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iSeries

CL Commands Volume 12

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Purpose

The Display Log (DSPLOG) command shows the system history log (QHST). The history log contains information about the operation of the system and the current system status.

The display contains the messages sent to the log, the date and time the message was sent, and the name of the job that sent it.

Optional Parameters

LOG Specifies which of the system logs is shown.

  QHST: The system history log QHST is shown.

PERIOD

  Specifies the time period covered by the logged message data being shown. The values that can be coded for this parameter are specified as two lists with two elements in each list. If PERIOD is not specified, the following values are assumed:

  ```
  PERIOD((*AVAIL *CURRENT) (*AVAIL *CURRENT))
  ```

  Element 1: Starting Time

  One of the following is used to specify the starting time at which or after which the data must have been logged. Entries logged before the specified time and date are not shown.

  *AVAIL: The logged data that is available for the specified starting *date* is shown.

  start-time: Specify the starting *time* on the specified starting date that indicates the logged data to be shown. The time is specified in 24-hour format with or without a time separator as follows:

  - With a time separator, specify a string of 5 or 8 digits, where the time separator for the job separates the hours, minutes, and seconds. If you issue 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 fails.
  - Without a time separator, specify a string of 4 or 6 digits (hhmm or hhmmss) where **hh** = hours, **mm** = minutes, and **ss** = seconds. Valid values for **hh** range from 00 through 23. Valid values for **mm** and **ss** range from 00 through 59.

  Element 2: Starting Date

  One of the following is used to specify the starting date on which or after which the data must have been logged. Entries logged before the specified date are not shown.

  *CURRENT: The logged data for the current day and between the specified starting and ending times (if specified) is shown.

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

  start-date: Specify the date printed. The date must be entered in the format specified by the system values QDATFMT and, if separators are used, QDATSEP.

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Element 3: Ending Time

One of the following is used to specify the ending time before which, or at which, the data must have been logged.

*AVAIL: The logged data that is available for the specified ending *date* is shown. The time can be entered as either 4 or 6 digits (hhmm or hhmmss) where hh = hours, mm = minutes, and ss = seconds. If time separators are used to separate the time values, the character string must be enclosed in apostrophes ('hh:mm:ss'). If a time separator other than the one specified for the job is used, the command fails.

Note: The values specified for the ending date and time are ignored if the output is shown. That is, all data in the log that was logged on or after the specified starting date and time can be shown, regardless of the ending date and time specified.

end-time: Specify the ending time for the specified ending date that determines the logged data that is printed.

Element 4: Ending Date

One of the following is used to specify the ending date before which or on which the data must have been logged.

*CURRENT: The current day is the last day for which logged data is shown.

*END: The last day on which data was logged is shown. If PERIOD(*END) is specified, a time value other than *AVAIL for end-time is ignored.

end-date: Specify the ending date for which logged data is to be printed. The date must be entered in the format specified by the system values QDATFMT and, if separators are used, QDATSEP.

Note: If no output is received after you run the DSPLOG command with *PRINT specified, the dates of some message data may be out of sequence. To print the data in this case, specify:

```
PERIOD((*AVAIL *BEGIN)(*AVAIL *END)).
```

JOB Specifies the names of the jobs (if any) whose messages in the system log are shown. If a job name is not qualified, all jobs by that name in the log will have their messages displayed.

A job identifier is a special value or a qualified name with up to three elements. For example:

```
*NONE
job-name
user-name/job-name
job-number/user-name/job-name
```

More information on this parameter is in commonly used parameters.

*NONE: No job name is used to indicate which messages are shown.

job-name: Specify the names of up to five jobs that are to have their logged messages shown.

user-name: Specify the names of the users of the jobs that are to have their messages displayed.

job-number: Specify the numbers of the jobs that are to have their logged messages displayed.

MSGID

Specifies up to 100 message identifiers (if any) of the logged messages that are shown. These messages are shown only if they were logged in the period of time specified in this command and in the jobs specified, if job names were given in this command.

*ALL: All logged messages, regardless of their identifiers, are shown if they meet the previous parameters' specifications.

message-identifier: Specify the identifiers of up to fifty messages that are shown. (Refer to the description of the MSGID parameter in the Add Message Description (ADDMSGD) command description for more information on message identifiers.)

To display specific generic types of messages, specify the 3-character code that identifies the message file followed by all zeros. For example, CPF0000 specifies that all CPF messages that meet the specifications of the previous parameters are shown. If an identifier is specified as `pppnn00`, any message beginning with the specified five characters (`pppnn`) can be shown.

OUTPUT

Specifies whether the output from the command is shown at the requesting display station or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

*PRINT: The output is printed with the job's spooled output. Only one line will be printed for each message and only the first 105 characters of the first level message text will be printed.

*PRTWRAP: The output is printed with the job's spooled output. If the message does not fit on one line, additional lines are printed to accomodate up to 2000 characters of the first level message text.

Examples for DSPLOG

Example 1: Displaying Logged Messages for Current Date

```
DSPLOG   LOG(QHST)
```

This command shows all the logged messages (and their associated data) that are available in the history log for the current date.

Example 2: Displaying Logged Messages for September 1988

```
DSPLOG   JOB(MYJOB)  PERIOD((*AVAIL 090188)
  (*AVAIL 093088))  MSGID(CPF0000)
```

This command displays all CPF messages, in the history log for MYJOB, that were logged during September 1988.

Error messages for DSPLOG

*ESCAPE Messages

CPF2403

Message queue &1 in &2 not found.

CPF2447

No entries exist in current version of log.

CPF2478

Not authorized to requested version of log.

CPF2480

> Requested version of log damaged.

CPF2519

> Error occurred while processing message ID list.

CPF2537

> Too many records written to file &2 in &3.

CPF9845

> Error occurred while opening file &1.

CPF9846

> Error while processing file &1 in library &2.

CPF9847

> Error occurred while closing file &1 in library &2.

DSPLOGBRM (Display Log for BRM) Command Description

Note: To use this command, you must have the 5722-BR1 (Backup Recovery and Media Services for iSeries) licensed program installed. For detailed information on the parameters of this command, see the online help.

DSPLOGBRM Command syntax diagram

Purpose

The Display Log for BRM (DSPLOGBRM) command displays the BRMS log. The BRMS log is a display by date and time of messages that BRMS has created as a result of processing. The DSPLOGBRM command allows you to display or print all or part of the log.

Example for DSPLOGBRM

Example 1: Displaying BRMS/400 Log Entries for a Date Range and Severity Level

```
DSPLOGBRM TYPE(*BKU)
PERIOD((*AVAIL *BEGIN) (*AVAIL *END))
SEV(20)
```

In this example the type of log entry is backup and the range of dates is from the beginning of the log to the end of the log. Log entries related to backups will be displayed in the Display BRM Log Information display that have a severity level of 20 or above.

Error messages for DSPLOGBRM

None

DSPLOGJS (Display Log for Job Scheduler) Command Description

DSPLOGJS Command syntax diagram

Purpose

The Display Log for Job Scheduler (DSPLOGJS) command allows you to display the Job Scheduler log.

Note: When referring to a job in this command, we are referring to an entry in Job Scheduler. An **entry** in Job Scheduler is a user-defined name for commands or programs that you want to process at scheduled times and dates. Job Scheduler jobs (entries) are not OS/400 objects. The Job Scheduler log is a display

by date and time of messages that Job Scheduler has created as a result of processing. The DSPLOGJS command allows you to display or print all or part of the log.

Optional Parameters

TYPE   The type of entry for which you want to review log entries.

> **<u>*ALL</u>:** Selects all log entries for display.
>
> ***RUN:** Selects only job run entries for display.
>
> ***SUBMIT:** Selects only submit job log entries for display.
>
> ***MAINT:** Selects only maintenance log entries for display.

PERIOD

> Specifies the time period used to select log entries to be included in the display or report. This parameter contains two lists of two elements each.
>
> **Element 1:** Beginning Time
>
> One of the following is used to specify the starting creation time at which or after log entries are included. Any log entries made before the specified time and date are not included in the display or report.
>
> **<u>*AVAIL</u>:** Any time that is available for the beginning date is included.
>
> *begin-time:* Specify the beginning time for the specified beginning date that indicates which log entries are to be included.
>
> **Element 2:** Beginning Date
>
> One of the following is used to specify the starting date on or after which the log entries must have been made. Any entries made before the specified date are not included in the display or report.
>
> **<u>*CURRENT</u>:** Log entries with a current date creation date and between the specified beginning and ending times (if specified) are displayed or reported.
>
> ***BEGIN:** Log entries from the beginning of the log information are included.
>
> *begin-date:* Specify the beginning date. The date must be specified in the job date format.
>
> *number-of-days:* Specify a number to represent the number of days before the current day that you want to use for the search. An example would be 10. If today's date were 3/12/94 (date format is mm/dd/yy), the From date for the Job Scheduler log would be 3/2/94.
>
> **Element 3:** Ending Time
>
> One of the following is used to specify the ending time before which log entries are included. Any log entries made after the specified time and date are not included in the items displayed or reported.
>
> **<u>*AVAIL</u>:** Any time that is available for the ending date is included.
>
> *end-time:* Specify the ending time for the specified ending date that indicates which log entries are to be included.
>
> **Element 4:** Ending Date
>
> One of the following is used to specify the ending date on which or before which the log entries must have been made. Any log entries created after the specified date are not included in the report or display.
>
> **<u>*CURRENT</u>:** Log entries whose date is on or before the current date are included in the display or report.
>
> ***END:** The log entries to the end of the log information are included.

end-date: Specify the ending date. The date must be specified in the job date format.

number-of-days: Specify a number to represent the number of days before the current day that you want to use for the search. An example would be 10. If today's date were 3/22/94 (date format is mm/dd/yy), the To date for the Job Scheduler log would be 3/12/94.

SEV Specifies the message severity level that you want to include in the report/display. For example, a severity level of 30 would include all messages that are severity level 30 and above. The severity level can be specified from 0 to 99.

*ALL: Include all severity levels in the report or display.

severity-level: Specify the severity level associated with log entries that you want to include in the display or report.

OUTPUT

Specifies whether the output from the command is displayed at the requesting work station or printed with the job's spooled output.

*: 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 Specifies the name of the job whose log entries you want to display. You must specify a job and alternately can specify a group to which the job belongs as well as a sequence number for the job within the group.

Element 1: Job

*ALL: All jobs that have log entries are displayed.

*NONE: All log entries that do not have jobs associated with them are displayed.

generic*-job-name: Specify the generic name of the jobs whose log entries you want to display. A generic name is a character string that contains one or more characters followed by an asterisk (*). If an * is not specified with the name, the system assumes that the name is a complete job.

job-name: Specify the name of the job whose log entries you want to display.

Element 2: Group

*ALL: All jobs that belong to this group with log entries are displayed.

*NONE: There is no group associated with the job.

generic*-group-name: Specify the generic name of the group whose log entries you want to display. A generic name is a character string that contains one or more characters followed by an asterisk (*). If an * is not specified with the name, the system assumes that the name is a complete group.

group-name: Specify the name of the group that contains the job whose log entries you want to display.

Element 3: Group sequence

*ALL: All job sequences that belong to this group with log entries are displayed.

*NONE: There is no sequence number associated with the job.

group-sequence-number: Specify the sequence number of the job within the group whose log entries you want to display.

RMTLOCNAME

Specifies the location and network identification of the remote location name that created the log entry that you want to display.

*ALL: Selects all log entries for all systems in the network.

*LCL: Selects all log entries for the local system.

remote-location-name: Specify the name of the location associated with the system whose log entries you want to display.

network-ID.location-name: Specify the network identifier and the name of the location associated with the system. Specify these values using the format nnnnnnnn.cccccccc where nnnnnnnn is the network identifier and cccccccc is the location name.

USER Specifies the name of the user profile for the log entries that you want to display.

*ALL: Include all user profiles in the display or report.

user-name: Specify the user profile whose log entries you want to include in the display or report.

MSGID

Specifies the name of the message identifier for the log entries that you want to display.

*ALL: Include all message identifiers profiles in the display or report.

message-identifier: Specify the message identifier whose log entries

MSGID

Specifies the name of the message identifier for the log entries that you want to display.

*ALL: Include all message identifiers profiles in the display or report.

message-identifier: Specify the message identifier whose log entries you want to include in the display or report.

Example for DSPLOGJS

Example 1: Displaying the Job Scheduler Log

```
DSPLOGJS PERIOD((*AVAIL *BEGIN) (*AVAIL *END))
JOB(JOB02)
```

In this example Job Scheduler log entries from the beginning of the log to the end of the log are displayed for JOB02.

Error messages for DSPLOGJS

None

DSPMGDSYSA (Display Managed System Attributes) Command Description

Note: To use this command, you must have the 5722-MG1 (Managed System Services for iSeries) licensed program installed.

DSPMGDSYSA Command syntax diagram

Purpose

The Display Managed System Attributes (DSPMGDSYSA) command shows the current values for the Managed System Services configuration attributes.

These attributes enable the user to control which activities are accepted by the managed system and under which user profile the activity is run.

There are no parameters for this command.

Restrictions:

1. You must have *JOBCTL authority to use the display command.

2. Public authority for this command is *EXCLUDE.

Example for DSPMGDSYSA

DSPMGDSYSA

This command displays the current managed system attributes.

Error messages for DSPMGDSYSA

<u>*ESCAPE Messages</u>

CPF9871
> Error occurred while processing.

MSS0415
> Managed system attributes not found or damaged.

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DSPMNUA (Display Menu Attributes) Command Description

DSPMNUA Command syntax diagram

Purpose

The Display Menu Attributes (DSPMNUA) command shows the following:
* Menu type
* Command line length
* Display function keys on the menu
* Program name and library for program menus
* Display file name and library for free-format menus
* Message file name and library for free-format menus
* The type of command line to be shown for display file menus:
  - *LONG
  - *SHORT
  - *NONE (an option line is used)
* Current library
* Product library
* Descriptive text

Restriction: The user must have *USE authority for the menu whose attributes are being shown and *USE authority for the library where the menu is located.

Required Parameter

MENU Specifies the qualified name of the menu whose attributes are displayed.

> The name of the menu can be qualified by one of the following library values:

> > **<u>*LIBL</u>:** All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

menu-name: Specify the name of the menu whose attributes are displayed.

Optional Parameter

OUTPUT

Specifies whether the output is directed to the display station screen or to a printer. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

Example for DSPMNUA

```
DSPMNUA MENU(PAYROLL)
```

This command shows the attributes of a menu named PAYROLL at the display station (if the command is running interactively). The menu is found by searching the library list (*LIBL default value).

Error messages for DSPMNUA

*ESCAPE Messages

CPF6ACD

Menu &1 in &2 is wrong version for system.

CPF7D41

Error occurred while logging order assistance request.

CPF7D42

Error occurred while performing database operation.

CPF9801

Object &2 in library &3 not found.

CPF9802

Not authorized to object &2 in &3.

CPF9803

Cannot allocate object &2 in library &3.

CPF9807

One or more libraries in library list deleted.

CPF9808

Cannot allocate one or more libraries on library list.

CPF9810

Library &1 not found.

CPF9811

Program &1 in library &2 not found.

CPF9812

        File &1 in library &2 not found.

CPF9814

        Device &1 not found.

CPF9820

        Not authorized to use library &1.

CPF9821

        Not authorized to program &1 in library &2.

CPF9822

        Not authorized to file &1 in library &2.

CPF9825

        Not authorized to device &1.

CPF9830

        Cannot assign library &1.

CPF9831

        Cannot assign device &1.

CPF9845

        Error occurred while opening file &1.

CPF9846

        Error while processing file &1 in library &2.

CPF9847

        Error occurred while closing file &1 in library &2.

CPF9871

        Error occurred while processing.

DSPMSGD (Display Message Descriptions) Command Description

DSPMSGD Command syntax diagram

Purpose

The Display Message Descriptions (DSPMSGD) command shows detailed information about the messages in a message file. The descriptions of specific messages or a range of messages in one message file can be specified by their identifiers, or all messages in one message file can be specified.

Optional Parameters

RANGE

        Specifies the range of message identifiers in the specified message file for which message descriptions are shown.

        All message descriptions in the message file specified by the MSGF parameter are shown or printed when *ALL is specified on this parameter.

        If the starting message identifier is not specified, the message descriptions begin with the first message in the specified message file. If the ending message identifier is not specified, the default value, *ONLY, is used, and only the description of the starting message identifier is shown or printed.

Note: The ending message identifier is ignored when DETAIL(*BASIC) and OUTPUT(*) (interactive display) are specified.

Element 1: Starting Message Identifier:

The first of the two values in the RANGE parameter specifies the message identifier of the first message description to show or print.

*FIRST: The first message in the file specified by the MSGF parameter is the first one whose description is shown or printed.

lower-value: Specify the 7-character identifier of the first message description to show or print.

Element 2: Ending Message Identifier:

The second of the two values in the RANGE parameter specifies the message identifier for the ending (last) message description to print. This value is ignored if OUTPUT(*) and DETAIL(*BASIC) is specified.

*ONLY: Only the description with the message identifier specified as a starting message identifier is shown or printed if *FULL is specified on the DETAIL parameter.

*LAST: The last message in the file is the last one whose description is shown or printed.

upper-value: Specify the 7-character identifier of the last message description to print.

Other Single Values:

*ALL: All message descriptions in the message file specified by the MSGF parameter are shown or printed. This value can only be specified on Element 1 of this parameter.

MSGF Specifies the qualified name of the message file from which the message descriptions are taken.

The name of the message file can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

*USRLIBL: Only the libraries in the user portion of the job's library list are searched.

library-name: Specify the name of the library to be searched.

QCPFMSG: Message descriptions are taken from the system message file, QCPFMSG.

message-file-name: Specify the name of the message file to use.

DETAIL
Specifies the amount of detail about the message to show or print.

*FULL: Detailed message descriptions are shown or printed. If OUTPUT(*PRINT) is specified, the detailed descriptions are printed. If OUTPUT(*) is specified, a menu is shown from which the user can select which details to view.

*BASIC: A list of the specified message identifiers, their severity, and first-level messages are shown or printed. If the user is working from an interactive display, the user can choose to show or print detailed descriptions of messages selected from the list.

FMTTXT

Specifies whether the message text is formatted.

*YES: The message text is formatted.

*NO: The message text is unformatted.

OUTPUT

Specifies whether the output from the command is shown at the requesting work station or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

Examples for DSPMSGD

Example 1: Displaying or Printing Descriptions

```
DSPMSGD   RANGE(CPF1100  CPF3600)
  MSGF(QSYS/QCPFMSG)
```

If this command is entered from a display station, the descriptions of the specified messages are shown on the display. If this command is entered from a batch job, the descriptions of the messages are sent to the job's spooled output queue.

Example 2: Printing Message Descriptions

```
DSPMSGD   RANGE(*FIRST  IDU0571)
  MSGF(QIDU/QIDUMSG)  FMTTXT(*NO)
  OUTPUT(*PRINT)
```

This command prints the message descriptions for message identifiers in the file that are in the following range: from the first message in the QIDUMSG message file through the message whose identifier is IDU0571. The message is unformatted.

Error messages for DSPMSGD

*ESCAPE Messages

CPF2401

Not authorized to library &1.

CPF2407

Message file &1 in &2 not found.

CPF2411

Not authorized to message file &1 in &2.

CPF2483

Message file currently in use.

CPF2510

Message file &1 in &2 logically damaged.

CPF2515

Invalid message ID range.

CPF2516
> Unable to open display or printer file &1 in &2.

CPF2519
> Error occurred while processing message ID list.

CPF2537
> Too many records written to file &2 in &3.

CPF9807
> One or more libraries in library list deleted.

CPF9810
> Library &1 not found.

CPF9830
> Cannot assign library &1.

DSPMSG (Display Messages) Command Description

DSPMSG Command syntax diagram

Purpose

The Display Messages (DSPMSG) command is used by the display station user to show the messages received at the specified message queue. If the message queue is not allocated to the job in which this command is entered or to any other job, it is implicitly allocated by this command for the duration of the command. When the messages are shown, options are also shown that allow the user to either remove one or more messages from the queue or to enter a reply to each inquiry message.

Note: A description of how to print a single message is in Print messages article in the Information Center or how to print a group of messages is in the Printing all messages in the message queue article in the Information Center.

Restrictions:
1. DSPMSG cannot be specified when another job has already allocated the message queue by specifying the ALCOBJ command operating in the *EXCL lock state.
2. The DSPMSG command allows the user to see, but not remove, messages for the job when the message queue is in the *BREAK or *NOTIFY mode for another job.
3. When the message queue is in the *BREAK mode for another job, the break handling program for the message queue determines whether the user is allowed to respond to inquiry messages. If PGM(*DSPMSG) is specified, the user can reply to inquiry messages, but if PGM(user-program) is specified, no reply to inquiry messages is allowed.
4. If multiple jobs show the same inquiry message, and all jobs reply to the message, only the first reply to the message is valid. Subsequent replies from other jobs cause error messages to be issued.

Optional Parameters

MSGQ
> Specifies the qualified name of the message queue from which messages are shown.

Note: The values *WRKUSR, *SYSOPR, and *WRKSTN can be used only when the user is in an interactive job.

*WRKUSR: Messages are shown from the work station's message queue. After exiting this display, the message queue for the job's user profile is shown. If there are no messages on the work station message queue, only the user profile message queue is shown.

*SYSOPR: Messages from the system operator message queue (QSYSOPR) are shown.

*USRPRF: Messages from the current user profile message queue are displayed.

*WRKSTN: Messages are shown from the work station's own message queue.

The name of the message queue can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

message-queue-name: Specify the name of the message queue from which messages are shown. The system operator can specify QSYSOPR to show messages on the system operator message queue.

MSGTYPE

Specifies the type of messages in the message queue that are shown.

*ALL: All messages that are in the message queue are shown.

*INFO: Only informational messages (those not requiring a reply) are shown.

*INQ: Only inquiry messages (those requiring a reply) are shown.

*COPY: Copies of the inquiry messages that were sent to other message queues and still require replies are shown.

START

Specifies whether the newest messages or the oldest messages in the message queue (of those specified by the MSGTYPE and SEV parameters) are shown first. The display station user can roll the display up or down to see other messages if the message list occupies more than one display screen. This parameter is ignored if the output is directed to a spooled printer file.

*LAST: If the intermediate view (Display Message) is displayed, the last (newest) message on the message queue is shown on the bottom line of the display. The display station user can press the Roll Down key to show older messages.

If the Basic view (Work with Messages) is displayed , the last (newest) message on the MSGQ is shown on the top line of the display. The display station user can press the Roll Up key to show older messages.

*FIRST: If the intermediate view (Dispaly Messages) is displayed, the first (oldest) message on the message queue is shown on the top line of the display. The display station user can press the Roll Up key to show newer messages.

If the Basic view (Work with Messages) is displayed, the first (oldest) message on the MSGQ is shown on the bottom of the display. The display station user can press the Roll Down ket to show newer messages.

SEV Specifies the severity code of the message. The severity code indicates the severity level of the condition that causes the message to be sent.

00: All messages in the specified message queue are shown.

*MSGQ: Messages with a severity code greater than or equal to the severity code specified for the message queue are shown.

severity-code: Specify a value, ranging from 00 through 99, that specifies the minimum severity code that a message must have to still be shown. More information on this parameter is in commonly used parameters.

OUTPUT

Specifies whether the output from the command is shown at the requesting display station or listed with the job's spooled output on a printer. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output. Immediate messages can be 512 bytes long.

*PRINT: The output is printed with the job's spooled output. Impromptu messages and predefined messages are truncated to 105 characters.

PRTWRAP: The output is printed with the job's spooled output without truncation.

ASTLVL

Specifies the user interface to display.

*PRV: The previous user interface used is displayed.

*USRPRF: The user interface specified in the current user profile is used.

BASIC: The Operational Assistant user interface is used. This user interface separates messages into two categories: (1) messages needing a reply and (2) messages not needing a reply. New messages are shown at the top of each message list.

*INTERMED: The system user interface is used.

Note:	The DSPMSG command documentation assumes the *INTERMED user interface is shown. If the *BASIC user interface is shown, see the documentation for the Work with Messages (WRKMSG) command.

Examples for DSPMSG

Example 1: Displaying Messages From Work Station Message Queue and User Profile Message Queue

```
DSPMSG
```

This command displays messages in the requester's work station message queue followed by the user profile message queue. If there are no messages in the work station queue, the user profile message queue is shown immediately.

Example 2: Displaying Informational Messages

```
DSPMSG   MSGQ(SMITH)  MSGTYPE(*INFO)
```

This command displays, at the requester's work station, any informational messages in the message queue named SMITH.

Error messages for DSPMSG

*ESCAPE Messages

CPF2203
>   User profile &1 not correct.

CPF2204
>   User profile &1 not found.

CPF2213
>   Not able to allocate user profile &1.

CPF2217
>   Not authorized to user profile &1.

CPF2225
>   Not able to allocate internal system object.

CPF2401
>   Not authorized to library &1.

CPF2403
>   Message queue &1 in &2 not found.

CPF2408
>   Not authorized to message queue &1.

CPF2433
>   Function not allowed for system log message queue &1.

CPF2450
>   Work station message queue &1 not allocated to job.

CPF2451
>   Message queue &1 is allocated to another job.

CPF2477
>   Message queue &1 currently in use.

CPF2513
>   Message queue &1 cannot be displayed.

CPF2537
>   Too many records written to file &2 in &3.

CPF8127
>   &8 damage on message queue &4 in &9. VLIC log-&7.

CPF8176
>   Message queue for device description &4 damaged.

CPF9830
>   Cannot assign library &1.

CPF9845
>   Error occurred while opening file &1.

CPF9846
>   Error while processing file &1 in library &2.

CPF9847
>   Error occurred while closing file &1 in library &2.

DSPMODD (Display Mode Description) Command Description

DSPMODD Command syntax diagram

Purpose

The Display Mode Description (DSPMODD) command displays a mode description for advanced-program-to-program communications (APPC) devices. Output is directed to a display or a spooled printer file as indicated on the OUTPUT parameter and job type.

Required Parameter

MODD

Specifies the name of the mode description.

Optional Parameter

OUTPUT

Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

Example for DSPMODD

```
DSPMODD  MODD(CICS2)
```

This command displays information about mode description CICS2. If the command is entered from a batch job, the output from the display is printed with the job's spooled output.

Error messages for DSPMODD

*ESCAPE Messages

CPF260A

Mode description &1 not found.

CPF262B

Mode description &1 previously deleted.

CPF262C

Mode description &1 damaged.

CPF2625

Not able to allocate object &1.

CPF2634

Not authorized to object &1.

DSPMODSTS (Display Mode Status) Command Description

DSPMODSTS Command syntax diagram

Purpose

The Display Mode Status (DSPMODSTS) command displays the status of all modes associated with an APPC device description. The display shows the status of the APPC device, the current number of source, target, and detached conversations in use, and configured and operational session maximum values.

Restriction: This command is valid only for APPC device descriptions.

Required Parameter

DEV   Specifies the name of the APPC device description.

Optional Parameters

MODE Specifies the name of the mode whose status is being shown.

> ***ALL:** All the modes used by the specified device are shown.

> **BLANK:** The mode name consisting of 8 blank characters is used.

> *mode-name:* Specify the name (up to 8 characters) of the mode whose status is being shown for the specified device. The mode name may contain the characters A through Z, 0 through 9, $, #, and @.

OUTPUT

> Specifies whether the output from the command is shown at the requesting work station or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

> ***:** Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

Example for DSPMODSTS

```
DSPMODSTS  DEV(MINN2)  MODE(CICS2)
```

This command shows the status of the mode CICS2 used by the device MINN2. If the command is entered from a batch job, the output from the display is printed with the job's spooled output.

Error messages for DSPMODSTS

*ESCAPE Messages

CPF2625
> Not able to allocate object &1.

CPF2634
> Not authorized to object &1.

CPF2688
> Device &1 is not in a proper status to get mode information.

CPF2698
> Mode &1 not found for device &2.

CPF2702
> Device description &1 not found.

CPF2706
> Device &1 not *APPC type device.

CPF9850
> Override of printer file &1 not allowed.

DSPMOD (Display Module) Command Description

DSPMOD Command syntax diagram

Purpose

The Display Module (DSPMOD) command displays information about a module. The display includes information about the compiler, the source from which the module was created, the processing attributes of the module, and the size of the module.

Restriction: To use this command, you must have *USE authority to the module being displayed and *EXECUTE authority to the library in which the module is stored.

Required Parameter

MODULE

Specifies the qualified name of the module for which information is displayed.

The name of the module can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

module-name: Specify the name of the module for which information is displayed.

Optional Parameters

DETAIL

Specifies the set of information to be displayed for the module. More than one value can be specified, but *ALL must be specified as a single value. DETAIL(*ALL) is valid only when information is displayed or printed. It is not valid if *OUTFILE is chosen for OUTPUT.

*ALL: All the information applicable to the specified module is displayed or printed.

*BASIC: The basic module information, module compatibility section, and SQL information is shown.

*SIZE: The size and size limits for this module are shown.

*EXPORT: The symbols and type defined in this module that are exported to other modules are shown.

*IMPORT: The symbols and type defined externally to this module are shown.

*PROCLIST: A list of the procedure names with their type is shown.

*REFSYSOBJ: A list of the system objects referred to by this module when the module is bound into a bound program or service program is shown.

*COPYRIGHT: Copyright information for this module is shown.

OUTPUT

Specifies whether the output from this command is displayed, printed, or directed to a database file. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

*OUTFILE: The output is directed to the database file specified on the OUTFILE parameter.

Note:	When a procedure name longer than 256 characters is encountered and the value *OUTFILE is specified, the last 253 characters of the procedure name are placed in the output file and are preceded by less than (<<<) characters. The less than (<<<) characters indicate that this is only a partial name. The diagnostic message CPD5D12, which indicates that not all available information is returned, is sent to the job log. The same message is sent as a status message to the calling program of the command processing program (CPP) that can be monitored. You can use the Retrieve Module Information (QBNRMODI) or the List Module Information (QBNLMODI) APIs to find the complete name of the procedure.
Note:	DETAIL(*ALL) is not valid when OUTPUT(*OUTFILE) is specified.

OUTFILE

Specifies the qualified name of the database file to which the output of the display is directed. If the OUTFILE does not exist, this command creates a database file in the specified library. If the file is created, the text is "Output file for DSPMOD". The public authority of the file is the same as the create authority specified for the library in which the file is created. The record format of the output file will be the same as that used in the IBM-supplied database file.

