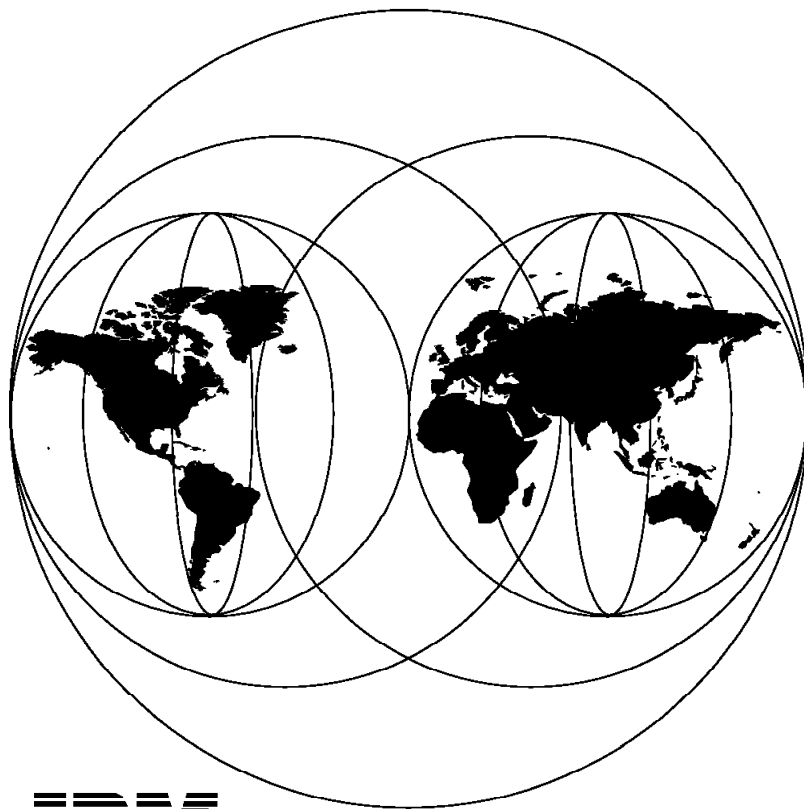


International Technical Support Organization

GG24-4269-00

**System Management
with FAQs/ASO and FAQs/PCS for VSE
in a VM/VSE Environment**

March 1995



IBM

**International Technical Support Organization
Boeblingen Center**



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March 1995

Take Note!

Before using this information and the product it supports, be sure to read the general information under "Special Notices" on page xv.

First Edition (March 1995)

This edition applies to Version 4.0.1 of GSS for VSE, Version 4.0.1 of FAQs/ASO for VSE, and Version 4.0.2 of FAQs/PCS for VSE from LEGENT for use with the VSE/ESA 1.3 and VM/ESA 2.1 operating systems.

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Abstract

This document is unique in its detailed coverage of FAQS/ASO (Automates System Operation) and FAQS/PCS (Production Control System) for VSE. It focuses on automated systems operation in a VSE/ESA area and it provides information about the installation, customization and use of FAQS/ASO and FAQS/PCS for VSE.

This document was written for VSE customers wishing to implement systems automation in a VSE environment. Some knowledge of VM/ESA, VSE/ESA and systems initialization is assumed

(226 pages)

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Special Notices

This publication is intended to help system planners and system programmers running VSE to evaluate the following program products provided by LEGENT

FAQS/ASO for VSE, and
FAQS/PCS for VSE.

The information in this publication is not intended as the specification of any programming interfaces that are provided by FAQS/ASO and FAQS/PCS for VSE. See the PUBLICATIONS section of the IBM Programming Announcement for FAQS/ASO and FAQS/PCS for VSE for more information about what publications are considered to be product documentation.

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FAQS/ASO for VM	LEGENT Software, Inc.
Microsoft	Microsoft Corporation

Preface

This document is intended to provide information about the installation, customization and basic use of the FAQS/ASO and FAQS/PCS products for VSE provided by LEGENT Software, Inc.

This document is intended for VSE customers planning for automated systems operation and production control.

How This Document is Organized

The document is organized as follows:

- **Part 1, “FAQS/ASO for VSE”**

This first part describes FAQS/ASO for VSE.

- Chapter 1, “Introduction”

- Chapter 2, “GSS Installation”

This chapter describes FAQS GSS installation.

- Chapter 3, “Introduction to FAQS/ASO”

This chapter provides an introduction to FAQS/ASO.

- Chapter 4, “FAQS/ASO Installation”

This chapter describes FAQS/ASO installation.

- Chapter 5, “FAQS/ASO Initialization”

This chapter describes FAQS/ASO initialization.

- Chapter 6, “Using FAQS/ASO for VSE”

This chapter describes the usage of FAQS/ASO.

- Chapter 7, “Automated Systems Operation Files”

This chapter describes GSFAQS.

- **Part 2, “FAQS/PCS for VSE”**

The second part describes FAQS/PCS for VSE.

- Chapter 8, “Introduction”

This chapter provides an introduction to FAQS/PCS.

- Chapter 9, “Installation and Initialization”

This chapter describes installation and initialization for FAQS/PCS.

- Chapter 10, “FAQS/PCS Configuration”

This chapter describes the FAQS/PCS configuration.

- Chapter 11, “FAQS/PCS Security”

This chapter describes FAQS/PCS security.

- Chapter 12, “Managing the Scheduler”

This chapter describes how to manage the scheduler in VSE.

- Chapter 13, “Using CMS with FAQS/PCS”

- This chapter describes the FAQs/PCS CMS interface.
- Chapter 14, “FAQS/PCS CICS Communication”
This chapter describes FAQs/PCS CICS communication.
 - Chapter 15, “Defining and Scheduling Events Online”
This chapter describes FAQs/PCS event scheduling.
 - Chapter 16, “Monitoring Schedule Activity”
This chapter describes monitoring the schedule activity.

Related Publications

The publications listed in this section are considered particularly suitable for a more detailed discussion of the topics covered in this document.

IBM Publications

- *VM/ESA Release 2.1 Planning and Administration*, SC24-5521

LEGENT Publications

- *FAQS/ASO for VSE Installation and Initialization Guide*
- *FAQS/ASO for VSE Common Utilities Guide*
- *FAQS/ASO for VSE Error Messages*
- *FAQS/ASO for VSE FMS User's Guide*
- *FAQS/ASO for VSE Online User's Guide*
- *FAQS/ASO for VSE FTL User's Guide*
- *FAQS/PCS Operations Guide*
- *FAQS/PCS Implementation Guide*
- *FAQS/GSS for VSE Installation and Utilities Guide*
- *FAQS/GSS for VSE Messages Guide*
- *FAQS/GSS for VSE REXX User's Guide*
- *FAQS/GSS for VSE CPR User's Guide*
- *FAQS/GSS for VSE GMF Connectivity Guide*

International Technical Support Organization Publications

- *VM/VSE Performance Hints and Tips*, GG24-4260
- *Controlling Multiple VSE Systems Under VM/ESA*, GG24-3847

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Part 1. FAQs/ASO for VSE

Chapter 1. Introduction

FAQS/ASO and FAQS/PCS for VSE and GSS are three products by the LEGENT company that assist VSE users in System Automation and Production Control. This book is split into two parts. The first part describes FAQS/ASO for VSE, how to install, customize and use it, and the second part describes the same for FAQS/PCS for VSE.

In this first chapter we give a short description of LEGENT's products and the system setup environment for VSE.

1.1 Short Product Description

GSS

GSS for VSE is a set of common code used by multiple LEGENT products.

FAQS/ASO

FAQS/ASO for VSE is the program for automated operations and console management for VSE systems.

FAQS/PCS

FAQS/PCS for VSE is a production control system for automated scheduling events for the VSE environment.

1.2 Prerequisites

To install and initialize GSS for VSE V4.0, FAQS/ASO for VSE V4.0.1, and FAQS/PCS for VSE V4.0.2, you must have:

- VSE/ESA V1.3 or later
- Ability to IPL your system
- 50K of free space in your SVA
- Ability to access a tape drive
- 1MB BG partition size (for initialization)
- 1MB Dynamic/Static partition in which to run the FAQS system

1.3 Setup Environment

Hardware:

- ES/9000 9121-260
- DASD 3390-2
- TAPE 3480

Software:

- VM/ESA 2.1
- VSE/ESA 1.3.4
- GSS for VSE V4.0

- FAQs/ASO for VSE V4.0.1
- FAQs/PCS for VSE V4.0.2

1.3.1 System Layout

We decided to have the system environment as follows:

- **CMS USERID** to use the FAQs system in VSE.
- **SERVER USERID** to communicate between VM-CMS and FAQs/PC.
- **FAQS USERID** is the VSE/ESA that runs the FAQs system.

The following are the sample profiles in the VM DIRECTORY.

```

USER CMSUSR CMSUSE 4M 32M G
ACCOUNT CMSUSR CMSUSR
IPL CMS PARM AUTOOCR
CONSOLE 009 3215
SPOOL 00C 2540 READER A
SPOOL 00D 2540 PUNCH A
SPOOL 00E 1403 A
LINK MAINT 190 190 RR
LINK MAINT 19E 19E RR
LINK MAINT 19D 19D RR
LINK ASOMAINT 191 333 RR
MDISK 0191 3390 197 5 IS1VMT MR ALL WRITE

```

Figure 1. Sample VM CMS User Profile

```

USER SERVER SERVER 4M 32M G
ACCOUNT SERVER SERVER
IUCV ALLOW
IPL CMS PARM AUTOOCR
CONSOLE 009 3215
SPOOL 00C 2540 READER A
SPOOL 00D 2540 PUNCH A
SPOOL 00E 1403 A
LINK MAINT 190 190 RR
LINK MAINT 19E 19E RR
LINK MAINT 19D 19D RR
LINK ASOMAINT 191 333 RR
MDISK 0191 3390 204 5 IS1VMT MR ALL WRITE

```

Figure 2. Sample VM SERVER User Id Profile

```

USER FAQSUSR FAQSUSR 16M 64M BFG
ACCOUNT FAQSUSR FAQSUSR
OPTION MAXCONN 150 MAINTCCW
IUCV ANY
MACHINE ESA
I 440
CONSOLE 0009 3215 T FAQSVM
SPOOL 000C 2540 READER *
SPOOL 000D 2540 PUNCH A
SPOOL 000E 1403 A
SPECIAL 01F 3270
SPECIAL 080 3270
SPECIAL 081 3270
SPECIAL 082 3270
SPECIAL 500 3270
SPECIAL 200 CTCA VSESAL34
LINK MAINT 190 0190 RR
LINK MAINT 19D 019D RR
LINK MAINT 19E 019E RR
MDISK 440 3390 1 1000 ASORES MW ALL ALL ALL
MDISK 441 3390 1001 1000 ASORES MW ALL ALL ALL
MDISK 442 3390 1 1000 ASOWK1 MW ALL ALL ALL

```

Figure 3. Sample VM FAQS User Id for Installing VSE and Running the FAQS System

For the VSE/ESA system, we assigned three minidisks of 1000 cylinders each as system volumes, we used two of these as system disks (called DOSRES and SYSWK1) and the third we dedicated to the use of LEGENT products only. Please refer to the following picture for a more complete description of the layout of the third DASD (SYSWK2).

VM/ESA 2.1			Volume Layout for SYSWK2	
V	V	V		0
M	M	S	LEGENT VSAM catalog	
/ C	/ S	E F	- Product	
E M	E E	/ A	Library	
S S	S R	E Q		514
A	A V	S S	SAM Area for FAQS req. files	
2	2 E	A	SYS\$VIO SYS\$CPR	
.	. R	1	SYS\$MON SYS\$LOG	
1	1	.	SYS\$ARC HISTORY file	
		3		998
			VTOC AREA	
SYSTEM LAYOUT				999

Figure 4. System Setup Environment and DASD Layout for SYSWK2

Chapter 2. GSS Installation

In this chapter we describe the system preparation and installation of GSS for VSE.

It covers the following topics:

- Prerequisite considerations for GSS installation
- System preparation for GSS installation and optional tasks to be completed before installing GSS

2.1 Prerequisite Considerations

The GSS for VSE version 4.0 tape supports the following operating systems:

- VSE/SP 2.1 and above
- VSE/ESA 1.1, 1.2, 1.3 and above

Although it supports all VSE operating system levels, the tape actually contains two separate sets of code:

- One for VSE/SP, VSE/ESA 1.1, and VSE/ESA 1.2
- One for VSE/ESA 1.3

Note: Please make sure the program level on the tape matches your configuration.

2.2 System Preparation

There are some system preparation tasks that have to be completed before you install GSS. In this chapter, you have to decide whether to use MSHP or LIBR to install GSS, and calculate DASD space required to install this product.

2.2.1 Task 1. Defining a Residence LEGENT Product Library

For this library we used a dedicated DASD volume called SYSWK2, we decided to divide the DASD into two parts, one for the VSAM area and one for the SAM area (see Figure 4 on page 5). On the first part of the DASD we defined a LEGENT catalog that holds the LEGENT product library and the LEGENT VSAM files. In the second part of the DASD we put LEGENT PDS required files in the SAM area.

Note: If you want to store the LEGENT product somewhere else you have to specify the library for installing this product and you can skip the rest of this step.

The following has to be performed:

- Define user catalog and space for LEGENT product
- Define LEGENT product library

You must allocate storage to store the residence library data set.

The *residence library* is the library in which the GSS for VSE modules reside. This library should not be the SYSRES library. It can be any private sublibrary.

The GSS for VSE modules are shared by the LEGENT products and must be installed in the same *library.sublibrary*.

GSS for VSE requires 1500 1K library blocks. To be accurate, you can check the DASD space requirement for your residence library by reading the *GSS for VSE V4.0 Installation and Utilities Guide, Chapter 3*.

Note: Before you define this library, you should include the size of FAQs/ASO for VSE and FAQs/PCS for VSE modules together. (See 4.2.2, “Task 2. Determine the Residence Library and Space Required” on page 16.)

The following is the sample job to create the library:

```
* $$ JOB JNM=DEFLIB,CLASS=0,DISP=D,NIFY=YES
// JOB DEFLIB DEFINE FILE
// EXEC IDCAMS,SIZE=AUTO
DEFINE CLUSTER ( -
    NAME (VSE.libname.LIBRARY ) -
    TRACKS (00000031 00000004 ) -
    SHAREOPTIONS (3) -
    RECORDFORMAT (NOCIFORMAT ) -
    VOLUMES (volid ) -
    NOREUSE -
    NONINDEXED -
    TO (99366) -
    DATA (NAME (VSE.libname.LIBRARY.@D@ ) ) -
    CATALOG (catalogname.USER.CATALOG )
IF LASTCC NE 0 THEN CANCEL JOB
/*
// OPTION STDLABEL=ADD
// DLBL libname,¢VSE.libname.LIBRARY¢,,VSAM, X
    CAT=catalogname,DISP=(OLD,KEEP)
/*
// EXEC IESVCLUP,SIZE=AUTO
A VSE.libname.LIBRARY libname catalogname OLD KEEP
/*
// EXEC LIBR,PARM=¢MSHP¢
    DEFINE LIB=libname REPLACE=YES
/*
/&
* $$ EOJ

Note: You have to fill in libname, volid, catalogname and
space required, either track or cylinder.
```

Figure 5. Sample Job to Create the Library

2.2.2 Task 2. Defining Labels for Required PDS Files

You have to choose some PDS files to match your configuration. You have to calculate the required space and define these files in the STDLABEL.PROC. (For more information about PDS files and space required, see the *GSS for VSE V4.0 Installation and Utilities Guide, Chapter 3*.)

Note: For this installation as we wanted to use FAQs/ASO and FAQs/PCS, we had to define the following files:

- SYS\$VIO
- SYS\$MON
- SYS\$ARC
- SYS\$CPR
- SYS\$LOG

The following is the procedure called STDLABEL.PROC that defines these files.

```

.
.
* LEGENT FILES
// DLBL SYS$VIO,¢SYS$VIO.LEGENT¢,1999/356,SD
// EXTENT ,SYSWK2,1,0,7574,500
// DLBL SYS$MON,¢SYS$MON.LEGENT¢,1999/356,SD
// EXTENT ,SYSWK2,1,0,8074,250
// DLBL SYS$ARC,¢SYS$ARC.LEGENT¢,1999/356,SD
// EXTENT ,SYSWK2,1,0,8324,42
// DLBL SYS$CPR,¢SYS$CPR.LEGENT¢,1999/356,SD
// EXTENT ,SYSWK2,1,0,8366,85
// DLBL SYS$LOG,¢SYS$LOG.LEGENT¢,1999/356,SD
// EXTENT ,SYSWK2,1,0,8451,50
.
.

Note : LEGENT PDS data sets information. The position and size
of each file should be reviewed for your site. (See the GSS
for VSE V.4 Installation and Utilities Guide, Chapter 3.
Preinstallation, for DASD Considerations)

```

Figure 6. Sample STDLABEL.PROC

2.2.3 Task 3. Create the Auxiliary History File (Optional)

You can ignore this step if you don't want to use MSHP to install GSS for VSE.

We encourage using MSHP because it simplifies the product maintenance, and all LEGENT fixes are shipped in MSHP format. Using MSHP eliminates incompatibilities between the LEGENT products.

If you use MSHP, a 1MB BG partition is required for installation.

Note: If you decide to install GSS for VSE into a different residence library from the one you used for a previous MSHP installation, you must change the residence information before the installation. If it is a new installation you have to create a new history file for the LEGENT product.

The following is a sample job for creating the history file.

```

* $$ JOB JNM=LEGENTHF,DISP=D,CLASS=0
// JOB LEGENTHF
// DLBL IJSYSHF,LEGENT.HISTORY.FILE,1999/356,SD
// EXTENT SYS010,SYSWK2,1,0,8501,75
// ASSGN SYS010,DISK,VOL=SYSWK2,SHR
// EXEC MSHP
        CREATE HISTORY
/*
/&
* $$ EOJ

```

Note: EXTENT and VOLUME depend on your site.

Figure 7. Sample Job for Creating the History File

2.2.4 Task 4. Running the Installation Jobstream

The GSS for VSE installation jobstream is called IDCM. You have to load it into the POWER RDR queue, link-edit the IDCM installation program, and catalog that program into the *lib.sublib* that you have specified.

To load the installation jobstream and install GSS for VSE, do the following steps:

- S RDR,*cuu*

Note: *cuu* is the tape address where you mounted the LEGENT product tape

.

- R RDR,**IDCM**

Now follow the installation steps from *GSS for VSE V4.0 Installation and Utilities Guide, Chapter 4*.

Notes:

- In the IDCM procedure the tape will rewind and unload. You have to reload the tape and continue.
- The IDCM procedure will end with RC=8 (this means that the installation is complete).

2.2.5 Task 5. Install CMS Members (Optional)

If you are a VM user, and you want to use the interface between FAQs in VSE and VM CMS, you may optionally install the CMS members onto your CMS minidisk after completing the GSS for VSE installation.

To install the CMS members to your minidisk, enter the following commands from your CMS session:

```

CP ATT cuu * 181
VMFPLC2 REW
VMFPLC2 FSF 10
VMFPLC2 LOAD * * A

```


Note: *cuu* is the address of the tape drive where the installation tape is mounted

2.2.6 Task 6. Reinstallation

In some circumstances you may be required to do a reinstallation. For your reinstallation step please refer to *GSS for VSE V4.0 Installation and Utilities Guide, Chapter 3*.

Chapter 3. Introduction to FAQS/ASO

In this chapter we describe FAQS/ASO for VSE.

It covers the following topics:

- Introduction to FAQS/ASO
- Online features
- Automated operations features
- Online help
- Product interfaces

3.1 Introduction to FAQS/ASO

FAQS/ASO for VSE is the program for automated operations and console management for the VSE system.

FAQS/ASO has two primary functions:

1. Online alternate console
2. Automated operations

3.2 Online Features

With FAQS/ASO, authorized users can use terminals as system consoles. A wide range of problem determination tools allows users to display GETVIS usage, execution status of jobs, POWER queues and members, current partition allocations and virtual storage information.

Using FAQS/ASO online, you have the ability to:

- Monitor console activity
- Issue POWER commands
- Maintain POWER queue members
- Monitor storage and manage DASD
- Generate online or batch reports
- Access partition storage information

3.3 Automated Operations Features

With FAQS/ASO, you have the ability to:

- Automate console message management
- Access user-friendly online menus
- Implement enhanced system security
- Utilize online REXX support

3.4 Online Help

All FAQS/ASO displays offer online help. Selected displays also offer field-sensitive help for the users.

3.5 Product Interfaces

FAQS/ASO can interface with most LEGENT VSE products. From FAQS/ASO you can access:

FAQS/PCS	Automated production control system
FLEE	VSE library manage
EPIC for VSE	Tape manager
EXPLORE for CICS-VSE	CICS performance monitor
EXPLORE for VSE	VSE performance monitor
EXPLORE for VTAM	VTAM performance monitor
EXTEND/DASD	VSAM data set compression tool
HYPER-BUF	VSAM buffer space allocation tool
MASTERCAT	VSAM catalog manager
EXPRESS DELIVERY for VSE	Automated output manager

Chapter 4. FAQs/ASO Installation

This chapter describes the FAQs/ASO installation and system preparation.

It covers the following topics:

- Prerequisite consideration
- Preinstallation
- FAQs/ASO installation procedure
- FAQs/ASO CMS members installation procedure

4.1 Prerequisite Consideration

The ASO for VSE installation tape contains two products:

- FAQs/ASO
- FAQs/PCS

There are two ASO for VSE tapes: one for Version 3.7 and one for Version 4.0

The Version 3.7 tape actually contains two separate sets of code:

1. Code for VSE/SP 2.1 and above
2. Code for VSE/ESA 1.1 and 1.2

The Version 4.0 tape contains code for VSE/ESA 1.3.

Note: The VSE/ESA 1.3 code will not run on the other system levels. You must reinstall FAQs/ASO for VSE on VSE/ESA 1.3. Do not copy FAQs/ASO for VSE code or do LIBR backups/restores of the FAQs/ASO for VSE library from a previous system level to VSE/ESA 1.3.

Before attempting to install FAQs/ASO for VSE, make sure you are aware of the following:

- Do not attempt the installation without reading through this chapter.
- All FAQs/ASO for VSE products require GSS for VSE.
- Do not start the installation if required files are not defined. The files that FAQs/ASO for VSE requires should have been defined *prior* to installing GSS for VSE.
- Perform the installation in a controlled environment only. You should be able to IPL the system.

4.2 Preinstallation

To install FAQs/ASO for VSE, you must perform the tasks in the following items. Some tasks may not apply, depending on your system setup.

- Install GSS for VSE
- Determine the residence library and space required
- Define the FAQMSG VSAM file for FAQs/ASO for VSE
- Define the PDS files for FAQs/ASO for VSE
- Create the AUXILIARY HISTORY FILE (Optional)
- Update the Library search chain
- Update the SDL procedure to load FAQs/ASO to the SVA

4.2.1 Task 1. Install GSS for VSE

You must install GSS for VSE **prior** to installing FAQs/ASO for VSE. (See Chapter 2, “GSS Installation” on page 7.)

4.2.2 Task 2. Determine the Residence Library and Space Required

The *residence library* is the library in which the FAQs/ASO for VSE phases reside. This library should not be the SYSRES library. It can be any private sublibrary.

FAQS/ASO for VSE and FAQs/PCS for VSE require 6000 1K library blocks. To be more accurate, you can check the DASD space requirement for your residence library by reading the *FAQS/ASO for VSE V3.7/4.0 Installation and Initialization Guide, Chapter 3*.

Note: We recommend to install FAQs/ASO for VSE into the same library in which GSS for VSE was installed.

4.2.3 Task 3. Define FAQSMMSG VSAM File for FAQs/ASO for VSE

The FAQSMMSG VSAM file holds messages that you can access online from FAQs/ASO for VSE.

To define the FAQSMMSG VSAM file correctly, you must follow the next three requirements:

1. Specify a DLBL of FAQSMMSG. Filename must be FAQSMMSG, and it must reside in system standard labels.
2. Specify a key length of 12 and a key position of 0.
3. Specify an average record size of 1024 bytes and maximum record size of 6000 bytes.

The following shows a sample job stream for defining the FAQSMMSG VSAM file:

```

* $$ JOB JNM=DEFFILE,CLASS=0,DISP=D,NIFY=YES
// JOB DEFFILE DEFINE FAQS MESSAGE FILE
// EXEC IDCAMS,SIZE=AUTO
DEFINE CLUSTER ( -
  NAME (FAQS.ERROR.MESSAGE ) -
  CYLINDERS(2 1 ) -
  SHAREOPTIONS (2) -
  RECORDSIZE (1024 6000 ) -
  VOLUMES (volid ) -
  NOREUSE -
  INDEXED -
  FREESPACE (10 10) -
  KEYS (12 0 ) -
  TO (99366)) -
  DATA (NAME (FAQS.ERROR.MESSAGE.@D@ ) -
  CONTROLINTERVALSIZE (6144 ) -
  INDEX (NAME (FAQS.ERROR.MESSAGE.@I@ ) -
  CATALOG (catalogname.USER.CATALOG )
IF LASTCC NE 0 THEN CANCEL JOB
/*
// OPTION STDLABEL=ADD
// DLBL FAQSMMSG,¢FAQS.ERROR.MESSAGE¢,,VSAM, X
    CAT=catalogname
/*
// EXEC IESVCLUP,SIZE=AUTO
A FAQS.ERROR.MESSAGE          FAQSMMSG catalogname          STDLABUP
/*
/&
* $$ EOJ

```

Note: You have to specify some parameters depending on your configuration as follows:

- valid = Volume ID of DASD (SYSWK2)
- catalogname = User catalog name
- space required in Cylinders or Tracks

Figure 8. Sample Job for Defining the FAQSMMSG VSAM File

Note: After finishing this job, you should check the result in the standard labels (STDLABUP.PROC):

```

.
.
// DLBL LEGCAT,¢LEGENT.USER.CATALOG¢,,VSAM
// DLBL LEGENT,¢VSE.LEGENT.LIBRARY¢,,VSAM,CAT=LEGCAT,DISP=(OLD,KEEP)
// DLBL FAQSMMSG,¢FAQS.ERROR.MESSAGE¢,,VSAM,CAT=LEGCAT
.
.

```

Note: The CATALOG and LIBRARY names used here are samples, you must tailor them depending on your configuration.

Figure 9. Sample Output of STDLABUP.PROC

4.2.4 Task 4. Define PDS Files for FAQs/ASO for VSE

We recommend that you define labels for the following PDSs even though they are not required for initial FAQs/ASO for VSE installation:

- SYS\$ARC
- SYS\$CPR

The FAQs/ASO Sysout archive facility allows you to archive end-of-job reports to a PDS and access them online. SYS\$ARC is the PDS that contains the Sysout archive files.

The CPR facility allows you to use CICS-defined printers (remote or local) to print part or all of the POWER RDR, LST, and PUN members.

Note: These files have already been defined in the GSS system preparation part (see 2.2.2, “Task 2. Defining Labels for Required PDS Files” on page 8).

4.2.5 Task 5. Create AUXILIARY HISTORY FILE (Optional)

Before you begin the FAQs/ASO for VSE installation, you must decide whether you will be using MSHP or LIBR to install FAQs/ASO for VSE.

We encourage using MSHP because it simplifies the product maintenance and all LEGENT fixes are shipped in MSHP format.

If you use MSHP, **you can use the same history file that was defined when the GSS was installed** (see 2.2.3, “Task 3. Create the Auxiliary History File (Optional)” on page 9).

