

Update for JobPak

version 6.1a, b, c, & d

October, 1999

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Preface

This document provides updated information compiled since the initial release of the JobPak version 6.1 software product from Nobix, Inc. This includes documentation for interim releases a, b, c, and d. Tapes dated after October 22, 1999 might contain modifications that are not included in this documentation. If you need information or documentation for new modifications for tapes dated after October 22nd, contact Nobix technical support.

JobPak includes three Nobix data center productivity tools bundled under the same name.

- JobRescue™
- JobQue™ (formerly JobTime)
- ElectroPage™

Together these products offer information technology managers and staff the production-class, system management capabilities needed to keep a single or networked HP3000 systems running at peak efficiency. The JobPak tools are used as a standard by Hewlett-Packard IT centers and by HP customers worldwide to provide productive and efficient operations on the HP3000. Although the JobPak products can be purchased and used individually, they all run in the background under the JobPak batch job.

JobPak and installation

The *JobPak Installation and Update Guide* describes the installation of JobPak products. Review this document before attempting to install or upgrade any of the JobPak software tools.

JobPak training classes are also available to provide training that will aid in administering JobPak. Please check with Nobix regarding training schedules and cost.

How this document is organized

[Chapter 1, “General.”](#) contains information that effects all the JobPak tools. Read this chapter before you install JobPak updates.

[Chapter 2, “Changes for documentation.”](#) contains information that was inaccurate or is new for the JobPak documentation.

[Chapter 3, “Enhancements.”](#) lists enhancements for JobPak.

[Chapter 4, “Known bugs and fixes.”](#) lists all known bugs and their resolution.

Assumptions

This document assumes that the reader is familiar with HP3000 computer systems and the MPE/iX operating system. It is intended for use by system administrators, managers, and any other users of the JobPak software tools.

Readers should also be familiar with manuals published by Hewlett-Packard Company.

Related documents

- *JobPak Installation and Update Guide*
- *JobRescue Reference Guide*
- *JobQue Reference Guide*
- *ElectroPage Reference Guide*
- Nobix web site www.nobix.com

Technical support

Nobix strives for efficient and reliable software; however, if you encounter any problems that this manual does not address, or find an error, contact the Nobix technical support team in the following ways:

Nobix, Inc.
Pleasanton, California
925.227.5600
800.538.3818
FAX: 925.225.1420
E-mail: support@nobix.com

If you fax your question, please include your name, return phone number, and fax number on the cover sheet. Usually, we call you as soon as we receive your fax.

If you report a limitation or problem, we will either fix it or provide a workaround solution.

Most problems and questions relate to the NSD account. We may require information about the NSD account structure and the files in the account. If possible, please be signed on into the NSD account when you call us. This will expedite the solution.

If you will allow us dial-up access to your machine, please have the dial-up number and passwords available. We do not sign on to every machine; however, sometimes it is easier to solve a problem when we can see it happen.

If you cannot find an answer in this manual, contact us!

Chapter 1

General

This chapter contains general information that effects all JobPak software. Read this chapter before installing any update for JobPak 6.1.

- [“Licenses and keys”](#)
- [“HP operating system patches”](#)
- [“Daylight Savings Time change”](#)
- [“Enabling POSIX \(T\)ime \(Z\)one adjustments”](#)
- [“POSIX file storage limit”](#)

Licenses and keys

Use the same licences and keys furnished to you in the original shipment of JobPak 6.1.

HP operating system patches

HP has many patches for their operating system that affect JobPak 6.1 performance. The following list shows the patches relative to the operating system version:

- Operating System 5.0 requires PowerPatch 7
- Operating System 5.5 requires PowerPatch 6
- Operating System 6.0 requires PowerPatch 1



Warning: System operators must install the appropriate patches before installing the JobPak software. Failure to do so could result in system failure. Nobix does not claim that the above patch list includes all patches required for your operating system. Contact HP to ensure that you have installed all appropriate patches.

Daylight Savings Time change

This document contains suggestions for working with time correction into and out of Daylight Savings Time. Because these sections contain suggestions that are specific to the Hewlett-Packard MPE/iX operating system and POSIX, and how Nobix products perform on those operating systems, Nobix cannot warrant that the above recommendations are error free and is not liable for any inaccuracy, error, or omission relative to these recommendations, regardless of cause. To ensure accuracy, refer to your HP documentation.

Background

MPE/iX references time in two ways:

- MPE/iX date functions that include date, time, and time zone as displayed by SHOWTIME or SHOWCLOCK. This accesses the traditional MPE/iX clock and displays the local time.
- POSIX date functions that reference the MPE/iX date functions, mentioned above, and also reference the MPE/iX and POSIX CI TZ variable to display the local time.

Many applications like JobPak™, TranSpooler™, and others use both time references. Therefore, you must ensure that both MPE/iX and POSIX dates and times are synchronized. Depending on when you change the MPE/iX time, it is possible for the two time references to become unsynchronized, causing the system to inaccurately record time.