Note:	When a procedure name longer than 256 characters is encountered and the value *OUTFILE is specified, the last 253 characters of the procedure name are placed in the output file and are preceded by the characters "<<<". The "<<<" characters indicate that this is only a partial name. The diagnostic message CPD5D12, which indicates that not all available information is returned, is sent to the job log. The same message is sent as a status message to the calling program of the command processing program (CPP) that can be monitored. You can use the Retrieve Module Information (QBNRMODI) or the List Module Information (QBNLMODI) APIs to find the complete name of the procedure.

The IBM-supplied database files and their record formats are as follows:

Detail	File	Record Format
*BASIC	QABNDMBA	QBNDMBAS
*SIZE	QABNDMSI	QBNDMSIZ
*EXPORT	QABNDMEX	QBNDMEXP
*IMPORT	QABNDMIM	QBNDMIMP
*PROCLIST	QABNDMPR	QBNDMPRO

Detail	File	Record Format
*REFSYSOBJ	QABNDMRE	QBNDMREF
*COPYRIGHT	QABNDMCO	QBNDMCOP

The name of the database file can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

database-file-name: Specify the name of the database file that receives the output of the display.

OUTMBR

Specifies the name of the database file member to which the output is directed. If a member already exists, the system uses the second element of this parameter to determine whether the member is cleared before the new records are added. If the member does not exist and a member name is not specified, the system creates a member with the name of the output file specified on the OUTFILE parameter. If an output file member name is specified, but the member does not exist, the system creates it.

Element 1: Member to Receive Output

*FIRST: The first member in the file receives the output. If OUTMBR(*FIRST) is specified and the member does not exist, the system creates a member with the name of the file specified on the OUTFILE parameter.

member-name: Specify the file member that receives the output. If OUTMBR(member-name) is specified and the member does not exist, the system creates it.

Element 2: Operation to Perform on Member

*REPLACE: The system clears the existing member and adds the new records.

*ADD: The system adds the new records to the end of the existing records.

Example for DSPMOD

```
DSPMOD    MODULE(MYMOD)
```

This command displays module object MYMOD from the library list.

Error messages for DSPMOD

*ESCAPE Messages

CPF5CE7

Error occurred while retrieving *MODULE data

CPF9801

Object &2 in library &3 not found.

CPF9802

Not authorized to object &2 in &3.

CPF9803

        Cannot allocate object &2 in library &3.

CPF9807

        One or more libraries in library list deleted.

CPF9808

        Cannot allocate one or more libraries on library list.

CPF9810

        Library &1 not found.

CPF9820

        Not authorized to use library &1.

CPF9830

        Cannot assign library &1.

CPF9871

        Error occurred while processing.

DSPMODSRC (Display Module Source) Command Description

DSPMODSRC Command syntax diagram

Purpose

The Display Module Source (DSPMODSRC) command allows the user to show the source debug displays for debugging bound programs.

There are no parameters for this command.

Example for DSPMODSRC

```
DSPMODSRC
```

This command shows the source debug displays for programs that are to be debugged.

Error messages for DSPMODSRC

DSPMFSINF (Display Mounted File System Information) Command Description

DSPMFSINF Command syntax diagram

Purpose

The Display Mounted File System Information (DSPMFSINF) command displays information about a mounted file system.

This command can also be issued using the following alternative command name:

* STATFS

For more information about Network File System commands, see OS/400 Network File System Support

book.

Required Parameter

OBJ   Specifies the path name of an object that is within the mounted file system whose statistics are to be displayed. Any object in the mounted file system can be specified. For example, it can be a directory (*DIR) or a stream file (*STMF).

Optional Parameter

OUTPUT

Specifies whether the output from the command is shown at the requesting work station or printed with the job's spooled output.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

Examples for DSPMFSINF

Example 1: Displaying Statistics of a Mounted File System

```
DSPMFSINF  OBJ('/jsmith/file1')
```

This command displays the statistics for the mounted file system that contains */jsmith/file1*.

Example 2: Displaying QSYS.LIB File System Statistics

```
DSPMFSINF  OBJ('/QSYS.LIB/MYLIB.LIB/MYFILE.FILE')
```

This command displays the statistics for the QSYS.LIB file system that contains *FILE object MYFILE in library MYLIB.

Error messages for DSPMFSINF

STATFS (Display Mounted File System Information) Command

STATFS Command syntax diagram

STATFS Command	For the description of the STATFS command, see the DSPMFSINF (Display Mounted File System Information) command description.

DSPNTBD (Display NetBIOS Description) Command Description

DSPNTBD Command syntax diagram

Purpose

The Display NetBIOS Description (DSPNTBD) command displays a NetBIOS description object.

Required Parameter

NTBD   Specifies the name of the NetBIOS description to be displayed.

Optional Parameter

OUTPUT

Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

Example for DSPNTBD

```
DSPNTBD  NTBD(MYNETBIOS)
```

This command displays information about the NetBIOS description named MYNETBIOS. The information is shown at the workstation from which the command was entered. If the command was submitted from a batch job, the output from the command is printed with the job's spool output.

Error messages for DSPNTBD

*ESCAPE Messages

CPF26B2
> NetBIOS description &1 previously deleted.

DSPNETA (Display Network Attributes) Command Description

DSPNETA Command syntax diagram

Purpose

The Display Network Attributes (DSPNETA) command displays the network attributes of the system.

Optional Parameter

OUTPUT
> Specifies whether the output of the command is displayed at the requesting work station or printed with the job's spooled output. More information on this parameter is in commonly used parameters.
>
> ***:** Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.
>
> ***PRINT:** The output is printed with the job's spooled output.

Example for DSPNETA

```
DSPNETA  OUTPUT(*)
```

If the job is interactive, this command displays the network attributes of the system at the work station. If the job is batch, the network attributes are printed with the job's spooled output.

Error messages for DSPNETA

*ESCAPE Messages

CPF9845
> Error occurred while opening file &1.

CPF9846
> Error while processing file &1 in library &2.

CPF9847
> Error occurred while closing file &1 in library &2.

CPF9850
> Override of printer file &1 not allowed.

CPF9851

Overflow value for file &1 in &2 too small.

CPF9871

Error occurred while processing.

DSPNWID (Display Network Interface Description) Command Description

DSPNWID Command syntax diagram

Purpose

The Display Network Interface Description (DSPNWID) command displays a network interface description.

Required Parameter

NWID   Specifies the name of the network interface description to be displayed.

Optional Parameters

OUTPUT

Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

OPTION

Specifies the panels to be displayed.

*ALL: All panels that apply to this specific network interface are displayed.

*BASIC: The basic displays that apply to this network interface are shown, but additional information displays are not shown.

*CHLENTRY: The channel entry list panels associated with the network interface description are displayed. This value is valid only when an integrated services digital network (ISDN) is used.

*DLCI: The data link connection identifier information, including the DLCI numbers, status, and active or attached lines is displayed. This value is valid only when a frame relay network (FR) is used.

*NETDIF: The values of the network difference parameters in the network interface description are displayed. This value is valid only when ISDN is used.

*PCLENTRY: The protocol-specific information, including the protocol entries for the network interface description, is displayed. This value is valid only when ISDN is used.

*TMRRTY: The timer and retry values for this network interface are displayed.

*THRESHOLD: The values specified on the threshold parameters in the network interface description are displayed. This value is valid only when ISDN is used.

Example for DSPNWID

```
DSPNWID   NWID(ISDNNET)
```

This command displays information about the network interface description named ISDNNET. The information is shown an the work station display from which the command was submitted. If the command is entered from a batch job, the output from the display is printed with the job's spooled output.

Error messages for DSPNWID

<u>*ESCAPE Messages</u>

CPD2637

Not authorized to object &1.

CPF2625

Not able to allocate object &1.

CPF2634

Not authorized to object &1.

CPF27AA

Option not allowed for network interface &1.

CPF27A4

Network interface description &1 not found.

CPF27A5

Network interface description &1 has been damaged.

CPF27A8

&2 not valid for network interface &1.

DSPNWSA (Display Network Server Attributes) Command Description

DSPNWSA Command syntax diagram

Purpose

The Display Network Server Attributes (DSPNWSA) command displays the network server attributes for the system.

Output is directed to a display or a spooled printer file as indicated by the OUTPUT parameter and job type.

Optional Parameters

OPTION

Specifies the displays to be shown.

<u>***ALL:**</u> All displays that apply to all server types are shown.

*NETWARE: The displays that apply to the *NETWARE server type are shown, but additional information displays are not shown.

*WINDOWSNT: The displays that apply to the *WINDOWSNT server type are shown, but additional information displays are not shown.

OUTPUT

Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in Commonly used parameters.

<u>***:**</u> Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

Example for DSPNWSA

```
DSPNWSA   OUTPUT(*)
```

If the job is interactive, this command displays the network server attributes of the system at the workstation. If the job is batch, the network server attributes are printed with the job's spooled output.

Error messages for DSPNWSA

<u>*ESCAPE Messages</u>

CPFA452
        Network server attributes not displayed.

DSPNWSD (Display Network Server Description) Command Description

DSPNWSD Command syntax diagram

Purpose

The Display Network Server Description (DSPNWSD) command displays a network server description object.

Required Parameter

NWSD
        Specifies the name of the network server description to be displayed.

Optional Parameters

OUTPUT
        Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

        <u>*</u>: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

OPTION
        Specifies what information you want displayed. You can choose to display all information (*ALL) or specific information.

        <u>*ALL:</u> All information concerning the network server is shown.

        ***BASIC:** Only basic characteristics of the network server are shown.

        ***PORTS:** Only the information concerning attached communication descriptions is shown.

        ***STGLNK:** Only the information concerning linked client storage spaces is shown.

        ***TCPIP:** Only the information concerning TCP/IP configuration is shown.

        ≫ ***RSTDEV:** Only the restricted devices associated with the NWSD are displayed.

        ***CLUINFO**: Only the information concerning cluster configuration is shown. ≪

Example for DSPNWSD

```
DSPNWSD   NWSD(SERVER1)
```

This command displays information about the network server description named SERVER1. Since no option was specified, all information is displayed. The information is shown at the work station display from which the command was entered. If the command was submitted from a batch job, the output from the command is printed with the job's spooled output.

Error messages for DSPNWSD

DSPNWSSTG (Display Network Server Storage Space) Command Description

DSPNWSSTG Command syntax diagram

Purpose

The Display Network Server Storage Space (DSPNWSSTG) command can be used to display a network server storage space. Output is directed to a display or to a spooled printer file as indicated on the OUTPUT parameter and by the job type. Information displayed includes the format of the storage space: (*FAT, *NETWARE and *NTFS), its size, the percentage used, the drive at which it is linked to an NWSD, (network server description), the ASP (Auxillary Storage Pool) that contains it, whether the format operation is complete and the text entered at create time.

Required Parameter

NWSSTG
> Specifies the name of the network server storage space to be displayed.

Optional Parameter

OUTPUT
> Specifies whether the output is shown on the display of the requesting workstation or is printed with the job's spooled output.
>
> ***:** Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.
>
> ***PRINT:** The output is printed with the job's spooled output.

Example for DSPNWSSTG

```
DSPNWSSTG   NWSSTG(STGSPACE1)
```

This command displays a network server storage space named STGSPACE1.

Error messages for DSPNWSSTG

DSPNWSUSRA (Display Network Server User Attributes) Command Description

DSPNWSUSRA Command syntax diagram

Purpose

The Display Network Server User Attributes (DSPNWSUSRA) command displays the network server user attributes for a user or group profile.

Output is directed to a display or a spooled printer file as indicated by the OUTPUT parameter and job type.

Optional Parameters

USRPRF

Specifies the name of a user or group profile.

*CURRENT: The user profile attributes for the current user profile are displayed.

user-name: Specify the name of a user or group profile to be displayed.

PRFTYPE

Specifies whether the information to be displayed is for a user profile or for a group profile.

*USER: The information to be displayed is for a user profile.

*GROUP: The information to be displayed is for a group profile.

OPTION

Specifies the displays to be shown.

*ALL: All displays that apply to all server types are shown.

*NETWARE: The displays that apply to the *NETWARE server type are shown, but additional information displays are not shown.

*WINDOWSNT: The displays that apply to the *WINDOWSNT server type are shown, but additional information displays are not shown.

OUTPUT

Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in Commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

Example for DSPNWSUSRA

```
DSPNWSUSRA    USRPRF(NWSUSR1)
```

If the job is interactive, this command displays the network server user attributes defined for user NWSUSR1 at the workstation. If the job is batch, the network server user attributes for user NWSUSR1 is printed with the job's spooled output.

Error messages for DSPNWSUSRA

*ESCAPE Messages

CPFA453

Network server user attributes not displayed.

DSPNWSUSR (Display Network Server Users) Command Description

DSPNWSUSR Command syntax diagram

Purpose

The Display Network Server Users (DSPNWSUSR) command allows a user to retrieve a list of all of the logged on users of a particular server. This command can be used to display logged on users for an individual NetWare server. The user identifier, the time since server log on, and other user information will be displayed when this command is issued.

Output is directed to a display or a spooled printer file as indicated by the OUTPUT parameter and job type.

Optional Parameters

SERVER

Specifies the name of a network server.

server-name: Specify the name of a specific, active server defined for the network.

SVRTYPE

Specifies the server type to use when displaying users.

*NWSUSRA: The server type specified in the network server user attributes (CHGNWSUSRA command) for the user profile running the DSPNWSUSR command is used to display the network users.

*NWSA: The network server type specified in the network server attributes (CHGNWSA command) is used to display the network users.

*NETWARE: Only those NetWare users associated with the specified network server are displayed.

OUTPUT

Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

Example for DSPNWSUSR

```
DSPNWSUSR   SERVER(NWS1)   SVRTYPE(*NETWARE)
```

The above command will allow you to display all of the NetWare users currently active for the server named NWS1. If NWS1 does not exist or is not active, an error message ('server NWS1 not found' or 'server NWS1 not active') will be returned.

Error messages for DSPNWSUSR

*ESCAPE Messages

CPFA43C

Network server users not displayed.

DSPNCK (Display Nickname) Command Description

DSPNCK Command syntax diagram

Purpose

The Display Nickname (DSPNCK) command is used to display, print, or create a database output file for nicknames in the system distribution directory.

A **nickname** is a short version of either a directory entry or a distribution list name. You can specify a nickname instead of the full directory entry or distribution list name on many OfficeVision displays. More

information about nicknames is in the SNA Distribution Services book.

Output from this command is directed as follows:

- For displayed output, the default is to display a list of all nicknames. When a nickname is specified, detailed information on that nickname only is displayed.
- For printed or database file output, the default is to write all nicknames to which the user has access. When a nickname is specified, detailed information on that nickname only is written to the output file.

Restriction: You must be the owner to display a private nickname. No special authority is needed to display a private nickname that you own or a public nickname.

Examples for DSPNCK

Example 1: Displaying a List of Nicknames

```
DSPNCK   NCK(*ALL *PRIVATE)
```

This command shows a list of private nicknames to the owner of the nicknames. The owner can request to show or print additional information for the nicknames shown.

Example 2: Printing a List of Nicknames

```
DSPNCK   NCK(MANAGER *PRIVATE)   OUTPUT(*PRINT)
```

This command prints detailed information on the user's private nickname MANAGER.

Example 3: Directing Nicknames to a Database File

```
DSPNCK   NCK(*ALL *PUBLIC)   OUTPUT(*OUTFILE)
  OUTFILE(ALLNICKS)   OUTMBR(*FIRST *REPLACE)
```

This command directs one record for each public nickname in the directory to the database file ALLNICKS. If this file is not found in the library list (the default library qualifier), it is created in the user's default library or in the QGPL library if no user default library is specified.

Example 4: Directing Nicknames for an Owner to a Database File

```
DSPNCK   NCK(*ALL *PUBLIC)   OWNER(CDJONES)
  OUTFILE(NICKNAME/CDJONES)   OUTMBR(*FIRST *REPLACE)
```

This command directs one record for each public nickname owned by the user whose user profile is CDJONES to the database file CDJONES in the library NICKNAME. If this file is not found in the library NICKNAME, it is created.

Error messages for DSPNCK

*ESCAPE Messages

CPF9A89
> Nickname function not successful.

CPF9009
> System requires file &1 in &2 be journaled.

CPF9820
> Not authorized to use library &1.

CPF9822
> Not authorized to file &1 in library &2.

CPF9838
> User profile storage limit exceeded.

CPF9845

>Error occurred while opening file &1.

CPF9846

>Error while processing file &1 in library &2.

CPF9847

>Error occurred while closing file &1 in library &2.

CPF9850

>Override of printer file &1 not allowed.

CPF9851

>Overflow value for file &1 in &2 too small.

CPF9860

>Error occurred during output file processing.

DSPNODGRP (Display Node Group) Command Description

DSPNODGRP Command syntax diagram

Purpose

The Display Node Group (DSPNODGRP) command displays the systems or nodes in a node group, as well as the partitioning scheme for the node group.

Required Parameter

NODGRP

>Specifies the name of the node group you want to display.

>The name of the node group can be qualified by one of the following library values:

>>***LIBL:** All libraries in the job's library list are searched until the first match is found.

>>***CURLIB:** The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

>>***USRLIBL:** Only the libraries in the user portion of the job's library list are searched.

>>*library-name:* Specify the name of the library to be searched.

>*node-group:* Specify the name of the node group to be displayed.

Optional Parameter

OUTPUT

>Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

>***:** Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

Examples for DSPNODGRP

Example 1: Displaying a Node Group

```
DSPNODGRP   NODGRP(LIB1/GROUP1)
```

This command displays the systems in the node group called GROUP1 and the partitioning scheme associated with the node group. The information is shown at the workstation.

Example 2: Printing a Node Group

```
DSPNODGRP   NODGRP(LIB1/GROUP2)   OUTPUT(*PRINT)
```

This command creates a spooled file that contains a list of the systems in the node group called GROUP1 and the associated partitioning scheme.

Error messages for DSPNODGRP

<u>***ESCAPE Messages**</u>

CPF2189
　　　Not authorized to object &1 in &2 type *&3.

CPF3166
　　　Node group &1 in library &2 not found.

CPF9804
　　　Object &2 in library &3 damaged.

CPF9810
　　　Library &1 not found.

CPF9820
　　　Not authorized to use library &1.

DSPOBJAUT (Display Object Authority) Command Description

DSPOBJAUT Command syntax diagram

Purpose

The Display Object Authority (DSPOBJAUT) command shows the list of authorized users of an object and their authorities for the object. If the object is secured by an authorization list, the name of the authorization list is also shown.

The following are shown for the specified object:
* The object name.
* The name of the library that contains the object.
* The name of the object's owner.
* The object's type.
* The name of the authorization list securing the object.
* A list of all the users who are authorized to use the object.
* The authorities that each user has for the object.

If the user entering the command does not have object management authority for the object, only that user's name and authorities are shown. The names of the other users and their authorities for the object are not shown. If an object does not have an owner name associated with it, no authorities for the object are shown.

≫ You must have *USE authority to the auxiliary storage pool device if one is specified. ≪

Required Parameters

OBJ Specifies the qualified name of the object for which the authorized users and their authorities are displayed.

The name of the object can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

object-name: Specify the name of the object.

OBJTYPE
Specifies the type of object that has its authorized users and authorities shown. Any one of the object types can be specified. For example, to display a list of users authorized to use a file, specify the value *FILE. More information on this parameter is in commonly used parameters.

Optional Parameters

OUTPUT
Specifies whether the output from the command is shown at the requesting work station, printed with the job's spooled output, or directed to a database file.

More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

*OUTFILE: The output is directed to the database file specified on the OUTFILE parameter.

OUTFILE
Specifies the name of the database file to which the output of the display is directed. If the output file does not exist, this command creates a database file in the specified library. If the file is created by this function, the text is *'OUTFILE created by DSPOBJAUT'*. The public authority is *EXCLUDE. The database format (QSYDSAUT) of the output file is the same as that used in the IBM-supplied database file QAOBJAUT.

The name of the database file can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

> *library-name:* Specify the name of the library to be searched.

> *database-file-name:* Specify the name of the database file to which the output is directed.

OUTMBR

Specifies the name of the database file member to which the output is directed.

Element 1: Member to Receive Output

*FIRST: The first member in the file receives the output. If OUTMBR(*FIRST) is specified and the member does not exist, the system creates a member with the name of the file specified on the OUTFILE parameter.

member-name: Specify the file member that receives the output. If OUTMBR(member-name) is specified and the member does not exist, the system creates it.

Element 2: Operation to Perform on Member

*REPLACE: The system clears the existing member and adds the new records.

*ADD: The system adds the new records to the end of the existing records.

AUTTYPE

Specifies whether object level authority, field level authority, or both object level and field level authority are displayed. Field level authority information only applies to *FILE objects.

*OBJECT: The object level authority information is displayed, placed in a spooled file, or placed in an outfile.

If OUTPUT(*) is requested and the object is a file with field level authorities, the F16 key, Display Field Authorities, will be enabled on the display.

*FIELD: The field level authority information is displayed, placed in a spooled file, or placed in an outfile.

This value is only valid if *FILE is specified for the Object type prompt (OBJTYPE parameter).

*ALL: If OUTPUT(*) is requested, the object level authority information is displayed. If there are field level authorities associated with the file, the F16 key, Display Field Authorities, will be enabled on the display. If OUTPUT(*PRINT) is requested, the object level and field level authority data are included in the spooled file. AUTTYPE(*ALL) is not valid with OUTPUT(*OUTFILE).

This value is only valid if *FILE is specified for the Object type prompt (OBJTYPE parameter).

≫ ASPDEV

Specifies the auxiliary storage pool (ASP) device name where the library that contains the object (OBJ parameter) is located. If the object's library resides in an ASP that is not part of the library name space associated with the job, this parameter must be specified to ensure the correct object is used as the target of the display operation.

*: The ASPs that are currently part of the job's library name space will be searched to locate the object. This includes the system ASP (ASP number 1), all defined basic user ASPs (ASP numbers 2-32), and, if the job has an ASP group, all independent ASPs in the ASP group.

*SYSBAS: The system ASP and all basic user ASPs will be searched to locate the object. No independent ASPs will be searched, even if the job has an ASP group.

auxiliary-storage-pool-device-name: The device name of the independent ASP to be searched to locate the object. The independent ASP must have been activated (by varying on the ASP device) and have a status of 'Available'. The system ASP and basic user ASPs will not be searched. ≪

Examples for DSPOBJAUT

Example 1: Displaying Users and Authorities

```
DSPOBJAUT   OBJ(ARLIB/PROG1)  OBJTYPE(*PGM)
```

This command shows the authorized users and their authorities for the object named PROG1 to the user who entered the command, if that user has object management authority for the object. If the user does not have object management authority, only personal authorities are shown. PROG1 is a program (*PGM) located in the library named ARLIB. The system assumes * for the device that shows the output list. If the command was entered in the batch subsystem, the output is placed in the default output queue for the job. If the command was entered in the interactive subsystem, the output is shown on the device where the user entered the command.

Example 2: Printing List of Users

```
DSPOBJAUT   OBJ(ARLIB/PROG2)  OBJTYPE(*PGM)
    OUTPUT(*PRINT)
```

This command causes the list of authorized users of the program named PROG2 in the ARLIB library to be printed. If the user who enters the command does not have object management authority for the program, only that user's name and authorities are printed.

Error messages for DSPOBJAUT

<u>*ESCAPE Messages</u>

CPF2204
>   User profile &1 not found.

CPF2207
>   Not authorized to use object &1 in library &3 type *&2.

CPF2208
>   Object &1 in library &3 type *&2 not found.

CPF2209
>   Library &1 not found.

CPF2211
>   Not able to allocate object &1 in &3 type *&2.

CPF2216
>   Not authorized to use library &1.

CPF224E
>   The AUTTYPE value of *FIELD is not valid for file &1 in library &2.

CPF2283
>   Authorization list &1 does not exist.

≫ CPF980B
>   Object &1 in library &2 not available.

CPF9814
>   Device &1 not found.

CPF9825
>   Not authorized to device &1. ≪

CPF9843
>   Object &1 in library &3 type &2 cannot be accessed.

CPF9860
>   Error occurred during output file processing.

≫ **CPF9873**

      ASP status is preventing access to object. ≪

DSPOBJD (Display Object Description) Command Description

DSPOBJD Command syntax diagram

Purpose

The Display Object Description (DSPOBJD) command shows the names and attributes of specified objects in the specified library or in the libraries of the thread's library list. The command can also be used to show the names and attributes of libraries themselves.

Only the object attributes of each object are shown; the data attributes of data in the object, and the actual data in the object, are not shown. Also indicated is whether an object being shown has been damaged (possibly by a system failure).

Any OS/400 system object for which the user has some authority can be shown by this command. Libraries for which the user does not have execute authority cannot be shown, even if specified in the command. ≫ If only one object is to be shown, the user can specify it by entering the object name, object type, the name of the library where it is located, and the auxiliary storage pool (ASP) device where the library is located. Depending on the values specified for the qualified object name (OBJ parameter), the object type (OBJTYPE parameter), and the auxiliary storage pool device name (ASPDEV parameter), either the first object found in the specified libraries is shown, or all objects in the specified libraries for which the user has some authority are shown. ≪

Notes:
1. For objects that are damaged or locked, the information shown, printed, or written to the output file is incomplete. An indication that the object is locked or damaged is written to the output file. If the description of the object is shown or printed, the text for the damaged or locked object indicates either the damaged or locked status.
2. The size of a library object does not include the sizes of the objects in the library. The size of a library, including the sizes of the objects in the library, can be obtained using the DSPLIB command with OUTPUT(*PRINT) or the Retrieve Library Description (QLIRLIBD) API.

Restrictions:
1. ≫ You must have *EXECUTE authority for the specified libraries, and some authority (that is, any one of the authorities other than *EXCLUDE) for each of the objects. If you do not have *EXECUTE authority to a library, none of its objects are shown.
2. The user must have *EXECUTE authority for the auxiliary storage pool (ASP) device if a specific ASP device name is specified on the ASPDEV parameter. ≪

Required Parameters

OBJ   Specifies which objects in the libraries are to have their object attributes shown. If no library qualifier is specified, *LIBL is assumed, and all libraries in the thread's library list are searched for the objects. Objects in the library for which the user does not have some authority are not shown.

        The name of the object can be qualified by one of the following library values:

                *LIBL: ≫ All libraries in the thread's library list are searched. If ASPDEV is specified when this value is used, ASPDEV(*) is the only valid value. ≪

*CURLIB: » The current library for the thread is searched. If no library is specified as the current library for the thread, the QGPL library is searched. If ASPDEV is specified when this value is used, ASPDEV(*) is the only valid value. «

*USRLIBL: » Only the libraries in the user portion of the thread's library list are searched. If ASPDEV is specified when this value is used, ASPDEV(*) is the only valid value. «

*ALL: » All libraries in the auxiliary storage pools specified by the ASPDEV parameter are searched. «

*ALLUSR: » All user libraries in the auxiliary storage pools (ASPs) defined by the ASPDEV parameter are searched. User libraries are all libraries with names that do not begin with the letter Q except for the following: «

#CGULIB	#DSULIB	#SEULIB
#COBLIB	#RPGLIB	
#DFULIB	#SDALIB	

» Although the following libraries with names that begin with the letter Q are provided by IBM, they typically contain user data that changes frequently. Therefore, these libraries are also considered user libraries: «

QDSNX	» QSYS2xxxxx «	QUSROND
QGPL	QS36F	QUSRPOSGS
QGPL38	QUSER38	QUSRPOSSA
QMPGDATA	QUSRADSM	QUSRPYMSVR
QMQMDATA	QUSRBRM	QUSRRDARS
QMQMPROC	QUSRDIRCL	QUSRSYS
QPFRDATA	QUSRDIRDB	QUSRVI
QRCL	QUSRIJS	QUSRVxRxMx
» QRCLxxxxx «	QUSRINFSKR	
» QSYS2 «	QUSRNOTES	

Notes:

1. » 'xxxxx' is the number of a primary auxiliary storage pool. «
2. A different library name, of the form QUSRVxRxMx, can be created by the user for each release that IBM supports. VxRxMx is the version, release, and modification level of the library.

library-name: Specify the name of the library to be searched.

*ALL: All objects in the libraries identified in the library qualifier, which are of the types specified by the OBJTYPE parameter, are shown.

Note:

- If the library qualifier is *ALL, *ALLUSR, or a library name, all objects of the specified types for which the user has some authority (for example, object operational authority) and that are in the specified libraries are shown.

- ≫ The user can show only those objects for which the user has some authority. ≪

generic*-object-name: Specify the generic name of the object. 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 name specifies all objects with names that begin with the generic prefix for which the user has authority. If an asterisk is not included with the generic (prefix) name, the system assumes it to be the complete object name. For more information on the use of generic names, refer to generic names.

object-name: Specify the name of the object that is shown.

Single Values

≫ ***ALLUSR:** When the object name has a value of *ALLUSR, the object type must be *LIB. All user libraries in the auxiliary storage pools specified by the ASPDEV parameter are shown. Refer to *ALLUSR in the description of the library qualifier above for a definition of user libraries. ≪

≫ ***IBM:** When the object name has a value of *IBM, the object type must be *LIB. All libraries in the auxiliary storage pools specified by the ASPDEV parameter which are saved/restored on the SAVLIB/RSTLIB CL commands with LIB(*IBM) are shown. ≪

OBJTYPE

Specifies the types of objects that are shown. More information on this parameter is in commonly used parameters.

*ALL: All object types that have the specified object name are shown. ≫ If the library qualifier specified or assumed for the OBJ parameter is *USRLIBL or *LIBL and the object name is a specific name (not *ALL and not a generic name), *ALL cannot be specified for OBJTYPE. ≪

object-type: Specify one or more values for the types of OS/400 system objects to be shown. Any of the OS/400 system object types can be specified. Objects in the specified libraries, as well as libraries themselves, that have the object types specified have their object attributes shown. If the library qualifier specified or assumed for the OBJ parameter is *USRLIBL or *LIBL ≫ and the object name is a specific name (not *ALL and not a generic name), ≪ only one object type (and it cannot be *ALL) can be specified.

Optional Parameters

DETAIL

Specifies which set of attributes is shown for each object.

