

# CA-GSS<sup>®</sup> for VSE

## CPR User Guide

5.0



Computer Associates<sup>®</sup>

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# Introduction

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The *CA-GSS for VSE CPR User Guide* defines CPR, explains how to configure, initiate, and maintain CPR, and how to use an audit trail. This guide also explains the CICS Auto Print Initialization feature and defines Print commands for Unicenter CA-FAQS Automated Systems Operation for VSE (hereafter called Unicenter CA-FAQS ASO). This chapter provides an overview of CPR (CICS Print Report).

## What Is CPR?

CPR (CICS Print Report) enables you to print reports on CICS printers.

Reports are spooled from the POWER queue (by Unicenter CA-FAQS ASO or Unicenter CA-Deliver Output Management (hereafter called Unicenter CA-Deliver) into CPR's print queue. Once the reports are in the queue, you can use CPR's online panels to control where, when, and how the reports are printed.

### Screen Print Facility

With CPR's screen print facility, you can print on a CICS printer a screen generated by a pseudo-conversational CICS application.

You use CPR's online panels to set up the screen print facility. Once the facility is set up, you press a PF key while on a screen and take a "picture" of it. The screen image gets spooled to the POWER LST queue, where it can be printed on a system printer or be rerouted to the CPR queue using Unicenter CA-Deliver or Unicenter CA-FAQS ASO. CPR can then print it on a CICS printer.

### Audit Trail

With CPR's audit trail feature, you can view the modification history of all CPR definitions. CPR's audit trail enables you to view changes that have been made to definitions by date, file, type of change, or user name.



# Getting Started

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This chapter shows you how to get started using CPR. It contains introductory information about CPR and its internal functions. It also has instructions about how to access CPR and how to use CPR's online panels.

## Printing with CPR

CPR enables you to manage spooled output from Unicenter CA-Deliver or Unicenter CA-FAQS ASO. You can also establish a method of printing output on printers defined to CICS systems.

Using CPR with Unicenter CA-Deliver

If you are using CPR with Unicenter CA-Deliver, you can print all or part of POWER LST members either:

- **As they are being archived**  
You can use the Unicenter CA-Deliver data collector, SARDATCL, to route members directly from POWER to the CPR queue.
- **After they have been archived**  
You can reprint archived reports using the batch program SARBCH.

**Tip:** For more information about SARDATCL and SARBCH, see the Unicenter CA-Deliver *Systems Guide*.

## Using CPR with Unicenter CA-FAQS ASO

If you are using CPR with Unicenter CA-FAQS ASO, you can print all or part of POWER LST, PUN, or RDR members.

### **LST Members Only**

You can define CICS Auto Print initialization parameters in Unicenter CA-FAQS ASO to automatically spool POWER LST members to CPR. Refer to Appendix A, “CICS Auto Print Initialization for Unicenter CA-FAQS ASO” for more information.

### **LST, PUN, or RDR Members**

You can use the Unicenter CA-FAQS ASO print commands to send a POWER LST, PUN, or RDR member from Unicenter CA-FAQS ASO to CPR. To do this, issue one of the commands while displaying the POWER member. For details about these commands, see Appendix B, “[Unicenter CA-FAQS ASO Print Commands](#)”.

**Tip:** For more information about how Unicenter CA-FAQS ASO is used with CPR, see the *Unicenter CA-FAQS ASO Online User Guide*.

## Troubleshooting CPR

A CPR trace feature is available to locate problems in CPR.

**Important!** *Tracing requires a lot of overhead. Do not use this function unless directed by Computer Associates Technical Support.*

## Security for CPR

You can control access to CPR using Unicenter CA-FAQS ASO or Unicenter CA-Deliver security features or CA-GSS support for eTrust CA-Top Secret Security for VSE (hereafter called eTrust CA-Top Secret).

You can further regulate access to certain CPR functions using Unicenter CA-FAQS ASO. For information about security within CPR, see the *Unicenter CA-FAQS ASO Online User Guide*. For information on eTrust CA-Top Secret see the *CA-GSS Getting Started* and the eTrust CA-Top Secret documentation.

## FAQSCIUS

If you want to establish a higher level of security for CPR, you can use the FAQSCIUS user exit. This user exit is called prior to printing output. For example, you can establish security rules at a printer level – managing the kinds of documents that can print on specific printers.

FAQSCIUS is a source member that is stored in the VSE library during product installation under the name FAQSCIUS.A. You must customize, assemble, and link FAQSCIUS to use it.

## CPR Internals

To help understand how CPR works, you should understand the CICS transactions and tasks associated with CPR. The following section provides a brief overview of CPR internals.

### Initiating and Terminating CPR

You initiate CPR using the FAQI transaction and terminate CPR using the FAQE transaction. You can also initiate and terminate CPR by using PLT entries.

### Data Flow from Queue to Printer

Either Unicenter CA-FAQS ASO or Unicenter CA-Deliver transfers members from the POWER queue to a member in CPR's queue. FAQSCIST, a VSE subtask that runs in the same partition as CICS, checks the CPR queue for work. When there is a member to print, FAQSCIST initiates the FAQW task. Then, FAQW starts the FAQP transaction on a CICS printer.

Using the CPR printer and form definitions, CPR prints the data on a CICS printer.

**Tip:** For details about the various CICS transactions used by CPR, see the chapter “[Configuring and Initiating CPR](#)”.

## SYS\$CPR

SYS\$CPR is the PDS used by CPR. It contains one member for the audit trail and one for each of the following files:

- CICS name
- Printer

- Form
- Control file
- User

It also contains a collection of print queue members.

#### FAQI and FAQE

The FAQI transaction starts FAQW, which attaches the VSE subtask FAQSCIST. The FAQE transaction shuts FAQSCIST down and terminates the FAQW transaction.

#### FAQSCIST

At the specified lookup interval, FAQSCIST searches the CPR print queue for members associated with an active printer. When there is a member to print, FAQSCIST initiates the FAQW task, which in turn starts the FAQP transaction on a CICS printer.

At the lookup interval, FAQSCIST also makes requested changes to printer status.

When FAQSCIST shuts down, FAQW shuts down. Likewise, when FAQW shuts down, FAQSCIST shuts down.

#### FAQW and FAQP

When FAQSCIST determines that a member is waiting to print, the FAQW task is notified. FAQW starts the FAQP transaction on the printer device, which does the actual printing.

During printing, FAQP requests data blocks from FAQSCIST. When printing is complete (all the data blocks have been processed), FAQP is terminated. FAQW remains active in CICS while CPR is active.

## CICS Table Entries

This section discusses required and optional CICS table entries, and screen print table entries.

### Required CICS Table Entries

Before accessing CPR, you must specify the following CICS table entries in each CICS 2.3 system that will use CPR to direct output to printers:

```
DFHPCT TYPE=ENTRY,TRANSID=FAQW,PROGRAM=FAQSCICW,TWASIZE=256
DFHPCT TYPE=ENTRY,TRANSID=FAQP,PROGRAM=FAQSCICP,TWASIZE=256
DFHPCT TYPE=ENTRY,TRANSID=FAQI,PROGRAM=FAQSCICI
DFHPCT TYPE=ENTRY,TRANSID=FAQE,PROGRAM=FAQSCICE
DFHPPT TYPE=ENTRY,PROGRAM=FAQSCICW,PGMLANG=ASSEMBLER
DFHPPT TYPE=ENTRY,PROGRAM=FAQSCICP,PGMLANG=ASSEMBLER
DFHPPT TYPE=ENTRY,PROGRAM=FAQSCICI,PGMLANG=ASSEMBLER
DFHPPT TYPE=ENTRY,PROGRAM=FAQSCICE,PGMLANG=ASSEMBLER
```

For CICS Transaction Server, use the RDO definitions in CACPRCSD.Z:

```
* *****
* *****
* *** THE FOLLOWING JCL IS USED TO DEFINE CPR RDO ENTRIES *****
* *** FOR CICS T/S USING DFHCSDUP. *****
* *** *****
* *** YOU MUST REPLACE THE CSD AND USER CATALOG NAMES *****
* *** TO CONFORM TO YOUR INSTALLATION STANDARDS. *****
* *****
* *****
==>// JOB GSSCSD CREATE CSD ENTRIES FOR CPR
// DLBL DFHCSD,'Your.RDO.File',VSAM,CAT=usercat
// EXEC DFHCSDUP,SIZE=600K
* -----*
* DEFINE CPR PROGRAMS AND TRANSACTIONS *
* -----*
DEFINE PROG(FAQSCICW) EXECK(CICS) G(GSS)
DEFINE PROG(FAQSCICP) EXECK(CICS) G(GSS)
DEFINE PROG(FAQSCICI) EXECK(USER) G(GSS)
DEFINE PROG(FAQSCICE) EXECK(CICS) G(GSS)
DEFINE PROG(FAQSCICQ) EXECK(CICS) G(GSS)
DEFINE PROG(FAQSCICT) EXECK(CICS) G(GSS)
DEFINE PROG(FAQTCIXT) EXECK(CICS) G(GSS)
DEFINE TRANSACTION(FAQW) G(GSS) PROGRAM(FAQSCICW) TASKDATAK(CICS)
TWASIZE(256)
DEFINE TRANSACTION(FAQP) G(GSS) PROGRAM(FAQSCICP) TASKDATAK(CICS)
TWASIZE(256)
DEFINE TRANSACTION(FAQI) G(GSS) PROGRAM(FAQSCICI) TASKDATAK(USER)
DEFINE TRANSACTION(FAQE) G(GSS) PROGRAM(FAQSCICE) TASKDATAK(CICS)
DEFINE TRANSACTION(FAQQ) G(GSS) PROGRAM(FAQSCICQ) TASKDATAK(CICS)
TWASIZE(256)
DEFINE TRANSACTION(FAQT) G(GSS) PROGRAM(FAQSCICT) TASKDATAK(CICS)
/*
==>/&
```

**Tip:** The FAQI and FAQE transactions allow you to manually initiate and terminate CPR. These transactions are especially helpful during testing when you may need to change definitions often.

#### Optional CICS Table Entries

You can enter optional CICS table entries that automatically initiate CPR when CICS is accessed and terminate CPR when CICS is shut down. Automatic initiation and termination is convenient during normal operation, when CPR definitions are not usually changed.

Following are the PLT entries needed for automatic initiation and termination:

```
DFHPLT    TYPE=ENTRY, PROGRAM=FAQSCICI  
DFHPLT    TYPE=ENTRY, PROGRAM=FAQSCICE
```

The first PLT entry should be included in the PLT for CICS initialization (PLTPI). The second PLT entry should be included in the PLT for CICS termination (PLTSD).