MPE/iX date functions

MPE/iX date, time, and time zone functions do not automatically adjust for going into or out of Daylight Savings Time. You must manually set them. To do this, Nobix suggests you change the MPE/iX time zone value as well as the date and time.

The MPE/iX time zone value is stated in hours West or East of the Prime Meridian. You need to know which time zone you are in. For instance, California in the U.S.A. is in the Pacific time zone. For Standard Time, the MPE/iX time zone value is **W8:00**. For Daylight Savings Time it is **W7:00**. You change these values twice a year.

POSIX date functions

POSIX date functions automatically adjust for going into or out of Daylight Savings Time. You do not have to adjust them.

According to law, local time changes at 2:00 a.m. However, POSIX date functions do not follow this standard. With POSIX functions, the local time changes as follows:

- At 1:00 a.m. on the specified Sunday in the fall
- At 3:00 a.m. on the specified Sunday in the spring

POSIX date functions reference the MPE/iX date functions and adjust accordingly. However, because of the difference in time between the moment you manually adjust the MPE/iX date functions and the moment when the POSIX automatic date functions adjust, the date recorded by the system can be inaccurate for a period of time until the two times synchronize. The following Fall and Spring Time Adjustment sections contain suggestions that can help minimize this affect.

The MPE/iX and POSIX CI TZ variable is used by the POSIX date functions and should be set in the MPE/iX CI environment as a system-wide Logon UDC. This allows the same value to be used for every user on the system. Once set, the TZ variable should not be changed.

Reference the TZTAB.LIB.SYS file to find the appropriate TZ value for your geographic location.

The TZTAB.LIB.SYS file, supplied with your operating system, contains a listing of geographical locations, dates to change the time for fall and spring, and valid time zone values. If your geographical location uses Daylight Savings Time, you can find the appropriate time zone value for your location in this easily viewable text file. Refer to your MPE/iX documentation for the format of each record in the list.

Enabling POSIX (T)ime (Z)one adjustments

The JobPak software is dependent upon POSIX date functions for the management of spoolfiles in the NSD account on the HP3000. Before installing or updating JobPak, set the POSIX Time Zone variable for all users.

Set the TZ CI variable in the system-wide OPTION LOGON UDC.

```
SETVAR TZ "STDoffsetDST"
```

Syntax	Description
STD	The Standard Time Zone where the system is located.
offset	The value that must be added to local time to arrive at Coordinated Universal Time (UTC or Greenwich Mean Time). If the offset is preceded by a – (minus), the time zone is east of the Prime Meridian. The default is west of the Prime Meridian and has no preceding – (minus); + is assumed.
DST	The Daylight Savings Time Zone. If Daylight Savings Time is not used, leave this field empty.

Example:

```
Pacific Time    SETVAR TZ "PST8PDT"
Mountain Time  SETVAR TZ "MST7MDT"
Central Time   SETVAR TZ "CST6CDT"
Eastern Time   SETVAR TZ "EST5EDT"
```

To check the values that have been set for this variable, read the TZTAB.LIB.SYS file on your HP3000 system. This file contains a table that lists all the time zones and their associated variable values. **Do not** modify this file.

If JobPak version 6.1 is currently installed and running on your system and you change the TZ variable, you must stop JobPak and restart to enable the variable change.

Fall time adjustment

To make the fall adjustment, change the MPE/iX time zone, date, and time.

If you change the MPE/iX time backwards before 1:01 a.m., POSIX time becomes one hour later than MPE/iX time until the MPE/iX time becomes 1:00 a.m., when they synchronize. If you change the MPE/iX time backward at 1:00 a.m. or after, POSIX time and MPE/iX time stay synchronized.

When you change the MPE/iX time zone value to reflect Daylight Savings Time, you cause the MPE/iX time to move backwards. Once you change the MPE/iX time zone value, MPE/iX uses its automatic time correction and slows its clock until it reaches the appropriate time. This can cause the system time to be inaccurate for approximately 24 hours. For this reason, Nobix suggests canceling the automatic time correction and explicitly stating the MPE/iX time.

Example

To change the MPE/iX date backward in time:

- 1** Select a time at or after 1:01 a.m.
- 2** Stop JobPak, TranSpooler, and any other applications that log the date and time.
- 3** Logon as **MANAGER.SYS**.
- 4** Change the MPE/iX time zone.

```
SETCLOCK ;TIMEZONE=<your time zone value for Standard Time>
```
- 5** Stop all time correction taking place on the system.

```
SETCLOCK ;CANCEL
```
- 6** Set the date and time.

```
SETCLOCK DATE=MM/DD/YY; TIME=HH:SS;NOW
```

Spring time adjustment

To make the spring adjustment, change the MPE/iX time zone, date, and time.

The POSIX time begins to change at 2:00 a.m., at which time it becomes one hour later than MPE/iX time. If you change the MPE/iX time forward before 2:00 a.m., the POSIX time becomes one hour later than MPE/iX time until 2:00 a. m., when it becomes one hour earlier than MPE/iX time. At 3:00 a.m., MPE/iX and POSIX times synchronize.