When the output is directed to a database file, the DETAIL parameter is ignored and all object attribute information is written to the file.

*BASIC: The display or printed output contains the name and a basic set of object attributes for each object.

*FULL: The display or printed output contains the name and a full set of object attributes for each object, which includes the basic set of attributes.

*SERVICE: The display or printed output contains the service-related attributes for each object.

≫ **ASPDEV**

Specifies the auxiliary storage pool (ASP) device name where storage is allocated for the library of the object being displayed (LIB parameter). If the library resides in an ASP that is not part of the

thread's library name space, this parameter must be specified to ensure the correct library is searched. ASPDEV(*) is the only valid value if *LIBL, *CURLIB, or *USRLIBL is specified as the library qualifier on the OBJ parameter.

Single Values

*: The ASPs that are currently part of the thread's library name space will be searched to locate the library. This includes the system ASP (ASP 1), all defined basic user ASPs (ASPs 2-32), and, if the thread has an ASP group, the primary and secondary ASPs in the thread's ASP group.

*ALLAVL: All available ASPs will be searched. This includes the system ASP (ASP 1), all defined basic user ASPs (ASPs 2-32), and all available primary and secondary ASPs (ASPs 33-255 with a status of 'Available'). ASPs and libraries to which the user is not authorized are bypassed and no authority error messages are sent.

*CURASPGRP: If the thread has an ASP group, the primary and secondary ASPs in the ASP group will be searched to locate the library. The system ASP (ASP 1) and defined basic user ASPs (ASPs 2-32) will not be searched.

*SYSBAS: The system ASP (ASP 1) and all defined basic user ASPs (ASPs 2-32) will be searched to locate the library. No primary or secondary ASPs will be searched, even if the thread has an ASP group.

Element 1: Auxiliary storage pool (ASP) device

auxiliary-storage-pool-device-name: The device name of the primary or secondary ASP to be searched. The primary or secondary ASP must have been activated (by varying on the ASP device) and have a status of 'Available'. The system ASP (ASP 1) and defined basic user ASPs (ASPs 2-32) will not be searched.

Element 2: Auxiliary storage pool (ASP) search type

*ASP: Specifies that only the single auxiliary storage pool (ASP) device named in element 1 is to be searched

*ASPGRP: Specifies that the entire group of the primary auxiliary storage pool (ASP) device named in element 1 is to be searched. ≪

OUTPUT

Specifies whether the output from the command is shown at the requesting work station, printed with the thread's spooled output, or directed to a database file. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive thread is shown on the display. Output requested by a batch thread is printed with the thread's spooled output.

*PRINT: The output is printed with the thread's spooled output.

*OUTFILE: The output is directed to the database file specified on the OUTFILE parameter.

Note:	All data is written to the file specified on the OUTFILE parameter regardless of the value specified on the DETAIL parameter.

OUTFILE

Specifies the qualified name of the database file to which the output of the display is directed. If the OUTFILE does not exist, this command creates a database file in the specified library. If the file is created, the text is 'output file for DSPOBJD'. The public authority is the same as the create authority specified for the library in which the file is created. The database format (QLIDOBJD) of the output file is the same as that used in the IBM-supplied file database QADSPOBJ.

The name of the database file can be qualified by one of the following library values:

*LIBL: All libraries in the thread's library list are searched until the first match is found.

*CURLIB: The current library for the thread is searched. If no library is specified as the current library for the thread, the QGPL library is used.

library-name: Specify the name of the library to be searched.

database-file-name: Specify the name of the database file that receives the output of the display.

OUTMBR

Specifies the name of the database file member to which the output is directed. If a member already exists, the system uses the second element of this parameter to determine whether the member is cleared before the new records are added. If the member does not exist and a member name is not specified, the system creates a member with the name of the output file specified on the OUTFILE parameter. If an output file member name is specified, but the member does not exist, the system creates it.

Element 1: Member to Receive Output

*FIRST: The first member in the file receives the output. If OUTMBR(*FIRST) is specified and the member does not exist, the system creates a member with the name of the file specified on the OUTFILE parameter.

member-name: Specify the file member that receives the output. If OUTMBR(member-name) is specified and the member does not exist, the system creates it.

Element 2: Operation to Perform on Member

*REPLACE: The system clears the existing member and adds the new records.

*ADD: The system adds the new records to the end of the existing records.

Examples for DSPOBJD

Example 1: Displaying a Basic Description of Objects

```
DSPOBJD  OBJ(X/PAY)  OBJTYPE(*ALL)
```

A basic description of all the objects (for which the user has some authority) that are named PAY in library X are shown. Objects in the library for which the user has no authority are not shown.

Example 2: Displaying a Full Description of a Program

```
DSPOBJD  OBJ(X/PAY)  OBJTYPE(*PGM)  DETAIL(*FULL)
```

A full description of the program named PAY in library X is shown. The display includes all the attributes of the program.

Example 3: Displaying Program Information

```
DSPOBJD  OBJ(*USRLIBL/PAY)  OBJTYPE(*PGM)
```

This command shows information about the first program named PAY that is found in the user portion of the thread's library list.

Example 4: Displaying a Basic Description of Files

```
DSPOBJD  OBJ(Z/ABC*)  OBJTYPE(*FILE)
```

A basic description of all of the files whose names begin with ABC (generic name) located in library Z, for which the user has some authority, are shown.

Error messages for DSPOBJD

*ESCAPE Messages

» CPFB8ED

> Device description &1 not correct for operation. «

CPF2105

> Object &1 in &2 type *&3 not found.

CPF2110

> Library &1 not found.

CPF2113

> Cannot allocate library &1.

CPF2114

> Cannot allocate object &1 in &2 type *&3.

CPF2115

> Object &1 in &2 type *&3 damaged.

CPF2121

> One or more libraries cannot be accessed.

CPF2123

> No objects of specified name or type exist in library &2.

CPF2124

> No specified objects can be displayed from library &2.

CPF2150

> Object information function failed.

» CPF2173

> Value for ASPDEV not valid with special value for library. «

CPF2176

> Library &1 damaged.

CPF2177

> OBJTYPE value not compatible with OBJ value.

» CPF218C

> &1 not a primary or secondary ASP. «

» CPF218D

> &1 not a primary ASP when *ASPGRP specified. «

CPF2182

> Not authorized to library &1.

CPF2189

> Not authorized to object &1 in &2 type *&3.

CPF326B

> Damage to file &1 in library &2.

» CPF9809

> Library &1 cannot be accessed. «

» CPF9814

> Device &1 not found. «

≫ CPF9825

> Not authorized to device &1. ≪

CPF9827

> Object &1 cannot be created or moved into &2.

≫ CPF9833

> *CURASPGRP or *ASPGRPPRI specified and thread has no ASP group. ≪

CPF9845

> Error occurred while opening file &1.

CPF9846

> Error while processing file &1 in library &2.

CPF9847

> Error occurred while closing file &1 in library &2.

CPF9850

> Override of printer file &1 not allowed.

CPF9851

> Overflow value for file &1 in &2 too small.

CPF9860

> Error occurred during output file processing.

DSPLNK (Display Object Links) Command Description

DSPLNK Command syntax diagram

Purpose

The Display Object Links (DSPLNK) command shows a list of names of specified objects in directories and options to display information about the objects.

For more information about integrated file system commands, see the Integrated file system topic in the File systems and management category of the Information Center.

Restriction: The user must have *R authority to the directory containing the object links and *X to the other directories in the path. Object authority is not required when displaying the object name only.

Optional Parameters

OBJ   Specifies which objects are displayed.

> ***:** All objects in the current directory are displayed.

> *object-name-pattern:* Specify the path name of the object or a pattern to match the name of the object to be shown. The object path name can be either a simple name or a name that is qualified with the name of the directory in which the object is located. A pattern can be specified in the last part of the path name. An asterisk (*) matches any number of characters and a question mark (?) matches a single character. If the path name is qualified or contains a pattern, it must be enclosed in apostrophes. For more information on specifying path names, refer to path names.

OUTPUT

> Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

> ***:** Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

OBJTYPE

Specifies the object type you want displayed. For a list of the OS/400 object types that are valid for this parameter, refer to commonly used parameters.

*ALL: All objects whose name matches the pattern specified in the OBJ parameter are displayed.

*ALLDIR: All directory types (DIR, LIB, FLR, database FILE) are displayed.

object-type: Specify the object type you want displayed.

DETAIL

Specifies the information you want to see on the Display Object Links display.

*PRV: The same information that was displayed when you ran this command previously is shown. The value *BASIC is used if you have not used this command or the Work with Object Links (WRKLNK) command before.

*NAME: Only the name is displayed.

*BASIC: The name is displayed along with the type, type attribute, and text.

*EXTENDED: In addition to the basic information noted above, the type field is extended to display more information about symbolic links and an additional option is available to display hard or symbolic links.

DSPOPT

Specifies whether to show PC system and hidden objects.

*PRV: The same value is used for this parameter as the previous time the command was run by this user. If this command has not been used before, *USER is used.

*USER: The PC system and hidden objects are not shown. Objects beginning with a period (.) are not displayed unless the specified pattern begins with a period (.).

*ALL: All objects are shown, including the PC system and hidden objects. Objects beginning with a period (.) are displayed (with asterisk (*) specified for the pattern) including the directory (.) and the parent directory (..) entries.

Example for DSPLNK

```
DSPLNK   OBJ('X/PAY')
```

This command displays the object PAY located in directory X in the current directory.

Error messages for DSPLNK

*ESCAPE Messages

CPF9899

Error occurred during processing of command.

CPFA085

Home directory not found for user &1.

CPFA0A7

Path name too long.

≫ **CPFA0A9**

Object not found. Object is &1. ≪

DSPOPT (Display Optical) Command Description

DSPOPT Command syntax diagram

Purpose

The Display Optical (DSPOPT) command displays volume, directory, or file attributes depending on the value specified on the DATA parameter. The information can be printed, displayed, or written to an output file. If the output is directed to an outfile it will have one of the following record formats:

When DATA(*VOLATR) is specified the database file will have a record format named QAMODVA. The fields in the database are the same as the fields in the IBM-supplied format QAMODVA in file QAMODVAF located in library QSYS.

When DATA(*DIRATR) is specified the database file will have a record format named QAMODPA. The fields in the database are the same as the fields in the IBM-supplied format QAMODPA in file QAMODPAF located in library QSYS.

When DATA(*FILATR) is specified the database file will have a record format named QAMODFA. The fields in the database are the same as the fields in the IBM-supplied format QAMODFA in file QAMODFAF located in library QSYS.

Restriction: To use this command you must have *USE authority to the authorization list securing the volumes being displayed.

Required Parameter

VOL   Specifies the identifier of the optical volume which contains the information being shown.

*ALL: The information is shown for all optical volumes on the specified directly attached optical device (DEV parameter).

*MOUNTED: The information is shown for the volume mounted on the specified device (DEV parameter).

Note: This value is valid only for optical devices, not for library devices.

volume-identifier: Specify the identifier of an optical volume.

generic*-volume-identifier: Specify the generic name of the volume identifier. 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 name specifies all objects with names that begin with the generic prefix for which the user has authority. If an asterisk is not included with the generic (prefix) name, the system assumes it to be the complete object name. For more information on the use of generic names, refer to generic names.

Optional Parameters

DEV   Specifies the name of the optical device containing the optical volume whose information is displayed.

Note: This parameter is ignored when a specific volume name is specified on the VOL parameter.

*ALL: The volume attributes are displayed for optical volumes on all directly attached optical devices.

optical-device: Specify the name of an optical device.

DATA   Specifies the type of information that is displayed when specified on the PATH parameter. If DATA(*SAVRST) is specified, the information includes a description of each object saved to the optical file and summary information about the saved objects. To determine whether the volume being displayed contains data in the basic stream file format or in the save and restore format, you can specify DATA(*FILATR) and check the data file identifiers listed.

*VOLATR: The volume attributes for the specified volume or volumes are displayed.

*DIRATR: The directory attributes for the specified directory or directories are displayed.

*FILATR: The file attributes for the specified file or files are displayed.

*SAVRST: The specified files contain save and restore data. Summary information is displayed for the command and each saved object.

PATH   Specifies the path name of the directory or the file on the volume being displayed, beginning with the root directory of the volume. The DATA parameter indicates whether the directory or the file attributes are displayed. The object path name can be either a simple name or a name that is qualified with the name of the directory in which the object is located. A pattern can be specified in the last part of the path name. An asterisk (*) matches any number of characters. If the path name is qualified or contains a pattern, it must be enclosed in apostrophes.

path-name: Specify either a path for a directory or file. The DATA parameter indicates whether directory or file attributes will be displayed for the specified path.

A pattern can be specified in the last part of the name by specifying an asterisk as the last character. If a pattern is specified, all files or directories with names that begin with the specified characters will be displayed.

*ALL can be specified in the last part of the name. If specified, all files or directories in the specified path will be displayed.

*ALL: *ALL can have different meanings based on how parameter DATA is specified. Following is a list of combinations and their meanings.
- DATA(*VOLATR) and PATH(*ALL), the PATH parameter is ignored.
- DATA(*SAVRST) and PATH(*ALL), all save/restore files for all directories on the volume will be listed.
- DATA(*SAVRST) and PATH(/directory1/*ALL), all save/restore files in the path /directory1 will be listed.
- DATA(*DIRATR) and PATH(*ALL), all directories attributes for all directories on the volume will be listed.
- DATA(*DIRATR) and PATH(/directory1/*ALL), all directories attributes for directories in the path /directory1 will be listed.
- DATA(*FILATR) and PATH(*ALL), all file attributes for files in the root directory (/) of the volume will be listed.

- DATA(*FILATR) and PATH(/directory1/*ALL), all file attributes for files in /directory1 of the volume will be listed.

OUTPUT

Specifies whether the output from the command is displayed at the requesting work station, printed with the job's spooled output, added to a database file or directed to a user space.

*: Output requested by an interactive job is shown on the display. If the command is run as part of a batch job, the output is printed with the job's spooled output.

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

*OUTFILE: The output is directed to the database file specified on the OUTFILE parameter.

*USRSPC: The output is added to the user space specified on the USRSPC parameter.

USRSPC

Specifies the qualified name of the user space to which the output of the display is added.

Note: This parameter is valid only if OUTPUT(*USRSPC) is specified.

The name of the user space can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

user-space-name: Specify the name of the user space that receives the output.

REPLACE

Indicates whether to replace an existing user space.

Note: This parameter is valid only if OUTPUT(*USRSPC) is specified and is ignored if the user space is not found in the specified library.

*YES: The user space is replaced if found. The existing authorities of the original user space are retained, but the contents are replaced.

*NO: The user space is not replaced if found. The request ends and a message is sent to the job log indicating that the user space already exists in the library and cannot be created.

OUTFILE

Specifies the name of the database file to which the output of the display is added.

Note: This parameter is valid only if OUTPUT(*OUTFILE) is specified.

The name of the database file can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

database-file-name: Specify the name of the database file that receives the output of the display. If the database file is qualified with the *LIBL value but the system cannot find the file, one is created in the user's default library. If a default library is not specified, the file is created in library QGPL.

OUTMBR

Specifies the name of the database file member to which the output is directed.

Note: This parameter is valid only if OUTPUT(*OUTFILE) is specified.

Element 1: Member to Receive Output

*FIRST: The first member in the file receives the output. If OUTMBR(*FIRST) is specified and the member does not exist, the system creates a member with the name of the file specified on the OUTFILE parameter.

member-name: Specify the file member that receives the output. If OUTMBR(member-name) is specified and the member does not exist, the system creates it.

Element 2: Action on Member

*REPLACE: The data currently contained in the output file member is replaced with the output of this command.

*ADD: The new records are added to the existing information in the specified database file member.

Examples for DSPOPT

Example 1: Displaying Attributes for All Optical Volumes

```
DSPOPT   VOL(*ALL) DEV(*ALL)
```

This command displays the volume attributes for all volumes in all local optical devices and libraries.

Example 2: Displaying Attributes Using a Generic Search

```
DSPOPT   VOL(PAY*) DATA(*DIRATR) PATH('/*')
```

This command displays the attributes for all directories in the root directory of all optical volumes beginning with the characters PAY.

Example 3: Displaying Attributes of a Specific Directory

```
DSPOPT   VOL(VOL01) DEV(OPT01) DATA(*FILATR)
  PATH('/DIR1/DIR2/*')
```

This command displays the file attributes for all files in the directory /DIR1/DIR2 of optical volume VOL01.

Example 4: Displaying Save and Restore Data

```
DSPOPT  VOL(*MOUNTED)  DEV(OPT01)  DATA(*SAVRST)
  PATH('*ALL')
```

This command displays the save and restore data for all files found on the optical volume mounted in device OPT01.

Error messages for DSPOPT

<u>***ESCAPE Messages**</u>

CPF1247
>   Subsystem &1 cannot start prestart job &2.

CPF384C
>   Error occurred during CCSID conversion.

CPF3864
>   &2 &1 in &3 not restored.

CPF386A
>   File not found.

CPF5729
>   Not able to allocate object &1.

CPF9810
>   Library &1 not found.

CPF9815
>   Member &5 file &2 in library &3 not found.

CPF9845
>   Error occurred while opening file &1.

CPF9850
>   Override of printer file &1 not allowed.

CPF9851
>   Overflow value for file &1 in &2 too small.

CPF9860
>   Error occurred during output file processing.

OPT1115
>   File not found.

OPT1125
>   File is in use.

OPT1135
>   Request failed because number of open files is at the limit.

OPT1140
>   Unexpected error occurred during file processing.

OPT1185
>   Cannot access held optical file.

OPT1205
>   Directory not found.

OPT1212
>   Directory in use.

OPT1224
>   Path length exceeds the maximum of 256 bytes.

OPT1247

        User space &1 not created in library &2.

OPT1255

        File is corrupted.

OPT1317

        Directory name is too long.

OPT1320

        Optical volume &1 in use.

OPT1325

        Optical volume format not recognized.

OPT1330

        Optical volume not found or not useable.

OPT1331

        Optical volume &1 not found.

OPT1340

        Optical volume &1 not initialized.

OPT1346

        Operation not allowed to volume located in a remote optical device.

OPT1360

        Media directory corrupted on optical volume &1.

OPT1427

        A generic or *ALL volume request is not allowed with DATA value.

OPT1460

        Optical volume &1 is not in an optical device.

OPT1463

        Operation not completed, optical volume is not a primary volume.

OPT1489

        Volume parameter is not permitted for device &1.

OPT1530

        &1 does not represent a valid optical device.

OPT1555

        Optical device &1 in use.

OPT1605

        Media or device error occurred.

OPT1640

        Error occurred reading files or directories.

OPT1790

        Operation conflicts with another request.

OPT1805

        Error accessing optical volume index file.

OPT1810

        Error accessing optical directory index file.

OPT1813

        Unexpected error occurred.

OPT1815
> Internal program error occurred.

OPT1820
> Internal error occurred on optical device &1.

OPT1821
> Internal error occurred on optical device &1.

OPT1825
> Optical indexes are incorrect for optical device &1.

OPT1860
> Request to optical device &1 failed.

OPT1861
> No device description configured for resource &1.

OPT1862
> No active device description for resource &1.

OPT1863
> Optical libraries need to be reclaimed.

OPT1872
> Optical request timed out.

OPT2040
> Error accessing backup control file.

OPT2301
> Internal system object in use.

OPT6713
> Display volume details failed.

OPT7740
> User not authorized to object &2 in library &3 type &4.

DSPOPTLCK (Display Optical Locks) Command Description

DSPOPTLCK Command syntax diagram

Purpose

The Display Optical Locks (DSPOPTLCK) command displays a list of locks held on an optical volume, directory, or file. If TYPE(*JOB) is specified, this command displays a list of all jobs currently performing an optical request. The information can be printed or displayed.

This command does not identify any locks to volumes, directories, or files which are in remote optical servers. It also does not identify any jobs which are currently using a remote optical server. Use the Display Optical Server (DSPOPTSVR) command with TYPE(*CONV) specified to determine if any jobs are currently using a remote optical server.

Required Parameter

TYPE   Specifies the type of locks to be displayed or printed.

> ***VOL:** Job information and locks on the specified optical volume are displayed or printed.

> ***DIR:** Job information and locks on the specified optical directory are displayed or printed.

> ***FILE:** Job information and locks on the specified optical file are displayed or printed.

*JOB: Job information and locks on all jobs currently performing optical requests are displayed or printed.

Optional Parameters

VOL   Specifies the volume identifier of the optical volume for which the locks are listed.

PATH   Specifies the path name of the directory or file on the volume for which the locks are listed.

Note: This parameter is valid only if TYPE(*DIR) or TYPE(*FILE) is specified.

OUTPUT

Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. If the command is run as part of a batch job, the output is printed with the job's spooled output.

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

Examples for DSPOPTLCK

Example 1: Displaying Locks on a File

```
DSPOPTLCK   TYPE(*FILE)  VOLUME(VOL001)
  PATH('/PAYROLL/JAN1995')
```

This command displays the locks held on the file JAN1995 in the directory /PAYROLL on the VOL001 volume.

Example 2: Displaying Locks for Active Jobs

```
DSPOPTLCK   TYPE(*JOB)
```

This command diplays a list of active jobs performing optical requests.

Error messages for DSPOPTLCK

*ESCAPE Messages

OPT1318
       File name is too long.

DSPOPTSVR (Display Optical Server) Command Description

DSPOPTSVR Command syntax diagram

Purpose

The Display Optical Server (DSPOPTSVR) command displays information about the configuration of all optical servers added with the Add Optical Server (ADDOPTSVR) command. The information can be printed or displayed.

Optional Parameters

TYPE   Specifies the type of information to be displayed.

*DEST: The destination information is displayed. This information includes a listing of all of the optical servers accessible with the hierarchical file system APIs and the current status of each destination.

*CONV: The conversation information is displayed. This information includes a listing of all active optical conversations, the destination of each conversation, the jobs using the conversation, and the path of each open file.

OUTPUT

Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

*: The requested data is shown on the display station.

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

Example for DSPOPTSVR

```
DSPOPTSVR   TYPE(*DEST)
```

This command displays the current status of each destination of all optical servers that have been started.

Error messages for DSPOPTSVR

*ESCAPE Messages

CPF4101

File &2 in library &3 not found or inline data file missing.

CPF6A1C

Unable to add print function.

CPF9845

Error occurred while opening file &1.

CPF9850

Override of printer file &1 not allowed.

CPF9851

Overflow value for file &1 in &2 too small.

OPT6710

Optical server support is not active.

DSPOPCLNK (Display OptiConnect Link Status) Command Description

DSPOPCLNK Command syntax diagram

Purpose

The Display OptiConnect Link Status (DSPOPCLNK) command allows you to view the connection status of the links between systems in the fiber optic network, or systems in the High Speed Link network.

Optional Parameter

OUTPUT

Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in Commonly used parameters.

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

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

Example for DSPOPCLNK

```
DSPOPCLNK OUTPUT(*PRINT)
```

This command will produce a listing showing the status of all connections that may be used by OptiConnect.

No error messages.

DSPOVR (Display Override) Command Description

DSPOVR Command syntax diagram

Purpose

The Display Override (DSPOVR) command displays file overrides at any active call level for a job. All file overrides, or file overrides for a specific file name, can be displayed.

The file overrides can be merged before being displayed. A merged file override is the result of combining all overrides for a file from call level one to the specified call level, producing the override which is applied when the file is opened at the specified call level.

A call level is associated with each call stack entry in the call stack. Calling a program or procedure adds another call stack entry to the call stack. When a program or procedure is called using the TFRCTL (Transfer Control) command, the call stack entry replaces a call stack entry that is already on the call stack; a new call level number is not created.

Note: This function can also be accessed through option 15 of the Work with Job (WRKJOB) command.

Optional Parameters

FILE Specifies whether all file overrides, or file overrides for a specific file, are displayed.

    *ALL: All the file overrides from call level one to the specified call level are displayed.

    *PRTF: The *PRTF file override, which exists in the call level where this command is entered, is displayed.

    overridden-file-name: Specify the name of the file for which all the file overrides, from call level one to the specified call level, are displayed.

MRGOVR

    Specifies whether the file overrides are merged. Only those parameters on the overrides of the same type as the last override used for the merged override are used in determining the effective override for the specified call level.

    *YES: The file overrides displayed are merged.

    *NO: The file overrides displayed are not merged.

LVL Specifies the call levels of the file overrides displayed. There is a one-to-one correspondence between the call stack entries displayed on the call stack from the WRKJOB command and the call level for that call stack entry.

The first call stack entry name displayed on the call stack (at the top of the list) is the program or procedure at call level one. The second call stack entry name displayed is the program or procedure at call level two. The last call stack entry name displayed is the program or procedure at the highest call level for the job.

- If a merged file override is displayed, file overrides from call level one to the specified call level contributes to the creation of the merged file override.
- If MRGOVR(*NO) and FILE(*ALL) are specified, all file overrides (and the call levels at which they were found) from call level one to the specified call level are displayed.
- If MRGOVR(*NO) is specified, and a file override name is specified on the FILE parameter, all file overrides for the file specified (and the call levels at which they were found) from call level one to the specified call level are displayed.

*: The call level of the file override displayed is the call level of the program that called the DSPOVR command processing program. If the DSPOVR command is called to QCMDEXC, the call level is the same level as that of QCMDEXC. Overrides at call level numbers greater than 999 are not displayed.

*JOB: The call levels of the file overrides displayed are all call levels for the job.

call-level-number: Specify the specific call levels of the file overrides displayed. A specific call level is used to display file overrides at call levels lower than the call level at which the user is running. Valid values range from 1 through 999.

OUTPUT

Specifies whether the output from the command is displayed at the requesting work station or printed with the job's spooled output. More information on this parameter is in Commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

ACTGRP

Specifies the level overrides to display for an activation group. When MRGOVR(*YES) is specified, the activation group level overrides are processed after all call level overrides that are greater than or equal to the call level of the oldest procedure in the activation group are processed.

*: The level overrides from the requester's activation group will be displayed.

activation-group-name: Specify the name of the activation group that specifies activation group level overrides.

Examples for DSPOVR

Example 1: Displaying Merged Overrides

```
DSPOVR FILE(REPORTS) MRGOVR(*YES) LVL(3) OUTPUT(*)
```

This command produces a display showing the merged override for the file REPORTS at call level 3 with text descriptions of each keyword and parameter. Applicable overrides at call levels 1, 2 and 3 are used to form the merged override.

Example 2: Displaying File Overrides

```
DSPOVR FILE(REPORTS) MRGOVR(*NO) LVL(2) OUTPUT(*)
```

This command displays all file overrides for the file reports up to call level 2. It produces a display showing the file name, the call level for which the override was requested, the type of override, and the override parameters. If no file overrides are found for the file up to and including the specified call level, escape message CPF9842 is sent.

Error messages for DSPOVR

*ESCAPE Messages

CPF1892
> Function &1 not allowed.

CPF9842
> Overrides not found for file &1.

CPF9845
> Error occurred while opening file &1.

CPF9846
> Error while processing file &1 in library &2.

CPF9847
> Error occurred while closing file &1 in library &2.

CPF9850
> Override of printer file &1 not allowed.

CPF9851
> Overflow value for file &1 in &2 too small.

CPF9852
> Page size too narrow for file &1 in &2.

DSPPFRDTA (Display Performance Data) Command Description

Note: To use this command, you must have the 5722-PT1 (Performance Tools for iSeries) licensed program installed.

DSPPFRDTA Command syntax diagram

Purpose

The Display Performance Data (DSPPFRDTA) command uses a series of displays to show the performance data collected by Collection Services.

Optional Parameters

MBR   Specifies the member that contains the performance data collected by the Collection Services.

> ***SELECT:** The Select Performance Member display lists all members available in the specified library so the user can select a member to show.

> *member-name:* Specify the name of the member that contains the performance data to be displayed.

LIB   Specifies the name of the library where the performance database files are located.

> **QPFRDATA:** The IBM-supplied performance data library, QPFRDATA, is used to locate the database files.

> *library-name:* Specify the name of the library where the database files are located.

Examples for DSPPFRDTA

Example 1: Displaying List of Members

DSPPFRDTA

This command uses the Select Performance Member display to list the members available in the default library QPFRDATA so the user can select a member to display performance data.

Example 2: Displaying Performance Data

DSPPFRDTA MBR(JUNE1)

This command displays the performance data stored in member JUNE1 located in library QPFRDATA.

Error messages for DSPPFRDTA

***ESCAPE Messages**

PFR1010
Cannot process request because of missing data.

PFR5501
Performance data file(s) are not upward compatible.

PFR5502
Cannot process request because of missing data.

PFR7001
Library &1 does not contain performance data.

PFR7003
Cannot show performance data.

PFR7005
Cannot show performance data.

PFR7006
Cannot show performance data.

PFR7022
No performance data to display.

PFR9031
Cannot use member &3 in performance graph.

PFR9072
Cannot use member &3 in historical graph.

PFR9114
No historical data to graph.

DSPPFRGPH (Display Performance Graph) Command Description

Note: To use this command, you must have the 5722-PT1 (Performance Tools for iSeries) licensed program installed.

DSPPFRGPH Command syntax diagram

Purpose

The Display Performance Graph (DSPPFRGPH) command produces a graph from the performance data collected by Collection Services.

The graph format must have been defined on the Create Graph Format (CRTGPHFMT) command. The graph can be sent as output to a graphics terminal, a non-graphics terminal, a printer, a plotter, or to a graphics data format (GDF) file that can be used by other systems. Jobs can be selectively included or omitted from the graph.

Required Parameters

GRAPH
Specifies the graph format or graph package used to create the graph.

The possible library values are:
- **QPFRDATA:** The graph format or graph package is located in the IBM-supplied performance data library, QPFRDATA.
- ***CURLIB:** The current library is used to locate the graph format or graph package. If no library is specified as the current library for the job, the QGPL library is used.
- *library-name:* Specify the name of the library where the graph format or graph package is located.

format-name: Specify the name of the graph format. If this value is specified, a package name cannot be specified.

package-name: Specify the name of the graph package. If this value is specified, format name cannot be specified.

MBR   Specifies the name of the file member for which performance data will be shown in the graph.

Optional Parameters

LIB   Specifies the name of the library where the object is saved.

QPFRDATA: The performance data is located in the IBM-supplied performance data library, QPFRDATA.

library-name: Specify the name of the library where the performance data is located.