4.2.6 Task 6. Update Library Search Chain

Be sure that the appropriate LIBDEFs are added to the BG partition for the GSS for VSE library. Individual FAQs/ASO for VSE product installations require the use of the GSS for VSE library.

Note: Where you use different versions together, you must place the residence library in the LIBDEF search chain *before* any library that contains earlier versions of FAQs/ASO for VSE or GSS for VSE.

```
.  
.br/>// LIBDEF *,SEARCH=LEGENT.FAQ5  
.  
.
```

Note: This library name is a sample, you must tailor it depending on your configuration.

Figure 10. Sample JCL for LEGENT Product Library Search Chain in BG

4.2.7 Task 7. Update the SDL Procedure to Load FAQs/ASO to SVA

You have to load the following LEGENT phases to the SVA by updating the SETSDL.PROC. This uses the SET SDL command to reload all LEGENT phases to the SVA.

```
CATALOG SETSDL.PROC          DATA=YES REPLACE=YES
SET SDL
.
.
.
GSPDSVAM,SVA                ----> For GSS
GSPDSVAE,SVA                ----> For GSS
$FAQS,SVA                   ----> For FAQs/ASO
$FAQSHCF,SVA                ----> For FAQs/ASO
$FAQSVM,SVA                 ----> For FAQs/ASO
/*
/+
```

Figure 11. Sample SET SDL Procedure to Load LEGENT Phases to the SVA

4.3 FAQs/ASO Installation Procedure

The installation jobstream, **IASO** contains multiple files. The first file is a POWER RDR file containing the installation jobstream. The installation jobstream performs a link-edit to the *lib.sublib* that you specify.

4.3.1 Task 1. Installation Procedure

To load the installation jobstream and install FAQs/ASO and FAQs/PCS for VSE, follow the steps:

- S RDR,*cuu*

Note: *cuu* is the tape address where you mounted the FAQs/ASO for VSE tape.

- R RDR,**IASO**

Follow the installation steps from the *ASO for VSE V3.7/4.0 Installation and Initialization Guide, Chapter 4*.

Note: The IASO Procedure will end with RC=4 (this means that the installation is completed).

4.3.2 Task 2. Reinstallation

In certain circumstances (such as having a pre-V3.4 ASO for VSE) it is necessary to reinstall. Please refer to *ASO for VSE V3.7/4.0 Installation and Initialization Guide, Chapter 3* Preinstallation and Reinstallation.

4.4 FAQs/ASO CMS Members Installation Procedure (Optional)

If you are a VM user, you can restore the CMS members to your CMS minidisk after you install ASO for VSE.

To do this, enter the following commands from your CMS session:

```
CP ATT cuu * 181
VMFPLC2 REW
VMFPLC2 FSF nn
VMFPLC2 LOAD * * A
```

Note: *cuu* is the address of the tape drive where the installation tape is mounted.

The following FSF *nn* values are required for the individual FASQ/ASO for VSE products:

<i>Table 1. FSF 'nn' Values for Installing Individual Modules</i>	
Product	FSF <i>nn</i> Value
FAQS/ASO	18
FAQS/PCS	19

Chapter 5. FAQs/ASO Initialization

This chapter describes the FAQs/ASO initialization and some tasks to be done before using FAQs/ASO for VSE.

It covers the following topics:

- FAQs/ASO for VSE initialization jobstream
- Online interfaces initialization
- REXX support
- Tailor schedule events (JCLSCHEM)
- Automatic startup for FAQs interfaces

Once you've installed FAQs/ASO for VSE, you must initialize it in order to use its features, and you must initialize at least one online interface for it. If you don't initialize the product, it will not work.

The installation program initializes files with a default configuration and user profile.

GSFAQS and **GSFTL** are FAQs/ASO batch utilities that enable you to initialize this product.

Whenever a transient is to be fetched into the LTA (Logical Transient Area) or CRT transient area, the **FAQS/ASO FTL** (Fast Transient Loader) determines whether or not the required phase is supported in storage. If the phase is resident, it is moved directly to the transient area, eliminating the overhead requirements to read the phase from the core-image library. Likewise, when a system phase or a phase of your own is supported by FTL, FTL moves the phase directly to the specified load address.

Some of the more common phases that can be made resident are:

- Job control phase
- \$\$A ERP transients
- Frequently referenced user routines

5.1 FAQs/ASO for VSE Initialization Jobstream

To initialize FAQs/ASO for VSE, we recommend that you perform all the following tasks:

- Create the FAQs initialization procedure
- Update the BG ASI procedure
- Update the LIBDEF procedure

5.1.1 Task 1. Create the FAQs Initialization Procedure

The following is a sample jobstream to catalog the FAQs/ASO for VSE initialization jobstream. This jobstream should be cataloged into the system library for system auto-start initialization of FAQs/ASO for VSE and it also improves overall performance by supporting common job control phases in the FTL MOVE mode. The STARTUP statement automatically loads the default FAQs/ASO command, message, and console PF-key files. The default files are all named **FAQSASO**.

Warning "FTLLIST" should be used carefully when other system software is used, it can cause archival problems for these products.

Users should change names to anything other than "FAQSASO" to avoid problems during release upgrades.

```
* $$ JOB JNM=CATALFQ,Class=0,Disp=D
// JOB CATALFQ
// EXEC LIBR          +----- Initialize procedure name
A S=IJSYSRS.SYSLIB   |
CATALOG STARTFQ.PROC <---+ DATA=YES          REPLACE=YES
* -----
* JOB STARTUP OF LEGENT --- FAQS/ASO UNDER VSE/ESA 1.3.4
* -----
// LIBDEF PHASE,SEARCH=lib.sublib <----- FAQS product library
// EXEC GSPRDL,SIZE=256K
PROD=xxxxxxxxxxxxxxxxxxxxx <----- LEGENT product code
STATUS
/*
* ----- *
* START FTL *
* -----*
// EXEC GSFTL,SIZE=256K
RDL=CREATE,MONITOR <----- Enable FTL monitor
FAQS
FTLLIST (optional if short on system GETVIS)
RDL=END
/*
* -----*
* INITIALIZE GSFAQS FOR FAQS/ASO *
* -----*
// EXEC GSFAQS,SIZE=256K
STARTUP FAQSASO <----- Default FAQS/ASO profile
/*
/+
/*
/&
* $$ EOJ

Note: Initialize procedure name can be anything you want.
The lib.sublib is the FAQS/ASO residence library you specified
at installation. You should have received a 20-character
LEGENT product code from your sales representative.
```

Figure 12. Sample Jobstream for FAQS/ASO Initialization

5.1.2 Task 2. Update the BG ASI Procedure

The following is a sample of the BG ASI procedure in which we placed the FAQS/ASO for VSE initialization procedure. We recommend that you put the FAQS/ASO initialization procedure before the POWER startup statement. After finishing, you must recatalog this procedure back to the VSE system library.

```

CATALOG $0JCL.PROC                DATA=YES REPLACE=YES
SIDOPT ACANCEL=NO,DECK=NO,DUMP=PART,SYSDMP=YES,SXREF=YES
// EXEC PROC=STDLABEL              LOAD LABEL AREA
// EXEC PROC=LIBDEF
// EXEC PROC=SETSDL                SET SDL
PRTY BG,FB,FA,F9,F8,F7,F6,F5,F4,F2,F3,F1
ASSGN SYSLST,IGN
// JOB BGINIT
// SETPARM XNCPU=ç ç
// EXEC PROC=$COMVAR,XNCPU
// EXEC DIRLISTRT,SIZE=AUTO,PARM=çCPUVAR&XNCPU;$JCLBSX;$JCLMINç
/*
// SETPARM RETCODE=$RC
// SETPARM XSPINIT=çFINISHEDç
// SETPARM XMODEBG=çMINIç
// SETPARM XPARTPW=çF1ç
// SETPARM XPWMODE=çWARMç
// IF RETCODE=1 OR RETCODE=9 THEN
// GOTO ALLOCBSX
// EXEC PROC=CPUVAR&XNCPU,XMODEBG,XPARTPW,XPWMODE,XSPINIT
// IF XSPINIT = FINISHED THEN
// GOTO NOSDL
// EXEC PROC=LIBSDL
SET SDL
LIST=$SVAVTAM
LIST=$SVACICS
/*
// LIBDROP PHASE
/. NOSDL
// IF XMODEBG=BASIC THEN
// GOTO ALLOCBSX
// EXEC DIRLISTVM
// SETPARM RETCODE=$RC
// IF RETCODE=4 THEN
// GOTO ALLOCVM
// EXEC PROC=ALLOC                PARTITION ALLOCATIONS
// EXEC PROC=STARTFQ              <----- FAQs/ASO initialization procedure
// GOTO PWRSTRT
.
.

```

Note: The FAQs/ASO initialization procedure name should be the same name as you cataloged on the previous step.

Figure 13. Sample BG ASI Procedure with FAQs/ASO Initialization Procedure

5.1.3 Task 3. Update the LIBDEF Procedure

The following is a sample LIBDEF procedure that includes the LEGENT product library. You must update and recatalog it back to the VSE system library.

```

CATALOG LIBDEF.PROC          DATA=YES REPLACE=YES
LIBDEF PHASE,SEARCH=(PRD2.CONFIG,PRD1.BASE,PRD2.PROD,PRD2.DBASE,      X
                    PRD2.COMM,PRD2.COMM2,LEGENT.FAQS),PERM
LIBDEF OBJ,SEARCH=(PRD2.CONFIG,PRD1.BASE,PRD2.PROD,PRD2.DBASE,      X
                    PRD2.COMM,PRD2.COMM2,LEGENT.FAQS),PERM
LIBDEF SOURCE,SEARCH=(PRD2.CONFIG,PRD1.BASE,PRD2.PROD,PRD2.DBASE,   X
                    PRD2.COMM,PRD2.COMM2,LEGENT.FAQS),PERM
/+                            |
/*                            +---> LEGENT product library

```

Figure 14. Sample LIBDEF Procedure with FAQs/ASO Product Library

5.1.4 Task 4. Re-IPL the VSE System

You have to **SHUTDOWN** and re-IPL the VSE system for the new parameters to become active.

5.2 Online Interface Initialization

FAQS/ASO comes with multiple user interfaces. However, you must initialize at least one online interface before you can access FAQs/ASO for VSE from a specific environment. For example, if you want to access FAQs/ASO for VSE from VTAM, you must first initialize a FAQs/ASO for VSE VTAM interface.

There are many ways to initialize FAQs online interfaces:

- Maintasks in dedicated partitions
- Subtasks of any task in a dedicated partition
- Subtasks of FAQs/PCS's job scheduler JCLSCHED

FAQSMAIN is a terminal Cross Partition Communication program (FAQSTXPC) used to communicate with other programs running as online interfaces. FAQSMAIN can run in a dynamic or a static partition as a main task or a subtask. It currently supports the following interfaces:

FAQSVMX	for CMS/VMCF
FAQSIUX	for IUCV
FAQSICX	for ICCF
DCMTDRIV	for VTAM
DCMOTDRV	for CICS

Note: The FAQSICX module for the ICCF interface does not work in this version. Therefore it will not be described in this book.

5.2.1 Running FAQSMAIN as Main Task

The following is a sample job to run FAQSMAIN as a main task.

```

.
.
// JOB FAQSMAIN
// LIBDEF *,SEARCH=lib.sublib
// EXEC FAQSMAIN,SIZE=FAQSMAIN
.
.

Note: The lib.sublib is the FAQS/ASO residence library you
      specified at installation.

```

Figure 15. Sample Jobstream for Running FAQSMAIN as a Main Task

5.2.2 Running FAQSMAIN as Subtask of DCMTASK

You can run FAQSMAIN as a subtask of any task in a dedicated partition and the main task can be any task you want.

DCMTASK is a LEGENT GSS utility that allows you to subtask tasks which do not share the same host.

```

.
.
// EXEC DCMTASK,SIZE=xxxx,PARM=¢maintask#FAQSVMX#FAQSMAIN¢
.
.

Note: FAQSVMX is a sample interface for VMCF,
      FAQSMAIN runs as a subtask of the main task

```

Figure 16. Sample Jobstream for Running FAQSMAIN as a Subtask of DCMTASK

5.2.3 Running FAQSMAIN as a Subtask of FAQS/PCS

You can run FAQSMAIN as a subtask of FAQS/PCS's job scheduler, **JCLSCHED**.

The **JCLSCHED.CTL** file contains a series of AUTO statements specifying which tasks to subtask under JCLSCHED. You can update this file by placing the statement in the JCLSCHED.CTL file in SYS\$MON (see 5.4, "Tailor the Events Scheduler (JCLSCHED)" on page 33).

For FAQS/PCS to schedule events, the scheduler JCLSCHED must be running. You can start JCLSCHED in any one of the following areas:

- A dedicated nonshared or shared partition (main task)
- A subtask of CICS
- A subtask of a main task

5.2.3.1 As a Main Task

Use the following JCL to activate the scheduler as a main task in a batch partition. **This is the recommended method of activating the scheduler.**

```
// JOB JCLSCHED
// LIBDEF *,SEARCH=lib.sublib
// EXEC JCLSCHED,SIZE=JCLSCHED
/*
```

Note: The lib.sublib is the FAQS/ASO residence library you specified at installation.

Figure 17. Sample Jobstream for Running JCLSCHED as a Main Task

This JCL causes an outstanding **replyID** on the console, enabling you to communicate with the scheduler. For example, you can respond to this reply ID by requesting that jobs be generated on demand.

5.2.3.2 As a CICS Subtask

You can activate the scheduler as part of the CICS startup by entering the appropriate CICS table entries. To subtask JCLSCHED under CICS, you must add the PCSPLT program to the following table entries:

```
DFHPCT TYPE=ENTRY,TRANSID=PCSS,PROGRAM=PCSPLT
```

Figure 18. Sample Entry for PCT (CICS DFHPCTSP)

```
DFHPPT TYPE=ENTRY,PROGRAM=PCSPLT,PGMLANG=ASSEMBLER
```

Figure 19. Sample Entry for PPT (CICS DFHPPTSP)

```
DFHPLT TYPE=ENTRY,PROGRAM=PCSPLT,PGMLANG=ASSEMBLER
```

Figure 20. Sample Entry for PLT (CICS DFHPLTSP)

5.2.3.3 As a Subtask of a Main Task

You can activate the scheduler as a subtask of a main task by using the **DCMTASK** program. Use the following JCL to run the scheduler as a subtask:


```
// JOB DCMTASK
// LIBDEF *,SEARCH=lib.sublib
// EXEC DCMTASK,SIZE=mainsize,PARM=¢maintask#JCLSCHED¢
```

Note: maintask is the name of the main task under which the scheduler will run. Do not specify the value AUTO for SIZE of execution. The lib.sublib is the FAQs/ASO residence library you specified at installation.

Figure 21. Sample Jobstream for Running JCLSCHED as a Subtask of DCMTASK

5.2.4 Terminating FAQSMAIN

You can terminate FAQSMAIN by issuing the following command:

- FAQs SHU,Y,MAIN from FAQs online
- TERMINATE the main task, if FAQSMAIN is a subtask.

Note: You can reactivate FAQSMAIN or other components as subtasks under JCLSCHED as explained previously. To reactivate FAQSMAIN issue the following command => **\$FAQSMAIN**

After tailoring FAQSMAIN, you must tailor the FAQs interface before you use the FAQs system.

In our environment, we selected to start with subtasks of FAQs/PCS because it was easy to maintain and did not require more partitions in which to run other interfaces.

We can connect to FAQs in three ways:

- VTAM
- CICS
- VM/CMS

You have to initialize at least one interface to use all features in FAQs/ASO for VSE. Here are some recommendations for the interface setup to initialize FAQs/ASO for VSE.

VTAM It impacted the system but it did not take a long time and it was very easy to set up and log on to the FAQs system.

CICS Only customers who have online transactions should use this, but the setup will affect all users as the CICS system has to be taken and restarted.

VM/CMS Only for customers who wanted to use FAQs for VSE from VM/CMS.

5.2.5 VTAM Interface Initialization

You have to execute two programs to serve as the VTAM interface:

1. DCMTDRIV: Interface part of GSS for VSE
2. FAQSMAIN: Uses XPCC to communicate with DCMTDRIV

These programs must both be running to access the VTAM interface, this can run in either a static or a dynamic partition.

5.2.5.1 Task 1. Update Library Search Chain for VTAM Startup

The following is the sample JCL for adding FAQs library's search chain:

```

.                               +-----> LEGENT product library
.                               |
// LIBDEF PHASE,SEARCH=(LEGENT.FAQS,                                X
                           PRD2.COMM,PRD2.COMM2,PRD2.CONFIG,PRD1.BASE),PERM
// LIBDEF OBJ,SEARCH=(LEGENT.FAQS,                                  X
                           PRD2.COMM,PRD2.COMM2,PRD2.CONFIG,PRD1.BASE),PERM
// LIBDEF SOURCE,SEARCH=(LEGENT.FAQS,                              X
                           PRD2.COMM,PRD2.COMM2,PRD2.CONFIG,PRD1.BASE),PERM
.
.
Note: The LEGENT product library should be the same as you
       specified at installation.

```

Figure 22. Sample Library Search Chain for VTAM Startup Job

5.2.5.2 Task 2. Define the FAQs/ASO Application Major Node

The following is the sample book for the VTAM application major node. You have to update and recatalog it back to the PRD2.CONFIG library.

```

CATALOG VIMAPPL.B                               REPLACE=YES

VIMAPPL
VIMAPPL  VBUILD TYPE=APPL
DEDCCICS APPL  AUTH=(PASS,ACQ)
PRODCICS APPL  AUTH=(PASS,ACQ)
POWER    APPL  AUTH=(ACQ)
ENET     APPL  AUTH=(PASS,ACQ),VPACING=3,MODETAB=VIMLOGTB,DLOGMOD=ENET
PSFAPPL  APPL  AUTH=ACQ,EAS=1,SONSCIP=YES
IESWAITT APPL  AUTH=(NOACQ)
FAQS     APPL  ACBNAME=DCMIDRIV,EAS=5 <----- FAQs Application
/+
/*

Note: The application name can be anything.

```

Figure 23. Sample VTAM Book for FAQs

5.2.5.3 Task 3. Restart VTAM

You have to shutdown VTAM and restart it for the new parameters to become active by issuing the following command on the VSE console:

- **Z NET,QUICK**

and restart VTAM by:

- **R RDR,VTAMSTRT**

Note: If you are already running with CICS you have to disconnect VTAM from CICS by issuing the command **CEMT SET VTAM CLOSE** and after the restart of VTAM you have to issue the command **CEMT SET VTAM OPEN** to reconnect VTAM to CICS without stopping the CICS system.

5.2.5.4 Task 4. Execute DCMTDRIV and FAQSMAIN

The following is the sample job to execute DCMTDRIV and FAQSMAIN as subtasks of the FAQs/PCS's job scheduler, JCLSCHED.

```
// JOB STARTINT
* -----
* Startup job to connect to FAQs system
* -----
// LIBDEF *,SEARCH=LEGENT.FAQ5
// SETPFIX LIMIT=200K
// EXEC JCLSCHED,SIZE=JCLSCHED
/*
/ &
```

Figure 24. Sample FAQs/ASO Startup Job for VTAM Interface

5.2.5.5 Task 5. Access to FAQs via the VTAM Interface

Now, you can use FAQs/ASO for VSE via the VTAM interface by issuing the following command on a VTAM screen:

- **LOGON APPLID(FAQS)**

Note: APPLID must be the same name as you specified in the VTAM application book.

5.2.6 CICS Interface Initialization

For CICS online interface setup, you have to execute two programs to serve as the CICS interface:

- DCMOCIXP** CICS interface that runs in the CICS partition
- DCMOTDRV** CICS interface that allows you to access the online application using XPC

FAQSMAIN is required for DCMOCIXP and DCMOTDRV to run, and could run in either a static or a dynamic partition.

Note: If you are running more than one CICS system, you have to decide which one will use the FAQs/ASO for VSE system, and update the entries for that system. We only used FAQs within the CICSICCF system therefore all our examples will show changes for that system only.

5.2.6.1 Task 1. Update the Library Search Chain for CICS Startup

The following is the sample JCL for adding the FAQs library search chain to the CICS startup job.

```
* $$ JOB JNM=CICSICCF,DISP=L,CLASS=2,EOJMSG=YES
* $$ LST CLASS=A,DISP=D,REB=100
// JOB CICSICCF          CICS/ICCF STARTUP
.
.
// LIBDEF *,SEARCH=(PRD2.CONFIG,PRD1.BASE,PRD2.PROD,PRD2.CICSR,      X
      LEGENT.FAQS,PRD2.DBASE),PERM
.      |
.      +-----> LEGENT product library
```

Figure 25. Sample CICS Startup Job

5.2.6.2 Task 2. Update the CICS Table Entries

You can update the CICS table entries and re-assemble them manually or use the RDO (CICS Resource Definition Online) facility to initialize all the CICS parameters.

Note: If you update the table entries, you have to recompile the table.

The following are sample CICS table entries for FAQs/ASO for VSE:

CICS Table	Description and Entry
PPT	DFHPPT TYPE=ENTRY,PGMLANG=ASSEMBLER,PROGRAM=DCMOCIXP,RES=YES
PCT	DFHPCT TYPE=ENTRY,TRANSID=FAQS,PROGRAM=DCMOCIXP,TWASIZE=3000

5.2.6.3 Task 3. Restarting CICS

You have to shutdown CICS and restart it for the new parameters to become active by issuing the following commands on the VSE console:

- **MSG F2**
- **2 CEMT P SHUT IMM**

and then restart CICS with:

- **R RDR,CICSICCF**

5.2.6.4 Task 4. Executing DCMOTDRV and FAQSMAN

Following is the sample startup job for the CICS interface.

```

// JOB STARTINT
* -----
* Startup job to connect to FAQS system
* -----
// LIBDEF *,SEARCH=LEGENT.FAQS
// SETPFIX LIMIT=200K
// EXEC JCLSCHED,SIZE=JCLSCHED
/*
/&

```

Figure 26. Sample FAQS/ASO Startup Job for the CICS Interface

5.2.6.5 Task 5. Access to FAQS via the CICS Interface

You can use FAQS/ASO for VSE via the CICS interface by following these steps:

1. Press **PF6** to go to the CICS session from the VSE/ESA selection panel
2. Issue the transaction **FAQS**

5.2.7 VM/CMS Interface Initialization

Communication between VSE/ESA and VM/ESA is through the virtual machine communication feature (VMCF), and normally there is a set of routines supplied with VSE/ESA to enable the normal CMS user to interface with the control program to do things such as:

- Submitting jobs (VSESUB)
- Sending a message to the console (VSEMSG)
- Sending a CP message to the VSE virtual machine (VSECP)

Because of the requirement of FAQS to change some VMCF parameters a new set of CMS members must be installed to allow communications between CMS and the FAQSMAN program, these members are installed in an **OPTIONAL** step (see 4.4, "FAQS/ASO CMS Members Installation Procedure (Optional)" on page 20).

FAQSVMX is the CMS/VMCF interface in VSE and is part of the FAQSMAN program that is loaded as part of the installation of FAQS/ASO. Communication between FAQSMAN and FAQSVMX is via the XPCF facility.

Note: In VSE systems prior to VSE/ESA V1.3 FAQSVMX must run in a static partition.

5.2.7.1 Task 1. Execute FAQSVMX and FAQSMAN

JCLSCHED is the FAQS/PCS job scheduler, and FAQSMAN is a program that is activated by this job scheduler, and the CMS interface FAQSVMX is part of the FAQSMAN program, therefore the following job should be run on the VSE machine to activate the CMS interface.

```

// JOB STARTINT
* -----
* Job startup to connect to FAQS system
* -----
// LIBDEF *,SEARCH=LEGENT.FAQS
// SETPFIX LIMIT=200K
// EXEC JCLSCHED,SIZE=JCLSCHED
/*
/&

```

Figure 27. Sample FAQS/ASO STARTUP Job for VM/CMS Interface

5.2.7.2 Task 2. Access FAQS/ASO via VM/CMS Interface

You can access FAQS/ASO for VSE via the VM/CMS interface by entering the following command in a CMS session:

- **FAQS** V131A94

where V131A94 is the VSE virtual machine name.

5.3 REXX Support Initialization

If you want to use the FAQS/ASO REXX processor, you must initialize it before executing any IMODs (REXX programs).

The FAQSAO program is the REXX processor. It can execute multiple IMODs and it must be active in a partition to execute an IMOD:

- Online
- From a console command
- From a console message
- From an SMSG

FAQSAO can run as a maintask or as a subtask. It can run in either a static or a dynamic partition.

To enable FAQS/ASO's REXX support, you can choose only one of the following steps.

5.3.1 Step 1. Running FAQSAO as Main Task

The following is the sample JCL to run FAQSAO as a main task in a dedicated partition:

```

.
// EXEC FAQSAO,SIZE=FAQSAO
.

```

Figure 28. Sample JCL for Running FAQSAO as a Main Task

5.3.2 Step 2. Running FAQSAO as Subtask

This following is the sample JCL for running FAQSAO as a subtask in a dedicated partition.

```
.  
// EXEC DCMTASK,SIZE=xxxx,PARM=¢maintask#FAQSAO¢  
.
```

Figure 29. Sample JCL for Running FAQSAO as a Subtask

Note: The main task can be any task you want. DCMTASK is a LEGENT GSS utility that allow you to subtask tasks which do not share the same host. DCMTASK allows you to subtask one or more tasks under any long-running task and the size of programs should be considered.

5.3.3 Step 3. Running FAQSAO as Subtask of FAQS/PCS

We recommend this procedure.

The following is the sample JCL for running FAQSAO as a subtask of FAQS/PCS's job scheduler, JCLSCHED:

```
.  
// EXEC JCLSCHED,SIZE=JCLSCHED  
.
```

Figure 30. Sample JCL for Running FAQSAO as a Subtask of FAQS/PCS

Note: The following statement is already included in the JCLSCHED.CTL file in SYS\$MON:

```
AUTO &FAQSAO
```

The JCLSCHED.CTL file contains a series of AUTO statements specifying which tasks to subtask under JCLSCHED.

5.4 Tailor the Events Scheduler (JCLSCHED)

Using scheduler control commands, you can initiate the following system interfaces through the console or the JCLSCHED.CTL PDS member:

- The FAQS/ASO and FAQS/PCS REXX processor
- Online interfaces for FAQS/ASO
- Any other subtaskable program(s)
- **FAQS/ASO and FAQS/PCS REXX Processor:**

The &FAQSAO command initiates the FAQSAO program, which allows REXX IMODs to run.

The &AO command uses the scheduler to run IMODs, executing the REXX procedure *memname*. Typically, the &AO *memname* command is entered through the outstanding REPLID.

REXX procedures executed using the &AO *memname* commands do not generate POWER output. If you want POWER output, call REXX procedures

from a FAQs/PCS *generate* job. REXX procedures reside in the SYS\$MON PDS file.

- **IUCV:**

The \$FAQSIUX command initiates the IUCV interface. If the interface is already active, the request is bypassed.

- **VMCF:**

The \$FAQSVMX command initiates the VMCF interface. If the interface is already active, the request is bypassed.

- **Attaching Subtasks:**

To attach and load a subtask, prefix the appropriate scheduler command with \$. For example, \$DCMTDRIV attaches the DCMTDRIV phase.