If you change the MPE/iX time forward after 2:00 a.m. but before 3:00 a.m., the POSIX time becomes one hour earlier than the MPE/iX time until 3:00 a.m. At 3:00 a.m., MPE/iX and POSIX times synchronize. If you change the MPE/iX time forward after 3:00 a.m., the POSIX time differs from the MPE/iX time beginning at 2:00 a.m. until the moment you change the MPE/iX time.

Due to these anomalies, Nobix suggests setting the time forward after 2:00 a.m. but before 3:00 a.m. This minimizes the period of time (exactly one hour) that the MPE/iX and the POSIX time references differ.

Example

To change the MPE/iX date forward in time:

- 1** Select a time between 2:00 a.m. and 3:00 a.m.
- 2** Stop JobPak, TranSpooler, and any other applications that log the date and time.
- 3** Logon as **MANAGER.SYS**.
- 4** Change the MPE/iX time zone.

```
SETCLOCK ;TIMEZONE=<your time zone value for Daylight Savings Time>
```
- 5** Stop all time correction taking place on the system.

```
SETCLOCK ;CANCEL
```

6 Set the date and time.

```
SETCLOCK DATE=MM/DD/YY; TIME=HH:SS;NOW
```

POSIX file storage limit

JobPak products save spoolfiles in the POSIX file system, making the files easier to identify and quicker to locate. Although there is no published limit on the number of files stored in a POSIX directory, operating system performance degrades significantly after about 50,000 files reside a single directory. Some JobPak customers store more than this number of files, therefore JobPak no longer stores spoolfiles in only the /NSD/files1 directory; it stores them in ten directories located under the account.



Note: If your current /NSD/files1 directory holds over 30,000 files, contact Nobix before you install any JobPak products. Converting a directory this large takes time and maximum system resources.

The following example illustrates the POSIX spoolfile naming convention:

```
/NSD/files6/A.593676.738412348
```

Syntax	Description
/NSD/files#	The directory for the file, where # is the last digit of the dfid number, 0-9.
A or R	The A or R at the beginning of each file specifies the file type as either A for \$STDLIST or R for report.
.593676	The first set of numbers is the spoolfile ID or dfid number.
.738412348	The second set of numbers represents the time to the nearest second that the file was saved. This number is always different for every file even if the dfid number is the same.

The last digit of the dfid number specifies the /NSD/files# directory that stores the spoolfile.



Note: The POSIX file system is case sensitive, whereas the MPE file system is not.

Chapter 2

Changes for documentation

This chapter contains the following corrections and new material for the *JobRescue* and *ElectroPage Reference Guides*.

- [“Mail notification syntax correction”](#)
- [“Configuration unload and backup program”](#)

Mail notification syntax correction

In the *JobRescue* and *ElectroPage Reference Guides*, Chapter 3 CONFIGIX program, the Miscellaneous system values section, the syntax for Internet Mail ID is incorrect. The following section contains the correct information.

Miscellaneous system values

To add the necessary system identifiers within one form, from the Configure Global Values menu, select Miscellaneous system values.

- Internet Mail ID—assigns a name to the JobPak software to use as the sender address for e-mail. Use a valid, standard internet mail format, such as:

Username@mailserver.domain

This e-mail address also receives return mail when the address mail is sent to is incorrect or unavailable.

Configuration unload and backup program

This material is new for the *JobRescue* and *ElectroPage Reference Guides*.

The UNLOAD.JPAK.NSD program allows system administrators to make global changes to the configuration files contained within the CONFIGIX program. It performs the following tasks:

- Output an editable ASCII version of the configuration files.
- Backup the following five configuration files found in the JPAK group:
CONFIG
FOLDERA
FOLDERF
FOLDERR
FDISPLAY
- Use the edited ASCII file as input to populate the five configuration files with data.

Any text editor that works with the HP3000 can view or edit the ASCII file.

You must be very familiar with entries and syntax contained in CONFIGIX to edit this ASCII file. Refer to the *JobRescue* and *ElectroPage Reference Guides* for information about CONFIGIX entries and syntax.

Create an ASCII configuration file

- 1 Logon to the system as MGR.NSD,PUB.
- 2 Enter the :FILE command specifying the name for the ASCII configuration file.
:FILE TEXTCNFG;SAVE;DISC=50000
- 3 Run the UNLOAD program using the ASCII configuration file name.

```
:UNLOAD.JPAK > *TEXTCNFG
```

UNLOAD creates an ASCII file named TEXTCNFG in the JPAK group.

Example—

```
1 0:GLOBAL:$GLOBAL::::HEADER:NUM:0
2 0:GLOBAL:$GLOBAL::::CHECKIF:NUM:1
3 0:GLOBAL:$GLOBAL::::CHECKIF:NUM:0
4 0:GLOBAL:$GLOBAL::::CHECKEOJ:NUM:1
5 0:GLOBAL:$GLOBAL::::CHECKEOJ:NUM:0
6 0:GLOBAL:$GLOBAL::::CONTOK:NUM:0
7 0:GLOBAL:$GLOBAL::::STARTXEQ:TEXT:" "
8 0:GLOBAL:$GLOBAL::::ERROR:TEXT:"(CIERR"
```

Edit the ASCII configuration file

- 1 Use any text editor to view or edit the ASCII configuration file.
:EDITOR
/T TEXTCNFG
- 2 When the edits are complete, keep the file.
/K TEXTCNFG,UNN
/EXIT

The text editor saves the changes to the ASCII configuration file.

