NetBatch-Plus Reference Manual

Abstract

This manual describes NetBatch-Plus, a Pathway application that provides a screen-driven interface to the NetBatch job management system. It describes all NetBatch-Plus screens, reports, and messages. It also contains installation procedures for NetBatch-Plus software and includes setup guidelines for the NetBatch-Plus processing environment.

Product Version

NetBatch-Plus D48

Supported Release Version Updates (RVUs)

This manual supports D40.00 and all subsequent D-series RVUs, and all G-series RVUs, until otherwise indicated in a new edition.

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NetBatch-Plus Reference Manual

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What's New in This Manual

Manual Information

Abstract

This manual describes NetBatch-Plus, a Pathway application that provides a screen-driven interface to the NetBatch job management system. It describes all NetBatch-Plus screens, reports, and messages. It also contains installation procedures for NetBatch-Plus software and includes setup guidelines for the NetBatch-Plus processing environment.

Product Version

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522461-001	NetBatch D40	February 2002
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New and Changed Information

This publication has been updated to reflect new product names:

- Since product names are changing over time, this publication might contain both HP and Compaq product names.
- Product names in graphic representations are consistent with the current product interface.

This edition contains these updates:

- Updated Installing NetBatch-Plus on page 2-2 to describe use of DSM/SCM instead of the INSTALL program

- Updated Installing NetBatch-Plus Software Overview on page 2-4 to more completely describe the NetBatch-Plus installation procedure using the NetBatch-Plus installation macro INSTALL
- Added Migrating a NetBatch-Plus Database on page 2-14 to describe the installation and use of the DBUPDATE tool when migrating to another system
- Consolidated the function key descriptions into tables for each screen in Section 6, NetBatch-Plus Screens
- Updated Figure 6-30, Main Menu Screen, on page 6-178, Figure 6-38, Utility Menu Screen, on page 6-219, and Figure 6-39, Utility Security Screen, on page 6-225
- Added the High PIN option to these screens:
  - Figure 6-4, Bulk Submit Environment Screen, on page 6-19 (description in High PIN on page 6-21)
  - Figure 6-14, Default Set Details Screen, on page 6-67 (description in High PIN on page 6-71)
  - Figure 6-21, Job Definition Screen, on page 6-102 (description in High PIN on page 6-108)
  - Figure 6-23, Job Info Screen, on page 6-120 (description in High PIN on page 6-123)
  - Figure 6-33, Scheduler Info Screen, on page 6-190 (description in High PIN on page 6-195)
- Added DBUPDATE files to Table A-1, File Descriptions and Locations, on page A-1

About This Manual

This manual describes NetBatch-Plus, a Pathway application that provides a screen-driven interface to the NetBatch job management system. The manual contains detailed descriptions of all NetBatch-Plus screens, reports, and messages. The manual also contains installation procedures for NetBatch-Plus software and includes setup guidelines for the NetBatch-Plus processing environment.

Audience Requirements

A user of this manual should be:

- An experienced system operator or programmer familiar with the NetBatch job management system
- Familiar with Pathway application management and the HP NonStop™ Kernel operating system

Organization

Section	Description
Section 1, Introducing NetBatch-Plus	Highlights and describes some of the features of the NetBatch-Plus application.
Section 2, Installation, Startup, and Shutdown	Explains how to install NetBatch-Plus software and configure, start up, and shut down the NetBatch-Plus PATHWAY system.
Section 3, Changing the NetBatch-Plus Pathway Configuration	Explains how to make changes to the NetBatch-Plus Pathway system.
Section 4, Setting Up the Processing Environment	Presents some general guidelines to help you plan your NetBatch-Plus processing environment. The section also contains descriptions of the main tasks involved in setting up the processing environment.
Section 5, Using NetBatch-Plus	Explains how to start NetBatch-Plus on a terminal, sign on and off, change passwords, and use online help.
Section 6, NetBatch-Plus Screens	Contains detailed descriptions of all NetBatch-Plus screens.
Section 7, NetBatch-Plus Reports	Describes the different types of NetBatch-Plus reports and explains the production process for each report type. Also gives general information about writing your own reports and includes detailed descriptions of the standard reports supplied with NetBatch-Plus software.

Section	Description
Appendix A, File Descriptions and Locations	Contains a table that lists and briefly describes all NetBatch-Plus files.
Appendix B, DLL Record Description	Contains Enform format descriptions of the report records in the DDL-generated NetBatch-Plus dictionary.
Appendix C, Messages	Lists and briefly describes NetBatch-Plus error, warning, and confirmation messages.

Further Reading

- *Edit User's Guide and Reference Manual* describes the syntax of EDIT commands, explains how to create and use EDIT files, and describes EDIT VS page mode editing.
- *ENFORM Reference Manual* provides detailed information about the syntax of the ENFORM language.
- *ENFORM User's Guide* provides a task-oriented view of the Enform language.
- *ENSCRIBE Programmer's Guide* describes each of the four types of disk file supported by the Enscribe product and explains how to access, create, and fill those files.
- *File Utility Program (FUP) Reference Manual* describes the syntax of all FUP commands and includes explanations of FUP error messages.
- *Guardian Procedure Calls Reference Manual* describes the syntax of all system procedure calls.
- *Guardian User's Guide* describes basic operating-system tasks.
- *NetBatch User's Guide* gives a task-oriented view of the NetBatch batch job management system.
- *NonStop SQL Conversational Interface Reference Manual* describes the HP NonStop SQL conversational interface (SQLCI), the report writer, and the NonStop SQL utilities.
- *Pathway/TS System Management Manual* describes the Pathway objects and the PATHCOM commands used to configure and manage Pathway Transaction Processing Systems.
- *Peripheral Utility Program (PUP) Reference Manual*, for systems running D-series RVUs, describes the syntax of all PUP commands and includes explanations of PUP error messages.
- *PS TEXT EDIT Reference Manual* describes PS TEXT EDIT (TEDIT), the multi-screen block mode text editor.

- *Safeguard Reference Manual* describes the Safeguard distributed security management facility and the syntax of the commands of the SAFECOM command interpreter.
- *Spooler Utilities Reference Manual* describes PERUSE and SPOOLCOM, the spooler utilities of the Guardian operating system. The manual includes a general introduction to the spooler.
- *System Generation Manual* describes software installation and system generation functions.
- *Tandem Advanced Command Language (TACL) Reference Manual* describes the syntax, operation, and results of all of the HP Tandem Advanced Command Language (TACL) commands, functions, built-in functions, and built-in variables.
- *TMF Reference Manual* describes the syntax and semantics of all TMFCOM commands.

Your Comments Invited

After using this manual, please take a moment to send us your comments. To do this:

- Complete a Contact *NonStop™ Himalaya* Publications form online at http://nonstop.compaq.com/view.asp?FOID=20.
- Fax or mail the form, which is included as a separate file in Total Information Manager (TIM) collections and located at the back of printed manuals. Our fax number and mailing address are included on the form.
- Send an e-mail message to the address included on the form. We will immediately acknowledge receipt of your message and send you a detailed response as soon as possible. Be sure to include your name, company name, address, and phone number in your message. If your comments are specific to a particular manual, also include the part number and title of the manual.

Many of the improvements you see in manuals are a result of suggestions from our customers. Please take this opportunity to help us improve future manuals.

Notation Conventions

General Syntax Notation

This list summarizes the notation conventions for syntax presentation in this manual:

UPPERCASE LETTERS. Uppercase letters indicate keywords and reserved words; enter these items exactly as shown. Items not enclosed in brackets are required. For example:

```
MAXATTACH
```

lowercase italic letters. Lowercase italic letters indicate variable items that you supply. Items not enclosed in brackets are required. For example:

```
file-name
```

computer type. Computer type letters within text indicate C and Open System Services (OSS) keywords and reserved words; enter these items exactly as shown. Items not enclosed in brackets are required. For example:

```
myfile.c
```

italic computer type. *Italic computer type* letters within text indicate C and Open System Services (OSS) variable items that you supply. Items not enclosed in brackets are required. For example:

```
pathname
```

[ ] Brackets. Brackets enclose optional syntax items. For example:

```
TERM [\system-name.]$terminal-name
```

```
INT[ERRUPTS]
```

A group of items enclosed in brackets is a list from which you can choose one item or none. The items in the list may be arranged either vertically, with aligned brackets on each side of the list, or horizontally, enclosed in a pair of brackets and separated by vertical lines. For example:

```
LIGHTS [ ON             ]
       [ OFF            ]
       [ SMOOTH [ num ] ]
```

```
K [ X | D ] address-1
```

{ } Braces. A group of items enclosed in braces is a list from which you are required to choose one item. The items in the list may be arranged either vertically, with aligned braces on each side of the list, or horizontally, enclosed in a pair of braces and separated by vertical lines. For example:

```
LISTOPENS PROCESS { $appl-mgr-name }
                  { $process-name  }
```

```
ALLOWSU { ON | OFF }
```

| Vertical Line. A vertical line separates alternatives in a horizontal list that is enclosed in brackets or braces. For example:

```
INSPECT { OFF | ON | SAVEABEND }
```

… Ellipsis. An ellipsis immediately following a pair of brackets or braces indicates that you can repeat the enclosed sequence of syntax items any number of times. For example:

```
M address-1 [ , new-value ]...
```

```
[ - ] {0|1|2|3|4|5|6|7|8|9}...
```

An ellipsis immediately following a single syntax item indicates that you can repeat that syntax item any number of times. For example:

```
"s-char..."
```

Punctuation. Parentheses, commas, semicolons, and other symbols not previously described must be entered as shown. For example:

```
error := NEXTFILENAME ( file-name ) ;

LISTOPENS SU $process-name.#su-name
```

Quotation marks around a symbol such as a bracket or brace indicate the symbol is a required character that you must enter as shown. For example:

```
"[" repetition-constant-list "]"
```

Item Spacing. Spaces shown between items are required unless one of the items is a punctuation symbol such as a parenthesis or a comma. For example:

```
CALL STEPMOM ( process-id ) ;
```

If there is no space between two items, spaces are not permitted. In the following example, there are no spaces permitted between the period and any other items:

```
$process-name.#su-name
```

Line Spacing. If the syntax of a command is too long to fit on a single line, each continuation line is indented three spaces and is separated from the preceding line by a blank line. This spacing distinguishes items in a continuation line from items in a vertical list of selections. For example:

```
ALTER [ / OUT file-spec / ] CONTROLLER

   [ , attribute-spec ]...
```

!i and !o. In procedure calls, the !i notation follows an input parameter (one that passes data to the called procedure); the !o notation follows an output parameter (one that returns data to the calling program). For example:

```
CALL CHECKRESIZESEGMENT (  segment-id                    !i
                         , error        ) ;              !o
```

!i,o. In procedure calls, the !i,o notation follows an input/output parameter (one that both passes data to the called procedure and returns data to the calling program). For example:

```
error := COMPRESSEDIT ( filenum ) ;                      !i,o
```

!i:i. In procedure calls, the !i:i notation follows an input string parameter that has a corresponding parameter specifying the length of the string in bytes. For example:

```
error := FILENAME_COMPARE_ (  filename1:length           !i:i
                            , filename2:length ) ;       !i:i
```

!o:i. In procedure calls, the !o:i notation follows an output buffer parameter that has a corresponding input parameter specifying the maximum length of the output buffer in bytes. For example:

```
error := FILE_GETINFO_ (  filenum                          !i
                        , [ filename:maxlen ] ) ;          !o:i
```

Notation for Messages

This list summarizes the notation conventions for the presentation of displayed messages in this manual:

Bold Text. Bold text in an example indicates user input entered at the terminal. For example:

```
ENTER RUN CODE

?123

CODE RECEIVED:      123.00
```

The user must press the Return key after typing the input.

Nonitalic text. Nonitalic letters, numbers, and punctuation indicate text that is displayed or returned exactly as shown. For example:

```
Backup Up.
```

lowercase italic letters. Lowercase italic letters indicate variable items whose values are displayed or returned. For example:

p-register

process-name

[ ] Brackets. Brackets enclose items that are sometimes, but not always, displayed. For example:

Event number = *number* [Subject = *first-subject-value*]

A group of items enclosed in brackets is a list of all possible items that can be displayed, of which one or none might actually be displayed. The items in the list might be arranged either vertically, with aligned brackets on each side of the list, or horizontally, enclosed in a pair of brackets and separated by vertical lines. For example:

LDEV *ldev* [CU %*ccu* | CU %...] UP [(*cpu*,*chan*,%*ctlr*,%*unit*)]

{ } Braces. A group of items enclosed in braces is a list of all possible items that can be displayed, of which one is actually displayed. The items in the list might be arranged

either vertically, with aligned braces on each side of the list, or horizontally, enclosed in a pair of braces and separated by vertical lines. For example:

```
LBU { X | Y } POWER FAIL
```

```
process-name State changed from old-objstate to objstate
{ Operator Request. }
{ Unknown.          }
```

| Vertical Line. A vertical line separates alternatives in a horizontal list that is enclosed in brackets or braces. For example:

```
Transfer status: { OK | Failed }
```

% Percent Sign. A percent sign precedes a number that is not in decimal notation. The % notation precedes an octal number. The %B notation precedes a binary number. The %H notation precedes a hexadecimal number. For example:

```
%005400
```

```
%B101111
```

```
%H2F
```

```
P=%p-register E=%e-register
```

Notation for Management Programming Interfaces

This list summarizes the notation conventions used in the boxed descriptions of programmatic commands, event messages, and error lists in this manual:

UPPERCASE LETTERS. Uppercase letters indicate names from definition files; enter these names exactly as shown. For example:

```
ZCOM-TKN-SUBJ-SERV
```

lowercase letters. Words in lowercase letters are words that are part of the notation, including Data Definition Language (DDL) keywords. For example:

```
token-type
```

!r. The !r notation following a token or field name indicates that the token or field is required. For example:

```
ZCOM-TKN-OBJNAME       token-type ZSPI-TYP-STRING.          !r
```

!o. The !o notation following a token or field name indicates that the token or field is optional. For example:

```
ZSPI-TKN-MANAGER       token-type ZSPI-TYP-FNAME32.         !o
```

1 Introducing NetBatch-Plus

This section introduces the NetBatch-Plus application, highlighting and describing some of its features:

Topic	Page
What Is NetBatch-Plus?	1-1
NetBatch-Plus Features	1-1
Communicating With NetBatch Systems	1-4
Managing NetBatch Objects	1-5
Storing NetBatch Job Descriptions in the NetBatch-Plus Database	1-6
Selecting and Submitting Jobs From the NetBatch-Plus Database	1-9
Securing the NetBatch-Plus Environment	1-13

What Is NetBatch-Plus?

NetBatch-Plus is a Pathway application that provides a screen-driven interface to the NetBatch job management system. The main functions of the interface are to:

- Simplify the tasks involved in setting up and controlling NetBatch schedulers and their objects (executors, classes, and jobs) by:
  - Providing you with easy-to-use screens for recording and displaying object details.
  - Letting you execute NetBatch command interpreter (BATCHCOM) commands via function keys. This lets you avoid entering lengthy commands and remembering BATCHCOM keywords and syntax.
- Let you define NetBatch jobs and store those definitions in the NetBatch-Plus database. The jobs can have attachments (ASSIGNs, PARAMs, and DEFINEs) and dependencies.
- Provide a way to submit, in a single operation, many related jobs for execution by NetBatch schedulers. The interface does this through its bulk submit facility that allows multiple job selection and submission via a single function key.

NetBatch-Plus Features

Support of NetBatch Functions

The NetBatch-Plus screen-driven interface fully supports all NetBatch scheduler and job management functions. To execute these functions, use the function keys on the relevant NetBatch-Plus screens.

Easy-to-Use Screens

NetBatch-Plus screens are simple to use. Their fields appear in logical groups that help you specify and interpret the data the fields contain. To help you quickly identify field purpose, field names are unambiguous.

You can select NetBatch-Plus screens by function key from menus or individual data screens. You can also use function keys to print screen copies, to recover screens, and to get online help.

Comprehensive Online Help

The NetBatch-Plus application offers two types of comprehensive online help:

- Screen help describes screen functions.
- Field help describes individual data fields on a screen and lists field options where applicable.

Simplified Job Definition and Maintenance

The NetBatch-Plus application simplifies job definition and maintenance through its defaults set and catalog attachment facilities.

The defaults set facility lets you create sets of job attributes. You can assign a single set of these attributes to many jobs, each of which adopts its default attributes from that set. You can override attributes from the set for individual jobs when necessary.

Defaults sets simplify job definition because you need only define job attributes for a set, not for each job. Defaults sets also simplify job maintenance; changes you make to a set’s attributes apply automatically to jobs adopting those attributes.

Catalog attachments perform a similar function to defaults sets. Instead of job attributes, however, catalog attachments specify ASSIGNs, PARAMs, and DEFINEs that different jobs can share. Defining and maintaining jobs with a common catalog attachment is easy because you need only record attachment details in the one place.

Powerful Job Selection and Submission Facilities

You can select jobs from the NetBatch-Plus database and submit them to a NetBatch scheduler by function key. You can submit jobs one at a time or in bulk via the bulk submit facility.

in addition to submitting jobs from the NetBatch-Plus database, you can define and submit jobs directly to a NetBatch scheduler without recording details of those jobs in the NetBatch-Plus database.

Screen-Based Job and Scheduler Management

The NetBatch-Plus scheduler interface screens enable you to set up and control NetBatch schedulers and their objects (executors, classes, and jobs). You can view details of jobs executing in or awaiting execution by schedulers. Where necessary, you can also alter details of the jobs or stop their execution.

Access to External Processes

The NetBatch-Plus application gives you easy access, via the Utility Menu screen, to external processes. The screen saves you time because you can run processes such as Guardian utilities without having to exit and reenter the application.

Your system administrator can configure the Utility Menu screen to let you access up to 12 processes.

Flexible Reporting Facilities

The NetBatch-Plus application supports Enform reporting of its database.

The application's software includes ten standard Enform reports. To customize these reports, change their EDIT-format source files (also supplied with the software). You can also write your own reports, using the supplied source files as examples.

To select and execute NetBatch-Plus reports, use the function keys on the Reports screen. Your system administrator can configure this screen to let you access up to eight reports. To run reports not listed on the screen, specify the names of their source or object files.

Screen Security and Record Security

There are two types of NetBatch-Plus security:

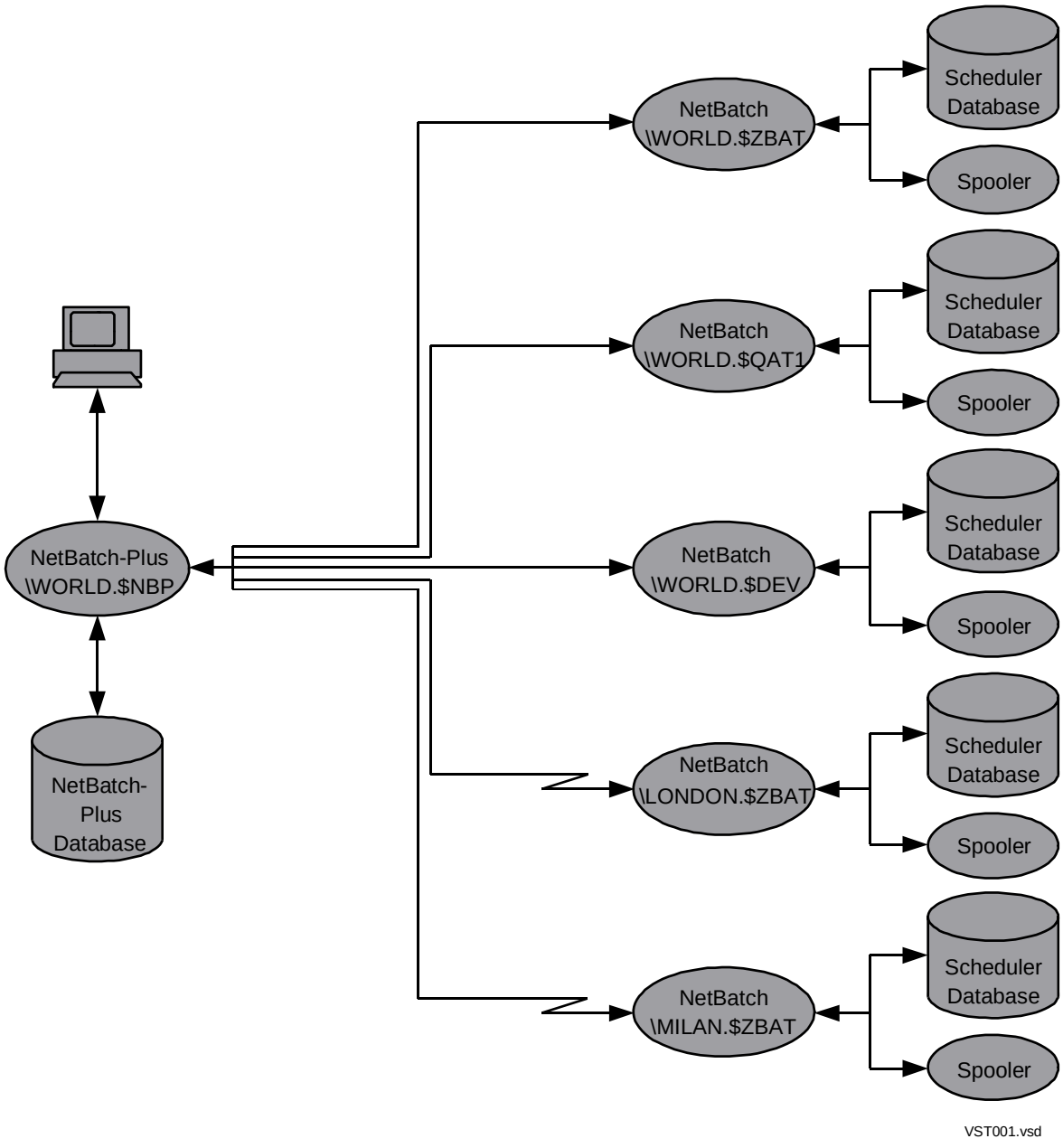
- Screen security controls user access to NetBatch-Plus screens and functions. It uses password-protected user names to which your system administrator assigns screen and function access privileges.
- Record security applies to defaults set, job, and catalog and job attachment records in the NetBatch-Plus database. Each of these records has a Guardian owner and Guardian security attributes that control read, write, use, and purge access. A NetBatch-Plus user wanting access to one of these records must first validate, on the Password Validation screen, the user ID and password of a Guardian user with access to that record.

Note. To control user access to the scheduler and its objects, use the NetBatch job management system. For information on the NetBatch system, see the *NetBatch User's Guide*.

Communicating With NetBatch Systems

You can use a single NetBatch-Plus system to communicate with and control multiple NetBatch systems running on the same or different nodes. For example, you could use a NetBatch-Plus system running on \WORLD to control NetBatch systems on that node as well as those on \LONDON and \MILAN.

Figure 1-1. Communicating with NetBatch Systems



Managing NetBatch Objects

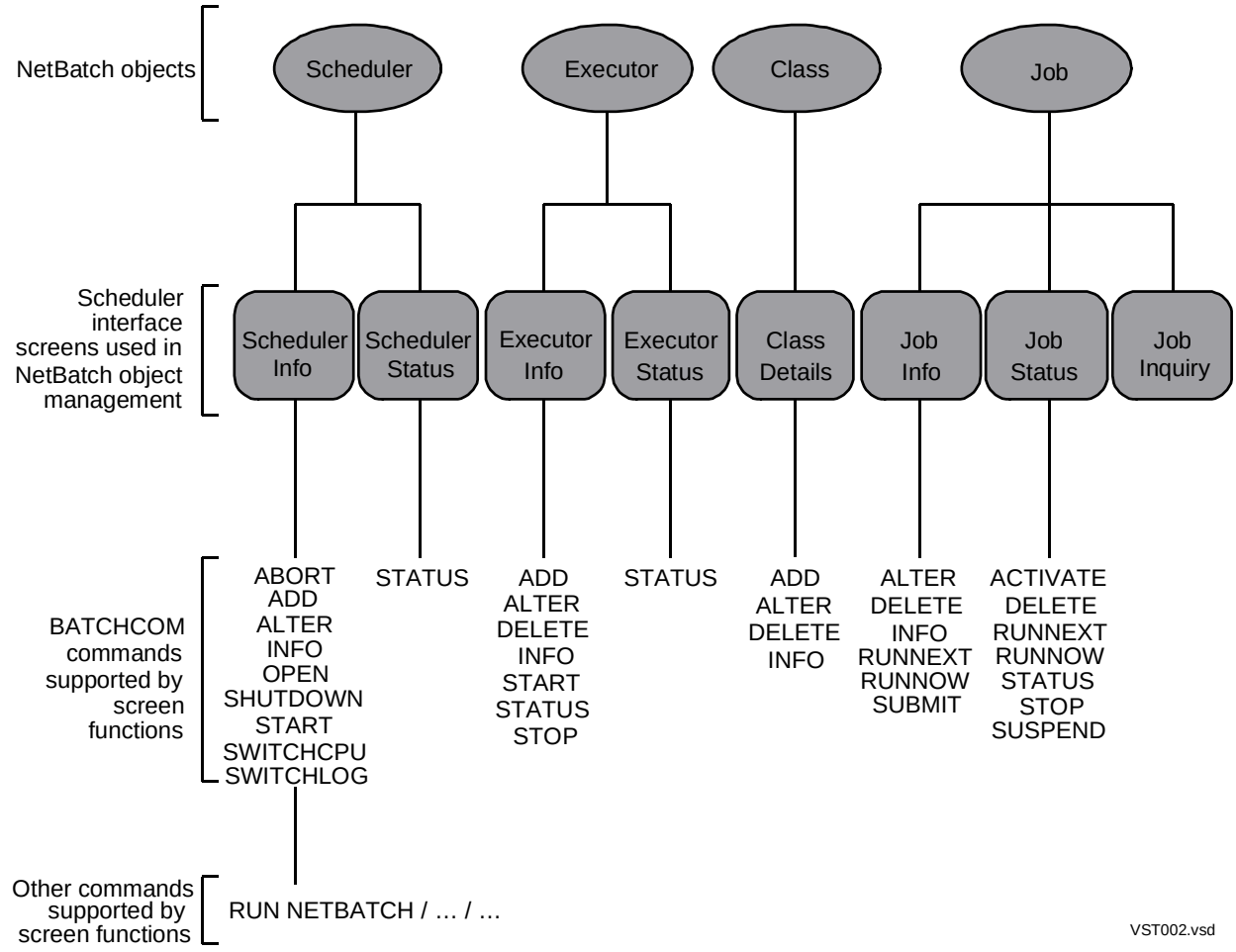
The NetBatch-Plus scheduler interface screens enable you to set up and control these NetBatch objects:

Schedulers Executors Classes Jobs

You can execute the BATCHCOM commands used in object management by function key. For example, F3–Submit on the NetBatch-Plus Job Info screen has the same function as the BATCHCOM command SUBMIT JOB.

Figure 1-2 shows the NetBatch-Plus scheduler interface screens and lists the BATCHCOM commands you can execute by function key on those screens. For a complete list of commands and their corresponding screen functions, see the BATCHCOM entry in the Index.

Figure 1-2. Managing NetBatch Objects



Storing NetBatch Job Descriptions in the NetBatch-Plus Database

One of the main functions of the NetBatch-Plus application is to store descriptions of NetBatch jobs in its database. You can select jobs from the database as often as you need and submit them to NetBatch schedulers for execution.

When you submit a job from the NetBatch-Plus database, the job becomes an object of the scheduler and, as such, is stored in the scheduler's database. The scheduler deletes the job from its database when execution finishes unless the job has an attribute specifying automatic rescheduling. The job's description, however, remains in the NetBatch-Plus database; you can therefore select it for submission to a scheduler whenever necessary.

The NetBatch-Plus application offers easy entry and maintenance of job descriptions through its defaults set, catalog attachment, and dependency facilities. This subsection briefly describes these facilities.

Using Defaults Sets

Defaults sets are the source of default attributes for all job descriptions in the NetBatch-Plus database. They also specify other job-related information such as scheduler names.

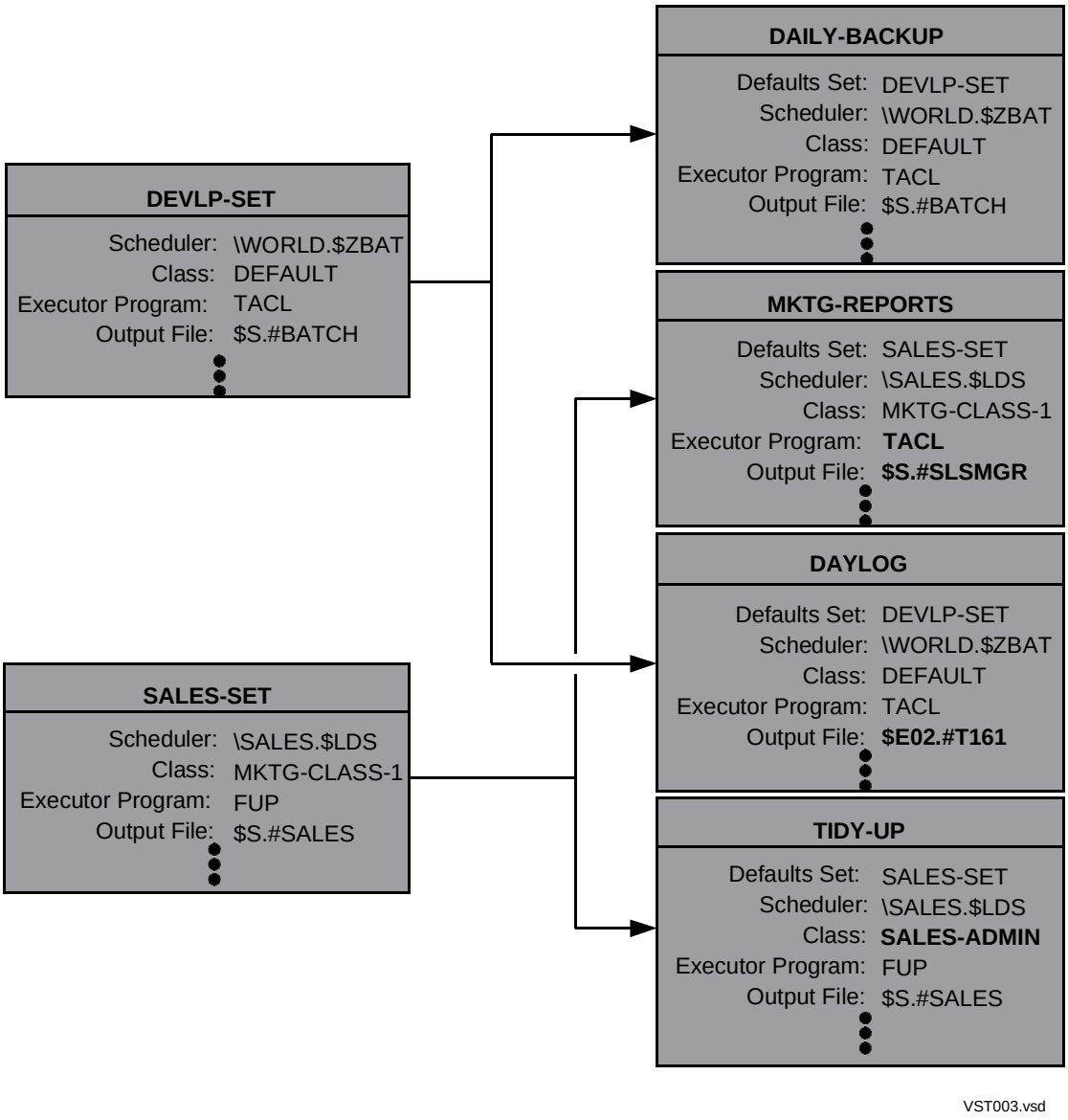
You can assign a single defaults set to any number of jobs. This simplifies entry of jobs having attributes in common because you enter the attributes only once rather than many times. Similarly, maintenance of jobs sharing a defaults set is easy because you need only update the defaults set.

You can override defaults set attributes for individual jobs if necessary. When you override a defaults set attribute for a job, you can no longer maintain that attribute for the job through its defaults set. By defining appropriate defaults sets, however, you can ensure that all or most attributes default, saving you time and effort in entering new jobs.

Figure 1-3 on page 1-7 shows jobs in the NetBatch-Plus database adopting their attributes from the defaults set they use.

For example, job DAILY-BACKUP adopts all its attributes from defaults set DEVLP-SET. Job MKTG-REPORTS, however, adopts some of its attributes from defaults set SALES-SET but overrides the executor program and output file specified by that set. Similarly, jobs DAYLOG and TIDY-UP adopt some of their attributes from their respective defaults sets but override others.

Figure 1-3. Using Default Sets



Using Catalog Attachments

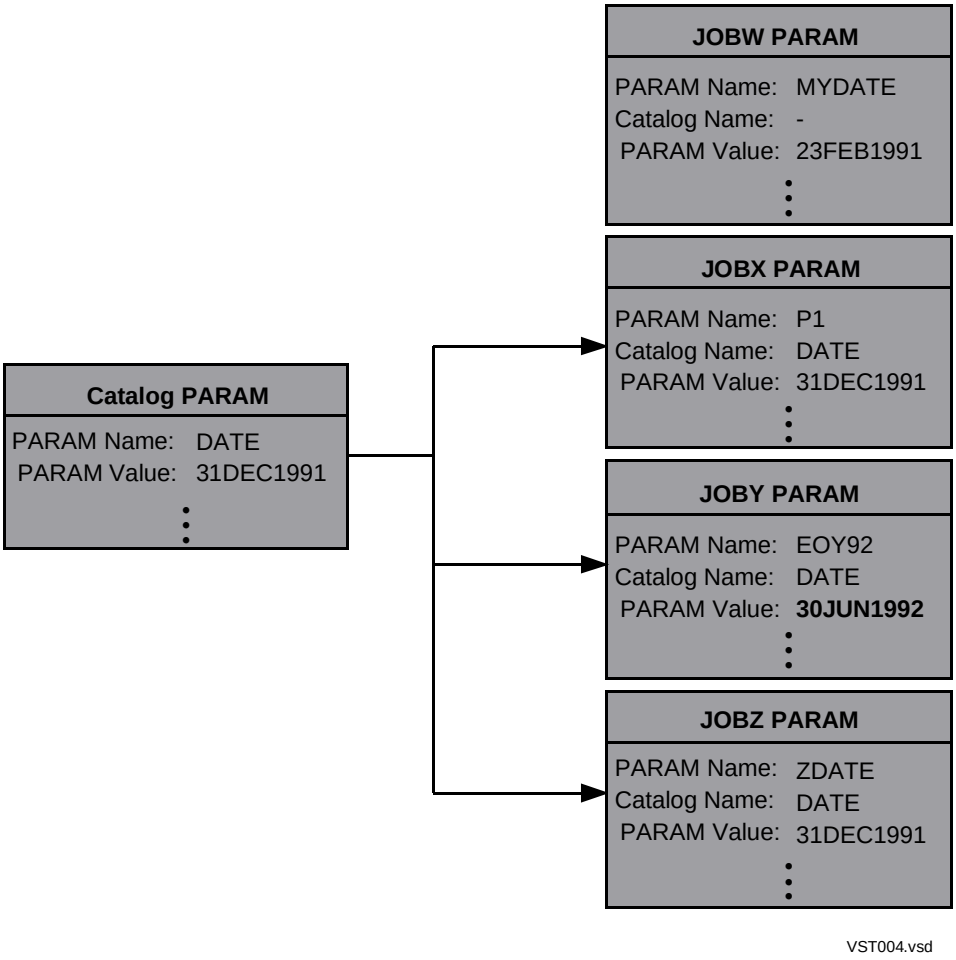
A catalog attachment is an ASSIGN, PARAM, or DEFINE that any number of different jobs can share. (The NetBatch-Plus application supports five types of DEFINEs: defaults, map, spool, SQL catalog, and tape.)

Catalog attachments simplify entry and maintenance of NetBatch-Plus job descriptions for much the same reasons as defaults sets. A single catalog attachment can be used by many jobs and therefore enables you to make quick and easy changes to attachment details.

Figure 1-4 on page 1-8 shows details of PARAMs attached to four different jobs. The PARAMs for JOBX, JOBY, and JOBZ use a catalog PARAM to supply their attributes.

JOBX and JOBZ adopt the attributes without change, but JOBY overrides the date. JOBW does not use a catalog attachment as the source of its PARAM attributes.

Figure 1-4. Using Catalog Attachments



Specifying Dependencies

The NetBatch-Plus application enables you to define and maintain job dependencies on the one screen.

You can specify up to eight jobs (called master jobs) on which execution of another job (the dependent job) depends. The NetBatch-Plus application passes dependency information to the NetBatch scheduler when you submit the job. The scheduler then manages the dependencies, making sure execution of the dependent job does not start until the job's masters release it.

For more information about job dependencies and how the scheduler manages them, see the *NetBatch User's Guide*.

Selecting and Submitting Jobs From the NetBatch-Plus Database

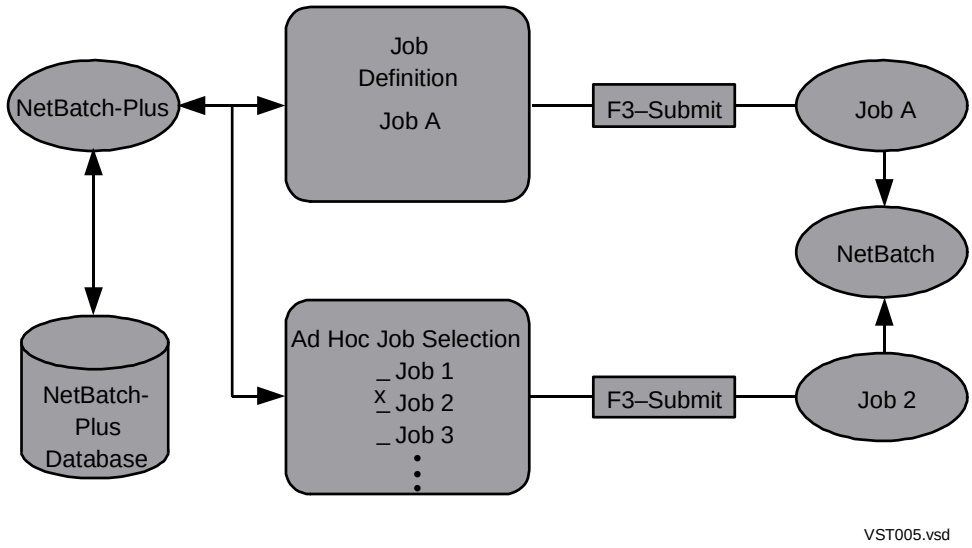
The NetBatch-Plus application offers you three methods of selecting jobs from its database and submitting them to NetBatch schedulers. Two methods enable you to select and submit jobs individually. The third method lets you select jobs in bulk.

Selecting and Submitting Jobs Individually

The Job Definition and Ad Hoc Job Selection screens let you select and submit jobs to schedulers one at a time:

- The Job Definition screen displays a specified job whose details you can change before submission.
- The Ad Hoc Job Selection screen displays a list of job names from which you can select and submit one job. This screen lists jobs by defaults set and offers wild-card selection facilities.

Figure 1-5. Selecting and Submitting Jobs Individually



Selecting and Submitting Jobs in Bulk

The third method of job selection and submission lets you select and submit up to 2500 jobs at a time. This selection and submission of multiple jobs is called bulk submit.

Selection Criteria

The bulk submit program selects and submits jobs from the NetBatch-Plus database according to selection criteria you specify on the Bulk Submit screen. You can specify the schedulers and classes of the jobs you want selected along with the run date or

category of those jobs. By supporting these varied selection criteria, the NetBatch-Plus application gives you extremely powerful bulk job selection facilities.

Schedulers and Classes

You can specify selection of jobs that run in a particular scheduler and belong to a particular class. For added flexibility, you can also specify a range of schedulers and classes by using wild-card characters in the scheduler and class names. For example, you could enter *.$ZBAT to specify the NetBatch scheduler process $ZBAT on all nodes.

Run Dates and Categories

You specify run dates and categories for a job on the Bulk Job Selection Criteria screen.

Run dates are the dates on which you want the job to run. For example, the fifteenth of the month could be the run date for payroll jobs.

Categories are a convenient way of linking related jobs. For example, you could specify the category PAYROLL as the selection criterion for each payroll job in your organization. You could then make these jobs eligible for selection in a bulk submit run by specifying PAYROLL as the selection criterion for the run.

You can also use categories as calendar categories to store several run dates. For example, as a calendar category, PAYROLL could specify various run dates for payroll jobs. You could then make the jobs eligible for selection in a run either by specifying one of those run dates as the selection criteria or the category PAYROLL. By specifying the date, you make eligible all payroll jobs due to run on that date. By specifying the category PAYROLL, you ensure that all payroll jobs are eligible, regardless of their run dates.

Figure 1-6 on page 1-11 gives an example of job selection by the bulk submit program. The selection criteria for the run specify jobs with a run date of September 15, 1991, whose scheduler is $ZBAT, and whose class name begins with C. The bulk submit program only selects jobs B and F in the run because:

- The scheduler for jobs B and F ($ZBAT) matches the selection criteria for the run (*.$ZBAT).
- The jobs' classes (C2 for job B and C6 for job F) match the class selection criteria (C*).
- The calendar categories specified for jobs B and F contain a run date (15Sep1991) matching the date specified for the bulk submit run.

Figure 1-6. Selecting and Submitting Jobs in Bulk

Selection Criteria for Bulk Submit Run	
Schedulers:	*.$ZBAT
Classes:	C*
Run Date:	15Sep1991

Category Dates	
PAYROLL-Q1	BACKUP-09
15Jul1991 15Aug1991 15Sep1991	01Sep1991 08Sep1991 15Sep1991 22Sep1991 29Sep1991

Bulk Job Details

Job	NetBatch Scheduler	Class	Run Date	Category	Selected?	Reason
A	\WORLD.$ZBAT	C1	06Sep1991	-	No	Run date ≠ 15Sep1991
B	\LONDON.$ZBAT	C2	-	PAYROLL-Q1	Yes	All criteria match
C	\WORLD.$QAT1	C3	-	PAYROLL-Q1	No	Scheduler ≠ $ZBAT
D	\SALES.$LDS	C4	15Sep1991	-	No	Scheduler ≠ $ZBAT
E	\WORLD.$DEV	C5	15Sep1991	-	No	Scheduler ≠ $ZBAT
F	\MILAN.$ZBAT	C6	-	BACKUP-09	Yes	All criteria match
G	\ADMIN.$ZBAT	DEFAULT	15Sep1991	-	No	Class ≠ C*

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Start Times

The NetBatch-Plus application lets you choose start times for jobs in bulk submit runs. You can specify start times for each job in a run or, when necessary, override those times and force all jobs to start together.

Run Types

There are two types of bulk submit runs: test and production. To execute these runs, use the Bulk Submit screen.

Run Type	Description
Test runs	A test run is a trial run in which the bulk submit program selects jobs but does not submit them to their schedulers. The selected jobs appear in the Bulk Submit Predictions report that the program produces automatically for the run. By running a test, you can determine which jobs the bulk submit program will select in a production run before you actually execute that run.
Production runs	During a production run, the bulk submit program both selects jobs and submits them to their respective schedulers. The jobs submitted in the run appear in the Bulk Submit Submissions report that the program produces automatically for the run. The NetBatch-Plus application offers three production run alternatives: ● Daily production runs: The bulk submit program runs every day at a particular time, automatically selecting and submitting jobs eligible to run that day. The program submits each job to its scheduler to start at the nominated time. You need only submit the bulk submit program once. It then runs at the same time every day. ● Production runs for a specified category: You can select all jobs belonging to a category, regardless of whether that category is a calendar category or not. ● Production runs for a specified run date: You can select all jobs due to run on a specific date, regardless of category. You can also select and submit bulk jobs scheduled for a particular run date on a different date. This feature is particularly useful when you want to rerun jobs or schedule a bulk submit run before its due date.

Securing the NetBatch-Plus Environment

The NetBatch-Plus application lets you control user access to your batch processing environment.

First, NetBatch-Plus controls access to the NetBatch-Plus database on a record-by-record basis. This feature lets you prevent unauthorized users from accessing defaults set, job, and catalog and job attachment records that you own.

Second, your system administrator can control access to screens and functions by defining access privileges for each user.

Record Security

Each defaults set, job, and catalog and job attachment record in the NetBatch-Plus database has a Guardian owner. NetBatch-Plus record security determines which Guardian users can read, write, use, or purge these records. You can restrict record access to the owner of the record, to members of the owner's group, or to all users. These restrictions apply to all NetBatch-Plus users, including those on remote systems.

Read, write, and purge security applies to all record types in the NetBatch-Plus database. However, only defaults set and catalog attachment records can have use access meaningfully defined. The owner of a defaults set can determine which users can use it. By specifying a particular access type for a defaults set, the owner can allow only certain users to use it for their job descriptions. Similarly, use access for a catalog attachment determines which users can use the attachment for their jobs.

Password Validation

The Password Validation screen lets you validate one or more Guardian user IDs for access to different records. All validated passwords remain current until the end of the NetBatch-Plus session.

2

Installation, Startup, and Shutdown

This section explains how to perform NetBatch-Plus installation, startup, and shutdown:

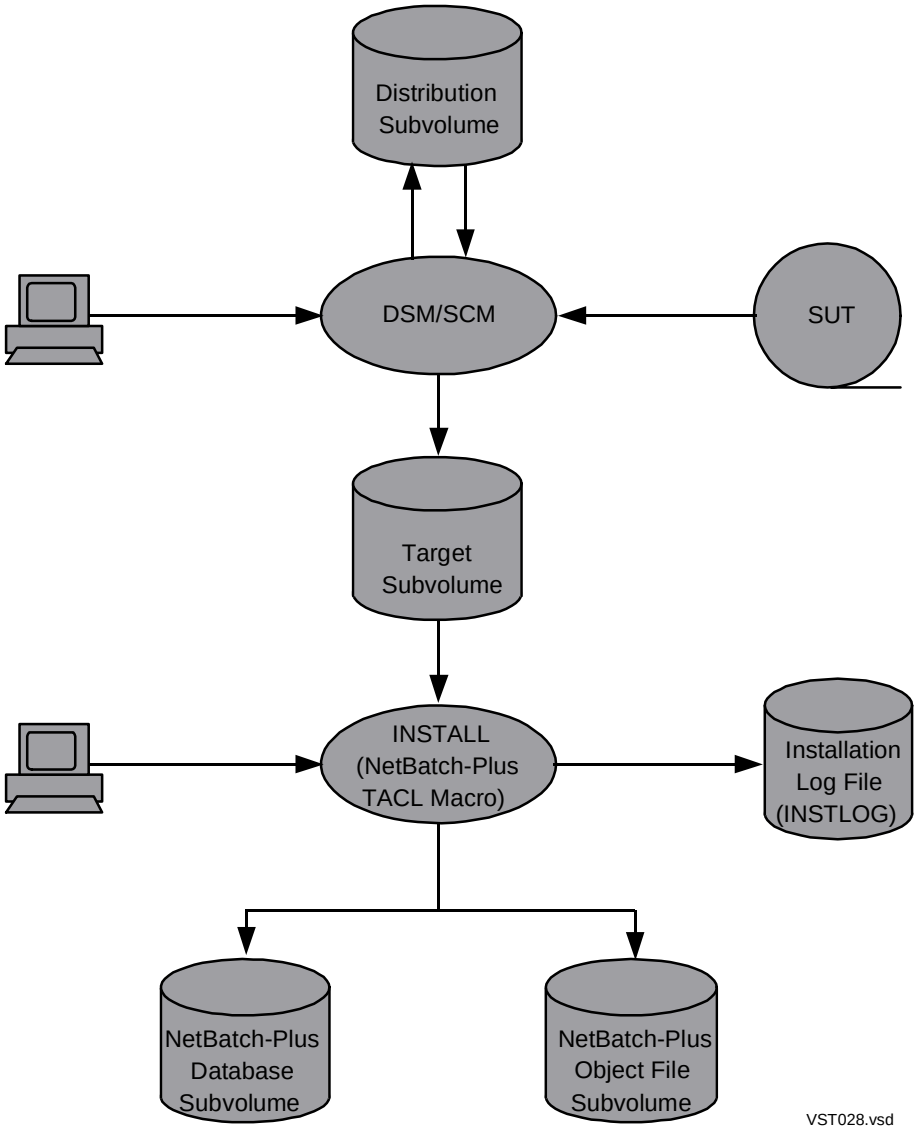
Topic	Page
Installing NetBatch-Plus	2-2
Configuring and Starting the NetBatch-Plus Pathway System	2-11
Running the NetBatch-Plus Application	2-12
Shutting Down the NetBatch-Plus Pathway System	2-13
Migrating a NetBatch-Plus Database	2-14

Installing NetBatch-Plus

Installation of NetBatch-Plus software is a two-stage process:

1. Transfer NetBatch-Plus software files from the site update tape (SUT) to your system. You transfer the files by running DSM/SCM.
2. Install the software on your system by invoking the NetBatch-Plus installation macro INSTALL.

Figure 2-1. NetBatch-Plus Installation



Before You Begin

Before installing NetBatch-Plus software:

1. Read this section to familiarize yourself with the installation process.
2. Make sure your system's hardware, firmware, and software satisfy the installation prerequisites for NetBatch-Plus software (see Table 2-1).

Table 2-1. Installation Prerequisites for NetBatch-Plus Software

	Requirement	
Hardware	NonStop Kernel system (named)	
Firmware	Standard	
Software	T9050	Guardian Operating System
	T9100	DDL Data Definition Language
	T9152	Enform Query and Report Writing Language
	T9153	Pathway Transaction Processing System
	T9190	NetBatch Job Management System
	T9205	Tandem Advanced Command Language (TACL)
	T9267	COBOL85 Run Time Library

Note. The NetBatch-Plus application only runs on named NonStop Kernel systems (for example, \WORLD). On unnamed systems, the application terminates with an illegal procedure call when it tries to perform a function requiring a system name.

For software version information, see the NetBatch-Plus Softdoc.

3. If you are replacing superseded NetBatch-Plus software on your system:
   a. Shut down the NetBatch-Plus Pathway system.
   b. Back up any existing NetBatch-Plus data files. For a list of data files, see Appendix A, File Descriptions and Locations.
   c. Make sure you have purge access to existing NetBatch-Plus objects, dictionaries, or Enform files.

Transferring SUT Files

After you complete the preliminary steps, transfer NetBatch-Plus software files from the SUT. To transfer the files, run DSM/SCM. For a full description DSM/SCM's features and functions and for detailed usage guidelines, see the *DSM/SCM User's Guide*.

During execution, DSM/SCM:

- Copies files from the SUT to your system's distribution subvolume (DSV). The NetBatch-Plus DSV is $*volume*.R9189*Xnn*, where *volume* is the volume specified

during INSTALL execution and *Xnn* the software version; for example, $SYSGEN.R9189D48.

- Copies these files from the DSV to the target subvolume (TSV). For brief descriptions of these files, see Appendix A, File Descriptions and Locations.

DDLNBP	ENF04S	ENF09S	NBPFUP	NBPSCOD	PS0130O
ENF01S	ENF05S	ENF67S	NBPIMUDB	NBPSDIR	PS0300O
ENF02S	NF06S	ENF68S	NBPINST	PB0010O	SKEL
ENF03S	ENF07S	INSTALL	NBPOBJ	PS0000O	

The NetBatch-Plus TSV is $*volume*.ZNBPLUS, where *volume* is the volume specified during execution of DSM/SCM.

Installing NetBatch-Plus Software Overview

1. After you transfer the NetBatch-Plus files from the SUT to your system, run the NetBatch-Plus INSTALL macro to install the software. The INSTALL macro is supplied with the NetBatch-Plus software in its TSV.

   To invoke the NetBatch-Plus installation macro INSTALL:

   a. Change the current volume and subvolume to the NetBatch-Plus TSV:

      ```
      $DATA7 ADMIN 34> VOLUME $SYSGEN.ZNBPLUS
      ```

   b. Type INSTALL at the TACL prompt and press RETURN. This invokes the INSTALL macro and starts the installation process. To stop the macro at any time, press BREAK.

      ```
      $SYSGEN ZNBPLUS 35> INSTALL
      ```

   The INSTALL macro:

   - Prompts you for the names of the database and object file subvolumes and for configuration information about the NetBatch-Plus Pathway system
   - Creates the TACL macros used to start and shut down the Pathway system
   - Creates the Pathway configuration file (PATHCONF)
   - Transfers the object files from the TSV to the specified object file subvolume
   - Creates the data files and compiles the DDL dictionaries and the Enform query files for the standard database reports
   - Creates the object file for the terminal control process and the library file for that object
   - Secures all the files in the database and object file subvolumes and gives ownership of the files to the specified Guardian user

   The INSTALL macro takes about 15 to 20 minutes to install the software.

2. Immediately after installation, your super ID (255, 255) must use the FUP LICENSE command to license the files PB0010O, PB9000O, PS0000O, and

PS0130O. For information on this command, see the *File Utility Program (FUP) Reference Manual*.

3. After your super ID licenses the files, you can cold start the NetBatch-Plus PATHWAY system. For information on cold starting the system, see Configuring and Starting the NetBatch-Plus Pathway System on page 2-11.

Installation Example

1. Change your current volume and subvolume to the NetBatch-Plus TSV:

   ```
   $DATA7 ADMIN 34> VOLUME $SYSGEN.ZNBPLUS

   $SYSGEN ZNBPLUS 35>
   ```

2. Run the NetBatch-Plus INSTALL macro:

   ```
   $SYSGEN ZNBPLUS 35> INSTALL
   ```

   INSTALL initializes itself and creates the installation log file INSTLOG in the TSV. INSTLOG records all installation events.

   ```
   NetBatch-Plus T9189D48 - (26FEB2002^ABF)
   Copyright 2002 Compaq Information Technologies Group, L.P.

   Created $SYSGEN.ZNBPLUS.INSTLOG

   Please enter information at the following prompts.
   (Press the BREAK key to abort the installation.)
   ```

   Steps 3 through 6 specify the subvolumes for NetBatch-Plus files and configuration information for the NetBatch-Plus Pathway system. Configuration information is written to the PATHCONF file. INSTALL does not process information you enter until you confirm it in Step 7. You can alter the information at Step 7 if necessary.

3. Enter the user name (*group-name.user-name*) or number (*group-id,user-id*) of the Guardian owner of the NetBatch-Plus Pathway system and the files INSTALL creates in the database and object file subvolumes:

   ```
   NBP system owner's user name or number: 205,70
   ```

4. Enter the Guardian name of the subvolume where the INSTALL macro creates these NetBatch-Plus data files:

   - Data files (NBP*nnnn*, NBP*nnnnx*)
   - DDL data dictionary files (DICT*xxx*)
   - ENFORM compiled query files (ENFORM*nn*)
   - Help and message text file (NBPIMUDB)

   ```
   [$VOL.]SUBVOL for database files: $DATA7.NBPDAT
   ```

   For descriptions of these files, see Appendix A, File Descriptions and Locations.

Before continuing installation, INSTALL checks the specified subvolume for files with the same names as the files INSTALL creates. If no such files exist, INSTALL continues processing. If the subvolume contains files with the same names, INSTALL prompts you to continue or end installation. If you continue, INSTALL keeps existing data files but purges DDL and ENFORM files and the text file from the subvolume before creating new ones. INSTALL displays the names of the files it will purge before it prompts you to continue or end installation. For example:

```
Found existing database files. These files will be retained.

The following NBP files will be purged by INSTALL if they
exist.
$DATA7.NBPDAT
DICTALT DICTCDF DICTDDF DICTKDF DICTMAP DICTOBL DICTODF
DICTOTF DICTOUF DICTOUK DICTRDF DICTTKN DICTTYP DICTVER
ENFORM01 ENFORM02 ENFORM03 ENFORM04 ENFORM05 ENFORM06
ENFORM07 ENFORM09 ENFORM67 ENFORM68 NBPIMUDB

Do you want to continue? Y/N : [Y]y
```

5. Enter the Guardian name of the subvolume where INSTALL creates these NetBatch-Plus object files:

   - Pathway files
   - Program and server files
   - TACL macros

   ```
   [$VOL.]SUBVOL for object files: $DATA7.NBPOBJ
   ```

   For descriptions of these files, see Appendix A, File Descriptions and Locations.

   Before continuing installation, INSTALL checks the specified subvolume for files with the same names as the files INSTALL creates. If no such files exist, INSTALL continues processing. If the subvolume contains files with the same names, INSTALL prompts you to continue or end installation. If you continue, INSTALL purges the files from the subvolume before creating new ones. INSTALL displays the names of the files it will purge before it prompts you to continue or end installation. For example:

   ```
   The following NBP files will be purged by INSTALL if they
   exist.
   $DATA7.NBPOBJ
   NBPTCP2 NBPTCPL NCOLD   NCOOL   NRUN   NSHUT PATHCONF PB0010O
   NBPSCOD NBPSDIR PS0000O PS0130O PS0300O PB9000O

   Do you want to continue? Y/N :[Y]y
   ```

6. Indicate the CPUs configured for your system.

   This helps you respond to INSTALL prompts requiring you to specify the primary and backup CPUs for PATHMON, TCP, and server processes.

   If you specify a nonexistent CPU or a backup CPU that is the same as the process's primary CPU, INSTALL displays an error message and prompts you for a

valid number. If you specify a down CPU, INSTALL displays a warning and continues processing.

If your system has only two CPUs, INSTALL does not ask about backup CPUs.

```
The valid range of CPU numbers is 0 - 15
Inactive CPUs are : 4 5 6 7 8 9 10 11 12 13 14 15
```

a. Indicate the primary CPU for the Pathway monitor process PATHMON:

   ```
   PATHMON CPU number ............ (Primary CPU): 1
   ```

   This process executes the PATHCOM commands for NetBatch-Plus Pathway system operations.

b. Indicate the backup CPU for the PATHMON process:

   ```
   PATHMON CPU number ............ (Backup  CPU): 0
   ```

c. Indicate the primary CPU for the terminal control process (TCP):

   ```
   TCP CPU number ................ (Primary CPU): 1
   ```

   The TCP interprets and executes NetBatch-Plus screen programs and controls the terminal input/output devices on which the NetBatch-Plus application runs.

d. Indicate the backup CPU for the TCP:

   ```
   TCP CPU number ................ (Backup  CPU): 0
   ```

e. Indicate the primary CPU for the environment server:

   ```
   Main server CPU number ........ (Primary CPU): 1
   ```

f. Indicate the backup CPU for the environment server:

   ```
   Main server CPU number ........ (Backup  CPU): 0
   ```

g. Indicate the primary CPU for the utility server:

   ```
   Utility server CPU number ..... (Primary CPU): 1
   ```

h. Indicate the backup CPU for the utility server:

   ```
   Utility server CPU number ..... (Backup  CPU): 0
   ```

i. Indicate the Guardian name of the PATHMON process:

   ```
   NBP's process name "$xxxx"...................: $nbp
   ```

   A five-character name (excluding $) prevents remote access to the process. To allow local and remote access, specify a name of fewer than five characters.

j. Indicate the Guardian name of the home terminal for the Pathway, TCP, and server processes, and the default home terminal for scheduler processes created on the Scheduler Info screen without a specified home terminal:

   ```
   Home and TCP terminal "\node.$dev" ..........: $zhome
   ```

   The home terminal can be a device or process, but not a disk file.

k. Indicate the Guardian name of the output file for the server class (can be a device, disk file, or process):

```
Out terminal "\node.$device" ..............: $s
```

l. Specify the timeout period (in seconds) for NetBatch-Plus screens and the action taken when the period expires:

```
Time-out value (>= 300 sec) for PATHWAY server: 300
```

The timeout period determines how long NetBatch-Plus displays a screen after use. When the timeout period expires on any screen beside the Main Menu, the Main Menu screen is redisplayed.

If the value is not an exact power of two, NetBatch-Plus converts it to the next higher power of two to give the actual timeout period. For example, 300 converts to an actual timeout period of 512 seconds (2^9) or 8.5 minutes.

m. Specify whether to exit NetBatch-Plus on timeout on the Main Menu screen:

```
Exit NetBatch-Plus on timeout? Y/N [Y]: N
```

When the timeout period expires on the Main Menu screen:

- If you entered Y (Yes) at the INSTALL prompt "Exit NetBatch-Plus on time-out?", NetBatch-Plus ends the PATHWAY session.
- If you entered N (No) at the prompt, the Main Menu screen remains but NetBatch-Plus logs off the signed-on user.

n. Specify the Guardian name of the default output file (device or process) for screen copies printed by the NetBatch-Plus screen print function SF13–Print:

```
Print file for screen (device or process)....: $s.#prt
```

To change the output file after installation, modify the PATHCONF file or the NRUN macro. For information on changing the output file, see Specifying the Output File for the SF13–Print Function on page 3-5.

o. Specify whether to enable the Audit Trail Facility:

```
Enable Audit Trail Facility (Y/[N])..........: n
```

p. Specify whether HIGHPIN is on for TCP (if so, you can use only systems running D-series or G-series RVUs to run NetBatch-Plus):

```
If TCP HIGHPIN ON, only terminals on D-series systems can
be used
TCP HIGHPIN (ON/[OFF]) <OFF> ..............: ON
```

q. Specify whether HIGHPIN is on for the Utility server (if so, you can use only systems running D-series or G-series RVUs to run NetBatch-Plus):

```
If Utility server has HIGHPIN ON, only terminals on
D-series systems can be used. Only utilities that tolerate
a high PIN requester will run.
Utility Server HIGHPIN (ON/[OFF])............: ON
```

r. Specify whether HIGHPIN is on for the Main server (if so, you can use only systems running D-series or G-series RVUs to run NetBatch-Plus):

```
If Main server has HIGHPIN ON, all NETBATCH servers used
by NetBatch-Plus must be D11 or greater.
Main Server HIGHPIN (ON/[OFF])..............: ON
```

s. Specify whether to use a daily bulk submittal:

```
Daily Bulk Submit 24-hour Window ([Y]/N) ....: Y
```

t. Specify the volume and subvolume where TCPLIB resides:

```
Location of TCPLIB ([$SYSTEM.ZPATHWAY]) .....:
```

7. Confirm the parameters you entered throughout Step 6.

   INSTALL displays all the parameters you entered and prompts you to accept or modify them:

```
------ (RETURN) to Continue or (Number) to Modify ------
(RETURN) or (Number) :
```

   - To accept the parameters as displayed and continue with installation, press RETURN.
   - To change a parameter before continuing:
     a. Enter its line number at the prompt and press RETURN.

        The INSTALL macro returns the parameter for you to change.

     b. Make the change, then press RETURN.

        INSTALL redisplays all parameters for confirmation.

     c. Repeat this process until all parameters are correct.

   When you press RETURN, the INSTALL macro processes the installation based on your parameters. INSTALL displays the processing steps. When processing finishes, INSTALL displays:

```
NetBatch-Plus has been installed successfully ...
NetBatch-Plus INSTALL completed ...
Closing $volume.NBPDAT.INSTLOG ...
```

   INSTALL then returns you to the TACL prompt.

8. Log on as the super ID (SUPER.SUPER).

9. Change the current volume and subvolume to the object file subvolume containing the program and server files PB0010O, PB9000O, PS0000O, and PS0130O:

```
$SYSTEM STARTUP 37> VOLUME $DATA.NBPOBJ
$DATA7 NBPOBJ 38>
```

10. License these files:

```
$DATA7 NBPOBJ 38> FUP LICENSE
(PB00100,PB9000o,PS0000O,PS0130O)
```

You can now:

Configure and start the NetBatch-Plus Pathway system	Configuring and Starting the NetBatch-Plus Pathway System on page 2-11
Run and sign on to the NetBatch-Plus application	Running the NetBatch-Plus Application on page 2-12
Set up the NetBatch-Plus processing environment	Section 4, Setting Up the Processing Environment

Configuring and Starting the NetBatch-Plus Pathway System

Before you can run the NetBatch-Plus application, you must configure and start its Pathway system. For descriptions of these general tasks for configuring and starting any Pathway system, see the *Pathway/TS System Management Manual*:

- Starting the Pathway monitor process (PATHMON) and the command interface to that process (PATHCOM)
- Configuring the PATHMON process and Pathway system and starting Pathway operations
- Configuring and starting the Pathway objects (TCPs, PATHWAY terminals, server classes)

The NetBatch-Plus application performs these startup and configuration tasks for you when you invoke either of two TACL macros created by the NetBatch-Plus installation macro INSTALL. These macros are:

NCOLD Cold starts the Pathway system using configuration information from the PATHCONF file. (For information about this file, see The Pathway Configuration File on page 3-1.) Use the NCOLD macro in either of these circumstances:

- To configure and start a newly installed system for the first time.
- To reconfigure and start a system that has been running before. For information on reconfiguring the Pathway system, see Section 3, Changing the NetBatch-Plus Pathway Configuration.

NCOOL Cool starts the Pathway system using configuration information from an existing NetBatch-Plus Pathway control file (NBPCTL). Use NCOOL to cool start a system that has been running before.

Cold Starting the NetBatch-Plus Pathway System

1. Log on as the owner of the NetBatch-Plus TACL macro NCOLD. (The macro's file security is "OOOO," which means only its owner can invoke it.)

```
$SALES MKTG 19> LOGON 205,70
Password:

$FPP ADMIN 20>
```

2. Change the current volume and subvolume to the NetBatch-Plus object file subvolume. This subvolume contains the NCOLD macro.

```
$FPP ADMIN 20> VOLUME $DATA7.NBPOBJ
```

3. Invoke the NCOLD macro to start the Pathway configuration and startup process.

```
$DATA7 NBPOBJ 21> NCOLD
```

Note. Before starting system configuration, NCOLD purges any existing Pathway control and log files (NBPCTL, NBPLOG, NBPLOG2) from the object file subvolume. If you are cold starting a newly installed system for the first time, these files will not exist. For this reason, the TACL command interpreter displays “File error 11” messages (“File not in directory …”) when NCOLD tries to purge the files. You can ignore these messages.

The examples in this procedure relate to the Installation Example on page 2-5.

Cool Starting the NetBatch-Plus Pathway System

1. Log on as the owner of the NetBatch-Plus TACL macro NCOOL. (The macro’s file security is “OOOO,” which means only its owner can invoke it.)

```
$EDP SPRVSR 70> LOGON 205,70
Password:

$FPP ADMIN 71>
```

2. Change the current volume and subvolume to the NetBatch-Plus object file subvolume. This subvolume contains the NCOOL macro.

```
$FPP ADMIN 71> VOLUME $DATA7.NBPOBJ
```

3. Invoke the NCOOL macro to start the Pathway configuration and startup process.

```
$DATA7 NBPOBJ 72> NCOOL
```

The examples in this procedure relate to the Installation Example on page 2-5.

Running the NetBatch-Plus Application

You can run the NetBatch-Plus application any time after configuring and starting its Pathway system. The TACL macro NRUN (created during the installation process) performs all tasks necessary to start the application on your terminal, including establishing communications between your terminal and the NetBatch-Plus PATHMON process, and running the program that displays the Main Menu screen.

To start the NetBatch-Plus application, invoke the NRUN macro in the NetBatch-Plus object file subvolume. The macro’s file security is “NOOO,” so any user can invoke it. This example of invoking the macro relates to the Installation Example on page 2-5:

```
$FPP ADMIN 104> $DATA7.NBPOBJ.NRUN
```

For information about signing on to the NetBatch-Plus application for the first time after installation, see 2. Sign On for the First Time on page 4-16. For information on setting up the processing environment after installation, see Planning Guidelines on page 4-2 and Setup Procedures on page 4-16.

Shutting Down the NetBatch-Plus Pathway System

To shut down the NetBatch-Plus Pathway system at any time, invoke the TACL macro NSHUT. This macro (created during the installation process) performs all tasks necessary to effect an orderly shut down of the system. These tasks include stopping the terminals, the TCPs, and any unopened servers. The tasks also include writing the internal configuration and directory information to the Pathway control file (NBPCTL) and stopping the PATHMON process. The macro does not affect executing jobs.

To restart the Pathway system after shutting it down, invoke the NCOLD macro (for a cold start) or NCOOL macro (for a cool start). For more information on these macros, see Configuring and Starting the NetBatch-Plus Pathway System on page 2-11.

To shut down the NetBatch-Plus Pathway system:

1. Log on as the owner of the NetBatch-Plus TACL macro NSHUT. (The macro's security is "OOOO," which means only its owner can invoke it.)

```
$CHQ ACCOUNT 246> LOGON 205,70
Password:

$FPP ADMIN 247>
```

2. Invoke the NSHUT macro to shut down the NetBatch-Plus Pathway system. The macro resides in the NetBatch-Plus object file subvolume.

```
$FPP ADMIN 247> $DATA7.NBPOBJ.NSHUT
```

The examples in this procedure relate to the Installation Example on page 2-5.

Migrating a NetBatch-Plus Database

This subsection describes how to migrate a NetBatch-Plus database from one system to another system. This is particularly useful for users migrating from an HP NonStop K-series system to a NonStop S-series system.

When migrating to a new system, you must change or update many job attributes. The DBUPDATE tool lets you perform these changes and updates in bulk rather than having to manually update each instance of each attribute.

DBUPDATE is a Pathway application that updates default-set details, job definitions, and attachment-sets. Through DBUPDATE you can change these attributes of default set details and job definitions:

- System name
- Executor program
- Infile
- Outfile
- Volume

DBUPDATE also updates these attributes of attachment sets:

- Node name
- Volume name

Installing DBUPDATE

Automated DBUPDATE installation files are shipped in the NetBatch-Plus DSV (T9189ABG or later). The installation macro for DBUPDATE is similar to the macro for NetBatch-Plus. This procedure assumes you already installed NetBatch-Plus so the DBUPDATE subvolume is already on your system.

This procedure includes example entries for prompts. Use your own system information, not necessarily these example entries. Options in brackets ([ ]) are defaults. If no options are displayed in brackets, you must enter a value. You cannot skip any step.

1. In the ZNBPLUS subvolume, run the DBUPDATE installation macro:

   ```
   > RUN DINSTALL
   ```

   The installation macro displays:

   ```
   NetBatch-Plus:DBUPDATE Tool T9189D48 - (19APR2002^ABG)
   COPYRIGHT 2002 Compaq Information Technologies Group, L.P.

   Created $volume.DBUPDATE.DINSTLOG

   Please enter information at the following prompts.
   (Press the BREAK key to abort the installation)
   ```

a. Enter the user name or number for the DBUPDATE system owner.

b. Enter the subvolume (with or without the volume) containing database files to update.

   If the database files are inconsistent in the specified subvolume, DINSTALL displays:

```
The DATABASE files are inconsistent.
One or all of the following files are missing from the
subvolume.
...

Do you want to continue with installation?
```

c. Enter Y to continue the installation.

d. Enter the subvolume (with or without the volume) for the object files.

   DINSTALL displays the valid range of CPU numbers and lists the inactive CPUs.

e. Enter the PATHMON primary CPU:

```
PATHMON CPU number ..........   (Primary CPU) : 1
```

f. Enter the PATHMON backup CPU:

```
PATHMON CPU number ..........   (Backup  CPU) : 2
```

g. Enter the TCP primary CPU:

```
TCP CPU number ..............   (Primary CPU) : 1
```

h. Enter the TCP backup CPU:

```
TCP CPU number ..............   (Backup  CPU) : 2
```

i. Enter the main server primary CPU:

```
DBUPDATE server CPU number ...   (Primary CPU) : 1
```

j. Enter the main server backup CPU:

```
DBUPDATE server CPU number ...   (Backup  CPU) : 2
```

k. Enter the DBUPDATE PATHMON process name:

```
DBUPDATE's PATHMON process name "$xxxx" ..... : $dbt
```

l. Enter the DBUPDATE SERVER process name:

```
DBUPDATE's SERVER  process name "$xxxx" ..... : $dbts
```

m. Enter the home and TCP termianl:

```
Home and TCP terminal "\node.$dev" .......... : $zhome
```

n. Enter the out terminal:

```
Out terminal "\node.$device" ............. : $ymiop.#clci
```

o. Enter the print file for screen:

```
Print file for screen (device or process) .... : $s.#p
```

p. Indicate whether TCP HIGHPIN is on:

```
If TCP HIGHPIN ON, only terminals on D-series or G-series
systems can be used
TCP HIGHPIN (ON/[OFF]) <OFF> ................. :
```

q. Indicate whether HIGHPIN is on for the DBUPDATE server:

```
DBUPDATE Server HIGHPIN (ON/[OFF]) ........... :
```

r. Enter the location of TCPLIB:

```
Location of TCPLIB ([$SYSTEM.ZPATHWAY]) ...... :
```

DINSTALL displays all the parameters you entered and prompts you to accept or modify them:

```
------ (RETURN) to Continue or (Number) to Modify ------
(RETURN) or (Number) :
```

- To accept the parameters as displayed and continue with installation, press RETURN.
- To change a parameter before continuing:
  a. Enter its line number at the prompt and press RETURN.

     The DINSTALL macro returns the parameter for you to change.

  b. Make the change, then press RETURN.

     DINSTALL redisplays all parameters for confirmation.

  c. Repeat this process until all parameters are correct.

When you press RETURN, the DINSTALL macro processes the installation based on your parameters. DINSTALL displays the processing steps. When processing finishes, DINSTALL displays:

```
DBUPDATE Tool INSTALL completed successfully ...
Closing $volume.DBUPDATE.DINSTLOG ...
```

DINSTALL then returns you to the TACL prompt.

2. Cold start and configure the DBUPDATE Pathway environment:

   a. Switch to the object subvolume you specified to DINSTALL.

   b. Run the DBUPDATE cold start macro:

      ```
      > RUN DCOLD
      ```

      DCOLD configures the DBUPDATE Pathway environment, then returns you to the TACL prompt.

      You can now use DRUN to run DBUPDATE from this subvolume.

Cool Starting the DBUPDATE Pathway Environment

If your DBUPDATE Pathway environment was configured before using the DCOLD macro, cool start the environment using the cool start macro:

```
> RUN DCOOL
```

DCOOL starts the Pathway environment using the previous Pathway control file.

When the macro finishes, it returns you to the TACL prompt. You can now use DRUN to run DBUPDATE from this subvolume.

Running DBUPDATE

1. From a TACL prompt, run DBUPDATE:

   ```
   > RUN DRUN
   ```

2. Log on using the SUPER.SUPER ID.

   DBUPDATE displays the menu screen, which contains three options:

   - Default set details
   - Job definition
   - Attachment sets

Changing Default Set Details or Job Definitions

1. From the menu screen, select either Default set details or Job definition.

   DBUPDATE asks you which field to update:

   - Scheduler
   - Executor program
   - Infile
   - Outfile
   - Volume

2. Select the field to update.

   - If you choose to change the scheduler, DBUPDATE asks whether you are changing only the node or also the scheduler name:
     - To change the node only, you must enter the old and new node names.
     - To change the node and scheduler names, enter the old and new node names, and the old and new scheduler names.
   - If you choose to change any other field, you must enter the old and new node names, and the appropriate old and new volume names.

DBUPDATE informs you when the change is complete and returns you to the same screen so you can perform further updates.

3. Choose more fields to update or exit DBUPDATE.

Changing Attachment Sets

You can modify only CATALOG and ASSIGNS.

1. From the menu screen, select Attachment sets.
2. Specify whether you are changing only the node or also the node and volume name:
   - To change the node only, you must enter the old and new node names.
   - To change the node and volume names, enter the old and new node names, and the old and new volume names.

   DBUPDATE informs you when the change is complete and returns you to the same screen.

Shutting Down the DBUPDATE Pathway Environment

When you are finished using DBUPDATE, shut down its Pathway environment:

1. Press Shift-F16 to exit DBUPDATE.

   DBUPDATE returns you to the TACL prompt.
2. Run the DBUPDATE Pathway shutdown macro:

   ```
   > RUN DSHUT
   ```

   When the Pathway environment for DBUPDATE is shut down, DSHUT returns you to the TACL prompt.
3. To confirm that the environment is shut down and that no object files are open:

   ```
   > fileinfo
   ```

   The files in the subvolume appear. An O next to the file name indicates that the file is open by a process.

3

Changing the NetBatch-Plus Pathway Configuration

This section explains how to make changes to the NetBatch-Plus Pathway system:

Topic	Page
The Pathway Configuration File	3-1
Changing the Pathway Configuration	3-1
Customizing NetBatch-Plus Screens	3-2
Specifying the Output File for the SF13–Print Function	3-5

The Pathway Configuration File

The Pathway configuration file for the NetBatch-Plus application is PATHCONF. This file contains the PATHCOM commands used to configure the NetBatch-Plus Pathway system. The PATHCOM process executes the commands when you invoke the cold start macro NCOLD.

PATHCONF is an EDIT-format file created by the NetBatch-Plus installation macro INSTALL. INSTALL creates the file in the object file subvolume and gives ownership to the user specified at the start of the installation process. PATHCONF file security is “OOOO.”

In its standard form, PATHCONF contains enough information to configure a working NetBatch-Plus Pathway system. By changing that information, you can alter the standard configuration to suit your own processing environment.

Changing the Pathway Configuration

To customize your NetBatch-Plus Pathway system, use the EDIT text editing program to change information in the PATHCONF file. The changes do not take effect until you shut down the existing Pathway system and cold start the new one.

To change the Pathway configuration:

1. Shut down the existing NetBatch-Plus Pathway system. To do this, invoke the macro NSHUT supplied with NetBatch-Plus software. For information on using NSHUT, see Shutting Down the NetBatch-Plus Pathway System on page 2-13.
2. Edit the PATHCONF file as necessary.
3. Cold start the new NetBatch-Plus Pathway system by invoking the macro NCOLD (supplied with NetBatch-Plus). For information on using NCOLD, see Configuring and Starting the NetBatch-Plus Pathway System on page 2-11.

Customizing NetBatch-Plus Screens

You can customize these two NetBatch-Plus screens:

- Reports
- Utility Menu

Customizing the Reports Screen

You can substitute your own reports for those on the Reports screen by changing, in PATHCONF, the report ASSIGNs and PARAMs for the utility server (PS0130).

- Report ASSIGNs specify the Enform compiled query files or EDIT-format source files of the reports. For a list of these files for the standard reports supplied with NetBatch-Plus software, see Report Types on page 7-1.
- Report PARAMs specify the report names displayed on the Reports screen.

Figure 3-1 shows the ASSIGNs and PARAMs for the standard Reports screen. The ASSIGN and PARAM names indicate the relative positions of the reports on the screen. The names also indicate the function keys used to execute the reports. For example, REPORT6 indicates a report in sixth position that you execute by pressing F6.

Note. The Catalogs report and Job Attachments report supplied with NetBatch-Plus software do not appear on the standard Reports screen. However, the PATHCONF file includes the ASSIGNs and PARAMs for these reports, but as comment text. You can substitute either or both of these reports for other reports as necessary.

Figure 3-1. Utility Server ASSIGNs and PARAMs for the Standard Reports Screen

```
SET SERVER PROGRAM $DATA7.NBPOBJ.PS0130O, LINKDEPTH 30
.
.
SET SERVER (ASSIGN REPORT1,  $DATA7.NBPDAT.ENFORM01)
SET SERVER (PARAM REPORT1 “Defaults Sets”)
SET SERVER (ASSIGN REPORT2,  $DATA7.NBPDAT.ENFORM03)
SET SERVER (PARAM REPORT2 “Job Definitions”)
SET SERVER (ASSIGN REPORT3,  $DATA7.NBPDAT.ENFORM05)
SET SERVER (PARAM REPORT3 “Dependent-Master Jobs”)
SET SERVER (ASSIGN REPORT4,  $DATA7.NBPDAT.ENFORM67)
SET SERVER (PARAM REPORT4 “Master-Dependent Jobs”)
SET SERVER (ASSIGN REPORT5,  $DATA7.NBPDAT.ENFORM68)
SET SERVER (PARAM REPORT5 “Bulk Job Selection Criteria”)
SET SERVER (ASSIGN REPORT6,  $DATA7.NBPDAT.ENFORM07)
SET SERVER (PARAM REPORT6 “Calendar by Category”)
SET SERVER (ASSIGN REPORT7,  $DATA7.NBPDAT.ENFORM09)
SET SERVER (PARAM REPORT7 “Calendar by Date”)
SET SERVER (ASSIGN REPORT8,  $DATA7.NBPDAT.ENFORM06)
SET SERVER (PARAM REPORT8 “Security Details”)
.
.
ADD SERVER PS0130
```

Customization Example

Figure 3-2 gives an example of the PATHCONF changes necessary to substitute one of the reports shown on the Reports screen with another. In the example, the Job Attachments report replaces the Calendar by Category report from Figure 3-1 on page 3-2. The substitution involves changing the ASSIGN and PARAM for REPORT6. The ASSIGN identifies the report's ENFORM compiled query file. The PARAM specifies the name of the report that appears on the screen.

Figure 3-2. Reports Screen Customization Example

```
SET SERVER PROGRAM $DATA7.NBPOBJ.PS0130O, LINKDEPTH 30
.
.
SET SERVER (ASSIGN REPORT1,  $DATA7.NBPDAT.ENFORM01)
SET SERVER (PARAM REPORT1 "Defaults Sets")
SET SERVER (ASSIGN REPORT2,  $DATA7.NBPDAT.ENFORM03)
SET SERVER (PARAM REPORT2 "Job Definitions")
SET SERVER (ASSIGN REPORT3,  $DATA7.NBPDAT.ENFORM05)
SET SERVER (PARAM REPORT3 "Dependent-Master Jobs")
SET SERVER (ASSIGN REPORT4,  $DATA7.NBPDAT.ENFORM67)
SET SERVER (PARAM REPORT4 "Master-Dependent Jobs")
SET SERVER (ASSIGN REPORT5,  $DATA7.NBPDAT.ENFORM68)
SET SERVER (PARAM REPORT5 "Bulk Job Selection Criteria")
SET SERVER (ASSIGN REPORT6,  $DATA7.NBPDAT.ENFORM04)
SET SERVER (PARAM REPORT6 "Job Attachments")
SET SERVER (ASSIGN REPORT7,  $DATA7.NBPDAT.ENFORM09)
SET SERVER (PARAM REPORT7 "Calendar by Date")
SET SERVER (ASSIGN REPORT8,  $DATA7.NBPDAT.ENFORM06)
SET SERVER (PARAM REPORT8 "Security Details")
.
.
ADD SERVER PS0130
```

Customizing the Utility Menu Screen

You can change all programs and Pathway applications shown on the Utility Menu screen except BATCHCOM, the NetBatch command interpreter. You make the changes to the screen by changing, in PATHCONF, the utility ASSIGNs and PARAMs for the utility server (PS0130).

