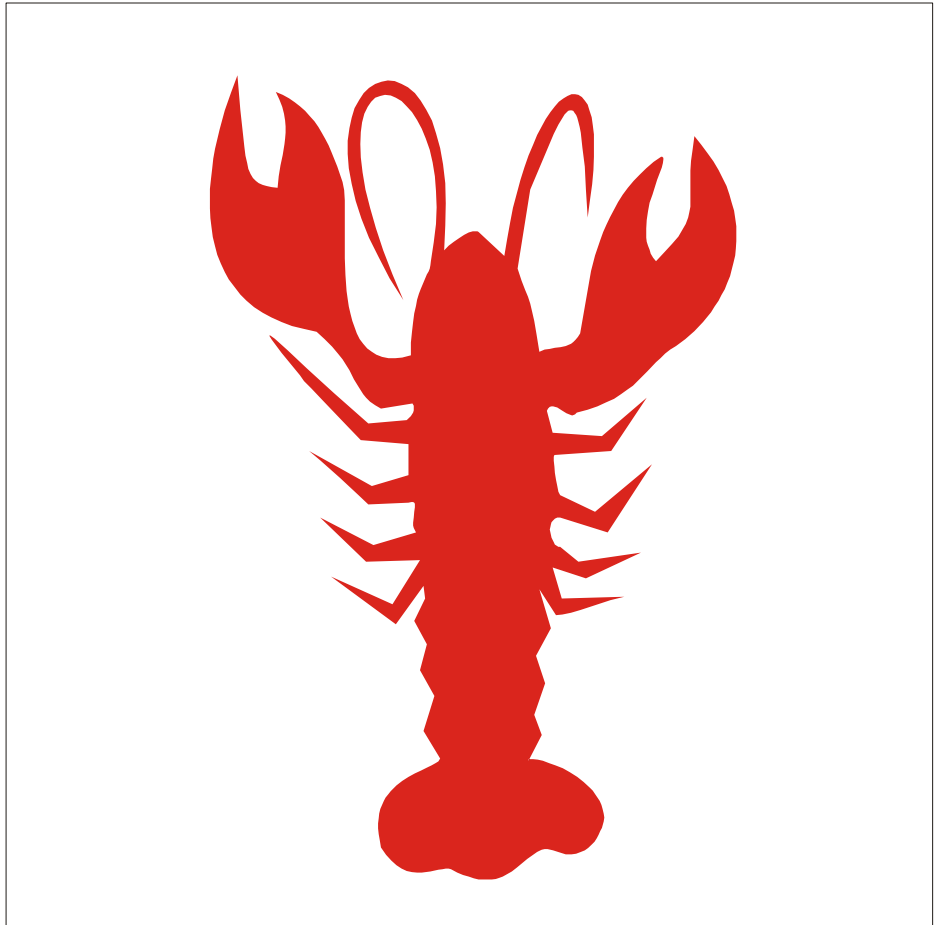


Report Designer
Programmer's Guide and Reference



Application Development

Edition Notice

Eighteenth Edition (March 2005)

This edition applies to the licensed program Report Designer (Program 2A55RDA), V2R8M0, and to all subsequent releases and modifications until otherwise indicated in new editions. This revision makes all previous editions obsolete. Make sure you are using the proper edition for the level of the product.

A version of this manual in Adobe's Portable Document Format (PDF) is available on the web.

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Chapter 1 How To Use This Manual

What's In This Chapter

This chapter describes who this manual is written for, how this manual is organized, and how to use this manual to get the information you need.

Who This Manual Is Written For

Report Designer Programmer's Guide and Reference Manual is written for programmers. The reader should have experience using the IBM ISeries Server and be familiar with the following:

- o DDS
 - o Printer files
 - o RPG programming
 - o IBM's Screen Design Aid (SDA) utility
-

How This Manual Is Organized

This manual is divided into five parts:

- o Chapters 1 through 4 are directed towards first time users of Report Designer.
- o Chapters 5 through 10 contain detailed descriptions of the display screens used by Report Designer.
- o Chapters 11 and 12 contain detailed examples, showing how to design reports from start to finish using Report Designer.
- o Chapters 13, 14, 15 and 16 describe how to convert report source using Report Designer's Convert Report Source (CVTRPТСRC) command, how to print a sample report using Report Designer's Print Report Sample (PRTRPТСAM) command, how to re-create a printer file using the Create Report Designer Printer File (CRTRDAPRTF) command, and how to print information using the Print Report Information (PRTRPTINF) command.
- o Chapters 17 and 18 are for reference in the event problems are encountered using Report Designer.

How To Use This Manual

If you are familiar with Report Designer or like to jump right into a new utility, you can skip the early chapters and the examples, and use this manual and the on-line Help Text as reference tools.

If you are new to Report Designer, the first chapters of this manual provide all the information you need to get started, and the two example chapters introduce the Report Designer features you will use most often.

Chapter 2 Introduction

What's In This Chapter

This chapter describes Report Designer's features, considerations, report records, DDS creation parameters and display flow.

Report Designer Features

Report Designer is an interactive utility for the IBM iSeries Server. With Report Designer, applications programmers can create and maintain report records coded in DDS, RPG or ILE/RPG. Report Designer replaces report design using printer layout charts and hand-coding of DDS, RPG or ILE/RPG source specifications. Report Designer:

- o Features functional equivalence to IBM's Screen Design Aid (SDA), with extensions for printer files.
- o Supports all DDS keywords and works with existing printer file source members.
- o Supports RPG internally-described printer files and works with existing source.
- o Supports both RPG and ILE/RPG.
- o Supports 27 X 132 display mode on the **Design Image (Work) Display**.
- o Provides rolling and windowing capabilities for designing reports larger than the display device in use.
- o Handles all report widths up to the DDS maximum of 378 columns.
- o Allows field selection from existing database files and from fields defined in an RPG program.
- o Allows printing of sample reports (PRTRPTSAM command).
- o Allows printing of report information (PRTRPTINF command).
- o Provides conversions between RPG and DDS (CVTRPТСRC command).
- o Stores and reapplies DDS printer file creation parameters.
- o Operates on any model ISeries Server with Operating System/400 (OS/400) V4R4M0 or higher installed, and is compatible with all security levels.
- o Participates in the full range of licensed program support provided by OS/400. Licensed program installation, PTF management, etc. are handled with the same commands used to manage IBM software. Complete online manual and context sensitive help are included.

Report Designer Considerations

Consider the following when using existing DDS and RPG source with Report Designer.

- o For DDS, Report Designer is designed to handle 92-byte source records. (Eighty bytes of source data, and 12 bytes for source date and sequence number.) Any source records that contain more than 80 bytes of source data are truncated on input and padded with blanks on output.
- o For RPG, Report Designer is designed to handle up to 112-byte source records. (One hundred bytes of source data, and 12 bytes for source date and sequence number.) Any source records that contain more than 100 bytes of source data are truncated on input and padded with blanks on output.
- o For DDS source, comment lines are identified by an asterisk (*) in column 7, or by blanks in columns 1 - 5 and 7 - 80. Report Designer retains all DDS source comments. Comment lines which have blanks in columns 1-5, 'A*---' in columns 6 - 10, and blanks in columns 11 - 44 have special meaning to Report

Designer.

Comments before the first report record specification are file-level comments. Comments between a report record specification and the first field specification of the report record are record-level comments. Comments after the last field in the source member are end-of-file comments. Comments which are not file-level, record-level, or end-of-file comments are field comments. Field comments immediately precede the field they are associated with. The first field in a report record can have no associated comments because these are assumed to be record-level comments.

File-level and end-of-file comments are always output to their original locations. Record-level and field-level comments are tied to their associated report record/field specifications. If a report record or field is moved within the source member, its comments are moved with it. If a report record or field is deleted, its comments are also deleted.

- o For RPG source, comment lines are identified by an asterisk (*) in column 7. Report Designer retains all comments in RPG source. All comments are replaced to their original positions on output, with the exception of comments imbedded within the output specifications of the printer file.

Comments between a report record specification and the first field specification of the report record are record-level comments. See "What Is A Report Record?" later in this chapter for an explanation of report records as they apply to RPG source. Comments after the last field in the printer file being edited are end-of-file comments. Comments which are not record-level or end-of-file comments are field comments. Field comments immediately precede the field they are associated with. The first field in a report record can have no associated comments because these are assumed to be record-level comments.

End-of-file comments are always output to their original locations. Record-level and field-level comments are tied to their associated report record/field specifications. If a report record or field is moved within the source member, its comments are moved with it. If a report record or field is deleted, its comments are also deleted.

- o A maximum of 256 lines of comments may be associated with any field (field-level comments). There is no limit to the number of file, report record, or end-of-file comments.
- o A maximum of 50 characters of text information are carried with any field. DDS text specifications of greater than 50 characters are truncated.
- o /COPY statements in RPG source are processed to look for field definitions. However, /COPY statements imbedded within the printer file are treated as comments and ignored. Report Designer requires the output specifications for the printer file be fully contained within a single source member.

What Is A Report Record?

The term "Report Record", used throughout this manual, may not be familiar to RPG programmers who have not used externally-defined printer files coded in DDS. The meaning of "report record" depends on source type.

For DDS, a report record begins with a record specification (an "R" in column 17) and includes all field specifications up until the next record specification, or the end of the source. For DDS the entire report record is sent to the print device with a single write.

For RPG internally-described printer files, Report Designer considers similar, consecutive header specifications - along with their associated field specifications - to be part of the same record. To be considered alike, consecutive header specifications must have the same output type, the same EXCPT name, and must be conditioned by the same indicators.

If the spacing and skipping between two lines in the same logical report record for RPG source nets to zero, the second of the two lines becomes the beginning of a new report record.

DDS Creation Parameters

When updating DDS source with Report Designer, parameters specified for the CRTPRTF command are saved as comments in the source. Each parameter specified on the CRTPRTF command from the Report Designer create display is placed on a separate line in the updated DDS. The parameters are stored as comments that are meaningful to Report Designer. On the next access with Report Designer, these comments are used to establish session values and CRTPRTF default values.

Report Designer stamps its comment lines with a specific signature. Comment lines that do not match the Report Designer signature are processed as regular comments. Report Designer signature comments have blanks in columns 1 - 5, 'A*---' in columns 6 - 10 and blanks in columns 11 - 44.

Report Designer stores the specified CRTPRTF values as if they were DDS keywords, specified in columns 45 - 80 of a Report Designer signature comment line. Although these are comment lines, they follow the DDS syntax rules for specifying keywords. The keyword names are the same as those on the CRTPRTF command, and the values specified must be valid on the CRTPRTF command.

The PAGESIZE, OVRFLW, and FOLD keywords are always placed in updated DDS source because they affect the Report Designer interactive session.

Report Designer signature comment lines can be deleted from your DDS source with SEU. Report Designer will use the appropriate defaults for keywords not specified. To specify CRTPRTF parameters directly with SEU:

- o Flag them as Report Designer signature comments.
- o Follow the DDS syntax rules.
- o Specify valid parameter values for the keyword.
- o Specify the parameters at the file level.

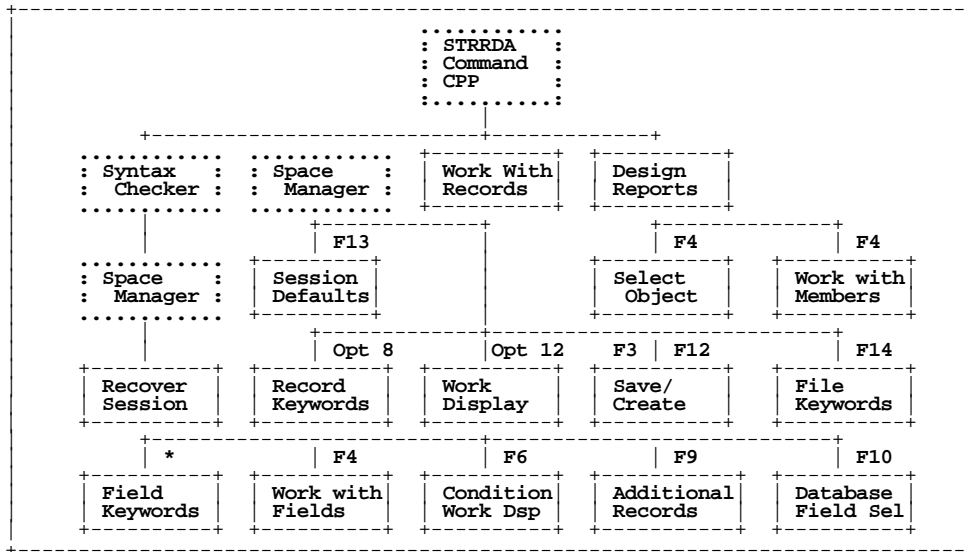
Only file-level Report Designer signature comments are significant. Report Designer signature comments at the record and field levels are treated as regular comments.

See the Create Report Designer Printer File (CRTRDAPRTF) command description to create printer files in batch using the stored creation parameter values.

Display Flow

This diagram shows the display order for options selected from the Work with Report Records display. Detailed descriptions of the options appear in the following chapters:

- o Ch 5 Work With Report Records Display
- o Ch 6 File Keywords Displays
- o Ch 7 Record Keywords Displays
- o Ch 8 Design Image (Work) Display
- o Ch 9 Field Keywords Displays
- o Ch 10 Save and Create
- o Ch 17 Recovery



Chapter 3 Installation

What's In This Chapter

This chapter describes how to install Report Designer, how to verify the installation, how to include the RDA library in a job's library list, how to determine release dependencies, how to test a new release while leaving the old in production, how to tailor the installation, how to remove Report Designer from the system, how to find additional installation information, how to contact technical support, and hot site installation.

Installing The Report Designer Licensed Program Product

Follow these instructions to install Report Designer V2R8M0 on your iSeries server:

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

1. Sign on to the system as the security officer (QSECOFR).
2. Verify that your machine is at i5/OS (OS/400) V5R2M0 or later by running:

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

Note: If you are running a version of i5/OS (OS/400) earlier than V5R2M0 you can not install Report Designer V2R8M0 on your machine. You must install an earlier version of Report Designer or upgrade the operating system.

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

```
WRKSYSVAL SYSVAL(QALWUSRDMN)
```

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

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

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

```
RSTLICPGM LICPGM(2A55RDA) DEV(device-name) LNG(2924)
```

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

When the RSTLICPGM command finishes a new library RDA and a new directory '/Gumbo/ProdData/2A55RDA' are on the system. You can access the Report Designer menu by entering the following command:

```
GO MENU(RDA/RDA)
```

You can determine which PTFs were included on the media by entering the command:

```
DSPPTF LICPGM(2A55RDA)
```

A list of current PTFs can be found at www.gumbo.com. If there are newer PTFs available, download and apply them. The bottom of our PTF web page also includes a listing of any IBM PTFs that affect the product.

Note: Gumbo Software recommends downloading the current cumulative PTF package after installing the software.

Verifying Report Designer Installation

You may verify that Report Designer has been correctly installed by running the installation verification program.

- o Access the Report Designer menu by entering the following command:

```
GO MENU(RDA/RDA)
```

- o Select the option to 'Verify that Report Designer is installed correctly' and press enter.

If the message 'Report Designer is installed correctly.' is displayed on the bottom of your display when the option finishes, installation is complete.

Library List Considerations

Library RDA must be in the library list of jobs using Report Designer commands, or the commands must be qualified with library RDA. Depending on your installation and intended use you may choose to:

- o Add library RDA to the system library list. This insures every job in the system has access to SpoolMail commands. However this introduces problems with installing new releases and is not recommended.
- o Add library RDA to the initial library list parameter of job descriptions controlling jobs which will use Report Designer commands. (recommended)
- o Run a ADDLIBLE RDA command in individual jobs requiring Report Designer commands.
- o Qualify the command names on each use:

```
RDA/CHGRDAAUT
```

Library RDA will be temporarily added to the product portion of the job's library list.

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

Release Considerations

Report Designer operates under i5/OS (OS/400) V5R2M0 or higher. Releases occur on a different schedule than IBM releases. Once Report Designer is installed the following considerations apply:

- o A new release of i5/OS (OS/400) may be installed without installing a new release of Report Designer.

Report Designer uses only published or IBM sanctioned interfaces and is upward compatible with all releases of i5/OS (OS/400). The Report Designer authorization code does not change.

- o A new release of Report Designer may be installed without installing a new release of i5/OS (OS/400).

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

- o More than one release of Report Designer may be installed on a system at one time.

By restoring Report Designer to a library other than RDA a new release can be installed for testing while the current release remains in production. Any release to release considerations that may apply will be noted in the documentation accompanying the new release. Additional operational considerations may apply. For more information on renaming a library during licensed program installation see the Restore Licensed Program (RSTLICPGM) command and the New Release Testing section of this chapter.

- o When a new release of Report Designer is installed in the same library as an old release the following processing is performed in order to preserve data and authorization information:

1. All objects are saved to the save file QGPL/RDAV2R8M0.

2. Product objects that contain default settings and operational information are copied to library QTEMP.
3. The Report Designer library is cleared.
4. Report Designer is restored.
5. Default settings and operational information are copied to the product objects.
6. All objects duplicated to QTEMP are deleted.
7. Save file QGPL/RDAV2R8M0 is deleted.

Note: Gumbo Software recommends making a backup of the current release before installing a new release of Report Designer.

New Release Testing

Unlike IBM licensed programs, Gumbo Software licensed programs are packaged in a way that allows multiple release to be installed on your ISeries at the same time. This feature allows you to test a new release while the current release remains in production.

The key to new release testing are the LIB() and CODHOMEDIR() parameters of i5/OS's (OS/400's) Restore License Program (RSTLICPGM) command which allow you to restore the product to a library name and directory different than the those used during packaging. To test a new release, follow this procedure:

1. Install the new release in library RDAV2R8M0 and directory '/Gumbo/ProdData/2A55RDAV2R8M0':

```
RSTLICPGM LICPGM(2A55RDA) DEV(device-name) LIB(RDAV2R8M0) REPLACERLS(*NO) LNG(2924)
          CODHOMEDIR('/Gumbo/ProdData/2A55RDAV2R8M0')
```

2. Perform your new release testing.
3. When testing is complete you must delete the new release.

```
DLTLICPGM LICPGM(2A55RDA) RLS(V2R8M0) OPTION(*ALL)
```

Note: Do not delete nor rename libraries and directories to move the new release into production. Doing so will corrupt the license program information kept internally by i5/OS (OS/400). If this has already occurred, see the "Software Installation Problems" section of the "Trouble Shooting" chapter.

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

Installation Tailoring

The **Installation Tailoring** display allows you to tailor default values to reflect the standards used at your installation. From the **Installation Tailoring** display you can:

- o Set the default page width.
- o Set the default page length.
- o Set the default overflow line.
- o Set the default printer name.
- o Set the default fold value.
- o Set the number of display window segments.
- o Set the number of display roll segments.
- o Set the off page fill element.
- o Enable 27x132 mode for 3180's.
- o Control writing of RPG printer name.
- o Set the appearance of fields on the **Work Display**.
- o Control clearing of the list of additional records.
- o Control the uses of unsupported interfaces.
- o Control the processing of overrides.