To tailor the JCLSCHEM.CTL file that contains a series of AUTO statements specifying which tasks to subtask under JCLSCHEM, you must do the following:

Step 1. Connect to FAQs System

You have to connect to the FAQs system via the VTAM, CICS or VM/CMS interface. This is the panel you will see:

```
FAQMENU0.3          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
===>

                      *** DCM Main Menu ***

1  HELP              Display help information
2  FAQs/ASO          FAQs/ASO Online menu driver
3  TERMINATE         Terminate FAQs session
4  AO                Automated System Operation Menu Panels
5  FAQs/PCS          FAQs Production Control System
C  CPR               CICS PRINT FACILITY Menu Panels
N  COPYRIGHT         Copyright Notice ....

                      *** Copyright (c) LEGENT Software, Inc. 1992-1994 ***

PF01=Help PF03=Return PF12=Exit
```

Figure 31. FAQs Main Menu Panel

Step 2. Update JCLSCHEM File

- Enter 5


```

FAQMENU0.3          ** FAQS/ASO Online V4.0.2 **          ID=V131A94.SYA
====> 5

                                *** DCM Main Menu ***

1  HELP                Display help information
2  FAQS/ASO            FAQS/ASO Online menu driver
3  TERMINATE           Terminate FAQS session
4  AO                  Automated System Operation Menu Panels
5  FAQS/PCS            FAQS Production Control System
C  CPR                 CICS PRINT FACILITY Menu Panels
N  COPYRIGHT           Copyright Notice ....

                                *** Copyright (c) LEGENT Software, Inc. 1992-1994 ***

PF01=Help PF03=Return PF12=Exit

```

Figure 32. FAQS Main Menu Panel

- Enter **U**

```

JOLMENU0.5 ** DCM-Systems - FAQS/PCS Online V4.0.2 ** ID=V131A94.SYB
====> U

                                ** DCM-SYSTEMS FAQS/PCS ONLINE - Menu Index **

C  Current Event Maintenance      E  Master Events Maintenance
U  PDS Update                      P  Event Forecasting
R  Retrieve Member from CMS        T  Transfer to CMS
Y  Verify Process Periods         Z  Account History Display
B  Browse PDS Member              F  FLEE Online
H  General Help                   M  Utilities
V  Define Variables               X  Exit
I  REXX Member Update             J  FAQS/CALL Definitions
W  Work/Data Station              A  Audit History Display
O  Configuration Options          S  System Security
D  Resource Utilization

                                PDS ====> MON      (PDS ID for Security Display and Update)

FAQS/PCS - Copyright (c) LEGENT Software, Inc., 1987, 1994

PF1=Help PF3=Return PF4=MSHP PF12=Exit

```

Figure 33. FAQS/PCS Online Panel

- Enter **JCLSCHEM.CTL** into the Member Mask

```

JOLUPD .U ** DCM-Systems - FAQs/PCS Online V4.0.2 ** ID=V131A94.SYB
====>
      DCM-SYSTEMS FAQs/PCS PDS  DIRECTORY DISPLAY AND MEMBER MAINTENANCE

Member Mask ====> JCLSCHED.CTL
PDS ID          ====> MON

For the Member Mask supply one to eight characters for the member
name, and optionally supply the three character member type delimited
from the member name by a period. Mask characters may be used to
match a member name. A †† mask matches one character while an †*†
mask matches a group of characters. Following are a few examples:

+++CICS+.MON - Will select any member that has the character string
              CICS beginning at position 4 in the name.
*CICS*       - Will select any MON type member that has the character
              CICS anywhere in the name.
JCLVER0.MON  - Will select the member JCLVER0.MON.

PF1=Help PF3=Return PF4=External Library PF5=Entire Directory

```

Figure 34. FAQs/PCS PDS Directory Panel

- Enter **X** in front of the JCLSCHED.CTL file

```

JOLUPD .0 ** DCM-Systems - FAQs/PCS Online V4.0.2 ** ID=V131A94.SYB
====>
====> MON : JCLSCHED.CTL
  MEMBER NAME      RECS  BLKS  UPDATE TIMESTAMP      EXECUTE TIMESTAMP
X JCLSCHED.CTL      7    1   10/24/94 16.33.09     10/27/94 12.50.37

Actions: A=Audit B=Browse C=Copy D=Documentation L=Delete P=Pull List
         R=Rename S=Submit T=Transfer X=Edit Z=Accounting
PF1=Help PF3=Return PF4=External Lib

```

Figure 35. FAQs/PCS PDS Directory Panel

The system will show the contents of the JCLSCHED.CTL file as follows:

```

=>
MEM=JCLSCHED
1..5...10...15...20...25...30...35...40...45...50...55...60...65...70...
* * * * B E G I N F I L E * * * *
AUTO $FAQSMAIN
AUTO &FAQSAO
* * * * E N D F I L E * * * *

```

Figure 36. FAQs/PCS PDS Editor Panel

Update this file by choosing the interfaces you want.

```

AUTO $FAQSMAIN    ---> For all interfaces
AUTO &FAQSAO      ---> For REXX supports
AUTO $DCMOTDRV   ---> For CICS interfaces
AUTO $DCMIDRIV   ---> For VTAM interfaces
AUTO $FAQSVMX    ---> For VMCF CMS interfaces

Note: You can tailor AUTO statements to your requirements.

```

Figure 37. Sample AUTO Statement for Subtasks in JCLSCHEd.CTL

- Enter **SAVE** on the command line

```

=> SAVE                                                    MEM=JCLSCHEd
1...5...10...15...20...25...30...35...40...45...50...55...60...65...70...
* * * * B E G I N F I L E * * * *
AUTO $FAQSMAIN
AUTO &FAQSAO
AUTO $DCMOTDRV
AUTO $DCMIDRIV
AUTO $FAQSVMX
* * * * E N D F I L E * * * *

```

Figure 38. FAQs/PCS PDS Editor Panel

- Exit by pressing **PF3** on the Main menu panel

Step 3. Terminate the FAQs System

For the new parameters to become active you have to terminate FAQs by issuing the following command to the FAQs partition:

- **TERMINATE**

When you restart FAQs, your new parameters will be activated.

5.5 Automatic Startup for FAQs Interfaces (Optional)

The following two tasks will allow you to start up the FAQs interfaces automatically when the system is initialized.

- **Step 1. Submit a JCLSCHEd Job to the POWER Reader Queue**

Submit this job with a hold status into the reader queue and you can run this job in either a static or dynamic partition.

The following is a sample job for JCLSCHEd as a main task in dynamic partition Class = Z. The job will be held in the POWER reader queue with Disposition = L.

```

* $$ JOB JNM=STARTINT,CLASS=Z1,DISP=L
// JOB STARTINT
* -----
* Startup job to connect to FAQS system (all interfaces)
* -----
// LIBDEF *,SEARCH=LEGENT.FAQS
// SETPFIX LIMIT=200K
// EXEC JCLSCHED,SIZE=JCLSCHED
/*
/&
* $$ EOJ

```

Figure 39. Sample Jobstream for Running JCLSCHED as a Main Task

Note: The job name can be anything

- **Step 2. Update the USERBG.PROC**

Update the USERBG procedure by adding POWER commands to release the JCLSCHED job to execute in your selected partition, after finishing you will have to recatalog it to the VSE system library.

```

CATALOG USERBG.PROC          DATA=YES REPLACE=YES
* START MODE FOR BG-PARTITION IS NORMAL
* *****
*           YOUR SYSTEM IS           *
// EXEC PROC=SPLEVEL
* *****
STDOPT DATE=MDY              Change standard options if wanted
// EXEC PROC=LIBDEF          change to your own LIBDEF PROC
.
.
.
// PWR PRELEASE RDR,VIAMSTRT      or your VIAM (SKVIAM)
// EXEC IESWAIT,PARM=ç03ç
/. NOVIAM
// PWR PRELEASE RDR,CICSICCF      or your CICS (SKCICS)
// PWR PRELEASE RDR,STARTINT     <----- Startup interface job for FAQS.
/+
/*

```

Figure 40. Sample USERBG Procedure

Note: The JCLSCHED job name must be the same name as you specified in the POWER reader queue.

Chapter 6. Using FAQs/ASO for VSE

This chapter describes the FAQs/ASO online usage, and it covers the following topics:

- The FAQs/ASO menu system
- The FAQs/ASO AO
- Security and user configuration
- Communication between VSE and VM

6.1 FAQs/ASO Menu System

The FAQs/ASO online system consists of two types of panels:

- Menu system panels

Menu system panels show a menu or are used to alter data.

- Online panels

Online panels are used to control FAQs/ASO features and set up the FAQs/ASO online system. Online commands can be used within the online system.

6.1.1 Accessing the FAQs/ASO Online System

You have to connect to the FAQs system via the VTAM, CICS or VM/CMS interface. When you enter FAQs, you will see this panel.

- Select number **2**

```
FAQMENU0.3          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
===> 2

                               *** DCM Main Menu ***

1  HELP                    Display help information
2  FAQs/ASO                FAQs/ASO Online menu driver
3  TERMINATE               Terminate FAQs session
4  AO                      Automated System Operation Menu Panels
5  FAQs/PCS                FAQs Production Control System
C  CPR                     CICS PRINT FACILITY Menu Panels
N  COPYRIGHT               Copyright Notice ....

                               *** Copyright (c) LEGENT Software, Inc. 1992-1994 ***

PF01=Help PF03=Return PF12=Exit
```

Figure 41. FAQs Main Menu Panel

The following is a sample of the panel that displays when you select the *FAQS* option from the DCM main menu while running FAQs/ASO Version 4.0:

```

FAQMENU2.2          ** FAQS/ASO Online V4.0.2 **          ID=V131A94.SYA
===>
                    ** FAQS/ASO -- Online Menu **

C - Current Console Display      1 - HELP
L - Display Console Log          3 - Return
P - Power                        4 - Display IBM or Goal message
J - PRTY J                       5 - Display Current Console
G - MAP GETVIS                   6 - Display/Alter Security
M - Extended MAP/DEBUG Menu      7 - DISPLAY Storage
O - MSGOP                        8 - DUMP DASD
K - PFKEY Definition
R - POWER PFKEY Definition
V - LVTOC
I - LISTIO
B - LIBLIST
Z - LSERV
Q - QSEEK
F - FTL MON
T - FTL RDL
W - VOLUME
D - DEBUG

PF01=Help PF03=Return PF05=D C PF12=Exit

```

Figure 42. FAQS/ASO Online Panel

6.1.1.1 FAQS/ASO Online Menu PF-keys

The following describes the PF-key functions available on the online menu:

Table 3. PF-key Function Table for FAQS/ASO Online Menu

PF-key	Description
PF01(help)	Displays help panel for the online menu.
PF03(Return)	Returns you to the DCM main menu.
PF05(D C)	Returns you to a current console activity display.
PF12(Exit)	Returns you to a current console activity display.

6.1.1.2 Accessing Product Features

You can use the FAQS/ASO online main menu to access all the FAQS/ASO features.

To select a menu option, do one of the following:

- Place the cursor on the selection you want and press ENTER.
- Enter the selection letter or number on the command line and press ENTER.
- Press the PF-key that corresponds to a menu item.
- Enter any FAQS/ASO command on the command line (==>).

The following table explains the menu options, the commands these options correspond to, and the panels displayed.

<i>Table 4. FAQs/ASO Online Menu Option Table</i>		
Option	Name	Displays
C	Current Console Display	Current console display menu
L	Display Console Log	Console log display menu
P	Power	POWER display menu
J	PRTY J	Job overview report
G	MAP GETVIS	Static Partition GETVIS MAP Display
M	Extended MAP/DEBUG menu (on systems running VSE/ESA V1.3 or higher) or MAP	Online MAP/DEBUG menu (VSE/ESA 1.3 or higher) or Default partition allocation display
O	MSGOP	Operator message panel
K	PFKEY definition	PFKEY display/alter
R	POWER PFKEY definition	POWER PFKEY display/alter
V	LVTOC	LVTOC menu display
I	LISTIO	LISTIO display menu
B	LIBLIST	LIBLIST display menu
Z	LSERV	LSERV display menu
Q	QSEEK	DASD statistics display
F	FTL MON	FTL MONitor panel
T	FTL RDL	FTL resident directory list menu
W	VOLUME	DASD VOLUME report
D	DEBUG	Static partition DEBUG display
1	HELP	HELP display
3	RETURN	Return to previous panel
4	Display IBM or LEGENT message	Online message panel
5	Display Current Console	Current console
6	Display/Alter security	Security panel
7	DISPLAY storage	Virtual Storage Display Main Menu
8	DUMP DASD	Dump DASD Display

Now we will examine a few of the online menu options:

- Selecting Current Console Display (C)

The following is a sample display of the current console panel:

```

      JOBNAME  PHASE      DURATION  CPU SEC.  SIO COUNT  TASK STATUS
F1  POWSTART  IPWPOWER  25.17.00   001.08    1821      82 82
F3  VIAMSTRT  ISTINCVT  25.16.04   013.18    3916     82 82 82 82
F2  CICSICCF  DFHSIP    25.14.52   039.82    5116     82 82 82 82 82 82
Z1  STARTINT  JCLSCHED  25.15.45   078.69    22756    82 82 82 82 82 82
CPU :   1.71%      PAGING  IN :      0/SEC      OUT :      0/SEC
REPLY -> Z1-020
01 Z1 055 Beeper condition 1 SET by $MSG ( 1S78I BKUPMON  CANCEL COMMAND
02 Z1 055 $BEEPER Failed RC=8                                     09
03 Z1 061 0   XCM PIPPO1                                         09
04 0                                                         09
05 BG 000 EOJ NO NAME                                           09
06   DATE 10/28/94,CLOCK 09/55/47                               09
07 F1 001 1Q34I   BG WAITING FOR WORK                          09
08 Z1 057 GST004I D08201  SESSION ESTABLISHED                  13
09 Z1 057 GST005I D08201  SESSION TERMINATED                   13
10

ENTER FAQs COMMAND
D S,S
F03=RETURN                                     LVL=01      V131A94  XCI SYC

```

Figure 43. FAQs/ASO Current Console Panel

- Selecting Display Console Log (L).

The following is a sample panel of the current console log for EOJ:

```

11 F4 004 EOJ JOBCMS      MAX.RETURN CODE=0000
12 F6 006 EOJ BKICCF
13 BG 000 EOJ BKICCF
14 BG 000 EOJ EVENTSUM   MAX.RETURN CODE=0000
15 F6 006 EOJ CREF      MAX.RETURN CODE=0000
16 BG 000 EOJ CATALFQ   MAX.RETURN CODE=0000
17 BG 000 EOJ FORECAST  MAX.RETURN CODE=0000
18 F4 004 EOJ FORECAST  MAX.RETURN CODE=0000
19 BG 000 EOJ BKUPMON
20 BG 000 EOJ NO NAME
*** MESSAGE REDISPLAY *** 10/27/94 12:50:08

ENTER FAQs COMMAND
D L,SCAN=çEOJç
PF03=RETURN                                     LVL=01      V131A94

```

Figure 44. FAQs/ASO Display Console Log

- Selecting POWER display menu (P).

The following is a sample panel of the POWER queue:

```

====>
  READER QUEUE  P D C S  CARDS  DATE    TIME    USER INFO
_ STARTIFQ 00597 8 L 0      32 10/19/94 11:08:22
_ PRTDUMPA 00033 3 L 0       6 10/11/94 14:54:17
_ PRTDUMPB 00034 3 L 0       6 10/11/94 14:54:18
_ ICCFREST 00010 3 L 0     149 10/11/94 14:54:13
_ ICCFLOAD 00011 3 L 0     18 10/11/94 14:54:13
_ JOB3     00323 3 L 0       9 10/18/94 15:49:48
_ JOB1     00377 3 L 0       9 10/18/94 14:29:53
_ PAUSEBG  00661 3 L 0       4 10/11/94 14:54:16
_ PAUSEF1  00024 3 L 1       4 10/11/94 14:54:16
_ CICSICCF 00650 5 * 2     58 10/13/94 12:39:17

D=DSP A=ALT H=HLD R=REL L=DEL P=PRT - PF3=QUIT PF4=REFRESH PF7=BWD PF8=F

```

Figure 45. FAQs/ASO POWER Queue

- Selecting PRTY J (J).

The following is a sample panel of the display job overview report:

```

          JOBNAME  DURATION  PHASE      DURATION  CPU SEC.  TASK STATUS  SIO
F1  POWSTART  25.48.27  IPWPOWER  25.44.59  001.08    82 - W-I/O
F3  VTAMSTRT  25.47.26  ISTINCVT  25.44.02  013.47    82 - W-I/O
F2  CICSICCF  25.47.22  DFHSIP    25.42.50  040.65    82 - W-I/O
Z1  STARTINT  25.47.03  JCLSCHED  25.43.43  080.71    83 - READY

          *** SUBTASKS ***
F1  IPW$$LS   82 - W-I/O
F3  VTAMRP    82 - W-I/O      ISTDCLU  82 - W-I/O      ISTINMLS 82 - W
F2  DFHLOADR  82 - W-I/O      DFHSKIP  82 - W-I/O      DTSCOPCM 82 - W
          DTSNIFY  82 - W-I/O      DTSCHIGH 82 - W-I/O      EDITTSXP 82 - W
Z1  FAQSMAIN  82 - W-I/O      FAQSAO   82 - W-I/O      DCMOITRV 82 - W
          DCMIDRIV 82 - W-I/O      FAQVMX   82 - W-I/O      PCSSRV   82 - W
          PCSLOG   82 - W-I/O      FAQXASUB 83 - READY      FAQSTSKG 82 - W
          FAQSTSKP 82 - W-I/O      SDFTASK  82 - W-I/O      JCLTASK  82 - W

CPU :   1.64%      PAGING  IN :      0/SEC      OUT :      0/SEC
REPLY -> Z1-020

ENTER FAQs COMMAND
PRTY J
PF03=RETURN                      LVL=01                      V131A94

```

Figure 46. FAQs/ASO Display of the Job Overview Report

- Selecting MAP GETVIS (G). The following is a sample panel of the display MAP GETVIS:

```

FAQMENM2.G          ** FAQS/ASO Online V4.0.2 **          ID=V131A94.SYB
====>
          ** FAQS/ASO -- STATIC Partition GETVIS MAP 31 bit Display **
                                     Redisplay interval

-----getvis----- -----status----- ----partition
  pt name      lo-addr  hi-addr    free   used   total  lo-addr
_ BG NO NAME   00740000  0077FFFF    0K     0K    256K  00600000
_ FB NO NAME   00614000  0067FFFF   420K    12K    432K  00600000
_ FA NO NAME   00614000  0067FFFF   420K    12K    432K  00600000
_ F9 NO NAME   00614000  0067FFFF   420K    12K    432K  00600000
_ F8 NO NAME   00614000  011FFFFFF  12136K   72K   12208K 00600000
_ F7 NO NAME   00614000  0067FFFF   420K    12K    432K  00600000
_ F6 NO NAME   00640000  0067FFFF    0K     0K    256K  00600000
_ F5 NO NAME   00614000  006FFFFFF   928K    16K    944K  00600000
_ F4 NO NAME   00900000  023FFFFFF    0K     0K   27648K 00600000
_ F3 VTAMSTRT 00620000  009FFFFFF  1168K   2800K   3968K 00600000
_ F2 CICSICCF 00900000  023FFFFFF  24644K  3000K  27644K 00600000
_ F1 POWSTART  006B9000  0078FFFF    616K   244K    860K  00600000

H=Getvis hole report  PF09=24 bit Display PF11=GVS
PF01=Help PF02=Redsply PF03=Retn PF04=Sys map PF05=Ptn map PF06=Dyn map

```

Figure 47. FAQS/ASO Display of the MAP GETVIS

- Selecting QSEEK (Q).

The following is a sample panel of the display DASD statistics report:

```

FROM- 12:48:45 10/27/94      FAQS DASD STATISTICS
          TOTAL      ORDERED  SAME TASK      MAXIMUM      QSEEK
  DEVICE  SEEK COUNT  SEEK COUNT  SEEK COUNT  QUEUE DEPTH  DEVICE ST
440 DOSRES    9,518      958        457         11          ACTIVE  Q
441 SYSWK2   24,647      56         0           4          ACTIVE  Q
442 SYSWK1    3,178      5          3           3          ACTIVE  Q
TOTALS      37,343     1,019      460

```

ENTER FAQS COMMAND
QSEEK
PF03=RETURN LVL=01 V131A94

Figure 48. FAQS/ASO Display of the DASD Statistic Report

- Selecting VOLUME (W). The following panel is a sample of the display volume id report:

```

CUU  VOLID  TYPE
280  *TAPE*  UA
281  *TAPE*  UA
440  DOSRES  3390
441  SYSWK2  3390
442  SYSWK1  3390
870  *TAPE*  UA

ENTER FAQS COMMAND
VOLUME
PF03=RETURN                                LVL=01          V131A94

```

Figure 49. FAQs/ASO Display of the Volume ID

- Selecting Display IBM or LEGENT Message (4).

The following is a sample panel of the Display IBM and LEGENT message with a search condition:

```

*** DCM SYSTEMS - FAQs/VSE MESSAGE DISPLAY ***

IST105I  nodename NODE NOW INACTIVE

Explanation:  The operator successfully deactivated the node
nodename.  In most cases, this is the result of a VARY INACT
command.  If nodename is a cross-domain resource manager (CDRM
in another domain, then deactivation could be the result of a
deactivation request from the domain of nodename.

System Action:  Processing continues.

Operator Response:  None.

Programmer Response:  None.

ENTER FAQS COMMAND
MSG IST105I
PF03=RETURN PF07=BACKWARD PF08=FORWARD  LVL=01          V131A94

```

Figure 50. FAQs/ASO Display of the Online Message of IBM or LEGENT

- Selecting Display DUMP DASD (8). The following is a sample panel of display DASD records from CKD or FBA devices:

```

FAQMENU8.0          ** FAQS/ASO Online V4.0.2 **          ID=V131A94.SYB
===>
                ** FAQS/ASO -- Dump DASD Display **

CUU VOLID  TYPE      ENTER ccc-hh-rr or rrr for FBA
440 DOSRES 3390      rec =                skip=        scan=
441 SYSWK2 3390      rec =                skip=        scan=
442 SYSWK1 3390      rec =                skip=        scan=

PF01=Help PF03=Return PF04=Refresh PF05=D C PF12=Exit

```

Figure 51. FAQS/ASO Dump DASD Display

6.2 Using FAQS/ASO AO

FAQS/ASO's AO features enable you to automate systems operations by using the following:

- REXX language, compiler, and editor
- GSFAQS
- FAQS/PCS
- Menus and data panels
- FAQS/ASO AO command

With FAQS/ASO, you can:

- Automate console messages
- Create operator commands
- Modify system commands
- Create REXX IMODs (Intelligent Modules) to control the system
- Create REXX IMODs and REXX EXECs to communicate between VSE and VM
- Define FAQS/ASO PF-keys
- Create console summary reports at EOJ or archive to the SYSOUT PDS
- Post global events for FAQS/ASO or FAQS/PCS
- Spool POWER members to CPR (CICS Print Report)
- Verify product levels and product maintenance levels installed by MSHP
- Order DASD I/O (QSEEK) for better system performance
- Use partition balancing for better performance (VSE/SP only)

6.2.1 REXX Overview

The REXX system includes the language, an editor, and a compiler. REXX is an extensive but simple structured language which you can use to program your own commands and responses to system messages.

The REXX editor is online and incorporates the compiler. When you save your file with the FILE command, it is automatically compiled and errors are displayed for your correction. This cuts down on testing time for REXX.

The compiler produces IMODs (Intelligent Modules) that may be executed via batch, SMSG triggers, console messages, AR (Attention Routine) commands, and FAQs/ASO online commands.

Implementing REXX as a compiler rather than an interpreter makes FAQs/ASO IMODs fast and efficient.

6.2.2 GSFAQS

The GSFAQS phase is used to initialize, modify, and terminate:

- Console spooling
- Sysout
- Message automation
- AR and SMSG hooks
- Console PF-keys
- Console timestamping
- QSEEK
- PBAL

With FAQs/ASO, you can define files that are executed by GSFAQS, GSFAQS then reads these files to initialize FAQs/ASO. At installation a startup file called FAQSASO is defined. Initially this file can be used to get FAQs/ASO up and running, and then you can create your own files containing the following information:

- Startup configuration
- Console PF-key settings
- Message management functions
- User-defined commands

For more information about GSFAQS see Chapter 7, “Automated Systems Operation Files” on page 67.

6.2.2.1 GSFAQS Console Spooling Facility

The GSFAQS console spooling facility provides the following:

- Automated system console support, including:
 - Full message management
 - Last command recall
 - PF-key support
 - Message timestamping
 - AR (Attention Routine) command support
 - CMS user message routing
- EOJ console reporting
- Hardcopy file printing and backup

Enhanced System Console Support:

The GSFAQS console spooling facility enhances the VSE display operator console by supporting:

- Message deletion
- Message highlighting
- Message masking
- Message reply
- message retention
- Message routing

- Message suppression
- Message unhold

Selected messages or partitions can be routed to individual FAQs/ASO online transactions using similar console selection criteria.

Program Function Keys:

The program function key support of the GSFAQS console spooling facility allows frequently used operator replies and commands to be assigned to program function keys on the system console. When a PF or PA key is entered instead of the ENTER key, the user assigned value is processed as if the entire message had been keyed in. A PF or PA key can be defined to recall previously entered commands into the console input area. The operator can then modify the text of the command or re-enter the recalled command. It allows a maximum of 60 characters of text to be assigned to each PF-key (PF1 - PF24) and PA key (PA1 - PA3) at console spooling initialization time.

EOJ Console Summary Report:

The EOJ console reporting includes an EOJ console summary report. The report is similar to LISTLOG but with several advantages. All console activity is timestamped for a chronological history of console reads and writes. AR (Attention Routine) messages that occur during the execution of a job are also included in the EOJ console summary report along with the normal partition console activity if AR logging is specified at console spooling initialization time.

At console spooling initialization, you can specify which partitions are eligible for console spooling and under what conditions the report is printed.

GSFAQS EOJ console summary report produces the following reports at the beginning of the next job:

- Job statistics by step report
- Phase load list summary report
- Library search sequence report
- HYPER-BUF for VSE close statistic report (If HYPER-BUF for VSE is installed)

EOJ reports are produced at the following two places:

- Printer to your list queue or printer
- Written to the SYS\$ARC PDS file

Note: You can use the FAQs/ASO GSFAQS startup definitions online panel in conjunction with the STARTUP command to specify where you want the report produced.

```

...+...1...+...2...+...3...+...4...+...5...+...6. <==MORE==> .+..LS 8....+...9....+...10....+...11....+..
// JOB EVENTSUM                               DATE 10/28/94,CLOCK 08/04/32
// EXEC GSACCNT,SIZE=(GSACCNT,100K)

1S55I LAST RETURN CODE WAS 0000
10/28/94 DCM SYSTEMS - FAQS/ASO CONSOLE SUMMARY REPORT V4.0.1 VSE/ESA CPUID=FF13047791210000 V131A94 PAGE 1

* ----- JOB STATISTICS BY STEP ----- *

PHASE      DURATION  CPU SECS.  SIO COUNT  STEP RC  GETVLS    USED    UNUSED    MAX BLK
GSACCNT    00.00.02   000.05     118        0000     1396K     60K     1336K     1336K

* -----FLEE/VSE PHASE LOAD LIST REPORT----- *

FETCH  PHASE                TIMES .....LAST MAINTENANCE.....LAST CATAL/CREATE.. .....PHASE DESCRIPTION.
TIME   NAME      LIBRARY  NAME  CATAL TYPE  DAY  DATE  TIME  DAY  DATE  TIME

*08.04.32 GSACCNT  LEGENT .FAQS
08.04.32 GSLOADGS LEGENT .FAQS

CORE-IMAGE LIBRARY LIBDEF SEARCH SEQUENCE
TEMP - *NONE*
PERM - PRD2.CONFIG      PRD1.BASE      PRD2.PROD      PRD2.DBASE      PRD2.COMM      PRD2.COMM2
      LEGENT.FAQ5

* ----- CONSOLE SUMMARY REPORT ----- *
08.04.33 BG 000 // JOB EVENTSUM                               10/28/94
08.04.33 DATE 10/28/94,CLOCK 08/04/32                       10/28/94
08.04.35 BG 000 EOJ EVENTSUM MAX.RETURN CODE=0000
08.04.35 DATE 10/28/94,CLOCK 08/04/35,DURATION 00/00/03

```

Figure 52. Sample Console Summary Report

Console spooling can be temporarily turned off or on for the duration of any job with two JCL commands. The OPTION CQON|CQOFF commands temporarily enable or disable the printing of EOJ the console summary report.

