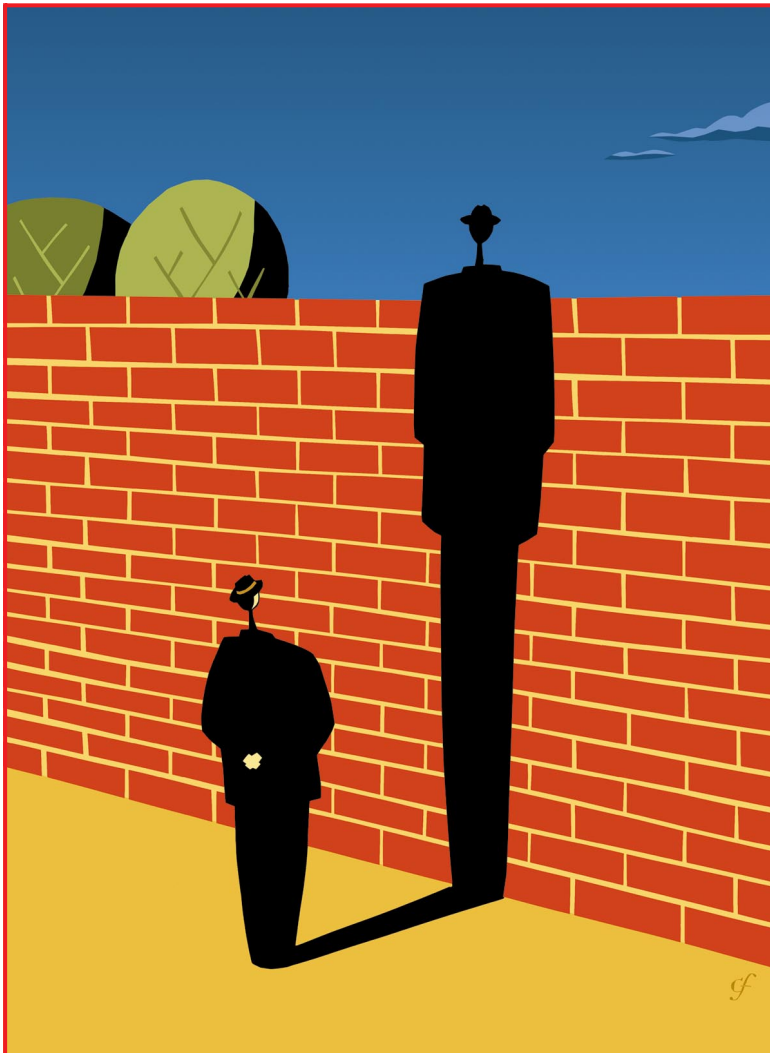


JobPak release notes version 6.1



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version 6.1
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JobPak version 6.1 release notes

This chapter describe the additions and modifications added to the following JobPak version 6.1 products:

- JobRescue™
- JobQue
- ElectroPage™

Although any of the JobPak products can be licensed and used individually, they all run in the background under the JobPak batch job. The installation and update instructions for the JobPak products are described in the *JobPak Installation and Update Guide*.



Caution: Review the *JobPak Installation and Update Guide* before installing or updating any of the JobPak products. Nobix recommends backing up the current JobPak installation before updating to the 6.1 version software.

Overview

The 6.1 release key objective is to insure that all components of the JobPak software function smoothly and effectively when the year changes from 1999 to 2000. This release also contains several additional improvements that increase reliability and efficiency, while using less system resources and delivering higher performance.

JobPak

All the JobPak products contain the following additions and modifications:

- Year 2000 Compliance
- New Company Name
- Message Files No Longer Used

- Saved Spoolfiles are Based on POSIX File System
- Displayed File Numbers in the STATUS Program
- Documentation on CD

For details, refer to the following sections.

Year 2000 compliance

Version 6.1 is year 2000 (Y2K) compliant. Changes affect both the storage and display format for dates and times.