Make sure the shut down PLT entry precedes the DFHDELIM entry.

#### Screen Print Table Entries

You must define the following CICS table entries for CICS 2.3 to use the screen print facility:

```
DFHPCT    TYPE=ENTRY, TRANSID=FAQQ, PROGRAM=FAQSCICQ, TWASIZE=256  
DFHPCT    TYPE=ENTRY, TRANSID=FAQT, PROGRAM=FAQSCICT  
DFHPPT    TYPE=ENTRY, PROGRAM=FAQSCICQ, PGMLANG=ASSEMBLER  
DFHPPT    TYPE=ENTRY, PROGRAM=FAQSCICT, PGMLANG=ASSEMBLER  
DFHPPT    TYPE=ENTRY, PROGRAM=FAQTCIXT, PGMLANG=ASSEMBLER
```

The RDO entries for CICS Transaction Server are included in the CACPRCSD.Z job illustrated above.

## CICS Parameters

This section discusses the SIT and SYSIDNT parameters.

### SIT Parameters

You must initialize the CICS SIT table with the following parameters:

- EXEC=YES
- EXITS=YES
- SPOOL=YES

### SYSIDNT Parameter

You must also use the SYSIDNT parameter to provide a CICS identifier for each CICS SIT table that runs CPR. SYSIDNT has the following format:

`SYSIDNT=xxxx`

**xxxx**

Specifies a unique four-character CICS identifier

**Warning!** The SYSIDNT you define must be unique for each CICS because printer IDs defined to CPR are associated with the CICS where they are running. If the SYSIDNT for each CICS is not unique, unpredictable results will occur.

## Accessing CPR

You can access CPR from any of the following:

- CICS
- VTAM or BTAM
- Unicenter CA-FAQS ASO
- Unicenter CA-Deliver

Before accessing CPR Online, you should have defined the proper PPT and PCT or RDO entries as described previously.

From CICS

To access CPR from a CICS session, use the DCMOCIXP/DCMTDRIV programs and follow these steps:

1. Make sure that DCMTDRIV is set up to run as a maintask or subtask.
2. Define a PCT or RDO entry with transaction ID CPR or DCMO. The program to invoke is DCMOCIXP. If the transaction ID is CPR, the DCMTDRIV Main Menu is bypassed. Otherwise, users can select other products from the menu, including CPR.
3. Define a PPT or RDO entry for DCMOCIXP.
4. Enter the CICS transaction ID defined in Step 2.

For more information about programs DCMOCIXP/DCMTDRIV and the CICS table entries, see the *CA-GSS Getting Started*.

From VTAM or BTAM

To access CPR from a VTAM or BTAM session, follow these steps:

1. Log on to the application DCMTDRIV.
2. Since your systems programmer can modify the initial screen, take one of the following actions depending on what is displayed:
  - If the DCM Main Menu is displayed, select option 7, *CPR*
  - If another main menu is displayed, see your systems programmer

For more information about the DCMTDRIV program, see the *CA-GSS Getting Started*.

From Unicenter CA-FAQS ASO

You can access CPR either from the DCM Main Menu or from the Unicenter CA-FAQS ASO command line. For more information about accessing CPR Online from Unicenter CA-FAQS ASO, see the *Unicenter CA-FAQS ASO Online User Guide*.

Unicenter CA-FAQS ASO Command Line

To access the CICS Print Support Main Menu from the Unicenter CA-FAQS ASO command line, enter **CPR** at the command line.

From Unicenter CA-Deliver

To access the CICS Print Support Main Menu from Unicenter CA-Deliver, use the following procedure:

1. Access the Unicenter CA-Deliver Main Menu
2. Select option K, *CICS Print Report facility*, or enter K at the command line

**Tip:** For more information about accessing CPR Online from Unicenter CA-Deliver, see the *Unicenter CA-Deliver Systems Guide*.

## CICS Print Support Main Menu

The CICS Print Support Main Menu is shown next. Its options are discussed in the sections that follow.

```
CPRMENU0.* ** CA-GSS - CPR Online 5.0-0202 ** ID=ADMINYS2.ADMIN33
===>

      *** CPR -- CICS Print Support Main MENU ***

A   CICS Print Audit trail report -- Status: E
C   CICS name maintenance
F   Form maintenance
L   Control files maintenance
P   Printer id maintenance and dispatch
Q   Print queue entries
U   Screen PRINT User file maintenance

PF01=Help PF03=Return
```

The menu options are described in this table:

**A CICS Print Audit trail report**

View the changes that have been made to CPR definitions.

**C CICS name maintenance**

Define CICSs and screen print attributes. Also define information related to the FAQSCIST subtask.

**F Form maintenance**

Define forms to identify format characteristics of output printed via CPR. Defining forms enables you to customize the way in which a CICS printer handles the output. This is done by defining print instructions such as lines per page and characters per line. You can associate particular forms with particular printer IDs.

**L Control files maintenance**

Define print header and trailer control files. You can define control files to supply necessary information when using advanced printers (such as laser printers) or supply additional printing information to print with the CPR output.

**P Printer id maintenance and dispatch**

Define CICS printer IDs to CPR. These IDs define the devices that are attached to CICSs, so that CPR knows the characteristics of the printer. You can organize your use of CPR by defining CICS printers to specific CICSs.

**Q Print queue entries**

View a directory of CPR print queue entries that are printing or waiting to print. This enables you to manipulate queue entries.

**U Screen PRINT User file maintenance**

Define user profiles which override the default screen print values set up in the CICS name maintenance.

**Tip:** In addition to the access method previously described for Unicenter CA-FAQS ASO, you can enter the option letter of any menu option to access the list panel for that option. For example, to access the CICS name maintenance list panel, enter **CPR C** at the Unicenter CA-FAQS ASO command line.

## CPR Online Panels

This section describes how to access and use the CPR online panels.

### User Interface

You use the CPR online panels for tasks that can be divided into three categories:

- Functions used to set up CPR:
  - Defining CICS names
  - Defining printers
  - Defining forms
  - Defining control files
  - Defining user profiles for the screen print feature
- Functions used to manage printers and maintain CPR:
  - Viewing print queue entries
  - Maintaining forms
  - Maintaining control files
  - Maintaining printers
- Functions used to audit modifications made to CPR:
  - Viewing the audit trail

### Types of Panels

There are two types of panels in CPR: list panels and entry panels. Entry panels are labeled as *Add/Alter/Delete* panels online.

#### **List**

Lists all existing definitions that correspond to a menu option. For example, the CICS name list panel lists all CICS names defined to CPR.

#### **Entry**

Displays all information for a single definition. For example, the CICS name entry panel displays all the information necessary to define one CICS name to CPR.

## Accessing Panels

Follow these steps to access the panels:

1. Select a CPR option from the CICS Print Support Main Menu, by either:
  - Entering the option letter at the command line and pressing Enter
  - Moving the cursor to the option and pressing Enter

That option's list panel is displayed.

2. From the list panel, use the PF keys and action codes to access the entry panel.

## Using Help

Press PF1 (Help) to display the help text for the displayed panel.

Within some help panels, colored text indicates that you can jump to a related help panel. To jump to a related help panel, press Tab to move the cursor to the colored text and press Enter. Then, to return to the previous help panel or to the CPR online panel, press PF3 (Return).

## Common Action Codes

Common action codes are:

- A Alters a definition
- L Deletes a definition
- C Copies a definition

## Common PF Keys

Common PF keys are:

- PF1 Displays help information for this panel
- PF3 Returns to the previous panel
- PF4 Refreshes current display
- PF5 Adds a definition to the file
- PF6 Saves the added, altered, or copied definition, or verifies a delete
- PF7 Displays the previous screen of information
- PF8 Displays the next screen of information
- PF12 Exits CPR

## Entering Search Criteria

Every list panel has fields that you can use to search for a particular definition or narrow the number of definitions displayed. Some panels may have multiple search fields. To enter search criteria, use this procedure:

1. Enter the search criteria in the input field(s). An asterisk (\*) can be entered as the first or last character of a string to allow more flexibility in the search.
2. Press Enter to initiate the search. The panel displays the entries that match the search criteria. If no matching entry is found, a blank list is displayed.



# Configuring and Initiating CPR

---

This chapter explains how to configure and initiate CPR. It also contains procedures for creating CPR definitions specific to your installation.

## CPR Definitions

To operate CPR, you must:

- Provide a unique four-character CICS identifier for each CICS where CPR will be active
- Specify the ID of each printer that will be used to print data
- Define the forms so that output is correctly formatted on the defined printers

You can also:

- Supply control files that provide additional printing instructions that precede and/or follow the printed output
- Create user profiles for CPR's screen print facility

## Sample Data

The procedures in this chapter provide sample data for the fields on the panels. As you follow the procedures, you should enter your own data in the fields; use the sample data only as a model.

## Minimum Definitions

You must define a CICS name, at least one printer, and a corresponding form before CPR can function.

If you are accessing CPR for the first time, we strongly recommend you begin by defining the following:

- One CICS name
- One printer capable of printing 132 columns and 66 lines per page
- One form called *STD*

## Maintaining CPR

After you have created the initial definitions, you can manage the entries queued for printing and make changes to CPR definitions. For more information about managing print entries and maintaining definitions, see the chapter "[Maintaining CPR](#)."

## CPR Configuration

This section describes how to configure CPR. It includes instructions to perform several tasks, including setting operating parameters, defining the screen print facility, and establishing printer and form names.

Defining a CICS System to CPR

Using the CICS Name Maintenance option, you can:

- Set the operating parameters for a particular CICS
- Define the screen print facility
- Define user defaults
- Establish where printer and form name information should be placed in the screen print sent to POWER

## Adding or Modifying CICS Names

Whenever you add or modify a CICS name, you need to terminate and reinitiate CPR for the change to take place. See [Initiating CPR](#) in this chapter for information about termination and reinitiation. For the configuration sequence in this chapter, you complete the configuration before terminating and reinitiating.