To access the **Installation Tailoring** display, enter the following command:

```
CHGRDADFT
```

When you press Enter, the **Installation Tailoring** display appears:

```

RDA                               Installation Tailoring
Type choices, press Enter.
Default page width. . . . .      132      1 - 378
Default page length. . . . .     66       1 - 255
Default overflow line. . . . .    60       1 - 255
Default printer name. . . . .    *PRTF   Name, *PRTF, *PRTF38, *FIRST
Default fold value. . . . .      N       Y=Yes, N=No
Display window segments. . . . .  3       1 - 9
Display roll segments. . . . .   3       1 - 9
Off page fill element. . . . .    .       Character
Enable 27x132 mode for 3180's. .  Y       Y=Yes, N=No
Always write RPG printer name. .  Y       Y=Yes, N=No
Use field name as image. . . . .  N       Y=Yes, N=No
Preserve record list. . . . .    N       Y=Yes, N=No
Use unsupported interfaces. . . .  N       Y=Yes, N=No
Process overrides. . . . .       Y       Y=Yes, N=No
Use DFT keyword. . . . .         N       Y=Yes, N=No
Authorized Serial No. . . . .    *AUTO
Demo Expires. . . . .           2004/06/15
Software Rel/Mod level. . . . .  V2R7M0 2A55RDA

F3=Exit  F12=Cancel
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```

Default page width: Page width is the number of columns on each line of a page. The maximum page width supported by DDS is 378.

Default page length: Page length is the number of lines on each page. The maximum page length supported by DDS is 255.

Default overflow line: Overflow line is the line number on the page at which printer overflow to a new page occurs. Overflow is signaled when the specified line number becomes the current line number, whether or not printing has occurred on that line. Report Designer uses overflow line when creating source.

Default printer name: Printer name is used by Report Designer to distinguish between RPG and DDS and to determine source code processing. *PRTF and *PRTF38 specify DDS source code with appropriate qualification and parameter syntax for the OS/400 and System/38 environments respectively. When a name is specified, RPG source code is used. The name identifies the internally-described printer file to process.

***MBRTYPE:** Infer the printer name from the member's source type. Members with source type PRTF are treated as if *PRTF were specified. Members with source type PRTF38 are treated as if *PRTF38 were specified. Members with source type RPG, RPT, RPG36 etc. are treated as if *FIRST were specified.

***PRTF:** The source is treated as native OS/400 DDS.

***PRTF38:** The source is treated as System/38 compatible DDS.

***FIRST:** The source is treated as RPG and the first printer file name encountered in the source is processed.

file-name: Specify the name of the RPG internally-described printer file.

Default fold value: Fold specifies whether print data that extends beyond the end of the page is folded to the next line or is dropped.

N: Do not fold data to the next line.

Y: Fold data to the next line.

Display window segments: The display window segments parameter governs the number of times you must press the window keys F19/F20 on the Report Designer **Work Display** to move one display width. A value of 2 requires 2 F19 keys to window the display one display width to the left.

Display roll segments: The display roll segments parameter governs the number of times you must press the page (roll) keys on the Report Designer **Work Display** to move one display length. A value of 2 requires pressing Page Down twice to roll the display 1 display length.

Off page fill element: When the **Work Display** is rolled or windowed beyond the edge of the page, an

out-of-bounds area is exposed. This area is filled with the off page fill character.

Enable 27x132 mode for 3180's: The Enable 27x132 mode parameter specifies whether 27 line by 132 column display mode is used with display devices that are capable of it. When not enabled, 24 line by 80 column display mode is used.

N: Do not use 27 x 132.

Y: Use 27 x 132 mode if available on device.

Always write RPG printer name: "Always write RPG printer name" governs the writing of the printer name in the generated source code. The parameter has no effect on DDS generation.

N: Write the printer name on the first record identification O-spec only.

Y: Write the printer name on each record identification O-spec.

Use field name as image: The "Use field name as image" parameter governs the appearance of fields on the **Work Display**.

N: Character fields are displayed as a sequence of O's while numeric fields are shown as 6's.

Y: The field's name is used to represent the field.

Preserve record list: The "Preserve record list" parameter governs clearing of the list of additional records to display on the **Work Display**.

N: Report Designer operates as SDA and the record list is cleared on exiting from the **Work Display**.

Y: The record list is preserved on exiting the **Work Display**. This allows switching between records without re-keying the additional records to be displayed.

Use unsupported interfaces: The "Use unsupported interfaces" parameter provides a means to improve Report Designer performance with very large field reference files. As shipped (the shipped value is "N"), Report Designer utilizes only IBM published and sanctioned interfaces. This makes Report Designer compatible with all security levels and upward compatible with all OS/400 versions.

Unfortunately, the IBM supplied API for retrieving field descriptions does not allow retrieval of individual fields. When a DDS source member references a very large field reference file, the performance of the IBM API is poor. Response times can become very long.

OS/400 includes a program (QDMROUTE) that can retrieve individual field descriptions. This is the interface that both SDA and RLU use to resolve field references. It is also the interface that was previously used by Report Designer.

If you are suffering poor response times and meet the following criteria, you may wish to try setting this parameter to "Y":

1. You are processing DDS printer file definitions (RPG is unaffected).
2. The DDS references a very large field reference file (many fields).
3. You are not concerned with level 40 security compatibility.
4. You are not using a security audit journal or are not concerned by additional entries in the audit journal.
5. You are willing to return the parameter to "N" if there is a future compatibility problem such as a change to QDMROUTE's parameter list.

When set to "Y", Report Designer will use program QDMROUTE. If this does not improve performance or if it produces undesirable results then you should return the value to "N".

Program QDMROUTE is shipped with public authority *EXCLUDE. Only user profiles with the *ALLOBJ special authority will be able to use Report Designer. You may wish to grant *USE authority to programmers who will be using Report Designer.

Process overrides: The "Process overrides" parameter governs the processing of overrides when field references are resolved.

N: Report Designer ignores any file overrides when resolving field references.

Y: File overrides are applied before field references are resolved.

Use DFT keyword: The "Use DFT keyword" parameter governs the generation of the "DFT" keyword for literals in DDS source code.

N: DFT is not generated. DDS literals appear as 'literal' in the source.

Y: DFT is generated. DDS literals appear as DFT('literal') in the source.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Enter default values to reflect the standards used at your installation and press enter. Use F3 to exit Installation Tailoring.

Note: Additional individual tailoring is available to each user from within Report Designer. Press F13=Session Defaults from the Work with Report Records display.

Deleting the Report Designer Licensed Program Product

Follow these instructions to remove Report Designer from your ISeries:

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

```
DLTLICPGM LICPGM(2A55RDA) OPTION(*ALL)
```

Additional Installation Information

Additional detailed installation information and instructions can be found in the [I5/OS \(OS/400\) Software Installation SC41-5120](#).

Technical Support

If you encounter a problem with Report Designer you should:

- o Follow the steps in Chapter 18 Problem Determination.
- o Load and apply the current cumulative PTF package for the software. You can obtain the current package by visiting the web site listed below.

If the problem remains unresolved, contact:

Mailing address: Gumbo Software, Inc.
809 W Howe St
Seattle, WA 98119
United States of America

Fax: (206) 284-5029
Telephone: (206) 284-5078
E-mail: support@gumbo.com
Web: www.gumbo.com

Hot Site Installation

In the event of a catastrophic system failure, an otherwise properly licensed and authorized copy of this product may be copied to a back up machine. The product's authorization algorithm will detect that the software is operating on a machine serial number different than the licensed and authorized serial number and automatically grant a 30 day temporary authorization for the back up machine. You do not need to contact Gumbo Software, Inc in the event of an emergency.

An otherwise properly licensed and authorized copy of this product may be transferred to a back up machine for the purpose of testing your emergency recovery procedures and the product's automatic temporary authorization function.

The correct sequence of steps is as follows:

1. Install the software and enter the permanent authorization on your production machine.
2. Save the software from your production machine using the Save Licensed Program (SAVLICPGM) command. This creates an authorized copy, save it with your back ups.
3. When restoring to the back up machine you must first insure that any previous copies have been deleted. To delete a previous copy use the Delete Licensed Program (DLTLICPGM) command.
4. Restore the authorized copy to the back up machine using the Restore License Program (RSTLICPGM) command.
5. The back up machine will create an automatic authorization running for 30 days from the first time the software is used. This allows you install the authorized copy in advance of a disaster.

Chapter 4 Accessing Report Designer

What's In This Chapter

This chapter describes how to access Report Designer. It describes the Start Report Designer (STRRDA) command and associated displays, how to create a user-defined option for use within the Program Development Manager (PDM) and how to display the Report Designer Menu.

Using the Start Report Designer (STRRDA) Command

Use the STRRDA prompt to review or change the parameter values for the STRRDA command before beginning a Report Designer session. To request the STRRDA prompt:

1. Key in STRRDA on a command line.
2. Press F4.

After completing the display, press Enter. If *PRV is specified for any of the parameters, the **Design Reports** display appears. Otherwise, the **Work with Report Records** display appears.

```
-----
                          Start Report Designer (STRRDA)
-----
Type choices, press Enter.

Source file . . . . . *PRV      Name, *PRV
Library . . . . . *PRV      Name, *PRV, *LIBL, *CURLIB
Source member . . . . . *PRV      Name, *PRV, *SELECT
*PRTF or RPG printer file . . . . . *PRV      Name, *PRV, *MBRTYPE...
Object library . . . . . *PRV      Name, *PRV, *CURLIB
Job description . . . . . *PRV      Name, *PRV, *USRPRF
Library . . . . . *PRV      Name, *PRV, *LIBL, *CURLIB

F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display  Bottom
F24=More keys
```

The Start Report Designer (STRRDA) command starts Gumbo Software, Inc's Report Designer.

Source file (SRCFILE)

Specifies the name of the file containing the source member to be updated or to which a new source member will be added.

***PRV:** Use the source file specified in the previous Report Designer session.

file-name: Specify the name of the source file.

The possible library values are:

***PRV:** Use the library specified in the previous Report Designer session.

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

***LIBL:** All libraries in the job's library list are searched.

library-name: Specify the name of the library.

Source member (SRCMBR)

Specifies the name of the member containing the source to be updated or the name of a new member to be created.

***PRV:** Use the name of the source member specified on the previous Report Designer session.

***SELECT:** Specifies that selection prompting is used to determine the source member name.

member-name: Specify the name of the source member.

***PRTF or RPG printer file (PRINTER)**

Specifies whether the source member is treated as DDS or RPG source. In the case of RPG source, specifies the name of the printer file to process as it appears in the F-spec.

***PRV:** Use the printer name specified in the previous Report Designer session.

***MBRTYPE:** Infer the printer name from the member's source type. Members with source type PRTF are treated as if *PRTF were specified. Members with source type PRTF38 are treated as if *PRTF38 were specified. Members with source type RPG, RPT, RPG36 etc. are treated as if *FIRST were specified.

***PRTF:** The source is treated as native OS/400 DDS.

***PRTF38:** The source is treated as System/38 compatible DDS.

***FIRST:** The source is treated as RPG and the first printer file name encountered in the source is processed.

file-name: Specify the name of the RPG internally-described printer file.

Object library (OBLIB)

Specifies the name of the library where the program or printer file created by Report Designer is stored.

***PRV:** Use the library specified in the previous Report Designer session.

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

library-name: Specify the name of the library.

Job description (JOBDESC)

Specifies the job description used with batch jobs submitted by Report Designer.

***PRV:** Use the job description name specified in the previous Report Designer session.

***USRPRF:** Use the job description name specified in the user profile.

job-description-name: Specify the name of the job description.

The possible library values are:

***PRV:** Use the library specified in the previous Report Designer session.

***LIBL:** All libraries in the job's library list are searched.

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

library-name: Specify the name of the library.

Example

```
STRRDA SRCFILE(SRC/QRPGSRC) SRCMBR(INV310) PRINTER(QPRINT)
```

This command updates an RPG printer definition in source file QRPGSRC in library SRC. The report layout in source member INV310 for file QPRINT is modified if it exists or added if it does not.

Creating a User-Defined PDM Option

IBM's Program Development Manager (PDM) allows creation of user-defined options. The following steps will create the user-defined option "RD" which can be used to access Report Designer from within PDM by keying "RD" next to a member name:

- o Enter PDM by using the WRKMBRPDM command.
- o Press F16 to work with user-defined options.
- o Press F6 to create a new user-defined option.

```
-----  
                          Create User-Defined Option  
Type option and command, press Enter.  
Option . . . . . RD      Option to create  
Command . . . . . RDA/STRRDA SRCFILE(&L/&F) SRCMBR(&N) PRINTER(*MB  
RTYPE) OBJLIB(&O) JOBD(&J)  
-----  
F3=Exit      F4=Prompt      F12=Cancel  
-----
```

- o Key the user-defined option definition as shown above and press Enter.
- o Press F3 to exit the **Work with User-Defined Options** display. Now key RD in the option field for source members in PDM to edit them with Report Designer.

The Report Designer Menu

Use Report Designer's menu to access all of the available Report Designer functions:

1. Key in GO RDA/RDA on a command line.
2. Press Enter

```
-----  
RDA                          Report Designer                          System:  GUMBO003  
Select one of the following:  
    1. Online Manual  
Report Design  
    2. Start Report Designer                          STRRDA  
Other Report Options  
    3. Create Report Designer Printer File           CRTRDAPRTF  
    4. Convert Report Source                         CVTRPTSRC  
    5. Print Report Sample                          PRTRPTSAM  
    6. Print Report Information                     PRTRPTINF  
Other Options  
    61. Search Help Index  
    62. Change Report Designer Default              CHGRDADFT  
More...  
Selection or command  
====> _____  
F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel  
© Copyright Gumbo Software, Inc. 1989, 2005. All Rights Reserved.  
-----
```

The options on the Report Designer (RDA) menu are divided into 4 categories:

- o Online Manual (Option 1)
- o Report Design (Option 2)
- o Other Report Options (Options 3 - 5)
- o Other Options (Options 61 - 66)

The Report Designer (RDA) menu options are summarized below:

Note: See the individual command descriptions for a complete explanation of each option.

Option 1. Online Manual

The online manual allows you to view the contents of the Report Designer Manual from a work station.

Option 2. Start Report Designer

The Start Report Designer (STRRDA) command starts Gumbo Software, Inc.'s Report Designer.

Option 3. Create RDA Printer File

The Create RDA Printer File (CRTRDAPRTF) command creates a DDS printer file using the same Create Printer File (CRTPRTF) command parameter values specified when the printer file was last created on exiting from Report Designer.

Option 4. Convert Report Source

The Convert Report Source (CVTRPTSRC) command converts a report definition contained in a source member from one source type to another.

Option 5. Print Report Sample

The Print Report Sample (PRTRPTSAM) command prints a sample report. The result is similar to pressing F17=Print from the **Work Display** and the command can be executed in batch.

Option 6. Print Report Information

The Print Report Information (PRTRPTINF) command parses a source member and generates various reports based on the content of the member.

Option 61. Search Help Index

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

Option 62. Change RDA Defaults

The Change RDA Defaults (CHGRDADFT) command changes values used by Report Designer to control processing and as initial defaults.

Option 64. Change RDA Authorization

The Change RDA Authorization (CHGRDAAUT) command changes the authorization value for Report Designer. The command is used to extend a demonstration period or to permanently authorize Report Designer for a system.

Option 65. Display RDA Work Space Status

The Display RDA Work Space Status (DSPRDASPC) command prints a listing of the contents of internal work spaces.

Report Designer copies any existing DDS or RPG source into a work space, which is used to keep track of all additions, changes, and deletions that occur during the design session. Upon normal completion, this work space is used to update the DDS or RPG source, and then the work space is deleted.

When Report Designer terminates abnormally (for example due to power failure or a ENDRQS command) the work space will usually be intact and may be recoverable. The next attempt to modify the same source member with Report Designer presents the **Recover RDA Session** display.

Option 66. Verify that Report Designer is installed correctly

Installation verification checks to make sure that Report Designer has been correctly installed.

Design Reports Display

The **Design Reports** display appears when you specify *SELECT for the source member parameter on the STRRDA command or when you specify *PRV for any of the parameters on the STRRDA command. From the **Design Reports** display you can:

- o Select a source file to work with.
- o Select a member for editing.

```
-----  
                                Design Reports  
Type choices, press Enter.  
Source file . . . . . SAMPLE      Name, F4 for list  
Library . . . . . RDA           Name, *LIBL, *CURLIB  
Member . . . . . _____      Name, F4 for list  
*PRTF or RPG printer file . . *PRTF   Name, *MBRTYPE, *PRTF, *FIRST  
  
F3=Exit    F4=Prompt    F12=Cancel  
-----
```

Field Descriptions

File: Specifies the name of the file containing the source member to be updated or to which a new source member will be added.

Member: Specifies the name of the member containing the source to be updated or the name of a new member to be created.

Printer: The name of the printer. For DDS source this contains either *PRTF or *PRTF38. For RPG source this contains the name of the internally-described printer file being edited (for example QSYSPRT). If *FIRST was specified as the printer name, the name of the first internally-described RPG printer file encountered in the source statements appears. If *MBRTYPE was specified, the printer name depends on the member's source type. For DDS source, printer is either *PRTF or *PRTF38. For RPG, the name of the first internally-described RPG printer file encountered in the source appears.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F4=Prompt: Provides assistance in typing additional parameter values for an option or in using a command.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Work With Members Using Report Designer

The **Work with Members** display appears when F4 is pressed with the cursor positioned in the member name field on the **Design Reports** display or the **Save/Create** display. The **Work with Members** display presents a list of all members in the specified source file. From the **Work with Members** display you can:

- o Position to a specific member in the list.
- o Display members for a specific source type only.
- o Select a source file to work with.
- o Change the text for members in the selected source file.
- o Change the source type for members in the selected source file.
- o Select an existing member to work with.
- o Delete members from the selected source file.
- o Display members from the selected source file.
- o Specify a new member to work with.

```

Work With Members Using Report Designer

Type information, press Enter.
Position to . . . . .
Subset by type . . . . .
Source file . . . . . SAMPLE . . . . . Library . . . . . RDA
New member . . . . . Type . . . . . PRTF
Text . . . . .

Type options, press Enter.
1=Select 4=Delete 5=Display

Opt Member Type Text
- CSTMST PF Sample Customer Master File
- RDCL501 CLP RDA Retrieve Report Designer PTF Create Comm Gear
- RPGSHELL RPG RPG example shell, without printer file.
- SYPR030 PRTF38 Standard format count report
- SYPR400 PRTF Standard format count report
- XXFLDR PF Sample field reference file

F3=Exit F5=Refresh F12=Cancel Bottom
  
```

Options

Type the number of an option and press the Enter key.

- 1=Select:** Selects the member for processing.
- 4=Delete:** Delete the member from the source file.
- 5=Display:** Display the member's contents.

Field Descriptions

Position to: To position the list to a specific member, key the name--or partial name--and press Enter. The cursor is positioned to the first member whose name is greater than or equal to the search characters you specify. If there is no member name greater than or equal to the specified search characters, the cursor is positioned to the last member in the list.

Subset by type: To include only members with a particular source type in the list, key the source type in the "Subset by type" field and press Enter. Press F5 to refresh the list and include all source types.

Source file: To select a new source file to work with, key the name and library of the source file in the fields provided, and press Enter.

New member: Specifies the name of a new member to create.

New Type: Specifies a source type for a new member.

New Text: Specifies a description for a new member.

Member: Specifies the name of the source member.

Type: Specifies the member source type. To change the source type for a member, key over the existing source type and press Enter.

Text: Specifies the member's description. To change the text description for a member, key over the existing text and press Enter.

Function keys

F1=Help: Provides additional information about the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F5=Refresh: Shows the display again with the most recent information and removes any typed selections.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about the display or a specific field.

Print: Prints information currently shown on the display.

Select Object Using Report Designer

The **Select Object Using Report Designer** display appears when a list is requested using F4. From the **Select Object Using Report Designer** display you can:

- o Position to a specific object in the list.
- o Display a filtered list of objects.
- o Select an object to work with.

```
-----
                          Select Object Using Report Designer
-----
Library . . . . . RDA      Name, *ALL, *LIBL, *USRLIBL, *CURLIB...
Object type . . . . . *PGM  *ALL, *ALRTBL, *AUTL, *CFGL, *CHTFMT...
Position to . . . . .      Starting character(s)
Subset by name . . . . . *ALL  *ALL, name, *generic*
Subset by attribute . . *ALL  *ALL, attribute, *generic*

Type option, press Enter.
1=Select

Opt Object      Library   Type      Attribute  Text
-  RDCL000     RDA      *PGM      CLP        RDA Report Designer Comman
-  RDCL001     RDA      *PGM      CLP        RDA Work Space Build
-  RDCL002     RDA      *PGM      CLP        RDA Create User Informatio
-  RDCL006     RDA      *PGM      CLP        RDA Source Syntax Checker
-  RDCL007     RDA      *PGM      CLP        RDA RTVMSGD for MSGCON Key
-  RDCL009     RDA      *PGM      CLP        RDA Work Space Empty
-  RDCL010     RDA      *PGM      CLP        RDA Retrieve Serial Number
-  RDCL011     RDA      *PGM      CLP        RDA Work Space Recovery
-  RDCL012     RDA      *PGM      CLP        RDA Change RDA Authorizati
                                          More...

F3=Exit  F5=Refresh  F12=Cancel
```

Options

Type the number of an option and press the Enter key.

1=Select: Selects the object for processing.

Field Descriptions

Library: Enter the name of a specific library to see a list of objects in that library only. Alternatively, specify *ALL to see a list of objects in all libraries; *LIBL to see a list of objects in any of the libraries in the job library list; *USRLIBL to see a list of objects in any of the libraries in the user part of the job library list; *CURLIB to see a list of objects in the job's current library; *ALLUSR to see a list of objects in all user libraries.

Object type: Enter *ALL to include all object types in the list, or enter an object type specification.

Position To: To locate a particular object in the list, key the name or partial name in the "Position to" field, and press Enter. The cursor will be positioned to the first object name greater than or equal to the name you specify.

Subset by name: Enter *ALL to include all object names in the list. Enter a specific object name to include only objects with that name in the list. Key asterisks (*) or question marks (?) in the object name specification to include objects by generic name.

Subset by attribute: Enter *ALL to include all object attributes in the list. Enter a specific object attribute to include only objects with that attribute in the list. Key asterisks (*) or question marks (?) in the object attribute specification to include objects generically by attribute.

Object: Specifies the object's name.

Library: Specifies the library in which the object is located.

Type: Specifies the object's type.

Attribute: Specifies the object's attribute.

Text: Specifies the object's description.

Generic names must be in one of the following formats:

- o ABC* includes all objects whose names begin with ABC.
- o *ABC includes all objects whose names end with ABC.
- o *ABC* includes all objects whose names contain ABC anywhere in the name.
- o A*C includes all objects whose names begin with A and end with C.
- o **ALL includes all objects whose names end in ALL.

A question mark anywhere in an object name will match any character in the same position of the actual object name. Question marks may be keyed anywhere in the name except for the first character. You may combine the use of question marks with asterisks in specifying a generic object name as in the following examples:

- o A?C* includes all objects whose names begin with A-anything-C.
- o A??B?C* includes all objects whose names have A in position 1, B in position 4 and C in position 6.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F5=Refresh: Shows the display again with the most recent information and removes any typed selections.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Chapter 5 Work With Report Records Display

What's In This Chapter

This chapter describes the **Work with Report Records** display and associated displays.

Work with Report Records Display

From the **Work with Report Records** display you can:

- o Add report records to a source member.
- o Edit report record comments with SEU.
- o Copy report records in a source member.
- o Remove report records from a source member.
- o Rename report records in a source member.
- o Select record keywords for a report record.
- o Design a report record's image.
- o Change the Report Designer session defaults.
- o Select file-level keywords.
- o Edit file-level comments with SEU.

Use this display to work with report records in a file member by selecting options or pressing function keys. To select an option, type the option number in the Option list area and press Enter. If you know the name of a report record you want to work with, enter the name in the Record prompt of the first list entry and type the option you want in the Option prompt.

Note: You can select additional records to work with when you are using option 12 (Design Image). Press F9 and the **Select Additional Records for Display** will appear.

If you press Enter without choosing any options, an exit display appears where you can choose to save and compile your work.