TITLE   Specifies a title to display at the top of the graph or of each graph of a package.

*SAME: The text of the graph title is the title defined in the graph format.

*BLANK: A blank title is used.

*MBRTEXT: The text of the selected member is used.

'graph-title': Specify no more than 50 characters of text, enclosed in apostrophes.

SUBTITLE
Specifies a subtitle to display at the top of the graph or of each graph of a package.

*SAME: The text of the graph subtitle is the subtitle defined in the graph format.

*BLANK: A blank subtitle is used.

*MBRTEXT: The text of the selected member is used.

'graph-subtitle': Specify no more than 50 characters of text, enclosed in apostrophes.

OUTPUT
Specifies whether the chart is to be displayed, plotted, printed, or saved in a graphics data format (GDF) file.

*: The graph is shown on the output display. This special value is valid only if JOBD(*NONE) is specified. Your display station can be either a graphics or nongraphics display station. A graphics display station shows the graph with colors, shading, and so forth. A nongraphics display station

shows the graph using characters you choose to represent colors, shading, and so forth. Once your graph is shown, you can define one overlay. An overlay is a graph that is placed on top of the current graph.

*PRINT: The graph is sent to the QPPGGPH printer file while the spooled file has the same name as the graph format. The appearance of graphs printed or displayed by graphical devices can be different from how they appear when printed or displayed by nongraphical devices, especially when *AUTO is specified by the Y (vertical) axis.

*PLOT: The graph is plotted on an attached plotter. This value is valid only if JOBD(*NONE) is specified. The 6180, 6182, 7371, and 7372 plotters are supported.

*OUTFILE: The graph is saved to the Graphics Data Format (GDF) file specified on the OUTFILE parameter. This option is not valid if a package is being displayed. You can use this file to display the graph on any system that supports the graphical data display manager function or the Business Graphics Utility licensed program. Graph packages cannot be sent to a GDF file.

PRTDEV
Specifies the name or type of printer on which the graph is printed. If a printer name (for example, PRT01) is specified, the output is spooled to the output queue of the printer. If a printer type (for example, 4214) is specified, the output is spooled to the output queue specified on the OUTQ parameter. This parameter is valid only if OUTPUT(*PRINT) is specified.

4214: The 4214 printer is used.

4234: The 4234 printer is used.

522X: One of the 522X series printer is used. They are the 5224 and 5225 printers.

*IPDS: One of the Intelligent Printer Data Stream (IPDS) printers is used. The choices are the 3812 and 4224 printers.

*NONGRAPHIC: The output is spooled to the output queue in a nongraphics format for use with printers that do not support graphics.

printer-name: Specify the system name of the printer to which the output is sent.

OUTQ Specifies the name and library of the output queue to which the printer file is to be sent.

*PRTDEV: The output queue associated with the printer is used. If a printer type has been specified, the output is sent to the job's output queue.

The name of the output queue can be qualified by one of the following library values:

- ***LIBL:** All libraries in the job's library list are searched until the first match is found.
- *library-name:* Specify the name of the library to be searched.

output-queue-name: Specify the name of the output queue.

PAGELEN
Specifies the page length for graphs. This parameter is valid only if OUTPUT(*PRINT) is specified.

*PRTDEV: The page length for the printer or printer type specified on the PRTDEV parameter is used.

51: Specifies 51 lines per page (8.5 inches).

66: Specifies 66 lines per page (11 inches).

PLTSPD
Specifies the speed at which the plotter creates the graph. A larger value represents a faster plotting rate. The smaller the value the better the plotting quality of the graph. This parameter is valid only when *PLOT is specified on the OUTPUT parameter.

100: A plotter speed of 100 is used.

plotter-speed: Specify the speed of the plotter. The plotter speed ranges from 1 through 100.

PLTPEN

Specifies the pen width in which to shade the performance graph. The smaller the value, the closer together the lines are for shading. If the user chooses a small value, the graph takes longer to plot. If the value is too large, the shading will have gaps in it. This parameter is valid only when *PLOT is specified on the OUTPUT parameter.

3: A pen width of 0.3 millimeters is used.

pen-width: Specify the width of the pen. Pen widths (values 1 through 10) range from 0.1 millimeter through 1.0 millimeter.

PLTADR

Specifies the address of the plotter attached to the terminal on which the graph is created. This parameter is valid only when the *PLOT is specified on the OUTPUT parameter.

1: The plotter with the address of 1 is used.

plotter-address: Specify the address of the plotter. Address values range from 1 through 31.

OUTFILE

Specifies the file in which the graph data format is saved. This parameter is valid only when *OUTFILE is specified on the OUTPUT parameter.

The possible library values are:
- **QPFRDATA:** The graph is saved in the IBM-supplied performance data library, QPFRDATA.
- ***LIBL:** The library list is used to locate the file in which to save the graph.
- ***CURLIB:** The current library is used to locate the file in which to save the graph. If no library is specified as the current library for the job, the QGPL library is used.
- *library-name:* Specify the name of the library where the graph is saved.

file-name: Specify the name of the file into which the graph is saved.

OUTMBR

Specifies the format member in which the graph is to be saved. This parameter is valid only if OUTPUT(*OUTFILE) is specified.

Element 1: Member to Receive Output

*FIRST: The first member in the file receives the output. If OUTMBR(*FIRST) is specified and the member does not exist, the system creates a member with the name of the file specified on the OUTFILE parameter.

member-name: Specify the name of the file member that receives the output. If the OUTMBR(*member-name*) is specified and the member does not exist, the system creates it. If the member already exists, the user has the option to either add new records to the end of the existing member or to clear the member and then add the new records.

Element 2: Operation to Perform on Member

*REPLACE: If a member exists, the system clears it and adds the new records.

*ADD: If a member exists, the system adds the new records to the end of the existing records.

TYPE Specifies whether the graph is a graph format or graph package.

*GPHFMT: The graph is a graph format.

*GPHPKG: The graph is a graph package.

XAXIS Specifies the range used on the X-axis.

*SAME: The range is the same as that defined in the graph format.

*AUTO: The system determines the range based on the data. This value must be specified if *TIME is specified for the X-axis variable.

Element 1: Starting Number of Range

starting-number: Specify the start of the X-axis range. This value is valid only if an ending number is also specified.

Element 2: Ending Number of Range

ending-number: Specify the end of the X-axis range. This value is valid only if a starting number is also specified.

YAXIS Specifies the range used on the Y-axis.

*SAME: The range is the same as that defined in the graph format.

*AUTO: The system determines the range based on the data.

Element 1: Starting Number of Range

starting-number: Specify the start of the Y-axis range. This value is valid only if an ending number is also specified.

Element 2: Ending Number of Range

ending-number: Specify the end of the Y-axis range. This value is valid only if a starting number is also specified.

AREAFILL

Specifies whether the graph is displayed with surfaces and bars filled in with a shading pattern.

This parameter allows the user to display detailed graphs quickly. If the user specifies AREAFILL(*NO) on this command after previously specifying AREAFILL(*YES) on the CRTGPHFMT command, the graph is displayed more quickly. This is caused by the greater amount of time it takes to fill in areas with shading patterns than to merely draw lines. Also, the more dense the shading pattern, the more time it takes to create. These issues are important if time is short and graphic quality is not momentarily important.

*SAME: The graph is shaded according to the graph format definition.

*YES: The graph is filled in with a shading pattern.

*NO: The graph is not filled in with a shading pattern.

PERIOD

Specifies the period of time for which to collect performance information for the performance graph. The starting and ending times and dates consist of four elements:

```
PERIOD((start-time start-date)
  (end-time end-date))
```

*N can be used in place of an element that precedes the value being specified in order to maintain positioning. For example, PERIOD(*N(*N 091289)) specifies the ending date and the default values for start-time, start-date, and end-time.

Element 1: Starting Time

One of the following pair of values is used to specify the starting time. Information collected before the starting time and starting date is not included on the graph.

*FIRST: Records starting at the beginning of the start day (00:00:00) are included on the graph.

start-time: Specify the time of the start day after which records are included. The time is specified in 24-hour format with or without a time separator as follows:

- With a time separator, specify a string of 5 or 8 digits, where the time separator for the job separates the hours, minutes, and seconds. If you issue this command from the command line, the string must be enclosed in apoltrophes. If a time separator other than the separator specified for your job is used, this command fails.

- Without a time separator, specify a string of 4 or 6 digits (hhmm or hhmmss) where **hh** = hours, **mm** = minutes, and **ss** = seconds. Valid values for **hh** range from 00 through 23. Valid values for **mm** and **ss** range from 00 through 59.

Element 2: Starting Date

One of the following pair of values is used to specify the starting date. Information collected before the starting time on the date specified on this parameter is not included on the graph.

*FIRST: Records starting on the first day of the collection period are included on the graph.

start-date: Specify the date on which information collection begins. The date must be entered in the format specified by the system values QDATFMT and, if separators are used, QDATSEP. For instance, the system might have a date format of *'mm/dd/yy'*. The month (mm), day (dd), and year (yy) are all required 1-digit or 2-digit values. The slashes (/) are optional if all six digits are specified. If the slashes are omitted, or if the value is entered from the prompt display, the enclosing apostrophes are not required.

Element 3: Ending Time

One of the following pair of values is used to specify the ending time. Information collected after the ending time and ending date is not included on the graph.

*LAST: Records through the end of the end day (23:59:59) are included on the graph.

end-time: Specify the time after which records are no longer collected. See the Element 1 in this parameter for details on how the time must be specified.

Element 4: Ending Date

One of the following values is used to specify the ending date. Information collected after the ending time and ending date is not included on the graph.

*LAST: Records through the last day of the collection period are included on the graph.

end-date: Specify the date after which records are no longer collected. See Element 2 in this parameter for details on how the date must be specified.

SLTJOB

Specifies a list of up to 50 jobs to select. Only performance data for the specified jobs are included on the graph.

The SLTJOB and OMTJOB parameters are mutually exclusive.

A job identifier is either the special value *ALL or a qualified name with up to three elements, for example:

```
*ALL
job-name
user-name/job-name
job-number/user-name/job-name
```

*ALL: All jobs in the collected data are included, unless excluded by some other selection criteria.

job-name: Specify the name of jobs to select. Because jobs may have identical job names, this value may not identify a specific job. This can be either a specific name or a generic name.

user-name: Specify the user name of jobs to select. Because jobs may have identical user names, this value may not identify a specific job. This can be either a specific name or a generic name.

job-number: Specify the 6-digit number of a job to select. All six digits must be specified (use leading zeros if necessary).

OMTJOB

Specifies a list of up to 50 jobs whose performance data is omitted from the graph.

The SLTJOB and OMTJOB parameters are mutually exclusive.

Similar to the SLTJOB parameter, a job identifier is either the special value *NONE or a qualified name with up to three elements. *N can be used in place of an element to maintain the position in the parameter value sequence.

*NONE: No job is excluded based on job identifier.

job-name: Specify the name of jobs to omit. Because jobs may have identical job names, this value may not identify a specific job. This can be either a specific name or a generic name.

user-name: Specify the user name of jobs to omit. Because jobs may have identical user names, this value may not identify a specific job. This can be either a specific name or a generic name.

job-number: Specify the 6-digit number of a job to omit. All six digits must be specified (use leading zeros if necessary).

SLTUSER

Specifies a list of up to 50 user names to select. Only jobs with one of the specified user names are included on the graph.

The SLTUSER and OMTUSER parameters are mutually exclusive.

*ALL: Jobs with all user names are included, unless excluded by other selection criteria.

user-name: Specify the user name of jobs to select. Because jobs may have identical user names, this value may not identify a specific job.) This can be either a specific or generic name. SLTUSER(*user*) is equivalent to SLTJOB(*N/user/*N).

OMTUSER

Specifies a list of up to 50 user names to omit. Jobs having the specified user names are excluded from the graph.

The SLTUSER and OMTUSER parameters are mutually exclusive.

*NONE: No job is excluded based on user name.

user-name: Specify the user name of jobs to omit. Because jobs may have identical user names, this value may not identify a specific job. This can be either a specific or generic name. OMTUSER(*user*) is equivalent to OMTJOB(*N/user/*N).

SLTPOOLS

Specifies a list of up to 64 pools to select. Only jobs that run in one of the specified pools are included in the report.

*ALL: Jobs running in all pools are included, unless excluded by other selection criteria.

storage-pool-identifier: Specify the number of a pool to select. Valid values range from 1 through 64.

OMTPOOLS

Specifies a list of up to 64 pools to omit. Jobs running in the specified pools are excluded from the graph.

The SLTPOOLS and OMTPOOLS parameters are mutually exclusive.

*NONE: No jobs are excluded based on their pool.

storage-pool-identifier: Specify the number of a pool to omit. Valid values range from 1 through 64.

SLTSBS

Specifies a list of up to 50 subsystems to select. Only jobs running in one of the specified subsystems are included on the graph.

The SLTSBS and OMTSBS parameters are mutually exclusive.

*ALL: Jobs in all subsystems are included, unless excluded by other selection criteria.

subsystem-name: Specify the name of a subsystem to select.

OMTSBS

Specifies a list of up to 50 subsystems to omit. Jobs running in the specified subsystems are excluded from the graph.

The SLTSBS and OMTSBS parameters are mutually exclusive.

*NONE: No jobs are excluded based on subsystem.

subsystem-name: Specify the name of a subsystem to omit.

SLTLINE

Specifies a list of up to 50 communications lines to select. Only jobs using a remote device connected through one of the specified communications lines are included on the graph.

The SLTLINE and OMTLINE parameters are mutually exclusive.

*ALL: All jobs are included, unless excluded by other selection criteria.

communications-line-name: Specify the names of communications lines to select. This excludes jobs using remote devices connected through other communications lines (or no communications line), even if the controllers to which those devices are attached are specified on the SLTCTL parameter.

OMTLINE

Specifies a list of up to 50 communications lines to omit. Jobs using a remote device connected through any of the specified lines are excluded from the graph.

The SLTLINE and OMTLINE parameters are mutually exclusive.

*NONE: Jobs are not excluded based on communications lines they use.

communications-line-name: Specify the name of a communications line to omit.

SLTCTL

Specifies a list of up to 50 communications controllers to select. Only jobs using a device connected to one of the specified communications controllers are included on the graph.

The SLTCTL and OMTCTL parameters are mutually exclusive.

*ALL: All jobs are included, unless excluded by other selection criteria.

controller-name: Specify the name of a communications controller to select.

OMTCTL

Specifies a list of up to 50 communications controllers to omit. Jobs using a device connected to any of the specified communications controllers are excluded from the graph.

The SLTCTL and OMTCTL parameters are mutually exclusive.

*NONE: Jobs are not excluded based on communications controller.

controller-name: Specify the name of a communications controller to omit.

SLTFCNARA
> Specifies a list of functional areas to select. Only jobs and users identified in one of the functional areas are included in the report.
>
> A functional area is a list of job names and user names previously defined by the user. You can find information on defining functional areas in the Performance Tools for iSeries book.
>
> ***ALL:** All jobs are included, unless excluded by other selection criteria.
>
> *functional-area-name:* Specify the name of a functional area to select.

OMTFCNARA
> Specifies a list of functional areas to omit. Jobs and users identified in any of the functional areas are excluded from the report.
>
> A functional area is a list of job names and user names previously defined by the user. You can find information on defining functional areas in the Performance Tools for iSeries book.
>
> ***NONE:** No jobs are excluded based on functional area.
>
> *functional-area-name:* Specify the name of a functional area to omit.

JOB   Specifies the job name used if the job is submitted for batch processing.
> **Note:** If *NONE is specified on the JOBD parameter, this parameter is ignored; job processing is performed interactively.
>
> **DSPPFRGPH:** The command name is used for the job name.
>
> ***MBR:** The name selected for the performance data member on the MBR parameter is used.
>
> *job-name:* Specify the name used for batch jobs.

JOBD   Specifies the job description used to submit jbos for batch processing.
> ***NONE:** A batch job is not submitted; instead, processing continues interactively while the user waits. The user's work station is not available for other use during this time, which could be significant for long jobs. This must be the job description if the output is to a screen or to a plotter. It is recommended that the user submit the job to batch if it is for printing or saving to a GDF file.
>
> The name of the job description can be qualified by one of the following library values:
> - ***LIBL:** All libraries in the job's library list are searched until the first match is found.
> - ***CURLIB:** The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.
> - *library-name:* Specify the name of the library to be searched.
>
> **QPFRJOBD:** The IBM-supplied Performance Tools job description is used.
>
> *job-description-name:* Specify the name of the job description.

Examples for DSPPFRGPH

Example 1: Displaying Performance Data Files
```
DSPPFRGPH  GRAPH(GRAPHLIB/CPU)
  MBR(QPFRDATA/JUN1)  TITLE(*MBRTEXT)
```

This command displays the performance data files in library QPFRDATA member JUN1. It is displayed as specified by graph format CPU in library GRAPHLIB. The report title is taken from the text of the member.

Example 2: Saving a Graph

```
DSPPFRGPH  GRAPH(GRAPHLIB/CPU)
  MBR(JUN1)  OUTPUT(*OUTFILE)
  OUTFILE(USERLIB/USERFILE)  OUTMBR(TEST)
  JOBD(*LIBL/QPFRJOBD)
```

This command submits a job to save the graph of performance data from file member JUN1, which is in library QPFRDATA, in a GDF file. The graph is saved in file USERLIB/USERFILE/TEST (file member TEST in file USRFILE, which is in library USRLIB).

Example 3: Printing a Graph

```
DSPPFRGPH  GRAPH(GRAPHLIB/CPU)
  MBR(JUN1)  OUTPUT(*PRINT)
  PRTDEV(PRT03)  JOBD(*LIBL/QPFRJOBD)
```

This command submits a job to print the graph of performance data from file member JUN1, which is in library QPFRDATA, on the system printer named PRT03.

Example 4: Printing All Graphs

```
DSPPFRGPH  GRAPH(GRAPHLIB/PACKAGE1)
  MBR(JUN1)  OUTPUT(*PRINT)
  PRTDEV(PRT03)  JOBD(*LIBL/QPFRJOBD)
  TYPE(*GPHPKG)
```

This command submits a job to print all of the graphs defined in PACKAGE1 in GRAPHLIB. The print job is sent to system printer PRT03. It's data source is in performance data member JUN1 in library QPFRDATA.

Example 5: Displaying a Graph

```
DSPPFRGPH  GRAPH(GRAPHLIB/CPU)
  MBR(JUN1)  OUTPUT(*)
  PERIOD((2330)(0130))
```

This command displays a graph of the data collected from 11:30 PM on the first day of collection through 1:30 AM on the last day of collection. However, if data collection started and ended on the same day, an error message is printed, because the specified ending date and time precedes the specified starting date and time.

Example 6: Displaying a Graph

```
DSPPFRGPH  GRAPH(GRAPHLIB/CPU)
  MBR(JUN1)  OUTPUT(*)
  PERIOD((2330)(0130)) SLTUSER(D46*)
```

This command displays a graph of the performance data collected for all the jobs whose user ID starts with D46 from 11:30 PM on the first day of collection through 1:30 AM on the last day of collection. However, if data collection started and ended on the same day, an error message is printed, because the specified ending date and time precedes the specified starting date and time.

Error messages for DSPPFRGPH

*ESCAPE Messages

PFR5501

Performance data file(s) are not upward compatible.

PFR5502

Cannot process request because of missing data.

PFR9031

Cannot use member &3 in performance graph.

PFR9046

Jobs defined in more than one functional area.

PFR9049

Graph format &1 in library &3 does not exist.

PFR9068

Value for OUTFILE parameter must be specified.

PFR9069

*NONE value must be specified for JOBD parameter.

PFR9071

X-axis variable for both graphs must be the same.

PFR9075

Plotter not found.

PFR9076

Plotter type not supported.

PFR9077

Graph format has too many legend entries for overlay.

PFR9078

Cannot display graph because of missing data.

PFR9079

Cannot write graph to output file.

PFR9080

Specify *AUTO for range with *TIME for X-axis.

PFR9082

Printer &1 not found.

PFR9083

Graph format selected for historical graph not valid.

PFR9096

Historical Data File QAPGHSTD not found in Library &1.

PFR9097

Cannot copy graph format &1 onto itself.

PFR9098

Cannot copy graph package &1 onto itself.

PFR9099

Cannot copy functional area &1 onto itself.

PFR9101

Graph has too many data points to display.

PFR9107

Graph format &1 is not valid.

PFR9113

Cannot display graph because of missing data.

DSPPFM (Display Physical File Member) Command Description

DSPPFM Command syntax diagram

Purpose

The Display Physical File Member (DSPPFM) command displays a physical database file member. Records are shown in arrival sequence, even if the file has a keyed access path. Users can page through the file, locate a particular record by record number, or specify a starting position in the record. They can also select a character or hexadecimal display of the records.

Required Parameter

FILE Specifies the name of the physical file that contains the member being shown. If no library qualifier is specified, the library list is used to locate the file.

The name of the physical file member can be qualified by one of the following library values:

***LIBL:** All libraries in the job's library list are searched until the first match is found.

***CURLIB:** The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

physical-file-name: Specify the name of the physical file.

Optional Parameters

MBR Specifies the name of the physical file member being shown.

***FIRST:** The first member in the database file is used.

***LAST:** The last member of the specified physical file is shown.

member-name: Specify the name of the physical file member.

FROMRCD
Specifies which record in a physical file is shown on the top line of the initial display. If the specified record number is a deleted record, the display is positioned on the first record that follows the record that has been deleted. The user can display as many records as needed using the page-up and page-down keys.

1: Record number one, or the first non-deleted record, of the physical file is shown. If the file is a distributed file, this will be the first non-deleted record of the local member, and only local data will be shown.

***END:** The last non-deleted record in the physical file is shown. The *END value shows the last complete page so that the last record in the physical file appears at the bottom of the screen. If the file is a distributed file, this will be the last non-deleted record of the local member, and only local data will be shown.

***ALLDATA:** All the data for a distributed file, including remote data, is shown. If *ALLDATA is specified for a non-distributed file, it will be treated the same as FROMRCD(1).

record-number: Specify the number of the record shown on the top line of the initial display. If the file is a distributed file, this will be the record number of the local member, and only local data will be shown.

Examples for DSPPFM

Example 1: Displaying the First File Member

```
DSPPFM   FILE(TESTA)
```

This command shows the first member of a physical file named TESTA. The library list is used to locate the file.

Example 2: Displaying a File Member

```
DSPPFM   FILE(SAMPLE/TESTB) MBR(PROGRAM)
```

This command shows member PROGRAM of physical file TESTB in library SAMPLE.

Error messages for DSPPFM

*ESCAPE Messages

CPF8056
    File &1 in &2 not a physical file.

CPF9810
    Library &1 not found.

CPF9812
    File &1 in library &2 not found.

CPF9820
    Not authorized to use library &1.

CPF9822
    Not authorized to file &1 in library &2.

CPF9845
    Error occurred while opening file &1.

CPF9846
    Error while processing file &1 in library &2.

CPF9847
    Error occurred while closing file &1 in library &2.

DSPPWRSCD (Display Power On/Off Schedule) Command Description

DSPPWRSCD Command syntax diagram

Purpose

The Display Power On/Off Schedule (DSPPWRSCD) command is used to display or print the power on/off schedule.

Optional Parameters

OUTPUT
    Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

    *: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

STRDATE
    Specifies the first date to be displayed or printed on the power on/off schedule.

    *TODAY: The current date is used.

date: Specify the first date to be displayed. The date must be specified in the format specified on the job attributes. Specify the current date or a date in the future.

DAYS Specifies the number of days for which the power on/off schedule is to be printed.

40: Forty days of the report are printed.

number-of-days: Specify the number of days. Valid values range from 1 through 366.

Examples for DSPPWRSCD

Example 1: Displaying Power On/Off Schedule

DSPPWRSCD

This command displays the power on/off schedule.

Example 2: Printing 30 Days of Power On/Off Schedule

DSPPWRSCD   OUTPUT(*PRINT) DAYS(30)

This command prints 30 days of the power on/off schedule, starting with the current date.

Error messages for DSPPWRSCD

*ESCAPE Messages

CPF1E2B
> Power scheduler and cleanup options not found.

CPF1E23
> Power schedule or cleanup options in use by another user.

CPF1E27
> Not authorized to change power on/off schedule.

CPF1E28
> Cannot print schedule at specified STRDATE.

CPF1E99
> Unexpected error occurred.

DSPPDGPRF (Display Print Descriptor Group Profile) Command Description

DSPPDGPRF Command syntax diagram

Purpose

The Display Print Descriptor Group Profile (DSPPDGPRF) command displays the print descriptor group (PDG) and print descriptor name for the specified user profile.

Restriction: You must have *OBJOPR authority to the user's profile.

Required Parameter

USER Specifies the name of the user whose PDG profile is to be displayed.

*CURRENT: The user profile that is currently running is used.

user-name: Specify the name of the user whose PDG profile is to be displayed.

Optional Parameter

OUTPUT

Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

Example for DSPPDGPRF

DSPPDGPRF   USER(TPDEXTER)

This command displays the print descriptor and the print descriptor group for user profile TPDEXTER.

Error messages for DSPPDGPRF

*ESCAPE Messages

CPF2204

User profile &1 not found.

CPF2217

Not authorized to user profile &1.

CPF9820

Not authorized to use library &1.

CPF9871

Error occurred while processing.

DSPPSFCFG (Display Print Services Facility Configuration) Command Description

DSPPSFCFG Command syntax diagram

Purpose

The Display Print Services Facility Configuration (DSPPSFCFG) command displays a Print Services Facility (PSF) configuration object in the specified library. If the PSF configuration object is found, it is displayed. If the PSF configuration object is not found, a message is sent to the user stating that the PSF configuration object could not be found.

Restriction: The PSF/400 feature is required to use this command.

Required Parameter

PSFCFG

Specifies the name and library of the PSF configuration object to display.

The name of the PSF configuration object can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

PSF-configuration-name: Specify the name of the PSF configuration object being displayed.

Optional Parameter

OUTPUT

Specifies whether the output from the command is displayed at the requesting work station or printed with the job's spooled output.

*: 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.

Example for DSPPSFCFG

```
DSPPSFCFG    PSFCFG(PSFCFG1)   OUTPUT(*PRINT)
```

This command will print a description of PSF configuration (*PSFCFG) object named PSFCFG1. The job's library list will be used to search for the PSFCFG1.

Error messages for DSPPSFCFG

*ESCAPE Messages

CPF9801

Object &2 in library &3 not found.

CPF9802

Not authorized to object &2 in &3.

CPF9803

Cannot allocate object &2 in library &3.

CPF9810

Library &1 not found.

CPF9820

Not authorized to use library &1.

DSPPRB (Display Problem) Command Description

DSPPRB Command syntax diagram

Purpose

The Display Problem (DSPPRB) command shows or print service information related to performing hardware and software maintenance. The service information, contained in the problem log entries, are shown on the DSPPRB display, printed with the job's output, or stored in a database file.

Optional Parameters

PRBID

Specifies the problem identifier of the problem being selected. Problems with different system origins can have the same identifier. This parameter can be used with the ORIGIN parameter to select a single problem from a particular system origin.

*ALL: All problem identifiers are selected.

problem-identifier: Specify the 10-character problem identifier of the problem being selected.

STATUS

Specifies the status of the problem log entries. The seven status types are as follows:

*OPENED

The problem is in OPENED status. The problem has been identified and a problem record has been created.

*READY

The problem is in READY status. Problem analysis information has been added to the problem record.

*PREPARED

The problem is in PREPARED status. The problem has been prepared for reporting.

*SENT

The problem is in SENT status. The problem has been sent to a service provider, but no answer has been returned.

*ANSWERED

The problem is in ANSWERED status. An answer was returned by the service provider or added by an operator on this system.

*VERIFIED

The problem is in VERIFIED status. The problem has been resolved and the system operator has verified that the problem has been corrected.

*CLOSED

The problem is closed.

*ALL: Problem log entries with any status are shown.

status-type: Specify up to six status types that identify the problem log entries being displayed.

SEV
Specifies the severity level of the problem log entries being shown on the display. The severity level is assigned by the user when the problem is prepared for reporting. The four severity levels are:

1   High

2   Medium

3   Low

4   None

*ALL: Problem log entries with any severity level are shown.

severity-level: Specify at least one or as many as three of the four severity levels.

PERIOD

Specifies the period of time for which the data log is printed. The following values can be coded in this parameter, which contains two sets of two values each (four list elements).

Element 1: Starting Time

*AVAIL: The error data that is available for the specified starting or ending date is printed.

start-time: Specify the starting time of the specified starting date for which the error data is printed. The time is specified in 24-hour format with or without a time separator as follows:

- With a time separator, specify a string of 5 or 8 digits, where the time separator for the job separates the hours, minutes, and seconds. If you issue 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 fails.

- Without a time separator, specify a string of 4 or 6 digits (hhmm or hhmmss) where **hh** = hours, **mm** = minutes, and **ss** = seconds. Valid values for **hh** range from 00 through 23. Valid values for **mm** and **ss** range from 00 through 59.

Element 2: Starting Date

<u>*BEGIN:</u> The logged data from the beginning of the log is displayed.

Note: If PERIOD(*BEGIN) is specified, then any time value other than *AVAIL for start-time is ignored.

<u>*CURRENT:</u> The logged data for the current day, and the time that has elapsed between the specified starting time and ending time for the day, is displayed.

start-date: Specify the date for which the first logged data is displayed. The date must be entered in the format specified by the system values QDATFMT and, if separators are used, QDATSEP.

Element 3: Ending Time

<u>*AVAIL:</u> The logged data that is available for the specified ending date is displayed.

end-time: Specify the time that the data logging ends. See the description of *start-time* for details about how time can be specified.

Element 4: Ending Date

<u>*END:</u> The last day on which data was logged is shown. If PERIOD(*END) is specified, a time value other than *AVAIL for end-time is ignored.

<u>*CURRENT:</u> The logged data for the current day, and the time that has elapsed between the specified starting time and ending time for the day, is displayed.

end-date: Specify the date that the data logging ends. The date must be entered in the format specified by the system values QDATFMT and, if separators are used, QDATSEP.

HARDWARE
Specifies the name of the problem log entries identifying the failing device.

Note: If *ALL is specified, then any value other than *ALL for model and serial number is ignored.

Element 1: Machine Type

<u>*ALL:</u> Entries are shown regardless of which device, if any, is identified as failing.

type-code: Specify the 4-character type code of the device.