## Setting Operating Parameters

To define operating parameters for a CICS name, follow these steps:

1. From the CICS Print Support Main Menu, enter **C**, CICS Name Maintenance, to access the CICS Print CICS list panel.
2. From the CICS Print CICS list panel, press PF5 (Add) to display the CICS entry Add/Alter/Delete panel, shown next.

```

CPRMEN4C.C ** CA-GSS - CPR Online 5.0-0202 ** ID=ADMINYS2.ADMIN34
====>
** CPR -- CICS entry Add/Alter/Delete

CICS name:      _____

PRTR load max:  ----          Strt max:    ----
Lookup interval: ----          Retry count:  ---

          SCREEN PRINT function definition:

PF key:   PF20    Max users:  -----   User file name:  USER

if USER is not found, use the following defaults:

PRTR id:  ----    Class:      Q          Priority:      1
Header:   Y

Insert PRTR into:  NODE ( X )  FORM (   )  USER INFO (   )
Insert FORM into:  NODE ( X )  FORM (   )  USER INFO (   )

PF1=Help PF3=Return PF12=Exit PF6=Save

```

3. In the CICS name field, enter the unique four-character SYSIDNT value. This is the value entered in the CICS SIT table. For example, enter **DEVA**.
4. In the PRTR load max field, enter the maximum number of printers that CPR can handle at one time. This value determines the amount of storage used. The larger the number, the more CICS partition GETVIS is used. The default value is 40. For example, enter **5**.
5. In the Strt max field, enter the maximum number of printers that CPR can start at one time. The larger the number, the higher the overhead. The default value is 20. For example, enter **5**.
6. In the Lookup interval field, enter the time, in seconds, FAQSCIST waits before dispatching new members to the printer and handling commands from the Printer list (Status) panel.

The higher the number, the less the CICS overhead is used. However, it takes more time for the results of a command to be seen or output to be printed. For example, enter **20**.

7. In the Retry count field, enter the number of times CPR retries an operation. For example, enter **10**.

The sample data in Steps 6 and 7 indicates that CPR tries 10 times (Retry Count) at 20-second intervals (Lookup Interval) to start a task to print data. After 10 attempts, the printer status changes to waiting on resources (W RES). Keep in mind that your numbers for the retry count and lookup interval may be different.

### Defining the Screen Print Facility

Now, continue in the CICS entry panel by entering the information to define the screen print facility. Use the following steps:

1. In the PF key field, specify the PF key used to activate a screen print request for this CICS. For example, enter **PF20**.
2. In the Max users field, enter the maximum number of screen print requests that can occur simultaneously. For example, enter **30**.
3. In the User file name field, enter the name of the user file to activate. The active user file contains a list of users and profiles for the screen print facility. For example, enter **USER**.

The default value is USER. If you have multiple user files, you can enter the name of another user file.

### Defining User Defaults

Enter the default values for those users who are not defined in the user file using these steps:

1. In the PRTR id field, enter the CPR printer ID where the screen print is printed if it is routed back to CPR by Unicenter CA-Deliver or Unicenter CA-FAQS ASO. For example, enter **PRT1**.
2. In the Class field, enter a POWER class. The screen print is spooled to this POWER class in the LST queue. For example, enter **T**.
3. In the Priority field, enter the priority the screen print has in POWER. For example, enter **3**.

**Note:** Currently, 3 is the only supported priority.

4. In the Header field, specify Y to display a header when a screen print is requested or N to suppress a header as part of a screen print request. N is the default, unless overridden by a user file entry.

### Establishing Printer and Form Names

Finally, define where printer and form name values should be saved when the screen print is routed to POWER. This information is useful if the screen image is re-routed to CPR by Unicenter CA-Deliver or Unicenter CA-FAQS ASO.

1. In the Insert PRTR into field, enter **X** next to the field where the printer ID is inserted.

**Note:** Currently, NODE is the only available option.

2. In the Insert FORM into field, enter **X** next to the field where the form ID is inserted.

**Note:** Currently, NODE is the only available option.

When you select NODE for both options, the printer ID occupies the first four bytes of the POWER NODE field and the form ID occupies the last four bytes.

### Saving the Definition

To save the definition, follow these steps:

1. Press PF6 (Save) to save the CICS name definition.
2. Press PF3 (Return) to return to the CICS Print CICS list panel.
3. Press PF3 (Return) again to return to the CICS Print Support Main Menu.

## Defining a Printer to CPR

The Printer ID Maintenance and Dispatch option on the CICS Print Support Main Menu enables you to:

- Define a printer
- Specify printer characteristics

### Printer Aliases

Because you can have multiple printers defined to a CICS, you can use an alias to represent a group of different printer IDs for more efficient use of CICS printers.

For example, if you have four printers defined to a particular CICS and it does not matter which printer is used, you can define one alias for all four printers. Then you can use that alias as the printer ID.

### Defining a Printer

To define a printer, use the following steps:

1. From the CICS Print Support Main Menu, enter **P**, Printer ID Maintenance and Dispatch, to access the CICS Print Printer list panel.
2. From the CICS Print Printer list panel, press PF5 (Add) to display the CICS Print Printer Add/Alter/Copy/Delete panel, shown next.

```

CPRMEN2B.B ** CA-GSS - CPR Online 5.0-0202 ** ID=ADMINYS2.ADMIN33
===>
** CPR -- CICS print printer Add/Alter/Copy/Delete

Printer id:      _____
Id defined in TCT: _____ CICS name :      _____

Lines/page:     _____ Default form:      _____
Chars/line:     _____

Printer aliases:  _____
                _____
                _____

Printer characteristics supported (Y/N), default=N:

Formfeed:       N           Lowercase:       Y
Maxchar=80:     N           Auto Start:     N
Auto Form:      N           SCS Printer:    N
Cntrl File:     N

Special SCS only printer characteristics (Y/N), default=N:

8 lines/inch   N
PF1=Help PF3=Return PF12=Exit PF6=Save
    
```

3. In the Printer id field, specify a printer ID. For example, enter **PRT1**. This can be the same as the TERMID specified in the TCT.

**Note:** Use a meaningful printer ID that identifies the printer's use or location.

4. In the field *Id defined in TCT*, enter the TCT TERMID as defined to CICS. For example, enter **L086**.
5. In the CICS name field, specify the unique four-character SYSIDNT value. This is the value entered in the CICS SIT table. For example, enter **DEVA**.
6. In the Lines/page field, specify the maximum number of lines per page if a default form is not specified. For example, enter **66**.
7. In the Default form field, specify the name of the default form this printer will use. For example, enter **STD**.
8. In the Chars/line field, enter the number of characters per line that your physical printer supports, or enter the number of characters per line your printer prints before it automatically creates a newline. CPR suppresses the newline it would normally do because the printer does one.  
  
The number entered in this field tells CPR when your printer will do an auto-newline. For example, enter **132**.
9. In the Printer aliases fields, specify any aliases by which the printer can be referenced. For more information about aliases, see [Printer Aliases](#) in this chapter.

#### Specifying Printer Characteristics

To specify printer characteristics, use the following steps:

1. In the Formfeed field, enter **Y** if the printer supports form feeds. If form feeds are not desired or not supported by the printer, enter **N**.
2. In the Lowercase field, enter **Y** if the printer supports mixed case data. If the printer supports only uppercase data, enter **N**.
3. The Maxchar=80 field is used for compatibility with prior releases of CPR. It is recommended that instead of this field, you use the Chars/Line field previously described to give CPR the flexibility to print a wider variety of reports.
4. In the Auto Start field, enter **Y** if the printer is to be started when CPR is initialized. If you would rather have the printer started manually using CPR's print (Status) panel, enter **N**.
5. In the Auto Form field, enter **Y** if the default form is already loaded into the printer when the printer is started. If the default form is not already loaded, enter **N**. If you specify **N**, you need to enter the GO action command for the printer using CPR's print (Status) panel. Entering **Y** indicates only that the form is mounted and that the printer does not wait for the form to be mounted. If a subsequent report uses a form whose name differs from the default name, the printer waits on a form mount.
6. In the SCS Printer field, enter **Y** if this is an SCS printer. If this is not an SCS printer, enter **N**.

7. In the Cntrl File field, enter Y if a control file can be sent to the printer to set printer attributes. Otherwise, enter N.

#### Specifying SCS Printer Characteristics

To specify SCS printer characteristics, use the following steps:

1. If you have an SCS printer, make sure the SCS Printer field shows Y.
2. In the *Special SCS only printer characteristics...* field, make one of the following entries:
  - If you want 8 lines per inch on your SCS printer, enter **Y**.
  - If you want 6 lines per inch on your SCS printer, enter **N**.

#### Saving the Definition

To save the definition, follow these steps:

1. Press PF6 (Save) to save your printer definition.
2. Press PF3 (Return) to return to the CICS Print Printer list panel.
3. Press PF3 (Return) again to return to the CICS Print Support Main Menu.

## Defining a Form to CPR

Now that you have defined a printer, you need to define forms to be used by the printer. The Form Maintenance option on the CICS Print Support Main Menu enables you to:

- Define a form
- Specify print options for the form

To define a form, use the following steps:

1. From the CICS Print Support Main Menu, enter **F**, Form Maintenance, to access the CICS Print Form list panel.
2. From the CICS Print Form list panel, press PF5 (Add) to display the CICS Print Form Add/Alter panel, shown next.

```

CPRMEN1A.A ** CA-GSS - CPR OnLine 5.0-0202** ID=ADMINYS2.ADMIN33
==>
** CPR -- CICS print form Add/Alter

Form name:      _____
Printer id:     _____

Lines/page:    000                Chars/line:    000

Cntrl header:          Cntrl trailer:

Channel 1:    000   Channel 2:    000   Channel 3:    000
Channel 4:    000   Channel 5:    000   Channel 6:    000
Channel 7:    000   Channel 8:    000   Channel 9:    000
Channel 10:   000   Channel 11:   000   Channel 12:   000

Uppercase translate (Y/N)  N   Suppress formfeed (Y/N)  N
Truncate lines > max (Y/N) N   Add newline at max (Y/N) N
SCS - set 8 lin/inch (Y/N) N   SCS - set 6 lin/inch      N

Skip first formfeed after form change (Y/N)  N
Skip first formfeed for each member (Y/N)    N
PF2=Get data from FCB:
PF1=Help PF3=Return PF12=Exit PF6=Save

```

3. If you wish to use an existing FCB (forms control buffer) to specify form options, enter the name of that FCB in the field *PF2=Get data from FCB*.
4. Then press PF2.
5. In the Form name field, enter the name of a new form. For example, enter **STD**.
6. In the Printer id field, enter the ID of the printer this form will be used for. For example, enter **PRT1**. If this field is left blank, the form can be used by any printer defined to CPR.
7. In the Lines/page field, specify the maximum number of lines per page this form can handle. For example, enter **66**. If no value is specified, CPR uses the lines per page value from the printer definition.
8. In the Chars/line field, specify the maximum number of characters per line this form supports before the printer performs an auto-newline. For example, enter **132**. If no value is specified, CPR uses the characters per line value from the printer definition.
9. In the Cntrl header and Cntrl trailer fields, specify the name of the control header and control trailer files that this form uses.
10. If you do not want to use existing FCBs to control printer advancing, enter the corresponding line number to reposition to when the output requests a 'skip-to-channel-x' in the Channel 1-12 fields. For example, enter **1** in the Channel 1 field; when the output requests a skip to channel 1, the printer repositions to line 1.