```
-----
Work with Report Records
File . . . . . : SAMPLE          Member . . . . . : SYPR400
Library . . . . : RDA             Printer . . . . . : *PRTF

Type options, press Enter.
1=Add                2=Edit comments      3=Copy           4=Remove
7=Rename             8=Select keywords   12=Design image

Opt Order  Record      Date      Error      Text
-----
10 SYPR030A  90/08/20
20 SYPR030B  90/08/20  Page headings
30 SYPR030C  90/08/20  Detail line
40 SYPR030D  90/08/20  Subtotal line
Total line

Bottom
F3=Exit              F5=Refresh          F12=Cancel
F13=Session defaults F14=File-level keywords F15=File-level comments
(C) Copyright Gumbo Software, Inc. 1989, 2005. All rights reserved.
```

Options

Type the number of an option and press the Enter key.

1=Add: Type 1 in the top entry of the list area to add a new report record. Type a name for your new report record in the Record prompt and press Enter. All new report records are added at the end of the report record list.

2=Edit comments: Type 2 to edit the comments associated with the report record. When you press Enter, the SEU display will appear.

3=Copy: Type 3 to copy an existing report record to a new report record. When you press Enter, the

Copy Records display appears. All new report records are added at the end of the report record list.

4=Remove: Type 4 to remove a report record from the member. When you press Enter, the **Confirm Remove of Records** display appears.

7=Rename: Type 7 to change the name of a report record. When you press Enter, the **Rename Records** display appears.

8=Select keywords: Type 8 to change the keyword selections for a report record. When you press Enter, a record-level keyword selection display appears.

12=Design Image: Type 12 to change the image of a report record. When you press Enter, the Design Image work screen appears.

Field Descriptions

File: Specifies the name of the file containing the source member to be updated or to which a new source member will be added.

Member: Specifies the name of the member containing the source to be updated or the name of a new member to be created.

Printer: The name of the printer. For DDS source this contains either *PRTF or *PRTF38. For RPG source this contains the name of the internally-described printer file being edited (for example QSYSPRT). If *FIRST was specified as the printer name, the name of the first internally-described RPG printer file encountered in the source statements appears. If *MBRTYPE was specified, the printer name depends on the member's source type. For DDS source, printer is either *PRTF or *PRTF38. For RPG, the name of the first internally-described RPG printer file encountered in the source appears.

Order: Contains a number (up to five digits) for each report record indicating the position of that report record in the source member. To change the position of a report record, change the number and Report Designer will renumber all order numbers in multiples of ten. You can type 0 as a number; however, it becomes 10 when you press Enter. Group the report records that you use most near the beginning of the source member.

Record: Specifies the name of the report record.

Date: The date the report record was last updated.

Error: Indicates whether or not errors were found during syntax checking of the report record. The most common cause of errors is reference in the source statements to files that cannot be located in the library list of the job. If this column indicates errors, compile the source to get a list of errors and correct them using SEU. Note: This column does not indicate whether an error has already been corrected within Report Designer.

Text: Specifies a description of the report record.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F5=Refresh: Shows the display again with the most recent information and removes any typed selections.

F12=Cancel: Cancels this display and returns to the previous display.

F13=Session defaults: Displays the session default values that govern the operations of Report Designer.

F14=File-level keywords: Displays the **Select File Keywords** display.

F15=File-level comments: Allows editing of the file-level comments associated with this member, using SEU.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Copy Records Display

From the **Copy Records** display you can:

- o Specify a new name for a record you are copying.

Use this display to copy records that you select from the **Work with Report Records** display in the current member. To copy a record, type a name in the New Name prompt next to a record from the Record list area, and press Enter. If the name of the copied record exists in the member, the **Confirm Copy of Record** display appears.

```
-----
                                Copy Records
File . . . . . :  SAMPLE                Member . . . . . :  SYPR400
Library . . . . :  RDA                  Printer . . . . . :  *PRTF

To rename copied record, type new name, press Enter.
Press F12=Cancel to return to change your choices.

Record          New name
SYPR030A       SYPR030A

F3=Exit      F5=Refresh      F12=Cancel
-----
```

Field Descriptions

File: Specifies the name of the file containing the source member to be updated or to which a new source member will be added.

Member: Specifies the name of the member containing the source to be updated or the name of a new member to be created.

Printer: The name of the printer. For DDS source this contains either *PRTF or *PRTF38. For RPG source this contains the name of the internally-described printer file being edited (for example QSYSPRT). If *FIRST was specified as the printer name, the name of the first internally-described RPG printer file encountered in the source statements appears. If *MBRTYPE was specified, the printer name depends on the member's source type. For DDS source, printer is either *PRTF or *PRTF38. For RPG, the name of the first internally-described RPG printer file encountered in the source appears.

Record: Specifies the name of the report record.

New name: Specifies the new name for the report record.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F5=Refresh: Shows the display again with the most recent information and removes any typed selections.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Confirm Copy of Record Display

From the **Confirm Copy of Record** display you can:

- o Confirm the deletion of an existing record by the copy operation.

This display appears when you try to copy a record to another record that already exists in the current member. You can do one of the following:

- o Type Y in the Delete existing record prompt and press Enter, to delete the existing record and perform the copy operation.
- o Type N in the Delete existing record prompt and press Enter, to bypass the copy operation and process any other options.
- o Press F12 to return to the previous display and to cancel the copy operation and any pending options.

```
-----
                        Confirm Copy of Record
File . . . . . :  SAMPLE                Member . . . . . :  SYPR400
Library . . . . :   RDA                  Printer . . . . . :  *PRTF

The following record already exists for this copy operation:

Record which exists . . . . . :  SYPR030B
Record to copy . . . . . :  SYPR030A

Type choice, press Enter.

Delete existing record . . . . .  N   Y=Yes, N=No
Press F12 to return and not perform the copy operation
(existing record will not be deleted).

F12=Cancel
-----
```

Field Descriptions

File: Specifies the name of the file containing the source member to be updated or to which a new source member will be added.

Member: Specifies the name of the member containing the source to be updated or the name of a new member to be created.

Printer: The name of the printer. For DDS source this contains either *PRTF or *PRTF38. For RPG source this contains the name of the internally-described printer file being edited (for example QSYSVRT). If *FIRST was specified as the printer name, the name of the first internally-described RPG printer file encountered in the source statements appears. If *MBRTYPE was specified, the printer name depends on the member's source type. For DDS source, printer is either *PRTF or *PRTF38. For RPG, the name of the first internally-described RPG printer file encountered in the source appears.

Record which exists: The name of the existing record.

Record to copy: The name of the record that you want to copy.

Delete existing record:

Y=YES: Type Y to delete the existing record and copy the new record.

N=NO: Leave N if you do not want to delete the existing record. The record is not copied and the existing record is not deleted. The next pending operation is processed.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Confirm Remove of Records Display

From the **Confirm Remove of Records** display you can:

- o Confirm the removal of records from a member.

Use this display to confirm the removal of selected records from the current member.

Press Enter to remove the record, or press F12 to cancel the request and return to the **Work with Report Records** display.

```
-----
                          Confirm Remove of Records
File . . . . . : SAMPLE          Member . . . . . : SYPR400
Library . . . . : RDA           Printer . . . . . : *PRTF

Press Enter to confirm your choices for 4=Remove.
Press F12 to return to change your choices.

Opt   Record   Date   Error   Text
 4   SYPR030A  90/08/20
                                Page headings

F3=Exit      F12=Cancel
-----
```

Field Descriptions

File: Specifies the name of the file containing the source member to be updated or to which a new source member will be added.

Member: Specifies the name of the member containing the source to be updated or the name of a new member to be created.

Printer: The name of the printer. For DDS source this contains either *PRTF or *PRTF38. For RPG source this contains the name of the internally-described printer file being edited (for example QSYSPRT). If *FIRST was specified as the printer name, the name of the first internally-described RPG printer file encountered in the source statements appears. If *MBRTYPE was specified, the printer name depends on the member's source type. For DDS source, printer is either *PRTF or *PRTF38. For RPG, the name of the first internally-described RPG printer file encountered in the source appears.

Record: Specifies the name of the report record.

Date: The date the report record was last updated.

Error: Indicates whether or not errors were found during syntax checking of the report record. The most common cause of errors is reference in the source statements to files that cannot be located in the library list of the job. If this column indicates errors, compile the source to get a list of errors and correct them using SEU. Note: This column does not indicate whether an error has already been corrected within Report Designer.

Text: Specifies a description of the report record.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Rename Records Display

From the **Rename Records** display you can:

- o Specify a new name for a record you are renaming.

Use this display to change the name of records that you selected on the **Work with Report Records** display. To rename a record, type a name in the New Name prompt next to a record from the Record list area, and press Enter.

```
-----  
                          Rename Records  
File . . . . . :   SAMPLE                Member . . . . . :   SYPR400  
Library . . . . :   RDA                  Printer . . . . . :   *PRTF  
  
To rename record, type new name, press Enter.  
Press F12=Cancel to return to change your choices.  
  
Record          New name  
SYPR030A       SYPR030A  
  
F3=Exit      F5=Refresh      F12=Cancel  
-----
```

Field Descriptions

File: Specifies the name of the file containing the source member to be updated or to which a new source member will be added.

Member: Specifies the name of the member containing the source to be updated or the name of a new member to be created.

Printer: The name of the printer. For DDS source this contains either *PRTF or *PRTF38. For RPG source this contains the name of the internally-described printer file being edited (for example QSYSPRT). If *FIRST was specified as the printer name, the name of the first internally-described RPG printer file encountered in the source statements appears. If *MBRTYPE was specified, the printer name depends on the member's source type. For DDS source, printer is either *PRTF or *PRTF38. For RPG, the name of the first internally-described RPG printer file encountered in the source appears.

Record: Specifies the name of the report record.

New name: Specifies the new name for the report record.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F5=Refresh: Shows the display again with the most recent information and removes any typed selections.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Session Defaults Display

Report Designer's **Session Defaults** display tailors default values to reflect your individual preferences. From the **Session Defaults** display you can:

- o Set the number of display window segments.
- o Set the number of display roll segments.
- o Set the off page fill element.
- o Enable 27x132 mode for 3180's.
- o Control writing of RPG printer name.
- o Set the appearance of fields on the **Work Display**.
- o Control clearing of the list of additional records.
- o Control record editing on the **Design Image (Work)** display.

```
-----  
RDA                      Session Defaults  
Type choices, press Enter.  
  
Display window segments . . . . . 3      1 - 9  
Display roll segments . . . . . 3      1 - 9  
Off page fill element . . . . . .      Character  
Enable 27x132 mode for 3180's . . . . . Y  Y=Yes, N=No  
Always write RPG printer name . . . . . Y  Y=Yes, N=No  
Use field name as image . . . . . N  Y=Yes, N=No  
Preserve record list . . . . . N  Y=Yes, N=No  
Multiple record editing . . . . . N  Y=Yes, N=No  
  
F3=Exit  F12=Cancel  
-----
```

Field Descriptions

Display window segments: Governs the number of times you must press the window keys F19/F20 on the **Work Display** to move one display width. A value of 2 would require 2 F19 keys to window the display one display width to the left.

Display roll segments: Governs the number of times you must press the page (roll) keys on the **Work Display** to move one display length. A value of 2 would require pressing Page Down twice to roll the display one display length.

Off page fill character: The character specified here will appear in out-of-bounds areas of the Report Designer **Work Display**.

Enable 27x132 mode: "Y" enables the 27 x 132 display mode of 27 x 132 capable displays. 27 x 132 capable devices will use 24 x 80 display mode if "N" is entered.

Always write RPG printer name: Governs the writing of the printer name in the generated RPG source code. With a value of "Y", the printer name is written on each record identification O-spec. With a value of "N", the printer name is written on the first record identification O-spec only. This value has no effect on DDS generation.

Use field name as image: Governs the appearance of fields on the **Work Display**. With a value of "N", character fields are displayed as a sequence of O's while numeric fields are shown as a sequence of 6's. With "Y", the field's name is used to represent the field.

Preserve record list: Governs clearing of the list of additional records to display on the **Work Display**. With "N", Report Designer operates as SDA and the record list is cleared on exiting from the **Work Display**. With "Y", the record list is preserved on exiting the **Work Display**. This allows switching between records without re-keying the additional records to be displayed.

Multiple record editing: Governs the report records that can be edited from the **Design Image (Work)**

display. With "N", Report Designer operates as SDA and only the current record can be edited from the **Work Display**. With "Y", all records on the **Work Display** including additional records may be edited.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Chapter 6 File Keywords Displays

What's In This Chapter

This chapter describes the File Keywords displays - F14 from the **Work with Report Records** display.

Select File Keywords Display

From the **Select File Keywords** display you can:

- o Select file-level keywords for review or update.
- o Select file-level indicator text for review or update.
- o Select file-level character definitions for review or update.
- o Select create printer file command keywords for review or update.
- o Display selected file-level keywords.

```
-----  
                                Select File Keywords  
Member . . . :  SYPR400  
Type choices, press Enter.  
  
                                Y=Yes  
General keywords . . . . . -  
Indicator keywords . . . . . -  
Define character keywords . . . . -  
Create printer file keywords . . -  
  
F3=Exit  F4=Display Selected Keywords  F12=Cancel  
-----
```

Field Descriptions

Member: Specifies the name of the member containing the source to be updated or the name of a new member to be created.

General keywords: To review or update general keywords, key a "Y" and press Enter.

Indicator keywords: To review or update indicator text, key a "Y" and press Enter.

Define character keywords: To review or update define character keywords, key a "Y" and press Enter.

Create printer file keywords: To review and select create printer file command parameters, key a "Y" and press Enter.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F4=Display Selected Keywords: Causes the Display Selected Keywords window to appear.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Select General Keywords Display

From the **Select General Keywords** display you can:

- o Specify a separate buffer area for printer file indicators.
- o Specify whether to fold or truncate data extending beyond a line.
- o Specify file-level skipping.
- o Specify the page size to work with.
- o Specify the page overflow information.
- o Specify a field reference file.

```

-----
                          Select General Keywords
Member . . . : SYPR400
Type choices, press Enter.

Separate indicator . . . . . Keyword  Y=Yes  Indicators/+
Work Display folds records . . . . . FOLD      N
Skip to line before printing records . . . . . SKIPB     ___ ___ ___
Skip to line after printing records . . . . . SKIPA     ___ ___ ___
Page size:
Length--lines per page . . . . . PAGESIZE  66      1-255
Width--positions per line . . . . .          132     1-378
Overflow:
Line number . . . . . OVRFLW   60      1-255
RPG indicator . . . . .          OF      OA-OG, OF

Reference database file . . . . . REF
Library . . . . .
Record . . . . .
Name
Name
Name

F3=Exit  F12=Cancel
-----
  
```

Field Descriptions

Separate indicator (INDARA): Key a "Y" if indicators used in the printer file should be placed in a separate 99-byte buffer. This option is not valid with RPG source.

Work Display folds records (FOLD): Key a "Y" to instruct Report Designer to fold any data that extends beyond a line on the **Work Display**. The folded data appears at the beginning of the next line.

Skip to line before printing records (SKIPB): The value you enter for Skip Before at the file-level will cause the printer to skip to the indicated line before printing each record in the file. A value of zero indicates no Skip Before value.

Skip to line after printing records (SKIPA): The value you enter for Skip After at the file-level will cause the printer to skip to the indicated line after printing each record in the file. A value of zero indicates no Skip After value.

File-level skipping keywords must be conditioned with indicators. Key the desired indicators in the spaces provided next to the appropriate keyword. Key a plus (+) in any indicator field to obtain more space for indicators. File-level skipping is not valid with RPG source.

Page Size (PAGESIZE): Specify the page width and page length by keying values in the spaces provided. The values you specify will affect the dimensions of the **Work Display**.

Overflow (OVRFLW): Specify the overflow line number and indicator (RPG only) by keying values in the spaces provided.

Reference Database File (REF): To associate a field reference file with your printer file, key the name, library, and record name of the file to use. Within the printer file, referenced fields will look for their definitions in the field reference file indicated, unless this is overridden at the field level with the REFFLD keyword. The REF keyword is not valid with RPG source.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

Create Printer File Display

The **Create Printer File** (CRTPRTF) display appears after selecting Create Printer File Keywords from the **Select File Keywords** display. From this prompt you can:

- o Specify additional Create Printer File Keywords.
- o Review additional Create Printer File Keywords specified previously.

```
-----  
                          Create Printer File (CRTPRTF)  
-----  
Type choices, press Enter.  
Device specification:  
Printer . . . . . *JOB          Name, *JOB, *SYSVAL  
Printer device type . . . . . *SCS          *SCS, *IPDS, *USERASCII  
  
F3=Exit   F4=Prompt   F5=Refresh   F10=Additional parameters   F12=Cancel  
F13=How to use this display   F24=More keys  
-----  
Bottom
```

Field Descriptions

For a complete explanation of each keyword, see command CRTPRTF in the [AS/400 Control Language Reference SC41-0030](#).

Function keys

- F1=Help:** Provides additional information about using the display or a specific field.
- F3=Exit:** Ends the current task and returns to the display from which it was started.
- F12=Cancel:** Cancels this display and returns to the previous display.
- Enter:** Submit information on the display for processing.
- Help:** Provides additional information about using the display or a specific field.
- Print:** Prints information currently shown on the display.

Display Selected Keywords Window

The **Display Selected Keywords** window shows a list of currently selected keywords in DDS source code form. From the **Display Selected Keywords** window you can:

- o Add keywords not supported on other displays.
- o Change keywords not supported on other displays.
- o Copy keywords not supported on other displays.
- o Delete keywords not supported on other displays.

```
-----
Member . . . : SYPR400          Select File Keywords
Type choices, press Enter.

General keywords . . : ..... Display Selected Keywords .....
Indicator keywords . : .....
Define character keyw : Type options, press Enter.
Create printer file k : 1=Add 2=Change 3=Copy 4=Delete
:
: Opt Keyword
: -----
: PAGESIZE(66 132)
: OVRFLW(60)
: FOLD(*NO)
:
: Bottom
:
: F12=Cancel
:
F3=Exit F4=Display Se :.....
-----
```

Options

Type the number of an option and press the Enter key.

1=Add: Use this option to add a new keyword. Only keywords that can not be added from other screens are allowed.

2=Change: Use this option to change a keyword. Only keywords that are inaccessible from other screens can be changed.

3=Copy: Use this option to copy a keyword. Only keywords that are inaccessible from other screens can be copied.

4=Delete: Use this option to delete a keyword. Only keywords that are inaccessible from other screens can be deleted.

Field Descriptions

Keyword: The keyword and associated parameter values.

Note: The associated parameters end in an ellipsis (...) when they do not all fit.

Chapter 7 Record Keywords Displays

What's In This Chapter

This chapter describes the Record Keywords Displays - option 8 from the **Work with Report Records** display.

Select Record Keywords Display

From the **Select Record Keywords** display you can:

- o Select record-level general keywords for review or update.
- o Select record-level spacing and skipping keywords for review or update.
- o Select record-level indicator text for review or update.
- o Select record-level character definitions for review or update.
- o Change the text associated with the report record.
- o Display selected record-level keywords.

```
-----  
                          Select Record Keywords  
Record . . . :  SYPR030A  
Type choices, press Enter.  
  
                          Y=Yes  
General keywords . . . . . -  
Spacing and skipping keywords . . -  
Indicator text keyword . . . . . -  
Define character keyword . . . . . -  
  
TEXT keyword . . . . . _____  
_____  
  
F3=Exit  F4=Display Selected Keywords  F12=Cancel  
-----
```

Field Descriptions

Record: Specifies the name of the report record.

General keywords: To review or update general keywords key a "Y" and press Enter.

Spacing and skipping keywords: To review or update spacing and skipping keywords key a "Y" and press Enter.

Indicator text keywords: To review or update indicator text key a "Y" and press Enter.

Define character keywords: To review or update define character keywords key a "Y" and press Enter.

Text: Specifies a description of the report record.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F4=Display Selected Keywords: Causes the Display Selected Keywords window to appear.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Select General Keywords Display

From the **Select General Keywords** display you can:

- o Change the Character Size (CHRSIZ) keyword value.
- o Change the Characters Per Inch (CPI) keyword value.
- o Change the Printer Drawer (DRAWER) keyword value.
- o Change the Printer Font (FONT) keyword values.
- o Change the Lines Per Inch (LPI) keyword value.
- o Change the Page Rotation (PAGRTT) keyword value.
- o Change the Print Quality (PRTQLTY) keyword value.
- o Change the RPG line type.
- o Change the RPG fetch overflow flag.
- o Change the RPG EXCPT name associated with the record.
- o Change the RPG record-level indicators.
- o Indicate that the first RPG indicator line should be blank.

```

Select General Keywords
Record . . . : SYPR030A
Type choices, press Enter.
Character size:      Keyword  Value      Indicators/+
                    CHRSIZ
Width . . . . .    _____ 1.0 - 20.0
Height . . . . .   _____ 1.0 - 20.0
Characters per inch . . . . . CPI      _____ 10, 15
Drawer . . . . .   _____ 1, 2, 3 ..
Font identifier . . . . . FONT     _____ Name, ID
Point size . . . . . _____ 0.1-999.9
Lines per inch . . . . . LPI      _____ 4, 6, 8, 9
Page rotation . . . . . PAGRTT  _____ 0, 90 ...
Print quality . . . . . PRTQLTY _____ *STD ...
RPG record-level parameters:
Line type . . . . . _____ H, D, E, T
Fetch overflow . . . . . _____ F, blank
EXCPT name . . . . . _____ Name
Blank indicator line . . . . . _____ Y=Yes

F3=Exit  F12=Cancel
  
```

Field Descriptions

Character Size: The CHRSIZ keyword allows you to specify the height and width of characters printed in the record. Not valid with RPG source.

Characters Per Inch: With the CPI keyword you specify the horizontal print density of characters in the record. Not valid with RPG source.

Drawer: With the DRAWER keyword, you specify the drawer from which forms will be selected at print time. Not valid with RPG source.

Font: With the FONT keyword, you control the style and appearance of characters printed in the record. Specify either a numeric font id or a graphic font name. If supported, specify a point size. Not valid with RPG source.

Lines Per Inch: With the LPI keyword you specify the vertical print density of lines within the record. Not valid with RPG source.

Page Rotation: With the PAGRTT keyword, you specify the degree of clockwise rotation of text within the record, with respect to the physical printed form. Zero (or blank) indicates no rotation. Valid values are 0, 90, 180, 270. Not valid with RPG source.

Print Quality: With the PRTQLTY keyword, you can set the print quality of the fields in the record. Allowable values are *STD (standard), *DRAFT (draft quality), and *NLQ (near letter quality). Not valid with RPG source.

RPG Line Type: Each print line in RPG must be assigned a type. Report Designer assumes that all lines within a logical record have the same type. The valid line types are H (header), D (detail), E (exception)

and T (total). If you leave the line type blank for RPG source, a type of D is assumed. This field is ignored for DDS source.

RPG Fetch Overflow Flag: An "F" in this field indicates that detail and header lines, conditioned with the overflow indicator, should be printed before the current record when page overflow is detected. This field is ignored for DDS source.

RPG EXCPT Name: An EXCPT name only has meaning for records with an output type of E (exception) in RPG source. Specifying an EXCPT name allows you to print the current record by name with the RPG EXCPT operation code. This field is ignored for DDS source.

RPG Record-Level Indicators: To condition a record, key the desired indicators in the spaces provided. Key a plus (+) in any indicator field to obtain more space for indicators. Record-level indicators are ignored for DDS source.

When the record is conditioned by indicators, enter a "Y" for "Leave 1st indicator line blank" to cause the first line of indicators to be blank on output. Beginning the record-level indicators on the second line can produce different results at print time. See RPG Reference manual SC09-1349 for more information. This field is ignored for DDS source and when no record-level indicators are specified.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Select Spacing and Skipping Keywords Display

From the **Select Spacing & Skipping Keywords** display you can:

- o Change the record-level spacing & skipping values.
- o Select fixed or relative line spacing for the record.
- o Adjust the spacing & skipping between lines in the record.

