

# SpoolMail

Enhancement Summary V2R6M0  
Product Number 2A55SM1

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## Edition

Sixteenth Edition (April 2011)

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## Installation Instructions

Follow these instructions to install SpoolMail V2R6M0 on your System i:

### Prepare

If you are upgrading a previous release (if SpoolMail is currently installed on your System i) perform these steps before installing the software:

1. Read the Enhancement Summary to determine if any changes affect your installation.
2. Insure that the product is not in use, as the installation process must clear the product's library. This will fail if objects such as menus are in use. If the installation fails, the previous release will be restored.

### Install

**Note:** If you have downloaded this software from the web, instructions specific to installing from the download can be found in the file "readme.htm" which was included.

1. Sign on to the system as the security officer (QSECOFR).
2. Verify that your machine is at IBM i V6R1M0 or later by running:

```
DSPDTAARA DTAARA(QGPL/QSS1MRI)
```

**Note:** If you are running a version of IBM i earlier than V6R1M0 you cannot install SpoolMail V2R6M0 on your machine. You must install an earlier version of SpoolMail or upgrade the operating system.

3. Verify that user domain objects are allowed in the libraries SPOOLMAIL and QSRV, by running:

```
WRKSYSVAL SYSVAL(QALWUSRDMN)
```

Take option 5 to display the value. If the value is not \*ALL, use option 2 to add libraries SPOOLMAIL and QSRV to the list of libraries where user domain objects are allowed.

**Note:** QSRV is required to correctly process PTFs when they are loaded and applied.

4. Insure that IBM i will be able to verify the signatures that we apply to our product's objects by installing our Signing Certificate and Root CA Certificate using Digital Certificate Manager. Alternately, insure that signature verification will not prevent the restore operation by running:

```
WRKSYSVAL SYSVAL(QVfyOBJRST)
```

Take option 5 to display the value. If the value is 3 or higher, use option 2 to temporarily change the value to 1.

5. Mount the distribution media in the appropriate device.
6. Submit the Restore Licensed Program (RSTLICPGM) command to batch:

```
RSTLICPGM LICPGM(2A55SM1) DEV(device-name) LNG(2924)
```

**Note:** Where "device-name" is the device the media was mounted on and is usually OPT01.

**Note:** During the restore operation, the system operator message queue may receive inquiry message CPA3DE4 "Directory not registered. (C G)". Unless you are using a directory naming convention similar to ours (that is the directory specified in the CPA3DE4's second level text is unrelated to our software), you can safely respond with a "G" to reestablish the relationship between the directory and the product. Typically, the message will occur three times.

## Finish

When the RSTLICPGM command completes, library SPOOLMAIL and directory '/Gumbo/ProdData/2A55SM1' contain the new software. To complete the installation:

1. If you have an Authorization letter with your permanent authorization code, enter it now.

**Note:** SpoolMail automatically grants 30 days usage for new installs or 90 days usage for release upgrades.

2. Determine which PTFs were included on the media by entering the following command:

```
DSPPTF LICPGM(2A55SM1)
```

3. Visit [www.gumbo.com](http://www.gumbo.com) to determine if newer PTFs are available. If so, download and install them. The bottom of our PTF web page also includes a listing of any IBM PTFs that affect the product.

**Note: GUMBO** recommends downloading the current cumulative PTF package from [www.gumbo.com](http://www.gumbo.com) after installing the software.

4. You can access the SpoolMail menu by entering the following command:

```
GO MENU(SPOOLMAIL/SPOOLMAIL)
```

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## Enhancements For SpoolMail V2R6M0

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### What's In This Section

This section provides information on SpoolMail enhancements for release V2R6M0, notes any customer code implications with a Compatibility Warning, and describes where to find more information when applicable.

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### EXTENSION() Parameter now accepts \*MIXED

SNDSPLMAIL's Attachment extension (EXTENSION) parameter has been changed to accept upper and lower case input. Previously, all input was converted to upper case.

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### Graphic Processor Default Added

IBM's Graphics Object Content Architecture (G:OCA) specification references "graphics processor default", i.e. printer dependant, behavior under certain circumstances. For graphics character precision, SpoolMail has historically used "character precision" as the graphics processor default behavior. As it turns out, most physical printers use the more easily implemented "string precision". SpoolMail's output of graphics text can appear different from printed output.

A new parameter, Graphic processor default (GROPRCDFT), has been added to SpoolMail's CHGSM1DFT command. The parameter allows you to specify which processor default behavior should be used.

All existing installations are treated as if \*PRECISION2, or character precision, had been specified and the shipped default value is \*PRECISION2. Most graphic objects specify the precision needed to correctly render them, and don't depend on a printer's drawing default. In the case where your graphic object does not specify a precision you can match the default supplied by your printer.

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### Verify/Set Up Mailhub Server (VFYMAILHUB) Command Added

A new command, Verify/Set Up Mailhub Server (VFYMAILHUB) has been added to SpoolMail as a replacement for our Verify/Set Up Mail Router (VFYROUTER) command. We are tracking an IBM change.

Both Verify/Set Up Mailhub Server (VFYMAILHUB) and Verify/Set Up Mail Router (VFYROUTER) are intended as a one time set up aids, and are not intended for inclusion in your programs or procedures. However, in order to provide a transition period, SpoolMail will continue to include VFYROUTER for a period of time. The VFYROUTER command will be removed in a future release.

At V6R1M0, IBM i's Change SMTP Attributes (CHGSMTPA) command added a new parameter: Forwarding mailhub server (FWDHUBSVR). FWDHUBSRV() implements the function intended for a mail server specified using CHGSMTPA's MAILROUTER() parameter with FIREWALL(\*YES). Apparently the function was not implemented correctly, but couldn't be changed. When FWDHUBSRV() is specified, all email is forwarded to the server for delivery. This effectively trumps the FIREWALL() parameter.