If this is the first time you are using CPR, we recommend that you begin testing CPR with a report that does at least one skip-to-channel-1.

### Specifying Print Options

To specify print options, follow these steps:

1. In the Uppercase translate field, enter Y if the data is to be translated to uppercase. Entering Y in this field overrides the value specified in the Lowercase field in the printer definition.
2. In the Suppress formfeed field, enter Y if skips-to-channel-1 are done using line feeds instead of form feeds. If skips are done using form feeds instead of line feeds, enter N.
3. In the Truncate lines > max field, enter Y if data that extends past the maximum characters per line is to be truncated. If the data should be wrapped to the next line, enter N.
4. In the Add newline at max field, enter Y if CPR should insert a newline at the end of the line because the printer does not support auto-newlines.

If the printer supports auto-newlines, and a value is entered in the Chars/line field, enter N because the printer supports the auto-newline.

If the printer supports auto-newlines and you enter Y in this field, two newlines occur, causing a double line.

5. If the printer is an SCS printer, enter Y in the appropriate field:

- SCS - set 8 lin/inch
- SCS - set 6 lin/inch fields

If neither is specified, the value defined for the printer is used.

6. In the field *Skip first formfeed after form change*, enter Y if the printer should suppress the first form feed after a form change to eliminate the blank page. If the printer should perform a form feed after each form change, enter N.
7. In the field *Skip first formfeed for each member*, enter Y if the printer should suppress the first form feed to eliminate the blank page between members. If the printer should perform a form feed between each member, enter N.

### Saving the Definition

To save the definition, follow these steps:

1. Press PF6 (Save) to save your form definition.
2. Press PF3 (Return) to return to the CICS Print Form list panel.
3. Press PF3 (Return) again to return to the CICS Print Support Main Menu.

## Defining a Control File to CPR

Control files are useful for passing control characters to the printer either before or after the data has been printed. The Control Files Maintenance option on the CICS Print Support Main Menu enables you to define the control files that pass control characters to the printer.

To define a control file, use the following steps:

1. From the CICS Print Support Main Menu, enter **L**, Control Files Maintenance, to access the CICS Print Control File list panel.
2. From the CICS Print Control File list panel, press PF5 (Add) to display the CICS Print Control File Add/Alter panel, shown next.

```

CPRMEN5D.A ** CA-GSS - CPR Online 5.0-0202** ID=ADMINYS2.ADMIN33
====>
** CPR -- CICS PRINT Control file Add/Alter

Control name:  _____ Four character Control file name
Printer id:    _____ Printer id (blank for generic)
Control chars: _____ (input in CHARACTER only)

00000000 00000000 00000000 00000000 .....
00000000 00000000 00000000 00000000 .....
00000000 00000000 00000000 00000000 .....
00000000 00000000 00000000 00000000 .....
00000000 00000000 00000000 00000000 .....
00000000 00000000 00000000 00000000 .....
00000000 00000000 00000000 00000000 .....
00000000 00000000 00000000 00000000 .....

NL=newline, CR=carriage return, F0=formfeed, BL=blank
PE=period, DS=dash, UN=underscore, QU=question mark

PF1=Help PF3=Return PF12=Exit PF5=Hex PF6=Save

```

3. In the Control name field, specify the control filename. For example, enter **AAAA**.
4. In the Printer id field, specify the printer ID for which this control file can be used. If no printer ID is specified, this control file can be used by any defined printer. For example, enter **PRT1**.
5. In the Control chars field, specify the control characters that are passed to the printer. You can enter the control characters in hexadecimal format by overtyping the zeros in the first four columns. Or, you can enter the control characters in character format by overtyping the periods in the far right column.

The active format is indicated by the phrase (*input in CHARACTER/HEX only*). Press PF5 (Hex/Char) to toggle between hexadecimal format and character format. For example, if you are in hex format, press PF5 to toggle to character. Then enter a series of control characters in character format.

### Special Control Characters

To specify any of the following functions in the Control char field, enter its corresponding special control characters (or hexadecimal equivalents of those characters). For example, to specify a question mark, do not enter *?*; *instead, enter QE*. The following list describes commonly used control characters.

<b>NL</b>	New line. Skips to the next line.
<b>CR</b>	Carriage return. Goes to the beginning of the same line.
<b>FO</b>	Form feed. Skips to the top of the next page.
<b>BL</b>	Blank. Inserts a blank in the string.
<b>PE</b>	Period. Inserts a period in the string.
<b>DS</b>	Dash. Inserts a dash in the string.
<b>UN</b>	Underscore. Inserts an underscore in the string.
<b>QE</b>	Question mark. Inserts a question mark in the string.

### Saving the Definition

To save the control file definition, use the following steps:

1. Press PF6 (Save) to save your control file definition.
2. Press PF3 (Return) to return to the CICS Print Control File list panel.
3. Press PF3 (Return) again to return to the CICS Print Support Main Menu.

## Defining a User for the Screen Print Facility

The Screen Print User File Maintenance option on the CICS Print Support Main Menu enables you to define one or more user profiles for the screen print facility.

### About the Screen Print Facility

When a screen print is taken, the screen print output goes to the POWER LST queue based on the user's profile in the active user file. As a POWER queue member, the screen print can be printed on the system printer or routed back to CPR using Unicenter CA-FAQS ASO or Unicenter CA-Deliver.

**Tip:** For information about routing members to CPR using Unicenter CA-FAQS ASO or Unicenter CA-Deliver, see the *Unicenter CA-FAQS ASO Online User Guide* or the *Unicenter CA-Deliver Systems Guide*.

## About User Files

User files contain profiles of users who are set up to use the screen print facility. Each profile establishes the individual characteristics of a screen print image.

More than one user file can be defined; however, only one file can be active for any one CICS at a time. Users not defined in the active file use the default values for printer ID, form name, class, and priority as defined in the CICS name definition.

## Editing or Changing the Active User File

CPR loads the active user file when initiated. If you edit the active file or change which file is active after initiating CPR, CPR does not recognize these changes until it is terminated and reinitiated.

See [Initiating CPR](#) in this chapter for more information about termination and reinitiation.

## Defining a User

To define a user, follow these steps:

1. From the CICS Print Support Main Menu, enter **U**, Screen Print User File Maintenance, to display the CICS Print User list panel.
2. From the CICS Print User list panel, press PF5 (Add) to display the User entry Add/Alter/Delete panel, shown next.

```

CPRMEN6E.E ** CA-G55 - CPR Online 5.0-0202 ** ID=ADMINYS2.ADMIN33
====>
** CPR -- USER entry Add/Alter/Delete

USER name:      _____  UPPER      FILE:  USER
PRTR id:        _____
FORM name:      _____
CLASS:          -
PRIORITY:       -
HEADER:         -

PF1=Help PF3=Return PF12=Exit PF6=Save

```

3. In the USER name field, specify the user's CICS logon ID. For example, enter **PDT**.

**Note:** UPPER indicates that the user ID entered in the User Name field was entered in upper case. If the user ID was entered in mixed case, MIXED will display instead of UPPER.

4. In the FILE field, specify which user file this user's record will be saved into. Unless you have multiple user files, we recommend you use **USER**.

5. In the PRTR id field, specify the CPR printer ID that will be inserted into the NODE field. The screen print can then be routed back to CPR using ExpressDelivery or Unicenter CA-FAQS ASO. If no printer ID is specified, the printer ID defined in the CICS Name Maintenance panel is used. For example, enter **PRT1**.
6. In the FORM name field, specify the form name to be inserted into the NODE field after the screen print gets routed to POWER. For example, enter **STD**. The form name will follow the printer ID in the POWER NODE field. Therefore, given the sample data here and in step 5, the POWER NODE field will be *PRT1STD*.
7. In the CLASS field, specify the POWER class.  
  
In the PRIORITY field, enter 3 as the POWER priority. Priority 3 is the only value currently supported.  
  
In the HEADER field, specify Y to include a header line on the screen print.  
  
The screen print is placed into the POWER queue with this class, priority, and header. If none are specified, the defaults specified in the CICS name maintenance panel will be used.

#### Saving the Definition

To save the definition, follow these steps:

1. Press PF6 (Save) to save your user file definition.
2. Press PF3 (Return) to return to the CICS Print User list panel.
3. Press PF3 (Return) again to return to the CICS Print Support Main Menu.

## What's Next?

At this time, you can continue creating the definitions necessary to configure CPR for your specific installation. Follow the steps previously outlined in this chapter to define all CICS names, printers, forms, control files, and user profiles to be used by CPR.

Once you have completed configuration, you can terminate and reinitiate CPR. Once reinitiated, CPR will be ready for use. Follow the steps in the chapter "[Maintaining CPR](#)" to manage print queue entries and maintain CPR.

---

## Initiating CPR

CPR can be initiated automatically or manually, as described in this section.

### Automatic Initiation

If you defined a startup DFHPLT entry, CPR starts up whenever you start CICS.

### Manual Initiation

You can manually initiate CPR using the FAQI transaction.

### Terminating and Reinitiating

Whenever you modify a CICS name or user file, you must terminate and reinitiate CPR for the changes to take effect. To terminate and reinitiate CPR (without cycling CICS), follow these steps:

1. Exit CPR.
2. Access CICS by:
  - Establishing a CICS online session, or
  - Communicating with CICS through the system console interface
3. Enter **FAQE** to terminate CPR. The message DONE is returned to the terminal that issued the FAQE transaction ID. The following message displays on the system console:

```
GFC010 CPR RELEASE V4.3.X HAS BEEN TERMINATED FOR ID=cccc
```
4. If you are in a CICS session, press CLEAR to clear the screen.
5. Enter **FAQI** to initiate CPR. The message DONE is returned to the terminal that issued the FAQI transaction ID. The following message displays on the system console:

```
GFC010 CPR RELEASE V4.3.X HAS BEEN INITIATED FOR ID=cccc
```
6. If you are in a CICS session, press CLEAR to clear the screen. If you are using the system console interface, enter a null response to free up the outstanding reply.

At this time, you can reaccess CPR following the instructions in the chapter "[Getting Started](#)."

**Tip:** Each time you issue the FAQI transaction, approximately 7K of the partition GETVIS is used. It is not necessary to reload the FAQSCIST program since it was not unloaded. The GETVIS is released when CICS is cycled.