- Utility ASSIGNs can specify:
  - For programs, the names of the program object files. For example, $SYSTEM.SYSTEM.TACL.
  - For Pathway applications, the names of the PATHMON processes for those applications. For example, \WORLD.$TRPM specifies the PATHMON process for the Pathway application PS MAIL 6530.
- Utility PARAMs specify program object files for Pathway applications. For example, M6530-1 specifies the program object file for PS MAIL 6530.

Figure 3-3 on page 3-4 shows the ASSIGNs for the standard Utility Menu screen. (There are no PARAMs because there are no Pathway applications on the standard screen.) The ASSIGN names indicate the relative positions of the programs on the

screen. For example, OPTION1 indicates the program is the first program listed on the screen after BATCHCOM, OPTION5 the fifth program, and so on.

Figure 3-3. Utility Server ASSIGNs for the Standard Utility Menu Screen

```
SET SERVER PROGRAM $DATA7.NBPOBJ.PS0130O, LINKDEPTH 30
.
.
SET SERVER (ASSIGN OPTION1,  $SYSTEM.SYSTEM.PERUSE)
SET SERVER (ASSIGN OPTION2,  $SYSTEM.SYSTEM.SPOOLCOM)
SET SERVER (ASSIGN OPTION3,  $SYSTEM.SYSTEM.PATHCOM)
SET SERVER (ASSIGN OPTION4,  $SYSTEM.SYSTEM.FUP)
SET SERVER (ASSIGN OPTION5,  $SYSTEM.SYSTEM.EDIT)
SET SERVER (ASSIGN OPTION6,  $SYSTEM.SYSTEM.TACL)
SET SERVER (ASSIGN OPTION7,  $SYSTEM.SYSTEM.TMFCOM)
SET SERVER (ASSIGN OPTION8,  $SYSTEM.SYSTEM.PUP)
SET SERVER (ASSIGN OPTION9,  $SYSTEM.SYSTEM.TEDIT)
SET SERVER (ASSIGN OPTION10,  $SYSTEM.SYSTEM.BATCHCAL)
SET SERVER (ASSIGN OPTION11,  $SYSTEM.SYSTEM.ENFORM)
SET SERVER (ASSIGN OPTION12,  $SYSTEM.SYSTEM.SQLCI)
.
.
ADD SERVER PS0130
```

Customization Example

Figure 3-4 gives an example of the PATHCONF changes necessary to substitute a Pathway application for a program on the Utility Menu screen. In the example, the Pathway application PS MAIL 6530 replaces the SQLCI option from Figure 3-3 on page 3-4. The substitution involves specifying both an ASSIGN and a PARAM. The ASSIGN identifies the application's PATHMON process. The PARAM specifies the application's program object file.

Figure 3-4. Utility Menu Customization Example

```
SET SERVER PROGRAM $DATA7.NBPOBJ.PS0130O, LINKDEPTH 30
.
.
SET SERVER (ASSIGN OPTION1,  $SYSTEM.SYSTEM.PERUSE)
SET SERVER (ASSIGN OPTION2,  $SYSTEM.SYSTEM.SPOOLCOM)
SET SERVER (ASSIGN OPTION3,  $SYSTEM.SYSTEM.PATHCOM)
SET SERVER (ASSIGN OPTION4,  $SYSTEM.SYSTEM.FUP)
SET SERVER (ASSIGN OPTION5,  $SYSTEM.SYSTEM.EDIT)
SET SERVER (ASSIGN OPTION6,  $SYSTEM.SYSTEM.TACL)
SET SERVER (ASSIGN OPTION7,  $SYSTEM.SYSTEM.TMFCOM)
SET SERVER (ASSIGN OPTION8,  $SYSTEM.SYSTEM.PUP)
SET SERVER (ASSIGN OPTION9,  $SYSTEM.SYSTEM.TEDIT)
SET SERVER (ASSIGN OPTION10,  $SYSTEM.SYSTEM.BATCHCAL)
SET SERVER (ASSIGN OPTION11,  $SYSTEM.SYSTEM.ENFORM)
SET SERVER (ASSIGN OPTION12,  \WORLD.$TRPM)
SET SERVER (PARAM OPTION12 “M6530-1”)
.
.
ADD SERVER PS0130
```

Specifying the Output File for the SF13–Print Function

The SF13–Print function is common to all NetBatch-Plus screens. The function copies the first 24 lines of a screen to an output file configured for the terminal. The file can be a device or a process, but not a disk file.

Specifying the Default Output File

When you cold start the NetBatch-Plus Pathway system, the SET PROGRAM PRINTER command in the PATHCONF file sets the default output file for screen copies. Figure 3-5 shows the command in a sample PATHCONF file.

Figure 3-5. SET PROGRAM PRINTER Command in PATHCONF

```
SET PROGRAM TYPE T16-6530 (INITIAL PR0000, DISPLAY-PAGES 10)
.
.
SET PROGRAM PRINTER \WORLD.$S.#PRT
.
.
ADD PROGRAM PR0000
```

By editing PATHCONF, you can change the default output file for your system. The change takes effect after you shut down and then cold start the Pathway system.

An alternative to changing the default output file in PATHCONF is to change it with the PATHCOM command ALTER PROGRAM. For example:

```
$DATA7 NBPOBJ 26> PATHCOM $NBP; ALTER PR0000, PRINTER $S.#LP1
```

ALTER PROGRAM changes the file specified in the Pathway control file NBPCTL but not in PATHCONF. The change takes effect as soon as the PATHCOM process executes the command and remains effective until changed again by ALTER PROGRAM or until the next cold start. HP recommends that you use ALTER PROGRAM to change the default output file when frequent changes of file are necessary.

Overriding the Default Output File

To override the default output file for a NetBatch-Plus session, do either of:

- Run the NetBatch-Plus application with a PATHCOM command instead of invoking the NRUN macro. You can include the PRINTER parameter in the command. For example:

  ```
  $DATA7 NBPOBJ 143> PATHCOM $NBP; RUN PR0000, PRINTER $S.#A
  ```

- Add the PRINTER parameter to the RUN PROGRAM command in the NRUN macro. Whenever you invoke the macro, the specified output file overrides the

default for the duration of the NetBatch-Plus session. Figure 3-6 shows the relevant lines in an NRUN macro modified to include the PRINTER parameter.

Figure 3-6. PRINTER Parameter in Modified NRUN Macro

```
?TACL MACRO
COMMENT   NRUN - NetBatch-Plus Startup TACL Macro
.
.
PATHCOM $NBP; RUN PR0000, PRINTER \SALES.$E02.#T161
```

4

Setting Up the Processing Environment

This section describes how to plan and set up your NetBatch-Plus processing environment:

Topic	Page
Planning Guidelines	4-2
Setup Procedures	4-16

Processing environment is a general term used in this manual to describe the working configuration of the NetBatch-Plus system.

The procedural instructions do not contain detailed information about screen fields and functions. For this information, see Section 6, NetBatch-Plus Screens.

Planning Guidelines

The NetBatch-Plus application offers a wide range of facilities that simplify batch job setup, submission, and management. These facilities are powerful productivity aids whose benefits you can maximize through careful planning of your batch processing environment.

This subsection discusses general guidelines to help you plan an effective processing environment for your organization. An effective processing environment uses all NetBatch-Plus facilities, increasing your productivity gains.

Topic	Page
Recording Planning Information	4-2
1. Identify Existing and Potential Batch Jobs	4-3
2. Plan Schedulers	4-4
3. Plan Classes and Executors	4-5
4. Plan Defaults Sets	4-8
5. Plan User Access to Screens and Functions	4-9
5. Detailed Job Planning	4-11
6. Plan Catalog Attachments	4-11
7. Plan for Bulk Submit Processing	4-13

These planning guidelines are only guidelines. They give direction to your planning activities but do not impose a rigid planning methodology. Use the guidelines as a source of planning advice, suggestions, and recommendations. Used in this way, the guidelines help you create an effective processing environment that works the way you want and satisfies your organization’s batch processing needs.

Recording Planning Information

The key to planning an effective processing environment is careful and thorough research of your organization's batch processing needs. You must record information resulting from your research in a way that optimizes its usefulness. One way to do this is to record the information in tabular form. Information in tables is usually easier to read and interpret than information presented by other means such as lists.

The examples in this subsection illustrate planning guidelines use tables to present their information. You can adapt these tables as necessary to suit your needs.

Although tables are useful for recording general planning information, they are not always suitable for recording the actual data you enter during setup. In these circumstances, you can record the data on screen copies printed by the SF13–Print function. (For information on using this function, see “Functions” in any subsection of Section 6, NetBatch-Plus Screens. For information on specifying the screen output file, see Specifying the Output File for the SF13–Print Function on page 3-5.)

You can usually derive the data you record on screen copies from information in one or more of your tables. For example, you can derive detailed setup information about schedulers from the table you create listing general scheduler information.

As well as offering you a convenient means of recording setup information, screen copies let you keep hard copy records of your setup data. These records are useful, for example, as reference aids when you want to reset part or all of the processing environment to its original configuration.

1. Identify Existing and Potential Batch Jobs

Create a table listing general information about your organization's existing and potential batch jobs. This table helps you identify job types (for example, program compilations and backups), shared attributes, and CPU-resource and I/O-resource requirements. This information also helps you complete all other planning activities.

Example

Figure 4-1 is an example of a batch job table you can adapt for your own use. In the example, the Job Description column lists actual jobs (for example, Daylog) as well as job types (for example, COBOL Compiles). The remaining columns list information about the jobs. In your table, you can have extra columns listing estimated number of jobs within a type, job duration and frequency, and job priority, and so on.

Figure 4-1. Example of a Job Table

Job Description	Owner	Job Security	Executor Program	Executor Program Nodes	CPU-Bound	I/O-Bound	Tape Drives	Output File
Backups—Daily	205, 255	OOOO	TACL	\DEVELOP		x	1	$S.#DLYBKUP
Backups—Weekly	19, 255	GOGO	TACL	\ADMIN \DEVELOP		x	2	$S.#WKBKUP
Backups—Monthly	255, 255	AG--	TACL	\ADMIN \DEVELOP \WORLD		x	3	$S.#MTHBKUP
COBOL Compiles	Various	AGG-	COBOL	\DEVELOP	x		Nil	$S.#COMPILE
Daylog	255, 205	GOGO	TACL	\WORLD		x	Nil	$FPP.SPRVSR.DLOG
End-of-Period Reports	19, 4	GGGO	ENFORM	\ADMIN		x	Nil	$S.#ADMIN
File Copies to Tape	205, 70	AAAA	FUP	\DEVELOP		x	1	$S.#TCOPY
Interest Calculations	25, 5	GOO-	TACL	\WORLD	x		Nil	\ADMIN.$T4.#A

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Information in the table helps you plan schedulers, executors, and classes as well as defaults sets and jobs. For example, information in the Executor Program, Executor Program Nodes, and Tape Drives columns helps you plan your system's schedulers. The CPU-Bound and I/O-Bound columns contain information helpful in planning executors and classes. (A CPU-bound job is a job whose processing takes place predominantly in a CPU, with few references to I/O resources such as disk files and tapes. Processing of an I/O-bound job, on the other hand, places a heavy demand on I/O resources but few demands on CPU resources.)

2. Plan Schedulers

Information from your table of existing and potential batch jobs helps you plan the NetBatch schedulers for your NetBatch-Plus system. You can record this planning information on another table. The information from this new table lets you derive the details you need to fully define each scheduler.

Planning Considerations and Recommendations

The number of schedulers you need depends on the number of nodes on your system, the number of jobs you want to run concurrently, and your organization's NetBatch-Plus testing and training needs. This subsection discusses these dependencies.

As a rule, plan no more than one scheduler on each node where you need batch processing facilities. A single scheduler on a node is usually enough to satisfy users' batch processing requirements on that node.

The benefits of limiting the number of schedulers to one per node come from simplified job and system management. You can manage CPU resources and job flow more efficiently and easily with one scheduler than with multiple schedulers. Also, you have only one scheduler database to maintain and one scheduler log file to check for details of scheduler events. NetBatch-Plus does not prevent you from having more than one scheduler on a node, but the tradeoff as you increase the number of schedulers is more complex job and system management.

There are two exceptions to the rule "one scheduler per node." These exceptions relate to schedulers needed for testing and training purposes and to the multiple schedulers necessary when you want to run more than 64 **concurrent jobs** (the maximum for a scheduler).

- For testing and training purposes, plan at least one additional scheduler. Staff who want to test jobs they are developing can use this scheduler for test runs instead of your production scheduler. Similarly, staff learning how to use NetBatch-Plus can familiarize themselves with scheduler management functions without the risk of damaging the production scheduler.
- For processing environments where more than 64 concurrent jobs are likely, you need as many schedulers as necessary to cope with the job load. For example, if you want to run 100 jobs concurrently, you need at least two schedulers.

A final consideration relates to scheduler naming conventions. Because you can use wild-card characters on some screens to specify multiple schedulers, consider giving schedulers names you can mask easily with those characters.

Example

Figure 4-2 is an example of a table listing details of the schedulers planned for a 3-node system. Information in the Node and Scheduler Attribute columns was derived from information in the Executor Program, Executor Program Nodes, and Tape Drives columns on the job table in Figure 4-1 on page 4-3. For example, the TACL command interpreter was chosen as the DEFAULT-EXECUTOR-PROGRAM attribute for the scheduler on \ADMIN because most jobs on that node have a TACL process as their executor program.

Figure 4-2. Example of a Scheduler Table

Node	Scheduler Name	Scheduler Owner	DEFAULT-EXECUTOR-PROGRAM Scheduler Attribute	TAPEDRIVES Scheduler Attribute
\ADMIN	$MGR	255, 205	$SYSTEM.SYSTEM.TACL	2
\DEVELOP	$DEV	255, 002	$SYSTEM.SYSTEM.COBOL	3
\WORLD	$ZBAT	255, 255	$SYSTEM.SYSTEM.TACL	2

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3. Plan Classes and Executors

After planning the schedulers for your NetBatch-Plus system, you can plan the classes and executors for each of those schedulers. As with schedulers, record your class and executor planning information on a table. The information from this table will help you later when you fully define the classes and executors for all your schedulers.

Planning Considerations and Recommendations

Classes

Before planning a scheduler’s classes, you must understand their main function in NetBatch-Plus processing. Classes function primarily as CPU resource managers. Via their INITIATION attribute, classes let you control the flow of jobs to executors and therefore to the CPUs associated with those executors. Thus, classes help you balance the job workload across all CPUs in your system.

Classes are most effective as CPU resource managers when they cater for jobs with similar CPU requirements. For this reason, plan at least one class for use specifically by CPU-bound jobs. Plan other classes for I/O-bound jobs.

To further enhance the effectiveness of CPUs as resource managers, have classes catering for jobs with similar processing times. For example, plan classes for long jobs and classes for short jobs.

You can also use classes to group jobs that have a common function or purpose. For example, you could plan a class for all your organization's payroll jobs, another for all high-priority jobs, and one for all jobs originating from a particular department. Using classes to group jobs in this way, however, can result in a class whose jobs have vastly different CPU-resource requirements and processing times. Jobs from such a class make CPU load balancing difficult. For this reason, use a class to group jobs by function or purpose only after you establish what effect jobs from that class have on CPU-management activities.

NetBatch-Plus does not limit the number of classes you can set up for each scheduler. As the number of classes increases, however, so does the complexity of managing those classes.

To determine a practical limit for class numbers, multiply the number of executors in a scheduler by eight (the maximum number of classes you can assign to an executor). For example, a scheduler with four executors could have 32 classes (8 classes x 4 executors).

As with scheduler names, consider class naming conventions. Because you can use wild-card characters on some screens to specify multiple classes, give classes names you can mask easily with those characters.

Executors

The information you use to plan a scheduler's classes also helps you plan the executors for that scheduler. Executors perform a similar function to classes (controlling CPU workload).

The number of executors you plan depends on how many CPUs are in your system and on the CPU and I/O resource requirements of your jobs. The recommended number of executors for each CPU is four:

- One executor for classes whose jobs are grouped by function or purpose (for example, an executor for jobs in a class used by a particular department).
- One executor for classes whose jobs are CPU-bound.
- Two executors for classes whose jobs are I/O-bound. You can have more than two executors for these classes; this depends on the power of your CPUs and the number of logical devices configured for each CPU. For example, a NonStop Cyclone system with eight disks per CPU can handle more executors than a NonStop CLX system with two disks per CPU.

Before you assign executors to those CPUs, consider existing loads on CPUs. For example, a CPU might be running a critical online Pathway application. Increasing that CPU's workload by directing batch jobs to it via executors might affect the application's

performance. In these circumstances, you might decide to assign only one executor to the CPU or perhaps none.

Planning which classes to assign to an executor is important in setting up an effective processing environment. As a rule, assign classes whose jobs have similar characteristics to executors catering for jobs with those characteristics. For example, assign classes containing CPU-bound jobs to each executor dedicated to processing CPU-bound jobs. Similarly, assign classes for I/O-bound jobs to executors processing I/O-bound jobs, and so on. Assigning a class to more than one executor helps to avoid a job backlog building in that class.

The order in which you assign classes to executors is also important. Jobs in the first class you assign to an executor take priority over jobs in the second class, jobs in the second class have priority over those in the third class, and so on. Varying the order in which you assign classes to executors ensures jobs in those classes have equal processing opportunities.

Example

The table in Figure 4-3 shows the classes and executors planned for a scheduler. For the example, the node where the scheduler runs has 4 CPUs.

Figure 4-3. Example of a Classes and Executors Table

CPUs	0 (All jobs except CPU-bound jobs)			1 (All jobs)				2 (All jobs)				3 (All jobs)			
Executors	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15
Classes	C1	C5	C6	C2	C9	C7	C8	C3	C10	C12	C14	C4	C11	C13	C15
	C2	C6	C7	C3	C10	C8	C5	C4	C11	C13	C15	C1	C9	C12	C14
	C3	C7	C8	C4	C11	C5	C6	C1	C9			C2	C10		
	C4	C8	C5	C1		C6	C7	C2				C3			

Key to Executors

- E1–4, E6–8, E12] For classes containing I/O-bound jobs
- E5, E9, E13] For classes containing CPU-bound jobs
- E10–11, E14–15] For classes containing jobs grouped by function or purpose

Key to Classes

- C1–4, C5–8] For I/O-bound jobs
- C9–11 For CPU-bound jobs
- C12 For department A's jobs
- C13 For end-of-period jobs
- C14 For department B's jobs
- C15 For general ledger jobs

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As well as showing the executors assigned to each CPU, it also illustrates class distribution among those executors. For example, classes C1 through C4 are assigned, in different order, to four executors (E1, E4, E8, and E12), each of which is assigned to a different CPU. Jobs in classes C1 through C4 have equal processing opportunities because each class appears once at the top of a class list, once in second position, and so on.

4. Plan Defaults Sets

After identifying existing and potential batch jobs and planning schedulers, classes, and executors, you can plan the defaults sets for your system. As with schedulers, classes, and executors, you get some of your information from your original job table. This time, however, you use information from all of the other tables created so far.

Planning Considerations and Recommendations

The objective in planning defaults sets is to plan only those sets needed to set up jobs identified in your job table. Because that table highlights similarities between jobs, it helps you identify jobs that can share a common defaults set. Each job you define must have a defaults set.

Users can add their own defaults sets after setup of the initial processing environment. For example, a department manager could define a set for use by all members of the department. Users could also create defaults sets for jobs with similar functions such as payroll or accounts payable jobs.

Example

Figure 4-4 is an example of a table recording planning information about defaults sets. The table contains information derived mainly from the job table. It also contains some information from the scheduler table and classes and executors table.

The example illustrates how features common to jobs running in the same scheduler help you identify defaults sets. In the example, most jobs running in the scheduler \ADMIN.$MGR have the same class, owner, executor program, and output file. These jobs have enough characteristics in common to warrant having their own defaults set. Similarly, you could create a second defaults set for use by jobs B, F, and G, which have most characteristics in common except their executor programs.

Figure 4-4. Example of a Defaults Sets Table

Job	Scheduler	Class	Owner	Executor Program	Output File	Defaults Set
A	\ADMIN.$MGR	C1	205, 255	TACL	$S	Set1
B	\DEVELOP.$DEV	C7	25, 5	TACL	$G	Set2
C	\ADMIN.$MGR	C1	205, 255	TACL	$D	Set3
D	\ADMIN.$MGR	C1	205, 255	ENFORM	$S	Set1
E	\WORLD.$ZBAT	C14	255, 255	TACL	$S	Set4
F	\DEVELOP.$DEV	C7	25, 5	COBOL	$G	Set2
G	\DEVELOP.$DEV	C7	25, 5	FUP	$G	Set2
H	\ADMIN.$MGR	C1	205, 255	TACL	$S	Set1
I	\WORLD.$ZBAT	C14	255, 255	TACL	$S	Set4
J	\ADMIN.$MGR	C1	205, 255	TACL	$S	Set1

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5. Plan User Access to Screens and Functions

You now have enough information about your processing environment to establish details of NetBatch-Plus users. These details include user names and access privileges to screens and functions. Access privileges determine if a user can access a screen for inquiry purposes only or for adding, updating, and deleting records.

Planning Considerations and Recommendations

The number of users you define and their access privileges depends on your organization’s requirements. Whatever those requirements, plan at least one supervisory user who has unlimited access to all NetBatch-Plus screens and functions. This user can take responsibility for all NetBatch-Plus management activities such as setting up users, controlling system access, and so on.

After you decide on a supervisory user, you can plan as many other users as you want. Keep the number of user records to a minimum to simplify management of those records.

One way to reduce the number of user records is by having records for employee groups instead of individual records for each user. For example, you could plan one user record for use by all system operators and another for all accounting department staff. It is not recommended that records be used for user groups, however, if their existence infringes on your organization's system security guidelines. Such records would not be appropriate, for example, when a "one user–one ID" rule is in force.

Access privileges for users other than the supervisory user depend on the roles of those users in your organization. For example, your system operators would need access to all screens whose functions enable them to control job processing. They would not necessarily need access to screens used to maintain NetBatch-Plus database records (such as the catalog screens).

Example

Figure 4-5 is an example of a table used to determine NetBatch-Plus users and their access privileges. The table lists, for a sample organization, information about a supervisory user, users in an operators' group, and four other individual users.

Because of space limitations, the table does not list all NetBatch-Plus screens and functions. However, you can develop your own table that does. You can use information from that table when you define users on the Security Supervise, Screen Security, and Utility Security screens.

Figure 4-5. Example of User's Table

Specified on SECURITY SUPERVISE Screen					Specified on SCREEN SECURITY Screen					Specified on UTILITY SECURITY Screen					
User Name	Deflts Set	Job Environment Limits			Supervisor	Change P'word	Screen Access			Utility Menu Access			Scheduler I/face Access		
		Job Defn	Blk Sbmt	Ad Hoc			Scrn 1	Scrn 2	Scrn *n*	Prgrm 1	Prgrm 2	Prgrm *n*	Scrn 1	Scrn 2	Scrn *n*
Manager (Individual)	Set1	No limits	No limits	No limits	Yes	Yes	M	M		I	I		M	M	
Operator (Group)	Set1	No limits	No limits	No limits	No	No	M	I		I	I		M	M	
User1 (Individual)	Set4	\ADMIN only	\WORLD only	No access	No	Yes	Nil	M		Nil	I		I	I	
User2 (Individual)	Set2	\ADMIN & \DEVELOP only. Limit classes to C1 and C2.			No	Yes	I	I		Nil	I		Nil	Nil	
User3 (Individual)	Set3	No access	\WORLD only	No access	No	Yes	Nil	Nil		I	I		Nil	Nil	
User4 (Individual)	Set1	No limits	No limits	No limits	No	Yes	M	M		I	Nil		I	M	

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The access codes shown in the table are the same as those you enter on the Screen Security and Utility Security screens. For example, M (for Modify) specifies unlimited

access and I (for Inquiry) specifies access for inquiry purposes only. The word “Nil” equates to a blank on either of the two screens and specifies no access.

The values in the Change Password column indicate whether users can change their own passwords. In the example, all users can do this except users who sign on as Operator (that is, members of the operators’ group). Disallowing password changes by these users helps prevent individual group members from changing the password and denying other users access to the system.

5. Detailed Job Planning

Up to now, your planning activities focused on establishing the minimum information required to set up a basic NetBatch-Plus system. For example, you identified your organization’s batch jobs, planned schedulers, executors, and classes, and planned defaults sets and users. However, your planning activities have not yet covered the detailed planning of the batch jobs you identified in your job table.

Detailed job planning involves:

- Establishing all information necessary to set up a job on the Job Definition screen.
- Specifying information about the job’s dependencies (on the Job Dependencies screen), attachments (on the job attachments screens), and bulk job selection criteria (on the Bulk Job Selection Criteria screen).

Although you could set up your NetBatch-Plus system without doing this planning, it is not recommended. Detailed planning saves set up time and helps you eliminate errors in job definitions before data entry begins. Detailed planning also helps you identify attachments you can enter in the attachments catalog. (For more information on attachments catalog planning, see 6. Plan Catalog Attachments.)

Planning Considerations and Recommendations

Initially, plan only jobs you identified in your job table. After you set up your system, users can plan their own jobs as necessary.

The amount of information about a job can be considerable. For example, a job might have multiple attachments and dependencies as well as bulk submit selection criteria. For this reason, record job information directly onto copies of the Job Definition, Job Dependencies, and job attachments screens.

Remember that when you record details of a job on the Job Definition screen, the job’s defaults set supplies some if not all of the job’s attributes.

6. Plan Catalog Attachments

The attachments you planned for some of your jobs might be the same. For example, a PARAM planned for one job might be identical to a PARAM planned for another. By using the catalog attachments facility, you can replace all identical job attachments with

a single catalog attachment. You can then use that attachment for as many jobs as you want, overriding its attributes at the job level when necessary.

Planning Considerations and Recommendations

You derive information about the catalog attachments for your system from the attachments you planned for your jobs. By sorting through those attachments, you can identify attachments shared by a number of jobs. These shared attachments form the basis of your attachments catalog.

To make identifying common attachments easier, create a table similar to Figure 4-6 on page 4-13. By using such a table to indicate which attachments belong to which jobs, you can identify attachments that are common to many jobs.

In some cases, you can have a number of job attachments that differ from one another in a minor way only. For example, three ASSIGNs might be the same except for the physical file they reference. In these circumstances, combine the attachments into one catalog attachment. Users can then use a single catalog attachment as the basis of their job attachments, specifying their own physical file where necessary.

You must associate each catalog attachment with a defaults set. You can select the most appropriate set for this purpose by using the information in your table. For example, where jobs sharing an attachment have the same defaults set, choose that set. Another example is where the attachment is an ASSIGN or map DEFINE. In this case, you can choose the defaults set belonging to the owner of the file referenced by the ASSIGN or DEFINE.

Example

Figure 4-6 on page 4-13 is an example of a catalog attachments table. The table lists a number of jobs and identifies their defaults sets and attachments.

The table contains enough information to allow identification of catalog attachments. For example, all jobs in the table use PARAM P4 with the most common defaults set among those jobs being Set1. The table therefore highlights an obvious catalog PARAM (CP3) for Set1.

The table also shows where catalog attachments are unnecessary. For example, there is no benefit in creating catalog records for ASSIGN A4, PARAMs P2 and P5, and DEFINEs D2 and D5 because there are few occurrences of these attachments.

Figure 4-6. Example of a Catalog Attachments Table

Job	Defaults Set	ASSIGNs					PARAMs					DEFINEs				
		A1	A2	A3	A4	A5	P1	P2	P3	P4	P5	D1	D2	D3	D4	D5
A	Set1	X		X		X			X	X		X		X	X	
B	Set2		X			X	X			X		X				
C	Set3			X	X					X	X	X			X	
D	Set1	X		X		X			X	X		X	X	X		
E	Set4					X	X	X	X	X				X	X	
F	Set2		X			X	X			X				X	X	X
G	Set2		X			X				X		X			X	X
H	Set1	X		X		X			X	X				X		
I	Set4					X	X		X	X			X		X	
J	Set1	X		X		X			X	X		X			X	
Catalog Attachment		CA1	CA2	CA3		CA4	CP1		CP2	CP3		CD1		CD2	CD3	
Defaults Set for Catalog Attachment		Set1	Set2	Set1		Set1	Set4		Set1	Set1		Set1		Set1	Set2	

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7. Plan for Bulk Submit Processing

Bulk submit processing lets users submit, in a single action, many jobs for processing by one or more schedulers.

Planning Considerations and Recommendations

1. Identify job groups.

   The bulk submit facility is most effective as a job submission tool when you use it to submit groups of jobs that usually run together. For example, daily backups might form one such job group in your organization and end-of-month processing jobs another.

- One way to identify job groups is by listing, in date order, the run dates for your jobs. This process suggests obvious job groupings (all jobs due to run on the same date) you might decide are sufficient.
- To take the grouping process one step further, look for specific groups among jobs with common run dates. For example, jobs with a run date of Monday 15 might be daily jobs, jobs that run every Monday, or jobs that run every month on the fifteenth. The relationship between jobs does not have to be calendar-based. The relationship might result from a similar function or purpose. For example, some of the jobs due to run on Monday 15 might be jobs from a particular department.

2. After you identify appropriate job groups, plan the selection criteria for those jobs. Selection criteria are the means by which the bulk submit program selects and submits the jobs for execution. The program can select jobs by a date or category.

   For jobs grouped by function or purpose, choose a suitable category name for the group. For example, ADMIN might be the name for jobs originating from your administration department. For jobs grouped by date, you can specify the selection date explicitly for each job or implicitly via a calendar category. For more information on selection criteria, selection dates, and calendar categories, see Bulk Job Selection Criteria on page 6-6 and Calendar on page 6-23.

3. Establish information about the bulk submit control job. (The control job submits jobs in a bulk submit run to their respective schedulers.) To plan the environment, determine the control job's scheduler, class, owner, and window (both the retention period for temporary output files created during bulk submit runs and the period before execution that users can schedule those runs). The environment also specifies the default output file for bulk submit reports. You therefore need to choose an appropriate location for these reports.

Example

Figure 4-7 on page 4-15 gives an example of a table showing information used to determine calendar categories and other bulk job selection criteria. The table lists and describes jobs, their run dates, and their originating departments.

From the information in the table, you can identify various selection criteria for the jobs. For example, you could create a calendar category called MONTH15 containing the run dates for Job M. For the backup jobs (Jobs N and O), you could use the names BACKUP or OPERATIONS as the selection criterion for those jobs. (BACKUP would be for backups specifically whereas OPERATIONS would be for other jobs from the operations department besides backups.)

Similarly, you could use the name CUSTSERV as the selection criterion for jobs from the customer services department (Jobs K and U).

An alternative to using CUSTSERV is to create a calendar category called FIRSTDAY. This category would contain all first-day-of-month dates. You could use it without qualification for the monthly statements produced by Job U. For Job K, however, you would need to exclude from the job's selection criteria dates other than 01 January and

01 July. You could do this by specifying, on the Bulk Job Selection Criteria screen, each run date when you do not need the statements. You then set the inclusion flag of each date to EX (Exclude). This ensures a bulk submit run selecting jobs by the category FIRSTDAY does not select Job K on the excluded dates.

Figure 4-7. Example of a Selection Criteria Table

Job	Description	Run Date	Department
K	Half-yearly statements	01 July 01 January	Customer Services
L	General ledger updates	Last day of month	Accounts
M	Payroll	15th of month	Administration
N	Backups—daily	Daily	Operations
O	Backups—weekly	Fridays	Operations
P–T	Management reports	During first week of month	Corporate Services
U	Monthly statements	First day of month	Customer
Various	Ad hoc jobs	As necessary	All

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Setup Procedures

This subsection explains how to set up your NetBatch-Plus processing environment.

Each task description contains procedural instructions designed for use with the relevant parts of Section 6, NetBatch-Plus Screens. For this reason, the instructions do not include screen diagrams and specific information about screen functions and fields.

Step	Page
1. Install and Start NetBatch-Plus	4-16
2. Sign On for the First Time	4-16
3. Define Schedulers	4-17
4. Define Classes	4-18
5. Define Executors	4-19
6. Define Defaults Sets	4-20
7. Define NetBatch-Plus Users	4-21
8. Define Catalog Attachments	4-23
9. Define Jobs	4-24
10. Define Job Attachments	4-25
11. Define Job Dependencies	4-26
12. Define the Bulk Submit Environment	4-27
13. Define Calendar Categories	4-28
14. Define Bulk Job Selection Criteria	4-29

1. Install and Start NetBatch-Plus

1. Install NetBatch-Plus software on your system. For installation information, see Installing NetBatch-Plus on page 2-2.
2. Start the NetBatch-Plus Pathway system. For startup information, see Configuring and Starting the NetBatch-Plus Pathway System on page 2-11.

2. Sign On for the First Time

Use this user name and password to sign on to the NetBatch-Plus application when there are no user records in the database:

- User name—NBP. This user has unlimited access to all screens and functions and therefore can perform all setup tasks. You cannot change or delete details of user NBP.
- Password—the Guardian password of the owner of the server object file PS0000O.

To sign on to the NetBatch-Plus application as user NBP:

1. Invoke the NRUN macro to run NetBatch-Plus and display the Main Menu screen. For information on the macro, see Running the NetBatch-Plus Application on page 2-12. For information on the screen, see Main Menu on page 6-178.
2. Enter NBP in the NBP User Name field on the Main Menu screen.
3. Enter the password of user NBP in the Password field. For information on password entry, see Main Menu on page 6-178 and Password Validation on page 6-182.
4. Press F16 to sign on to NetBatch-Plus.

   The application validates the password you entered before granting you access to the system. After you sign on as user NBP, the application gives you access to all its screens and functions.

Note. NetBatch-Plus allows you three attempts to enter the correct password of user NBP. If you enter three incorrect passwords in succession, the application locks your keyboard for one minute.

---

3. Define Schedulers

1. Display the Scheduler Info screen. For information about the fields and functions on this screen, see Scheduler Info on page 6-190.
2. Enter the name of the scheduler you want to define in the Scheduler field.
3. Enter the Guardian user ID of the scheduler owner in the first part of the Owner field. The ID must be that of a super-group user (255, *n*). Enter the owner's password in the second part of the field.
4. Specify, in these fields, the run parameters and options for the scheduler program NETBATCH:

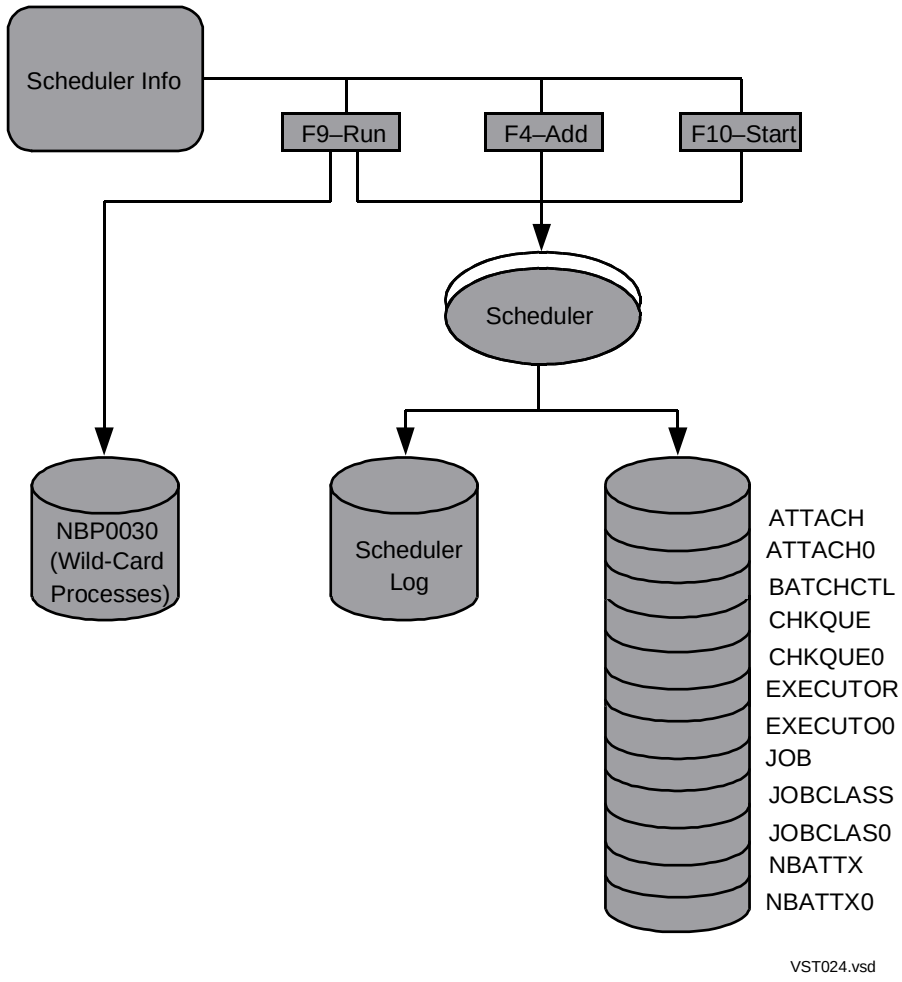
Home Term	IMMU File	Log File	CTL File
Log Vol	Prog Vol	CPU	

5. Specify the attributes of the scheduler in these fields:

Class	At Allowed	Max Lines	Bakcupcpu
Selpri	Exec. Prg.	Submit Allowed	Max Pages
Tapedrives	Pri	Out	Stop On Abend

6. Press F9 to create the primary scheduler process and the scheduler log file. F9 also writes the name of the scheduler to the wild-card processes file NBP0030. To view the contents of this file, use the Wild-Card Processes screen.
7. Press F4 to create and initialize the scheduler database. For descriptions of the files in the scheduler database, see Scheduler Info on page 6-190.
8. Press F10 to create the backup scheduler process and to open the scheduler database.

Figure 4-8. Defining Schedulers



4. Define Classes

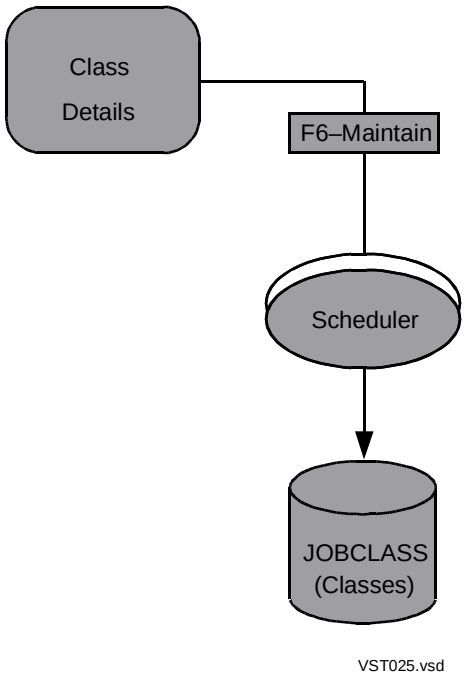
Class definition is the process of defining a scheduler's classes. You can assign classes only to an existing scheduler.

1. Display the Class Details screen. For information on the fields and functions on this screen, see Class Details on page 6-62.
2. In the Scheduler field, enter the name of the scheduler to which you want to assign the classes.
3. Enter a super-group user ID (255, *n*) in the first part of the Owner field. Enter that user's password in the second part of the field.
4. For each class you want to define:
   a. Enter A (for Add) in the A, D, or U column field.
   b. Enter the name of the class in the Name column field.

c. Specify the INITIATION attribute of the class in the Initiation column field. The recommended initial setting is Y, indicating the attribute INITIATION ON. This setting ensures jobs belonging to the class are available for scheduling and execution. You can change the setting to N (indicating INITIATION OFF) at a later stage if necessary.

5. Press F6 to define the classes and to assign them to the specified scheduler. The scheduler writes class details to its database file JOBCLASS.

Figure 4-9. Defining Classes



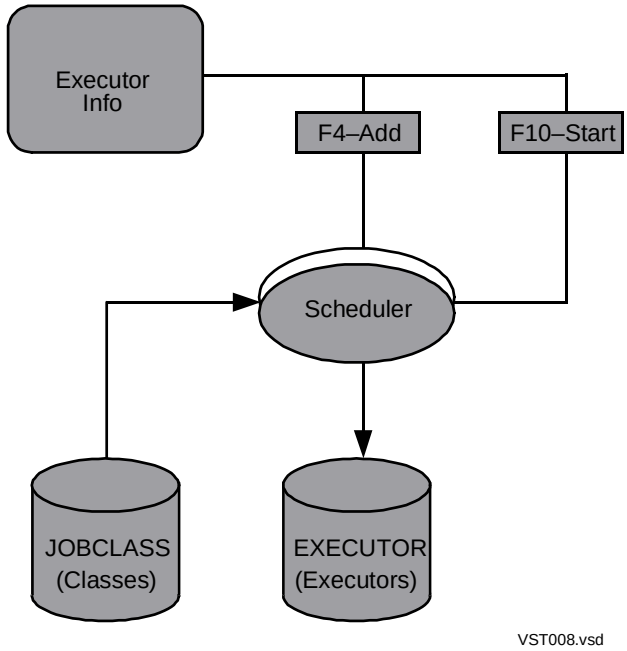
5. Define Executors

Executor definition is the process of defining and starting a scheduler's executors. You can specify existing schedulers and classes only in the executor definition process.

1. Display the Executor Info screen. For information on the fields and functions on this screen, see Executor Info on page 6-76.
2. In the Scheduler field, enter the name of the scheduler to which you want to add the executor.
3. Enter a super-group user ID (255, *n*) in the first part of the Owner field. Enter that user's password in the second part of the field.
4. Enter the name of the executor you want to define in the Executor Name field.
5. Specify the CPU attribute of the executor in the CPU field.
6. Specify the CLASS attribute of the executor in the Classes column fields.

7. Press F4 to define the executor and to add it to the specified scheduler. The scheduler writes executor details to its database file EXECUTOR.
8. Press F10 to start the executor.

Figure 4-10. Defining Executors



6. Define Defaults Sets

Defaults set definition is the process of establishing sets of job attributes and other job-related information.

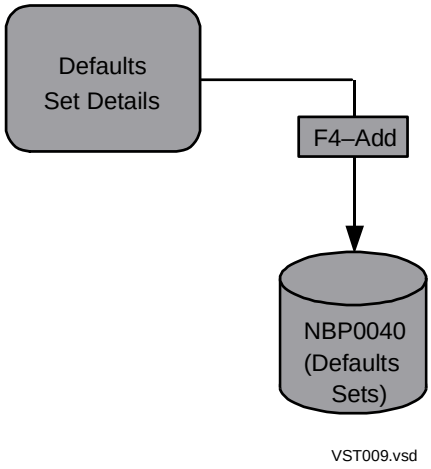
1. Display the Defaults Set Details screen. For information on the fields and functions on this screen, see Defaults Set Details on page 6-67.
2. Enter the name of the set you want to define in the Set field.
3. Enter the name of the scheduler for the defaults set in the Scheduler field.
4. Enter the name of the class for the defaults set in the Class field.
5. Specify the owner and security attributes of the defaults set record:
   a. Enter the Guardian user ID of the owner in the first part of the Owner field. Enter the password of that user in the second part of the field.
   b. Enter the security attributes of the defaults set record in the third part of the field.
6. Specify, in these fields, the job attributes and other job-related information for the defaults set:

Comment	At/Af	Volume	Any User Submit	Wait
Out	Hold	Pri	In	Restart
Selpri	Hold After	Pages	Startup	Stop On Abend
Lines	Exec. Prg.	Time	Drives	

7. Press F4 to create the defaults set.

   NetBatch-Plus writes defaults set details to its database file NBP0040.

Figure 4-11. Defining Default Sets



7. Define NetBatch-Plus Users

NetBatch-Plus user definition involves using the three linked security screens (Security Supervise, Screen Security, and Utility Security) to define a user's access privileges to NetBatch-Plus screens and functions.

1. Display the Security Supervise screen. For information on the fields and functions on this screen, see Security Supervise on page 6-215.
2. Enter the name of the user you want to define in the first part of the NBP User field. Enter the user's password in the second part of the field.
3. In the Set field, enter the name of the defaults set you want to associate with the user.
4. Specify, in these fields, the schedulers and classes available to the user on the Job Definition, Bulk Submit, and Ad Hoc Job Selection screens:

Job Definitions	Bulk Submit	Ad Hoc Submit

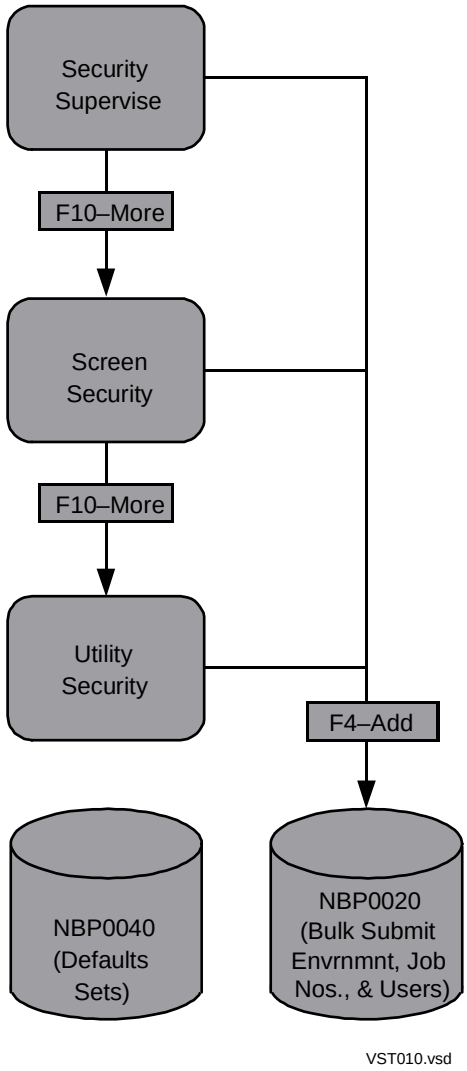
5. Press F4 to define the user at this point. Otherwise, go to Step 6 to continue the user definition process.

   If you press F4, NetBatch-Plus adds the user record to the database using information from all three screens in the security screen series. (To change details of a record you add, use the F6 function on any of the three screens.)

6. Press F10 to display the Screen Security screen. For information on the fields and functions on this screen, see Screen Security on page 6-212.
7. Specify the user's screen access privileges by entering the appropriate single-character access codes in the access code fields.
8. Press F4 if you want to define the user at this point. Otherwise, go to Step 9 to continue the user definition process.

   If you press F4, NetBatch-Plus adds the user record to the database using information from all three screens in the security screen series. (You can change details of a record you add by using the F6 function on any of the three screens.)
9. Press F10 to display the Utility Security screen. For information on the fields and functions on this screen, see Utility Security on page 6-225.

Figure 4-12. Defining NetBatch-Plus Users



10. Specify the user's access privileges to programs and Pathway applications listed on the Utility Menu screen and to screens on the Scheduler Interface screen. You specify the privileges by entering the appropriate single-character access codes in the access code fields.
11. Press F4 to define the user.

    NetBatch-Plus adds the user record to the database file NBP0020 using information from all three screens in the security screen series.

8. Define Catalog Attachments

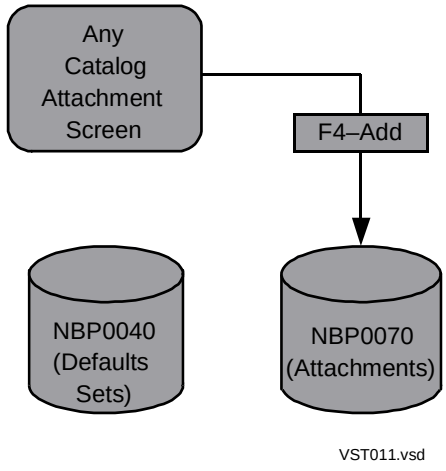
Catalog attachments definition is the process of defining the ASSIGNs, PARAMs, and DEFINEs in the NetBatch-Plus attachments catalog.

1. Display the catalog attachments screen you want to use. The screens are:

Catalog ASSIGNs	Catalog Defaults DEFINEs	Catalog Tape DEFINEs
Catalog PARAMs	Catalog Map DEFINEs	
Catalog Catalog DEFINEs	Catalog Spool DEFINEs	

   For information on the fields and functions on these screens, see Section 6, NetBatch-Plus Screens.
2. Enter, in the Set field, the name of the defaults set with which you want to associate the attachment.
3. Enter the name of the attachment in the *attachment-type* Name field. *attachment-type* depends on the screen you displayed and can have one of the following values: ASSIGN, PARAM, DEFINE.

Figure 4-13. Defining Catalog Attachments



4. Specify the owner and security attributes of the attachment record:

a. Enter the Guardian user ID of the owner in the first part of the Owner field. Enter the password of that user in the second part of the field.

b. Enter the security attributes of the attachment record in the third part of the field.

5. Specify the attributes of the attachment in the remaining fields on the screen.
6. Press F4 to define the attachment.

   NetBatch-Plus writes attachment details to its database file NBP0070.

9. Define Jobs

Job definition is the process of defining and adding job records to the NetBatch-Plus database.

1. Display the Job Definition screen. For information about the fields and functions on this screen, see Job Definition on page 6-102.
2. Enter the name of the defaults set for the job in the Set field.
3. Press F7 to display attributes of the specified defaults set. Otherwise, go to Step 4.
4. Enter the name of the job you want to define in the Job Name field.
5. Enter the name of the scheduler for the job in the Scheduler field. Leave the field blank to accept the scheduler from the defaults set.
6. Specify the CLASS attribute of the job in the Class field. Leave the field blank to accept the class from the defaults set.
7. Specify the owner and security attributes of the job record:

   a. Enter the Guardian user ID of the owner in the first part of the Owner field. Leave this part of the field blank to accept the owner from the defaults set. Enter the password of the user in the second part of the field.

   b. Enter the security attributes of the job record in the third part of the field. Leave this part of the field blank to accept the security attributes from the defaults set.

8. Specify job attributes and other job-related information in these fields:

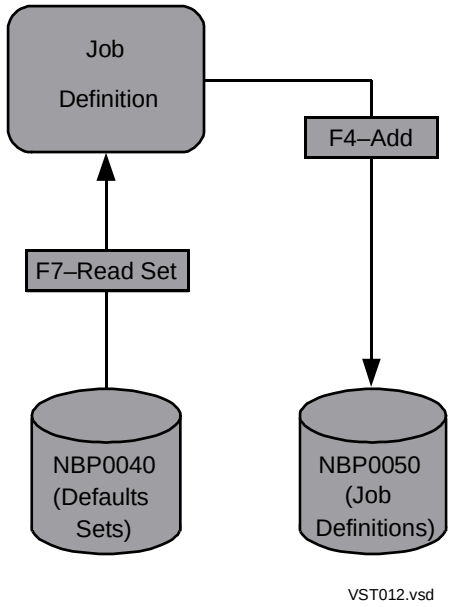
Comment	Startup	Pages	Hold
Exec. Prg.	Selpri	Wait	Any User Submit
In	Pri	At/Af	Stop On Abend
Out	Drives	Time	Hold After
Volume	Lines	Restart	

   Leave a field blank if you want to accept the defaults set value.

9. Press F4 to define the job.

   NetBatch-Plus writes job details to its database file NBP0050.

Figure 4-14. Defining Jobs



10. Define Job Attachments

Job attachments definition is the process of defining and attaching ASSIGNs, PARAMs, and DEFINEs to jobs. You can create the attachments or use attachments from the attachments catalog.

1. Display the Job Definition screen and select the job whose attachment you want to define. To select the job:
   a. Enter the name of the job's defaults set in the Set field.
   b. Enter the name of the job in the Job Name field.
   c. Press F1 to display details of the job.
2. Display the job attachments screen you want to use. Job attachments screens are:

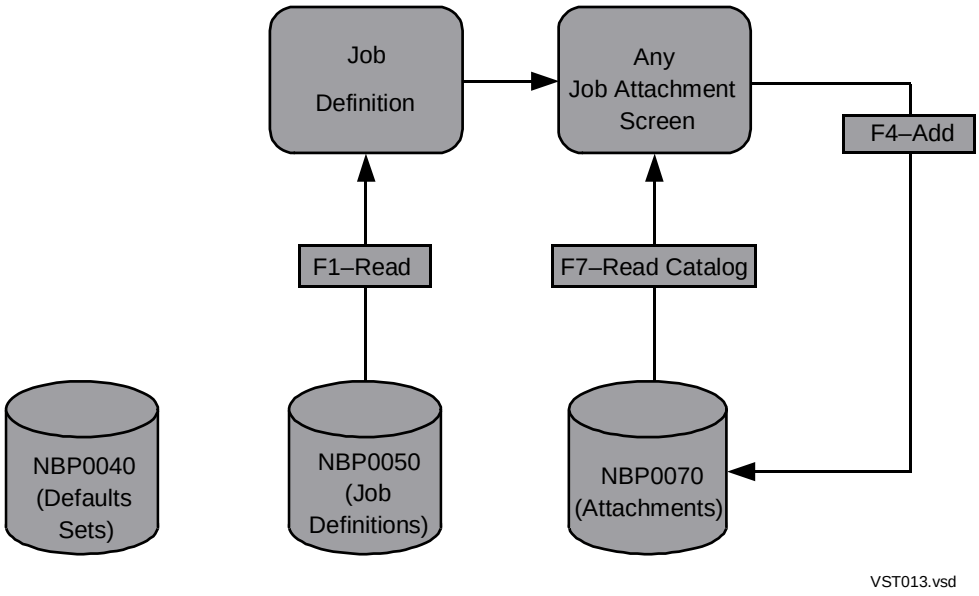
Job ASSIGNs	Job Defaults DEFINEs	Job Tape DEFINEs
Job PARAMs	Job Map DEFINEs	
Job Catalog DEFINEs	Job Spool DEFINEs	

   For information on the fields and functions on these screens, see Section 6, NetBatch-Plus Screens.
3. Enter the security attributes of the attachment record in the Owner field.
4. Enter the name of the attachment in the *attachment-type* Name field. *attachment-type* depends on the screen you displayed and can have one of the following values: ASSIGN, PARAM, DEFINE.

5. If you want to use a catalog attachment as the basis of the job attachment (otherwise go to Step 6):
   a. Enter the name of the defaults set for the catalog attachment in the Catalog Set field.
   b. Enter the name of the catalog attachment in the Catalog Name field.
   c. Press F7 to display details of the catalog attachment.
6. Specify the attributes of the job attachment in the remaining fields on the screen. Leave fields blank if you attached a catalog attachment at Step 5 and want to accept values from that attachment.
7. Press F4 to define the job attachment.

   NetBatch-Plus writes attachment details to its database file NBP0070.

Figure 4-15. Defining Job Attachments



11. Define Job Dependencies

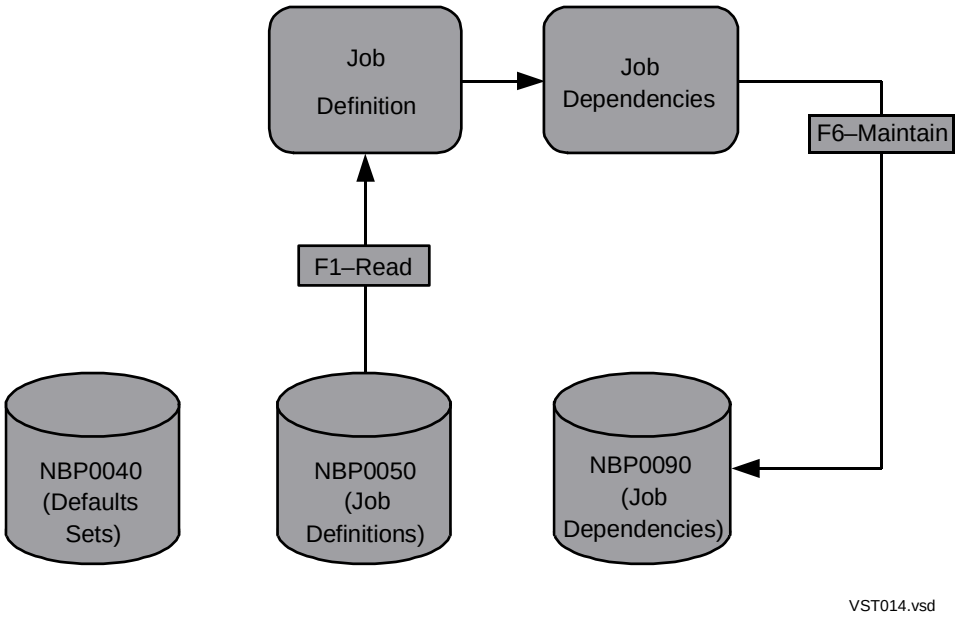
Job dependencies definition is the process of defining a job's master jobs (that is, the jobs on which a job depends).

1. Display the Job Definition screen and select the dependent job whose masters you want to define. To select the dependent job:
   a. Enter the name of the job's defaults set in the Set field.
   b. Enter the name of the job in the Job Name field.
   c. Press F1 to display details of the job.

2. Press F14 to display the Job Dependencies screen. For information on the fields and functions on this screen, see Job Dependencies on page 6-117.
3. For each master job you want to define:
   a. Enter A (for Add) in the A, D, or U column field.
   b. Enter the name of the master job's defaults set in the Set column field.
   c. Enter the name of the master job in the Job Name column field.
4. Press F6 to define the dependencies.

   NetBatch-Plus writes dependency details to its database file NBP0090.

Figure 4-16. Defining Job Dependencies



12. Define the Bulk Submit Environment

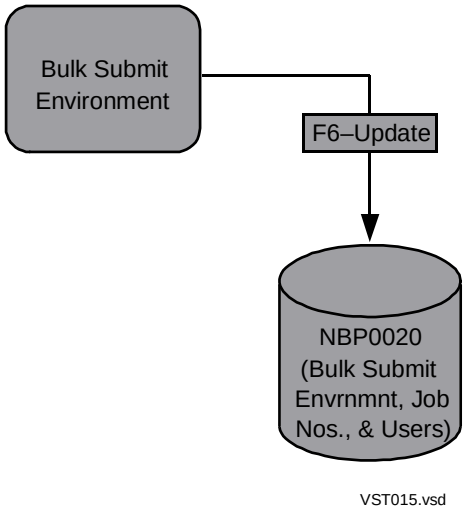
Defining the bulk submit environment involves specifying the default attributes for bulk submit control jobs and the parameters controlling bulk job submission.

1. Display the Bulk Submit Environment screen. For information on the fields and functions on this screen, see Bulk Submit Environment on page 6-18.
2. Enter the name of the scheduler for bulk submit control jobs in the Scheduler field.
3. Enter the name of the class for control jobs in the Class field.
4. In the Owner field, enter the Guardian user ID of the control job owner.
5. In the Password field, enter the password of the user you specified in the Owner field.

6. In the Report File field, specify the output file for control job log files and bulk submit reports.
7. In the Window field, enter the number of days specifying the retention period for temporary output files created during bulk submit runs. The value you enter also specifies the number of days before execution that users can schedule bulk submit runs.
8. Press F6 to define the bulk submit environment.

   NetBatch-Plus writes environment details to its database file NBP0020.

Figure 4-17. Defining the Bulk Submit Environment



13. Define Calendar Categories

Calendar category definition is the process of adding dates to a named calendar category. You can add the dates automatically or manually.

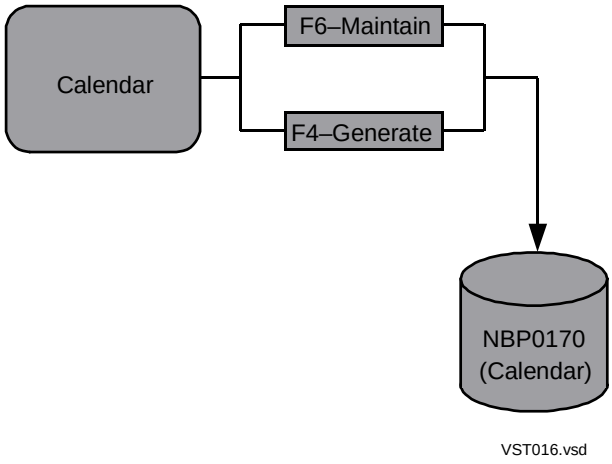
1. Display the Calendar screen. For information on the fields and functions on this screen, see Calendar on page 6-23.
2. Decide which date generation method you want to use. For automatic date generation, go to Step 3. For manual date generation, go to Step 4.
3. To create a category and automatically add dates to it:
   a. Enter the name of the category you want to create in the Category field.
   b. Specify the date range for which you want dates generated in the Start and End fields.
   c. Enter the frequency options NetBatch-Plus will use to calculate the dates in the Freq field.
   d. Press F4 to create the category and generate its dates.

NetBatch-Plus writes category and date information to its database file NBP0170.

4. To create a category and manually add dates to it:
   a. Enter A (for Add) in the A, D, or U column field.
   b. Enter the name of the category you want to create in the Category column field.
   c. Enter the date in the Date column field.
   d. Repeat Steps 4a through 4c for each date you want to add to the category.
   e. Press F6 to create the category and add the dates.

      NetBatch-Plus writes category and date information to its database file NBP0170.

Figure 4-18. Defining Calendar Categories



14. Define Bulk Job Selection Criteria

Bulk job selection criteria definition is the process of defining selection parameters that determine when the bulk submit program will select a job in a bulk submit run.

1. Display the Job Definition screen and select the job whose selection criteria you want to define. To select the job:
   a. Enter the name of the job's defaults set in the Set field.
   b. Enter the name of the job in the Job Name field.
   c. Press F1 to display details of the job.
2. Press F15 to display the Bulk Job Selection Criteria screen. For information on the fields and functions on this screen, see Bulk Job Selection Criteria on page 6-6.
3. For each selection criterion:

a. Enter A (for Add) in the A, D, or U column field.

b. Specify the inclusion flag for the criterion in the Include/Exclude column field.

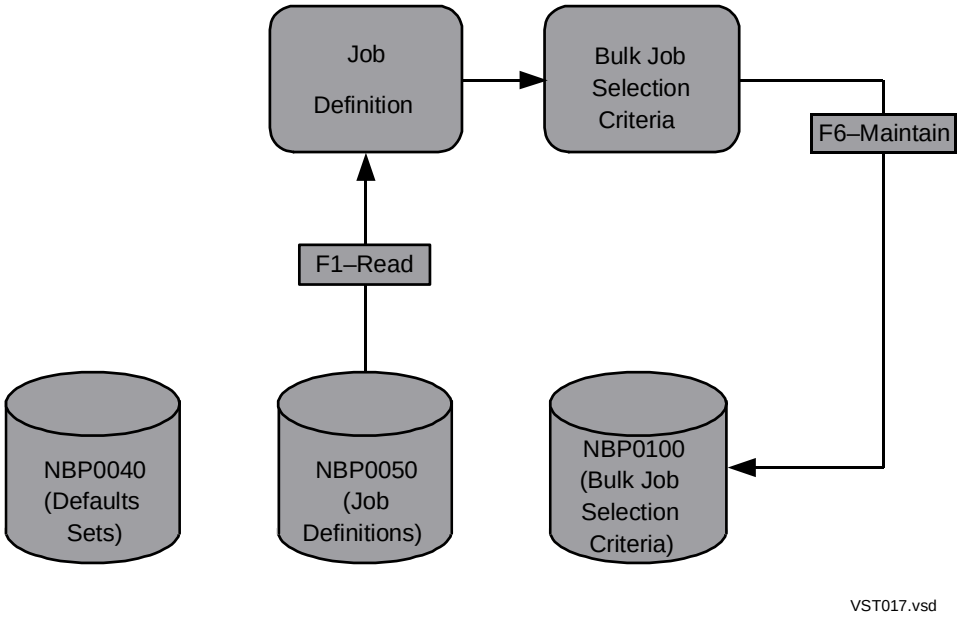
c. To specify selection by a category, enter that category name in the Category column field. To specify selection by date, enter the date in the Date column field. Category and date are mutually exclusive.

d. To override the value specified in the At/Af field on the Job Definition screen, sepcify the AT or AFTER job attribute in the At/After column field. Enter the time component of the attribute in the Time column field.

4. Press F6 to define the selection criteria.

   NetBatch-Plus writes selection criteria to its database file NBP0100.

Figure 4-19. Defining Bulk Job Selection Criteria



5 Using NetBatch-Plus

This section helps you to start using the NetBatch-Plus application:

Topic	Page
Starting NetBatch-Plus on Your Terminal	5-1
Signing On and Off	5-2
Screen Layout, Access, and Functions	5-3
Using Online Help	5-5

Starting NetBatch-Plus on Your Terminal

To start the NetBatch-Plus application on your terminal and to display the Main Menu screen, invoke the NRUN macro. The macro resides in the NetBatch-Plus object file subvolume. To invoke the macro, do either of:

- Change to the object file subvolume and invoke the macro from that subvolume. In this example, NRUN resides in $DATA7.NBPOBJ:

```
$FPP ADMIN 3> VOLUME $DATA7.NBPOBJ
$DATA7 NBPOBJ 4> NRUN
```

- Specify the expanded file name of the macro from any subvolume on the node where the NetBatch-Plus PATHWAY system resides. For example, to invoke $DATA7.NBPOBJ.NRUN from $SALES.MGR:

```
$SALES MGR 16> $DATA7.NBPOBJ.NRUN
```

After you invoke the NRUN macro, NetBatch-Plus displays the Main Menu screen.

Figure 5-1. The NetBatch-Plus Main Menu Screen

```
NETBATCH-PLUS T9189D48 - (26FEB2002^ABF)  MAIN MENU         20Mar2002   SNP000
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 NBP User Name: ________   Password: ________________

                          F16  Sign On

                          F1   Defaults Set Details
                          F2   Job Definition
                          F3   Ad Hoc Job Selection
                          F4   Catalogs
                          F5   Calendar
                          F6   Bulk Submit Environment
                          F7   Bulk Submit
                          F8   Utilities
                          F9   Scheduler Interface
                          F10  Reports
                          F11  Security

                          SF16 Exit

 All Screens:   SF1-Screen Help    SF3-Field Help     SF5-Password Validation
                SF13-Print         SF15-Recover
```

Signing On and Off

To sign on to and off from the NetBatch-Plus application, use the Main Menu screen.

Signing On

To sign on to the NetBatch-Plus application after displaying the Main Menu screen:

1. Enter your valid NetBatch-Plus user name in the NBP User Name field.
2. Enter your NetBatch-Plus user password in the Password field.

   The application does not display the characters you enter. For more information about password entry, see Main Menu on page 6-178 and Password Validation on page 6-182.
3. Press F16 to sign on.

   The NetBatch-Plus application validates your user name and password before granting you access to the system. After you sign on, you can display any of the screens with highlighted names. NetBatch-Plus security prevents you from displaying screens whose names appear in regular text.

Note. The NetBatch-Plus application allows you three attempts to enter your password correctly. If you enter three incorrect passwords in succession, the application locks your keyboard for one minute.

For information about signing on when there are no user records in the NetBatch-Plus database, see 2. Sign On for the First Time on page 4-16.

Changing Your Password

You can change your own password if you have S (Supervisor) or P (Password) access to the Security Supervise screen. You can change the password of other users only if you have S (Supervisor) access to the Security Supervise screen. For information about changing passwords, see Security Supervise on page 6-215.

Signing Off

To sign off from the NetBatch-Plus application, ending the current session:

- Press SF16 on any NetBatch-Plus screen to display the Main Menu screen.
- Press SF16 on the Main Menu screen. This function stops the NetBatch-Plus application.

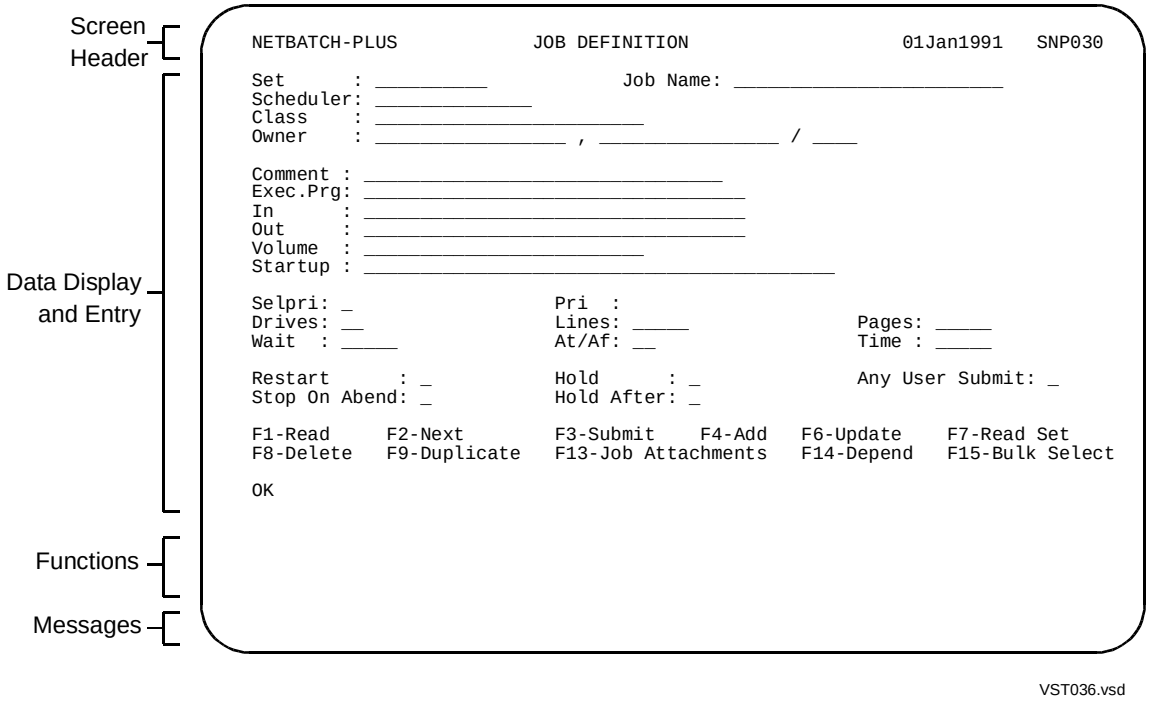
Screen Layout, Access, and Functions

This subsection gives general information about NetBatch-Plus screen layout, access methods, and function keys.

Screen Layout

Figure 5-2 shows the layout of a typical NetBatch-Plus screen and identifies the four main screen areas.

Figure 5-2. NetBatch-Plus Screen Layout



VST036.vsd

Screen Header

Screen header information gives you the product name, the screen name, the current date, and the screen identification code. The screen identification code (in the example, SNP030) identifies the screen requester program.

Data Display and Entry

The central screen area is for data display and entry. Not all NetBatch-Plus screens enable you to enter data. For example, the Utility Menu screen is a display-only screen whose options you select by function key.

Functions

The lower screen area lists most functions available on a screen. The exceptions are functions common to all screens. For example, the functions for screen help (SF1) and field help (SF3) appear on the Main Menu screen only. For a list of all functions available on a particular screen, see the relevant screen description in Section 6, NetBatch-Plus Screens.

Messages

The NetBatch-Plus application displays error, warning, and confirmation messages at the foot of each screen. For a list and brief descriptions of these messages, see Appendix C, Messages.

Screen Access

Access to NetBatch-Plus screens is via menus or other screens. For detailed access information for each screen and a menu map showing navigation paths, see Section 6, NetBatch-Plus Screens.

Function Keys

Navigation between NetBatch-Plus screens is by function key. The letter F identifies unshifted functions (for example, F1) in this manual and on all screens and the letters SF shifted functions (for example, SF15). For the function keys used to navigate to each screen, see Menu Map on page 6-231.

Using Online Help

The NetBatch-Plus application provides online screen and field help for all screens and fields. The following paragraphs briefly describe how to use screen and field help.

Screen Help

To get screen help for a displayed screen, press SF1. The NetBatch-Plus application displays help text on the Help screen.

If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen.

- To go to the next page, press the Next Page key on your keyboard.
- To go to the previous page, press the Prev Page key.

To return to the screen for which you displayed help, press F16.

Field Help

To get field help, position the cursor anywhere in the field for which you want help and press SF3. The NetBatch-Plus application displays help text for the selected field on the Help screen.

For information about displaying multiple pages of field help text, see the preceding description of screen help.

To return to the screen for which you displayed field help, press F16.

6 NetBatch-Plus Screens

This section describes all the NetBatch-Plus screens:

Screen	Page	Screen	Page
Ad Hoc Job Selection	6-2	Job Definition	6-102
Bulk Job Selection Criteria	6-6	Job Dependencies	6-117
Bulk Submit	6-10	Job Info	6-120
Bulk Submit Environment	6-18	Job Inquiry	6-139
Calendar	6-23	Job Map DEFINEs	6-145
Catalog ASSIGNs	6-29	Job PARAMs	6-149
Catalog Catalog DEFINEs	6-35	Job Spool DEFINEs	6-153
Catalog Defaults DEFINEs	6-39	Job Status	6-159
Catalog Map DEFINEs	6-43	Job Tape DEFINEs	6-170
Catalog PARAMs	6-47	Main Menu	6-178
Catalog Spool DEFINEs	6-50	Password Validation	6-182
Catalog Tape DEFINEs	6-55	Reports	6-185
Class Details	6-62	Scheduler Info	6-190
Defaults Set Details	6-67	Scheduler Interface	6-207
Executor Info	6-76	Scheduler Status	6-209
Executor Status	6-81	Screen Security	6-212
Help	6-86	Security Supervise	6-215
Job ASSIGNs	6-88	Utility Menu	6-219
Job Catalog DEFINEs	6-94	Utility Security	6-225
Job Defaults DEFINEs	6-98	Wild-Card Processes	6-228

Each description includes:

- A screen summary
- A picture of the screen showing sample data
- Information about displaying the screen
- Field descriptions (in the order they appear on screen left to right, top to bottom)
- Function descriptions

The menu map (Figure 6-41 on page 6-231) shows the path to each screen and the function keys you can use for screen navigation.

Ad Hoc Job Selection

Use the Ad Hoc Job Selection screen to list jobs associated with specified defaults sets.

The screen lets you select any one of the listed jobs via a cursor selection field. To submit the selected job for execution, use the F3–Submit function or, with the F9–Display Job function, display the job's details on the Job Definition screen. To make a temporary copy of the selected job, use the F10–Create Temp function. This function displays details of the copied job on the Job Definition screen, but does not record those details in the NetBatch-Plus database. You can use the Job Definition screen to modify the copied job before submitting it from that screen for execution as a one-off job. For information on one-off jobs, see Job Info on page 6-120.

Figure 6-1. Ad Hoc Job Selection Screen

```
NETBATCH-PLUS            AD HOC JOB SELECTION             01Apr2002   SNP080

Set: DEF-SET-A_   Job Name: *_____________________   Any User Only: Y

                 Use Cursor to Select Job
         Set           Job Name                Job Description
     _DEF-SET-A  ACCOUNTS-Q3              AR and AP
     _DEF-SET-A  BACKUP-JOB-EOP           End-of-Quarter Backup
     _DEF-SET-A  EOP-SALES-ACCUMULATION   Sales for Region 8 - 3rd Quarter
     _DEF-SET-A  JOB-D6                   Admin. Reports
     _DEF-SET-A  MIS                      MIS Reports - Q3
     _DEF-SET-A  NBP-JOB-A                Forecast - Q4
     _DEF-SET-A  UID                      Users in Sales Division
     _
     _
     _
     _
     _
     _
     _
     _

F1-First    F2-Next      F3-Submit      F9-Display Job      F10-Create Temp
```

Displaying the Screen

From the Main Menu screen, press F3 to display the Ad Hoc Job Selection screen.

Field Descriptions

Set

Use the Set field to specify the defaults sets of the jobs you want to list. You can specify a single set or a range of sets. To specify a single set, enter the name of the set in full. To specify a range of sets, use these wild-card characters in the name:

? Matches a single character. For example, ABC?? matches five-character names beginning with ABC (such as ABCDE and ABC12, but not ABCDEF).

* Matches zero or more characters. For example, A*D matches names beginning with A and ending in D (such as ABCD and AD, but not CAD). You can use multiple asterisks in a name as long as you separate them by at least one character. For example, *CD* matches names containing CD (such as ABCDEF, XYZCD, and CD21, but not BC3D or DCA). * matches all names.

When you display the screen, the field shows the name of the current defaults set.

Job Name

Use the Job Name field to specify the job at which you want the list to start. You can specify the job by entering its name in full or by using wild-card characters:

- If you enter the full name, the list contains all jobs starting from the specified job.
- If you use wild-card characters, the list contains only those jobs matching the wild-card specification. For information on wild-card characters, see Set on page 6-2.

Any User Only

Use the Any User Only field to restrict the list to jobs whose Any User Submit flag on the Job Definition screen is Y. The field options are:

Y Yes specifies jobs whose Any User Submit flag on the Job Definition screen is Y

N No specifies all jobs, regardless of the value of their Any User Submit flags on the Job Definition screen. Only the owners of jobs whose Any User Submit flag is N can submit those jobs. Other users can submit the jobs but only if they validate the owners' Guardian user IDs before submission.

Blank Same as N

For more information on the Any User Submit flag, see Job Definition on page 6-102.

Set

The fields in the Set column show the names of defaults sets. You cannot enter information in these fields.

Job Name

The fields in the Job Name column show the names of jobs. You cannot enter information in these fields.

Job Description

The fields in the Job Description column show job descriptions from the Comment field on the Job Definition screen. You cannot enter information in Job Description column fields.

Cursor Selection

Use the Cursor Selection field to select the job you want to submit or create a temporary copy of, or whose details you want to display on the Job Definition screen. The Cursor Selection field is on the left of each field in the Set column.

To select a job, use the cursor movement keys to position the cursor next to the job you require.

Functions

These functions are available on the Ad Hoc Job Selection screen:

Function	Description
F1–First	Lists, in alphabetic order, the jobs associated with the set or range of sets specified in the Set field. If the Set field is blank when you press F1, the list starts with jobs associated with the first set on file. If the Job Name field is blank, the list starts with the first job associated with the specified set.
F2–Next	Continues the job listing. At the end of the list, the NetBatch-Plus application displays a message advising you there are no more job details. To redisplay the list from the first job on file, clear the Set field and press F1.
F3–Submit	Submits the selected job for execution by its scheduler. (F3–Submit has the same function as the BATCHCOM command SUBMIT JOB.) After you submit the job, to control its execution or change its attributes, use the functions on the Job Info screen or Job Status screen. To inquire about processes started by the job, use the Job Inquiry screen. The job remains in the NetBatch-Plus database after submission. For more information on submitting jobs, see Job Info on page 6-120.
F9–Display Job	Displays the Job Definition screen. The screen shows information about the selected job. To return to the Ad Hoc Job Selection screen, press F16.
F10–Create Temp	Creates a temporary copy of the selected job (including any attachments and dependencies) and displays it on the Job Definition screen. You can then change the copy if you need to before submitting it to the scheduler for execution as a one-off job. Changes you make to the copy do not affect the original job. The NetBatch-Plus database does not store details of the copied job, and the scheduler deletes the job after it finishes executing.
F16–Previous Screen*	Displays the previous screen on the menu path.

* Function is available on screen, but not displayed,

Function	Description
SF1–Screen Help*	Displays information about the Ad Hoc Job Selection screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Ad Hoc Job Selection screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Ad Hoc Job Selection screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job will be the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Bulk Job Selection Criteria

Use the Bulk Job Selection Criteria screen to specify the criteria by which the bulk submit program selects the current job for inclusion in a bulk submit run. You can specify selection by categories or dates. You can toggle individual selection criteria on (to include in a run) or off (to exclude from a run) as needed.

Figure 6-2. Bulk Job Selection Criteria Screen

```
NETBATCH-PLUS            BULK JOB SELECTION CRITERIA      01Jan2002   SNP030S

Job Set: DEF-SET-A   Job Name: BULK-JOB-10

(A,D, or U) INclude/EXclude     Category  or    Date           AT/AFter Time

    _            IN             __________    24Apr2002_ Wed       __ _____
    _            IN             __________    30Jun2002_ Sun       AF 11:00
    _            EX             __________    16Jul2002_ Tue       __ _____
    D            IN             __________    31Jul2002_ Sun       __ _____
    _            EX             ANNUAL_____   __________           __ _____
    _            IN             BACKUPS____   __________           __ _____
    _            IN             CHRISTMAS_    __________           __ _____
    _            IN             FIRSTWED__    __________           __ _____
    U            IN             FRIDAYS____   __________           AF 15:00
    _            IN             HOLIDAYS__    __________           __ _____
    _            EX             LASTFRIDAY    __________           __ _____
    A            IN             LEAPYEAR__    __________           __ _____
    A            IN             PAYDAY_____   __________           __ _____
    _            __             __________    __________           __ _____


F1-Read    F2-Next      F6-Maintain     F13-Job Attachments     F14-Depend
```

Displaying the Screen

From the Job Definition screen, Job Dependencies screen, or any job attachments screen, press F15 to display the Bulk Job Selection Criteria screen.

Field Descriptions

Job Set

The Job Set field shows the name of the defaults set of the job named in the Job Name field (the current job). You cannot enter information in the Job Set field.

Job Name

The Job Name field shows the name of the current job. You cannot enter information in this field.

A, D, or U

Use the fields in the A, D, or U column to indicate the maintenance functions you want to perform on the corresponding entries. The NetBatch-Plus application executes these functions when you press F6–Maintain. The field options are:

A Adds the entry to the selection criteria.