```

Select Spacing And Skipping Keywords
Record . . . : SYPR030A
Type choices, press Enter.
Report record level:
Skip before . . . . . SKIPB   _1  _ _ _ _
Skip after  . . . . . SKIPA   _ _ _ _
Space before . . . . . SPACEB  _ _ _ _
Space after . . . . . SPACEA  _ _ _ _
Line spacing . . . . .         _2  _ _ _ _
                                     1=Fixed line nbrs
                                     2=Use Spaces/Skips
Line/field level:
Skip Before   Skip After   Space Before   Space After
Val Indicators/+ Val Indicators/+ Val Indicators/+ Val Indicators/+
1   _ _ _ _ _   _ _ _ _ _   _ _ _ _ _   _ 1 _ _ _ _
2   _ _ _ _ _   _ _ _ _ _   _ _ _ _ _   _ 3 _ _ _ _
5   _ _ _ _ _   _ _ _ _ _   _ _ _ _ _   _ 1 _ _ _ _
6   _ _ _ _ _   _ _ _ _ _   _ _ _ _ _   _ 1 _ _ _ _
                                     Bottom
F3=Exit  F12=Cancel

```

Field Descriptions

Record-level Spacing And Skipping: The value you enter for Skip Before at the record-level will cause the printer to skip to the indicated line before printing the record. A value of zero indicates no Skip Before value.

The value you enter for Skip After at the record-level will cause the printer to skip to the indicated line after printing the record. A value of zero indicates no Skip After value.

The value you enter for Space Before at the record-level will cause the printer to advance the indicated number of lines before printing the record. A value of zero indicates no Space Before value. At execution time, the printer will skip to the line indicated by the Skip Before value (if any) before honoring any Space Before request.

The value you enter for Space After at the record-level will cause the printer to advance the indicated number of lines after printing the record. A value of zero indicates no Space After value. At execution time, the printer will skip to the line indicated by the Skip After value (if any) before honoring any Space After request.

Any of the record-level spacing and skipping keywords may be conditioned with indicators. Key the desired indicators in the spaces provided next to the appropriate keyword. Key a plus (+) in any indicator field to obtain more space for indicators.

Record-level spacing and skipping cannot be specified for RPG source.

Keying a "1" for Line Spacing will cause fields within the DDS report record to be output with fixed line numbers. A value of "2" will cause spacing and skipping keywords to be used to achieve the required spacing within the record. For RPG source, only option "2" is valid.

Line/field Level Spacing And Skipping: A list of lines currently defined for the record is shown, along with spacing and skipping values that would result in the record printing with the lines indicated. You may change the spacing and skipping for any line.

The location of the first line in the record is determined by the record-level Skip Before/Space Before values, and the Skip Before/Space Before values for the line in question. The location of subsequent lines in the record is determined by the Skip After/Space After values of the previous line, and the Skip

Before/Space Before values for the line in question.

Any of the line level spacing and skipping keywords may be conditioned with indicators. Key the desired indicators in the spaces provided next to the appropriate keyword. Key a plus (+) in any indicator field to obtain more space for indicators.

Indicators associated with spacing and skipping keywords are not taken into account by Report Designer when calculating line positions for the **Work Display**.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Display Selected Keywords Window

The **Display Selected Keywords** window shows a list of currently selected keywords in DDS source code form. From the **Display Selected Keywords** window you can:

- o Add keywords not supported on other displays.
- o Change keywords not supported on other displays.
- o Copy keywords not supported on other displays.
- o Delete keywords not supported on other displays.

```
-----
                Select Record Keywords
Record . . . : SYPR030A
Type choices, press Enter.

General keywords . . : ..... Display Selected Keywords ..... :
Spacing and skipping : : :
Indicator text keywor : Type options, press Enter. :
Define character keyw : 1=Add 2=Change 3=Copy 4=Delete :
TEXT keyword . . . . : Opt Keyword :
: :
: TEXT('Page headings) :
: SKIPB(1) :
: :
: :
: F12=Cancel Bottom :
: :
F3=Exit F4=Display Se :.....:
-----
```

Options

Type the number of an option and press the Enter key.

1=Add: Use this option to add a new keyword. Only keywords that can not be added from other screens are allowed.

2=Change: Use this option to change a keyword. Only keywords that are inaccessible from other screens can be changed.

3=Copy: Use this option to copy a keyword. Only keywords that are inaccessible from other screens can be copied.

4=Delete: Use this option to delete a keyword. Only keywords that are inaccessible from other screens can be deleted.

Field Descriptions

Keyword: The keyword and associated parameter values. These values end in an ellipsis (...) when they do not all fit.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Chapter 8 Design Image (Work) Display

What's In This Chapter

This chapter describes Design Image (field) definition using the **Work Display** - option 12 on the **Work with Report Records** display. From the **Design Image (Work)** display you can:

- o Define fields and constants for the selected record.
- o Move, copy, delete, and exclude fields on the **Work Display**.
- o Select database fields and place them on the **Work Display**.
- o Add or remove attributes and colors.
- o Add or remove editing.
- o Review or change the names of fields in a record.
- o Condition the **Work Display**.
- o Select additional records to display on the **Work Display**.
- o Add or remove a ruler on the display.
- o Center the fields and constants on a line.
- o Center a field or constant between its neighbors.
- o Print the current **Work Display**.
- o Reverse Image constants on the display.
- o Window the **Work Display** left and right.
- o Hide additional records on the **Work Display**.
- o Enter OS/400 system commands.
- o Roll the **Work Display** up and down.

Defining Fields

To define an alpha field on the **Work Display**, key a + followed by 1 or more O's, and press Enter.

To define a numeric field, key a + followed by 1 or more 6's, and press Enter.

To define a floating point field, key in a + followed by one or more 6's, followed by an E (single precision) or a D (double precision).

Field definitions can be entered in either upper or lower case. Field length is determined by the number of characters after the plus sign (+) or by a length specification in brackets after the first character.

After defining a field, you can modify the field's attributes with the extended field definition displays. Key an asterisk (*) in the position preceding a field and press Enter to see the extended definition displays for the field.

The following examples illustrate defining fields:

+000	or	+o(3)	-	3 character alpha field.
+66.66	or	+6(4,2)	-	4 character numeric field with 2 decimal positions (set by an edit word).
+6.66E	or	+6(3,2)e	-	Single precision floating point field with 3 significant digits and 2 decimal positions.
+66.6d	or	+6(5,1)D	-	Double precision floating point field with 5 significant digits and 1 decimal position.

Defining Constants

Key constants without quotes (') and press Enter to define constants for each group of characters that is followed by a blank. Surround character groups with quotes to define the constant lengths and boundaries. Surround constants with quotes to redefine as one constant. Use a double quote (") to stop and start constants in one position. Use +M and a length specification to define a MSGCON (message constant) field. To add predefined constants, key *DATE *TIME or *PAGNBR (DDS); or key *DATE *PAGE *PAGE1 *PAGE2 *PAGE3 *PAGE4 *PAGE5 *PAGE6 or *PAGE7 (RPG), at the desired location and press Enter.

The following examples illustrate defining constants:

- 'x x x"Y Y Y' - Define 2 constant fields.
- 'xxx YY zzz' - Combine 3 constant fields.
- +MMMMMM or +m(7) - Define a 7 character MSGCON field.
- *TIME - Define time constant field.
- *page - Define page number constant field.

Moving Fields

To move a single field, key a minus sign (-) in the position preceding the field. Key an equal sign (=) in the position preceding the desired target for the field and press Enter. There must be adequate space for the field at the target location.

You can move a field to the left by keying one or more less than signs (<) in the positions preceding the field. You can move a field to the right by keying one or more greater than signs (>) in the positions following the field.

To move a group of fields, key a minus sign (-) in a blank position at the upper left corner of the group of fields to move. Key another minus sign in a blank position at the lower right corner of the group of fields to move. Key an equal sign (=) in the position before the desired target location and press Enter. There must be adequate space for the group of fields at the target location.

The following examples illustrate moving fields:

1. Move a field 3 positions to the right.

```

+-----+
| 0000  000000>>> |
+-----+

```

2. Move a field 1 position to the right and another field 4 positions to the left.

```

+-----+
| 0000> <<<<000000 |
+-----+

```

3. Move a field to a target.

```

+-----+
| -0000 000000                (Before) |
| =                                |
+-----+
+-----+
|      000000                (After)  |
| 0000                        |
+-----+

```

4. Move a group of fields down 1 line.

```

+-----+
|      000000  00 00                (Before) |
| 0000                                |
+-----+
+-----+
| -      000000  00 00                (Indicate Group Move) |
| 0=000 -                                |
+-----+
+-----+
|      000000  00 00                (After)  |
| 0000                                |
+-----+

```

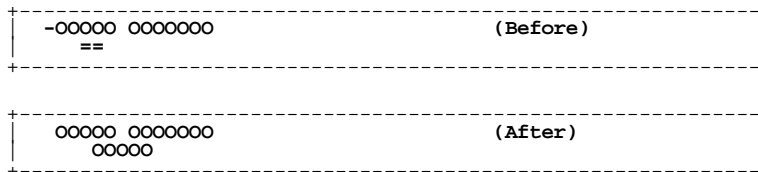
Copying Fields

To copy a single field, key a minus sign (-) in the position preceding the field. Key two equal signs (==) beginning in the position preceding the desired target for the field and press Enter. There must be adequate space for the new field at the target location.

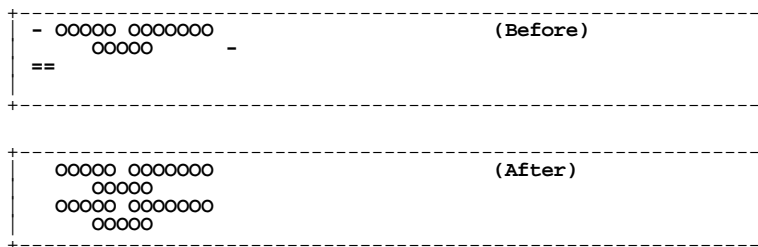
To copy a group of fields, key a minus sign (-) in a blank position at the upper left corner of the group of fields to copy. Key another minus sign in a blank position at the lower right corner of the group of fields to copy. Key two equal signs (==) beginning in the position before the desired target location and press Enter. There must be adequate space for the new group of fields at the target location.

The following examples illustrate copying fields:

1. Copy a single field.



2. Copy a group of fields.



Deleting Fields

To delete a field or constant from the **Work Display**, key a D or d in the position preceding it and press Enter. When you delete a field, the field name is added to the field list displayed at the bottom of the screen. This allows you to add the field to the display again at a later time.

The following example illustrates deleting a field:

```
00000 66/66/66 00000000000 Before field delete.
00000 d66/66/66 00000000000 Deleting a field.
00000 00000000000 After field delete.
```

Excluding Fields

To temporarily exclude a field or constant from appearing on the **Work Display**, key a X or x in the position preceding it and press Enter. When you exclude a field, any overlapped fields reappear. Excluding fields allows the creation of overlapped fields. Use the **Work with Fields** display to determine the overlap status of fields, and to include fields previously excluded.

The following example illustrates excluding a field:

```
00000 66/66/66 00000000000 Before field excluded.
00000 x66/66/66 00000000000 Excluding a field.
00000 00000000000 After field excluded.
```

Working With Database Fields

Use F10 to select database fields. The selected fields are displayed at the bottom of the **Work Display**. You may add these fields to the **Work Display** by keying in a & sign, followed by a field number, followed optionally by a column heading position (L, R, C, or P). The field will be placed at the position of the & sign. You do not have to specify a field number when working in single-field mode.

The following examples illustrate adding a database field:

- &1 - Add field number 1. Without column headings.
- &2L - Add field number 2. Add column headings to its left.
- &3R - Add field number 3. Add column headings to its right.
- &4C - Add field number 4. Center column headings above it.
- &5P - Add only column headings from field number 5.
- &C - Add current database field with centered column headings.

Adding or Removing Attributes or Color

Key an H in the position preceding a field or constant, and press Enter to add the HIGHLIGHT attribute.

Key a U in the position preceding a field or constant, and press Enter to add the UNDERLINE attribute.

Key a minus sign (-) in the space immediately preceding a field or constant followed by a U, H or A, and press Enter to remove the UNDERLINE, HIGHLIGHT or All attributes.

Key a C in the position preceding a field or constant, followed by a color code to add a COLOR attribute.

The valid color codes are:

- | | | |
|-----------|-----------|------------------------------|
| K - Black | G - Green | T - Turquoise |
| B - Blue | P - Pink | Y - Yellow |
| N - Brown | R - Red | A - All colors (remove only) |

Key a -C in the position preceding a field or constant, followed by a color code to remove a COLOR attribute.

Note: HIGHLIGHT, UNDERLINE, and COLOR are not supported by all printers.

The following examples illustrate using attributes and color:

- | | |
|------------------|---|
| oooooo | Alpha field before adding attributes. |
| hoooooo | Specifying HIGHLIGHT attribute. |
| oooooo | Alpha field after adding HIGHLIGHT attribute. |
| Uoooooo | Specifying UNDERLINE attribute. |
| <u>oooooo</u> | Alpha field after adding UNDERLINE attribute. |
| Report Heading | Constant before adding COLOR attributes. |
| CReport Heading | Specifying Turquoise attribute. |
| Report Heading | Constant after adding COLOR attributes. |
| cReport Heading | Specifying Green attribute. |
| Report Heading | Constant after adding COLOR attributes. |
| -cReport Heading | Removing all color attributes. |

How Report Designer Displays Attributes

When you specify UNDERLINE, HIGHLIGHT, or COLOR attributes for a field, Report Designer attempts to display the field with its specified attributes on the **Work Display**. If part of the field is outside the display window, if the field begins in the first position of the line, or if the field ends in the last position of the line, the attributes are not shown. Where two or more fields are positioned contiguously without any spaces between them, attributes are shown only if they are the same for all of the fields in the group. Color attributes will not display as expected on monochrome displays.

The following chart shows how Report Designer displays fields with different combinations of attributes specified.

<u>Highlight</u>	<u>Underline</u>	<u>Color</u>	<u>Appearance On Color Display</u>	<u>Appearance On Monochrome Display</u>
X		Any	White	HI
	X	None	Green, UL	UL
X	X	Any	White, UL	HI, UL
		None	Green	Normal
		Black	Green	Normal
		Green	Green	Normal
		Red	Red	Blink
		Brown	Red, RI	Blink, RI
		Turq	Turq	CS
		Yellow	Yellow	CS, HI
		Pink	Pink	CS, Blink
		Blue	Blue	CS, Blink, HI
	X	Black	Green, UL	UL
	X	Green	Green, UL	UL
	X	Red	Red, UL	Blink, UL
	X	Brown	Red, RI, UL	Blink, RI, UL
	X	Turq	Turq, UL	CS, UL
	X	Yellow	Yellow, UL	CS, HI, UL
	X	Pink	Pink, UL	CS, Blink, UL
	X	Blue	Blue, UL	CS, Blink, HI, UL

Adding or Removing Editing

Key an E in the position preceding a numeric field followed by an edit code to add editing to a field.

The valid edit codes are:

	No Sign	CR Sign	- Sign(R)	- Sign(L)
Commas and zero balance	1	A	J	N
Commas	2	B	K	O
Zero balance	3	C	L	P
No commas or zero balances	4	D	M	Q
User-defined edit codes	5-9			
Date edit	Y			
Suppress leading zeros	Z			

Key an -E in the position preceding a numeric field to remove editing.

Note: Editing is only allowed for numeric fields.

The following examples illustrate using editing:

66666666	Numeric field (8,2) before adding editing.
E16666666	Specifying edit code 1.
666,666.66	Numeric field after adding editing.
66666666	Numeric field (8,2) before adding editing.
eL6666666	Specifying edit code L.
666666.66-	Numeric field after adding editing.
666,666.66	Numeric field with editing.
-e66,666.66	Removing editing.
66666666	Numeric field with editing removed.

Centering a Field or Constant

Key an A in the position preceding a field or constant followed by a C. This command works slightly differently than it does in SDA. The field or constant is centered in the space available between its nearest neighbors on the line. If there are no other fields on the line, the field or constant is simply centered.

The following example illustrates centering:

```
00000      66/66/66 00000000000 Before centering.
00000      ac6/66/66 00000000000 Centering a field.
00000      66/66/66  00000000000 After centering.
```

Additional Features

Extended field definition

Key an asterisk (*) in the position preceding the field to add field level attributes and keywords.

Display field name and length

To review the name of a field on the **Work Display**, key a question mark (?) in the position preceding the field and press Enter. The field name and length are displayed at the bottom of the screen. To change the field name, key over the displayed name and press Enter.

You can also review/change field names from the **Work With Fields** display (F4).

When you key a question mark in front of a MSGCON (message constant) field, the message id, message file, and message file library are shown at the bottom of the screen. You can change any of these values by keying over them and pressing Enter. See DDS Reference Manual SC41-9620 for more information on MSGCON fields.

Function keys

From the **Design Image (Work)** display you may use various function keys to request additional Report Designer displays and functions. The function keys, the display names, and the functions are:

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F4=Prompt: Causes the **Work with Fields** display to appear.

F6=Condition: Causes the **Condition Work Screen** display to appear.

F7=Tab: Moves the cursor to the attribute position of the next field.

F8=Back Tab: Moves the cursor to the attribute position of the previous field.

F9=Select additional records: Prompts for additional records to display on the **Design Image (Work)** display.

F10=Database: Causes the **Select Database Files** display to appear.

F11=Switch: Switches between selected and unselected database field modes.

F12=Cancel: Cancels this display and returns to the previous display.

F14=Ruler: Places a ruler at the cursor or if the ruler is currently displayed, removes the ruler. Defining fields on the ruler may cause results that can not be predicted.

F15=Center: Centers the fields of a line on the page.

F17=Print: Prints the contents of the **Design Image (Work)** display.

F18=Reverse Image constants: Toggles the reverse imaging of constants on and off. This reverse imaging is temporary and does not affect the compiled image. Use F18 to determine the starting and ending points of the constants. When reverse imaged other attributes such as color do not display for constants.

F19=Left: Windows the display to the left.

F20=Right: Windows the display to the right.

F21=Display additional records: Toggles the display of additional records with the primary record. Use F21 to determine which fields on the display belong to the primary record.

F22=System command: Displays a window in which you can enter OS/400 system commands.

HOME=Home: Positions cursor to current home position, or positions **Work Display** to page 1, line 1, position 1.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Work with Fields Display

The **Work with Fields** display shows a list of fields in the current record on the **Design Image (Work)** display. From the **Work with Fields** display you can:

- o Change the order of fields in the DDS or RPG source.
- o Rename fields.
- o Delete fields.
- o Include/Exclude fields.
- o Select field keywords.
- o Edit field-level comments.
- o Sort the fields into line and position order.
- o Switch the display between start and end positions.

```

Work with Fields

Record . . . : SYPR030A

Type information, press Enter.
Number of fields to roll . . . . . 10

Type options, change values, press Enter.
1=Select keywords 2=Edit comments 4=Delete 9=Include/Exclude

Option  Order  Field          Type  Length  Page/Line/Pos  Ref  Condition  Overlap
-----  -
 10    *DATE          C      6      1      1      1
 20    PSEPGM         A     10      1      1     11  R
 30    COUNT REPO    C     12      1      1     36
 40    JOB#          C      4      1      1     68
 50    P0JOB#        A     10      1      1     73
 60    **-DECOLLA   C     15      1      1     86      Y
 70    PAGE          C      4      1      1    115      Y
 80    *PAGNBR      C      4      1      1    121
 90    *TIME        C      6      1      2      1      Y
100    PORTXT       A     30      1      2     36

F3=Exit  F6=Sort by line/position  F11=Display end positions  F12=Cancel
More...

```

Options

Type the number of an option and press the Enter key.

1=Select keywords: Use this option to select field keywords for a field. The Field Keywords displays appear for each field in turn.

2=Edit comments: Use this option to edit comments associated with a field. The SEU edit display appears.

4=Delete: Use this option to delete a field.

9=Include/Exclude: Use this option to include a field previously excluded or to exclude a field not previously excluded.

Field Descriptions

Record: The name of the record that contains the fields.

Number of fields to roll: Type a number to indicate the number of entries to roll when paging down or up.

Order: To resequence a field, change the Order number for the field and press Enter. This changes the field location in the DDS or RPG source without affecting the print line/position for the field.

Note: It is not possible to sequence a field before a field on a previous line or after a field on a subsequent line.

Field: Specifies the field's name. To rename a field, key over the field name and press Enter. Constant fields cannot be renamed.

Type: Specifies the type of the field. Field types include C-constant, A-alpha, P-packed numeric, S-zoned numeric, etc.

Length: Specifies the length of the field. For numeric fields, the total number of digits in the field and the number of decimal positions are separated by a comma.

Page/Line/Pos: The relative position of the field within the record is shown.

Ref: An "R" is displayed in the REF column if the field is a referenced field.

Condition: A "Y" is displayed if the field is conditioned by indicators.

Overlap: A "Y" is displayed when the field is overlapped by another field. Overlapped fields are not shown on the **Work Display**.

An "X" is displayed when a field has been excluded from the **Work Display**. Field exclusion takes precedence over field overlapping.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F6=Sort By line/position: Resequence the fields to appear in order by line and position.

F11=Display start/end positions: Toggles the display from start positions to end positions and back again.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Condition Work Screen Display

From the **Condition Work Screen** display you can:

- o Condition the **Work Display** with indicators.
- o Specify indicators for all new fields and keywords added on the **Work Display**.
- o Display the indicators associated with a particular field.
- o Delete all fields from the **Work Display** prompt line.
- o Indicate whether fields pulled from database files should be reference fields.
- o Specify fields on the prompt line display one at a time.