# Maintaining CPR

---

This chapter explains how to maintain CPR effectively. After CPR is configured, you use the Queue list panel to manage entries in the print queue and maintain CPR definitions. From the Queue list panel, you can access the panels that enable you to add, alter, and delete definitions.

## CPR Maintenance

While maintaining CPR, you might follow the process outlined next. This process is designed to encourage flexibility and efficient use of CPR.

1. View the queue entries.
2. If necessary, make changes to the entries.
3. If necessary, modify the form, control file, or printer definitions.
4. Start printers.
5. Manage the printers.

Less frequent tasks include modifying CICS names and modifying the user file.

## Adding, Altering, or Copying Definitions

You can add, alter, or copy any definition on the displayed list panel.

To add a definition, follow the appropriate procedure in the chapter "[Configuring and Initiating CPR](#)."

To alter or copy a definition, follow these steps:

1. Press Tab to move the cursor to the left of the desired definition.
2. Enter **A** to alter/add or **C** to copy the definition.
3. Press Enter to display the definition's entry panel.

4. Follow the appropriate procedure in the chapter "[Configuring and Initiating CPR](#)" to make changes.

## Deleting Definitions

You can delete any definition on the list panel by following these steps:

1. Press Tab to move the cursor to the left of the desired definition.
2. Enter L to delete the definition.
3. Press Enter to display the definition's entry panel.
4. Press PF6 (Verify delete) to confirm the delete.
5. Press PF3 (Return) to return to the list panel.

## Viewing the Queue List

The Queue list panel displays all CPR queue entries printing, waiting to print, or being held. On the Queue list panel, you can change the attributes of a print entry.

Each entry displays the following information:

- Description of the entry
- Printer ID on which the entry prints
- Lines per page
- Number of copies that are printed
- Disposition and priority of the entry
- Form on which the entry prints (ignored if a value is entered in Ln/Pg)
- Control header and trailer that are used for the entry
- Date and time the entry was queued/the number of lines in the entry (toggled)

## Accessing the Q Panel

From the CICS Print Support Main Menu, select option Q (Print Queue Entries) to display the CICS Print Queue List Panel, shown next.

```

CPRMENU3.Q ** CA-GSS - CPR OnLine 5.0-0202** ID=ADMINYS2.ADMIN33
====>
** CPR -- CICS PRINT queue list **                pds= CPR

Search For DESCRIPTION: _____ PRTR: _____
DISP: _____ FORM: _____

DESCRIPTION      PRTR LN/PG COPY DSP PRI  FORM CTLH CTLT  DATE      TIME
_SARBATCH P2     AAAA      1  H   1          TEST TEST 02/29/02 20.16.44
_SAR PAYROLL     AAAA      1  D   1          TES1 TES3 05/29/02 11.55.58
_TEST PAGE 1,2   AAAA      1  D   1          08/25/02 14.28.11
_GSFAQS 38425 Q  AUTO      1  D   3  1111 01/08/02 09.28.38
_GSFAQS 38423 Q  AUTO      1  T   3  1111 04/09/01 09.17.55
_PAUSE 56679 Q   AUTO      1  K   3  STD 02/21/02 13.18.54
_FAQSXP5 13457 Q AUTO      1  D   3  STD 12/21/02 13.24.39
_PAUSEFAQ 29629 Q AUTO      1  H   3  TEST 02/27/02 16.06.06
_FAQSXP5 13457 Q AUTO      1  K   3  STD 07/16/02 16.31.23
_FAQSXP5 13457 Q AUTO      1  K   3  STD 07/15/02 16.51.22
_FCBTEST 64430 Q BOBS      1  K   3  STD 11/12/01 13.12.35
_FCBTEST 64430 Q BOBS      1  K   3  STD 11/12/01 14.52.59
_PAUSE 56419 Q   KJM       1  D   3  STD 03/12/02 11.51.57

A=Alter L=Delete PF5=Forms PF6=Printers PF11=Control Files
PF1=Help PF3=Return PF4=Refresh PF8=Fwd PF10=Lines PF12=Exit

```

The panel's fields are discussed next.

**DESCRIPTION**

Sixteen-character entry description.

**PRTR**

Printer ID or alias where the report is to be printed.

**LN/PG**

Lines per page to use for the specified printer. If a value is entered here, any value entered in the Form field is ignored.

**COPY**

Number of copies. If the entry is currently printing (disposition is \*), COPY indicates the number of copies remaining to be printed.

**DSP**

Disposition. Valid values are:

- D** Entry is ready to print (dispatchable) and is deleted when printed.
- H** Entry is not ready to print (on hold).
- K** Entry is ready to print (dispatchable) and is kept when printed. When printed, its disposition changes to L.
- L** Entry is on hold. It has either been printed (changed from disposition K) or spooled to CPR with disposition L.
- S** Security violation has been detected by user exit.

**T** Same as disposition K, except tracing is activated while the member prints. Tracing is used for debugging, as directed by Computer Associates Technical Support.

**N** Requested form for this entry is not defined.

**W** Entry is waiting for forms to be mounted.

\* Entry is currently printing.

**PRI**

Priority of the print entry. Values are 1 (highest) through 9.

**FORM**

Form name of the form that must be mounted before printing. This value is ignored if a value is entered in LN/PG.

**CTLH**

Control file loaded at the start of printing.

**CTLT**

Control file loaded at the end of printing.

**DATE/TIME**

Date and time the member print entry was queued. You can toggle between the DATE/TIME or LINES display by pressing PF10.

**LINES**

Total number of SYS\$CPR records occupied by this member. This value is not a line count!

You can toggle between the LINES or DATE/TIME display by pressing PF10.

***Warning!** For large LST queue members, it is recommended that you do not alter the member's printer ID or priority. Changing either of these values causes the member to be copied which can consume a great deal of uninterrupted resources. Since both the printer ID and the priority are a part of the member name, this restriction is related to the PDS, not CPR.*

## Altering Entries

You can alter any entry on the Queue list panel except for LINES and DATE/TIME. Altering an entry in the queue list differs from the steps outlined in section Adding, Altering, or Copying Definitions.

Follow these steps to alter an entry:

1. Press Tab to move the cursor to the left of the desired entry.
2. Enter **A** to alter the entry.
3. Press Tab to move the cursor to the field to be changed.
4. Overtyping the field with the new information.

5. Press Enter. The word “altered” displays at the end of the line to indicate that the entry was altered.
6. Press PF4 (Refresh) to refresh the panel and view the changes.

### Deleting Entries

You can delete any entry on the Queue list panel. Deleting an entry from the queue list differs from the steps outlined in section Deleting Definitions.

Follow these steps to delete an entry:

1. Press Tab to move the cursor to the left of the desired entry.
2. Enter L to delete the entry.
3. Press Enter. The word “deleted” displays at the end of the line to indicate that the entry was deleted.
4. Press PF4 (Refresh) to refresh the panel and clear the deleted entry.

### Specifying Search Criteria

You can specify search criteria using the input fields at the top of the panel. Enter any combination of the following to search for a print entry:

- Description
- Disposition
- Printer ID
- Form

For more information about entering search criteria, refer to Chapter 2, “Getting Started”.

### PF Keys

In addition to the standard PF keys described in the chapter “[Getting Started](#),” the Queue list panel offers the following PF keys:

- PF5    Accesses the Forms list panel.
- PF6    Accesses the Printer list (Status) panel.
- PF10   Toggles between DATE/TIME and LINES displays.
- PF11   Accesses the Control File list panel.

## Maintaining Forms

The Form list panel enables you to view all forms defined to CPR. For each form defined, the following information is displayed:

- Printer used for this form
- Number of lines per page
- Number of characters per line
- Control file header and trailer
- Line number to reposition to when skip-to-channel requests are encountered

From this panel, you can access the Form entry panel where you can add, alter, copy, or delete a form.

### Override Values

The values for the following fields on the Form list panel override the values on the Printer list panel:

- Lines per page
- Characters per line
- Control header
- Control trailer

If any of these values are defined in the queue entry, those values override the values on the Form list panel and the Printer list panel.

### Accessing the Panel

You can access the Form list panel either from the Queue list panel, or from the CICS Print Support Main Menu.

- From the CICS Print Queue List panel, press PF5 (Forms).
- From the CICS Print Support Main Menu, enter **F** (Form Maintenance).

The Form list panel is shown next.

```

CPRMENU1.F ** CA-GSS - CPR Online 5.0-0202 ** ID=ADMINYS2.ADMIN33
==>
** CPR -- CICS PRINT form list **

Search for FORM: _____ PRTR: _____

FORM PRTR LN/ CH/ CNTL CNTL:----- CHANNEL SKIPS -----:
_STD 66 132 HEAD TAIL 1 0 0 0 0 0 0 0 0 56 0 0 66
_CHKZ 32 80 1 0 0 0 0 0 0 0 0 56 0 0 66
_SAM PRT2 62 64 0 0 0 0 0 0 0 0 0 0 0 0
_SAM PRTR 62 64 0 0 0 0 0 0 0 0 0 0 0 0

A=Alter L=Delete C=Copy
PF1=Help PF3=Return PF4=Refresh PF5=Add PF12=Exit
    
```

The fields on this panel are discussed next.

**FORM**

Form name.

**PRTR**

Name of printer (ID or alias) defined for the form. Blanks indicate that the form can be used for any printer.

**LN/PG**

Number of lines defined per page. Page refers to the physical page of the form. If form feed is not a defined characteristic for the selected printer, this value helps CPR determine where to start printing.

**CH/LIN**

Maximum number of characters per line before CPR starts a new line. You can use up to 255 characters.

**CHANNEL SKIPS**

Line number to reposition to when a skip-to-channel (for channels 1-12) is encountered.

Control File Fields

Control files send additional information to the printer before and after the actual data that CPR retrieved from Unicenter CA-FAQS ASO or Unicenter CA-Deliver. The following fields identify the control file information that is associated with particular forms.

**CNTL HDR** Name of control file inserted before data

**CNTL TRLR** Name of control file inserted after data

### Specifying Search Criteria

You can specify search criteria using the input fields at the top of the panel. You can use the FORM and PRTR input fields at the same time.

For more information about using search criteria, refer to Chapter 2, “Getting Started”.

## Maintaining Control Files

The Control File list panel displays all header and trailer control files that provide the control characters necessary to set up the physical printer. For example, this panel is used to provide formatting instructions for advanced printers (such as laser printers) or to create a banner.

From this panel, you can access the Control File entry panel where you can add, alter, copy, or delete a control file.