Element 2: Model Number

<u>*ALL:</u> All entries identifying the specified type of failing device are shown.

model-number: Specify the 3-character model number of the device.

Element 3: Serial Number

<u>*ALL:</u> All entries identifying the specified type and model of the failing device are shown.

serial-number: Specify the serial number of the device in one of the following formats where n is a decimal digit (0-9).

- `nnnnn`
- `nnnnnnn`
- `nn-nnnnn`
- `nn-nnnnnnn`

RESOURCE

Specifies the name of the failing resource, or all failing resources, for which problem log entries are shown.

<u>*ALL:</u> Entries are shown regardless of which resource name, if any, is identified by the problem.

resource-name: Specify the name of the resource for which logged entries are being displayed.

LICPGM

Specifies the name of the failing licensed program for which problem log entries are shown.

Element 1: Licensed Program

<u>*ALL:</u> All licensed programs are shown regardless of whether any are identified as failing.

Note: If *ALL is specified, any value other than *ALL for release and modification is ignored.

licensed-program-name: Specify the name of the failing licensed program.

Element 2: Release Level of the Licensed Program

<u>*ALL:</u> All entries identifying failing licensed programs are shown.

release-level: Specify the release level of the failing licensed program.

Element 3: Modification Number of the Release

<u>*ALL:</u> All entries identifying a failing licensed program of the specified licensed program and release are shown.

modification-number: Specify the modification number of the release of the failing licensed program.

FUNCTION

Specifies the name of the function identifier for which the problem log entries are shown.

<u>*ALL:</u> Entries are shown regardless of which function identifier, if any, is identified.

generic-function-identifier:* Specify the generic name of the function identifier. 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 name specifies all objects with names that begin with the generic prefix for which the user has authority. If an asterisk is not included with the generic (prefix) name, the system assumes it to be the complete object name. For more information on the use of generic names, refer to generic names.

function-identifier: Specify the complete function identifier of the function. If blank characters are included, the character string must be enclosed in apostrophes.

PGM Specifies that only problem log entries identifying the failing program are shown. For machine-detected problems, the failing program is identified by the possible cause with the highest probability of failure.

*ALL: Entries are shown regardless of which program, if any, is identified.

generic*-program-name: Specify the generic name of the program.

program-name: Specify the name of the program.

MSGID
Specifies the message or range of messages for which the problem log entries are shown. This is the problem message identifier shown in the problem details display. For user-detected problems, the message identifier is entered by the user.

*ALL: Entries are shown regardless of which problem message identifier is associated with a problem.

generic*-message-identifier: Specify the generic name of the message identifier.

message-identifier: Specify the problem message identifier.

ORIGIN
Specifies the nodes for which the problem log entries are shown.

Element 1: Network Identifier

*ALL: Entries are shown regardless of the network identifier of the origin system of each entry.

*NETATR: Only entries that originated on systems with the same local network identifier as the one defined in the network attributes for this system are shown.

network-identifier: Specify a network identifier. Only entries originating on systems with this local network identifier are shown.

Element 2: Control Point Name

*ALL: All entries originating on systems using the network identifier are shown.

*NETATR: Only entries originating on systems with the same control point name as the one defined in the network attributes are shown.

control-point-name: Specify the name of the control point. Only entries originating on systems with this control point name are shown.

SRVID
Specifies that only problem log entries using the IBM service-assigned number are shown. This number is assigned when the problem is reported to IBM service support.

*ALL: Entries are shown regardless of which service number, if any, is assigned to the problem.

service-identifier-number: Specify the service identifier number.

ASNUSER
Specifies which problem log entries are displayed.

*ALL: All problem log entries are shown, regardless of the user name assigned to them.

user-name: Specify the user name assigned to the problem log entries to be displayed.

GROUP
Specifies the group in the filter to which the problem is assigned.

*ALL: All problem log entries are shown, regardless of the group assigned to them.

group-name: Specify the 10-character problem filter group assigned to the entry.

Note: The values are blank if problem log filtering is not used.

PRBTYPE

Specifies which type of problems to display.

*ALL: All problem log entries are shown, regardless of the problem type.

1: Only machine-detected problems are shown.

2: Only user-detected problems are shown.

3: Only PTF order problems are shown.

4: Only application-detected problems are shown.

5: Only PC machine-detected problems are shown.

6: Only PC user-detected problems are shown.

PRBCGY

Specifies which category of problems to display.

*ALL: All problems are shown.

*REPORT: Problems that are logged and reported to the service provider are shown.

*CRITICAL: Problems that are critical are shown.

*LOGONLY: Problems that are logged, but not reported to the service provider, are shown.

OUTPUT

Specifies whether the output from the command is shown at the requesting work station, printed with the job's spooled output, or directed to a database file.

More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

*OUTFILE: The output is directed to the database file specified on the OUTFILE parameter.

OUTFILE

Specifies the qualified name of the database file that receives the output of the command. If the file does not exist, this command creates a database file in the specified library. If a file is created, the text reads "Outfile for DSPPRB," and the authority for users other than those who have specific authority, group authority, or authority from an authorization list is *EXCLUDE. Refer to the tables at the end of the TYPE parameter description for the format used.

Note: The format must be the same as that of the TYPE parameter.

The name of the database file can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

database-file-name: Specify the name of the database file to which the output of the command is written.

OUTMBR

Specifies the name of the database file member to which the output is directed.

Element 1: Member to Receive Output

*FIRST: The first member in the file receives the output. If OUTMBR(*FIRST) is specified and the member does not exist, the system creates a member with the name of the file specified on the OUTFILE parameter. If the member exists, records may be either added to the end of the member or replace existing records.

member-name: Specify the file member that receives the output. If OUTMBR(member-name) is specified and the member does not exist, the system creates it.

Element 2: Operation to Perform on Member

*REPLACE: The system clears the existing member and adds the new records.

*ADD: The system adds the new records to the end of the existing records.

TYPE Specifies the type of problem information that is placed in the output file. Only one type of data can be placed in each file. More information on each value of this parameter, including a table on the output record format for the value, is located at the end of this parameter description.

Note: This parameter is valid only when a value is specified also on the OUTFILE parameter.

*BASIC: Basic problem data includes problem type and status; device type, model, and serial number; product ID, contact information; and tracking data.

*CAUSE: Possible problem causes include point-of-failure, partial, isolation, or answer cause records. Answer causes are used if they are available. If they are not, isolation causes are used. If isolation causes are not available, partial causes are used. If partial causes are not available, then the point-of-failure causes are used.

*FIX: Fixes to the problem are program temporary fix (PTF) records.

*USRTXT: User-supplied text, consisting of note records, is placed in the output file.

*SPTDTA: Output files with supporting data identifiers are created.

Basic Problem Data (*BASIC)

The output file produced for type *BASIC has one record for each problem in the problem log. Each record has a unique problem identifier.

The record format is QASXPBOF. See the following "DSPPRB Fields for Basic Problem Data (TYPE(*BASIC))" table for the fields in the record.

Table 1. DSPPRB Fields for Basic Problem Data (TYPE(*BASIC))

Field Name	Length	Description
PBRCEN	1	Century that the data was retrieved and placed in the output file:
		0 20th century
		1 21st century
PBRDAT	6	Date that the data was retrieved and placed in the output file.
PBRTIM	6	Time that the data was retrieved and placed in the output file.

Field Name	Length	Description
PBSYSN	8	Name of the system in which the DSPPRB command is run to create this output file.
PBFORM	8	Record format, which is always *BASIC.
PBID	10	Problem identifier.
PBORG	20	System origin.
PBORGI	1	Problem origin indication:

L	Local	
R	Remote	

Field Name	Length	Description
PBSEV	1	Problem severity levels:

1	High
2	Medium
3	Low
4	None

Field Name	Length	Description
PBTYPE	1	Problem type (which identifies how the problem was detected):

1	Machine-detected
2	User-perceived
3	PTF order

Field Name	Length	Description
PBSTAT	1	Problem status:

O	Opened
R	Ready
P	Prepared
S	Sent
A	Answered
V	Verified
C	Closed

Field Name	Length	Description
PBDESC	7	Message identifier of a message in the QCPFMSG message file that describes the problem.
PBPMSG	7	Message identifier of a message in the QCPFMSG message file that describes the reference code.
PBRFCD	4	Original reference code.
PBSLID	8	Identifies the entry recorded in the error log when the system detected a problem.
PBMACH	4	Identifies the type of device with which this problem is associated.
PBMODL	3	Identifies the model of the device with which this problem is associated.
PBFEAT	4	Identifies the feature number of the device with which this problem is associated.
PBMSER	10	Identifies the serial number of the device with which this problem is associated.
PBEC	12	Identifies the engineering change (EC) level of the device with which this problem is associated.
PBLPP	7	Shows the identification number of the program with the problem. This number could be for a licensed program or for licensed internal code.
PBVER	4	Identifies the version of the program with the problem.
PBREL	2	Identifies the release level of the program with the problem.
PBMDF	2	Identifies the modification level that applies to the release level of the licensed program with the problem.
PBCNT	36	The name of the person whom service personnel should contact to help resolve this problem.
PBTEL1	30	Primary telephone number. The number service support personnel should use to contact the user's company.
PBTEL2	30	Alternate telephone number. The number service support personnel should use to contact the user's company if the primary telephone number is not available.

Field Name	Length	Description
PBFTEL1	30	Primary fax telephone number. The number service support personnel should use to contact the user's company.
PBFTEL2	30	Alternate fax telephone number. The number service support personnel should use to contact the user's company if the primary telephone number is not available.
PBENTR	36	Company name.
PBSTR1	36	First line of street address.
PBSTR2	36	Second line of street address.
PBSTR3	36	Third line of street address.
PBCITY	36	City and state.
PBCOUN	20	Country or region.
PBZIP	12	ZIP code.
PBSNUM	10	Service assigned number.
PBEPDP	8	Identifies the program used to run problem analysis.
PBPDPE	2	Identifies the code the system returned after problem analysis is run.
PBISOS	1	Identifies the result of running problem analysis:

1		Problem analysis was successful, the problem still exists.
2		Problem analysis was successful, the problem has been resolved.
3		Problem analysis was not successful.
4		Problem analysis was not completed.
5		Problem analysis was partially completed.

Field Name	Length	Description
PBDATO	6	Date the problem was opened.
PBTIMO	6	Time the problem was opened.
PBUSRO	10	User who opened the problem.
PBDATA	6	Date the problem was analyzed.
PBTIMA	6	Time the problem was analyzed.
PBUSRA	10	User who analyzed the problem.
PBDATP	6	Date the problem was prepared.
PBTIMP	6	Time the problem was prepared.
PBUSRP	10	User who prepared the problem.
PBDATS	6	Date the service request was sent.
PBTIMS	6	Time the service request was sent.
PBUSRS	10	User who sent the service request.
PBDATN	6	Date the service request was answered.
PBTIMN	6	Time the service request was answered.
PBUSRN	10	User who answered the problem.
PBDATF	6	Date fix was verified.
PBTIMF	6	Time fix was verified.
PBUSRF	10	User who verified the fix.
PBDATC	6	Date the problem was closed.
PBTIMC	6	Time the problem was closed.
PBUSRC	10	User who closed the problem.
PBSYMP	256	Symptom string.
PBUSRD	10	User assigned to the problem.
PBFTRN	10	Filter assigned to the problem.
PBFTRL	10	Filter library.
PBFTRG	10	Group in filter assigned to the problem.
PBALIB	10	Library containing APAR data saved for the problem.

Field Name   Length   Description

Note:

1. All fields are of type C (character).

2. All dates are represented in YYMMDD format where:

   YY   Year

   MM   Month

   DD   Day

   For example 940515 represents May 15, 1994.

3. All times are for a 24-hour clock and are represented in HHMMSS format where:

   HH   Hour

   MM   Minutes

   SS   Seconds

   For example 144526 represents 26 seconds past 2:45 p.m.

4. The contact name, telephone numbers, company name, and address are only present if different than the service contact information.

5. For those activities that can be done more than once, the date and time represent the last time the activity was done.

Possible Causes (*CAUSE)

The output file produced for type *CAUSE has one record for each possible cause identified at the time the failure was detected or as a result of running problem analysis. The cause list type indicates when the possible causes were identified and is the same for all records with a given problem identifier.

The sum of the possibilities will equal 100 percent for each problem identifier.

The record format is QSXCAOF. See the following "DSPPRB Fields for Possible Cause Data (TYPE(*CAUSE))" table for the fields in the record.

Table 2. DSPPRB Fields for Possible Cause Data (TYPE(*CAUSE))

Field Name	Length	Description
CARCEN	1	Century that the data was retrieved and placed in the output file:
		0 20th century
		1 21st century
CARDAT	6	Date that the data was retrieved and placed in the output file.
CARTIM	6	Time that the data was retrieved and placed in the output file.
CASYSN	8	Name of the system where the DSPPRB command was run to create this output file.
CAFORM	8	Format, which is always *CAUSE.
CAID	10	Problem identifier.
CAORG	20	System origin.

Field Name	Length	Description
CALIST	1	Cause list type:

	P	The possible cause list was identified when the failure occurred.
	L	The possible cause list was identified by problem analysis which was not completed.
	I	The possible cause list was identified by problem analysis.
	A	The possible cause list was returned by RETAIN as result of a service request.

Field Name	Length	Description
CACODE	4	Cause code.
CANAME	7	A message identifier of a message in QCPFMSG that describes a possible cause.
CADOC	7	Message identifier of a message in QCPFMSG that identifies the document being referenced when solving this problem.
CADEVL	40	Location of the rack or system unit when the device is installed.
CAPRT1	12	Part 1, a part which describes a possible hardware problem cause. Up to six part numbers are possible for a part because different part numbers are used to identify the part when it has different features.
CAPRT2	12	Part 2
CAPRT3	12	Part 3
CAPRT4	12	Part 4
CAPRT5	12	Part 5
CAPRT6	12	Part 6
CATYPE	1	Cause type:

Field	Type (Instances)
A, K, N	Hardware (communications controller or power supply)
C	Software (OS/400)
D	Device (terminal, printer, or tape unit)
E	S/370 channel attached device
G	Configuration (controller description parameter incorrect)
H	General (modem or cable)
M	Media (tape or diskette)
U	User (door open or diskette upside down)

Field Name	Length	Description
CACHNC	3,0	The possibility that this part or action will correct the problem (1-100%).
CADEVN	10	Name of the device where the part is installed.
CAMACH	4	Type of device.
CAMODL	3	Model number of device.
CAFEAT	4	Feature number of device.
CAMSER	10	Serial number of the device.
CARSER	10	Serial number of the rack where the device is installed.
CAADDR	9	Address (1234-5678)
CALPP	7	Identifies a licensed program or licensed internal code. Only present for cause type 'C'.
CAVER	4	Version of the licensed program. Only present for cause type 'C'.
CAREL	2	Release level of the licensed program. Only present for cause type 'C'.
CAMDF	2	Modification level that applies to the release of the licensed program. Only present for cause type 'C'.
CAMOD	10	Module in the licensed program. Only present for cause type 'C'.
CAVOL	8	Removable media volume identifier. Only present for cause type 'M'.
CARSRC	10	Resource name assigned to the device by the system.
CAPORT	2	Port where the work station cable connects to the work station attachment.
CAPLOC	25	Location of the part in the device.

Field Name	Length	Description
CAPCOD	4	Symptom code, also called the Fault Symptom Code (FSC). It is generated by the sense bits collected in the hardware device at the time of failure. Only present for cause type 'E'.
CASENS	64	Sense data bytes are made up of the bits that are collected in the hardware device to show the status of the device. Only present for cause type 'E'.
CAEADDR	13	Address of device where part is installed.
		1-4 Identifies the device controller card.
		5 Separator character (-).
		6-13 Identifies the failing device or resource.

Note: All fields are of type C (character), except the CACHNC field, which is of type P (packed decimal).

Program Fixes (*FIX)

The output file produced for type *FIX has one record for each program temporary fix (PTF) identified as a result of a service call for a machine-detected or user-perceived problem. Multiple program fix records may have the same problem identifier.

The record format is QSXFXOF. See the following "DSPPRB Fields for Program Fix Data (TYPE(*FIX))" table for the fields in the record.

Table 3. DSPPRB Fields for Program Fix Data (TYPE(*FIX))

Field Name	Length	Description
FXRCEN	1	Century that the data was retrieved and placed in the output file:
		0 20th century
		1 21st century
FXRDAT	6	Date that the data was retrieved and placed in the output file.
FXRTIM	6	Time that the data was retrieved and placed in the output file.
FXSYSN	8	Name of the system where the DSPPRB command was run to create this output file.
FXFORM	8	Format, which is always *FIX.
FXID	10	Problem identifier.
FXORG	20	System origin.
FXPTF	7	Program temporary fix (PTF) number.
FXPST	1	Program temporary fix (PTF) status:
		N Not requested.
		R Requested.
FXSFS	1	PTF save file status: "Y" = yes; "N" = no; "R" = yes (released)
FXPRD	7	PTF product ID or special value *ONLY. *ONLY represents PTFID(*ONLYPRD) specified on the SNDPTFORD command.
FXRLS	6	PTF release level (VxRxMx) or special value *ONLY. *ONLY represents PTFID(*ONLYRLS) specified on the SNDPTFORD command.

Note: All fields are of type C (character).

User Text (*USRTXT)

The output file produced for type *USRTXT has one record for each line of user-entered text (notes). Multiple text records may have the same problem identifier.

The record format is QSXTXOF. See the following "DSPPRB Fields for User Text Data (TYPE(*USRTXT))" table for the fields in the record.

Table 4. DSPPRB Fields for User Text Data (TYPE(*USRTXT))

Field Name	Length	Description
TXRCEN	1	Century that the data was retrieved and placed in the output file:
		0 20th century
		1 21st century
TXRDAT	6	Date that the data was retrieved and placed in the output file.
TXRTIM	6	Time that the data was retrieved and placed in the output file.
TXSYSN	8	Name of the system where the DSPPRB command was run to create this output file.
TXFORM	8	Format, which is always *USRTXT.
TXID	10	Problem identifier.
TXORG	20	System origin.
TXTYPE	1	Type of text:
		N Note
		S Problem description
TXTEXT	80	User-entered text.

Note: All fields are of type C (character).

Supporting Data Identifiers (*SPTDTA)

The output file produced for type *SPTDTA has one record for each item identified. Multiple records may have the same problem identifier. Items identified contain information related to the problem. The data identifier type indicates the type of item being identified. The information in other fields is dependent on the type of item being identified.

The record format is QSXSDOF. See the following "DSPPRB Fields for Supporting Data Identifier Data (TYPE(*BASIC))" table for the fields in the record.

Table 5. DSPPRB Fields for Supporting Data Identifier Data (TYPE(*SPTDTA))

Field Name	Length	Description
SDRCEN	1	Century that the data was retrieved and placed in the output file:
		0 20th century
		1 21st century
SDRDAT	6	Date that the data was retrieved and placed in the output file.
SDRTIM	6	Time that the data was retrieved and placed in the output file.
SDSYSN	8	Name of the system where the DSPPRB command was run to create this output file.
SDFORM	8	Format, which is always *SPTDTA.
SDID	10	Problem identifier.
SDORG	20	System origin.
SDTYPE	1	Type of identifier:
		S Spooled file identifier
SDNAM1	10	Identifier name 1:
		Type S Spooled file name
SDNAM2	10	Identifier name 2:
		Type S Job name
SDNAM3	10	Identifier name 3:
		Type S User name
SDJNBR	10	Job number
SDFNBR	10	Spooled file number

Note: All fields are of type C (character).

Examples for DSPPRB

Example 1: Displaying Today's Problem Log Entries

```
DSPPRB  PERIOD((*AVAIL  *CURRENT)  (*AVAIL  *CURRENT))
```

This command shows all problem log entries that were created today.

Example 2: Creating an Output File

```
DSPPRB  OUTPUT(*OUTFILE)  OUTFILE(*CURLIB/NEWFILE)
```

This command creates a member in the physical file NEWFILE in the current library which contains a record for each problem log entry in the problem log.

Example 3: Displaying a List of Hardware Problems

```
DSPPRB  SEV(1 2)  HARDWARE(9347 001 10-7523489)
```

This command shows a list containing problems with the hardware specified by the user. The user has specified that the command track medium-to-high levels of severity.

Example 4: Displaying a List of Problems That Have Been Opened

```
DSPPRB  STATUS(*OPENED)  PERIOD((*AVAIL  *CURRENT)
  (120000  *CURRENT))  LICPGM(5716SS1  03  00)
  PGM(QNOPGM)
```

This command shows a list containing problems that have been opened during the period starting at midnight and ending at noon on the current day, and have not yet been analyzed. This command also identifies the specified licensed program identifier and program name as the probable cause of the failure.

Example 5: Displaying a List of Machine-Detected Problems

```
DSPPRB  RESOURCE(TAP01)  MSGID(CPF6788)
```

This command shows a list containing machine-detected problems that were opened due to the message, CPF6788, having been sent to the system operator message queue. The list of problems includes user-detected problems. To get the user-detected problems, the user specified the resource name and message identifier by using the Analyze Problem (ANZPRB) command.

Example 6: Displaying a List of Reported Problems

```
DSPPRB  SRVID(12345)
```

This command shows a list containing problems that have been reported to an IBM service support center and have 12345 as the service identifier.

Error messages for DSPPRB

*ESCAPE Messages

CPF7A9C
> Cannot work with the problem log at this time.

CPF9845
> Error occurred while opening file &1.

CPF9847
> Error occurred while closing file &1 in library &2.

DSPPGM (Display Program) Command Description

DSPPGM Command syntax diagram

Purpose

The Display Program (DSPPGM) command displays information about a program. The display includes information about the compiler, certain processing attributes of the program, the type of program (ILE or OPM), the size of the program, and the number of parameters that can be passed to the program when it is called.

Restrictions:

1. You must have *READ authority to the program and *EXECUTE authority to the library to use this command.
2. You must have *USE authority to the program when DETAIL(*MODULE) is specified.

Required Parameter

PGM   Specifies the qualified name of the program for which information is displayed.

The name of the program can be qualified by one of the following library values:

> ***LIBL:** All libraries in the job's library list are searched until the first match is found.

> ***CURLIB:** The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

> *library-name:* Specify the name of the library to be searched.

program-name: Specify the name of the program for which information is displayed.

Optional Parameters

OUTPUT

Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

DETAIL

Specifies the type of information displayed for the service program. More than one value can be specified, but a list of values must not include *ALL. *ALL must be specified as a single value.

Note: DETAIL(*ALL) or DETAIL(*BASIC) are the only values valid for original program model (OPM) programs. All values other than *ALL or *BASIC are ignored for an OPM program.

> ***ALL:** All of the DETAIL information types (*BASIC, *SIZE, *MODULE, *SRVPGM, *ACTGRPEXP, *ACTGRPIMP, and *COPYRIGHT) would be shown on the display. If the user has chosen the

information to be displayed on the screen, the user would be able to scroll through the information for each DETAIL, but would have to press enter (or PF12) to go from DETAIL to DETAIL.

*BASIC: General program information is shown.

*SIZE: The size and size limits for this program are shown.

*MODULE: A list is shown of the module objects bound by this program. The library shown for each module is the library that the module was in when the program was first created. If the module has been replaced by a module from a different library, this library name remains the name of the library that the module was in when the program was created. To determine the source that the module was created from, use option 5=Display description to see the source file, library, and member names.

*SRVPGM: A list is shown of the service programs bound by this program.

*ACTGRPEXP: A list is shown of the data items exported to the activation group specified in the data export entry in the binding specifications.

*ACTGRPIMP: A list is shown of the imports that are resolved by weak exports that had been exported to the activation group directory.

*COPYRIGHT: A list is shown of the copyrights for this service program.

Note:	The DETAIL values *SIZE, *MODULE, *SRVPGM, *ACTGRPIMP, *ACTGRPEXP, and *COPYRIGHT are valid only for integrated language environment (ILE) programs. Specifying one of these values for an original program model (OPM) program results in the *BASIC information being shown.

Examples for DSPPGM

Example 1: Displaying Program Information

```
DSPPGM   PGM(LIB01/PAYROLL)
```

This command displays information about the program named PAYROLL in library LIB01. The display is shown at the display station if requested by an interactive job, or printed if requested by a batch job.

Example 2: Printing Program Information

```
DSPPGM  PGM(CUSINQ)  OUTPUT(*PRINT)
```

This command displays information about a program named CUSINQ. The library list is used to find the program, and the information is printed.

Error messages for DSPPGM

*ESCAPE Messages

CPF2150
    Object information function failed.

CPF2151
    Operation failed for &2 in &1 type *&3.

CPF8122
    &8 damage on library &4.

CPF8123

Damage on object information for library &4.

CPF8129

Program &4 in &9 damaged.

CPF9803

Cannot allocate object &2 in library &3.

CPF9806

Cannot perform function for object &2 in library &3.

CPF9807

One or more libraries in library list deleted.

CPF9808

Cannot allocate one or more libraries on library list.

CPF9810

Library &1 not found.

CPF9811

Program &1 in library &2 not found.

CPF9820

Not authorized to use library &1.

CPF9821

Not authorized to program &1 in library &2.

CPF9830

Cannot assign library &1.

CPF9871

Error occurred while processing.

DSPPGMREF (Display Program References) Command Description

DSPPGMREF Command syntax diagram

Purpose

The Display Program References (DSPPGMREF) command provides a list of the system objects to which the specified programs refer.

Program Type
     System Objects

BASIC

*FILE (externally described) and *PGM

C   No information is provided for programs in C except for ILE C (program type CLE)

CBLLE

*FILE, *PGM, and *SRVPGM

CL   *FILE, *PGM, and *DTAARA

CLE   *SRVPGM

CLLE   *FILE, *PGM, *DTAARA, and *SRVPGM

COBOL

*FILE and *PGM (literal names on the CALL command)

CSP   *FILE, *PGM, *MSGF, *CSPMAP, and *CSPTBL

PASCAL
No information is provided for programs in Pascal

PL/I   *FILE and *PGM

RPG   *FILE, *DTAARA, *PGM

RPGLE
*FILE, *PGM, *DTAARA, and *SRVPGM

This information can be shown, printed, or written to (stored in) a database output file (an OUTFILE).

If the information is shown or printed, a list (by library) of the specified user-authorized programs, along with the objects referenced by each program, is created. For files, information about how each file is used (input, output, update, unspecified, or any combination of these four) is also shown or printed.

If the information is written to a database file, the database file will have a record format named QWHDRPPR. The fields in record format QWHDRPPR are the same as the fields in the IBM-supplied format QWHDRPPR in file QADSPPGM in the library QSYS. The following information is contained in the database file:

- The name of the program and its text description
- The name of the library containing the program
- The number of objects referenced by the program
- The qualified name of the system object
- The information retrieval dates
- The object type of the referenced object

For files, the record contains the following additional fields:

- The name of the file in the program (possibly different from the system object name if an override was in effect when the program was created)
- The program use of the file (1=input, 2=output, 4=update, 8=unspecified, or a number representing a combination of any of these four; for example, a code of 11 is a combination of 1, 2, and 8, which is input, output, and unspecified)
- The number of record formats referenced, if any
- The name of the record format used by the file and its record format level identifier
- The number of fields referenced for each format

Note: This command lists which objects are referenced when the object is created or updated using UPDPGM or UPDSRVPGM. The referenced object names and libraries listed may be different than the actual names of the objects, since this information is stored when the program is created. Entries can be added as the ILE program or service program is updated using UPDPGM or UPDSRVPGM, but entries are never removed. If the object has been moved since the program was created, or an override was in effect during creation, the names listed may differ from the actual names.

Restrictions:

1. The user must have object operational authority for the program.
2. Also, of the libraries specified by the library qualifier, only the libraries for which the user has read authority are searched for the programs.

Required Parameter

PGM   Specifies the qualified name of the program (or all programs) that has a list of the files and other related system objects that are referenced by the program. A specific program name or a generic program name is specified; either type can be optionally qualified by a library name. Only the libraries in the specified library qualifier that the user either owns or is authorized to use are searched for the program(s).

The name of the program can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

*USRLIBL: Only the libraries in the user portion of the job's library list are searched.

*ALL: All libraries in the system, including QSYS, are searched.

≫ ***ALLUSR**: User libraries are all libraries with names that do not begin with the letter Q except for the following:≪

#CGULIB	#DSULIB	#SEULIB
#COBLIB	#RPGLIB	
#DFULIB	#SDALIB	

≫ Although the following libraries with names that begin with the letter Q are provided by IBM, they typically contain user data that changes frequently. Therefore, these libraries are also considered user libraries:≪

QDSNX	≫ QSYS2xxxxx≪	QUSROND
QGPL	QS36F	QUSRPOSGS
QGPL38	QUSER38	QUSRPOSSA
QMPGDATA	QUSRADSM	QUSRPYMSVR
QMQMDATA	QUSRBRM	QUSRRDARS
QMQMPROC	QUSRDIRCL	QUSRSYS
QPFRDATA	QUSRDIRDB	QUSRVI
QRCL	QUSRIJS	QUSRVxRxMx
≫ QRCLxxxxx≪	QUSRINFSKR	
≫ QSYS2≪	QUSRNOTES	

Notes:

1. ≫ 'xxxxx' is the number of a primary auxiliary storage pool.≪
2. A different library name, of the form QUSRVxRxMx, can be created by the user for each release that IBM supports. VxRxMx is the version, release, and modification level of the library.

library-name: Specify the name of the library to be searched.

*ALL: All programs in the specified library (or all the libraries identified in the library qualifier to which the user has access) have their information shown.

generic*-program-name: Specify the name of the program or the generic name of several programs in the specified library (or all libraries identified in the library qualifier) that has information shown. 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 name specifies all objects with names that begin with the generic prefix for which the user has authority. If an asterisk is not included with the generic (prefix) name, the system assumes it to be the complete object name. For more information on the use of generic names, refer to generic names.

program-name: Specify the name of the program to have information shown.

Optional Parameters

OUTPUT

Specifies whether the output from this command is displayed, printed, or directed to a database file. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

*OUTFILE: The output is directed to the database file specified on the OUTFILE parameter.

OBJTYPE

Specifies the object type for which information is displayed.

*PGM: Only program information is displayed.

*ALL: Program information and SQL package information are displayed.

*SQLPKG: Only SQL package information is displayed.