// OPTION CQON The EOJ console summary report to be printed at EOJ time.
// OPTION CQOFF To suppress the console summary report.

These two commands are read by job control and processed by the GSFAQS \$JOBCTLG phase. When CQON or CQOFF is specified on an OPTION statement, it must be the only parameter on the statement. Specify other OPTION parameters on a separate JCL statement.

OPTION CQON and CQOFF override the previous console spooling status of the partition for the duration of the associated job. The prior status automatically resets at end-of-job (/&).

Note: In VSE/ESA, OPTION CQON and CQOFF shouldn't be used in a dynamic partition because they will reset the status for the entire class, not just the partition.

Hardcopy File: The GSFAQSHC utility is a batch program that will print the IJSYSCN hardcopy file and back it up to a cumulative backup file for future analysis. The main advantages of the GSFAQSHC utility over the VSE PRINTLOG utility are as follows:

- GSFAQSHC can create a backup of all console activity for console backup and problem determination.

- It is possible to print the HCF disk and backup files in any one of different fashions. This includes printing the entire contents of the file or selectively printing the file by jobname, partition ID, time period, or by user-specified scan arguments, which can be generic. GSFAQSHC also supports a PRINT NEW function, similar to PRINTLOG, which prints just the console records that have been added to the file since the last time it was printed.
- It provides a cross-reference report to aid in the location of messages or job starts, job ends, job duration, and abnormal terminations.

Note: You can use the FAQUTIL utility to merge GSFAQSHC hardcopy backup files into a single output file for printing. FAQUTIL MERGE determines whether the input backup files are from tape or disk, and merges them accordingly.

6.2.2.2 DASD I/O Scheduling

The VSE supervisor schedules DASD I/O requests on a FIFO (First-In-First-Out) basis. If the requested disk is currently unavailable, the I/O request is queued to the logical end of the channel queue (CHANQ) for that disk.

GSFAQS provides two different methods of queuing I/O requests in the CHANQ to improve performance.

- Ordered by seek address (Ordered Seek Scheduling)
- Ordered by partition priority (Priority DASD Scheduling)

Note: For VSE/ESA users, Priority DASD scheduling is supported only when running under VSE/SP. VSE/ESA users should use the IBM PRTY IO command.

DASD Scheduling Statistics:

A statistical report detailing the I/O information collected by the DASD I/O scheduling feature of GSFAQS can be requested using the GSFAQS STATUS command or by specifying the QSEEK command through the FAQS/ASO online transaction. This report is also produced when I/O scheduling is disabled by GSFAQS.

GSFAQS accumulates seek information for every disk device eligible for ordered seeks and saves it in an internal device table. The GSFAQS program interprets this data and prints the statistical report on SYSLST. The statistical fields in the device table can optionally be reset to zeros by specifying the RESET parameter of the STATUS command.

The following is a description of the statistical items displayed in the statistical report:

- Device - the three character device address
- Volser - volume serial number
- Number of seeks - the total number of seeks issued for each disk device
- Number of ordered seeks - the number of seeks that were actually ordered by GSFAQS
- Maximum queue depth - the maximum number of entries in the CHANQ at any one time for each device
- Status - the device status active or inactive

The sample display panel for DASD scheduling statistics:

FROM- 12:48:45 10/27/94		FAQS DASD STATISTICS					
DEVICE	TOTAL SEEK COUNT	ORDERED SEEK COUNT	SAME TASK SEEK COUNT	MAXIMUM QUEUE DEPTH	QSEEK DEVICE STATUS		
440 DOSRES	9,518	958	457	11	ACTIVE	QSMTON	
441 SYSWK2	24,647	56	0	4	ACTIVE	QSMTON	
442 SYSWK1	3,178	5	3	3	ACTIVE	QSMTON	
TOTALS	37,343	1,019	460				
ENTER FAQS COMMAND							
QSEEK							
PF03=RETURN			LVL=01	V131A94			

Figure 53. Sample Display Panel for QSEEK

6.2.2.3 Partition Balancing

Note: Partition balancing is supported only when running under VSE/SP.

GSFAQS distributes the performance of batch partitions by dynamically changing execution priorities of selected partitions in an attempt to equalize system workload. GSFAQS improves system performance in a multiprogramming environment by more readily adapting task dispatching to the ever-changing CPU and I/O usage requirements of a group of partitions. The GSFAQS partition balancer offers a CPU balancing algorithm and allows multiple sets of balanced partitions to be defined.

GSFAQS offers four balancing algorithms as follows:

- Equal time slicing
- Weighted-priority time slicing
- Dynamic dispatching by I/O activity
- Dynamic balancing by CPU utilization

6.2.3 FAQS/ASO AO Command

You can use the AO command either to access the FAQS/ASO AO menu system or to issue an AR command.

The AO command is used to accomplish the following:

- List the defined command, action, and PF-key files
- List the commands, actions, and PF-key definitions in those files
- Load a command, action, or PF-key file
- Shut down the FAQS/ASO REXX processor task
- Find out which command, action, and PF-key files are current
- Receive a list of AO options, parameters, and variables
- Cancel an executing IMOD or a previous AO CANCEL command

6.2.3.1 AO Command

The following table is a summary of the AO command options:

<i>Table 5. Sample AO Command Option Table</i>	
Option	Description
CANCEL imodname	Cancels a specific executing IMOD
CANCEL	Cancels a previous AO CANCEL command
CLEAR CMD	Clears current command file
CLEAR MSG	Clears current message file
CLEAR ACTION	Clears current action file
LIST CMD	Lists the names of all the available user-defined command files
LIST CMD *	Lists the names of all the commands in the current user-defined command file
LIST CMD filename	Lists the names of all the commands in the specified user-defined command file
LIST MSG	Lists the names of all the available action files
LIST MSG *	Lists all the action definitions in the current action file
LIST PFK	Lists the names of all the available PFKEY files
LIST PFK *	Lists all the PF-key definitions in the current PFKEY file
LOAD CMD *	Reloads the current user-defined command file
LOAD CMD filename	Loads the specified user-defined command file
LOAD MSG *	Reloads the current action file
LOAD MSG filename	Loads the specified action file
LOAD PFK *	Reloads the current PFKEY file
LOAD PFK filename	Loads the specified PFKEY file
LOAD ACTION *	Reloads the current console MSG file
LOAD ACTION filename	Loads a new console MSG file
HELP	Lists the AO command options, along with a brief description of what they do
SHUTDOWN	Terminates the FAQs/ASO AO session
STATUS	Lists the names of the current user-defined command file, action file, and PFKEY file

The following is a sample of using the *AO LIST CMD* command from the VSE console display:

```
01*F2-075 GJJ206I JOB SCHEDULER ACTIVE
02*Z1-020 GJJ206I JOB SCHEDULER ACTIVE
10 Z1 069 OP AO LIST CMD XCI SYA/A001
11 AO LIST CMD
12 Z1 055 -----
13 Z1 055 Friday - 11 Nov 1994 - 13:17:59
14 Z1 055 COMMAND - current file: MYCMD
15 Z1 055 FILE      Commands  Update time stamp      Load time stamp
16 Z1 055 -----
17 Z1 055 FAQSASO      51  10/12/94 15.13.22      10/18/94 09.36.48
18 Z1 055 MYCMD       51  10/19/94 14.48.03      11/02/94 08.49.57
19 Z1 055 -----
20

ENTER FAQS COMMAND
OP AO LIST CMD
```

Figure 54. Sample Console Display for *AO LIST CMD* Command

Note: On the FAQS/ASO display console you must use **OP** for operator mode to issue commands to the VSE system.

6.3 Security and User Configuration

The FAQS/ASO online transaction is controlled by user profiles and a configuration record. The user profiles are stored in the SYS\$VIO PDS file. This file can be shared across multiple VSE systems without the overhead of VSAM.

User profiles allow for automatic signon if desired, which avoids confusing the end user with more user profiles and procedures to remember. The configuration record allows system tailoring of the FAQS/ASO transaction and system-wide message highlighting, suppression, and routing.

The FAQS/ASO security provides functions to authorize or limit access to the FAQS system by checking individual security definitions. They have a default profile that allow everyone to signon that's called " **PROFILE** "

Recommendation: When you set up the security feature, don't forget to set up at least one **ADMIN** user for system administration. The ADMIN user has the authority to define, alter, and tailor all FAQS user profiles.

You can use the GSS for VSE utility *GSPDSU*, to back up and restore the SYS\$VIO PDS file with the commands *BACKUP* and *RESTORE*.

To set up the FAQS/ASO security feature, do the following:

- Step 1. Connect to FAQS/ASO

You have to connect to the FAQS system via the VTAM, CICS or VM/CMS interface. When you enter FAQS, you will see this panel:

```

FAQMENU0.3          ** FAQS/ASO Online V4.0.2 **          ID=V131A94.SYA
====>

                                *** DCM Main Menu ***

1  HELP                Display help information
2  FAQS/ASO            FAQS/ASO Online menu driver
3  TERMINATE           Terminate FAQS session
4  AO                  Automated System Operation Menu Panels
5  FAQS/PCS            FAQS Production Control System
C  CPR                 CICS PRINT FACILITY Menu Panels
N  COPYRIGHT           Copyright Notice ....

                                *** Copyright (c) LEGENT Software, Inc. 1992-1994 ***

PF01=Help PF03=Return PF12=Exit

```

Figure 55. FAQS Main Menu Panel

- Connect to the FAQS/ASO system by selecting number **2**

```

FAQMENU0.3          ** FAQS/ASO Online V4.0.2 **          ID=V131A94.SYA
====> 2

                                *** DCM Main Menu ***

1  HELP                Display help information
2  FAQS/ASO            FAQS/ASO Online menu driver
3  TERMINATE           Terminate FAQS session
4  AO                  Automated System Operation Menu Panels
5  FAQS/PCS            FAQS Production Control System
C  CPR                 CICS PRINT FACILITY Menu Panels
N  COPYRIGHT           Copyright Notice ....

                                *** Copyright (c) LEGENT Software, Inc. 1992-1994 ***

PF01=Help PF03=Return PF12=Exit

```

Figure 56. FAQS Main Menu Panel

- Select the feature number **6**

```

FAQMENU2.2          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
===> 6
                    ** FAQs/ASO -- Online Menu **

C - Current Console Display      1 - HELP
L - Display Console Log          3 - Return
P - Power                        4 - Display IBM or Goal message
J - PRTY J                       5 - Display Current Console
G - MAP GETVIS                   6 - Display/Alter Security
M - Extended MAP/DEBUG Menu      7 - DISPLAY Storage
O - MSGOP                        8 - DUMP DASD
K - PFKEY Definition
R - POWER PFKEY Definition
V - LVTOC
I - LISTIO
B - LIBLIST
Z - LSERV
Q - QSEEK
F - FTL MON
T - FTL RDL
W - VOLUME
D - DEBUG

PF01=Help PF03=Return PF05=D C PF12=Exit

```

Figure 57. FAQs/ASO Online Panel

- Step 2. Enable the Security Feature

With security access limited to security administrators, an administrator has an almost unlimited ability to allow or limit user access to:

- Displays
- Partition information
- Job statistics
- Commands

However, you must turn on security before you can take full advantage of FAQs/ASO's security feature.

After you pass the previous task, the system will show the FAQs/ASO security panel with the default user as **'PROFILE'**

- Put an **X** in the CONFIG field and press enter

```

                                DCM SYSTEMS - FAQs/ASO SECURITY
CONFIG   ( X )                   1 DEFINED FAQs USERS       START SCREEN(1)

   USER ID   MODEL ID   USER ID   MODEL ID
  _ PROFILE   _____  - _____  _____
  - _____  _____  - _____  _____
  - _____  _____  - _____  _____

A=ADD L=DELETE M=MODEL X=EDIT
PF01=HELP PF03=END           PF07=BWD PF08=FWD

```

Figure 58. FAQs/ASO Security Panel

- Put an **X** in the USE SCTY ENTRY NOT ONLY PROFILE field.

```

DCM SYSTEMS - FAQs/ASO SECURITY                                CONFIG
USE SCTY ENTRY NOT ONLY PROFILE      ( X )    POWER QUEUE  COLOR  ATTR
CLEAR KEY IS CLEAR NOT QUIT          (   )    ACTIVE      ( YELLOW ) ( R )
DISPLAY EXTENDED MESSAGE              ( X )    FREE        ( WHITE  ) ( _ )
ALLOW DUMP DASD FUNCTION              ( X )    HOLD        ( TURQ   ) ( _ )
ALLOW ALTER DASD FUNCTION             ( X )
UPPER CASE ALL DISPLAYS               (   )    MISC.       COLOR  ATTR
EXTENDED DUMP ON SUBTASK ABEND        (   )    HEADERS     ( RED    ) ( R )
USE XPCC ON POWER COMMANDS            ( X )    D S         ( GREEN  ) ( R )
SUPPORT IBM IESMSGs FILE              ( X )
CLOSE FAQMSG/IESMSGs VSAM FILES       ( X )
DO NOT SUPPORT APL TEXT CHARACTERS    (   )

PF01=HELP PF03=END PF05=UPD PF07=BWD PF08=FWD

```

Figure 59. FAQs/ASO Security Configuration Panel (1)

In this panel you can set up other FAQs/ASO security features by placing an X in selected fields. You can also set up color message displays by advancing to the second part of the panel using **PF8** and then updating the following panel:

```

DCM SYSTEMS - FAQs/ASO SECURITY
ABFFFFFFFFFFFF          :--DYNAMIC CLASSES
MESSAGE  TYP CLR ATR ID  SCAN  PID  RG123456789AB  CDEGHIJKLMNOPQRSTU
-----  --- --- --- --- --- ---  -----  -----
          C  RED  _  _  _  _  F3  _____  _____
          C  BLU  _  _  _  _  F2  _____  _____
          C  YEL  _  _  _  _  F1  _____  _____
          C  WHI  _  _  _  _  AR  _____  _____
          C  TUR  _  _  _  _  Z1  _____  _____
JOB      R  _  _  05  01  01  _  _____  _____
EOJ      R  _  _  05  01  01  _  _____  _____
          -  -  -  -  -  -  -  _____  _____
          -  -  -  -  -  -  -  _____  _____
          -  -  -  -  -  -  -  _____  _____

TYP = (H=HI,C=COLOR,S=SUPP,R=ROUTE)    CLR = (RED,BLU,YEL,WHI,PIN,TUR
ATR = (B=BLINK,R=REVERSE,U=UNDERSCORE)  ID = (1-99) ROUTE-ID

PF01=HELP PF03=END PF05=UPD PF07=BWD PF08=FWD

```

Figure 60. FAQs/ASO Security Configuration Panel (2)

Note: For more information, see *FAQS/ASO for VSE V4.0 Online User's Guide, Chapter 4. Security and User Configuration.*

- Press **PF5** to update the file
- Step 3. Create a User Profile
 - User profiles can be created online using the security display. There are different options with which to create a new user profile:

compact.

- **A** This option allows you to add a new user ID
- **M** Place this next to a user ID you want to model
- **X** Place this next to a user ID you want to edit

To create a user profile, move the cursor to the first USER ID input field on the panel:

- type **A**, and press **ENTER**.

```
DCM SYSTEMS - FAQs/ASO SECURITY

CONFIG ( )          1 DEFINED FAQs USERS          START SCREEN(1)

  USER ID  MODEL ID  USER ID  MODEL ID
A PROFILE  _____  - _____  _____
- _____  _____  - _____  _____
- _____  _____  - _____  _____

A=ADD L=DELETE M=MODEL X=EDIT
PF01=HELP PF03=END          PF07=BWD PF08=FWD
```

Figure 61. FAQs/ASO Security Panel

The system will display the FAQs/ASO security add user panel as follows:

```
DCM SYSTEMS - FAQs/ASO SECURITY          ADD

USER-ID      _____  PASSWORD      UNUSED      ADMIN ( X )
AUTO SINON   YES ( ) NO ( ) ONLY ( )

INTERFACES   ALL ( ) CICS ( ) ICCF ( ) CMS ( ) OTHER ( )

VM MACHINE   ALL INCLUDE EXCLUDE USER-ID USER-ID USER-ID USER-ID
RESTRICTIONS ( ) ( ) ( ) _____

CICS TERMINAL ALL INCLUDE EXCLUDE TERM TERM TERM TERM TERM TERM
RESTRICTIONS ( ) ( ) ( ) _____

RETURN PROGRAM _____ ALLOW RETURN TO ALTERNATE PROGRAM ON EXIT FOR CICS

SINON COMMAND D C ENTER FAQs INITIAL ENTRY COMMAND
REDISPLAY TIME 000 ENTER DEFAULT TIMED RE-DISPLAY INTERVAL (SECONDS)
REDISPLAY MIN 000 ENTER MINIMUM TIMED RE-DISPLAY INTERVAL (SECONDS)
REDISPLAY IDLE 000 ENTER MAXIMUM TIMED RE-DISPLAY IDLE TIME (MINUTES)

FAQS SHU,Y OR N ( ) ALLOW USER TO ISSUE IUCV/VMCF SHUTDOWN COMMANDS

PF01=HELP PF03=END PF05=UPD PF07=BWD PF08=FWD
```

Figure 62. FAQs/ASO Security Add User Panel

It's important to point out that this security definition will be an **administrator** definition. Notice the **X** in the ADMIN field. A FAQs/ASO security administrator can create and tailor user definitions for all FAQs/ASO users.

Only an administrator can access security using the **SCTY** command. As a result, if you want to return to the security panel, the definition you create must be authorized as an administrator definition.

By default, the PROFILE user definition is authorized as an administrator. Now that you've created your own administrator security definition, you'll want to edit the PROFILE user definition and remove its administrator authorization. Once you've disabled the PROFILE administrator authorization, access to the SCTY command and selected FAQs/ASO features will be limited to security administrators.

The following is a sample of a VTAM user definition:

```

                                DCM SYSTEMS - FAQs/ASO SECURITY                                EDIT
USER-ID          D08201          PASSWORD          UNUSED          ADMIN ( )
AUTO SINON      YES ( X ) NO    ( ) ONLY ( )

INTERFACES      ALL ( ) CICS ( ) ICCF ( ) CMS ( ) OTHER ( X )

VM MACHINE      ALL INCLUDE EXCLUDE USER-ID USER-ID USER-ID USER-ID
RESTRICTIONS    ( ) ( ) ( ) _____

CICS TERMINAL   ALL INCLUDE EXCLUDE TERM TERM TERM TERM TERM TERM
RESTRICTIONS    ( ) ( ) ( ) _____

RETURN PROGRAM _____ ALLOW RETURN TO ALTERNATE PROGRAM ON EXIT FOR CICS

SINON COMMAND  MENU      ENTER FAQs INITIAL ENTRY COMMAND
REDISPLAY TIME 002      ENTER DEFAULT TIMED RE-DISPLAY INTERVAL (SECONDS)
REDISPLAY MIN  002      ENTER MINIMUM TIMED RE-DISPLAY INTERVAL (SECONDS)
REDISPLAY IDLE 005      ENTER MAXIMUM TIMED RE-DISPLAY IDLE TIME (MINUTES)

FAQS SHU,Y OR N ( X ) ALLOW USER TO ISSUE IUCV/VMCF SHUTDOWN COMMANDS

PF01=HELP PF03=END PF05=UPD PF07=BWD PF08=FWD

```

Figure 63. Sample VTAM User Definition

The following is a sample of a CICS user definition:

```
DCM SYSTEMS - FAQs/ASO SECURITY                                EDIT
USER-ID      SYA      PASSWORD(          ) SET      ADMIN (    )
AUTO SINON   YES ( X ) NO   (    ) ONLY (    )
INTERFACES   ALL (    ) CICS ( X ) ICCF (    ) CMS (    ) OTHER (    )
VM MACHINE   ALL  INCLUDE EXCLUDE  USER-ID  USER-ID  USER-ID  USER-ID
RESTRICTIONS (    ) (    ) (    )  _____  _____  _____  _____
CICS TERMINAL ALL  INCLUDE EXCLUDE   TERM  TERM  TERM  TERM  TERM  TERM
RESTRICTIONS (    ) (    ) (    )   _____  _____  _____  _____
RETURN PROGRAM _____ ALLOW RETURN TO ALTERNATE PROGRAM ON EXIT FOR CICS
SINON COMMAND MENU   ENTER FAQs INITIAL ENTRY COMMAND
REDISPLAY TIME 002   ENTER DEFAULT TIMED RE-DISPLAY INTERVAL (SECONDS)
REDISPLAY MIN  002   ENTER MINIMUM TIMED RE-DISPLAY INTERVAL (SECONDS)
REDISPLAY IDLE 005   ENTER MAXIMUM TIMED RE-DISPLAY IDLE TIME (MINUTES)
FAQS SHU,Y OR N ( X ) ALLOW USER TO ISSUE IUCV/VMCF SHUTDOWN COMMANDS
PF01=HELP PF03=END PF05=UPD PF07=BWD PF08=FWD
```

Figure 64. Sample CICS User Definition

The following is a sample of a VM/CMS user definition.

```

                                DCM SYSTEMS - FAQs/ASO SECURITY                                EDIT
USER-ID      PIPPO1      PASSWORD      UNUSED      ADMIN ( )
AUTO SIGNON  YES ( X ) NO ( ) ONLY ( )

INTERFACES   ALL ( ) CICS ( ) ICCF ( ) CMS ( X ) OTHER ( )

VM MACHINE   ALL INCLUDE EXCLUDE USER-ID USER-ID USER-ID USER-ID
RESTRICTIONS ( ) ( ) ( ) _____

CICS TERMINAL ALL INCLUDE EXCLUDE TERM TERM TERM TERM TERM TERM
RESTRICTIONS ( ) ( ) ( ) _____

RETURN PROGRAM _____ ALLOW RETURN TO ALTERNATE PROGRAM ON EXIT FOR CICS

SIGNON COMMAND MENU ENTER FAQs INITIAL ENTRY COMMAND
REDISPLAY TIME 002 ENTER DEFAULT TIMED RE-DISPLAY INTERVAL (SECONDS)
REDISPLAY MIN 002 ENTER MINIMUM TIMED RE-DISPLAY INTERVAL (SECONDS)
REDISPLAY IDLE 005 ENTER MAXIMUM TIMED RE-DISPLAY IDLE TIME (MINUTES)

FAQS SHU,Y OR N ( X ) ALLOW USER TO ISSUE IUCV/VMCF SHUTDOWN COMMANDS

PF01=HELP PF03=END PF05=UPD PF07=BWD PF08=FWD

```

Figure 65. Sample VM/CMS User Definition

Parameter Description

The following describes FAQs/ASO security update user panel parameters:

- USER-ID** Enter a unique user ID that must be supplied to FAQs via the SIGNON screen or through the AUTO SIGNON. Multiple users can use the same user ID. For the CMS interfaces the CMS user ID is checked for AUTO SIGNON. For CICS the three-character op ID is used. ICCF uses the four-character logon ID. If the user ID of PROFILE is specified, users may hit enter on the SIGNON screen and they will be signed on with the default user ID *PROFILE*.
- ADMIN** Placing an 'X' in the ADMIN field allows this user to enter into and use the FAQs online security.
- AUTO SIGNON** Place an 'X' under the desired heading. Where:
 - YES** allows automatic SIGNON on a match
 - NO** designates that user IDs may not be used for automatic SIGNON.
 - ONLY** allows automatic SIGNON on match but password may not be keyed in on the SIGNON screen.

A match occurs when the three-character CICS operator sign-on ID, eight-character CMS user ID, VTAM terminal identifier, or the four-character ICCF logon ID matches the user ID.

INTERFACES	Place an 'X' under ALL to allow all interfaces to be used for this USER-ID or selectively place 'X's under desired interfaces.														
VM MACHINE	Place an 'X' under ALL to allow access to all VM MACHINES (ignore if not under VM). To restrict USER-ID place 'X' under INCLUDE or EXCLUDE and specify machine names or masks (generics are supported).														
RETURN PROGRAM	This field is for CICS to allow FAQs to do a RETURN TRANS-ID on exit.														
SIGNON COMMAND	Specify up to eight characters to be used as the initial command displayed after SIGNON. Special signon commands of OPS, OPW, and OPJ place the user in D S split screen or D S window in timed redisplay and OPMODE respectively.														
REDISPLAY TIME	Specify from 0 to 255 for the redisplay time to be used on an 'OP' command. Zero means the 'OP' command will not go into timed redisplay by default.														
REDISPLAY MIN	Specify from 0 to 255 for the minimum redisplay time to be used. Zero disallows the use of timed redisplay.														
REDISPLAY IDLE	Specify from 0 to 255 for the number of minutes that FAQs will allow timed redisplay to be idle (that is, user not hitting ENTER or a PF-key). Zero allows timed redisplay to go on indefinitely. Note: User must sign on to implement change to timed redisplay idle.														
FAQS SHU,Y OR N	Place an X in this field to allow the user to issue the FAQs SHU command. This command allows the user to terminate FAQSVDCF, FAQSIUCV or FAQSVTAM.														
GENERICS	The online security of FAQs supports generics for VM MACHINE IDs. Where the following supplied search argument formats are supported: <table border="0" style="margin-left: 20px;"> <tr> <td>AAAAAAA</td> <td>Full name requiring exact match.</td> </tr> <tr> <td>*ABC</td> <td>Any leading characters ending with ABC.</td> </tr> <tr> <td>ABC*</td> <td>ABC followed by any ending characters.</td> </tr> <tr> <td>AB*CD</td> <td>AB followed by any string followed by CD.</td> </tr> <tr> <td>+AAAAAAA</td> <td>Plus sign matches any character.</td> </tr> <tr> <td>=AAAAAAA</td> <td>Equal sign matches numeric character.</td> </tr> <tr> <td><AAAAAAA</td> <td>Less than sign matches alpha character.</td> </tr> </table>	AAAAAAA	Full name requiring exact match.	*ABC	Any leading characters ending with ABC.	ABC*	ABC followed by any ending characters.	AB*CD	AB followed by any string followed by CD.	+AAAAAAA	Plus sign matches any character.	=AAAAAAA	Equal sign matches numeric character.	<AAAAAAA	Less than sign matches alpha character.
AAAAAAA	Full name requiring exact match.														
*ABC	Any leading characters ending with ABC.														
ABC*	ABC followed by any ending characters.														
AB*CD	AB followed by any string followed by CD.														
+AAAAAAA	Plus sign matches any character.														
=AAAAAAA	Equal sign matches numeric character.														
<AAAAAAA	Less than sign matches alpha character.														

– Press **PF5** for update/save.

The system will display the following screen:

6.4.1.2 Command Format

The following are sample command formats to send a message to a CMS user from a VSE machine:

CP MSG USERID message

CP SMSG USERID message

Note: The VM virtual machine must be set up to receive SMSG commands

CP WNG USERID message

Note: The VSE virtual machine must have the correct CP command classes to use the WNG command

MSGNOH USERID message

Note: The VSE virtual machine must have the correct CP command classes to use the MSGNOH command

6.4.2 Running a Job on VM from VSE

6.4.2.1 Prerequisites

To run a job on a VM machine, the VSE machine must:

- Be running under VM
- Be running the FAQSAO task
- Have AO enable

The VM machine must be set up to accept SMSG commands.