D Deletes the entry from the selection criteria.

U Updates the values in the Include/Exclude, Category, Date, At/After, and Time fields.

Include/Exclude

Use the fields in the Include/Exclude column to set the inclusion flags for the corresponding entries. The inclusion flag determines whether the job is a candidate for selection in a bulk submit run that selects jobs by the category or date specified by an entry. The flag lets you customize the selection criteria for individual bulk submit runs. The field options are:

IN Includes the job in a run that selects jobs by the specified category or date.

EX Excludes the job from a run that selects jobs by the specified category or date. EX overrides IN when the excluded entry specifies a date already specified by an included entry. This means the bulk submit program does not select a job on a date specified by an included entry if that date is excluded by another entry.

You must specify either IN or EX for all entries on the screen.

Category

Use the fields in the Category column to specify one of these selection categories for the current job:

- A calendar category as defined on the Calendar screen. A calendar category identifies a set of predefined selection dates. A selection date specifies the day, month, and year when the bulk submit program will select the job in a bulk submit run selecting jobs by that date. To override a calendar category date, specify that date as a selection criterion and set its inclusion flag to EX (Exclude). For more information on calendar categories, see Calendar on page 6-23.

- A category in name only. This type of category is simply a means of grouping jobs for selection purposes. For example, you could specify a category MYJOB for all or some of your own jobs. If you enter that category as a run parameter on the Bulk Submit screen, the bulk submit program then selects your jobs in a bulk submit run.

  A category name can contain from 1 to 10 letters and numbers. It can also contain hyphens (-). The name must begin with a letter and can end with any letter or number but not with a hyphen.

The bulk submit program does not select a job if the inclusion flag of the job's category is EX (Exclude). For more information on the flag, see Include/Exclude on page 6-7.

Category and date (specified in the Date field) are mutually exclusive.

Date

Use the fields in the Date column to enter selection dates for the current job. A selection date specifies the day, month, and year when the bulk submit program selects the job in a bulk submit run, selecting jobs by that date. The program does not select the job if the inclusion flag of the date is EX (Exclude). For more information on the flag, see Include/Exclude on page 6-7.

You can use any of these forms to enter the selection date. For more information on date forms, see Calendar on page 6-23.

```
[d]d mmm
[d]d mmm [yy]yy
[yy]yy mmm [d]d
[yy]yy [m]m [d]d
[yy]yymmdd
mmm [d]d
mmm [d]d [yy]yy
```

Date and category (specified in the Category field) are mutually exclusive.

At/After

Use the fields in the At/After column to specify whether the AT or AFTER job attribute will apply to the job when selected by the corresponding category or date. The fields override the At/Af field on the Job Definition screen. The field options are:

AT Specifies the AT job attribute. This attribute causes execution of the job at the time specified in the Time field. If an executor is not available at that time, the scheduler creates a temporary executor to run the job. The scheduler deletes the temporary executor when job execution finishes.

AF Specifies the AFTER job attribute. This attribute makes the job available for execution at the time specified in the Time field.

For more information on the AT and AFTER job attributes, see Job Definition on page 6-102.

Time

Use the fields in the Time column to specify the time component of the AT or AFTER attribute. You can specify time only if the entry's inclusion flag is IN (Include).

`[h]h:[m]m`

`[h]h`

is an integer in the range 0 through 23 specifying the hour of the day.

`[m]m`

is an integer in the range 0 through 59 specifying the minute of the hour.

The first minute of the day is 00:00 (midnight). The last minute is 23:59.

For more information on the Time field, see Job Definition on page 6-102.

Functions

These functions are available on the Bulk Job Selection Criteria screen:

Function	Description
F1–Read	Lists the selection criteria for the current job.
F2–Next	Continues the listing of selection criteria.
F6–Maintain	Adds, deletes, or updates selection criteria according to the values in the A, D, or U column fields.
F13–Job Attachments	Displays the Job ASSIGNs screen. Use this screen to attach ASSIGNs to the current job. You can also use the screen to access the Job PARAMs screen and each of the job DEFINEs screens.
F14–Depend	Displays the Job Dependencies screen. Use this screen to specify up to eight master jobs on which execution of the current job depends. When you display the screen, it shows the names of any master jobs already specified for the current job. The screen also shows the name of the defaults set to which each master job belongs.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Bulk Job Selection Criteria screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Bulk Job Selection Criteria screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Bulk Job Selection Criteria screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, NetBatch-Plus displays the name of the output file at the bottom left of the screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Bulk Submit

Use the Bulk Submit screen to execute a bulk submit run. You can specify parameters for the run such as the job selection criterion and the start time of the bulk submit control job.

There are two types of bulk submit run:

- A test run is a trial run in which the bulk submit program selects jobs but does not submit them to their schedulers. The program lists the selected jobs in the Bulk Submit Predictions report, which it produces automatically for the run. By running a test, you can determine which jobs the program will select in a production run before you actually execute that run.
- In a production run, the bulk submit program both selects jobs and submits them to their schedulers. The program lists the submitted jobs in the Bulk Submit Submissions report, which it also produces automatically for the run.

Figure 6-3. Bulk Submit Screen

```
NETBATCH-PLUS            BULK SUBMIT                      01Jan2002   SNP090

Submit Environment : \ADMIN.$ZBAT    DEFAULT
  Report Owner     : SALES.MNGR_______
  Report File      : $S.#SALES_____________________________
  Start Submit     : 04Jan2002_12:00_
Submit Jobs For    : \*.$*_________   *_____________________________

           Test Run   Production Run

             F1           F2            For Specified Run Date

             F3           F4            For Specified Category

                          F6            Daily Production Run



Select By Date: __________ or Category: LASTFRIDAY  Hold: N

Job Start Time: 01Jan2002_11:48_ Override: N
```

Displaying the Screen

From the Main Menu screen, press F7 to display the Bulk Submit screen.

Field Descriptions

Submit Environment

The Submit Environment field shows the names of the scheduler and class of the bulk submit control job. You cannot enter information in this field. For more information on the control job, see Bulk Submit Environment on page 6-18.

Report Owner

Use the Report Owner field to enter the Guardian user ID of the owner of these bulk submit reports:

- Bulk Submit Predictions—produced automatically by the bulk submit program for all test runs and for daily production runs
- Bulk Submit Submissions—produced automatically by the bulk submit program for all production runs

For more information on the bulk submit reports, see Bulk Submit Reports on page 7-3.

The default value is the user ID of the owner of the bulk submit control job.

Report File

Use the Report File field to specify the OUT attribute of the bulk submit control job. The attribute identifies the location where the scheduler sends the job log file and the bulk submit reports.

To specify the attribute, enter the Guardian name of a device, disk file, or process. If you enter a partial name, the NetBatch-Plus application expands it using the logon defaults of the control job owner. The default value is the location specified for the control job on the Bulk Submit Environment screen.

Start Submit

Use the Start Submit field to specify the start time of the bulk submit control job. The control job submits the jobs in a bulk submit run to their respective schedulers. You can specify the start time by entering, in any order, a date, a time, or both. Use a space as a separator if you enter both date and time.

You can enter the date in any of these forms. For more information on date forms, see Calendar on page 6-23.

```
[d]d mmm
[d]d mmm [yy]yy
[yy]yy mmm [d]d
[yy]yy [m]m [d]d
[yy]yymmdd
```

mmm [*d*]*d*
mmm [*d*]*d* [*yy*]*yy*

You can specify the time in any of these forms:

[*h*]*h*:[*m*]*m*

[*h*]*h*

is an integer in the range 0 through 23 specifying the hour of the day.

[*m*]*m*

is an integer in the range 0 through 59 specifying the minute of the hour.

The first minute of the day is 00:00 (midnight). The last minute is 23:59.

The value in the Window field on the Bulk Submit Environment screen determines the number of days before execution that you can schedule a bulk submit run. For example, if the Window field specifies 10 days, you cannot schedule runs more than 10 days in advance.

The default value is the current date and time.

Submit Jobs For

Use the two-part Submit Jobs For field to specify the schedulers and classes for which the bulk submit program selects jobs in a bulk submit run. The values in the Bulk Submit field on the Security Supervise screen determine the range of schedulers and classes available to the signed-on user. The bulk submit program selects only jobs associated with schedulers and classes in that range.

In the first part of the field, specify the schedulers in the form:

[*system-name*.]$*process-name*

system-name

is the name of the system where the scheduler process resides. You do not have to enter the name if the process resides in the default system (the system where the NetBatch-Plus Pathway system is running).

process-name

is the name of the scheduler process.

You can specify a single scheduler or a range of schedulers from the wild-card scheduler processes list. To specify a single scheduler, enter the system name and process name in full (for example, \WORLD.$ZBAT). You can leave out the system name if the process resides in the default system. To specify a range of schedulers, use the question mark (?) and asterisk (*) wild-card characters in the name. For more information on specifying schedulers, see the description of the Scheduler field in Scheduler Info on page 6-190.

In the second part of the field, specify the classes. You can specify a single class or a range of classes. To specify a single class, enter the class name in full (for example, CL-1). To specify a range of classes, use the question mark (?) and asterisk (*) wild-card characters in the name.

Select By Date

Use the Select By Date field to enter a selection date for a bulk submit run. The bulk submit program uses the date as the criterion by which it selects jobs in the run. The program selects a job in a run specifying selection by date when both of these conditions exist:

- The job's selection criteria (specified on the Bulk Job Selection Criteria screen) includes the selection date. You can specify the date for a job explicitly (for example, 25Dec2002) or implicitly via a calendar category including that date (for example, CHRISTMAS).
- The inclusion flag of the job's date or category criterion matching the selection date is IN (Include). The bulk submit program does not select the job if the inclusion flag is EX (Exclude). For more information on the flag, see Bulk Job Selection Criteria on page 6-6.

You can specify the selection date for the run using any of the forms listed in the preceding description of the Start Submit field. Date and category (specified in the Select By Category field) are mutually exclusive.

Select By Category

Use the Select By Category field to enter a selection category for a bulk submit run. The bulk submit program uses the category as the criterion by which it selects jobs in the run. The program selects a job in a run specifying selection by category when both of these conditions exist:

- The job's selection criteria (specified on the Bulk Job Selection Criteria screen) includes the selection category.
- The inclusion flag of the job's category criterion matching the selection category is IN (Include). The bulk submit program does not select the job if the inclusion flag is EX (Exclude). For more information on the flag, see Bulk Job Selection Criteria on page 6-6.

Category and date (specified in the Select By Date field) are mutually exclusive.

Hold

Use the Hold field to set the HOLD attribute of the jobs selected in a bulk submit run. The field specifies whether the jobs' schedulers place the jobs on hold as soon as the bulk submit program submits them for execution. The field overrides the HOLD attribute set on the Job Definition screen for individual jobs in the run. The field options are:

Y Yes specifies the attribute HOLD ON. The schedulers place the jobs on hold as soon as the bulk submit program submits them. The schedulers flag the jobs with a state of SPECIAL-1, and the jobs do not run until you change their individual HOLD attributes to OFF.

N No specifies the attribute HOLD OFF. The jobs are available for execution as soon as the bulk submit program submits them.

For more information on the HOLD job attribute, see Job Definition on page 6-102. The default value is N.

Job Start Time

Use the Job Start Time field with the Override field to specify one of these start times. (The times apply to jobs selected by the control job for submission in a bulk submit run.)

- The default start time for jobs whose start time is not explicitly specified. The default time applies when the value in the Override field is N (No). Table 6-1 shows the priority given to the start times specified on different screens.

  If a job has the WAIT attribute, the NetBatch-Plus application adds the wait time to the default start time for that job. For more information on the WAIT attribute, see Job Definition on page 6-102.

- The start time for all jobs in the run, regardless of the individual start times specified for those jobs. This time applies only when the value in the Override field is Y (Yes).

You can specify the start time by entering, in any order, a date, a time, or both. For more information about date and time forms, see the preceding description of the Start Submit field.

The default value is the current date and time.

Table 6-1. Start Time Priority in Bulk Submit Runs

Override Field	Start Time Priority (Highest1; Lowest 3)	Screen	Field
N (No)	1	Bulk Job Selection Criteria	Time
	2	Job Definition	Time
	3	Bulk Submit	Job Start Time
Y (Yes)	1	Bulk Submit	Job Start Time

Override

Use the Override field to specify whether the time in the Job Start Time field overrides the individual start times of jobs in the run. The field options are:

Y Yes specifies the time in the Job Start Time field overrides the individual start times of all jobs in the run. The bulk submit program submits the jobs to their schedulers at the specified time.

N No specifies the time in the Job Start Time field does not override the individual start times of jobs in the run. However, the time in the field acts as the default start time for jobs whose start time is not explicitly specified. For more information on the default start time, see Job Start Time on page 6-14.

The default value is N.

Functions

These functions are available on the Bulk Submit screen:

Function	Description
F1–Test Run For Specified Run Date	Executes a test bulk submit run in which the bulk submit program selects jobs by date but does not actually submit them for processing. The program selects the jobs by the date specified in the Select By Date field. The Bulk Submit Predictions report lists information about the jobs selected in the run. This function lets you test a bulk submit run before executing a production run.
F2–Production Run For Specified Run Date	Executes a production bulk submit run in which the bulk submit program selects jobs by date and submits them for processing. The program selects the jobs by the date specified in the Select By Date field. The Bulk Submit Submissions report lists information about the selected jobs. The bulk submit program checks for dependent jobs among the jobs it selects in a run. When the program finds a dependent job, it also checks the selected jobs for the dependent's masters. If found, the program submits the dependent job before those masters, which means the dependent job exists for its masters to release. If the program cannot find the masters among the selected jobs, it submits the dependent job anyway, but the scheduler does not execute that job until its masters release it. To check whether the bulk submit program selects a dependent job's masters, do one of: ● Execute a test bulk submit run and review the Bulk Submit Predictions report produced for that run. In its Start Time/Waiton column fields, the report lists the names of master jobs selected in the run. ● Use the Bulk Job Selection criteria screen to check whether the dependent job's masters have the same selection date or category as the dependent job.

* Function is available on screen, but not displayed,

Function	Description
F3–Test Run For Specified Category	Executes a test bulk submit run in which the bulk submit program selects jobs by category but does not actually submit them for processing. The program will select the jobs by the category specified in the Select By Category field. This function enables you to test a bulk submit run before executing a production run. The Bulk Submit Predictions report lists information about the jobs selected in the run.
F4–Production Run For Specified Category	Executes a production bulk submit run in which the bulk submit program selects jobs by category and submits them for processing. The program selects the jobs by the category specified in the Select By Category field. The Bulk Submit Submissions report lists information about the jobs selected in the run. For information on how the bulk submit program manages dependent/master job relationships, see F2–Production Run For Specified Run Date.
F6–Daily Production Run	Starts a daily production bulk submit run that selects jobs by a specified category or date. The bulk submit program submits the selected jobs on the date and at the time specified in the Start Submit field. The Bulk Submit Submissions report will list information about the jobs selected in the run. After submitting the jobs in a daily run, the bulk submit program increments the date in the Start Submit field by one day. The time specified in the field does not change. The control job runs again on the new date but at the time specified for the original run. If you specified a selection date in the Select By Date field, the program also increments that date by one day. The Bulk Submit Predictions report lists information about the jobs due to run on the following day. The bulk submit program produces this report at the same time as the Bulk Submit Submissions report. For information on how the bulk submit program manages dependent and master job relationships, see F2–Production Run For Specified Run Date.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Bulk Submit screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Bulk Submit screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Bulk Submit screen, press F16.

* Function is available on screen, but not displayed,

Function	Description
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Bulk Submit Environment

Use the Bulk Submit Environment screen to specify the scheduler, class, owner, and default OUT attribute for the bulk submit control job. You can also specify the time interval that determines the retention period for temporary output files created during bulk submit runs. This interval also determines the number of days before execution that you can schedule those runs.

The control job submits the jobs in a bulk submit run to their respective schedulers. Selection of jobs in the run is by their selection criteria and by the run parameters specified on the Bulk Submit screen. You specify job selection criteria on the Bulk Job Selection Criteria screen.

The NetBatch-Plus application names the control job automatically. The name is of the form NBP-ZZNP*nnnn* where *nnnn* is a number in the range 0001 through 9999. The application assigns the numbers in sequence but in reverse order (9999, 9998, ... 0002, 0001, 9999, 9998, ...). If a number already exists, the application assigns the next available number.

The NetBatch-Plus application creates a temporary input file for the control job when you initiate a run on the Bulk Submit screen. The application places the file in the NetBatch-Plus database subvolume. The file name is ZZNP*nnnn* where *nnnn* is the number assigned to the control job name.

After submitting the jobs in a bulk run, the bulk submit program deletes the temporary input file and creates a temporary output file. The name and location of the new file are the same as those of the deleted file. The bulk submit program writes a record (RECORD-BULK) to the temporary output file for each job in the run. This record contains information about the job such as its name and owner, where and when it will run, and its dependencies. You can use the Enform language to query and report on this information if necessary.

The NetBatch-Plus application purges temporary output files on expiration of the specified retention period.

Figure 6-4. Bulk Submit Environment Screen

```
NETBATCH-PLUS            BULK SUBMIT ENVIRONMENT          01Jan2002   SNP010



Scheduler   : \ADMIN.$ZBAT__
Class       : DEFAULT_________________

Owner       : SUPER.SUPER______
Password    : ________________

Report File : $S.#BLKSBMT___________________________

Window      : _7

High PIN    : __




               F1-Read                  F6-Update
```

Displaying the Screen

From the Main Menu screen, press F6 to display the Bulk Submit Environment screen.

Field Descriptions

Scheduler

Use the Scheduler field to specify the scheduler for the bulk submit control job. For security reasons, the scheduler must reside in the default system (the system where the NetBatch-Plus Pathway system is running).

To specify the scheduler, enter a scheduler name in the form:

[*system-name*.]$*process-name*

system-name

is the name of the default system. The NetBatch-Plus application enters this name for you if you perform the F6–Update function when the field is blank.

process-name

is the name of the scheduler process.

Class

Use the Class field to specify the CLASS attribute for the bulk submit control job. The attribute links a job to an executor and therefore to the executor's CPU.

To specify the attribute, enter the name of an existing class.

For more information on the CLASS job attribute, see Job Definition on page 6-102.

Owner

Use the Owner field to enter the Guardian user ID of the owner of all control jobs created during bulk submit runs. For more information on entering Guardian user IDs, see Password Validation on page 6-182.

Password

Use the Password field to enter the password of the Guardian user you specified in the Owner field. For more information on entering Guardian passwords, see Password Validation on page 6-182.

Report File

Use the Report File field to specify the default OUT attribute for the bulk submit control job. The default applies to control jobs whose OUT attribute is not specified in the Report File field on the Bulk Submit screen.

The OUT attribute of a control job identifies the location where the scheduler sends the job log file and these bulk submit reports:

- Bulk Submit Predictions—produced automatically by the bulk submit program for all test runs and for daily production runs
- Bulk Submit Submissions—produced automatically by the bulk submit program for all production runs

For more information on the bulk submit reports, see Bulk Submit Reports on page 7-3.

To specify the default OUT attribute, enter the Guardian name of a device, disk file, or process. If you enter a partial name, the NetBatch-Plus application expands it using the logon defaults of the user specified in the Owner field. The default value is the spooler location $S.#JSCHED on the system specified for the control job's scheduler.

Window

Use the Window field to enter an integer in the range 1 through 99 specifying, in days, these values:

- The retention period for temporary output files created during bulk submit runs. The retention period determines how long the NetBatch-Plus application keeps the files before purging them automatically. For example, if the period is 14 days and

the application created a temporary output file at 9:00 a.m. on 1 April, the file will be eligible for purging at 9:00 a.m. on 16 April. NetBatch-Plus automatically adds a one day grace period before purging files.

- The number of days before execution that users can schedule bulk submit runs. For example, a value of 14 in the field specifies that users can schedule runs up to 14 days in advance.

High PIN

Use the High PIN field to set the HIGHPIN job attribute. This attribute specifies whether a job can be started in a high PIN.

Allowed values for this field are:

- Y = ON (job can be started in a high PIN)
- N = OFF (job cannot be started in a high PIN; default)

When a process runs at a high PIN, it cannot communicate with a remote C-series process.

Functions

These functions are available on the Bulk Submit Environment screen:

Function	Description
F1—Read	Shows details of the bulk submit control job.
F6—Update	Updates details of the bulk submit control job.
F16—Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Bulk Submit Environment screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. • To go to the next page, press the Next Page key on your keyboard. • To go to the previous page, press the Prev Page key. To return to the Bulk Submit Environment screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Bulk Submit Environment screen, press F16.

* Function is available on screen, but not displayed,

Function	Description
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Calendar

Use the Calendar screen to add, inquire about, update, and delete calendar categories.

A calendar category is a set of selection dates identified by a unique name. A selection date specifies the day, month, and year when the bulk submit program selects a job in a bulk submit run that selects jobs by that date.

You can use calendar categories on the Bulk Job Selection Criteria screen when you want to specify multiple selection dates for a job. Instead of entering the dates one by one, you enter only the name of the category containing those dates.

You create calendar categories and add dates to them by performing the F4–Generate and F6–Maintain functions on the Calendar screen. F4–Generate calculates and adds dates automatically based on a user-supplied date range and frequency. F6–Maintain lets you add dates manually to a category.

Figure 6-5. Calendar Screen

```
NETBATCH-PLUS            CALENDAR                          01Jan2002   SNP070

Category: LASTFRIDAY Start: 01Jul2002_ End: 30Jun2003_ Freq: M/-6/FRI____

    (A,D, or U)        Category              Date
         _             LASTFRIDAY          26Jul2002_ Fri
         _             LASTFRIDAY          30Aug2002_ Fri
         _             LASTFRIDAY          27Sep2002_ Fri
         _             LASTFRIDAY          25Oct2002_ Fri
         _             LASTFRIDAY          29Nov2002_ Fri
         _             LASTFRIDAY          27Dec2002_ Fri
         _             LASTFRIDAY          24Jan2003_ Fri
         _             LASTFRIDAY          28Feb2003_ Fri
         _             LASTFRIDAY          27Mar2003_ Fri
         _             LASTFRIDAY          24Apr2003_ Fri
         _             LASTFRIDAY          29May2003_ Fri
         _             LASTFRIDAY          26Jun2003_ Fri
         _             __________          __________
         _             __________          __________
         _             __________          __________
         _             __________          __________

F1-Read   F2-Next   F6-Maintain    Entire Category:  F4-Generate   F8-Delete
```

Displaying the Screen

From the Main Menu screen, press F5 to display the Calendar screen. The screen shows, in date order, all dates in all calendar categories.

Field Descriptions

Category

Use the Category field to name the calendar category you want to add, inquire about, update, or delete. A category name can contain from 1 to 10 letters and numbers. It can also contain hyphens (-). The name must begin with a letter and can end with any letter or number but not with a hyphen.

Start

Use the Start field to enter the first date in the range of dates you want to add, inquire about, update, or delete. You can enter the date in any of the forms:

```
[d]d mmm
[d]d mmm [yy]yy
[yy]yy mmm [d]d
[yy]yy [m]m [d]d
[yy]yymmdd
mmm [d]d
mmm [d]d [yy]yy
```

`[d]d`

is an integer in the range 1 through 31 specifying the day of the month.

`dd`

is a two-digit number in the range 01 through 31 specifying the day of the month.

`[m]m`

is an integer in the range 1 through 12 specifying the month.

`mm`

is a two-digit number in the range 01 through 12 specifying the month.

`mmm`

is a character string specifying the month. You must enter at least the first three characters of the month name. For example, to specify the fourth month, enter APR, APRI, or APRIL.

`[yy]yy`

is a two-digit or four-digit number specifying the year. When you specify a two-digit number, the NetBatch-Plus application adds 1900 to that number to calculate the year. If the sum is less than the current year, the application interprets the year as 2000 plus the number. For example, in 1992, the application will interpret 05 as the year 2005 and 93 as the year 1993.

Note. For spaces in the dates you enter, you can substitute diagonals (/), periods (.), or hyphens (-). You can leave out spaces if they separate alphabetic and numeric date components (for example, you can enter 2002JUL04 instead of 2002 JUL 04). You cannot leave out spaces between numeric date components (for example, you can enter 2002 7 04 but not 2002704).

The date forms *mmm* [*d*]*d* and [*d*]*d mmm* refer to the current year.

The default value for the Start field is the current date on your system. The NetBatch-Plus application shows this date in the field when you display the screen. It also enters the date in the field if you perform the F1–Read or F4–Generate functions when the field is blank. The default value does not apply to the F8–Delete function. If you press F8 when the field is blank, the NetBatch-Plus application displays a message advising you a date is necessary.

End

Use the End field to enter the last date in the range of dates you want to add, inquire about, update, or delete. The date must be later than the date in the Start field. You can enter the date in any form listed in the preceding Start field description.

You must enter a date in the End field when you want to perform the F4–Generate or F8–Delete functions. The date is optional for the F1–Read function. If the End field is blank when you press F1, the NetBatch-Plus application lists all dates from the date in the Start field.

Freq

Use the Freq field to specify the interval the NetBatch-Plus application uses to calculate dates when it performs the F4–Generate function. You specify the interval using one or more standard frequency options. The field options are:

n Specifies a day of the month where *n* is an integer in the range 1–31. For example, 1 specifies the first of the month; 15 specifies the fifteenth of the month; 31 specifies the last day of the month (not necessarily the thirty-first).

*n*M Specifies a frequency in months from the date in the Start field. *n* is an integer in the range 1–12. For example, 2M specifies a frequency of once every two months from the Start field date; 3M specifies a quarterly frequency.

*n*Y Specifies a frequency in years from the date in the Start field. *n* is an integer in the range 1–11. For example, 5Y specifies a frequency of once every five years from the Start field date.

day Specifies a day of the week where *day* is the first three characters of the day name. For example, MON specifies Monday; SUN specifies Sunday. You cannot combine other frequency options with this option if it is the first entry in the field.

H*[n]* Specifies a half-yearly frequency occurring at month-end *n* months after each half-year (30 June and 31 December). *n* is an integer in the range 1–5. For example, H specifies a six-monthly frequency occurring at the end of June and December; H4 specifies the end of October and April.

M Specifies a monthly frequency occurring at month-end (31 January, 28 February (leap years 29 February), 31 March, … 31 December). You can also specify this frequency by specifying 31 as the value for option *n*.

mth Specifies the first of the month where *mth* is the first three characters of the month name. For example, JAN specifies the first of January; DEC specifies the first of December. You can combine this option with option *n* to specify a day other than the first of the month. For example, JAN/18 specifies the eighteenth of January.

Q*[n]* Specifies a quarterly frequency occurring at month-end *n* months after the end of each quarter (31 March, 30 June, 30 September, and 31 December). *n* can be 1 or 2. For example, Q specifies a quarterly frequency occurring at the end of March, June, September, and December; Q2 specifies the end of February, May, August, and November.

Y*[n]* Specifies a yearly frequency occurring at month-end *n* months after year-end (31 December). *n* is an integer in the range 1–11. For example, Y specifies a yearly frequency occurring at the end of December; Y6 specifies the end of June.

+*n* Specifies a frequency in days where *n* is an integer in the range 1–32767. For example, +7 specifies a frequency of once a week; +14 specifies a fortnightly frequency. You cannot combine other frequency options with this option if it is the first entry in the field.

–*n* Specifies the number of days to subtract from another frequency option. *n* is an integer in the range 1–32767. For example, M/-5 specifies a monthly frequency occurring five days before month-end. You cannot specify this option on its own.

You can combine frequency options when you want to specify a frequency you cannot specify by entering an option on its own. For example, there is no single option you can use to specify the last Friday of each month. To specify these Fridays, combine options M, –*n*, and *day* in the form M/–6/FRI.

When you combine options, you must specify them in order of frequency, with longer frequencies coming before shorter frequencies. For example, year must come before month, month before day of the month, and day of the month before day of the week. The exceptions are +*n* and –*n*, which you can use to qualify any option. You must separate combined options with a diagonal (/). More examples of combined options are:

M/MON	The first Monday after month-end
10/FRI	The first Friday after the tenth of the month
5/–7/WED	The Wednesday in the seven-day period before the fifth of the month
APR/26	The twenty-sixth of April

A, D, or U

Use the fields in the A, D, or U column to indicate the maintenance functions you want to perform on the corresponding dates. The NetBatch-Plus application executes these functions when you press F6–Maintain. The field options are:

A Adds the date in the Date column to the category named in the Category column. The NetBatch-Plus application creates the category if it does not exist.

Use this option when you want to add dates to existing categories or create new categories containing dates occurring at irregular intervals. For example, you could create a category containing the birth dates of all employees of your company.

D Deletes the date in the Date column from the category named in the Category column.

U Updates the date in the Date column

Category

Use the fields in the Category column to enter the names of categories whose dates you want to add, delete, or update. For information about the make-up of the name, see the preceding description of the Category field.

Date

Use the fields in the Date column to specify the dates you want to add, delete, or update. The days corresponding to dates displayed by the NetBatch-Plus application appear on the right of the field. You can enter the date in any form listed in the preceding Start field description.

Functions

These functions are available on the Calendar screen:

Function	Description
F1–Read	Lists, in date order, the dates in the specified category and date range. If you press F1 when the Category field is blank, the NetBatch-Plus application lists the dates in all categories. If the Start field is blank, F1 lists all dates from the current date. If the End field is blank, F1 lists all dates in the category from the date in the Start field.
F2–Next	Continues the listing of dates in the specified category and date range.
F4–Generate	Calculates, for the specified date range, the dates occurring at the interval shown in the Freq field. After calculating the dates, the NetBatch-Plus application adds them to the category named in the Category field: ● If the category does not exist, the application creates it before adding the dates. ● If the category exists, the application combines the dates with any dates already in that category. This feature lets you perform the F4–Generate function a number of times in succession to create a category containing dates generated by different frequency options. Table 6-2 on page 6-28 illustrates this feature by showing the field values necessary to generate a category containing all weekday dates in a year. To generate this category, you perform the function five times in succession, each time with a different frequency option.

* Function is available on screen, but not displayed,

Function	Description
F6–Maintain	Adds, deletes, or updates dates according to the values in the A, D, or U column fields.
F8–Delete	Deletes, from the specified category, all dates in the range shown by the Start and End fields. (See Caution after this table.)
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Calendar screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Calendar screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Calendar screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus PATHWAY system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

△ **Caution.** If you press F8 when the Category field is blank, the NetBatch-Plus application deletes the dates from all categories.

Table 6-2. Example of Category Generation Using the F4-Generate Function

F4-Generate Function	Category Field	Start Field	End Field	Freq Field
1st Performance	WEEKDAY	01Jan2002	31Dec2002	MON
2nd Performance	WEEKDAY	01Jan2002	31Dec2002	TUE
3rd Performance	WEEKDAY	01Jan2002	31Dec2002	WED
4th Performance	WEEKDAY	01Jan2002	31Dec2002	THU
5th Performance	WEEKDAY	01Jan2002	31Dec2002	FRI

Catalog ASSIGNs

Use the Catalog ASSIGNs screen to add new ASSIGNs to the attachments catalog. You can also use the screen to inquire about, update, and delete ASSIGNs already in the catalog.

ASSIGNs are used for file redirection or substitution. You can enter the logical name of an ASSIGN in place of a physical file name in a program. ASSIGNs are similar to map DEFINEs. However, ASSIGNs are usually processed by an application program, whereas map DEFINEs are processed by the system.

ASSIGNs in the NetBatch-Plus catalog can be shared by any number of jobs. By using these ASSIGNs, you can easily and quickly attach identical ASSIGNs to multiple jobs. Instead of creating ASSIGNs for each job, you create only a single ASSIGN in the catalog. You can then attach that ASSIGN to as many jobs as you want. Catalog ASSIGNs also simplify ASSIGN maintenance. By updating the attributes of a catalog ASSIGN, you automatically update those attributes for all jobs to which they apply.

You can attach catalog ASSIGNs to jobs by using the Job ASSIGNs screen. You can also use that screen to override attributes of a catalog ASSIGN.

Figure 6-6. Catalog ASSIGNs Screen

```
NETBATCH-PLUS            CATALOG ASSIGNS                  01Jan2002   SNP040

Option      : ASSIGN__
Set         : DEF-SET-1_
ASSIGN Name : GLEDGER.DAYLOG-FILE_____________________________________________
Owner       : ADMIN.OPER1______ , _________________ / AOAO
              SUPER.OPERATOR                          AAAA

Physical Filename : \AUST1.$BANK.USER1.DAYLOG__________


Exclusion   : E
Access      : IO

Prim Extent:  100__
Sec Extent  : 200__
File code   : 905__

Record Size : 512__
Block Size  : 4096_

F1-Read            F2-Next            F4-Add             F6-Update
F8-Delete          F13-Choose Option
```

Displaying the Screen

You can display the Catalog ASSIGNs screen from any of these screens:

- From the Main Menu screen, press F4.
- From the Catalog PARAMs screen or any catalog DEFINEs screen, enter A or ASSIGN in the Option field and press F13.

Field Descriptions

Option

Use the Option field to specify the catalog attachment screen displayed when you perform the F13–Choose Option function. The field options are:

P[ARAM]	Specifies the Catalog PARAMs screen.
C[ATALOG]	Specifies the Catalog Catalog DEFINEs screen.
D[EFAULTS]	Specifies the Catalog Defaults DEFINEs screen.
M[AP]	Specifies the Catalog Map DEFINEs screen.
S[POOL]	Specifies the Catalog Spool DEFINEs screen
T[APE]	Specifies the Catalog Tape DEFINEs screen.

Set

Use the Set field to enter the name of the defaults set with which the NetBatch-Plus application associates the ASSIGN. The name must identify a defaults set defined on the Defaults Set Details screen.

ASSIGN Name

Use the ASSIGN Name field to enter the logical name you want to use as a substitute for the physical file name. You can enter the logical name in any of the forms:

```
logical-file
program-unit.logical-file
*.logical-file
```

logical-file

is the logical file name as it appears in the program file (for example, DAYLOG-FILE). The name can contain from 1 through 31 letters, numbers, hyphens (-), and circumflexes (^). The first character must be a letter.

program-unit

is the name of the program unit to which the assignment applies (for example, GLEDGER). The make-up of the name is the same as the name of the logical file.

*

applies the assignment to all program units in the program file being run.

Owner

Use the three-part Owner field to specify the owner and security attributes of the ASSIGN record.

In the first part of the field, enter a Guardian user ID identifying the owner of the record. Enter the user's password in the second part of the field. For more information on entering Guardian user IDs and passwords, see Password Validation on page 6-182.

If you do not specify the owner, the NetBatch-Plus application gives ownership of the record to the owner of the defaults set.

In the third part of the field, enter the four security codes specifying the security attributes of the record. The security attributes are:

R Read specifies who can read the record.

W Write specifies who can update the record.

U Use specifies who can attach the record to a job.

P Purge specifies who can delete the record.

For each attribute, you can specify any one of these security codes:

O Specifies that only the owner can access the record.

If the owner is the super ID (255, 255), the NetBatch-Plus application automatically sets the write security attribute to O. This helps to prevent users from gaining unauthorized access to the super ID's records.

G Specifies that any user in the owner's group can access the record.

A Specifies that any user can access the record.

- Specifies that only the super ID can access the record.

A record added without security attributes adopts those of the owner of the defaults set.

The NetBatch-Plus application prevents users who do not have read access to a record from updating, using, or deleting that record. This restriction applies regardless of the security codes assigned to the record's write, use, and purge attributes.

When you display the screen, the NetBatch-Plus application shows one of these user IDs below the first part of the field:

- The user ID from the defaults set associated with the signed-on user. The application shows this ID if no other user IDs have been validated during the current session.
- The user ID of the last user validated by a function performed during the current session.

The security attributes associated with that user appear below the third part of the field.

Physical Filename

Use the Physical Filename field to enter the name of the actual file.

The file name must be a Guardian file name. If you enter a partial name, the NetBatch-Plus application uses the system, volume, and subvolume specified for the defaults set to expand the name. The Volume field on the Defaults Set Details screen displays these values.

Exclusion

Use the Exclusion field to specify the exclusion mode of the physical file. The exclusion mode determines the circumstances under which other processes can access the file. The field options are:

E Exclusive specifies that no other processes can access the physical file while the program referring to the logical file has the file open.

S Shared specifies that other processes can both read and write to the physical file while the program referring to the logical file has the file open.

P Protected specifies that another process can read but not write to the physical file while the program referring to the logical file has the file open.

For more information on exclusion modes, see the *ENSCRIBE Programmer's Guide*.

Access

Use the Access field to specify the access mode of the physical file. The access mode determines the file operations that processes can perform on the file. The field options are:

I Input specifies that processes can only read the physical file.

O Output specifies that processes can only write to the physical file.

IO Input-output specifies that processes can both read and write to the physical file.

For more information on access modes, see the *ENSCRIBE Programmer's Guide*.

Prim Extent

Use the Prim Extent field to specify the size of the primary extent allocated to the physical file. This file-creation attribute applies only when the program referring to the logical file creates the physical file.

To specify the primary extent size, enter an integer in the range 1 through 65534.

Sec Extent

Use the Sec Extent field to specify the size of the secondary extents allocated to the physical file. Secondary extents are allocated after the primary extent. This file-creation attribute applies only when the program referring to the logical file creates the physical file.

To specify the secondary extent size, enter an integer in the range 1 through 65534.

File Code

Use the File Code field to assign a file code to the physical file. This file-creation attribute applies only when the program referring to the logical file creates the physical file.

To specify the file code, enter an integer in the range 0 through 65534.

For a list of reserved file codes, see the *File Utility Program (FUP) Reference Manual*.

Record Size

Use the Record Size field to specify, in bytes, the length of records in the physical file. This file-creation attribute applies only when the program referring to the logical file creates the physical file.

To specify the record length, enter an integer in the range 1 through 65534.

Block Size

Use the Block Size field to specify the size of the data blocks in the physical file. This file-creation attribute applies only when the program referring to the logical file creates the physical file.

To specify the block size, enter an integer in the range 1 through 65534.

Functions

These functions are available on the Catalog ASSIGNs screen:

Function	Description
F1–Read	Shows information about the ASSIGN specified in the ASSIGN Name field that belongs to the defaults set named in the Set field.
F2–Next	Shows information about the next ASSIGN belonging to the defaults set. When there are no more ASSIGNs, the function displays, in this order and on the appropriate screens, the DEFINEs and PARAMs for the set: 1. Catalog DEFINEs 2. Defaults DEFINEs 3. Map DEFINEs 4. Spool DEFINEs 5. Tape DEFINEs 6. PARAMs After the F2–Next function displays the last PARAM for the set, it redisplays the Catalog ASSIGNs screen. The screen shows details of the first ASSIGN of the next set.
F4–Add	Adds the ASSIGN to the attachments catalog.
F6–Update	Updates attributes of the ASSIGN. The updated attributes apply automatically to jobs using the ASSIGN unless overridden on the Job ASSIGNs screen.
F8–Delete	Deletes the ASSIGN from the attachments catalog. You cannot delete catalog ASSIGNs attached to jobs.

* Function is available on screen, but not displayed,

Function	Description
F13–Choose Option	Displays the catalog attachment screen you specified in the Option field. If you press F13 when the field is blank, the NetBatch-Plus application redisplays the Catalog ASSIGNs screen.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Catalog ASSIGNs screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next ->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Catalog ASSIGNs screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Catalog ASSIGNs screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Catalog Catalog DEFINEs

Use the Catalog Catalog DEFINEs screen to add new SQL catalog DEFINEs to the attachments catalog. You can also use the screen to inquire about, update, and delete SQL catalog DEFINEs already in the NetBatch-Plus catalog.

SQL catalog DEFINEs are used for NonStop SQL/MP catalog redirection or substitution. You can enter the logical name of the catalog DEFINE in place of a catalog name in CATALOG clauses in NonStop SQL/MP data manipulation language (DML) statements.

DEFINEs in the NetBatch-Plus catalog can be shared by any number of jobs. By using these DEFINEs, you can easily and quickly attach identical DEFINEs to multiple jobs. Instead of creating the DEFINEs for each job, you need only create a single DEFINE in the catalog. You can then attach that DEFINE to as many jobs as you want. Catalog DEFINEs also simplify DEFINE maintenance. By updating the attributes of a catalog DEFINE, you automatically update those attributes for all jobs to which they apply.

You can attach SQL catalog DEFINEs from the NetBatch-Plus catalog to jobs by using the Job Catalog DEFINEs screen. You can also use that screen to override attributes of the DEFINEs.

Figure 6-7. Catalog Catalog DEFINEs Screen

```
NETBATCH-PLUS            CATALOG CATALOG DEFINES          01Jan2002   SNP050DC

Option      : CATALOG_
Set         : DEF-SET-1_
DEFINE Name : =SALES_____________________
Owner       : SALES.MNGR_______ , _________________ / AOOO
              ADMIN.OPER1                             AOAO


Subvolume   : \SYS1.$VOL1.SALES________




F1-Read           F2-Next           F4-Add            F6-Update
F8-Delete         F13-Choose Option
```

Displaying the Screen

From any catalog attachment screen, enter C or CATALOG in the Option field and press F13 to display the Catalog Catalog DEFINEs screen.

Field Descriptions

Option

Use the Option field to specify the catalog attachment screen displayed when you perform the F13–Choose Option function. The field options are:

A[SSIGN]	Specifies the Catalog ASSIGNs screen.
P[ARAM]	Specifies the Catalog PARAMs screen.
D[EFAULTS]	Specifies the Catalog Defaults DEFINEs screen.
M[AP]	Specifies the Catalog Map DEFINEs screen.
S[POOL]	Specifies the Catalog Spool DEFINEs screen.
T[APE]	Specifies the Catalog Tape DEFINEs screen.

Set

Use the Set field to enter the name of the defaults set with which the NetBatch-Plus application associates the DEFINE. The name must identify a defaults set defined on the Defaults Set Details screen.

DEFINE Name

Use the DEFINE Name field to enter the logical name you want to use as a substitute for the physical NonStop SQL/MP catalog name. The logical name can contain from 2 through 24 characters. The first character must be an equals sign (=); the remaining characters can be letters, numbers, hyphens (-), underscores (_), or circumflexes (^). Note that in some products (for example, the TACL command interpreter), names whose second character is an underscore are reserved for use by HP. To avoid errors or unexpected results, do not use an underscore as the second character. Names beginning with =_ZBAT are reserved for use by the NetBatch-Plus application.

Owner

Use the three-part Owner field to specify the Guardian owner of the DEFINE record and the security attributes of that record. For more information on this field, see Catalog ASSIGNs on page 6-29.

Subvolume

Use the Subvolume field to enter the name of the physical NonStop SQL/MP catalog.

The form of the catalog name is a Guardian subvolume name. If you enter a partial name, the NetBatch-Plus application uses the system, volume, and subvolume specified for the defaults set to expand the name. The Volume field on the Defaults Set Details screen displays these values.

Functions

These functions are available on the Catalog Catalog DEFINEs screen:

Function	Description
F1–Read	Shows information about the DEFINE specified in the DEFINE Name field that belongs to the defaults set named in the Set field.
F2–Next	Shows information about the next SQL catalog DEFINE belonging to the defaults set. When there are no more SQL catalog DEFINEs, the function displays, in this order and on the appropriate screens, the remaining DEFINEs and the PARAMs for the set: 1. Defaults DEFINEs 2. Map DEFINEs 3. Spool DEFINEs 4. Tape DEFINEs 5. PARAMs After the F2–Next function displays the last PARAM for the set, it redisplays the Catalog ASSIGNs screen. The screen shows details of the first ASSIGN of the next set.
F4–Add	Adds the DEFINE to the attachments catalog.
F6–Update	Updates attributes of the DEFINE. The updated attributes apply automatically to jobs using the DEFINE unless overridden on the Job Catalog DEFINEs screen.
F8–Delete	Deletes the DEFINE from the attachments catalog. You cannot delete catalog DEFINEs attached to jobs.
F13–Choose Option	Displays the catalog attachment screen you specified in the Option field. If you press F13 when the field is blank, the NetBatch-Plus application displays the Catalog ASSIGNs screen.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Catalog Catalog DEFINEs screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard ● To go to the previous page, press the Prev Page key. To return to the Catalog Catalog DEFINEs screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Catalog Catalog DEFINEs screen, press F16.

* Function is available on screen, but not displayed,

Function	Description
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Catalog Defaults DEFINEs

Use the Catalog Defaults DEFINEs screen to add new defaults DEFINEs to the attachments catalog. You can also use the screen to inquire about, update, and delete defaults DEFINEs already in the catalog.

Defaults DEFINEs are used for holding the standard default values of a process (for example, the default volume).

DEFINEs in the NetBatch-Plus catalog can be shared by any number of jobs. By using these DEFINEs, you can easily and quickly attach identical DEFINEs to multiple jobs. Instead of creating the DEFINEs for each job, you need only create a single DEFINE in the catalog. You can then attach that DEFINE to as many jobs as you want. Catalog DEFINEs also simplify DEFINE maintenance. By updating the attributes of a catalog DEFINE, you automatically update those attributes for all jobs to which they apply.

You can attach catalog defaults DEFINEs to jobs by using the Job Defaults DEFINEs screen. You can also use that screen to override attributes of a catalog defaults DEFINE.

Figure 6-8. Catalog Defaults DEFINEs Screen

```
NETBATCH-PLUS            CATALOG DEFAULTS DEFINES         01Jan2002   SNP050DD

Option      : DEFAULTS
Set         : DEF-SET-1_
DEFINE Name : =DFLTS_____________________
Owner       : ADMIN.SM1_________ , ________________ / GGGO
              SUPER.CE                               AAAA



Volume  : \ADMIN.$A.RECORD___________

Catalog : \SYS1.$VOL1.SALES__________

Swap    : $BANK_____________




F1-Read           F2-Next            F4-Add             F6-Update
F8-Delete         F13-Choose Option
```

Displaying the Screen

From any catalog attachment screen, enter D or DEFAULTS in the Option field and press F13 to display the Catalog Defaults DEFINEs screen.

Field Descriptions

Option

Use the Option field to specify the catalog attachment screen displayed when you perform the F13–Choose Option function. The field options are:

A[SSIGN]	Specifies the Catalog ASSIGNs screen.
P[ARAM]	Specifies the Catalog PARAMs screen.
C[ATALOG]	Specifies the Catalog Catalog Defaults DEFINEs screen.
M[AP]	Specifies the Catalog Map DEFINEs screen.
S[POOL]	Specifies the Catalog Spool DEFINEs screen.
T[APE]	Specifies the Catalog Tape DEFINEs screen.

Set

Use the Set field to enter the name of the defaults set with which the NetBatch-Plus application associates the DEFINE. The name must identify a defaults set defined on the Defaults Set Details screen.

DEFINE Name

Use the DEFINE Name field to enter the name of the defaults DEFINE. The name can contain from 2 through 24 characters. The first character must be an equals sign (=). The remaining characters can be letters, numbers, hyphens (-), underscores (_), or circumflexes (^). In some products (for example, the TACL command interpreter), names whose second character is an underscore are reserved for use by HP. To avoid errors or unexpected results, do not use an underscore as the second character. Names beginning with =_ZBAT are reserved for use by the NetBatch-Plus application.

Owner

Use the three-part Owner field to specify the Guardian owner of the DEFINE record and the security attributes of that record. For more information on this field, see Catalog ASSIGNs on page 6-29.

Volume

Use the Volume field to specify, in Guardian form, the default system, volume, and subvolume.

You must specify at least a volume and subvolume. If you do not specify a system, the system specified for the defaults set applies. The Volume field on the Defaults Set Details screen displays this value.

Catalog

Use the Catalog field to enter the name of the default NonStop SQL/MP catalog. The form of the catalog name is a Guardian subvolume name.

You must specify at least a volume and subvolume. If you do not specify a system, the system specified for the defaults set applies. The Volume field on the Defaults Set Details screen displays this value.

Swap

Use the Swap field to specify the disk volume used as the default location for swap files. The swap volume must be on the same system as the object to be run.

Functions

These functions are available on the Catalog Defaults DEFINEs screen:

Function	Description
F1–Read	Shows information about the DEFINE specified in the DEFINE Name field that belongs to the defaults set named in the Set field.
F2–Next	Shows information about the next defaults DEFINE belonging to the defaults set. When there are no more defaults DEFINEs, the function displays, in this order and on the appropriate screens, the remaining DEFINEs and the PARAMs for the set: 1. Map DEFINEs 2. Spool DEFINEs 3. Tape DEFINEs 4. PARAMs After the F2–Next function displays the last PARAM for the set, it redisplays the Catalog ASSIGNs screen. The screen shows details of the first ASSIGN of the next set.
F4–Add	Adds the DEFINE to the attachments catalog.
F6–Update	Updates attributes of the DEFINE. The updated attributes apply automatically to jobs using the DEFINE unless overridden on the Job Defaults DEFINEs screen.
F8–Delete	Deletes the DEFINE from the attachments catalog. You cannot delete catalog DEFINEs attached to jobs.
F13–Choose Option	Displays the catalog attachment screen you specified in the Option field. If you press F13 when the field is blank, the NetBatch-Plus application displays the Catalog ASSIGNs screen.
F16–Previous Screen*	Displays the previous screen on the menu path.

* Function is available on screen, but not displayed,

Function	Description
SF1–Screen Help*	Displays information about the Catalog Defaults DEFINEs screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Catalog Defaults DEFINEs screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Catalog Defaults DEFINEs screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Catalog Map DEFINEs

Use the Catalog Map DEFINEs screen to add new map DEFINEs to the attachments catalog. You can also use the screen to inquire about, update, and delete map DEFINEs already in the catalog.

Map DEFINEs are used for file redirection or substitution. You can enter the logical name of a map DEFINE in place of a physical file name in a command or procedure call. Map DEFINEs are similar to ASSIGNs. However, map DEFINEs are processed by the system, whereas ASSIGNs are usually processed by an application program.

DEFINEs in the NetBatch-Plus catalog can be shared by any number of jobs. By using these DEFINEs, you can easily and quickly attach identical DEFINEs to multiple jobs. Instead of creating the DEFINEs for each job, you need only create a single DEFINE in the catalog. You can then attach that DEFINE to as many jobs as you want. Catalog DEFINEs also simplify DEFINE maintenance. By updating the attributes of a catalog DEFINE, you automatically update those attributes for all jobs to which they apply.

You can attach catalog map DEFINEs to jobs by using the Job Map DEFINEs screen. You can also use that screen to override attributes of a catalog map DEFINE.

Figure 6-9. Catalog Map DEFINEs Screen

```
NETBATCH-PLUS            CATALOG MAP DEFINES              01Jan2002   SNP050DM

Option      : MAP_____
Set         : DEF-SET-1_
DEFINE Name : =ACCOUNT-FILE___________
Owner       : CHQ.JOHN_________ , _________________ / AGGO
              SALES.MNGR                              AOOO


Physical Filename : \ADMIN.$CHQ.JOHN.ACCOUNT___________




F1-Read           F2-Next            F4-Add             F6-Update
F8-Delete         F13-Choose Option
```

Displaying the Screen

From any catalog attachment screen, enter M or MAP in the Option field and press F13 to display the Catalog Map DEFINEs screen.

Field Descriptions

Option

Use the Option field to specify the catalog attachment screen displayed when you perform the F13–Choose Option function. The field options are:

A[SSIGN]	Specifies the Catalog ASSIGNs screen.
P[ARAM]	Specifies the Catalog PARAMs screen.
C[ATALOG]	Specifies the Catalog Catalog Defaults DEFINEs screen.
D[EFAULTS]	Specifies the Catalog Defaults DEFINEs screen.
S[POOL]	Specifies the Catalog Spool DEFINEs screen.
T[APE]	Specifies the Catalog Tape DEFINEs screen.

Set

Use the Set field to enter the name of the defaults set with which the NetBatch-Plus application associates the DEFINE. The name must identify a defaults set defined on the Defaults Set Details screen.

DEFINE Name

Use the DEFINE Name field to enter the logical name you want to use as a substitute for the physical file name. The logical name can contain from 2 through 24 characters. The first character must be an equals sign (=). The remaining characters can be letters, numbers, hyphens (-), underscores (_), or circumflexes (^). In some products (for example, the TACL command interpreter), names whose second character is an underscore are reserved for use by HP. To avoid errors or unexpected results, do not use an underscore as the second character. Names beginning with =_ZBAT are reserved for use by the NetBatch-Plus application.

Owner

Use the three-part Owner field to specify the Guardian owner of the DEFINE record and the security attributes of that record. For more information on this field, see Catalog ASSIGNs on page 6-29.

Physical Filename

Use the Physical Filename field to enter the name of the actual file.

The file name must be a Guardian file name. If you enter a partial name, the NetBatch-Plus application uses the system, volume, and subvolume specified for the defaults set to expand the name. The Volume field on the Defaults Set Details screen displays these values.

Functions

These functions are available on the Catalog Map DEFINEs screen:

Function	Description
F1–Read	Shows information about the DEFINE specified in the DEFINE Name field that belongs to the defaults set named in the Set field.
F2–Next	Shows information about the next map DEFINE belonging to the defaults set. When there are no more map DEFINEs, the function displays, in this order and on the appropriate screens, the remaining DEFINEs and the PARAMs for the set: 1. Spool DEFINEs 2. Tape DEFINEs 3. PARAMs After the F2–Next function displays the last PARAM for the set, it redisplays the Catalog ASSIGNs screen. The screen shows details of the first ASSIGN of the next set.
F4–Add	Adds the DEFINE to the attachments catalog.
F6–Update	Updates attributes of the DEFINE. The updated attributes apply automatically to jobs using the DEFINE unless overridden on the Job Map DEFINEs screen.
F8–Delete	Deletes the DEFINE from the attachments catalog. You cannot delete catalog DEFINEs attached to jobs.
F13–Choose Option	Displays the catalog attachment screen you specified in the Option field. If you press F13 when the field is blank, the NetBatch-Plus application displays the Catalog ASSIGNs screen.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Catalog Map DEFINEs screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Catalog Map DEFINEs screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Catalog Map DEFINEs screen, press F16.

* Function is available on screen, but not displayed,

Function	Description
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Catalog PARAMs

Use the Catalog PARAMs screen to add new PARAMs to the attachments catalog. You can also use the screen to inquire about, update, and delete PARAMs already in the catalog.

PARAMs are used to send values to processes that request parameter values when the processes start.

PARAMs in the NetBatch-Plus catalog can be shared by any number of jobs. By using these PARAMs, you can easily and quickly attach identical PARAMs to multiple jobs. Instead of creating the PARAMs for each job, you need only create a single PARAM in the catalog. You can then attach that PARAM to as many jobs as you want. Catalog PARAMs also simplify PARAM maintenance. By updating the attributes of a catalog PARAM, you automatically update those attributes for all jobs to which they apply.

You can attach catalog PARAMs to jobs by using the Job PARAMs screen. You can also use that screen to override attributes of a catalog PARAM.

Figure 6-10. Catalog PARAMs Screen

```
NETBATCH-PLUS            CATALOG PARAMS                  01Jan2002   SNP060

Option      : PARAM___
Set         : DEF-SET-1_
PARAM  Name : DATE_____________________________
Owner       : SUPER.CE_________ , _________________ / AAAA
              CHQ.JOHN                               AGGO


PARAM Value : 910720_____________________________________________________________




F1-Read           F2-Next           F4-Add            F6-Update
F8-Delete         F13-Choose Option
```

Displaying the Screen

From any catalog attachment screen, enter P or PARAM in the Option field and press F13 to display the Catalog PARAMs screen.

Field Descriptions

Option

Use the Option field to specify the catalog attachment screen displayed when you perform the F13–Choose Option function. The field options are:

A[SSIGN]	Specifies the Catalog ASSIGNs screen.
C[ATALOG]	Specifies the Catalog Catalog DEFINEs screen.
D[EFAULTS]	Specifies the Catalog Defaults DEFINEs screen.
M[AP]	Specifies the Catalog Map DEFINEs screen.
S[POOL]	Specifies the Catalog Spool DEFINEs screen.
T[APE]	Specifies the Catalog Tape DEFINEs screen.

Set

Use the Set field to enter the name of the defaults set with which the NetBatch-Plus application associates the PARAM. The name must identify a defaults set defined on the Defaults Set Details screen.

PARAM Name

Use the PARAM Name field to enter the name of the parameter to which you want to assign a value. The name can contain from 1 through 31 characters and can include letters, numbers, hyphens (-), and circumflexes (^). The first character must be a letter.

Owner

Use the three-part Owner field to specify the Guardian owner of the PARAM record and the security attributes of that record. For more information on this field, see Catalog ASSIGNs on page 6-29.

PARAM Value

Use the PARAM Value field to enter the actual value of the parameter specified in the PARAM Name field. The value can contain up to 60 characters and can include spaces.

Functions

These functions are available on the Catalog PARAMs screen:

Function	Description
F1–Read	Shows information about the PARAM specified in the PARAM Name field that belongs to the defaults set named in the Set field.
F2–Next	Shows information about the next PARAM belonging to the defaults set. When there are no more PARAMs, F2–Next redisplays the Catalog ASSIGNs screen. The screen shows details of the first ASSIGN of the next set.
F4–Add	Adds the PARAM to the attachments catalog.
F6–Update	Updates attributes of the PARAM. The updated attributes apply automatically to jobs using the PARAM unless overridden on the Job PARAMs screen.
F8–Delete	Deletes the PARAM from the attachments catalog. You cannot delete catalog PARAMs attached to jobs.
F13–Choose Option	Displays the catalog attachment screen you specified in the Option field. If you press F13 when the field is blank, the NetBatch-Plus application displays the Catalog ASSIGNs screen.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Catalog PARAMs screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next ->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Catalog PARAMs screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Catalog PARAMs screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Catalog Spool DEFINEs

Use the Catalog Spool DEFINEs screen to add new spool DEFINEs to the attachments catalog. You can also use the screen to inquire about, update, and delete spool DEFINEs already in the catalog.

Spool DEFINEs are used to pass information to the spooler collector process. The attributes of a spool DEFINE specify parameters such as the spooler location and batch name.

DEFINEs in the NetBatch-Plus catalog can be shared by any number of jobs. By using these DEFINEs, you can easily and quickly attach identical DEFINEs to multiple jobs. Instead of creating the DEFINEs for each job, you need only create a single DEFINE in the catalog. You can then attach that DEFINE to as many jobs as you want. Catalog DEFINEs also simplify DEFINE maintenance. By updating the attributes of a catalog DEFINE, you automatically update those attributes for all jobs to which they apply.

You can attach catalog spool DEFINEs to jobs by using the Job Spool DEFINEs screen. You can also use that screen to override attributes of a catalog spool DEFINE.

Figure 6-11. Catalog Spool DEFINEs Screen

```
NETBATCH-PLUS            CATALOG SPOOL DEFINES            01Jan2002   SNP050DS

Option      : SPOOL___
Set         : DEF-SET-1_
DEFINE Name : =DS1-SPOOL_______________
Owner       : SUPER.OPERATOR___ , _________________ / AAAA
              SUPER.SUPER                             A---

Location : \ADMIN.$S.LPT1_____________________
Batchname: EOP-ACCOUNTS_____________________
Owner    : SALES.MNGR________
Form     : INV01___________
Report   : INVOICES________
Max Lines: _____
Max Pages: 100__
Page Size: 60___
Copies   : 1____
Hold     : OFF
Holdafter: ON_
Selpri   : 3

F1-Read           F2-Next           F4-Add            F6-Update
F8-Delete         F13-Choose Option
```

Displaying the Screen

From any catalog attachment screen, enter S or SPOOL in the Option field and press F13 to display the Catalog Spool DEFINEs screen.

Field Descriptions

Option

Use the Option field to specify the catalog attachment screen displayed when you perform the F13–Choose Option function. The field options are:

A[SSIGN]	Specifies the Catalog ASSIGNs screen.
P[ARAM]	Specifies the Catalog PARAMs screen.
C[ATALOG]	Specifies the Catalog Catalog DEFINEs screen.
D[EFAULTS]	Specifies the Catalog Defaults DEFINEs screen.
M[AP]	Specifies the Catalog Map DEFINEs screen.
T[APE]	Specifies the Catalog Tape DEFINEs screen.

Set

Use the Set field to enter the name of the defaults set with which the NetBatch-Plus application associates the DEFINE. The name must identify a defaults set defined on the Defaults Set Details screen.

DEFINE Name

Use the DEFINE Name field to enter the name of the spool DEFINE. The name can contain from 2 through 24 characters. The first character must be an equals sign (=). The remaining characters can be letters, numbers, hyphens (-), underscores (_), or circumflexes (^). In some products (for example, the TACL command interpreter), names whose second character is an underscore are reserved for use by HP. To avoid errors or unexpected results, do not use an underscore as the second character. Names beginning with =_ZBAT are reserved for use by the NetBatch-Plus application.

Owner

Use the three-part Owner field to specify the Guardian owner of the DEFINE record and the security attributes of that record. For more information on this field, see Catalog ASSIGNs on page 6-29.

Location

Use the Location field to specify, in Guardian form, the spooler location for jobs created by processes using the DEFINE. If you do not specify the system where the spooler resides, the system specified for the defaults set applies. The Volume field on the Defaults Set Details screen displays this value.

Batchname

Use the Batchname field to specify the name printed on the batch header page of jobs created by processes using the DEFINE. The batch header page prints after the

spooler header page. It includes the name of the owner of the batch jobs and the batch ID. It also includes the name of the device used to print the jobs.

A batch header name can contain from 1 through 30 letters and numbers. It can also contain hyphens (-). The name must begin with a letter and can end with any letter or number but not with a hyphen.

Owner

Use the Owner field to enter the Guardian user ID of the owner of jobs created by processes using the DEFINE. For more information on entering Guardian user IDs, see Password Validation on page 6-182.

Form

Use the Form field to enter the name of the form used for printing jobs created by processes using the DEFINE. The form name usually identifies preprinted stationery or a special printer ribbon. The jobs only print on a device to which you assigned the form name. (You can assign form names to devices by using the SPOOLCOM DEV subcommand.)

A form name can contain from 1 through 16 letters and numbers. The first character must be a letter.

Report

Use the Report field to specify the name printed on the spooler header page of jobs created by processes using the DEFINE. The spooler header page prints before the batch header page. It includes the date and time of printing, the job number, and the form name.

A report name can contain from 1 through 16 letters and numbers. It can include spaces and must begin with a letter.

Max Lines

Use the Max Lines field to specify the maximum number of print lines for each job created by processes using the DEFINE. To specify this value, enter an integer in the range 1 through 65534. The default value, a blank field, specifies no maximum.

Max Pages

Use the Max Pages field to specify the maximum number of pages for each job created by processes using the DEFINE. To specify this value, enter an integer in the range 1 through 65534. The default value, a blank field, specifies no maximum.

Page Size

Use the Page Size field to specify the number of lines per page for each job created by processes using the DEFINE. To specify this value, enter an integer in the range 1 through 32767.

Copies

Use the Copies field to specify the number of print copies of each job created by processes using the DEFINE. To specify this value, enter an integer in the range 1 through 32767.

Hold

Use the Hold field to set the hold flag of jobs submitted to the spooler queue by processes using the DEFINE. The hold flag specifies whether a job is available for printing immediately after submission. The field options are:

ON Sets the hold flag to ON. This option prevents a job from printing after submission to the spooler queue. To print the job, use the PERUSE HOLD OFF command or the SPOOLCOM JOB START command to clear the hold state.

OFF Sets the hold flag to OFF. This option makes a job available for printing immediately after submission to the spooler queue.

Holdafter

Use the Holdafter field to set the holdafter flag of jobs submitted to the spooler queue by processes using the DEFINE. The holdafter flag specifies whether a job is placed on hold after printing. The field options are:

ON Sets the holdafter flag to ON, which places a job on hold when it finishes printing.

OFF Sets the holdafter flag to OFF, which deletes a job when it finishes printing.

Selpri

Use the Selpri field to specify the spooler selection priority of each job created by processes using the DEFINE. To specify the priority, enter an integer in the range 0 (lowest selection priority) through 7 (highest selection priority).

Functions

These functions are available on the Catalog Spool DEFINEs screen:

Function	Description
F1–Read	Shows information about the DEFINE specified in the DEFINE Name field that belongs to the defaults set named in the Set field.

* Function is available on screen, but not displayed,

Function	Description
F2–Next	Shows information about the next spool DEFINE belonging to the defaults set. When there are no more spool DEFINEs, the function displays, in this order and on the appropriate screens, the remaining DEFINEs and the PARAMs for the set: 1. Tape DEFINEs 2. PARAMs After F2 displays the last PARAM for the set, it redisplays the Catalog ASSIGNs screen showing details of the first ASSIGN of the next set.
F4–Add	Adds the DEFINE to the attachments catalog.
F6–Update	Updates attributes of the DEFINE. The updated attributes apply automatically to jobs using the DEFINE unless overridden on the Job Spool DEFINEs screen.
F8–Delete	Deletes the DEFINE from the attachments catalog. You cannot delete catalog DEFINEs attached to jobs.
F13–Choose Option	Displays the catalog attachment screen you specified in the Option field. If you press F13 when the field is blank, the NetBatch-Plus application displays the Catalog ASSIGNs screen.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Catalog Spool DEFINEs screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Catalog Spool DEFINEs screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Catalog Spool DEFINEs screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Catalog Tape DEFINEs

Use the Catalog Tape DEFINEs screen to add new tape DEFINEs to the attachments catalog. You can also use the screen to inquire about, update, and delete tape DEFINEs already in the catalog.

Tape DEFINEs pass information to the tape process during labeled-tape operations. The attributes of a tape DEFINE specify parameters such as the name of the tape device and the record format.

DEFINEs in the NetBatch-Plus catalog can be shared by any number of jobs. By using these DEFINEs, you can easily and quickly attach identical DEFINEs to multiple jobs. Instead of creating the DEFINEs for each job, you need only create a single DEFINE in the catalog. You can then attach that DEFINE to as many jobs as you want. Catalog DEFINEs also simplify DEFINE maintenance. By updating the attributes of a catalog DEFINE, you automatically update those attributes for all jobs to which they apply.

You can attach catalog tape DEFINEs to jobs by using the Job Tape DEFINEs screen. You can also use that screen to override attributes of a catalog tape DEFINE.

Figure 6-12. Catalog Tape DEFINEs Screen

```
NETBATCH-PLUS            CATALOG TAPE DEFINES            01Jan2002   SNP050DT

Option      : TAPE____
Set         : DEF-SET-1_
DEFINE Name : =AA-TAPE_________________
Owner       : SUPER.SUPER______ , _________________ / A---
              ADMIN.SM1                               GGGO

Device    : $TAPE1__________
Expiration: 31DEC2002_             Tape Owner: _______________
Blocklen  : 4096_        Reclen : 1024_        Use    : OPENFLAG
Density   : 6250         Recform: F            Gen    : 9999
EBCDIC    : OFF          Reels  : ___          Version: 99
Filesect  : 100          Retentn: _____        Labels : IBM____
Fileseq   : _500         Fileid : MYFILEID_________

Volumeid  : _______ _______ _______ _______ _______ _______ _______

Mountmsg  :
_____________________________________________________________________________

F1-Read           F2-Next            F4-Add             F6-Update
F8-Delete         F13-Choose Option
```

Displaying the Screen

From any catalog attachment screen, enter T or TAPE in the Option field and press F13 to display the Catalog Tape DEFINEs screen.

Field Descriptions

Option

Use the Option field to specify the catalog attachment screen displayed when you perform the F13–Choose Option function. The field options are:

A[SSIGN]	Specifies the Catalog ASSIGNs screen.
P[ARAM]	Specifies the Catalog PARAMs screen.
C[ATALOG]	Specifies the Catalog Catalog DEFINEs screen.
D[EFAULTS]	Specifies the Catalog Defaults DEFINEs screen.
M[AP]	Specifies the Catalog Map DEFINEs screen.
S[POOL]	Specifies the Catalog Spool DEFINEs screen.

Set

Use the Set field to enter the name of the defaults set with which the NetBatch-Plus application associates the DEFINE. The name must identify a defaults set defined on the Defaults Set Details screen.

DEFINE Name

Use the DEFINE Name field to enter the name of the tape DEFINE. The name can contain from 2 through 24 characters. The first character must be an equals sign (=). The remaining characters can be letters, numbers, hyphens (-), underscores (_), or circumflexes (^). In some products (for example, the TACL command interpreter), names whose second character is an underscore are reserved for use by HP. To avoid errors or unexpected results, do not use an underscore as the second character. Names beginning with =_ZBAT are reserved for use by the NetBatch-Plus application.

Owner

Use the three-part Owner field to specify the Guardian owner of the DEFINE record and the security attributes of that record. For more information on this field, see Catalog ASSIGNs on page 6-29.

Device

Use the Device field to enter, in Guardian form, the name of the tape device where the tape will be mounted. If you do not specify the system where the device resides, the system specified for the defaults set applies. The Volume field on the Defaults Set Details screen displays this value.

The Device field is optional when you specify ANSI, BACKUP, or IBM in the Labels field. It is mandatory when you specify BYPASS, OMITTED, or TMFTAPE in that field.

Expiration

For ANSI-standard and IBM-standard labeled tapes only, use the Expiration field to enter the expiration date of the tape file. The expiration date is the date the file can be overwritten. For information on the forms in which you can enter the date, see Calendar on page 6-23.

Expiration date and retention period (specified in the Retentn field) are mutually exclusive.

Tape Owner

For ANSI-standard and IBM-standard labeled tapes only, use the Tape Owner field to specify the owner of the tape. For an ANSI tape, enter an identifying name or code containing from 1 to 14 characters. For an IBM tape, enter an identifying name or code containing from 1 to 10 characters.

Blocklen

Use the Blocklen field to specify, in bytes, the block length in the tape file. If you specified fixed-length records in the Recform field, the block length must be a multiple of the record length specified in the Reclen field.

To specify the block length, enter an integer in the range 1 through 65534.

The tape process does not check block length of input files if you leave the Blocklen field blank.

Reclen

Use the Reclen field to specify the record length in the tape file. If you specified fixed-length records for an ANSI-standard labeled tape, the default length is the value configured for the device at system generation time.

To specify the record length, enter an integer in the range 1 through 65534.

Use

Use the Use field to specify how the tape file is to be used. The field options are:

IN	Specifies that the tape file is to be read. If you specify this option, you must also specify the tape volume ID in the Volumeid field and ANSI or IBM in the Labels field. You cannot specify this option if you entered SCRATCH in the Volumeid field.
OUT	Specifies that data is to be written to the tape file.
EXTEND	Specifies that data is to be appended to the tape file. If you specify this option, you must also specify the tape volume ID in the Volumeid field and ANSI or IBM in the Labels field. You cannot specify this option if you entered SCRATCH in the Volumeid field.
OPENFLAG	Specifies the type of access indicated by the access flag of the open call. The flag must indicate read or write access. OPENFLAG is the default value.

Density

Use the Density field to specify, in bits per inch (bpi), the data density of the tape. The density can be 800 bpi, 1600 bpi, or 6250 bpi. The default density is the current setting of the tape device.

Recform

Use the Recform field to specify the record format of ANSI-standard and IBM-standard labeled tapes. The field options are:

F Specifies fixed-length records. If you specify this option, you must also specify a block length that is a multiple of the record length.

U Specifies records of undefined length.

For input files, values in the Recform, Blocklen, and Reclen fields are not required, and the tape process does not check them for consistency. If you enter values in any of these fields, however, the values in the corresponding label fields must match the values in those three fields. Otherwise, the tape is rejected.

For output files, if you do not specify values in the Recform, Blocklen, and Reclen fields for an IBM tape, the open is rejected. For an ANSI tape, these values are assumed:

Recform	U
Blocklen	None
Reclen	As configured for the device

Gen

For ANSI-standard and IBM-standard labeled tapes only, use the Gen field to specify the generation group to which the file belongs. To specify the group, enter an integer in the range 1 through 9999. The default value is 1.

EBCDIC

Use the EBCDIC field to specify whether data on an IBM-standard labeled tape is to be translated from EBCDIC format to ASCII format when the tape is processed. The field options are:

ON Specifies that data is to be translated when the tape is processed. This is the default value for IBM tapes.

OFF Specifies that data is not to be translated when the tape is processed.

Reels

Use the Reels field to specify the number of volumes in a multivolume input file. You can specify this value only if the option specified in the Use field is IN. You must specify the number of volumes for all multivolume input files.

To specify the number of volumes, enter an integer in the range 1 through 255. The default value is 1.

Version

For ANSI-standard and IBM-standard labeled tapes only, use the Version field to indicate a version within one generation group. To specify the version, enter an integer in the range 0 through 99. The default value is 0.

Filesect

Use the Filesect field to specify, for ANSI-standard and IBM-standard labeled tapes only, the position of the volume in a multivolume file. To specify the position, enter an integer in the range 1 through 9999. This number is always 1 for a single-volume file.

Retentn

For ANSI-standard and IBM-standard labeled tapes only, use the Retentn field to specify the retention period of the tape file. The tape cannot be overwritten until the retention period expires.

To specify the retention period, enter an integer indicating the number of days the tape file is to be retained. The tape process calculates an expiration date using this value when the process writes the labels on the tape. The default value is 0, indicating no retention period.

Retention period and expiration date (specified in the Expiration field) are mutually exclusive.

Labels

Use the Labels field to specify the type of tape and, for labeled tapes, the label processing mode. The field options are:

ANSI — Specifies that the tape file is on an ANSI-standard labeled tape and that standard label processing is required (LP mode).

BACKUP — Specifies that the tape file be read only by the BACKUP and RESTORE utilities.

BYPASS — Specifies that label processing is not required and the tape not be checked for labeling (BLP mode). You must also specify the tape device in the Device field. When you specify BYPASS, you must not enter values in these fields:

Blocklen	Filesect	Reclen	Use
EBCDIC	Fileseq	Reels	Version
Expiration	Gen	Retentn	Volume
Fileid	Recform	Tape Owner	Volumeid

IBM — Specifies that the tape file is on an IBM-standard labeled tape and standard label processing is required (LP mode). You must also specify a record format in the Recform field and the tape file name in the Fileid field.

OMITTED — Specifies that the tape file is not on a standard labeled tape. Label processing is not performed other than to check the tape is not a standard labeled tape (NL mode). You must also specify the tape device in the Device field. When OMITTED is specified, you must not enter values in the fields listed for the BYPASS option.

TMFTAPE Specifies that the tape file be used only by the HP NonStop Transaction Management Facility (TMF) process for backups and online dumps.

Fileseq

For ANSI-standard and IBM-standard labeled tapes only, use the Fileseq field to specify the position of the tape file in a multifile volume.

To specify the file position, enter an integer in the range 1 through 9999. In multifile multivolume organization, this number indicates the order of each file in the set. In single-file organization, this number is always 1.

Fileid

For ANSI-standard and IBM-standard labeled tapes only, use the Field field to enter the name of the tape file. The name can contain from 1 through 17 characters.

Volumeid

For ANSI-standard and IBM-standard labeled tapes only, use the Volumeid field to specify the tape volume ID. You can enter the six-byte identification code assigned to the volume or SCRATCH for a scratch tape. For a multivolume file, you can enter up to seven volume IDs.

If you specified IN in the Use field, you must enter a volume ID. Otherwise, its value is SCRATCH.

Mountmsg

Use the Mountmsg field to enter an additional message for display with the system mount message. The message also appears with the drive-usage request printed when the DEFINE is opened.

Functions

These functions are available on the Catalog Tape DEFINEs screen:

Function	Description
F1–Read	Shows information about the DEFINE specified in the DEFINE Name field that belongs to the defaults set named in the Set field.

* Function is available on screen, but not displayed,

Function	Description
F2–Next	Shows information about the next tape DEFINE belonging to the defaults set. When there are no more tape DEFINEs, the function displays the PARAMs for the set on the Catalog PARAMs screen. After the F2 function displays the last PARAM for the set, it redisplays the Catalog ASSIGNs screen. The screen shows details of the first ASSIGN of the next set.
F4–Add	Adds the DEFINE to the attachments catalog.
F6–Update	Updates attributes of the DEFINE. The updated attributes apply automatically to jobs using the DEFINE unless overridden on the Job Tape DEFINEs screen.
F8–Delete	Deletes the DEFINE from the attachments catalog. You cannot delete catalog DEFINEs attached to jobs.
F13–Choose Option	Displays the catalog attachment screen you specified in the Option field. If you press F13 when the field is blank, the NetBatch-Plus application displays the Catalog ASSIGNs screen.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Catalog Tape DEFINEs screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Catalog Tape DEFINEs screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Catalog Tape DEFINEs screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Class Details

Use the Class Details screen to define a scheduler's classes and to inquire about, update, or delete existing classes.

Figure 6-13. Class Details Screen

```
NETBATCH-PLUS                CLASS DETAILS                  01Jan2002   SNP260
            \WORLD.$ZBAT                                    31Dec2001 13:41
Scheduler : \*.$*_________    Owner: SUPER.OPERATOR___ , _________________
Class Name: *_____________________

     (A,D, or U)        Name             Initiation
           U     COBOL-CLASS_____________     N
           _     DEFAULT_________________     Y
           _     NBPUSER-CLASS-1_________     Y
           _     NBPUSER-CLASS-2_________     N
           D     NBPUSER-CLASS-3_________     Y
           _     TAL-CLASS_______________     N
           A     WORK1___________________     Y
           _     ________________________     _
           _     ________________________     _
           _     ________________________     _
           _     ________________________     _
           _     ________________________     _
           _     ________________________     _
           _     ________________________     _
           _     ________________________     _

   F1-Read               F2-Next                    F6-Maintain
```

Displaying the Screen

From the Scheduler Interface screen, press F6 to display the Class Details screen.

Field Descriptions

Scheduler

Use the Scheduler field to specify, in the following form, the schedulers whose classes you want to define, inquire about, update, or delete:

[*system-name*.]$*process-name*

system-name

is the name of the system where the scheduler process resides. You do not have to enter the name if the process resides in the default system (the system where the NetBatch-Plus Pathway system is running).

process-name

is the name of the scheduler process.

You can specify a single scheduler or a range of schedulers from the wild-card scheduler processes list. To specify a single scheduler, enter the system name and

process name in full (for example, \WORLD.$ZBAT). You can leave out the system name if the process resides in the default system. To specify a range of schedulers, use the question mark (?) and asterisk (*) wild-card characters in the name. For more information on specifying schedulers, see the description of the Scheduler field in Scheduler Info on page 6-190.

Owner

Use the two-part Owner field to enter the Guardian user ID of a super-group user (255, *n*). This user ID is a prerequisite to performing the F6–Maintain function but is not required for the F1–Read and F2–Next functions.

In the first part of the field, enter the super-group user ID. Enter the user's password in the second part of the field. For more information on entering Guardian user IDs and passwords, see Password Validation on page 6-182.

You do not have to enter a super-group user ID if you want to perform the F6–Maintain function and either of these conditions exists:

- A super-group user ID is shown in the field, and you entered the password of that user. The password is not required if the ID has been validated during the current session.
- A super-group user ID is not shown in the field but at least one has been validated during the current session. In these circumstances, NetBatch-Plus performs the function using the most recently validated super-group user ID. The ID used replaces the ID shown in the field.

When you display the screen, the field shows one of these user IDs:

- The user ID from the defaults set associated with the signed-on user. The NetBatch-Plus application shows this ID if no other IDs have been validated during the current session.
- The user ID of the last user validated by a function performed during the current session.

Class Name

Use the Class Name field to specify the classes about which you want to inquire. You can specify a single class or a range of classes. To specify a single class, enter the class name in full (for example, NBPUSER-CLASS-1). To specify a range of classes, use these wild-card characters in the name:

? Matches a single character. For example, ABC?? matches five-character names beginning with ABC (such as ABCDE and ABC12, but not ABCDEF).

* Matches zero or more characters. For example, A*D matches names beginning with A and ending in D (such as ABCD and AD, but not CAD). You can use multiple asterisks in a name if you separate them by at least one character. For example, *CD* matches names containing CD (such as ABCDEF, XYZCD, and CD21, but not BC3D or DCA).

You cannot leave the Class Name field blank.

When you display the screen, the Class Name field shows the value *. This value specifies all classes associated with the scheduler specified in the Scheduler field.

A, D, or U

Use the fields in the A, D, or U column to indicate the maintenance functions you want to perform on the corresponding classes. The NetBatch-Plus application executes these functions when you press F6–Maintain. The field options are:

A Defines the class and adds it to the scheduler. You must add a class to a scheduler before you can assign that class to an executor.

D Deletes the class from the scheduler. Before you can delete the class, you must dissociate it from all executors to which it is assigned. To dissociate the class from an executor, use the Executor Info screen.

Note. The scheduler saves any jobs belonging to the class you delete. The jobs are never scheduled for execution, however, unless you reassign them to existing classes or add a class with the same name as the deleted class.

U Alters the INITIATION attribute of the class. The NetBatch-Plus application alters the attribute to the value you entered in the Initiation field.

Only super-group users (255, *n*) can add, delete, or update classes.

Name

Use the fields in the Name column to enter the names of classes you want to define. The fields also show the names of the scheduler's existing classes.

A class name can contain from 1 through 24 letters and numbers. It can also contain hyphens (-). The name must begin with a letter and can end with any letter or number but not with a hyphen.

Initiation

Use the fields in the Initiation column to set the INITIATION attribute of classes named in the Name column. The attribute determines whether jobs belonging to the class are available for execution. The field options are:

Y Yes specifies the attribute INITIATION ON. Jobs belonging to a class with this attribute are available for scheduling and execution.

N No specifies the attribute INITIATION OFF. Jobs belonging to a class with this attribute are not available for scheduling and execution. Changing the attribute to INITIATION OFF when jobs belonging to the class are executing does not affect those jobs.

The default value is Y.