Rules for editing the ASCII file

- The ASCII file is structured into records and fields.
- Fields are delineated by colons (:).
- The first field, named Category, groups lines together that have the same category number. Category numbers range from 1 to 10.
- Category number definitions and descriptions are as follows:

Cat. #	Contains	Non-editable fields	Editable fields
0	Global definitions	Fields 2 through 9	Field 10, which follows TEXT: OR NUM:
1	Job Specific definitions	Fields 2, 3, 8, or 9	Fields 4, 5, 6, 7, and 10
2	IBM report definitions	Fields 2, 8, and 9	Fields 3, 4, 5, 6, and 10
3	Report Specific definitions	Fields 2, 8, and 9	Fields 3, 4, 5, 6, and 10
7	FOLDERF definitions (Top-level and Sub-folder)	Field 2, or a field with the value \$FOLDERHEADER (Top-level)	Fields 3 and 4 except if they have the value \$FOLDERHEADER
8	FOLDERR definitions (Report folders)	Field 2	Fields 3 through 8
9	FOLDERA definitions (Access security)	Field 2	Fields 3 through 6
10	FDISPLY definitions (Rarely occurs)	Do not modify	

- Data in the fields following the :TEXT : field are surrounded by double quotes (“) in the ASCII file. Changes to these fields must be within the double quotes.
- Changes to the ASCII file must meet the criteria stated in the *JobRescue* and *ElectroPage Reference Guides* for valid data in that specific field.

Backup the current configuration and load the edited ASCII file

- 1** Logon to the system as MGR.NSD,PUB.
- 2** Run the UNLOAD program using the output file name.

```
:UNLOAD.JPAK -LOAD < TEXTCNFG
```

The backup file name is CFG nnn .JPAK, where nnn is a 3-digit number that is automatically incremented.

The UNLOAD program creates a backup of the current configuration and loads the changes from the ASCII configuration file. The changes take effect immediately, even if JobPak is running.



Warning: UNLOAD does very little syntax error checking. If you load an ASCII file that has syntax errors, you might cause damage to the configuration files. If this occurs, refer to the Restore the backup configuration section.

Restore the backup configuration

- 1** Logon to the system as MGR.NSD,PUB.
- 2** Enter CHGROUP JPAK.
- 3** Enter LISTF CFG@,2.
- 4** Write down the number of the CFG nnn file with the highest number.
- 5** PURGE the files FOLDERA, FOLDERF, FOLDERR, FDISPLY, and CONFIG.
- 6** At the colon prompt, type UHAUL.PUB
This runs a script to access the backup configuration.
- 7** To the question "DO YOU WANT TO LOAD, UNLOAD OR LIST FILES?," enter UNLOAD.
- 8** To the question "ENTER THE NAME OF YOUR TRUCK," enter CFG nnn (where nnn is the number from step 4).
This is the file that contains the most recent configuration backup.
- 9** The system restores the backup to the configuration files.

Print a configuration report

- 1** Logon to the system as MGR.NSD,PUB.
- 2** Enter the :FILE command specifying the name for the ASCII configuration file.
:FILE TEXTCNFG;SAVE;DISC=50000
- 3** Run the UNLOAD program using the ASCII configuration file name.
:UNLOAD.JPAK > *TEXTCNFG
- 4** Enter the :FILE command specifying the name of the output file and device.
:FILE lp;dev=lp
- 5** Run the POSIX shell and the UNLOAD program specifying the name of the ASCII configuration file and output file command.
:SH.HPBIN.SYS /NSD/EXAMPLE/UNLOAD < TEXTCNFG > *lp

The system sends the report of the configuration to the specified file command.

Example—

```
UNLOAD.JPAK @    Wed Nov 18 14:30:37 PST 1998
                JobPak configuration
```

Type	FileDes.	Job/Sess	User	Account.	Device	Command	Value
GLOBAL						CHECKIF	NUM 1
GLOBAL						CHECKIF	NUM 0
GLOBAL						CHECKEOJ	NUM 1
GLOBAL						CHECKEOJ	NUM 0
GLOBAL						CONTOK	NUM 0
GLOBAL						STARTXEQ	TEXT ""
GLOBAL						ERROR	TEXT "(CIERR"

Chapter 3

Enhancements

The following features have been added to the JobPak software.

JobRescue, ElectroPage, and JobQue

- [“Restoring 6.1a data onto a 6.1b or later system”](#)

JobRescue and ElectroPage

- [“Banner definition year variables”](#)s
- [“Delay \\$STDLIST examination”](#)
- [“Timing for compression”](#)
- [“New CI variables for STATUS”](#)

JobRescue

- [“AUTODIAL”](#)

JobQue

- [“View start time sequence”](#)
- [“Step order”](#)

JobRescue, ElectroPage, and JobQue

The following features involve all three JobPak components, JobRescue, JobQue, and ElectroPage.