6.4.2.2 Command Format

The following is a sample command format to run a job on a VM machine from VSE:

- **CP SMSG** *machine exec args*

Parameter description:

- *machine* is the name of the VM virtual machine
- *exec* is the name of job or REXX EXEC you want to run on VM.
- *args* are any arguments you want to send to the EXEC or job.

6.4.3 Running a Job on Another VSE Machine

6.4.3.1 Prerequisites

To run a job on another virtual VSE machine, the VSE machine must:

- Be running under VM
- Be running the FAQSAO task
- Have AO enable

The VM machine must be set up to accept SMSG commands.

6.4.3.2 Command Format

The following is a sample command format to run a job on another VSE machine, real or virtual:

- **CP SMSG** *machine ASO imod args*

Parameter description:

- *machine* is the name of the receiving machine, real or virtual.
- *ASO* specifies that this is a command for FAQs/ASO on the receiving machine.
- *imod* is the name of the user-defined IMOD that runs on the receiving machine.
- *args* are any arguments you want to send to the IMOD on the receiving machine.

For example, coding the following line executes the TEST command on a machine name VSEPS01:

```
CP SMSG VSEPS01 ASO TEST
```

6.4.4 Performing a Function on VSE from VM

6.4.4.1 Prerequisites

To perform functions on a VSE machine from VM, the VSE machine must:

- Be running under VM
- Be running the FAQSAO task
- Have AO enable

6.4.4.2 ASO EXEC

This is a REXX EXEC file provided with FAQs/ASO for VSE. ASO EXEC concatenates VM data and sends messages to your VSE machine to perform the functions you want.

6.4.4.3 ASO EXEC Command Format

The following is a sample command format for invoking the ASO EXEC:

```
ASO machine imod args
```

Parameter description:

- *machine* is the name of the VSE machine, real or virtual.
- *imod* is the name of the user-defined IMOD you select from the IMODs provided with ASO EXEC or your own user-defined IMOD.
- *args* are any arguments you want to send to the IMOD on the VSE machine.

For example, using the following command, the ASO EXEC is invoked, the \$GETVIS IMOD is executed on the VSEPS01 machine, and the status of the background partition GETVIS area is displayed.

```
ASO VSEPS01 $GETVIS BG
```

Entering a particular partition ID here as argument generates a display of the status of the GETVIS area for that particular partition. If you do not enter a partition ID in this example, the status of the GETVIS areas of all the partitions will be displayed.

Chapter 7. Automated Systems Operation Files

This chapter gives more detail about the FAQS automated systems operation files.

It covers the following topics:

- The GSFAQS startup file
- The command file
- The message definition file
- The console PF-key file

7.1 The GSFAQS Startup File

GSFAQS is the startup program for FAQS/ASO for VSE and FAQS/PCS for VSE that reads the profile file and initializes the FAQS system.

From the SYS\$VIO PDS, the GSFAQS STARTUP file pulls in the command file, the message definition file, and the console PF-key file.

Note: The default name for all these files is **FAQSASO**

You can define FAQS/ASO parameters by using:

- FAQS/ASO commands (initialized by a FAQS/ASO job or entered on the system console)
- The FAQS/ASO STARTUP command
- FAQS/ASO panels

7.1.1 The FAQS/ASO STARTUP Command

The following sample jobstream initializes GSFAQS using a STARTUP file defined in FAQS/ASO:

```
/*
* -----*
* INITIALIZE GSFAQS FOR FAQS/ASO      *
* -----*
// EXEC GSFAQS,SIZE=256K
STARTUP FAQSASO                       <----- Default FAQS/ASO profile
/*
```

Figure 68. Sample of the GSFAQS Initialization Jobstream

Note: This sample jobstream is part of the FAQS initialization jobstream. You can change the default profile name **FAQSASO** if you have already set up your own profile. GSFAQS requires a LIBDEF search for the GSS and ASO libraries, and it also requires a DLBL and an EXTENT statement for the SYS\$VIO. These statements should be defined in the system standard labels.

7.1.2 FAQs/ASO Startup Definition Panels

The FAQs/ASO Startup Definition panels enable you to initialize selected components of GSFAQS and to update FAQs/ASO. The fields on the FAQs/ASO panels correspond to the GSFAQS commands. These fields are initialized when a GSFAQS job is run.

FAQS/ASO online enables you to:

- Change a partition's eligibility for console logging
- Add or drop partitions from balancing and to alter the balancing intervals
- Add or drop disk devices from DASD channel scheduling
- View the current status of GSFAQS components

7.1.2.1 Defining GSFAQS Setup Procedure

You have to connect to the FAQs system via the VTAM, CICS or VM/CMS interface.

When you connect with FAQs, you will receive this panel:

- Enter a **4**

```
FAQMENU0.3          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
===> 4

                      *** DCM Main Menu ***

  1  HELP              Display help information
  2  FAQs/ASO         FAQs/ASO Online menu driver
  3  TERMINATE        Terminate FAQs session
  4  AO               Automated System Operation Menu Panels
  5  FAQs/PCS         FAQs Production Control System
  C  CPR              CICS PRINT FACILITY Menu Panels
  N  COPYRIGHT        Copyright Notice ....

                      *** Copyright (c) LEGENT Software, Inc. 1992-1994 ***

PF01=Help PF03=Return PF12=Exit
```

Figure 69. FAQs Main Menu Panel

- Now enter an **I**

```
FAOMENU0.4          ** FAQS/ASO Online V4.0.2 **          ID=V131A94.SYA
====> I
                    *** FAQS/ASO -- Main Menu ***
I      Initialization and Configuration

R      REXX          - REXX IMOD member/directory Maintenance
D      LOCK         - Online Lock file display
S      SYSOUT       - Sysout member/directory Maintenance
L      GSFAQSHC     - Online Job Generation for Hardcopy File Maintenance

                    GSS Utilities
V      MSHP         - Online MSHP History Display
U      GSPDSU       - Online Job Generation for Partitioned Data Sets
A      PDS          - Display Partitioned Data Set Statistics

PF01=Help PF03=Return PF12=Exit
```

Figure 70. FAQS/ASO Main Menu Panel

- Enter a **G**

```
FAOMENUI.I          ** FAQS/ASO Online V4.0.2 **          ID=V131A94.SYA
====> G
                    ** FAQS/ASO -- Initialization and Configuration

G      GSFAQS       Startup Definitions
P      Console PFKEY Definitions
M      Message Definitions
C      Command Definitions

R      REXX IMOD Initialization and Tailoring
E      Event Definitions
O      FAQS Online Command Definition and Maintenance
A      CICS Auto Print Initialization
B      FAQS/CALL Definition and Maintenance

Z      Product Code Maintenance

PF01=Help PF03=Return PF12=Exit
```

Figure 71. FAQS/ASO Initialization and Configuration Panel

- Press **PF5** to add a new user profile or put **C** in front of the default profile **FAQSASO** to copy from this file

```

FAOMENUG.G          ** FAQS/ASO Online V4.0.2 **          ID=V131A94.SYA
====>
  ** FAQS/ASO -- GSFAQS Startup File Directory List **    Key ==> *

  STARTUP FILE      RECORDS  UPDATE TIMESTAMP    LOAD TIMESTAMP
_ FAQSASO           13      10/12/94 15.13.25   10/18/94 09.36.46

X=Edit L=Delete R=Rename C=Copy

PF1=Help PF3=Return PF4=Refresh PF5=Add

```

Figure 72. FAQS/ASO GSFAQS Startup File Directory List Panel

The system will show the FAQS/ASO - Online GSFAQS Startup Definition panel, which is the first data entry panel used for defining GSFAQS members in VSE/ESA.

```

FAOMENUG.F          ** FAQS/ASO Online V4.0.2 **          ID=V131A94.SYA
====>
  ** FAQS/ASO -- Online GSFAQS Startup Definition **    FILE ==> _____
Enable AR Hook      ( X )      Set hold on (K S,DEL=Y) ( X )
Enable SMSG Hook    ( X )      Set hold off (K S,DEL=N) ( _ )
Allow SMSG OP commands ( X )    Automation buffers (0-9) ( 2 )
Enable Console Management ( X )  Auto pause on abend ( _ )
HARDCOPY File Timestamps ( X )

                                Edit Dir
Pf-key file ==> FAQSASO <=== ( _ )( _ )
Message file ==> FAQSASO <=== ( _ )( _ )
Command file ==> FAQSASO <=== ( _ )( _ )

Eoj Console Summary BG F1 F2 F3 F4 F5 F6 F7 F8 F9 FA FB AR
                   X _ A L _ _ _ _ _ _ _ _ X
                   C D E G H I J K L M N O P Q R S T U V W X Y Z
                   _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Place (X) all jobs (L) option log (A) for abend jobs
Sysout Archival    BG F1 F2 F3 F4 F5 F6 F7 F8 F9 FA FB AR
                   _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
                   C D E G H I J K L M N O P Q R S T U V W X Y Z
                   _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Place (X) all jobs (L) option log (A) for abend jobs

PF1=Field Help PF3=Return PF5=Update PF8=Forward

```

Figure 73. FAQS/ASO Online GSFAQS Startup Definition Panel (1)

Input field parameters description

FILE ==> < = = = Displays the startup member that matches the filename between the arrows.

Enable AR Hook	<p>Initializes the FAQs/ASO Attention Routine hook.</p> <ul style="list-style-type: none"> • Enables you to run REXX IMODs from the console • Provides support for multiple commands defined to PF-keys • Provides line-end character support • Enables you to define shorthand commands
Enable SMSG Hook	<p>Initializes the FAQs/ASO SMSG hook which intercepts the special messages (SMSG) from VM to the VSE machine in order to execute a REXX IMOD.</p>
Allow SMSG OP commands	<p>Allows the FAQs/ASO SMSG hook to execute AR commands and replies via SMSG. The SMSG hook must be enabled for this field to be meaningful.</p>
Enable Console Management	<p>Initializes the FAQs/ASO console management feature (CLOG) which provides:</p> <ul style="list-style-type: none"> • Enhanced system console support • EOJ console reports • Sysout archival
Hardcopy File Timestamps	<p>Activates timestamping of console messages</p>
Set hold on (K S,DEL=Y)	<p>This field allows you to control the console <i>K S</i> command; the VSE/ESA default is <i>K S,DEL=N</i>.</p>
Set hold off (K S,DEL=N)	<p>This field allows you to control the console <i>K S</i> command, and the default of VSE/ESA is <i>K S,DEL=N</i>.</p>
Automation buffers (0-9)	<p>This field allows you to specify 0-9 automation buffers. These buffers are allocated from PFIxed system GETVIS and are 4K in length. A buffer is divided into 256-byte segments and is shared by ASO for automation when a page fault is not acceptable. The default is 2.</p> <p>Functions that use these buffers are:</p> <ul style="list-style-type: none"> • Message actions that reply, execute commands, or run REXX IMODs • PRTY REPLY • SMSG support to run an IMOD • OPerator command
Auto pause on abend	<p>Initializes automatic job pause for jobs that abend.</p>
PF-key file	<p>Initializes the specified FAQs/ASO PF-key file that contains console PF-key startup definitions. The Edit and Dir fields allow you to edit a</p>

specific PF-key file or view a PFKEY Directory List. Enter *X* in either field.

Message file

Initializes the specified FAQs/ASO message file that contains message-management definitions. The Edit and Dir fields allow you to edit a specific action file or view an Action File Directory List. Enter *X* in either field.

Command file

Initializes the specified FAQs/ASO command file that contains user-defined commands or redefined system commands. The Edit or Dir fields allow you to edit a specific command file or view a Command File Directory List. Enter *X* in either field.

EOJ Console Summary

Defines partitions under which conditions are eligible for the Console Summary Report printed after each job. AR indicates the attention routine.

Enter:

- **A** to select job that abends in the partition
- **L** for job with // OPTION LOG specified in the partition
- **X** for all jobs

If you are running VSE/ESA, you can specify static or dynamic partition classes, indicating how EOJ will be handled for the specified partition(s).

Sysout Archival

Defines partitions under which conditions are eligible for Sysout Archival. AR indicates the attention routine.

Enter:

- **A** to select job that abends in the partition
- **L** for job with // OPTION LOG specified in the partition
- **X** for all jobs

If you are running VSE/ESA, you can specify static or dynamic partition classes, indicating how EOJ will be handled for the specified partition(s).

Note: For all fields except EOJ console summary, you must enter either *X* or blank. An *X* activates the command represented, a blank field deactivates the command represented.

- Press **PF8** for the next page of the GSFAQS startup definition

```

FAQMENUG.8          ** FAQS/ASO Online V4.0.2 **          ID=V131A94.SYA
===>
  ** FAQS/ASO -- Online GSFAQS Startup Definition **      FILE ==>

Enable CPU statistics ( _ )

Enable QSEEK          ( _ )

Include ( _ ) Exclude ( _ ) (Ignore for all dasd)

  _ _ _ _ _ _ _ _ _ _ _ _ _ _
  _ _ _ _ _ _ _ _ _ _ _ _ _ _

PF1=Field Help PF3=Return PF5=Update PF7=Backward

```

Figure 74. FAQS/ASO Online GSFAQS Startup Definition Panel (2)

Input field parameters description

Enable CPU statistics Enable CPU %, PAGE IN, and PAGE OUT on the FAQS/ASO 'D S' display for VSE/ESA. This field enables the system task to collect these statistics.

Enable QSEEK Initializes the DASD I/O scheduling mechanism

Include Makes one or more device(s) eligible for DASD I/O scheduling.
 Use the fields below the Include field to enter three-character device addresses.

Exclude Makes one or more device(s) ineligible for DASD I/O scheduling.
 Use the fields below the Exclude field to enter three-character device addresses.

- Press **PF5** to update this file
- Press **PF3** to return to the GSFAQS startup file directory list panel
- Press **PF3** to return to the FAQS/ASO initialization and configuration panel
- Press **PF3** to return to the FAQS/ASO main menu panel
- Press **PF3** to return to the DCM main menu panel

7.2 Command File

The FAQs/ASO's GSFAQS command definition panels enables you to write commands and run REXX IMODs to do more complicated tasks.

You can define console commands using FAQs/ASO. The directory contains command files that can be loaded by:

- GSFAQS
- The console command definition panel (PF06 Load)
- The *AO LOAD CMD* command

Each file contains console commands that are intercepted from the AR (Attention Routine) and processed by FAQs/ASO.

7.2.1 Tailoring the Console Command Files

To tailor the console command files, take the following steps:

From FAQs/ASO Initialization and Configuration panel:

- Enter a **C**

```
FAOMENUI.I          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
===> C
                   ** FAQs/ASO -- Initialization and Configuration

G   GSFAQS Startup Definitions
P   Console PFKEY Definitions
M   Message Definitions
C   Command Definitions

R   REXX IMOD Initialization and Tailoring
E   Event Definitions
O   FAQs Online Command Definition and Maintenance
A   CICS Auto Print Initialization
B   FAQs/CALL Definition and Maintenance

Z   Product Code Maintenance

PF01=Help PF03=Return PF12=Exit
```

Figure 75. FAQs/ASO Initialization and Configuration Panel

The system will show you the FAQs/ASO console command file directory list.

Note: We recommend that you copy the default profile *FAQSASO*, change the name and modify it as required.

To copy and modify the default profile:

- Put a **C** in front of the default profile 'FAQSASO' and put your filename in the file column (for example MYCFIL) and press ENTER
- Press **PF4** to refresh

To create a new file

- Press **PF05** to add a new profile

```

FAOMENUC.C          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
===>
** FAQs/ASO -- Console Command File Directory List **    Key ==> *

  COMMAND FILE      RECORDS  UPDATE TIMESTAMP      LOAD TIMESTAMP
C FAQsASO MYCFILE    51    10/12/94 15.13.22     10/18/94 09.36.48

X=Edit L=Delete R=Rename C=Copy A=Add

PF1=Help PF3=Return PF4=Refresh PF5=Add PF6=Current Def

```

Figure 76. FAQs/ASO Console Command File Directory List Panel (1)

After copying the file you can now edit your file:

- Put an **X** before the file you want to edit

```

FAOMENUC.C          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
===>
** FAQs/ASO -- Console Command File Directory List **    Key ==> *

  COMMAND FILE      RECORDS  UPDATE TIMESTAMP      LOAD TIMESTAMP
_ FAQsASO           51    10/12/94 15.13.22     10/18/94 09.36.48
X MYCFILE           51    10/12/94 15.14.00     00/00/00 00.00.00

X=Edit L=Delete R=Rename C=Copy A=Add

PF1=Help PF3=Return PF4=Refresh PF5=Add PF6=Current Def

```

Figure 77. FAQs/ASO Console Command File Directory List Panel (2)

The system will display all the commands inside your selected file.

```

FAOMENUC.F          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
===>
  ** FAQs/ASO -- Console Commands Directory List **      FILE ==> MYCFILE
                                                         Key ==> *

  Console Command LOG Function:  IMOD or Command
  _ $ARG              N IMOD=$ARG
  _ $BEEPER           N IMOD=$BEEPER
  _ $GETVIS           N IMOD=$GETVIS
  _ $JOBACCT          N IMOD=$JOBACCT
  _ $MSG              N IMOD=$MSG
  _ $REPLID           N IMOD=$REPLID
  _ $STATUS           N IMOD=$STATUS
  _ $VTAM             N IMOD=$VTAM
  _ >                 N IMOD=$TO
  _ ADDRESS           N IMOD=$ADDRESS
  _ BEEPER            N IMOD=$BEEPASO
  _ BG                N IMOD=$REPLY
  _ CICS              N IMOD=$CICSREP
  _ CONSOLE           N IMOD=$CONSOLE
  _ CP                N IMOD=$CP
  _ CPR               N IMOD=$CPRCMD
  X=Edit L=Delete A=Add

  PF1=Help PF3=Return PF4=Refresh PF5=IMOD Menu PF6=Load PF8=Fwd

```

Figure 78. FAQs/ASO Console Command Directory List Panel (1)

The following table describes the fields in the console commands directory list panel.

Table 6. Console Commands Directory List Fields Table	
Field	Description
File = = > < = =	Displays only the commands that are in the file named between the arrows
KEY = = > < = =	Criteria to display command files. An * alone displays all files An * as a wildcard replaces one or more characters of a file name
_ (input field)	Input field for valid commands: X Edit L Delete R Rename C Copy

The following table describes the Unique Console Commands Directory List PF-keys functions.

Table 7. PF-keys for Console Commands Directory List Panel	
Key	Explanation
PF5 (IMOD Menu)	Displays the REXX IMOD File Directory List.
PF6 (Load)	Loads the file you are viewing into the SVA. This file becomes the current definition.

The following is the sample to add a new command.

- Put an **A** in any input field and press ENTER

```
FAOMENUC.F          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
===>
  ** FAQs/ASO -- Console Commands Directory List **      FILE ==> MYCFILE
                                                         Key ==> *

  Console Command LOG Function:  IMOD or Command
A $ARG              N IMOD=$ARG
_ $BEEPER           N IMOD=$BEEPER
_ $GETVIS           N IMOD=$GETVIS
_ $JOBACCT          N IMOD=$JOBACCT
_ $MSG              N IMOD=$MSG
_ $REPLID           N IMOD=$REPLID
_ $STATUS           N IMOD=$STATUS
_ $VTAM             N IMOD=$VTAM
_ >                 N IMOD=$TO
_ ADDRESS           N IMOD=$ADDRESS
_ BEEPER            N IMOD=$BEEPASO
_ BG                N IMOD=$REPLY
_ CICS              N IMOD=$CICSREP
_ CONSOLE           N IMOD=$CONSOLE
_ CP                N IMOD=$CP
_ CPR               N IMOD=$CPRCMD
X=Edit L=Delete A=Add

PF1=Help PF3=Return PF4=Refresh PF5=IMOD Menu PF6=Load PF8=Fwd
```

Figure 79. FAQs/ASO Console Command Directory List Panel (2)

- Put **PRTY** in the command ==> field
- Put **X** in the NO field for LOG command
- Put **\$PRTY** in the IMOD ==> field

Your panel should look like this:

```

FAQMENUC.M          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
===>
    ** FAQs/ASO -- Console Command Definition **          FILE ==> MYCFILE

New Command ==> PRTY          <== Console command to intercept

                                YES  NO
LOG Command  (  ) ( X )

                                Run an REXX IMOD for the COMMAND
EDIT
_ IMOD ==> $PRTY          <==          REXX EXEC to Execute
  Args ==>                                Old Style Args

                                Replace COMMAND with the CMD below
==>

PF1=Help PF3=Return PF5=Save PF6=IMOD DIRECTORY

```

Figure 80. Sample of the FAQs/ASO Console Command Definition Panel

- Press **PF5** to save
- Press **PF3** to return

You have now created the *PRTY* command in your 'MYCFILE' console command file. If you want to use it, you have to load it to the SVA by pressing *PF6* then it will be available in the FAQs console display (*D C*).

7.3 Message Definition File

FAQS/ASO's GSFAQS message action panels enable you to automate your system and improve console messages. With FAQs/ASO you can define action files that respond to console messages. These action files are read by GSFAQS.

Message management includes:

- Message deletion
- Message highlighting
- Message masking
- Message reply
- Message retention
- Message routing
- Message suppression
- Message unhold
- AR, POWER, and VTAM command processing as a result of a message
- REXX IMOD execution as a result of a message

An *action* is an automated procedure you can create by using an action definition panel. You can access an action definition panel from the console action file directory list.

An *action file* is a file containing all your user-defined actions. The console action file directory list displays all the action files you have defined.

Message actions can be set by the following methods:

- GSFAQS startup panels
- Message action definition panels
- The *AO LOAD MSG* command
- *// OPTION MSG=*
- *GSFAQS SET MSG=*

7.3.1 Tailoring an Action File

By tailoring a console action file, you can:

- Create an action
- Create an Automated Message Reply

7.3.1.1 Creating an Action

To create an action, take the following steps:

From FAQs/ASO Initialization and Configuration panel:

- Enter an **M**

```
FAOMENUI.I          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
====> M
                    ** FAQs/ASO -- Initialization and Configuration

G      GSFAQS Startup Definitions
P      Console PFKEY Definitions
M      Message Definitions
C      Command Definitions

R      REXX IMOD Initialization and Tailoring
E      Event Definitions
O      FAQs Online Command Definition and Maintenance
A      CICS Auto Print Initialization
B      FAQs/CALL Definition and Maintenance

Z      Product Code Maintenance

PF01=Help PF03=Return PF12=Exit
```

Figure 81. FAQs/ASO Initialization and Configuration Panel

The system will show you the FAQs/ASO console action file directory list.

```

FAOMENUM.M          ** FAQS/ASO Online V4.0.2 **          ID=V131A94.SYA
===>
  ** FAQS/ASO -- Console Action File Directory List **    Key ==> *

  ACTION FILE      RECORDS  UPDATE TIMESTAMP    LOAD TIMESTAMP
_ FAQSASO          14      10/18/94 11.10.24   10/18/94 11.11.15

X=Edit L=Delete R=Rename C=Copy A=Add P=Print
PF1=Help PF3=Return PF4=Refresh PF5=Add PF6=Current Def

```

Figure 82. FAQS/ASO Console Action File Directory List Panel (1)

Note: We recommend that you copy the default profile *FAQSASO*, change the name and modify it as required.

To create a new file:

- Press **PF05** to add a new profile

To copy and modify the action file directory list:

- Put a **C** before the default profile *FASQASO*, and put your filename in the file column (for example *MYAFILE*) and press ENTER.

```

FAOMENUM.M          ** FAQS/ASO Online V4.0.2 **          ID=V131A94.SYA
===>
** FAQS/ASO -- Console Action File Directory List **      Key ==> *

ACTION FILE        RECORDS  UPDATE TIMESTAMP    LOAD TIMESTAMP
C FAQSASO MYAFILE    14    10/18/94 11.10.24    10/18/94 11.11.15

X=Edit L=Delete R=Rename C=Copy A=Add P=Print

PF1=Help PF3=Return PF4=Refresh PF5=Add PF6=Current Def

```

Figure 83. FAQS/ASO Console Action File Directory List Panel (2)

After that, the system will display the following panel.

- Put **X** before the file you would like to edit

```

FAOMENUM.M          ** FAQS/ASO Online V4.0.2 **          ID=V131A94.SYA
===>
** FAQS/ASO -- Console Action File Directory List **      Key ==> *

ACTION FILE        RECORDS  UPDATE TIMESTAMP    LOAD TIMESTAMP
_ FAQSASO          14    10/18/94 11.10.24    10/18/94 11.11.15
X MYAFILE          14    10/18/94 11.11.00    00/00/00 00.00.00

X=Edit L=Delete R=Rename C=Copy A=Add P=Print

PF1=Help PF3=Return PF4=Refresh PF5=Add PF6=Current Def

```

Figure 84. FAQS/ASO Console Action File Directory List Panel (3)

The system will display all the action names inside your selected file.

```

FAOMENUM.F          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
===>
  ** FAQs/ASO -- Console Action Directory List **  FILE ==> MYAFILE
                                                    Key ==> *

  Action Name      Function:
_ EOJ              High,IMOD M=(EOJ)
_ HLIBM           High M=(0<==<)
_ JOB             High,IMOD M=(// JOB)
_ LIBR-SHAREDV    Reply M=(L2828)
_ POWERFORMS     High,CMD M=(1Q40A)
_ PW=            Mask M=(PW=)
_ REPLYDEL       Reply M=(4444D) M2 (PROD)
_ REPLYDL1       Reply M=(4444D) M2 (PROD)
_ SUPPRESS       Supp M=(1I40I)
_ SYSOUTMSG      IMOD M=(GFF390)
_ SYSOUTMSG2     CMD M=(GFF390) M2=(09=)
_ VTAM IST105I   IMOD M=(IST105I)
_ VTAM 5B05I     IMOD M=(5B05I)
_ 1S78I          IMOD M=(1S78I)

X=Edit L=Delete A=add

PF1=Help PF3=Return PF4=Refresh PF5=PRINT PF6=Load File

```

Figure 85. FAQs/ASO Console Action Directory List Panel (1)

The following table describes the fields in the Console Action Directory List field panel.

Table 8. Console Commands Directory List Fields Table	
Field	Description
File = = > < = =	Displays only the actions contained in the file named between the arrows. You may switch to a new file simply by over-typing the file specified in this field and pressing ENTER.
KEY = = > < = =	Criteria to display action files. An * alone displays all files An * as a wildcard character represents one or more characters of a file name A ? as a wild card character replaces one character of a file name
_ (input field)	Action to perform against the action name: X Edit L Delete A Add

The following table describes the Unique Console Action Directory List PF-keys functions.

Table 9. PF-key for Console Commands Directory List Panel	
Key	Explanation
PF5 (Print)	Displays ACTION print panel. From this panel, you can submit a batch job to print a message explanation and message text
PF6 (Load File)	Loads the file into the SVA. This loaded file becomes the current definition.

The following is a example to add an action for highlighting any message that begins with *IST0xxx*.