*SRVPGM: Service program information is displayed.

*MODULE: Module information is displayed.

OUTFILE

Specifies the qualified name of the database output file in which the program-related information is written.

When creating the database output file, the current date, time, and system name must be included. The system name is the name of the source system, not the target system. If the specified file does not exist, the system creates a database output file and member. If the file is created, the description text is *'Outfile for DSPPGMREF'* and the public authority is *EXCLUDE.

Note: The format of the output file must be the same as QWHDRPPR of the system file QADSPPGM. More information on the OUTFILE format is in the Database Programming topic in the Information Center.

The name of the database file can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

database-file-name: Specify the name of the database output file in which the program-related information is placed. If the specified file is not found, a file by that name is created and stored in the specified library, or in *CURLIB if not qualified. This file can be used again when other DSPPGMREF commands are entered. The IBM-supplied database file QADSPPGM *cannot* be specified.

OUTMBR

Specifies the name of the database file member to which the output is directed.

Element 1: Member to Receive Output

*FIRST: The first member in the file receives the output. If OUTMBR(*FIRST) is specified and the member does not exist, the system creates a member with the name of the file specified on the OUTFILE parameter. If the member exists, the user has the option to add records to the end of the existing member or to clear the existing member and add the new records.

member-name: Specify the file member that receives the output. If OUTMBR(member-name) is specified and the member does not exist, the system creates it.

Element 2: Operation to Perform on Member

*REPLACE: The system clears the existing member and adds the new records.

*ADD: The system adds the new records to the end of the existing records.

Examples for DSPPGMREF

Example 1: Storing a List of Programs

```
DSPPGMREF   PGM(LIBRARY1/*ALL)   OUTPUT(*OUTFILE)
  OUTFILE(LIB2/FILE2)
```

This command creates a list of all authorized programs found in LIBRARY1, and of the files and other system objects that the programs reference. It stores the list in a database file named FILE2 in LIB2.

Example 2: Printing a List of Objects

```
DSPPGMREF   PGM(LIBRARY1/BILLING)   OUTPUT(*PRINT)
```

This command creates a list of system objects that are referenced by the BILLING program in LIBRARY1. The output is spooled for printing.

Additional Considerations

When the DSPPGMREF command is entered, the library is searched for the program or programs specified on the PGM parameter; then a group of records that give system object-related information about each program is created. The records are placed in the printer device file named QPDSPPGM. If OUTPUT(*PRINT) is specified on the command, the records are listed on the printer in the following order:

- Header information: Lists the DSPPGMREF command input values.
- Program-related information: Lists, for each program identified by the PGM parameter, all of the system objects (including files) that are referenced by the program. If more than one program is identified, the beginning of the next one follows the end of the previous one.

If the DSPPGMREF command is entered interactively and OUTPUT(*) is specified or assumed, the records in the printer device file are shown instead of being printed.

Error messages for DSPPGMREF

*ESCAPE Messages

CPF3033

Object &1 in library &2 not found.

CPF3034

Object &1 in library &2 not displayed.

CPF3052

Description for file &1 not available.

CPF3061

Record format &3 not found for outfile &1.

CPF3063

Output file &1 in &2 not physical file.

CPF3064

Library &1 not found.

CPF3066

Error creating output file &1 in &2.

CPF3067

Error while opening file &1 in &2.

CPF3068

Error while writing to file &1 in &2.

CPF3069

Error while closing file &1 in &2.

CPF3070

Error creating member &3 in file &1.

CPF3072

File &1 in &2 is a system file.

CPF3074

Not authorized to library &1.

CPF3075

Library &1 not available.

CPF3076

Error occurred when on display.

CPF3077

Error occurred when canceling display.

CPF3084

Error clearing member &3 in file &1.

DSPPTF (Display Program Temporary Fix) Command Description

DSPPTF Command syntax diagram

Purpose

The Display Program Temporary Fix (DSPPTF) command shows the program temporary fixes (PTFs) for a specified product.

Restriction: This command is shipped with public *EXCLUDE authority and the QPGMR, QSYSOPR, QSRV, and QSRVBAS user profiles have private authorities to use the command.

Optional Parameters

LICPGM

Specifies the product for which PTFs are shown. When LICPGM(*ALL) is specified, PTFs for all installed and supported products are shown.

*ALL: The PTFs of all installed and supported products are shown.

licensed-program: Specify the product for which PTFs are shown.

SELECT

Specifies which PTF is shown for the specified product. *ALL cannot be specified for the LICPGM parameter if a PTF number is specified on the SELECT parameter.

When LICPGM(*ALL) and SELECT(*ALL) are specified, all PTFs for all installed and supported products are shown.

When LICPGM(*licensed-program*) and SELECT(*ALL) are specified, PTFs for all releases of the specified products are shown.

*ALL: The status of all PTFs for the specified product is shown.

*ONORDER: The PTFs that are currently on order are shown. This special value allows a user to get a list of PTFs that are currently on order. This special value is valid for PTFs both on order and on the system, that is, in the QGPL library save file or in a loaded status.

*PTFSAVF: Only PTFs for which save files exist within the QGPL library are shown. This special value is useful to the base system user for determining which PTF save files are no longer needed. It is also useful for the service provider for determining which PTFs can be distributed.

*ACTRQD: The PTFs that have actions pending are shown. This special value is useful to the user for determining which PTFs require an action to become active.

Note: If *ACTRQD is specified, the exit programs that run can take a long time resulting in a delay in the appearance of the first screen.

PTF-number: Specify the PTF identification number of the PTF that is shown.

RLS Specifies the release level of the PTFs being displayed.

*ALL: The PTFs for all releases of the supported and installed products are displayed.

release-level: Specify the release level in VxRyMz format, where Vx is the version number, Ry is the release number, and Mz is the modification level. The variables x and y can be a number from 0 through 9, and the variable z can be a number from 0 through 9 or a letter from A through Z.

If the release-level specified is the release-level of the installed base option of the product, PTFs for all installed options of the product are displayed regardless of the release-level of the option. All PTFs for options that are supported at this release-level are also displayed.

If the release-level specified is not the release-level of the installed base option of the product, only PTFs for the product options that are supported or installed at that release-level are displayed.

COVERONLY

Specifies whether only the cover letter is displayed.

*NO: The cover letter is not displayed.

*YES: The cover letter is displayed.

OUTPUT

Specifies whether the output from this command is displayed, printed, or directed to a database file. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

*PRINT: The output is printed with the job's spooled output. The name of the spooled file is QSYSPRT.

*OUTFILE: The output is directed to the database file specified on the OUTFILE parameter.

OUTFILE

Specifies the qualified name of the output file that is used to store the requested DSPPTF information. This parameter is valid only if OUTPUT(*OUTFILE) is specified. The model output file is QADSPPTF in library QSYS.

The name of the file can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

file-name: Specify the name of the file that receives the PTFs.

OUTMBR

Specifies the name of the database file member to which the output is directed.

Element 1: Member to Receive Output

*FIRST: The first member in the file receives the output. If OUTMBR(*FIRST) is specified and the member does not exist, the system creates a member with the name of the file specified on the OUTFILE parameter.

member-name: Specify the file member that receives the output. If OUTMBR(member-name) is specified and the member does not exist, the system creates it.

Element 2: Operation to Perform on Member

*REPLACE: The system clears the existing member and adds the new records.

*ADD: The system adds the new records to the end of the existing records.

Examples for DSPPTF

Example 1: Printing Status of PTFs

```
DSPPTF   LICPGM(5722SS1)  OUTPUT(*PRINT)
```

This command produces a printout containing the status of PTFs for the product 5722SS1.

Example 2: Printing Information

```
DSPPTF   LICPGM(5722SS1)  SELECT(SI00034)  OUTPUT(*PRINT)
```

This command produces a printout containing detailed information about PTF SI00034 for the product 5722SS1.

Error messages for DSPPTF

CPF0C4B

Product availability object &2/&1 recovery required.

CPF0C4C

Cannot allocate object &1 in library &2.

CPF0C4D

Error occurred while processing object &1 in library &2.

CPF24B4

Severe error while addressing parameter list.

CPF358A

Release not valid.

CPF35BE

Product &1 &3 not supported or installed.

CPF35F5

Cover letter not found for PTF &1-&2 &3

CPF3925

Cannot open file &1.

CPF3950

Error message &2 received for file &1. Request ended.

CPF6601

No PTF activity exists for product &1.

CPF6602

PTF &1-&2 &3 not found.

CPF6603

No PTFs found.

CPF6613

No PTFs met selection criteria.

CPF8191

Product definition &4 in &9 damaged.

CPF8193

Product load object &4 in &9 damaged.

CPF9860

Error occurred during output file processing.

DSPPGMVAR (Display Program Variable) Command Description

DSPPGMVAR Command syntax diagram

Purpose

The Display Program Variable (DSPPGMVAR) command shows the current value of one or more program variables in a program that is being debugged. The variables can be specified either by their variable names or by their machine-interface object-definition-table-vector (MI ODV) numbers. Up to 10 variables can be specified.

Restrictions:

1. This command is valid only in debug mode. To start debug mode, refer to the STRDBG (Start Debug) command.
2. This command cannot be used if the user is servicing another job, and that job is on a job queue, or is being held, suspended, or ended.
3. This command cannot be used to display variables in a bound program.
4. This command cannot be used to display variables within the system domain unless the user has *SERVICE special authority.

Required Parameter

PGMVAR

Specifies the names of from 1 through 10 program variables whose values are shown. The variables can be in a high-level language (HLL) or machine-interface (MI) program.

Element 1: Program Variables

*CHAR: This special value is specified instead of a variable name if a basing pointer is also specified. This special value displays a character view of a pointer being shown without the use of a based variable.

'program-variable': Specify the names of from 1 through 10 program variables to be shown. The name must be enclosed in apostrophes if it contains special characters.

If the program variable is an array, the subscripts representing an element in the array can be specified. If an array name is specified without any subscripts, all of the array elements are recorded. A single-dimensional cross-section can also be specified. Up to 132 characters may be specified for this program variable entry. This includes any qualifiers, subscripts, embedded blanks, parentheses, and commas. It does not include the enclosing apostrophes when special characters are used. An integer, MI ODV number, asterisk (single-dimensional cross-section), or a numeric variable name can be specified for a subscript. For more information on the program-variable value, refer to parameter values used for testing and debugging in the Information Center.

Some examples are:

```
PGMVAR(A)
PGMVAR('A(2,B)')
PGMVAR('B(I1,*,I3)')
PGMVAR('VAR1 OF A(I,J IN B)')
```

Element 2: Basing Pointers

'basing-pointer': Specify up to five basing pointers for the each program variable being displayed. In some languages, the program variable may be based on a pointer variable. This set of values allows the user to specify the basing pointers for the variable to be displayed. Each basing pointer name must be enclosed in apostrophes if it contains special characters.

If the basing pointer is an array, the subscripts representing an element in the array must be specified. Up to 132 characters can be specified for a basing pointer name. This includes any qualifiers, subscripts, embedded blanks, parentheses, and commas. It does not include the enclosing apostrophes when special characters are used. An integer, MI ODV number, or a numeric variable name can be specified for a subscript. For more information on the basing pointer value, refer to parameter values used for testing and debugging in the Information Center.

Some examples are:

```
PGMVAR(('VAR1(B,5)' 'PTR2(C,P2)'))
PGMVAR((VAR2 (BASEPTRA BASEPTRB)))
```

Optional Parameters

START

Specifies, for string variables only, the starting position in the string from which its value is being displayed. If more than one string variable is specified in the PGMVAR parameter, the same starting position value is used for each one. For a bit string, the value specifies the starting bit position; for a character string, the value specifies the starting character position.

1: The scope of the open data path (ODP) is the job in which the Program variables occurs. If the job is multi-threaded, only those opens from the same thread can share this ODP.

starting-position: Specify the first position in the string being displayed. The START value specified must not be larger than the maximum string length for any variable specified, except that START(1) is allowed if the maximum length for a string is zero. The LEN value, plus the START position minus one, must not be greater than the maximum string length. These checks are made for each string variable specified in the PGMVAR parameter.

LEN   Specifies, for string variables only, the length of the string shown when the breakpoint is reached, starting at the position specified by the START parameter. If more than one string variable is specified in the PGMVAR parameter, the same value is used for each one. For a bit string, the value specifies the number of bits shown; for a character string, the value specifies the number of characters shown.

*DCL: The string variable is shown to the end of the string or for a value of 200 bytes, whichever is less. If the string variable has a maximum length of zero, only LEN(*DCL) is allowed.

displayed-length: Specify the length of the data shown. The length (as well as the combination of START and LEN) must be no greater than the length of the shortest string specified in the PGMVAR parameter.

OUTFMT

Specifies the format in which the objects are shown.

*CHAR: The program variables are shown in character form.

*HEX: Program variables are shown in both character format and hexadecimal format.

OUTPUT

Specifies whether the output from the command is shown at the requesting display station or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

PGM   Specifies the name of the program that contains the program variables shown.

*DFTPGM: The program currently specified as the default program has its variables shown.

program-name: Specify the name of the program whose program variables are shown.

RCRLVL

Specifies which recursion level of the program contains the variables being shown. Recursion level 1 is the first (or earliest) call of the program, recursion level 2 is the second call of the program, and so on to the last (most recent) recursion level in the stack. For example, if program A calls program B, and then program B calls program A, a new recursion level of program A is formed. Some high-level languages also allow recursive procedures. For these programs, refer to the appropriate high-level language manual for more information.

*LAST: The last (most recent) call of the program contains the pointer being shown.

recursion-level-number: Specify the number of the recursion level of the program containing the pointer being shown.

Examples for DSPPGMVAR

Example 1: Displaying Program Variables

```
DSPPGMVAR   PGMVAR('&QUANT')  PGM(MYPROG)
```

Assuming that the program MYPROG is in debug mode, this command shows the name and current value of the CL variable called &QUANT its type and length are also shown.

Example 2: Displaying Program Variables

```
DSPPGMVAR   PGMVAR(TOTSALES   MANHRS)
   PGM(REGION)  RCRLVL(1)
```

This command shows the program variables TOTSALES and MANHRS of the first call of the program REGION.

Error messages for DSPPGMVAR

<u>*ESCAPE Messages</u>

CPF1999
> Errors occurred on command.

DSPPGMADP (Display Programs that Adopt) Command Description

DSPPGMADP Command syntax diagram

Purpose

The Display Programs that Adopt (DSPPGMADP) command is used to show objects that adopt the special and private authorities of the specified user profile. This is a convenient way to check security exposure due to program adoption.

Restrictions:

1. The user of this command must have *OBJMGT authority to the user profile.
2. The user profile specified on the command will be locked while the command is running. The lock prevents such things as objects having their ownership changed. If this profile owns a lot of objects, the profile could be locked for an extended period of time.

Required Parameter

USRPRF
> Specifies the name of the user profile whose authorities are adopted. Up to 10 characters can be specified.

Optional Parameters

OBJTYPE
> Specifies the type of object shown.
>
> **<u>*ALL:</u>** All objects that adopt the user profile specified on the USRPRF parameter are shown.
>
> ***PGM:** Only programs that adopt the specified user profile are shown.
>
> ***SQLPKG:** Only Structured Query Language (SQL) packages that adopt the specified user profile are shown.
>
> ***SRVPGM:** Only service programs that adopt the specified user profile are shown.

OUTPUT

Specifies whether the output from the command is shown at the requesting work station, printed with the job's spooled output, or directed to a database file. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

*OUTFILE: The output is directed to the database file specified on the OUTFILE parameter.

OUTFILE

Specifies the qualified name of the database file to which output of the display is directed. If this file does not exist, this command creates a database file in the specified library. If this function creates the file, the text states 'Outfile for DSPPGMADP', and the public authority is *EXCLUDE.

The name of the output database file can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

database-file-name: Specify the name of the database file.

OUTMBR

Specifies the name of the database file member to which the output is directed.

Element 1: Member to Receive Output

*FIRST: The first member in the file receives the output. If OUTMBR(*FIRST) is specified and the member does not exist, the system creates a member with the name of the file specified on the OUTFILE parameter. If the member exists, the user has the option of either adding records to the end of the existing member or clearing the existing member and adding the new records.

member-name: Specify the file member that receives the output. If OUTMBR(member-name) is specified and the member does not exist, the system creates it.

Element 2: Operation to Perform on Member

*REPLACE: The system clears the existing member and adds the new records.

*ADD: The system adds the new records to the end of the existing records.

Example for DSPPGMADP

```
DSPPGMADP  USRPRF(xxx)  OUTPUT(*PRINT)
```

This command causes the objects that adopt the special and private authorities of user profile (xxx) to be printed.

Error messages for DSPPGMADP

*ESCAPE Messages

CPF2204

User profile &1 not found.

CPF2213

Not able to allocate user profile &1.

CPF2217

Not authorized to user profile &1.

CPF9845

Error occurred while opening file &1.

CPF9846

Error while processing file &1 in library &2.

CPF9850

Override of printer file &1 not allowed.

CPF9860

Error occurred during output file processing.

DSPPTFCVR (Display PTF Cover Letter) Command Description

DSPPTFCVR Command syntax diagram

Purpose

The Display Program Temporary Fix Cover Letter (DSPPTFCVR) command shows the program temporary fix cover letters for a specified product.

Restriction: This command is shipped with public *EXCLUDE authority and the QPGMR, QSYSOPR, QSRV, and QSRVBAS user profiles have private authorities to use the command.

LICPGM

Specifies the product for which cover letters are displayed.

*ALL: The cover letters for all installed and supported products are displayed.

licensed-program: Specify the product for which cover letters are displayed.

SELECT

Specifies which cover letter is displayed for the specified product.

When LICPGM(*ALL) and SELECT(*ALL) are specified, all cover letters for all installed and supported products are displayed.

When LICPGM(*licensed-program*) and SELECT(*ALL) are specified, cover letters for all releases of the specified product are displayed.

*NOTAPY: All cover letters of the PTFs that are not already applied or superseded for the specified product are displayed.

*ALL: All cover letters for the specified product are displayed.

PTF-number: Specify the PTF identification number of the cover letter that is displayed. A maximum of 300 PTF numbers can be specified.

RLS Specifies the release level of the PTFs being displayed.

*ALL: The cover letters for all releases of the supported and installed product are displayed.

release: Specify the release level in VxRyMz format, where Vx is the version number, Ry is the release number, and Mz is the modification level. The variables x and y can be a number from 0 through 9, and the variable z can be a number from 0 through 9 or a letter from A through Z.

If the release specified is the release of the installed base option of the product, cover letters for all installed options of the product are displayed regardless of the release of the option. All cover letters for options that are supported at this release are also displayed.

If the release specified is not the release of the installed base option of the product, only cover letters for the product options that are supported or installed at that release are displayed.

CVRATR

Specifies which cover letter to display based on the attributes in the cover letter.

*ALL: All cover letters are displayed.

*SPCINST: Only cover letters with special instructions are displayed.

*PREIMM: Only cover letters with special instructions that need to be followed before being applied or removed immediately are displayed.

*PREOPR: Only cover letters with special instructions that need to be followed before being applied or removed (immediately or delayed) are displayed.

*PREDLY: Only cover letters with special instructions that need to be followed before being applied or removed during an IPL (delayed) are displayed.

*POSTOPR: Only cover letters with special instructions that need to be followed after being applied or removed are displayed.

*UNKNOWN: Display the cover letters for which the system cannot detect if they have attributes. The most likely reasons are when the PTF cover letter was created prior to operating system release V5R1M0, or the cover letter was created using the System Manager for AS/400 licensed program.

CVRLTRLNG

Specifies the language feature code that is used to display the cover letters.

*DFT: Cover letters are displayed in the default language feature code. If there is only one cover letter for the PTF, it will be displayed. If there is more than one cover letter for the PTF, the following criteria will be used to determine which cover letter to display.

- The language feature code that matches the service contact information (WRKCNTINF).
- If no language feature code matches the service contact information, the language feature code that matches the operating system will be used.
- If no cover letters match the language feature code in the service contact information, or the language feature code of the operating system, all cover letters for the PTF will be displayed. The user will be given a list of language feature codes to chose from (if requested by an interactive job) or all cover letters will be printed with the job's spooled output (if requested by a batch job).

*ALL: Cover letters for all languages are displayed.

feature-code: Cover letters for the selected language feature code are displayed. If a cover letter for the selected language feature code is not available, no cover letter is displayed for the PTF. More information on language feature code identifications and a list of IBM-supplied language feature codes is in the Software Installation book.

OUTPUT

Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in Commonly used parameters.

*: 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. The name of the spooled output file is QSYSPRT.

Example for DSPPTFCVR

Example 1: Print PTF cover letters

```
DSPPTFCVR  LICPGM(5722SS1)  SELECT(SI00034)  OUTPUT(*PRINT)
```

This command produces a printout of the cover letter for PTF SI00034 in the product 5722SS1.

Error messages for DSPPTFCVR

*ESCAPE Messages

CPF0C4B

   Product availability object &2/&1 recovery required.

CPF0C4C

   Cannot allocate object &1 in library &2.

CPF0C4D

   Error occurred while processing object &1 in library &2.

CPF3586

   List of PTFs not correct.

CPF358A

   Release not valid.

CPF35BE

   Product &1 &3 not supported or installed.

CPF35F5

   Cover letter not found for PTF &1-&2 &3.

CPF35D5

   Cover letter NLV not valid.

CPF6601

   No PTF activity exists for product &1.

CPF6602

   PTF &1-&2 &3 not found.

CPF6603

   No PTFs found.

≫

DSPRCVCMD (Display Received Commands) Command Description

Note: To use this command, you must have the 5722-MG1 (Managed System Services for iSeries) licensed program installed.

DSPRCVCMD Command syntax diagram

Purpose

The Display Received Commands (DSPRCVCMD) command shows all remote command requests that are active on the managed system.

Restriction:

Public authority for this command is *USE.

Optional Parameter

OUTPUT

Specifies whether the output from the command is shown on the display of the workstation that entered the command or printed with the job's spooled printer output.

*: The output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

Example for DSPRCVCMD

```
DSPRCVCMD   OUTPUT(*PRINT)
```

This command displays all remote command requests that are active on the managed system to a spooled file.

Error messages for DSPRCVCMD

None

DSPRCDLCK (Display Record Locks) Command Description

DSPRCDLCK Command syntax diagram

Purpose

The Display Record Locks (DSPRCDLCK) command allows the user to show the current record lock status of a particular database physical file member. This command displays the lock status for a particular relative record number, or the lock status of all locked records in the member.

Required Parameter

FILE   Specifies the qualified name of the physical file that contains the member whose record locks are shown on the display.

The name of the physical file can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

physical-file-name: Specify the name of the physical file.

Optional Parameters

MBR   Specifies the name of the member in the file whose record locks are shown on the display.

*FIRST: The first member in the database file is used.

member-name: Specify the name of the physical file member that is shown.

RCDNBR

Specifies a particular relative record number or all records of a member.

*ALL: The lock status of all records currently locked in a physical file member is shown on the display.

record-number: Specify the number of the record whose lock status is shown on the display.

OUTPUT

Specifies whether the output from the command is shown at the requesting work station or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

Example for DSPRCDLCK

```
DSPRCDLCK   FILE(MASTER/PAYROLL)  MBR(*FIRST)
  RCDNBR(1)  OUTPUT(*)
```

This command shows the lock status of relative record number 1, in the first member of the physical file named PAYROLL in the MASTER library.

Error messages for DSPRCDLCK

*ESCAPE Messages

CPF3130
Member &2 already in use.

CPF3210
File &1 in library &2 not correct type.

CPF3247
Record number &4 does not exist in member &3.

CPF3275
Member &3 file &1 in &2 not found.

CPF7D41
Error occurred while logging order assistance request.

CPF7D42
Error occurred while performing database operation.

CPF9803
Cannot allocate object &2 in library &3.

CPF9810
Library &1 not found.

CPF9812
File &1 in library &2 not found.

CPF9845
Error occurred while opening file &1.

CPF9846
Error while processing file &1 in library &2.

CPF9847
Error occurred while closing file &1 in library &2.

CPF9871
Error occurred while processing.

DSPRCYAP (Display Recovery for Access Paths) Command Description

DSPRCYAP Command syntax diagram

Purpose

The Display Recovery for Access Paths (DSPRCYAP) command is used to show or print the access path recovery status information and target access path recovery time for the system and for all auxiliary storage pools (ASPs) that are currently active or have available status on the system. ≫ Additionally, the output will include up to 500 access paths with the largest estimated access path recovery time which are not eligible for system-managed access-path protection and why they are not eligible. Also, the output will include up to 500 access paths with the largest estimated access path recovery time which are currently being protected by system-managed access-path protection. ≪

The system uses no more than the specified target access path recovery time when recovering access paths during an initial program load (IPL) ≫ or vary on of an independent ASP ≪ after an abnormal system end. Because access path recovery time is a target, performance may range around the target.

The time taken to rebuild access paths exposed while running the Copy File (CPYF), the Reorganize Physical File Member (RGZPFM), or the Restore Object (RSTOBJ) commands is not considered in the target access path recovery time of access paths protected with this command.

For more information on using this command, see the Journal management article in the Information Center.

Restriction: You must have job control special authority to use this command.

Optional Parameter

OUTPUT

> Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in commonly used parameters.
>
> ***:** The output requested by an interactive job is shown on the display. The output requested by a batch job is printed with the job's spooled output.
>
> ***PRINT:** The output is printed with the job's spooled output.

≫ **ASP**

> Specifies the ASP containing the access paths to be displayed.
>
> ***ALL:** The output requested will be the top 500 access paths across all active or available ASPs.
>
> ***ASPGRP:** The output requested will be the top 500 access paths across the input ASP group.
>
> *ASP-identifier:* Specify a value ranging from 1 through 32 to specify the identifier of the basic user ASP from which to list the top 500 access paths. Or specify the ASP device name of the independent user ASP from which to list the top 500 access paths. Valid values depend on the ASPs active or available on the system.

Note:	The value 1 is the system ASP. Values 2 to 32 denote all basic user ASPs. Independent ASPs are entered as device names.

ASPGRP

Specifies the name of the auxiliary storage pool (ASP) group from which to list the top 500 access paths. The ASP group name is the name of the primary independent ASP device within the ASP group.

auxiliary-storage-pool-group-name: Specify the name of the auxiliary storage pool (ASP) group from which to list the top 500 access paths. The ASP group name is the name of the primary independent ASP device within the ASP group. ≪

Examples for DSPRCYAP

≫ **Example 1: Displaying All Recovery Times for Access Paths** ≪

DSPRCYAP

This command shows the target access path recovery times and recovery status information for the system and ≫ active or available ≪ auxiliary storage pools. Output from the command is shown on the workstation if the command is run interactively, or printed with the job's spooled output if the command is run in batch.

≫ **Example 2: Printing Recovery Times for Access Paths for an ASP Group**

DSPRCYAP OUTPUT(*PRINT) ASP(*ASPGRP) ASPGRP(WAREHUS1)

This command shows the target access path recovery times and recovery status information for the independent ASP group WAREHUS1. Output from the command is printed with the job's spooled output. ≪

Error messages for DSPRCYAP

*ESCAPE Messages

CPF70FB

No authority to use command.

CPF70F4

Error occurred.

CPF700F

Access path recovery time for &1 set to *NONE.

CPF702E

Access path recovery times set to system defaults.

≫ **CPF9814**

Device &1 not found.

CPF9825

Not authorized to device &1. ≪

CPF9871

Error occurred while processing.

≫ **CPFB8ED**

Device description &1 not correct for operation. ≪

DSPRDBDIRE (Display Relational Database Directory Entry) Command Description

DSPRDBDIRE Command syntax diagram

Purpose

The Display Relational Database Directory Entry (DSPRDBDIRE) command is used to display one entry, generic entries, or all entries in the relational database directory.

Optional Parameters

RDB   Specifies the relational database directory entries being displayed.

   <u>*ALL:</u> All entries in the relational database directory are displayed.

   generic-relational-database-name:* Specify a generic relational database name. 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 name specifies all objects with names that begin with the generic prefix for which the user has authority. If an asterisk is not included with the generic (prefix) name, the system assumes it to be the complete object name. For more information on the use of generic names, refer to generic names.

   relational-database-name: Specify the name of the relational database being displayed.

OUTPUT
   Specifies whether the relational database directory information is displayed at the requesting work station, printed, or directed to an output file.

   <u>*:</u> Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

   ***PRINT:** The requested information is printed with the job's spooled output.

   ***OUTFILE:** The requested information is stored in an output file.

OUTFILE
   Specifies the qualified name of the output file to which the requested information is directed. If the file does not exist, it is created. If a new file is created, system file QADSPDE in system library QSYS with a record format name of RWRDDSP is used as a model. If the file already exists, it must have this format. This parameter is valid only if OUTPUT(*OUTFILE) is specified.

   The name of the database file can be qualified by one of the following library values:

   <u>*LIBL:</u> All libraries in the job's library list are searched until the first match is found.

   ***CURLIB:** The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

   library-name: Specify the name of the library to be searched.

   database-file-name: Specify the name of the file in which the requested information is to be located.

OUTMBR
   Specifies the output file member in which the requested relational database information is to be located. If the member does not exist, it is created. This parameter is valid only if OUTPUT(*OUTFILE) is specified.

Element 1: Member to Receive Output

*FIRST: The requested information is stored in the first file member.

member-name: Specify the name of the output file member in which the requested information is to be located. The member name can be from 1 to 10 characters in length.

Element 2: Operation to Perform on Member

*REPLACE: If the member exists, the system clears it and adds the new information.

*ADD: If the member exists, the system adds the new information to the existing records.

Examples for DSPRDBDIRE

Example 1: Directing Information to an Output File

```
DSPRDBDIRE    OUTPUT(*PRINT)
```

This command directs information from all of the relational database directory entries to a spooled file.

Example 2: Directing Information to an Output File

```
DSPRDBDIRE    OUTPUT(*OUTFILE)   OUTFILE(SAVEDIR)
```

This command directs all of the relational database directory entries to an output file named SAVEDIR. This is the usual method for backing up the contents of the relational database directory. The entries can be restored using a CL program that reads the information from the output file and issues Add Relational Database Directory Entry (ADDRDBDIRE) commands to add the information back into the relational database directory.

Error messages for DSPRDBDIRE

*ESCAPE Messages

CPF3EC3

Display relational database directory entry failed.

