

# Dumpster

Programmer's Guide and Reference  
Licensed Program 2A55DMP V2R2M0



Spoiled File Internals

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## **Edition**

### **Eleventh Edition (January 2020)**

This edition applies to the licensed program Dumpster (Program 2A55DMP), Version 2 Release 2 Modification 0, and to all subsequent releases and modifications until otherwise indicated in new editions. This revision makes all previous editions obsolete. Make sure you are using the proper edition for the level of the product.

This manual is available as option 1 from the DUMPSTER menu, in PDF format in directory /Gumbo/Proddata/2A55DMP/doc on your system, and on the web at [www.gumbo.com](http://www.gumbo.com)

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## Chapter 1 Introduction

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### What's In This Chapter

This chapter introduces you to Dumpster. The chapter:

- Describes the features of Dumpster.
- Describes product support features.
- Outlines future directions for the product.
- Describes conventions used in this manual.

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### Dumpster Features

Dumpster is a software utility that dumps the internals of IBM i spooled files.

Now you can use the same tools we use to inspect a spooled file and print resource internals. It isn't pretty but with it you can gain insight into the inner workings of IBM i's spool support. This can be useful for increasing printer throughput or determining the exact effect of various DDS keyword combinations.

Dumpster supports most of the IBM i spooled file print data streams:

<b>*SCS</b>	SNA Character String.
<b>*IPDS</b>	Intelligent Printer Data Stream.
<b>*AFPDS</b>	Advanced Function Presentation Data Stream.

Dumpster generates the following formatted dumps:

<b>*ATTRIB</b>	The spooled file's complete attributes, equivalent to WRKSPLFA on steroids.
<b>*RSCLST</b>	A list of external resources referenced by the spooled file. This is the output of IBM i's QGSLRSC API.
<b>*DTASTR</b>	The raw data stream in readable form.
<b>*BUFFER</b>	Complete information on the spooled file's buffer's. This is the output of IBM i's QSPGETSP API for format SPFR0200.

Dumpster includes a work-a-like for IBM i's Work with Spooled File (WRKSPLF) command called Work with Gumbo Spooled Files (WRKGSISPLF). It also includes a work-a-like for IBM i's Work with Output Queue (WRKOUTQ) command called Work with Gumbo Output Queue (WRKGSIOUQ). These commands provide the same functions as their IBM i equivalent. In addition they provide an option that allows you to access the function of Dumpster by entering an option number.

Best of all it is free.

---

### Product Support Features

**GUMBO** products include a range of standard features that make them easy to use, easy to manage, and easy to live with:

- Extensive manual, both online as menu option 1 and in PDF
- Context sensitive help for every command and parameter.
- Menu that provides organized access to the product's features.
- Products are packaged as licensed programs and participates in the full range of support provided by IBM i Licensed program installation, PTF management, etc. are handled with the same commands used to manage IBM® software.
- Unlike IBM® Licensed Programs, our products are packaged to allow multiple releases to be installed at the same time, which facilitates new release testing.

- Product PTFs are available on the web at [www.gumbo.com](http://www.gumbo.com) or can be retrieved and installed in a single step using our Retrieve Gumbo PTF (RTVGSIPTF) command.
- Our products include a hot site friendly automatic authorization function that allows you to immediately move operations to any back up or fail over machine without contacting us for a license key or authorization code.
- We include a Check Dumpster Authorization (CHKDMPAUT) command that allows you to exercise the product's authorization algorithm and insure there are no authorization "surprises".
- An installation verification option is available on the menu. You can easily verify that the product is correctly installed.
- All (applicable) objects in our products are digitally signed allowing you to verify their integrity. Modifications that could jeopardize the security of your system are easily detected with IBM i's Check Object Integrity (CHKOBJITG) command.
- Our products are upward compatible with future releases of IBM i. You can install a new releases of IBM i without installing a new release from us.
- Our products are compatible with all IBM i security levels. We use only published interfaces.

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## Future Directions

Future releases of Dumpster will include enhanced functionality based on customer feedback. Additionally, enhancements may be added to an existing release by Program Temporary Fix (PTF).

Candidate enhancements include:

- Improved print formatting

Contact **GUMBO** to suggest additional enhancements.

---

## Manual Conventions

A note on conventions used in this manual. In several places, instructions for entering commands are given. When the command is intended to be run from a PC command prompt, it is flagged by **[PC]**. When the command is intended to be run from an IBM i command line, it is flagged by **[I]**, or is not flagged at all. **[Enter]** denotes the enter key.

---

## Chapter 2 Installation

---

### What's In This Chapter

This chapter describes

- How to install Dumpster.
- API authority granted during installation
- How to include the DUMPSTER library in a job's library list.
- How to determine release dependencies.
- How to test a new release while leaving the old in production.
- How to remove Dumpster from the system.
- How to find additional installation information.
- How to contact technical support.

---

### Installing Dumpster

Follow these instructions to install Dumpster V2R2M0 on IBM i using physical media or a virtual image:

#### Prepare

If you are upgrading a previous release (if Dumpster is currently installed), 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 are installing from a save file downloaded as an executable zip (.exe), use the save file specific "readme.htm" instructions included in the download.

1. Sign on to the system as the security officer (QSECOFR).
2. Verify that your machine is at IBM i V7R3M0 or later by running:

```
WRKLICINF
```

**Note:** If you are running a version of IBM i earlier than V7R3M0 you cannot install Dumpster V2R2M0 on your machine. You must install an earlier version of Dumpster or upgrade the operating system.

3. Verify that user domain objects are allowed in the libraries DUMPSTER 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 DUMPSTER 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 physical media or virtual image on the appropriate device.
6. Submit the Restore Licensed Program (RSTLICPGM) command to batch:

```
RSTLICPGM LICPGM(2A55DMP) DEV(device-name) LNG(2924)
```

**Note:** Where "device-name" is the device where the media or image was mounted 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 or four times.

## Finish

When the RSTLICPGM command completes, library DUMPSTER and directory '/Gumbo/ProdData/2A55DMP' contain the new software. To complete the installation:

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

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

2. Retrieve the current cumulative Dumpster PTF package by running the following command:

```
DUMPSTER/RTVGSIPTF
```

**Note:** **GUMBO** recommends downloading the current cumulative PTF package after installing the software.

3. Visit our PTF page at [www.gumbo.com](http://www.gumbo.com) and check the **Additional IBM i PTF Information** section for IBM PTFs you may need to install.
4. You can access the Dumpster menu by running the following command:

```
GO MENU(DUMPSTER/DUMPSTER)
```



---

## API Authority Granted During Installation

The first time Dumpster is installed on a system, public authority \*USE is granted to 3 of the IBM i supplied spooling APIs. These are QSPOPNP, QSPGETSP, and QSPCLOSP. The APIs are used by Dumpster to open, read and close spooled files. This is required to perform the product's functions.

Security restrictions and authority requirements pertaining to spooled files and output queues remain in effect and are enforced by IBM i during use of the APIs. However, if you are operating a highly secured environment you may wish to review and revise the authority granted during installation.

No authority is granted during installation if Dumpster exists on the system. This prevents new releases from altering changes made after the initial installation.

---

## Library List Considerations

Library DUMPSTER must be in the library list of jobs using Dumpster commands, or the commands must be qualified with library DUMPSTER. Depending on your installation and intended use, you can choose to:

- Add library DUMPSTER to the system library list. This insures every job in the system has access to Dumpster commands. However, this introduces problems with installing new releases and is not recommended.
- Add library DUMPSTER to the initial library list parameter of job descriptions controlling jobs that will use Dumpster commands. (recommended)
- Run an ADDLIB DUMPSTER command in individual threads requiring Dumpster commands.
- Qualify the command names on each use:

```
DUMPSTER/CHGDMPDFT
```

Library DUMPSTER will be temporarily added to the product portion of the current thread's library list.

Determine the best method for your installation and perform any changes required.