- Put an **A** in any input field and press ENTER

```

FAOMENUM.F          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
===>
  ** FAQs/ASO -- Console Action Directory List **  FILE ==> MYAFILE
                                           Key ==> *

  Action Name      Function:
A EOJ              High,IMOD M=(EOJ)
_ HIIBM            High M=(0<==<)
_ JOB              High,IMOD M=(// JOB)
_ LIBR-SHAREDV     Reply M=(L2828)
_ POWERFORMS       High,CMD M=(1Q40A)
_ PW=              Mask M=(PW=)
_ REPLYDEL          Reply M=(4444D) M2   (PROD)
_ REPLYDL1          Reply M=(4444D) M2   (PROD)
_ SUPPRESS          Supp M=(1I40I)
_ SYSOUTMSG         IMOD M=(GFF390)
_ SYSOUTMSG2        CMD M=(GFF390) M2=(09=)
_ VTAM IST105I      IMOD M=(IST105I)
_ VTAM 5B05I        IMOD M=(5B05I)
_ 1S78I            IMOD M=(1S78I)

X=Edit L=Delete A=add

PF1=Help PF3=Return PF4=Refresh PF5=PRINT PF6=Load File

```

Figure 86. FAQs/ASO Console Action Directory List Panel (2)

- Put **IST0MSG** in the Action name ==> field
- Put **Highlight only IST0xxx VTAM message** in the description field across from the Action Name ==> field
- Put **IST0** in the Message ==> field
- Put **X** in the Highlight Enabled field

Your panel should now look like this:

```

FAOMENUM.A          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
====>
                                                    File: MYAFILE
Action Name ==> ISTOMSG          Highlight only IST0xxx VTAM message_____
Message   = ==> IST0              Scan (   ,   )          MIWRFSS
Message2  = ==>                   Scan (   ,   )          _____
Occurrences ==>                   Phase ==>
Frequency ==> ( 00 : 00 : 00 )    Jobname ==>
Time Range ==> ( 00 : 00 , 00 : 00 ) CPUID ==> *
_ Pid
ACTION      Enabled
Highlight   ( X )
Hold        (   )
Unhold      (   )
Suppress    (   )
Delete      (   )
Disable Generics (   )
Simulate Action (   )
Stop After Match (   )
Old Style Args ( _ )
Command Delay ( 00 : 00 ) MM : SS
_ REXX IMOD (   ) ==>
_ Reply     (   ) ==>
_ Command   (   ) ==>
_ Mask      (   ) Mask=          Length=          Offset=
_ Notify    (   ) Type=          User=           Node=           RSCS=

PF1=Field Help PF3=Return PF4=MSG exp PF5=Save PF6=Easy Scan PF9=MSG Lookup

```

Figure 87. Sample of the FAQs/ASO Console Action Definition Panel

- Press **PF4** for an Action explanation:

```

FAOMENUM.4          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
====>
** Action Explanation for FAQs/ASO Console Action Definition **

Action ISTOMSG will trigger when:

* Message †IST0† occurs in column 1.

When triggered, the message itself will be

* Highlighted on the system console.

PF3=Return PF7=Backward PF8=Forward

```

Figure 88. Sample Panel for an Action Explanation

- Press **PF3** to return
- Press **PF5** to save
- Press **PF3** to return

You have now created an action command in your *MYAFILE* action file. If you want to use it, you have to load it to the SVA by pressing *PF6*, it will then be available in the FAQs console display (*D C*).

7.3.1.2 Creating an Automated Message Reply

Due to the complexity of our systems, we need to reply to messages received on the console by one of the following three methods:

- responding to an outstanding REPLY
- issuing a COMMAND
- executing a REXX IMOD

FAQS/ASO enables us to automate these replies, and it could be done in one or all of the following manners:

Automate Message Reply via the REPLY Message: You can use this method to respond to any messages which require some REPLY from the console operator.

Warning: Before you set up this function, please examine the consequences because it will affect all messages that match your conditions.

In the following example we set up an automatic reply to the message MSG=8F06D (accessing Data Secured File(s)) in any partition. It should reply *PROCEED* and highlight the reply.

```

FAOMENUM.M          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
===>

                                     File: MYMSG
Action Name ==> PROCEED          Take response to proceed for secure f.__
Message   = ==> 8F06D          Scan ( 01 , 05 )          MIWRFSS
Message2  = ==>                Scan (   ,   )          _____
Occurrences ==> *              Phase   ==>
Frequency ==> ( 00 : 00 : 00 ) Jobname ==>
Time Range ==> ( 00 : 00 , 00 : 00 ) CPUID   ==> *
_ Pid     =
_ ACTION  Enabled
Highlight ( X )                Disable Generics ( _ )
Hold      ( )                  Simulate Action ( _ )
Unhold    ( )                  Stop After Match ( _ )
Suppress  ( )                  Old Style Args ( _ )
Delete    ( )                  Command Delay ( 00 : 00 ) MM : SS
_ REXX IMOD ( ) ==>
_ Reply   ( X ) ==> PROCEED
_ Command ( ) ==>
_ Mask    ( ) Mask=            Length=            Offset=
_ Notify  ( ) Type=            User=              Node=            RSCS=

PF1=Field Help PF3=Return PF4=MSG Exp PF5=Save PF6=Easy Scan PF9=MSG Lookup

```

Figure 89. Sample Panel for Automated Message Reply with REPLY Message

- Press **PF5** to save
- Press **PF3** to return

Note: To use this definition, you must load it to the SVA by pressing *PF6*, and then it will be available for use as a current definition.

Automate Message Reply via COMMAND: You can use this method to respond to any message which requires some command from the console operator.

Warning: Before you set up this function, please examine the consequences because it will affect all messages that match your conditions.

The following is the explanation for the sample COMMAND panel:

- Action **AUTOACT** will be triggered when:
 - Message *IST105I* occurs within columns 1 and 7.
- When triggered, the message itself will be **highlighted** on the system console.
- In addition, the following action will occur:
 - The command **V NET,ACT,ID=&(8,7)** will be issued to AR.

```

FAQMENUM.0          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
====>
                                                    File: MYAF2
Action Name ==> AUTOACT          Auto activates node with VTAM command__
Message   = ==> IST105I          Scan ( 01 , 07 )          MIWRFSS
Message2  = ==>                  Scan (   ,   )          _____
Occurrences ==> *                Phase ==>
Frequency ==> ( 00 : 00 : 00 )    Jobname ==>
Time Range ==> ( 00 : 00 , 00 : 00 ) CPUID ==> *
_ Pid     =
ACTION    Enabled
Highlight ( X )                  Disable Generics ( _ )
Hold      ( )                    Simulate Action ( _ )
Unhold    ( )                    Stop After Match ( _ )
Suppress  ( )                    Old Style Args  ( _ )
Delete    ( )                    Command Delay   ( 00 : 00 ) MM : SS
_ REXX IMOD ( ) ==>
_ Reply    ( ) ==>
_ Command  ( X ) ==> V NET,ACT,ID=&(8,7)
_ Mask     ( ) Mask=              Length=          Offset=
_ Notify   ( ) Type=              User=          Node=          RSCS=

PF1=Field Help PF3=Return PF4=MSG Exp PF5=Save PF6=Easy Scan PF9=MSG Lookup

```

Figure 90. Sample Panel for Automated Message Reply with COMMAND

Note: In this sample it will only activate VTAM node names that are six to seven characters long, and it will respond to *IST105I xxxxxx*

Where xxxxxx is the VTAM node_id.

- Press **PF5** to save
- Press **PF3** to return

Note: To use this definition, you must load it to the SVA by pressing *PF6*, and then it will be available for use as a current definition.

To test the result, you can issue the VTAM command to inactivate any node and FAQs/ASO will automatically issue the VTAM activate command for that node. See the example in the following panel:

```

Z1 071 GAO648I ACTION FILE MYAF2 LOADED                10:15:26
V NET,INACT,ID=D50001,F                                10:15:37
AR 015 1C39I COMMAND PASSED TO ACF/VTAM                10:15:39
F3 053 IST097I VARY ACCEPTED                            10:15:40
F3 053 IST129I UNRECOVERABLE OR FORCED ERROR ON NODE D50001 - VARY INACT
SCHED                                                  10:15:40
F3 053 IST105I D50001 NODE NOW INACTIVE                 10:15:40
V NET,ACT,ID=D50001                                    10:15:41
AR 015 1C39I COMMAND PASSED TO ACF/VTAM                10:15:41
F3 053 IST097I VARY ACCEPTED                            10:15:42
F3 053 IST093I D50001 ACTIVE                            10:15:42

```

Figure 91. Sample Output on the System Console Panel

Automate Message Reply through a REXX IMOD:

If a reply to the console requires more than just a *REPLY* or a *COMMAND* a REXX IMOD can be used to send an automated message to do the reply. An IMOD can be set up to do a whole series of actions when it finds a message on the console.

In the following example we set up an automated reply to:

- Trigger the action *AUTOACTR* when:
 - message *IST105I* occurs within columns 1 and 7.
- When triggered, the message itself will be highlighted on the system console and in addition, the following will occur:

The REXX IMOD *AUTOREXX* will run if the *FAQSAO* task is active.

The argument passed to the IMOD will contain the message that triggered the action. If the message has a continuation line, it will also be passed to the IMOD.

Note: The REXX *ASOENV* function may be used to obtain the jobname, phasename, partition, and time.

```

FAOMENUM.0          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
===>
                                                    File: MYAF2
Action Name ==> AUTOACTR          AUTO ACTIVATE VTAM ANY NODES WITH REXX__
Message      = ==> IST105I          Scan ( 01 , 07 )          MIWRFSS
Message2     = ==>                   Scan (   ,   )          _____
Occurrences  ==> *                   Phase ==>
Frequency    ==> ( 00 : 00 : 00 )    Jobname ==>
Time Range   ==> ( 00 : 00 , 00 : 00 ) CPUID ==> *
_ Pid       =
ACTION      Enabled
Highlight   ( X )
Hold        (   )
Unhold      (   )
Suppress    (   )
Delete      (   )
_ REXX IMOD ( X ) ==> AUTOREXX
_ Reply     (   ) ==>
_ Command   (   ) ==>
_ Mask      (   ) Mask=           Length=           Offset=
_ Notify    (   ) Type=           User=           Node=           RSCS=

Disable Generics ( _ )
Simulate Action ( _ )
Stop After Match ( _ )
Old Style Args ( _ )
Command Delay ( 00 : 00 ) MM : SS

PF1=Field Help PF3=Return PF4=MSG Exp PF5=Save PF6=Easy Scan PF9=MSG Lookup

```

Figure 92. Sample Panel for Automated Message Reply with a REXX IMOD

You must create the IMOD before you activate this profile.

To create a REXX IMOD:

- Put an **X** in front of `_ REXX IMOD`.

The following example is how to create a REXX IMOD program. When you have completed the coding of this IMOD, you have to save it by putting **FILE** on the command line to enable the REXX compiler to compile and save the IMOD.

```

=> FILE                                                    MEM=AUTOREXX
1...5...10...15...20...25...30...35...40...45...50...55...60...65...70...
* * * * B E G I N F I L E * * * *
/* A SAMPLE REXX IMOD PROGRAM                               */
/* TO AUTOMATICALLY ACTIVATE VTAM NODES                   */
/*                                                         */
ARG MSG
MBUF=MSG
MNODE=WORD(MBUF,4)
ADDRESS CONSOLE %V NET,ACT,ID=%MNODE
EXIT
* * * * E N D F I L E * * * *

```

Figure 93. Sample REXX IMOD Program

- Press **PF5** to save
- Press **PF3** to return

Note: To use this definition, you must load it to the SVA by pressing **PF6**, and then it will be available for use as a current definition.

To test the result, you can issue the VTAM command to inactivate any node and FAQs/ASO will automatically issue the VTAM activate command for a node. See in the following panel:

```
Z1 071 GAO648I ACTION FILE MYAF2 LOADED 10:53:54
V NET,INACT,ID=VIMSW1,F 10:54:09
AR 015 1C39I COMMAND PASSED TO ACF/VTAM 10:54:09
F3 053 IST097I VARY ACCEPTED 10:54:10
F3 053 IST105I VIMSW1 NODE NOW INACTIVE 10:54:10
V NET,ACT,ID=VIMSW1 10:54:10
AR 015 1C39I COMMAND PASSED TO ACF/VTAM 10:54:10
F3 053 IST097I VARY ACCEPTED 10:54:10
F3 053 IST093I VIMSW1 ACTIVE 10:54:11
V NET,INACT,ID=ISTCDRDY,F 10:54:25
AR 015 1C39I COMMAND PASSED TO ACF/VTAM 10:54:25
F3 053 IST097I VARY ACCEPTED 10:54:26
F3 053 IST105I ISTCDRDY NODE NOW INACTIVE 10:54:26
V NET,ACT,ID=ISTCDRDY 10:54:28
AR 015 1C39I COMMAND PASSED TO ACF/VTAM 10:54:28
F3 053 IST097I VARY ACCEPTED 10:54:30
F3 053 IST093I ISTCDRDY ACTIVE 10:54:31
```

Figure 94. Sample Output on the System Console Panel

7.4 Console PF-key File

GSFAQS console PF-key panels enable you to support PF-keys on the system console in the following manner:

- Use commands as PF-key values
- Set the PF or PA keys to recall previous commands
- Enter a maximum of 60 characters for each PF or PA key

PF-keys can be set by the following methods:

- The GSFAQS startup panels
- The PF-key definition panels
- The *AO LOAD PFKEY* command
- The GSFAQS set PF-key

Note: In our example we show how to set the PF-keys through the GSFAQS PF-key definition panels.

7.4.1 Tailoring System Console PF-keys

To tailor system console PF-keys, do the following:

From the FAQs/ASO initialization and configuration panel

- Enter a **P**

```

FAOMENUI.I          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
===> P
                    ** FAQs/ASO -- Initialization and Configuration

G   GSFAQS Startup Definitions
P   Console PFKEY Definitions
M   Message Definitions
C   Command Definitions

R   REXX IMOD Initialization and Tailoring
E   Event Definitions
O   FAQs Online Command Definition and Maintenance
A   CICS Auto Print Initialization
B   FAQs/CALL Definition and Maintenance

Z   Product Code Maintenance

PF01=Help PF03=Return PF12=Exit

```

Figure 95. FAQs/ASO Initialization and Configuration Panel

The system will show you the FAQs/ASO Console PFKEY Directory List:

- Press **PF5** to add a new profile

```

FAOMENUP.P          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
===>
                    ** FAQs/ASO -- Console PFKEY Directory List **   Key ==> *

MEMBER NAME        UPDATE TIMESTAMP        LOAD TIMESTAMP
_ FAQsASO          10/12/94 15.13.18        10/18/94 09.36.48

X=Edit L=Delete R=Rename C=Copy

PF1=Help PF3=Return PF4=Refresh PF5=Add PF6=Current def

```

Figure 96. FAQs/ASO Console PFKEY Directory List Panel

The system will show the FAQs/ASO Console PFKEY Alter panel(1):


```

FAOMENUP.F          ** FAQS/ASO Online V4.0.2 **          ID=V131A9
===>
      ** FAQS/ASO -- System Console PFKEY Alter **      Member ==>
PFkey Variable = @      Description: FAQS/ASO Console PFKEY Member
Line End Char  = #

                                          Delay Suffix
PF01 = * UNDEFINED *          ( X ) ( )
PF02 = * UNDEFINED *          ( X ) ( )
PF03 = * UNDEFINED *          ( X ) ( )
PF04 = * UNDEFINED *          ( X ) ( )
PF05 = * UNDEFINED *          ( X ) ( )
PF06 = * UNDEFINED *          ( X ) ( )
PF07 = * UNDEFINED *          ( X ) ( )
PF08 = * UNDEFINED *          ( X ) ( )
PF09 = * UNDEFINED *          ( X ) ( )
PF10 = * UNDEFINED *          ( X ) ( )
PF11 = * UNDEFINED *          ( X ) ( )
PF12 = * UNDEFINED *          ( X ) ( )

PA01 = * UNDEFINED *
PA02 = * UNDEFINED *
PA03 = * UNDEFINED *

PF01=Help PF03=Return PF05=Save PF06=Load PF08=FWD

```

Figure 97. FAQS/ASO System Console PFKEY Alter Panel (1)

- Press **PF8** to go to the next PFKEY alter panel

The system will show the FAQS/ASO Console PFKEY Alter panel(2):

```

FAOMENUP.F          ** FAQS/ASO Online V4.0.2 **          ID=V131A9
===>
      ** FAQS/ASO -- System Console PFKEY Alter **      Member ==>
PFkey Variable = @      Description: FAQS/ASO Console PFKEY Member
Line End Char  = #

                                          Delay Suffix
PF13 = * UNDEFINED *          ( X ) ( )
PF14 = * UNDEFINED *          ( X ) ( )
PF15 = * UNDEFINED *          ( X ) ( )
PF16 = * UNDEFINED *          ( X ) ( )
PF17 = * UNDEFINED *          ( X ) ( )
PF18 = * UNDEFINED *          ( X ) ( )
PF19 = * UNDEFINED *          ( X ) ( )
PF20 = * UNDEFINED *          ( X ) ( )
PF21 = * UNDEFINED *          ( X ) ( )
PF22 = * UNDEFINED *          ( X ) ( )
PF23 = * UNDEFINED *          ( X ) ( )
PF24 = * UNDEFINED *          ( X ) ( )

PA01 = * UNDEFINED *
PA02 = * UNDEFINED *
PA03 = * UNDEFINED *

PF01=Help PF03=Return PF05=Save PF06=Load PF07=BWD

```

Figure 98. FAQS/ASO System Console PFKEY Alter Panel (2)

The following table describes the fields on the Console PFKEY Definition panel:

Field	Description
Member = = > < = =	Displays only the PF-key member that matches the member name between the arrows
PFkey Variable	Identifies the variable that will be substituted for PF-keys defined within parentheses
Line End Char	Identifies the variable that separates commands defined for the same PF-key
PFxx =	Defines console PF-keys
PAxx =	Defines console PA-keys
Delay	Places the PF-key data in the console command area (rather than executing the command immediately)
Suffix	Places the PF-key data in the console command area, with the variable data appended to the PFKEY command

You can now tailor the PF-keys to your requirements. To help you with your selections we are supplying you with the settings of a sample PF-key file (*MYPFKEY*) so that you can see how we defined ours.

```

FAOMENUP.F          ** FAQs/ASO Online V4.0.2 **          ID=V131A94.SYA
===>
      ** FAQs/ASO -- System Console PFKEY Alter **      Member ==> MYPFKEY
PFkey Variable = @      Description: Console PFkeys provided at install
Line End Char = %

                                Delay Suffix
PF01 = RECALL                ( )
PF02 = PRTY REPLY @          ( ) ( X )
PF03 = PRTY MSG               ( ) ( )
PF04 = PRTY PF                ( ) ( )
PF05 = PRTY REPLY CANCEL      ( ) ( )
PF06 = PRTY J                 ( ) ( X )
PF07 = AO LOAD CMD @          ( ) ( X )
PF08 = AO LOAD MSG @          ( ) ( X )
PF09 = AO LOAD PFKEY @        ( ) ( X )
PF10 = AO LIST CMD            ( ) ( X )
PF11 = AO LIST MSG            ( ) ( X )
PF12 = AO LIST PFKEY          ( ) ( X )

PA01 = RECALL
PA02 = RECALL
PA03 = RECALL

PF01=Help PF03=Return PF05=Save PF06=Load PF08=FWD

```

Figure 99. Sample of our FAQs/ASO System Console PFKEY Panel

When you have completed editing your file you have to:

- Press **PF05** to save
- Press **PF06** to load your PF-key file into the SVA, making it the current PF-key file.
- Press **PF03** to return

Note: You can have more than one profile. You must load the profile before you can use it or update the GSFAQS startup definition file for the next FAQS startup. The default profile for PFKEY is 'FAQSASO'.

Part 2. FAQs/PCS for VSE

Chapter 8. Introduction

This chapter provides some general information about FAQS/PCS, a LEGENT company product and its features; more detailed descriptions will follow in the installation, customization and usage chapters.

8.1 What is FAQS/PCS

FAQS/PCS is LEGENT's production control system for automated scheduling of events in a VSE environment. FAQS/PCS provides an online user interface and a set of batch utilities.

FAQS/PCS features are:

1. Event scheduling
2. Easy online interface
3. JCL management
4. Security and configuration
5. Auditing and accounting reports

FAQS/PCS has interfaces to many other LEGENT VSE products:

- FAQS/ASO for VSE - Automated operations and console management
- EXPLORE for VSE - Performance monitor for VSE System
- EXPLORE for CICS - Performance monitor for CICS
- EXPLORE for SQL/DS - Performance monitor for SQL/DS
- MASTERCAT for VSE - VSAM data set manager

8.2 Event Scheduling

FAQS/PCS allows you to submit jobs, create REXX procedures, define and issue commands through the event's manager.

8.2.1 What is an Event in FAQS/PCS

In FAQS/PCS an event has two meanings, it is either:

- A command processed by the scheduler
- or
- Any occurrence detected on the system

An event command can be:

- A user job
- Operator commands
- A POWER command
- REXX procedures
- Scheduler commands

An event can contain some requirements that must be met before this event command is scheduled.

You can define an event command to be issued according to:

- Day and time of day
- Available resource percentages

- Manual conditions that must take place
- Available tapes or cartridges
- Activity of a data set
- Updating of a PCS global variable
- Completing of other jobs with certain return codes

Once all the dependencies are satisfied, FAQS/PCS automatically schedules the event command.

FAQS/PCS recognizes also any occurrence detected on the system as an event, such as:

- A DOS job
- A POWER job
- A single step (phase)
- A console message

8.3 Online Interfaces

The FAQS/PCS Online facility is composed of a series of panels that help you to display, create or update the PCS events and perform various other PCS functions.

Most FAQS/PCS online screens present information in *directory* format, this means menus and submenus with online help.

This allows you:

- To access information of increasing detail on successive panels
- To issue fast path commands for quick access
- To view a subset of a directory using selection criteria

FAQS/PCS can be accessed through the following interfaces:

- CMS
- CICS
- VTAM
- BTAM

Note: Access through CMS is independent of the VSE system and it is available even if the VSE system is down.

8.4 JCL Management

FAQS/PCS can manage user jobs in the following libraries:

- PCS partition data set
- VSE library
- ICCF library
- CMS minidisk

Other OEM libraries that it can also manage are:

- Panvalet
- Condor
- CA-Librarian
- CA-Vollie
- Bim-Edit

FAQS/PCS owns a partition data set called **PDS** where it keeps its JCL. You can use this data set to store and manage your own JCL.

PCS partition data set PDS offers the following advantages for the JCL that resides in it:

- JCL global updating
- Report cross-reference
- Auditing and security control

FAQS/PCS lets you modify JCL before and during job execution.

8.5 Security and Configuration

These features are defined online through some easy panels.

The security feature allows you to control access to:

- PCS events
- Online panels
- PDS members
- Utilities

The configuration options allow you to define options for the PCS system or for a specific user.

8.6 Auditing and Accounting Reports

FAQS/PCS provides a variety of online and batch reports to inform you about all scheduled activity.

You can view data about your events and jobs already scheduled through two displays:

1. **The Audit History**

This display provides information about the activity of events and PDS members.

2. **The Account History**

This display provides information about all jobs submitted by FAQS/PCS. It allows you to view summarized:

- Average time
- Duration of the job
- CPU usage
- I/O

PCS enables you to view data about your current schedule and event definitions. FAQS/PCS provides a report called **Event Cross-Reference**, which displays a cross-reference of all events based on their dependency conditions.

FAQS/PCS allows you also to view how your schedule will be working in the future, through two forecasting displays:

1. The **Event Forecast** display shows the events that will be scheduled on a specific day.

This display provides information about the activity of events and PDS members.

2. The ***Partition Occupancy*** report shows the partitions in which events might run in the future.

This display provides information about all jobs submitted by FAQS/PCS. It allows you to view summarized average time, duration, CPU usage and I/Os for all the events.

Chapter 9. Installation and Initialization

This chapter describes everything you need to know to install and initialize FAQS/PCS successfully.

It covers the following topics:

- GSS installation
- FAQS/PCS installation
- FAQS/PCS initialization
- Scheduler activation
- Initialize online interfaces
- Tailor the control file

Warning: All the tasks discussed in this chapter must be performed **as described** in order to ensure startup.

9.1 GSS Installation

To avoid unnecessary duplication of common code where some LEGENT products are installed, LEGENT introduced GSS (Global SubSystem) for VSE.

You must have GSS for VSE successfully installed before you can install FAQS/PCS on your system.

If you have to install GSS for VSE, please read Chapter 2, “GSS Installation” on page 7.

For more information about GSS for VSE, see the following documentation:

- *GSS for VSE Installation Guide*
- *GSS for VSE Message Guide*

If you have already installed GSS for VSE, you should make sure you have the current version of GSS for VSE installed and that the sizes of the library and the required PDSs are sufficient to run FAQS/PCS.

DASD Types	Number of Blocks per Track	Number of Blocks per Cylinder
3380	46	690
3390	55	824

Allocate at least 3000 4K blocks of disk space for each PDS.

When your GSS for VSE installation is complete, you are ready to install FAQS/PCS.

9.2 FAQs/PCS Installation

Before you install FAQs/PCS, you should define a label for the **SYSS\$LOG** PDS. Its function is to support data set logging for FAQs/PCS.

The following shows sample DLBL and EXTENT statements for SYSS\$LOG on a 3390 DASD.

```
// DLBL SYSS$LOG,¢file.ID¢,99/365
// EXTENT ,RES001,1,0,7680,60
```

Note: Include this file in your system standard labels.

If you have already installed FAQs/ASO for VSE, you don't need to install FAQs/PCS on your system because the job stream **IASO** provided for FAQs/ASO installation contains the installation procedures for both products.

Note: For more information about IASO see 4.3, "FAQS/ASO Installation Procedure" on page 19.

If you install PCS for the first time, you can follow the installation steps for FAQs/ASO for VSE, see Chapter 4, "FAQS/ASO Installation" on page 15.

If you are a VM user, you must install the CMS part of the FAQs/PCS online interface. For more information, please see 4.4, "FAQS/ASO CMS Members Installation Procedure (Optional)" on page 20.

Once the installation is completed successfully, you need to initialize FAQs/PCS.

9.3 FAQs/PCS Initialization

Once you have installed FAQs/PCS, you have to initialize it to ensure quick and effective activation.

Before you activate the Job Scheduler, you should:

1. Activate the product code

This allows you to use FAQs/PCS and its features.

2. Add appropriate SVA phases

This will leave more partition space.

3. Enable data collection

Note: Make sure **JA=YES** is specified in your IPL PROCEDURE.

9.3.1 Activating the Product Code

You can activate the FAQs/PCS product code by the following two methods:

- Entering the product code on the appropriate online panel.
- Executing the GSPRDLD program.

9.3.1.1 Using Online Panels

1. On the PCS Menu Index, select **M** Utilities option and press ENTER.
2. On the Utility Function Menu select **P** Product Code Maintenance and press ENTER.
3. The Product Code Information Screen is displayed.

```
====>
                ** DCM-SYSTEMS - Product Code Information **

Product Code ====> _____

PRODUCT CODE      DATE      CPU      VALID PRODUCTS      FLAGS
_ XXXXXXXXXXXXXXXXXXXX 95/100 -ANY-
_ YYYYYYYYYYYYYYYYYYYY 94/329 -ANY-

PF1=Help PF3=Return PF5=Add PF7=BCK PF12=Exit
```

Figure 100. Production Code Information Screen

Press PF5 to add the product code and store it in the SYS\$PROD PDS file.

9.3.1.2 Executing the GSPRDLD Program

You can use the following jobstream to initialize FAQs/PCS.

```
// JOB INITPCS
// LIBDEF *,SEARCH=Lib.Sub
// EXEC GSPRDLD,SIZE=256K
PROD=XXXXXXXXXXXXXXXXXXXXX
STATUS
/*
/ &
```

Figure 101. Sample JCL to Execute GSPRDLD

This program allows you to load and verify the product code. You can issue an optional parameter **STATUS** to produce a list of the product codes currently loaded.