IBM's FWDHUBSRV() parameter is more capable than the function revealed by our VFYMAILHUB command. If you wish to take advantage of these functions, for example specifying a domain from which a server is resolved from MX records, configure it manually.

With the addition of VFYMAILHUB, menu options, help text and manual sections have been updated as well.

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## Font Processor Changes

- Previously, when processing fonts specified using DDS' FONTNAME() keyword, only IBM supplied fonts could be located. Now, the search for fonts follows the method used by IBM i, and user supplied fonts are correctly located and processed.
- For DBCS data, font size is ordinarily specified; usually by the QIGCCDEFNT system value. In the absence of a DBCS font specification, a value is calculated based on the spooled file's other attributes. The value calculated resulted in characters that overlapped from line to line in some circumstances. The calculation has been modified to avoid this.
- Horizontal Scale Factor triplet was being applied to GRID specified font mappings in \*AFPDS spooled files and shouldn't have been. Most GRID based font mappings don't include the triplet, but those that did ended up with incorrectly sized fonts.

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## FreeType Changes

- Added functions to open and close font file paths coded in any CCSID.

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## Graphic Object Processing Changes

- Enable external control of the device default behavior of the graphics processor.

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## Integrated File System Changes

- An internal table was missing '\ ' code points for CCSIDs 1130, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149, 1153, 1154, 1155, 1156, 1157, 1158, 1160, 1164, 1388, 1399, 4971, and 5026. As a result, path normalization from '\ ' to '/' did not work correctly in these ccuids.

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## Mail Set Up Changes

- Mail verification no longer turns off \*LOOPBACK. At V6R1, the STRTCPIFC command issues message id TCP1B12 as a diagnostic instead of an escape. Our VFYLOCAL command was using the escape to determine if we turned on the interface and if we did, turned it off. Now the \*LOOPBACK interface is left on in all cases.
- DSPMAILLOG no longer assumes the system date format is the same as the job date format when converting \*CURRENT special value.

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## National Language Support Changes

- Added new function to open conversion descriptors that track conversion substitution counts.

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## Logical Printer Miscellaneous Changes

- CRTDEVGLP and CRTDEVGLP check the existence of command STRSEU to determine if PDM is installed and EDTF should be used instead. IBM added a STRSEU proxy command to QSYS so the check was always positive, even if PDM is not installed, causing the commands to fail on machines without PDM. The check is now qualified to library QPDA.

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## PDF Generator Changes

- Previously, PDF/A implemented the draft standard with regard to XMP metadata similar to Acrobat 7.0. The implementation has been updated to reflect ISO 19005-1:2005 as accepted.
- Media overlays were being placed on the page out of order. Unless there were overlapping page segments or overlays on the page, the misordering had no visual affect. Overlapped resources were presented incorrectly. The order has been corrected.
- IBM Graphic Objects typically specify details of the required rendering but can and sometimes do depend on "device default" behavior. Previously, our pdf processor's default behavior was the more detailed "character precision". For graphic objects that depend on a default behavior of "string precision", this can give odd results. The pdf processor has been updated to enable the user selectable default behavior implemented in our Graphics Processor.
- Previously, when processing fonts specified using DDS' FONTNAME() keyword, and the data stream did not supply a code page, irrelevant diagnostic messages were generated. These messages have been suppressed.
- Text stored in the "Application" attribute of the "General" "Document properties" of generated PDF files has been updated. Previously, "i5/OS program ..." was stored. Now "IBM i program ..." is stored to reflect the renaming of the operating system.
- PDF now honors TXTRELPOS(\*EXACT) setting for improved underlining of SCS typographic fonts.
- Sizing of DBCS fonts when found in \*SCS spooled files subject to computer output reduction (\*COR), was too generous, resulting characters that overlapped. The size has been corrected.
- Jpeg images with density specified in centimeters were being sized incorrectly.

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## Print Data Stream Processor Changes

- Added print data stream sink facility to allow clients to request that a message identifying the created spooled file be sent to the joblog.

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## Program Distribution Changes

- Fine tuning of the Trouble Shooting chapter's instruction for clearing a product from a machine to get to a stable state.
- Service programs now take advantage of deferred activation introduced at release V6R1 of IBM i. Only the service programs that are needed are activated, at the point at which they are needed. Unnecessary activations are avoided
- Added object text to user space containing resolved product directory.

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## Conversion Processor Changes

- New transform \*NONEPDF was added. Processing is identical to transform \*NONE, i.e. no conversion, but with an implied default extension of .pdf. This is useful for processing \*USERASCII spooled files containing .PDF documents, such as those generated by JD Edwards.

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## SCS Processor Changes

- Added export and changes to allow more accurate position calculations when \*EXACT specified, benefiting underline of variable typographic fonts.

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## Spool Indexing Changes

- Propagating special values such as \*DOCIDXGRPP and \*STRPAGGRPP failed to properly propagate for the first page group.

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## Spool Management Changes

- At V7R1M0, IBM's List Spooled File AFPDS Resources (QGSLRSC) API changes behavior with regards to missing resources. Changes were made in our logic to account for the difference in order to give the same results when resolving resources used by spooled files.
- CRTSPLSAVF command now includes user defined objects specified on the spooled file when creating the save file.
- Processing of AFPDS spooled files containing BNG/ENG structure field bounded page groups with field tags resulted in mismatched tags under some merge/split/copy operations.
- Added copy cursor facility to allow clients to request that a message identifying the created spooled file is sent to the joblog.