### Accessing the Panel

You can access the Control File list panel either from the Queue list panel or from the CICS Print Support Main Menu.

- From the Print Queue List panel, press PF11 (Control files).
- From the Print Support Main Menu, enter L (Control Files Maintenance).

The Control File list panel is shown next.

```
CPRMENU5.L ** CA-GSS - CPR OnLine 5.0-0202 ** ID=ADMINYS2.ADMIN33
===>
** CPR -- CICS PRINT Control File list **

Search for CONTROL FILE: _____ PRTR: _____

CNTL PRTR :----- CONTROL CHARACTERS -----:
- HEAD      E385A2A340A38889A240A2A3A486864B4B4B0C0000000000000000...
- TAIL      C59584409686409389A2A3899587404B4B4B4B4B0C0000000000000...
- TEST THIS C59584409686409389A2A3899587404B81818181818181818181...

A=Alter L=Delete C=Copy
PF1=Help PF3=Return PF4=Refresh PF5=Add PF12=Exit
```

The fields on this panel are discussed next.

**CNTL**

Name of control file.

**PRTR**

Name of the printer that the control file is defined for.

**CONTROL CHARACTERS**

Characters used to define the printer control needed for setup. For example, control characters could be used to change the page layout from landscape to portrait.

Hexadecimal representation can be used to indicate characters that are not on your keyboard. Only the first 28 control characters are displayed on this panel.

### Specifying Search Criteria

You can specify search criteria using the input fields at the top of the panel. You can use the CONTROL FILE and PRTR input fields at the same time. For more information about entering search criteria, refer to Chapter 2, “Getting Started”.

## Maintaining Printers

The Printer list panel enables you to monitor and change the status of printers defined to CPR. For example, to print an entry in the queue, you would access the Printer list panel and start the printer associated with the queue entry.

When you display the printer list panel, you can view either the Printer list (Status) panel or the Printer list (Define) panel. The panels each have the following features:

- **Printer list (Status)**—you can view or change a printer status
- **Printer list (Define)**—you can view a CICS printer status and add, modify, or delete a CICS printer definition

You can toggle between the two panels by pressing PF6 (Status/Define) from either of the Printer list panels.

### Printer List (Status) Panel

The Printer list (Status) panel enables you to view all printers defined to CPR. For each printer defined, status information is displayed. This panel shows how the activity of the subtask affects printer processing.

Use the action commands at the bottom of the screen to change printer status.

## Accessing the Panel

You can access the Printer list (Status) panel either from the Queue list panel, or from the CICS Print Support Main Menu.

- From the CICS Print Queue List panel, press PF6 (Printers).
- From the CICS Print Support Main Menu, enter **P** (Printer ID Maintenance and Dispatch)

The Printer list (Status) panel is shown next.

```

CPRMENU2.P  ** CA-GSS - CPR Online 5.0-0202**  ID=ADMINYS2.ADMIN33
===>
** CPR -- CICS PRINT Printer list **

Search for PRTR:  _____  Redisplay interval:  5

PRTR  CURRENT INCL  LAST LAST MEMBER
ID    STATUS  FORM  FORM  STARTED
-
PRT1  PAUSE
-
PRT2  PAUSE
-
PRT3  PAUSE
-
PRT4  PAUSE
-
PRT7  PAUSE
-
PRTZ  PAUSE
-
PRTS  PAUSE

G=Go P=Pause E=Peoj F=Flush H=Hold S=Start R=Restart V=Verify I=Include
PF1=Help PF2=Redsply PF3=Retn PF4=Refr PF5=Add PF6=Define PF12=Exit
    
```

The Printer list (Status) panel shows each defined printer, its status, the associated form, and the print entry that is printing or was last started. The panel's fields are discussed next.

### Redisplay interval

Frequency, in seconds, during which the display is refreshed.

### PRTR ID

CPR printer ID.

### CURRENT STATUS

Status of printer. Valid statuses are:

- PAUSE**    Stopped
- FREE**     Ready for work
- READY**    About to print
- PRINT**    Printing

### FORMS

Waiting for forms. The console message GFC001 indicates which form to mount.

**ERR $nnn$** 

Error detected. If STATUS is ERR $nnn$ , a message (highlighted in red on a color monitor) appears, telling you to press PF9 to view the source of the error. Values for  $nnn$  have the following meanings:

<b>225 - 240</b>	FAQW transaction error
<b>241</b>	PDS error (see GFC002 messages on console)
<b>243 - 245</b>	FAQP transaction error

For an explanation of error codes, press PF1 (Help).

<b>W FLSH</b>	Flush in progress
<b>W HOLD</b>	Hold in progress
<b>W RES</b>	Printer not available
<b>W RSTR</b>	Restart in progress
<b>W STRT</b>	Start in progress
<b>W STOP</b>	Stop in progress
<b>W EOJ</b>	T YES in progress
<b>FORCE</b>	FORCE was issued to stop CPR

If the command is in progress, any change of status for the printer is ignored.

**INCL FORM**

Name of the form that the printer is limited to.

**LAST FORM**

Current or last form mounted on the printer.

**LAST MEMBER STARTED**

Entry that was last started.

## Current Status Field

A *W* as the first character of CURRENT STATUS, or *FORCE* in the CURRENT STATUS field, indicates that a command is in progress and all input for this printer is ignored – except the *T FORCE* command, which can still be entered.

## Action Commands

You can change the status of printers using Action commands. You enter these commands on the Printer list (Status) panel in the command input area to the left of the PRTR field.

**Tip:** Printer maintenance is controlled by the lookup interval you defined for your CICS definitions. For example, if your lookup value is 20 seconds, a maximum of 20 seconds passes before CPR executes the action command. For more information about the lookup interval, see the chapter “[Configuring and Initiating CPR](#)”.

The following table lists and explains the action commands that you can enter on the Printer list (Status) panel:

Command	Function	Description	Use for Status
G	GO	Begin printing; forms are mounted.	FORMS
P	PAUSE	Stop the printer and flush the entry currently being printed.	PRINT FREE ERR FORMS
E	PEOJ	Stop the printer when the current entry finishes printing.	PRINT FORMS
F	FLUSH	Flush the current print entry. If the disposition is D, the entry is deleted. If the disposition is K, the disposition is changed to L.	PRINT FORMS
H	HOLD	Flush the current print entry and hold in the queue with disposition H.	PRINT FORMS
S	START	Start a printer. The printer must have been in PAUSE status, there must be no more than the specified maximum number of printers already started, and there must be sufficient GETVIS in the CICS partition to start the printer.  If more than the specified maximum number of printers are requested, issue the PAUSE command for a printer with FREE status. You can then start the printer.	PAUSE
R <i>nnnnnn</i>	RESTART	Restart the printer at line <i>nnnnnn</i> . Enter the line number in the STATUS field.	FORMS
R <i>Pnnnnn</i>		Restart the printer at page <i>nnnnn</i> . Enter the page number, prefixed with the letter P, in the STATUS field.	
V <i>nnn</i>	VERIFY	Verify form alignment by printing <i>nnn</i> pages of test data. Enter the number of pages in the STATUS field.	FORMS

Command	Function	Description	Use for Status
I <i>form</i>	INCLUDE	Set or reset the form that restricts which members are printed on the printer. The value for <i>form</i> can either be a form name or four blanks (indicating any form). Enter the form name or blanks in the INCL FORM field.	PAUSE FREE READY PRINT FORMS
T YES	QUIESCE	Terminate facility. Printers <i>must</i> be in PAUSE or ERR <i>nnn</i> status. Termination does not occur until all printers are stopped or encounter an error. Enter <b>YES</b> in the STATUS field.	PAUSE ERR <i>nnn</i>
T FORCE	TERMINATE	Terminate all printers immediately. Enter <b>FORCE</b> in the STATUS field.  <i>Warning!</i> T FORCE causes <i>abend GFC003E</i> and creates a false print disposition (*) or an incorrect copy count. In most cases, restarting CPR fixes all T FORCE resulting conditions, but you may need to check entries. <b>Use T FORCE for emergencies only.</b>	Any
Z YES	ZAP	Cancel a request waiting for a resource (status of W RES). Enter YES in the status field.	W RES

**Tip:** You can issue any command from either the Printer list (Status) panel or the Printer list (Define) panel.

### Specifying Search Criteria

You can specify search criteria using the PRTR input field at the top of the panel. For more information about how to search for a specific printer ID, see the chapter "[Getting Started](#)."

### PF Keys

In addition to the standard PF keys described in the chapter "[Getting Started](#)," the Printer list (Status) panel offers the following PF keys:

#### PF2

Toggles between Redisplay and Normal display.

**Note:** If PF2=None on the Printer list (Status) panel, then this feature is not available.

#### PF6

Toggles between the Printer list (Status) and Printer list (Define) panels.

## Printer List (Define) Panel

The Printer list (Define) panel enables you to view all printers defined to CPR. For each printer defined, synonym information is displayed. From this panel, you can add, modify, or delete printer definitions.

You can access the Printer list (Define) panel either from the Queue list panel, or from the CICS Print Support Main Menu.

- From the CICS Print Queue List panel, press PF6 (Printers).
- From the CICS Print Support Main Menu, enter **P** (Printer ID Maintenance and Dispatch).

Then, from the Printer list (Status) panel, press PF6 (Define) to display the Printer list (Define) panel, shown next.

```

CPRMENU2.6  ** CA-GSS - CPR Online 5.0-0202**  ID=ADMINYS2.ADMIN33
====>
  ** CPR -- CICS PRINT Printer list **

  Search for PRTR:  _____  Redisplay interval:  5

PRTR  CURRENT  INCL  LAST  LAST  MEMBER
ID    STATUS   FORM  FORM  STARTED  :----- SYNONYMS -----:
- PRT1  PAUSE
- PRT2  PAUSE      AAAA BBBB CCCC DDDD EEEE FFFF
- PRT3  PAUSE      GGGG HHHH IIII JJJJ KKKK LLLL
- PRT4  PAUSE      MMMM NNNN OOOO PPPP QQQQ RRRR
- PRT7  PAUSE      MNMM NNNN OOOO PPPP QQQQ RRRR
- PRTZ  PAUSE      AAAA CCCC DDED EEEE FFFF QQQQ
- PRTS  PAUSE      AAAA UUUU VVVV WWWW XXXX YYYY
- PRTS  PAUSE      AAAA UUUU VVVV WWWW XXXX YYYY

A=Alter C=Copy L=Delete
PF1=Help PF2=Redsply PF3=Retn PF4=Refr PF5=Add PF6=Status PF12=Exit
    
```

With the exception of the following field, the fields on the Printer list (Define) panel are defined in section Printer List (Status) Panel.