Note: You should have received a 20 character product code from your LEGENT sales representative.

9.3.2 Adding SVA Phases

Once you have added the appropriate product code, you can add the following phases to the SVA:

- JCLPOST,SVA
- PCSADR,SVA
- PCSSUC,SVA
- GSAOGEM,SVA (only if you use EXPLORE for VSE)

```

// JOB LOAD PHASES
// LIBDEF *,SEARCH=Lib.Sub
SET SDL
JCLPOST,SVA
PCSADR,SVA
PCSSUC,SVA
GSAOGEM,SVA
/&

```

Figure 102. Sample JCL to Load FAQs/PCS Phases to the SVA

Note: Update your SETSDL procedure by adding LEGENT PDS required phases and then recatalog it.

9.4 Scheduler Activation

FAQS/PCS is activated in two stages:

1. Activating job hooks
2. Activating JCLSCHEM

9.4.1 Activating Job Hooks

JCLXCU is the batch utility that enables you to initialize FAQs/PCS.

The **ENABLE** statement activates FAQs/PCS job hooks for various features and data collection.

```

// JOB JCLXECU
// LIBDEF *,SEARCH=Lib.Sub
// EXEC JCLXCU,SIZE=JCLXCU
ENABLE LOAD=N
/*
/&

```

Figure 103. Sample JCL to Enable All the FAQs/PCS Job Hooks

For more information about the **ENABLE** statement, see the *FAQS/PCS Implementation Guide*.

Make sure you have enough storage before running this job:

- You need 80-100K of SVA storage if you have any LEGENT products that use GSS for VSE.
- You need 120-140K of SVA storage if you don't have any LEGENT products that use GSS for VSE.

Note: We recommend to put the FAQs/PCS initialization procedure in your BG ASI procedure.

9.4.2 Activating JCLSCHEd

JCLSCHEd is the FAQS/PCS's event scheduler program which schedules events and dispatches event commands.

Before activating JCLSCHEd you have to check the following storage requirements:

- You need 400K for running FAQS/PCS (to load phases and schedule commands)
- You need 700K for running FAQS/ASO under the scheduler

You can start JCLSCHEd using the following methods:

1. As a **main task** in any partition

Use the following JCL to activate the scheduler as a main task.

```
// JOB JCLSCHEd
// LIBDEF *,SEARCH=Lib.Sub
// EXEC JCLSCHEd,SIZE=JCLSCHEd
/*
/ &
```

Figure 104. Sample JCL to Activate FAQS/PCS Scheduler as a Main Task

2. As a **subtask of CICS**

You can activate the scheduler as part of CICS.

For this you must update the following CICS table entries:

```
CICS PCT entry
DFHPCT TYPE=ENTRY,TRANSID=PCSS,PROGRAM=PCSPLT

CICS PPT entry
DFHPPT TYPE=ENTRY,PROGRAM=PCSPLT

CICS PLT entry
DFHPLT TYPE=ENTRY,PROGRAM=PCSPLT
```

Figure 105. CICS Table Entries for PCS as Subtask

9.5 Initializing Online Interfaces

PCS Online Interfaces allow you to display and control scheduled activity, look at auditing and accounting information and manage JCL members.

FAQS/PCS provides the following online interfaces:

- CICS
- VTAM
- CMS

Note: For the CMS Interface see 13.1, "FAQS/PCS CMS Online Interface" on page 149.

If you have FAQs/ASO for VSE, you already have an online interface running from which you can access FAQs/PCS. You can skip this section and go to 9.6, "Tailoring the FAQs/PCS Control File" on page 108.

9.5.1 CICS Interface

If you want to access FAQs/PCS from CICS, you must initialize the CICS interface.

DCMOCIXP is a CICS program that enables you to use FAQs/PCS online and edit PDS members.

To run this transaction, the following entries are required:

```
CICS PCT entry  
DFHPCT TYPE=ENTRY,TRANSID=DCMO,PROGRAM=DCMOCIXP  
  
CICS PPT entry  
DFHPPT TYPE=ENTRY,PROGRAM=DCMOCIX
```

Figure 106. CICS Table Entries for PCS CICS Interface

You can define another transaction ID to enable direct access to PCS.

```
CICS PCT entry  
DFHPCT TYPE=ENTRY,TRANSID=PCS,PROGRAM=DCMOCIXP
```

DCMOCIXP executes **DCMOTDRV**, which enables you to avoid using CICS partition GETVIS.

You can execute DCMOTDRV:

- As a main task in a dedicated partition
- As a subtask of JCLSCHED

As a main task

```
// EXEC DCMOTDRV,SIZE=DCMOTDRV
```

As a subtask of JCLSCHED

```
// EXEC JCLSCHED,SIZE=JCLSCHED
```

This causes an outstanding replid on the console:

- replid **\$DCMOTDRV**

If you want to execute this permanently as a subtask of JCLSCHED, add the following statement to the JCLSCHED.CTL file:

- **AUTO \$DCMOTDRV**

Note: For more information about the JCLSCHED.CTL file, please see 9.6, "Tailoring the FAQs/PCS Control File" on page 108.

To access FAQs/PCS type **PCS** and the FAQs/PCS Menu Index will be displayed.

9.5.2 VTAM Interface

If you want to use the VTAM interface you have to use the **DCMTDRIV** program. This program is a GSS utility that enables you to access FAQs/PCS from any VTAM controlled terminal.

DCMTDRIV doesn't require CICS.

To activate the VTAM interface follow these steps:

Define an application's majnode or add the following statement in your current application's majnode.

```
FAQS APPL ACBNAME=DCMTDRIV,EAS=5
```

Note: **FAQS** is your VTAM applid

Enable VTAM interface

You can execute DCMTDRIV:

- As a main task in a batch partition
- As a subtask of JCLSCHED

As a main task

```
// EXEC DCMTDRIV,SIZE=DCMTDRIV
```

As a subtask of JCLSCHED

```
// EXEC JCLSCHED,SIZE=JCLSCHED
```

This causes an outstanding replid on the console:

- replid **\$DCMTDRIV**

If you want to execute this task permanently as a subtask of JCLSCHED, add the following statement to the JCLSCHED.CTL file:

- **AUTO \$DCMTDRIV**

Note: For more information about the JCLSCHED.CTL file, please see 9.6, "Tailoring the FAQs/PCS Control File" on page 108.

Log on to the FAQs/PCS using the VTAM command:

- LOGON APPLID(**FAQS**)

Note: APPLID must be the same name as you have specified in your application's majnodes.

The FAQs/PCS Menu Index will be displayed.

9.6 Tailoring the FAQs/PCS Control File

When JCLSCHEd starts up, it reads the **JCLSCHEd.CTL** member in SYS\$MON PDS and executes the commands found there.

The first time that you access FAQs/PCS you will only have the entry **AUTO &FAQSAO**. Now you can add other commands to be initialized during FAQs/PCS scheduler startup.

It is recommended that you add the following commands in the JCLSCHEd.CTL file:

Command	Function
AUTO &FAQSAO	Enables you to execute REXX IMODs and use the message feature
AUTO \$PCSSRV	This program monitors all data set activity and performs data set logging
AUTO &DCMOTDRV	This program accesses online applications in a CICS environment

If you have FAQs/ASO for VSE, you can include its subtasks in your JCLSCHEd.CTL member. To load and attach a subtask, use the *\$phasename* command.

9.6.1 Connecting to FAQs/PCS for Setup

When you access FAQs/PCS via FAQs/ASO, the system will show the DCM Terminal Driver Main Menu; you must select option **5**.

```
====> 5

                                     *** DCM Main Menu ***

1  HELP                               Display help information
2  FAQs/ASO                           FAQs/ASO Online menu driver
3  TERMINATE                           Terminate FAQs session
4  AO                                  Automated System Operation Menu Panels
5  FAQs/PCS                             FAQs Production Control System
C  CPR                                  CICS PRINT FACILITY Menu Panels
N  COPYRIGHT                            Copyright Notice ....

PF01=Help PF03=Return PF12=Exit
```

To tailor the JCLSCHEd.CTL you must follow these steps:

On the DCM-SYSTEM FAQs/PCS ONLINE panel, select **U** (PDS Update)

====> U

** DCM-SYSTEMS FAQs/PCS ONLINE - Menu Index **

C	Current Event Maintenance	E	Master Events Maintenance
U	PDS Update	P	Event Forecasting
R	Retrieve Member from CMS	T	Transfer to CMS
Y	Verify Process Periods	Z	Account History Display
B	Browse PDS Member	F	FLEE Online
H	General Help	M	Utilities
V	Define Variables	X	Exit
I	REXX Member Update	J	FAQS/CALL Definitions
W	Work/Data Station	A	Audit History Display
O	Configuration Options	S	System Security
D	Resource Utilization		

PDS ====> MON (PDS ID for Security Display and Update)

PF1=Help PF3=Return PF4=MSHP PF12=Exit

On the DCM-SYSTEMS FAQs/PCS PDS DIRECTORY panel, set the member mask to **JCLSCHED.CTL**.

====>

DCM-SYSTEMS FAQs/PCS PDS DIRECTORY DISPLAY AND MEMBER MAINTENANCE

Member Mask ====> JCLSCHED.CTL

PDS ID ====> MON

For the Member Mask supply one to eight characters for the member name, and optionally supply the three character member type delimited from the member name by a period. Mask characters may be used to match a member name. A ++ mask matches one character while an +*+ mask matches a group of characters. Following are a few examples:

+++CICS+.MON - Will select any member that has the character string CICS beginning at position 4 in the name.
CICS - Will select any MON type member that has the character CICS anywhere in the name.
JCLVER0.MON - Will select the member JCLVER0.MON.

PF1=Help PF3=Return PF4=External Library PF5=Entire Directory

Type an **X** in front of the JCLSCHED.CTL member.

====> MON:JCLSCHED.CTL

MEMBER NAME	RECS	BLKS	UPDATE TIMESTAMP	EXECUTE TIMESTAMP
x JCLSCHED.CTL	7	1	10/28/94 13.45.56	11/03/94 17.40.10

Actions: A=Audit B=Browse C=Copy D=Documentation L=Delete P=Pull List
R=Rename S=Submit T=Transfer X=Edit Z=Accounting

PF1=Help PF3=Return PF4=External Lib

When the member is displayed, add some lines to insert the AUTO commands.

```
=> MEM=JCLSCHED
1...5...10...15...20...25...30...35...40...45...50...55...60...65...70...
* * * * B E G I N F I L E * * * *
AUTO &FAQSAO
AUTO $PCSSRV
AUTO $DCMOTDRV
* * * * E N D F I L E * * * *
```

On the command line enter **FILE** to save the changes.

Press PF3 to return.

Note: On the system where JCLSCHED is running, you can specify **PCSLOG** in the JCLSCHED.CTL member, using the **AUTO \$PCSLOG**.

This task is used to improve the performance of FAQs/PCS.

Chapter 10. FAQS/PCS Configuration

This chapter describes how you should configure your FAQS/PCS system before defining the "scheduled activity" section.

10.1 FAQS/PCS Configuration

The FAQS/PCS configuration definitions control the operations of FAQS/PCS.

The FAQS/PCS system is controlled by the configuration member called **JCLCONFIG.CTL**. This member is created and maintained via online interfaces.

It contains:

- Private user ID Options
- System Options

To access FAQS/PCS configuration, select **O** on the DCM-SYSTEMS FAQS/PCS ONLINE panel.

```
====> O

          ** DCM-SYSTEMS FAQS/PCS ONLINE - Menu Index **

C   Current Event Maintenance      E   Master Events Maintenance
U   PDS Update                     P   Event Forecasting
R   Retrieve Member from CMS       T   Transfer to CMS
Y   Verify Process Periods        Z   Account History Display
B   Browse PDS Member             F   FLEE Online
H   General Help                  M   Utilities
V   Define Variables              X   Exit
I   REXX Member Update            J   FAQS/CALL Definitions
W   Work/Data Station             A   Audit History Display
O   Configuration Options         S   System Security
D   Resource Utilization

          PDS ====> MON      (PDS ID for Security Display and Update)

PF1=Help PF3=Return PF4=MSHP PF12=Exit
```

The FAQS/PCS Configuration Options panel is now displayed.

```

====>

** FAQs/PCS Configuration Options      - Menu Index **

Private User ID Options                System Options

V   CMS Submit Defaults                Q   System CMS Submit Defaults
E   Panel Defaults                    R   System Panel Defaults
                                         S   CMS Server Defaults
                                         G   Global Configuration Options
                                         U   User Class Config. Options
                                         C   User ID Classes
                                         I   Library Defaults
                                         F   Define Holidays and Cycles
                                         D   CPUID Synonyms & Nodes
                                         N   Dataset Exclusion
                                         T   Dataset Logging

PF1=Help  PF3=Return  PF6=Update

```

Private user ID Options

These options are used to set up defaults for current PCS user IDs.

The following table briefly describes each private option.

<i>Table 13. Private User ID Options</i>	
Option	Function
V CMS submit defaults	Identifies to where a job is to be routed
E Panel defaults	Defines defaults when events are created, establishes defaults for the event panel and defaults for PDS browsing and updating

System Options

You can set up global configuration values for any user ID.

The following table briefly describes each system configuration option.

<i>Table 14 (Page 1 of 2). Global System Configuration Options</i>	
Option	Function
Q System CMS Submit Defaults	Identifies to where a job is to be routed to be executed for any user ID.
R System Panel Defaults	Defines defaults when events are created, establishes defaults for the event panel and defaults for PDS browsing and updating for any user ID.
S CMS Server Defaults	Defines the name of the CMS server machine, VSE machine and spool class.
G Global Configuration Options	Enables to setup system configuration options globally.

Table 14 (Page 2 of 2). Global System Configuration Options

Option	Function
U User Class Configuration Options	Sets up user class batch options.
C User ID Classes	Sets up default values for users assigned to defined classes.
I Library Defaults	Sets up default libraries for submitting jobs.
F Define Holidays and Cycles	Defines event holidays, workdays, cycles and user-defined calendars.
D CPUID Synonyms & Nodes	Defines CPU synonyms for all CPUs in the network.
N Dataset Exclusion	Specifies data sets to be monitored for exclusion when an event is scheduled.
T Dataset Logging	Collects data set logging suppression.

10.1.1 Defining System Options

Now you have to establish the defaults for the FAQS/PCS system. This must be done before you define your events.

10.1.1.1 Defining System CMS Submit Defaults

To define system CMS submit defaults follow these steps.

On the FAQS/PCS Configuration Options panel, select **Q**.

The FAQS/PCS Set Up CMS Default screen is now displayed.

```

====>
          FAQS/PCS Set Up CMS Defaults

CMS Options for User  ====> PIPPO

Class  ====> A           Enter class of target machine reader.
User   ====> VSEPROD     Enter target machine user ID.
Node   ====> VSEREM      Enter node name of target remote system.
RSCS   ====> RSCSV3      Enter name of your RSCS on this VM system.

PF1=Help  PF3=Return  PF4=Update
    
```

1. Enter the CMS user ID in the input field
2. Specify the options for this user ID
3. Update the values on disk by pressing PF4

Note: For more information use Online Help or see the *FAQS/PCS Implementation Guide*.

10.1.1.2 Defining System Panel Defaults

To define System Panel defaults follow these steps:

On the FAQS/PCS Configuration Options panel, select **R**.

The FAQS/PCS Set Up screen is now displayed.

```
====>

**FAQS/PCS Set Up Event and PCS Update and Browse Defaults**

                User                ==> $DEFAULT

Event Default Values                Event Panel Display Options
Early Time    ==>                    Event Refresh ==>
Late Time     ==>                    Display Group ==>
Abort Time    ==>                    Sort Time     ==>
Event Cpu ID  ==>                    Tran to Mast  ==>

PDS Update and Browse Defaults      Miscellaneous Defaults
PDS Id        ==>                    Confirm Deletes ==>
Data Type     ==>                    Log direction  ==>

PF1=Help PF3=Return PF4=Update PF12=Exit
```

1. Specify the options for the events
2. Specify the options for the PDS's members
3. Update the values on disk by pressing PF4

Note: For more information use Online Help or see the *FAQS/PCS Implementation Guide*.

10.1.1.3 Defining CMS Server Defaults

To define CMS Server defaults, follow these steps:

On the FAQS/PCS Configuration Options panel, select **S**.

The FAQS/PCS CMS Server ID Defaults screen is now displayed.


```

====>

                ** FAQs/PCS Global Configuration Options **

        Current User Classes:  *** NONE ***

Y   AUDIT Trail enabled
N   CADRIVER local variable support
N   POWER SLI catalog support
Y   FLEE GSERV shifting
Y   Log messages to console
Y   Retain POWER JOB statements upon RESTART
Y   Retain POWER LST statements upon RESTART
Y   Retain POWER PUN statements upon RESTART
N   Retain POWER RDR and SLI statements upon RESTART
N   Scan columns 1-80 for variables (default 1-71)
Y   Preserve columns 72-80 from variable substitution
Y   Convert PCL operator replies to uppercase

PF1=Help PF3=Return PF6=Update PF8=Fwd

```

1. Select the options you want to enable (Y) globally
2. Press PF8, the second panel is displayed

```

====>

                ** FAQs/PCS Global Configuration Options **

Default batch USERID                ===> ADMN
Scheduler Partition                  ===> Z
Default POWER JOB class for scheduler submitted jobs ===> 0
Default POWER JOB class for non-scheduled jobs      ===> A
Default POWER JOB DISP= parameter          ===>
Default POWER JOB priority              ===> 4
Default POWER JOB SYSID= parameter        ===>
Default PDS member datatype            ===> MON
JCL restart card retention              ===> STEP
Restart comment format                  ===> STEP *
Additional PCL prefix                    ===> ./ &&
GOTO limit counter                      ===>

PF1=Help PF7=Bwd

```

1. Select the options you want to change by entering a new value
2. Return to the first panel (PF3) and update by pressing PF6

Note: For more information use Online Help or see the *FAQS/PCS Implementation Guide*.

10.1.1.5 Defining User Class Configuration Options

To define User Class Configuration Options follow these steps:

On the FAQs/PCS Configuration Options panel, select **U**.

The FAQs/PCS User Class Configuration Options screen is now displayed.

```

====>

                ** FAQS/PCS Class Configuration Options **

Current User Classes:  *** NONE ***
Option Class  ====>

Y   FLEE GSERV shifting
Y   Log messages to console
Y   Retain POWER JOB statements upon RESTART
Y   Retain POWER LST statements upon RESTART
Y   Retain POWER PUN statements upon RESTART
N   Retain POWER RDR and SLI statements upon RESTART
N   Scan columns 1-80 for variables (default 1-71)
Y   Preserve columns 72-80 from variable substitution
Y   Convert PCL operator replies to uppercase

PF1=Help PF3=Return PF4=Add PF6=Update PF7=Bwd PF8=Fwd PF9=Del

```

1. Add a new user class by pressing PF4
2. Enter the new class in the input field
3. Select the options you want to enable (Y) globally
4. Update by pressing PF6

Note: For more information use Online Help or see the *FAQS/PCS Implementation Guide*.

10.1.1.6 Defining User ID Classes

To define user ID classes follow these steps:

On the FAQS/PCS Configuration Options panel, select **C**.

The FAQS/PCS User ID Class screen is now displayed.

```

====>

                ** FAQS/PCS User ID Classes **

CLASS          USER IDs

_  A      ADMN

_  O      OPER

_  F      PIPPO

L=Delete O=Options S=Security U=Update
PF1=Help PF3=Return PF4=Add PF6=Update PF7=Bwd PF8=Fwd

```

1. Add a new user class for the user ID by pressing PF4
2. Update a current user class with maintenance options
3. Update by pressing PF6

Note: For more information use Online Help or see the *FAQS/PCS Implementation Guide*.

10.1.1.7 Defining Library Defaults

To define library defaults follow these steps:

On the FAQS/PCS Configuration Options panel, select **I**.

The FAQS/PCS Library Default screen is now displayed.

```
====>

                **   Library Defaults   **

BIM-EDIT Library Name      ===> _____
BIM-EDIT Logon Parameter   ===> _____

CA-LIBRARIAN Library Name  ===> _____

CA-VOLLIE Library Name     ===> _____

CONDOR Library Name        ===> _____

PANVALET Library Name      ===> _____

ICCF Primary Library       ===> _____
ICCF Connected Library     ===> _____
ICCF Common Library        ===> _____

PDS Search String          ===> _ _ _ _ _

PF1=Help PF3=Return PF4=Update PF9=Delete
```

Default library names enable you to enter shorter commands to access library members.

1. Update this panel with the libraries you use
2. Update by pressing PF4

Note: For more information use Online Help or see the *FAQS/PCS Implementation Guide*.

10.1.1.8 Defining CPUID Synonym Table

To define a CPUID synonym table follow these steps:

On the FAQS/PCS Configuration Options panel, select **D**.

The FAQS/PCS CPUID Nodeid Synonym table screen is now displayed.

```

====>

                ** CPUID NODEID SYNONYM TABLE **

SYNONYM   CPUID                SYNONYM   CPUID
MYVSE     = 130477              _____ = _____
_____   = _____          _____ = _____
_____   = _____          _____ = _____
_____   = _____          _____ = _____
_____   = _____          _____ = _____
_____   = _____          _____ = _____
_____   = _____          _____ = _____
_____   = _____          _____ = _____
_____   = _____          _____ = _____
_____   = _____          _____ = _____
_____   = _____          _____ = _____
_____   = _____          _____ = _____
_____   = _____          _____ = _____
_____   = _____          _____ = _____
_____   = _____          _____ = _____
_____   = _____          _____ = _____

PF1=Help PF3=Return PF4=Write to Disk

```

1. Enter a synonym for your CPUID
2. Enter six digits of the CPUID
3. Update by pressing PF4

Note: For more information use Online Help or see the *FAQS/PCS Implementation Guide*.

10.1.1.9 Specifying Holiday and Cycle Definitions

The define holiday and cycles option enables you to define holidays, workdays and cycles. These definitions can be used with event creation.

To define holidays and cycles follow these steps:

On the FAQS/PCS Configuration Options panel, select **F**.

The FAQS/PCS Holiday and Cycle definition screen is now displayed.

```

====>

** FAQS/PCS Online - Holiday and Cycle definition entry panel **

Selection Panel for maintaining and displaying Holiday and Cycle
definitions. Also, if any user defined calendars have been set
up, a user may display and edit them.
Enter A B C D E or F for the appropriate selection.

A Holiday Definition List by IDs
B Holiday Id 000 Display and Edit
C Cycle Definition List by IDs
D Cycle Id 000 Display and Edit
E Display and Edit any Existing User Defined Calendar
F Exception Date Definition List by IDs

PF1=Help PF3=Return

```

This menu allows access to the various Holiday and Cycle definitions panels.

<i>Table 15. Sample Holiday and Cycle Definition Panels</i>	
Option	Function
Holiday Definition List	Displays all currently defined holiday ID definitions
Holiday Id 000 Display	Displays or edits the Holiday ID definition 000
Cycle Definition List	Displays all currently defined Cycle ID definitions
Cycle Id 000 Display	Displays or edits the Cycle ID definition 000
Display and Edit User defined calendars	Displays or edits any existing user defined calendars

Listing and Defining Holidays or Cycles by IDs

```

====>
                List of Holiday (Cycle) definitions by Id
   ID      Description                               Update Timestamp
_ 000                                           10/18/94 17.24.10
_ 100    Payroll holidays                          11/07/94 07.42.04

Actions:  L=Delete X=Edit
          PF1=Help PF2=Refresh PF3=Return PF4=Add

```

This panel displays a summary of all Holiday definitions, Cycle definitions, or user calendars depending on the selected menu option.

All Holiday and Cycle definitions are displayed with their three digit identifier, associated description, and the last date and time definition was updated.

User calendars are displayed with their four character calendar name and last date and time the calendar was updated.

If you want to edit an ID enter **B** for Holiday, **D** for Cycle and **E** for User on the Holiday and Cycles menu panel or enter **X** in the input field next to the ID.

The following panel is displayed for **Holiday**:

```

====>

Holiday Id ====> 100   Desc ====> Payroll holidays

   **/12/25           _____
   **/07/04           _____
   **/01/01           _____
   94/05/21           _____
   94/06/22           _____
   94/07/21           _____
   94/08/23           _____
   94/09/24           _____
   _____
   _____
   _____
   _____

MIWTFSS                Enter Holidays in YY/MM/DD Format
XXXXX_ <==== Workdays  Place X beneath valid workdays

PF1=Help PF3=Return PF4=Write to Disk

```

The panel for **Cycles** looks like the following sample:

```

====>

Cycle Id ====> 000   Desc ====> Default cycle table
Date range for cycle period           Date range for cycle period

(01) 94/01/01 <====> 94/12/31 (16) _____ <====> _____
(02) _____ <====> _____ (17) _____ <====> _____
(03) _____ <====> _____ (18) _____ <====> _____
(04) _____ <====> _____ (19) _____ <====> _____
(05) _____ <====> _____ (20) _____ <====> _____
(06) _____ <====> _____ (21) _____ <====> _____
(07) _____ <====> _____ (22) _____ <====> _____
(08) _____ <====> _____ (23) _____ <====> _____
(09) _____ <====> _____ (24) _____ <====> _____
(10) _____ <====> _____ (25) _____ <====> _____
(11) _____ <====> _____ (26) _____ <====> _____
(12) _____ <====> _____ (27) _____ <====> _____
(13) _____ <====> _____ (28) _____ <====> _____
(14) _____ <====> _____ (29) _____ <====> _____
(15) _____ <====> _____ (30) _____ <====> _____

PF1=Help PF3=Return PF4=Write to Disk

```

Note: For more information use Online Help or see the *FAQS/PCS Implementation Guide*.

Defining an Exception Data ID:

Use exception data to handle exceptional scheduling conditions. In a list you can specify the dates when you do or don't want the event to run. The dates listed are used to override all other event day scheduling criteria. This includes all holidays too.

Valid XDATE definition IDs are 001-255.


```

====>

      ** FAQS/PCS Dataset Exclusion Configuration **

      Dataset name monitored for exclusion           Multi-CPU

      PAYROLL.FILE_____                          -
      CONTAB.TABLE.FILE_____                      -
      _____                                    -
      _____                                    -
      _____                                    -
      _____                                    -
      _____                                    -
      _____                                    -
      _____                                    -
      _____                                    -
      _____                                    -

      PF1=Help  PF3=Return  PF4=Save  PF7=Bwd  PF8=Fwd

```

Update this panel and press PF4 to save.

Note: For more information use Online Help or see the *FAQS/PCS Implementation Guide*.

10.1.1.11 Specifying Data Set Logging Suppression

Dataset Logging collects data set activity for reporting. The Dataset Logging option enables you specify data sets to exclude from logging. You can suppress data set logging by:

- Partition
- Phase name
- DOS jobname
- Data set name

To define Dataset Logging Suppression follow these steps:

On the FAQS/PCS Configuration Options panel, select **T**.

The FAQS/PCS Dataset Logging Configuration screen is displayed.

```

====>

      ** FAQS/PCS Dataset Logging Configuration Menu **

      C   Suppression by Partition
      P   Suppression by Phase Name
      J   Suppression by DOS Jobname
      N   Logged Dataset Names
      D   Suppression by Dataset Name

      PF1=Help  PF3=Return

```

Specifying Data Set Logging by Partition: FAQs/PCS enables you to specify the file type of a file and whether it will be logged in a specific partition.