```
-----
                          Condition Work Screen
Record . . . : SYPR030A
Type choices, press Enter.
Activate indicators . . . . . N           Y=Yes
Indicators to be turned ON . . . . .    01-99
                                         -----
                                         -----
                                         -----
                                         -----
Indicators to condition all new
fields and attributes . . . . .         -----
Show indicator setting for field . . . . Name
Delete all fields on bottom line . . . . Y=Yes
Reference database fields . . . . .     Y=Yes
Display in single-field mode . . . . .  Y=Yes
                                         -----
F3=Exit   F12=Cancel
-----
```

Field Descriptions

Activate indicators: When display conditioning is specified, Report Designer displays only those fields on the **Work Display** whose conditioning indicators match the **Work Display** conditioning indicators. Similarly, keywords conditioned by indicators are only in effect when their indicator settings agree with the **Work Display** conditioning indicator settings. Report Designer always ignores indicator settings for spacing and skipping keywords when positioning fields on the **Work Display**.

Indicators to be turned on: When "Y" is specified for Activate indicators, the display is conditioned with

the indicators listed set on. All other indicators are set off.

Indicators to condition all new fields and attributes: To condition new fields added to the **Work Display**, key conditioning indicators. To obtain space for more indicators, key a plus (+) in one of the indicator spaces and press Enter.

Show indicator setting for field: To display the conditioning indicators associated with a field, key the field's name.

Delete all fields on bottom line To delete all fields from the **Work Display** prompt line, key "Y".

Reference database fields: If fields selected from database files are reference fields, key a "Y" in the space provided. These fields will reference their definitions from the database field definition. This option is ignored for RPG source.

If the definition for fields selected from database files should be explicit, key "N".

Display in single-field mode: To display fields in the **Work Display** prompt line singly, key "Y". Otherwise, fields in the prompt line are displayed several across.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about the display or a specific field.

Print: Prints information currently shown on the display.

Select Additional Records Display

The **Select Additional Records** display appears when you press F9 from the **Design Image (Work)** display. From the **Select Additional Records for Display** you can:

- o Select additional report records for display on the **Work Display**.
- o Specify the number of times to repeat an Additional record.
- o Specify additional blank lines be displayed after a record.
- o Specify the relative position of the current record.

Use this display to select additional records to appear with the current printer record on the **Work Display**. The current printer record is the printer record selected from the **Work with Report Records** display.

```
-----
                          Select Additional Records for Display
-----
File . . . . . : SAMPLE                      Member . . . . . : SYPR400
Library . . . . : RDA                          Printer . . . . . : *PRTF

Type information, press Enter.
Current record . . . . . : SYPR030A
Blanks . . . . . :                               00-99
Position in additional records . . . . . :      0-31
Type options, press Enter.
1,2,3...31=Select for display as additional record

Option  Record      Repeat  Blanks
-----  -
-       SYPR030B      -       -
-       SYPR030C      -       -
-       SYPR030D      -       -

F3=Exit    F5=Refresh    F12=Cancel

Bottom
```

Field Descriptions

File: Specifies the name of the file containing the source member to be updated or to which a new source member will be added.

Member: Specifies the name of the member containing the source to be updated or the name of a new member to be created.

Printer: The name of the printer. For DDS source this contains either *PRTF or *PRTF38. For RPG source this contains the name of the internally-described printer file being edited (for example QSYSPRT). If *FIRST was specified as the printer name, the name of the first internally-described RPG printer file encountered in the source statements appears. If *MBRTYPE was specified, the printer name depends on the member's source type. For DDS source, printer is either *PRTF or *PRTF38. For RPG, the name of the first internally-described RPG printer file encountered in the source appears.

Current record: The record selected from the **Work with Report Records** display.

Blanks: The number of blank lines to insert after the current record. Add blanks when you intend to add lines to the record. Unused blanks are dropped when the record is created.

If the current record is the last record on the **Work Display**, then the value entered for "Blanks" is ignored. All remaining lines in the logical page are available for use by the record.

Position in additional records: When selecting additional records for display with the current record, enter the relative position in which the current record should be displayed. For example, if two additional records are selected, and the current record should display between them, enter 2 for Position in additional records. If you do not specify a relative display position, the current record is displayed first.

Option: Use Option to select up to thirty-one additional records for display with the current printer record. Type the option numbers next to the records you want to select and press Enter. Each additional record has to be selected with a different option number. If more than one record is selected with the same option number, the last one processed is selected. The current record is always selected. Choose from the following:

1,2,3...31=Select for display as additional record

Type 1, 2, 3, through 31 to select an additional record for display on the **Work Display**. The option number reflects the order in which the records appear on the **Work Display**.

Record: Specifies the name of the report record.

Repeat: The number of times the record should be repeated on the display. Use repeat to give the appearance of repeated detail line printing.

Blanks: The number of blank lines to insert after the record.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F5=Refresh: Shows the display again with the most recent information and removes any typed selections.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Select Database Files Display

The **Select Database Files** display appears when you press F10 from the **Design Image (Work)** display. From the **Select Database Files** display you can:

- o Specify database files to use as reference files.
- o Specify the source member as a reference.

```
-----  
                          Select Database Files  
-----  
Type options and names, press Enter.  
1=Display database field list  
2=Select all fields  
  
Option   Database File   Library   Record  
-----  
-        RDFLDR           *LIBL     _____  
-        *SRCMBR       *LIBL     _____  
-        _____   *LIBL     _____  
-        _____   *LIBL     _____  
  
F3=Exit  F4=Record list  F12=Cancel  
-----
```

Options

Type the number of an option and press the Enter key.

- 1=Display database field list**
- 2=Select all fields**

Field Descriptions

Database File: To access a database file as a reference file, key the file's name. To access fields defined within the source member as a reference file, key *SRCMBR for file name.

Library: Enter the library name of the file to use, let the library default to *LIBL, or enter *CURLIB.

Record: Enter the record of the database file to use. Position the cursor in the Record field and press F4 to select from a list of records in the file.

Function keys

- F1=Help:** Provides additional information about using the display or a specific field.
- F3=Exit:** Ends the current task and returns to the display from which it was started.
- F4=Record list:** Display a list of records in the database file.
- F12=Cancel:** Cancels this display and returns to the previous display.
- Enter:** Submit information on the display for processing.
- Help:** Provides additional information about using the display or a specific field.
- Print:** Prints information currently shown on the display.

Select Database Records Display

The **Select Database Records** display appears when you prompt for a database record name from the **Select Database Files** display using F4. From the **Select Database Records** display you can:

- o Select a database file record to use for field referencing.

```
-----
                          Select Database Records
Database file . . . . . :  XXFLDR          Library . . . . :  *LIBL
Type options, press Enter.
 1=Select
Option   Record
  _     XXFLDRR

F3=Exit  F12=Cancel

Bottom
-----
```

Options

Type the number of an option and press the Enter key.

1=Select

Selects the record for use on the **Select Database Files** display.

Field Descriptions

Record: Specifies the name of the database file's record.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Select Database Fields Display

The **Select Database Fields** display appears when you select a database file with a "1" option on the **Select Database Files** display. From the **Select Database Fields** display you can:

- o Select database fields for further review.
- o Select database fields to use as reference fields.
- o Search for a field name.

```
-----
                        Select Database Fields
Record . . . :   XXFLDRR
Type information, press Enter.
  Number of fields to roll . . . . . :    8
  Name of field to search for . . . . . :
Type options, press Enter.
  1=Display extended field description
  2=Select
Option  Field          Length  Type  Column Heading
-----  -
  -     NAME            30    A    CUSTOMER NAME
  -     ADDR             30    A    ADDRESS
  -     CITY             23    A    CITY
  -     STATE            2     A    STATE
  -     ZIP              5     A    ZIP CODE
  -     CSTNBR           7,0   P    CUSTOMER NUMBER
  -     PHONE            10,0  P    PHONE NUMBER
  -     PRGM             10    A    PROGRAM NAME
F3=Exit  F12=Cancel  F16=Search                                     More...
```

Options

Type the number of an option and press the Enter key.

- 1=Display extended field description:** The **Select Extended Database Field** display shows further information about the field.
- 2=Select:** Selects the field for use as a reference field. Selected fields are displayed on the **Design Image (Work)** display field line.

Field Descriptions

Number of fields to roll: Type a number to indicate the number of entries to roll when paging down or up.

Name of field to search for: To locate a field in the list, key the full name of the field and press F16. If the field exists in the list, the cursor is positioned to the left of the field. Alternatively, key the first letters of the field name, end with an asterisk (*), and press F16. The cursor is positioned to the first field beginning with the letters keyed. Additionally, the wild card character (?) can be used in the search field. All characters match the wild card character.

Field: Specifies the field's name.

Length: Specifies the length of the field. For numeric fields, the total number of digits in the field and the number of decimal positions are separated by a comma.

Type: Specifies the type of the field. Field types include C-constant, A-alpha, P-packed numeric, S-zoned numeric, etc.

Column heading: Specifies the column headings associated with the field.

Function keys

- F1=Help:** Provides additional information about the display or a specific field.
- F3=Exit:** Ends the current task and returns to the display from which it was started.
- F12=Cancel:** Cancels this display and returns to the previous display.
- F16=Search for field:** Searches for the named field.
- Enter:** Submit information on the display for processing.
- Help:** Provides additional information about the display or a specific field.

Print: Prints information currently shown on the display.

Select Extended Database Field Display

The **Select Extended Database Field** display shows additional information for a field when you select option 1 from the **Select Database Field** display. From the display you can:

- o Select the database field to use as a reference field.

```
-----
                          Select Extended Database Field
Field . . . . . : NAME           Length . . . : 30
Type . . . . . : CHARACTER
Text . . . . . : CUSTOMER NAME
Column heading . . . . : CUSTOMER
                       NAME
Edit code/word . . . . :
Type choices, press Enter.
Field usage . . . . . _ 2=Select
F3=Exit  F12=Cancel
-----
```

Field Descriptions

Field: Specifies the field's name.

Length: Specifies the length of the field. For numeric fields, the total number of digits in the field and the number of decimal positions are separated by a comma.

Type: The type for the field is displayed.

TEXT keyword: Specifies the description associated with the field.

Column heading: Specifies the column headings associated with the field.

Edit code/word: The Edit Code or Edit Word associated with the field is displayed.

Field usage: Key a "2" to select the field for use as a reference field. Leave this space blank if you do not want to select the field. Fields selected will be displayed on the **Work Display** field line.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Chapter 9 Field Keywords Displays

What's In This Chapter

This chapter describes the Field Keywords displays. The Field Keywords displays are accessed using option 1 from the **Work with Fields** display, or by keying an "*" in front of a field on the **Design Image (Work)** display.

Select Field Keywords Display

From the **Select Field Keywords** display you can:

- o Select field-level keywords for review or update.
- o Change the text associated with the field.
- o Display selected field-level keywords.

```
-----  
                          Select Field Keywords  
Field . . . . . :   FLD054  
Length . . . . . :     3,0                Line . . . :     2  Position . . . :    14  
Type choices, press Enter.  
Print attributes . . . . . :   Y=Yes      For Field Type  
Colors . . . . . :   -                   All types  
                                         All types  
  
General keywords . . . . . :   -          All types  
Editing keywords . . . . . :   -          Numeric  
Database reference . . . . . :   -         All types  
  
TEXT keyword . . . . . :   _____  
F3=Exit   F4=Display Selected Keywords   F12=Cancel  
-----
```

Field Descriptions

Field: Specifies the field's name.

Length: Specifies the length of the field. For numeric fields, the total number of digits in the field and the number of decimal positions are separated by a comma.

Line: Specifies the line number on which the field is located relative to the beginning of the record.

Position: Specifies the position of the field within the line.

Keyword Group Choices: To select categories of keywords to review or update, key a "Y" in the column following the category description and press Enter.

TEXT keyword: Specifies the description associated with the field.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F4=Display Selected Keywords: Causes the Display Selected Keywords window to appear.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Select Print Attributes Display

From the **Select Print Attributes** display you can:

- o Change the indicators that condition printing of the field.
- o Specify the field is highlighted.
- o Specify the field is underlined.
- o Indicate that data in the field should be folded at a blank.
- o Indicate that a floating point field is printed as decimal.
- o Change the Characters Per Inch (CPI) keyword value.
- o Change the Printer Font (FONT) keyword values.
- o Change the Print Quality (PRTQLTY) keyword value.
- o Change the Character Size (CHRSIZ) keyword value.
- o Indicate the field is printed in barcode format.

```

-----
                          Select Print Attributes
Field . . . . . :   FLD054
Length . . . . . :       3,0                Line . . . :    2  Position . . . :   14
Type choices, press Enter.

Field conditioning . . . . .      Keyword
Field highlighting . . . . .     HIGHLIGHT  -   Y=Yes  - - - - -
Field underlining . . . . .      UNDERLINE -   Y=Yes  - - - - -
Records folded at blank . . . . . BLKFOLD   -   Y=Yes  - - - - -
Float to fixed decimal . . . . .  FLTFIXDEC -   Y=Yes  - - - - -
Characters per inch . . . . .     CPI        -   10, 15 - - - - -
Font Identifier . . . . .         FONT
Point size . . . . .              - - - - - 0.1 - 999.9
Print quality . . . . .           PRTQLTY
Character size . . . . .          CHRSIZ    - - - - - 1.0 - 20.0
Barcode ID . . . . .             BARCODE
Height in lines . . . . .         -

F3=Exit  F12=Cancel
-----
  
```

Field Descriptions

Field conditioning: By conditioning a field with indicators, you can control whether the field is printed. Key the desired indicators in the spaces provided. Key a plus (+) in any indicator field to obtain more space for indicators.

Field highlighting (HIGHLIGHT): Key a "Y" for the HIGHLIGHT keyword to cause the field to print in bold face. This option is not valid with RPG source. To condition this keyword, key the desired indicators in the spaces provided. Key a plus (+) in any indicator field to obtain more space for indicators.

Field underlining (UNDERLINE): Key a "Y" for the UNDERLINE keyword to cause the field to print underlined. This option is not valid with RPG source. To condition this keyword, key the desired indicators in the spaces provided. Key a plus (+) in any indicator field to obtain more space for indicators.

Records folded at blank (FOLD): Key a "Y" for the BLKFOLD to indicate that the field should be folded at a blank if it overflows to another line. BLKFOLD has no effect unless you specify *YES for the FOLD parameter on the CRTPRTF, CHGPRTF, or OVRPRTF commands. This option is not valid for RPG source.

Float to fixed decimal (FLTFIXDEC): Key "Y" for the FLTFIXDEC keyword to indicate that a floating point field should be printed in fixed decimal format. This option is only valid with floating point fields.

Characters per inch (CPI): With the CPI keyword you specify the horizontal print density of characters in the field. Not valid with RPG source. To condition this keyword, key the desired indicators in the spaces provided. Key a plus (+) in any indicator field to obtain more space for indicators.

Font ID (FONT): With the FONT keyword, you control the style and appearance of characters printed. Specify either a numeric font id or a graphic font name. If supported specify a point size. Not valid with RPG source. To condition this keyword, key the desired indicators in the spaces provided. Key a plus

(+) in any indicator field to obtain more space for indicators.

Print quality (PRTQLTY): The PRTQLTY keyword allows you to vary the print quality of the field. Valid values are *STD (standard) *DRAFT (draft quality) and *NLQ (near letter quality). Not valid with RPG source.

Character size (CHRSIZ): The CHRSIZ keyword allows you to specify the height and width of characters printed in the field. Not valid with RPG source.

Barcode ID (BARCODE): To print a field in barcode format, enter a barcode-id and height in the spaces provided. Not valid with RPG source. See the Data Description Specifications Reference for more rules concerning barcodes.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Select Colors Display

From the **Select Colors** display you can:

- o Assign colors to the field.

```
-----
                                Select Colors
Field . . . . . :  FLD054
Length . . . . . :   3,0
Line . . . . . :    2  Position . . . :   14
Type choices, press Enter.

                                Keyword  Order  Indicators/+
                                (1-8)
Colors:
Black . . . . . : (K) BLK      -      - - - -
Blue . . . . . : (B) BLU      -      - - - -
Brown . . . . . : (N) BRN      -      - - - -
Green . . . . . : (G) GRN      -      - - - -
Pink . . . . . : (P) PNK      -      - - - -
Red . . . . . : (R) RED      -      - - - -
Turquoise . . . . . : (T) TRQ     -      - - - -
Yellow . . . . . : (Y) YLW     -      - - - -

F3=Exit  F12=Cancel
-----
```

Field Descriptions

Order: To assign a color to the field, enter a value from 1 to 8 for the sequence number associated with the desired color. You may assign more than one color to the field but only one will be in effect at print time.

When more than one color is specified for a field, the color used at print time is determined by indicator settings and the order of color specifications. At print time, some color specifications may be excluded by indicator settings. Of the specifications that are selected, the color specified first (lowest sequence number) will be the one used. Not valid with RPG source.

Indicator/+: To condition a color specification, key the desired indicators in the spaces provided. Key a plus (+) in any indicator field to obtain more space for indicators.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it started.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.
Help: Provides additional information about the display or a specific field.
Print: Prints information currently shown on the display.

Select General Keywords Display

From the **Select General Keywords** display you can:

- o Associate an alias name with the field.
- o Associate an alternate graphics character set with the field.
- o Indicate character data is interpreted as hexadecimal.
- o Insure the printer does not interpret the field as control characters.
- o Indicate an RPG field is blanked after printing,
- o Specify the precision for a floating point field.

```

-----
                          Select General Keywords
Field . . . . . :   FLD054
Length . . . . . :       3,0                Line . . . :    2  Position . . . :   14

Type parameters and choices, press Enter.

Alias name . . . . .      Keyword  Text or Value
Translate characters . . .  CHRID   _____ Y=Yes
Convert to hexadecimal . .  CVTDTA  -         Y=Yes
Transparent code points . . TRNSPY  -         Y=Yes
Blank after printing (RPG). . -         Y=Yes
Floating point precision . . FLTPCN  _____ *SINGLE, *DOUBLE

F3=Exit  F12=Cancel
-----

```

Field Descriptions

Alias Name (ALIAS): To associate an alternate name with the field, key the alias name in the field provided. Some high-level language compilers will bring the alias name into the program instead of the DDS name. See the specific compiler reference manual for more information. Not valid with RPG.

Translate characters (CHRID): Specify "Y" for CHRID to indicate that a graphics character set other than the device default can be used for this field. Not valid for numeric fields. Not valid for RPG source.

Convert to hexadecimal (CVTDTA): Key a "Y" for the CVTDTA keyword to interpret the field's data as hexadecimal characters. When you specify "Y" for CVTDTA, your field must contain only valid hex characters--0 through 9, and A through F. Each two characters of data in the field are sent to the printer as a single character hex equivalent. Not supported by all printers. Not valid with RPG.

Transparent code points (TRNSPY): Specify "Y" for the TRNSPY keyword to indicate that hexadecimal data in the field should not be interpreted as control characters by the printer. Not supported by all printers. Not valid with RPG source.

Blank after printing: Key "Y" to indicate the field is set to blank/zero after printing. Valid only for RPG source.

Floating point precision (FLTPCN): Use the FLTPCN keyword to indicate double or single precision for a floating point field when printed. The default is *SINGLE. Only valid with floating point fields. Not valid with RPG source.

Function keys

F1=Help: Provides additional information about using the display or a specific field.
F3=Exit: Ends the current task and returns to the display from which it was started.
F12=Cancel: Cancels this display and returns to the previous display.
Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.
Print: Prints information currently shown on the display.

Select Editing Keywords Display

From the **Select Editing Keywords** display you can:

- o Edit a numeric field with a predefined edit code.
- o Edit a numeric field with a customized edit word.

```

Select Editing Keywords
Field . . . . . : FLD054
Length . . . . . : 3,0
Line . . . : 2 Position . . . : 14

Edit Code Description      No Sign  CR Sign  - Sign(R) - Sign(L)
Commas and zero balances   1        A        J        N
Commas                     2        B        K        O
Zero balances              3        C        L        P
No commas or zero balances 4        D        M        Q
User-defined edit codes    5-9
Date edit                  Y
Suppress leading zeros     Z

Type choices, press Enter.