- **Storage Format:** The date storage format now uses a 32-bit field where all of the previous versions used a 64-bit field.

Previous versions used 32-bits for the date and 32-bits for the time. Version 6.1 uses 32-bits to represent the date in Coordinated Universal Time (commonly referred to as UTC—time in seconds elapsed since 12:00AM, January 01, 1970).

- **Display Format:** In previous versions, although the date has always been sorted by century, the display format only used one or two characters.

February 24, 1998 appeared as 98FEB24 or 24FEB8.

In 6.1, the display format uses four characters to show the century and year.

February 24, 1998 now appears as 1998/02/24 or 19980224

The display format for time remains the same and appears as HH:MM or HHMM, based on a 24-hour clock.

The change of century on December 1999 at midnight will not affect or interrupt schedules that are active at that time within JobQue.

New company name

While the new company name, Nobix, appears in the 6.1 version, NSD remains the account name. This insures that data established in this account need not be reestablished.

Message files no longer used

Version 6.1 no longer uses message files. The previous versions used 16-bit compatibility mode message files that slowed the system and consumed CPU time. Version 6.1 uses MPE/iX ports and TCP sockets that are more efficient and reliable.

Saved spool files are based on POSIX file system

All of the version 6.1 products now require the MPE/iX 5.0 (or later) operating system. This operating system supports both the MPE and the POSIX file system. Saved spoolfiles from JobPak products are now saved in the POSIX file system, making the files easier to identify and quicker to locate.

Previous versions of the JobPak products saved the spoolfiles in the MPE file system. POSIX uses file naming that more clearly identifies file contents.

The following example illustrates the POSIX spoolfile naming convention:

/NSD/files1/A.593676.7384123

Syntax	Description
/NSD/files1/	The directory of the file.
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 of the original spoolfile.
.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 spoolfile ID is the same.



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

Displayed file numbers in the status program

The displayed file numbers in the STATUS program are now relative to the number of spoolfiles saved in JobPak. Previous versions displayed a unique file ID that was automatically incremented and could become quite large.

Documentation on CD

The three manuals belonging to the JobPak products are now available to view, search, and print from PDF files on a CD enclosed in the JobPak installation package. These files use the Adobe® Acrobat® Reader. The PC version of the reader is included on the CD.

JobRescue and ElectroPage

JobRescue and ElectroPage products contain the following additions and modifications:

- Outbound SMTP Message Capability
- LZ77 Data Compression
- Configuration Report Capability
- Persistent Examination Processes
- Configurable Examination Delay
- No Lockwords on Saved Files
- Delay \$STDLIST examination
- ElectroPage Banner page variables
- Configuration unload and backup program

For details, refer to the following sections.

Outbound SMTP mail message capability

Version 6.1 uses outbound SMTP messaging to send Email for notification of job completion and errors, and to send reports.

These products still support HPDesk Manager.

LZ77 data compression

JobRescue and ElectroPage versions 6.1 now use LZ77 compression on spoolfile data to compress data in blocks of 8192 bytes. This provides an average of approximately 65% compression. Previous versions of the JobPak products did not support data compression. The CONFIGIX program has an option to turn compression on or off.

Configuration report capability

Version 6.1 has a utility that takes a snapshot of the current configuration and copies it into an editable ASCII file. This file can then be modified in an editor and loaded back into the system to change the configuration while JobPak is running.

Persistent examination processes

Version 6.1 supports persistent examination processes. The previous versions used a single process per spoolfile. The 6.1 version uses a default of five processes that start up and stay running to handle all spoolfiles. This uses system resources more efficiently by using less CPU time than the previous versions.

Configurable examination delay

Version 6.1 now has a configurable time period before examination that allows users access to a spoolfile before it is examined.

No lockwords on saved files

Version 6.1 does not use lockwords on saved files. Previous versions used lockwords on individual files to keep unauthorized users within an account from viewing the files. In version 6.1 the entire account is now secured and lockwords are no longer needed.