### SYNONYMS

Aliases of the defined printer. For more information about aliases, see the chapter "[Configuring and Initiating CPR.](#)"

### Specifying Search Criteria

You can specify search criteria using the PRTR input field at the top of the panel. For more information about how to search for a specific printer ID, see the chapter "[Getting Started.](#)"

## PF Keys

In addition to the standard PF keys described in the chapter “[Getting Started](#),” the Printer list (Define) panel offers the following PF keys:

**PF2**

Toggles between Redisplay and Normal display every *n* seconds as specified in Redisplay interval field.

**Note:** If PF2=None on the Printer list (Define) panel, then this feature is not available.

**PF6**

Toggles between the Printer list (Status) and Printer list (Define) panels.

## Actions

You should use actions *A* and *L* only when the printer status is PAUSE.



## Using the Audit Trail

---

With CPR's audit trail facility you can view the modification history of changes made to CPR definitions. You can view the chronological history of a definition or review the contents of an individual change.

With CPR's audit trail facility you can view the modification history of changes made to CPR definitions. You can view the chronological history of a definition or review the contents of an individual change.

This feature is useful to

- Review the kinds of changes that have been made
- See who made a particular change
- Reconstruct a modified definition
- Review a list of all added, copied, deleted, or altered definitions
- Aid technical support in debugging
- Act as a form of security against changes

### Enabling the Audit Trail

In order to use the audit trail, it must be enabled. The audit trail is enabled or disabled by accessing option C, *Miscellaneous Configuration* from the GSS System Configuration menu. See the *CA-GSS Getting Started* for more information on the GSS Configuration panels. You can tell if the audit trail is enabled by looking on the CICS Print Support Main Menu. To the right of the audit trail option is the *Status:* field. After this field is one of the following statuses:

- E Enabled
- D Disabled

## Viewing the Audit Trail

The CPR Audit Trail panel enables you to view the history of changes that have been made to CPR definitions.

### Display Order

The entries are displayed in chronological order with the most recent entries shown at the end of the list.

### Accessing the Panel

To access this panel, from the CICS Print Support Main Menu, select option A (CICS Print Audit trail report). The CICS Print Audit trail panel is displayed.

### Sample Panel

```

CPRMENU7.1  ** CA-GSS - CPR Online 5.0-0202 **  ID=ADMINYS2.ADMIN33
===>
  ** CPR -- CICS PRINT Audit trail **

Search for DATE:  _____ (YYMMDD)      USERID:  _____ (XXXXXXXX)
File type   :  _          (C,F,L,P,Q,U)    Function:  _          (A,C,I,L,S)

  DATE      TIME      ACTION  TARGET  FILE  FIELDS CHANGED
- 02/03/02  13:34:04  Add    CICS    Cics  ADD AS CICZ
- 02/03/02  13:34:12  Copy   CICZ    Cics  COPY TO CICY
- 02/03/02  13:34:27  Copy   CICY    Cics  COPY TO CICX
- 02/03/02  13:34:56  Copy   CICX    Cics  COPY TO CICW
- 02/03/02  13:35:05  Delete CICZ    Cics  DELETE OF CICZ
- 02/03/02  13:35:12  Delete CICY    Cics  DELETE OF CICY
- 02/03/02  13:36:50  Alter  CICX    Cics  Load(max) Start(max) ...
- 02/03/02  13:36:50  Alter  CICX    Cics  Class(def) Prty(def)
- 02/03/02  13:39:46  Set    PRT3    Printr Status
- 02/03/02  13:39:53  Alter  PRT3    Printr Status
- 02/03/02  13:40:20  Alter  FPRTA1.. Queue Member
- 02/03/02  13:40:38  Alter  FPRTA1.. Queue Member Prtrid
- 02/03/02  13:40:38  Alter  FPRTA1.. Queue Description
- 02/03/04  16:43:09  Alter  FPRTQ1.. Queue Description
B=Browse
PF1=Help PF3=Return PF4=Refresh PF8=Fwd PF12=Exit

```

The fields on this panel are:

#### DATE

Date the definition was changed.

#### TIME

Time the definition was changed.

#### ACTION

Operation that was performed. Types of operations are:

**Add** Definition was added to the file.

**Alter** Existing definition was changed.

**Copy** Definition is a copy of an existing definition.

- Delete** Definition was deleted.
- Set** Status of the printer was manually changed.

**TARGET**

Name of the changed definition.

**FILE**

CPR file type that was affected.

**FIELDS CHANGED**

Field names that were modified. If the field names end in an ellipsis (...), there are additional fields that were changed.

## Specifying Search Criteria

You can specify search criteria using the input fields at the top of the panel. Enter any combination of the following to search for an entry:

- Date
- User ID
- File type
- Function

## Actions

From the Audit trail panel, you can use the *B* action to browse an entry.

## Browsing an Entry

When you browse an entry in the audit trail, you view information about the change such as type of change, the user ID of the person who made the change, what the original information was, and what the information was changed to.

Although you cannot make changes to the fields on the browse panel, you can use the information on the panel to complete tasks such as reviewing deleted definitions or reversing changes that have been made.

To access the panel, follow these steps:

- 1 From the CICS Print Support Main Menu, select option *A* (CICS Print Audit trail report). The CICS Print Audit trail is displayed.
- 2 From the Audit trail panel, press Tab to move to the cursor to the left of an entry. The CICS Print Audit trail is displayed.
- 3 Enter *B* (Browse). The CICS Print Audit Trail Browse is displayed.

## Sample Panel

```
CPRMEN7F.B ** CA-GSS - CPR Online 5.0-0202** ID=ADMINYS2.ADMIN33
==>
** CPR -- CICS print Audit trail Browse

Date :    02/03/17           User:    PROFILE
Time :    16:17:51

File :    Queue             Name:    FPRTR3..
Type :    Alter

Field:    Member (Name)

From :    FPRTR .prt
          C6D7D9E3D9039BEA4B9799A3

To  :    Fprt1 .prt
          C6D7D9E3F1039BEA4B9799A3

PF1=Help PF3=Return PF8=Fwd PF12=Exit
```

The fields on this panel are:

**Date**

Date the definition was changed.

**Time**

Time the definition was changed.

**User**

ID of the user who made the change.

**File**

CPR file type that was affected.

**Type**

Operation that was performed. Types of operations are:

Add        Definition was added to the file.

Alter       Existing definition was changed.

Copy        Definition is a copy of an existing definition.

Delete      Definition was deleted.

Set         Status of the printer was manually changed.

**Name**

Name of the changed definition.

**Note:** If a member is changed, the name will appear as *F*, followed by the four-character printer ID, followed by a decimal representation of the member's priority, followed by a character representation of the timestamp (if printable).

**Field**

Field name that was changed. If more than one field on the panel was changed, you can press PF8 (Fwd) or PF7 (Bwd) to view each of the next fields.

**From**

Original data in the field. The first line displays in character. The second line displays in hexadecimal, so if the entry is not displayable, you can interpret what the intended entry was.

**To**

New data in the field. The first line displays in character. The second line displays in hexadecimal.

## Added, Deleted, and Copied Definitions

If a definition was added, deleted, or copied, the browse display shows the name of the affected definition, but does not show the data in the individual fields on the panel.

## Altered Definitions

If a definition was altered, there is one browse panel for each field that was changed. Press PF8 (Fwd) to view each of the modified fields in turn.

An altered definition may have more than one record in the audit trail.

## Printer Status Changes

If the status of a printer was changed, the panel displays the original status and the new status. However, with a printer status change, there is only one panel.

## Printing an Audit Trail Report

You can print a variety of audit trail reports to analyze the audit trail information. When you print an audit trail report, you specify the type of report that you want to print followed by selection criteria. The sample JCL to print a report is shown in this section, as well as a sample report.

### Types of Reports

When you print an audit trail report, you specify the type of report that you'd like in the *REPORT=* statement. You can specify the following types of reports:

- D** Sorts report by date and time
- U** Sorts report by user ID
- F** Sorts report by file type
- T** Sorts report by type of action

The default report type is F (File type).

### Selection Criteria

Following *REPORT=* statement, you can include selection criteria for the report. You can include as many selection criteria as necessary. The following list provides the statements and values you can use for criteria:

- *DATE yymmdd*
- *USERID user*
- *FILE*. Valid values for *FILE* are:
  - C** CICS name
  - F** Form
  - L** Control file
  - P** Printer
  - Q** Queue
  - U** User file
- *TYPE*. Valid values for *TYPE* are:
  - AL** Alter
  - AD** Add
  - CO** Copy
  - DE** Delete
  - T** Status change

For example, if you want to print a report consisting only of changes to printer definitions, sorted by date, include the following statements in your JCL:

```
REPORT=D FILE=P
```

Sample JCL

The following example shows the JCL necessary to print an audit trail report:

```
* $$ JOB JNM=CPRAUD,DISP=D,PRI=3,CLASS=S
* $$ LST CLASS=W,DISP=L
// JOB REXXBAT
// EXEC REXXBAT,SIZE=REXXBAT,PARM='CPRAUDR1 REPORT=U USERID=KJM'
/*
/&
* $$ EOJ
```

Sample Report

The following shows a File report with a user ID selection criteria of *KJM*:

CPR Audit Trail REPORT 31 Mar 2002				PAGE: 1		
File Actn	Field type	Previous value	Current value	Userid	Date	Time
Cics Add	CICZ			KJM	02/03/02	13:34:04
Cics Copy	CICZ		TO CICY	KJM	02/03/02	13:34:12
Cics Copy	CICY		TO CICX	KJM	02/03/02	13:34:27
Cics Copy	CICX		TO CICW	KJM	02/03/02	13:34:56
Cics Delete	CICZ	x'C3C9C3E9'		KJM	02/03/02	13:35:05
Cics Delete	CICY	x'C3C9C3E8'		KJM	02/03/02	13:35:12
Cics Alter	CICX	x'C3C9C3E7'		KJM	02/03/02	13:36:50
	Load(max)	30	40			
	Start(max)	20	30			
	Interval	5	10			
	Retries	10	20			
	Pfkey	6C (PA01)	F1 (PF01)			
	User-file	USER	TEST			
	Prtrid(def)	PRT1	PRTA			
Cics Alter	CICX	x'C3C9C3E7'		KJM	02/03/02	13:36:50
Queu Alter	FPRTA1..	x'C6D7D9E3C101B9C7'		KJM	02/03/02	13:40:38
	Prtrid	PRTA	PRTQ			
Prin Set	PRT3	x'D7D9E3F3'		KJM	02/03/02	13:39:46
	Status	0000 (PAUSE )	0104 (W STRT)			
Prin Alter	PRT3	x'D7D9E3F3'		KJM	02/03/02	13:39:53
	Status	0104 (W STRT)	0000 (PAUSE )			
User Copy		kjm...->USER	TO kjm...->TEST	KJM	02/03/31	13:14:03

## Deleting the Audit Trail

You can delete the audit trail. You may want to delete the audit trail to avoid filling up the SYS\$CPR PDS.