---

## Release Considerations

Dumpster operates under IBM i V7R3M0 or higher. Releases occur on a different schedule than IBM releases. Once Dumpster is installed, the following considerations apply:

- A new release of IBM i may be installed without installing a new release of Dumpster.

Dumpster uses only published or IBM sanctioned interfaces and is upward compatible with all releases of IBM i. The Dumpster authorization code does not change.

- A new release of Dumpster may be installed without installing a new release of IBM i.

Any change in the requirements for operating system release level will be noted in the documentation accompanying the Dumpster release. The new authorization code must be entered.

- A new release of Dumpster may be installed over any prior release of Dumpster.

You can skip "missed" releases.

- More than one release of Dumpster may be installed on a system at one time.

By restoring Dumpster to a library other than DUMPSTER, a new release can be installed for testing while the old release remains in production. Any release-to-release considerations that may apply will be noted in the documentation accompanying the new release.

Additional operational considerations may apply. For more information on renaming a library during licensed program installation, see the Restore Licensed Program (RSTLICPGM) command and the New Release Testing section of this chapter.

- When a new release of Dumpster is installed in the same library as an old release the following processing is performed in order to preserve data and Dumpster authorization information:
  1. The Dumpster library is saved to QGPL/DMPVxRyMz. Where VxRyMz is the old release.
  2. Product objects that contain default settings and operational information are copied to library QTEMP.
  3. The Dumpster library is cleared.
  4. Dumpster is restored.
  5. Default settings and operational information are copied back to the product objects.
  6. All objects duplicated to QTEMP are deleted.
  7. Save file QGPL/DMPVxRyMz is deleted.

**Note:** *GUMBO* recommends making a backup of the old release before installing a new release of Dumpster.

---

## New Release Testing

Unlike IBM licensed programs, *GUMBO* licensed programs are packaged in a way that allows multiple release to be installed at the same time. This feature allows you to test a new release while the old release remains in production.

The key to new release testing are the LIB() and CODHOMEDIR() parameters of IBM i's Restore License Program (RSTLICPGM) command which allow you to restore the product to a library name and directory different from those used during packaging.

To test a new release, follow this procedure:

1. Review the Enhancement Summary for any release-to-release considerations that could affect your installation.
2. Install the new release in library DMPV2R2M0 and directory '/Gumbo/ProdData/2A55DMPV2R2M0':

```
RSTLICPGM LICPGM(2A55DMP) DEV(device-name) LNG(2924)
          LIB(DMPV2R2M0) REPLACERLS(*NO)
          CODHOMEDIR('/Gumbo/ProdData/2A55DMPV2R2M0')
```

Where "device-name" is the device where the media or image was mounted.

3. Prompt CHGDMPDFT on both releases and copy any changes from the existing release to the new release.
4. Perform your new release testing.
5. When testing is complete, you must delete the new release.

```
DLTLICPGM LICPGM(2A55DMP) RLS(V2R2M0) OPTION(*ALL)
```

**Note:** Do not delete nor rename libraries and directories to move the new release into production. Doing so will corrupt the license program information kept internally by IBM i. If this has already occurred, see the Software Installation Problems section of the *Trouble-Shooting* chapter of this manual.

6. Follow the installation instructions to place the new release into production.

---

## Deleting Dumpster

Follow these instructions to remove Dumpster from IBM i:

1. Sign on to the system as the security officer (QSECOFR).
2. Delete the Dumpster library by using the Delete Licensed Program (DLTLICPGM) command:

```
DLTLICPGM LICPGM(2A55DMP) OPTION(*ALL)
```

These instructions delete an otherwise healthy installation of Dumpster. If the installation has been damaged, follow the instructions for Installation Fails in the *Software Installation Problems* section of the *Trouble-Shooting* chapter of this manual.

---

## Additional Installation Information

Additional detailed installation information and instructions can be found in *IBM i and related software > PDF file... > Installing, upgrading, or deleting IBM i and related software SC41-5120* topic in the IBM i Knowledge Center at [http://www.ibm.com/support/knowledgecenter/ssw\\_ibm\\_i](http://www.ibm.com/support/knowledgecenter/ssw_ibm_i).

---

## Technical Support

If you encounter a problem with Dumpster you should:

- Review the information in the Trouble Shooting chapter for a description of and solution to common problems.
- Load and apply the current cumulative PTF package for the software. You can obtain the current package by visiting the web site listed below.

If the problem remains unresolved, contact [support@gumbo.com](mailto:support@gumbo.com).

If your problem involves spooled file processing, the best method for getting it resolved is to capture the spooled file using the Create Spool Save File (CRTSPLSAVF) command and email the resulting save file along with a description of the problem to the address listed above. Be sure to include contact information.

**Note:** See the Trouble Shooting chapter for details on creating and sending spool save files.

---

## Chapter 3 Menu

---

### What's In This Chapter

This chapter describes how to access the Dumpster menu, and reviews the functions that can be performed from the menu.

---

### Accessing Menu DUMPSTER

The Dumpster commands and functions that you will use most often are collected on menu DUMPSTER. To access the menu use the Go To Menu (GO) command:

```
GO MENU(DUMPSTER/DUMPSTER)
```

Library DUMPSTER is added to the product portion of the current thread's library list while the menu is displayed.