Edit code . . . . . Keyword
Replace leading zeros with . . . . . EDTCDE - A-D, J-Q, Y, Z, 1-9
Edit word . . . . . EDTWRD - *, $

F3=Exit F12=Cancel
  
```

Field Descriptions

Edit Code (EDTCDE): To edit a field with a predefined edit code, key the edit code character (A-D, J-M, Y, Z, 1-9) in the space provided. Each edit code has different features. The features are summarized in the table that appears on the screen. The table groups the edit codes into columns by the way they display negative numbers. The edit code description applies to all edit codes in that row.

When you specify an edit code, you may also specify that leading zeros in the field be replaced with asterisks (*). To do so, key an "*" in the space provided. To cause the currency symbol to print immediately to the left of the first non-zero digit, key a "\$" in the space provided for floating currency symbol. Edit codes and edit words are mutually exclusive.

Edit Word (EDTWRD): You can define an edit word to edit a numeric field in a customized fashion. Key your edit word in the space provided, enclosed in single quotes ('). See DDS Reference SC41-9620 for more information on the rules for specifying edit words for DDS. See RPG/400 Reference SC09-1349 for more information on the rules for specifying edit words for RPG.

For RPG you may specify the name of a constant field that contains an edit word. Edit words and edit codes are mutually exclusive.

Function keys

- F1=Help:** Provides additional information about using the display or a specific field.
- F3=Exit:** Ends the current task and returns to the display from which it was started.
- F12=Cancel:** Cancels this display and returns to the previous display.
- Enter:** Submit information on the display for processing.
- Help:** Provides additional information about using the display or a specific field.
- Print:** Prints information currently shown on the display.

Define Database Reference Display

From the **Define Database Reference** display you can:

- o Indicate the field is referenced from a database field, or another field in the same source member.
- o Override reference attributes and tailor the field definition.

```

-----
                          Define Database Reference
Field . . . . . :   FLD054
Length . . . . . :     3,0                Line . . . :    2  Position . . . :   14
Type choices, press Enter.
Reference field . . . . . :   REFFLD      Y=Yes
Reference current DDS source . . : *SRC      Y=Yes
Field (if different) . . . . . :           Name
Database file . . . . . :           Name
Library . . . . . :           Name, *LIBL
Record . . . . . :           Name
Override existing field definition:
New field length . . . . . :           +nnnn, -nnnn, nnnn
New decimal positions . . . . . :           +n, -n, nn
Ignore previously specified:
Editing . . . . . :   DLTEDT      Y=Yes

F3=Exit  F12=Cancel
-----

```

Field Descriptions

Reference field (REFFLD): To base the definition of the current field on another field, key a "Y" to indicate that this is a reference field. Field referencing is not valid with RPG source.

Reference current source (*SRC): To reference another field in the same source member, key a "Y" in the *SRC field.

Field: Specifies the name of the field being referenced. If the name is left blank the name of the referencing field is used.

Database file: Specifies the name of the file, library, and record that contain the field to reference.

Override existing field definition: To override the referenced length of the field, key a new length in the space provided. You may also key a relative increment to the referenced field length by keying a plus (+) or minus (-) sign, followed by the increment amount.

To override the referenced decimal positions of the field, key a new value for decimal positions in the space provided. You may also key a relative increment to the referenced field decimal positions by keying a plus (+) or minus (-) sign, followed by the increment amount.

Ignore previously specified editing: Key a "Y" for DLTEDT if the referenced field's editing does not apply to the current field.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it was started.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about using the display or a specific field.

Print: Prints information currently shown on the display.

Display Selected Keywords Window

The Display Selected Keywords window shows a list of currently selected keywords in DDS source code form. From the Display Selected Keywords window you can:

- o Add keywords not supported on other displays.
- o Change keywords not supported on other displays.
- o Copy keywords not supported on other displays.
- o Delete keywords not supported on other displays.

```
-----
                Select Field Keywords
Field . . . . . : PSEPGM
Length . . . . . : 10           Line . . : 1
Position . . . . : 1
Type choices, press Enter.
-----
Print attributes . . : Display Selected Keywords
Colors . . . . . :
                  : Type options, press Enter.
                  : 1=Add 2=Change 3=Copy 4=Delete
General keywords . . : Opt Keyword
Database reference . : COLOR(RED)
                  : UNDERLINE
TEXT keyword . . . . : F12=Cancel
F3=Exit F4=Display Se : Bottom
-----
```

Options

Type the number of an option and press the Enter key. Only keywords that can not be accessed from other screens are allowed.

- 1=Add:** Use this option to add a new keyword.
- 2=Change:** Use this option to change a keyword.
- 3=Copy:** Use this option to copy a keyword.
- 4=Delete:** Use this option to delete a keyword.

Field Descriptions

Keyword: The keyword and associated parameter values. The associated parameters end in an ellipsis (...) when they do not all fit.

Function keys

- F1=Help:** Provides additional information about using the display or a specific field.
- F12=Cancel:** Cancels this display and returns to the previous display.
- Enter:** Submit information on the display for processing.
- Help:** Provides additional information about using the display or a specific field.
- Print:** Prints information currently shown on the display.

Chapter 10 Save And Create

What's In This Chapter

This chapter describes how to save updated source and how to create objects from it using Save And Create Displays. Report Designer displays one of two screens when you exit the **Work with Report Records** display. If you are editing a DDS source member, the **Save DDS - Create Printer File** display appears. If you are editing an RPG source member, the **Save RPG Source - Create Program** display appears.

Save DDS - Create Printer File Display

The **Save DDS - Create Printer File** display appears on exiting the **Work with Report Records** display. From the **Save DDS - Create Printer File** display you can:

- o Save the modified DDS source.
- o Create a printer file from the DDS source.

```
Save DDS - Create Printer File
Type choices, press Enter.
Save DDS source . . . . . Y          Y=Yes
Source file . . . . . SAMPLE      F4 for list
Library . . . . . RDA           Name, *LIBL ...
Member . . . . . DDSEXAMPLE     F4 for list
Text . . . . . DDS Example
-----
Create printer file . . . . . Y      Y=Yes
Prompt for parameters . . . . .      Y=Yes
Printer file . . . . . SAMPLE     F4 for list
Library . . . . . QTEMP        Name, *CURLIB
Replace existing file . . . . . Y   Y=Yes
Submit create job to batch . . . . . Y   Y=Yes
Specify additional
save or create options . . . . . -      Y=Yes
F3=Exit  F4=Prompt  F12=Cancel
Member DDSEXAMPLE already exists in file SAMPLE.  Press Enter to replace.
```

Field Descriptions

Save DDS source: Enter a "Y" to save the modified source.

File: Specifies the name of the file containing the source member to be updated or to which a new source member will be added.

Member: Specifies the name of the member containing the source to be updated or the name of a new member to be created.

Text: Specifies a description of the source member.

Create printer file: Enter a "Y" to create a printer file from the modified DDS source.

Prompt for parameters: Enter a "Y" to specify other parameters on the Create Printer File (CRTPTF) command.

Printer file: Specifies the name and library of the printer file to create.

Replace existing file: Enter a "Y" if the created printer file is to replace an existing file by the same name.

Submit create job to batch: Enter a "Y" to execute printer file creation in batch.

Specify additional save or create options: Enter a "Y" to view and change more options.

Function keys

F1=Help: Provides additional information about using the display or a specific field.

- F3=Exit:** Ends the current task and returns to the display from which it was started.
- F4=Prompt:** Provides assistance in typing additional parameter values for an option or in using a command.
- F12=Cancel:** Cancels this display and returns to the previous display.
- Enter:** Submit information on the display for processing.
- Help:** Provides additional information about using the display or a specific field.
- Print:** Prints information currently shown on the display.

Specify Additional Options DDS

The **Specify Additional Options** display appears when additional options are requested from the Save **DDS - Create Printer File** display. From the **Specify Additional Options** display you can:

- o Specify how to add sequence numbers to the updated source.
- o Specify that a listing should display if the create fails.
- o Specify the maximum message severity and flagging level on the create.
- o Specify a job description to be used for batch creates.

```

Specify Additional Options

Type choices, press Enter.

For save DDS source=Yes:
Sequence number
Start . . . . .          1.00      0000.01-9999.99
Increment . . . . .       1.00      00.01-99.99

For create printer file=Yes:
If create fails, display listing . . . Y      Y=Yes
Create file if DDS message severity .
(GENLVL) is less than . . . . .       20      0-30
Flagging severity level . . . . .      0      0-30

For submit create job to batch=Yes
Job description . . . . .       RDABLD      F4 for list
Library . . . . .               *LIBL      Name, *LIBL ...

F3=Exit  F4=Prompt  F12=Cancel

```

Field Descriptions

- Sequence Number:** Specifies the starting number and an increment amount used to generate source statement sequence numbers.
- If create fails, display listing:** Specify "Y" to view the create listing on the screen in the event that the compile fails. This is only valid for interactive compiles.
- Create file if DDS message severity (GENLVL) is less than:** Specifies the maximum message severity allowed in the source before the create fails.
- Flagging severity level (GENLVL) is less than:** Specifies the minimum severity level of messages to be listed.
- Job Description:** Specifies the job description used to submit the create to batch.

Function keys

- F1=Help:** Provides additional information about the display or a specific field.
- F3=Exit:** Ends the current task and returns to the display from which it started.
- F4=Prompt:** Provides assistance in typing additional parameter values for an option or in using a command.
- F12=Cancel:** Cancels this display and returns to the previous display.
- Enter:** Submit information on the display for processing.
- Help:** Provides additional information about the display or a specific field.
- Print:** Prints information currently shown on the display.

Save RPG Source - Create Program Display

The **Save RPG Source - Create Program** display appears on exiting the **Work with Report Records** display. From the **Save RPG Source - Create Program** display you can:

- o Save the modified RPG source.
- o Create a program from the RPG source.

```
-----
                          Save RPG Source - Create Program
-----
Type choices, press Enter.

Save RPG source . . . . . Y          Y=Yes
Source file . . . . . SAMPLE      F4 for list
Library . . . . . RDA             Name, *LIBL ...
Member . . . . . RPGEXAMPLE      F4 for list
Text . . . . . RPG example shell, without printe
r file.

Create program . . . . . Y          Y=Yes
Prompt for parameters . . . . .      Y=Yes
Program . . . . . RPGSHELL       F4 for list
Library . . . . . QTEMP         Name, *CURLIB
Replace existing program . . . . . Y Y=Yes

Submit create job to batch . . . . . Y Y=Yes

Specify additional
save or create options . . . . . -      Y=Yes

F3=Exit  F4=Prompt  F12=Cancel
Member RPGSHELL already exists in file SAMPLE.  Press Enter to replace.
-----
```

Field Descriptions

Save RPG source: Enter a "Y" to save the modified source.

File: Specifies the name of the file containing the source member to be updated or to which a new source member will be added.

Member: Specifies the name of the member containing the source to be updated or the name of a new member to be created.

Text: Specifies a description of the source member.

Create program: Enter a "Y" to create a program from the modified RPG source.

Prompt for parameters: Enter a "Y" to specify other parameters on the Create RPG Program (CRTRPGPGM) command.

Program: Specifies the name and library of the program to create.

Replace existing program: Enter a "Y" if the created program is to replace an existing program by the same name.

Submit create job to batch: Enter a "Y" to execute program creation in batch.

Specify additional save or create options: Enter a "Y" to view and change more options.

Function keys

F1=Help: Provides additional information about the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it started.

F4=Prompt: Provides assistance in typing additional parameter values for an option or in using a command.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about the display or a specific field.

Print: Prints information currently shown on the display.

Specify Additional Options RPG

The **Specify Additional Options** display appears when additional options are requested from the **Save RPG Source - Create Program** display. From the **Specify Additional Options** display you can:

- o Specify how to add sequence numbers to the updated source.
- o Specify that a listing should display if the create fails.
- o Specify the maximum message severity on the create.
- o Specify a job description to be used for batch creates.

```
-----  
                          Specify Additional Options  
Type choices, press Enter.  
For save RPG source=Yes:  
Sequence number  
Start . . . . .          1.00      0000.01-9999.99  
Increment . . . . .      1.00      00.01-99.99  
  
For create program=Yes:  
If create fails, display listing . . .  Y          Y=Yes  
Create file if RPG message severity .  9          0-99  
(GENLVL) is less than . . . . .  
  
For submit create job to batch=Yes  
Job description . . . . .      RDA          F4 for list  
Library . . . . .            RDA          Name, *LIBL ...  
  
F3=Exit  F4=Prompt  F12=Cancel  
-----
```

Field Descriptions

Sequence Number: Specifies the starting number and an increment amount used to generate source statement sequence numbers.

If create fails, display listing: Specify "Y" to view the create listing on the screen in the event that the compile fails. This is only valid for interactive compiles.

Create program if RPG message severity (GENLVL) is less than: Specifies the maximum message severity allowed in the source before the create fails.

Job Description: Specifies the job description used to submit the create to batch.

Function keys

F1=Help: Provides additional information about the display or a specific field.

F3=Exit: Ends the current task and returns to the display from which it started.

F4=Prompt: Provides assistance in typing additional parameter values for an option or in using a command.

F12=Cancel: Cancels this display and returns to the previous display.

Enter: Submit information on the display for processing.

Help: Provides additional information about the display or a specific field.

Print: Prints information currently shown on the display.

Chapter 11 DDS Example

What's In This Chapter

This chapter takes you through the steps required to design and create a simple report using external printer file DDS.

Detailed descriptions of the Report Designer displays shown in this example, and those not covered, appear in other chapters.

Keying In The Example

To key in this example, your library list must include RDA, and you must be authorized to the source files.

- o Selecting Field Descriptions

A database file is supplied with Report Designer. You will select field descriptions from this file to design your report records.

- o Removing a Previously Entered Example

If the example has been entered previously, the member created must be removed from the DDS source file or be given a different name. To remove a member, use the RMVM command or option 4 from PDM. To rename a member, use the RNMM command or option 7 from PDM.

- o Exiting From The Example

If you do not want to complete the example, or if you make an error and wish to start over, exit from Report Designer by repeatedly pressing F3.

Begin the example here:

1. At a command line enter the following:

ADDLIBLE RDA. Press Enter.

STRRDA. Press F4.

The Start Report Designer prompt is displayed.

```

Start Report Designer (STRDA)

Type choices, press Enter.
Source file . . . . . SAMPLE Name, *PRV
Library . . . . . RDA Name, *PRV, *LIBL, *CURLIB
Source member . . . . . *SELECT Name, *PRV, *SELECT
*PRTF or RPG printer file . . . . . *MBRTYPE Name, *PRV, *MBRTYPE...
Object library . . . . . *TNAME Name, *PRV, *CURLIB
Job description . . . . . RDA Name, *PRV, *USRPRF
Library . . . . . RDA Name, *PRV, *LIBL, *CURLIB

Bottom
F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys

```

2. Fill in the prompt screen as shown and press Enter. The **Design Reports** display appears.

```

Design Reports

Type choices, press Enter.
Source file . . . . . SAMPLE Name, F4 for list
Library . . . . . RDA Name, *LIBL, *CURLIB
Member . . . . . Name, F4 for list
*PRTF or RPG printer file . . . . . *MBRTYPE Name, *MBRTYPE, *PRTF, *FIRST

Bottom
F3=Exit F4=Prompt F12=Cancel

```

3. Position the cursor to the Member field and press F4. The **Work with Members** display appears.

```

Work With Members Using Report Designer

Type information, press Enter.
Position to . . . . .
Subset by type . . . . .
Source file . . . . . SAMPLE Library RDA
New member . . . . . DDSEXAMPLE Type PR1F
Text . . . . . DDS Example

Type options, press Enter.
1=Select 4=Delete 5=Display

Opt Member Type Text
- CSTMST PF Sample Customer Master File
- PTCMBUL OLF Retrieve PTP Create Communications Gear
- RPGSHELL RPG RPG example shell, without printer file.
- SYPRJUU PR1F38 Standard format count report
- SYPRJUU PR1F Standard format count report
- XXFLDR PF Sample field reference file

Bottom
F3=Exit F5=Refresh F12=Cancel

```

4. Enter "DDSEXAMPLE" for New member. Enter "DDS Example" for Text. Press Enter twice. The **Work with Report Records** display is shown next.

```

Work with Report Records

File . . . . . : SAMPLE Member . . . . . : DDSEXAMPLE
Library . . . . . : RDA Printer . . . . . : *PRTF

Type options, press Enter.
1=Add 2=Edit comments 3=Copy 4=Remove
7=Rename 8=Select keywords 12=Design image

Opt Order Record Date Error Text
1 DETAIL

Bottom
F3=Exit F5=Refresh F12=Cancel
F13=Session Defaults F14=File-level keywords F15=File-level comments
(C) Copyright Gumbo Software, Inc. 1989, 2005. All rights reserved.

```

5. Enter "1" for Option and "DETAIL" for Record. Press Enter. The blank **Work Display** appears.

```

Report Designer Work Display for DETAIL: Press HELP for function keys.

... ..10.... ..20.... ..30.... ..40.... ..50.... ..60.... ..70.... ..80
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

```

6. With the cursor in the upper left-hand corner of the screen, press F14 to display the ruler.

7. Press F10 to access the **Select Database Files** display.

```

Select Database Files
Type options and names, press Enter.
1=Display database field list
2=Select all fields

Option Database File Library Record
1 XXFLDR RDA
- *LIBL
- *LIBL
- *LIBL

F3=Exit F4=Record list F12=Cancel

```

8. Enter a "1" for Option. Enter "XXFLDR" for Database File. Enter "RDA" for Library. Position the cursor to the Record column and press F4. The **Select Database Records** display appears.

```

Select Database Records
Database file . . . . . : XXFLDR Library . . . . . : RDA
Type options, press Enter.
1=Select

Option Record
1 XXFLDRR

F3=Exit F12=Cancel Bottom

```

9. Enter a "1" beside XXFLDRR and press Enter. The **Select Database Fields** display appears.

```

Select Database Fields
Record . . . : XXFLDRR
Type information, press Enter.
Number of fields to roll . . . . . : 8
Name of field to search for . . . . . :
Type options, press Enter.
1=Display extended field description
2=Select

Option Field Length Type Column Heading
2 NAME 30 A CUSTOMER NAME
2 ADDR 30 A ADDRESS
2 CITY 23 A CITY
2 STATE 2 A STATE
2 ZIP 5 A ZIP CODE
2 CSTNBR 7,0 P CUSTOMER NUMBER
2 PHONE 10,0 P PHONE NUMBER
- PRGM 10 A PROGRAM NAME

F3=Exit F12=Cancel F16=Search More...

```

10. Enter a "2" beside the fields NAME, ADDR, CITY, STATE, ZIP, CSTNBR, and PHONE. Press Enter to select the fields and return to the **Select Database Files** display. Press F12 to return to the **Work Display**. The selected fields are displayed at the bottom of the **Work Display**.

```

... 10... 20... 30... 40... 50... 60... 70... 80
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
1:NAME 2:ADDR 3:CITY 4:STATE 5:ZIP 6:CSTNBR 7:PHONE

```

11. Key "&1" at line 2 position 2 of the **Work Display** and press Enter. The CUSTOMER NAME field is added to the display.

```

... 10... 20... 30... 40... 50... 60... 70... 80
&1
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
1:ADDR 2:CITY 3:STATE 4:ZIP 5:CSTNBR 6:PHONE

```



```

.....60.....70.....80.....90.....100.....110.....120.....130.
000000000000 000000000000000000000000 00 00000  &2

```

1:CSTNBR 2:PHONE

16. Key "&2" at line 2 position 100 and press Enter to add the PHONE NUMBER to the display. Notice the PHONE NUMBER is displayed in edited format.

```

.....60.....70.....80.....90.....100.....110.....120.....130.
000000000000 000000000000000000000000 00 00000  666-666-6666

```

1:CSTNBR

17. Key "&1" at line 2 position 118 and press Enter to add the CUSTOMER NUMBER to the display.

```

.....60.....70.....80.....90.....100.....110.....120.....130.
000000000000 000000000000000000000000 00 00000  666-666-6666  &1

```

1:CSTNBR

```

.....60.....70.....80.....90.....100.....110.....120.....130.
000000000000 000000000000000000000000 00 00000  666-666-6666  6666666

```

18. Key an "*" in front of the CUSTOMER NUMBER and press Enter to see the Field Keywords displays for CUSTOMER NUMBER.

```

.....60.....70.....80.....90.....100.....110.....120.....130.
000000000000 000000000000000000000000 00 00000  666-666-6666  *6666666

```

19. Key a "Y" for Editing keywords and press Enter.

```

Select Field Keywords
Field . . . . . : CSTNBR
Length . . . . . : 7,0
Line . . . . . : 2 Position . . . : 118
Type choices, press Enter.
Print attributes . . . . . : - All types
Colors . . . . . : - All types
General keywords . . . . . : All types
Editing keywords . . . . . : Y Numeric
Database reference . . . . . : - All types
TEXT keyword . . . . . : CUSTOMER NUMBER
F3=Exit F4=Display Selected Keywords F12=Cancel

```

```

Select Editing Keywords
Field . . . . . : CSTNBR
Length . . . . . : 7,0
Line . . . . . : 2 Position . . . : 118

Edit Code Description      No Sign  CR Sign  - Sign(R) - Sign(L)
Commas and zero balances  1       A       J       N
Commas                    2       B       K       O
Zero balances             3       C       L       P
No commas or zero balances 4       D       M       Q
User-defined edit codes   5-9
Date edit                 Y
Suppress leading zeros    Z

Type choices, press Enter.

Edit code . . . . . : EDTCDE 3 A-D, J-Q, Y, Z, 1-9
Replace leading zeros with . . . . . : * , $
Edit word . . . . . : EDTWRD -

F3=Exit F12=Cancel

```

20. Enter "3" for Edit code, and press F12 twice to return to the **Work Display**. This will cause the CUSTOMER NUMBER to print in edited format.

```

00000000000000000000000000000000 00000000000000000000000000000000 0000000000000000

```

21. Press F14 to remove the ruler from the **Work Display**. Press Home to position the display to line 1 column 1.

```

-00000000000000000000000000000000 00000000000000000000000000000000 0000000000000000

```

22. Move all of the fields up 1 line by keying the following information. Do not press Enter until all of the information has been entered. Key an "=" in line 1 column 2 to mark the target for the move block. Key a "-" in line 2 column 1 to mark the beginning of the move block. Press F20 twice to window to the far right of the display.

```

00000000000000 00000000000000000000000000 00 00000 666-666-6666 6666666 -

```

23. Key a "-" to the right of the last field to mark the end of the move block. Now press Enter. All fields are moved up 1 line and over 1 position to the right.