DSPRMTDFN (Display Remote Definition) Command Description

DSPRMTDFN Command syntax diagram

Purpose

The Display Remote Definition (DSPRMTDFN) command allows the user to display or print remote definitions for a system. The output can be displayed, printed, or directed to a database file.

Required Parameter

SYSTEM

Specifies the system name and system group of the remote system being displayed.

*ANY: Displays the default definition for a remote system not covered by the other entries.

*ALL: Displays all definitions for remote systems.

Element 1: System Name

system-name: Specify the name of the remote system to be displayed.

Element 2: System Group

system-group: Specify the group name of the remote system to be displayed. Do not specify this value if the group name is blank.

Optional Parameters

OUTPUT

Specifies whether the output from this command is displayed, printed, or directed to a database file. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

*OUTFILE: The output is directed to the database file specified on the OUTFILE parameter.

OUTFILE

Specifies the qualified name of the database file to which the output of this command is directed. If the file does not exist, the system creates a file in the specified library. If a new file is created, system file QAOCRMTDFN in system library QSYS with a record format name of RMTDFN is used as a model. If the file already exists, it must have this format.

The name of the file can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

file-name: Specify the name of the output file.

OUTMBR

Specifies the name of the database file member to which the output is directed.

Element 1: Member to Receive Output

*FIRST: The first member in the file receives the output. If OUTMBR(*FIRST) is specified and the member does not exist, the system creates a member with the name of the file specified on the OUTFILE parameter.

member-name: Specify the file member that receives the output. If OUTMBR(member-name) is specified and the member does not exist, the system creates it.

Element 2: Operation to Perform on Member

*REPLACE: The output data replaces existing records in the specified member.

*ADD: The output data is added after existing records in the specified member.

Examples for DSPRMTDFN

Example 1: Displaying a Specific Remote Definition

```
DSPRMTDFN  SYSTEM(RCHAS1)
```

This command displays the current attributes for remote system RCHAS1.

Example 2: Writing a Definition to an Output File

```
DSPRMTDFN  SYSTEM(*ALL)  OUTPUT(*OUTFILE)
  OUTFILE(RMTDFNOUT)
```

This command writes the current attributes for all defined remote systems to the output file RMTDFNOUT.

Error messages for DSPRMTDFN

<u>*ESCAPE Messages</u>

CPF6A50
>   Error was found during display file or printer file operation.

CPF6DCA
>   SYSTEM parameter cannot be local system.

CPF6DCC
>   Remote definition for system &1 &2 not found.

CPF9860
>   Error occurred during output file processing.

CPF9899
>   Error occurred during processing of command.

DSPSAVF (Display Save File) Command Description

DSPSAVF Command syntax diagram

Purpose

The Display Save File (DSPSAVF) command displays the save information in a save file. This information includes a description of each object saved to the save file and summary information.

The information can be written to a printer or shown on a display device.

Restriction: The user of this command must have use authority for the save file and read authority for the specified library.

Required Parameter

FILE   Specifies the qualified name of the save file to be shown on the display.

>   The name of the save file can be qualified by one of the following library values:

>>   **<u>*LIBL:</u>** All libraries in the job's library list are searched until the first match is found.

>>   ***CURLIB:** The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

>>   *library-name:* Specify the name of the library to be searched.

>   *file-name:* Specify the name of the file.

Optional Parameter

OUTPUT

Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

Example for DSPSAVF

```
DSPSAVF   FILE(ONLINE)  OUTPUT(*PRINT)
```

This command shows the objects saved to save file ONLINE. The output is printed with the job's spooled output.

Error messages for DSPSAVF

*ESCAPE Messages

CPD375A

Media error on save media.

CPF3704

Request ended; data management error occurred.

CPF3743

File cannot be restored, displayed, or listed.

CPF3782

File &1 in &2 not a save file.

CPF3782

File &1 in &2 not a save file.

CPF3792

Information not displayed. Error occurred.

CPF3793

Machine storage limit reached.

CPF3812

Save file &1 in &2 in use.

CPF9806

Cannot perform function for object &2 in library &3.

CPF9809

Library &1 cannot be accessed.

CPF9812

File &1 in library &2 not found.

CPF9820

Not authorized to use library &1.

CPF9822

Not authorized to file &1 in library &2.

CPF9850

Override of printer file &1 not allowed.

CPF9851

Overflow value for file &1 in &2 too small.

DSPSECA (Display Security Attributes) Command Description

DSPSECA Command syntax diagram

Purpose

The Display Security Attributes (DSPSECA) command displays the security attributes of the system, such as:

- The user ID number that will be used the next time a user ID number is generated.
- The group ID number that will be used the next time a group ID number is generated.
- The security level or the machine. The pending security level is shown if it is different than the current security level.
- The password level of the machine. The pending password level is shown if it is different than the current password level.

Optional Parameter

OUTPUT

> Specifies whether the output from the command is displayed at the requesting work station or printed with the job's spooled output.

> ***:** Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

Example for DSPSECA

```
DSPSECA  OUTPUT(*PRINT)
```

This command prints the current security attributes.

Error messages for DSPSECA

*ESCAPE Messages

CPFB304

> User does not have required special authorities.

DSPSECAUD (Display Security Auditing Values) Command Description

DSPSECAUD Command syntax diagram

Purpose

The Display Security Auditing Values (DSPSECAUD) command displays current information about the security audit journal and the current settings for the system values that control what is being audited on the system.

Restrictions:

You must have *ALLOBJ and *AUDIT special authorities to use this command.

Optional Parameter

OUTPUT

Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

*: 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.

Example for DSPSECAUD

DSPSECAUD

This command displays current information about the security audit journal and the current settings for the system values that control what is being audited on the system.

Error messages for DSPSECAUD

*ESCAPE Messages

CPFB304

User does not have required special authorities.

≫

DSPSVRAUTE (Display Server Authentication Entries) Command Description

DSPSVRAUTE Command syntax diagram

Purpose

The Display Server Authentication Entries (DSPSVRAUTE) command shows a list of server authentication entries for a specified user profile.

Optional Parameters

USRPRF

Specifies the user profile whose server authentication entries will be shown.

*CURRENT: Server authentication entries for the user running this command will be shown.

user-profile-name: Specify the name of the user profile whose server authentication entries will be shown.

OUTPUT

Specifies whether the output from the command is shown at the requesting work station or printed with the job's spooled output.

More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

Example for DSPSVRAUTE

DSPSVRAUTE

This command will show the server authentication entries for the currently running user.

Error messages for DSPSVRAUTE

DSPSRVA (Display Service Attributes) Command Description

DSPSRVA Command syntax diagram

Purpose

The Display Service Attributes (DSPSRVA) command displays information about how the system is set up to:

- Analyze problems
- Notify the service provider of problems
- Install a PTF
- Handle messages about critical system conditions

There are no parameters for this command.

Error messages for DSPSRVA

DSPSRVPGM (Display Service Program) Command Description

DSPSRVPGM Command syntax diagram

Purpose

The Display Service Program (DSPSRVPGM) command displays information about a service program, including the creation and processing attributes of the service program, information about the compiler, and the size of the service program.

Restrictions:

1. You must have *USE authority to the service program being displayed and *EXCUTE authority to the library in which the service program exists.
2. You must have *USE authority to the service program when DETAIL(*MODULE) is specified.

Required Parameter

SRVPGM

Specifies the name of the service program for which information is displayed or printed.

The name of the service program can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

service-program-name: Specify the name of the service program for which information is displayed.

Optional Parameters

OUTPUT

Specifies whether the output from the command is shown at the requesting work station or printed with the job's spooled output.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

DETAIL

Specifies the type of information displayed for the service program. More than one value can be specified, with the exception of *ALL, which must be specified as a single value.

*ALL: All of the DETAIL information types (*BASIC, *SIZE, *MODULE, *SRVPGM, *PROCEXP, *DTAEXP, *ACTGRPEXP, *ACTGRPIMP, *SIGNATURE, and *COPYRIGHT) are shown on the display. If the user has chosen the information to be displayed on the screen, the user would be able to scroll through the information for each DETAIL, but would have to press Enter (or PF12) to go from DETAIL to DETAIL.

*BASIC: General service program information is shown.

*SIZE: The size and size limits are shown.

*MODULE: A list of the module objects bound by this service program is shown. The library shown for each module is the library that the module was in when the service program was first created. If the module has been replaced by a module from a different library, this library name remains the name of the library that the module was in when the service program was created. To determine the source that the module was created from, use option 5=Display description to see the source file, library, and member names.

*SRVPGM: A list of the service program objects bound by this service program is shown.

*PROCEXP: A list of the procedures exported from a service program and specified in the binding language is shown. The exports are only for the current signature.

*DTAEXP: A list of the data items exported from a service program and specified in the binding language is shown. The exports are only for the current signature.

*ACTGRPEXP: A list is shown of the data items exported to the activation group specified in the data export entry in the binding specifications.

*ACTGRPIMP: A list is shown of the imports that are resolved by weak exports that had been exported to the activation group directory.

*SIGNATURE: A list of the signatures is shown. The first signature in the list is the current signature.

*COPYRIGHT: A list of the copyrights is shown.

Example for DSPSRVPGM

```
DSPSRVPGM    SRVPGM(COACH)
```

This command displays a service program object named COACH.

Error messages for DSPSRVPGM

*ESCAPE Messages

CPF2150
> Object information function failed.

CPF2151
> Operation failed for &2 in &1 type *&3.

CPF8122
> &8 damage on library &4.

CPF8123
> Damage on object information for library &4.

CPF813D
> Service program &4 in &9 damaged.

CPF9801
> Object &2 in library &3 not found.

CPF9802
> Not authorized to object &2 in &3.

CPF9803
> Cannot allocate object &2 in library &3.

CPF9806
> Cannot perform function for object &2 in library &3.

CPF9807
> One or more libraries in library list deleted.

CPF9808
> Cannot allocate one or more libraries on library list.

CPF9810
> Library &1 not found.

CPF9820
> Not authorized to use library &1.

CPF9830
> Cannot assign library &1.

CPF9871

        Error occurred while processing.

≫

DSPSRVPVDA (Display Service Provider Attributes) Command Description

Note: To use this command, you must have the 5722-SM1 (System Manager for iSeries) licensed program installed.

DSPSRVPVDA Command syntax diagram

Purpose

The Display Service Provider Attributes (DSPSRVPVDA) command displays the configuration attributes of the service provider. The system attributes include the following:

- Log remote problems
- Send PTFs automatically
- Shows the name of the message queue and library where you want to receive messages about remote system problems
- Maximum number of Kbytes of data that can be distributed
- Hold PTFs received
- Cover letter language
- Automatically forward requests to the next service provider.

The Change Service Provider Attributes (CHGSRVPVDA) command can be used to change the service provider attributes.

Example for DSPSRVPVDA

DSPSRVPVDA

This command displays the configuration attributes of the service provider.

Error messages for DSPSRVPVDA

<u>*ESCAPE Messages</u>

None ≪

DSPSRVSTS (Display Service Status) Command Description

DSPSRVSTS Command syntax diagram

Purpose

The Display Service Status (DSPSRVSTS) command shows information about the current service status of the specified job. This includes the name of the job it is servicing and/or the name of the job servicing the specified job.

Restriction: This command is shipped with public *EXCLUDE authority and the QPGMR, QSYSOPR, QSRV, and QSRVBAS user profiles have private authorities to use the command.

Optional Parameters

JOB Specifies which job is having its service status shown on the display. If no user name or job number are given, all of the jobs currently in the system are searched for the simple job name; the name specified must be unique within the system.

A job identifier is a special value or a qualified name with up to three elements. For example:

```
*
job-name
user-name/job-name
job-number/user-name/job-name
```

More information on this parameter is in commonly used parameters.

*: Status information is shown about the job in which the DSPSRVSTS command is entered.

job-name: Specify the name of the job whose status information is shown.

user-name: Specify the name of the user of the job whose status information is shown.

job-number: Specify the number of the job whose status information is shown.

DUPJOBOPT

Specifies the action taken when duplicate jobs are found by this command.

*SELECT: The selection display is shown when duplicate jobs are found during an interactive session. Otherwise, an escape message is issued.

*MSG: An escape message is issued when duplicate jobs are found.

Example for DSPSRVSTS

```
DSPSRVSTS
```

This command shows the service status information for the job from which the command is entered.

Error messages for DSPSRVSTS

*ESCAPE Messages

CPF3520

Job not found.

CPF3524

More than one job with specified name found.

CPF3925

Cannot open file &1.

CPF3950

Error message &2 received for file &1. Request ended.

DSPSFWRSC (Display Software Resources) Command Description

DSPSFWRSC Command syntax diagram

Purpose

The DSPSFWRSC (Display Software Resources) command allows the user to show, print, or write to an output file the list of installed software resources.

Optional Parameters

OUTPUT

Specifies whether the output from the command is displayed at the requesting work station, printed with the job's spooled output, or directed to a database file.

More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

*OUTFILE: The output is directed to the database file specified on the OUTFILE parameter.

Note: If OUTPUT(*OUTFILE) is used, the name of the database file is required.

OUTFILE

Specifies the qualified name of the database file to which the output of the command is directed. If the file does not exist, this command creates a database file in the specified library. If a new file is created, the system uses the physical file QARZLCOF in the library list as a model file. The file has a record format name of QARZLCGD. Field level information can be obtained using the Display File Field Description (DSPFFD) command and specifying QARZLCOF as the file name and *LIBL as the library. If this function creates the file, the text says "Output file for DSPSFWRSC". The authority for users other than those who have specific authority, group authority, or authority from an authorization list, is the same as the create authority specified for the library in which the file is created. This parameter is valid only if OUTPUT(*OUTFILE) is specified.

The name of the database file can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

database-file-name: Specify the name of the database file to which the output of the command is directed.

OUTMBR

Specifies the name of the database file member to which the output is directed. This parameter is valid only if OUTPUT(*OUTFILE) is specified.

Element 1: Member to Receive Output

*FIRST: The first member in the file receives the output. If OUTMBR(*FIRST) is specified and the member does not exist, the system creates a member with the name of the file specified on the OUTFILE parameter. If the member exists, the records may be added to the end of the existing member or the existing member may be cleared and the records added at the top of the member.

member-name: Specify the file member that receives the output. If OUTMBR(member-name) is specified and the member does not exist, the system creates it.

Element 2: Operation to Perform on Member

*REPLACE: The system clears the existing member and adds the new records.

*ADD: The system adds the new records to the end of the existing records.

Example for DSPSFWRSC

```
DSPSFWRSC  OUTPUT(*OUTFILE)  OUTFILE(*CURLIB/NAMES)
```

This command sends the output from the command to the first member of the file NAMES in the current library. The output replaces the information in the member.

Error messages for DSPSFWRSC

*ESCAPE Messages

CPF0C4A
> Product record not found.

CPF0C4B
> Product availability object &2/&1 recovery required.

CPF0C4C
> Cannot allocate object &1 in library &2.

CPF0C4D
> Error occurred while processing object &1 in library &2.

CPF0C54
> Data in product record not correct.

CPF9860
> Error occurred during output file processing.

CPF9871
> Error occurred while processing.

DSPSOCSTS (Display Sphere of Control Status) Command Description

DSPSOCSTS Command syntax diagram

Purpose

The Display Sphere of Control Status (DSPSOCSTS) command shows the status of the sphere of control including primary, default, backup, and requested nodes.

More information on sphere of control is in the Alerts Support book.

Optional Parameters

OUTPUT
> Specifies whether the output from the command is displayed at the requested work station or printed with the job's spooled printer output. More information on this parameter is in commonly used parameters.
>
> ***:** Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.
>
> ***PRINT:** The output is printed with the job's spooled output.

DETAIL
> Specifies whether the output from the command is printed as a list of nodes or as a detailed description of each node in the sphere of control.
>
> ***BASIC:** A list of nodes in the sphere of control is printed.
>
> ***FULL:** A list of nodes in the sphere of control with detailed information for each node is printed.

Example for DSPSOCSTS

```
DSPSOCSTS
```

This command shows the Sphere of Control Status display at the requesting work station.

Error messages for DSPSOCSTS

None

DSPSPLF (Display Spooled File) Command Description

DSPSPLF Command syntax diagram

Purpose

The Display Spooled File (DSPSPLF) command shows the data records in the specified spooled file. ≫ The current contents of the file (data records) can be displayed for spooled files which do not contain ASCII data. ≪ The display provides various functions to show the file and to scan for a specific character string.

Required Parameters

FILE Specifies the name of the spooled file whose records are to be displayed.

Optional Parameters

JOB Specifies the qualified name of the job and consists of as many as three elements. For example:

>   job-name

>   user-name/job-name

>   job-number/user-name/job-name

*N may be used in place of the user-name element to maintain position in the sequence. More information on this parameter is in commonly used parameters.

*: The job that issued this DSPSPLF command is the job that created the spooled file.

job-name: Specify the name of the job that created the spooled file.

user-name: Specify the name of the user of the job that created the spooled file.

job-number: Specify the number of the job that created the spooled file.

SPLNBR
>   Specifies the number of the job's spooled file that is being displayed. More information on this parameter is in commonly used parameters.

>   ***ONLY:** One spooled file from the job has the specified file name. The number of the spooled file is not necessary. If *ONLY is specified and more than one spooled file has the specified file name, a message is sent.

>   ***LAST:** The highest-numbered spooled file with the specified file name is displayed.

>   ≫ ***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 creation date and time parameter is to take precedence over the spooled file number when selecting a spooled file. ≪

spooled-file-number: Specify the number of the spooled file having the specified file name whose data records are displayed.

≫ **JOBSYSNAME**

Specifies the name of the system where the job that create 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 creation 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 creation 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 creation date and time parameter is to take precedence over the job system name when selecting a spooled file.

system name: Specify the name of the system where the job that created the spooled file ran.

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.

*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 creation 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: Date spooled file was created

date: Specify the date the spooled file was created.

Element 2: Time spooled file was created

*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 creation date.

*LAST: The spooled file with the latest creation time of the specified job name, user name, job number, spooled file name, spooled file number, job system name, and spooled file creation date is used.

time: Specify the time the spooled file was created. ≪

FOLD Specifies whether the records in the first display are folded if they are longer than the length of the display line.

*NO: The records are not folded. When the length of the record is longer than one line, the remaining positions of the record are not shown.

*YES: The first display shows the first record folded on one or more display lines if it is longer than one line.

Example for DSPSPLF

```
DSPSPLF  FILE(QPRINT)  JOB(PAYROLL01)  SPLNBR(4)
  FOLD(*NO)
```

In this example, the spooled file QPRINT is displayed. The file is the fourth file produced by the job PAYROLL01. The record positions that are longer than the length of the display line are truncated on the first display.

Error messages for DSPSPLF

***ESCAPE Messages**

CPF2207

        Not authorized to use object &1 in library &3 type *&2.

CPF3303

        File &1 not found in job &5/&4/&3.

CPF3308

        Error occurred when trying to display data.

CPF3309

        No files named &1 are active.

CPF3330

        Necessary resource not available.

CPF3340

        More than one file with specified name found in job &5/&4/&3.

CPF3342

        Job &5/&4/&3 not found.

CPF3343

        Duplicate job names found.

CPF3344

        File &1 number &2 no longer in the system.

CPF3359

        Not able to display data.

CPF3386

        File &1 in &2 not a data base file.

CPF3387

        Cannot display data in file &1 in &2.

CPF3394

        Cannot convert spooled file data.

CPF33F9

        Error occurred while displaying file &1 number &2.

CPF3427

        Job &5/&4/&3 not interactive job.

CPF3428

        DSPSPLF command ended for file &1 number &2.

CPF3429

        File &1 number &2 cannot be displayed, copied, or sent.

CPF3434

        Data in file &1 in &2 member &3 not in required format.

CPF3435

        Requested data not found in file &1 in &2 member &3.

CPF3478

        File &1 not found in job &5/&4/&3 on output queue &6 in library &7.

CPF3492

        Not authorized to spooled file.

CPF7D41

        Error occurred while logging order assistance request.

CPF7D42

      Error occurred while performing database operation.

CPF9812

      File &1 in library &2 not found.

CPF9815

      Member &5 file &2 in library &3 not found.

CPF9845

      Error occurred while opening file &1.

CPF9846

      Error while processing file &1 in library &2.

CPF9871

      Error occurred while processing.

≫

DSPSBMCRQA (Display Submitted Change Request Activities) Command Description

Note: To use this command, you must have the 5722-SM1 (System Manager for iSeries) licensed program installed.

DSPSBMCRQA Command syntax diagram

Purpose

The Display Submitted Change Request Activities (DSPSBMCRQA) command displays the list of activities for the selected change request.

Restriction: Only activities for a change request you submitted are displayed. If you have *JOBCTL special authority, you can view a list of activities for any change requests.

Required Parameter

CRQ   Specifies the change request name and the sequence number of the activity list to display.

        The possible change request name values are:

        change-request-name: Specify the name of the change request for which activities are displayed.

        The possible sequence number values are:

        sequence-number: Specify the change request sequence number.

Optional Parameters

STATUS

      Specifies the status criteria for displaying activities.

      Possible values are:

          *ALL: All change request activities display regardless of status.

          *HELD: Displays the activities with a status of Held.

*NOTSTARTED: Display the activities with a status of Not Started.

*SCHEDULED: Displays the activities with a status of Scheduled.

*WAIT: Displays the activities with a status of Wait.

*READY: Displays the activities with a status of Ready.

*STARTED: Displays only the activities with a status of Started.

*SENT: Displays only the activities with a status of Sent.

*NOTSENT: Displays only the activities with a status of Notsent.

*RUNNING: Displays only the activities with a status of Running.

*ENDING: Displays only the activities with a status of Ending.

*ENDED: Displays only the activities with a status of Ended.

ENDCODE
Specifies the end code for the change request activities displayed.

Possible values are:

*ANY: Display activities regardless of end codes.

*SUCCESS: Displays all activities with the highest end code between 0 and 9.

*FAIL: Displays all activities with the highest end code between 10 and 89.

*NOTRUN: Displays all activities with the highest end code between 90 and 99.

end-code: Specify the end code to use. Displays activities with the specified end code or an end code greater than the one specified. The valid values are 0 through 99.

OUTPUT
Specifies whether the command output files displays at the requested work station, or prints with the spooled output.

*: Displays output files requested by an interactive job. Batch job output prints with the job's spooled output.

*PRINT: The output prints with the job's spooled output.

Examples for DSPSBMCRQA

```
DSPSBMCRQA CRQ(CHG001 123456)
```

Displays the activities of the change request named CHG001 with the sequence number 123456.

Error messages for DSPSBMCRQA

*ESCAPE Messages

None «»

DSPSBMCRQM (Display Submitted Change Request Messages) Command Description

Note: To use this command, you must have the 5722-SM1 (System Manager for iSeries) licensed program installed.

DSPSBMCRQM Command syntax diagram

Purpose

The Display Submitted Change Request Messages (DSPSBMCRQM) command displays or prints a list of messages for one or more submitted change requests.

Restriction: Only messages for a change request that you submitted are displayed. If you have *JOBCTL authority, you can view the messages for any change requests.

Optional Parameters

CRQ   Specifies the qualified change request name used to display messages.

        Element 1: Change Request Name

        *ALL: Displays the messages for all change requests matching the selection criteria of the other parameters.

        change-request-name: Specify a change request name for which the messages are displayed.

        generic*-change-request-name: Specify the generic change request name for which messages are displayed. A generic name is a string containing one or more characters followed by an asterisk (*).

        Element 2: Sequence Number

        *ALL: Displays messages for the change request specified regardless of the sequence number.

        sequence-number: Specify a change request sequence number that identifies the change request for which messages are displayed.

ACTIVITY

    Specifies the name of the activity for which the messages are displayed.

    The possible values are:

    *ALL: Display all change request messages regardless of the activity name.

*LAST: Display the message for the last activity that runs. The actual stored name is *LAST.

activity-name: Specify a change request activity for which you want to display messages.

CPNAME

Specifies the APPN control point names of the managed systems on which this activity is to be performed.

Element 1: Network Identifier Values

*ALL: Messages are displayed regardless of the destination network ID.

*NETATR: Only change request activity messages for which the destination network ID is the same as the one defined in the network attributes for this system are displayed.

network-identifier: Specify a network ID. Only change request messages with the destination network ID and with the control point name specified are displayed.

Element 2: Control Point Values

*ALL: Messages display regardless of the destination node control point name.

*NETATR: Only change request activity messages for which the destination control point name is the same as the one defined in the system network attributes are displayed.

control-point-name: Specify a control point name. Only change request activity messages for the destination network ID and for the control point name are displayed. For NetView Distribution Management Agents, the control point name is the change control client which supports numeric characters (0-9) in the first position of control point names that are valid in other platforms.

SEV   Specifies that the severity level for which messages are displayed.

0: All messages in the message queue specified are shown.

severity-code: Specify a value 0 through 99. Displays messages with a severity code equal to or greater than the value specified.

PERIOD

Specifies a period of time for which the messages for either the change requests or message requests are displayed. The following values can be coded in this parameter, which contains two lists of two elements each:

Element 1: Starting Time

One of the following is used to specify the starting time at which or after which the change request message must have been logged. Change requests logged before the specified time and date are not displayed.

*AVAIL: The change request messages that are available for the specified starting date are displayed.

start-time: Specify the starting time for the specified starting date that indicates the change requests to be displayed.

Element 2: Starting Date

One of the following is used to specify the starting date on which or after which the change requests messages must have been logged. Messages logged before the specified date are not displayed.

*BEGIN: The change request messages from the beginning of the log are displayed. If *BEGIN is specified, then any start time value other than *AVAIL for start-time is ignored.

*CURRENT: The change request messages logged today between the specified starting and ending times are displayed.

start-date: Specify the starting date for which change request messages are displayed.

Element 3: Ending Time

One of the following is used to specify the ending time before which the change request messages must be logged.

*AVAIL: The change request messages that are available for the specified ending date are displayed.

end-time: Specify the ending time for the specified ending date that determines the change request messages to be displayed.

Element 4: Ending Date

One of the following is used to specify the ending date before which or on which the change request messages must have been logged.

*END: The last day on which change request messages have been logged is the last day for which the change request messages are displayed. If *END is specified, then any time value other than *AVAIL for ending time is ignored.

*CURRENT: The change request messages submitted today between the specified starting and ending times are displayed.

end-date: Specify the ending date for which change request messages are displayed.

OUTPUT

Specifies that the output from the command is shown at the workstation requested, or prints with the job's spooled output.

*: Output requested by an interactive job is shown on the display. Batch job output prints with the job's spooled output.

*PRINT: The output prints with the job's spooled output.

Examples for DSPSBMCRQM

Example 1: Displaying All Messages for a Change Request

```
DSPSBMCRQM CRQ(CHG0001 000001)
```

This example shows how to display all messages for change request CHG0001 with sequence number 000001.

Example 2: Displaying All Severity 30 Messages for a Change Request

```
DSPSBMCRQM CRQ(CHG0001 000001)
  ACTIVITY(APLYPTF)  SEV(30)
```

This example shows how to display all change request messages for CRQ00001 000001 activity APLYPTF with severity greater than, or equal to 30.

Example 3: Displaying All Messages for a Specified Period

```
DSPSBMCRQM CRQ(CHGRQS*)  CPNAME(*NETATR CHICAGO)
  PERIOD((*AVAIL 08/31/02)   (*AVAIL *CURRENT ))
```

This example displays all messages for change requests starting with CHGRQS and that have a destination of CHICAGO. Only the messages logged between 8/31/02 and the current date are displayed.

Error messages for DSPSBMCRQM

*ESCAPE Messages

None ≪≫

DSPSBMCRQ (Display Submitted Change Requests) Command Description

Note: To use this command, you must have the 5722-SM1 (System Manager for iSeries) licensed program installed.

DSPSBMCRQ Command syntax diagram

Purpose

The Display Submitted Change Requests (DSPSBMCRQ) command allows you to display or print a list of submitted change requests.

Restriction: Only the change requests submitted by you are shown. If you have *JOBCTL special authority, all selected change requests are shown.

CRQ   **Element 1: Change Request Name**
Specifies the qualified change request name.

The possible change request name values are:

*ALL: Display all the qualified change requests.

change-request-name: Specify that only the specified change requests display.

generic*-change-request-name: Specify a generic change request name. A generic name is a character string containing one or more characters followed by an asterisk (*). Only the change request names matching or beginning with the string displays.

Element 2: Sequence Number

The possible sequence number values are:

*ALL: Display all selected change requests regardless of sequence number.

sequence-number: Specify that only the change requests with a sequence number display.

STATUS
Specifies the status of the change request to display.

*ALL: Display all qualified change requests regardless of status.

*SBM: Display only the change requests with a status of Submitting.

*ACTIVE: Display only the change requests with a status of Active.

*ENDED: Display the change requests with a status of Ended.

HIGHENDCDE
Specifies the highest end code or range for which change requests are displayed.

*ANY: Display all change requests regardless of the highest end code.

*FAIL: Display all change requests with the highest end code between 10 and 89.

*SUCCESS: Display all change requests with the highest end code between 0 and 9.

*NOTRUN: Display all change requests with the highest end code between 90 and 99.

highest-end-code: Specify the highest end code for which to display change requests. The valid values are 0 through 99.

LASTENDCDE
Specifies the last change request end code or range for which change requests are displayed.

*ANY: Display all change requests regardless of the last end code.

*FAIL: Display all change requests with the last end code between 10 and 89.

*SUCCESS: Display all change requests with the last end code between 0 and 9.

*NOTRUN: Display all change requests with the last end code between 90 and 99.

last-end-code: Specify the last end code for which to display change requests. The valid values are 0 through 99.

CRQD   Specifies the qualified name of the change request description object.

The possible library values are:

*ALL: Search all libraries in the system for the specified change request description.

library-name: Specify that only the library specified in this parameter be searched.

The possible values for change request description names are:

*ALL: Display all change requests regardless of their change request descriptions.

change-request-description: Specify that only change requests based on the specified change request description be displayed.

generic*-change-request-description: Specify a generic change request description name. A generic name is a character string containing one or more characters followed by an asterisk(*). Display only change requests based on the change request description names matching or beginning with the string.

SBM   Specifies the user profile that submitted the change request.

*ALL: Display all selected change requests regardless of submitter.

user-profile-name: Specify that only the change requests by the user profile name are displayed.