---

### DUMPSTER Menu Options

```
DUMPSTER                               Dumpster                               System:  DMP
Select one of the following:

    1. Reference Manual

Dumpster
    2. Dump Spooled File                 DMPSPLF
    3. Work with Gumbo Spooled Files     WRKGSISPLF
    4. Work with Gumbo Output Queue     WRKGSIOUQ
    5. Dump Print Resource               DMPPRTRSC

Other Options

    61. Display Current PTF Status       DSPPTF
    62. Retrieve Gumbo PTF              RTVGSIPTF
    63. Search Help Index               STRSCHIDX
    66. Create Spool Save File          CRTSPLSAVF
                                         More...

Selection or command
====>

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
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```

#### Option 1. Reference Manual

Provides access to the Dumpster Programmer's Guide and Reference Manual.

#### Option 2. Dump Spooled File

The Dump Spooled File (DMPSPLF) command dumps the contents or attributes of an IBM i spooled file.

#### Option 3. Work with Gumbo Spooled Files

The Work with Gumbo Spooled Files (WRKGSISPLF) command works like IBM i's Work with Spooled Files (WRKSPLF) command but provides additional options to access the functions of Dumpster.

#### Option 4. Work with Gumbo Output Queue

The Work with Gumbo Output Queue (WRKGSIOUQ) command works like IBM i's Work with Output Queue (WRKOUTQ) command but provides additional options to access the functions of Dumpster.

**Option 5. Dump Print Resource**

The Dump Print Resource (DMPPRTRSC) command dumps the contents or print resources including \*OVL, \*FORMDF, \*PAGSEG, \*FCT, \*FNTRSC, \*PAGDFN, and \*PGD.

**Option 61. Display Current PTF Status**

Displays the Dumpster PTFs that have been applied to the software.

**Option 62. Retrieve Gumbo PTF**

The Retrieve Gumbo PTF (RTVGSIPTF) command checks a remote system for new product PTFs, and, if available, downloads and installs them.

**Option 63. Search Help Index**

Search help index allows you to access the Dumpster help index and search for specific information.

**Option 66. Create Spool Save File**

The Create Spool Save File (CRTSPLSAVF) command creates a save file containing a spooled file and all its related resources. The save file is suitable for emailing with a problem report.

**Option 67. Work with Source Code for Tools and Examples**

Access source code found in file DMSOURCE which provides useful functions and demonstrates coding techniques used with Dumpster.

---

## Chapter 4 Implementation

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### What's In This Chapter

This chapter describes how to implement Dumpster in your environment. The chapter:

- Gives an overview of implementation choices.
- Describes useful spooled file information.
- Describes included example source code.
- Describes a CL coding tip.
- Describes changing command defaults.

---

### Overview

The main function of Dumpster is accessed by running the Dump Spooled File (DMPSPLF) command. The command takes a spooled file and generates a formatted dump of the requested information.

There really isn't too much to it, simply run the Dump Spooled File (DMPSPLF) command specifying the spooled file to dump. Then use WRKSPLF to view the results.

---

### Useful Spooled File Information

IBM i provides powerful printing capabilities collectively known as AFP (Advanced Function Presentation). If you use IPDS printers you also need PSF/400. Otherwise, the base operating system gives you everything you need to take advantage of the power of AFP. For example, you can create overlays (electronic forms) to replace preprinted forms and print invoices on plain paper on your laser printers. Detailed information on AFP can be found in the *Printing > Advanced Function Presentation (AFP)* topic of the IBM i Knowledge Center at [http://www.ibm.com/support/knowledgecenter/ssw\\_ibm\\_i](http://www.ibm.com/support/knowledgecenter/ssw_ibm_i).

The single best source that we've found for information on all aspects of IBM i printing is the Redbook *Printing V SG24-4389* (and its replacement *Printing VI SG24-6250*). The books are available for download in the PDF format at <http://www.redbooks.ibm.com>.

The Redbook supplements the standard reference documents on printing by providing more specific "how to" information, such as diagrams, programming samples, and working examples. We find that it pulls together the information from other manuals and fits the pieces together in an understandable way.

### Creating Overlays and Page Segments

InfoPrint's (formerly IBM's®) AFP Printer Driver is a very useful piece of software that allows you to create IBM i overlays and page segments by "printing" from any PC based application. Best of all, it is free and available for download at [www.infoprintsolutionscompany.com](http://www.infoprintsolutionscompany.com), search on "AFP Printer Driver" or Google "'AFP Printer Driver for Windows" download site:ibm.com'. In addition, Google *AFP AS/400 Programming Sampler* which contains useful tools for compiling the overlays and page segments on IBM i. The sampler.savf was last spotted at <ftp://ftp.software.ibm.com/printers/products/as400>

Additional information is available from the IBM Software Knowledge Base Document Number 5184341, *Creating AFP Resources Using the IBM AFP Printer Drivers*.

Our experience shows that you get the best results using a smaller is better approach to creating overlays and page segments. Trim as much as possible and position instead of creating a page size overlay or page segment. Use the lowest resolution, color depth, etc. that gives acceptable results.

## \*LINE and \*AFPDSLINE Data

Our spooled file conversions do not process spooled files with printer device type \*LINE or \*AFPDSLINE. However IBM i allows you to convert these to pure \*AFPDS data which can be processed (most conversions). There are two methods for accomplishing this:

1. The printer file's CVTLINDTA() parameter while creating the spooled file.
2. Respooling an existing \*LINE or \*AFPDSLINE spooled file using CRTAFPDTA/PRTAFPDTA commands.

See Redbook *Printing VI SG24-6250* for details and examples.

---

## Example Source Code

Additional information, and example source code is contained in file DUMPSTER/DMSOURCE. The file includes:

**Note:** If you decide to use these examples, copy the source member to another library. A new release WILL overwrite or remove each member. In either case any modifications will be lost.

**Note:** Do not compile programs to DUMPSTER. The library WILL be cleared during new release installation and the programs lost.

### User Defined Option

The spooled file user defined option program demonstrates the correct parameter list and is a good starting point for creating a new CL based option to run the DMPSPFLF command from IBM supplied spooled file panels WRKSPLF, WRKOUTQ and WRKJOB OPTION(\*SPLF).

---

## CL Coding Tip

Many of our commands accept a variable number of values for a given parameter. For example, the Send Spool Mail (SNDSPLMAIL) command accepts up to 300 email addresses on the recipient parameter. When writing CL programs, the problem of how to code for a variable number of email addresses without coding the SNDSPLMAIL command multiple times (once for each address count) arises. The solution is a little known CL trick for coding "no value" in a variable. "No value" is represented in CL by '\*N'. Consider the following program fragment:

```
PGM
DCL      VAR(&ADD1) TYPE(*CHAR) LEN(128) VALUE(' *N' )
DCL      VAR(&ADD2) TYPE(*CHAR) LEN(128) VALUE(' *N' )
DCL      VAR(&ADD3) TYPE(*CHAR) LEN(128) VALUE(' *N' )
...
CHGVAR   VAR(&ADD1) VALUE(NOBODY@GUMBO.COM)
...
SNDSPLMAIL FILE(QPDSPLIB) TRANSFORM(*TXT) +
          TOSMTPNAME((&ADD1) (&ADD2) (&ADD3))
...
ENDPGM
```

Since &ADD2 and &ADD3 contain '\*N' they are treated as if they were not specified on the command and the email is sent to only one address.

---

## Changing Command Defaults

As with any CL command, you can change the default values of the commands found in our products. You do this using the IBM i Change Command Default (CHGCMDDFT) command.



But before you do, there are some gotchas (slang term for "I got you": a trap) you should be aware of. You WILL lose the change each time a new release of the product is installed, and you COULD lose the change when PTFs are applied to the product. You must then reapply the default change.

As an example, to change the default transform on SpoolMail's SNDSPLMAIL command from \*TXT to \*PDF4, run the following:

```
CHGCMDDFT  CMD(SNDSPLMAIL) NEWDFT('TRANSFORM(*PDF4)')
```

**GUMBO** recommends AGAINST changing command defaults, we know from the calls for support we receive that this regularly causes problems for customers.



---

## Chapter 5 Commands

---

### What's In This Chapter

This chapter describes the control language (CL) commands supplied by Dumpster. The commands are arranged in alphabetic order by command name (mnemonic). Each description includes environment and threadsafe classification, a brief general description, detailed parameter explanations, examples and message information. Additional explanatory material can be found in the *Programming > Control Language > CL Concepts > CL Commands > CL command information and documentation* topic in the IBM i Knowledge Center at [http://www.ibm.com/support/knowledgecenter/ssw\\_ibm\\_i](http://www.ibm.com/support/knowledgecenter/ssw_ibm_i).

---

## Archive Spooled File (ARCSPLF)

Where allowed to run: All environments (\*ALL)  
Threadsafe: No

The Archive Spooled File (ARCSPLF) command creates a spooled file archive which can be saved and restored, and from which the spooled file can be retrieved (recreated).

---

### Parameters

Keyword	Description	Choices	Notes
<b>FILE</b>	Spooled file	<i>Name</i>	Required, Positional 1
<b>ARC</b>	Spooled file archive	<i>Qualified object name</i>	Optional
	Qualifier 1: Spooled file archive	<i>Name, *GEN</i>	
	Qualifier 2: Library	<i>Name, *CURLIB</i>	
<b>JOB</b>	Job name	Single values: <i>_</i> Other values: <i>Qualified job name</i>	Optional
	Qualifier 1: Job name	<i>Name</i>	
	Qualifier 2: User	<i>Name</i>	
	Qualifier 3: Number	000000-999999	
<b>SPLNBR</b>	Spool file number	1-999999, *ONLY, *LAST, *ANY	Optional
<b>JOBSYSNAME</b>	Job system name	<i>Name, *ONLY, *CURRENT, *ANY</i>	Optional
<b>CRTDATE</b>	Spooled file created	Single values: *ONLY, *LAST Other values: <i>Element list</i>	Optional
	Element 1: Creation date	<i>Date</i>	
	Element 2: Creation time	<i>Time, *ONLY, *LAST</i>	

---

### Spooled file (FILE)

Specifies the name of the spooled file to process. CHAR(10)

This is a required parameter.

***name*** Specify the name of the spooled file.

---

### Spooled file archive (ARC)

Specifies the name of the archive that contains the spooled file.

#### Qualifier 1: Spooled file archive

**\*GEN** Generate the archive name from the supplied FILE, JOB, and SPLNBR parameters.

***name*** Specify the name of the archive.

#### Qualifier 2: Library

**\*CURLIB** Use the current library for the job. If no library is specified as the current library for the job, QGPL is used.

***name*** Specify the name of the library.

---

### Job name (JOB)

Specifies the job that contains the spooled file.

#### Single values

***\_*** The job that issued the command.

#### Qualifier 1: Job name

***name*** Specify the name of the job. CHAR(10)

### Qualifier 2: User

*name* Specify the name that identifies the user profile under which the job is run. CHAR(10)

### Qualifier 3: Number

*000000-999999* Specify the system assigned job number. CHAR(6)

---

## Spool file number (SPLNBR)

Specifies the number of the spooled file. INT(4)

- \*LAST** The highest numbered spooled file with the specified file name is used.
- \*ONLY** Only one spooled file in the job has the specified file name; therefore, the number of the spooled file is not necessary.
- \*ANY** The spooled file number is not used to determine which spooled file is used. Use this value when the job system name parameter or the spooled file create date and time parameter is to take precedence over the spooled file number when selecting a spooled file.
- 1-999999** Specify the number of the spooled file.

---

## Job system name (JOBSYSNAME)

Specifies the system where the job that created the spooled file (JOB parameter) ran. This parameter is considered after the job name, user name, job number, spooled file name, and spooled file number parameter requirements have been met.

- \*ONLY** There is one spooled file with the specified job name, user name, job number, spooled file name, spooled file number, and spooled file create date and time.
- \*CURRENT** The spooled file created on the current system with the specified job name, user name, job number, spooled file name, spooled file number, and create date and time is used.
- \*ANY** The job system name is not used to determine which spooled file is used. Use this value when the spooled file create date and time parameter is to take precedence over the job system name when selecting a spooled file.
- name*** Specify the name of the system where the job that created the spooled file ran.

---

## Spooled file created (CRTDATE)

Specifies the date and time the spooled file was created. This parameter is considered after the job name, user name, job number, spooled file name, spooled file number, and job system name parameter requirements have been met.

### Single values

- \*ONLY** There is one spooled file with the specified job name, user name, job number, spooled file name, spooled file number, and job system name.
- \*LAST** The spooled file with the latest create date and time of the specified job name, user name, job number, spooled file name, spooled file number, and job system name is used.

### Element 1: Creation date

***date*** Specify the date the spooled file was created.

### Element 2: Creation time

- \*ONLY** There is one spooled file with the specified job name, user name, job number, spooled file name, spooled file number, job system name, and spooled file create date.
- \*LAST** The spooled file with the latest create time of the specified job name, user name, job number, spooled file name, spooled file number, job system name, and spooled file create date is used.
- time*** Specify the time the spooled file was created.

---

## Examples

### Example 1:

```
ARCSPLF FILE(QSYSPRT)
```

This command archives the last spooled file named QSYSPRT. The current job is searched to locate the file. The archive is placed in the job's \*CURLIB.

### Example 2:

```
ARCSPLF FILE(QPQUPRFIL) ARC(QGPL/*GEN) SPLNBR(3)
```

The file named QPQUPRFIL, which is spooled file number 3 in the job executing this command, is archived. The archive is placed in library QGPL.

---

## Error messages

### \*ESCAPE messages

**SPLA106**        Unable to archive spooled file for job //.

---

## Create Spool Save File (CRTSPLSAVF)

Where allowed to run: All environments (\*ALL)  
Threadsafe: No

The Create Spool Save File (CRTSPLSAVF) command creates a save file containing a spooled file and all its related resources. The save file is suitable for emailing with a problem report.

---

### Parameters

Keyword	Description	Choices	Notes
<b>FILE</b>	Spooled file	<i>Name</i>	Required, Positional 1
<b>SAVF</b>	Save file	<i>Qualified object name</i>	Required, Positional 2
	Qualifier 1: Save file	<i>Name</i>	
	Qualifier 2: Library	<i>Name, *CURLIB</i>	
<b>JOB</b>	Job name	Single values: <i>_</i> Other values: <i>Qualified job name</i>	Optional
	Qualifier 1: Job name	<i>Name</i>	
	Qualifier 2: User	<i>Name</i>	
	Qualifier 3: Number	000000-999999	
<b>SPLNBR</b>	Spool file number	1-999999, *ONLY, * <b>LAST</b> , *ANY	Optional
<b>SAVRSC</b>	Save resources	* <b>YES</b> , *NO, Y, N	Optional
<b>MSG</b>	Message	<i>Character value, *NONE</i>	Optional

---

### Spooled file (FILE)

Specifies the name of the spooled file to process. CHAR(10)

This is a required parameter.

***name*** Specify the name of the spooled file.

---

### Save file (SAVF)

Specifies the name of the save file that is used to contain spooled file data. The saved file must not exist and will be created by the command.

This is a required parameter.

#### Qualifier 1: Save file

***name*** Specify the save file name.

#### Qualifier 2: Library

\***CURLIB** Use the current library for the job. If no library is specified as the current library for the job, QGPL is used.

***name*** Specify the name of the library.

---

### Job name (JOB)

Specifies the job that contains the spooled file.

#### Single values

***\_*** The job that issued the command.

#### Qualifier 1: Job name

***name*** Specify the name of the job. CHAR(10)

## Qualifier 2: User

**name** Specify the name that identifies the user profile under which the job is run. CHAR(10)

## Qualifier 3: Number

**000000-999999** Specify the system assigned job number. CHAR(6)

---

## Spool file number (SPLNBR)

Specifies the number of the spooled file. INT(4)

**\*LAST** The highest numbered spooled file with the specified file name is used.  
**\*ONLY** Only one spooled file in the job has the specified file name; therefore, the number of the spooled file is not necessary.  
**\*ANY** The spooled file number is not used to determine which spooled file is used. Use this value when the job system name parameter or the spooled file create date and time parameter is to take precedence over the spooled file number when selecting a spooled file.  
**1-999999** Specify the number of the spooled file.

---

## Save resources (SAVRSC)

Specifies if external resource such as overlays and page segments are included in the save file.

**\*YES** Resources are saved.  
**\*NO** Resources are not saved.

---

## Message (MSG)

Specifies a short message to include in the save file.

**\*NONE** No message is included.  
**character-value** Specify a short message to include in the save file.

---

## Examples

### Example 1:

```
CRTSPLSAVF FILE(QSYSPRT) SAVF(QGPL/PRBRPT)
```

This command creates save file PRBRPT in library QGPL. The last spooled file named QSYSPRT is saved along with its resources. The current job is searched to locate the file.

### Example 2:

```
CRTSPLSAVF FILE(QPQUPRFIL) SAVF(NEWPRB) SPLNBR(3)
```

The file named QPQUPRFIL, which is spooled file number 3 in the job executing this command, is saved to save file NEWPRB. The save file is placed in job's \*CURLIB.

---

## Error messages

### \*ESCAPE messages

**SPLE101** Unable to create spool save file for job //.



---

## Dump Print Resource (DMPRTRSC)

Where allowed to run: All environments (\*ALL)  
Threadsafe: No

The Dump Print Resource (DMPRTRSC) command dumps the contents or print resources including \*OVL, \*FORMDF, \*PAGSEG, \*FCT, \*FNTRSC, \*PAGDFN, and \*PGD.

---

### Parameters

Keyword	Description	Choices	Notes
RSC	Resource	<i>Qualified object name</i>	Required,
	Qualifier 1: Resource	<i>Name</i>	Positional 1
	Qualifier 2: Library	<i>Name, *LIBL, *CURLIB</i>	
OBJTYPE	Object type	*PAGSEG, *OVL, *FCT, *FNTRSC, *FNTTBL, *FORMDF, *PAGDFN, *PGD	Required, Positional 2

---

### Resource (RSC)

Specifies the name of the resource to dump.

This is a required parameter.

#### Qualifier 1: Output queue

***name*** Specify the name of the print resource.

#### Qualifier 2: Library

**\*LIBL** All libraries in the thread's library list are searched.

**\*CURLIB** Use the current library for the job. If no library is specified as the current library for the job, QGPL is used.

***name*** Specify the name of the library.

---

### Object type (OBJTYPE)

Specifies the type of the resource to dump.

This is a required parameter.

***object-type*** Specify the object type for the object to be dumped.

To see a complete list of object types when prompting this command, position the cursor on the field for this parameter and press F4 (Prompt). For a description of the object types, see "Object types" in the CL topic collection in the Programming category in the IBM i Knowledge Center at [http://www.ibm.com/support/knowledgecenter/ssw\\_ibm\\_i](http://www.ibm.com/support/knowledgecenter/ssw_ibm_i).

---

### Examples

#### Example 1:

```
DMPRTRSC RSC(QFNTCDEPAG/T1V00037) OBJTYPE(*FNTRSC)
```

This command dumps contents of the font resource T1V00037 in library QFNTCDEPAG.

#### Example 2:

```
DMPRTRSC RSC(RSCLIB/LOGO) OBJTYPE(*PAGSEG)
```

This command dumps the page segment LOGO in library RSCLIB.

---

## Dump Spooled File (DMPSPLF)

Where allowed to run: All environments (\*ALL)  
Threadsafe: No

The Dump Spooled File (DMPSPLF) command dumps the contents or attributes of an IBM i spooled file.

---

### Parameters

Keyword	Description	Choices	Notes
<b>FILE</b>	Spooled file	<i>Name</i> , *LASTCRT	Required, Positional 1
<b>JOB</b>	Job name	Single values: <i>_</i> Other values: <i>Qualified job name</i>	Optional, Positional 2
	Qualifier 1: Job name	<i>Name</i>	
	Qualifier 2: User	<i>Name</i>	
	Qualifier 3: Number	000000-999999	
<b>SPLNBR</b>	Spool file number	1-999999, *ONLY, *LAST, *ANY	Optional, Positional 3
<b>OPTION</b>	Dump options	Single values: *ALL Other values (up to 4 repetitions): *DTASTR, *RSCLST, *ATTRIB, *BUFFER	Optional, Positional 4
<b>JOBSYSNAME</b>	Job system name	<i>Name</i> , *ONLY, *CURRENT, *ANY	Optional
<b>CRTRDATE</b>	Spooled file created	Single values: *ONLY, *LAST Other values: <i>Element list</i>	Optional
	Element 1: Creation date	<i>Date</i>	
	Element 2: Creation time	<i>Time</i> , *ONLY, *LAST	

---

### Spooled file (FILE)

Specifies the name of the spooled file to process. CHAR(10)

This is a required parameter.

- \*LASTCRT** The last spooled file created by the current job or thread is identified using the QSPRILSP API and processed. This is useful for jobs that create spooled files under other user profiles, which consequently end up in the user's QPRTJOB. When \*LASTCRT is specified, the JOB() and SPLNBR() parameters are ignored.
- name*** Specify the name of the spooled file.

---

### Job name (JOB)

Specifies the job that contains the spooled file.

#### Single values

- \_*** The job that issued the command.

#### Qualifier 1: Job name

- name*** Specify the name of the job. CHAR(10)

#### Qualifier 2: User

- name*** Specify the name that identifies the user profile under which the job is run. CHAR(10)

#### Qualifier 3: Number

- 000000-999999*** Specify the system assigned job number. CHAR(6)

---

### Spool file number (SPLNBR)

Specifies the number of the spooled file. INT(4)

<b>*LAST</b>	The highest numbered spooled file with the specified file name is used.
<b>*ONLY</b>	Only one spooled file in the job has the specified file name; therefore, the number of the spooled file is not necessary.
<b>*ANY</b>	The spooled file number is not used to determine which spooled file is used. Use this value when the job system name parameter or the spooled file create date and time parameter is to take precedence over the spooled file number when selecting a spooled file.
<b>1-999999</b>	Specify the number of the spooled file.

---

## Dump options (OPTION)

Specifies the information to be dumped.

<b>*DTASTR</b>	The spooled file's print data stream is dumped.
<b>*RSCLST</b>	The spooled file's resource list is dumped.
<b>*ATTRIB</b>	The spooled file's attributes are dumped.
<b>*BUFFER</b>	The spooled file's buffers are dumped.
<b>*ALL</b>	All of the spooled file's information is dumped.

---

## Job system name (JOBSYSNAME)

Specifies the system where the job that created the spooled file (JOB parameter) ran. This parameter is considered after the job name, user name, job number, spooled file name, and spooled file number parameter requirements have been met.

<b>*ONLY</b>	There is one spooled file with the specified job name, user name, job number, spooled file name, spooled file number, and spooled file create date and time.
<b>*CURRENT</b>	The spooled file created on the current system with the specified job name, user name, job number, spooled file name, spooled file number, and create date and time is used.
<b>*ANY</b>	The job system name is not used to determine which spooled file is used. Use this value when the spooled file create date and time parameter is to take precedence over the job system name when selecting a spooled file.
<b>name</b>	Specify the name of the system where the job that created the spooled file ran.

---

## Spooled file created (CRTDATE)

Specifies the date and time the spooled file was created. This parameter is considered after the job name, user name, job number, spooled file name, spooled file number, and job system name parameter requirements have been met.

### Single values

<b>*ONLY</b>	There is one spooled file with the specified job name, user name, job number, spooled file name, spooled file number, and job system name.
<b>*LAST</b>	The spooled file with the latest create date and time of the specified job name, user name, job number, spooled file name, spooled file number, and job system name is used.

### Element 1: Creation date

<b>date</b>	Specify the date the spooled file was created.
-------------	--

### Element 2: Creation time

<b>*ONLY</b>	There is one spooled file with the specified job name, user name, job number, spooled file name, spooled file number, job system name, and spooled file create date.
<b>*LAST</b>	The spooled file with the latest create time of the specified job name, user name, job number, spooled file name, spooled file number, job system name, and spooled file create date is used.
<b>time</b>	Specify the time the spooled file was created.

---

## Examples

### Example 1:

```
DMPSPLF FILE(QSYSPRT) JOB(033194/QPGMR/MONTHEND) SPLNBR(2)
```

This command dumps spooled file number 2, QSYSPRT from job MONTHEND/QPGMR/033194. The spooled file's data stream is dumped.

### Example 2:

```
DMPSPLF FILE(QSYSPRT) OPTION(*RSCLST)
```

This command dumps the list of resources used by the last spooled file with name QSYSPRT from the job running the command.

---

## Extract AFP Resources (EXTAFPRSC)

**Where allowed to run:** All environments (\*ALL)  
**Threadsafe:** No

The Extract AFP Resources (EXTAFPRSC) command creates a file containing a member for each AFP resource found in an \*AFPDS spooled file's external resource group. The file is suitable for creating local copies of AFP resources using the IBM i commands.

---

### Parameters

Keyword	Description	Choices	Notes
<b>FILE</b>	Spooled file	<i>Name</i>	Required, Positional 1
<b>OUTFILE</b>	File to receive output	<i>Qualified object name</i>	Required, Positional 2
	Qualifier 1: File to receive output	<i>Name</i>	
	Qualifier 2: Library	<i>Name</i> , <b>*CURLIB</b>	
<b>JOB</b>	Job name	Single values: <i>_</i> Other values: <i>Qualified job name</i>	Optional
	Qualifier 1: Job name	<i>Name</i>	
	Qualifier 2: User	<i>Name</i>	
	Qualifier 3: Number	000000-999999	
<b>SPLNBR</b>	Spool file number	1-999999, *ONLY, <b>*LAST</b> , *ANY	Optional

---

### Spooled file (FILE)

Specifies the name of the spooled file to process. CHAR(10)

This is a required parameter.

***name*** Specify the name of the spooled file.

---

### File to receive output (OUTFILE)

Specifies the name and library of the database file to which the output of the command is directed. If the file does not exist, the command creates one in the specified library. CHAR(10) CHAR(10)

This is a required parameter.

#### Qualifier 1: File to receive output

***name*** Specify the name of the file to which the output of the command is directed.

#### Qualifier 2: Library

**\*LIBL** All libraries in the thread's library list are searched.

**\*CURLIB** Use the current library for the job. If no library is specified as the current library for the job, QGPL is used.

***name*** Specify the name of the library.

---

### Job name (JOB)

Specifies the job that contains the spooled file.

#### Single values

**\_** The job that issued the command.

#### Qualifier 1: Job name

***name*** Specify the name of the job. CHAR(10)

## Qualifier 2: User

**name** Specify the name that identifies the user profile under which the job is run. CHAR(10)

## Qualifier 3: Number

**000000-999999** Specify the system assigned job number. CHAR(6)

---

## Spool file number (SPLNBR)

Specifies the number of the spooled file. INT(4)

**\*LAST** The highest numbered spooled file with the specified file name is used.  
**\*ONLY** Only one spooled file in the job has the specified file name; therefore, the number of the spooled file is not necessary.  
**\*ANY** The spooled file number is not used to determine which spooled file is used. Use this value when the job system name parameter or the spooled file create date and time parameter is to take precedence over the spooled file number when selecting a spooled file.  
**1-999999** Specify the number of the spooled file.

---

## Examples

### Example 1:

```
EXTAFPRSC FILE(QSYSPRT) OUTFILE(QGPL/AFPRSC)
```

This command extracts AFP resources to file AFPRSC in library QGPL. The last spooled file named QSYSPRT is processed. The current job is searched to locate the file.

### Example 2:

```
EXTAFPRSC FILE(INVOICES) OUTFILE(QGPL/NEWRSC) SPLNBR(3)
```

The file named INVOICES which is spooled file number 3 in the job executing this command is processed and resources placed in file NEWRSC in library QGPL.

---

## Error messages

### \*ESCAPE messages

**AFP1012** Resource extraction failed.

---

## Retrieve Gumbo PTF (RTVGSIPTF)

**Where allowed to run:** All environments (\*ALL)  
**Threadsafe:** No

The Retrieve Gumbo PTF (RTVGSIPTF) command checks a remote system for new product PTFs, and, if available, downloads and installs them.

The command assumes that IBM i has connectivity to the PTF server. Unless you are running your own internal server hosting our PTFs, this means that IBM i has access to the internet and is not blocked by a firewall.

The command first checks the availability of new PTFs by retrieving a product and release specific file (Ex. q2p20LastPtf.txt) from the remote system and comparing its contents to the last PTF applied locally. If newer PTFs are available, a product and release specific PTF save file (Ex. q2p20all.svf) is downloaded, and the PTFs it contains are loaded and applied.

**Note:** **GUMBO** only delivers immediate PTFs. Immediate PTFs do not require an IPL and an IPL is never performed by the command.

---

### Parameters

Keyword	Description	Choices	Notes
<b>LICPGM</b>	Product	Character value, <b>*THIS</b> , 2A55DCR, 2A55DMP, 2A55RDA, 2A55RM1, 2A55SAM, 2A55SM1, 2A55SM2, 2A55XL1	Optional, Positional 1
<b>RLS</b>	Release	Character value, <b>*THIS</b>	Optional, Positional 2
<b>CHECK</b>	Check	<b>*YES</b> , <b>*NO</b> , <b>*ONLY</b>	Optional
<b>RMTSYS</b>	Remote system	Character value, <b>*GUMBOPTF</b> , *GUMBOFTP	Optional
<b>PROTOCOL</b>	Protocol (Obsolete)	<b>*HTTP</b> , *FTP	Optional
<b>PROXY</b>	Proxy	Single values: <b>*NONE</b> Other values: <i>Element list</i>	Optional
	Element 1: Host name	Character value	
	Element 2: User name	Character value, <b>*NONE</b>	
	Element 3: User password	Character value	

---

### Product (LICPGM)

Specifies the product for which PTFs are retrieved. All **GUMBO** products take the form 2A55tla where "tla" identifies the product. Run DSPSFWRSC '2A55\*' to determine which **GUMBO** products are installed. CHAR(7)

<b>*THIS</b>	Use the product (2A55DMP) containing this copy of the Retrieve Gumbo PTF (RTVGSIPTF) command.
<b>2A55DCR</b>	Dicer
<b>2A55DMP</b>	Dumpster
<b>2A55RDA</b>	Report Designer
<b>2A55RM1</b>	Report Manager
<b>2A55SAM</b>	Spool-a-Matic
<b>2A55SM1</b>	SpoolMail
<b>2A55SM2</b>	Gumbo Mail
<b>2A55XL1</b>	Excel-erator
<b>character-value</b>	Specifies the 7-character identifier of the product for which PTFs are retrieved.

---

## Release (RLS)

Specifies the release for which PTFs are retrieved. Run DSPSFWRSC to determine which **GUMBO** products are installed. CHAR(6)

- \*THIS** Use the release of the product (V2R2M0) containing this copy of the Retrieve Gumbo PTF (RTVGSIPTF) command.
- character-value** Specify the release level of the product in the format VxRyMz, where Vx is the version number, Ry is the release number, and Mz is the modification level.

---

## Check (CHECK)

Specifies if checking for newer PTFs is performed. CHAR(10)

- \*YES** Check for newer PTFs is performed before downloading. If newer PTFs are not available, processing stops.
- \*NO** No check for newer PTFs is performed before downloading.
- \*ONLY** Only a check for newer PTF availability is performed. Nothing is downloaded, regardless of the result.

---

## Remote system (RMTSYS)

Specifies the name of remote system which serves PTF save files for download. CHAR(255)

- \*GUMBOPTF** Use **GUMBO's** PTF server.
- \*GUMBOFTP** Obsolete value which maps to \*GUMBOPTF which is preferred.
- character-value** Specify the remote system name to use.

**Note:** When prompting, the input field can be expanded by typing an ampersand (&) in the first position of the field followed by a blank, and pressing enter.

---

## Protocol (Obsolete) (PROTOCOL)

Obsolete parameter that specified protocol used to communicate with the PTF server. CHAR(10)

GUMBO switched PTF communications to exclusively HTTP and the function of this parameter was removed. The parameter remains for compatibility with existing customer code but it is ignored.

- \*HTTP** Communication uses HTTP.
- \*FTP** Obsolete.

**Note:** FTP has been phased out and this value results in a message. Communication uses HTTP.

---

## Proxy (PROXY)

Specifies a proxy server that facilitates connection to the PTF server.

### Single values

- \*NONE** No proxy server is required to connect to the PTF server.

### Element 1: Host name CHAR(255)

- character-value** Specifies the proxy server's host name. To specify a custom port number append :NN to the host name where NN is the custom port number. Ex. server2:8080.

**Note:** When prompting, the input field can be expanded by typing an ampersand (&) in the first position of the field followed by a blank, and pressing enter.

### Element 2: User name CHAR(80)

- \*NONE** The proxy server does not require log in with a user name.
- character-value** Specifies the user name needed to log in to the proxy server.



**Note:** When prompting, the input field can be expanded by typing an ampersand (&) in the first position of the field followed by a blank, and pressing enter.

### Element 3: User password CHAR(128)

**character-value** Specifies the user password needed to log in to the proxy server.

**Note:** When prompting, the input field can be expanded by typing an ampersand (&) in the first position of the field followed by a blank, and pressing enter.

---

## Examples

### Example 1:

```
RTVGSIPTF
```

The Gumbo PTF server is check for new PTFs available for product 2A55DMP release V2R2M0. If available, the PTFs are downloaded and installed.

### Example 2:

```
RTVGSIPTF PRODUCT(2A55DMP) RLS(V2R2M0) CHECK(*ONLY)
```

The Gumbo PTF server is check for new PTFs available for product 2A55DMP release V2R2M0. No other processing is performed.

---

## Error messages

### \*ESCAPE messages

**PID1007** Retrieve PTF failed for product .

**PID7001** When a proxy is specified, protocol \*HTTP must be specified.

---

## Work with Gumbo Output Queue (WRKGSIOUQ)

Where allowed to run: All environments (\*ALL)  
Threadsafe: No

The Work with Gumbo Output Queue (WRKGSIOUQ) command works like IBM i's Work with Output Queue (WRKOUTQ) command but provides additional options to access the functions of Dumpster.

---

### Parameters

Keyword	Description	Choices	Notes
OUTQ	Output queue	<i>Qualified object name</i>	Required,
	Qualifier 1: Output queue	<i>Name</i>	Positional 1
	Qualifier 2: Library	<i>Name, *LIBL, *CURLIB</i>	
OUTPUT	Output	<i>*, *PRINT</i>	Optional, Positional 2

---

### Output queue (OUTQ)

Specifies the Output queue and the library where it resides.

This is a required parameter.

#### Qualifier 1: Output queue

*name* Specify the name of the output queue.

#### Qualifier 2: Library

**\*LIBL** All libraries in the thread's library list are searched.

**\*CURLIB** Use the current library for the job. If no library is specified as the current library for the job, QGPL is used.

*name* Specify the name of the library.

---

### Output (OUTPUT)

Specifies where the output from the command is sent. CHAR(10)

**\*** The output is displayed (if requested by an interactive job) or printed with the job's spooled output (if requested by a batch job).

**\*PRINT** The output is printed with the job's spooled output.

---

### Examples

#### Example 1:

```
WRKGSIOUQ OUTQ(PRT01)
```

This command allows you to work with all of the spooled files on the PRT01 output queue.

#### Example 2:

```
WRKGSIOUQ OUTQ(QGPL/QPRINT)
```

This command allows you to work with all of the spooled files on the QPRINT output queue in library QGPL.

---

### Error messages

#### \*ESCAPE messages

**SUI3002** Command processing failure.

## Work with Gumbo Spooled Files (WRKGSISPLF)

Where allowed to run: All environments (\*ALL)  
 Threadsafes: No

The Work with Gumbo Spooled Files (WRKGSISPLF) command works like IBM i's Work with Spooled Files (WRKSPLF) command but provides additional options to access the functions of Dumpster.

### Parameters

Keyword	Description	Choices	Notes
<b>SELECT</b>	Select files for	<i>Element list</i>	Optional, Positional 1
	Element 1: User	<i>Generic name, name, *CURRENT, *ALL</i>	
	Element 2: Print device	<i>Name, *ALL, *OUTQ</i>	
	Element 3: Form type	<i>Character value, *ALL, *STD</i>	
	Element 4: User data	<i>Character value, *ALL</i>	
	Element 5: ASP	<i>1-32, *ALL</i>	
	Element 6: Spooled file	<i>Generic name, name, *ALL</i>	
<b>OUTPUT</b>	Output	<i>*, *PRINT</i>	Optional, Positional 2
<b>JOB</b>	Job name	Single values: <i>*ALL</i> Other values: <i>Qualified job name</i>	Optional
	Qualifier 1: Job name	<i>Generic name, name</i>	
	Qualifier 2: User	<i>Generic name, name, *ALL</i>	
	Qualifier 3: Number	<i>000000-999999, *ALL</i>	
<b>PERIOD</b>	Time period	<i>Element list</i>	Optional
	Element 1: Starting date and time	<i>Element list</i>	
	Element 1: Starting time	<i>Time, *AVAIL</i>	
	Element 2: Starting date	<i>Date, *BEGIN</i>	
	Element 2: Ending date and time	<i>Element list</i>	
	Element 1: Ending time	<i>Time, *AVAIL</i>	
	Element 2: Ending date	<i>Date, *END</i>	

### Select files for (SELECT)

Specifies the criteria used to further select spooled files for display. Selection criteria consist of 4 elements. Only spooled files that match each of the values are selected.

#### Element 1: User

- \*CURRENT** Spooled files created by the user of the current job are selected.
- \*ALL** All spooled files are selected regardless of the user creating them.
- generic-name** Files created by all users that meet the criteria are selected. A generic name is a character string that contains one or more characters followed by an asterisk (\*); for example, ABC\*. The asterisk substitutes for any valid characters. If an asterisk is not specified with the name, the system assumes that the name is a complete user name.
- name** Specify a user name. Only spooled files created by the user are selected.

#### Element 2: Print device

- \*ALL** All spooled files are selected regardless of the device or output queue.
- \*OUTQ** All files on any user-created output queue are selected. A user-created output queue is any output queue that is not automatically created by a device. A user-created output queue does not generally have the same name as a device, but if it does, it does not reside in library QUSRSYS.
- name** Specify a device name. Only files on the device created output queue for that device are selected. A device created output queue is one that has the same name as a device and resides in the QUSRSYS library. Unless it already exists, it will automatically be created by the system when the device is created. A device created output queue cannot be deleted.

### Element 3: Form type

- \*ALL** All spooled files are selected regardless of their form type.
- \*STD** Only files that specify the standard form type are selected.
- character-value** Specify the form type to select the file.

### Element 4: User data

- \*ALL** All spooled files are selected regardless of their user data.
- generic-user-data** Files with a user data tag that matches the criteria are selected. A generic user data tag is a character string that contains one or more characters and ends with an asterisk (\*); for example, ABC\*. The asterisk substitutes for any valid characters. If an asterisk is embedded in the middle of the string, for example 'AB\*C\*', it will be treated as part of the comparison string.
- character-value** Specify the user data to select the file.

### Element 5: ASP

- \*ALL** All spooled files are selected regardless of ASP.
- 1-32** Specify the auxiliary storage pool (ASP) of the of the files being selected.

### Element 5: Spooled file

- \*ALL** Files with any name are selected. of ASP.
- generic-name** All spooled files with a name that matches the generic name are selected. A generic name is a character string that contains one or more characters followed by an asterisk (\*); for example, ABC\*. The asterisk substitutes for any valid characters. If an asterisk is not specified with the name, the system assumes that the name is a complete spooled file name.
- name** Specify the name of the spooled files to select.

---

## Output (OUTPUT)

Specifies where the output from the command is sent. CHAR(10)

- \_** The output is displayed (if requested by an interactive job) or printed with the job's spooled output (if requested by a batch job).
- \*PRINT** The output is printed with the job's spooled output.

---

## Job name (JOB)

Specifies the name of the job or jobs that created the spooled files to be selected.

**Note:** This parameter is allowed only if \*ALL is specified for the user name element of the SELECT parameter.

### Single values

- \*ALL** All jobs are included.

### Qualifier 1: Job name

- generic-name** Jobs with the generic name specified are to be included. A generic name is a character string of one or more characters followed by an asterisk (\*); for example, ABC\*. The asterisk substitutes for any valid characters. A generic job name specifies all jobs with job names that begin with the generic prefix.
- name** Specify the name of the job. CHAR(10)

### Qualifier 2: User

- \*ALL** All jobs that match the specified job name are included.
- generic-name** All jobs that match the specified job name are included.
- name** Specify the name that identifies the user profile under which the job is run. CHAR(10)

### Qualifier 3: Number

- \*ALL** All jobs that match the specified job name and user name are to be included.
- 000000-999999** Specify the system assigned job number. CHAR(6)

---

## Time period (PERIOD)

Specifies the period of time for selecting which spooled files are shown. This is the creation date and time of the spooled files. This parameter contains two element lists of two elements each.

### Element 1: Starting date and time

**Element 1: Starting time** One of the following specifies the starting time from which entries are shown. Entries created before this time on the **Starting date** are not shown.

**\*AVAIL** All data that is available for the specified date is shown.

**time** Specify the start time from which data for the specified date is shown. The time is specified in 24-hour format and can be specified with or without a time separator:

- Without a time separator, specify a string of 4 or 6 digits (hhmm or hhmmss) where hh = hours, mm = minutes, and ss = seconds.
- With a time separator, specify a string of 5 or 8 digits where the time separator specified for your job is used to separate the hours, minutes, and seconds. If you enter this command from the command line, the string must be enclosed in apostrophes. If a time separator other than the separator specified for your job is used, this command will fail.

**Element 2: Starting date** One of the following specifies the starting date from which entries are shown. Entries created before this date are not shown.

**\*BEGIN** The data from the beginning of the log is shown.

**date** Specify the start date from which data is shown. The date must be specified in the job date format.

### Element 2: Ending date and time

**Element 1: Ending time** One of the following specifies the ending time to which entries are shown. Entries created after this time on the **Ending date** are not shown.

**\*AVAIL** All data that is available for the specified date is shown.

**time** Specify the end time to which data for the specified date is shown. The time is specified in 24-hour format and can be specified with or without a time separator:

- Without a time separator, specify a string of 4 or 6 digits (hhmm or hhmmss) where hh = hours, mm = minutes, and ss = seconds.
- With a time separator, specify a string of 5 or 8 digits where the time separator specified for your job is used to separate the hours, minutes, and seconds. If you enter this command from the command line, the string must be enclosed in apostrophes. If a time separator other than the separator specified for your job is used, this command will fail.

**Element 2: Ending date** One of the following specifies the ending date to which entries are shown. Entries created after this date are not shown.

**\*END** The data to the end of the log is shown.

**date** Specify the end date to which data is shown. The date must be specified in the job date format.

---

## Examples

### Example 1:

```
WRKGSISPLF  SELECT(*ALL *ALL *ALL *ALL)
```

This command allows you to work with all of the spooled files on the system.

### Example 2:

```
WRKGSISPLF  SELECT(CASMITH *ALL *ALL MEMO)
```

This command allows you to work with all of the spooled files on the system for the user named CASMITH that have MEMO specified in the user data for the spooled file.

---

## **Error messages**

### **\*ESCAPE messages**

<b>SUI3002</b>	Command processing failure.
<b>GSID001</b>	JOB parameter conflicts with SELECT parameter.

---

## Chapter 6 Trouble-Shooting

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### What's In This Chapter

This chapter provides information and procedures useful for correcting or reporting Dumpster problems. The chapter:

- Describes general trouble-shooting.
- Describes software installation problems.
- Describes how to create a spool save file.
- Describes how to email a spool save file.

---

### General Trouble-Shooting

If a command from Dumpster fails to run to completion or if the results you receive are different from those expected, perform these items:

- Check the detailed messages in your job log:
  1. Run the DSPJOBLOG command.
  2. Press F10 to display detailed messages.
  3. Locate the messages related to the error.
  4. Place your cursor on each message in turn and press F1.
  5. Take any corrective actions suggested by the messages.
- Download the current cumulative PTF package from [www.gumbo.com](http://www.gumbo.com).
- Check the bottom of the PTF page at [www.gumbo.com](http://www.gumbo.com) for IBM PTFs that may be required.
- Review the detailed trouble shooting procedures in this chapter for solutions related to your problem.

If you are unable to correct the problem, prepare a problem report and contact your service provider.

---

### Software Installation Problems

This section describes problems, causes, and solutions specific to software installation.

- Installation Generates "Directory not registered. (C G)"

<b>Symptom</b>	During installation inquiry message id CPA3DE4 "Directory not registered. (C G)" is issued.
<b>Cause</b>	IBM i has lost the relationship between the product and the directory and hence the message.
<b>Solution</b>	You can safely take a "G" to this message. You will receive the message three or four times.

- Installation Fails

<b>Symptom</b>	Installation fails and diagnostic message id CPF9898 "Unable to clear old release. Is the software being used?" appears in the job log. Or, when the installation verification option is run, verification fails with diagnostic message id CPD0C2E appearing in the job log.
<b>Cause</b>	This usually arises from attempting to install a new release over an old release while objects in the old release are in use.
<b>Solution</b>	End the jobs that are holding locks on (using) objects from the old release and perform the installation again.

- Installation Fails or Installation Verification Fails

<b>Symptom</b>	Installation or installation verification fails and messages in the job log do not help in recovering.
<b>Cause</b>	The software is not installed correctly or the installation is damaged. This can be caused for a variety of reasons including renaming of libraries, directories, or objects that make up the product.
<b>Solution</b>	<p>Get the system to a stable consistent state by completely removing the product then re-installing it by performing the following:</p> <ol style="list-style-type: none"> <li>1. Check the system library list by running:  <code>DSPSYSVAL SYSVAL(QSYSLIBL)</code>  <b>Note:</b> If DUMPSTER is present, remove it with WRKSYSVAL and IPL the system.</li> <li>2. Delete the licensed program by running:  <code>DLTLICPGM LICPGM(2A55DMP) RLS(*ALL) OPTION(*ALL)</code>  <b>Note:</b> It is okay if this fails with diagnostic CPD3D91 "Product 2A55DMP option *ALL release *ALL not installed."</li> <li>3. Delete the product's library by running:  <code>DLTLIB LIB(DUMPSTER)</code>  <b>Note:</b> It is okay if this fails with escape CPF2110 "Library DUMPSTER not found."</li> <li>4. Delete the product's directories by running:  <code>RMVDIR DIR( '/Gumbo/ProdData/2A55DMP' ) SUBTREE(*ALL) RMVLNK(*YES)</code>  <b>Note:</b> It is okay if this fails with escape CPFA0A9 "Object not found. ...".            If there are no other <b>GUMBO</b> products installed:  <code>RMVDIR DIR( '/Gumbo/ProdData' )</code>  <code>RMVDIR DIR( '/Gumbo' )</code>  <b>Note:</b> It is okay if these fail with escape CPFA0A9 "Object not found. ...".</li> <li>5. Rebuild IBM i's internal licensed program information by running:  <code>CALL PGM(QSYS/QSZRECOV)</code>  <b>Note:</b> This takes several minutes depending on machine size.</li> <li>6. Install the product according to the instructions in the Installation chapter.</li> <li>7. Enter your authorization code.</li> </ol>

---

## Creating a Spool Save File

A save file containing all the information needed to transport and reproduce a spooled file on a **GUMBO** development system can be produced using the Create Spool Save File (CRTSPLSAVF) command. To create a spool save file:

- Determine the identity of the spooled file to be saved. A spooled file's identity consists of the file's name, the name/user/number of the job that created it, and the spooled file's number within the job. You can find this information using option 8 from the Work with Spooled Files (WRKSPLF) or Work with Output Queue (WRKOUTQ) commands among others.
- Determine a library to contain the save file. Typically this is your test library. If you do not have a test library, QGPL can be used.
- Determine a name for the save file. It must be a file name that does not exist in the library determined above.
- Run the Create Spool Save File (CRTSPLSAVF) command entering the information from the preceding steps.



**Note:** The command allows for a short message to be included in the save file. Use this to describe the reason for the save file and to include contact information such as your name and phone number.

In saving the spooled file the command creates a temporary library. It retrieves the contents and attributes of the spooled file and stores these in a user space. Any resources used (such as page segments or overlays) are duplicated to the temporary library. Data areas containing various system values and the message are placed in the library. After creating the requested save file, the library is saved to it and finally the temporary library is deleted.

---

## Emailing A Spool Save File

Once a spool save file has been created using the Create Spool Save File (CRTSPLSAVF) command you can download it to your PC and email it to **GUMBO** by following these steps:

1. [U](#) Insure the FTP server is active by running:

```
STRTCPSVR SERVER (*FTP)
```

2. [PC](#) Choose Start > Programs > Accessories > Command Prompt to open a command prompt.
3. [PC](#) Create a temporary directory and change to it:

```
md c:\gumbo [Enter]
cd c:\gumbo [Enter]
```

4. [PC](#) Open an FTP connection to IBM i by substituting your system's host name and running:

```
ftp host_name [Enter]
```

5. [PC](#) Enter a user name and password as prompted.
6. [PC](#) Change to binary (image) mode by running:

```
binary [Enter]
```

7. [PC](#) Change to library/file/member mode by running:

```
cd /qsys.lib/qgpl.lib [Enter]
quote site namefmt 0 [Enter]
```

8. [PC](#) Download the spool save file by running (in this example the save file's name is QGPL/TEST):

```
get qgpl/test [Enter]
```

9. [PC](#) End the ftp session and the command prompt by running:

```
quit [Enter]
exit [Enter]
```

10. [PC](#) Send email to support@gumbo.com after attaching file c:\gumbo\test.

Include in your email a description of the problem encountered and the command parameter values you were using when it happened.

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## Appendix A Notices

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