Restoring 6.1a data onto a 6.1b or later system

RJOBDATA was enhanced with a *-move* argument to allow it to move files into the files0/9 directories as it recovers them. This was done in case the user restored 6.1a JobPak data onto a 6.1b or later system.

JobRescue and ElectroPage

The following features involve JobRescue and ElectroPage.

Banner definition year variables

Developers added two new date variables for banner page definitions.

Variable	Length	Description
\$YEAR	4	4-digit year the spoolfile was created, as in 2001
\$CCYYMMDD	8	8-digit date the spoolfile was created, as in 20010331

Delay \$STDLIST examination

MPE procedure exits notify JobRescue and ElectroPage when a new READY state spoolfile arrives in the queue. These programs immediately examine new spoolfiles for processing. To delay when JobRescue or ElectroPage examines spoolfiles, place the DELAYEXAMSECS variable in the JOBPAK.JPAK file.

Syntax—

```
!SETVAR DELAYEXAMSECS #####
```

Where ##### is a number between 1 and 10,000 representing seconds for delay.

In the JOBPAK.JPAK file, place this line with other SETVARs prior to the command line JP02SXL.JPAK.

Timing for compression

COMPSPFL now pauses 60 seconds between passes through the JOBDATA file when there are no files that need compression, and pauses 5 seconds when there are files that need compression.

New CI variables for STATUS

STATUSNOAUTOREFRESH prevents STATUS from reloading the JOBDATA file if the file changes while the user is running STATUS. A new command, REFRESH, can be used to force the STATUS program to reread the file.

STATUSDONTREMEMBER allows the use of the STATUSI file instead of the new 6.1 feature that retains a user's print-settings for a specific report. A non-zero value for this variable causes JobPak to reference the STATUSI file without saving changes made to the print settings that are specific to the current report.

DONTLOADFKKEYS instructs the system whether or not to read the Function Key labels and set them back to what they were before running STATUS. A non-zero number does not reload the Function Key labels; zero reloads the Function Key labels. This is the same as putting DONTLOADFKKEYS in the STATUSI file.

JobRescue

The following features involve JobRescue.

AUTODIAL

AUTODIAL has a new parity option setting for port connections.

`PARITY=BINARY|NONE|EVEN|ODD`

This command must appear in the phone file before any dialing commands.

JobQue

The following features involve JobQue.

View start time sequence

When using SCOMXL and the SHOW AJT command, you can now use ;TIME to view the active job table in start time sequence.

Step order

JobQue users could use \$LIMIT in a schedule to limit the number of stream-type steps that can run simultaneously. \$LIMIT did not ensure that steps would run in numeric sequence when some steps contained dependencies and others in the same schedule did not. JobTime was enhanced to always ensure numeric order for stream-type steps when the user sets the limit to 1 inside a schedule.

Chapter 4

Known bugs and fixes

The following table contain information about known software bugs, and the results of bug fixes. Known bugs and fixes affect all three JobPak products or just some of them.

Symptom	Cause	Resolution
JobRescue, ElectroPage, and JobQue		
Reports were being bypassed.	A report definition created in JobPak 5.1 used \$BYPASS and was incorrectly carried forward to JobPak 6.1.	In JobPak 6.1, CONOPT now ignores \$BYPASS for report definitions.
A bug in the MPE/iX operating system was discovered having to do with using UDP.	JP09SXL was UDP capable, but UDP was not implemented as a part of JopPak functions.	Took UDP out of JP09SXL.
Message: "There are no licensed products." appears when running CONFIGIX from an account other than NSD.	CONFIGIX referenced the user's current group and account to find the activation keys file.	Changed CONFIGIX to reference the JOBPAKACCOUNT variable or the NSD account to find the activation keys file.

Symptom	Cause	Resolution
After initiating the STATUS program, the SHOW command does not display spoolfiles examined after the program was initiated.	STATUS checks the JOBDATA file for modification time to create the list of examined spoolfiles. Modification time did not change reliably because the JP06SXL examination process left JOBDATA open for extended periods.	Modified STATUS to check for JOBDATA EOF changes, as well as modification time changes, to determine when to generate a new list of available files.
The OPERATOR command in STATUS returned an error and did not start JPAKCOM when used from an account other than NSD.	The OPERATOR command in STATUS was attempting to qualify the JPAKCOM program in the user's logon account and not in the NSD account.	Changed the OPERATOR command to start JPAKCOM in the NSD account.
Message: "Nonexistent permanent file (FSERR 52)." and "Unable to open help catalog, CICAT.PUB.SYS. (CIERR 1800)." appears when using the HELP command in STATUS.	The help files (HELPCATA/B/E/F/G) were not included in the software distribution.	Included the help files in the software distribution.
When using the STATUS SHOW command for \$STDLISTs, the heading that displays File Number, Job Number, and Job Name has no leading space between Job Number and Job Name.	The Job Number field had no capability for a trailing space when the job numbers reached five digits, causing them to adjoin to the Job Name field with no intervening space.	Reduced the File Number field by one digit, which was not used, and appended the extra space to the Job Number field to create a leading space.
In CONFIGIX, the "Maximum Number of \$STDLIST Lines to Process" field could not be changed, nor could any field following it in the Processing Options menu.	The CONFIGF mask file had an incorrect value defined for the field edit.	Changed the CONFIGF form file to use the correct field edit.
In the Global Configuration parameters, if compression is on, the decompression routine displayed a message about illegal data address traps 65 in the procedure DecompressLZ77.	An unsigned integer variable was used in LZ77 code when it should have used a signed variable, as it can be decremented below zero and the test on it is for >0.	Fixed the LZ77 procedure and released the following programs: STATUS, JP25SXL, REGEN61, STDLOGR, COMPSPFL.