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.

Banner page variables

Developers added two new date variables for banner page definitions: \$YEAR and \$CCYYMMDD.

Configuration unload and backup program

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
FDISPLY
- 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.

JobQue

The JobQue product contains the following additions and modifications:

- Schedule Names Limited to 31 Characters
- Network Scheduling
- Dependencies on Remote Systems
- Schedule Aliases
- User Defined Job Exclusions
- Event Driven User Streamed Jobs

For details, refer to the following sections.

Schedule names limited to 31 characters

Schedule names in version 6.1 are now limited to 31 characters. This is important because previously 32 characters could be used. Schedule names can no longer contain the ";" semicolon character or the "@" character. The "@" character is used as a delimiter between the schedule name and a remote hostname.

JobName@SystemName

Network scheduling

Version 6.1 now features peer to peer network scheduling. Each JobQue system can request a remote system to initiate a schedule or a job, as well as locally execute requests from remote JobQue systems. All JobQue systems report job initiations and completions to any other JobQue system to satisfy remote dependencies. These features require that all peers use JobQue version 6.1.

Dependencies on remote systems

As jobs finish, JobQue sends notification of completion to the other systems on the network. This notification initiates other jobs set up as dependencies, pending the completion of remote jobs.

Schedule aliases

In version 6.1 the ability to give a schedule an alias allows users to have different schedules using a common name. This allows schedules that run on different days to satisfy the same dependency by referencing the alias name.

Example:

```
$DEFINE SCHEDULE ONCE_A_DAY
    $ALIAS NIGHTLY_PRERUN
    $RUNAT ENDOFDAY_TIMES
$STEP 100 STREAM JOB1.JOBS.SYS
$DEFINE END
$DEFINE SCHEDULE ONCE_A_WEEK
    $ALIAS NIGHTLY_PRERUN
    $RUNAT ENDOWEEK_TIMES
```

```
$STEP 100 STREAM JOB3.JOBS.SYS
$DEFINE END
$DEFINE SCHEDULE NIGHTLY_JOBS
$DEPENDSON NIGHTLY_PRERUN
$STEP 100 STREAM JOB8.JOBS.SYS
$DEFINE END
```

User defined job exclusions

JoQue allows the definition of a user defined job queue (concurrency). The jobs and the number that run concurrently can be specified either explicitly or with wildcards.

A new feature added to concurrent definitions allows specification of job logons that are not to be included in the concurrency. For example, there are 213 different jobs that could run in the account named BOGUS. Of those jobs, only 211 are to be managed by JobQue. Previously, all 211 jobs would have to be defined. Now, only the two that are not to be managed need to be defined.

Example:

```
$DEFINE CONCURRENT 1
$ENTRY JOB @,@.BOGUS
$ENTRY JOB -THISJOB,MGR.BOGUS
$ENTRY JOB -THATJOB,MGR.BOGUS
$DEFINE END
```



Note: The minus sign on the entries for THISJOB and THATJOB indicate that those two jobs are to be excluded from the concurrency definition.

Event driven user streamed jobs

Previously, JobQue periodically polled the job queue to determine what jobs were currently executing, waiting, scheduled, etc. This has been changed to use procedure exits, so that the MPE/iX operating system notifies JobQue that a job has been initiated or terminated. The polling cycle is eliminated along with its associated CPU overhead. This has made the JobQue software more responsive, eliminating up to five seconds that transpired before JobQue could have initiated the next job.

System environment

JobPak software requires an HP3000 system with MPE/iX version 5.0 or later.

The CD ROM that contains the JobPak documentation requires a PC with a CD ROM and the Adobe Acrobat Reader 3.02 or later. For convenience, the latest PC version of the reader is included in the JobPak installation package on the enclosed CD. To obtain other versions of the reader, go to <http://www.Adobe.com>.