Functions

These functions are available on the Class Details screen:

Function	Description
F1–Read	Lists, alphabetically by class name, information about the classes you specified in the Class Name field. Only classes associated with the scheduler specified in the Scheduler field are listed.
F2–Next	Performs Next Page and Next Scheduler functions, in that order: ● Next Page—continues the listing of classes for the current scheduler. If no more classes are associated with the scheduler, F2–Next performs the Next Scheduler function. ● Next Scheduler—shows information about classes associated with the next scheduler on the wild-card scheduler processes list. At the end of the list, NetBatch-Plus displays a message advising you no details were found. To display the classes associated with the first scheduler on the list, clear the Scheduler field and press F1.
F6–Maintain	Adds, deletes, or alters classes according to the values in the A, D, or U column fields. F6 is the same as the BATCHCOM command ADD CLASS when the value is A, DELETE CLASS when D, and ALTER CLASS when U. This function is only available to super-group users (255, *n*).
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Class Details screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Class Details screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Class Details screen, press F16.

* Function is available on screen, but not displayed,

Function	Description
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Defaults Set Details

Use the Defaults Set Details screen to create and add defaults sets to the NetBatch-Plus database. You can also use the screen to inquire about, update, and delete defaults sets already in the database.

A defaults set is a set of job attributes that can be shared by any number of jobs created on the Job Definition screen. As well as job attributes, a defaults set specifies the scheduler for the jobs and the owner of the job records.

Defaults sets save you time and effort when you want to create and maintain groups of similar or related jobs. For example, you could use a defaults set as the basis of all payroll jobs in your organization. Instead of creating each payroll job, create a single defaults set and use that set as the source of attributes for the jobs. You can then easily update attributes of the jobs by just updating the defaults set. You can override attributes of the set for individual jobs in the group when necessary.

Use defaults sets as the selection criteria for reports (for example, Master Jobs by Set report). You can also use them to display groups of jobs on the Ad Hoc Job Selection screen.

Figure 6-14. Default Set Details Screen

```
NETBATCH-PLUS            DEFAULTS SET DETAILS            01Jan2002   SNP020

Set      : DEF-SET-A_
Scheduler: \SALES.$LDS___
Class    : NBP-USER-CLASS-1_________
Owner    : SALES.MNGR________ , ___________________ / AOOO

Comment : **Sales & Marketing Department**
Exec.Prg: \WORLD.$SYSTEM.SYSTEM.NBEXEC_________
In      : $DATA3.NBPBAT.OMSBATCH_____________
Out     : $S.#BATCH_____________________________
Volume  : \SYS1.$VOL1.SALES_________
Startup : B-1, LI 2:00, XPRI 110____________________

Selpri: 3                  Pri  : 120                High PIN: _
Drives: 3_                 Lines: _____              Pages: 50___
Wait  : 02:00              At/Af: AT                 Time : 13:00

Restart      : N           Hold      : Y             Any User Submit: N
Stop On Abend: N           Hold After: N


F1-Read        F2-Next         F4-Add          F6-Update       F8-Delete
```

Displaying the Screen

From the Main Menu screen, press F1 to display the Defaults Set Details screen. The Set, Scheduler, Class, and Owner fields show information about one of these defaults sets:

- The defaults set associated with the signed-on user. The NetBatch-Plus application shows information about this set if you display the screen when no functions have been performed during the current session.

- The defaults set that was the subject, directly or indirectly, of the last function performed during the current session.

Field Descriptions

Set

Use the Set field to enter the name of the defaults set. The name can contain from 1 through 10 letters and numbers. It can also contain hyphens (-). The name must begin with a letter and can end with any letter or number but not with a hyphen.

Scheduler

Use the Scheduler field to enter the name of the scheduler for the defaults set. Jobs using the defaults set run in this scheduler unless it is overridden on the Job Definition screen.

To specify the scheduler, enter a scheduler name in the form:

```
[\system-name.]$process-name
```

system-name

is the name of the system where the scheduler process resides. You do not have to enter the name if the process resides in the default system (the system where the NetBatch-Plus Pathway system is running).

process-name

is the name of the scheduler process.

Class

Use the Class field to specify the CLASS job attribute for the defaults set. The attribute links a job to an executor and therefore to the executor's CPU.

To specify the attribute, enter the name of a class. The class does not have to exist at this stage but must be defined before you can link the defaults set to a job.

For more information on the CLASS job attribute, see Job Definition on page 6-102.

Owner

Use the three-part Owner field to specify the owner and security attributes of the defaults set record.

In the first part of the field, enter a Guardian user ID identifying the owner of the record. Enter the user's password in the second part of the field. For more information on entering Guardian user IDs and passwords, see Password Validation on page 6-182.

In the third part of the field, enter the four security codes specifying the security attributes of the record. The security attributes are:

R Read specifies who can read the record.

W Write specifies who can update the record.

U Use specifies who can use the record.

P Purge specifies who can delete the record.

For each attribute, you can specify any one of these security codes:

O Specifies that only the owner can access the record.

If the owner is the super ID (255, 255), the NetBatch-Plus application automatically sets the write security attribute to O. This helps to prevent users from gaining unauthorized access to the super ID's records.

G Specifies that any user in the owner's group can access the record.

A Specifies that any user can access the record.

- Specifies that only the super ID can access the record.

The NetBatch-Plus application prevents users who do not have read access to a record from updating, using, or deleting that record. This restriction applies regardless of the security codes assigned to the record's write, use, and purge attributes.

When you display the screen, the NetBatch-Plus application shows one of these user IDs in the first part of the field:

- The user ID from the defaults set associated with the signed-on user. The application shows this ID if no other user IDs have been validated during the current session.
- The user ID of the last user validated by a function performed during the current session.

Comment

Use the Comment field to enter a description of the defaults set. You can enter up to 32 characters.

Exec. Prg.

Use the Exec. Prg. field to specify the EXECUTOR-PROGRAM job attribute for the defaults set. The attribute specifies the executor program used to process the input file of a job.

To specify the attribute, enter the Guardian name of the program file.

For more information on the EXECUTOR-PROGRAM job attribute, see Job Definition on page 6-102.

In

Use the In field to specify the IN job attribute for the defaults set. The attribute specifies the input file of a job.

To specify the attribute, enter the Guardian name of the file. The file can be a device, a disk file, or a process.

For more information on the IN job attribute, see Job Definition on page 6-102.

Out

Use the Out field to specify the OUT job attribute for the defaults set. The attribute specifies the name of the output file of a job.

To specify the attribute, enter the Guardian name of the file. The file can be a device, a disk file, or a process.

For more information on the OUT job attribute, see Job Definition on page 6-102.

Volume

Use the Volume field to specify the VOLUME job attribute for the defaults set. The attribute specifies the system, volume, and subvolume for any unqualified file references in a job input file.

To set the attribute, enter the names of the system, volume, and subvolume in the form:

```
[\system-name.]$volume.subvol
               $volume
               subvol
```

system-name

is a Guardian system name.

volume.subvol

are the names of the volume and subvolume.

volume

is the volume name.

subvol

is the subvolume name.

For more information on the VOLUME job attribute, see Job Definition on page 6-102.

Startup

Use the Startup field to specify the STARTUP job attribute for the defaults set. The attribute specifies a parameter or series of parameters the scheduler sends to a new executor program process as its startup message.

To specify the attribute, enter a string of 1 through 40 alphanumeric characters.

Selpri

Use the Selpri field to specify the SELPRI job attribute for the defaults set. The attribute specifies the selection priority of a job within its class.

To specify the attribute, enter an integer in the range 0 (lowest selection priority) through 7 (highest selection priority).

For more information on the SELPRI job attribute, see Job Definition on page 6-102.

Pri

Use the Pri field to specify the PRI job attribute for the defaults set. The attribute specifies the execution priority of the executor program process of a job. It also specifies the priority of any process created by the job if the priority of that process is not explicitly stated.

To specify the attribute, enter an integer in the range 1 (lowest execution priority) through 199 (highest execution priority).

For more information on the PRI job attribute, see Job Definition on page 6-102.

High PIN

Use the High PIN field to set the HIGHPIN job attribute. This attribute specifies whether a job can be started in a high PIN.

Allowed values for this field are:

- Y = ON (job can be started in a high PIN)
- N = OFF (job cannot be started in a high PIN; default)

When a process runs at a high PIN, it cannot communicate with a remote C-series process.

Drives

Use the Drives field to specify the TAPEDRIVES job attribute for the defaults set. The attribute specifies the number of tape drives required by a job.

To specify the attribute, enter an integer in the range 0 through 99 indicating the number of tape drives.

For more information on the TAPEDRIVES job attribute, see Job Definition on page 6-102.

Lines

Use the Lines field to specify the MAXPRINTLINES job attribute for the defaults set. The attribute specifies the maximum number of print lines for a job output file. Because

the attribute is, in effect, a spooler attribute, it is effective only if the output file is a spooler process.

To specify the attribute, enter an integer in the range 120 through 65534 specifying the maximum number of print lines. To specify no maximum, enter NOMAX.

For more information on the MAXPRINTLINES job attribute, see Job Definition on page 6-102.

Pages

Use the Pages field to specify the MAXPRINTPAGES job attribute for the defaults set. The attribute specifies the maximum number of pages for a job output file. Because the attribute is, in effect, a spooler attribute, it is effective only if the output file is a spooler process.

To specify the attribute, enter an integer in the range 2 through 65534 specifying the maximum number of pages. To specify no maximum, enter NOMAX.

For more information on the MAXPRINTPAGES job attribute, see Job Definition on page 6-102.

Wait

Use the Wait field to specify the WAIT job attribute for the defaults set. The attribute delays execution of a job for a specified number of hours and minutes after job submission.

To specify the attribute, enter the delay period in the form:

[h]h:*[m]m*

[h]h

is an integer in the range 0 through 99 specifying the number of hours.

[m]m

is an integer in the range 0 through 59 specifying the number of minutes.

For more information on the WAIT job attribute, see Job Definition on page 6-102.

At/Af

Use the At/Af field with the Time field to specify the AT job attribute or AFTER job attribute for the defaults set. The options for the At/Af field are:

AT Specifies the AT job attribute. The attribute causes a job to be executed at the time specified in the Time field. If an executor is not available at that time, the scheduler creates a temporary executor to run the job. The scheduler deletes the temporary executor when job execution finishes.

AF Specifies the AFTER job attribute. The attribute makes a job available for execution at the time specified in the Time field.

For more information on the At/Af field, see Job Definition on page 6-102.

Time

Use the Time field with the At/Af field to specify the AT job attribute or AFTER job attribute for the defaults set. The Time field enables you to specify, in this form, the time component of those attributes:

[h]h:*[m]m*

[h]h

is an integer in the range 0 through 23 specifying the hour of the day.

[m]m

is an integer in the range 0 through 59 specifying the minute of the hour.

The first minute of the day is 00:00 (midnight). The last minute is 23:59.

For more information on the Time field, see Job Definition on page 6-102.

Restart

Use the Restart field to set the RESTART job attribute for the defaults set. The attribute specifies whether a job is restarted automatically if it fails during execution for any of these reasons:

- The executor program process stops or abends with completion code 7.
- The executor program process terminates because of CPU failure. This reason does not apply if the process has a backup that successfully takes over job execution.
- A process created by the executor program process terminates because of CPU failure, and the job has the attribute STOP-ON-ABEND ON.

The options for the Restart field are:

Y Yes specifies the attribute RESTART ON. The job is restarted if it fails during execution for any of the reasons listed previously.

N No specifies the attribute RESTART OFF. The job is not restarted if it fails during execution.

For more information on the RESTART job attribute, see Job Definition on page 6-102.

Hold

Use the Hold field to specify the HOLD job attribute for the defaults set. The attribute specifies whether a job is placed on hold as soon as you submit it. The field options are:

Y Yes specifies the attribute HOLD ON. The job is placed on hold as soon as you submit it.

N No specifies the attribute HOLD OFF. The job is available for execution as soon as you submit it.

For more information on the HOLD job attribute, see Job Definition on page 6-102.

Any User Submit

Use the Any User Submit field to specify whether a job using the defaults set can be submitted by any user on the Ad Hoc Job Selection screen. The field options are:

Y Yes specifies that any user can submit the job on the Ad Hoc Job Selection screen.

N No specifies that only the owner can submit the job on the Ad Hoc Job Selection screen. Other users can submit the job but only if they validate the owner's Guardian user ID before selecting the job.

Stop On Abend

Use the Stop On Abend field to specify the STOP-ON-ABEND job attribute for the defaults set. The attribute specifies whether a job is stopped automatically if any process started by it terminates because of CPU failure, abends with any completion code, or stops with completion code -3, -2, -1, 2, 3, 4, 5, or 6. The field options are:

Y Yes specifies the attribute STOP-ON-ABEND ON. The job is stopped as soon as any process started by it terminates, abends, or stops for the reasons listed previously. All processes already started by the job are also stopped.

N No specifies the attribute STOP-ON-ABEND OFF. The job continues processing when a process terminates, abends, or stops.

For more information on the STOP-ON-ABEND job attribute, see Job Definition on page 6-102.

Hold After

Use the Hold After field to specify the HOLDAFTER job attribute for the defaults set. The attribute specifies whether a job with a time attribute placed on hold after it finishes executing. Time attributes you can specify on the Job Definition screen are AFTER, AT, and WAIT. The field options are:

Y Yes specifies the attribute HOLDAFTER ON. The job is placed on hold when it finishes executing.

N No specifies the attribute HOLDAFTER OFF. The job is not placed on hold when execution finishes.

For more information on the HOLDAFTER job attribute, see Job Definition on page 6-102.

Functions

These functions are available on the Defaults Set Details screen:

Function	Description
F1–Read	Shows information about the defaults set specified in the Set field.
F2–Next	Shows information about the next defaults set on file. The NetBatch-Plus application lists sets in alphabetic order.
F4–Add	Adds the defaults set specified in the Set field to the database.
F6–Update	Updates attributes of the current defaults set. The updated attributes apply automatically to jobs associated with the set unless overridden on the Job Definition screen. The function does not update attributes of jobs already submitted to the scheduler for execution.
F8–Delete	Deletes the current defaults set from the database. You cannot delete the set if it is in use by a job.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Defaults Set Details screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Defaults Set Details screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Defaults Set Details screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Executor Info

Use the Executor Info screen to define a scheduler's executors and to inquire about, update, or delete existing executors. You can also use the screen to start executors in the OFF state or to stop executors in the ON or ACTIVE state.

Figure 6-15. Executor Info Screen

```
NETBATCH-PLUS            EXECUTOR INFO                    01Jan2002   SNP270
                                                          31Dec2001 14:11
 Scheduler    : \WORLD.$ZBAT__    Owner: SUPER.OPERATOR___ , ________________
 Executor Name: EXEC01_____________________   CPU: 2_ State: ON    Jobno:


                       Classes

                  DEFAULT_____________________
                  CLASS-01____________________
                  CLASS-02____________________
                  ____________________________
                  ____________________________
                  ____________________________
                  ____________________________
                  ____________________________



F1-Read           F3-Status          F4-Add             F6-Update
F8-Delete         F10-Start          F12-Stop
```

Displaying the Screen

You can display the Executor Info screen from either of these screens:

- From the Scheduler Interface screen, press F7.
- From the Executor Status screen, press F3.

Field Descriptions

Scheduler

Use the Scheduler field to name, in the following form, the scheduler whose executors you want to define, inquire about, update, or delete:

[*system-name*.]$*process-name*

system-name

is the name of the system where the scheduler process resides. You do not have to enter the name if the process resides in the default system (the system where the NetBatch-Plus Pathway system is running).

process-name

is the name of the scheduler process.

When you display the screen, the field shows the name of one of these schedulers:

- The scheduler from the defaults set associated with the signed-on user. The NetBatch-Plus application shows the name of this scheduler if you display the screen when no functions have been performed during the current session.
- The scheduler that was the subject, directly or indirectly, of the last function performed during the current session.

The date and time on the system where the scheduler resides appears below your system's date at the top of the screen.

Owner

Use the two-part Owner field to enter the Guardian user ID of a super-group user (255, *n*). This user ID is a prerequisite to performing all functions except F1–Read and F3–Status.

In the first part of the field, enter the super-group user ID. Enter the user's password in the second part of the field. For more information on entering Guardian user IDs and passwords, see Password Validation on page 6-182.

You do not have to enter a super-group user ID if it is a prerequisite to performing a function and either of these conditions exists:

- A super-group user ID is shown in the field and you entered the password of that user. The password is not required if the ID was validated during the current session.
- A super-group user ID is not shown in the field but at least one has been validated during the current session. In these circumstances, the NetBatch-Plus application performs the function using the most recently validated super-group user ID. The ID used replaces the ID shown in the field.

When you display the screen, the field shows one of these user IDs:

- The user ID from the defaults set associated with the signed-on user. NetBatch-Plus shows this ID if no other IDs were validated during the current session.
- The user ID of the last user validated by a function performed during the current session.

Executor Name

Use the Executor Name field to name the executor you want to define, inquire about, update, or delete.

An executor name can contain from 1 through 24 letters and numbers. It can also contain hyphens (-). The name must begin with a letter and can end with any letter or number but not with a hyphen.

CPU

Use the CPU field to set the CPU attribute of the executor named in the Executor Name field. The attribute specifies the CPU where the executor program process of any job associated with the executor runs. Other processes started by the job also run in the CPU unless otherwise specified.

To set the CPU attribute, enter an integer in the range 0 through 15 identifying a CPU available on your system. An executor can have only one CPU assigned to it, but that CPU can be shared by other executors. You cannot leave the CPU field blank when you add or update the executor.

When a CPU fails, the state of any executor to which it is assigned changes to DOWN. A job whose executor program process is running in the CPU is stopped if that process has no backup. If the job has the attribute RESTART ON, it is restarted when the CPU becomes available. If the stopped job is a recurrent job (a recurrent job is one that has the CALENDAR or EVERY attribute), it is rescheduled as usual. If the executor program process has a backup, the backup takes over and the job continues to run without interruption.

△ **Caution.** If a TACL process is the executor program and has a backup process, it initializes itself when the CPU fails and reprocesses the job input file from the beginning of the file. To avoid possibly damaging your scheduler database in these circumstances, do not specify a backup process for a TACL process that is an executor program. This does not apply if your input file includes the logic to ensure execution restarts in the correct place.

State

The State field shows the processing state of the executor named in the Executor Name field. (For a list and descriptions of processing states, see Table 6-3 on page 6-83.) You cannot enter information in the State field.

Jobno

If an executor named in the Executor Name field is running a job, the Jobno field shows the job number. You cannot enter information in the Jobno field.

Classes

Use the fields in the Classes column to assign up to eight classes to the executor named in the Executor Name field. These classes form the CLASS executor attribute. The attribute links the classes (and therefore the jobs belonging to them) to the CPU associated with the executor.

To set the CLASS attribute, enter the names of the classes you want to assign to the executor. (The classes must be added to the scheduler on the Class Details screen before you can assign them to the executor.) The order in which you assign classes to an executor determines the class priority. For example, assigning class B to the first field in the Classes column and class A to the second field gives priority to jobs in class B. You can assign a class to more than one executor.

To make the executor available to execute jobs belonging to any class, enter an asterisk (*) in the first field in the column. After you specify this option, you cannot also specify individual classes for that executor unless you overwrite the asterisk.

If you add or update an executor when all Classes column fields are blank, the executor adopts the DEFAULT-CLASS scheduler attribute. The NetBatch-Plus application enters the name of this class in the first field in the column when you press F4–Add or F6–Update. To display the DEFAULT-CLASS scheduler attribute before you perform these functions, use the Scheduler Info screen.

Functions

These functions are available on the Executor Info screen:

Function	Description
F1–Read	Shows the attributes of the executor you specified in the Executor Name field.
F3–Status	Displays the Executor Status screen. Use this screen to display status information about one or more executors. The information identifies each executor's CPU and shows executor processing states. If an executor is running a job, the information also includes the job number and name of the class to which the job belongs. You can select an executor on the Executor Status screen and return to the Executor Info screen to inquire about, update, or delete that executor.
F4–Add**	Adds a new executor to the scheduler. F4 is the same as the BATCHCOM command ADD EXECUTOR. If you add an executor when all Classes column fields are blank, the executor adopts the DEFAULT-CLASS scheduler attribute. NetBatch-Plus enters the name of this class in the first field in the column when you press F4. To display the DEFAULT-CLASS scheduler attribute before you perform this function, use the Scheduler Info screen.
F6–Update**	Alters attributes of the current executor. F6 is the same as the BATCHCOM command ALTER EXECUTOR. If you update an executor when all Classes column fields are blank, the executor adopts the DEFAULT-CLASS scheduler attribute. NetBatch-Plus enters the name of this class in the first field in the column when you press F6. To display the DEFAULT-CLASS scheduler attribute before you perform this function, use the Scheduler Info screen.

* Function is available on screen, but not displayed.

** Function is available only to super-group users (255, *n*).

Function	Description
F8–Delete**	Deletes the current executor. F8–Delete has the same function as the BATCHCOM command DELETE EXECUTOR.
F10–Start**	Starts an executor that has a state of OFF. F10 is the same as the BATCHCOM command START EXECUTOR. An executor whose state is OFF can be a new executor added by F4–Add but not started. It can also be an existing executor stopped by F12–Stop. Starting the executor makes it available for job processing.
F12–Stop**	Suspends the operation of an executor that has a state of ON or ACTIVE. F12 is the same as the BATCHCOM command STOP EXECUTOR. If the executor is running a job when you press F12, the job finishes before the executor stops. You can restart a stopped executor by performing the F10–Start function.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Executor Info screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Executor Info screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Executor Info screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job will be the owner of the NetBatch-Plus PATHWAY system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed.

** Function is available only to super-group users (255, *n*).

Executor Status

Use the Executor Status screen to display status information about one or more executors. The information identifies each executor's CPU and shows executor processing states. If an executor is running a job, the information also includes the job number and name of the class to which the job belongs. Figure 6-16 shows the screen format.

Figure 6-16. Executor Status Screen

```
NETBATCH-PLUS            EXECUTOR STATUS                  01Jan2002   SNP280
          \WORLD.$ZBAT                                    31Dec2001 11:16
Scheduler: \*.$*_________  Executor Name: *EXEC*___________________

        Executor               CPU State  Jobno Class
      _ COBOL-EXEC               0 STOP   41    COMPILE
      _ EXEC01                   3 ON
      _ NBPUSER-EXEC             2 ACTIVE 37    NBPUSER-CLASS-1
      _ TAL-EXEC                 1 OFF
      _
      _
      _
      _
      _
      _
      _
      _
      _
      _
      _

      F1-Read              F2-Next              F3-Info
```

Displaying the Screen

You can display the Executor Status screen from either of these screens:

- From the Scheduler Interface screen, press F8.
- From the Executor Info screen, press F3.

Field Descriptions

Scheduler

Use the Scheduler field to specify, in this form, the schedulers about whose executors you want to inquire:

[*system-name*.]$*process-name*

system-name

is the name of the system where the scheduler process resides. You do not have to enter the name if the process resides in the default system (the system where the NetBatch-Plus Pathway system is running).

process-name

is the name of the scheduler process.

You can specify a single scheduler or a range of schedulers from the wild-card scheduler processes list. To specify a single scheduler, enter the system name and process name in full (for example, \WORLD.$ZBAT). You can leave out the system name if the process resides in the default system. To specify a range of schedulers, use the question mark (?) and asterisk (*) wild-card characters in the name. For more information on specifying schedulers, see the description of the Scheduler field in Scheduler Info on page 6-190.

Executor Name

Use the Executor Name field to specify the executors about which you want to inquire. You can specify a single executor or a range of executors. To specify a single executor, enter the executor name in full (for example, COBOL-EXEC). To specify a range of executors, use these wild-card characters in the name:

? Matches a single character. For example, ABC?? matches five-character names beginning with ABC (such as ABCDE and ABC12, but not ABCDEF).

* Matches zero or more characters. For example, A*D matches names beginning with A and ending in D (such as ABCD and AD, but not CAD). You can use multiple asterisks in a name as long as you separate them by at least one character. For example, *CD* matches names containing CD (such as ABCDEF, XYZCD, and CD21, but not BC3D or DCA).

You cannot leave the Executor Name field blank.

When you display the screen, the field contains an asterisk (*). The asterisk specifies all executors associated with the scheduler named in the Scheduler field.

Executor

The fields in the Executor column show the names of the executors you specified in the Executor Name field. The NetBatch-Plus application lists only executors associated with the scheduler specified in the Scheduler field. You cannot enter information in Executor column fields.

CPU

The fields in the CPU column show the CPU attributes of the executors named in the Executor column. You cannot enter information in CPU column fields.

State

The fields in the State column show the processing states of executors named in the Executor column. You cannot enter information in State column fields. Table 6-3 on page 6-83 lists and describes the six executor states.

Table 6-3. Executor States

State	Description
ACTIVE	The executor is running a job.
DELETE	The executor is running a job but is deleted when the job finishes executing. An executor in the DELETE state can be either of: ● A temporary executor. The scheduler creates a temporary executor in these circumstances if no other executor is available at the time: When you submit a job that has the AT attribute and the AT-ALLOWED scheduler attribute is ON When you submit a job by performing the F5–Run Now function on the Job Info or Job Status screens ● An executor that, while running a job, was the subject of the F8–Delete function on the Executor Info screen.
DOWN	The executor's CPU is down.
OFF	The executor is not available to run a job. An executor in the OFF state can be either of: ● A new executor that has not been started ● An executor stopped by the F12–Stop function on the Executor Info screen To start or restart an executor in the OFF state, perform the F10–Start function on the Executor Info screen.
ON	The executor is available to run a job.
STOP	The executor is running a job but is stopped when the job finishes executing. An executor in the STOP state was the subject of the F12–Stop function on the Executor Info screen. When the job finishes executing, the executor state changes to OFF.

Jobno

If an executor named in the Executor column is running a job, the corresponding field in the Jobno column shows the job number. You cannot enter information in Jobno column fields.

Class

If an executor named in the Executor column is running a job, the corresponding field in the Class column identifies the class to which the job belongs. You cannot enter information in Class column fields.

Cursor Selection

Use the Cursor Selection field to select an executor whose details you want to display on the Executor Info screen. The Cursor Selection field is on the left of each field in the Executor column.

To select an executor, use the cursor movement keys to position the cursor next to the executor you require.

Functions

These functions are available on the Executor Status screen:

Function	Description
F1–Read	Lists, alphabetically by executor name, information about the executors you specified in the Executor Name field. Only executors associated with the scheduler specified in the Scheduler field are listed.
F2–Next	Performs Next Page and Next Scheduler functions, in that order. ● Next Page—continues the listing of executors for the current scheduler. If no more exeuctors are associated with the scheduler, F2–Next performs the Next Scheduler function. ● Next Scheduler—shows information about executors associated with the next scheduler on the wild-card scheduler processes list. At the end of the list, the NetBatch-Plus application displays a message advising you no details were found. To display the executors associated with the first scheduler on the list, clear the Scheduler field and press F1.
F3–Info	Displays the Executor Info screen. The screen shows attributes of the executor you selected by using a Cursor Selection field. If you did not select an executor by this method, the NetBatch-Plus application selects the executor for you by using information from the Executor Name field. If the field specifies a full executor name, the Executor Info screen shows attributes of that executor. If the field contains wild-card characters, the Executor Info screen shows attributes of the first executor shown in the Executor column.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Executor Status screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Executor Status screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Executor Status screen, press F16.

* Function is available on screen, but not displayed,

Function	Description
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Help

Use the Help screen to get online help for any NetBatch-Plus screen or field. Figure 6-17 is an example of online help for the Report File field on the Reports screen.

Figure 6-17. Help Screen

```
                  REPORT FILE

This is the output file location of the report.

Either a spooler location or a Guardian file name can be specified.
If a file name is entered, the file must exist.

The spooler location is a valid file name of the form:

      [\Node.]$Collector[.#Group[.Destination]]

where \Node         is the system on which the spooler is located
      $Collector    is the spooler collector
      #Group        is the group name
      Destination   is the destination name

The file name must be a valid Guardian file name of the form:

      [\Node.[$Vol.[Subvol.]]]Filename

where \Node    is the system on which the file is located
      $Vol     is the name of the volume on which the file is located
     Subvol   is the name of the subvolume in which the file is located
```

Displaying the Screen

To display the Help screen:

- For screen help, display the screen for which you want information and press SF1.
- For field help, position the cursor anywhere in the field for which you want information and press SF3.

Field Descriptions

There are no data entry or display-only fields on Help screens.

Functions

These functions are available on Help screens:

Function	Description
Next	Displays the next page of help. The NetBatch-Plus application displays “Next -->” at the bottom right of your screen when there is more than one page of help text.
Prev	Displays the previous page of help.
F16–Previous Screen	Returns you to the screen from which you obtained help.
SF13–Print	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.

Job ASSIGNs

Use the Job ASSIGNs screen to attach ASSIGNs to jobs. You can create the ASSIGNs or use ASSIGNs from the attachments catalog. The screen also lets you inquire about, update, and delete ASSIGNs already attached to jobs.

ASSIGNs are used for file redirection or substitution. You can enter the logical name of an ASSIGN in place of a physical file name in a program. ASSIGNs are similar to map DEFINEs. However, ASSIGNs are usually processed by an application program, whereas map DEFINEs are processed by the system.

Figure 6-18. Job ASSIGNs Screen

```
NETBATCH-PLUS            JOB ASSIGNS                      01Jan2002   SNP030A

Option       : ASSIGN__        Owner   : SUPER.NBOPS1       / AAAA AGAO
Job Set      : AA-DEFAULT      Job Name: JOB1
ASSIGN Name  : GLEDGER.DAILY-TRANSACTION-FILE_____________________________
Catalog Set  : DEF-SET-1_
Catalog Name : GLEDGER.DAYLOG-FILE_________________________________________

Physical Filename : _____________________________
                    \AUST1.$BANK.USER1.DAYLOG

Exclusion   : _ E
Access      : __ IO

Prim Extent : _____ 100
Sec Extent  : _____ 200
File Code   : _____ 905

Record Size : 1024_ 512
Block Size  : _____ 4096

F1-Read      F2-Next            F4-Add        F6-Update       F7-Read Catalog
F8-Delete    F13-Choose Option  F14-Depend    F15-Bulk Select
```

Displaying the Screen

To display the Job ASSIGNs screen:

- From any of these screens, press F13:
  - Bulk Job Selection Criteria
  - Job Definition
  - Job Dependencies
- From the Job PARAMs screen or any job DEFINEs screen, enter A or ASSIGN in the Option field and press F13.

Field Descriptions

Option

Use the Option field to specify the job attachments screen displayed when you perform the F13–Choose Option function. The field options are:

P[ARAM]	Specifies the Job PARAMs screen.
C[ATALOG]	Specifies the Job Catalog DEFINEs screen.
D[EFAULTS]	Specifies the Job Defaults DEFINEs screen.
M[AP]	Specifies the Job Map DEFINEs screen.
S[POOL]	Specifies the Job Spool DEFINEs screen.
T[APE]	Specifies the Job Tape DEFINEs screen.

Owner

Use the Owner field to enter the four security codes specifying the security attributes of the ASSIGN record. The security attributes are:

R Read specifies who can read the record.

W Write specifies who can update the record.

U Use specifies who can attach the record to a job.

P Purge specifies who can delete the record.

For each attribute, you can specify any one of these security codes:

O Specifies that only the owner can access the record. If the owner is the super ID (255, 255), the NetBatch-Plus application automatically sets the write security attribute to O. This helps prevent users from gaining unauthorized access to the super ID's records.

G Specifies that any user in the owner's group can access the record.

A Specifies that any user can access the record.

\- Specifies that only the super ID can access the record.

If you do not specify security attributes, the record adopts the attributes of the job owner. These attributes and the user ID of the job owner appear in regular text next to the field.

The NetBatch-Plus application prevents users who do not have read access to a record from updating, using, or deleting that record. This restriction applies regardless of the security codes assigned to the record's write, use, and purge attributes.

Job Set

The Job Set field shows the name of the defaults set of the job named in the Job Name field (the current job). You cannot enter information in the Job Set field.

Job Name

The Job Name field shows the name of the current job. You cannot enter information in this field.

ASSIGN Name

Use the ASSIGN Name field to enter the logical name you want to use as a substitute for the physical file name. You can enter the logical name in any of these forms:

```
logical-file
program-unit.logical-file
*.logical-file
```

logical-file

is the logical file name as it appears in the program file (for example, DAILY-TRANSACTION-FILE). The name can contain from 1 through 31 letters, numbers, hyphens (-), and circumflexes (^). The first character must be a letter.

program-unit

is the name of the program unit to which the assignment applies (for example, GLEDGER). The make-up of the name is the same as the name of the logical file.

*

applies the assignment to all program units in the program file being run.

Catalog Set

Use the Catalog Set field to specify the defaults set to which the catalog ASSIGN named in the Catalog Name field belongs. You must specify the defaults set before you can display attributes of the ASSIGN with the F7–Read Catalog function.

Catalog Name

Use the Catalog Name field to specify the catalog ASSIGN whose attributes you want to display with the F7–Read Catalog function. The ASSIGN must belong to the defaults set you specified in the Catalog Set field.

You must have use access to a catalog ASSIGN to attach it to a job and override its attributes.

Physical Filename

Use the Physical Filename field to enter the name of the actual file.

The file name must be a Guardian file name. If you enter a partial name, the NetBatch-Plus application uses the system, volume, and subvolume specified for the defaults set to expand the name. The Volume field on the Defaults Set Details screen displays these values.

Exclusion

Use the Exclusion field to specify the exclusion mode of the physical file. The exclusion mode determines the circumstances under which other processes can access the file. The field options are:

E Exclusive specifies that no other processes can access the physical file while the program referring to the logical file has the file open.

S Shared specifies that other processes can both read and write to the physical file while the program referring to the logical file has the file open.

P Protected specifies that another process can read but not write to the physical file while the program referring to the logical file has the file open.

For more information on exclusion modes, see the *ENSCRIBE Programmer's Guide*.

Access

Use the Access field to specify the access mode of the physical file. The access mode determines the file operations that processes can perform on the file. The field options are:

I Input specifies that processes can only read the physical file.

O Output specifies that processes can only write to the physical file.

IO Input/output specifies that processes can both read and write to the physical file.

For more information on access modes, see the *ENSCRIBE Programmer's Guide*.

Prim Extent

Use the Prim Extent field to specify the size of the primary extent allocated to the physical file. This file-creation attribute applies only when the program referring to the logical file creates the physical file.

To specify the primary extent size, enter an integer in the range 1 through 65534.

Sec Extent

Use the Sec Extent field to specify the size of the secondary extents allocated to the physical file. Secondary extents are allocated after the primary extent. This file-creation attribute applies only when the program referring to the logical file creates the physical file.

To specify the secondary extent size, enter an integer in the range 1 through 65534.

File Code

Use the File Code field to assign a file code to the physical file. This file-creation attribute applies only when the program referring to the logical file creates the physical file.

To specify the file code, enter an integer in the range 0 through 65534. For a list of reserved file codes, see the *File Utility Program (FUP) Reference Manual*.

Record Size

Use the Record Size field to specify, in bytes, the length of records in the physical file. This file-creation attribute applies only when the program referring to the logical file creates the physical file.

To specify the record length, enter an integer in the range 1 through 65534.

Block Size

Use the Block Size field to specify the size of the data blocks in the physical file. This file-creation attribute applies only when the program referring to the logical file creates the physical file.

To specify the block size, enter an integer in the range 1 through 65534.

Functions

These functions are available on the Job ASSIGNs screen:

Function	Description
F1–Read	Shows information about the ASSIGN specified in the ASSIGN Name field that is attached to the current job.
F2–Next	Shows information about the next ASSIGN attached to the job. When there are no more ASSIGNs, the function displays, in this order and on the appropriate screens, the DEFINEs and PARAMs for the job: 1. Catalog DEFINEs 2. Defaults DEFINEs 3. Map DEFINEs 4. Spool DEFINEs 5. Tape DEFINEs 6. PARAMs
F4–Add	Attaches the ASSIGN specified in the ASSIGN Name field to the current job.
F6–Update	Updates attributes of the ASSIGN specified in the ASSIGN Name field.
F7–Read Catalog	Displays attributes of the catalog ASSIGN specified in the Catalog Name field. The attributes appear in regular text next to or below the attribute fields. The attributes apply to the job unless you override them by doing either of: ● Entering your preferred attributes in the attribute fields. ● Entering N, NO, NON, or NONE in the attribute fields. This option specifies the default value for the fields in which it is entered.
F8–Delete	Deletes the ASSIGN specified in the ASSIGN Name field from the current job.

* Function is available on screen, but not displayed,

Function	Description
F13–Choose Option	Displays the job attachments screen you specified in the Option field. If you press F13 when the field is blank, the NetBatch-Plus application redisplays the Job ASSIGNs screen.
F14–Depend	Displays the Job Dependencies screen. Use this screen to specify up to eight master jobs on which execution of the current job depends. When you display the screen, it shows the names of any master jobs already specified for the current job. It also shows the name of the defaults set to which each master job belongs.
F15–Bulk Select	Displays the Bulk Job Selection Criteria screen. Use this screen to specify the criteria the NetBatch-Plus application uses to select the current job for a bulk submit run. When you display the screen, it shows any selection criteria already specified for the job.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Job ASSIGNs screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Job ASSIGNs screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Job ASSIGNs screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Job Catalog DEFINEs

Use the Job Catalog DEFINEs screen to attach SQL catalog DEFINEs to jobs. You can create the DEFINEs or use DEFINEs from the attachments catalog. The screen also enables you to inquire about, update, and delete SQL catalog DEFINEs already attached to jobs.

SQL catalog DEFINEs are used for NonStop SQL/MP catalog redirection or substitution. You can enter the logical name of the catalog DEFINE in place of a catalog name in CATALOG clauses in NonStop SQL/MP data manipulation language (DML) statements.

Figure 6-19. Job Catalog DEFINEs Screen

```
NETBATCH-PLUS            JOB CATALOG DEFINES              01Jan2002   SNP030DC

Option       : CATALOG_        Owner    : SALES.MNGR        / AGG- AOOO
Job Set      : AA-DEFAULT      Job Name: JOB1
DEFINE Name  : =SALEREP_________________
Catalog Set  : DEF-SET-1_
Catalog Name : =SALES___________________


Subvolume    : \ADMIN.$SALES.FY9192______
               \SYS1.$VOL1.SALES




F1-Read      F2-Next            F4-Add        F6-Update       F7-Read Catalog
F8-Delete    F13-Choose Option  F14-Depend    F15-Bulk Select
```

Displaying the Screen

From any job attachments screen, enter C or CATALOG in the Option field and press F13 to display the Job Catalog DEFINEs screen.

Field Descriptions

Option

Use the Option field to specify the job attachments screen displayed when you perform the F13–Choose Option function. The field options are:

A[SSIGN]	Specifies the Job ASSIGNs screen.
P[ARAM]	Specifies the Job PARAMs screen.
D[EFAULTS]	Specifies the Job Defaults DEFINEs screen.

M[AP]	Specifies the Job Map DEFINEs screen.
S[POOL]	Specifies the Job Spool DEFINEs screen.
T[APE]	Specifies the Job Tape DEFINEs screen.

Owner

Use the Owner field to specify the security attributes of the DEFINE record. For more information on this field, see Job ASSIGNs on page 6-88.

Job Set

The Job Set field shows the name of the defaults set of the job named in the Job Name field (the current job). You cannot enter information in the Job Set field.

Job Name

The Job Name field shows the name of the current job. You cannot enter information in this field.

DEFINE Name

Use the DEFINE Name field to enter the logical name you want to use as a substitute for the physical SQL catalog name. The logical name can contain from 2 through 24 characters. The first character must be an equals sign (=). The remaining characters can be letters, numbers, hyphens (-), underscores (_), or circumflexes (^). In some products (for example, the TACL command interpreter), names whose second character is an underscore are reserved for use by HP. To avoid errors or unexpected results, do not use an underscore as the second character. Names beginning with =_ZBAT are reserved for use by the NetBatch-Plus application.

Catalog Set

Use the Catalog Set field to specify the defaults set to which the catalog DEFINE named in the Catalog Name field belongs. You must specify the defaults set before you can display attributes of the DEFINE with the F7–Read Catalog function.

Catalog Name

Use the Catalog Name field to specify the catalog DEFINE whose attributes you want to display with the F7–Read Catalog function. The DEFINE must belong to the defaults set you specified in the Catalog Set field.

You must have use access to a catalog DEFINE to attach it to a job and override its attributes.

Subvolume

Use the Subvolume field to enter the name of the physical SQL catalog.

The form of the catalog name is a Guardian subvolume name. If you enter a partial name, the NetBatch-Plus application uses the system, volume, and subvolume specified for the defaults set to expand the name. The Volume field on the Defaults Set Details screen displays these values.

Functions

These functions are available on the Job Catalog DEFINEs screen:

Function	Description
F1–Read	Shows information about the DEFINE specified in the DEFINE Name field that is attached to the current job.
F2–Next	Shows information about the next SQL catalog DEFINE attached to the job. When there are no more SQL catalog DEFINEs, the function displays, in this order and on the appropriate screens, the remaining DEFINEs and the PARAMs for the job: 1. Defaults DEFINEs 2. Map DEFINEs 3. Spool DEFINEs 4. Tape DEFINEs 5. PARAMs
F4–Add	Attaches the DEFINE specified in the DEFINE Name field to the current job.
F6–Update	Updates attributes of the DEFINE specified in the DEFINE Name field.
F7–Read Catalog	Displays attributes of the catalog DEFINE specified in the Catalog Name field. The attributes appear in regular text next to or below the attribute fields. The attributes apply to the job unless you override them by either of: ● Entering your preferred attributes in the attribute fields. ● Entering N, NO, NON, or NONE in the attribute fields. This option specifies the default value for the fields in which it is entered.
F8–Delete	Deletes the DEFINE specified in the DEFINE Name field from the current job.
F13–Choose Option	Displays the job attachments screen you specified in the Option field. If you press F13 when the field is blank, the NetBatch-Plus application redisplays the Job ASSIGNs screen.
F14–Depend	Displays the Job Dependencies screen. Use this screen to specify up to eight master jobs on which execution of the current job depends. When you display the screen, it shows the names of any master jobs already specified for the current job. It also shows the name of the defaults set to which each master job belongs.

* Function is available on screen, but not displayed,

Function	Description
F15–Bulk Select	Displays the Bulk Job Selection Criteria screen. Use this screen to specify the criteria the NetBatch-Plus application uses to select the current job for a bulk submit run. When you display the screen, it shows any selection criteria already specified for the job.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Job Catalog DEFINEs screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Job Catalog DEFINEs screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Job Catalog DEFINEs screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Job Defaults DEFINEs

Use the Job Defaults DEFINEs screen to attach defaults DEFINEs to jobs. You can create the DEFINEs or use DEFINEs from the attachments catalog. The screen also lets you inquire about, update, and delete defaults DEFINEs already attached to jobs.

Defaults DEFINEs are used for holding the standard default values of a process (for example, the default volume).

Figure 6-20. Job Defaults DEFINEs Screen

```
NETBATCH-PLUS            JOB DEFAULTS DEFINES            01Jan2002   SNP030DD

Option       : DEFAULTS        Owner    : ADMIN.OPER1       / ____ AAAA
Job Set      : AA-DEFAULT      Job Name: JOB1
DEFINE Name  : =BATCHUSER-DFLTS________
Catalog Set  : DEF-SET-1_
Catalog Name : =DFLTS___________________


Volume  : ______________________________ \ADMIN.$A.RECORD

Catalog : ______________________________ \SYS1.$VOL1.SALES

Swap    : $TEMP___________ $BANK




F1-Read      F2-Next            F4-Add        F6-Update       F7-Read Catalog
F8-Delete    F13-Choose Option  F14-Depend    F15-Bulk Select
```

Displaying the Screen

From any job attachments screen, enter D or DEFAULTS in the Option field and press F13 to display the Job Defaults DEFINEs screen.

Field Descriptions

Option

Use the Option field to specify the job attachments screen displayed when you perform the F13–Choose Option function. The field options are:

A[SSIGN]	Specifies the Job ASSIGNs screen.
P[ARAM]	Specifies the Job PARAMs screen.
C[ATALOG]	Specifies the Job Catalog DEFINEs screen.
M[AP]	Specifies the Job Map DEFINEs screen.
S[POOL]	Specifies the Job Spool DEFINEs screen.
T[APE]	Specifies the Job Tape DEFINEs screen.

Owner

Use the Owner field to specify the security attributes of the DEFINE record. For more information on this field, see Job ASSIGNs on page 6-88.

Job Set

The Job Set field shows the name of the defaults set of the job named in the Job Name field (the current job). You cannot enter information in the Job Set field.

Job Name

The Job Name field shows the name of the current job. You cannot enter information in this field.

DEFINE Name

Use the DEFINE Name field to enter the name of the defaults DEFINE. The name can contain from 2 through 24 characters. The first character must be an equals sign (=). The remaining characters can be letters, numbers, hyphens (-), underscores (_), or circumflexes (^). In some products (for example, the TACL command interpreter), names whose second character is an underscore are reserved for use by HP. To avoid errors or unexpected results, do not use an underscore as the second character. Names beginning with =_ZBAT are reserved for use by the NetBatch-Plus application.

Catalog Set

Use the Catalog Set field to specify the defaults set to which the catalog DEFINE named in the Catalog Name field belongs. You must specify the defaults set before you can display attributes of the DEFINE with the F7–Read Catalog function.

Catalog Name

Use the Catalog Name field to specify the catalog DEFINE whose attributes you want to display with the F7–Read Catalog function. The DEFINE must belong to the defaults set you specified in the Catalog Set field.

You must have use access to a catalog DEFINE to attach it to a job and override its attributes.

Volume

Use the Volume field to specify, in Guardian form, the default system, volume, and subvolume.

You must specify at least a volume and subvolume. If you do not specify a system, the system specified for the defaults set applies. The Volume field on the Defaults Set Details screen displays this value.

Catalog

Use the Catalog field to enter the name of the default SQL catalog. The form of the catalog name is a Guardian subvolume name.

You must specify at least a volume and subvolume. If you do not specify a system, the system specified for the defaults set applies. The Volume field on the Defaults Set Details screen displays this value.

Swap

Use the Swap field to specify the disk volume used as the default location for swap files. The swap volume must be on the same system as the object to be run.

Functions

These functions are available on the Job Defaults DEFINEs screen:

Function	Description
F1–Read	Shows information about the DEFINE specified in the DEFINE Name field that is attached to the current job.
F2–Next	Shows information about the next defaults DEFINE attached to the job. When there are no more defaults DEFINEs, the function displays, in this order and on the appropriate screens, the remaining DEFINEs and the PARAMs for the job: 1. Map DEFINEs 2. Spool DEFINEs 3. Tape DEFINEs 4. PARAMs
F4–Add	Attaches the DEFINE specified in the DEFINE Name field to the current job.
F6–Update	Updates attributes of the DEFINE specified in the DEFINE Name field.
F7–Read Catalog	Displays attributes of the catalog DEFINE specified in the Catalog Name field. The attributes appear in regular text next to or below the attribute fields. The attributes apply to the job unless you override them in one of these ways: ● By entering your preferred attributes in the attribute fields. ● By entering N, NO, NON, or NONE in the attribute fields. This option specifies the default value for the fields in which it is entered.
F8–Delete	Deletes the DEFINE specified in the DEFINE Name field from the current job.
F13–Choose Option	Displays the job attachments screen you specified in the Option field. If you press F13 when the field is blank, the NetBatch-Plus application redisplays the Job ASSIGNs screen.

* Function is available on screen, but not displayed,

Function	Description
F14–Depend	Displays the Job Dependencies screen. Use this screen to specify up to eight master jobs on which execution of the current job depends. When you display the screen, it shows the names of any master jobs already specified for the current job. It also shows the name of the defaults set to which each master job belongs.
F15–Bulk Select	Displays the Bulk Job Selection Criteria screen. Use this screen to specify the criteria the NetBatch-Plus application uses to select the current job for a bulk submit run. When you display the screen, it shows any selection criteria already specified for the job.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Job Defaults DEFINEs screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Job Defaults DEFINEs screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Job Defaults DEFINEs screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Job Definition

Use the Job Definition screen to create and add nonrecurrent jobs to the NetBatch-Plus database. (A nonrecurrent job is a job that does not have the CALENDAR or EVERY attribute.) You can also use the screen to inquire about, update, and delete jobs already in the database.

A job you create on the Job Definition screen can include any or all of:

- ASSIGNs, PARAMs, and DEFINEs specified on the job attachments screens
- Selection criteria specified on the Bulk Job Selection Criteria screen
- Job dependencies specified on the Job Dependencies screen

Each job is associated with a defaults set, the attributes of which apply to the job unless overridden. The defaults set owner owns the job unless otherwise specified.

When you add a job to the database, you can submit it for execution in these ways:

- Use the F3–Submit function on the Job Definition screen
- Select the job on the Ad Hoc Job Selection screen and submit it with the F3–Submit function on that screen
- Include the job in a bulk submit run (if you specified selection criteria for the job)

After you submit the job, to control its execution or change its attributes, use the functions on the Job Info screen or Job Status screen. To inquire about processes started by the job, use the Job Inquiry screen. The job remains in the NetBatch-Plus database after submission and therefore can be submitted as many times and as often as necessary.

Figure 6-21. Job Definition Screen

```
NETBATCH-PLUS            JOB DEFINITION                  01Jan2002   SNP030

Set      : DEF-SET-A_            Job Name: EOP-SALES-ACCUMULATION__
Scheduler: _______________ \SALES.$LDS
Class    : DEFAULT_____________________ NBP-USER-CLASS-1
Owner    : _____________ , _____________ / ____
           SALES.MNGR                     AOOO
Comment : Sales for Region 8 - 3rd Quarter **Sales & Marketing Department**
Exec.Prg: ____________________________________ \WORLD.$SYSTEM.SYSTEM.NBEXEC
In       : $DATA6.SALES.REG83Q_________________ $DATA3.NBPBAT.OMSBATCH
Out      : $S.#REGION8_________________________ $S.#BATCH
Volume   : ____________________________ \SYS1.$VOL1.SALES
Startup : ____________________________________________
          B-1, LI 2:00, XPRI 110
Selpri: _ 3               Pri  : 149 120            High PIN: _
Drives: 1_ 3              Lines: _____              Pages: 1000_ 50
Wait  : 00:00 02:00       At/Af: __ AT              Time : 19:30 13:00

Restart      : _ N        Hold      : N Y           Any User Submit: _ N
Stop On Abend: _ N        Hold After: Y N

F1-Read     F2-Next       F3-Submit    F4-Add   F6-Update    F7-Read Set
F8-Delete   F9-Duplicate  F13-Job Attachments   F14-Depend   F15-Bulk Select
```

Displaying the Screen

You can display the Job Definition screen in these ways:

- From the Main Menu screen, press F2.
- From the Bulk Job Selection Criteria screen, Job Dependencies screen, or any job attachments screen, press F16.
- From the Ad Hoc Job Selection screen, move the cursor to a selection field next to a listed job and press F9–Display Job or F10–Create Temp.

When you display the screen, the Set, Scheduler, Class, and Owner fields show information from one of these defaults sets:

- The defaults set associated with the signed-on user. The NetBatch-Plus application shows information from this set if you display the screen when no functions have been performed during the current session.
- The defaults set that was the subject, directly or indirectly, of the last function performed during the current session.

Field Descriptions

Set

Use the Set field to enter the name of the defaults set to which you want to link the job. The name must identify a set defined on the Defaults Set Details screen.

Attributes of the defaults set apply to the job unless overridden. You can display the attributes by performing the F7–Read Set function.

Job Name

Use the Job Name field to enter the name of the job. The name must be unique and can contain from 1 through 24 letters and numbers. It can also contain hyphens (-). The name must begin with a letter and can end with any letter or number but not with a hyphen.

Scheduler

Use the Scheduler field to name, in this form, the scheduler where the job runs when submitted:

`[\`*`system-name`*`.]$`*`process-name`*

`system-name`

is the name of the system where the scheduler process resides. You do not have to enter the name if the process resides in the default system (the system where the NetBatch-Plus Pathway system is running).

process-name

is the name of the scheduler process.

Class

Use the Class field to set the CLASS job attribute. The attribute links the job to an executor and therefore to the executor's CPU.

To set the attribute, enter the name of an existing class.

If you submit a job without specifying its CLASS attribute, the job adopts the DEFAULT-CLASS scheduler attribute. To display this scheduler attribute, use the Scheduler Info screen.

For information on the order in which the NetBatch-Plus application selects jobs for processing, see Job Info on page 6-120.

Owner

Use the three-part Owner field to specify the owner and security attributes of the job record.

In the first part of the field, enter a Guardian user ID identifying the owner of the record. Enter the user's password in the second part of the field. For more information on entering Guardian user IDs and passwords, see Password Validation on page 6-182.

If you do not specify the owner, the NetBatch-Plus application gives ownership of the record to the owner of the defaults set.

In the third part of the field, enter the four security codes specifying the security attributes of the record. The security attributes are:

R Read specifies who can read the record.

W Write specifies who can update the record.

U Use specifies who can use the record.

P Purge specifies who can delete the record.

For each attribute, you can specify any one of the following security codes:

O Specifies that only the owner can access the record.

If the owner is the super ID (255, 255), the NetBatch-Plus application automatically sets the write security attribute to O. This helps prevent users from gaining unauthorized access to the super ID's records.

G Specifies that any user in the owner's group can access the record.

A Specifies that any user can access the record.

- Specifies that only the super ID can access the record.

A record added without security attributes adopts those of the owner of the defaults set.

The NetBatch-Plus application prevents users who do not have read access to a record from updating, using, or deleting that record. This restriction applies regardless of the security codes assigned to the record's write, use, and purge attributes.

When you display the screen, the NetBatch-Plus application shows one of the following user IDs in the first part of the field. The security attributes associated with that user appear in the third part of the field.

- The user ID from the defaults set associated with the signed-on user. The application shows this ID if no other user IDs have been validated during the current session.
- The user ID of the last user validated by a function performed during the current session.

Comment

Use the Comment field to enter a job description of up to 32 characters. When you list the job on the Ad Hoc Job Selection screen, the NetBatch-Plus application displays your description in the Job Description column.

Exec. Prg.

Use the Exec. Prg. field to set the EXECUTOR-PROGRAM job attribute. The attribute specifies the program used to process a job input file.

To set the attribute, enter the Guardian name of the program file.

If you submit a job without specifying its EXECUTOR-PROGRAM attribute, the job adopts the DEFAULT-EXECUTOR-PROGRAM scheduler attribute. To display this scheduler attribute, use the Scheduler Info screen.

When you specify a remote executor program, the job runs in the CPU assigned to its executor, but it runs on the remote system. If the CPU is unavailable, the next available CPU on the remote system is used. While the job is running, the corresponding CPU on the local system remains available for use by local jobs. Failure of the remote CPU stops the job but not the executor.

The home terminal of the executor program process is the scheduler process. Any processes created by the executor program process also use the scheduler process as the home terminal unless otherwise specified with the run option TERM.

In

Use the In field to set the IN job attribute. The attribute specifies the input file of a job.

To set the attribute, enter the Guardian name of the file. The file can be a device, a disk file, or a process.

You must specify the IN attribute for every job you submit, regardless of whether the executor program requires an input file or not. If the executor program does not require

an input file, you can specify a dummy file. Examples of executor programs not requiring input files are the File Utility Program (FUP) and the Disk Space Analysis Program (DSAP).

An input file must contain commands compatible with a job's executor program. For example, if a TACL process is the executor program, the file must contain TACL commands.

Users with write access to your job input file can alter any attribute of or delete a job that uses the file. Using the input file as a medium, these users can also assume your level of security. They can modify the input file to delete your files, change your password, and so on. To avoid compromising system security, secure your input files using the Safeguard distributed security management facility or the Guardian standard security system.

For information on securing files using the SAFEGUARD facility, see the *Safeguard Reference Manual.* For information on securing files using the Guardian security system, see the *Guardian User's Guide*.

Out

Use the Out field to set the OUT job attribute. The attribute specifies the output file of a job.

To set the attribute, enter the Guardian name of the file. The file can be a device, a disk file, or a process.

- If the output file is a spooler process, spooler jobs are created for:
  - The job log file
  - Executor program output
  - Output from other processes created by the job
- Spooler jobs are linked only if they have the same JOBID, form, owner, and device.
- If the output file is a disk file or nonterminal device, the file is opened for executor program output only. Processes created by the job cannot open the same file and might fail, depending on how the processes handle "file in use" errors. Process output is only created if the processes specify output files different from the executor program's output file. The job log file is not created.
- If the output file is a terminal, this output is displayed on the terminal:
  - Executor program output
  - Output from other processes created by the job
- The job log file is not created.

If you submit a job without specifying its OUT attribute, the job adopts the DEFAULT-OUT scheduler attribute. To display this scheduler attribute, use the Scheduler Info screen.

Volume

Use the Volume field to set the VOLUME job attribute. The attribute specifies the system, volume, and subvolume for unqualified file references in a job input file. These values are passed to the executor program in the startup message.

To set the attribute, enter the names of the system, volume, and subvolume in the form:

```
[\system-name.]$volume.subvol
               $volume
               subvol
```

system-name

is a Guardian system name.

volume.subvol

are the names of the volume and subvolume.

volume

is the volume name.

subvol

is the subvolume name.

If you submit a job without specifying its VOLUME attribute, the job owner's logon defaults apply to unqualified file references.

Startup

Use the Startup field to set the STARTUP job attribute. The attribute specifies a parameter or series of parameters the scheduler sends to a new executor program process as its startup message.

To set the attribute, enter a string of 1 through 40 alphanumeric characters.

Selpri

Use the Selpri field to set the SELPRI job attribute. The attribute specifies the selection priority of a job within its class.

To set the attribute, enter an integer in the range 0 (lowest selection priority) through 7 (highest selection priority).

If you submit a job without specifying its SELPRI attribute, the job adopts the DEFAULT-SELPRI scheduler attribute. To display this scheduler attribute, use the Scheduler Info screen.

Job selection is by job submission time if jobs with the same SELPRI attribute are scheduled to run at the same time.

Pri

Use the Pri field to set the PRI job attribute. The attribute specifies the execution priority of the executor program process of a job. The attribute is adopted by any process created by the job if the execution priority of that process is not explicitly stated.

To set the attribute, enter an integer in the range 1 (lowest execution priority) through 199 (highest execution priority).

If you submit a job without specifying its PRI attribute, the job adopts the DEFAULT-PRI scheduler attribute. To display this scheduler attribute, use the Scheduler Info screen.

Note. To prevent batch jobs from taking precedence over online applications, specify an execution priority for those jobs that is less than the priority of the applications.

High PIN

Use the High PIN field to set the HIGHPIN job attribute. This attribute specifies whether a job can be started in a high PIN.

Allowed values for this field are:

- Y = ON (job can be started in a high PIN)
- N = OFF (job cannot be started in a high PIN; default)

When a process runs at a high PIN, it cannot communicate with a remote C-series process.

Drives

Use the Drives field to set the TAPEDRIVES job attribute. The attribute specifies the number of tape drives required by a job.

To set the attribute, enter an integer in the range 0 through 99 specifying the number of drives.

When you submit a job with the attribute, the scheduler checks the number of drives required against its internal tape drives counter. If the number is:

- Less than or equal to the counter, the job is scheduled immediately for execution.
- Greater than the counter but no greater than the TAPEDRIVES scheduler attribute, the job is scheduled for execution when the required number of drives is available. Jobs waiting for tape drives are flagged with a state of TAPE.

- Greater than the TAPEDRIVES scheduler attribute, the job is never scheduled for execution. To avoid this, do not specify more drives for a job than are specified by the TAPEDRIVES scheduler attribute. If it does occur, resolve it by doing one of:
  - Increase the number of drives specified by the TAPEDRIVES scheduler attribute
  - Reduce the number of drives required by the job

For more information on the tape drives counter, see Scheduler Info on page 6-190.

Lines

Use the Lines field to set the MAXPRINTLINES job attribute. The attribute specifies the maximum number of print lines for a job output file. Because the attribute is, in effect, a spooler attribute, it is effective only if the output file is a spooler process.

To set the attribute, enter an integer in the range 120 through 65534 specifying the maximum number of print lines. To specify no maximum, enter NOMAX.

If you submit a job without specifying its MAXPRINTLINES attribute, the job adopts the DEFAULT-MAXPRINTLINES scheduler attribute. To display this scheduler attribute, use the Scheduler Info screen.

The MAXPRINTLINES job attribute applies to the job log file and the output of each process started by the job.

- If the job log file fills, the spooler logs error code 45 (“File is full”) to the scheduler log file but continues processing the job.
- If a TACL process or NBEXEC process is the executor program and the process output file fills, the job is stopped. All processes started by the job are also stopped. If the executor program is neither a TACL process nor NBEXEC process, whether or not the job is stopped depends on how the process handles spooler error code 45.

The attribute is overridden by the MAXPRINTPAGES job attribute if the number of pages specified by MAXPRINTPAGES converts to fewer lines. For example, MAXPRINTPAGES 8 (480 lines) overrides MAXPRINTLINES 600. To avoid conflicting attributes, specify MAXPRINTLINES or MAXPRINTPAGES, not both.

Pages

Use the Pages field to set the MAXPRINTPAGES job attribute. The attribute specifies the maximum number of pages for a job output file. Because the attribute is, in effect, a spooler attribute, it is only effective if the output file is a spooler process.

To set the attribute, enter an integer in the range 2 through 65534 specifying the maximum number of pages. To specify no maximum, enter NOMAX.

If you submit a job without specifying its MAXPRINTPAGES attribute, the job adopts the DEFAULT-MAXPRINTPAGES scheduler attribute. To display this scheduler attribute, use the Scheduler Info screen.

The MAXPRINTPAGES job attribute applies to the job log file and the output of each process started by the job:

- If the job log file fills, the spooler logs error code 45 (“File is full”) to the scheduler log file but continues processing the job.
- If a TACL process or NBEXEC process is the executor program and the process output file fills, the job is stopped. All processes started by the job are also stopped. If the executor program is neither a TACL process nor NBEXEC process, whether or not the job is stopped depends on how the process handles spooler error code 45.

The attribute is overridden by the MAXPRINTLINES job attribute if the MAXPRINTPAGES value converts to more lines. For example, MAXPRINTLINES 1200 overrides MAXPRINTPAGES 25 (1500 lines). To avoid conflicting attributes, specify MAXPRINTPAGES or MAXPRINTLINES, not both.

Wait

Use the Wait field to set the WAIT job attribute. The attribute delays execution of a job for a specified number of hours and minutes after job submission.

To set the attribute, enter the delay period in the form:

```
[h]h:[m]m
```

`[h]h`

is an integer in the range 0 through 99 specifying the number of hours.

`[m]m`

is an integer in the range 0 through 59 specifying the number of minutes.

The scheduler adds the delay period to the job start time if the start time is specified. For example, a job scheduled to start at 13:00 is delayed until 15:00 if the WAIT attribute specifies a two-hour delay.

At/Af

Use the At/Af field with the Time field to set the AT job attribute or AFTER job attribute. The options for the At/Af field are:

AT Specifies the AT job attribute. The attribute causes a job to be executed at the time specified in the Time field. If an executor is not available at that time, the scheduler creates a temporary executor to run the job. The scheduler deletes the temporary executor when job execution finishes

Execution does not occur at the specified time if either of these conditions exists:

- The job's TAPEDRIVES attribute specifies more tape drives than are available. The job is executed as soon as the required number of drives is available. For more information on the TAPEDRIVES job attribute, see Drives on page 6-108.
- The job has the WAITON attribute and has not been released by the master jobs on which it depends. The job is executed as soon as it is released by all its master jobs. For more information on the WAITON job attribute, see Job Dependencies on page 6-117.

NetBatch-Plus converts the AT attribute to AFTER if you submit the job when the AT-ALLOWED scheduler attribute is OFF. This lets the scheduler accept the job and ensures the job runs as soon after the specified time as possible. For more information on the AT-ALLOWED scheduler attribute, see Scheduler Info on page 6-190.

AF Specifies the AFTER job attribute. The attribute makes a job available for execution at the time specified in the Time field. After this time is reached, execution of the job depends on:

- Executor availability (the scheduler does not create a temporary executor to run the job)
- Tape drives availability (if the job has the TAPEDRIVES attribute)
- Master jobs releasing the job (if it has the WAITON attribute)

Execution of a job with the AT or AFTER attribute is delayed by the WAIT attribute if the WAIT attribute is specified. For example, a job scheduled to run at or after 17:30 is delayed until 18:00 if the WAIT attribute specifies a half-hour delay.

Time

Use the Time field with the At/Af field to set the AT job attribute or AFTER job attribute. The Time field lets you specify, in this form, the time component of those attributes:

[h]h:*[m]m*

[h]h

is an integer in the range 0 through 23 specifying the hour of the day.

[m]m

is an integer in the range 0 through 59 specifying the minute of the hour.

The first minute of the day is 00:00 (midnight). The last minute is 23:59.

Restart

Use the Restart field to set the RESTART job attribute. The attribute specifies whether the job is restarted automatically if it fails during execution for any of the following reasons:

- The executor program process stops or abends with completion code 7. This code indicates to the scheduler the job is to be restarted if its RESTART attribute is ON. For more information on completion codes, see the *Guardian Procedure Calls Reference Manual*.
- The executor program process terminates because of CPU failure. This reason does not apply if the process has a backup that successfully takes over job execution.
- A process created by the executor program process terminates because of CPU failure, and the job has the attribute STOP-ON-ABEND ON.

The options for the Restart field are:

Y Yes specifies the attribute RESTART ON. The job is restarted if it fails during execution for any of the reasons listed previously. Execution of a restarted job begins at the start of the job, not from where it stopped.

There is no limit to the number of times a job is restarted while the failure condition continues.

N No specifies the attribute RESTART OFF. The job is not restarted if it fails during execution.

If you submit the job without specifying its RESTART attribute, the job adopts the attribute RESTART OFF.

Hold

Use the Hold field to set the HOLD job attribute. The attribute specifies whether a job be placed on hold as soon as you submit it. The field options are:

Y Yes specifies the attribute HOLD ON. The job is placed on hold as soon as you submit it. The job is flagged with a state of SPECIAL-1 and does not run until you change the attribute to HOLD OFF.

N No specifies the attribute HOLD OFF. The job is available for execution as soon as you submit it.

If you submit a job without specifying its HOLD attribute, the job adopts the attribute HOLD OFF.

Any User Submit

Use the Any User Submit field to specify whether any user can submit the job on the Ad Hoc Job Selection screen. The field options are:

Y Yes specifies that any user can submit the job on the Ad Hoc Job Selection screen.

N No specifies that only the owner can submit the job on the Ad Hoc Job Selection screen. Other users can submit the job but only if they validate the owner's Guardian user ID before selecting the job.

Stop On Abend

Use the Stop On Abend field to set the STOP-ON-ABEND job attribute. The attribute specifies whether a job is stopped automatically if any process started by it terminates because of CPU failure, abends with any completion code, or stops with completion code -3, -2, -1, 2, 3, 4, 5, or 6. The field options are:

Y Yes specifies the attribute STOP-ON-ABEND ON. The job is stopped as soon as any process started by it terminates, abends, or stops for the reasons listed previously. Processes already started by the job is also stopped.

△ **Caution.** If your TACL version is earlier than T9205C20 AAJ, the executor program process might start new processes before the scheduler receives the terminate, abend, or stop message. To prevent new processes from starting in these circumstances, test the completion code of each process before starting the next process.

N No specifies the attribute STOP-ON-ABEND OFF. The job continues processing when a process terminates, abends, or stops.

If you submit a job without specifying its STOP-ON-ABEND attribute, the job adopts the DEFAULT-STOP-ON-ABEND scheduler attribute. To display this scheduler attribute, use the Scheduler Info screen.

A process that terminates, abends, or stops does not stop a job with the STOP-ON-ABEND ON attribute if the process was dissociated from the job by the run option JOBID. For information on dissociating processes from jobs, see the *NetBatch User's Guide*.

Both processes of a process pair must cease to exist before the STOP-ON-ABEND attribute takes effect.

Table 6-4 lists the completion codes causing a job to stop. For more information on completion codes, see the *Guardian Procedure Calls Reference Manual*.

Table 6-4. Completion Codes Recognized by STOP-ON-ABEND Job Attribute

Code	Description
-3	The process terminated itself but passed bad parameters to STOP or ABEND.
-2	The process terminated itself. The Guardian operating system could not pass the requested completion code and associated termination information because of a Guardian resource problem.
-1	TRAP detected.
2	Abnormal, voluntary termination with fatal errors or diagnostics.
3	Abnormal, voluntary but premature termination with fatal errors or diagnostics.

Table 6-4. Completion Codes Recognized by STOP-ON-ABEND Job Attribute

Code	Description
4	The process did not start.
5	The process called ABEND on itself.
6	A STOP or ABEND for the process was issued by an external, authorized process.

Hold After

Use the Hold After field to set the HOLDAFTER job attribute. The attribute specifies whether a job with a time attribute is placed on hold after it finishes executing. On this screen, you can specify the time attributes AFTER, AT, and WAIT. The field options are:

Y Yes specifies the attribute HOLDAFTER ON. The job is placed on hold when it finishes executing and is flagged with a state of SPECIAL-1.

N No specifies the attribute HOLDAFTER OFF. The job is not placed on hold when execution finishes.

If you submit a job without specifying its HOLDAFTER attribute, the job adopts the attribute HOLDAFTER OFF.

Functions

These functions are available on the Job Definition screen:

Function	Description
F1–Read	Shows information about the job specified in the Job Name field that is associated with the defaults set named in the Set field.
F2–Next	Shows information about the next job associated with the current defaults set. When there are no more jobs for the current set, the function displays the first job of the next set. The NetBatch-Plus application lists jobs and sets in alphabetic order.
F3–Submit	Submits the job to the scheduler for execution. (F3–Submit has the same function as the BATCHCOM command SUBMIT JOB.) After you submit the job, to control its execution or change its attributes, use the functions on the Job Info screen or Job Status screen. To inquire about processes started by the job, use the Job Inquiry screen. The job remains in the NetBatch-Plus database after submission. For more information on submitting jobs, see Job Info on page 6-120.

* Function is available on screen, but not displayed,

Function	Description
F4–Add	Adds the job specified in the Job Name field to the NetBatch-Plus database. This function also links the job to the defaults set named in the Set field. The attributes of the defaults set apply to the job unless you override them in one of these ways: ● By entering your preferred attributes in the attribute fields. ● By entering N, NO, NON, or NONE in the attribute fields. This option specifies the default value for the fields in which it is entered.
F6–Update	Updates the current job. This function updates only the job description. It does not affect jobs submitted for execution that use the description. To control these jobs after they are submitted, use the functions on the Job Info screen or Job Status screen.
F7–Read Set	Displays attributes of the defaults set specified in the Set field. The attributes appear in regular text next to or below the fields to which they apply. The attributes are adopted by the job when you add or update it unless overridden.
F8–Delete	Deletes the current job from the NetBatch-Plus database. This function deletes only the job description. It does not delete jobs submitted for execution that use the description. To delete these jobs after they are submitted, use the appropriate functions on the Job Info screen or Job Status screen.
F9–Duplicate	Adds a copy of the current job description (including its attachments, dependencies, and bulk submit selection criteria) to the NetBatch-Plus database. Use this function to add new jobs that are similar to existing jobs to the database. Before you press F9, you must specify the name of the copy in the Job Name field. At the same time, you can change attributes of the original job if necessary.
F13–Job Attachments	Displays the Job ASSIGNs screen. Use this screen to attach ASSIGNs to the current job or to access the Job PARAMs screen and each of the job DEFINEs screens.
F14–Depend	Displays the Job Dependencies screen. Use this screen to specify up to eight master jobs on which execution of the current job depends. When you display the screen, it shows the names of any master jobs already specified for the current job and of the defaults set to which each master job belongs.
F15–Bulk Select	Displays the Bulk Job Selection Criteria screen. Use this screen to specify the criteria the NetBatch-Plus application uses to select the current job for a bulk submit run. When you display the screen, it shows any selection criteria already specified for the job.

* Function is available on screen, but not displayed,

Function	Description
F16–Previous Screen*	Displays one of these screens: ● Main Menu—if you displayed the Job Definition screen from the Main Menu screen ● Ad Hoc Job Selection—if you displayed the Job Definition screen by pressing F9 on the Ad Hoc Job Selection screen
SF1–Screen Help*	Displays information about the Job Definition screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Job Definition screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Job Definition screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Job Dependencies

Use the Job Dependencies screen to set the WAITON attribute of the current job. The attribute specifies that execution of the job depends on up to eight other jobs.

A job with the WAITON attribute is a dependent job. The jobs on which it depends are its master jobs.

Figure 6-22. Job Dependencies Screen

```
NETBATCH-PLUS            JOB DEPENDENCIES                 01Jan2002   SNP030DP

Job Set: AA-DEFAULT      Job Name: JOB1

                               Master Jobs

          (A,D, or U)     Set                  Job Name

               D         AA-DEFAULT           ABC-TEST-JOB_____________
               _         DEF-SET-1_           AC-NETBATCH-JOB__________
               U         BACKUP____           DAILY-BACKUP_____________
               _         DEF-SET-R_           DEP-JOB-D5_______________
               A         AA-DEFAULT           JOB2_____________________
               _         DEF-SET-R_           NBP-JOB-G________________
               _         __________           _________________________
               _         __________           _________________________


F1-Read       F6-Maintain       F13-Job Attachments       F15-Bulk Select
```

Displaying the Screen

From the Job Definition screen, Bulk Job Selection Criteria screen, or any job attachments screen, press F14 to display the Job Dependencies screen. The screen shows the names of any master jobs already specified for the current job and the name of the defaults set to which each master job belongs.

Field Descriptions

Job Set

The Job Set field shows the name of the defaults set of the job named in the Job Name field (the current job). You cannot enter information in the Job Set field.

Job Name

The Job Name field shows the name of the current job. You cannot enter information in this field.

A, D, or U

Use the fields in the A, D, or U column to indicate the maintenance functions you want to perform on the corresponding master jobs. The NetBatch-Plus application executes these functions when you press F6–Maintain. The field options are:

A Adds the job specified by the set and job name to the master jobs list.

D Deletes the job specified by the set and job name from the master jobs list.

I Updates details of the job specified by the set and job name.

Set

Use the fields in the Set column to specify the defaults sets with which the master jobs are associated.

Job Name

Use the fields in the Job Name column to enter the names of the master jobs on which the current job depends. Each master job runs in the scheduler specified for it on the Job Definition screen.

The dependent job does not run until released by all its master jobs. To enable master jobs to release the dependent job, you must include the TACL macro ZBAT:RELEASE or the NBEXEC command $RELEASE in the input file of each master job.

- Use the ZBAT:RELEASE macro if the master job's executor program is a TACL process
- Use the $RELEASE command if the master job's executor program is an NBEXEC process

You can place the macro or command anywhere in the input files of the master jobs. For information on ZBAT:RELEASE and $RELEASE, see the *NetBatch User's Guide*.

Functions

These functions are available on the Job Dependencies screen:

Function	Description
F1–Read	Lists the master jobs on which the current job depends.
F6–Maintain	Adds, deletes, or updates jobs on the master jobs list according to the values in the A, D, or U column fields.
F13–Job Attachments	Displays the Job ASSIGNs screen. Use this screen to attach ASSIGNs to the current job. You can also use the screen to access the Job PARAMs screen and each of the job DEFINEs screens.
F15–Bulk Select	Displays the Bulk Job Selection Criteria screen. Use this screen to specify the criteria the NetBatch-Plus application uses to select the current job for a bulk submit run. When you display the screen, it shows any selection criteria already specified for the job.

* Function is available on screen, but not displayed,

Function	Description
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Job Dependencies screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Job Dependencies screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Job Dependencies screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Job Info

Use the Job Info screen to define a one-off job and to submit that job to the scheduler for execution. A one-off job is a job whose details are not recorded in the NetBatch-Plus database. After executing a one-off job, the scheduler deletes it unless it is recurrent. (A recurrent job is a job with the CALENDAR or EVERY attribute.)

After you submit a one-off job, you can use the functions on the Job Info screen to alter the job's attributes. You can promote execution of the job by performing the F4–Run Next or F5–Run Now functions. You can also delete the job if it is not executing or suspended.

The Job Info screen also enables you to display information about and control jobs submitted on the Job Definition, Ad Hoc Job Selection, and Bulk Submit screens. For example, you could use the F6–Alter function to change the executor program of a job submitted in a bulk submit run.

Figure 6-23. Job Info Screen

```
NETBATCH-PLUS            JOB INFO                          01Jan2002   SNP210
                                                           01Jan2002 15:24
Scheduler: \AUST1.$BANK__   Job Owner: super.super______ , _________________
Class: CLASS1_____________________ Job Name: EOM-ACCT-BALANCE-0190___ No: 13__

Exec.Prg: $SYSTEM.SYSTEM.TACL_______________  High PIN: _
In      : $VOLUME.SUBVOL.EOMBAL_____________  Purge: N
Out     : $S.#BATCH_________________________
Volume  : $VOLUME.SUBVOL____________
Startup : ___________________________________________
                                                 Waiton Jobs
Selpri: 3      Iffails      : N         \*.$*_________ MMB-CALCULATION_________
Pri   : 120    Restart      : N         \*.$*_________ ___________________________
Drives: 2_     Hold         : N         \*.$*_________ ___________________________
Lines : NOMAX  Hold After   : Y         \*.$*_________ ___________________________
Pages : 50___  Stop On Abend: N         \*.$*_________ ___________________________
                                        \*.$*_________ ___________________________
After : 01Feb2002 01:00______           \*.$*_________ ___________________________
Wait  : _____                           \*.$*_________ ___________________________
Every : ___ Days ______ Hours Calendar: \ADMIN.$WORK.MYFILES.CALFILE______

F1-Read          F3-Submit          F4-Run Next        F5-Run Now
F6-Alter         F8-Delete          F14-Status         F15-Inquiry
```

Displaying the Screen

To display the Job Info screen:

- From the Scheduler Interface screen, press F1.
- From the Job Inquiry screen or Job Status screen, press F13.

Field Descriptions

Scheduler

Use the Scheduler field to specify, in this form, the scheduler for the job:

```
[\system-name.]$process-name
```

system-name

is the name of the system where the scheduler process resides. You do not have to enter the name if the process resides in the default system (the system where the NetBatch-Plus Pathway system is running).

process-name

is the name of the scheduler process.

When you display the screen, the field shows the name of one of these:

- The scheduler from the defaults set associated with the signed-on user. NetBatch-Plus shows the name of this scheduler if you display the screen when no functions have been performed during the current session.
- The scheduler that was the subject, directly or indirectly, of the last function performed during the current session.

The date and time on the system where the scheduler resides appears below your system's date at the top of the screen.

Job Owner

Use the two-part Job Owner field to specify the owner of the job.

In the first part of the field, enter the Guardian user ID identifying the owner. Enter the user's password in the second part of the field. For more information on entering Guardian user IDs and passwords, see Password Validation on page 6-182.

When you display the screen, the field shows one of these user IDs:

- The user ID from the defaults set associated with the signed-on user. NetBatch-Plus shows this ID if no other IDs were validated during the current session.
- The user ID of the last user validated by a function performed during the current session.

Class

Use the Class field to set the CLASS job attribute. The attribute links the job to an executor and therefore to the executor's CPU.

To set the attribute, enter the name of an existing class.

If you submit the job without specifying its CLASS attribute, the job adopts the DEFAULT-CLASS scheduler attribute. To display this scheduler attribute, use the Scheduler Info screen.

A scheduler selects jobs from a class whose executor is available (that is, the executor's state is ON) in this order:

- Jobs with a state of RUNNOW have the highest priority. They execute as soon as you perform the F5–Run Now function on this screen or the Job Status screen.
- Jobs with a state of RUNNEXT take priority over all jobs except those with a state of RUNNOW. They execute as soon as an executor associated with their class is available. When more than one job has the RUNNEXT state, selection is by SELPRI attribute. If RUNNEXT jobs have the same SELPRI attribute, selection is by submission time.
- Jobs with a state other than RUNNOW or RUNNEXT. The scheduler selects these jobs by their SELPRI attribute. Selection of jobs scheduled to run at the same time and with the same SELPRI attribute is by submission time.

When you display the screen, the field shows the name of one of these classes:

- The class from the defaults set associated with the signed-on user. The NetBatch-Plus application shows the name of this class if you display the screen when no functions have been performed during the current session.
- The class that was the subject, directly or indirectly, of the last function performed during the current session.

Job Name

Use the Job Name field to enter the name of the job. The name must be unique and contain from 1 to 24 letters and numbers. It can also contain hyphens (-). The name must begin with a letter and end with any letter or number but not a hyphen.

No

Use the No field to enter the job number identifying the job you want to display with the F1–Read function. The field offers you an alternative to identifying the job by name.

The scheduler assigns numbers to jobs at submission time. For information about how the numbers are assigned, see the F3–Submit function description.

Exec. Prg.

Use the Exec. Prg. field to set the EXECUTOR-PROGRAM job attribute. The attribute specifies the program used to process the job input file.

To set the attribute, enter the Guardian name of the program file.

If you submit the job without specifying its EXECUTOR-PROGRAM attribute, the job adopts the DEFAULT-EXECUTOR-PROGRAM scheduler attribute. To display this scheduler attribute, use the Scheduler Info screen.

When you specify a remote executor program, the job runs in the CPU assigned to its executor, but it runs on the remote system. If the CPU is unavailable, the next available CPU on the remote system is used. While the job is running, the corresponding CPU on the local system remains available for use by local jobs. Failure of the remote CPU stops the job but not the executor.

The home terminal of the executor program process is the scheduler process. Any processes created by the executor program process also uses the scheduler process as the home terminal unless otherwise specified with the run option TERM.

High PIN

Use the High PIN field to set the HIGHPIN job attribute. This attribute specifies whether a job can be started in a high PIN.

Allowed values for this field are:

- Y = ON (job can be started in a high PIN)
- N = OFF (job cannot be started in a high PIN; default)

When a process runs at a high PIN, it cannot communicate with a remote C-series process.

In

Use the In field to set the IN job attribute. The attribute specifies the input file of the job.

To set the attribute, enter the Guardian name of the file. The file can be a device, a disk file, or a process.