Symptom	Cause	Resolution
In the Global Configuration parameters, if compression was on, the system could take too much CPU time to perform compressions, causing the compression process to preempt other processes.	Data compression is very CPU intensive.	COMPSPFL now has a new CI variable: named MAXCOMPRESSCPU . This variable sets the maximum percentage of CPU allowed. The default is 2%. To change this value, use a SETVAR in the JOBPAK.JPAK job control file.
In the Global Configuration parameters, if compression was on, JobPak might not shutdown.	COMPSPFL used <code>exit()</code> when it should have used <code>ExitProgram()</code> , causing JP01SXL to wait forever for COMPSPFL to terminate. This left the process hanging and the JOBPAK job was unable to stop.	Corrected COMPSPFL, and JP01SXL now waits a maximum of five minutes for COMPSPFL to terminate before forcing a shutdown.
Compression would not stop in a timely fashion, causing JobPak to not log off.	COMPSPFL would not stop until all of the recently processed spoolfiles were compressed.	JP02SXL now issues a CI variable, JOBPAKSHUTDOWN , when JobPak is intended to be shutdown. COMPSPFL checks for this in between compression cycles and preempts its normal port receive processing.
A message appeared in the JOBPAK \$STDLIST about not being able to open the delete log to record the generation being deleted.	When JP20SXL was run, it opened the delete log (DELTELOG.PUB.NSD) file with exclusive access. JP06SXL could not open the file to update it when it was deleting a generation of a spoolfile due to processing a newer one.	Switched the access to shared for JP06SXL and JP20SXL. The procedure, used to rename the log files when they became full, now waits up to two minutes to gain exclusive access during the rename. It then switches back to shared access.
JobRescue and ElectroPage		
Only 131 columns of a report appeared on the screen.	STATUS was subtracting 1 from the SCREENSIZE value in STATUSI when the STATUSDONTREMEMBER CI variable was used.	Fixed STATUS and SCREENSIZE to show 132 columns.
In the STATUS program when using the SHOW command, the last digit of a foreign job number did not appear.	The field for job number was only six characters, which made STATUS cut off the last digit of a foreign job number.	Increased the size of this field to seven in the STATUS program.

Symptom	Cause	Resolution
During retention management and compression, error messages appeared about not finding specific files.	The retention management program, JP20SXL, and the compression program, COMPSPFL, ran simultaneously. If a file was deleted by either JP20SXL or COMPSPFL, an error message occurred even though the file was handled properly.	To stop COMPSPFL from running during retention management, added the CI variable, RETENTIONMGRRUNNING. JP20SXL sets this variable to a non-zero number while it is running. This instructs COMPSPFL to remain idle. When JP20SXL finishes, it sets this variable to zero to instruct COMPSPFL to run. If COMPSPFL does not find a file, a message appears.
When trying to open a file, the message "Unable to open" appeared and the file could not be opened.	The jobdata file did not correctly code a compressed or non-compressed file.	Changed COMPSPFL to update the jobdata file when it finds a compressed or non-compressed file that is incorrectly coded so that this message does not appear and the file can be opened. Also, fixed READAFIL() to release memory that was not freed in ACLOSEFILE().
When viewing and re-printing, 59 instead of 60 lines appeared per-page.	The counter was not started at 0.	Changed the counter so that STATUS, JP06SXL, and REGEN61 view and re-print 60 lines-per-page.
When viewing a report, the user could not scroll to the last line of the report.	STATUS would not let the last line appear.	Fixed the STATUS program to scroll to the last line of reports.
The TEXT command by job number would not display the \$STDLIST.	TEXT by job number looked at any file created by that job, not just \$STDLISTs.	Fixed the STATUS program to look for only \$STDLISTs.
Message: "Waiting for JobTime port to open." appears when JobTime is not licensed.	A task within a system process opened a comm port to JobTime even when the user had not licensed this product.	Modified the task to check the JobTime license before attempting to open a comm port to this program.
In STATUS, when using the LIST command with the UNN option, the system retains the UNN value without allowing the user to reset it.	STATUS was not capable of resetting this value.	Altered the LIST command to default to a numbered listing and removed STATUS's ability to retain the UNN option.