Sample JCL

The following example shows the JCL necessary to delete members from the audit trail:

```
* $$ JOB JNM=PDSADEL  
* $$ LST DISP=D  
// JOB DELETE CPR AUDIT TRAIL MEMBER FROM CPR PDS  
// EXEC GSPDSU  
PDS=CPR,SEL=FAQWAUDT.*,DIRLIST,DELETE  
/*  
/&  
* $$ EOJ
```

# CICS Auto Print Initialization for Unicenter CA-FAQS ASO

---

This appendix explains how to create or edit a print auto initialization using the Unicenter CA-FAQS ASO panel definition.

## CICS Print Auto Initialization Directory List

The Unicenter CA-FAQS ASO CICS Print Auto Initialization Directory List enables you to view all CPUs that you want to define to send data to CPR. For each CPU defined, class, timer, printer, and forms information is also displayed.

CICS auto print support is enabled by a match on the CPU ID when the FAQSAO task is enabled.

## \$PWRPRNT IMOD

The \$PWRPRNT IMOD supplied with Unicenter CA-FAQS ASO is set up to spool only LST members. If you want to spool PUN and RDR members also, you must modify \$PWRPRNT.

For another way to spool POWER members to CPR through Unicenter CA-FAQS ASO, see the appendix "[Unicenter CA-FAQS ASO Print Commands](#)."

### Menu Access

To access the menu, follow these steps:

1. On the Unicenter CA-FAQS ASO Main Menu, select option *I (Initialization and Configuration)* to display the Unicenter CA-FAQS ASO Initialization and Configuration Menu.
2. Select option *A (CICS Auto Print Initialization)* to display the CICS Print Auto Initialization Directory List, shown next.

```
FAOMENUI.A  ** Unicenter CA-FAQS ASO Online 5.0-0202 **  ID=ADMINYS2.ADMIN33
===>
  ** CICS Print Auto Initialization Directory List **  Key ==> *      <=
  CPUID :
  *
  -          Class=Q Timer=1 Printer='AUTO' Forms='STD'

X=Edit L=Delete A=Add
PF1=Help PF3=Return PF4=Refresh
```

The panel's fields are discussed next.

**Key**

Input field to search the list for specific names.

**CPUID**

CPU ID or VM machine name where the FAQSAO task is initiated. An asterisk (\*) indicates all machines.

**Class**

POWER class.

**Timer**

Time interval, in minutes, between POWER queue scans.

**Printer**

Target printer.

**Forms**

Target forms.

#### Actions and PF Keys

The action keys and their functions are described next:

- A** Add a CPU ID definition
- L** Delete a defined CPU ID definition
- X** Edit a defined CPU ID definition
- PF1** Display help information for this panel
- PF3** Return to the previous panel
- PF4** Refresh the current display

## Searching for CPU IDs

You can search the CICS Print Auto Initialization Directory List for specific CPU IDs by using the Key input field at the top of the panel.

Enter a CPU ID at the Key input field. The CICS Print Auto Initialization Directory List displays the entries that match the search criteria. To display all CPU IDs, enter an asterisk (\*).

## CICS Auto Print Support Panel

The Unicenter CA-FAQS ASO CICS Auto Print Support panel lets you define a new print auto initialization definition or edit an existing one.

To access the Auto Print Support Panel, follow these steps:

1. On the Unicenter CA-FAQS ASO Main Menu, select option *I (Initialization and Configuration)* to display the Unicenter CA-FAQS ASO Initialization and Configuration menu.
2. Select option *A (CICS Auto Print Initialization)* to display the CICS Print Auto Initialization Directory List.
3. Enter an action (X, L, or A) to display the CICS Auto Print Support menu.

```

FAOMENUI.M  ** Unicenter CA-FAQS ASO Online 5.0-0202**  ID=ADMINYS2.ADMIN33
===>
      ** CICS Print Initialization Definition **   CPUID ==> DEVVSE   <==

CPUID ==> *           <== CPUID or VM ID or use * for any CPU
Timer Interval       = 1           1-99 minutes
POWER Intercept Class = Q           0-9 A-Z
POWER Intercept SYSID =             0-9 or null
POWER Alter user exit =              1 to 8 char IMOD name
Printer Selection:
Use POWER Forms ( ) Use POWER Node ( ) Use POWER User info ( )

Forms Selection:
Use POWER Forms ( ) Use POWER Node ( ) Use POWER User info ( )

Optional Target Member Actions:
Delete member      ( ) issue 'L LST,name,number'
Hold member        ( X ) issue 'H LST,name,number'
POWER Target Disp  ( ) issue 'A LST,name,number,DISP=x'
                    where x is D, K, H, or L
POWER Target Class ( ) 0-9 A-Z or null

PF1=Field level Help PF3=Return PF5=Save

```

## Fields

The fields on the panel are discussed next.

### **CPUID**

CPU ID or VM machine name where the FAQSAO task is initiated. The CPU ID can be modified on the panel to let you copy an entry to a new or existing file. The CPU ID specified determines if CICS auto printing is enabled by the FAQSAO task.

### **Timer Interval**

Interval, in minutes, that the POWER queue is scanned for work.

### **POWER Intercept Class**

POWER class from which members are spooled to the CPR queue. To be spooled, members must have a disposition of D or K.

### **POWER Intercept SYSID**

POWER SYSID. If the member matches the SYSID specified, it is spooled to the CPR queue.

### **POWER Alter user exit**

IMOD that is called as a user exit after a member is spooled to CPR and before target member actions occur. You can use the user exit to issue POWER commands to re-spool the member to CPR. In this way, you can print on multiple printers.

### **Printer Selection**

Identifies location of the CPR printer ID. If all fields are blank, a default printer ID is used. Valid choices for printer selection are:

#### **POWER Forms**

The POWER FNO field contains the CPR printer ID or alias.

#### **POWER Node**

The POWER TUSER field contains the CPR printer ID in the first four bytes.

#### **POWER User info**

The POWER USER INFO field contains the CPR printer ID in the first four bytes.

### **Forms Selection**

Identifies where the CPR form ID can be found. If all fields are blank, form ID *STD* is used. Valid choices for form selection include:

#### **POWER Forms**

The POWER FNO field contains the CPR form ID.

**POWER Node**

The POWER TUSER field contains the CPR form ID. The TUSER field is eight bytes long. The first four bytes are used as a CPR form ID unless POWER Node is also selected for printer selection. Then the first four bytes are used as the CPR printer ID, and the second four bytes are used as the CPR form ID.

**POWER User info**

The POWER USER INFO field contains the CPR form ID. The first 4 bytes of the first blank delimited word is used as the CPR form ID unless POWER USER INFO is also selected for printer selection. Then the first four bytes of the second word is used as the CPR form ID.

**Optional Target Member Actions**

Determine the disposition of the POWER member after spooling is complete. Valid options include:

**Delete member**

The member is deleted from the POWER queue. No other fields are available if delete is specified. If no target member actions are selected, disposition D members are deleted and disposition K members are altered to disposition L.

**Hold member**

Disposition D members are altered to disposition H, and disposition K members are altered to disposition L.

**POWER Target Disp**

If no target class is specified, or the target class is the same as the intercept class, then only H or L is available as the target disposition to prevent looping.

**POWER Target Class**

If no target class is specified then the target class is the same as the intercept class.

## PF Keys

The PF keys and functions are described next:

**PF1**

Displays help information for this panel. Field-level help is available for all fields on this panel. Place the cursor on the desired input field and press PF1 to display field-specific help.

**PF3**

Returns to the previous panel.

**PF5**

Saves the added or modified definition.

### Saving Changes

If you want to save the changes that you make to the fields on the Auto Print Support panel, follow these steps:

1. Press PF5 (Save) to save the changes. A message appears in the command line confirming the changes.
2. Press PF3 (Return) to return to the Auto Initialization Directory List.

# Unicenter CA-FAQS ASO Print Commands

This appendix covers the Unicenter CA-FAQS ASO Print commands.

## Unicenter CA-FAQS ASO Print Commands

You can use a print command to submit LST, RDR, or PUN print entries to the CPR print queue through Unicenter CA-FAQS ASO.

You can enter the print command while displaying a POWER member using Unicenter CA-FAQS ASO.

### Abbreviated Print Command

As an alternative to the full print command, you can enter **P** on the full screen LST queue display to spool output to CPR. The CPR printer ID is taken from the POWER DEST/LDEST field. The CPR form ID is taken from the POWER FNO field.

### Printing Lines or Pages

You can spool a portion of the member by specifying which page or line on which to start printing and how many pages or lines to send.

### CICS PPrint Command

To spool pages, use the PPrint command, which has the following format:

```
PPrint xxxx sp np T='xxxxxxxxxxxxxxxxxx' C=nnn D=n P=n F=nnnn L=nnn
```

To spool lines, use the LPrint command, which has the following format:

```
LPrint xxxx sl nl T='xxxxxxxxxxxxxxxxxx' C=nnn D=n P=n F=nnnn L=nnn
```

#### PRint and LPrint Parameters

**xxxx**

Four-character CPR printer ID or alias.

**sp/sl**

Page/line where spooling should start.

**np/nl**

Number of pages/lines to spool.

Enter the following fields in any order:

**T='xxx...xxx'**

Sixteen-character description. Single quotation marks must enclose the description. T defaults to the POWER jobname and starting line or page number.

**C=nnn**

Number of copies to print, to a maximum of 255. Default is one copy.

**D=n**

Disposition of the print entry. Values can be

**D** Delete entry when printing is finished

**H** Hold entry on queue without printing

**K** Print entry, then change to disposition L

**L** Leave entry on queue without printing

**P=n**

Priority. Value can be 1-9; 1, the highest priority, is the default.

Enter one of the following fields. If both are entered, the number of lines (L=) value takes precedence.

**F=nnnn**

Four-character form name. Default is blanks.

**L=nnn**

Number of lines to print on a page. This field takes precedence over the F=nnnn value. The default for L is no value.

#### CICS Print Report Message

When the PRint, P, or LPrint command is accepted, you receive the following message:

Spooled to CICS.

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