```

00000000000000 00000000000000000000000000 00 00000 666-666-6666 6666666

```

24. Press F12 to return to the **Work with Report Records** display.

```

Work with Report Records
File . . . . . : SAMPLE      Member . . . . . : DDSEXAMPLE
Library . . . . : RDA       Printer . . . . . : *PRTF

Type options, press Enter.
1=Add          2=Edit comments      3=Copy          4=Remove
7=Rename       8=Select keywords     12=Design image

Opt Order  Record  Date      Error  Text
-----  -
1         10  HEADER   93/08/15

Bottom
F3=Exit      F5=Refresh      F12=Cancel
F13=Session defaults  F14=File-level keywords  F15=File-level comments

```

25. Enter "1" for Opt and "HEADER" for Record as shown. Press Enter.


```

Customer Master Listing                               Page *pagnbr
-----
'City'          'ST' 'ZIP'    'Phone'        'Cust #'
00000000000000 000000000000000000000000 00 00000 666-666-6666 66666666

```

31. Enter the remaining constants for the HEADER record as shown. Pressing Enter defines the constant fields for the record.

```

Customer Master Listing                               Page 6666
-----
City          ST  ZIP    Phone        Cust #
00000000000000 000000000000000000000000 00 00000 666-666-6666 66666666

```

32. Press F12 to return to the **Work with Report Records** display.

```

Work with Report Records
File . . . . . : SAMPLE      Member . . . . . : DDSEXAMPLE
Library . . . . : RDA        Printer . . . . . : *PRTF

Type options, press Enter.
1=Add          2=Edit comments      3=Copy          4=Remove
7=Rename       8=Select keywords      12=Design image

Opt Order  Record  Date      Error  Text
-----
10  10  DETAIL    93/08/15
20  20  HEADER    93/08/15

F3=Exit      F5=Refresh      F12=Cancel
F13=Session defaults  F14=File-level keywords  F15=File-level comments

```

33. Key "8" for Opt beside the HEADER record to select keywords for the report record. Press Enter.

```

Select Record Keywords
Record . . . . : HEADER
Type choices, press Enter.

General keywords . . . . . Y=Yes
Spacing and skipping keywords . . . Y
Indicator text keyword . . . . . -
Define character keyword . . . . . -
TEXT keyword . . . . .

F3=Exit  F4=Display Selected Keywords  F12=Cancel

```

34. Key a "Y" for Spacing and skipping keywords and press Enter.

```

Select Spacing And Skipping Keywords
Record . . . . : HEADER
Type choices, press Enter.

Report record level:
Skip before . . . . . SKIPB 1
Skip after . . . . . SKIPA
Space before . . . . . SPACEB
Space after . . . . . SPACEA
Line spacing . . . . . 2 1=Fixed line nbrs
                                     2=Use Spaces/Skips

Line/field level:
Skip Before  Skip After  Space Before  Space After
Val Indicators/+  Val Indicators/+  Val Indicators/+  Val Indicators/+
1 1
2 1
4 1
5 1

F3=Exit  F12=Cancel

```

35. Key a "1" for Skip Before at the record-level to cause the report record to skip to line 1 each time it is printed.

36. Press F12 twice to return to the **Work with Report Records** display.

```

Work with Report Records
File . . . . . : SAMPLE      Member . . . . . : DDSEXAMPLE
Library . . . . : RDA        Printer . . . . . : *PRTF

Type options, press Enter.
1=Add          2=Edit comments      3=Copy          4=Remove
7=Rename       8=Select keywords      12=Design image

Opt Order  Record  Date      Error  Text
-----
10  10  DETAIL    93/08/15
20  20  HEADER    93/08/15

F3=Exit      F5=Refresh      F12=Cancel
F13=Session defaults  F14=File-level keywords  F15=File-level comments

```

37. Press F3 to exit. The DDS exit display appears.

```

-----
Save DDS - Create Printer File
Type choices, press Enter.
Save DDS source . . . . . Y Y=Yes
Source file . . . . . SAMPLE F4 for list
Library . . . . . RDA Name, *LIBL ...
Member . . . . . DDSEXAMPLE F4 for list
Text . . . . . DDS EXAMPLE
-----
Create printer file . . . . . Y Y=Yes
Prompt for parameters . . . . . Y=Yes
Printer file . . . . . DDSEXAMPLE F4 for list
Library . . . . . QTEMP Name, *CURLIB
Replace existing file . . . . . Y Y=Yes
Submit create job to batch . . . . . Y Y=Yes
Specify additional
save or create options . . . . . - Y=Yes
F3=Exit F4=Prompt F12=Cancel
Member DDSEXAMPLE already exists in file SAMPLE. Press Enter to replace.
-----
Save DDS - Create Printer File
Type choices, press Enter.
Save DDS source . . . . . Y Y=Yes
Source file . . . . . SAMPLE F4 for list
Library . . . . . RDA Name, *LIBL ...
Member . . . . . DDSEXAMPLE F4 for list
Text . . . . . DDS EXAMPLE
-----
Create printer file . . . . . Y Y=Yes
Prompt for parameters . . . . . Y=Yes
Printer file . . . . . DDSEXAMPLE F4 for list
Library . . . . . QTEMP Name, *CURLIB
Replace existing file . . . . . Y Y=Yes
Submit create job to batch . . . . . Y Y=Yes
Specify additional
save or create options . . . . . - Y=Yes
F3=Exit F4=Prompt F12=Cancel
Member DDSEXAMPLE saved. Batch create submitted. Press Enter.
-----

```

38. Press Enter to save the source and create the printer file. A completion message is displayed at the bottom of the screen.

39. Press Enter to exit Report Designer. This concludes this example.

Chapter 12 RPG Example

What's In This Chapter

This chapter takes you through the steps required to design and create a simple report using RPG internal printer file specifications.

Detailed descriptions of the Report Designer displays shown in this example, and those not covered, appear in other chapters.

Keying In The Example

To key in this example, your library list must include RDA, and you must be authorized to the source files.

- o Selecting Field Descriptions

A database file is supplied with Report Designer. You will select field descriptions from this file to design your report records.

- o Removing a Previously Entered Example

If the example has been entered previously, the member created must be removed from the RPG source file or be given a different name. To remove a member, use the RMVM command or option 4 from PDM. To rename a member, use the RNMM command or option 7 from PDM.

- o Exiting From The Example

If you do not want to complete the example, or if you make an error and wish to start over, exit from Report Designer by repeatedly pressing F3.

Begin the example here:

1. At a command line enter the following:

ADDLIBLE RDA. Press Enter.

STRRDA. Press F4.

The Start Report Designer prompt is displayed.

```

Start Report Designer (STRDA)

Type choices, press Enter.
Source file . . . . . SAMPLE Name, *PRV
Library . . . . . RDA Name, *PRV, *LIBL, *CURLIB
Source member . . . . . *SELECT Name, *PRV, *SELECT
*PRTF or RPG printer file . . . . . QPRINT Name, *PRV, *MBRTYPE...
Object library . . . . . QTRM Name, *PRV, *CURLIB
Job description . . . . . RDA Name, *PRV, *USRPRF
Library . . . . . RDA Name, *PRV, *LIBL, *CURLIB

Bottom
F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys

```

2. Fill in the prompt screen as shown and press Enter. The **Design Reports** display is displayed.

```

Design Reports

Type choices, press Enter.
Source file . . . . . SAMPLE Name, F4 for list
Library . . . . . RDA Name, *LIBL, *CURLIB
Member . . . . . Name, F4 for list
*PRTF or RPG printer file . . . . . QPRINT Name, *MBRTYPE, *PRTF, *FIRST

Bottom
F3=Exit F4=Prompt F12=Cancel

```

3. Position the cursor to the Member field and press F4. The **Work with Members** display appears.

```

Work With Members Using Report Designer

Type information, press Enter.
Position to . . . . .
Subset by type . . . . .
Source file . . . . . SAMPLE Library RDA
New member . . . . . Type PRIF
Text . . . . .

Type options, press Enter.
1=Select 4=Delete 5=Display

Opt Member Type Text
- CSTMST PF Sample Customer Master File
- PTCMBUL CLP Retrieve PTP Create Communications Gear
- RPGSHELL RPG RPG example shell, without printer file.
- SYPRJUU PRIF38 Standard format count report
- SYPRJUU PRIF Standard format count report
- XXFLDR PF Sample field reference file

Bottom
F3=Exit F5=Refresh F12=Cancel

```

4. Key a "1" to the left of RPGSHELL to select it for processing. Press Enter twice. The message **"* Syntax checking in progress"** will be displayed. The **Work with Report Records** display is shown next.

```

Work with Report Records

File . . . . . : SAMPLE Member . . . . . : RPGSHELL
Library . . . . . : RDA Printer . . . . . : QPRINT

Type options, press Enter.
1=Add 2=Edit comments 3=Copy 4=Remove
7=Rename 8=Select keywords 12=Design image

Opt Order Record Date Error Text
1 DETAIL

Bottom
F3=Exit F5=Refresh F12=Cancel
F13=Session defaults F14=File-level keywords F15=File-level comments
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```

5. Enter "1" for Option and "DETAIL" for Record. Press Enter. The blank **Work Display** appears.

```

-

Report Designer Work Display for DETAIL: Press HELP for function keys.

... ..10.... ..20.... ..30.... ..40.... ..50.... ..60.... ..70.... ..80
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

```

6. With the cursor in the upper left-hand corner of the screen, press F14 to display the ruler.

7. Press F10 to access the **Select Database Files** display.

```

Select Database Files
Type options and names, press Enter.
1=Display database field list
2=Select all fields

Option Database File Library Record
1 XXFLDR RDA
- *LIBL
- *LIBL
- *LIBL

F3=Exit F4=Record list F12=Cancel

```

8. Enter a "1" for Option. Enter "XXFLDR" for Database File. Enter "RDA" for Library. Position the cursor to the Record column and press F4. The **Select Database Records** display appears.

```

Select Database Records
Database file . . . . . : XXFLDR Library . . . . . : RDA
Type options, press Enter.
1=Select

Option Record
1 XXFLDRR

F3=Exit F12=Cancel Bottom

```

9. Enter a "1" beside XXFLDRR and press Enter. The **Select Database Fields** display appears.

```

Select Database Fields
Record . . . : XXFLDRR
Type information, press Enter.
Number of fields to roll . . . . . : 8
Name of field to search for . . . . . :
Type options, press Enter.
1=Display extended field description
2=Select

Option Field Length Type Column Heading
2 NAME 30 A CUSTOMER NAME
2 ADDR 30 A ADDRESS
2 CITY 23 A CITY
2 STATE 2 A STATE
2 ZIP 5 A ZIP CODE
2 CSTNBR 7,0 P CUSTOMER NUMBER
2 PHONE 10,0 P PHONE NUMBER
- PRGM 10 A PROGRAM NAME

F3=Exit F12=Cancel F16=Search More...

```

10. Enter a "2" beside the fields NAME, ADDR, CITY, STATE, ZIP, CSTNBR, and PHONE. Press Enter to select the fields and return to the **Select Database Files** display. Press F12 to return to the **Work Display**. The selected fields are displayed at the bottom of the **Work Display**.

```

... 10... 20... 30... 40... 50... 60... 70... 80
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
1:NAME 2:ADDR 3:CITY 4:STATE 5:ZIP 6:CSTNBR 7:PHONE

```

11. Key "&1" at line 2 position 2 of the **Work Display** and press Enter. The CUSTOMER NAME field is added to the display.

```

... 10... 20... 30... 40... 50... 60... 70... 80
&1
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
1:ADDR 2:CITY 3:STATE 4:ZIP 5:CSTNBR 6:PHONE

```



```

.....60.....70.....80.....90.....100.....110.....120.....130.
000000000000 000000000000000000000000 00 00000  &2

```

1:CSTNBR 2:PHONE

16. Key "&2" at line 2 position 100 and press Enter to add the PHONE NUMBER to the display. Notice the PHONE NUMBER is displayed in edited format.

```

.....60.....70.....80.....90.....100.....110.....120.....130.
000000000000 000000000000000000000000 00 00000  666-666-6666

```

1:CSTNBR

17. Key "&1" at line 2 position 118 and press Enter to add the CUSTOMER NUMBER to the display.

```

.....60.....70.....80.....90.....100.....110.....120.....130.
000000000000 000000000000000000000000 00 00000  666-666-6666  &1

```

1:CSTNBR

```

.....60.....70.....80.....90.....100.....110.....120.....130.
000000000000 000000000000000000000000 00 00000  666-666-6666  66666666

```

18. Key an "*" in front of the CUSTOMER NUMBER and press Enter to see the **Select Field Keywords** display for CUSTOMER NUMBER.

```

.....60.....70.....80.....90.....100.....110.....120.....130.
000000000000 000000000000000000000000 00 00000  666-666-6666  *66666666

```

19. Key a "Y" for Editing keywords and press Enter.

```

Select Field Keywords
Field . . . . . : CSTNBR
Length . . . . . : 7,0
Line . . . . . : 2 Position . . . : 118
Type choices, press Enter.
Print attributes . . . . . Y=Yes For Field Type
Colors . . . . . - All types
General keywords . . . . . All types
Editing keywords . . . . . Y Numeric
Database reference . . . . . - All types
TEXT keyword . . . . . CUSTOMER NUMBER
F3=Exit F4=Display Selected Keywords F12=Cancel

```



```

Select Record Keywords
Record . . . : DETAIL
Type choices, press Enter.

General keywords . . . . . Y=Yes
Spacing and skipping keywords . . . . . Y
Indicator text keyword . . . . . -
Define character keyword . . . . . -
TEXT keyword . . . . . _____

F3=Exit F4=Display Selected Keywords F12=Cancel

```

26. Key "Y" for General keywords. Press Enter.

```

Select General Keywords
Record . . . : DETAIL
Type choices, press Enter.

Character size:
Width . . . . . Keyword Value Indicators/+
Height . . . . . CHRSLZ _____ 1.0 - 20.0
Characters per inch . . . . . CPI _____ 1.0 - 20.0
Drawer . . . . . DRAWER _____ 10, 15
Font Identifier . . . . . FONT _____ 1, 2, 3 ..
Point size . . . . . _____ Name, ID
Lines per inch . . . . . LPI _____ 0.1-999.9
Page rotation . . . . . PAGRPT _____ 4, 6, 8, 9
Print quality . . . . . PRTQLTY _____ 0, 90 ...
RPG record-level parameters:
Line type . . . . . E H, D, E, T
Fetch overflow . . . . . F F, blank
EXCPT name . . . . . DETAIL Name
Blank indicator line . . . . . Y=Yes

F3=Exit F12=Cancel

```

27. Enter "E" for RPG Line type, "F" for Fetch overflow, and "DETAIL" for EXCPT name. Press F12 twice to return to the **Work with Report Records** display.

```

Work with Report Records
File . . . . . : SAMPLE Member . . . . . : RPGSHELL
Library . . . . . : RDA Printer . . . . . : QPRINT

Type options, press Enter.
1=Add 2=Edit comments 3=Copy 4=Remove
7=Rename 8=Select keywords 12=Design image

Opt Order Record Date Error Text
1 10 HEADER 93/08/15
DETAIL

F3=Exit F5=Refresh F12=Cancel Bottom
F13=Session defaults F14=File-level keywords F15=File-level comments

```

28. Enter "1" for Opt and "HEADER" for Record as shown. Press Enter.

```

Report Designer Work Display for HEADER: Press HELP for function keys.

```

29. The blank **Work Display** appears for report record HEADER. Press F9 to select additional records to display along with the HEADER record.

```

Select Additional Records for Display
File . . . . . : SAMPLE Member . . . . . : RPGSHELL
Library . . . . . : RDA Printer . . . . . : QPRINT

Type information, press Enter.
Current record . . . . . : HEADER
Blanks . . . . . : 5 00-99
Position in additional records . . . . . : 0-31
Type options, press Enter.
1,2,3...31=Select for display as additional record

Option Record Repeat Blanks
1 10 DETAIL - -

F3=Exit F5=Refresh F12=Cancel Bottom

```

30. Key "1" next to DETAIL, and "5" for Blanks as shown and press Enter.

```

000000000000 0000000000000000000000 00 00000 666-666-6666 66666666

Record HEADER displayed first relative to additional record(s) by default.

```

31. The **Work Display** appears, with 5 blank lines at the top for the HEADER record, and the DETAIL record displayed below. Press HOME to position the display to line 1 position 1.

```

*date
+666666
-----
Name                               Address
-----
00000000000000000000000000000000 00000000000000000000000000000000 00000000000000000000000000000000

```

32. Key the field and constant definitions for the HEADER record on the display as shown. Be sure to enclose the dashed lines in single quotes ('). Pressing Enter completes the field definitions.

```

66/66/66
666666
-----
Name                               Address
-----
00000000000000000000000000000000 00000000000000000000000000000000 00000000000000000000000000000000

```

```

66/66/66
*666666
-----
Name                               Address
-----
00000000000000000000000000000000 00000000000000000000000000000000 00000000000000000000000000000000

```

33. Key an "*" in front of the TIME field as shown, and press Enter to see the **Select Field Keywords** display for this field.

```

-----
Select Field Keywords
-----
Field . . . . . : FLD009
Length . . . . . : 6,0           Line . . . : 2 Position . . . : 3
Type choices, press Enter.
Print attributes . . . . . Y=Yes For Field Type
Colors . . . . . - All types
General keywords . . . . . All types
Editing keywords . . . . . Y Numeric
Database reference . . . . . - All types
TEXT keyword . . . . .
-----
F3=Exit F4=Display Selected Keywords F12=Cancel

```

34. Key a "Y" for Editing keywords and press Enter.

```

-----
Select Editing Keywords
-----
Field . . . . . : FLD009
Length . . . . . : 6,0           Line . . . : 2 Position . . . : 3
Edit Code Description No Sign CR Sign - Sign(R) - Sign(L)
Commas and zero balances 1 A J N
Commas 2 B K O
Zero balances 3 C L P
No commas or zero balances 4 D M Q
User-defined edit codes 5-9
Date edit Y
Suppress leading zeros Z
Type choices, press Enter.
Edit code . . . . . Keyword
Replace leading zeros with . . . . . EDTUDE - A-D, J-Q, Y, Z, 1-9
Edit word . . . . . EDTWRD T : : '
-----
F3=Exit F12=Cancel

```

35. Enter the Edit word as shown, and press F12 twice to return to the **Work Display**. Notice the field is now displayed in edited format.

```

66/66/66
?66:66:66
-----
Name                               Address
-----
00000000000000000000000000000000 00000000000000000000000000000000 00000000000000000000000000000000

```

36. Key a "?" in front of the TIME field and press Enter to see the field name prompt.


```

Select Spacing And Skipping Keywords

Record . . . : HEADER
Type choices, press Enter.

Report record level:
Skip before . . . . . SKIPB  ---  ---  ---  ---
Skip after . . . . . SKIPA  ---  ---  ---  ---
Space before . . . . . SPACEB ---  ---  ---  ---
Space after . . . . . SPACEA ---  ---  ---  ---
Line spacing . . . . . Z      ---  ---  ---  ---
                                     1=Fixed line nbrs
                                     2=Use Spaces/Skips

Line/field level:
Skip Before Skip After Space Before Space After
Val Indicators/+ Val Indicators/+ Val Indicators/+ Val Indicators/+
1 1 1 1 1 1
2 1 1 1 1 1
4 1 1 1 1 1
5 1 1 1 1 1

F3=Exit F12=Cancel

```

43. Key a "1" in Skip Before for line 1 to cause the record to skip to line 1 each time it is printed. Press F12 twice to return to the **Work with Report Records** display.

```

Work with Report Records

File . . . . . : SAMPLE      Member . . . . . : RPGSHELL
Library . . . . : RDA        Printer . . . . . : QPRINT

Type options, press Enter.
1-Add      2-Edit comments  3-Copy      4-Remove
7-Rename   8-Select keywords 12-Design image

Opt Order Record Date Error Text
---
10 DETAIL 93/08/15
20 HEADER 93/08/15

Bottom
F3=Exit F5=Refresh F12=Cancel
F13=Session defaults F14=File-level keywords F15=File-level comments

```

44. Press F3 to exit. The RPG exit display appears.

```

Save RPG Source - Create Program

Type choices, press Enter.

Save RPG source . . . . . Y Y=Yes
Source file . . . . . SAMPLE F4 for list
Library . . . . . RDA Name, *LIBL ...
Member . . . . . RPGEXAMPLE F4 for list
Text . . . . . RPG example shell, without printe
r file.

Create program . . . . . Y Y=Yes
Prompt for parameters . . . . . Y=Yes
Program . . . . . RPGSHELL F4 for list
Library . . . . . QTEMP Name, *CURLIB
Replace existing program . . . . . Y Y=Yes

Submit create job to batch . . . . . Y Y=Yes

Specify additional
save or create options . . . . . Y=Yes

F3=Exit F4=Prompt F12=Cancel
Member RPGSHELL already exists in file SAMPLE. Press Enter to replace.

```

45. Change the Member name to "RPGEXAMPLE" so RPGSHELL is not changed and can be reused. Press Enter to save the source and create the program. A completion message is displayed at the bottom of the screen.

```

Save RPG Source - Create Program

Type choices, press Enter.

Save RPG source . . . . . Y Y=Yes
Source file . . . . . SAMPLE F4 for list
Library . . . . . RDA Name, *LIBL ...
Member . . . . . RPGEXAMPLE F4 for list
Text . . . . . RPG example shell, without printe
r file.

Create program . . . . . Y Y=Yes
Prompt for parameters . . . . . Y=Yes
Program . . . . . RPGSHELL F4 for list
Library . . . . . QTEMP Name, *CURLIB
Replace existing program . . . . . Y Y=Yes

Submit create job to batch . . . . . Y Y=Yes

Specify additional
save or create options . . . . . Y=Yes

F3=Exit F4=Prompt F12=Cancel
Member RPGEXAMPLE saved. Batch create submitted. Press Enter.