Symptom	Cause	Resolution
In STATUS, the SHOWDELETELOG command displays garbage after converting from JobPak 6.0 to 6.1.	The 6.0 to 6.1 conversion did not convert the DELTELOG file.	Created a program, CONDLOG, to convert the delete log to the 6.1 format.
Child folders under the parent folder did not correctly inherit folder access.	STATUS did not correctly associate the access table with child folders.	Altered the STATUS program to correctly pass-on access inheritance from parent folders to those folders below them.
The STATUS SHOW command would sometimes cause a Data Memory Protection Trap.	The tvFmtCYMDHMS() procedure in XL.XL had the wrong formatting mask.	The proper format mask is now used.
After using the HELP command, the Control-Y break command did not work.	In the STATUS program, once help was entered the CONTROL-Y trap was disabled.	Enabled CONTROL-Y to function correctly with the HELP command.
In the STATUS program when using the SHOW ;REPORT command, the report appeared with the wrong file number.	The wrong format mask was used for the SHOW display line.	Fixed the STATUS program to use the correct format mask. Also implemented the STATUSREPORTBREAK CI variable from JobPak 6.0g. This variable prevents a report break on the device field. One of the parameters that reports sort by is the device the report is sent to. If the device field is wildcarded for a Report Specific Entry and the reports matching this entry are identical except for the device, then the reports display within Status Report mode (under whatever folder) as separate reports, even though they appear to be identical, but just spooled to a different device.
When using the RETRIEVE command, a message appeared stating the header file did not exist.	The RETRIEVE command incorrectly assumed that all 6.1 saved files would have associated header files. 6.1 compressed files do not have an associated header file.	Fixed the STATUS program so that it does not display this message.

Symptom	Cause	Resolution
The STATUS program could open an index file only when the user was signed on as MANAGER.SYS or MGR.NSD.	The STATUS program did not override NSD account security when it opened an index file.	Fixed the STATUS program to override NSD account security when opening an index file.
Error message -8035 appeared in the JobPak \$STDLIST.	JP26SXL, which checks for unprocessed files, was printing an error message when it could not retrieve spool system information for particular files that had already printed.	Suppressed the generation of this message.
When using a wildcard for identifying a matching file, repeating characters at the end of a string did not match a wildcard followed by a single character, such as, prd@A did not match prd309AA and did match prd309XA.	The smatch() procedure in the XL.XL reintroduced an old 6.0 bug.	Created a new XL to correct this issue.
STATUS parameter localmaxpages defaulted to 10 instead of unlimited.	The default was incorrectly set.	Changed the default to -1, which is unlimited. Further enabled the value of 0 to prevent users from doing any local printing.
JobQue		
The schedule simulator report did not display all steps in the schedule.	Steps that did not have times did not appear in the report. These steps ran, but did not appear.	Fixed the JT18SXL program to display the missing steps. Also, fixed the suppressed time value so that the time would appear on the far left of the report.
A step or schedule ran when it was not supposed to or it did not run when it was supposed to.	When a step or schedule appeared more than once in the AJT, JT08SXL used the completion status of an earlier generation of the same step or schedule to satisfy a dependency in the most recent generation of the step or schedule.	Fixed JT08SXL to use the most recent generation of steps or schedules to satisfy dependencies.

Symptom	Cause	Resolution
Message: "CIERROR 1620 when streaming <fname>." appears when the job was streamed properly.	The XSTRM08 script reported that CIERROR was set to 1620 to the JobTime JT08SXL process. Most likely, this is due to concurrent use of the CIERROR variable within the JOBPak job.	Modified JT08SXL to ignore CIERROR 1620.
All the stream-type steps in a schedule start, regardless of any calendars attached to them with a step-level RUNAT.	An internal program switch was not initialized, causing JT08SXL to ignore all calendar dependencies.	Initialized the internal program switch used to indicate calendar dependencies.
Schedules started from other schedules do not start when a \$RUNAT that is on the schedule references a calendar that has no time.	When JT08SXL evaluated the time (even though the calendar did not include one), the time had already passed, so it did not start an old schedule iteration. There was an error in the time evaluation function for schedules started from other schedules; it would not check back to 00:00 of the current day; it only checked the current time through 23:59. Calendars with no time used 00:00 as the default.	Fixed the time evaluation function to encompass a 24-hour period from midnight to midnight.
JobTime runs more than the defined number of concurrent jobs.	When job concurrencies used any wildcarding, the schedule compiler, JT14SXL, discarded @ from the definition, resulting in all jobs logging on to be considered undefined. JobPak 6.1a used @ as a jobname delimiter for designating a remote hostname. The \$DEFINE CONCURRENT job entries, as well as the DEPENDSON JOB syntax used the same job-logon parsing routine. The dependency syntax, did not allow the use of wildcards, so it used the @ as a delimiter.	Changed the logic in the CONCURRENT and DEPENDSON syntax parsers to allow the use of the @ for concurrencies.