You must specify the IN attribute for every job you submit, regardless of whether the executor program requires an input file. If the executor program does not require an input file, you can specify a dummy file. Executor programs not requiring input files include the File Utility Program (FUP) and the Disk Space Analysis Program (DSAP).

An input file must contain commands compatible with a job’s executor program. For example, if a TACL process is the executor program, the file must contain TACL commands.

Users with write access to your job input file can alter any attribute of or delete a job that uses the file. Using the input file as a medium, these users can also assume your level of security. They can modify the input file to delete your files, change your password, and so on. To avoid compromising system security, secure your input files using the Safeguard distributed security management facility or the Guardian standard security system.

For information on securing files using the SAFEGUARD facility, see the *Safeguard Reference Manual*. For information on securing files using the Guardian security system, see the *Guardian User's Guide*.

If you specify a nonexistent input file for a job you submit, the NetBatch-Plus application displays a warning but submits the job anyway. If the job has a time attribute, the HOLD attribute, or the WAITON attribute, you can create the file any time before execution. Time attributes are AFTER, AT, CALENDAR, EVERY, and WAIT.

Purge

Use the Purge field to set the PURGE-IN-FILE job attribute. The attribute specifies whether the job input file is to be purged when the job finishes executing. The field options are:

Y Yes specifies the attribute PURGE-IN-FILE ON. The input file is purged when the job finishes executing. The file is not purged if the job owner does not have purge access to it.

N No specifies the attribute PURGE-IN-FILE OFF. The input file is not purged when the job finishes executing.

If you submit the job without specifying its PURGE-IN-FILE attribute, the job adopts the attribute PURGE-IN-FILE OFF.

Out

Use the Out field to set the OUT job attribute. The attribute specifies the output file of the job. To set the attribute, enter the Guardian name of the file. The file can be a device, a disk file, or a process.

- If the output file is a spooler process, spooler jobs are created for:
  - The job log file
  - Executor program output
  - Output from other processes created by the job
- Spooler jobs are linked only if they have the same JOBID, form, owner, and device.
- If the output file is a disk file or nonterminal device, the file is opened for executor program output only. Processes created by the job cannot open the same file and might fail, depending on how the processes handle "file in use" errors. Process output is created only if the processes specify output files different from the executor program's output file. The job log file is not created.
- If the output file is a terminal, this output is displayed on the terminal:
  - Executor program output
  - Output from other processes created by the job
- The job log file is not created.

If you submit the job without specifying its OUT attribute, the job adopts the DEFAULT-OUT scheduler attribute. To display this scheduler attribute, use the Scheduler Info screen.

Volume

Use the Volume field to set the VOLUME job attribute. The attribute specifies the system, volume, and subvolume for unqualified file references in the job input file. These values are passed to the executor program in the startup message.

To set the attribute, enter the names of the system, volume, and subvolume in the form:

```
[\system-name.]$volume.subvol
               $volume
               subvol
```

system-name

is a Guardian system name.

volume.subvol

are the names of the volume and subvolume.

volume

is the volume name.

subvol

is the subvolume name.

The default value is the job owner’s logon defaults.

Startup

Use the Startup field to set the STARTUP job attribute. The attribute specifies a parameter or a series of parameters the scheduler sends the executor program process of the job as its startup message.

To set the attribute, enter a string of 1 through 40 alphanumeric characters.

Selpri

Use the Selpri field to set the SELPRI job attribute. The attribute specifies the selection priority of the job within its class.

To set the attribute, enter an integer in the range 0 (lowest selection priority) through 7 (highest selection priority).

If you submit the job without specifying its SELPRI attribute, the job adopts the DEFAULT-SELPRI scheduler attribute. To display this scheduler attribute, use the Scheduler Info screen.

Job selection is by job submission time if jobs with the same SELPRI attribute are scheduled to run at the same time.

Iffails

Use the Iffails field to set the IFFAILS job attribute. The attribute specifies whether a recurrent job is to be rescheduled automatically if it fails during execution for either of these reasons (a recurrent job is a job with the CALENDAR or EVERY attribute):

- A process created by the executor program process failed for any of the preceding reasons, and the job has the attribute STOP-ON-ABEND ON.
- The executor program process failed because of CPU failure, abended with any completion code, or stopped with completion code -3, -2, -1, 2, 3, 4, 5, or 6. For descriptions of these codes, see Table 6-4 on page 6-113.

The options for the Iffails field are:

Y Specifies the attribute IFFAILS ON. The job is rescheduled if it fails during execution for any of the reasons listed previously.

A job with the IFFAILS ON attribute is not rescheduled if it also has the attribute RESTART OFF and stops because of CPU failure. In these circumstances, the job is flagged with a state of SPECIAL-6.

N Specifies the attribute IFFAILS OFF. The job is not rescheduled if it fails during execution. It is flagged with a state of SPECIAL-5 or SPECIAL-6, depending on its RESTART attribute. If the RESTART attribute is ON, the job is flagged with a state of SPECIAL-5. If the RESTART attribute is OFF, the job is flagged with a state of SPECIAL-6.

If you submit the job without specifying its IFFAILS attribute, the job adopts the attribute IFFAILS OFF.

Waiton Jobs

Use the Waiton Jobs fields to set the WAITON attribute of the current job. The attribute specifies that execution of the job depends on up to eight other jobs. A job with the WAITON attribute is a dependent job. The jobs on which it depends are its master jobs.

To set the attribute, enter the master jobs' names. These jobs can run in any scheduler on any system.

The dependent job does not run until released by all its masters. To enable master jobs to release the dependent job, include the TACL macro ZBAT:RELEASE or the NBEXEC command $RELEASE in the input file of each master job:

- Use the ZBAT:RELEASE macro if the master job's executor program is a TACL process

- Use the $RELEASE command if the master job's executor program is an NBEXEC process

You can place the macro or command anywhere in the input files of the master jobs. For information on ZBAT:RELEASE and $RELEASE, see the *NetBatch User's Guide*.

A dependent, recurrent job always depends on its master jobs. A dependent job does not run again when rescheduled until released once more by its masters. An R (for Released) displayed next to the field indicates the master job has released the dependent job.

Pri

Use the Pri field to set the PRI job attribute. The attribute specifies the execution priority of the executor program process of the job. The attribute is adopted by any process created by the job if the execution priority of that process is not explicitly stated.

To set the attribute, enter an integer in the range 1 (lowest execution priority) through 199 (highest execution priority).

If you submit the job without specifying its PRI attribute, the job adopts the DEFAULT-PRI scheduler attribute. To display this scheduler attribute, use the Scheduler Info screen.

Note. To prevent batch jobs from taking precedence over online applications, specify an execution priority for those jobs that is less than the priority of the applications.

Restart

Use the Restart field to set the RESTART job attribute. The attribute specifies whether the job is restarted automatically if it fails during execution for any of the following reasons:

- The executor program process stops or abends with completion code 7. This code indicates to the scheduler the job is to be restarted if its RESTART attribute is ON. For more information about completion codes, see the *Guardian Procedure Calls Reference Manual*.
- The executor program process terminates because of CPU failure. This does not apply if the process has a backup that successfully takes over job execution.
- A process created by the executor program process terminates because of CPU failure, and the job has the attribute STOP-ON-ABEND ON.

The options for the Restart field are:

Y Yes specifies the attribute RESTART ON. The job is restarted if it fails during execution for any of the reasons listed previously. Execution of a restarted job begins at the start of the job, not from where it stopped. There is no limit to the number of times a job restarts while the failure condition continues.

A recurrent job with the RESTART ON attribute is not restarted unless it also has the IFFAILS ON attribute. (A recurrent job is a job with the CALENDAR or EVERY attribute.) If the job has the IFFAILS OFF attribute, it is flagged with a state of SPECIAL-5.

N No specifies the attribute RESTART OFF. The job is not restarted if it fails during execution.

If you submit the job without specifying its RESTART attribute, the job adopts the attribute RESTART OFF.

Drives

Use the Drives field to set the TAPEDRIVES job attribute. The attribute specifies the number of tape drives required by the job.

To set the attribute, enter an integer in the range 0 through 99 specifying the number of drives. The default value is 0.

When you submit a job with the attribute, the scheduler checks the number of drives required against its internal tape drives counter. If the number is:

- Less than or equal to the counter, the job is scheduled immediately for execution.
- Greater than the counter but no greater than the TAPEDRIVES scheduler attribute, the job will be scheduled for execution when the required number of drives is available. Jobs waiting for tape drives are flagged with a state of TAPE.
- Greater than the TAPEDRIVES scheduler attribute, the job is never scheduled for execution. To avoid this, do not specify more drives for a job than are specified by the TAPEDRIVES scheduler attribute. If it occurs, resolve it by doing one of:
  - Increase the number of drives specified by the TAPEDRIVES scheduler attribute
  - Reduce the number of drives required by the job

For more information on the tape drives counter, see Scheduler Info on page 6-190.

Hold

Use the Hold field to set the HOLD job attribute. The attribute specifies whether the job is placed on hold as soon as you submit it. The field options are:

Y Yes specifies the attribute HOLD ON. The job is placed on hold as soon as you submit it. The job is flagged with a state of SPECIAL-1 and does not run until you change the attribute to HOLD OFF.

N No specifies the attribute HOLD OFF. The job is available for execution as soon as you submit it.

You can alter the HOLD attribute of an existing job with a state of EVENT, READY, RUNNEXT, SPECIAL-*n*, TIME, or TAPE. You cannot alter the attribute if the job has a state of EXECUTING or SUSPENDED.

A job with the EVERY attribute might accumulate a job backlog while it is on hold. When you set the HOLD attribute to OFF, the job runs repeatedly until the backlog is cleared. For information on preventing the backlog from running, see F10–Activate on page 6-167.

A job with the CALENDAR attribute does not accumulate a job backlog while it is on hold. When you set the HOLD attribute to OFF, the job runs only when the attribute condition is next satisfied.

If you submit a job without specifying its HOLD attribute, the job adopts the attribute HOLD OFF.

Lines

Use the Lines field to set the MAXPRINTLINES job attribute. The attribute specifies the maximum number of print lines for the job output file. Because the attribute is, in effect, a spooler attribute, it is effective only if the output file is a spooler process.

To set the attribute, enter an integer in the range 120 through 65534 specifying the maximum number of print lines. To specify no maximum, enter NOMAX.

If you submit a job without specifying its MAXPRINTLINES attribute, the job adopts the DEFAULT-MAXPRINTLINES scheduler attribute. To display this scheduler attribute, use the Scheduler Info screen.

The MAXPRINTLINES job attribute applies to the job log file and the output of each process started by the job.

- If the job log file fills, the spooler logs error code 45 (“File is full”) to the scheduler log file but continues processing the job.
- If a TACL process or NBEXEC process is the executor program and the process output file fills, the job is stopped. All processes started by the job are also stopped. If the executor program is not a TACL process or NBEXEC process, whether the job is stopped depends on how the process handles spooler error code 45.

The attribute is overridden by the MAXPRINTPAGES job attribute if the number of pages specified by MAXPRINTPAGES converts to fewer lines. For example, MAXPRINTPAGES 8 (480 lines) overrides MAXPRINTLINES 600. To avoid conflicting attributes, specify MAXPRINTLINES or MAXPRINTPAGES, not both.

Hold After

Use the Hold After field to set the HOLDAFTER attribute for jobs with a time attribute (AFTER, AT, CALENDAR, EVERY, and WAIT). The HOLDAFTER attribute specifies whether a job is placed on hold after it finishes executing. The field options are:

Y Yes specifies the attribute HOLDAFTER ON. The job is placed on hold when it finishes executing and is flagged with a state of SPECIAL-1.

N No specifies the attribute HOLDAFTER OFF. The job is not placed on hold when execution finishes.

If you submit a job without specifying its HOLDAFTER attribute, the job adopts the attribute HOLDAFTER OFF.

Pages

Use the Pages field to set the MAXPRINTPAGES job attribute. The attribute specifies the maximum number of pages for the job output file. Because the attribute is, in effect, a spooler attribute, it is effective only if the output file is a spooler process.

To set the attribute, enter an integer in the range 2 through 65534 specifying the maximum number of pages. To specify no maximum, enter NOMAX.

If you submit a job without specifying its MAXPRINTPAGES attribute, the job adopts the DEFAULT-MAXPRINTPAGES scheduler attribute. To display this scheduler attribute, use the Scheduler Info screen.

The MAXPRINTPAGES job attribute applies to the job log file and the output of each process started by the job:

- If the job log file fills, the spooler logs error code 45 (“File is full”) to the scheduler log file but continues processing the job.
- If a TACL process or NBEXEC process is the executor program and the process output file fills, the job is stopped. All processes started by the job are also stopped. If the executor program is neither a TACL process nor NBEXEC process, whether or not the job is stopped depends on how the process handles spooler error code 45.

The attribute is overridden by the MAXPRINTLINES job attribute if the MAXPRINTPAGES value converts to more lines. For example, MAXPRINTLINES 1200 will override MAXPRINTPAGES 25 (1500 lines). To avoid conflicting attributes, specify MAXPRINTPAGES or MAXPRINTLINES, not both.

Stop On Abend

Use the Stop On Abend field to set the STOP-ON-ABEND job attribute. The attribute specifies whether a job is stopped automatically if any process started by it terminates because of CPU failure, abends with any completion code, or stops with completion code -3, -2, -1, 2, 3, 4, 5, or 6. For descriptions of these codes, see Table 6-4 on page 6-113.

The options for the Stop On Abend field are:

Y Yes specifies the attribute STOP-ON-ABEND ON. The job is stopped as soon as any process started by it terminates, abends, or stops for the reasons listed previously. Processes already started by the job is also stopped.

△ **Caution.** If your TACL version is earlier than T9205C20 AAJ, the executor program process might start new processes before the scheduler receives the terminate, abend, or stop message. To prevent new processes from starting in these circumstances, test the completion code of each process before starting the next process.

N No specifies the attribute STOP-ON-ABEND OFF. The job continues processing when a process terminates, abends, or stops.

If you submit a job without specifying its STOP-ON-ABEND attribute, the job adopts the DEFAULT-STOP-ON-ABEND scheduler attribute. To display this scheduler attribute, use the Scheduler Info screen.

A process that terminates, abends, or stops does not stop a job with the STOP-ON-ABEND ON attribute if the process was dissociated from the job by the run option JOBID.

Both processes of a process pair must cease to exist before the STOP-ON-ABEND attribute takes effect.

At/After

Use the At/After field with the Start Time field to set the AT job attribute or AFTER job attribute. The options for the At/After field are:

AT Specifies the AT job attribute. The attribute executes a job on the date and time specified in the Start Time field. If an executor is not available at that time, the scheduler creates a temporary executor to run the job. The scheduler deletes the temporary executor when job execution finishes.

Execution does not occur at the specified time in either of these conditions:

- The job's TAPEDRIVES attribute specifies more tape drives than are available. The job is executed as soon as the required number of drives is available. For more information on the TAPEDRIVES job attribute, see Drives on page 6-128.
- The job has the WAITON attribute and has not been released by the master jobs on which it depends. The job is executed as soon as it is released by all its master jobs. For more information on the WAITON job attribute, see Waiton Jobs on page 6-126.

NetBatch-Plus converts the AT attribute to AFTER if you submit the job when the AT-ALLOWED scheduler attribute is OFF. This conversion lets the scheduler accept the job and ensures the job runs as soon after the specified time as possible. For more information on the AT-ALLOWED scheduler attribute, see Scheduler Info on page 6-190.

AFTER Specifies the AFTER job attribute. The attribute makes a job available for execution on the date and time specified in the Start Time field. After this time, execution of the job depends on:

- Executor availability (the scheduler does not create a temporary executor to run the job)
- Tape drives availability (if the job has the TAPEDRIVES attribute)
- Master jobs releasing the job (if it has the WAITON attribute)

AFTERExecution of a job with the AT or AFTER attribute is delayed by the WAIT attribute if the WAIT attribute is specified. For example, a job scheduled to run at or after 17:30 is delayed until 18:00 if the WAIT attribute specifies a half-hour delay.

The default value is AFTER.

Start Time

Use the Start Time field with the At/After field to set the AT job attribute or AFTER job attribute. The Start Time field enables you to specify, in any order, the date, time, or both for these attributes.

You can enter the date in any of these forms. For more information on date forms, see Calendar on page 6-23.

```
[d]d mmm
[d]d mmm [yy]yy
[yy]yy mmm [d]d
[yy]yy [m]m [d]d
[yy]yymmdd
mmm [d]d
mmm [d]d [yy]yy
```

You can specify the time in any of these forms. If you do not specify the time, the job is made available for execution at 00:00 on the specified date.

```
[h]h:[m]m
```

`[h]h`

is an integer in the range 0 through 23 specifying the hour of the day.

`[m]m`

is an integer in the range 0 through 59 specifying the minute of the hour.

The first minute of the day is 00:00 (midnight). The last minute is 23:59.

Wait

Use the Wait field to set the WAIT job attribute. The attribute delays execution of a job for a specified number of hours and minutes after job submission.

To set the attribute, enter the delay period in the form:

`[`*h*`]h:[`*m*`]m`

`[`*h*`]h`

is an integer in the range 0 through 23 specifying the number of hours.

`[`*m*`]m`

is an integer in the range 0 through 59 specifying the number of minutes.

The scheduler adds the delay period to the job start time if the start time is specified. For example, a job scheduled to start at 13:00 is delayed until 15:00 if the WAIT attribute specifies a two-hour delay.

Every

Use the two-part Every field to set the EVERY job attribute. The attribute specifies execution of the job at regular, designated intervals. You can specify the interval in days or hours and minutes, but not both.

In the first part of the field, enter an integer in the range 1 through 365 specifying the interval in days. If you enter days, you cannot also specify hours and minutes.

In the second part of the field, enter the interval in hours and minutes in the form:

`[h[h]]h:mm`

`[`*h*`[`*h*`]]`*h*

is an integer in the range 0 through 168 specifying the number of hours.

`mm`

is an integer in the range 0 through 59 specifying the number of minutes.

A job with the EVERY attribute is scheduled for execution as soon as you submit it. After execution, the job is rescheduled to run when the interval specified by the attribute expires. To calculate the next run time, the scheduler adds the interval to the original submission time. The rescheduled job retains all its original attributes, including the job number.

If you stop an executing job that has the EVERY attribute, it is rescheduled as usual. To prevent the job running again, alter its scheduling attributes or delete it.

When you submit a job with EVERY attribute, the job automatically adopts the attribute IFFAILS OFF. The job is not rescheduled if it abends during execution. To have the job be rescheduled if it abends, specify the attribute IFFAILS ON before submission.

A job with the EVERY attribute might accumulate a job backlog while suspended. When you activate the job, it runs repeatedly until the backlog is cleared. For information on preventing the backlog from running, see F10–Activate on page 6-167.

Calendar

Use the Calendar field to set the CALENDAR job attribute. The attribute specifies the name of the file containing scheduling information for the job. To set the attribute, enter the Guardian name of the disk file containing the calendar information. The file must be created by the BATCHCAL program (file code 848).

When you submit a job with the CALENDAR attribute, the job adopts automatically the attribute IFFAILS OFF. This prevents the job from being rescheduled if it abends during execution. To reschedule the job in these circumstances, specify the attribute IFFAILS ON when you submit it.

A job with the CALENDAR attribute does not accumulate a job backlog while suspended. When you activate the job, it runs only when the attribute condition is next satisfied.

Functions

These functions are available on the Job Info screen:

Function	Description
F1–Read	Shows information about a job submitted for execution by the scheduler named in the Scheduler field. You can specify the job by name (in the Job Name field) or number (in the No field).

* Function is available on screen, but not displayed,

Function	Description

F3–Submit	Submits the job to the scheduler for execution. (F3 is the same as the BATCHCOM command SUBMIT JOB.) After you submit the job, to alter its attributes and change its selection priority, use the functions on the Job Info screen. You can delete the job if it is not executing or suspended. You can further control the job using the functions on the Job Status screen. For example, you can suspend or delete the job if it is executing or activate the job if it is suspended. To inquire about processes started by the job, use the Job Inquiry screen.
	
	The scheduler deletes the job after execution unless it is a recurrent job.
	
	If you submit the job without attributes (other than the mandatory IN), the job adopts these scheduler attributes (to display these scheduler attributes, use the Scheduler Info screen):
	
	`DEFAULT-CLASS` `DEFAULT-OUT`
	`DEFAULT-EXECUTOR-PROGRAM` `DEFAULT-PRI`
	`DEFAULT-MAXPRINTLINES` `DEFAULT-SELPRI`
	`DEFAULT-MAXPRINTPAGES` `DEFAULT-STOP-ON-ABEND`
	
	The job is scheduled for execution as soon as you submit it unless delayed by a time attribute, the HOLD attribute, or the WAITON attribute. Time attributes are AFTER, AT, CALENDAR, EVERY, and WAIT.
	
	When you submit the job, NetBatch-Plus enters its number in the No field. You can use the number instead of the job name to identify the job on this or the Job Inquiry screen.
	
	The scheduler assigns job numbers consecutively in the range 1 through 9999. If the number is already assigned to a job, it uses the next available number. After job 9999 is submitted, numbering begins again at 1. Numbering also begins at 1 whenever the scheduler is started with the F10–Start function on the Scheduler Info screen.

* Function is available on screen, but not displayed,

Function	Description
F4–Run Next	Promotes the current job to run as soon as an executor associated with its class is available. The function overrides the job's SELPRI attribute. (F4 is the same as the BATCHCOM command RUNNEXT JOB.) You can promote a job with a state of EVENT, READY, TAPE, or TIME. You cannot promote a job with a state of EXECUTING, RUNNOW, SPECIAL-*n*, or SUSPENDED. (See first Caution after this table.) If only one executor is associated with the job's class, the job runs after the currently executing job finishes. When more than one job has the RUNNEXT state, the scheduler selects the jobs for execution by their SELPRI attribute. If RUNNEXT jobs have the same SELPRI attribute, selection is by submission time. The job does not run if either of these conditions exists: ● The job has the TAPEDRIVES attribute and requires more drives than are available. RUNNEXT jobs waiting for tape drives have a state of TAPE, not RUNNEXT. ● The class to which the job belongs has the attribute INITIATION OFF. This attribute prevents jobs in the class from running. To make jobs in the class available for execution, use the Class Details screen to set the attribute to INITIATION ON. Only super-group users (255, *n*) can perform the F4–Run Next function.
F5–Run Now	Executes the current job as soon as you press F5. (F5–Run Now has the same function as the BATCHCOM command RUNNOW JOB.) The job runs in any available executor associated with the job's class. If no executors are available for the class, the job runs in any available executor, regardless of class. If no executors are available, the scheduler creates a temporary executor that is deleted when job execution finishes. You can perform this function on a job with a state of EVENT, READY, RUNNEXT, TAPE, or TIME. You cannot perform the function on a job with a state of EXECUTING, SPECIAL-*n*, or SUSPENDED. (See second Caution after this table.) You can perform this function only if the AT-ALLOWED scheduler attribute is ON. The default AT-ALLOWED scheduler attribute is OFF. The job will not run if either of these conditions exists: ● The job has the TAPEDRIVES attribute and requires more drives than are available. RUNNOW jobs waiting for tape drives have a state of TAPE, not RUNNOW. ● The class to which the job belongs has the attribute INITIATION OFF. This attribute prevents jobs in the class from running. To make jobs in the class available for execution, use the Class Details screen to set the attribute to INITIATION ON. Only super-group users (255, *n*) can perform the F5–Run Now function.

* Function is available on screen, but not displayed,

Function	Description
F6–Alter	Changes the attributes of the current job. (F6–Alter has the same function as the BATCHCOM command ALTER JOB.) You can change any attribute of a job that is not executing or suspended. The changed attributes apply when the job runs. You can change the following attributes of an executing or suspended job: IFFAILS, PURGE-IN-FILE, RESTART, STOP-ON-ABEND. The changed attributes apply as soon as you press F6. You can change any attribute of an executing or suspended recurrent job (a recurrent job is one that has the CALENDAR or EVERY attribute). The changed attributes apply the next time the job runs. You can use F6–Alter function to alter the attributes of your own jobs. You can also alter another user's job but only if you have write access to the input file of that job. If the input file does not exist or if the file is a device or process, only the owner can alter the job.
F8–Delete	Deletes the current job. (F8–Delete has the same function as the BATCHCOM command DELETE JOB.) You can delete jobs with a state of EVENT, READY, RUNNEXT, RUNNOW, SPECIAL-*n*, TAPE, or TIME. You cannot delete jobs with a state of EXECUTING or SUSPENDED. (To delete these jobs, use the F12–Stop function on the Job Status screen.) F8 cancels a recurrent job (a recurrent job has the CALENDAR or EVERY attribute). Canceled recurrent jobs are not rescheduled for execution. Super-group users (255, *n*) can use this function to delete jobs owned by any user. Non-super-group users can delete their own jobs. They can also delete jobs owned by other users if they have write access to the input files of those jobs. If the input file does not exist or if the file is a device or process, only the owner or a super-group user can delete the job.
F14–Status	Displays the Job Status screen. Use the Job Status screen to display the number, name, selection priority, owner, class, and processing state of a scheduled job. You can perform the F4–Run Next and F5–Run Now functions on the screen. You can also suspend or delete the job (if the job is executing) or activate it (if the job is suspended).
F15–Inquiry	Displays the Job Inquiry screen. Use the Job Inquiry screen to display information about the processes created by an executing job.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Job Info screen. If there is more than one page of help text, the NetBatch-Plus application displays "Next -->" at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Job Info screen, press F16.

* Function is available on screen, but not displayed,

Function	Description
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Job Info screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

△ **Caution.** F4–Run Next overrides the WAITON attribute of an EVENT job. The job is released for execution regardless of whether its masters have completed. For this reason, do not use F4 to promote an EVENT job until you have determined and are prepared to accept the effect on the job's masters.

△ **Caution.** F5–Run Now overrides the WAITON attribute of an EVENT job. The job is executed immediately regardless of whether its masters have completed. For this reason, do not use F5 to execute an EVENT job until you have determined and are prepared to accept the effect on the job's masters.

Job Inquiry

Use the Job Inquiry screen to display status information about processes associated with an executing job. If the executor program of the job is a TACL process or NBEXEC process, you can also use the screen to display a portion of the executor program output file.

Figure 6-24. Job Inquiry Screen

```
NETBATCH-PLUS            JOB INQUIRY                      01Jan2002   SNP230
                                                          01Jan2002 14:33
Scheduler: \ADMIN.$ZBAT__   Operator : SUPER.CE_________ , ________________
Job Name: JOB-X1____________________ No: __36
Progrm DLPFR PID   CPU,PIN Pri CPU Time State
TAL      DR  $TT1   00,070 119 00:00.00 RUNABLE
PUP      DPR $PT1   00,075 119 00:00.00 RUNABLE
NBEXEC   D   $X624  01,060 120 00:00.00 LDONE LREQ RUNABLE
DSAP     DPR $DST1  01,076 119 00:00.01 RUNABLE
TAL      DR  $TT2   01,085 119 00:00.00 RUNABLE




F1-Processes      F2-Inquiry          F13-Info            F14-Status
```

Displaying the Screen

To display the Job Inquiry screen:

- From the Scheduler Interface screen, press F3.
- From the Job Info screen or Job Status screen, press F15.

Field Descriptions

Scheduler

Use the Scheduler field to specify, in this form, the scheduler of the job about which you want to inquire:

[*system-name*.]$*process-name*

system-name

is the name of the system where the scheduler process resides. You do not have to enter the name if the process resides in the default system (the system where the NetBatch-Plus Pathway system is running).

process-name

is the name of the scheduler process.

When you display the screen, the field shows the name of one of these schedulers:

- The scheduler from the defaults set associated with the signed-on user. The NetBatch-Plus application shows the name of this scheduler if you display the screen when no functions have been performed during the current session.
- The scheduler that was the subject, directly or indirectly, of the last function performed during the current session.

The date and time on the system where the scheduler resides appears below your system's date at the top of the screen.

Operator

Use the two-part Operator field to specify the owner of the job whose executor program output you want to display with the F2–Inquiry function. Specifying the owner is not a prerequisite to performing the F1–Processes function.

In the first part of the field, enter the Guardian user ID identifying the owner. Enter the user's password in the second part of the field. For more information on entering Guardian user IDs and passwords, see Password Validation on page 6-182. You do not have to enter the user ID and password if you previously validated that information during the current session.

When you display the screen, the field shows one of these user IDs:

- The user ID from the defaults set associated with the signed-on user. The NetBatch-Plus application shows this ID if no other IDs have been validated during the current session.
- The user ID of the last user validated by a function performed during the current session.

Job Name

Use the Job Name field to enter the name of the job about which you want to inquire. The NetBatch-Plus application reads this name only if the No field is blank when you press F1–Processes or F2–Inquiry.

No

Use the No field to enter the job number identifying the job about which you want to inquire. The field offers you an alternative to identifying the job by name.

Progrm

The fields in the Progrm column show the names of the program files of processes. You cannot enter information in Progrm column fields.

DLPFR

The fields in the DLPFR column show codes that give you general information about processes. Table 6-5 lists and describes each of these codes. You cannot enter information in DLPFR column fields.

Table 6-5. Descriptions of DLPFR Codes on Job Inquiry Screen

Code	Description
D	DEFINEs enabled
L	Object file of the process licensed at process creation time
P	Privileged process
F	Page fault occurred
R	Process is on the ready list

PID

The fields in the PID column show the process IDs of named processes. You cannot enter information in PID column fields.

CPU, PIN

The fields in the CPU, PIN column identify the CPUs and process identification numbers (PINs) of processes. The PIN number of a process identifies the process control block in a CPU for that process. You cannot enter information in CPU, PIN column fields.

Pri

The fields in the Pri column show the execution priority of processes. You cannot enter information in Pri column fields.

CPU Time

The fields in the CPU Time column show, in hundredths of seconds, the execution times of processes. You cannot enter information in CPU Time column fields.

State

The fields in the State column show the wait states and process states of processes. Table 6-6 lists and describes each of these states. For more information on wait states and process states, see the *Guardian Procedure Calls Reference Manual*. You cannot enter information in State column fields.

Table 6-6. Wait States and Process States on Job Inquiry Screen

	State	Description
Wait States	INTR	Interrupt
	IOPON	I/O power on
	LCAN	Message system, cancel
	LDONE	Message system, done
	LINSP	INSPECT event
	LREQ	Message system, request
	LTMF	TMF request
	PON	CPU power on
Process States	DBG/INSP BRK	DEBUG or INSPECT breakpoint
	DBG/INSP MAB	DEBUG or INSPECT memory access breakpoint
	DBG/INSP RQST	DEBUG or INSPECT request
	DBG/INSP TRAP	DEBUG or INSPECT trap
	NO MSGS	Process not accepting any messages
	PENDING	In a pending process state
	RUNABLE/SUSP	Runable or suspended
	SAVEABND	SAVEABEND
	START/STOP	Starting or terminating
	SYST-MAB	Memory access breakpoint in system code
	TEMP SYS PROC	Temporary system process

Functions

These functions are available on the Job Inquiry screen:

Function	Description
F1–Processes	Lists the currently executing processes of the specified job.
F2–Inquiry	Displays the last 18 lines of the specified job's executor program output file where the executor program is a TACL process or NBEXEC process. If the executor program is neither of these, F2–Inquiry performs the same function as F1–Processes. For output from a TACL process, the display occupies the full column width (79 characters). For output from an NBEXEC process, column width is 64 characters. An example of the Job Inquiry screen showing NBEXEC output appears below. The NetBatch-Plus application displays output only when you specify the job owner's user ID in the Operator field or have previously validated that ID during the current session. (See the example screen after this table.)
F13–Info	Displays the Job Info screen. Use the Job Info screen to display information about the current job. You can also use the screen to create a job and submit it to the scheduler for execution.
F14–Status	Displays the Job Status screen. Use the Job Status screen to display the number, name, selection priority, owner, class, and processing state of a scheduled job. You can perform the F4–Run Next and F5–Run Now functions on the screen. You can also suspend or delete the job (if the job is executing) or activate it (if the job is suspended).
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Job Inquiry screen. If there is more than one page of help text, the NetBatch-Plus application displays "Next -->" at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Job Inquiry screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Job Inquiry screen, press F16.

* Function is available on screen, but not displayed,

Function	Description
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

```
NETBATCH-PLUS            JOB INQUIRY                      01Jan2002   SNP230
                                                          01Jan2002 14:31
Scheduler: \ADMIN.$ZBAT__   Operator : SUPER.CE_________ , _________________
Job Name: JOB-X1_____________________ No: __36
Copyright 2002 Compaq Information Technologies Group, L.P.
SYSTEM SUPERVISOR:    \ADMIN.$ZBAT
JOB NUMBER:           0
NBEXEC PROCESS NAME:  \ADMIN  .$X623
HOME TERMINAL:        Self
CURRENT VOLUME:       $DATA7.CUSTENG
USERID:               255,70
USERNAME:             SUPER.CE
SECURITY:             NCNC
XPRI:                 148
CONTROL FILE NAME:    $DATA3.ZNBJOBS.OTPROC
LIST FILE NAME:       =_ZBAT_OUT
TIME LIMIT:           01:00
14:31:11       :FUP /OUT $S.#TEST, CPU 0, NAME $FT1, NOWAIT/ C
14:31:14       :PUP /OUT $S.#TEST, CPU 0, NAME $PT1, NOWAIT/ L
14:31:16       :DSAP /OUT $S.#TEST, CPU 1, NAME $DST1, NOWAIT/
14:31:18       :TAL /IN TALSRC1, OUT $S.#TEST, CPU 0, NAME $TT1
14:31:20       No-wait job $FT1 FUP       abended.
F1-Processes      F2-Inquiry         F13-Info           F14-Status
```

Job Map DEFINEs

Use the Job Map DEFINEs screen to attach map DEFINEs to jobs. You can create the DEFINEs or use DEFINEs from the attachments catalog. The screen also lets you inquire about, update, and delete map DEFINEs already attached to jobs.

Map DEFINEs are used for file redirection or substitution. You can enter the logical name of a map DEFINE in place of a physical file name in a command or procedure call. Map DEFINEs are similar to ASSIGNs. However, map DEFINEs are processed by the system, whereas ASSIGNs are usually processed by an application program.

Figure 6-25. Job Map DEFINEs Screen

```
NETBATCH-PLUS            JOB MAP DEFINES                  01Jan2002   SNP030DM

Option       : MAP_____         Owner   : FPP.JOHN          / AAOO AAAA
Job Set      : AA-DEFAULT       Job Name: JOB1
DEFINE Name  : =ACCT-FILE_______________
Catalog Set  : DEF-SET-1_
Catalog Name : =ACCOUNT-FILE____________


Physical Filename : \ADMIN.$CHQ.JOHN.ARAP_______________
                    \ADMIN.$CHQ.JOHN.ACCOUNT









F1-Read      F2-Next            F4-Add        F6-Update       F7-Read Catalog
F8-Delete    F13-Choose Option  F14-Depend    F15-Bulk Select
```

Displaying the Screen

From any job attachments screen, enter M or MAP in the Option field and press F13 to display the Job Map DEFINEs screen.

Field Descriptions

Option

Use the Option field to specify the job attachments screen displayed when you perform the F13–Choose Option function. The field options are:

A[SSIGN]	Specifies the Job ASSIGNs screen.
P[ARAM]	Specifies the Job PARAMs screen.
C[ATALOG]	Specifies the Job Catalog DEFINEs screen.
D[EFAULTS]	Specifies the Job Defaults DEFINEs screen.
S[POOL]	Specifies the Job Spool DEFINEs screen.
T[APE]	Specifies the Job Tape DEFINEs screen.

Owner

Use the Owner field to specify the security attributes of the DEFINE record. For more information on this field, see Job ASSIGNs on page 6-88.

Job Set

The Job Set field shows the name of the defaults set of the job named in the Job Name field (the current job). You cannot enter information in the Job Set field.

Job Name

The Job Name field shows the name of the current job. You cannot enter information in this field.

DEFINE Name

Use the DEFINE Name field to enter the logical name you want to use as a substitute for the physical file name. The logical name can contain from 2 through 24 characters. The first character must be an equals sign (=). The remaining characters can be letters, numbers, hyphens (-), underscores (_), or circumflexes (^). In some products (for example, the TACL command interpreter), names whose second character is an underscore are reserved for use by HP. To avoid errors or unexpected results, do not use an underscore as the second character. Names beginning with =_ZBAT are reserved for use by the NetBatch-Plus application.

Catalog Set

Use the Catalog Set field to specify the defaults set to which the catalog DEFINE named in the Catalog Name field belongs. You must specify the defaults set before you can display attributes of the DEFINE with the F7–Read Catalog function.

Catalog Name

Use the Catalog Name field to specify the catalog DEFINE whose attributes you want to display with the F7–Read Catalog function. The DEFINE must belong to the defaults set you specified in the Catalog Set field.

You must have use access to a catalog DEFINE in order to attach it to a job and to override its attributes.

Physical Filename

Use the Physical Filename field to enter the name of the actual file. The file name must be a Guardian file name. If you enter a partial name, the NetBatch-Plus application uses the system, volume, and subvolume specified for the defaults set to expand the name. The Volume field on the Defaults Set Details screen displays these values.

Functions

These functions are available on the Job Map DEFINEs screen:

Function	Description
F1–Read	Shows information about the DEFINE specified in the DEFINE Name field that is attached to the current job.
F2–Next	Shows information about the next map DEFINE attached to the job. When there are no more map DEFINEs, the function displays, in this order and on the appropriate screens, the remaining DEFINEs and the PARAMs for the job: 1. Spool DEFINEs 2. Tape DEFINEs 3. PARAMs
F4–Add	Attaches the DEFINE specified in the DEFINE Name field to the current job.
F6–Update	Updates attributes of the DEFINE specified in the DEFINE Name field.
F7–Read Catalog	Displays attributes of the catalog DEFINE specified in the Catalog Name field. The attributes appear in regular text next to or below the attribute fields. The attributes apply to the job unless you override them in one of these ways: ● By entering your preferred attributes in the attribute fields. ● By entering N, NO, NON, or NONE in the attribute fields. This option specifies the default value for the fields in which it is entered.
F8–Delete	Deletes the DEFINE specified in the DEFINE Name field from the current job.
F13–Choose Option	Displays the job attachments screen you specified in the Option field. If you press F13 when the field is blank, the NetBatch-Plus application redisplays the Job ASSIGNs screen.
F14–Depend	Displays the Job Dependencies screen. Use this screen to specify up to eight master jobs on which execution of the current job depends. When you display the screen, it shows the names of any master jobs already specified for the current job. It also shows the name of the defaults set to which each master job belongs.

* Function is available on screen, but not displayed,

Function	Description
F15–Bulk Select	Displays the Bulk Job Selection Criteria screen. Use this screen to specify the criteria the NetBatch-Plus application uses to select the current job for a bulk submit run. When you display the screen, it shows any selection criteria already specified for the job.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Job Map DEFINEs screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next ->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Job Map DEFINEs screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Job Map DEFINEs screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Job PARAMs

Use the Job PARAMs screen to attach PARAMs to jobs. You can create the PARAMs or use PARAMs from the attachments catalog. The screen also enables you to inquire about, update, and delete PARAMs already attached to jobs.

PARAMs send values to processes that request parameter values when the processes start.

Figure 6-26. Job PARAMs Screen

```
NETBATCH-PLUS            JOB PARAMS                        09Aug2002   SNP030P

Option       : PARAM____       Owner   : SUPER.NBPOPS1     / ____ AAAA
Job Set      : AA-DEFAULT      Job Name: JOB1
PARAM  Name  : TODAY-DATE_____________________
Catalog Set  : DEF-SET-1_
Catalog Name : DATE_____________________________


PARAM Value : 9AUGUST2002_____________________________________________________
              910720









F1-Read      F2-Next            F4-Add        F6-Update       F7-Read Catalog
F8-Delete    F13-Choose Option  F14-Depend    F15-Bulk Select
```

Displaying the Screen

From any job attachments screen, enter P or PARAM in the Option field and press F13 to display the Job PARAMs screen.

Field Descriptions

Option

Use the Option field to specify the job attachments screen displayed when you perform the F13–Choose Option function. The field options are:

A[SSIGN]	Specifies the Job ASSIGNs screen.
C[ATALOG]	Specifies the Job Catalog DEFINEs screen.
D[EFAULTS]	Specifies the Job Defaults DEFINEs screen.

M[AP]	Specifies the Job Map DEFINEs screen.
S[POOL]	Specifies the Job Spool DEFINEs screen.
T[APE]	Specifies the Job Tape DEFINEs screen.

Owner

Use the Owner field to specify the security attributes of the PARAM record. For more information on this field, see Job ASSIGNs on page 6-88.

Job Set

The Job Set field shows the name of the defaults set of the job named in the Job Name field (the current job). You cannot enter information in the Job Set field.

Job Name

The Job Name field shows the name of the current job. You cannot enter information in this field.

PARAM Name

Use the PARAM Name field to enter the name of the parameter to which you want to assign a value. The name can contain from 1 through 31 characters and can include letters, numbers, hyphens (-), and circumflexes (^). The first character must be a letter.

Catalog Set

Use the Catalog Set field to specify the defaults set to which the catalog PARAM named in the Catalog Name field belongs. You must specify the defaults set before you can display attributes of the PARAM with the F7–Read Catalog function.

Catalog Name

Use the Catalog Name field to specify the catalog PARAM whose attributes you want to display with the F7–Read Catalog function. The PARAM must belong to the defaults set you specified in the Catalog Set field.

You must have use access to a catalog PARAM in order to attach it to a job and to override its attributes.

PARAM Value

Use the PARAM Value field to enter the actual value of the parameter specified in the PARAM Name field. The value can contain up to 60 characters and can include spaces.

Functions

These functions are available on the Job PARAMs screen:

Function	Description
F1–Read	Shows information about the PARAM specified in the PARAM Name field that is attached to the current job.
F2–Next	Shows information about the next PARAM attached to the job.
F4–Add	Attaches the PARAM specified in the PARAM Name field to the current job.
F6–Update	Updates attributes of the PARAM specified in the PARAM Name field.
F7–Read Catalog	Displays attributes of the catalog PARAM specified in the Catalog Name field. The attributes appear in regular text next to or below the attribute fields. The attributes apply to the job unless you override them in one of these ways: ● By entering your preferred attributes in the attribute fields. ● By entering N, NO, NON, or NONE in the attribute fields. This option specifies the default value for the fields in which it is entered.
F8–Delete	Deletes the PARAM specified in the PARAM Name field from the current job.
F13–Choose Option	Displays the job attachments screen you specified in the Option field. If you press F13 when the field is blank, the NetBatch-Plus application redisplays the Job ASSIGNs screen.
F14–Depend	Displays the Job Dependencies screen. Use this screen to specify up to eight master jobs on which execution of the current job depends. When you display the screen, it shows the names of any master jobs already specified for the current job. It also shows the name of the defaults set to which each master job belongs.
F15–Bulk Select	Displays the Bulk Job Selection Criteria screen. Use this screen to specify the criteria the NetBatch-Plus application uses to select the current job for a bulk submit run. When you display the screen, it shows any selection criteria already specified for the job.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Job PARAMs screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Job PARAMs screen, press F16.

* Function is available on screen, but not displayed,

Function	Description
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Job PARAMs screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Job Spool DEFINEs

Use the Job Spool DEFINEs screen to attach spool DEFINEs to jobs. You can create the DEFINEs or use DEFINEs from the attachments catalog. The screen also enables you to inquire about, update, and delete spool DEFINEs already attached to jobs.

Spool DEFINEs are used to pass information to the spooler collector process. The attributes of a spool DEFINE specify parameters such as the spooler location and batch name.

Figure 6-27. Job Spool DEFINEs Screen

```
NETBATCH-PLUS            JOB SPOOL DEFINES                01Jan2002   SNP030DS

Option       : SPOOL___         Owner   : ADMIN.OPER1        / OOOO AAAA
Job Set      : AA-DEFAULT       Job Name: JOB1
DEFINE Name  : =DFLT-J1_________________
Catalog Set  : DEF-SET-1_
Catalog Name : =DS1-SPOOL_______________

Location : _____________________________________ \ADMIN.$S.#LPT1
Batchname: _____________________________ EOP-ACCOUNTS
Owner    : ADMIN.OPER1______ SALES.MNGR
Form     : _________________ INV01
Report   : INVOICES 1290___ INVOICES
Max Lines: _____
Max Pages: 950__ 100
Page Size: _____ 60
Copies   : 2____ 1
Hold     : ON_ OFF
Holdafter: OFF ON
Selpri   : 5 3

F1-Read      F2-Next            F4-Add        F6-Update       F7-Read Catalog
F8-Delete    F13-Choose Option  F14-Depend    F15-Bulk Select
```

Displaying the Screen

From any job attachments screen, enter S or SPOOL in the Option field and press F13 to display the Job Spool DEFINEs screen.

Field Descriptions

Option

Use the Option field to specify the job attachments screen displayed when you perform the F13–Choose Option function. The field options are:

A[SSIGN]	Specifies the Job ASSIGNs screen.
P[ARAM]	Specifies the Job PARAMs screen.
C[ATALOG]	Specifies the Job Catalog DEFINEs screen.

D[EFAULTS]	Specifies the Job Defaults DEFINEs screen.
M[AP]	Specifies the Job Map DEFINEs screen.
T[APE]	Specifies the Job Tape DEFINEs screen.

Owner

Use the Owner field to specify the security attributes of the DEFINE record. For more information on this field, see Job ASSIGNs on page 6-88.

Job Set

The Job Set field shows the name of the defaults set of the job named in the Job Name field (the current job). You cannot enter information in the Job Set field.

Job Name

The Job Name field shows the name of the current job. You cannot enter information in this field.

DEFINE Name

Use the DEFINE Name field to enter the name of the spool DEFINE. The name can contain from 2 to 24 characters. The first character must be an equals sign (=). The remaining characters can be letters, numbers, hyphens (-), underscores (_), or circumflexes (^). In some products (for example, the TACL command interpreter), names whose second character is an underscore are reserved for use by HP. To avoid errors or unexpected results, do not use an underscore as the second character. Names beginning with =_ZBAT are reserved for use by the NetBatch-Plus application.

Catalog Set

Use the Catalog Set field to specify the defaults set to which the catalog DEFINE named in the Catalog Name field belongs. You must specify the defaults set before you can display attributes of the DEFINE with the F7–Read Catalog function.

Catalog Name

Use the Catalog Name field to specify the catalog DEFINE whose attributes you want to display with the F7–Read Catalog function. The DEFINE must belong to the defaults set you specified in the Catalog Set field.

You must have use access to a catalog DEFINE in order to attach it to a job and to override its attributes.

Location

Use the Location field to specify, in Guardian form, the spooler location for jobs created by processes using the DEFINE. If you do not specify the system where the spooler

resides, the system specified for the defaults set applies. The Volume field on the Defaults Set Details screen displays this value.

Batchname

Use the Batchname field to specify the name printed on the batch header page of jobs created by processes using the DEFINE. The batch header page prints after the spooler header page. It includes the name of the owner of the batch jobs and the batch ID. It also includes the name of the device used to print the jobs.

A batch header name can contain from 1 through 30 letters and numbers. It can also contain hyphens (-). The name must begin with a letter and can end with any letter or number but not with a hyphen.

Owner

Use the Owner field to enter the Guardian user ID of the owner of jobs created by processes using the DEFINE. For more information on entering Guardian user IDs, see Password Validation on page 6-182.

Form

Use the Form field to enter the name of the form used for printing jobs created by processes using the DEFINE. The form name usually identifies preprinted stationery or a special printer ribbon. The jobs print only on a device to which you assigned the form name. (You can assign form names to devices by using the SPOOLCOM DEV subcommand.)

A form name can contain from 1 to 16 letters and numbers. The first character must be a letter.

Report

Use the Report field to specify the name printed on the spooler header page of jobs created by processes using the DEFINE. The spooler header page prints before the batch header page. It includes the date and time of printing, the job number, and the form name.

A report name can contain from 1 through 16 letters and numbers. It can include spaces and must begin with a letter.

Max Lines

Use the Max Lines field to specify the maximum number of print lines for each job created by processes using the DEFINE. To specify this value, enter an integer in the range 1 through 65534. The default value, a blank field, specifies no maximum.

Max Pages

Use the Max Pages field to specify the maximum number of pages for each job created by processes using the DEFINE. To specify this value, enter an integer in the range 1 through 65534. The default value, a blank field, specifies no maximum.

Page Size

Use the Page Size field to specify the number of lines per page for each job created by processes using the DEFINE. To specify this value, enter an integer in the range 1 through 32767.

Copies

Use the Copies field to specify the number of print copies of each job created by processes using the DEFINE. To specify this value, enter an integer in the range 1 through 32767.

Hold

Use the Hold field to set the hold flag of jobs submitted to the spooler queue by processes using the DEFINE. The hold flag specifies whether a job is available for printing immediately after submission. The field options are:

ON Sets the hold flag to ON. This option prevents a job from printing after submission to the spooler queue. To print the job, use the PERUSE HOLD OFF command or the SPOOLCOM JOB START command to clear the hold state.

OFF Sets the hold flag to OFF. This option makes a job available for printing immediately after submission to the spooler queue.

Holdafter

Use the Holdafter field to set the holdafter flag of jobs submitted to the spooler queue by processes using the DEFINE. The holdafter flag specifies whether a job is placed on hold after printing. The field options are:

ON Sets the holdafter flag to ON. This option places a job on hold when it finishes printing.

OFF Sets the holdafter flag to OFF. This option deletes a job when it finishes printing.

Selpri

Use the Selpri field to specify the spooler selection priority of each job created by processes using the DEFINE. To specify the priority, enter an integer in the range 0 (lowest selection priority) through 7 (highest selection priority).

Functions

These functions are available on the Job Spool DEFINEs screen.

Function	Description
F1–Read	Shows information about the DEFINE specified in the DEFINE Name field that is attached to the current job.
F2–Next	Shows information about the next spool DEFINE attached to the job. When there are no more spool DEFINEs, the function displays, in the following order and on the appropriate screens, the remaining DEFINEs and the PARAMs for the job: 1. Tape DEFINEs 2. PARAMs
F4–Add	Attaches the DEFINE specified in the DEFINE Name field to the current job.
F6–Update	Updates attributes of the DEFINE specified in the DEFINE Name field.
F7–Read Catalog	Displays attributes of the catalog DEFINE specified in the Catalog Name field. The attributes appear in regular text next to or below the attribute fields. The attributes apply to the job unless you override them in one of these ways: ● By entering your preferred attributes in the attribute fields. ● By entering N, NO, NON, or NONE in the attribute fields. This option specifies the default value for the fields in which it is entered.
F8–Delete	Deletes the DEFINE specified in the DEFINE Name field from the current job.
F13–Choose Option	Displays the job attachments screen you specified in the Option field. If you press F13 when the field is blank, the NetBatch-Plus application redisplays the Job ASSIGNs screen.
F14–Depend	Displays the Job Dependencies screen. Use this screen to specify up to eight master jobs on which execution of the current job depends. When you display the screen, it shows the names of any master jobs already specified for the current job. It also shows the name of the defaults set to which each master job belongs.
F15–Bulk Select	Displays the Bulk Job Selection Criteria screen. Use this screen to specify the criteria the NetBatch-Plus application uses to select the current job for a bulk submit run. When you display the screen, it shows any selection criteria already specified for the job.
F16–Previous Screen*	Displays the previous screen on the menu path.

* Function is available on screen, but not displayed,

Function	Description
SF1–Screen Help*	Displays information about the Job Spool DEFINEs screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Job Spool DEFINEs screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Job Spool DEFINEs screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Job Status

Use the Job Status screen to display status information about jobs submitted to a scheduler for execution. The information includes the number, name, selection priority, owner, class, and processing state of each job. You can perform the F4–Run Next and F5–Run Now functions on the screen. You can also suspend or delete the job (if the job is executing) or activate it (if the job is suspended).

Figure 6-28. Job Status Screen

```
NETBATCH-PLUS            JOB STATUS                        01Jan2002   SNP220
          \AUST1.$BANK                                     01Jan2002 09:10
Scheduler: \*.$*_________   Job Owner: *.*_______________   STATE: _________
Class: *____________________   Job Name: *____________________

   No  Name          Pri User ID           Class Name  State/Submit After
    16 EOM-ACCT-BAL-  3 SUPER.SUPER       CLASS1      Wait MMB-CALCULATION
    18 WKLY-SALES     5 SALES.MNGR        DEFAULT     RUNNOW
    21 EOP-TOTALS     2 SUPER.OPERATOR    WORK1       HOLD ON
    22 FRCST-FY91     3 CHQ.JOHN          DEFAULT     TIME    AT 01Jan91 15:00
    23 ADMIN.RPTS     3 ADMIN.USER1       DEFAULT     TIME    AF 09Jan91 13:32
    24 PROG-COMPILE   4 SYSOP.ONS         COBOL-CLASS EXECUTING
    32 DAILY-BACKUP   1 SUPER.OPERATOR    BACKUP      TAPE
    47 ACCT-UPDATE    5 SUPER.SUPER       ACCT-CLASS  Wait EOM-ACCT-BAL-0191
    49 JOB1           3 FPP.SEG           DEFAULT     NEWPROCESS error
    74 MISC.DR        3 ACCTS.CL4         GL-CLASS    SUSPENDED
   101 MMB-CALCULATI  7 SUPER.SUPER       CLASS1      TIME    AF 01Feb91 01:00



F1-Read        F2-Next         F4-Run Next     F5-Run Now      F8-Delete
F10-Activate   F11-Suspend     F12-Stop        F13-Info        F15-Inquiry
```

Displaying the Screen

To display the Job Status screen:

- From the Scheduler Interface screen, press F2.
- From the Job Info screen or Job Inquiry screen, press F14.

Field Descriptions

Scheduler

Use the Scheduler field to specify, in the following form, the schedulers of the jobs you want to display:

`[\system-name.]$process-name`

system-name

is the name of the system where the scheduler process resides. You do not have to enter the name if the process resides in the default system (the system where the NetBatch-Plus Pathway system is running).

process-name

is the name of the scheduler process.

You can specify a single scheduler or a range of schedulers from the wild-card scheduler processes list. To specify a single scheduler, enter the system name and process name in full (for example, \WORLD.$ZBAT). You can leave out the system name if the process resides in the default system. To specify a range of schedulers, use the question mark (?) and asterisk (*) wild-card characters in the name. For more information on specifying schedulers, see the description of the Scheduler field in Scheduler Info on page 6-190.

Job Owner

Use the Job Owner field to specify the Guardian user IDs of the owners of the jobs you want to display. The NetBatch-Plus application uses the information in this field for job selection purposes only.

You can specify a single owner or a range of owners. To specify a single owner, enter the Guardian user ID in full (for example, 205, 70; SALES.MNGR). To specify a range of owners, use the question mark (?) and asterisk (*) wild-card characters in the user ID. For more information on wild-card characters, see the description of the Scheduler field in Scheduler Info on page 6-190.

- The default value is *.* and specifies all owners.

State

Use the State field to specify the processing state of the jobs you want to display. For information on job processing states, see Table 6-7 on page 6-163. The field options are:

C[ALENDAR]	Specifies jobs with a processing state of SPECIAL-7 or SPECIAL-8.
E	Specifies jobs with a processing state of EVENT or EXECUTING.
EV[ENT]	Specifies jobs with a processing state of EVENT.
EX[ECUTING]	Specifies jobs with a processing state of EXECUTING.
F[AILED]	Specifies jobs with a processing state of SPECIAL-4.
H[OLD]	Specifies jobs with a processing state of SPECIAL-1.
N[EWPROCESS]	Specifies jobs with a processing state of SPECIAL-3.
R	Specifies jobs with a processing state of READY, RUNNEXT, RUNNOW, SPECIAL-5, or SPECIAL-6.
REA[DY]	Specifies jobs with a processing state of READY.

RES[TART]	Specifies jobs with a processing state of SPECIAL-5 or SPECIAL-6.
RUNNE[XT]	Specifies jobs with a processing state of RUNNEXT.
RUNNO[OW]	Specifies jobs with a processing state of RUNNOW.
S	Specifies jobs with a processing state of SPECIAL-*n* or SUSPENDED.
SPECIAL	Specifies all jobs with a SPECIAL-*n* processing state.
SPECIAL-*n*	Specifies jobs with a processing state of SPECIAL-*n* where *n* has one of these values: 1, 2, 3, 4, 5, 6, 7, 8.
SU[SPENDED]	Specifies jobs with a processing state of SUSPENDED.
T	Specifies jobs with a processing state of TAPE or TIME.
TA[PE]	Specifies jobs with a processing state of TAPE.
TI[ME]	Specifies jobs with a processing state of TIME.
TIME AF	Specifies jobs with the AFTER attribute whose processing state is TIME.
TIME AT	Specifies jobs with the AT attribute whose processing state is TIME.
W[AIT]	Specifies jobs with a processing state of EVENT.
Blank	Specifies all jobs regardless of their processing states. This is the default value for the field.

Class

Use the Class field to specify the classes of the jobs you want to display.

You can specify a single class or a range of classes. To specify a single class, enter the class name in full (for example, DEFAULT). To specify a range of classes, use the question mark (?) and asterisk (*) wild-card characters in the class name. For more information on wild-card characters, see the description of the Scheduler field in Scheduler Info on page 6-190.

The default value is * and specifies all classes.

Job Name

Use the Job Name field to specify the jobs you want to display. The NetBatch-Plus application lists the jobs in alphabetic order when you press F1–Read or F2–Next.

You can specify a single job or a range of jobs. To specify a single job, enter the job name in full (for example, EOM-ACCT-BALANCE-0190). To specify a range of jobs, use the question mark (?) and asterisk (*) wild-card characters in the job name. For example, to specify all jobs ending in 0190, enter *0190. For more information on wild-card characters, see the description of the Scheduler field in Scheduler Info on page 6-190.

The default value is * and specifies all jobs.

Cursor Selection

Use the Cursor Selection field to select a job displayed by the F1–Read or F2–Next functions. The Cursor Selection field is on the left of each field in the No column.

To select a job, use the cursor movement keys to position the cursor next to the job you require.

You must select a job before you can perform any of these functions: F4–Run Next, F5–Run Now, F8–Delete, F10–Activate, F11–Suspend, F12–Stop. Job selection is optional to perform the F14–Info or F15–Inquiry functions.

No

The fields in the No column show job numbers. You cannot enter information in these fields.

Name

The fields in the Name column show job names. You cannot enter information in these fields.

Pri

The fields in the Pri column show the SELPRI attributes of the jobs. You cannot enter information in these fields.

User ID

The fields in the User ID column show the Guardian user IDs of the job owners. You cannot enter information in these fields.

Class Name

The fields in the Class Name column show the names of the classes to which the jobs belong. You cannot enter information in these fields.

State/Submit After

The fields in the State/Submit After column show the processing states of the jobs. Table 6-6 on page 6-142 lists and describes each of these processing states.

These considerations apply to jobs whose processing state is EVENT, SPECIAL-*n*, or TIME:

- If the state is EVENT, the field shows the word “Wait” followed by the name of a master job. This job is the first on the master jobs list that has not released the dependent job. (You can view the master jobs list on the Job Info or Job Dependencies screens.) For example, if the dependent job was released by the first job on the list but not by the second, the second job is shown.
- If the state is SPECIAL-*n*, the field shows a brief description of the special state instead of SPECIAL-*n*. For example, HOLD ON is shown instead of SPECIAL-1. Table 6-6 lists the SPECIAL-*n* codes and their corresponding descriptions.

- If the state is TIME and the job has the AFTER, CALENDAR, EVERY, or WAIT attribute, the field shows the date and time the job is made available for execution. If the job has the AT attribute, the field shows the date and time the job is executed.

You cannot enter information in the fields in the State/Submit After column.

Table 6-7. Job States (page 1 of 3)

State	Description
EVENT	The job has the WAITON attribute and does not run until released by its master jobs. When the job is released, its state changes to READY or TAPE, depending on its requirement for tape drives. For more information on the WAITON attribute, see Job Info on page 6-120.
EXECUTING	The job is running.
READY	The job is available for execution. It is selected when an executor associated with its class is available and no RUNNOW or RUNNEXT jobs are waiting. The job remains in the READY state if its class has the attribute INITIATION OFF. This attribute prevents jobs belonging to the class from running. To make the jobs available for execution, use the Class Details screen to set the attribute to INITIATION ON.
RUNNEXT	The job runs as soon as an executor associated with its class is available. It is selected ahead of READY jobs but after RUNNOW jobs. The job remains in the RUNNEXT state when an executor is available if either of the following conditions exists: ● The job has the TAPEDRIVES attribute and requires more drives than are available. For more information on this attribute, see Job Info on page 6-120. ● The job's class has the attribute INITIATION OFF. This attribute prevents jobs belonging to the class from running. To make the jobs available for execution, use the Class Details screen to set the attribute to INITIATION ON.
RUNNOW	The job was the subject of the F5–Run Now function and is in this state momentarily until execution begins. For more information on the F5–Run Now function, see Job Info on page 6-120. The job remains in the RUNNOW state if either of these conditions exists: ● The job has the TAPEDRIVES attribute and requires more drives than are available. For more information on this attribute, see Job Info on page 6-120. ● The job's class has the attribute INITIATION OFF. This attribute prevents jobs belonging to the class from running. To make the jobs available for execution, use the Class Details screen to set the attribute to INITIATION ON.

Table 6-7. Job States (page 2 of 3)

State	Description
SPECIAL-*n*	The job is on hold. Its HOLD attribute was set to ON in one of these ways: ● By a user before execution started ● By the scheduler during execution because of a problem requiring user intervention *n* indicates the reason the job was placed on hold and has one of these values (to make any SPECIAL-*n* job available for execution, set its HOLD attribute to OFF):

n	State/Submit After Column	Description
1	HOLD ON	The job was placed on hold by a user before execution started.
2	Sched failed while running	The scheduler failed while the job was running.
3	NEWPROCESS error	An attempt to create a new process for the executor program failed. For information on the cause of the failure, see the scheduler or the job log file.
4	Failed after NEWPROCESS	A new process was successfully created for the executor program, but the program failed during startup. For information on the cause of the failure, see the scheduler or the job log file.
5	RESTART Y, IFFAILS N	The job has the RESTART ON attribute and abended. It did not restart because its IFFAILS attribute was OFF. This state applies only to jobs with the CALENDAR or EVERY attribute.
6	RESTART N, IFFAILS N	The job has the RESTART OFF attribute and abended. It did not restart because its IFFAILS attribute was OFF. This state applies only to jobs with the CALENDAR or EVERY attribute.
7	Calendar error	An error occurred when the scheduler tried to access the job's BATCHCAL calendar file. For information on the cause of the error, see the scheduler or job log file.
8	Calendar empty	There are no more dates in the job's BATCHCAL calendar file.

Table 6-7. Job States (page 3 of 3)

State	Description
SUSPENDED	The job was suspended by the F11–Suspend function on the Job Status screen. To activate the job, use the F10–Activate function on that screen.
TAPE	The job has the TAPEDRIVES attribute and requires more drives than are available. For more information on this attribute, see Job Info on page 6-120. The job remains in the TAPE state after the required drives become available if either of these conditions exists: ● No executor is available for the job's class. ● The job's class has the attribute INITIATION OFF. This attribute prevents jobs belonging to the class from running. To make the jobs available for execution, use the Class Details screen to set the attribute to INITIATION ON.
TIME	The job has one of these attributes specifying the time it is to run: AFTER, AT, CALENDAR, EVERY, WAIT. When the attribute condition is satisfied, the state changes to one of: ● EVENT—if the job also has the WAITON attribute and has not been released by its master jobs ● TAPE—if the job requires more tape drives than are available and has been released by its master jobs (if any) ● READY—if all the preceding conditions are satisfied

Functions

These functions are available on the Job Status screen:

Function	Description
F1–Read	Lists, in alphabetic order, jobs matching the selection criteria you specified in these fields: Scheduler, Job Owner, State, Class, Job Name.
F2–Next	Continues the listing of jobs matching your selection criteria.

* Function is available on screen, but not displayed,

Function	Description
F4–Run Next	Promotes the selected job to run as soon as an executor associated with its class is available. The function overrides the job's SELPRI attribute. (F4 is the same as the BATCHCOM command RUNNEXT JOB.) You can promote a job with a state of EVENT, READY, TAPE, or TIME. You cannot promote a job with a state of EXECUTING, RUNNOW, SPECIAL-*n*, or SUSPENDED. (See the first Caution after this table.) If only one executor is associated with the job's class, the job runs after the currently executing job finishes. When more than one job has the RUNNEXT state, the scheduler selects the jobs for execution by their SELPRI attribute. If RUNNEXT jobs have the same SELPRI attribute, selection is by submission time. The job does not run if either of these conditions exists: ● The job has the TAPEDRIVES attribute and requires more drives than are available. RUNNEXT jobs waiting for tape drives have a state of TAPE, not RUNNEXT. ● The class to which the job belongs has the attribute INITIATION OFF. This attribute prevents jobs in the class from running. To make jobs in the class available for execution, use the Class Details screen to set the attribute to INITIATION ON. Only super-group users (255, *n*) can perform the F4–Run Next function.
F5–Run Now	Executes the selected job as soon as you press F5. (F5 is the same as the BATCHCOM command RUNNOW JOB.) The job runs in any available executor associated with the job's class. If no executors are available for the class, the job runs in any available executor, regardless of class. If no executors are available, the scheduler creates a temporary executor that is deleted when job execution finishes. You can perform this function on a job with a state of EVENT, READY, RUNNEXT, TAPE, or TIME. You cannot perform the function on a job with a state of EXECUTING, SPECIAL-*n*, or SUSPENDED. (See the second Caution after this table.) You can perform this function only if the AT-ALLOWED scheduler attribute is ON. The default AT-ALLOWED scheduler attribute is OFF. The job does not run if either of these conditions exists: ● The job has the TAPEDRIVES attribute and requires more drives than are available. RUNNOW jobs waiting for tape drives have a state of TAPE, not RUNNOW. ● The class to which the job belongs has the attribute INITIATION OFF. This attribute prevents jobs in the class from running. To make jobs in the class available for execution, use the Class Details screen to set the attribute to INITIATION ON. Only super-group users (255, *n*) can perform the F5–Run Now function.

* Function is available on screen, but not displayed,

Function	Description
F8–Delete	Deletes the selected job if it is not executing or suspended. You can delete jobs with a state of EVENT, READY, RUNNEXT, RUNNOW, SPECIAL-*n*, TAPE, or TIME. To delete jobs with a state of EXECUTING or SUSPENDED, you must use F12–Stop instead. F8–Delete cancels a recurrent job (a recurrent job has the CALENDAR or EVERY attribute). Canceled recurrent jobs are not rescheduled for execution. You can delete a job on this screen only if you previously validated one of these Guardian user IDs: ● The ID of a super-group user (255, *n*). Super-group users can delete any job. ● The ID of the job owner. ● The ID of a user who has write access to the job input file. If the input file does not exist or if the file is a device or process, only the owner or a super-group user can delete the job.
F10–Activate	Resumes execution of a suspended job. (F10 is the same as the BATCHCOM command ACTIVATE JOB.) A job with the EVERY attribute might accumulate a job backlog while it is suspended. When you activate the job, it runs repeatedly until the backlog is cleared. To prevent the backlog from running, before you press F10: 1. Use the Class Details screen to set the INITIATION attribute of the job's class to OFF. 2. Use the F12–Stop function on the Job Status screen to stop the suspended job and all its processes. 3. Use the F6–Alter function on the Job Info screen to alter the scheduling attributes of the job. Also consider deleting the job using the F8–Delete function on the Job Info or Job Status screens. 4. Use the Class Details screen to reset the INITIATION attribute of the class to ON. A job with the CALENDAR attribute does not accumulate a job backlog while it is suspended. When you activate the job, it runs only when the attribute condition is next satisfied. You can activate a job only if you previously validated one of these Guardian user IDs: ● The ID of a super-group user (255, *n*). Super-group users can activate any job. ● The ID of the job owner. ● The ID of a user who has write access to the job input file. If the input file does not exist or if the file is a device or process, only the owner or a super-group user can activate the job.

* Function is available on screen, but not displayed,

Function	Description
F11–Suspend	Suspends the processes associated with an executing job. (F11 is the same as the BATCHCOM command SUSPEND JOB.) The executor of a suspended job is not available to execute other jobs while the job remains suspended. You can release the executor for job execution by doing either of: ● Resume execution of the job by performing the F10–Activate function. The executor is released when the job finishes. ● Delete the job by performing the F8–Delete function. You can only suspend a job if you previously validated one of these Guardian user IDs: ● The ID of a super-group user (255, *n*). Super-group users can suspend any job. ● The ID of the job owner. ● The ID of a user who has write access to the job input file. If the input file does not exist or if the file is a device or process, only the owner or a super-group user can suspend the job.
F12–Stop	Deletes an executing or suspended job and all the processes associated with the job. (F12 is the same as the BATCHCOM command STOP JOB.) The function does not delete a process created by the job but dissociated from it by the run option JOBID. The function deletes jobs with a state of EXECUTING or SUSPENDED. The function does not delete jobs with a state of EVENT, READY, RUNNEXT, RUNNOW, SPECIAL-*n*, TAPE, or TIME. (To delete these jobs, use the F8–Delete function). F12 does not prevent a recurrent job (a recurrent job has the CALENDAR or EVERY attribute) from being rescheduled for execution. The job is rescheduled as usual the next time the attribute condition is satisfied. You can stop a job only if you previously validated one of these Guardian user IDs: ● The ID of a super-group user (255, *n*). Super-group users can stop any job. ● The ID of the job owner. ● The ID of a user who has write access to the job input file. If the input file does not exist or if the file is a device or process, only the owner or a super-group user can stop the job.
F13–Info	Displays the Job Info screen. Use the Job Info screen to display information about a selected job. You can also use the screen to create a job and submit it to the scheduler for execution.
F15–Inquiry	Displays the Job Inquiry screen. Use the Job Inquiry screen to display information about the processes created by an executing job.

* Function is available on screen, but not displayed,

Function	Description
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Job Status screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Job Status screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Job Status screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

△ **Caution.** F4–Run Next overrides the WAITON attribute of an EVENT job. The job is released for execution regardless of whether its masters have completed. For this reason, do not use F4 to promote an EVENT job until you determine and are prepared to accept the effect on the job’s masters.

△ **Caution.** F5–Run Now overrides the WAITON attribute of an EVENT job. The job is executed immediately regardless of whether its masters have completed. For this reason, do not use F5 to execute an EVENT job until you determine and are prepared to accept the effect on the job’s masters.

Job Tape DEFINEs

Use the Job Tape DEFINEs screen to attach tape DEFINEs to jobs. You can create the DEFINEs or use DEFINEs from the attachments catalog. The screen also lets you inquire about, update, and delete tape DEFINEs already attached to jobs.

Tape DEFINEs are used to pass information to the tape process during labeled-tape operations. The attributes of a tape DEFINE specify parameters such as the name of the tape device and the record format.

Figure 6-29. Job Tape DEFINEs Screen

```
NETBATCH-PLUS            JOB TAPE DEFINES                 01Jan2002   SNP030DT

Option       : TAPE____         Owner   : SUPER.SUPER       / ____ GOGO
Job Set      : AA-DEFAULT       Job Name: JOB1
DEFINE Name  : =SUPERTAPE_____________
Catalog Set  : DEF-SET-1_
Catalog Name : =AA-TAPE_______________

Device    : $TAPE2__________ $TAPE1
Expiration: 30JUN2002_ 31Dec2002   Tape Owner: SUPER_________
Blocklen  : _____ 4096   Reclen : _____ 1024   Use    : _________ OPENFLAG
Density   : ____ 6250    Recform: _ F          Gen    : ____ 9999
EBCDIC    : ___ OFF      Reels  : ___          Version: __ 99
Filesect  : ___  100     Retentn: _____        Labels : _______ IBM
Fileseq   : ____  500    Fileid : EOYTAPE__________ MYFILEID

Volumeid  : _______ _______ _______ _______ _______ _______ _______

Mountmsg  :
_____________________________________________________________________________

F1-Read      F2-Next            F4-Add        F6-Update       F7-Read Catalog
F8-Delete    F13-Choose Option  F14-Depend    F15-Bulk Select
```

Displaying the Screen

From any job attachments screen, enter T or TAPE in the Option field and press F13 to display the Job Tape DEFINEs screen.

Field Descriptions

Option

Use the Option field to specify the job attachments screen displayed when you perform the F13–Choose Option function. The field options are:

A[SSIGN]	Specifies the Job ASSIGNs screen.
P[ARAM]	Specifies the Job PARAMs screen.
C[ATALOG]	Specifies the Job Catalog DEFINEs screen.

D[EFAULTS]	Specifies the Job Defaults DEFINEs screen.
M[AP]	Specifies the Job Map DEFINEs screen.
S[POOL]	Specifies the Job Spool DEFINEs screen.

Owner

Use the Owner field to specify the security attributes of the DEFINE record. For more information on this field, see Job ASSIGNs on page 6-88.

Job Set

The Job Set field shows the name of the defaults set of the job named in the Job Name field (the current job). You cannot enter information in the Job Set field.

Job Name

The Job Name field shows the name of the current job. You cannot enter information in this field.

DEFINE Name

Use the DEFINE Name field to enter the name of the tape DEFINE. The name can contain from 2 through 24 characters. The first character must be an equals sign (=). The remaining characters can be letters, numbers, hyphens (-), underscores (_), or circumflexes (^). In some products (for example, the TACL command interpreter), names whose second character is an underscore are reserved for use by HP. To avoid errors or unexpected results, do not use an underscore as the second character. Names beginning with =_ZBAT are reserved for use by the NetBatch-Plus application.

Catalog Set

Use the Catalog Set field to specify the defaults set to which the catalog DEFINE named in the Catalog Name field belongs. You must specify the defaults set before you can display attributes of the DEFINE with the F7–Read Catalog function.

Catalog Name

Use the Catalog Name field to specify the catalog DEFINE whose attributes you want to display with the F7–Read Catalog function. The DEFINE must belong to the defaults set you specified in the Catalog Set field.

You must have use access to a catalog DEFINE in order to attach it to a job and to override its attributes.

Device

Use the Device field to enter, in Guardian form, the name of the tape device where the tape will be mounted. If you do not specify the system where the device resides, the

system specified for the defaults set applies. The Volume field on the Defaults Set Details screen displays this value.

The Device field is optional when you specify ANSI, BACKUP, or IBM in the Labels field. It is mandatory when you specify BYPASS, OMITTED, or TMFTAPE in that field.

Expiration

Use the Expiration field to enter, for ANSI-standard and IBM-standard labeled tapes only, the expiration date of the tape file. The expiration date is the date the file can be overwritten. For information on the forms in which you can enter the date, see Calendar on page 6-23.

Expiration date and retention period (specified in the Retentn field) are mutually exclusive.

Tape Owner

Use the Tape Owner field to specify, for ANSI-standard and IBM-standard labeled tapes only, the owner of the tape. For an ANSI tape, enter an identifying name or code containing from 1 through 14 characters. For an IBM tape, enter an identifying name or code containing from 1 through 10 characters.

Blocklen

Use the Blocklen field to specify, in bytes, the block length in the tape file. If you specified fixed-length records in the Recform field, the block length must be a multiple of the record length specified in the Reclen field.

To specify the block length, enter an integer in the range 1 through 65534.

The tape process does not check block length of input files if you leave the Blocklen field blank.

Reclen

Use the Reclen field to specify the record length in the tape file. If you specified fixed-length records for an ANSI-standard labeled tape, the default length is the value configured for the device at system generation time.

To specify the record length, enter an integer in the range 1 through 65534.

Use

Use the Use field to specify how the tape file is to be used. The field options are:

IN	Specifies that the tape file is to be read. If you specify this option, you must also specify the tape volume ID in the Volumeid field and ANSI or IBM in the Labels field. You cannot specify this option if you entered SCRATCH in the Volumeid field.
OUT	Specifies that data is to be written to the tape file.
EXTEND	Specifies to append data to the tape file. If you specify this option, you must also specify the tape volume ID in the Volumeid field and ANSI or IBM in the Labels field. You cannot specify this option if you entered SCRATCH in the Volumeid field.
EXTEND	Specifies the type of access indicated by the access flag of the open call. The flag must indicate read or write access.

The default value is OPENFLAG.

Density

Use the Density field to specify, in bits per inch (bpi), the data density of the tape. The density can be 800 bpi, 1600 bpi, or 6250 bpi. The default density is the current setting of the tape device.

Recform

Use the Recform field to specify the record format of ANSI-standard and IBM-standard labeled tapes. The field options are:

F	Specifies fixed-length records. If you specify this option, you must also specify a block length that is a multiple of the record length.
U	Specifies records of undefined length.

For input files, values in the Recform, Blocklen, and Reclen fields are not required, and the tape process does not check them for consistency. If you enter values in any of these fields, however, the values in the corresponding label fields must match the values in those three fields. Otherwise, the tape is rejected.

For output files, if you do not specify values in the Recform, Blocklen, and Reclen fields for an IBM tape, the open is rejected. For an ANSI tape, the following values are assumed:

Recform	U
Blocklen	None
Reclen	As configured for the device

Gen

Use the Gen field to specify, for ANSI-standard and IBM-standard labeled tapes only, the generation group to which the file belongs. To specify the group, enter an integer in the range 1 through 9999. The default value is 1.

EBCDIC

Use the EBCDIC field to specify whether data on an IBM-standard labeled tape is to be translated from EBCDIC format to ASCII format when the tape is processed. The field options are:

ON Specifies that data is to be translated when the tape is processed. This is the default value for IBM tapes.

OFF Specifies that data is not to be translated when the tape is processed.

Reels

Use the Reels field to specify the number of volumes in a multivolume input file. You can specify this value only if the option specified in the Use field is IN. You must specify the number of volumes for all multivolume input files.

To specify the number of volumes, enter an integer in the range 1 through 255. The default value is 1.

Version

Use the Version field to indicate, for ANSI-standard and IBM-standard labeled tapes only, a version within one generation group. To specify the version, enter an integer in the range 0 through 99. The default value is 0.

Filesect

Use the Filesect field to specify, for ANSI-standard and IBM-standard labeled tapes only, the position of the volume in a multivolume file. To specify the position, enter an integer in the range 1 through 9999. This number is always 1 for a single-volume file.

Retentn

Use the Retentn field to specify, for ANSI-standard and IBM-standard labeled tapes only, the retention period of the tape file. The tape cannot be overwritten until the retention period expires.

To specify the retention period, enter an integer indicating the number of days the tape file is to be retained. The tape process calculates an expiration date using this value when the process writes the labels on the tape. The default value is 0, indicating no retention period.

Retention period and expiration date (specified in the Expiration field) are mutually exclusive.

Labels

Use the Labels field to specify the type of tape and, for labeled tapes, the label processing mode. The field options are:

ANSI — Specifies that the tape file is on an ANSI-standard labeled tape and that standard label processing is required (LP mode).

BACKUP — Specifies that the tape file be read only by the BACKUP and RESTORE utilities.

BYPASS — Specifies that label processing is not required and the tape is not to be checked for labeling (BLP mode). If you specify this option, you must also specify the tape device in the Device field. You must not enter values in these fields when BYPASS is specified:

Blocklen	Filesect	Reclen	Use
EBCDIC	Fileseq	Reels	Version
Expiration	Gen	Retentn	Volume
Fileid	Recform	Tape Owner	Volumeid

IBM — Specifies that the tape file is on an IBM-standard labeled tape and that standard label processing is required (LP mode). If you specify this option, you must also specify a record format in the Recform field and the tape file name in the Fileid field.

OMITTED — Specifies that the tape file is not on a standard labeled tape. Label processing is not performed other than to check the tape is not a standard labeled tape (NL mode). If you specify this option, you must also specify the tape device in the Device field. You must not enter values in the fields listed for the BYPASS option when OMITTED is specified.

TMFTAPE — Specifies that the tape file is used only by the TMF process for backups and online dumps.

Fileseq

Use the Fileseq field to specify, for ANSI-standard and IBM-standard labeled tapes only, the position of the tape file in a multifile volume.

To specify the file position, enter an integer in the range 1 through 9999. In multifile multivolume organization, this number indicates the order of each file in the set. In single-file organization, this number is always 1.

Fileid

Use the Fileid field to enter, for ANSI-standard and IBM-standard labeled tapes only, the name of the tape file. The name can contain from 1 through 17 characters.

Volumeid

Use the Volumeid field to specify, for ANSI-standard and IBM-standard labeled tapes only, the tape volume ID. You can enter the six-byte identification code assigned to the volume or SCRATCH for a scratch tape. For a multivolume file, you can enter up to seven volume IDs.

If you specified IN in the Use field, you must enter a volume ID. Otherwise, its value is SCRATCH.

Mountmsg

Use the Mountmsg field to enter an additional message for display with the system mount message. The message also appears with the drive-usage request printed when the DEFINE is opened.

Functions

These functions are available on the Job Tape DEFINEs screen:

Function	Description
F1–Read	Shows information about the DEFINE specified in the DEFINE Name field that is attached to the current job.
F2–Next	Shows information about the next tape DEFINE attached to the job. When there are no more tape DEFINEs, the function displays the PARAMs for the job on the Job PARAMs screen.
F4–Add	Attaches the DEFINE specified in the DEFINE Name field to the current job.
F6–Update	Updates attributes of the DEFINE specified in the DEFINE Name field.
F7–Read Catalog	Displays attributes of the catalog DEFINE specified in the Catalog Name field. The attributes appear in regular text next to or below the attribute fields. The attributes apply to the job unless you override them in one of these ways: ● By entering your preferred attributes in the attribute fields. ● By entering N, NO, NON, or NONE in the attribute fields. This option specifies the default value for the fields in which it is entered.
F8–Delete	Deletes the DEFINE specified in the DEFINE Name field from the current job.
F13–Choose Option	Displays the job attachments screen you specified in the Option field. If you press F13 when the field is blank, the NetBatch-Plus application redisplays the Job ASSIGNs screen.
F14–Depend	Displays the Job Dependencies screen. Use this screen to specify up to eight master jobs on which execution of the current job depends. When you display the screen, it shows the names of any master jobs already specified for the current job. It also shows the name of the defaults set to which each master job belongs.
F15–Bulk Select	Displays the Bulk Job Selection Criteria screen. Use this screen to specify the criteria the NetBatch-Plus application uses to select the current job for a bulk submit run. When you display the screen, it shows any selection criteria already specified for the job.
F16–Previous Screen*	Displays the previous screen on the menu path.