```

47. Press Enter to exit Report Designer. This concludes this example.

Chapter 13 Converting Report Source

What's In This Chapter

This chapter explains how Report Designer's Convert Report Source (CVTRPТСRC) command works, discusses the limitations of conversion, gives a detailed explanation of the command's parameters, and contains a sample source conversion log.

Conversion Explanation

Report Designer contains high-level language parsers to convert RPG or DDS source code into Report Designer's internal representation of report definitions. Additionally, Report Designer contains high-level language source code generators that convert Report Designer's internal representation of report definitions into RPG or DDS. The Convert Report Source (CVTRPТСRC) command reads in a source member using one of the parsers and outputs a new member with one of the source code generators. CVTRPТСRC command provides the following functions:

- o Generate DDS source code for an equivalent externally-described printer file from RPG specifications for an internally-described printer file.
- o Generate RPG source code for an equivalent internally-described printer file from DDS source code for an externally-described printer file.
- o Standardize RPG coding style of printer file O-specs by reading in existing RPG and writing out RPG in the Report Designer style.
- o Standardize DDS coding style by reading in existing DDS and writing out DDS in the Report Designer style.

Since printer function provided by RPG is a subset of that provided by DDS, DDS to RPG conversions may lose some printer function. As an example, since there is no RPG equivalent of the DDS COLOR keyword, COLOR is dropped on conversion to RPG. Additional differences will occur.

Limitations

Because Report Designer was not designed as a conversion aide, the Convert Report Source (CVTRPТСRC) command has several limitations:

- o RPG fields defined by externally defined data structures have incorrect REFFLD keyword values when converted to DDS. These must be corrected by hand using SEU.
- o The conversion process does not change the input source member when converting between source types. Removing output specifications, changing EXCPT opcodes to WRITE, etc must be performed by hand when converting from RPG to DDS.

Convert Report Source

The Convert Report Source (CVTRPSTSRC) command converts a report definition contained in a source member from one source type to another. To prompt the Convert Report Source (CVTRPSTSRC) command:

1. Key in CVTRPSTSRC on a command line.
2. Press F4.

After completing the display, press Enter to convert the report source.

Note: The command can also be submitted to batch.

```

                                Convert Report Source (CVTRPSTSRC)

Type choices, press Enter.

From source file . . . . .      *LIBL      Name
Library . . . . .                Name, *LIBL, *CURLIB
To source file . . . . .        *LIBL      Name
Library . . . . .                Name, *LIBL, *CURLIB
From source member . . . . .    *MBRTYPE  Name
*PRTF or RPG printer file . . . *FROMMBR  Name, *MBRTYPE, *PRTF...
To source member . . . . .      *PRTF     Name, *FROMMBR
*PRTF or RPG printer file . . . *PRTF     Name, *PRTF, *PRTF38

                                Bottom
F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
  
```

From source file (FROMFILE)

Specifies the name of the file containing the source to be converted and the library where it resides. This is a required parameter. The possible library values are:

***LIBL:** All libraries in the job's library list are searched.

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

library-name: Specify the name of the library.

To source file (TOFILE)

Specifies the name of the existing file to receive the converted source and the library where it resides. This is a required parameter. The possible library values are:

***LIBL:** All libraries in the job's library list are searched.

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

library-name: Specify the name of the library.

From source member (FROMMBR)

Specifies the name of the member containing the source to be converted. This is a required parameter.

*PRTF or RPG printer file (FROMPRTF)

Specifies whether the source member is treated as DDS or RPG source. In the case of RPG source, specifies the name of the printer file to process as it appears in the F-spec.

***MBRTYPE:** Infer the printer name from the member's source type. Members with source type PRTF are treated as if *PRTF were specified. Members with source type PRTF38 are treated as if *PRTF38 were specified. Members with source type RPG, RPT, RPG36 etc. are treated as if *FIRST were specified.

***PRTF:** The source is treated as native OS/400 DDS.

***PRTF38:** The source is treated as System/38 compatible DDS.

***FIRST:** The source is treated as RPG and the first printer file name encountered in the source is processed.

file-name: Specify the name of RPG internally-described printer file.

To source member (TOMBR)

Specifies the name of the member to receive the converted source.

***FROMMBR:** Use the name of the source member to be converted.

member-name: Specify the name of the source member.

*PRTF or RPG printer file (TOPRTF)

Specifies whether the source member is treated as DDS or RPG source. In the case of RPG source, specifies the name of the printer file to process as it appears in the F-spec.

***PRTF:** The source is treated as native OS/400 DDS.

***PRTF38:** The source is treated as System/38 compatible DDS.

file-name: Specify the name of the RPG internally-described printer file.

Example

```
CVTRPTSRC FROMFILE(SRC/QRPGSRC) TOFILE(SRC/QDDSSRC) FROMMBR(INV310)
```

This command converts an RPG printer definition to DDS. The first printer file encountered in source member INV310 in source file QRPGSRC in library SRC is converted. The generated DDS source code is placed in new member INV310 in source file QDDSSRC in the same library.

Conversion Log

The Convert Report Source command creates a "RDA Source Conversion Log" detailing the outcome of the conversion process. Review the listing for any correctable errors. A representative listing for an RPG to DDS conversion might look like this:

```
RDPL056      Rel  3.01  R e p o r t   D e s i g n e r                Page  1
                                   RDA Source Conversion Log                09/14/89

From:
Source file. . . . . : QRPGSRC
Library. . . . . : RDTEST2
Member . . . . . : MNU023
Printer name . . . . : MSYSPRT
Text . . . . . : MNU User Verification Listing

To:
Source file. . . . . : QDDSSRC
Library. . . . . : RDTEST2
Member . . . . . : MNU023PR
Printer name . . . . : *PRTF

-----
Message ID / Message text
-----
RDA6022
Unable to open /COPY member SRMH01 in file QRPGCPY..
RDA6022
Unable to open /COPY member SRMH04 in file QRPGCPY..
RDA6022
Unable to open /COPY member MUINIT in file QRPGCPY..
RDA6022
Unable to open /COPY member MRPASS in file QRPGCPY..
RDA6022
Unable to open /COPY member SRPSSR in file QRPGCPY..
RDA6021
Definition not found for field EXCPGM in record FMT0000001.
RDA6021
Definition not found for field SYSVER in record FMT0000001.
RDA6021
Definition not found for field SYSTIT in record FMT0000001.
RDA6021
Definition not found for field SYSNAM in record FMT0000001.
RDA6021
Definition not found for field EXCJOB in record FMT0000001.
RDA6021
Definition not found for field EXCUSR in record FMT0000001.
RDA6021
Definition not found for field EXCNBR in record FMT0000001.
RDA6021
Definition not found for field EXCDAT in record FMT0000001.
RDA6021
Definition not found for field EXCTIM in record FMT0000001.
RDA7006
* Member MNU023PR saved. Press ENTER.

* * * * * E n d   O f   L i s t i n g   * * * * *
```

Chapter 14 Printing Report Samples

What's In This Chapter

This chapter explains how Report Designer's Print Report Sample (PRTRPTSAM) command works, and gives a detailed explanation of the command's parameters.

Command Explanation

Report Designer contains high-level language parsers to convert RPG or DDS source code into Report Designer's internal representation of report definitions. Additionally, Report Designer contains routines to create and print a visual representation of Report Designer's internal definition. Usually the print function is accessed from the Report Designer **Work Display**. The Print Report Sample (PRTRPTSAM) command provides a means to access the print report definition function from a batch job. PRTRPTSAM command provides the following functions:

- o Syntax check DDS or RPG printer file source code specifications.
- o Generate a report sample equivalent to the **Work Display** print function.

Print Report Sample

The Print Report Sample (PRTRPTSAM) command prints a sample report. The result is similar to pressing F17=Print from the Work Display and the command can be executed in batch.

To prompt the Print Report Sample (PRTRPTSAM) command:

1. Key in PRTRPTSAM on a command line.
2. Press F4.

After completing the display, press Enter to print the report sample.

Note: The command can also be submitted to batch.

```
Print Report Sample (PRTRPTSAM)
Type choices, press Enter.
Source file . . . . . _____ Name
Library . . . . . _____ *LIBL Name, *LIBL
Source member . . . . . _____ Name
*PRTF or RPG printer file . . . . . *MBRTYPE Name, *MBRTYPE, *PRTF...
Records:
Record name . . . . . *FIRST Name, *FIRST
Additional blanks . . . . . _____ 0-99
Repeat count . . . . . _____ 1-9
+ for more values
Field print control . . . . . *CURRENT *CURRENT, *NONE, *ALL
Indicator setting:
Activate indicators . . . . . *NO *NO, *YES
Indicators to be turned ON . . . . . _____ 01, 02, 03, 04, 05, 06, 07...
+ for more values
_____
Bottom
F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys
```

Source file (SRCFILE)

Specifies the name of the file containing the source member to be updated or to which a new source member will be added. This is a required parameter. The possible library values are:

***LIBL:** All libraries in the job's library list are searched.

library-name: Specify the name of the library.

Source member (SRCMBR)

Specifies the name of the member containing the source to be updated or the name of a new member to be created. This is a required parameter.

***PRTF or RPG printer file (PRINTER)**

Specifies whether the source member is treated as DDS or RPG source. In the case of RPG source, specifies the name of the printer file to process as it appears in the F-spec.

***MBRTYPE:** Infer the printer name from the member's source type. Members with source type PRTF are treated as if *PRTF were specified. Members with source type PRTF38 are treated as if *PRTF38 were specified. Members with source type RPG, RPT, RPG36 etc. are treated as if *FIRST were specified.

***PRTF:** The source is treated as native OS/400 DDS.

***PRTF38:** The source is treated as System/38 compatible DDS.

***FIRST:** The source is treated as RPG and the first printer file name encountered in the source is processed.

file-name: Specify the name of RPG internally-described printer file.

Records (RECORDS)

The Records parameter specifies which records appear in the sample and the order in which they appear.

You can enter multiple values for this parameter. If you are on an entry display and you need additional entry fields to enter these multiple values, type a plus sign (+) in the entry field opposite the phrase "+ for more", and press the Enter key.

Each record specification is made up of 3 elements:

Element 1 Record name: The name of the printer record in the source member. When the special value *FIRST is specified Report Designer uses the record names found in the source member in the order they are found.

Element 2 Additional blanks: The number of blank lines to insert after the record.

Element 3 Repeat count: The number of times the record should be repeated. Use this to give the appearance of repeated detail line printing.

Field print control (FLDPRTCTL)

Specifies what field information is printed.

***CURRENT:** Field definitions from the *CURRENT (first) record format are printed.

***NONE:** No field definitions are printed.

***ALL:** Field definitions for all of the selected record formats are printed.

Indicator setting (INDSET)

Specifies how conditioning indicators are processed. When *YES is specified for "Activate indicators", Report Designer displays only those fields whose conditioning indicators match those specified in "Indicators to be turned on". Similarly, keywords conditioned by indicators are only in effect when their indicator settings agree with the specified indicator settings. Report Designer always ignores indicator settings for spacing and skipping keywords when positioning fields.

Example

```
PRTRPTSAM SRCFILE(SRC/QRPGSRC) SRCMBR(INV310)
```

This command prints a sample from RPG source member INV310. The first printer file encountered in source member is used. The report records are printed in order they appear in the source member.

Chapter 15 Recreating Printer Files

What's In This Chapter

This chapter explains how Report Designer's Create RDA Printer File (CRTRDAPRTF) command works, and gives a detailed explanation of the commands parameters.

Command Explanation

When updating DDS source with Report Designer, parameters specified for the CRTPRTF command are saved as comments in the source. Each parameter specified on the CRTPRTF command from the Report Designer create display is placed on a separate line in the updated DDS. The parameters are stored as comments that are meaningful to Report Designer. On the next access with Report Designer, these comments are used to establish session values and CRTPRTF default values.

The Create RDA Printer File (CRTRDAPRTF) command runs the Create Printer File (CRTPRTF) command after applying the stored parameter DDS values. Several benefits result from the ability to separate compilation from interactive design.

- o Mass re-creations for new releases of OS/400 are easier.
- o "Compile to production" change management procedures are enabled.

Create RDA Printer File

The Create RDA Printer File (CRTRDAPRTF) command creates a DDS printer file using the same Create Printer File (CRTPRTF) command parameter values specified when the printer file was last created on exiting from Report Designer.

To prompt the Create RDA Printer File (CRTRDAPRTF) command:

1. Key in CRTRDAPRTF on a command line.
2. Press F4.

After completing the display, press Enter to print the report sample.

Note: The command can also be submitted to batch.

```
-----  
                          Create RDA Printer File (CRTRDAPRTF)  
Type choices, press Enter.  
File . . . . . _____ Name  
  Library . . . . . _____ *CURLIB Name, *CURLIB  
Source file . . . . . _____ Name  
  Library . . . . . _____ *LIBL Name, *LIBL  
Source member . . . . . _____ Name  
  
F3=Exit   F4=Prompt   F5=Refresh   F12=Cancel   F13=How to use this display  
F24=More keys  
Bottom
```

File (FILE)

Specifies the name of the printer device file to create. If the file is used in a high-level language program the file name should be consistent with the naming rules of that language. This is a required parameter. The possible library values are:

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

library-name: Specify the name of the library.

Source file (SRCFILE)

Specifies the name of the file containing the source member to be updated or to which a new source member will be added. This is a required parameter. The possible library values are:

***LIBL:** All libraries in the job's library list are searched.

library-name: Specify the name of the library.

Source member (SRCMBR)

Specifies the name of the member containing the source to be updated or the name of a new member to be created. This is a required parameter.

***FILE:** Use the name of the printer file to be created.

member-name: Specify the name of the source member.

Example

```
CRTDAPRTF SRCFILE(SRC/QRPGSRC) SRCMBR(INV310)
```

This command executes IBM's Create Printer File (CRTPRTF) command using parameter values supplied in the last Report Designer session.

Chapter 16 Printing Report Information

What's In This Chapter

This chapter explains how Report Designer's Print Report Information (PRTRPTINF) command works, and gives a detailed explanation of the commands parameters.

Command Explanation

Report Designer contains high-level language parsers to convert RPG or DDS source code into Report Designer's internal representation of report definitions. The Print Report Information (PRTRPTINF) command provides a means to to print the information in the internal representation in a batch job. PRTRPTSAM command provides the following functions:

- Syntax check DDS or RPG printer file source code specifications.
- Generate a selected report based on the data found in the source code.

Print Report Information

The Print Report Information (PRTRPTINF) command parses a source member and generates various reports based on the content of the member.

To prompt the Print Report Information (PRTRPTINF) command:

1. Key in PRTRPTINF on a command line.
2. Press F4.

After completing the display, press Enter to generate the report.

Note: The command can also be submitted to batch.

```
-----  
                          Print Report Information (PRTRPTINF)  
Type choices, press Enter.  
Source file . . . . . _____ Name  
Library . . . . . _____ *LIBL Name, *LIBL  
Source member . . . . . _____ Name  
*PRTF or RPG printer file . . . . . _____ *MBRTYPE Name, *MBRTYPE, *PRTF...  
Information to print . . . . . _____ *RCDLIST Name, *RCDLIST, *FLDLIST  
  
F3=Exit   F4=Prompt   F5=Refresh   F12=Cancel   F13=How to use this display  
F24=More keys  
Bottom
```

Source file (SRCFILE)

Specifies the name of the file containing the source member to be updated or to which a new source member will be added. This is a required parameter. The possible library values are:

***LIBL:** All libraries in the job's library list are searched.

library-name: Specify the name of the library.

Source member (SRCMBR)

Specifies the name of the member containing the source to be updated or the name of a new member to

be created. This is a required parameter.

***PRTF or RPG printer file (PRINTER)**

Specifies whether the source member is treated as DDS or RPG source. In the case of RPG source, specifies the name of the printer file to process as it appears in the F-spec.

***MBRTYPE:** Infer the printer name from the member's source type. Members with source type PRTF are treated as if *PRTF were specified. Members with source type PRTF38 are treated as if *PRTF38 were specified. Members with source type RPG, RPT, RPG36 etc. are treated as if *FIRST were specified.

***PRTF:** The source is treated as native OS/400 DDS.

***PRTF38:** The source is treated as System/38 compatible DDS.

***FIRST:** The source is treated as RPG and the first printer file name encountered in the source is processed.

file-name: Specify the name of RPG internally-described printer file.

Information to print (TYPE)

The Information to print parameter specifies type of report that is printed. The possible values are:

***RCDLIST:** A list of records and associated data is created.

***FLDLIST:** A list of fields and associated data is created.

Example

```
PRTRPTINF SRCFILE(SRC/QRPGSRC) SRCMBR(INV310)
```

This command prints a record list for RPG source member INV310. The first printer file encountered in source member is used.

Chapter 17 Recovery

What's In This Chapter

This chapter describes Report Designer session interruptions and how to recover work if one occurs.

Session Interruption

A Report Designer session can be interrupted for various reasons including the following:

- o The display station is signed off by the system operator.
- o The display station is turned off.
- o A system failure occurs.
- o An electrical failure occurs.

Report Designer helps recover most of the work from an interrupted session.

Recover RDA Session Display

If a session is interrupted, Report Designer will display the **Recover RDA Session** display the next time the source member is accessed:

```
Recover RDA Session
Member . . . . : SYPR400
File . . . . . : QDDSSRC
Library . . . . : RDTEST2

The previous RDA session for the member shown
ended abnormally.

Select one of the following:

    1. Recover changes made in the previous RDA session
    2. Discard changes and start a new session

Selection
===> 1
F3=Exit  F12=Cancel
```

Use one of two options to recover from an interrupted session:

- o Select option 1 to recover the interrupted session and review the changes made.
- o Select option 2 to discard changes made during the interrupted session, and reload the source member.

Chapter 18 Problem Determination

What's In This Chapter

This chapter describes the steps to follow if you encounter a problem while using Report Designer.

Basics

When you encounter a problem, always check these basic items first:

- o Make sure you are authorized to the commands, programs, and files in library RDA.
 - o Make sure you are authorized to the source you are updating.
-

Check Low-Level Messages

If the basics check out, check low-level messages for more details on the problem by following these steps.

1. Run the Display Job Log (DSPJOBLOG) command.
 2. From the **Display Job Log** display, press F10 to display low-level messages.
 3. Press F5 to refresh the display.
 4. If necessary, press F18 to display the end of the job log.
 5. When you have located the messages relating to the problem at hand, print the information by pressing the PRINT key.
 6. If you cannot determine the nature of the problem from the job log, or if you cannot correct the problem, proceed to the next section.
-

Check PTF List

If you encounter a problem while using Report Designer, and you are unable to solve it by following the steps outlined in the sections above, review the list of currently available PTFs at www.gumbo.com.

Compare the PTF descriptions from the list to the problem you have encountered. If any sound similar, download and apply the cumulative PTF package to your system.

Contact Gumbo With Problem Information

If you encounter a problem while using Report Designer, and you are unable to solve it by following the steps outlined in the sections above, collect the following information and contact Gumbo Software at:

Gumbo Software, Inc.
809 W Howe St
Seattle WA 98119

Phone: 206-284-5078
FAX: 206-284-5029
E-mail: support@gumbo.com

Save the following to a save file for e-mail support or a 1/4" tape cartridge for mail support:

- o The source member in use when the problem was encountered.
- o All database files (without data) referenced in the source member for external field descriptions. For DDS source members, this includes any database files referenced with the REF or REFFLD keywords. For RPG source members, this includes all externally defined files and data structures.
- o The job log described above.

Include your name, phone number, company name and address and a description of the problem and step-by-step narrative for how to recreate it.

Software Installation Problems

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

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

Symptom During installation inquiry message id CPA3DE4 "Directory not registered. (C G)" is issued.

Cause We believe this is an artifact from the first releases of products to include or create directories. The products did not properly register the directories /Gumbo and /Gumbo/ProdData as belonging to Gumbo products and hence the inquiry.

Solution You can safely take a "G" to this message. You will receive the message 3 times.

If you wish to avoid the problem during installation of subsequent releases of the product, follow the instructions for getting the system to a stable, consistent state found later in this section including the removal of the /Gumbo and /Gumbo/ProdData directories. Reinstall the product.

- o Installation Fails

Symptom Installation fails and diagnostic message id CPF9898 "Unable to clear old release. Is the software being used?." appears in the job log. Or, when the installation verification option is run, verification fails with diagnostic message id CPD0C2E appearing in the job log.

Cause This usually arises from attempting to install a new release over an old release while objects in the old release are in use.

Solution End the jobs that are holding locks on (using) objects from the old release and perform the installation again.

- o Installation Fails or Installation Verification Fails

Symptom Installation or installation verification fails and messages in the job log do not help in recovering.

Cause The software is not installed correctly or the installation is damaged. This can be caused for a variety of reasons including renaming of libraries, directories, or objects that make up the product.

Solution Get the system to a clean and stable state and re-install the software by performing the following:

1. Delete the licensed program by running:

```
DLTLICPGM LICPGM(2A55RDA) RLS(*ALL) OPTION(*ALL)
```

It is okay if this fails with diagnostic CPD3D91 "Product 2A55RDA option *ALL release *ALL not installed."

2. Delete the product's library by running:

```
DLTLIB LIB(RDA)
```

It is okay if this fails with escape CPF2110 "Library RDA not found."

3. Delete the product's directory by running:

```
RMVLNK OBJLNK('/Gumbo/ProdData/2A55RDA')
```

It is okay if this fails with escape CPFA0A9 "Object not found. ...". But if it fails because the directory is not empty, delete the contents using WRKLNK.

If there are no other products installed:

```
RMVLNK OBJLNK('/Gumbo/ProdData')  
RMVLNK OBJLNK('/Gumbo')
```

4. Rebuild i5/OS's (I5/OS's (OS/400's)) internal licensed program information by running:

CALL PGM(QSYS/QSZRECOV)

This takes several minutes depending on machine size.

5. Install the product according to the instructions in the Installation chapter.
6. Enter your authorization code.

Appendix A Notices

Copyrights

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