Symptom	Cause	Resolution
Syntax error: "Expected one or more additional arguments on this line." appears even when the syntax is correct.	<p>This occurred on stream-type steps when using a <code>DEPENDSON JOB</code> or a <code>WAITFOR JOB</code> and the <code>DEPENDSON/WAITFOR</code> are not the last arguments on the command line.</p> <p>The schedule compiler's syntax parser called a sub-procedure that is resetting the <code>strtok()</code> global pointer and is not able to resume <code>strtok(NULL)</code> calls as it expected.</p>	Changed the syntax parser to save the value of the current <code>strtok()</code> global pointer before calling the sub-procedure and restore the saved <code>strtok()</code> value after control returns to the calling procedure.
When using <code>SCOMXL</code> menu mode, the <code>Start-A-Step-Now</code> displays garbage after the end of the schedule/step names.	The display buffer was not initialized for spaces.	Initialized the display buffer for spaces before loading the screen data.
The schedule simulation report does not show the starts of schedules started from parent schedules.	The <code>JT18SXL</code> report program used the wrong field to extract the schedule name from the compiled schedule.	Modified <code>JT18SXL</code> to use the correct schedule name field.
<code>SCOMXL</code> <code>Start-A-Step-Now</code> screens do not show remote host names for steps and schedules started on remote systems.	Remote host names were dropped during the program update from 6.0 to 6.1.	Altered <code>SCOMXL</code> to display remote host names in the <code>Start-A-Step-Now</code> screens.
Some secondary schedules would ignore dependencies and start immediately.	When the scheduler initialized the first manually started schedule, and if that schedule started secondary schedules, all dependencies for secondary schedules were ignored. This happened once after initializing schedules.	Modified <code>JT08SXL</code> to correctly process schedule level dependencies.
For dates in the format "MON(3), FEB, the system generated 12 dates instead of one.	The <code>JT14SXL</code> program syntax parser had an error.	Fixed this program and the syntax for week specific <code>\$DAY</code> commands.
Once the user entered a non-scheduled schedule start command from <code>SCOMXL</code> , <code>JT08SXL</code> would not schedule any new tasks.	An internal switch was not reset following the processing of the first <code>SCOMXL</code> command related to the start of an unscheduled task.	Altered <code>JT08SXL</code> to reset this switch.

Symptom	Cause	Resolution
The schedule compiler incorrectly coded the \$WAITFOR command as a \$DEPENDSON command. The step-level ;WAITFOR was not affected.	JT14SXL did not set the WAITFOR switch for the schedule level dependencies, therefore all schedule dependencies were treated as DEPENDSON types.	Fixed JT14SXL to correctly code the \$WAITFOR command.
While SCOMXL was running from a job, it did not properly execute commands.	When running SCOMXL in batch mode from a job without an EXIT command in the command list, SCOMXL did not know when it reached the end of its \$STDIN. This caused SCOMXL to go into a loop and read whatever remained of the JCL as input data. The SCOMXL program did not properly recognize the EOD.	Fixed the SCOMXL program to recognize EOD and gave it more intelligence to know when SCOMXL is run from a job.
When SCOMXL ran, the "Start an Unplanned Step" screen was garbage.	The buffer used for the screen display was not correctly initialized.	Correctly initialized the buffer.
At start up, an error about unknown trap (traps 69) appeared and displayed in the JOBPak STDLIST related to JT08SXL.	JT08SXL attempted to enter an async port handler during a procedure call to one of the malloc() family of procedures.	Fixed JT08SXL to disable port messages during memory allocations.
During the conversion to 6.1b, as well as any time changes were made to the schedule, the compiler was looping.	In JT14SXL, the \$DATE calculations for days 29 through 31, referencing months that do not contain that range of days, caused the compiler to loop.	Fixed the compiler, JT14SXL.
Schedules with a \$LIMIT 1 command waited excessively between steps.	JT08SXL did not correctly update the schedule step count, which prevented the program logic from knowing that there were zero steps currently executing. However, once a minute the step count was correctly revised. This could have caused some steps to wait until the next minute occurred, even though that step could have been started as soon as the previous one ended.	Fixed JT08SXL to correctly update the schedule step count as soon as a step is completed.

Symptom	Cause	Resolution
The \$QUIET command did not suppress console messages.	\$QUIET was broken in the 6.1 native mode compiler.	Fixed JT14SXL to correctly implement the \$QUIET command.
ElectroPage		
BANTSTXL did not exist in the JobPak 6.1 installation.	BANTSTXL was not included on the JobPak 6.1 tape.	Included BANTSTXL in the distribution.
ElectroPage 5.1 OPTIONS files created with the \$DIST command did not properly convert to CONFIGIX distribution lists.	In report definitions, if \$DEVICE and \$OUTPRI occurred before the \$DIST commands, distribution lists had encoded values. If after the \$DIST commands, the parser had no reference and device and output priority had blank values.	Changed CONOPT to create the entire distribution list after the parser evaluates \$DEVICE and \$OUTPRI values that follow \$DIST commands.
JobRescue		
The BACKWARDS syntax did not work as documented for the STATUS program STATS command.	Even though part of the syntax, it was left out of the program.	Added the BACKWARDS syntax to the STATS command