PERIOD

Specifies the period of time for which the change requests are displayed. The following values can be coded in this parameter, which contains two lists of two elements each:

Element 1: Starting Time

One of the following is used to specify the starting time at which or after which the change request must have been submitted. Change requests submitted before the specified time and date are not displayed.

*AVAIL: The change requests that are available for the specified starting date are displayed.

start-time: Specify the starting time for the specified starting date that indicates the change request to be displayed.

Element 2: Starting Date

One of the following is used to specify the starting date on which or after which the change requests must have been submitted. Entries submitted before the specified date are not displayed.

*BEGIN: Change requests are displayed beginning with the date that the first change request submitted. If *BEGIN is specified, then any time value other than *AVAIL for start-time is ignored.

*CURRENT: The change requests submitted today between the specified starting and ending times are displayed.

start-date: Specify the starting date for which change requests are displayed.

Element 3: Ending Time

One of the following is used to specify the ending time before which the change requests must be submitted.

*AVAIL: The change requests that are available for the specified ending date are displayed.

end-time: Specify the ending time for the specified ending date that determines the change requests to be displayed.

Element 4: Ending Date

One of the following is used to specify the ending date before which or on which the change requests must have been submitted.

*END: The last day on which change requests have been submitted is the last day for which the change requests are displayed. If *END is specified, then any value other than *AVAIL for ending time is ignored.

*CURRENT: The change requests submitted today between the specified starting and ending times are displayed.

end-date: Specify the ending date for which change requests are displayed.

PRBID
Specifies the problem identifier associated with the change requests to be displayed.

*ALL: Specifies that change requests are displayed regardless of the associated problem ID.

problem-identifier: Specify the associated problem ID for which the change request is displayed.

PRBORG
Specifies the originating system of the problem ID.

Element 1: Network Identifier

*ALL: Display change requests regardless of the problem origin network ID.

*NETATR: Display change requests with a problem origin network ID that is the same as the network ID in the system network attributes.

network-Identifier: Specify a problem origin network ID for which change requests are displayed.

Element 2: Control Point Name

*ALL: Display change requests regardless of the problem origin control point name of this system.

*NETATR: Display the change requests with the control point name that is the same as the control point name defined in the system network attributes.

control-point-name: Specify a problem origin control point name for which change requests are displayed.

OUTPUT
Specifies whether the output from the command shows at the requesting work station, or prints with the job's spooled output.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

*PRINT: Prints the output with the job's spooled output.

Examples for DSPSBMCRQ

Example 1: Displaying All Change Requests

```
DSPSBMCRQ (CRQ* *ALL)
```

This command displays all change requests with names that start with CRQ.

Example 2: Displaying All Change Requests That Failed

```
DSPSBMCRQ STATUS(*ENDED) LASTENDCDE(*FAIL)
```

This command displays all change requests that ended in a failed state.

Example 3: Displaying Change Requests by a Specific User

```
DSPSBMCRQ SBM(JOE) PERIOD((*AVAIL 08/31/02)
  (*AVAIL *CURRENT))
```

This command displays all change requests submitted by the user profile JOE beginning 31 August 2002 to the current date.

Example 4: Displaying Change Requests for a Specific Change Request Description

```
DSPSBMCRQ CRQD(CRQD001)
```

This command displays all submitted change requests based on the CRQD001 change request description.

Error messages for DSPSBMCRQ

<u>*ESCAPE Messages</u>

None

DSPSBSD (Display Subsystem Description) Command Description

DSPSBSD Command syntax diagram

Purpose

The Display Subsystem Description (DSPSBSD) command displays the information contained in a subsystem description. The types of information, which are shown on separate displays, include the following: operational attributes, pool definitions, autostart job entries, work station entries (by name and type), job queue entries, routing entries, communications entries, and remote location name entries. If this command is entered in a batch job, the information for *all* the types is printed with the job's spooled output.

Restriction: The user must have object operational and read authority for the subsystem description before its contents can be shown.

Required Parameter

SBSD   Specifies the qualified name of the subsystem description that is to be displayed.

The name of the subsystem description can be qualified by one of the following library values:

<u>*LIBL:</u> All libraries in the job's library list are searched until the first match is found.

***CURLIB:** The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

subsystem-description-name: Specify the name of the subsystem description to be displayed.

Optional Parameter

OUTPUT

> Specifies whether the output from the command is displayed at the requesting work station or printed with the job's spooled output. More information on this parameter is in commonly used parameters.
>
> ***:** Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.
>
> ***PRINT:** The output is printed with the job's spooled output.

Example for DSPSBSD

```
DSPSBSD  SBSD(LIB6/ORDER)  OUTPUT(*)
```

This command (if entered from a batch job) sends a complete set of display information about the subsystem description named ORDER (stored in LIB6 library) to the job's spooling queue for printing. The information includes the subsystem's attributes, all of the job entries, and all of the routing entries currently in the subsystem description. If the command is entered in an interactive job, the subsystem description menu is shown on a display from which an option may be chosen.

Error messages for DSPSBSD

*ESCAPE Messages

CPF1619

> Subsystem description &1 in library &2 damaged.

CPF1692

> Subsystem description &1 not displayed.

CPF9850

> Override of printer file &1 not allowed.

CPF9851

> Overflow value for file &1 in &2 too small.

CPF9861

> Output file &1 created in library &2.

CPF9871

> Error occurred while processing.

DSPSYSSTS (Display System Status) Command Description

DSPSYSSTS Command syntax diagram

Purpose

The Display System Status (DSPSYSSTS) command allows the user to display or print information about the current status of the system.

Optional Parameters

OUTPUT

> Specifies whether the output is displayed at the requesting work station or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

RESET

Specifies whether system status statistics fields are reset to zero, as if this is the first occurrence of the DSPSYSSTS command in this job. The value specified on this parameter does not affect the information presented for *BASIC assistance level.

*NO: The system status statistics are not reset.

*YES: The system status statistics are reset.

ASTLVL

Specifies which user interface to use.

*PRV: The previously used assistance level is presented.

*USRPRF: The assistance level defined in the user profile is presented.

*BASIC: The Operational Assistant user interface is presented.

*INTERMED: The system user interface is presented.

*ADVANCED: The system user interface expert mode is presented.

Example for DSPSYSSTS

```
DSPSYSSTS  OUTPUT(*PRINT)
```

This command prints the current system status information.

Error messages for DSPSYSSTS

None

DSPSYSVAL (Display System Value) Command Description

DSPSYSVAL Command syntax diagram

Purpose

The Display System Value (DSPSYSVAL) command displays the name and the value of the specified system value.

Restriction: You must have *ALLOBJ and *SECADM special authorities to change security related system values.

Required Parameter

SYSVAL

Specifies the name of the system value that is displayed. A complete list of system values that are shipped with the system is in the OS/400 system values topic in the Information Center.

Optional Parameter

OUTPUT

Specifies whether the output from the command is displayed at the requesting work station or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

Example for DSPSYSVAL

```
DSPSYSVAL    SYSVAL(QHOUR)
```

This command displays the current value of the system value QHOUR.

Error messages for DSPSYSVAL

*ESCAPE Messages

CPF1028
> &1 not valid for parameter SYSVAL.

CPF1074
> SYSVAL(QMONTH) not valid for Julian date format.

CPF9845
> Error occurred while opening file &1.

CPF9846
> Error while processing file &1 in library &2.

CPF9847
> Error occurred while closing file &1 in library &2.

CPF9850
> Override of printer file &1 not allowed.

CPF9851
> Overflow value for file &1 in &2 too small.

CPF9871
> Error occurred while processing.

DSPS36 (Display System/36) Command Description

DSPS36 Command syntax diagram

Purpose

The Display System/36 (DSPS36) command allows the user to show or print the description of the System/36 environment configuration. The description includes System/36 printers, display stations, general environment values, and (if the user is authorized) MRT security values.

Required Parameter

OUTPUT
> Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in commonly used parameters.
>
> ***:** The output is displayed at the requesting work station if requested by an interactive job. If this is not an interactive job, the output is printed with the job's spooled output.
>
> ***PRINT:** The output is printed with the job's spooled output.

Example for DSPS36

```
DSPS36  OUTPUT(*)
```

This command allows the user in an interactive job to display the System/36 environment description.

No error messages.

DSPTAP (Display Tape) Command Description

DSPTAP Command syntax diagram

Purpose

The Display Tape (DSPTAP) command shows the volume label and data file label information that is contained on a standard labeled magnetic tape or the volume type and density. Information includes an indication of whether the tape is written using improved data recording capability (IDRC) format. If the tape is not labeled, it shows the volume type and density.

If DATA(*SAVRST) is specified, the information includes a description of each object saved to the tape file and summary information about the saved objects.

The information can be printed or shown on a display device. This command allows the user to display a single file label or all file labels on a volume. Additional information can be displayed for save or restore files by specifying DATA(*SAVRST). (The user should know whether the tape being displayed contains data in the basic exchange format or in the save/restore format. But, if not known, the user can specify DATA(*LABELS) and check the data file identifiers listed. If the names of libraries are displayed, the data files are probably in the save/restore format.)

The volume for which information is displayed must be on the specified device. After some information is displayed and DATA(*SAVRST) is specified, the DSPTAP command can read more of the tape before additional information is displayed. If DATA(*SAVRST) is specified, the user is prompted to load the tape volumes on which the data continues.

Required Parameter

DEV Specifies the name of the tape or media library device where the volume being displayed is located.

Optional Parameters

VOL Specifies the tape volume to be displayed.

Note: If the device specified is a media library device, then the volume specified should be the cartridge identifier to be mounted and used.

> ***MOUNTED:** The volume currently placed in the device is used. For a media library device, the volume to be used is the next cartridge in the category mounted by the Set Tape Category (SETTAPCGY) command.
>
> *volume-identifier:* Specify the volume identifier of the labeled volume. The volume identifier read from the tape is compared to this value. If the volume identifier specified is not found on the tape, an escape message is sent.

LABEL
Specifies the data file identifiers of the data files on the tape whose labels are displayed. The data file identifier is stored in the file label ahead of the data in the file.

> *ALL:* All data file identifiers on the tape specified on the DEV parameter are shown.

data-file-identifier: Specify the data file identifier (17 alphanumeric characters maximum) of the data file for which label information is displayed. For save and restore files, the label is usually the library name, but it does not have to be.

≫ SEQNBR

Specifies, for volumes with multiple files, the range of sequence numbers of the data files on tape whose label information is displayed. If LABEL(*ALL) is specified or assumed, all labels for the files within the specified sequence number range are displayed after the specified starting file sequence number.

If a specific LABEL identifier is specified, it is compared with the label identifier of the data file specified by the starting sequence number. If the identifiers do not match, an error message is sent.

This parameter can be specified as a list of two values (Elements 1 and 2) or as a single value (*ALL).

Element 1: Starting File Sequence Number

<u>*FIRST:</u> The data file labels being displayed begin with the first file (or the only file) on the tape.

start-file-sequence-number: The valid range of sequence numbers is 1 through 16777215. If the specified starting file sequence number is not found on the tape, an error message is sent.

Element 2: Ending File Sequence Number

<u>*LAST:</u> The range of data file labels being displayed begins with the specified starting file sequence number and ends with the last data file label on tape.

*ONLY: Only the file specified in the starting sequence is displayed.

end-file-sequence-number: The valid range of sequence numbers is 1 through 16777215. The specified ending file sequence number must be greater than or equal to the starting file sequence number.

Note:	The ending file sequence number is ignored for OUTPUT(*) for an interactive job. The user has control and can continue to display information or end whenever they desire.

Note:	The ending file sequence number is ignored if a specific LABEL identifier is specified.

Other Single Values

*ALL: All data file labels on the tape are displayed. ≪

DATA   Specifies the type of information that is displayed.

<u>*LABELS:</u> The volume label and data file labels are displayed.

*SAVRST: The tape contains save and restore data. Summary information is shown for the command and each saved object. This option is valid only if the data file was created using one of the CL save commands.

OUTPUT

Specifies whether the output from the command is displayed at the requesting work station or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

<u>*:</u> Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

Note: For a tape created by the Save (SAV) command, each file is printed as a separate listing.

*OUTFILE: The output is directed to the database file specified on the OUTFILE parameter.

OUTFILE

Specifies the qualified name of the database file to which the information about the tape files is directed. If the file does not exist, this command creates a database file in the specified library. If a new file is created, the system uses QATADOF in QSYS as a model with the format name of QTADOUTF ≫ as a model ≪ .

This parameter is valid only when OUTPUT(*OUTFILE) and DATA(*LABELS) is specified.

≫ The name of the database file can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

database-file-name: Specify the name of the database file to which the output of the command is directed. ≪

OUTMBR

Specifies the name of the database file member to which the output is directed when OUTPUT(*OUTFILE) is specified.

Element 1: Member to Receive Output

*FIRST: The first member in the file receives the output. If OUTMBR(*FIRST) is specified and the member does not exist, the system creates a member with the name of the file specified on the OUTFILE parameter.

member-name: Specify the name of the file member that is to receive the output. If OUTMBR(*member-name*) is specified and the member does not exist, the system creates it. ≫ If the member exists, the user can add records to the end of the existing member or clear the existing member and add the records. ≪

Element 2: Operation to Perform on Member

*REPLACE: The existing records in the specified database file member are replaced by the new records.

*ADD: ≫ The new records are added to the existing information in the specified database file member. ≪

ENDOPT

Specifies the operation that is automatically performed on the tape volume after the operation ends. If more than one volume is included, this parameter applies only to the last tape volume used; all other tape volumes are rewound and unloaded when the end of the tape is reached.

*REWIND: The tape is automatically rewound, but not unloaded, after the operation has ended.

*UNLOAD: The tape is automatically rewound and unloaded after the operation ends.

Example for DSPTAP

```
DSPTAP   DEV(QTAPE2)  LABEL(*ALL)
```

The volume label and file labels on the tape volume that is on the tape device named QTAPE2 are displayed.

Error messages for DSPTAP

*ESCAPE Messages

CPD375A
> Media error on save media.

CPF3704
> Request ended; data management error occurred.

CPF3743
> File cannot be restored, displayed, or listed.

CPF3792
> Information not displayed. Error occurred.

CPF3793
> Machine storage limit reached.

CPF6708
> Command ended due to error.

CPF6718
> Cannot allocate device &1.

CPF6721
> Device &1 not a tape device.

CPF6723
> File not found on volume &2 on device &1.

CPF6724
> File label &5 not found on volume &2.

CPF6745
> Device &1 not a media library device.

CPF6751
> Load failure occurred on device &4.

CPF6760
> Device &1 not ready.

CPF6772
> Volume on device &1 cannot be processed.

CPF9814
> Device &1 not found.

CPF9825
> Not authorized to device &1.

CPF9845
> Error occurred while opening file &1.

CPF9846
> Error while processing file &1 in library &2.

CPF9847

> Error occurred while closing file &1 in library &2.

CPF9850

> Override of printer file &1 not allowed.

CPF9851

> Overflow value for file &1 in &2 too small.

DSPTAPCTG (Display Tape Cartridge) Command Description

DSPTAPCTG Command syntax diagram

Purpose

The Display Tape Cartridge (DSPTAPCTG) command displays the attributes of tape cartridges.

Required Parameter

DEV   Specifies the name of the library device to be used. The device name must have been created previously on the system using the Create Device Media Library (CRTDEVMLB) command.

Optional Parameters

CTG   Specifies a maximum of 40 cartridge identifiers to be displayed.

Note: The cartridge identifier should be the same as the external identifier if the library device has a bar code scanner to read external identifiers.

*ALL: All tape cartridges in the device or in the category specified are displayed.

generic*-cartridge-identifier: Specify the generic name of the cartridge identifier. 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 name specifies all objects with names that begin with the generic prefix for which the user has authority. If an asterisk is not included with the generic (prefix) name, the system assumes it to be the complete object name. For more information on the use of generic names, refer to generic names.

cartridge-identifier: Specify the cartridge identifier.

CGY   Specifies the category of tape cartridges to be shown.

Element 1: Category Name

*ALL: All categories are searched for the cartridge identifiers specified on the CTG parameter and all are displayed.

*NOSHARE: The cartridge identifiers in the *NOSHARE category are displayed. A cartridge with this identifier cannot be shared with other systems.

*IPL: The cartridge identifiers in the *IPL category are displayed. A cartridge with this identifier can be used for an alternate IPL.

*NL: The cartridge identifiers in the *NL category are displayed. A cartridge with this identifier is used as a non-labeled tape.

*SYSGEN: The cartridge identifiers in the *SYSGEN category are displayed. If the library device is in *SYSGEN mode, cartridges cannot be moved from the *SYSGEN category.

*CNV: The cartridge identifiers in the *CNV category are displayed. A cartridge in this category is for use with the convenience station.

category-name: Specify the name of a user-defined category. This category name must have been created previously with the Create Tape Category (CRTTAPCGY) command.

Element 2: Category System

This element identifies the system to which the category belongs. The system name is obtained from the pending system name field of a Display Network Attributes (DSPNETA) command. If there is no pending system name, the current system name attribute is used.

Attention
If the system name is changed, the category information associated with all tape cartridges in library devices owned by the system are no longer valid.

*CURRENT: The category belongs to the system currently running this command.

*ALL: All systems that own categories available to the system running this command are used.

system-name: Specify the name of the system to which the category belongs.

Single Values:

*SHARE400: The cartridge identifiers in the *SHARE400 category are displayed. A cartridge in this category can be shared with other systems attached to the same device.

*INSERT: The cartridge identifiers in the *INSERT category are displayed. A cartridge in this category has been placed in the library device, but its identifier has not been added to the system.

*EJECT: The cartridge identifiers in the *EJECT category are displayed. A cartridge in this category has had its identifier removed from the system and is no longer usable.

OUTPUT

Specifies whether the output from the command is displayed at the requesting work station, printed to an output file, or printed with the job's spooled output.

*: 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.

*OUTFILE: The output is directed to a database file specified on the OUTFILE parameter. The file must have the same format as database file QSYS/QATAVOF.

OUTFILE

Specifies the qualified name of the database file to which the information about the tape volumes is directed. If the file does not exist, this command creates a database file in the specified library. If a new file is created, the system uses QATAVOF in QSYS as a model with the format name of QTAVOLOF.

Note: This parameter is valid only when OUTPUT(*OUTFILE) is specified.

The name of the database file can be qualified by one of the following library values:

*LIBL: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

database-file-name: Specify the name of the database file to be used.

OUTMBR

Specifies the name of the database file member to which the output is directed when OUTPUT(*OUTFILE) is specified.

Element 1: Member to Receive Output

*FIRST: The first member in the file receives the output. If this value is specified and the member does not exist, the system creates a member with the name of the file specified on the OUTFILE parameter.

member-name: Specify the name of the file member that is to receive the output. If OUTMBR(*member-name*) is specified and the member does not exist, the system creates it.

Element 2: Operation to Perform on Member

*REPLACE: The existing records in the specified database file member are replaced by the new records.

*ADD: The system adds the new records at the end of the existing member.

Examples for DSPTAPCTG

Example 1: Displaying the Tape Cartridges in the *SHARE400 Category

```
DSPTAPCTG   DEV(LIB01)  CGY(*SHARE400)  OUTPUT(*)
```

This command displays the attributes of all tape cartridges in the *SHARE400 category on the work station display.

Example 2: Displaying the Tape Cartridge for VOL3

```
DSPTAPCTG   DEV(LIB01)  CTG(VOL3)  OUTPUT(*)
  CGY(*ALL)
```

This command displays the attributes of the cartridge identifier VOL3.

Error messages for DSPTAPCTG

*ESCAPE Messages

CPF6708

Command ended due to error.

CPF6711

Command not allowed

CPF6718

Cannot allocate device &1.

CPF6745

Device &1 not a media library device.

CPF67A6

Category does not exist

CPF67D2

      Cartridge does not exist

CPF67D4

      Category not available

CPF67E4

      Library device function not successful

CPF67E6

      Volume &2 is not correct

CPF67EA

      Function not successful

CPF67EC

      Library device description &1 does not exist

CPF67ED

      Library device &1 not available

CPF67F5

      Duplicate cartridge ID found

CPF9814

      Device &1 not found.

CPF9825

      Not authorized to device &1.

DSPTAPCGY (Display Tape Category) Command Description

DSPTAPCGY Command syntax diagram

Purpose

The Display Tape Category (DSPTAPCGY) command allows the user to display the categories defined through the Create Tape Category (CRTTAPCGY) command.

Optional Parameters

OUTPUT

      Specifies whether the output from the command is displayed at the requesting workstation, printed to an output file, or printed with the job's spooled output.

      <u>*</u>: 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.

      *OUTFILE: The output is directed to a database file specified on the OUTFILE parameter. The file must have the same format as database file QATACOF.

OUTFILE

      Specifies the qualified name of the database file to which the information about the tape volumes is directed. If the file does not exist, this command creates a database file in the specified library. If a new file is created, the system uses QATACOF in QSYS as a model with the format name of QTACOUTF. This parameter is valid only when OUTPUT(*OUTFILE) is specified.

      The name of the database file can be qualified by one of the following library values:

            <u>*LIBL</u>: All libraries in the job's library list are searched until the first match is found.

*CURLIB: The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name: Specify the name of the library to be searched.

database-file-name: Specify the name of the database file to be used.

OUTMBR
Specifies the name of the database file member to which the output is directed when OUTPUT(*OUTFILE) is specified.

Element 1: Member to Receive Output

*FIRST: The first member in the file receives the output. If OUTMBR(*FIRST) is specified and the member does not exist, the system creates a member with the name of the file specified on the OUTFILE parameter.

member-name: Specify the name of the file member that is to receive the output. If OUTMBR(*member-name*) is specified and the member does not exist, the system creates it.

Element 2: Operation to Perform on Member

*REPLACE: The existing records in the specified database file member are replaced by the new records.

*ADD: The system adds the new records at the end of the existing member.

Example for DSPTAPCGY

```
DSPTAPCGY OUTPUT(*)
```

This command displays the user defined categories on this system to the workstation display.

Error messages for DSPTAPCGY

*ESCAPE Messages

CPF67E4
Library device function not successful

DSPTAPSTS (Display Tape Status) Command Description

DSPTAPSTS Command syntax diagram

Purpose

The Display Tape Status (DSPTAPSTS) command does the following:
- Displays slot information associated with the media library device.
- Displays information about the resources attached to the media library device.

Optional Parameters

DEV Specifies the name of the media library device for which information is displayed.

*ALL: Specifies that all tape media library devices defined through Create Device Media Library (CRTDEVMLB) command are displayed.

device-name: Specify the device name. The device name must be a tape media library device name or a random access cartridge loader(RACL) device name. The device name must already be known to the system by Create Device Media Library (CRTDEVMLB) command.

OUTPUT

Specifies whether the output from the command is displayed at the requesting workstation, printed to an output file, or printed with the job's spooled output.

*: The requested output is shown on the display. If this value is specified for a batch job, the effect is the same as if *PRINT were entered.

*PRINT: The requested output is written to a spooled file, which is found in the job's output queue.

*OUTFILE: The output is directed to a database file specified on the OUTFILE parameter. The file must have the same format as database file QATAIOF or QATAIOF2.

OUTFILE

Specifies the qualified name of the database file to which the information about the tape media libraries is directed. If the file does not exist, this command creates a database file in the specified library. If a new file is created with OUTFILFMT(*TYPE1), the system uses QATAIOF in QSYS as a model with the format name of QTAIOF2. This parameter is valid only when OUTPUT(*OUTFILE) is specified.

database-file-name: Specify the name of the database file to be used.

OUTMBR

Specifies the name of the database file member to which the output is directed when OUTPUT(*OUTFILE) is specified.

Element 1: Member to Receive Output

*FIRST: The first member in the file receives the output. If OUTMBR(*FIRST) is specified and the member does not exist, the system creates a member with the name of the file specified on the OUTFILE parameter.

member-name: Specify the name of the file member that is to receive the output. If OUTMBR(*member-name*) is specified and the member does not exist, the system creates it.

Element 2: Operation to Perform on Member

*REPLACE: The existing records in the specified database file member are replaced by the new records.

*ADD: The system adds the new records at the end of the existing member.

OUTFILFMT

Specifies the format of the output file when OUTPUT(*OUTFILE) is specified.

*TYPE1: The format is defined by model output file QATAIOF in library QSYS with record format name QTAIOUTF.

*TYPE2: The format is defined by model output file QATAIOF2 in library QSYS with record format name QTAIOF2.

Example for DSPTAPSTS

```
DSPTAPSTS   DEV(LIB01)  OUTPUT(*)
```

This command displays the valid information about this library device to the workstation display.

Error messages for DSPTAPSTS

*ESCAPE Messages

CPF6718

        Cannot allocate device &1.

CPF6745

        Device &1 not a media library device.

CPF67E4

        Library device function not successful.

CPF67E7

        No library devices exist.

CPF9814

        Device &1 not found.

CPF9825

        Not authorized to device &1.

CPF9845

        Error occurred while opening file &1.

CPF9846

        Error while processing file &1 in library &2.

CPF9847

        Error occurred while closing file &1 in library &2.

CPF9860

        Error occurred during output file processing.

CPF9871

        Error occurred while processing.

DSPTRC (Display Trace) Command Description

DSPTRC Command syntax diagram

Purpose

The Display Trace (DSPTRC) command displays all of the data traces that are currently defined in the programs specified in this command. The following data tracing information is displayed:

- The statement ranges or machine instruction ranges in the program
- The name or machine-interface object-definition-table-vector (MI ODV) numbers of all the variables associated with the trace statements
- If the variables are recorded whenever the trace statement is processed or only when their values are changed

Restriction: This command is valid only in the debug mode. To start the debug mode, use the STRDBG (Start Debug) command.

Optional Parameters

OUTPUT

        Specifies whether the output from the command is displayed at the requesting display station or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

        <u>*</u>: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

PGM   Specifies the programs in the debug mode whose trace data statements and associated program variables are displayed.

   ***DFTPGM:** The trace data statement of the default program is displayed.

   ***ALL:** Trace statements of the programs currently in the debug mode are displayed.

   program-name: Specify the names of up to 20 programs already in the debug mode whose trace data statements are displayed.

Example for DSPTRC

DSPTRC

This command shows all of the trace data statement ranges currently specified in the default program of this debugging session. Also displayed are the program variables (but not their values) that are associated with the trace data statements.

Error messages for DSPTRC

*ESCAPE Messages

CPF1999
   Errors occurred on command.

DSPTRCDTA (Display Trace Data) Command Description

DSPTRCDTA Command syntax diagram

Purpose

The Display Trace Data (DSPTRCDTA) command shows the output of any traces performed since the most recent Clear Trace Data (CLRTRCDTA) command. All of the trace statements and associated program variables within the trace range are displayed. The display shows the sequence in which the traced statements or machine instructions were processed and the name or machine-interface object-definition-table-vector (MI ODV) number and value of any program variables defined for the trace at each point in the sequence. Displaying variable values is controlled by the OUTVAR parameter on the Add Trace (ADDTRC) command that defines which trace is being displayed.

If a job is in debug mode, and that job ends before an ENDDBG is done, this command will be done automatically, printing the output with the job's spooled output.

Restriction: This command is valid only in debug mode. To start debug mode, refer to the STRDBG (Start Debug) command.

Optional Parameters

OUTPUT
   Specifies whether the output from the command is displayed at the requesting display station or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

Note:	A program statement appears in the trace data prior to its processing a variable. Therefore, when a program statement (Statement A) changes a variable specified in the trace, the new value appears in the trace data after the statement that follows Statement A.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

CLEAR

Specifies whether the trace data is cleared after it has been displayed.

*NO: The trace data is not cleared.

*YES: The trace data is cleared after it has been displayed.

Example for DSPTRCDTA

DSPTRCDTA

This command shows all of the recorded trace data at the requesting display station. All of the trace statements in the trace range and the values of the associated program variables are displayed. The trace data is not cleared after it has been displayed because CLEAR(*NO) is assumed.

Error messages for DSPTRCDTA

*ESCAPE Messages

CPF1999

Errors occurred on command.

DSPTM (Display Trademarks) Command Description

DSPTM Command syntax diagram

Purpose

The Display Trademarks (DSPTM) command displays a list of trademarks that appear in the names of licensed products.

There are no parameters for this command.

Example for DSPTM

DSPTM

This command displays a list of trademarks.

No error messages.

DSPUSRPMN (Display User Permission) Command Description

DSPUSRPMN Command syntax diagram

Purpose

The Display User Permission (DSPUSRPMN) command shows the names of the users who are permitted to handle documents or folders and perform tasks on behalf of another user, or shows the names of users who have permitted other users to work on their behalf. More information on user permission is in the

Grant User Permission (GRTUSRPMN) command and the SNA Distribution Services book.

Optional Parameters

USER Specifies the name of the user profile for which the information is displayed. The name in the USER parameter must be enrolled in the system distribution directory before this command is run.

*CURRENT: The user profile that is currently running is used.

*ALL: Information is displayed for all users in the information directory.

user-profile-name: Specify the name of the user profile for which the information is displayed. Up to 300 user profile names can be specified.

GRANTED
Specifies whether the output produced should display the granted-to relationships or granted-from relationships of a user or users.

*TO: Users who are permitted to work on behalf of the specified user are displayed.

*FROM: Users that have permitted the specified user to work on their behalf are displayed.

OUTPUT
Specifies whether the output from the command is shown at the requesting workstation or printed with the job's spooled output. More information on this parameter is in commonly used parameters.

*: Output requested by an interactive job is shown on the display. Output requested by a batch job is printed with the job's spooled output.

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

Examples for DSPUSRPMN

Example 1: Displaying Names of Users

```
DSPUSRPMN  USER(*CURRENT)  GRANTED(*TO)  OUTPUT(*PRINT)
```

This command prints the names of the users who are permitted to work on behalf of the current user.

Example 2: Printing Names of Users

```
DSPUSRPMN  USER(*ALL)  GRANTED(*TO)  OUTPUT(*PRINT)
```

This command prints the names of all users who have permitted other users to work on their behalf as well as the names of the other users.

Error messages for DSPUSRPMN

*ESCAPE Messages

CPF9043
User permission is not displayed because error occurred.

CPF9845
Error occurred while opening file &1.

CPF9846
Error while processing file &1 in library &2.

CPF9847
Error occurred while closing file &1 in library &2.

CPF9850
Override of printer file &1 not allowed.

CPF9851
Overflow value for file &1 in &2 too small.

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