

DICER

Enhancement Summary V1R5M0
Program Number 2A55DCR

Fourth Edition (June 2007)

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Installation Instructions

Restoring the new release

Read the Enhancement Summary to determine if any changes affect your installation.

Follow these instructions to install Dicer V1R5M0 on your System i5:

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 is included in the download.

1. Sign on to the system as the security officer (QSECOFR).
2. Verify that your machine is at i5/OS V5R3M0 or later by running:

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

Note: If you are running a version of i5/OS earlier than V5R3M0 you can not install Dicer V1R5M0 on your machine. You must install an earlier version of Dicer or upgrade the operating system.

3. Verify that user domain objects are allowed in the libraries DICER 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 DICER and QSRV to the list of libraries where user domain objects are allowed.

4. Insure that i5/OS 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(2A55DCR) DEV(device-name) LNG(2924)
```

Note: "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. © 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.

7. Enter your permanent authorization code by following the instructions on your Authorization letter.
8. Determine which PTFs were included on the media by entering the following command:

```
DSPPTF LICPGM(2A55DCR)
```

9. Visit www.gumbo.com to determine if newer PTFs are available.

Enhancements For Dicer V1R5M0

What's In This Section

This section provides information on Dicer enhancements for the current release, notes any customer code implications, and describes where to find more information when applicable.

Product Integrity Enhancements

Objects and the save files that contain them are digitally signed by Gumbo when they are created on our development system. You can verify that their contents have not been altered or corrupted since they were produced. You do this by first importing our root certificate authority (CA) and object signing certificates to your system and then running the Check Object Integrity (CHKOBJITG) command against them. For detailed instruction on importing certificates for signature verification using the CHKOBJITG command, see IBM's manual "Digital Certificate Manager RZAH-U000".

Note: We uniquely name our digital certificates to simplify their management on your system. If you have previously imported digital certificates from us with the same name as those included in this package, you do not need to repeat this step.

Certificates can be found in downloads that contain save files as well as in the product's /doc directory after it is installed.

Font Processor Corrections And Updates

- o Updated font base data table with additional cpgid - codepage information including recent Polish additions.
- o Faulty logic allowed code pages in the process of being parsed to be used as complete during high load stress test.
- o Previously, when processing a spooled file's attributes for font specifications, the file's Character identifier (CHRID) setting was ignored and values were derived from the default CCSID in all cases. CHRID is now processed correctly.
- o Updated font base data table with additional glyph names.
- o Added new functions for accessing IFS based Type 1 fonts.
- o Changes to allow correct handling of FGID=0.
- o Bold and italic now handled correctly for user defined FGIDs.
- o Concurrent timing issues in resolving font resources can lead to failures including Array not found and pointer not set exceptions under unusual circumstances.

Integrated File System Component Corrections And Updates

- o oflag process was expanded in lfsOpen() to provide more fine grain control required by some digital signing methods.

Print Data Stream Processor Corrections And Updates

- o Error merging spooled files containing mixed SCS/IPDS under some rare circumstances.

SCS Processor Corrections And Updates

- o Corrected initial position calculated during set horizontal margin (SHM) SCS control code processing.
- o Parser now correctly handles emphasis during font imbedding.
- o Corrected mixed SCS/IPDS cross parser communication for font stack control.
- o Corrected mixed SCS/IPDS cross parser communication for page status, number.

Spool Indexing Corrections And Updates

- o Indexer now considers PTOCA transparent data when building spooled file indexes.
- o Indexing mishandled spooled files with blank last page causing the page to be dropped.
- o Corrected mixed SCS/IPDS cross parser communication for page number during dump/retrieve.
- o Uninitialized variable could cause divide by zero error for some SCS/IPDS spooled files during dump/retrieve.
- o Added note to Dump Page Index Position output to show "Data position in line = Pos + Data Offset".
- o Uninitialized variable caused occasional SIX0021 indexer reset error.

Space Management Component Corrections And Updates

- o Added locking protocol to insure that pointer retrieved during space creation points at newly created space.
- o Space locking now uses job default wait time.

Spool Component Corrections And Updates

- o Previously the CRTSPLSAVF command could fail if the printer file, which is included in the saved material, contained functionality that would not save to earlier releases. I.e. a new barcode format. Now when this case arises the printer file is omitted and the save completed.