* Function is available on screen, but not displayed,

Function	Description
SF1–Screen Help*	Displays information about the Job Tape DEFINEs screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Job Tape DEFINEs screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help* on page 6-177.
SF5–Password*	Displays the Password Validation screen. To return to the Job Tape DEFINEs screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Main Menu

Use the Main Menu screen to sign on to and off from the NetBatch-Plus application.

After you sign on, you can display any of the screens with highlighted names. (NetBatch-Plus security prevents you from displaying screens whose names appear in regular text.)

Figure 6-30. Main Menu Screen

```
NETBATCH-PLUS T9189D48 - (26FEB2002^ABF)  MAIN MENU         13Jun2002   SNP000
Copyright 2002 Compaq Information Technologies Group, L.P.

NBP User Name: NBPUSER1   Password: _________________

                          F16  Sign On

                          F1   Defaults Set Details
                          F2   Job Definition
                          F3   Ad Hoc Job Selection
                          F4   Catalogs
                          F5   Calendar
                          F6   Bulk Submit Environment
                          F7   Bulk Submit
                          F8   Utilities
                          F9   Scheduler Interface
                          F10  Reports
                          F11  Security

                          SF16 Sign Off, Exit

All Screens:   SF1-Screen Help    SF3-Field Help     SF5-Password Validation
               SF13-Print         SF15-Recover
```

Displaying the Screen

The Main Menu screen appears automatically when you invoke, from a TACL process, the NRUN macro supplied with NetBatch-Plus software. For information on invoking the macro, see Starting NetBatch-Plus on Your Terminal on page 5-1.

When the NetBatch-Plus application is running, you can return to the Main Menu screen from any other screen in these ways:

- Press F16. This returns you to the Main Menu screen via the previous screen on the menu path. (Depending on the screen displayed, you might need to press F16 more than once.)
- Press SF16. This returns you directly to the Main Menu screen.

Field Descriptions

NBP User Name

Use the NBP User Name field to enter your NetBatch-Plus user name. This name identifies a user record in the NetBatch-Plus database that determines your access privileges to NetBatch-Plus screens and functions. The record also contains information about the schedulers and classes you can use on the Ad Hoc Job Selection, Bulk Submit, and Job Definition screens.

Your user name is defined on the Security Supervise screen by a user with S (Supervisor) access to that screen (for example, your system administrator). User names are not associated with Guardian user IDs.

Password

Use the Password field to enter your NetBatch-Plus password. NetBatch-Plus does not display the characters you type and clears the password from the field after validation.

Your password is defined on the Security Supervise screen. You can define and change your own password if you have P (Change Own Password) access to that screen. Users with S (Supervisor) access to the Security Supervise screen can define and change the password of any user.

Functions

These functions are available on the Main Menu screen:

Function	Description
F1–Defaults Set Details	Displays the Defaults Set Details screen.
F2–Job Definition	Displays the Job Definition screen. From this screen, you can go to these screens: ● Bulk Job Selection Criteria ● Job Dependencies ● Job ASSIGNs. From this screen, you can go to these job attachments screens: Job PARAMs Job Catalog DEFINEs Job Defaults DEFINEs Job Map DEFINEs Job Spool DEFINEs Job Tape DEFINEs
F3–Ad Hoc Job Selection	Displays the Ad Hoc Job Selection screen.

Function	Description
F4–Catalogs	Displays the Catalog ASSIGNs screen. From this screen, you can go to these screens: ● Catalog PARAMs ● Catalog Catalog DEFINEs ● Catalog Defaults DEFINEs ● Catalog Map DEFINEs ● Catalog Spool DEFINEs ● Catalog Tape DEFINEs
F5–Calendar	Displays the Calendar screen.
F6–Bulk Submit Environment	Displays the Bulk Submit Environment screen.
F7–Bulk Submit	Displays the Bulk Submit screen.
F8–Utilities	Displays the Utility Menu screen.
F9–Scheduler Interface	Displays the Scheduler Interface screen. From this screen, you can go to these screens: ● Class Details ● Executor Info ● Executor Status ● Job Info ● Job Inquiry ● Job Status ● Scheduler Info ● Scheduler Status ● Wild-Card Processes
F10–Reports	Displays the Reports screen.
F11–Security	Displays the Security Supervise screen. From this screen, you can go to these screens: ● Screen Security ● Utility Security
F16–Sign On	Signs you on to the NetBatch-Plus application after you enter your user name and password. The application verifies these details before granting you access to the system. After you sign on, you can display any of the screens with highlighted names. NetBatch-Plus security prevents you from displaying screens whose names appear in regular text.

Function	Description
SF1–Screen Help	Displays information about the Main Menu screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Main Menu screen, press F16.
SF3–Field Help	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help.
SF5–Password	Displays the Password Validation screen. To return to the Main Menu screen, press F16.
SF13–Print	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Exit	Stops the NetBatch-Plus application.

Password Validation

Use the Password Validation screen to validate Guardian user IDs for your terminal. Validating a user ID gives you access to the NetBatch-Plus records and functions to which that user has access.

When you validate a user ID, it remains validated for your terminal until the end of the NetBatch-Plus session. There is no limit on the number of user IDs you can validate during a session.

You must validate your own user ID each time you sign on to the NetBatch-Plus application. If you do not validate your ID, the application denies you access to records you own and to functions requiring that ID.

Note. The recommended time to use the Password Validation screen is immediately after you sign on to the NetBatch-Plus application. Use the screen at this time to validate all user IDs you intend to use during the NetBatch-Plus session, including your own. Validating user IDs at the start of a session saves you time when you perform functions requiring an ID.

Figure 6-31. Password Validation

```
NETBATCH-PLUS            PASSWORD VALIDATION            01Jan2002   SNP170




User: ADMIN.OPER1______ , ________________




                                F5-Validate
```

Displaying the Screen

From any screen, press SF5 to display the Password Validation screen. To return to the screen from which you displayed the Password Validation screen, press F16.

Field Descriptions

User

Use the two-part User field to enter the Guardian user ID and password of the user whose ID you want to validate.

In the first part of the field, enter the user ID in either of these forms:

- *group-name.user-name*

  group-name

  is the name of the group to which the user belongs.

  user-name

  is the name of the user assigned to the group.

  An example of a user ID entered in this form is ADMIN.OPER1.

- *group-id*, *user-id*

  group-id

  is a number between 1 and 255 identifying the group to which the user belongs.

  user-id

  is a number between 1 and 255 identifying the user assigned to the group.

  An example of a user ID entered in this form is 205, 70.

- When the NetBatch-Plus application validates a numeric user ID, it replaces it with the corresponding group name and user name. For example, SUPER.SUPER replaces 255, 255.

In the second part of the field, enter the Guardian password of the specified user. The NetBatch-Plus application does not display the characters you type and clears the password from the field after validation. If you enter three incorrect passwords in succession, the application locks your keyboard for one minute.

When you want to enter a Guardian password containing control characters:

- In NetBatch-Plus, the circumflex (^) is equivalent to the CTRL key. To enter a control character in a Guardian password, enter ^ before the character instead of pressing CTRL. For example, enter ^A instead of pressing CTRL+A.
- If the password contains ^, enter ^^. For example, if the password is AB^, enter AB^^.
- If the password contains the control character generated by CTRL+^, enter ^@.

When you display the screen, the field shows the user ID NULL.NULL.

Functions

These functions are available on the Password Validation screen:

Field	Description
F5–Validate	Validates the Guardian user ID shown in the User field and associates that user with your terminal.
F16–Previous Screen*	Returns the screen from which you displayed the Password Validation screen.
SF1–Screen Help*	Displays information about the Password Validation screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Password Validation screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.

* Function is available on screen, but not displayed,

Reports

Use the Reports screen to execute Enform reports. Figure 6-32 shows the format of the standard screen supplied with NetBatch-Plus software.

You can execute any report listed on the screen by pressing the function key corresponding to that report. You can also execute a report that is not listed by specifying its input file in the User ENFORM Input File field. The input file can be an Enform compiled query file or an EDIT-format file containing Enform source code.

You can specify selection parameters for reports listing information by NetBatch-Plus user name, calendar category, date, defaults set, or job name. For example, you can specify a range of dates and user names for a report listing information by date and user.

The Reports screen can be customized to suit your own processing environment. For example, your own reports could be substituted for those shown on the standard screen. For information on customizing the Reports screen, see Section 3, Changing the NetBatch-Plus Pathway Configuration.

For an explanation of the report production process and information on writing your own reports, see Section 7, NetBatch-Plus Reports. It also describes each standard report supplied with NetBatch-Plus software.

Figure 6-32. Reports Screen

```
NETBATCH-PLUS            REPORTS                          01Jan2002   SNP300

                 Standard Reports

           F1    Defaults Sets
           F2    Job Definitions
           F3    Dependent-Master Jobs
           F4    Master-Dependent Jobs
           F5    Bulk Job Selection Criteria
           F6    Calendar by Category
           F7    Calendar by Date
           F8    Security Details
           F15   User ENFORM Input File: \SYSOP.$DATA3.NBPDAT.ENFORM02_____

                   Start                     End
    NBP User    : __________                __________
    Category    : __________                __________
    Date        : __________                __________
    Set         : AA-DEFAULT                DEF-SET-X_
    Job         : _________________________ _________________________

   Report Owner: ADMIN.OPER1______ , _________________
   Report File : \WORLD.$S.#LPT1_____________________
```

Displaying the Screen

From the Main Menu screen, press F10 to display the Reports screen.

Field Descriptions

User ENFORM Input File

Use the User ENFORM Input File field when you want to execute an ENFORM report not listed on the screen. To execute the report, enter the name of its input file in the field and press F15. The input file can be either of:

- An Enform compiled query file (file code 888)
- An EDIT-format file (file code 101) containing Enform source code

You must specify the name of the input file in Guardian form. If you enter a partial name, the NetBatch-Plus application expands it by using the logon defaults of the user specified in the Report Owner field. These defaults also identify the DDL dictionary location for queries submitted via EDIT-format files. If the logon defaults do not identify the dictionary, the queries fail with dictionary file access errors. When you want to execute an EDIT-format file, make sure you specify a user in the Report Owner field whose logon defaults identify the dictionary volume and subvolume.

NBP User

Use the two-part NBP User field to specify a name range for reports listing information by NetBatch-Plus user name (for example, Security Details).

In the first part of the field, enter the NetBatch-Plus user name at which you want the report to begin. If you do not enter a name, the report begins at the first name on file.

In the second part of the field, enter the NetBatch-Plus user name at which you want the report to end. If you do not enter a name, the report ends at the last name on file.

Category

Use the two-part Category field to specify a category range for reports listing information by calendar category (for example, Calendar by Category).

In the first part of the field, enter the calendar category at which you want the report to begin. If you do not enter a category, the report begins at the first category on file.

In the second part of the field, enter the calendar category at which you want the report to end. If you do not enter a category, the report ends at the last category on file.

Date

Use the two-part Date field to specify a date range for reports listing information by date (for example, Calendar by Date).

In the first part of the field, enter the date at which you want the report to begin. If you do not enter a date, the report begins at the first date on file.

In the second part of the field, enter the date at which you want the report to end. If you do not enter a date, the report ends at the last date on file.

You can enter the date in any of these forms:

```
[d]d mmm
[d]d mmm [yy]yy
[yy]yy mmm [d]d
[yy]yy [m]m [d]d
[yy]yymmdd
mmm [d]d
mmm [d]d [yy]yy
```

For more information on date forms, see Calendar on page 6-23.

Set

Use the two-part Set field to specify a defaults set range for reports listing information by defaults set (for example, Master-Dependent Jobs).

In the first part of the field, enter the defaults set at which you want the report to begin. If you do not enter a defaults set, the report begins at the first defaults set on file.

In the second part of the field, enter the defaults set at which you want the report to end. If you do not enter a defaults set, the report ends at the last defaults set on file.

Job

Use the two-part Job field to specify a range of job names for reports listing information by job name (for example, Job Definitions).

In the first part of the field, enter the job name at which you want the report to begin. If you do not enter a start name, the report begins at the first name on file.

In the second part of the field, enter the job name at which you want the report to end. If you do not enter a name, the report ends at the last name on file.

Report Owner

Use the two-part Report Owner field to specify the owner of the report.

In the first part of the field, enter the Guardian user ID identifying the owner. Enter the user's password in the second part of the field. For more information on entering Guardian user IDs and passwords, see Password Validation on page 6-182.

The report gives information about records to which the specified user and any previously validated Guardian users have read access.

When you display the screen, the field shows one of these user IDs:

- The user ID from the defaults set associated with the signed-on user. The NetBatch-Plus application shows this ID if no other IDs have been validated during the current session.

- The user ID of the last user validated by a function performed during the current session.

Report File

Use the Report File field to specify the report output file. The output file can be a spooler location or an existing disk file. If you do not specify the output file, the NetBatch-Plus application writes the report to spooler location $S.#ENFM.

You must specify the name of the output file in Guardian form. If you enter a partial name, the NetBatch-Plus application expands it by using the logon defaults of the user specified in the Report Owner field.

Functions

These functions are available on the standard Reports screen:

Function	Description
F1–Defaults Sets	Executes the Defaults Sets report using the Enform compiled query file ENFORM01. The report lists, by defaults set name, particulars of defaults sets. For more information on the report, see Defaults Sets on page 7-18
F2–Job Definitions	Executes the Job Definitions report using the Enform compiled query file ENFORM03. The report lists details of jobs defined on the Job Definition screen. The jobs are sorted by job name within defaults set. For more information on the report, see Job Definitions on page 7-25.
F3–Dependent-Master Jobs	Executes the Dependent-Master Jobs report using the Enform compiled query file ENFORM05. The report lists, for each dependent job, the master jobs and the defaults sets to which the master jobs belong. The report lists the dependent jobs by defaults set. For more information on the report, see Dependent-Master Jobs on page 7-21.
F4–Master-Dependent Jobs	Executes the Master-Dependent Jobs report using the Enform compiled query file ENFORM67. The report lists, for each master job, dependent jobs and the defaults sets to which the dependent jobs belong. The report lists the master jobs by defaults set. For more information on the report, see Master-Dependent Jobs on page 7-28.
F5–Bulk Job Selection Criteria	Executes the Bulk Job Selection Criteria report using the Enform compiled query file ENFORM68. The report lists the bulk submit selection criteria for jobs. Jobs are listed by defaults set. For more information on the report, see Bulk Job Selection Criteria on page 7-5.
F6–Calendar by Category	Executes the Calendar by Category report using the Enform compiled query file ENFORM07. The report lists, by calendar category, the dates belonging to each category. For more information on the report, see Calendar by Category on page 7-12.
F7–Calendar by Date	Executes the Calendar by Date report using the Enform compiled query file ENFORM09. The report lists, in date order, dates and the calendar category or categories to which they belong. For more information on the report, see Calendar by Date on page 7-14

* Function is available on screen, but not displayed,

Function	Description
F8–Security Details	Executes the Security Details report using the Enform compiled query file ENFORM06. The report lists, by NetBatch-Plus user name, the security profiles of NetBatch-Plus users. For more information on the report, see Security Details on page 7-30.
F15–User ENFORM Input File	Executes a report using the file you specified in the User ENFORM Input File field.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Reports screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Reports screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Reports screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Scheduler Info

Use the Scheduler Info screen to add new schedulers and to inquire about and maintain the attributes of existing schedulers. You can also use the screen to start and stop schedulers and to determine the system resources the schedulers use.

Figure 6-33. Scheduler Info Screen

```
NETBATCH-PLUS            SCHEDULER INFO                    13Jun2002   SNP240
            \SALES.$LDS                                    14Jun2002 08:36
Scheduler  : \*.$*_________    OWNER: SUPER.OPERATOR___ , ________________
  Home Term \SALES.$TRM5.#A_____________________
  Prog Vol : $SYSTEM.SYSTEM___ .NETBATCH          CPU: 1     Backup: 3
  Log Vol  : \ADMIN.$LOGS.BATCH_______
  Log File : \ADMIN.$LOGS.BATCH.LOGAAA_________ <LOG VOL>.LOGxxx
  CTL File : \ADMIN.$LOGS.BATCH.BATCHCTL_______ <LOG VOL>.BATCHCTL
  IMMU File: $SYSTEM.SYSTEM.BATCHIMU___________ <PROG VOL>.BATCHIMU

Defaults
  Class    : DEFAULT___________________
  Exec.Prg : $SYSTEM.SYSTEM.TACL_______________
  Out      : $S.#SALES_____________________________
                                                   High PIN: _
 Selpri    : 3         Pri      : 120              Backupcpu: *_
 Tapedrives: 2         Max Lines: NOMAX            Max Pages: NOMAX

 At Allowed: N         Submit Allowed: Y           Stop On Abend: N

F1-Read          F2-Next            F3-Status          F4-Add
F6-Alter         F8-Abort           F9-Run             F10-Start
F12-Shutdown     F14-Switch Cpu     F15-Switch Log
```

Displaying the Screen

You can display the Scheduler Info screen from either of the following screens:

- From the Scheduler Interface screen, press F4.
- From the Scheduler Status screen, press F3.

Field Descriptions

The descriptions of the data entry and display-only fields on the Scheduler Info screen are organized in two groups that are based on the field groupings on the screen:

- Scheduler environment fields. These fields form the group of fields at the top of the screen in the section titled Scheduler. Use them to specify the parameters and options the NetBatch-Plus application uses to run the scheduler program NETBATCH. The application runs the program when you use the F9–Run function.
- Scheduler attributes fields. These fields form the group of fields at the bottom of the screen in the section titled Defaults. Use them to set scheduler attributes such as DEFAULT-CLASS, DEFAULT-SELPRI, and TAPEDRIVES. The NetBatch-Plus application assigns the attributes to the scheduler when you perform the F4–Add function.

Scheduler Environment Fields

The fields in the scheduler environment group are:

Scheduler	CPU	Log File
Owner	Backup	CTL File
Home Term	Log Vol	IMMU File
Prog Vol		

Scheduler

Use the Scheduler field to specify, in this form, the schedulers whose details you want to add, inquire about, update, or delete:

[*system-name*.]$*process-name*

system-name

is the name of the system where the scheduler process resides. You do not have to enter the name if the process resides in the default system (the system where the NetBatch-Plus Pathway system is running).

process-name

is the name of the scheduler process.

You can specify a single scheduler or a range of schedulers. To specify a single scheduler, enter the system name and process name in full (for example, \WORLD.$ZBAT). You can leave out the system name if the process resides in the default system. To specify a range of schedulers, use the following wild-card characters in the name:

? Matches a single character. For example, ABC?? matches five-character names beginning with ABC (such as ABCDE and ABC12, but not ABCDEF).

* Matches zero or more characters. For example, A*D matches names beginning with A and ending in D (such as ABCD and AD, but not CAD). You can use multiple asterisks in a name as long as you separate them by at least one character. For example, *CD* matches names containing CD (such as ABCDEF, XYZCD, and CD21, but not BC3D or DCA).

Wild-card characters do not match period (.) and dollar ($).

When you include a wild-card character in a name and press F1 or F2, the NetBatch-Plus application searches for a matching scheduler on the wild-card scheduler processes list. If there is no match, the application displays a message advising you no details were found. To specify a scheduler that is not on the list, enter the system and process names in full. For more information on the wild-card scheduler processes list, see Wild-Card Processes on page 6-228.

If you are creating a scheduler process with the F9–Run function, you must specify the system and process names in full. The system you specify must be the system where the NETBATCH object file resides.

When you display the screen, the NetBatch-Plus application shows the default value in the field and a scheduler name above the field:

- The default value is the wild-card specification of the last scheduler specified with wild-card characters during the current session. If wild-card characters were not used, *.$* is the default value and specifies all schedulers on the wild-card scheduler processes list.
- The scheduler name above the field identifies one of these schedulers:
  - The scheduler from the defaults set associated with the signed-on user. The NetBatch-Plus application shows the name of this scheduler if you display the screen when no functions have been performed during the current session. When you press F1–Read or F2–Next, the name changes to the name of the scheduler whose details are displayed.
  - The scheduler that was the subject, directly or indirectly, of the last function performed during the current session. When you press F1 or F2, the name changes to the name of the scheduler whose details are displayed.
  - The scheduler whose details you displayed by pressing F1 or F2.
- The date and time on the system where the scheduler resides appears below your system's date at the top of the screen.

Owner

Use the two-part Owner field to enter the Guardian user ID of a super-group user (255, *n*). The ID identifies the scheduler owner and is a prerequisite to performing all functions except F1–Read, F2–Next, and F3–Status.

In the first part of the field, enter the super-group user ID. Enter the user's password in the second part of the field. For more information on entering Guardian user IDs and passwords, see Password Validation on page 6-182.

You do not have to enter a super-group user ID if it is a prerequisite to performing a function and either of these conditions exists:

- A super-group user ID is shown in the field, and you entered the password of that user. The password is not required if the ID has been validated during the current session.
- A super-group user ID is not shown in the field, but at least one has been validated during the current session. In these circumstances, the NetBatch-Plus application performs the function using the most recently validated super-group user ID. The ID used replaces the ID shown in the field.

When you display the screen, the field shows one of these user IDs:

- The user ID from the defaults set associated with the signed-on user. The NetBatch-Plus application shows this ID if no other IDs have been validated during the current session.

- The user ID of the last user validated by a function performed during the current session.

When you display details of a scheduler, the field shows the user-ID of the scheduler owner.

Home Term

Use the Home Term field to enter the Guardian file name of the home terminal of the scheduler process. The scheduler uses the home terminal to log an error message when it detects a fatal error and is about to terminate abnormally. The home terminal can be a device (for example, a printer) or process, but not a disk file.

The default value is the name of the home terminal specified in the PATHCONF file by the SET SERVER HOMETERM command.

Prog Vol

Use the Prog Vol field to specify the volume and subvolume containing the object file NETBATCH. This file contains the scheduler program. The system where the file resides is implicit in the field and is the system specified for the scheduler process.

The default value is the volume and subvolume specified in the PATHCONF file by the SET SERVER (PARAM PROG-VOL "$*volume.subvol*") command.

CPU

Use the CPU field to specify the CPU where the NetBatch-Plus application creates the primary scheduler process. The process is created when you perform the F9–Run function. To specify the CPU, enter one of:

- An integer in the range 0 through 15 identifying a CPU on the system specified for the scheduler process. When you press F9, the NetBatch-Plus application checks the availability of the CPU before creating the process. The process is not created if the CPU is not configured for the system or is down.
- An asterisk (*) to specify any CPU available on the system specified for the scheduler process. When you press F9, the NetBatch-Plus application replaces the asterisk with the number of the CPU where it creates the process.

When the primary scheduler process is running, the only way you can change its CPU is by performing the F14–Switch CPU function.

The default value is *.

Backup

The Backup field shows the number of the CPU where the backup scheduler process is running. The scheduler creates its backup when you perform the F10–Start function. The field shows the value NO if a primary scheduler process has no backup.

Log Vol

Use the Log Vol field to specify the subvolume where the scheduler creates its log files and database. A log file is created when you perform the F9–Run function. The scheduler database is created when you perform the F4–Add function.

The default value is the volume and subvolume specified in the Prog Vol field.

Log File

Use the Log File field to specify the name of the scheduler log file. If you do not specify the name, the scheduler assigns a default file name of the form *svol*.LOG*xxx*. *svol* is the subvolume specified in the Log Vol field, and *xxx* are characters in the range AAA to ZZZ. Default file names are assigned in sequence (LOGAAA, LOGAAB, … LOGZZY, LOGZZZ, LOGAAA, LOGAAB, …). If a name is already assigned, the next available name is used.

When a log file is full, the scheduler closes it automatically and opens a new file with the default file name. To change the log file at any time, perform the F15–Switch Log function.

CTL File

Use the CTL File field to specify the subvolume containing the BATCHCTL file. This file contains scheduler attributes and is created when you perform the F4–Add function.

The default value is the subvolume specified in the Log Vol field.

IMMU File

Use the IMMU File field to specify the subvolume containing the BATCHIMU file. This file, which is supplied with NetBatch software, contains NetBatch message and help text.

The default value is the subvolume specified in the Prog Vol field.

Scheduler Attributes Fields

The fields in the scheduler attributes group are:

Class	Pri	Max Pages
Exec. Prg.	Backupcpu	At Allowed
Out	Tapedrives	Submit Allowed
Selpri	Max Lines	Stop On Abend

Class

Use the Class field to set the DEFAULT-CLASS scheduler attribute. The attribute names the class adopted by jobs whose CLASS attribute is not specified. It also names the class the scheduler assigns automatically to executors added without a CLASS attribute.

To set the attribute, enter the name of a class. The name can contain from 1 through 24 letters and numbers. It can also contain hyphens (-). The name must begin with a letter and can end with any letter or number but not with a hyphen.

The default value is DEFAULT.

The class you specify must be added to the scheduler in order to make the class available for use by jobs and executors. This condition applies regardless of whether you enter the class name or accept the default. For information on adding classes to schedulers, see Class Details on page 6-62.

Exec. Prg.

Use the Exec. Prg. field to set the DEFAULT-EXECUTOR-PROGRAM scheduler attribute. The attribute specifies the executor program used to process the input file of a job whose EXECUTOR-PROGRAM attribute is not specified.

To set the attribute, enter the file name of the executor program. You do not have to include the system name in the file name if the executor program resides on the system specified for the scheduler process.

The default value is $SYSTEM.SYSTEM.TACL on the system specified for the scheduler process.

Out

Use the Out field to set the DEFAULT-OUT scheduler attribute. The attribute names the output file used by jobs whose OUT attribute is not specified. The output file can be a device, a disk file, or a process. For information on the output created by a job, see Job Definition on page 6-102.

To set the attribute, enter the name of a device, disk file, or process. The default value is the spooler location $S.#BATCH on the system specified for the scheduler process.

High PIN

Use the High PIN field to set the HIGHPIN job attribute. This attribute specifies whether a job can be started in a high PIN.

Allowed values for this field are:

- Y = ON (job can be started in a high PIN)
- N = OFF (job cannot be started in a high PIN; default)

When a process runs at a high PIN, it cannot communicate with a remote C-series process.

Selpri

Use the Selpri field to set the DEFAULT-SELPRI scheduler attribute. The attribute specifies the selection priority assigned to jobs whose SELPRI attribute is not

specified. Job selection is by job submission time if jobs with the same SELPRI attribute are scheduled to run at the same time.

To set the attribute, enter an integer in the range 0 (lowest selection priority) through 7 (highest selection priority). The default value is 3.

Pri

Use the Pri field to set the DEFAULT-PRI scheduler attribute. The attribute specifies the execution priority of the executor program process of a job whose PRI attribute is not specified. The attribute is adopted by any process created by the job if the priority of that process is not stated explicitly.

To set the attribute, enter an integer in the range 1 (lowest execution priority) through 199 (highest execution priority). The default value is 120.

Backupcpu

Use the Backupcpu field to set the BACKUPCPU scheduler attribute. The attribute specifies the CPU where the scheduler creates its backup process. The scheduler creates the process when you perform the F10–Start function or when a CPU fails. The Backup field shows the number of the CPU where the backup process is currently running.

To specify the backup CPU, enter one of:

- An integer identifying a CPU on the system specified for the primary scheduler process. The backup CPU cannot be the same as the primary CPU. If the CPU is unavailable when you press F10 or fails during processing, the scheduler creates the backup process in any available CPU. The process is not switched to the CPU specified by the attribute if that CPU subsequently becomes available.
- An asterisk (*) to specify any CPU available on the system specified for the primary scheduler process.

You can alter the BACKUPCPU attribute of an active scheduler, but the change does not take effect until one of these conditions exists:

- The scheduler is shut down with the F12–Shutdown function and reactivated with the F9–Run and F10–Start functions.
- The primary scheduler process stops. When the process stops, the backup process becomes the primary, and the scheduler creates a new backup in the specified CPU.
- The backup scheduler process stops. When the process stops, the scheduler creates a new backup in the specified CPU.

The default value is *.

Tapedrives

Use the Tapedrives field to set the TAPEDRIVES scheduler attribute. The attribute specifies the maximum number of tape drives available for use.

Note. The scheduler cannot determine the actual number of tape drives available on your system. Consequently, make sure you check tape drive availability before you specify the TAPEDRIVES scheduler attribute.

The scheduler calculates the number of tape drives available for job processing by using its TAPEDRIVES attribute to initialize an internal counter. When you submit a job, the scheduler compares the number of drives required by the job with the counter. If the number is:

- Less than or equal to the counter, the job is scheduled immediately for execution and the number subtracted from the counter. The number is added to the counter when the job finishes executing.
- Greater than the counter but no greater than the TAPEDRIVES scheduler attribute, the job is scheduled for execution when the required number of drives is available. Jobs waiting for tape drives are flagged with a state of TAPE.
- Greater than the TAPEDRIVES scheduler attribute, the job is never scheduled for execution. To avoid this, do not specify more drives for a job than are specified by the TAPEDRIVES scheduler attribute. If it does occur, to resolve it, do one of:
    - Increase the number of drives specified by the TAPEDRIVES scheduler attribute
    - Reduce the number of drives required by the job

To set the attribute, enter an integer in the range 0 through 99 specifying the number of tape drives. The default value is 2.

To display the number of tape drives configured and the number in use, use the Scheduler Status screen.

Max Lines

Use the Max Lines field to set the DEFAULT-MAXPRINTLINES scheduler attribute. The attribute specifies the maximum number of print lines for jobs whose MAXPRINTLINES attribute is not specified.

The attribute is effective only for jobs whose output files are spooler processes. For information on how the attribute affects job output, see Job Definition on page 6-102.

To set the attribute, enter an integer in the range 120 through 65534 specifying the maximum number of print lines. The default value, NOMAX, specifies no maximum.

To avoid setting conflicting DEFAULT-MAXPRINTLINES and DEFAULT-MAXPRINTPAGES attributes, do one of:

- Set both attributes to NOMAX (the default values)

- Set one attribute to NOMAX and the other to a specified value

Max Pages

Use the Max Pages field to set the DEFAULT-MAXPRINTPAGES scheduler attribute. The attribute specifies the maximum number of pages for jobs whose MAXPRINTPAGES attribute is not specified.

The attribute is effective only for jobs whose output files are spooler processes. For information on how the attribute affects job output, see Job Definition on page 6-102.

To set the attribute, enter an integer in the range 2 through 65534 specifying the maximum number of pages. The default value, NOMAX, specifies no maximum.

To avoid setting conflicting DEFAULT-MAXPRINTPAGES and DEFAULT-MAXPRINTLINES attributes, do one of:

- Set both attributes to NOMAX (the default values)
- Set one attribute to NOMAX and the other to a specified value

At Allowed

Use the At Allowed field to set the AT-ALLOWED scheduler attribute. The attribute controls submission of these jobs:

- Jobs that have the AT attribute
- Jobs submitted with the F5–Run Now function on the Job Info or Job Status screens

The NetBatch-Plus application gives you control over these jobs because they can create temporary executors if no other executors are available and might overload your system if submitted close together. The field options are:

Y Yes specifies the attribute AT-ALLOWED ON. With this attribute, the scheduler accepts jobs with the AT attribute and jobs submitted by the F5–Run Now function. The scheduler does not accept these jobs if the SUBMIT-ALLOWED scheduler attribute is OFF.

N No specifies the attribute AT-ALLOWED OFF. With this attribute, the scheduler accepts jobs with the AT attribute but converts the attribute to AFTER. The scheduler does not accept jobs submitted by the F5–Run Now function. Changing the attribute to AT-ALLOWED OFF does not prevent the scheduling and execution of jobs submitted before the attribute was changed. Rescheduling of recurrent jobs (jobs with the CALENDAR or EVERY attribute) continues to occur as usual.

The default value is N.

Submit Allowed

Use the Submit Allowed field to set the SUBMIT-ALLOWED scheduler attribute. The attribute controls submission of all jobs. The field options are:

Y Yes specifies the attribute SUBMIT-ALLOWED ON. With this attribute, the scheduler accepts all jobs submitted by users. The only exceptions are jobs with the AT attribute and jobs submitted by the F5–Run Now function. The scheduler does not accept these jobs if the AT-ALLOWED scheduler attribute is OFF.

N No specifies the attribute SUBMIT-ALLOWED OFF. With this attribute, the scheduler prevents users from submitting jobs. Changing the attribute to SUBMIT-ALLOWED OFF does not prevent the scheduling and execution of jobs submitted before the attribute was changed. Rescheduling of recurrent jobs (jobs with the CALENDAR or EVERY attribute) continues to occur as usual.

The default value is Y.

Stop On Abend

Use the Stop On Abend field to set the DEFAULT-STOP-ON-ABEND scheduler attribute. The attribute specifies the STOP-ON-ABEND attribute adopted by jobs submitted without the attribute. For information on how the attribute affects job processing, see Job Definition on page 6-102.

The default value is N.

Functions

These functions are available on the Scheduler Info screen:

Function	Description
F1–Read	Shows information about the scheduler you specified in the Scheduler field. When you press F1, the name shown above the Scheduler field changes to the name of the scheduler whose information is displayed. The date and time on the system where the scheduler resides appears below your system's date at the top of the screen.
F2–Next	Shows information about the next scheduler on the wild-card scheduler processes list. At the end of the list, the NetBatch-Plus application displays a message advising you no details were found. To display information about the first scheduler on the list, clear the Scheduler field and press F1. When you press F2, the name shown above the Scheduler field changes to the name of the scheduler whose information is displayed. The date and time on the system where the scheduler resides appears below your system's date at the top of the screen.
F3–Status	Displays the Scheduler Status screen. The screen shows statistical information about jobs, classes, and executors associated with the scheduler whose information you displayed on the Scheduler Info screen. The information includes the number of active and suspended processes created by jobs running in the scheduler. It also includes the number of tape drives configured and in use.

* Function is available on screen, but not displayed,

Function	Description
F4–Add	Creates and initializes a new scheduler database. F4 is the same as the BATCHCOM command ADD SCHEDULER. Before you can perform this function, you must create the scheduler process by using F9–Run. The files created by the F4–Add function are: ATTACH — A relative file containing the attachments (ASSIGNs, PARAMs, and DEFINEs) used by the scheduler to establish the initial processing environment for a job. ATTACH0 — The ATTACH alternate key file. BATCHCTL — An unstructured file containing scheduler attributes. When you press F4, the scheduler adopts the default attributes shown in Table 6-8 on page 6-206 unless otherwise specified. CHKQUE — A key-sequenced file containing information used to link job-related information (for example, the time a job is to run) to jobs. CHKQUE0 — The CHKQUE alternate key file. EXECUTOR — A key-sequenced file containing information on executors and their attributes. EXECUTO0 — The EXECUTOR alternate key file. JOB — A key-sequenced file containing information on jobs and their attributes. JOBCLASS — A key-sequenced file containing information on classes and their attributes. JOBCLAS0 — The JOBCLASS alternate key file. NBATTX — A key-sequenced file containing information linking attachments to jobs and vice versa. NBATTX0 — The NBATTX alternate key file. Except for the BATCHCTL file, the scheduler creates the files in the subvolume specified in the Log Vol field. The BATCHCTL file is created in the subvolume specified in the CTL File field. (See the first Caution after this table.) All files created by F4–Add are secured “OOOO” to the super ID (255, 255). In addition, the JOB file is secured with the PROGID security option of the SECURE command in the File Utility Program (FUP). After creating a new scheduler, you must start it by performing the F10–Start function. This function makes the scheduler available for job processing. The F4–Add function is available only to super-group users (255, *n*).

* Function is available on screen, but not displayed,

Function	Description
F6–Alter	Changes the attributes of the current scheduler. F6–Alter has the same function as the BATCHCOM command ALTER SCHEDULER. Table 6-9 on page 6-206 lists scheduler attributes and the fields you use on the Scheduler Info screen to set those attributes. The changes you make with the F6–Alter function take effect as soon as the NetBatch-Plus application finishes executing the function. The only exception to this rule occurs when you change the BACKUPCPU attribute. For this attribute, the function changes the value on the screen and in the scheduler database, but the actual CPU change does not occur until the primary or backup process stops. For more information on changing the backup CPU, see Backupcpu on page 6-196. If an attribute field is blank when you press F6, the NetBatch-Plus application redisplays the attribute set by the F4–Add function. The default value for the field is not used in these circumstances. You cannot use the F6–Alter function to change parameters and options in the scheduler environment fields. These values are specified before performing the F9–Run function and cannot be changed when the scheduler is running. The only exception to this rule concerns the scheduler log file specified in the Log File field. You can change this file as necessary with the F15–Switch Log function. The F6–Update function is available only to super-group users (255, *n*).
F8–Abort	Immediately stops all executing and suspended jobs and halts scheduler operation. F8 is the same as the BATCHCOM command ABORT SCHEDULER. (See the second Caution after this table.) F8–Abort stops the scheduler process after the scheduler stops any executing or suspended jobs. When the process stops, all files in the scheduler's database (including the log file) are closed. The existing scheduler configuration is retained in the files. No scheduler or job control functions are effective after you press F8. To warm start a scheduler halted by the function, perform the F9–Run then F10–Start functions. For more information on warm starting schedulers, see F10–Start. The F8–Abort function is available only to super-group users (255, *n*).

* Function is available on screen, but not displayed,

Function	Description
F9–Run	Runs the scheduler program NETBATCH that creates the primary scheduler process and creates and opens a new scheduler log file. F9–Run has the same function as the TACL run command that executes the NETBATCH program. The NetBatch-Plus application runs the scheduler program using the parameters and options you specified in the scheduler environment fields. The function also adds the name of the scheduler to the wild-card scheduler processes list. The execution priority of the scheduler process is set automatically to 150. To change the priority, use the TACL ALTPRI command. The scheduler process owner is the super-group user you specified in the Owner field. The scheduler log file is secured “NGGG” to the same user. You must perform the F9–Run function before you can use the F4–Add and F10–Start functions. The F9–Run function is available only to super-group users (255, *n*).
F10–Start	Creates the backup scheduler process, opens the scheduler database, and makes the scheduler available for use. F10 is the same as the BATCHCOM command START SCHEDULER. Before you can perform the function, these conditions must exist: ● The primary scheduler process must be running. If the process is not running, use the F9–Run function to create a new process and open a scheduler log file. ● The scheduler database must exist. If there is no database, use the F4–Add function to create and initialize a new database. You can also use F4–Add if the database exists but contains information you do not want to keep. (See the third Caution after this table.) The processing environment when the F10–Start function finishes executing depends on whether you used the F4–Add function before you pressed F10: ● If you performed F4–Add, you must set up the scheduler’s processing environment before you can submit jobs for execution. Setting up the processing environment involves changing scheduler attributes (if necessary) and adding executors and classes. For information on performing these activities, see Section 4, Setting Up the Processing Environment. ● If you did not perform F4–Add, the processing environment is the same as when the scheduler process stopped. Job execution resumes: The scheduler immediately stops jobs executing when the scheduler process stopped. (Processes can still be executing if the scheduler process abended.) Jobs with the RESTART ON attribute are resubmitted for execution. Jobs that do not have the RESTART ON attribute are flagged with a job state of SPECIAL-2.

* Function is available on screen, but not displayed,

Function	Description
	After a one-minute delay, the scheduler starts to select jobs for execution. The delay gives you time to review the jobs scheduled for execution and, if necessary, prevent jobs from executing. All functions are available during the delay period. To prevent job execution, stop an executor or set the INITIATION attribute of a class to OFF. You can also prevent job execution by deleting a job or altering its attributes.
	Cold start and *warm start* are sequences of functions performed on the Scheduler Info screen. Perform a cold start to initialize a new or existing scheduler database. Perform a warm start to restart a stopped scheduler without initializing its database. To cold start the scheduler: 1. Run the scheduler program NETBATCH by performing the F9–Run function. 2. Initialize the scheduler database by using the F4–Add function. 3. Start the scheduler by performing the F10–Start function. To warm start the scheduler: 1. Run the scheduler program NETBATCH by performing the F9–Run function. 2. Restart the scheduler by performing the F10–Start function. The F10–Start function is available only to super-group users (255, *n*).

* Function is available on screen, but not displayed,

Function	Description
F12–Shutdown	Halts scheduler operation. F12–Shutdown has the same function as the BATCHCOM command SHUTDOWN SCHEDULER. When you perform this function, the scheduler lets executing jobs finish but stops suspended jobs immediately. After job execution finishes, all files in the scheduler database (including the log file) will be closed and the scheduler process stopped. The existing scheduler configuration is retained in the files. You cannot submit jobs to the scheduler after you press F12. The function also prevents automatic rescheduling of jobs. The only scheduler and job control functions effective from when you press F12 to when job execution finishes are: ● F8–Abort on the Scheduler Info screen ● F12–Stop on the Job Status screen No scheduler and job control functions are effective after job execution finishes. To warm start a scheduler halted by the function, perform the F9–Run and F10–Start functions (in that order). For more information about warm starting schedulers, see the preceding description of the F10–Start function. The F12–Shutdown function is only available to super-group users (255, *n*).
F14–Switch CPU	Changes the backup scheduler process to the primary scheduler process. The former primary process becomes the backup. F14–Switch CPU has the same function as the BATCHCOM command SWITCHCPU SCHEDULER. The F14–Switch CPU function is available only to super-group users (255, *n*).
F15–Switch Log	Closes the current scheduler log file and opens a new log file. F15–Switch Log has the same function as the BATCHCOM command SWITCHLOG SCHEDULER. You can either specify the name of the new file (in the Log File field) before you press F15, or you can accept the default file name. For more information about log file names, see the preceding description of the Log File field. The F15–Switch Log function is available only to super-group users (255, *n*).
F16–Previous Screen*	Displays the previous screen on the menu path.

* Function is available on screen, but not displayed,

Function	Description
SF1–Screen Help*	Displays information about the Scheduler Info screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Scheduler Info screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Job Inquiry screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

△ **Caution.** If the specified subvolumes contain closed files from an existing scheduler database, the scheduler purges those files before creating the new files. The scheduler does not purge open files or scheduler log files.

△ **Caution.** This function does not let executing jobs finish before it halts operation of the scheduler. Use this function only in an emergency (for example, when jobs are damaging the scheduler database). Under normal operating conditions, use F12–Shutdown to stop a scheduler.

△ **Caution.** The F4–Add function purges existing scheduler files from the scheduler database before creating new files. Do not press F4 until you are certain the existing files are not required.

Table 6-8. Default Scheduler Attributes

Scheduler Attributes	Default
AT-ALLOWED	OFF
BACKUPCPU	*
DEFAULT-CLASS	DEFAULT
DEFAULT-EXECUTOR-PROGRAM	$SYSTEM.SYSTEM.TACL
DEFAULT-MAXPRINTLINES	NOMAX
DEFAULT-MAXPRINTPAGES	NOMAX
DEFAULT-OUT	$S.#BATCH
DEFAULT-PRI	120
DEFAULT-SELPRI	3
DEFAULT-STOP-ON-ABEND	OFF
SUBMIT-ALLOWED	ON
TAPEDRIVES	2

Table 6-9. Scheduler Attribute Fields on Scheduler Info Screen

Scheduler Attributes	Field Where Set
AT-ALLOWED	At Allowed
BACKUPCPU	Backupcpu
DEFAULT-CLASS	Class
DEFAULT-EXECUTOR-PROGRAM	Exec. Prg.
DEFAULT-MAXPRINTLINES	Max Lines
DEFAULT-MAXPRINTPAGES	Max Pages
DEFAULT-OUT	Out
DEFAULT-PRI	Pri
DEFAULT-SELPRI	Selpri
DEFAULT-STOP-ON-ABEND	Stop On Abend
SUBMIT-ALLOWED	Submit Allowed
TAPEDRIVES	Tapedrives

Scheduler Interface

Use the Scheduler Interface screen to gain access to any of the screens with highlighted names. NetBatch-Plus security prevents you from displaying screens whose names appear in regular text.

Figure 6-34. Scheduler Interface Screen

```
NETBATCH-PLUS            SCHEDULER INTERFACE            01Jan2002   SNP200



                         F1   Job Info
                         F2   Job Status
                         F3   Job Inquiry
                         F4   Scheduler Info
                         F5   Scheduler Status
                         F6   Class Details
                         F7   Executor Info
                         F8   Executor Status
                         F9   Wild-Card Processes
```

Displaying the Screen

From the Main Menu screen, press F9 to display the Scheduler Interface screen.

Field Descriptions

There are no data entry or display-only fields on the Scheduler Interface screen.

Functions

These functions are available on the Scheduler Interface screen:

Function	Description
F1–Job Info	Displays the Job Info screen. From this screen, you can go to: ● Job Inquiry ● Job Status
F2–Job Status	Displays the Job Status screen. From this screen, you can go to: ● Job Info ● Job Inquiry

* Function is available on screen, but not displayed,

Function	Description
F3–Job Inquiry	Displays the Job Inquiry screen. From this screen, you can go to: ● Job Info ● Job Status
F4–Scheduler Info	Displays the Scheduler Info screen. From this screen, you can go to the Scheduler Status screen.
F5–Scheduler Status	Displays the Scheduler Status screen. From this screen, you can go to the Scheduler Info screen.
F6–Class Details	Displays the Class Details screen.
F7–Executor Info	Displays the Executor Info screen. From this screen, you can go to the Executor Status screen.
F8–Executor Status	Displays the Executor Status screen. From this screen, you can go to the Executor Info screen.
F9–Wild-Card Processes	Displays the Wild-Card Processes screen.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Scheduler Interface screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Scheduler Interface screen, press F16.
SF5–Password*	Displays the Password Validation screen. To return to the Scheduler Interface screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Scheduler Status

Use the Scheduler Status screen to display statistical information about a scheduler's jobs, classes, and executors. The information includes the number of active and suspended processes created by jobs running in the scheduler. It also includes the number of tape drives configured and in use.

Figure 6-35. Scheduler Status Screen

```
NETBATCH-PLUS            SCHEDULER STATUS                 01Jan2002   SNP250
           \WORLD.$ZBAT                                   31Dec2001 22:00
Scheduler: \*.$*_________     Owner: SUPER.SUPER


              Off   On
  Class    :    5   13


              Off   On Actve Stop Down  Del
  Executor :    1    3    2    0    0    1


            Actv Susp
  Processes:    4    0


            Redy Exec Spec Time Evnt Susp Rnxt Rnow Tape
  Job      :    1    2    1    2    1    0    0    0    1

  Tapedrives: 2   Configured;   0   In Use

 F1-Read                 F2-Next                    F3-Info
```

Displaying the Screen

You can display the Scheduler Status screen from either of these screens:

- From the Scheduler Interface screen, press F5.
- From the Scheduler Info screen, press F3.

Field Descriptions

Scheduler

Use the Scheduler field to specify, in this form, the schedulers about which you want to inquire:

`[\system-name.]$process-name`

system-name

is the name of the system where the scheduler process resides. You do not have to enter the name if the process resides in the default system (the system where the NetBatch-Plus Pathway system is running).

process-name

is the name of the scheduler process.

You can specify a single scheduler or a range of schedulers from the wild-card scheduler processes list. To specify a single scheduler, enter the system name and process name in full (for example, \WORLD.$ZBAT). You can leave out the system name if the process resides in the default system. To specify a range of schedulers, use the question mark (?) and asterisk (*) wild-card characters in the name. For more information on specifying schedulers, see the description of the Scheduler field in Scheduler Info on page 6-190.

Owner

The Owner field shows the Guardian user ID of the scheduler owner. You cannot enter information in this field.

Class

The Class fields show the number of classes with the INITIATION ON attribute and the number with the INITIATION OFF attribute. For information on the INITIATION class attribute, see Class Details on page 6-62. You cannot enter information in Class fields.

Executor

The Executor fields show, for each executor state, the number of executors in that state. For information on executor states, see Executor Status on page 6-81. You cannot enter information in Executor fields.

Processes

The Processes fields show the number of active and suspended processes created by jobs running in the scheduler. You cannot enter information in these fields.

Job

The Job fields show, for each job state, the number of jobs in that state. For information on job states, see Job Status on page 6-159. You cannot enter information in Job fields.

Tapedrives

The Tapedrives fields show the number of tape drives available for use and the number of drives actually in use. You cannot enter information in these fields.

Functions

These functions are available on the Scheduler Status screen:

Function	Description
F1–Read	Shows information about the scheduler you specified in the Scheduler field.
F2–Next	Shows information about the next scheduler on the wild-card scheduler processes list. At the end of the list, the NetBatch-Plus application displays a message advising you no details were found. To display information about the first scheduler on the list, clear the Scheduler field and press F1.
F3–Info	Displays the Scheduler Info screen. The screen shows details of the scheduler whose information was displayed on the Scheduler Status screen.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Scheduler Status screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Scheduler Status screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Scheduler Status screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Screen Security

Use the Screen Security screen to define user access privileges to all screens except those listed on the Scheduler Interface screen. Use the Utility Security screen to define user access privileges to screens listed on the Scheduler Interface screen.

Figure 6-36. Screen Security Screen

```
NETBATCH-PLUS            SCREEN SECURITY                 01Jan2002   SNP101

NBP User: NEWUSER1
Codes:   M-Modify, I-Inquiry,          Codes:   I-Inquiry, Blank-No Access
         Blank-No Access
SNP010   Bulk Submit Environment  _    SNP130   Utility Menu               _
SNP020   Defaults Set Details     I    SNP200   Scheduler Interface        I
SNP030   Job Definition           M

SNP030A  Job ASSIGNs              M    SNP300   Reports                    _
SNP030D- Job DEFINEs              M
SNP030P  Job PARAMs               M
SNP030DP Job Dependencies         M
SNP030S  Bulk Selection Criteria  _

SNP040   Catalog ASSIGNs          _    Codes:
SNP050D- Catalog DEFINEs          _    S-Supervisor, P-Change Own Password,
SNP060   Catalog PARAMs           _    I-Inquiry,    Blank-No Access

SNP070   Calendar                 I    SNP100   Security                   P
SNP080   Ad Hoc Job Selection     M
SNP090   Bulk Submit            M
F1-Read     F2-Next      F4-Add       F6-Update    F8-Delete    F10-More
```

Displaying the Screen

From the Security Supervise screen, press F10 to display the Screen Security screen. The screen shows information about the user whose details you displayed on the Security Supervise screen.

Field Descriptions

NBP User

Use the NBP User field to name the NetBatch-Plus user whose access privileges you want to define, inquire about, or update. You can also use the screen to add or delete the NetBatch-Plus user record.

When you display the screen, the field shows the name of the user whose details you displayed on the Security Supervise screen.

Access Code

Use the single-character access code fields to specify screen access privileges for the user. The field options are:

I Inquiry access gives the user access to the screen for inquiry purposes only.

M Modify access gives the user unlimited access to the screen and its functions. This option is available for all screens except Reports, Scheduler Interface, Security Supervise, Utility Menu.

P Password access gives the user limited access to the Security Supervise, Screen Security, and Utility Security screens. Users with this access level can change their own password. They can also inquire about other NetBatch-Plus users, but they cannot add or update user records. This option is available for the Security Supervise screen only.

S Supervisor access gives the user unlimited access to all NetBatch-Plus screens and functions. This option is available for the Security Supervise screen only and overrides automatically all other access codes.

Blank Prevents the user from gaining access to the screen.

When you display the screen, the field shows information about the user whose details you displayed on the Security Supervise screen.

Functions

These functions are available on the Screen Security screen:

Function	Description
F1–Read	Shows information about the NetBatch-Plus user specified in the NBP User field.
F2–Next	Shows information about the next NetBatch-Plus user on file. The NetBatch-Plus application lists users alphabetically by name.
F4–Add	Adds a new NetBatch-Plus user record to the NetBatch-Plus database. The NetBatch-Plus application creates the record using information from the Security Supervise, Screen Security, and Utility Security screens. Check the information on each of these screens before you add the record. This check helps you avoid adding a user record containing unwanted information from the previously displayed user. You can add user records only if you have S (Supervisor) access to the Security Supervise screen.
F6–Update	Updates the NetBatch-Plus user record to reflect changes you made on the Security Supervise, Screen Security, and Utility Security screens. You can update user records only if you have S (Supervisor) access to the Security Supervise screen. The exception is your own password, which you can change if you have P (Password) access to the Security Supervise screen.

* Function is available on screen, but not displayed,

Function	Description
F8–Delete	Deletes the NetBatch-Plus user record from the NetBatch-Plus database. You can delete user records only if you have S (Supervisor) access to the Security Supervise screen.
F10–More	Displays the Utility Security screen. Use the Utility Security screen to define user access privileges to programs on the Utility Menu screen and to screens on the Scheduler Interface screen.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Screen Security screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next ->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Screen Security screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Screen Security screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Security Supervise

Use the Security Supervise screen to define NetBatch-Plus user names and passwords and to link defaults sets to the names. Users with access to these names and passwords can use them to sign on to the NetBatch-Plus application. You can also use the screen to specify the schedulers and classes available to the users on the Job Definition, Bulk Submit, and Ad Hoc Job Selection screens.

Figure 6-37. Security Supervise Screen

```
NETBATCH-PLUS            SECURITY SUPERVISE              01Jan2002   SNP100

NBP User: NEWUSER1 , _________________ Set: DEF-SET-1_

                     Job Environment Limits

                     Scheduler      Class

Job Definition    : \WORLD.$*_____ CLASS??_________________

Bulk Submit       : \SYS??.$ZBAT__ CLASS-EXEC-1____________

Ad Hoc Submit     : \*DEV.$Z???___ DG*_____________________




F1-Read     F2-Next      F4-Add       F6-Update    F8-Delete    F10-More
```

Displaying the Screen

From the Main Menu screen, press F11 to display the Security Supervise screen. The screen shows information about the signed-on user.

Field Descriptions

NBP User

Use the two-part NBP User field to enter the name and, optionally, the password of a NetBatch-Plus user.

In the first part of the field, enter the user name. The name can contain up to eight letters and numbers and can include but not begin or end with hyphens. It cannot contain spaces. NetBatch-Plus user names are not associated with Guardian user IDs.

In the second part of the field, enter the password. The password can contain up to eight letters, numbers, and other characters but not spaces.

NetBatch-Plus does not display the characters you type and clears the password from the field after validation. If you want to enter control characters in the password:

- A circumflex (^) is equivalent to the CTRL key. To enter a control character in the password, enter ^ before the character instead of pressing CTRL. For example, enter ^A instead of pressing CTRL+A.
- If the password contains ^, enter ^^. For example, if the password is AB^, enter AB^^.
- If the password contains the control character generated by CTRL+^, enter ^@.

Passwords apply only at signon time on the Main Menu screen. A password is not a prerequisite to performing functions on the Security Supervise screen.

You can change your own password if you have S (Supervisor) or P (Password) access to the Security Supervise screen. You can change the password of other users only if you have S (Supervisor) access to the Security Supervise screen.

When you display the screen from the Main Menu screen, the field shows the name of the signed-on user.

Note. NetBatch-Plus software contains details of user NBP. User NBP enables your system administrator to sign on for the first time after installing the software, add new users, and set up the processing environment. For information on signing on as user NBP, see 2. Sign On for the First Time on page 4-16.

Set

Use the Set field to enter the name of the defaults set you want to associate with the user. The name must identify a defaults set defined on the Defaults Set Details screen.

When you display the Security Supervise screen from the Main Menu screen, the field shows the defaults set of the signed-on user.

Job Definition

Use the two-part Job Definition field to specify the schedulers and classes available to the user on the Job Definition screen. The field determines which schedulers and classes the user can specify when adding, updating, or duplicating jobs on that screen.

In the first part of the field, specify the schedulers in the form:

`[\`*`system-name`*`.]$`*`process-name`*

`system-name`

is the name of the system where the scheduler process resides. You do not have to enter the name if the process resides in the default system (the system where the NetBatch-Plus Pathway system is running).

`process-name`

is the name of the scheduler process.

You can specify a single scheduler or a range of schedulers from the wild-card scheduler processes list. To specify a single scheduler, enter the system name and process name in full (for example, \WORLD.$ZBAT). You can leave out the system name if the process resides in the default system. To specify a range of schedulers, use the question mark (?) and asterisk (*) wild-card characters in the name. For more information on specifying schedulers, see the description of the Scheduler field in Scheduler Info on page 6-190.

In the second part of the field, specify the classes. You can specify a single class or a range of classes. To specify a single class, enter the class name in full (for example, CLASS-EXEC-1). To specify a range of classes, use the question mark (?) and asterisk (*) wild-card characters in the name.

When you display the screen from the Main Menu screen, the fields show the schedulers and classes available to the signed-on user.

Bulk Submit

Use the two-part Bulk Submit field to specify the schedulers and classes available to the user on the Bulk Submit screen. The field determines the schedulers and classes from which the NetBatch-Plus application selects jobs for the user’s bulk submit runs.

For information about specifying the schedulers and classes, see the preceding description of the Job Definition field.

Ad Hoc Submit

Use the two-part Ad Hoc Submit field to specify the schedulers and classes available to the user for job submission on the Job Definition and Ad Hoc Job Selection screens. The field determines which schedulers and classes the user can specify when submitting jobs on those screens.

For information about specifying the schedulers and classes, see the preceding description of the Job Definition field.

Functions

These functions are available on the Security Supervise screen:

Function	Description
F1–Read	Shows information about the NetBatch-Plus user specified in the NBP User field.
F2–Next	Shows information about the next NetBatch-Plus user on file. The NetBatch-Plus application lists users alphabetically by name.

* Function is available on screen, but not displayed,

Function	Description
F4–Add	Adds a new NetBatch-Plus user record to the NetBatch-Plus database. The NetBatch-Plus application creates the record using information from the Security Supervise, Screen Security, and Utility Security screens. Check the information on each of these screens before you add the record. This check helps you to avoid adding a user record containing unwanted information from the previously displayed user. You can add user records only if you have S (Supervisor) access to the Security Supervise screen.
F6–Update	Updates the NetBatch-Plus user record to reflect changes you made on the Security Supervise, Screen Security, and Utility Security screens. You can update user records only if you have S (Supervisor) access to the Security Supervise screen. The exception is your own password, which you can change if you have P (Password) access to this screen.
F8–Delete	Deletes the NetBatch-Plus user record from the NetBatch-Plus database. You can delete user records only if you have S (Supervisor) access to the Security Supervise screen.
F10–More	Displays the Screen Security screen. Use the Screen Security screen to define user access privileges to all screens except those listed on the Scheduler Interface screen.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Security Supervise screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Security Supervise screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Security Supervise screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Utility Menu

Use the Utility Menu screen to run, without leaving the NetBatch-Plus application, any of the processes with highlighted names. (NetBatch-Plus security prevents you from running processes whose names appear in regular text.) Figure 6-38 shows the format of the standard screen supplied with NetBatch-Plus software.

You can customize the Utility Menu screen to suit your own processing environment. All processes shown on the screen can be replaced except for BATCHCOM, the NetBatch command interpreter. For information on customizing the Utility Menu screen, see Section 3, Changing the NetBatch-Plus Pathway Configuration.

Figure 6-38. Utility Menu Screen

```
NETBATCH-PLUS            UTILITY MENU                    13Jun2002   SNP130

User : ADMIN.OPER1       Password    ________________

Parameter: \SYSOP.$BATCH.MYFILES.DGBATCH

     Process   Default Startup Parameter

F1   BATCHCOM  \WORLD.$ZBAT
F2   PERUSE
F3   SPOOLCOM
F4   PATHCOM
F5   FUP
F6   EDIT
F7   TACL
F8   TMFCOM
F9   PUP
F10  TEDIT
F11  BATCHCAL
F12  ENFORM
F13  SQLCI
F14  MEDIACOM
```

Displaying the Screen

From the Main Menu screen, press F8 to display the Utility Menu screen.

Field Descriptions

User

Use the User field to enter a Guardian user ID. This user will own the process you select and any reports or files the process creates. For more information on entering Guardian user IDs, see Password Validation on page 6-182. When you display the screen, the field shows one of these user IDs:

- The user ID from the defaults set associated with the signed-on user. The NetBatch-Plus application shows this ID if no other IDs have been validated during the current session.

- The user ID of the last user validated by a function performed during the current session.

Password

Use the Password field to enter the password of the Guardian user specified in the User field. The NetBatch-Plus application does not display the characters you type and clears the password from the field after validation. For more information on password entry, see Password Validation on page 6-182.

The password is not required if you validated the user ID on the Password Validation screen or performed another function requiring password entry.

Parameter

Use the Parameter field to specify the startup message for the process you select. Table 6-10 on page 6-220 gives examples for the processes shown on the standard Utility Menu screen.

Note. Some processes for which you specify a startup message return the Utility Menu screen immediately after execution. Therefore, you might not have time to view the result of the command executed by the process. For example, a FUP process executes an INFO command, displays file details, and returns the Utility Menu screen without pausing for you to read those details. To see the results of commands executed by processes behaving in this way, leave the Parameter field blank and execute the commands from within the process.

If you select the BATCHCOM command interpreter but do not specify a scheduler in the Parameter field, the BATCHCOM process opens the last scheduler referenced. The NetBatch-Plus application shows the name of this scheduler on the right of the F1 function key display.

The process you select uses the logon defaults of the specified Guardian user when expanding partial file names. Logon defaults are the system, volume, subvolume, and file security values in effect when the user logged on to the system. To override logon defaults, specify current defaults in the Parameter field, or qualify file names within the process. For more information on logon defaults, current defaults, file-name expansion, and qualifying file names, see the *Guardian User's Guide*.

Table 6-10. Parameter Examples for Utility Menu Processes (page 1 of 2)

Process	Parameter
BATCHCOM	\SALES.$LDS
PERUSE	\REMOTE.$SPLS
SPOOLCOM	JOB (LOC #ENFM), HOLD, DELETE !
PATHCOM	$NBX; SHOW /OUT $S.#PTHCM/ CMDVOL
FUP	DUP INFILE1, INFILE2
EDIT	MYFILE R; LB /DATE/A

Table 6-10. Parameter Examples for Utility Menu Processes (page 2 of 2)

Process	Parameter
TACL	;SEGVOL $ADMIN
TMFCOM	INFO DUMPS $DATA3.NBPOBX.*, BRIEF
PUP	LISTDEV /OUT $S.#LPT2/ 3
TEDIT	LOGFILE; USEP WIDE; LAST
BATCHCAL	Not applicable
ENFORM	$DATA3.NBPDAT.DICT
SQLCI	CREATE CATALOG; FILEINFO *;

Functions

These functions are available on the standard Utility Menu screen:

Function	Description
F1–BATCHCOM	Runs BATCHCOM, the NetBatch command interpreter. Use the command interpreter to execute commands that control NetBatch schedulers and their objects. When you exit from the command interpreter, the NetBatch-Plus application returns you to the Utility Menu screen. If you select this function but do not specify a scheduler in the Parameter field, the BATCHCOM process opens the last scheduler referenced. The NetBatch-Plus application shows the name of this scheduler on the right of the F1 function key display. For information on using the BATCHCOM command interpreter, see the *NetBatch User's Guide*.
F2–PERUSE	Runs PERUSE, the interactive program you use to examine and change the attributes of a spooled job. When you exit the program, the NetBatch-Plus application returns you to the Utility Menu screen. For information on using the PERUSE program, see the *Spooler Utilities Reference Manual.*
F3–SPOOLCOM	Runs SPOOLCOM, the command interface to the spooler system. Use the interface to create and initialize the components of the spooler system. You can also use the interface to get information about the status of spooler components (for example, collectors, jobs), start offline devices, and cause a device printing a job to skip pages. When you exit from the interface, the NetBatch-Plus application returns you to the Utility Menu screen. For information on using the SPOOLCOM command interface, see the *Spooler Utilities Reference Manual*.

* Function is available on screen, but not displayed,

Function	Description
F4–PATHCOM	Runs PATHCOM, the command interface to the Pathway monitor process PATHMON. Use the interface to describe terminals, terminal control processes, and servers to the Pathway system. When you exit from the interface, the NetBatch-Plus application returns you to the Utility Menu screen. For information on using the PATHCOM command interface, see the *Pathway/TS System Management Manual*.
F5–FUP	Runs FUP, the File Utility Program. You can use the program to perform many functions involving disk files and devices such as tape drives. For example, you can create, display, duplicate, and purge files, alter file characteristics, and load data into files. When you exit from the program, the NetBatch-Plus application returns you to the Utility Menu screen. For information on using the FUP program, see the *File Utility Program (FUP) Reference Manual*.
F6–EDIT	Runs the text editing program EDIT. The program provides two editors: EDIT (a line editor) and EDIT VS (a screen editor). You can use either of these editors to write documents and store them on the computer. When you exit from the program, the NetBatch-Plus application returns you to the Utility Menu screen. For information on using the EDIT program, see the *Edit User's Guide and Reference Manual.*
F7–TACL	Runs TACL (Tandem Advanced Command Language), the standard command interpreter for the Guardian operating system. Use the TACL command interpreter to manipulate files, devices, and data, control processes, and interact with the system environment and the TACL environment. You can also use TACL built-in functions and variables to define your own commands and to develop routines. The NetBatch-Plus application starts a new TACL process on your terminal when you select this function. After starting the process, you must log on (using a Guardian user ID) before you can begin entering commands. To stop the process and return to the Utility Menu screen, use the TACL EXIT command while you are still logged on. (You cannot return to the Utility Menu screen if you log off.) For information on using the TACL command interpreter, see the *Tandem Advanced Command Language (TACL) Reference Manual*.
F8–TMFCOM	Runs TMFCOM, the utility you use to configure and control the Transaction Management Facility (TMF). When you exit from the utility, the NetBatch-Plus application returns you to the Utility Menu screen. For information on using the TMFCOM utility, see the *TMF Reference Manual*.

* Function is available on screen, but not displayed,

Function	Description
F9–PUP	On systems running D-series RVUs, runs PUP, the Peripheral Utility Program. Use the program to perform various operations on disks and other peripheral devices connected to the system. For example, you can prepare uninitialized disk packs for use or make devices inaccessible to user processes. When you exit from the program, the NetBatch-Plus application returns you to the Utility Menu screen. For information on using the PUP program, see the *Peripheral Utility Program (PUP) Reference Manual*.
F10–TEDIT	Runs the text editor PS TEXT EDIT (TEDIT). Use the TEDIT editor to write documents and store them on the computer. When you exit from the editor, the NetBatch-Plus application returns you to the Utility Menu screen. For information on using the TEDIT editor, see the *PS TEXT EDIT Reference Manual*.
F11–BATCHCAL	Runs BATCHCAL, the NetBatch program that creates a calendar file from an EDIT-format source file. When you exit from the program, the NetBatch-Plus application returns you to the Utility Menu screen. You cannot use the Parameter field when you select the BATCHCAL program. For information on using the BATCHCAL program, see the *NetBatch User's Guide*.
F12–ENFORM	Runs Enform, the database query and report writing language. Use the language to create customized reports about information in your NetBatch-Plus database. When you exit from the Enform process, the NetBatch-Plus application returns you to the Utility Menu screen. For information on using the Enform language, see the *ENFORM Reference Manual*.
F13–SQLCI	Runs SQLCI, the command interface to a NonStop SQL/MP database. Use the interface to create or alter NonStop SQL/MP tables, query the NonStop SQL/MP database, or run any NonStop SQL/MP utility. When you exit from the interface, the NetBatch-Plus application returns you to the Utility Menu screen. For information on using the SQLCI command interface, see the *NonStop SQL Conversational Interface Reference Manual*.
F14-MEDIACOM	Runs MEDIACOM, the command interface for labeled-tape operations. Use the program to label, catalog, and manage tapes.
F16–Previous Screen*	Displays the previous screen on the menu path.

* Function is available on screen, but not displayed,

Function	Description
SF1–Screen Help*	Displays information about the Utility Menu screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Utility Menu screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Utility Menu screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

* Function is available on screen, but not displayed,

Utility Security

Use the Utility Security screen to define user access privileges to processes on the Utility Menu screen and to screens on the Scheduler Interface screen.

Figure 6-39. Utility Security Screen

```
NETBATCH-PLUS            UTILITY SECURITY                01Jan2002   SNP102

NBP User: NEWUSER1
Codes:   I-Inquiry, Blank-No Access   Codes:   M-Modify, I-Inquiry,
                                               Blank-No Access
      Utility Menu                    Scheduler Interface

      BATCHCOM              I         SNP210   Job Info                  M
      PERUSE                I         SNP220   Job Status                M
      SPOOLCOM              _         SNP230   Job Inquiry               M
      PATHCOM               _         SNP240   Scheduler Info            _
      FUP                   _         SNP250   Scheduler Status          _
      EDIT                  I         SNP260   Class Details             _
      TACL                  _         SNP270   Executor Info             I
      TMFCOM                _         SNP280   Executor Status           I
      PUP                   _         SNP290   Wild-Card Processes       _
      TEDIT                 _
      BATCHCAL              _
      ENFORM                I
      SQLCI                 _
      MEDIACOM              _

F1-Read     F2-Next      F4-Add       F6-Update    F8-Delete    F10-More
```

Displaying the Screen

From the Screen Security screen, press F10 to display the Utility Security screen. The screen shows information about the user whose details you displayed on the Screen Security screen.

Field Descriptions

NBP User

Use the NBP User field to name the NetBatch-Plus user whose access privileges you want to define, inquire about, or update. You can also use the screen to add or delete the NetBatch-Plus user record.

When you display the screen, the field shows the name of the user whose details you displayed on the Screen Security screen.

Access Code

Use the single-character access code fields to specify the access privileges the user has to the listed processes and screens. The field options are:

I For processes listed on the Utility Menu screen, inquiry access lets the user run the process. For screens listed on the Scheduler Interface screen, inquiry access gives the user access to the screen for inquiry purposes only.

M Modify access gives the user unlimited access to the screen and its functions. This option is available only for screens listed on the Scheduler Interface screen.

Blank For processes listed on the Utility Menu screen, this option prevents the user from running the process. For screens listed on the Scheduler Interface screen, this option prevents the user from gaining access to the screen.

When you display the screen, the field shows information about the user whose details you displayed on the Screen Security screen.

Functions

These functions are available on the Utility Security screen:

Function	Description
F1–Read	Shows information about the NetBatch-Plus user specified in the NBP User field.
F2–Next	Shows information about the next NetBatch-Plus user on file. The NetBatch-Plus application lists users alphabetically by name.
F4–Add	Adds a new NetBatch-Plus user record to the NetBatch-Plus database. The NetBatch-Plus application creates the record using information from the Security Supervise, Screen Security, and Utility Security screens. Check the information on each of these screens before you add the record. This check helps you to avoid adding a user record containing unwanted information from the previously displayed user. You can add user records only if you have S (Supervisor) access to the Security Supervise screen.
F6–Update	Updates the NetBatch-Plus user record to reflect changes you made on the Security Supervise, Screen Security, and Utility Security screens. You can update user records only if you have S (Supervisor) access to the Security Supervise screen. The exception is your own password, which you can change if you have P (Password) access to the Security Supervise screen.
F8–Delete	Deletes the NetBatch-Plus user record from the NetBatch-Plus database. You can delete user records only if you have S (Supervisor) access to the Security Supervise screen.
F10–More	Displays the Security Supervise screen. Use the Security Supervise screen to define NetBatch-Plus user names and to assign passwords and defaults sets to those users. You can also use the screen to specify the schedulers and classes available to the users on the Job Definition, Bulk Submit, and Ad Hoc Job Selection screens.

Function	Description
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Utility Security screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Utility Security screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Utility Security screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

Wild-Card Processes

Use the Wild-Card Processes screen to add new processes to a wild-card processes list. You can also use the screen to inquire about, update, or delete processes already on a list.

A wild-card processes list is a table of fully qualified process names. There are two types of processes lists: scheduler and spooler. Scheduler lists contain the names of scheduler processes. Spooler lists contain the names of spooler supervisor processes.

The NetBatch-Plus application uses the lists to search for scheduler or spooler supervisor process names matching a user-entered name containing wild-card characters. (Users can enter wild-card characters in scheduler and spooler names on some screens.) Instead of performing a time-consuming search of all systems for matching processes, the application makes a quick search of the relevant list. If there is no match, the application displays a message advising no details were found. Users can specify processes that are not on a list but only by entering system and process names in full.

The NetBatch-Plus application automatically adds scheduler names to the scheduler processes list whenever the F9–Run function is performed on the Scheduler Info screen.

Figure 6-40. Wild-Card Processes Screen

```
NETBATCH-PLUS            WILD-CARD PROCESSES              26Jun2002   SNP290

     Process Type : N NETBATCH

 (A,D, or U) Process Name             (A,D, or U) Process Name
          _ \LONDON.$DG___ 26Jun 00:57          _ ________________
          D \NEWYORK.$BANK 25Jun 19:57          _ ________________
          _ \PARIS.$NBP___ 26Jun 01:57          _ ________________
          _ \SYDNEY.$A____ 26Jun 09:57          _ ________________
          _ \TOKYO.$ENG___ 26Jun 09:57          _ ________________
          _ \WORLD.$ZBAT__ 26Jun 09:57          _ ________________
          U \ZURICH.$WORK_ 26Jun 01:57          _ ________________
          A \ACCTS.$BTCH__                      _ ________________
          A \FINANCE.$EOP_                      _ ________________
          _ ________________                    _ ________________
          _ ________________                    _ ________________
          _ ________________                    _ ________________
          _ ________________                    _ ________________
          _ ________________                    _ ________________
          _ ________________                    _ ________________

 F1-Read                    F2-Next                  F6-Maintain
```

Displaying the Screen

From the Scheduler Interface screen, press F9 to display the Wild-Card Processes screen.

Field Descriptions

Process Type

Use the Process Type field to specify the wild-card processes list you want to display. The field options are:

N NetBatch scheduler processes

S Spooler supervisor processes

When you press a function key, the NetBatch-Plus application shows the process type description next to the field. When you display the screen, the field contains the default value N.

A, D, or U

Use the fields in the A, D, or U column to indicate the maintenance functions you want to perform on the corresponding processes. The NetBatch-Plus application executes these functions when you press F6–Maintain. The field options are:

A Adds the process to the list specified in the Process Type field.

D Deletes the process from the list specified in the Process Type field.

U Updates the process name on the list specified in the Process Type field.

Process Name

Use the fields in the Process Name column to enter, in this form, the names of scheduler or spooler supervisor processes you want to add to a list. The fields also show the names of processes already on the list.

```
[\system-name.]$process-name
```

system-name

is the name of the system where the scheduler process resides. You do not have to enter the name if the process resides in the default system (the system where the NetBatch-Plus Pathway system is running).

process-name

is the name of the scheduler process.

Some examples of processes specified in this form are \WORLD.$ZBAT (scheduler process) and \SALES.$SPLS (spooler supervisor process).

When you press F6–Maintain to add the process, the NetBatch-Plus application shows, next to the field, the date and time on the system where the process resides.

Functions

These functions are available on the Wild-Card Processes screen:

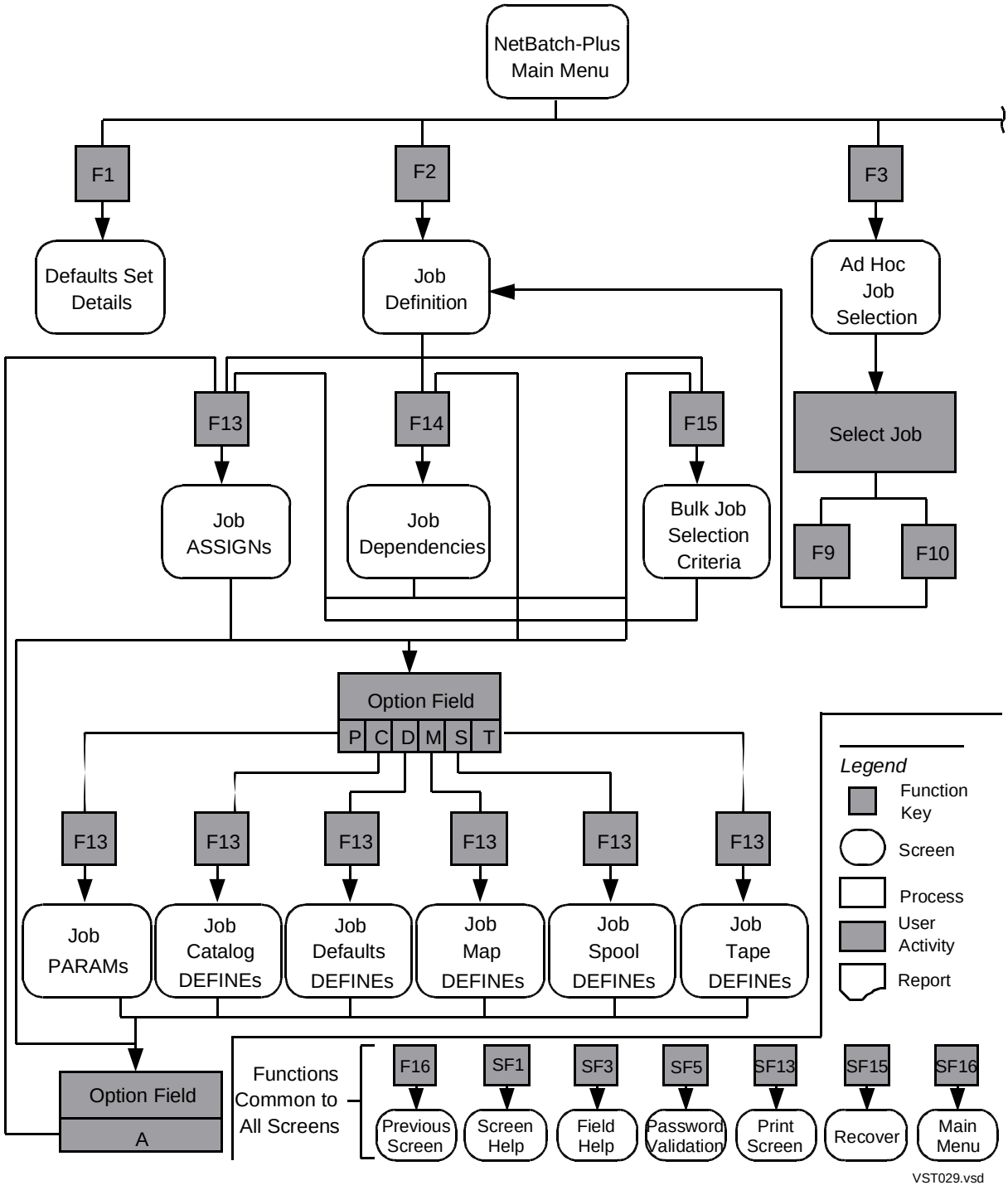
Function	Description
F1–Read	Lists, in alphabetic order, processes of the type you specified in the Process Type field.
F2–Next	Continues the listing of processes of the specified process type.
F6–Maintain	Adds, deletes, or updates processes on a list according to the values in the A, D, or U column fields.
F16–Previous Screen*	Displays the previous screen on the menu path.
SF1–Screen Help*	Displays information about the Wild-Card Processes screen. If there is more than one page of help text, the NetBatch-Plus application displays “Next -->” at the bottom right of your screen. ● To go to the next page, press the Next Page key on your keyboard. ● To go to the previous page, press the Prev Page key. To return to the Wild-Card Processes screen, press F16.
SF3–Field Help*	Displays information about the field where you positioned the cursor. You can position the cursor anywhere in a field to get field help. For information on displaying multiple pages of help text, see SF1–Screen Help*.
SF5–Password*	Displays the Password Validation screen. To return to the Wild-Card Processes screen, press F16.
SF13–Print*	Copies the first 24 lines of the screen to the output file configured for your terminal. After making the copy, the NetBatch-Plus application displays the name of the output file at the bottom left of your screen. If the file is a spooler process, the owner of the spooler job is the owner of the NetBatch-Plus Pathway system.
SF15–Recover*	Restores your screen to the state it was in the last time you pressed a function key. You can use this function for screen recovery when unplanned breaks in data transmission garble the information displayed.
SF16–Main Menu*	Displays the Main Menu screen.

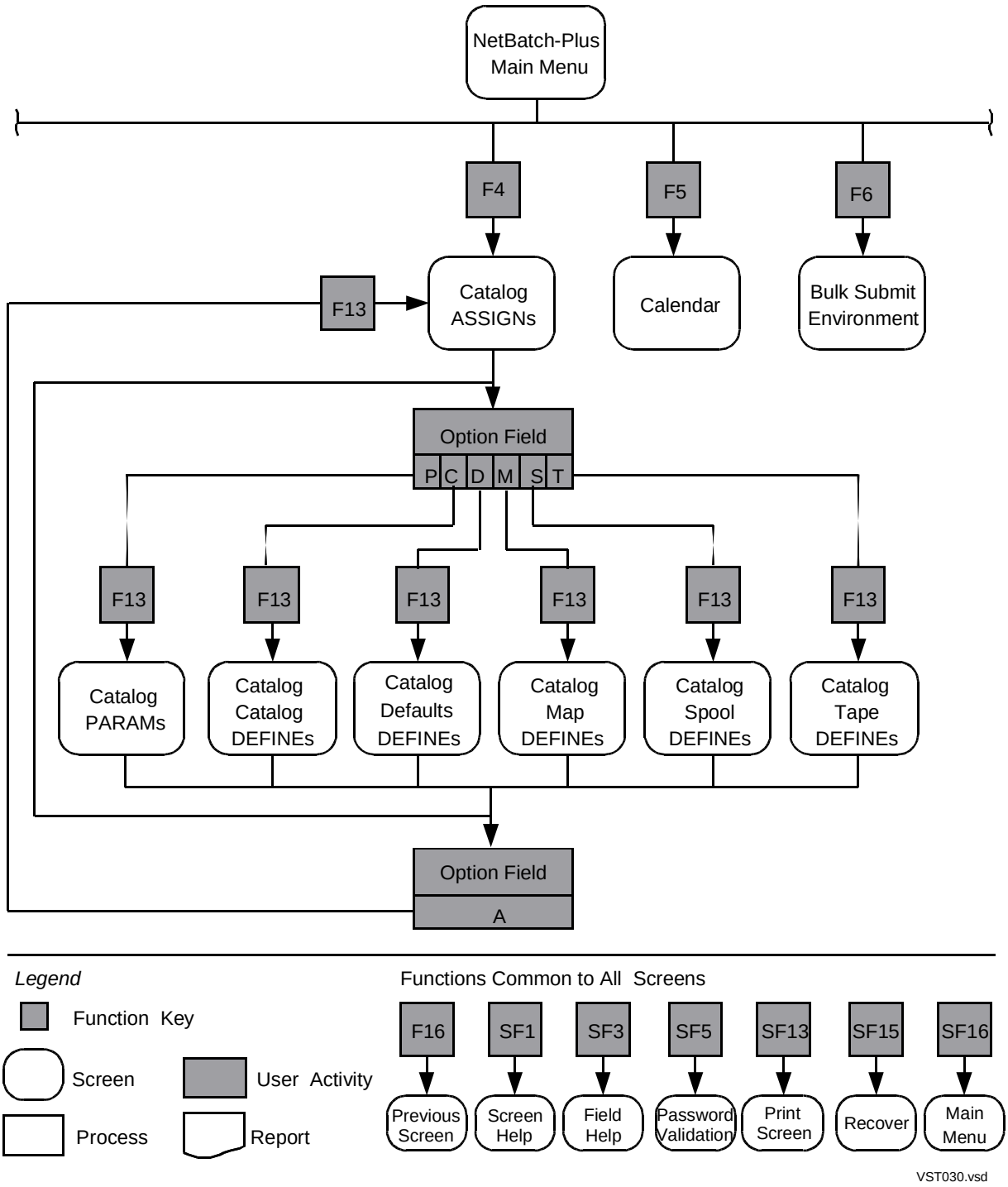
* Function is available on screen, but not displayed,

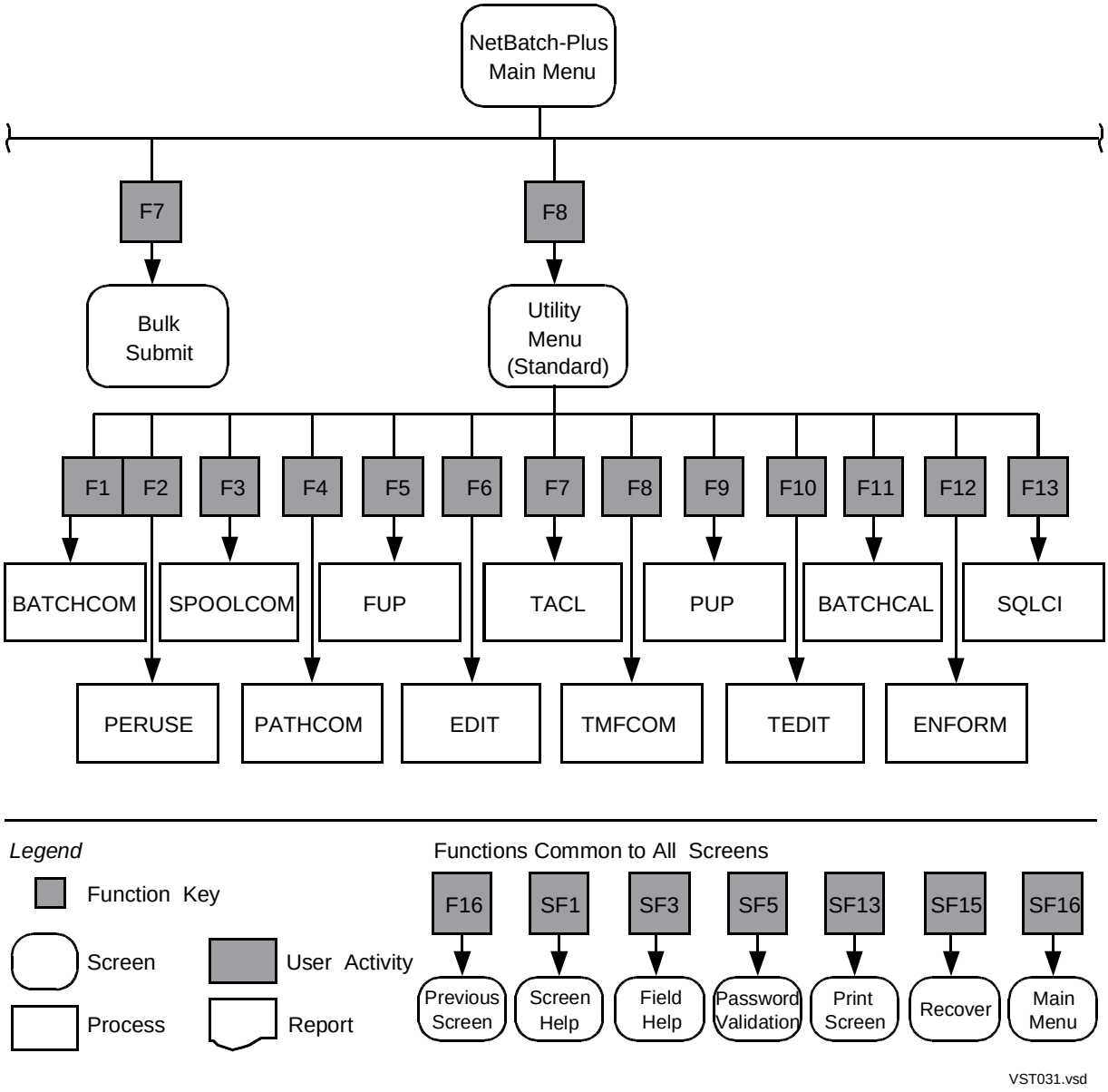
Menu Map

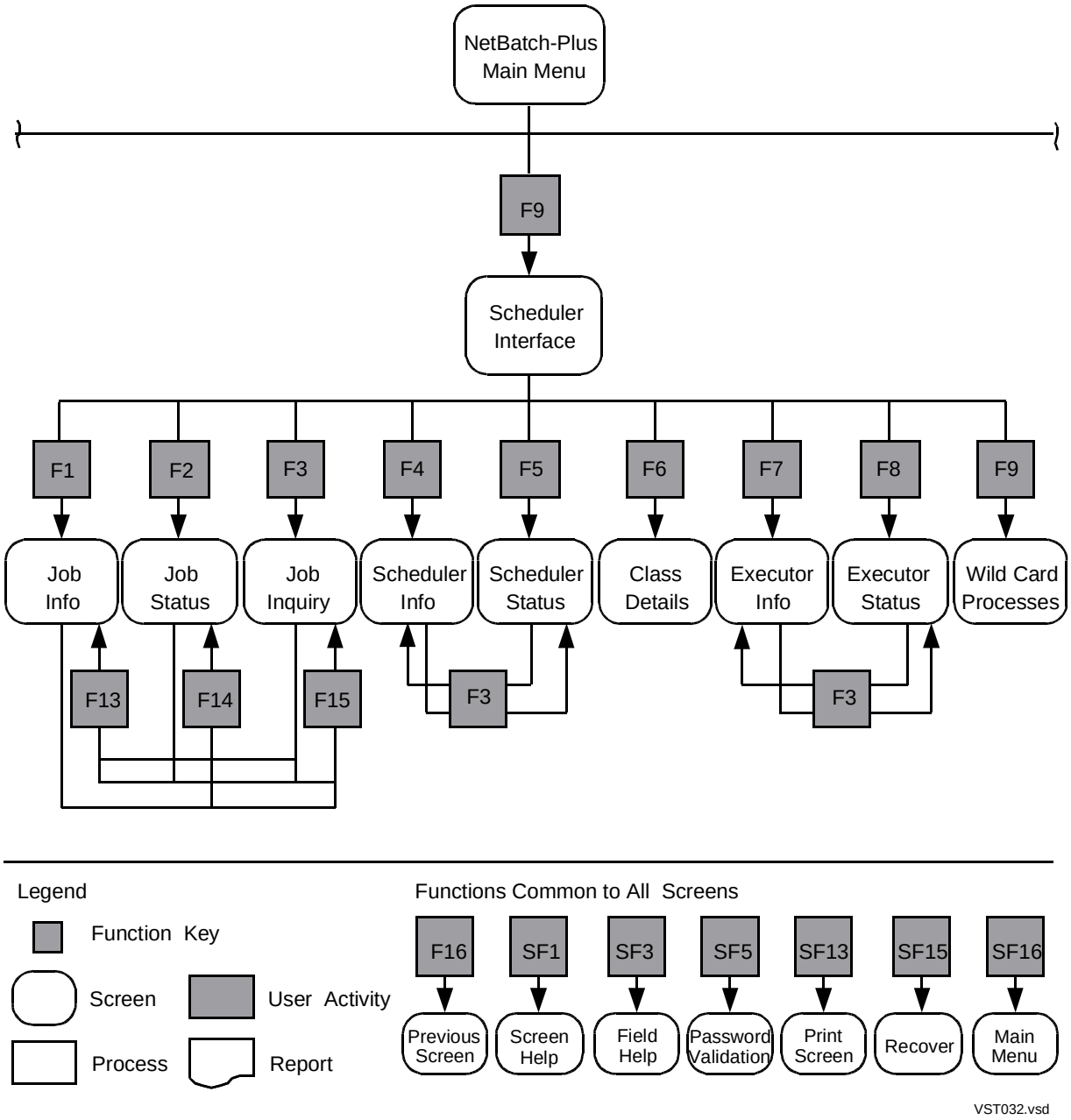
Figure 6-41 illustrates the relationships between NetBatch-Plus screens and shows the function keys you use to navigate to those screens.

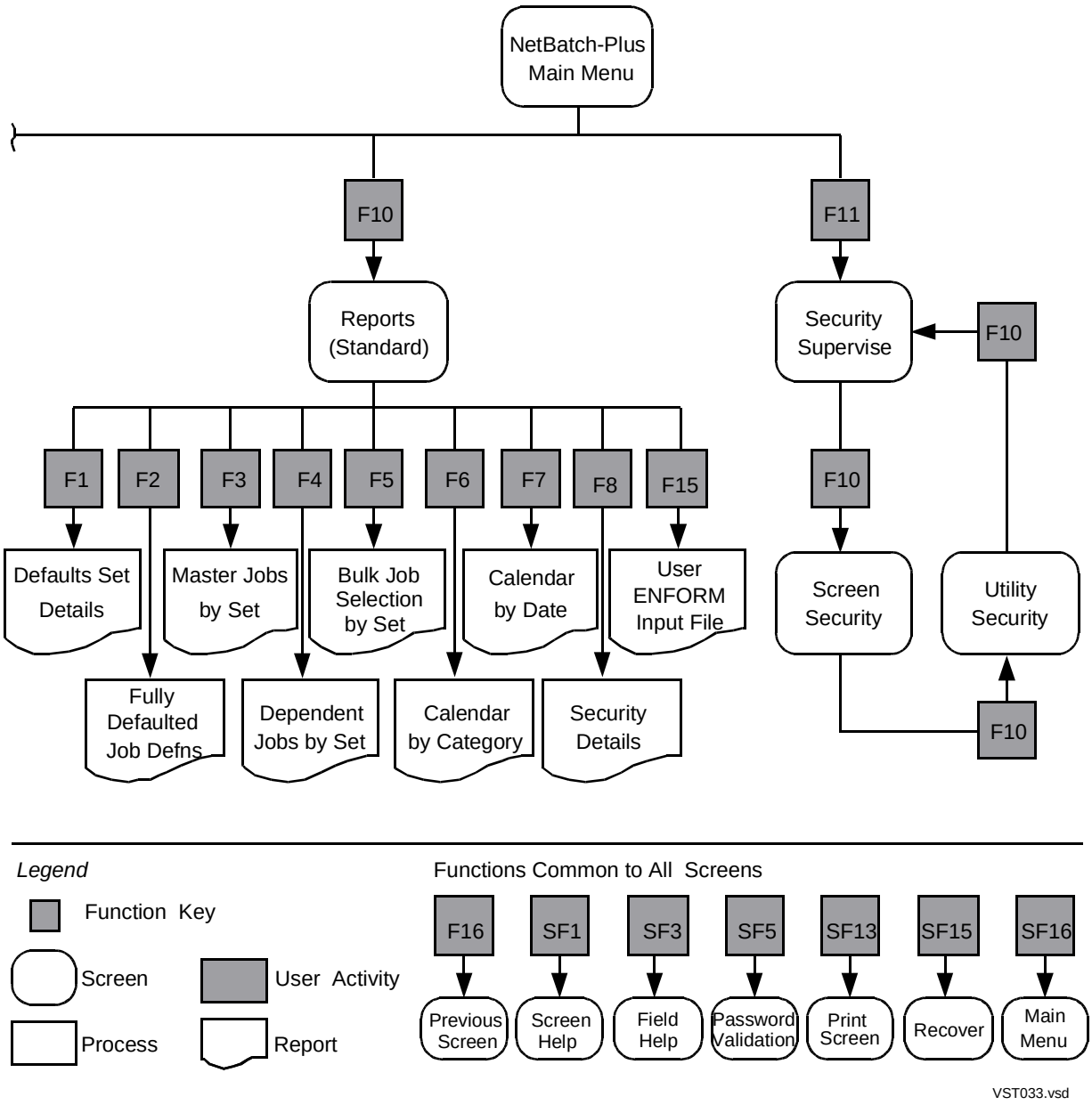
Figure 6-41. Menu Map




NetBatch-Plus Main Menu
F4
F5
F6
F13
Catalog ASSIGNs
Calendar
Bulk Submit Environment
Option Field
P C D M S T
F13
F13
F13
F13
F13
F13
Catalog PARAMs
Catalog Catalog DEFINEs
Catalog Defaults DEFINEs
Catalog Map DEFINEs
Catalog Spool DEFINEs
Catalog Tape DEFINEs
Option Field
A
Legend
Function Key
Screen
User Activity
Process
Report
Functions Common to All Screens
F16
SF1
SF3
SF5
SF13
SF15
SF16
Previous Screen
Screen Help
Field Help
Password Validation
Print Screen
Recover
Main Menu
VST030.vsd


NetBatch-Plus Main Menu
F7
F8
Bulk Submit
Utility Menu (Standard)
F1
F2
F3
F4
F5
F6
F7
F8
F9
F10
F11
F12
F13
BATCHCOM
SPOOLCOM
FUP
TACL
PUP
BATCHCAL
SQLCI
PERUSE
PATHCOM
EDIT
TMFCOM
TEDIT
ENFORM
Legend
Function Key
Screen
User Activity
Process
Report
Functions Common to All Screens
F16
SF1
SF3
SF5
SF13
SF15
SF16
Previous Screen
Screen Help
Field Help
Password Validation
Print Screen
Recover
Main Menu
VST031.vsd


NetBatch-Plus Main Menu
F9
Scheduler Interface
F1
F2
F3
F4
F5
F6
F7
F8
F9
Job Info
Job Status
Job Inquiry
Scheduler Info
Scheduler Status
Class Details
Executor Info
Executor Status
Wild Card Processes
F13
F14
F15
F3
F3
Legend
Function Key
Screen
User Activity
Process
Report
Functions Common to All Screens
F16
SF1
SF3
SF5
SF13
SF15
SF16
Previous Screen
Screen Help
Field Help
Password Validation
Print Screen
Recover
Main Menu
VST032.vsd


NetBatch-Plus Main Menu
F10
F11
Reports (Standard)
Security Supervise
F10
F1
F2
F3
F4
F5
F6
F7
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Defaults Set Details
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7 NetBatch-Plus Reports

This section describes the NetBatch-Plus reports and how to create your own reports:

Topic	Page
Report Types	7-1
Writing Your Own Enform Reports	7-4
Report Descriptions	7-5

Report Types

There are two types of NetBatch-Plus reports:

Report Type	Page
Database Report	7-1
Bulk Submit Report	7-3

Database Reports

Database reports list information stored in the NetBatch-Plus database. They are based on Enform queries. To run these reports from the Reports screen:

- Press the function key next to the report (if the report appears on the screen).
- Specify the report's Enform compiled query file or EDIT-format source file in the User ENFORM Input File field, then press F15.

NetBatch-Plus software includes a set of standard database reports. For a list of these reports and the names of their compiled query files and source files, see Table 7-1. All reports (except Catalogs and Job Attachments) appear on the standard Reports screen.

As well as using the standard reports to report on the database, you can write your own reports using the ENFORM language. For more information, see Writing Your Own Enform Reports on page 7-4.

Table 7-1. Database Reports Supplied With NetBatch-Plus Software (page 1 of 2)

Report Name	Object File	Source File
Bulk Job Selection Criteria	ENFORM68	ENF68S
Calendar By Category	ENFORM07	ENF07S
Calendar By Date	ENFORM09	ENF09S
Catalogs	ENFORM02	ENF02S
Default Sets	ENFORM01	ENF01S
Dependent-Master Jobs	ENFORM05	ENF05S
Job Attachments	ENFORM04	ENF04S

Table 7-1. Database Reports Supplied With NetBatch-Plus Software (page 2 of 2)

Report Name	Object File	Source File
Job Definitions	ENFORM03	ENF03S
Master-Dependent Jobs	ENFORM67	ENF67S
Security Details	ENFORM06	ENF06S

Note. After installing NetBatch-Plus software, the locations of the files are:

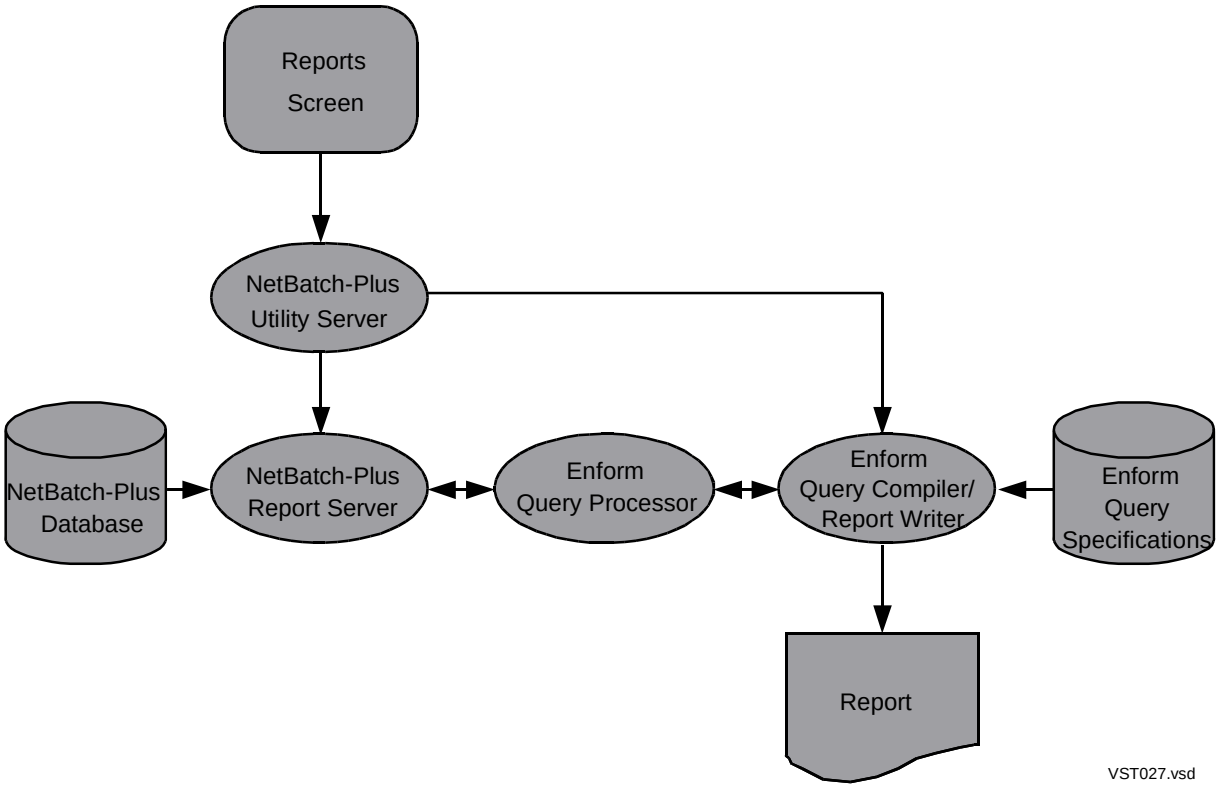
- Compiled query files—in the database subvolume specified during installation
- Source files—in the subvolume $*volume*.ZNBPLUS, where *volume* is the volume specified during installation

To find the files, use the TACL FILEINFO command. For example, to locate the file ENFORM68 on system \WORLD, enter `FILEINFO \WORLD.$*.*.ENFORM68`. For more information on the FILEINFO command, see the *Tandem Advanced Command Language (TACL) Reference Manual*.

Production of Database Reports

Figure 7-1 gives an overview of the production process for NetBatch-Plus database reports.

Figure 7-1. Production of Database Reports



The NetBatch-Plus utility server processes requests for reports from the Reports screen. (The primary function of the utility server is to give users access from within the NetBatch-Plus application to processes listed on the Utility Menu screen.) For each report request, the utility server creates these secondary processes:

- The report server
- The Enform query compiler/report writer. This process creates, in turn, the Enform query processor.

The query compiler/report writer compiles the query (if necessary) from your query specifications and sends the compiled query to the query processor. The query processor retrieves the data from the report server and returns that data to the query compiler/report writer, which formats it and produces the report.

The report server is an Enform server that retrieves records from the NetBatch-Plus database and passes them, one at a time, to the query processor. The server selects only:

- Records matching the report selection parameters specified on the Reports screen. For example, if you specify a date range for the Calendar by Date report, the report server selects only dates falling within that range.
- Records secured for read access by:
  - The Guardian owner of the report (specified on the Reports screen)
  - Any other Guardian user whose ID was validated during the current NetBatch-Plus session

  The report server selects not only records the report owner can read but also records that can be read by other Guardian users whose IDs were validated during the current session. For more information on access to records, see Record Access on page B-1.

Bulk Submit Reports

Bulk submit reports list information about jobs selected in bulk submit test and production runs. The bulk submit program produces the reports automatically.

There are two bulk submit reports:

- Bulk Submit Predictions
- Bulk Submit Submissions

The bulk submit program produces the Bulk Submit Predictions report for every test bulk submit run and the Bulk Submit Submissions report for every production run. The program produces both reports for daily production runs.

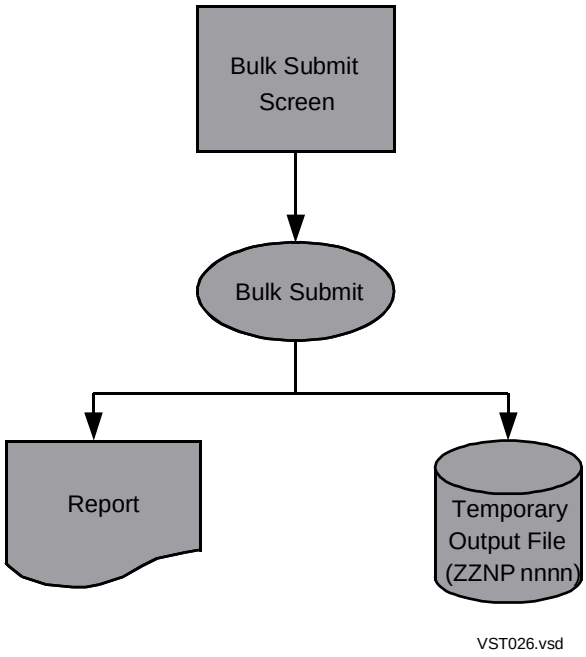
Production of Bulk Submit Reports

For an overview of the production process for bulk submit reports, see Figure 7-2.

The bulk submit program produces reports during bulk submit runs. The program also creates a temporary output file (ZZNP*nnnn*) and writes a report record (REPORT-BULK) to that file for each job selected in the run. You can write your own Enform queries to report on this information as needed.

For more information on the temporary output file, see Bulk Submit Environment on page 6-18. For more information on writing your own Enform queries, see Writing Your Own Enform Reports.

Figure 7-2. Production of Bulk Submit Reports



Writing Your Own Enform Reports

To write your own database and bulk submit reports, use Enform, the query and report writing language. Through the Enform language, you can build a library of reports to supplement the standard reports supplied with NetBatch-Plus software. For more information on using the Enform language, see the *ENFORM User's Guide*.

You can use the source files of the standard reports to guide you in developing your own reports. These source files are particularly useful for finding out how to create effective links between report records in the NetBatch-Plus database.

For lists and descriptions of the records used for reporting purposes, information on record access, and a diagram showing the links between records, see Appendix B, DLL Record Description.

Report Descriptions

This subsection describes the standard database and bulk submit reports supplied with NetBatch-Plus software. The reports are listed alphabetically by name. Each description includes:

- A report summary.
- The name of the report record used for Enform queries. Report records come from the DDL-generated NetBatch-Plus dictionary and are described in Appendix B, DLL Record Description.
- Information about report execution.
- Field descriptions (listed in the order they appear on the report left to right, top to bottom).
- A picture of the report showing sample data.

Bulk Job Selection Criteria

The Bulk Job Selection Criteria report lists the bulk submit selection criteria for jobs. The report sorts the jobs by their defaults sets. Example 7-1 on page 7-7 shows the report format. For more information on selection criteria, see Bulk Job Selection Criteria on page 6-6.

Report Record

`REPORT-SCHED`

Executing the Report

To execute the Bulk Job Selection Criteria report:

1. Display the Reports screen.
2. Enter the report selection parameters in the Start and End column fields. The parameters you can specify are calendar category, date, defaults set, job name.
3. Press the function key corresponding to the report. This key is F5 if your NetBatch-Plus system has the standard Reports screen. If the report does not appear on the screen, specify the compiled query file ENFORM68 in the User ENFORM Input File field and press F15.

Field Descriptions

The fields in the Bulk Job Selection Criteria report are:

Field	Description
Set	Lists, in alphabetic order, the names of defaults sets.
Job	Lists the names of jobs for which the report gives bulk submit selection information.
Category	Lists the names of calendar categories.
Date	Lists bulk submit selection dates.
Include/ Exclude	Lists the inclusion flags of the listed jobs. A job's inclusion flag determines whether the job is a candidate for selection in a bulk submit run that selects the job by its category or date. When the flag is Include, the field also shows whether the AT or AFTER attribute applies to the job.
Time	Indicates, where applicable, the time component of the AT or AFTER job attribute.
Access	Indicates whether the report server could read and report on a job's selection criteria. The options are: ● Ok—The report server successfully read and reported details of the job's selection criteria. ● Denied—The report server did not report details of the job's selection criteria because the security attributes of the job prevented read access.

Example 7-1. Bulk Job Selection Criteria Report

```
  NETBATCH-PLUS  T9189D48 - (26FEB2002^ABF)
  ENFORM68 - BULK JOB SELECTION CRITERIA

                                                          EXCLUDE
    SET             JOB         CATEGORY      DATE         INCLUDE    TIME
ACCESS
 ----------  ----------------  ----------  -----------  -------------------  ----
--

 BACKUP      BACKUP            AAA                      include              Ok
                               DLYBACKUP                include-at    23:30  Ok
                               HOLIDAYS                 exclude              Ok
                               MTHLYBAKUP               exclude              Ok
             DAILY-BACKUP      AAA                      include              Ok
                               DLYBACKUP                include-at    23:30  Ok
                               HOLIDAYS                 exclude              Ok
                               MTHLYBAKUP               exclude              Ok
             TEST              AAA                      include-after 22:00  Ok
                               DLYBACKUP                include-at    23:30  Ok
                               HOLIDAYS                 exclude              Ok
                               MTHLYBAKUP               exclude              Ok
             DMG-TEST-JOB
Denied
 DEF-SET-X   BULK-JOB-02       THURSDAYS                include              Ok
             BULK-JOB-03                    01-NOV-2002 include-after 12:00  Ok
             BULK-JOB-09                    30-OCT-2002 include              Ok
                                            01-NOV-2002 include              Ok
                               EVERYDAY                 exclude              Ok
                               FIRSTFRI                 include              Ok
                               QUARTER                  include              Ok
             BULK-JOB-10                    24-OCT-2002 include              Ok
                                            30-OCT-2002 include-after 11:00  Ok
                                            16-NOV-2002 exclude              Ok
                                            30-NOV-2002 include              Ok
                               ANNUAL                   exclude              Ok
                               CHRISTMAS                include              Ok
                               FIRSTFRI                 exclude              Ok
                               FIRSTWED                 include              Ok
                               FRIDAYS                  include              Ok
                               HOLIDAYS                 include              Ok
                               LEAPYEAR                 include              Ok
                               PAYDAY                   include-after 15:00  Ok
                               THURSDAYS                include-after 18:00  Ok
             DEP-JOB-D6        DEPENDENT                include              Ok
             JOB-DEPENDENT     DEPENDENT                include              Ok
             JOB-MASTER        DEPENDENT                include              Ok
 DEF-SET-Y   AHOC-JOB-Y9
Denied
             BULK-JOB-05                    30-OCT-2002 include-at    15:00  Ok
             BULK-JOB-06                    30-OCT-2002 exclude              Ok
                               EVERYDAY                 include              Ok
             BULK-JOB-07       FIRSTMTH                 exclude              Ok
                               FRIDAYS                  include              Ok
 DEF-SET-Z   BULK-JOB-04                    30-OCT-2002 include-at    15:00  Ok
             BULK-JOB-08                    30-OCT-2002 include              Ok
                               THURSDAYS                exclude              Ok
             DEP-JOB-D4        DEPENDENT                include              Ok
 .
 .
                            RUN ON 15-OCT-2002 AT 13:45 HR
```

Bulk Submit Predictions

The Bulk Submit Predictions report lists jobs the bulk submit program predicts it will select for submission in a future production bulk submit run. Example 7-2 on page 7-9 shows the report format. For more information on bulk submit runs, see Bulk Submit on page 6-10.

Report Record

REPORT-BULK

Executing the Report

The bulk submit program automatically produces the Bulk Submit Predictions report:

- When you execute a test bulk submit run by pressing F1 or F3 on the Bulk Submit screen.
- When you execute a daily production bulk submit run by pressing F6 on the Bulk Submit screen. The report lists the jobs that will run on the following day.

Field Descriptions

The fields in the Bulk Submit Predictions report are:

Field	Description
ENFORM File	Shows the name of the temporary output file created by the bulk submit run.
Predicting Job Submissions For	Shows the date for which the bulk submit program is predicting job submissions.
Selected Jobs For Submission	Shows the number of predicted job submissions for the date shown in the Predicting Job Submissions For field. The date and time at which the bulk submit program predicted the submissions appears on the right of the field.
Set/Job Name	Lists the names of defaults sets and jobs.
Scheduler/Class	Lists the schedulers and classes for the jobs.
Start Time/Waiton	Lists the start dates and times for the jobs and indicates whether the AT attribute or AFTER attribute applies to each job. For dependent jobs, the field shows the names of the master jobs.
Messages	Displays error, warning, or status messages about jobs listed on the report. Each message appears on the line below the job to which the message applies.

Example 7-2. Bulk Submit Predictions Report

```
NetBatch-Plus - \SYS00 - PB0010 - T9189D48 - (26FEB2002^ABF) Time:15Oct2002 16:25
Copyright 2002 Compaq Information Technologies Group, L.P.
ENFORM file (Record REPORT-BULK): \SYS00.$DATA3.NBPDAT.ZZNP9996

Predicting Job Submissions for: 24Oct2002
Selected 0008 Jobs for submission:  15Oct2002 16:25:05.47

SET/JOBNAME              SCHEDULER/CLASS           START TIME/WAITON

DEF-SET-X BULK-JOB-10    \SYS00.$ZBAK MIS          AF24OCT2002 17:00
AA-DEFAULT DG-COBOL-CODE \SYS00.$ZBAK COMPILE      AF24Oct2002 17:45
AA-DEFAULT               \SYS00.$ZBAK DEFAULT      AF24Oct2002 18:00
 AC-NETBATCH-JOB
BACKUP BACKUP            \SYS00.$ZBAK DEFAULT      Job DAILY-BACKUP
BACKUP TEST              \SYS00.$ZBAK DEFAULT      AT24Oct2002 19:30
BACKUP DAILY-BACKUP      \SYS00.$ZBAK DEFAULT      AT24Oct2002 23:30
DEF-SET-A ACCNT-UPDATE   \SYS00.$ZBAK ACCOUNTS     AF24Oct2002 23:59
DEF-SET-Y BULK-JOB-06    \MELBVLX.$QBAT MIS        AF24Oct2002 23:59

Processed 8 Jobs. Reported 0 Errors.

Finished Processing:  15Oct2002 16:25:10.70
```

Bulk Submit Submissions

The Bulk Submit Submissions report lists jobs the bulk submit program selected in a production bulk submit run. Example 7-3 on page 7-11 shows the report format. For more information on bulk submit runs, see Bulk Submit on page 6-10.

Report Record

REPORT-BULK

Executing the Report

The bulk submit program automatically produces the Bulk Submit Submissions report when you execute a production bulk submit run on the Bulk Submit screen.

Field Descriptions

The fields in the Bulk Submit Submissions report are:

Field	Description
ENFORM File	Shows the name of the temporary output file created by the bulk submit run.
Job Submissions For	Shows the date for which the bulk submit program submitted jobs.
Selected Jobs For Submission	Shows the number of job submissions for the date shown in the Job Submissions For field. The date and time at which the bulk submit program selected the jobs appears on the right of the field.
Set/Job Name	Lists the names of defaults sets and jobs.
Scheduler/Class	Lists the schedulers and classes for the jobs.
Start Time/ Waiton	Lists the start dates and times for the jobs and indicates whether the AT attribute or AFTER attribute applies to each job. For dependent jobs, the field shows the names of the master jobs.
Messages	Displays error, warning, or status messages about jobs listed on the report. Each message appears on the line below the job to which the message applies.

Example 7-3. Bulk Submissions Report

```
NetBatch-Plus - \SYS00 - PB0010 - T9189D48 - (26FEB2002^ABF) Time:15Oct2002 14:16
Copyright 2002 Compaq Information Technologies Group, L.P.
ENFORM file (Record REPORT-BULK): \SYS00.$DATA3.NBPDAT.ZZNP9997
Job Submissions for: 15Oct2002
Selected 0006 Jobs for submission:  15Oct2002 14:16:45.95

SET/JOBNAME              SCHEDULER/CLASS           START TIME/WAITON

DEF-SET-X BULK-JOB-10    \SYS00.$ZBAK MIS          AF15OCT2002 17:00
Other users have WRITE or PURGE access to IN file; resecure if required
AA-DEFAULT DG-COBOL-CODE \SYS00.$ZBAK COMPILE      AF15Oct2002 17:45
AA-DEFAULT               \SYS00.$ZBAK DEFAULT      AF15Oct2002 18:00
 AC-NETBATCH-JOB
BACKUP TEST              \SYS00.$ZBAK DEFAULT      AF15Oct2002 19:30
DEF-SET-A ACCNT-UPDATE   \SYS00.$ZBAK ACCOUNTS     AF15Oct2002 22:15
BACKUP DAILY-BACKUP      \SYS00.$ZBAK DEFAULT      AT15Oct2002 23:30
AT-ALLOWED is currently OFF in the scheduler

Processed 6 Jobs. Reported 2 Errors.

Finished Processing:  15Oct2002 14:16:50.27
```

Calendar by Category

The Calendar by Category report lists calendar categories and the dates belonging to those categories. Example 7-4 on page 7-13 shows the report format. For more information on calendar categories, see Calendar on page 6-23.

Report Record

```
REPORT-CALENDAR
```

Executing the Report

To execute the Calendar by Category report:

1. Display the Reports screen.
2. Enter the report selection parameters in the Start and End column fields. The parameters you can specify are calendar category, date.
3. Press the function key corresponding to the report. This key is F6 if your NetBatch-Plus system has the standard Reports screen. If the report does not appear on the screen, specify the compiled query file ENFORM07 in the User ENFORM Input File field and press F15.

Field Descriptions

The fields in the Calendar by Category report are:

Field	Description
Category	Lists the names of calendar categories in alphabetic order.
Date	Lists the dates in each listed category in chronological order.

Example 7-4. Calendar By Category Report

```
NETBATCH-PLUS  T9189D48 - (26FEB2002^ABF)
ENFORM07 - CALENDAR BY CATEGORY

 CATEGORY      Date
----------  -----------

BACKUP      18-OCT-2002
            25-OCT-2002
            01-NOV-2002
            08-NOV-2002
            15-NOV-2002
            22-NOV-2002
            29-NOV-2002
            06-DEC-2002
            13-DEC-2002
            20-DEC-2002
            27-DEC-2002
CHRISTMAS   25-DEC-2002
DAY25       25-OCT-2002
            25-NOV-2002
            25-DEC-2002
FIRSTDAY    01-NOV-2002
            01-DEC-2002
HOLIDAYS    06-NOV-2002
            25-DEC-2002
LASTFRIDAY  25-OCT-2002
            29-NOV-2002
            27-DEC-2002
MONDAY      21-OCT-2002
            28-OCT-2002
            04-NOV-2002
            11-NOV-2002
            18-NOV-2002
            25-NOV-2002
            02-DEC-2002
            09-DEC-2002
            16-DEC-2002
            23-DEC-2002
            30-DEC-2002
MONTHEND    31-OCT-2002
            30-NOV-2002
            31-DEC-2002
PAYDAY      16-OCT-2002
            23-OCT-2002
            30-OCT-2002
            06-NOV-2002
            13-NOV-2002
            20-NOV-2002
            27-NOV-2002
            04-DEC-2002
            11-DEC-2002
            18-DEC-2002
            25-DEC-2002
.
.
RUN ON 15-OCT-2002 AT 11:32 HR
```

Calendar by Date

The Calendar by Date report lists the dates in calendar categories. For each date, the report shows the names of the categories to which the date belongs. Example 7-5 on page 7-15 shows the report format. For more information on calendar categories, see Calendar on page 6-23.

Report Record

REPORT-CALENDAR

Executing the Report

To execute the Calendar by Date report:

1. Display the Reports screen.
2. Enter the report selection parameters in the Start and End column fields. The parameters you can specify are calendar category, date.
3. Press the function key corresponding to the report. This key is F7 if your NetBatch-Plus system has the standard Reports screen. If the report does not appear on the screen, specify the compiled query file ENFORM09 in the User ENFORM Input File field and press F15.

Field Descriptions

The fields in the Calendar by Date report are:

Field	Description
Date	Lists dates in chronological order.
Category	Lists the calendar category of each listed date in alphabetic order.

Example 7-5. Calendar by Date Report

```
NETBATCH-PLUS  T9189D48 - (26FEB2002^ABF)
ENFORM09 - CALENDAR BY DATE

   Date       CATEGORY
-----------  ----------

16-OCT-2002  PAYDAY
18-OCT-2002  BACKUP
21-OCT-2002  MONDAY
23-OCT-2002  PAYDAY
25-OCT-2002  BACKUP
             DAY25
             LASTFRIDAY
28-OCT-2002  MONDAY
30-OCT-2002  PAYDAY
31-OCT-2002  MONTHEND
01-NOV-2002  BACKUP
             FIRSTDAY
04-NOV-2002  MONDAY
06-NOV-2002  HOLIDAYS
             PAYDAY
08-NOV-2002  BACKUP
11-NOV-2002  MONDAY
13-NOV-2002  PAYDAY
15-NOV-2002  BACKUP
18-NOV-2002  MONDAY
20-NOV-2002  PAYDAY
22-NOV-2002  BACKUP
25-NOV-2002  DAY25
             MONDAY
27-NOV-2002  PAYDAY
29-NOV-2002  BACKUP
             LASTFRIDAY
30-NOV-2002  MONTHEND
01-DEC-2002  FIRSTDAY
02-DEC-2002  MONDAY
04-DEC-2002  PAYDAY
06-DEC-2002  BACKUP
09-DEC-2002  MONDAY
11-DEC-2002  PAYDAY
13-DEC-2002  BACKUP
16-DEC-2002  MONDAY
18-DEC-2002  PAYDAY
20-DEC-2002  BACKUP
23-DEC-2002  MONDAY
25-DEC-2002  CHRISTMAS
             DAY25
             HOLIDAYS
             PAYDAY
27-DEC-2002  BACKUP
             LASTFRIDAY
30-DEC-2002  MONDAY
31-DEC-2002  MONTHEND
.
.
RUN ON 15-OCT-2002 AT 13:49 HR
```

Catalogs

The Catalogs report shows details of catalog ASSIGNs, PARAMs, and DEFINEs. The report groups these attachments according to the defaults set to which they belong. Example 7-6 on page 7-17 shows the report format. For more information on catalog attachments, see Section 6, NetBatch-Plus Screens.

Report Records

REPORT-CATALOG

REPORT-SET

Executing the Report

To execute the Catalogs report:

1. Display the Reports screen.
2. Enter the report selection parameters in the Start and End column fields. You can specify only defaults sets as the parameters for this report.
3. Press the function key corresponding to the report. If the report does not appear on the screen, specify the compiled query file ENFORM02 in the User ENFORM Input File field and press F15.

Field Descriptions

The fields in the Catalogs report are:

Field	Description
Set	Shows the name of the defaults set for which the report gives catalog information.
Scheduler	Shows the name of the scheduler for the defaults set.
Owner	Shows the name of the owner of the defaults set.
Security	Shows the codes specifying the security attributes of the defaults set record. For information on defaults set security, see Defaults Set Details on page 6-67.

Example 7-6. Catalogs Report

```
NETBATCH-PLUS  T9189D48 - (26FEB2002^ABF)
ENFORM02 - CATALOGS

--------------------------------------------------------------------------------
SET      : AA-DEFAULT
SCHEDULER: \MELBVLX.$QBAT
OWNER    : SUPER.CE                 SECURITY : AAAA
--------------------------------------------------------------------------------
*** CATALOG INFORMATION ***

ASSIGN GLEDGER.DAYLOG-FILE, \MELBDEV.$BANK.USER1.DAYLOG, EXT(100, 200), CODE 905,
EXCLUSIVE, I-O, REC 2048, BLOCK 4096

DEFINE =AA-DEFAULT, CLASS DEFAULTS, VOLUME \MELBVLX.$DATA3.SUBVOL, CATALOG
\MELBVLX.$DATA7.SUBVOL, SWAP \MELBVLX.$SYSTEM

DEFINE =AA-MAP, CLASS MAP, FILE \MELBVLX.$DATA3.S1234567.MAPXFILE

DEFINE =AA-SPOOL, CLASS SPOOL, BATCHNAME AA-ZZ-9999, LOC \MELBVLX.$S.#AA.SPOOL,
REPORT "REPORT FIELD", OWNER FPP.NULL, FORM AAFORM, COPIES 32767, HOLDAFTER ON,
SELPRI 7, MAXPRINTLINES 65534, MAXPRINTPAGES 65534, PAGESIZE 32767

DEFINE =AA-TAPE, CLASS TAPE, LABELS IBM, DENSITY 6250, DEVICE $TAPE, EBCDIC OFF,
EXPIRATION 31Dec2002, FILEID MYFILEID, FILESECT 100, FILESEQ 0500, GEN 9999,
VERSION 99, RECFORM F, BLOCKLEN 4096, RECLEN 1024, MOUNTMSG "TAPE OPS"

PARAM  TIME "15:05"



--------------------------------------------------------------------------------
SET      : DEF-SET-Z
SCHEDULER: \MELBVLX.$QNB1
OWNER    : FPP.NULL               SECURITY : GOGO
--------------------------------------------------------------------------------
*** CATALOG INFORMATION ***

ASSIGN CAT-ASSIGN-N, $DATA7.NBPQA.NBP0080, EXT(5, 64000), CODE 200, EXCLUSIVE,
I-O, REC 500, BLOCK 2000

DEFINE =CAT^CTLOG-N, CLASS CATALOG, SUBVOL $DATA7.NBPQA

DEFINE =CAT^DEFAULT-N, CLASS DEFAULTS, VOLUME $DATA6.NBPLIB, SWAP $DATA3

DEFINE =CAT^SPOOL-N, CLASS SPOOL, BATCHNAME QA-BATCH-CATALOG-SPOOL-DEFINES, LOC
\MELBORN.$S.#LOCN.DEFINE, REPORT "NETBATCHPLUS", OWNER FPP.NULL, FORM FORMPAPER,
COPIES 2, HOLD ON, HOLDAFTER ON, SELPRI 7, MAXPRINTLINES 20000, MAXPRINTPAGES
100, PAGESIZE 20

DEFINE =CAT^TAPE-N, CLASS TAPE, LABELS IBM, USE IN, DENSITY 6250, DEVICE
\MELBORN.$TAPE, EBCDIC OFF, EXPIRATION 30Jun1992, FILEID MYTAPEFILE, VOLUME
(VOL001, VOL002, VOL003, VOL004, VOL005, VOL006, VOL007), REELS 7, OWNER
"NBP.MNGR",
FILESECT 005, FILESEQ 0021, GEN 0599, VERSION 12, RECFORM F,
.
.
RUN ON 15-OCT-2002 AT 14:05 HR
```

Defaults Sets

The Defaults Sets report shows details of defaults sets. The report lists the sets alphabetically by name. Example 7-7 on page 7-20 shows the report format. For more information on defaults sets, see Defaults Set Details on page 6-67.

Report Record

REPORT-SET

Executing the Report

To execute the Defaults Sets report:

1. Display the Reports screen.
2. Enter the report selection parameters in the Start and End column fields. You can specify only defaults sets as the parameters for this report.
3. Press the function key corresponding to the report. This key is F1 if your NetBatch-Plus system has the standard Reports screen. If the report does not appear on the screen, specify the compiled query file ENFORM01 in the User ENFORM Input File field and press F15.

Field Descriptions

The fields in the Defaults Sets report are:

Field	Description
Set	Shows the name of the defaults set.
Scheduler	Shows the name of the scheduler for the defaults set.
Class	Shows the CLASS job attribute for the defaults set.
Owner	Shows the name of the owner of the defaults set.
Security	Shows the codes specifying the security attributes of the defaults set record.
Comment	Shows the description of the defaults set.
Executor	Shows the EXECUTOR-PROGRAM job attribute for the defaults set.
In File	Shows the IN job attribute for the defaults set.
Out File	Shows the OUT job attribute for the defaults set.
Volume	Shows the VOLUME job attribute for the defaults set.
Startup	Shows the STARTUP job attribute for the defaults set.
Selpri	Shows the SELPRI job attribute for the defaults set.
Priority	Shows the PRI job attribute for the defaults set.
Drives	Shows the TAPEDRIVES job attribute for the defaults set.
Lines	Shows the MAXPRINTLINES job attribute for the defaults set.
Pages	Shows the MAXPRINTPAGES job attribute for the defaults set.

Field	Description
Wait	Shows the WAIT job attribute for the defaults set.
AT/AF	Shows whether the AT job attribute or AFTER job attribute applies to the defaults set.
Time	Shows the time applicable to the AT attribute or AFTER attribute.
Restart	Shows the RESTART job attribute for the defaults set.
Hold	Shows the HOLD job attribute for the defaults set.
Any User Submit	Shows the Any User Submit flag for the defaults set.
Stop On Abend	Shows the STOP-ON-ABEND job attribute for the defaults set.
Hold After	Shows the HOLDAFTER job attribute for the defaults set.

Example 7-7. Defaults Sets Report

```
NETBATCH-PLUS  T9189D48 - (26FEB2002^ABF)
ENFORM01 - DEFAULTS SETS

--------------------------------------------------------------------------------
SET      : BACKUP

SCHEDULER: \MELBDEV.$ZBAK
CLASS    : DEFAULT
OWNER    : FPP.MANAGER
SECURITY : OOOO

COMMENT  : This is the default for backup
EXECUTOR : $SYSTEM.SYSTEM.TACL
IN FILE  :
OUT FILE : $S.#KILLME.BACKUP
VOLUME   : $DATA6.NBPBAKUP
START-UP :

SELPRI   : 3               PRIORITY : 117
DRIVES   : 1               LINES    : NOMAX          PAGES    : NOMAX
WAIT     :                 AT/AF    : AT             TIME     : 23:00

RESTART      : Y           HOLD     : N              ANY USER SUBMIT: Y
STOP ON ABEND: N           HOLD AFTER: Y
--------------------------------------------------------------------------------



--------------------------------------------------------------------------------
SET      : DEF-SET-Y

SCHEDULER: \MELBVLX.$QBAT
CLASS    : MIS
OWNER    : FPP.QA
SECURITY : AGAG

COMMENT  : Member of Defaults Set DEF-SET-Y
EXECUTOR : $SYSTEM.SYSTEM.EDIT
IN FILE  : OBEDIT
OUT FILE : $S.#SETY
VOLUME   : $DATA3.NBPBAT
STARTUP  : MYFILE;NA;LA;NAT2B5

SELPRI   : 5               PRIORITY : 145
DRIVES   : 3               LINES    : 64000          PAGES    : 61599
WAIT     : 00:30           AT/AF    : AF             TIME     : 18:00

RESTART      : N           HOLD     : Y              ANY USER SUBMIT: N
STOP ON ABEND: Y           HOLD AFTER: N
--------------------------------------------------------------------------------



.
.
RUN ON 15-OCT-2002 AT 13:32 HR
```

Dependent-Master Jobs

The Dependent-Master Jobs report lists dependent jobs and their masters. The report sorts the dependent jobs by their defaults sets. Example 7-8 on page 7-22 shows the report format. For more information on dependent and master jobs, see Job Dependencies on page 6-117.

Report Record

```
REPORT-DEPENDENT
```

Executing the Report

To execute the Dependent-Master Jobs report:

1. Display the Reports screen.
2. Enter the report selection parameters in the Start and End column fields. The parameters you can specify (applicable to dependent jobs only) are defaults set, job name.
3. Press the function key corresponding to the report. This key is F3 if your NetBatch-Plus system has the standard Reports screen. If the report does not appear on the screen, specify the compiled query file ENFORM05 in the User ENFORM Input File field and press F15.

Field Descriptions

The fields in the Dependent-Master Jobs report are:

Field	Description
Set	Lists the names of the defaults sets of the dependent jobs in alphabetic order.
Dependent Job	Lists the names of the dependent jobs in alphabetic order.
Master Set	Lists the names of the defaults sets of the master jobs.
Master Job	Lists the names of the master jobs.
Access	Indicates whether the report server could read and report on details of a dependent job's masters. The options are: ● Ok—The report server successfully read and reported details of the dependent job's masters. ● Defined—The report server did not report details of the dependent job's masters because the security attributes of the dependent job prevented read access.

Example 7-8. Dependent-Master Jobs Report

```
NETBATCH-PLUS  T9189D48 - (26FEB2002^ABF)
ENFORM05 - DEPENDENT-MASTER JOBS

   SET           DEPENDENT JOB        MASTER SET         MASTER JOB
ACCESS
---------  ------------------------  ----------  ------------------------  -----
-

AA-DEFAULT  AA-DUPLICAT-JOB          AA-DEFAULT  AC-NETBATCH-JOB           Ok
                                     AA-DEFAULT  AD-NETBATCH-JOB           Ok
            AA-NETBATCH-JOB          AA-DEFAULT  AC-NETBATCH-JOB           Ok
                                     AA-DEFAULT  AD-NETBATCH-JOB           Ok
            DMG-TEST-JOB
Denied
            TEST-JOB-02D             AA-DEFAULT  TEST-JOB-03              Ok
                                     AA-DEFAULT  TEST-JOB-04               Ok
                                     AA-DEFAULT  TEST-JOB-04D              Ok
ACCNT-BAL   ACCOUNT-UPDATE           ACCNT-BAL   MMB-CALCULATIONS          Ok
            DEPOSITS                 ACCNT-BAL   EOP-UPDATE               Ok
            EOP-UPDATE
Denied
            MMB-CALCULATIONS         ACCNT-BAL   DEPOSITS                  Ok
                                     ACCNT-BAL   WITHDRAWALS               Ok
            WITHDRAWALS              ACCNT-BAL   EOP-UPDATE               Ok
BACKUP      BACKUP                   BACKUP      DAILY-BACKUP             Ok
                                     BACKUP      TEST                     Ok
DEF-SET-1   JOB1                     DEF-SET-R   NBP-JOB-G                Ok
                                     DEF-SET-R   DEP-JOB-D5                Ok
                                     BACKUP      DAILY-BACKUP             Ok
                                     DEF-SET-1   AC-NETBATCH-JOB           Ok
                                     AA-DEFAULT  ABC-TEST-JOB              Ok
                                     AA-DEFAULT  JOB2                      Ok
DEF-SET-R   DEP-JOB-D10              DEF-SET-R   NBP-JOB-G                 Ok
                                     DEF-SET-X   ADP-JOB-A                 Ok
                                     DEF-SET-R   DEP-JOB-D5                Ok
                                     AA-DEFAULT  TEST-JOB-04D              Ok
DEF-SET-X   ADP-JOB-C                DEF-SET-X   ADP-JOB-B                 Ok
            DEP-JOB-10               DEF-SET-X   DEP-JOB-M1                Ok
                                     DEF-SET-X   DEP-JOB-M2                Ok
                                     DEF-SET-X   DEP-JOB-M3                Ok
                                     DEF-SET-X   DEP-JOB-M4                Ok
                                     DEF-SET-X   DEP-JOB-M6                Ok
                                     DEF-SET-X   DEP-JOB-M7                Ok
                                     DEF-SET-X   DEP-JOB-M8                Ok
                                     AA-DEFAULT  DMG-TEST-JOB              Ok
            DEP-JOB-D6               DEF-SET-Z   DEP-JOB-D4                Ok
                                     DEF-SET-R   DEP-JOB-D5                Ok
            JOB-DEPENDENT            DEF-SET-X   JOB-MASTER                Ok
DEF-SET-Y   AHOC-JOB-Y9
Denied
GL-UPDATE   ACCNT-PYBL-Q4            HQ-FINANCE  ACCOUNTS-Q4               Ok
            ACCNT-RCVBL-Q4           HQ-FINANCE  INVOICES-Q4               Ok
            EOP-AP                   GL-UPDATE   ACCNT-PYBL-Q4             Ok
            EOP-AR                   GL-UPDATE   ACCNT-RCVBL-Q4            Ok
HQ-FINANCE  ACCOUNTS-Q4
Denied
            INVOICES-Q4
Denied
PASS-SET-B  CTL3-JOB-03
Denied
.
.
RUN ON 15-OCT-2002 AT 13:42 HR
```

Job Attachments

The Job Attachments report shows details of job ASSIGNs, PARAMs, and DEFINEs. The report groups the attachments by job. Example 7-9 on page 7-24 shows the report format. For more information on job attachments, see Section 6, NetBatch-Plus Screens.

Report Records

`REPORT-ATTACHMENT`

`REPORT-JOBD`

Executing the Report

To execute the Job Attachments report:

1. Display the Reports screen.
2. Enter the report selection parameters in the Start and End column fields. The parameters you can specify are defaults set, job name.
3. Press the function key corresponding to the report. If the report does not appear on the screen, specify the compiled query file ENFORM04 in the User ENFORM Input File field and press F15.

Field Descriptions

The fields on the Job Attachments report are.

Field	Description
Set	Shows the name of the defaults set of the job specified in the Job Name field.
Job Name	Shows the name of the job for which the report gives attachments information.
Scheduler	Shows the name of the scheduler for the job.
Class	Shows the CLASS attribute of the job.
Owner	Shows the name of the owner of the job record.
Security	Shows the codes specifying the security attributes of the job record.

An asterisk (*) printed next to a report field indicates the field value is from the job's defaults set.

Example 7-9. Job Attachments Report

```
NETBATCH-PLUS  T9189D48 - (26FEB2002^ABF)
ENFORM04 - JOB ATTACHMENTS

--------------------------------------------------------------------------------
SET      : AA-DEFAULT             JOB NAME : AA-DUPLICAT-JOB
SCHEDULER: \MELBVLX.$QBAT*
CLASS    : DEFAULT                 *
OWNER    : FPP.MANAGER            SECURITY : AAAA
--------------------------------------------------------------------------------
*** JOB ATTACHMENTS ***

ASSIGN Y-ASSIGN, \??.$SYSTEM.SUBVOL.FILE, PROTECTED, I-O

DEFINE =Y-CATALOG, CLASS CATALOG, SUBVOL \MELBVLX.$DATA3.SUBVOL

DEFINE =Y-DEFAULT, CLASS DEFAULTS, VOLUME \MELBVLX.$DATA3.SUBVOL, CATALOG
\MELBVLX.$DATA7.SUBVOL, SWAP \MELBVLX.$SYSTEM

DEFINE =Y-MAP, CLASS MAP, FILE \MELBVLX.$DATA3.S1234567.MAPXFILE

DEFINE =DMG-SPOOL-DEFINE-JOB, CLASS SPOOL, BATCHNAME EOP-ACCOUNTS, LOC
\MELBDEV.$S.#LPT1, REPORT "EOP INVOICES", OWNER FPP.MANAGER, HOLDAFTER ON, SELPRI
3, MAXPRINTPAGES 100, PAGESIZE 60

DEFINE =Y-TAPE, CLASS TAPE, LABELS OMITTED, DEVICE $TAPE, MOUNTMSG "TEST TAPE
INSERT"

PARAM  Z-PARAM "Z-VALUE"



--------------------------------------------------------------------------------
SET      : AA-DEFAULT             JOB NAME : AC-NETBATCH-JOB
SCHEDULER: \MELBVLX.$QBAT*
CLASS    : DEFAULT                 *
OWNER    : FPP.MANAGER            SECURITY : AAAA
--------------------------------------------------------------------------------
*** THIS JOB HAS NO ATTACHMENTS ***



--------------------------------------------------------------------------------
SET      : PASS-SET-A             JOB NAME : CTL2-JOB-01
SCHEDULER: \MELBVLX.$QBAT*
CLASS    : DEFAULT                 *
OWNER    : FPP.QA                 SECURITY : AAAA
--------------------------------------------------------------------------------
*** JOB ATTACHMENTS ***

ASSIGN CTL2-JOB-01-ASSIGN, $DATA7.NBPQA.NBP0080, EXT(50,  100), CODE 101, SHARED,
I-O, REC 80, BLOCK 400



.
.
RUN ON 15-OCT-2002 AT 13:54 HR
```

Job Definitions

The Job Definitions report shows details of jobs defined on the Job Definition screen. Example 7-10 on page 7-27 shows the report format. For more information on these jobs, see Job Definition on page 6-102.

Report Record

REPORT-JOBD

Executing the Report

To execute the Job Definitions report:

1. Display the Reports screen.
2. Enter the report selection parameters in the Start and End column fields. The parameters you can specify are defaults set, job name.
3. Press the function key corresponding to the report. This key is F2 if your NetBatch-Plus system has the standard Reports screen. If the report does not appear on the screen, specify the compiled query file ENFORM03 in the User ENFORM Input File field and press F15.

Field Descriptions

The fields on the Job Definitions report are:

Field	Description
Set	Shows the name of the defaults set of the job.
Job Name	Shows the name of the job.
Scheduler	Shows the name of the scheduler assigned to the job.
Class	Shows the CLASS attribute of the job.
Owner	Shows the name of the owner of the job.
Security	Shows the codes specifying the security attributes of the job record.
Comment	Shows the job description.
Executor	Shows the EXECUTOR-PROGRAM attribute of the job.
In File	Shows the IN attribute of the job.
Out File	Shows the OUT attribute of the job.
Volume	Shows the VOLUME attribute of the job.
Startup	Shows the STARTUP attribute of the job.
Selpri	Shows the SELPRI attribute of the job.
Priority	Shows the PRI attribute of the job.
Drives	Shows the TAPEDRIVES attribute of the job.
Lines	Shows the MAXPRINTLINES attribute of the job.
Pages	Shows the MAXPRINTPAGES attribute of the job.
Wait	Shows the WAIT attribute of the job.
AT/AF	Shows whether the AT attribute or AFTER attribute applies to the job.
Time	Shows the time applicable to the AT attribute or AFTER attribute.
Restart	Shows the RESTART attribute of the job.
Hold	Shows the HOLD attribute of the job.
Any User Submit	Shows the Any User Submit flag of the job.
Stop On Abend	Shows the STOP-ON-ABEND attribute of the job.
Hold After	Shows the HOLDAFTER attribute of the job.

An asterisk (*) printed next to a report field indicates the field value is from the job's defaults set.

Example 7-10. Job Definitions Report

```
NETBATCH-PLUS  T9189D48 - (26FEB2002^ABF)
ENFORM03 - JOB DEFINITIONS

--------------------------------------------------------------------------------
SET      : BACKUP                 JOB NAME : BACKUP
SCHEDULER: \MELBDEV.$ZBAK*
CLASS    : DEFAULT                 *
OWNER    : FPP.MANAGER      *
SECURITY : OOOO*

COMMENT  : This is the default for backup  *
EXECUTOR : $SYSTEM.SYSTEM.TACL                *
IN FILE  : CLXPART
OUT FILE : $S.#KILLME.BACKUP                  *
VOLUME   : $DATA6.NBPBAKUP          *
STARTUP  :

SELPRI   : 3*              PRIORITY : 117*
DRIVES   : 1 *             LINES    : NOMAX          PAGES    : NOMAX
WAIT     : 00:00           AT/AF    : AT*            TIME     : 00:00

RESTART      : Y*          HOLD      : Y             ANY USER SUBMIT: Y*
STOP ON ABEND: N*          HOLD AFTER: Y*
--------------------------------------------------------------------------------



--------------------------------------------------------------------------------
SET      : AA-DEFAULT             JOB NAME : DMG-TEST-JOB
SCHEDULER:
CLASS    :
OWNER    : SUPER.SUPER            JOB NOT ACCESSIBLE BY REPORT OWNER
SECURITY : GOGO

COMMENT  :
EXECUTOR :
IN FILE  :
OUT FILE :
VOLUME   :
START-UP :

SELPRI   :                 PRIORITY :
DRIVES   :                 LINES    :               PAGES    :
WAIT     :                 AT/AF    :               TIME     :

RESTART      :             HOLD      :             ANY USER SUBMIT:
STOP ON ABEND:             HOLD AFTER:
--------------------------------------------------------------------------------




.
.
RUN ON 15-OCT-2002 AT 13:40 HR
```

Master-Dependent Jobs

The Master-Dependent Jobs report lists master jobs and their dependent jobs. The report sorts the master jobs by their defaults sets. Example 7-11 on page 7-29 shows the report format. For more information on master and dependent jobs, see Job Dependencies on page 6-117.

Report Record

REPORT-MASTER

Executing the Report

To execute the Master-Dependent Jobs report:

1. Display the Reports screen.
2. Enter the report selection parameters in the Start and End column fields. The parameters you can specify (applicable to master jobs only) are defaults set, job name.
3. Press the function key corresponding to the report. This key is F4 if your NetBatch-Plus system has the standard Reports screen. If the report does not appear on the screen, specify the compiled query file ENFORM67 in the User ENFORM Input File field and press F15.

Field Descriptions

The fields in the Master-Dependent Jobs report are:

Field	Description
Master Set	Lists the names of the defaults sets of the master jobs in alphabetic order.
Master Job	Lists the names of the master jobs in alphabetic order.
Dependent Set	Lists the names of the defaults sets of the dependent jobs.
Dependent Job	Lists the names of the dependent jobs.
Access	Indicates whether the report server could read and report on details of a master job's dependents: ● Ok—The report server successfully read and reported details of the master job's dependents. ● Denied—The report server did not report details of the master job's dependents because the security attributes of the master job prevented read access.

Example 7-11. Master-Dependent Jobs Report

```
NETBATCH-PLUS  T9189D48 - (26FEB2002^ABF)
ENFORM67 - MASTER-DEPENDENT JOBS

MASTER SET       MASTER JOB        DEPENDENT SET       DEPENDENT JOB
ACCESS
---------  --------------------  ------------  ----------------------  -----
-

AA-DEFAULT  ABC-TEST-JOB          DEF-SET-1     JOB1                    Ok
            AC-NETBATCH-JOB       AA-DEFAULT    AA-NETBATCH-JOB         Ok
                                  AA-DEFAULT    AA-DUPLICAT-JOB         Ok
                                  ACCNT-BAL     EOP-UPDATE              Ok
            AD-NETBATCH-JOB       AA-DEFAULT    AA-NETBATCH-JOB         Ok
                                  AA-DEFAULT    AA-DUPLICAT-JOB         Ok
            DMG-TEST-JOB
Denied
            JOB1                  HQ-FINANCE    INVOICES-Q4             Ok
            JOB2                  DEF-SET-1     JOB1                    Ok
                                  HQ-FINANCE    ACCOUNTS-Q4             Ok
            TEST-JOB-03           AA-DEFAULT    TEST-JOB-02D            Ok
            TEST-JOB-04           AA-DEFAULT    TEST-JOB-02D            Ok
            TEST-JOB-04D          AA-DEFAULT    TEST-JOB-02D            Ok
                                  DEF-SET-R     DEP-JOB-D10             Ok
ACCNT-BAL   DEPOSITS              ACCNT-BAL     MMB-CALCULATIONS        Ok
            EOP-UPDATE            ACCNT-BAL     DEPOSITS                Ok
                                  ACCNT-BAL     WITHDRAWALS             Ok
            MMB-CALCULATIONS      ACCNT-BAL     ACCOUNT-UPDATE          Ok
            WITHDRAWALS           ACCNT-BAL     MMB-CALCULATIONS        Ok
BACKUP      DAILY-BACKUP          BACKUP        BACKUP                  Ok
                                  DEF-SET-1     JOB1                    Ok
            TEST                  BACKUP        BACKUP                  Ok
DEF-SET-R   DEP-JOB-D5            DEF-SET-X     DEP-JOB-D6              Ok
                                  DEF-SET-R     DEP-JOB-D10             Ok
                                  DEF-SET-1     JOB1                    Ok
            NBP-JOB-G             DEF-SET-R     DEP-JOB-D10             Ok
                                  DEF-SET-1     JOB1                    Ok
DEF-SET-X   ADP-JOB-A             DEF-SET-R     DEP-JOB-D10             Ok
            ADP-JOB-B             DEF-SET-X     ADP-JOB-C               Ok
            DEP-JOB-M1            DEF-SET-X     DEP-JOB-10              Ok
            DEP-JOB-M2            DEF-SET-X     DEP-JOB-10              Ok
            DEP-JOB-M3            DEF-SET-X     DEP-JOB-10              Ok
            DEP-JOB-M4            DEF-SET-X     DEP-JOB-10              Ok
            DEP-JOB-M6            DEF-SET-X     DEP-JOB-10              Ok
            DEP-JOB-M7            DEF-SET-X     DEP-JOB-10              Ok
            DEP-JOB-M8            DEF-SET-X     DEP-JOB-10              Ok
            JOB-MASTER            DEF-SET-X     JOB-DEPENDENT           Ok
DEF-SET-Y   AHOC-JOB-Y9
Denied
DEF-SET-Z   DEP-JOB-D4            DEF-SET-X     DEP-JOB-D6              Ok
GL-UPDATE   ACCNT-PYBL-Q4         GL-UPDATE     EOP-AP                  Ok
            ACCNT-RCVBL-Q4        GL-UPDATE     EOP-AR                  Ok
HQ-FINANCE  ACCOUNTS-Q4           GL-UPDATE     ACCNT.PYBL-Q4           Ok
            INVOICES-Q4           GL-UPDATE     ACCNT-RCVBL-Q4          Ok
PASS-SET-B  CTL3-JOB-03
Denied



.
.
RUN ON 15-OCT-2002 AT 13:43 HR
```

Security Details

The Security Details report lists the security profiles of NetBatch-Plus users. Example 7-12 on page 7-31 shows the report format. For more information on security profiles, see Security Supervise on page 6-215, Screen Security on page 6-212, and Utility Security on page 6-225.

Report Record

`REPORT-SEC`

Executing the Report

To execute the Security Details report:

1. Display the Reports screen.
2. Enter the report selection parameters in the Start and End column fields. The parameters you can specify are NetBatch-Plus user name, defaults set.
3. Press the function key corresponding to the report. This key is F8 if your NetBatch-Plus system has the standard Reports screen. If the report does not appear on the screen, specify the compiled query file ENFORM06 in the User ENFORM Input File field and press F15.

Field Descriptions

The fields in the Security Details report are:

Field	Description
NBP User Name	Shows the name of the NetBatch-Plus user to which the security profile relates.
Defaults Set	Shows the name of the defaults set associated with the user.
For Job Definitions	Shows the schedulers and classes available to the user when adding, updating, or duplicating jobs on the Job Definition screen.
For Bulk Submit	Shows the schedulers and classes available to the user on the Bulk Submit screen.
For Ad Hoc Submit	Shows the schedulers and classes available to the user when submitting jobs on the Ad Hoc Job Selection and Job Definition screens.
Access Code	Indicates the user's access privileges to the corresponding screen or utility. The report lists the access code options.

Example 7-12. Security Details Report

```
NETBATCH-PLUS  T9189D48 - (26FEB2002^ABF)
ENFORM06 - SECURITY DETAILS

--------------------------------------------------------------------------------
NBP USER NAME : SUPER100     DEFAULTS SET : MS
                           ALLOWED ENVIRONMENTS
                           SCHEDULER      CLASS
FOR JOB DEFINITIONS      : \*.$*          *
FOR BULK SUBMIT          : \*.$*          *
FOR AD-HOC SUBMIT        : \*.$*          *
--------------------------------------------------------------------------------
SCREEN SECURITY

Codes:   M-Modify, I-Inquiry,           Codes:   I-Inquiry, Blank-No Access
         Blank-No Access
SNP010   BULK SUBMIT ENVIRONMENT : M    SNP090   BULK SUBMIT             : I
SNP020   DEFAULTS SET DETAILS    : M    SNP130   UTILITY MENU            : I
SNP030   JOB DEFINITION          : M    SNP200   SCHEDULER INTERFACE     : I

SNP030A  JOB ASSIGNS             : M    SNP300   REPORTS                 : I
SNP030D- JOB DEFINES             : M
SNP030P  JOB PARAMS              : M
SNP030DP JOB DEPENDENCIES        : M
SNP030S  BULK SELECTION CRITERIA : M

SNP040   CATALOG ASSIGNS         : M    Codes:
SNP050D- CATALOG DEFINES         : M    S-Supervisor, P-Change Own Password,
SNP060   CATALOG PARAMS          : M    I-Inquiry,    Blank-No Access
SNP070   CALENDAR                : M    SNP100   SECURITY                : S
SNP080   AD HOC JOB SELECTION    : M
--------------------------------------------------------------------------------
UTILITY AND SCHEDULER INTERFACE

Codes:   I-Inquiry, Blank-No Access     Codes:   M-Modify, I-Inquiry,
                                                 Blank-No Access

UTILITY MENU                            SCHEDULER INTERFACE

BATCHCOM :                          I   SNP210   JOB INFO            :     M
PERUSE   :                          I   SNP220   JOB STATUS          :     M
SPOOLCOM :                          I   SNP230   JOB INQUIRY         :     I
PATHCOM  :                          I   SNP240   SCHEDULER INFO      :     M
FUP      :                          I   SNP250   SCHEDULER STATUS    :     I
EDIT     :                          I   SNP260   CLASS DETAILS       :     M
TACL     :                          I   SNP270   EXECUTOR INFO       :     M
TMFCOM   :                          I   SNP280   EXECUTOR STATUS     :     I
PUP      :                          I   SNP290   WILD CARD PROCESSES :     M
TEDIT    :                          I
BATCHCAL :                          I
ENFORM   :                          I
SQLCI    :                          I
--------------------------------------------------------------------------------
.
.

RUN ON 15-OCT-2002 AT 13:50 HR
```

A

File Descriptions and Locations

Table A-1 lists and describes all NetBatch-Plus files. It indicates whether the files are supplied on the site update tape (SUT) containing NetBatch-Plus software, and the location of each file immediately after installation of the software. The location options shown on the table are:

SUT	The file is supplied on the site update tape containing NetBatch-Plus software.
Target Subvolume	The file location is the subvolume $*volume*.ZNBPLUS where *volume* is the volume specified during execution of the system generation program INSTALL.
Database Subvolume	The file location is the database subvolume specified during execution of the NetBatch-Plus installation macro INSTALL.
Object File Subvolume	The file location is the object file subvolume specified during execution of the NetBatch-Plus installation macro INSTALL.

For information on NetBatch files, see the *NetBatch User's Guide*.

Note. Your system administrator can change the locations of files after installation of NetBatch-Plus software. Therefore, the locations shown in the table are valid only if the files remain in the subvolumes specified during installation.

Table A-1. File Descriptions and Locations (page 1 of 5)

File Type	File Name	Description	SUT	File Location Subvol
Data files	NBP0000	For the current NetBatch-Plus session, contains a record of the number of signed-on users and a list of validated Guardian user IDs.		Database
	NBP0020	Contains allocated job numbers, parameters for the bulk submit control job, and details of NetBatch-Plus users.		Database
	NBP0030	Contains details of processes on the wild-card processes list.		Database
	NBP0040	Contains details of defaults sets.		Database
	NBP0050	Contains details of jobs defined on the Job Definition screen.		Database
	NBP0070	Contains details of catalog and job attachments.		Database
	NBP0090	Contains details of job dependencies.		Database
	NBP0100	Contains bulk job selection criteria.		Database

Table A-1. File Descriptions and Locations (page 2 of 5)

File Type	File Name	Description	SUT	File Location Subvol
Data files *(continued)*	NBP0170	Contains details of calendar categories.		Database
	NBP00500	Alternate key file for NBP0050.		Database
	NBP00700	Alternate key file for NBP0070.		Database
	NBP00900	Alternate key file for NBP0090.		Database
	NBP01700	Alternate key file for NBP0170.		Database
DBUPDATE files	DBINST	Macro for accepting user input and validation during DBUPDATE installation		ZNBPLUS
	DINSTALL	Installation macro for DBUPDATE tool		ZNBPLUS
	DSKEL	Skeleton macro for DBUPDATE		ZNBPLUS
	REQCOD	DBUPDATE requester program file		ZNBPLUS
	REQDIR	DBUPDATE requester program file		ZNBPLUS
	SDBOBJ	DBUPDATE server program file		ZNBPLUS
DDL files	DDLNBP	DDL dictionary.	x	Installation
	DICT*xxx*	DDL dictionary files.		Database
Pathway files	NBPCTL	Control file.		Object file
	NBPLOG NBPLOG2	Log files used by the Pathway processes PATHMON and TCP2 for reporting errors and changes in object status.		Object file
	NBPSCOD	SCREEN COBOL code file.	x	Object file installation
	NBPSDIR	Directory to SCREEN COBOL code file.	x	Object file installation
	NBPTCP2	Object file for the TCP2 terminal control process.		Object file
	NBPTCPL	Library for the object file NBPTCP2.		Object file
	PATHCONF	Configuration file for the NetBatch-Plus Pathway system.		Object file

Table A-1. File Descriptions and Locations (page 3 of 5)

File Type	File Name	Description	SUT	File Location Subvol
Program and server files	NBPOBJ	Object file containing user conversion routines used during NetBatch-Plus installation to build the NBPTCPL file.	x	Object file installation
	PB0010O	Object file (licensed) for the bulk submit program.	x	Object file installation
	PS0000O	Object file (licensed) for the environment server. This server is the main NetBatch-Plus server, performing all functions except those performed by the utility server (PS0130O) and the report server (PS0300O).	x	Object file installation
	PS0130O	Object file (licensed) for the utility server. The primary function of this server is to give users access from within the NetBatch-Plus application to processes listed on the Utility Menu screen.	x	Object file installation
	PS0300O	Object file for the Enform report server. For more information on the report server, see Report Types on page 7-1.	x	Object file installation
Report files	ENF01S	EDIT-format source file for Defaults Sets report.	x	Installation
	ENF02S	EDIT-format source file for Catalogs report.	x	Installation
	ENF03S	EDIT-format source file for Job Definitions report.	x	Installation
	ENF04S	EDIT-format source file for Job Attachments report.	x	Installation
	ENF05S	EDIT-format source file for Dependent-Master Jobs report.	x	Installation
	ENF06S	EDIT-format source file for Security Details report.	x	Installation
	ENF07S	EDIT-format source file for Calendar by Category report.	x	Installation
	ENF09S	EDIT-format source file for Calendar by Date report.	x	Installation
	ENF67S	EDIT-format source file for Master-Dependent Jobs report.	x	Installation

Table A-1. File Descriptions and Locations (page 4 of 5)

File Type	File Name	Description	SUT	File Location Subvol
Report files (*continued*)	ENF68S	EDIT-format source file for Bulk Job Selection Criteria report.	x	Installation
	ENFORM01	Enform compiled query file for Defaults Sets report.		Database
	ENFORM02	Enform compiled query file for Catalogs report.		Database
	ENFORM03	Enform compiled query file for Job Definitions report.		Database
	ENFORM04	Enform compiled query file for Job Attachments report.		Database
	ENFORM05	Enform compiled query file for Dependent-Master Jobs report.		Database
	ENFORM06	Enform compiled query file for Security Details report.		Database
	ENFORM07	Enform compiled query file for Calendar by Category report.		Database
	ENFORM09	Enform compiled query file for Calendar by Date report.		Database
	ENFORM67	Enform compiled query file for Master-Dependent Jobs report.		Database
	ENFORM68	Enform compiled query file for Bulk Job Selection Criteria report.		Database
TACL macros	INSTALL	Starts the NetBatch-Plus installation process and invokes the macros in NBPINST. Also handles error processing during installation and creates and writes details of installation events to the log file INSTLOG.	x	Installation
	NCOLD	Cold starts the NetBatch-Plus Pathway system by using configuration information specified in the PATHCONFfile.		Object file
	NCOOL	Cool starts the NetBatch-Plus Pathway system by using existing configuration information from the control file NBPCTL.		Object file

Table A-1. File Descriptions and Locations (page 5 of 5)

File Type	File Name	Description	SUT	File Location Subvol
TACL macros *(continued)*	NRUN	Starts the NetBatch-Plus Pathway system on the current terminal and runs the program that displays the Main Menu screen.		Object file
	NSHUT	Shuts down the Pathway system on the current terminal. The control file NBPCTL retains configuration information for the system.		Object file
Text file	NBPIMUDB	Contains the text of NetBatch-Plus messages, and screen and field help.	x	Installation database object file
Other files	INSTLOG	Log file generated during NetBatch-Plus installation. The file contains a record of installation events such as user responses to prompts by the NetBatch-Plus installation macro INSTALL, and so on.		Installation
	NBPFUP	EDIT-format file containing the FUP source code used for data file creation during NetBatch-Plus installation.	x	Installation
	NBPINST	Library file containing the macros invoked by the NetBatch-Plus installation macro INSTALL.	x	Installation
	SKEL	Skeleton file containing the source code used to create these TACL macros during installation: NCOLD, NCOOL, NRUN, NSHUT. The file also contains the source code used to create the PATHCONFfile.	x	Installation

B DLL Record Description

This appendix contains Enform format descriptions of the report records in the DDL-generated NetBatch-Plus dictionary. The appendix includes a brief discussion about record access and gives some general information about attachments records. Figure B-1 on page B-15 shows the connecting relationships between records.

Record Access

Records containing secured information have a field called *key-item*-ACCESS where *key-item* is the record identifier. For example, this field on the REPORT-ASSIGN record is A-ACCESS. On the REPORT-JOBD record, it is JD-ACCESS.

The field displays one of these values indicating whether the report owner or any other validated Guardian user has read access to the record:

OK Read access granted. The report server returns all information in the record.

NK Read access denied. The report server returns primary key information only.

EM Read access granted, but the record is empty.

Only three records do not have a *key-item*-ACCESS field: REPORT-BULK, REPORT-CALENDAR, REPORT-SEC. These records do not have the field because they do not contain secured information.

Attachments Records

Table B-1 lists the report records containing information about catalog and job attachments.

Table B-1. Catalog and Job Attributes (page 1 of 2)

Attachment Type	Report Record	Contents
Catalog	REPORT-CATALOG	All Catalog ASSIGNs, PARAMs, and DEFINEs
	REPORT-CASSIGN	Catalog ASSIGNs
	REPORT-CCAT	Catalog Catalog DEFINEs
	REPORT-CDEF	Catalog Defaults DEFINEs
	REPORT-CMAP	Catalog Map DEFINEs
	REPORT-CPARAM	Catalog PARAMs
	REPORT-CSPOOL	Catalog Spool DEFINEs
	REPORT-CTAPE	Catalog Tape DEFINEs
Job	REPORT-ATTACHMENT	All Job ASSIGNs, PARAMs, and DEFINEs
	REPORT-ASSIGN	Job ASSIGNs
	REPORT-CAT	Job Catalog DEFINEs

Table B-1. Catalog and Job Attributes (page 2 of 2)

Attachment Type	Report Record	Contents
	REPORT-DEF	Job Defaults DEFINEs
	REPORT-MAP	Job Map DEFINEs
	REPORT-PARAM	Job PARAMs
	REPORT-SPOOL	Job Spool DEFINEs

Two of the attachments records contain information about all attachments of the same type:

- REPORT-CATALOG—contains details of all catalog attachments
- REPORT-ATTACHMENT—contains details of all job attachments

Each of these records has a type field whose value indicates whether the record is an ASSIGN, PARAM, or DEFINE. For REPORT-CATALOG, the type field is CG-TYPE. For REPORT-ATTACHMENT, AT-TYPE. The field values are:

a Identifies an ASSIGN
P Identifies a PARAM
C Identifies an SQL catalog DEFINE
D Identifies a defaults DEFINE
M Identifies a map DEFINE
S Identifies a spool DEFINE
T Identifies a tape DEFINE

The type field values let you specify and sort attachments from either of the two records. NetBatch-Plus uses the lowercase a and p to list ASSIGNs and PARAMs before DEFINEs when you specify no other sorting sequence. The application does not find ASSIGNs and PARAMs if you specify them with uppercase letters.

Each attachments record contains at least one 100-byte field recording attachment attributes. The field lists the attributes in a linear fashion, with the attachment name listed first.

Table B-2. Examples of Attachments Records

Record	Attribute Fields	Attachment Example
REPORT-ASSIGN	A-ASSIGN-1 A-ASSIGN-2	CTL2-JOB-01-ASSIGN, $DATA7.NBPQA.NBP0080, EXT (50, 100), CODE 101, SHARED, I-O, REC 80, BLOCK 400
REPORT-CCAT	CC-CATALOG	=CAT^CTLOG-N, CLASS CATALOG, SUBVOL $DATA7.NBPQA
REPORT-SPOOL	S-SPOOL-1 S-SPOOL-2 S-SPOOL-3	=DMG-SPOOL-DEFINE-JOB, CLASS SPOOL, BATCHNAME EOP-ACCOUNTS, LOC \MELBDEV.$S.#LPT1, REPORT “EOP INVOICES”, OWNER FPP.MANAGER, HOLDAFTER ON, SELPRI 3, MAXPRINTPAGES 100, PAGE SIZE 60

Record Descriptions

This subsection contains the report record descriptions. The records are listed alphabetically by name. Each description includes:

- A record summary.
- Environmental information that includes each field’s name, data type, length offset, number of occurrences, and whether the field is a key field or not. The descriptions indicate the key type (primary or alternate) for key fields.

REPORT-ASSIGN

Records details of ASSIGNs attached to jobs.

Example B-1. REPORT-ASSIGN Record

```
01  A     0:236           REPORT-ASSIGN
 02  A     0:2              A-ACCESS
 02  A     2:134   ,P-KEY  A-KEY
  03  A     2:34    ,P-KEY  A-JOB-KEY
   04  A     2:10    ,P-KEY  A-SET
   04  A    12:24            A-JOB
  03  A    36:100           A-ASSIGN-1
 02  A   136:100           A-ASSIGN-2
```

REPORT-ATTACHMENT

Records details of ASSIGNs, PARAMs, and DEFINEs attached to jobs.

Example B-2. REPORT-ATTACHMENT Record

```
01  A     0:400           REPORT-ATTACHMENT
 02  A     0:2             AT-ACCESS
 02  A     2:98    ,P-KEY  AT-KEY
  03  A     2:34    ,P-KEY  AT-J
   04  A     2:10    ,P-KEY  AT-SET
   04  A    12:24            AT-JNAME
  03  A    36:1             AT-TYPE
  03  A    37:63            AT-NAME
 02  A   100:100           AT-1
 02  A   200:100           AT-2
 02  A   300:100           AT-3
```

REPORT-BULK

Records details of jobs selected in bulk submit test and production runs.

Example B-3. REPORT-BULK Record

```
01  A     0:354           REPORT-BULK
 02  A     0:1             PREDICT-SUBMIT
 02  A     1:17            JOB-OWNER
 02  A    18:18            SCHEDULER
 02  A    36:10            D-SET
 02  A    46:24            JOB-NAME
 02  A    70:24            JOB-CLASS
 02  A    94:36            EXECUTOR-PROGRAM
 02  A   130:26            DEFAULTS
 02  A   156:36            IN-NAME
 02  A   192:36            OUT-FILE
 02  A   228:2             START-AT-AFTER
 02  A   230:6             AFTER-TIME
  03  N   230:6              B  (3 occurrences, 2 bytes each)
 02  A   236:1             HOLD-AFTER-FLAG
 02  A   238:1             HOLD-FLAG
 02  A   239:1             WAIT-ON
 02  A   240:10            MASTER-SET
 02  A   250:24            MASTER-NAME
 02  A   274:80            MESSAGES
```

REPORT-CALENDAR

Records calendar details.

Example B-4. REPORT-CALENDAR Record

```
01  A     0:14    ,P-KEY  REPORT-CALENDAR
 02  A     0:14    ,P-KEY  CALENDAR-KEY
  03  A     0:10    ,P-KEY  CATEGORY
  03  A    10:4     ,A-KEY  CALENDAR-DATE
   04  N    10:4     ,A-KEY  B
```

REPORT-CASSIGN

Records details of ASSIGNs in the attachments catalog.

Example B-5. REPORT-CASSIGN Record

```
01  A     0:212           REPORT-CASSIGN
 02  A     0:2             CA-ACCESS
 02  A     2:110   ,P-KEY  CA-KEY
  03  A     2:10    ,P-KEY  CA-SET
  03  A    12:100           CA-ASSIGN-1
 02  A   112:100           CA-ASSIGN-2
```

REPORT-CAT

Records details of SQL catalog DEFINEs attached to jobs.

Example B-6. REPORT-CAT Record

```
01  A     0:136           REPORT-CAT
 02  A     0:2             C-ACCESS
 02  A     2:34    ,P-KEY  C-KEY
  03  A     2:34    ,P-KEY  C-JOB-KEY
   04  A     2:10    ,P-KEY  C-SET
   04  A    12:24           C-JOB
 02  A    36:100           C-CATALOG
```

REPORT-CATALOG

Records details of ASSIGNs, PARAMs, and DEFINEs in the attachments catalog.

Example B-7. REPORT-CATALOG Record

```
01  A     0:376           REPORT-CATALOG
 02  A     0:2             CG-ACCESS
 02  A     2:74    ,P-KEY  CG-KEY
  03  A     2:10    ,P-KEY  CG-SET
  03  A    12:1             CG-TYPE
  03  A    13:63            CG-NAME
 02  A    76:100           CG-1
 02  A   176:100           CG-2
 02  A   276:100           CG-3
```

REPORT-CCAT

Records details of SQL catalog DEFINEs in the attachments catalog.

Example B-8. REPORT-CCAT Record

```
01  A     0:112           REPORT-CCAT
 02  A     0:2             CC-ACCESS
 02  A     2:10    ,P-KEY  CC-KEY
  03  A     2:10    ,P-KEY  CC-SET
 02  A    12:100           CC-CATALOG
```

REPORT-CDEF

Records details of defaults DEFINEs in the attachments catalog.

Example B-9. REPORT-CDEF Record

```
01  A     0:112           REPORT-CDEF
 02  A     0:2             CD-ACCESS
 02  A     2:110   ,P-KEY  CD-KEY
  03  A     2:10    ,P-KEY  CD-SET
  03  A    12:100           CD-DEFAULT
```

REPORT-CMAP

Records details of map DEFINEs in the attachments catalog.

Example B-10. REPORT-CMAP Record

```
01  A     0:112           REPORT-CMAP
 02  A     0:2             CM-ACCESS
 02  A     2:110   ,P-KEY  CM-KEY
  03  A     2:10    ,P-KEY  CM-SET
  03  A    12:100           CM-MAP
```

REPORT-CPARAM

Records details of PARAMs in the attachments catalog.

Example B-11. REPORT-CPARAM Record

```
01  A     0:112           REPORT-CPARAM
 02  A     0:2             CP-ACCESS
 02  A     2:110   ,P-KEY  CP-KEY
  03  A     2:10    ,P-KEY  CP-SET
  03  A    12:100           CP-PARAM
```

REPORT-CSPOOL

Records details of spool DEFINEs in the attachments catalog.

Example B-12. REPORT-CSPOOL Record

```
01  A     0:312           REPORT-CSPOOL
 02  A     0:2             CS-ACCESS
 02  A     2:110   ,P-KEY  CS-KEY
  03  A     2:10    ,P-KEY  CS-SET
  03  A    12:100           CS-SPOOL-1
 02  A   112:100           CS-SPOOL-2
 02  A   212:100           CS-SPOOL-3
```

REPORT-CTAPE

Records details of tape DEFINEs in the attachments catalog.

Example B-13. REPORT-CTAPE Record

```
01  A     0:312           REPORT-CTAPE
 02  A     0:2             CT-ACCESS
 02  A     2:110   ,P-KEY  CT-KEY
  03  A     2:10    ,P-KEY  CT-SET
  03  A    12:100           CT-TAPE-1
 02  A   112:100           CT-TAPE-2
 02  A   212:100           CT-TAPE-3
```

REPORT-DEF

Records details of defaults DEFINEs attached to jobs.

Example B-14. REPORT-DEF Record

```
01  A     0:136           REPORT-DEF
 02  A     0:2             D-ACCESS
 02  A     2:134   ,P-KEY  D-KEY
  03  A     2:34    ,P-KEY  D-JOB-KEY
   04  A     2:10    ,P-KEY  D-SET
   04  A    12:24           D-JOB
  03  A    36:100           D-DEFAULT
```

REPORT-DEPENDENT

Records details of dependent jobs and their masters.

Example B-15. REPORT-DEPENDENT Record

```
01  A     0:70            REPORT-DEPENDENT
 02  A     0:2             DP-ACCESS
 02  A     2:34    ,P-KEY  DP-DEPENDENT
  03  A     2:10    ,P-KEY  DP-SET
  03  A    12:24           DP-NAME
 02  A    36:34           DP-MASTER
  03  A    36:10           DP-SETM
  03  A    46:24           DP-NAMEM
```

REPORT-JOB

Records details of jobs defined on the Job Definition screen. The record does not include values inherited by a job from its defaults set.

Example B-16. REPORT-JOB Record

```
01  A     0:354           REPORT-JOB
 02  A     0:2             JB-ACCESS
 02  A     2:34    ,P-KEY  JB-KEY
  03  A     2:10    ,P-KEY  JB-SET
  03  A    12:24            JB-NAME
 02  A    36:24            JB-SECURITY
  03  A    36:18            RECORD-OWNER
  03  A    54:5             RECORD-RWUP
 02  A    60:294           JB-DETAILS
  03  A    60:15            SCHEDULER
  03  A    75:25            JOBCLASS
  03  A   100:36            EXECUTOR-PROGRAM
  03  A   136:6             PRINT-LINES
  03  A   142:6             PRINT-PAGES
  03  A   148:3             TAPE-DRIVES
  03  A   151:41            START-UP
  03  A   192:2             SELPRI
  03  A   194:4             PRIORITY
  03  A   198:6             WAIT-TIME
  03  A   204:6             START-TIME
  03  A   210:36            IN-FILE
  03  A   246:36            OUT-FILE
  03  A   282:26            DEFAULTS
  03  A   308:33            JOB-TEXT
  03  A   341:3             START-AT-AFTER
  03  A   344:2             ANY-USER-SUBMIT
  03  A   346:2             HOLD-FLAG
  03  A   348:2             RESTART-FLAG
  03  A   350:2             STOP-ON-ABEND
  03  A   352:2             HOLD-AFTER-FLAG
```

REPORT-JOBD

Records details of jobs defined on the Job Definition screen. The record includes values inherited by a job from its defaults set. These values appear with an asterisk (*) at the last character position in the fields to which they apply.

The REPORT-JOBD record simplifies Enform reporting because it links, in the report server, the REPORT-JOB and REPORT-SET records. This link means you have to specify REPORT-JOBD in your ENFORM queries only when you want to report on information in the other two records. As a result, queries specifying REPORT-JOBD are easier to write. They also take less time to process than queries specifying and linking REPORT-JOB and REPORT-SET.

Example B-17. REPORT-JOBD Record

```
01  A     0:354           REPORT-JOBD
 02  A     0:2             JD-ACCESS
 02  A     2:34    ,P-KEY  JD-KEY
  03  A     2:10    ,P-KEY  JD-SET
  03  A    12:24            JD-NAME
 02  A    36:24            JD-SECURITY
  03  A    36:18            RECORD-OWNER
  03  A    54:5             RECORD-RWUP
 02  A    60:294           JD-DETAILS
  03  A    60:15            SCHEDULER
  03  A    75:25            JOBCLASS
  03  A   100:36            EXECUTOR-PROGRAM
  03  A   136:6             PRINT-LINES
  03  A   142:6             PRINT-PAGES
  03  A   148:3             TAPE-DRIVES
  03  A   151:41            START-UP
  03  A   192:2             SELPRI
  03  A   194:4             PRIORITY
  03  A   198:6             WAIT-TIME
  03  A   204:6             START-TIME
  03  A   210:36            IN-FILE
  03  A   246:36            OUT-FILE
  03  A   282:26            DEFAULTS
  03  A   308:33            JOB-TEXT
  03  A   341:3             START-AT-AFTER
  03  A   344:2             ANY-USER-SUBMIT
  03  A   346:2             HOLD-FLAG
  03  A   348:2             RESTART-FLAG
  03  A   350:2             STOP-ON-ABEND
  03  A   352:2             HOLD-AFTER-FLAG
```

REPORT-MAP

Records details of map DEFINEs attached to jobs.

Example B-18. REPORT-MAP Record

```
01  A     0:136           REPORT-MAP
 02  A     0:2             M-ACCESS
 02  A     2:134   ,P-KEY  M-KEY
  03  A     2:34    ,P-KEY  M-JOB-KEY
   04  A     2:10    ,P-KEY  M-SET
   04  A    12:24            M-JOB
  03  A    36:100           M-MAP
```

REPORT-MASTER

Records details of master jobs and their dependents.

Example B-19. REPORT-MASTER Record

```
01  A     0:70            REPORT-MASTER
 02  A     0:2             MA-ACCESS
 02  A     2:34            MA-DEPENDENT
  03  A     2:10            MA-SET
  03  A    12:24            MA-NAME
 02  A    36:34    ,P-KEY  MA-MASTER
  03  A    36:10    ,P-KEY  MA-SETM
  03  A    46:24            MA-NAMEM
```

REPORT-PARAM

Records details of PARAMs attached to jobs.

Example B-20. REPORT-PARAM Record

```
01  A     0:136           REPORT-PARAM
 02  A     0:2             P-ACCESS
 02  A     2:134   ,P-KEY  P-KEY
  03  A     2:34    ,P-KEY  P-JOB-KEY
   04  A     2:10    ,P-KEY  P-SET
   04  A    12:24            P-JOB
  03  A    36:100           P-PARAM
```

REPORT-SCHED

Records details of the bulk submit selection criteria for jobs.

Example B-21. REPORT-SCHED Record

```
01  A     0:56            REPORT-SCHED
 02  A     0:2              SC-ACCESS
 02  A     2:48    ,P-KEY   SC-KEY
  03  A     2:34    ,P-KEY   SC-JOB
   04  A     2:10    ,P-KEY   SC-SET
   04  A    12:24             SC-NAME
  03  A    36:10             SC-CATEGORY
  03  A    46:4              SC-DATE
   04  N    46:4               B
 02  A    50:5              SC-START-TIME
 02  A    55:1              SC-SCHED-FLAG
```

REPORT-SEC

Records the security profiles of NetBatch-Plus users.

Example B-22. REPORT-SEC Record

```
01  A     0:181           REPORT-SEC
 02  A     0:8     ,P-KEY  BATCH-USER
 02  A     8:173           S
  03  A     8:10             L-SET-NAME
  03  A    18:14             L-JOB-SCHEDULER
  03  A    32:24             L-JOB-JOBCLASS
  03  A    56:14             L-AD-HOC-SCHEDULER
  03  A    70:24             L-AD-HOC-JOBCLASS
  03  A    94:14             L-SCHEDULE-SCHEDULER
  03  A   108:24             L-SCHEDULE-JOBCLASS
  03  N   132:4              L-TIMEOUT-VALUE
  03  A   136:1              L-REDISPLAY
  03  A   137:44             L-SECURITY
   04  A   137:13             MAIN-MENU-SECURITY
    05  A   137:1               L-CONF
    05  A   138:1               L-SET
    05  A   139:1               L-DEFI
    05  A   140:1               L-CAAS
    05  A   141:1               L-CADE
    05  A   142:1               L-CAPA
    05  A   143:1               L-CALE
    05  A   144:1               L-SESU
    05  A   145:1               L-SCGE
    05  A   146:1               L-SECU
    05  A   147:1               L-RPRT
    05  A   148:1               L-UTIL
    05  A   149:1               L-NBIF
```

(continued)

```
04  A   150:13            UTILITY-MENU-SECURITY
  05  A   150:1             L-BATC
  05  A   151:1             L-PERU
  05  A   152:1             L-SPOO
  05  A   153:1             L-PATH
  05  A   154:1             L-FUP
  05  A   155:1             L-EDIT
  05  A   156:1             L-TACL
  05  A   157:1             L-TMFC
  05  A   158:1             L-PUP
  05  A   159:1             L-TTEX
  05  A   160:1             L-TMAI
  05  A   161:1             L-ENFO
  05  A   162:1             L-COMI
 04  A   163:9             NBIF-MENU-SECURITY
  05  A   163:1             L-JOB
  05  A   164:1             L-JOBS
  05  A   165:1             L-JOBE
  05  A   166:1             L-EXEC
  05  A   166:1             L-EXEC
  05  A   167:1             L-EXST
  05  A   168:1             L-JOBC
  05  A   169:1             L-SCHE
  05  A   170:1             L-SCHS
  05  A   171:1             L-NBSP
 04  A   172:5             JOB-DEF-MENU-SECURITY
  05  A   172:1             L-ASSI
  05  A   173:1             L-DEFI-1
  05  A   174:1             L-PARA
  05  A   175:1             L-DEPE
  05  A   176:1             L-SCHE-JD
 04  A   177:4             AD-HOC-MENU-SECURITY
  05  A   177:1             L-JOAS
  05  A   178:1             L-JODE
  05  A   179:1             L-JOPA
  05  A   180:1             L-JOOW
```

REPORT-SET

Records details of defaults sets.

Example B-23. REPORT-SET Record

```
01  A     0:330           REPORT-SET
 02  A     0:2             SE-ACCESS
 02  A     2:10    ,P-KEY  SE-SET
 02  A    12:24            SE-SECURITY
  03  A    12:18            RECORD-OWNER
  03  A    30:5             RECORD-RWUP
 02  A    36:294           SE-DETAILS
  03  A    36:15            SCHEDULER
  03  A    51:25            JOBCLASS
  03  A    76:36            EXECUTOR-PROGRAM
  03  A   112:6             PRINT-LINES
  03  A   118:6             PRINT-PAGES
  03  A   124:3             TAPE-DRIVES
  03  A   127:41            START-UP
  03  A   168:2             SELPRI
  03  A   170:4             PRIORITY
  03  A   174:6             WAIT-TIME
  03  A   180:6             START-TIME
  03  A   186:36            IN-FILE
  03  A   222:36            OUT-FILE
  03  A   258:26            DEFAULTS
  03  A   284:33            JOB-TEXT
  03  A   317:3             START-AT-AFTER
  03  A   320:2             ANY-USER-SUBMIT
  03  A   322:2             HOLD-FLAG
  03  A   324:2             RESTART-FLAG
  03  A   326:2             STOP-ON-ABEND
  03  A   328:2             HOLD-AFTER-FLAG
```

REPORT-SPOOL

Records details of spool DEFINEs attached to jobs.

Example B-24. REPORT-SPOOL Record

```
01  A     0:336           REPORT-SPOOL
 02  A     0:2             S-ACCESS
 02  A     2:134   ,P-KEY  S-KEY
  03  A     2:34    ,P-KEY  S-JOB-KEY
   04  A     2:10    ,P-KEY  S-SET
   04  A    12:24            S-JOB
  03  A    36:100           S-SPOOL-1
 02  A   136:100           S-SPOOL-2
 02  A   236:100           S-SPOOL-3
```

REPORT-TAPE

Records details of tape DEFINEs attached to jobs.

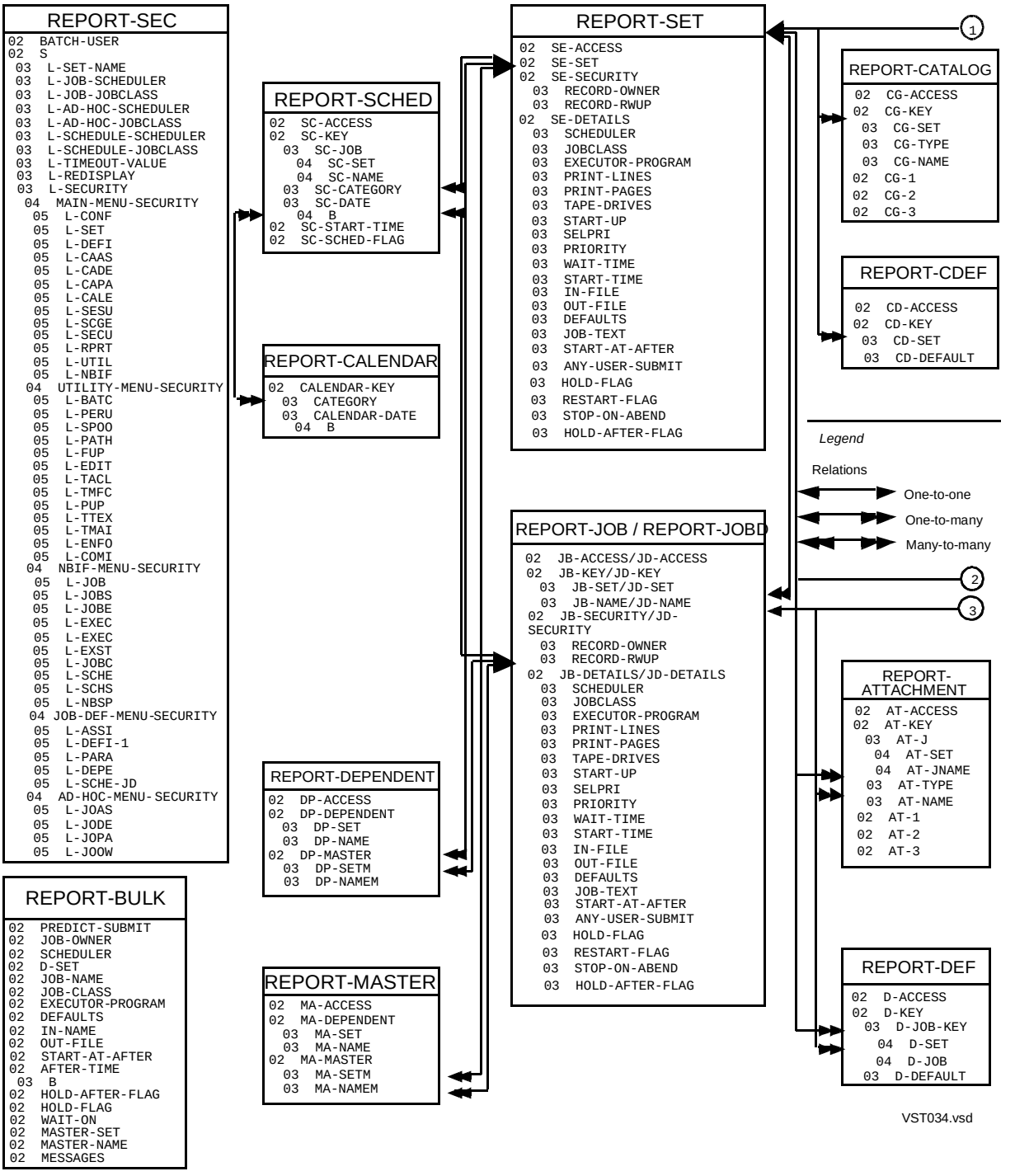
Example B-25. REPORT-TAPE Record

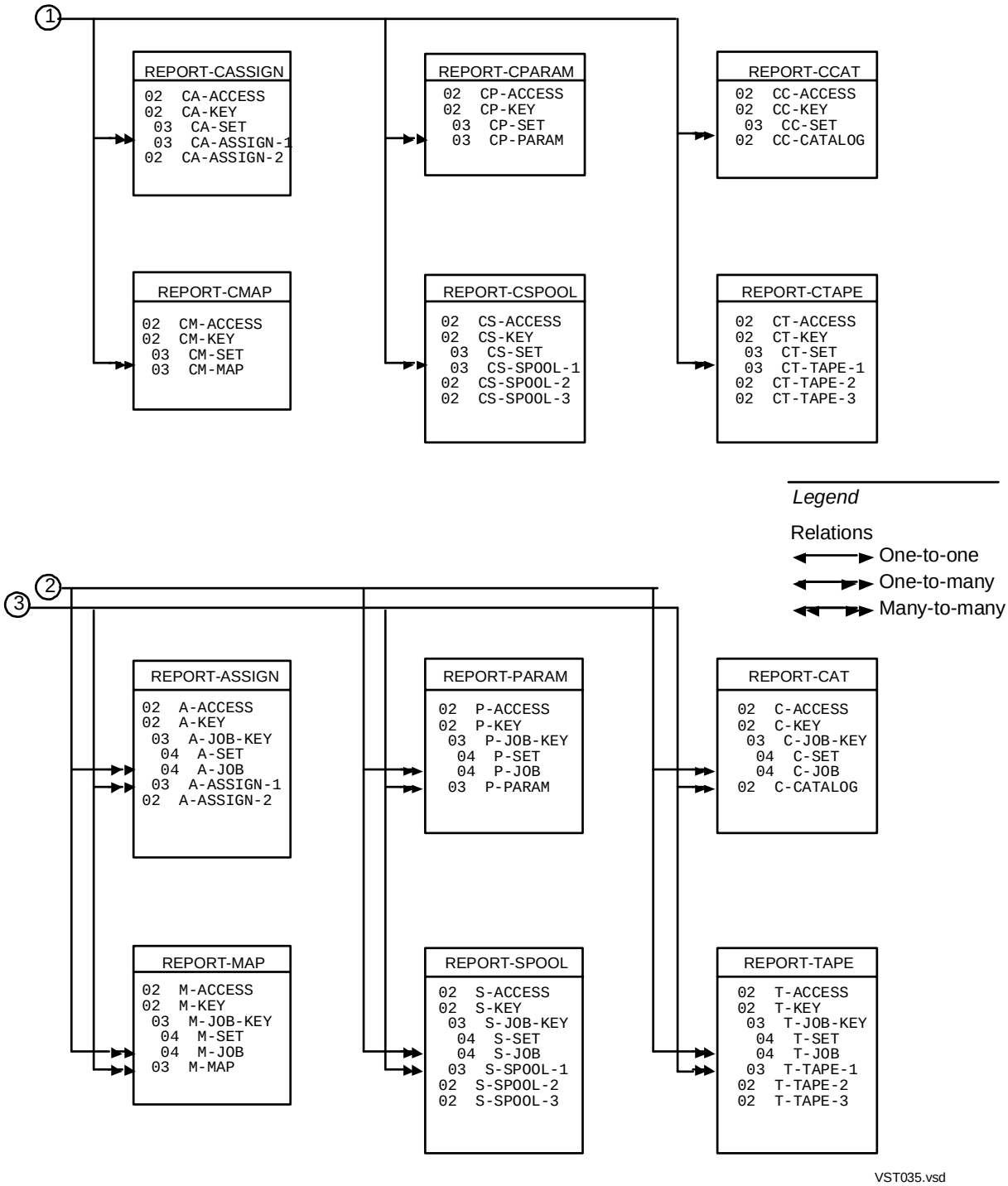
```
01  A     0:336           REPORT-TAPE
 02  A     0:2             T-ACCESS
 02  A     2:134   ,P-KEY  T-KEY
  03  A     2:34    ,P-KEY  T-JOB-KEY
   04  A     2:10    ,P-KEY  T-SET
   04  A    12:24            T-JOB
  03  A    36:100           T-TAPE-1
 02  A   136:100           T-TAPE-2
 02  A   236:100           T-TAPE-3
```

DDL Diagram

Figure B-1 on page B-15 shows the report records in the DDL-generated NetBatch-Plus dictionary and, where applicable, the connecting relationships between those records.

Figure B-1. DDL Record Descriptions




1
REPORT-CASSIGN
02 CA-ACCESS
02 CA-KEY
03 CA-SET
03 CA-ASSIGN-1
02 CA-ASSIGN-2
REPORT-CPARAM
02 CP-ACCESS
02 CP-KEY
03 CP-SET
03 CP-PARAM
REPORT-CCAT
02 CC-ACCESS
02 CC-KEY
03 CC-SET
02 CC-CATALOG
REPORT-CMAP
02 CM-ACCESS
02 CM-KEY
03 CM-SET
03 CM-MAP
REPORT-CSPOOL
02 CS-ACCESS
02 CS-KEY
03 CS-SET
03 CS-SPOOL-1
02 CS-SPOOL-2
02 CS-SPOOL-3
REPORT-CTAPE
02 CT-ACCESS
02 CT-KEY
03 CT-SET
03 CT-TAPE-1
02 CT-TAPE-2
02 CT-TAPE-3
Legend
Relations
One-to-one
One-to-many
Many-to-many
2
3
REPORT-ASSIGN
02 A-ACCESS
02 A-KEY
03 A-JOB-KEY
04 A-SET
04 A-JOB
03 A-ASSIGN-1
02 A-ASSIGN-2
REPORT-PARAM
02 P-ACCESS
02 P-KEY
03 P-JOB-KEY
04 P-SET
04 P-JOB
03 P-PARAM
REPORT-CAT
02 C-ACCESS
02 C-KEY
03 C-JOB-KEY
04 C-SET
04 C-JOB
02 C-CATALOG
REPORT-MAP
02 M-ACCESS
02 M-KEY
03 M-JOB-KEY
04 M-SET
04 M-JOB
03 M-MAP
REPORT-SPOOL
02 S-ACCESS
02 S-KEY
03 S-JOB-KEY
04 S-SET
04 S-JOB
03 S-SPOOL-1
02 S-SPOOL-2
02 S-SPOOL-3
REPORT-TAPE
02 T-ACCESS
02 T-KEY
03 T-JOB-KEY
04 T-SET
04 T-JOB
03 T-TAPE-1
02 T-TAPE-2
02 T-TAPE-3
VST035.vsd

C Messages

This appendix lists and briefly describes NetBatch-Plus error, warning, and informational messages. The appendix lists the messages in alphabetic order.

Error Messages

Error messages give reasons why the NetBatch-Plus application did not perform the function you requested. For example, if you attempt a function on a nonexistent ASSIGN, the application displays this error message:

```
ASSIGN details do not exist - try another
```

Warning Messages

Warning messages advise the NetBatch-Plus application performed the function you requested, but a condition exists that might affect the successful outcome of the function. This message is an example of a warning displayed when you submit a job to a scheduler without specifying the job's input file:

```
IN file does not exist; create and secure as required
```

Informational Messages

Informational messages confirm the NetBatch-Plus application performed the function you requested. This example of a common informational message indicates a successful read function:

```
Displayed Ok - Ready for use
```

Error, Warning, and Informational Messages

system-name.$*process-name* is not a NetBatch scheduler

The function you attempted failed because you specified a nonexistent scheduler. Enter the name of an existing NetBatch scheduler and retry the function.

```
A Category and Date must be specified
```

The F6–Maintain function attempted to add a date to a calendar category. The attempt failed because you did not specify both the category and the date.

```
A Category must be specified
```

On the Calendar screen, this message indicates the F4–Generate function attempted to generate dates in a calendar category. The attempt failed because you did not specify the category name.

On the Bulk Submit screen, this message indicates, for the previously mentioned reason, an unsuccessful attempt to submit a bulk run that selects jobs by category.

```
A Frequency must be specified
```

The F4–Generate function attempted to generate dates in a calendar category. The attempt failed because you did not specify the frequency option.

```
A job cannot be directly or indirectly dependent on itself
```

The function you attempted failed because you specified a dependent job as one of its own masters. A dependent job cannot depend on itself, whether you specify the dependency directly or indirectly through another job.

```
A job cannot specify both CALENDAR and EVERY attributes
```

The function you attempted failed because you specified the mutually exclusive attributes CALENDAR and EVERY for the job. You can specify either of these attributes for a job, but not both.

```
ABORTing Scheduler - running jobs will be killed
```

A warning message advising the F8–Abort function is stopping all executing and suspended jobs immediately and halting scheduler operation. The function does not let executing jobs finish before it halts the scheduler.

```
Access not permitted to user-ID
```

You attempted to read, write, use, or purge a record owned by *user-ID*. The attempt failed because the ID and password of a Guardian user with appropriate RWUP access had not been validated during the current session. Before retrying the function, use the Password Validation screen to validate either the record owner's ID and password or those of a Guardian user with the necessary RWUP access.

```
Activated Ok - Ready for use
```

The F10–Activate function activated a suspended job.

```
Added Ok - Ready for use
```

The NetBatch-Plus application performed an add function successfully.

```
AFTER DAY is out of range 1 to 31
```

The function you attempted failed because the integer specifying the day of the month for the AFTER job attribute is not in the valid range 1 through 31.

```
AFTER HOUR is out of range 0 to 23
```

The function you attempted failed because the integer specifying the hour of the day for the AFTER job attribute is not in the valid range 0 through 23.

```
AFTER MINUTE is out of range 0 to 59
```

The function you attempted failed because the integer specifying the minute of the hour for the AFTER job attribute is not in the valid range 0 through 59.

```
AFTER MONTH is out of range 1 to 12
```

The function you attempted failed because the integer specifying the month for the AFTER job attribute is not in the valid range 01 through 12.

```
AFTER YEAR is out of range current-year to 2525
```

The function you attempted failed because the integer specifying the year for the AFTER job attribute is not in the valid range. The integer must be equal to or greater than *current-year* but not greater than the year 2525.

```
ALTERed job is currently executing. ALTER may not work
```

The F6–Alter function changed the attributes of an executing or suspended job. However, only changes to these attributes affect job execution: IFFAILS, PURGE-IN-FILE, RESTART, STOP-ON-ABEND. If the job is a recurrent job (a job with the CALENDAR or EVERY attribute), all changed attributes apply next time the job runs.

```
An End date must be greater than Start date
```

The F4–Generate function attempted to generate calendar category dates in the range specified by the Start and End fields. The attempt failed because the end date was either missing or the same as or earlier than the start date.

```
ASSIGN details already exist - try another
```

You attempted to add an ASSIGN to the NetBatch-Plus database. The attempt failed because the ASSIGN name matched the name of an existing ASSIGN. Either delete the existing ASSIGN before retrying the function or specify a unique name for the new ASSIGN.

```
ASSIGN details do not exist - try another
```

You specified a nonexistent ASSIGN.

```
ASSIGN Failure: file-name
```

The function you attempted failed because the physical file *file-name* referenced by an ASSIGN in the PATHCONF file does not exist. Before you retry the function, have your system administrator either create the file or correct the PATHCONF ASSIGN.

```
ASSIGN Name must not be spaces
```

You attempted to add a catalog or job ASSIGN without specifying its name. Give the ASSIGN a name before retrying the function.

```
AT DAY is out of range 1 to 31
```

The function you attempted failed because the integer specifying the day of the month for the AT job attribute is not in the valid range 1 through 31.

```
AT HOUR is out of range 0 to 23
```

The function you attempted failed because the integer specifying the hour of the day for the AT job attribute is not in the valid range 0 through 23.

```
AT MINUTE is out of range 0 to 59
```

The function you attempted failed because the integer specifying the minute of the hour for the AT job attribute is not in the valid range 0 through 59.

```
AT MONTH is out of range 1 to 12
```

The function you attempted failed because the integer specifying the month for the AT job attribute is not in the valid range 01 through 12.

```
AT YEAR is out of range current-year to 2525
```

The function you attempted failed because the integer specifying the year for the AT job attribute is not in the valid range. The integer must be equal to or greater than *current-year* but not greater than the year 2525.

```
AT-ALLOWED attribute is OFF
```

The F5–Run Now function attempted to submit a job to a scheduler whose AT-ALLOWED attribute was OFF. The attempt failed because the AT-ALLOWED attribute must be ON for a scheduler to accept jobs submitted by F5–Run Now.

```
AT-ALLOWED is currently OFF in the Scheduler; submitted AFTER
time
```

You submitted a job with the AT attribute to a scheduler whose AT-ALLOWED attribute was OFF. The NetBatch-Plus application converted the attribute to AFTER to prevent the scheduler from rejecting the job.

```
BACKUPCPU out of range 0 to 15, or * for any CPU
```

The function you attempted failed because the CPU specified for the backup scheduler process does not exist on the system where the primary scheduler process resides. To specify a valid CPU, enter an integer in the range 0 through 15 identifying an existing CPU on that system. Alternatively, enter an asterisk (*) to specify any CPU.

```
BACKUPCPU specified is the primary CPU for NetBatch
```

The function you attempted failed because the CPU specified for the backup scheduler process is the same as the CPU where the primary scheduler process resides. You can run the backup scheduler process only in a CPU that is different from that of the primary scheduler process.

```
BLOCKLEN must be a multiple of RECLEN
```

The function you attempted failed because you specified, for fixed-length records in a tape file, a block length that is not a multiple of the record length. The number of bytes specifying block length must be a multiple of record length.

```
BLOCKLEN, RECFORM, RECLEN required for OUTput to IBM
```

The function you attempted failed because you did not specify block length, record format, and record length for an output file on an IBM-standard labeled tape. You must specify these values for IBM-standard labeled tapes.

```
Both Af/At and TIME must exist as a pair
```

The function you attempted failed because you did not specify a value in the Time field with a corresponding value in the At/Af field or vice versa. You must specify a value in the At/Af field with a value in the Time field.

```
Both Volume and Subvolume must be entered
```

The function you attempted failed because you did not specify enough information in the Volume field, Catalog field, or both. You must specify at least a volume and subvolume in each of these fields.

```
Bulk job selection details do not exist - try another
```

The current job has no bulk job selection criteria.

```
Calendar details in use - please try again
```

The function you attempted failed because the NetBatch-Plus application was already processing another user's request to update the calendar. Wait a few moments before retrying the function.

```
CALENDAR file has an invalid filecode
```

The function you attempted failed because you specified an invalid calendar file for the job's CALENDAR attribute. Valid calendar files are those generated by the NetBatch calendar program BATCHCAL (file code 848).

```
CALENDAR file has expired; job put in SPECIAL-8 state
```

You submitted a job whose BATCHCAL calendar file contains no dates equal to or greater than the current date. The scheduler accepted the job but flagged it with a state of SPECIAL-8.

```
Can't talk to system monitor process
```

You attempted to run a program listed on the Utility Menu screen. The attempt failed because the NetBatch-Plus application could not communicate with the program's system monitor process. Contact your system administrator for help.

```
Catalog details cannot be deleted, in use by Job defaults-
set:job-name
```

The F8 function attempted to delete a catalog attachment. The attempt failed because the attachment was attached to the job whose set is *defaults-set* and name is *job-name*. You can delete catalog attachments only when they are not in use by jobs.

```
Catalog details in use - please try again
```

The function you attempted failed because the NetBatch-Plus application was already processing another user's request to update the catalog attachment record. Wait a few moments before retrying the function.

```
Category Generated Ok
```

The F4–Generate function generated the specified dates in the calendar category.

```
Changed Ok - Ready for use
```

The NetBatch-Plus application performed an update function successfully.

```
CLASS already exists
```

The F6–Maintain function attempted to add a new class with the same name as an existing class. The attempt failed because each class must have a unique name.

```
CLASS does not exist
```

The function you attempted failed because you specified a nonexistent class. Use the Class Details screen to list valid classes.

```
Class must not be spaces
```

You attempted to add or update details of a job or class. The attempt failed because you did not specify the class name.

```
Configuration details have changed - re-display
```

The function you attempted failed because details of the currently displayed user have changed since you last read the record. Perform the F1–Read function to display updated user details.

```
CONVERTTIMESTAMP Error; Check Daylight Savings Time (DST)
table
```

The function you attempted failed because the execution time specified for a job caused a daylight savings table (DST) timestamp conversion error. The code indicating the source of the error is written to the scheduler log file. For explanations of DST error codes recorded in the log, see the CONVERTTIMESTAMP Procedure in the *Guardian Procedure Calls Reference Manual*.

```
CPU specified is not configured for this system.
```

The function you attempted failed because the CPU specified in the CPU field does not exist on the system where the scheduler resides. To specify a valid CPU, enter an integer in the range 0 through 15 identifying an existing CPU on that system. Alternatively, enter an asterisk (*) to specify any CPU.

```
Cursor not in a selection field, or field contains no Job
```

The function did not select a job because the cursor was not in a selection field or was in a selection field with no corresponding job.

```
DEFINE cannot be altered - please read again
```

You attempted to change DEFINE details without first reading the record. Read the record before retrying the function.

```
DEFINE details already exist - try another
```

You attempted to add a DEFINE to the NetBatch-Plus database. The attempt failed because the DEFINE name matched the name of an existing DEFINE. Either delete the existing DEFINE before retrying the function or specify a unique name for the new DEFINE.

```
DEFINE details do not exist - try another
```

You specified a nonexistent DEFINE.

```
DEFINE Name must not be spaces
```

You attempted to add a catalog or job DEFINE without specifying its name. Give the DEFINE a name before retrying the function.

```
DELETE failed because the CLASS is in use by an EXECUTOR
```

The F6–Maintain function attempted to delete a class. The attempt failed because you had not dissociated the class from its executors. To dissociate classes from their executors, use the Executor Info screen.

```
Deleted Ok - Ready for use
```

The NetBatch-Plus application performed a delete function successfully.

```
Dependency details already exist - try another
```

The function you attempted failed because you attempted to add a master job that already exists as a master. You can specify a job only once as a master of a dependent job.

```
Dependency details do not exist - try another
```

The current job has no dependencies.

```
Dependent will cause Master Job deadlock
```

The F6–Maintain function attempted to add or update dependency details. The attempt failed because one of the master jobs you specified is either the dependent job or is indirectly dependent on the dependent job. A job cannot depend on itself, either directly or indirectly.

```
Device must be specified
```

The function you attempted failed because the value in the Labels field is BYPASS, OMITTED, or TMFTAPE and you did not specify the tape device. You must specify the tape device when the Labels field has one of these values.

```
Disk expected
```

The function you attempted failed because the value specified as the default location for swap files does not identify a disk volume. The default location for swap files must be a disk volume on the same system as the object to be run.

```
Displayed Next Ok - Ready for use
```

The F2–Next function displayed the next record on file.

```
Displayed Ok - Ready for use
```

The NetBatch-Plus application performed a read function successfully.

```
Duplicate Jobname to WAITON
```

The function you attempted failed because the job you specified as a master job already exists as a master. You can specify a job only once as a master of a dependent job.

```
Duplicated Ok - Ready for use
```

The F9–Duplicate function duplicated a job record in the NetBatch-Plus database.

```
Either the JOB or CHKQUE file is full
```

Job submission failed because the JOB or CHKQUE files in the scheduler database were full. This error can occur in the following circumstances:

- When the files contain the maximum number of job records (9999). To delete unwanted jobs from the scheduler database, use the F8–Delete function on the Job Info screen.
- When the maximum extents specified for the files have been reduced by a user after scheduler database creation. To increase the maximum extents of the files, use the FUP ALTER command. The recommended maximum extents is 100 for the JOB file and 16 for the CHKQUE file.

```
Either CATEGORY or DATE must be input
```

The F6–Maintain function attempted to add or update bulk job selection criteria. The attempt failed because a selection criterion did not specify either a category or date.

```
ENFORM Not accepting ASSIGNS for report server
```

The Enform process on your system did not request ASSIGN information from the NetBatch-Plus report server. Contact your system administrator for help.

```
ENFORM Report is running \system-name.process-id
```

Identifies the system and process ID (CPU number and process number) of an Enform report you executed by using the Reports screen.

```
Enter 24 hour time from 00:00 to 23:59
```

The function you attempted failed because you specified twenty-four-hour time incorrectly. To specify hours, enter an integer in the range 0 through 23. To specify minutes, enter an integer in the range 0 through 59.

```
Error opening CALENDAR file; job put in SPECIAL-7 state
```

An error occurred when the scheduler tried to access a job's BATCHCAL calendar file. For error details, see the scheduler log file.

```
EVERY 1 to 365 days, or 0 to 168 hours, and 0 to 59 minutes
```

The function you attempted failed because the integer specifying the execution interval for the EVERY job attribute is not in the valid range. To specify the interval in days, enter an integer in the range 1 through 365. To specify the interval in hours and minutes, enter integers in the range 0 through 168 for hours and 0 through 59 for minutes. If hours equals 0, minutes must be greater than or equal to 1.

```
EXECUTOR already exists
```

The F4–Add function attempted to add a new executor with the same name as an existing executor. Enter a unique name before retrying the function.

```
EXECUTOR does not exist
```

The function you attempted failed because you specified a nonexistent executor. Use the Executor Status screen to list valid executors.

```
Executor has already started
```

The F10–Start function attempted to start an executor whose state was already ACTIVE or ON.

```
EXECUTOR has already stopped or will stop on job completion
```

The F12–Stop function attempted to stop an executor whose state was already DELETE, STOP, or OFF.

```
Executor must not be spaces
```

An attempt to inquire about, add, or update details of an executor failed because you did not specify the executor name.

```
Executor Program must not be spaces
```

An attempt to add or update details of a job in the NetBatch-Plus database failed because you did not specify the executor program.

```
EXPIRATION applies to IBM,ANSI tapes
```

The function you attempted failed because you specified a tape file expiration date for a tape other than an ANSI-standard or IBM-standard labeled tape. The expiration date is required only for ANSI-standard and IBM-standard labeled tapes.

```
Extended data segment init error error-number
```

The NEWPROCESS procedure returned an extended data segment initialization error. For an explanation of *error-number*, see the *Guardian Procedure Errors and Messages Manual*.

```
Extended segment swap error error-number
```

The NEWPROCESS procedure returned an extended segment swap file error. For an explanation of *error-number*, see the *Guardian Procedure Errors and Messages Manual*.

```
F2–Inquiry not available for TACL version prior to AAM
```

You attempted to display TACL output file data by using the F2–Inquiry function. The attempt failed because your TACL version is earlier than T9205C20 AAM. The F2–Inquiry function displays TACL output file data only if your TACL version is equal to or later than AAM.

```
File error trying to switch to new logfile
```

An error occurred when the scheduler attempted to open a new log file. For error details, see the scheduler log file.

```
FILE must not be spaces
```

You attempted to add or update a catalog or job map DEFINE without specifying its physical file-name attribute. You must specify the attribute for all map DEFINEs.

```
File system error, on the BATCHCTL file
```

An error occurred when the scheduler attempted to open its BATCHCTL file. For error details, see the scheduler log file.

```
File/Process name can’t be networked
```

A warning message advising that you specified a five-character process name on a remote system. To allow both local and remote access to the process, specify a process name containing no more than four characters.

```
FILEID/VOLUME are only meaningful for ANSI or IBM
```

The function you attempted failed because you specified a tape file name (file ID) and tape volume ID for a tape other than an ANSI-standard or IBM-standard labeled tape. These values are required only for ANSI-standard and IBM-standard labeled tapes.

```
FILESECT applies to IBM,ANSI tapes
```

The function you attempted failed because you specified the position of a volume in a multivolume file for a tape other than an ANSI-standard or IBM-standard labeled tape. This value is required only for ANSI-standard and IBM-standard labeled tapes.

```
FILESEQ applies to IBM,ANSI tapes
```

The function you attempted failed because you specified the position of a tape file in a multifile volume for a tape other than an ANSI-standard or IBM-standard labeled tape. This value is required only for ANSI-standard and IBM-standard labeled tapes.

```
Full Supervisor security is implied when security level is
'S'
```

You attempted to change a supervisory user's screen and function access privileges. (An S in the Access Code field on the Screen Security screen indicates a supervisory user.) The attempt failed because you cannot change the access privileges of such a user.

```
Function not as yet implemented
```

The function you selected is not available in the current version of the NetBatch-Plus application.

```
GENeration group applies to IBM,ANSI tapes
```

The function you attempted failed because you specified a tape file generation group for a tape other than an ANSI-standard or IBM-standard labeled tape. The generation group is required only for ANSI-standard and IBM-standard labeled tapes.

```
Give DEVICE to BYPASS labeled proc
```

You attempted to perform a function on an ANSI-standard or IBM-standard labeled tape. The attempt failed because the value in the Labels field is BYPASS and you did not specify the tape device. You must specify the tape device when the value in the Labels field is BYPASS and the tape is an ANSI-standard or IBM-standard labeled tape.

```
Illegal file name specification file-name
```

The function you attempted failed because you specified the file *file-name* in the wrong format. For the correct format, check field help.

```
Illegal home term error-number
```

The NEWPROCESS procedure returned an illegal home terminal error. For an explanation of *error-number*, see the *Guardian Procedure Errors and Messages Manual*.

```
IN file does not exist; create and secure as required
```

The specified job input file does not exist, but the scheduler scheduled the job anyway. You can create the file any time before execution if the job's executor program requires an input file and the job has a time attribute. Time attributes are AFTER, AT, CALENDAR, EVERY, and WAIT.

```
In File must not be spaces
```

You attempted to add or alter a job without specifying its input file. You must specify the input file for all job records in the NetBatch-Plus database.

```
INclude/EXclude must be IN or EX
```

The F6–Maintain function attempted to add or update bulk job selection criteria. The attempt failed because you did not specify the inclusion flag of the highlighted criterion.

```
Invalid $Tape Device
```

The function you attempted failed because the name of the tape device you entered in the highlighted field is in the wrong format. For the correct format, check field help.

```
Invalid Date (see Field Help SF3)
```

The function you attempted failed because you entered an incorrectly formatted date in the highlighted field. For the correct format, check field help.

```
Invalid Date/Time (see Field Help SF3)
```

The function you attempted failed because you entered an incorrectly formatted date or time in the highlighted field. For the correct format, check field help.

```
Invalid disk volume
```

The function you attempted failed because the value specified as the default location for swap files does not identify a disk volume. The default location for swap files must be a disk volume on the same system as the object to be run.

```
Invalid Filename
```

The function you attempted failed because the file name you entered in the highlighted field is in the wrong format. For the correct format, check field help.

```
Invalid Frequency/Date
```

The function you attempted failed because you entered an incorrectly formatted frequency or date in the highlighted field. For the correct format, check field help.

```
Invalid function key
```

The function you selected is not available on the current screen.

```
Invalid Group.User
```

The function you attempted failed because the Guardian user ID you entered in the highlighted field is in the wrong format. For the correct format, check field help.

```
Invalid IMMU file
```

The function you attempted failed because the BATCHIMU file you specified in the IMMU File field does not exist. Create the file before retrying the function or enter the correct file name.

```
Invalid number format
```

The function you attempted failed because you entered incorrectly formatted numeric data in the highlighted field. For the correct format, check field help.

```
Invalid password - try another
```

The function you attempted failed because you entered an invalid password.

```
Invalid process ID (\Node.$Pname)
```

The function you attempted failed because the process name you entered in the highlighted field is in the wrong format. For the correct format, check field help.

```
Invalid Spooler Location
```

The function you attempted failed because the spooler location you entered in the highlighted field is in the wrong format. For the correct format, check field help.

```
Invalid Time (see Field Help SF3)
```

The function you attempted failed because the time you entered in the highlighted field is in the wrong format. For the correct format, check field help.

```
Invalid transaction code for server
```

The function you attempted failed because the screen requester handling the function sent an invalid transaction code to a server, disabling the function on the screen. For help, contact your system administrator.

```
Invalid server Query Request
```

The function you attempted failed because the screen requester handling the function sent an invalid server ID to the server *server*, disabling the function on the screen. For help, contact your system administrator.

```
Items are dependent on this record Delete again to remove
dependency.
```

You attempted to delete a master job whose dependents still exist. The NetBatch-Plus application displays this message as a warning only. To delete the job, perform the delete function again.

```
Job cannot be altered - please read again
```

You attempted to change job details without first reading the record. Read the record before retrying the function.

```
JOB Dependency DEADLOCK
```

The function you attempted failed because a master job you specified is either the dependent job or is indirectly dependent on the dependent job. A job cannot depend on itself, either directly or indirectly.

```
Job details already exist - try another
```

You attempted to add a job to the NetBatch-Plus database. The attempt failed because the job name matched the name of an existing job with the same defaults set. Delete the existing job before retrying the function or specify a unique name for the new job within the set.

```
Job details do not exist - try another
```

You specified a nonexistent job.

```
Job details have changed - re-display
```

The function you attempted failed because details of the currently displayed job have changed since you last read the record. Perform the F1–Read function to display updated job details.

```
Job details in use - please try again
```

The function you attempted failed because the NetBatch-Plus application was already processing another user's request to update the job record. Wait a few moments before retrying the function.

```
JOB does not exist
```

The function you attempted failed because you specified a job name or number that does not identify a job in the scheduler database.

```
Job is dependent on itself, Add failed
```

The F6–Maintain function attempted to add dependency details. The attempt failed because one of the master jobs you specified is either the dependent job or is indirectly dependent on the dependent job. A job cannot depend on itself, either directly or indirectly.

```
Job is not executing or suspended; STOP command ignored
```

The F12–Stop function attempted to delete a job whose state was EVENT, READY, RUNNEXT, RUNNOW, SPECIAL-*n*, TAPE, or TIME. The attempt failed because you can delete jobs in these states only by using the F8–Delete function on the Job Info or Job Status screens.

```
Job is not executing, SUSPEND command ignored
```

The F11–Suspend function attempted to suspend a job that was not executing. The attempt failed because this function can suspend only executing jobs.

```
Job is not in EVENT, READY, TAPE or TIME state; RUNNEXT is
ignored
```

The F4–Run Next function attempted to promote a job whose state was EXECUTING, RUNNOW, SPECIAL-*n*, or SUSPENDED. The attempt failed because the function is effective only for jobs whose state is EVENT, READY, TAPE, or TIME.

```
Job is not in EVENT, READY, TAPE, TIME or RUNNEXT state;
RUNNOW is ignored
```

The F5–Run Now function attempted to execute a job whose state was EXECUTING, SPECIAL-*n*, or SUSPENDED. The attempt failed because the function is effective only for jobs whose state is EVENT, READY, RUNNEXT, TAPE, or TIME.

```
JOB job-name SUBMITTED - Ready for use
```

The F3–Submit function successfully submitted job *job-name* to a NetBatch scheduler.

```
Job name must not be spaces
```

The F3–Submit function attempted to submit a job to the scheduler. The attempt failed because you did not name the job. You must name all jobs before submission.

```
Job or Set may not be spaces
```

The F4–Add function attempted to add a job record to the NetBatch-Plus database. The attempt failed because you did not specify the job's defaults set, name, or both.

```
Jobname already exists
```

The function you attempted failed because the specified job has the same name as an existing job in the scheduler database. Each job must have a unique name.

```
Library conflict
```

The NEWPROCESS procedure returned a library conflict error. Contact your system administrator for help.

```
Location must be specified
```

You attempted to add or update a catalog or job spool DEFINE without specifying the spooler location. You must specify the location for all spool DEFINEs.

```
Log volume is in use by another NETBATCH process
```

You attempted to create and initialize a new scheduler database with the F4–Add function. The attempt failed because the target subvolume specified by the Log Vol field already contained a scheduler database. Either remove the existing database before retrying the function or specify a different target subvolume in the Log Vol field.

```
MAXPRINTLINES is out of range 120 to 65534
```

The function you attempted failed because the integer specifying the maximum number of print lines for a job output file is not in the valid range 120 through 65534.

```
MAXPRINTPAGES is out of range 2 to 65534
```

The function you attempted failed because the integer specifying the maximum number of print pages for a job output file is not in the valid range 2 through 65534.

```
"NetBatch-Plus" details cannot be changed or deleted
```

You attempted to update or delete details of user NBP. The attempt failed because details of this user are coded in NetBatch-Plus software and can neither be changed nor deleted.

```
NetBatch-Plus internal stack overflow
```

The bulk submit program generated an internal error. Contact your system administrator for help.

```
NetBatch-Plus security limits use of resource to: user-class
```

You attempted to perform a function available only to the class of user identified by *user-class*. The attempt failed because the ID and password of a Guardian user belonging to the specified class had not been validated during the current session. Use the Password Validation screen to validate an appropriate Guardian ID and password before retrying the function.

```
Newprocess Define context propagation error error-number
```

The NEWPROCESS procedure returned a DEFINE context propagation error. Contact your system administrator for help. For an explanation of *error-number*, see the description of the NEWPROCESS procedure in the *Guardian Procedure Calls Reference Manual*.

```
No Calendar details have changed - re-display
```

The F6–Maintain function attempted to add, delete, or update calendar details. The attempt failed because you did not indicate which maintenance functions you wanted to perform in the A, D, or U column fields.

```
No embedded spaces, use ^^ for ^, ^A for for CTRL/A etc.
```

The function you attempted failed because you entered a password containing incorrectly formatted control characters. For the correct format, check field help.

```
No menu item for this function key - try another
```

The function you selected is not available on the current screen.

```
No more Bulk Job Selection criteria
```

The F2–Next function has listed the last page of bulk selection criteria for the current job.

```
No more Calendar details
```

The specified calendar category contains no dates in the range specified by the Start and End fields.

```
No more file names ZZNBnnnn can be allocated
```

The F3–Submit function attempted to submit a job with attachments. The attempt failed because the job's input file subvolume already contained the maximum number of attachments files (9999). To reduce the number of attachments files, delete unwanted jobs with attachments or move the job's input file to another subvolume.

```
No more Job Attachments
```

The F2–Next function has listed the last attachment for the current job.

```
No more Job details
```

The F2–Next function has listed the last job description on file.

```
No more NetBatch-Plus User Details
```

The F2–Next function has listed details of the last NetBatch-Plus user on file.

```
No more PARAM details
```

The F2–Next function has listed details of the last catalog attachment on file.

```
No more Set details
```

The F2–Next function has listed details of the last defaults set on file.

```
No more than 8 DEPENDENCIES allowed
```

You attempted to specify more than eight master jobs for a dependent job. The attempt failed because the maximum number of master jobs for any dependent job is eight.

```
No Schedule details have changed - re-display
```

The F6–Maintain function attempted to add, delete, or update bulk job selection criteria. The attempt failed because you did not indicate which maintenance functions you wanted to perform in the A, D, or U column fields.

```
Object file with illegal device subtype
```

The NEWPROCESS procedure returned an error caused by an object file with an illegal process device subtype. For help, see the description of the NEWPROCESS procedure in the *System Procedure Calls Reference Manual* or contact your system administrator.

```
Only Date may be updated
```

The F6–Maintain function attempted to change the name of an existing calendar category. The attempt failed because you cannot change the names of existing calendar categories. You can only change dates in those categories.

```
Other users have WRITE or PURGE access to IN file; resecure
if required
```

A warning message advising that file security for the submitted job's input file does not prevent other users from writing to the file or purging it. The scheduler scheduled the job anyway, but you should secure the file against write and purge access if necessary.

```
Out File must not be spaces
```

You attempted to add or alter a job without specifying its output file. You must specify the output file for all job records in the NetBatch-Plus database.

```
OWNER applies to ANSI or IBM labeled tapes
```

The function you attempted failed because you specified a tape owner for a tape other than an ANSI-standard or IBM-standard labeled tape. The tape owner is only required for ANSI-standard and IBM-standard labeled tapes.

```
OWNER must not be spaces
```

You attempted to add or alter a defaults set without specifying its Guardian owner. You must specify the Guardian owner for all defaults set records in the NetBatch-Plus database.

```
PARAM details already exist - try another
```

You attempted to add a PARAM to the NetBatch-Plus database. The attempt failed because the PARAM name matched the name of an existing PARAM. Either delete the existing PARAM before retrying the function or specify a unique name for the new PARAM.

```
PARAM details do not exist - try another
```

You specified a nonexistent PARAM.

```
PARAM Name must not be spaces
```

You attempted to add a catalog or job PARAM without specifying its name. Give the PARAM a name before retrying the function.

```
Password accepted
```

The NetBatch-Plus application successfully validated the specified Guardian user ID and password.

```
Please specify only one of EXPIRATION or RETENTION
```

The function you attempted failed because you specified, for an ANSI-standard or IBM-standard labeled tape, the mutually exclusive attributes EXPIRATION and RETENTION. Specify one or the other, but not both.

```
PRI is out of range 1 to 199
```

The function you attempted failed because the integer specifying the execution priority of a job's executor program process is not in the valid range 1 through 199.

```
Program/Library are the same file
```

The NEWPROCESS procedure returned an error indicating the program and library files are the same. For help, see the description of the NEWPROCESS procedure in the *Guardian Procedure Calls Reference Manual* or contact your system administrator.

```
RECFORM applies to IBM,ANSI tapes
```

The function you attempted failed because you specified the record format for a tape other than an ANSI-standard or IBM-standard labeled tape. Record format is required only for ANSI-standard and IBM-standard labeled tapes.

```
REELS applies only when USE is 'IN'
```

The function you attempted failed because you specified the number of volumes (that is, the number of reels) in a multivolume input file when the value in the Use field was other than IN. The number of volumes is required only when the value in the Use field is IN.

```
Required tape drives unavailable. All drives are assigned to
you
```

For an executing or suspended job, you specified additional tape drives that are not currently available.

```
Resource was not accessed, because of security restrictions
```

You attempted to perform a function available only to Guardian super-group users (255, *n*). The attempt failed because no super-group ID and password was validated during the current session. Use the Password Validation screen to validate a super-group user ID and password before retrying the function.

```
RETENTN applies to IBM, ANSI tapes
```

The function you attempted failed because you specified the tape file retention period for a tape other than an ANSI-standard or IBM-standard labeled tape. The retention period is required only for ANSI-standard and IBM-standard labeled tapes.

```
Run Next Ok - ready for use
```

The F4–Run Next function promoted the specified job to run in the next available executor for its class.

```
Run Now Ok - ready for use
```

The F5–Run Now function submitted the specified job for immediate execution.

```
RWUP Security must not be spaces
```

You attempted to add or update a defaults set record without specifying its read, write, use, and purge (RWUP) security attributes. You must specify these attributes for all defaults set records.

```
Schedule details in use - please try again
```

The function you attempted failed because the NetBatch-Plus application was already processing another user's request to update the bulk job selection criteria. Wait a few moments before retrying the function.

```
Schedule output-file Submitted Ok - Ready for use
```

The bulk submit program is selecting jobs in a test or production run and, for a production run, is submitting the jobs to their schedulers for execution. The program writes details of the selected jobs to the bulk submit report file *output-file*.

```
Scheduler Added Ok, START now required
```

The F4–Add function created and initialized a new scheduler database. You can now start the scheduler by using the F10–Start function on the Scheduler Info screen.

```
Scheduler cannot be altered - please read again
```

You attempted to change scheduler details without first reading the record. Read the record before retrying the function.

```
SCHEDULER has already started
```

The F10–Start function attempted to start a scheduler already started.

```
Scheduler is busy - Try again later
```

The NetBatch-Plus application did not perform your requested function because the application was processing another function affecting the same scheduler. The application usually displays this message when you perform the F4–Add function on the Scheduler Info screen immediately after performing the F9–Run function.

```
Scheduler must not be spaces
```

You attempted a function requiring entry of a scheduler name. The attempt failed because you did not specify the scheduler.

```
Security details have changed - re-display
```

The function you attempted failed because details of the currently displayed user have changed since you last read the record. Perform the F1–Read function to display updated user details.

```
Security violation; You have no authority for this request
```

NetBatch-Plus security denied you access to the function. Use the Password Validation screen to validate the ID and password of a Guardian user with access to the function.

```
SELPRI must be in range 0 to 7
```

The function you attempted failed because the integer specifying the selection priority of a job in its class is not in the valid range 0 through 7.

```
Set cannot be altered - please read again
```

You attempted to change defaults set details without first reading the record. Read the record before retrying the function.

```
Set details already exist - try another
```

You attempted to add a defaults set to the NetBatch-Plus database. The attempt failed because the set name matched the name of an existing set. Either delete the existing set before retrying the function or specify a unique name for the new set.

```
Set details cannot be deleted, in use by Job defaults-
set:job-name
```

The F8–Delete function attempted to delete a defaults set. The attempt failed because the set was in use by the job whose set and name are specified by *defaults-set* and *job-name*. You can delete defaults sets only when they are not in use by jobs.

```
Set details do not exist - try another
```

You specified a nonexistent defaults set.

```
Set details have changed - re-display
```

Details of the currently displayed defaults set have changed since you last read the record. Perform the F1–Read function to display updated set details.

```
Set details in use - please try again
```

The function you attempted failed because the NetBatch-Plus application was already processing another user's request to update the defaults set record. Wait a few moments before retrying the function.

```
START EXECUTOR failed because its CPU is not available
```

The function you attempted failed because the CPU specified for an executor is unavailable on the system where the executor's scheduler resides. To specify a valid CPU, enter an integer in the range 0 through 15 identifying a CPU available on that system.

```
Start Submit time exceeded configured maximum (Retry?)
```

You scheduled the bulk submit run too far ahead. Change the start time specified in the Start Time field to a value within the period specified by the Window field on the Bulk Submit Environment screen.

```
Started Ok - Ready for use
```

On the Executor Info screen, this message indicates the F10–Start function started the specified executor. On the Scheduler Info screen, this message indicates the F10–Start function started the specified scheduler.

```
Stopped Ok - Ready for use
```

On the Executor Info screen, this message indicates the F12–Stop function suspended operation of an executor whose state was ON or ACTIVE.

On the Job Info screen, this message indicates the F8–Delete function deleted a job that was not executing or suspended.

```
SUBMIT-ALLOWED is OFF; the Scheduler is not accepting Job
submissions
```

Job submission failed because the job's scheduler had the attribute SUBMIT-ALLOWED OFF. The SUBMIT-ALLOWED attribute must be ON for a scheduler to accept jobs submitted to it.

```
Suspended Ok - Ready for use
```

The F11–Suspend function suspended all processes associated with the specified job.

```
SWITCHCPU SCHEDULER was requested without a backup process
```

The F14–Switch CPU function attempted to switch the backup scheduler process with the primary scheduler process. The attempt failed because the backup process did not exist and could not be created in any available CPU.

```
System unknown
```

The function you attempted failed because the system you specified does not exist on your network.

```
Tape volume-id (except "SCRATCH") is from 1 to 6 characters
```

The function you attempted failed because the tape volume ID specified for an ANSI-standard or IBM-standard labeled tape is invalid. To enter a valid volume ID, enter the six-byte identification code assigned to the volume. For scratch tapes, enter SCRATCH. For a multivolume file, enter up to seven volume IDs.

```
TAPEDRIVES must be in range 0 to 99
```

The function you attempted failed because the integer specifying the number of tape drives is not in the valid range 0 through 99.

```
The EVERY attribute cannot be 0:00 hours
```

The function you attempted failed because the execution interval specified for the EVERY job attribute is not equal to or greater than one minute. To specify the interval in hours and minutes, enter integers in the range 0 through 168 for hours and 0 through 59 for minutes. If hours equals 0, minutes must be greater than or equal to 1.

```
The EXECUTOR file is full
```

The F4–Add function attempted to add a new executor to the scheduler. The attempt failed because the EXECUTOR file in the scheduler database was full. To increase the maximum extents of the file, use the FUP ALTER command. The recommended maximum extents for the file is 100.

```
The EXECUTOR-PROGRAM does not exist
```

The executor program specified for a job does not exist, but the scheduler scheduled the job anyway. When the job runs, it fails with a NEWPROCESS error and is flagged with a state of SPECIAL-3. To prevent job failure from occurring, specify a valid executor program before execution starts.

```
The job to activate was not suspended
```

The F10–Activate function attempted to activate a job that was not suspended. The function can activate only suspended jobs.

```
The JOBCLASS file is full
```

The F6–Maintain function attempted to add a new class to the scheduler. The attempt failed because the JOBCLASS file in the scheduler database was full. To increase the maximum extents of the file, use the FUP ALTER command. The recommended maximum extents for the file is 100.

```
The scheduler is being SHUTDOWN
```

The F12–Shutdown function attempted to shut down a scheduler already being shut down.

```
Unable to allocate map
```

The NEWPROCESS procedure was unable to allocate an internal system table. Contact your system administrator for help.

```
Unlicensed privileged program
```

The NEWPROCESS procedure returned an unlicensed privileged program error. For help, contact your system administrator.

```
Use ADD SCHEDULER to create and initialize the database
```

The F10–Start function attempted to start a scheduler whose database was not in the subvolume specified in the Log Vol field. Specify the correct subvolume before trying the function again. To create and initialize a new scheduler database, use the F4–Add function before F10–Start.

```
Use START SCHEDULER to enable the scheduler for processing
```

The function you performed required access to a scheduler that had not been started. Use the F10–Start function on the Scheduler Info screen to start the scheduler.

```
User Name must not be spaces
```

On the Security Supervise, Screen Security, and Utility Security screens, this message indicates an attempt to inquire about, add, or alter a user record failed because you did not specify the NetBatch-Plus user name.
On the Job Info screen, this message indicates the attempted function failed because you did not specify the Guardian user ID and password of the job owner.

```
Value incorrect
```

The function you attempted failed because you entered, in the highlighted numeric field, either a value outside the valid range or a value composed of alphabetic characters. For information about allowed values, see field help.

```
Value wrong
```

The attempted function failed. The option entered in the Option field does not identify a catalog or job attachments screen. For a list of valid field options, see field help.

```
VERSION applies to IBM,ANSI tapes
```

The function you attempted failed because you specified a version within a tape file generation group for a tape other than an ANSI-standard or IBM-standard labeled tape. The version is required only for ANSI-standard and IBM-standard labeled tapes.

```
VOLUME is required if USE is 'IN'
```

The attempted function failed. You did not specify the tape volume ID in the Volumeid field. You must specify the tape volume ID when the value in the Use field is IN.

```
WAIT 1 to 365 days, 0 to 168 hours, or 0 to 59 minutes
```

The function you attempted failed because the integer specifying the delay period for the WAIT job attribute is not in the valid range. To specify the period in days, enter an integer in the range 1 through 365. To specify the period in hours and minutes, enter integers in the range 0 through 168 for hours and 0 through 59 for minutes.

```
Warning: Undefined externals
```

The NEWPROCESS procedure returned a warning that the process had undefined externals but was started anyway. For help, contact your system administrator.

```
Warning: Write access to record allows others to submit user-ID jobs
```

The security attributes of the job record give other users write access to the record, including the job's input file.

Users with write access to the job input file can alter any attribute of or delete a job using the file. Using the input file as a medium, these users can also assume the record owner's level of security. They can modify the input file to delete the owner's files, change passwords, and so on. To avoid compromising system security, make sure you control write and purge access to all input files.

```
Wrong format
```

The function you attempted failed because you entered incorrectly formatted data in the highlighted field. For the correct format, check field help.

```
Wrong format - digit expected
```

The function you attempted failed because you entered a letter in the highlighted field when a number was expected.

```
Wrong format - letter expected
```

The function you attempted failed because you entered a number in the highlighted field when a letter was expected.

```
You cannot DELETE jobs on the executing or suspended list
```

The F8–Delete function attempted to delete a job whose state was EXECUTING or SUSPENDED. The attempt failed because you can delete jobs in these states only by using the F12–Stop function on the Job Status screen.

```
You have no EXECUTE access to EXECUTOR-PROGRAM
```

File security for the submitted job's executor program prevents execute access by the job owner. The scheduler scheduled the job anyway, but when the job runs, it fails with a NEWPROCESS error and is flagged with a state of SPECIAL-3. To prevent job failure from occurring, secure the executor program for execute access or specify a different executor program to which the job owner has execute access.

```
You have no PURGE access to IN file
```

A job you submitted has the attribute PURGE-IN-FILE ON, but the job owner does not have purge access to the job's input file. The scheduler scheduled the job anyway, but the attempt to purge the file when execution finishes fails. The purge error is logged to the scheduler log file.

```
You have no READ access to IN file
```

The specified job input file exists, but the job owner does not have read access to it. The scheduler scheduled the job anyway, but the job fails on startup if the executor program requires an input file. A job that fails in these circumstances is flagged by the scheduler with a state of SPECIAL-4.

```
You have no WRITE access to OUT file
```

The specified job output file does not exist or, if it exists, its file security prevents write access by the job owner. The scheduler scheduled the job anyway, but the job might fail depending on how the executor program processes jobs whose output files are either not specified or whose file security prevents write access.

```
You must specify an IN file
```

You did not specify an input file for the job. You must specify the input file for all jobs, regardless of whether the executor program requires an input file or not. If the executor program does not require an input file, specify a dummy file.

```
Your Security Level must be 'S' for this function
```

You attempted to update a NetBatch-Plus user record. The attempt failed because the signed-on user does not have supervisory access to the Security Supervise, Screen Security, and Utility Security screens. (An S in the Access Code field on the Screen Security screen indicates this type of access.)

Glossary

access privileges. Screen and function usage rights assigned by the system administrator to NetBatch-Plus users on a series of three linked screens: Security Supervise, Screen Security, and Utility Security.

ad hoc job. A job selected from a list of job names displayed on the Ad Hoc Job Selection screen. You can submit the selected job for execution from either the Ad Hoc Job Selection screen or Job Definition screen. You can also create a temporary copy of the selected job and then submit that copy as a one-off job. See also one-off job.

ASSIGN. A parameter that assigns the name of an actual file to a logical file name in a program and, optionally, specifies the creation attributes of the file.

attachments. A collective name for catalog and job ASSIGNs, PARAMs, and DEFINEs.

BATCHCOM. The program name of the NetBatch command interpreter.

BPROC. The former program name of NBEXEC, the NetBatch NonStop executor program. See NBEXEC.

bulk job selection criteria. The criteria by which the bulk submit program selects a job for inclusion in a bulk submit run.

bulk submit. A NetBatch-Plus job selection and submission method letting you select and submit, to NetBatch schedulers, up to 2500 jobs at a time.

bulk submit control job. A job that submits the jobs in a bulk submit run to their respective schedulers. You specify control job parameters on the Bulk Submit Environment screen.

bulk submit environment. Specifies the NetBatch scheduler and the class, owner, and default OUT attribute for the bulk submit control job. Also specifies the time interval that determines the retention period for temporary output files created during bulk submit runs. This interval also determines the number of days before execution that you can schedule those runs.

calendar category. A set of bulk submit selection dates identified by a unique name.

catalog attachment. An ASSIGN, PARAM, or DEFINE that several jobs in the NetBatch-Plus database can share. You define catalog attachments on the catalog attachments screens.

catalog DEFINEs. See DEFINE.

category. See calendar category and selection category.

class. A logical entity in a NetBatch scheduler. Classes control the flow of jobs to executors and therefore to those executors' CPUs. You can use classes to group jobs according to their demand for system resources. For example, you could group CPU-bound jobs such as program compilations into one class, I/O-bound jobs such as reports into another class, and so on. You can assign classes to multiple executors, the order in which you do so determines the order in which the executors process them.

completion code. A status code returned by a process to its creator. The code indicates whether the process terminated successfully or otherwise.

concurrent job. A job executing at the same time as another job. A NetBatch scheduler can execute up to 64 concurrent jobs.

control job. See bulk submit control job.

daily production bulk submit run. A production bulk submit run in which the bulk submit program runs automatically at the same time each day. See also production bulk submit run.

DBUPDATE tool. A Pathway application that lets you migrate a NetBatch-Plus database from one system to another.

defaults DEFINEs. See DEFINE.

defaults set. A set of job attributes owned by a NonStop Kernel user and recorded by NetBatch-Plus in its database. Jobs in the database can share a common defaults set and adopt their attributes from that set unless otherwise specified.

DEFINE. A named set of attributes and associated values. In a DEFINE (as with an ASSIGN), you can specify information that jobs communicate to processes they start. The NetBatch-Plus application supports five types of DEFINEs:

- Defaults DEFINEs hold the standard default values of a process such as the default volume.
- Map DEFINEs redirect or substitute files. You can enter the logical name of a map DEFINE in place of a physical file name in a command or procedure call.
- Spool DEFINEs pass information to the spooler collector process. The attributes of a spool DEFINE specify parameters such as the spooler location and batch name.
- SQL catalog DEFINEs specify the locations of NonStop SQL/MP catalogs. You can enter the logical name of the catalog DEFINE in place of a catalog name in CATALOG clauses in NonStop SQL/MP data manipulation language (DML) statements.
- Tape DEFINEs pass information to the tape process during labeled-tape operations. Tape DEFINE attributes specify parameters such as the tape device name and the record format.

dependency. A relationship between two jobs that prevents one of the jobs (the dependent job) from executing before the other job (the master job) releases it.

dependent job. A job with the WAITON attribute. Dependent jobs do not execute until released by all the jobs specified by the attribute.

EBCDIC. Extended Binary Coded Decimal Interchange Code. One of the codes used to represent characters in computers.

executor. A logical entity in a NetBatch scheduler. Executors link jobs, via their classes, to CPUs. This link enables the scheduler to execute, in the specified CPU, the initial process (the executor program) of each job. The number of active executors in a scheduler determines the number of jobs that can run concurrently. For example, a scheduler with 10 active executors can run up to 10 jobs at the same time. Similarly, for a scheduler to run the maximum possible number of concurrent jobs (64), it would need 64 active executors.

executor program. An object file started as a process by a NetBatch scheduler. The object file can be a command interpreter (for example, TACL) or a compiler (for example, COBOL85). It can also be a query language and report formatter (for example, Enform), a utility (for example, FUP), or a user program.

IMMU. Informational Message Management Utilities. A product used for handling text such as message text, help text, and keyword substitution. It consists of a utility that loads and unloads key-sequenced message tables and the procedures needed to access those tables. The NetBatch-Plus application uses the IMMU product for handling help text.

input file. A file containing information an executor program needs to execute a job. For example, if a TACL process is the executor program, the file contains TACL commands. If the COBOL85 compiler is the executor program, the file contains the program source. The syntax of the information in the file must comply with the syntax rules of the executor program. In a traditional batch processing environment, the job input file is known as a job control file.

JCF. Job control file. See input file.

job. A logical entity in a NetBatch scheduler. A job's attributes specify information the scheduler uses to start an executor program as a NonStop Kernel process, including:

- The name of the executor program, its execution priority, input and output files, and startup parameters
- Details of the job's class and selection priority within that class
- Details of the job's dependencies
- Resource requirements such as the number of tape drives the job needs
- Run information such as timing details, hold flags, and the action to be taken in the event of job failure

You can record job descriptions in the NetBatch-Plus database. You can then select jobs from this database at any time and submit them for execution by a NetBatch scheduler.

job attachment. An ASSIGN, PARAM, or DEFINE used by a job. You define job attachments on the job attachments screens.

job control file. Job control file. See input file.

logon defaults. The system, volume, subvolume, and file security values in effect when you logged on to the system. For more information about logon defaults, current defaults, file-name expansion, and qualifying file names, see the *Guardian User's Guide*.

map DEFINEs. See DEFINE.

master job. A job on which another job (the dependent job) depends. Master jobs are the jobs specified by the WAITON attributes of their dependent jobs.

NBEXEC. The program name of the NetBatch executor program. NBEXEC superseded BPROC as the name of this program.

NetBatch. A job management system used to submit, schedule, execute, and control batch jobs.

NetBatch-Plus. A Pathway application that provides a screen-driven interface to the NetBatch job management system. You can use the application, which has its own database, to control NetBatch systems running on different nodes.

NetBatch-Plus database. A database containing descriptions of jobs that NetBatch-Plus users can select and submit for execution by a NetBatch scheduler. Job descriptions can include information about dependencies, attachments, and bulk job selection criteria. As well as job descriptions, the database records details of NetBatch-Plus users and configuration information for the bulk submit program.

Next Page key. The key you press on your keyboard to display the next 24 lines of help text. The actual name of the key depends on the keyboard you are using. For example, the Next Page key on some keyboards is Next and on others Page Down or PgDn.

nonrecurrent job. A job that does not have the CALENDAR or EVERY attribute. The scheduler deletes nonrecurrent jobs from its database after they finish executing.

one-off job. A job submitted from within the NetBatch-Plus application to a NetBatch scheduler and whose details are not recorded in the NetBatch-Plus database. You can create and submit one-off jobs by using the Job Info screen or Ad Hoc Job Selection screen.

PARAM. A parameter supplying a user-defined value to a process requesting that value at creation time.

Prev Page key. The key you press on your keyboard to display the previous 24 lines of help text. The actual name of the key depends on the keyboard you are using. For example, the Previous Page key on some keyboards is Prev and on others Page Up or PgUp.

production bulk submit run. A bulk submit run in which the bulk submit program selects jobs and submits them to their NetBatch schedulers. The Bulk Submit Submissions report, which the program produces automatically for the run, lists the jobs submitted in the run.

recurrent job. A job that has the CALENDAR or EVERY attribute. The scheduler automatically executes recurrent jobs on the dates or at the interval specified by the attribute.

scheduler. A fault-tolerant, process-pair server controlling the execution of batch jobs. Scheduler functions include:

- Scheduling jobs for execution
- Distributing the processing load across different CPUs
- Monitoring the processing states of jobs
- Restarting failed jobs (if specified)
- Managing job dependencies
- Maintaining job and configuration information

A scheduler can execute up to 64 jobs at the same time. Jobs executing at the same time are called concurrent jobs.

scheduler database. A database containing scheduler configuration information that includes details of the scheduler's executors and classes. Each scheduler has its own database. The database also contains jobs submitted to the scheduler for execution. It can store up to 9999 jobs. The scheduler deletes jobs from its database after they finish executing unless the jobs are recurrent (that is, they have an attribute specifying automatic rescheduling).

selection category. A means of selecting jobs from the NetBatch-Plus database for inclusion in a bulk submit run. A selection category can be a calendar category or simply a name used to group jobs for selection purposes.

selection date. A date used by the bulk submit program to select a job from the NetBatch-Plus database.

session. The period of time from when you start and sign on to the NetBatch-Plus application to when you sign off.

spool DEFINEs. See DEFINE.

SPR. Software product revision. An update to a software product version distributed between major product enhancements.

SQL catalog DEFINEs. See DEFINE.

TACL. Tandem Advanced Command Language, the standard command interpreter for the NonStop Kernel operating system.

tape DEFINEs. See DEFINE.

test bulk submit run. A trial bulk submit run in which the bulk submit program selects jobs but does not submit them to their NetBatch schedulers. The Bulk Submit Predictions report, which the program produces automatically for the run, lists the jobs selected in the run. By running a test, you can determine which jobs will be selected in a production run before you actually execute that run.

wild-card process. A wild-card process is a NetBatch scheduler process or spooler supervisor process specified using the asterisk (*) and/or question mark (?) wild-card characters. When the NetBatch-Plus application searches for process names matching the specification, it searches on the wild-card processes list, which you maintain on the Wild-Card Processes screen. The list is a table of fully qualified process names enabling the application to perform quick searches for matching processes rather than time-consuming searches on all systems in your network.

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