The valid file types are:

- VSAM** VSAM files are all files referenced using a VSAM ACB.
- DASD** DASD files include those referenced using DTFSD, DTFDA and some DTFPH macros.
- TAPE** TAPE files are those referenced using DTFMT and some DTFPH macros.

```

====>

                ** FAQs/PCS Dataset Logging Partition Configuration **

Type   B F F F F F F F F F           Dynamic Partition Classes
       G B A 9 8 7 6 5 4 3 2 1   C D E G H I J K L M N O P Q R S T U V W X

VSAM   X X X X X X X X X X X X   X X X X X X X X X X X X X X X X X X X X X X
DASD   X X X X X X X X X X X X   X X X X X X X X X X X X X X X X X X X X X X
TAPE   X X X X X X X X X X X X   X X X X X X X X X X X X X X X X X X X X X X

PF1=Help PF3=Return PF4=Save

```

Specifying Data Set Logging by Phase: FAQs/PCS enables you to specify phases whose data set activity will not be logged.

```

====>

                ** FAQs/PCS Dataset Logging Phase Exceptions **

      PHASE           PHASE           PHASE           PHASE           PHASE

IDCAMS_____
_____
_____
_____
_____
_____
_____
_____

PF1=Help PF3=Return PF4=Save

```

Specifying Data Set Logging by DOS Job: FAQs/PCS enables you to specify a DOS Job whose data set activity will not be logged.

```

====>

      ** FAQs/PCS Dataset Logging DOS JOB Exceptions**

      DOSJOB      DOSJOB      DOSJOB      DOSJOB      DOSJOB

PAYROLL_  _____  _____  _____  _____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

PF1=Help  PF3=Return  PF4=Save

```

Including Data Sets for Logging: Another way to control data set logging is to specify only those data sets you want to have logged. By default, all data sets will be logged.

```

====>

      ** FAQs/PCS Dataset Logging Names to Log **

      Dataset Name

      * _____
      _____
      _____
      _____

PF1=Help  PF3=Return  PF4=Save

```

Excluding Data Sets from Logging: FAQs/PCS enables you to exclude data sets from logging by data set name.

```

====>

      ** FAQs/PCS Dataset Logging Name Exceptions **

      Dataset Name

      %DOS.* _____
      VSAM.MASTER.CATALOG _____
      VSESP.USER.CATALOG _____
      _____
      _____
      _____

PF1=Help  PF3=Return  PF4=Save

```

Chapter 11. FAQs/PCS Security

This chapter describes how to establish a security structure for the FAQs/PCS system.

11.1 Defining Initial FAQs/PCS Security

FAQS/PCS enables you to secure access to various FAQs/PCS functions.

The different security options allow you to protect PDS members, event files and utilities. The online security is based on the FAQs/ASO for VSE user ID.

The following table outlines the steps suggested to establish a satisfactory security structure.

Step	Action
1	Select and define a user to be Security Administrator
2	Set rules for the PCS Administrator
3	Establish rules for the \$DEFAULT user ID. \$DEFAULT user ID rules are applied to all user IDs who don't have security rules set for them
4	Add remaining FAQs/PCS user IDs

FAQS/PCS enables you to define security quickly and efficiently with online menus and option screen.

To access FAQs/PCS security, select **S** on the *DCM-SYSTEMS FAQs/PCS ONLINE* panel.

```
====> S

          ** DCM-SYSTEMS FAQs/PCS ONLINE - Menu Index **

C   Current Event Maintenance      E   Master Events Maintenance
U   PDS Update                     P   Event Forecasting
R   Retrieve Member from CMS       T   Transfer to CMS
Y   Verify Process Periods        Z   Account History Display
B   Browse PDS Member             F   FLEE Online
H   General Help                  M   Utilities
V   Define Variables              X   Exit
I   REXX Member Update            J   FAQs/CALL Definitions
W   Work/Data Station             A   Audit History Display
O   Configuration Options         S   System Security
D   Resource Utilization

          PDS ====> MON          (PDS ID for Security Display and Update)
```

```
PF1=Help PF3=Return PF4=MSHP PF12=Exit
```

The FAQS/PCS System Security panel is now displayed.

```

====>

                ** FAQS/PCS System Security - Menu Index **

O   Online Function Security
M   Member Security
V   Event Group Security
E   Event Security
G   Global FAQS/PCS Utility Security
U   User Class FAQS/PCS Utility Security
C   User ID Classes

PF1=Help  PF3=Return  PF6=Write Rules

```

These are the security options:

<i>Table 17. Security Options</i>	
Option	Function
O Online Function Security	Secures access to online FAQS/PCS functions to add, delete and modify security user ID
M Member Security	Secures access to specific PDS member
V Event Group Security	Secures access to events by group ID
E Event Security	Secures access to specific FAQS/PCS event
G Global FAQS/PCS Utility Security	Specifies system-wide utility security options
U User Class FAQS/PCS Utility Security	Specifies user-class utility security options
C User ID Classes	Maintains user classes

11.1.1 Defining a Security Administrator

On the FAQS/PCS System Security panel, select **O**.

```

====> O

                ** FAQS/PCS System Security - Menu Index **

O   Online Function Security
M   Member Security
V   Event Group Security
E   Event Security
G   Global FAQS/PCS Utility Security
U   User Class FAQS/PCS Utility Security
C   User ID Classes

PF1=Help  PF3=Return  PF6=Write Rules

```

The FAQS/PCS Security User IDs panel is now displayed.

```

====>

                ** FAQs/PCS Security User IDs **

      USER ID  MODEL ID      USER ID  MODEL ID      USER ID  MODEL ID

      _ D08101  $DEFAULT    _ D08201  $DEFAULT    _ MYUSER
      _ PIPPO1  _ PROFILE    _ PROFILE  $DEFAULT    _ SYA
      _ SYB      _ $DEFAULT

L=Delete M=Model U=Update
PF1=Help PF3=Return PF4=Add PF7=Bwd PF8=Fwd

```

Now perform the following steps:

1. Press PF4 and add a new user ID.
2. Allow the administrator to define security, by entering **Y** next to all the functions the administrator should be able to use.

```

====>

                **FAQS/PCS Online Security System Maintenance **

PCS/Online User ID ===> ADMIN      Model ID ===>

Y   Allow BROWSE function.          Y   Allow REXX panel.
Y   Allow FLEE/VSE online.          Y   Allow GSPDSU panel.
Y   Allow UPDATE function.          Y   Allow Ext. Lib BROWSE/COPY
Y   Allow transfer to CMS.          Y   Event Administrator
Y   Allow transfer from CMS.        Y   Allow Beeper Panel
Y   Allow security definition.      Y   Allow Product Code maint.
Y   Allow SYSTEM Config update.     Y   Allow Online CICS commands
Y   Allow event maintenance.        Y   Allow MSHP Online
Y   Allow event forecasting.        Y   Allow Resource Display
Y   Allow audit function.
Y   Allow CPU definition.
Y   Allow Calendar definition.
Y   Allow accounting function.
Y   Allow Variable alteration.
Y   Allow Work Station Access.

```

3. Press PF4 to update

Event Administrator field controls access to the event files.

Table 18. Access Control to Event Files	
Option	Explanation
Y	Allows users access to all event files.
N	Limits the users ability when accessing event files. They can only see the events and request or demand events to the current file. They are unable to change or edit the event.
U	The user will only be able to see events that they requested to the current file that were set up with an event day of REQUEST.
A	"A" is generally the same as a value of "Y" with the exception that the user will not be able to create new events.

11.1.2 Modifying the \$DEFAULT User ID

By default, all users have access to all functions. The default security is maintained by the \$DEFAULT user ID, which is supplied with the FAQs/PCS installation.

It is recommended that you modify the \$DEFAULT user ID to reflect only those security rights you wish all your users to have.

To do this, follow these steps:

1. On the FAQs/PCS Security User IDs panel, put **U** next to the \$DEFAULT user ID to update it.

```
====>

                ** FAQs/PCS Security User IDs **

      USER ID  MODEL ID      USER ID  MODEL ID      USER ID  MODEL ID
      _ D08101  $DEFAULT    _ D08201  $DEFAULT    _ MYUSER
      _ PIPPO1                                     _ PROFILE  $DEFAULT    _ SYA
      _ SYB                                           U $DEFAULT

L=Delete M=Model U=Update
PF1=Help PF3=Return PF4=Add PF7=Bwd PF8=Fwd
```

2. Manage the following panel to update the rules for this user ID.

```
====>

                **FAQS/PCS Online Security System Maintenance **

PCS/Online User ID ===> $DEFAULT Model ID ===>

Y Allow BROWSE function.      N Allow REXX panel.
Y Allow FLEE/VSE online.     Y Allow GSPDSU panel.
N Allow UPDATE function.     Y Allow Ext. Lib BROWSE/COPY
N Allow transfer to CMS.     N Event Administrator
N Allow transfer from CMS.   N Allow Beeper Panel
N Allow security definition. N Allow Product Code maint.
N Allow SYSTEM Config update. N Allow Online CICS commands
Y Allow event maintenance.   N Allow MSHP Online
Y Allow event forecasting.   N Allow Resource Display
N Allow audit function.
N Allow CPU definition.
N Allow Calendar definition.
N Allow accounting function.
N Allow Variable alteration.
Y Allow Work Station Access.
```

3. Press PF4 to update.

11.1.3 Adding Other User IDs

Once a security administrator is defined, the administrator can define security for all other FAQs/PCS users, by performing the following functions.

- Adding a user ID
- Updating a user ID
- Modeling a user ID
- Deleting a user ID

FAQS/PCS online user IDs and optional model IDs are listed in alphanumeric sorted sequence.

The user ID is either the CICS three character identifier taken from the DFHSNT OPID field, or the VM/CMS user ID accessing the FAQS/PCS online system.

The model ID is a defined FAQS/PCS user ID. MODEL user IDs are intended to ease the use of maintaining many user IDs with similar security access. When the MODEL user ID is maintained, all users with that model specified will operate with the changes when they next signon to FAQS/PCS.

11.2 Defining Complete Security

11.2.1 Defining User ID Classes

User classes are for grouping user ID(s) with similar characteristics. You may establish user groups for security or configuration purposes. Each user class is presented in alphanumeric sorted order with the first 10 user IDs of each class. A user group may contain one or more user IDs.

On the FAQS/PCS System Security panel, select **C**.

```
====> C

                ** FAQS/PCS System Security - Menu Index **

O   Online Function Security
M   Member Security
V   Event Group Security
E   Event Security
G   Global FAQS/PCS Utility Security
U   User Class FAQS/PCS Utility Security
C   User ID Classes

PF1=Help  PF3=Return  PF6=Write Rules
```

The FAQS/PCS User ID Class screen is now displayed.

```
====>

                ** FAQS/PCS User ID Classes **

CLASS          USER IDs

_  A          ADMN

_  O          OPER

_  F          PIPPO

                L=Delete O=Options S=Security U=Update
PF1=Help  PF3=Return  PF4=Add  PF6=Update  PF7=Bwd  PF8=Fwd
```

You can:

- Depress PF4 to create a new class of user IDs.
- Delete a user class.
- Maintain or view configuration options associated with a user class.
- Maintain or view security options associated with a user class.
- Maintain or view all user IDs within a class.

When you have defined your user classes depress the PF6 key to save your updates. All changes made to the global/user class options and global/user class security options will also be saved at this time to the JCLCONFIG.CTL member in the MON PDS.

11.2.2 Defining Member Level Security

The Member Security option enables you to secure all access to specific PDS members.

FAQS/PCS PDS member access may be restricted to prevent unauthorized access.

To access PDS member-level security, select **M** on the FAQS/PCS System Security panel.

```

====> M

                ** FAQS/PCS System Security - Menu Index **

O   Online Function Security
M   Member Security
V   Event Group Security
E   Event Security
G   Global FAQS/PCS Utility Security
U   User Class FAQS/PCS Utility Security
C   User ID Classes

PA1=Help PA3=Return PF6=Write Rules

```

The FAQS/PCS Member Security Rules panel is now displayed.

```

====>

                ** FAQS/PCS Member Security Rules **

MEMBER          AUTHORIZATION LEVELS
NAME            READ  UPDATE EXECUTE

_ MON:*.EVT     N     N     N
_ MON:JCLDOC.MON Y     N     Y

U=Update
PF1=Help PF3=Return PF4=Add PF6=Write Rules PF7=Bwd PF8=Fwd

```

- To add a member name, press PF4.

- To update a member name, enter **U** in the input field next to the member name.

The Member Level Security Rules screen for a specific member is now displayed

```

====>
          ** FAQs/PCS Member Level Security Rules **
Member = MON:JCLDOC.MON      (Format=> PDS:MMMMMMMM.ttt)

Specify type of Security by placing an X next to one of the following

Restrict from:

      UPDATE      X      READ and UPDATE  _
      ALL access  _      EXECUTE          _

Security applies to USERID's or classes:  (default=ALL)
User1 ==>      User2 ==>      User3 ==>
User4 ==>      User5 ==>      User6 ==>
User7 ==>

Authorized USERID's or classes to BYPASS this security rule:
User1 ==> ADMN      User2 ==>      User3 ==>
User4 ==>      User5 ==>      User6 ==>
User7 ==>

PF1=Help  PF3=Return  PF6=Write Rules  PF9=Delete

```

Specific member or generic member names may be protected.

The full format of the member name is as follows: PPP:MMMMMMMM.TTT

PPP	PDS id
MMMMMMMM	member name
TTT	member type

PPP and TTT default to MON, thus if omitted the member will be assumed to reside in the MON PDS and also have a datatype of MON.

PDS member access can be restricted from the following access with single rule:

UPDATE	Users can't update a PDS member. However, they can still read and execute the PDS member.
EXECUTE	Users can't execute a PDS member. However, they can still read and update the PDS member.
READ & UPDATE	Users can't read or update a PDS member. However, they can still execute the PDS member.
ALL	Users can't access a PDS member.

Apply to Rules identify the user IDs or user ID classes to which this rule pertains. This category of user IDs could be used to restrict only certain user IDs or user ID classes. A class is a single character user ID.

Bypass User ID Rules identify the user IDs or user ID classes that are excluded from this rule. At least one user ID is required to be specified. If there are no exceptions to this rule a non-existent user ID may be specified.

After PDS security rules have been defined, press PF6 to save the changes.

11.2.3 Defining Event Group Security

FAQS/PCS enables you to secure access to events by group ID. Once event group security rules are established, only authorized users can see those events. Unauthorized users cannot display the events nor update them in any way.

To access PDS event group security, select **V** on the FAQS/PCS System Security panel.

```
====> V

          ** FAQS/PCS System Security - Menu Index **

O   Online Function Security
M   Member Security
V   Event Group Security
E   Event Security
G   Global FAQS/PCS Utility Security
U   User Class FAQS/PCS Utility Security
C   User ID Classes

PF1=Help  PF3=Return  PF6=Write Rules
```

The FAQS/PCS Event Group Security Rules panel is now displayed.

```
====>

          ** FAQS/PCS Event Group Security Rules **

EVENT GROUP          SCHEDULE

_ MGR                MASTER

U=Update
PF1=Help  PF3=Return  PF4=Add  PF6=Write Rules  PF7=Bwd  PF8=Fwd
```

- To add an event group name, press PF4.
- To update an event group, enter **U** in the input field next to the event group name.

The Event Level Security Rules screen for a specific event group is now displayed.

```

====>
          ** FAQS/PCS Event Level Security Rules **
Group ==>MGR

Specify type of Security by placing an X next to proper selection

Restrict from:

X ALL MASTER access      _ ALL CURRENT access

Security applies to USERID's or classes:  (default=ALL)
User1 ==> PIPPO      User2 ==>      User3 ==>
User4 ==>      User5 ==>      User6 ==>
User7 ==>

Authorized USERID's or classes to BYPASS this security rule:
User1 ==>      User2 ==>      User3 ==>
User4 ==>      User5 ==>      User6 ==>
User7 ==>

PF1=Help  PF3=Return  PF6=Write Rules  PF9=Delete

```

Event Group security can be restricted to the MASTER or CURRENT schedules with a single security rule.

Users authorized to access the event group will be allowed all access unless restricted via individual event security rules.

To confirm your changes, press PF6.

11.2.4 Defining Event-Level Security

FAQS/PCS enables you to secure access to specific events.

To access PDS event-level security, select **E** on the FAQS/PCS System Security panel.

```

====> E

          ** FAQS/PCS System Security - Menu Index **

O   Online Function Security
M   Member Security
V   Event Group Security
E   Event Security
G   Global FAQS/PCS Utility Security
U   User Class FAQS/PCS Utility Security
C   User ID Classes

PF1=Help  PF3=Return  PF6=Write Rules

```

The FAQS/PCS Event Security Rules panel is now displayed.

```

====>

                ** FAQs/PCS Event Security Rules **

EVENT NAME                AUTHORIZATION LEVELS

_ EVENT1                  CURRENT POST

U=Update
PF1=Help PF3=Return PF4=Add PF6=Write Rules PF7=Bwd PF8=Fwd

```

- To add an event name, press PF4.
- To update an event, enter **U** in the input field next to the event name.

The Event Level Security Rules screen for a specific event is now displayed.

```

====>

                ** FAQs/PCS Event Security Rules **

Event =  EVENT1

Specify type of Security by placing an X next to proper selection

Restrict from:

_ MASTER Update          _ CURRENT Update      X CURRENT Hold
_ CURRENT Unhold        _ CURRENT Post        _ CURRENT Reset

Security applies to user IDs or classes:  (default=ALL)
User1 ===>                User2 ===>                User3 ===>
User4 ===>                User5 ===>                User6 ===>
User7 ===>

Authorized user IDs or classes to BYPASS this security rule:
User1 ===> OPER           User2 ===>                User3 ===>
User4 ===>                User5 ===>                User6 ===>
User7 ===>

PF1=Help PF3=Return PF6=Write Rules PF9=Delete

```

Specific events or generic events may be protected.

EVENT access can be restricted from the following access:

MASTER UPDATE	Users can't update the master schedule
CURRENT UPDATE	Users can't update the current schedule
CURRENT HOLD	Users can't place an event on the current schedule on hold
CURRENT UNHOLD	Users can't schedule an event which is on hold
CURRENT POST	Users can't post an event on the current schedule
CURRENT RESET	Users can't reset an event on the current schedule

After PDS security rules have been defined, press PF6 to save the changes.

11.2.5 Defining Global Utility Security

The Global Utility Option enables you to specify entire system utility options. These options are common for all users that do not have specific user class security options set up.

To access Global Utility Security, select **G** on the FAQS/PCS System Security panel.

```
====> G

          ** FAQS/PCS System Security - Menu Index **

O   Online Function Security
M   Member Security
V   Event Group Security
E   Event Security
G   Global FAQS/PCS Utility Security
U   User Class FAQS/PCS Utility Security
C   User ID Classes

PF1=Help  PF3=Return  PF6=Write Rules
```

The FAQS/PCS Global Utility Security panel is now displayed.

```
====>

          ** FAQS/PCS Global Utility Security **

Current User Classes:  *** NONE ***

Y   All JCLRCICS functions allowed
Y   JCLRCICS dataset Open/Close allowed
Y   JCLRCICS DL/I Open/Close allowed
Y   GSEDIT DEL= command allowed
Y   GSEDIT submit allowed
Y   FAQS/PCS utility access via ICCF interface
Y   JCLMAINT member ADD allowed
Y   JCLMAINT member DELETE allowed
Y   JCLMAINT/GSEDIT member REPLACE
N   JCLMAINT member REPLACE CTL key required
Y   JCLMAINT member UPDATE allowed
N   GSEDIT update allowed
Y   JCLXCU allowed to issue OPERATOR commands

PF1=Help  PF3=Return  PF6=Write rules
```

- Set up rules by allowing (Y) or denying (N) access to each FAQS/PCS utility.
- To update the values on disk, press PF6.

Utility Security Options

<i>Table 19. Utility Security Options</i>	
Option	Function
All JCLRCICS functions	Allows all JCLRCICS functions to be used from either the JCLBCICS batch utility or from a REXX IMOD via an address CICS command.
JCLRCICS data set OPEN/CLOSE functions	This controls if the OPEN and CLOSE commands will be allowed for CICS data sets.
JCLRCICS DL/I OPEN/CLOSE functions	This controls if the OPEN and CLOSE commands will be allowed for DL/I databases.
GSEDIT DEL= command allowed	Allows the DEL=member command to be used when updating a member.
GSEDIT submit allowed	Allows jobstreams to be submitted from GSEDIT. This includes any attempts to submit jobs via .mmmmmmmm from the FAQs interface, entering SUBMIT or pressing PF12 while editing a jobstream, and using the Submit option from the UPDATE member panel.
FAQS/PCS utility access via ICCF interface	Allows ICCF users to execute FAQs/PCS Utilities within the ICCF interactive partitions.
JCLMAINT member ADD allowed	Allows PDS members to be added using the JCLMAINT ADD function in batch.
JCLMAINT member Delete allowed	Allows PDS members to be deleted using the JCLMAINT DEL function in batch.
JCLMAINT member Replace allowed	Allows PDS members to be replaced using the JCLMAINT REP function in batch.
JCLMAINT member Replace requires logout CTL key	When members are replaced using JCLMAINT, LOGOUT control will be used.
JCLMAINT member Update allowed	This option determines whether or not the JCLMAINT Update function will be allowed in batch. If JCLMAINT UPD is allowed, then GSEDIT update cannot be disallowed.
GSEDIT update allowed	When updates are disallowed from GSEDIT, member changes cannot be saved. GSEDIT can ONLY be secured from update if JCLMAINT Update is disallowed.
JCLXCU allowed to issue Operator commands	The default is to allow operator commands to be issued by JCLXCU.

11.2.6 Defining User Class Utility Security

The FAQS/PCS User Class Security option enables you to specify user class utility security options. These options will pertain only to users that are assigned to this class.

Generally these options would be used for special situations such as Security Administrators or Systems Programmers who may require different options than the general user.

To access User Class Utility Security, select **U** on the FAQS/PCS System Security panel.

```
====> U

          ** FAQS/PCS System Security - Menu Index **

O   Online Function Security
M   Member Security
V   Event Group Security
E   Event Security
G   Global FAQS/PCS Utility Security
U   User Class FAQS/PCS Utility Security
C   User ID Classes

PF1=Help  PF3=Return  PF6=Write Rules
```

The FAQS/PCS User Class Utility Security panel is now displayed.

```
====>

          ** FAQS/PCS User Security Classes **

Current User Classes:
Security Class  ====>

Y   ALL JCLRCICS functions allowed
Y   JCLRCICS dataset Open/Close allowed
Y   JCLRCICS DL/I Open/Close allowed
Y   GSEDIT DEL= command allowed
Y   GSEDIT submit allowed
Y   FAQS/PCS utility access via ICCF interface
Y   JCLMAINT member ADD allowed
Y   JCLMAINT member DELETE allowed
Y   JCLMAINT/GSEDIT member REPLACE
N   JCLMAINT member REPLACE CTL key required
Y   JCLMAINT member UPDATE allowed
N   GSEDIT update allowed
Y   JCLXCU allowed to issue OPERATOR commands

PF1=Help  PF3=Return  PF4=Add  PF6=Write  PF7=Bwd  PF8=Fwd  PF9=Del
```

- To add a new User Security Class, press PF4.
- Set up rules by allowing (Y) or denying (N) access to each FAQS/PCS utility.
- To update the values on disk, press PF6.

Chapter 12. Managing the Scheduler

This chapter describes how to handle FAQS/PCS for scheduler activity and how to generate jobs for FAQS/PCS.

12.1 Scheduler Control Command

JCLSCHEd is FAQS/PCS's event scheduler program.

It schedules events and dispatches event commands that can:

- Issue FAQS/PCS scheduler control commands
- Run REXX procedures
- Issue VM/CP commands
- Issue VSE/POWER commands
- Issue operator commands
- Schedule jobs

This program supports many facilities. Its commands allow management of:

- The event files
- Initialization interfaces
- Other functions.

You can use these commands in FAQS/ASO console mode or put them in a JCLSCHEd job stream.

12.1.1 Loading Events into the Current Event File

There are two directories for managing the event files:

Master Event File	Contains every event that has been created in FAQS/PCS. The scheduler loads a subset of the events into the current file each day at midnight or at the user defined time.
Current Event File	Contains every event that has been created for the current processing period.

Before event processing can occur, the event must be loaded into the current event file.

The following commands affect how events are loaded into the current event file:

&EVLOAD	With this command the FAQS/PCS takes events from the master event file and merges them into the current event file. When you issue the &EVLOAD command, FAQS/PCS searches the master event file for the events eligible for the current processing period and places those events in the current event file. &EVLOAD also deletes events from the current event file that have completed during the previous processing period.
&EVRLOAD	The &EVRLOAD command creates the current event file for the processing period. The difference between &EVLOAD and &EVRLOAD is that &EVRLOAD deletes the existing current event file before it extracts the proper events from the master event file.

EVLDON	The &EVLDON command enables the scheduler to reload and update the current event file at midnight.
&EVLDOFF	To disable automatic event loading, use the &EVLDOFF command.
&LOADTIME	This command alters the automatic loadtime default of midnight. Before you use this command, &EVLDON and &EVON must be set, otherwise no load occurs. Add the &LOADTIME command to your JCLSCHED.CTL member if you want the load to run automatically at a specific time (other than midnight) every day.

12.1.2 Controlling Event Processing

You can control how events will be processed by entering the appropriate commands independently on the console, in the JCLSCHED.CTL startup file or by scheduling event commands as events themselves.

The following commands control how events are processed:

&EVON	To enable the event scheduler.
&EVOFF	To disable the event scheduler.
&EVIO n	To change the event file scan interval (default 15 sec.)
&EVNAME On Off	To enable/disable the event display on the console when the event is scheduled (default OFF).
&EVTEST On Off	To enable/disable scheduling simulation.
&LOADMSG	Rebuilds the message table for events in the current event file.

12.1.3 Initiating Interfaces by the Scheduler

Using scheduler control commands, you can initiate the following system interfaces either on the console or in the JCLSCHED startup file:

&FAQSIUCV	To enable the IUCV interface.
&FAQSAO	To enable the REXX IMODs interface.
\$phasename	To load and attach the phase as a subtask.
&ALERTVSE	Initiates the ALERT for the VSE logger task.

12.1.4 Remote Scheduling Commands

FAQS/PCS supports scheduling on a remote system via LU 6.2 communication protocol. You can specify a target node in an event definition and the originating system will dispatch the event command to the remote system for execution.

&REMCMD <i>target-node cmd</i>	To send a command to a remote system
&RMT <i>node keyword</i>	To test the communications protocol between systems.

Keyword

RESET	Resets connection
STATUS	Displays status for the connection
TEST	For test connection
TRACEON	Enables trace flags

TRACEOFF	Disables trace flags
WTO	Echoed text follows keyword

12.1.5 Miscellaneous Scheduling Commands

The miscellaneous control commands affect the scheduler, but not in relation to the events or interfaces.

&CON	To enable console input
&COFF	To disable console input
&CP <i>vmcmd</i>	To issue a VM CP command
&CMS <i>cmd</i>	To execute a command on a FAQs/PCS CMS server
&AO <i>lmod-name</i>	To run a REXX procedure
&SECLD	To load security definitions
&TERMINATE	To close the scheduler

When JCLSCHEM is activated, the following actions occur:

1. Commands in the JCLSCHEM.CTL member are processed.
2. A console prompt is displayed.
3. Events are processed.

The console prompt enables you to enter commands into JCLSCHEM.

When you enter a command from the console, the requested action is performed and the status is reported on the console. The console prompt displays at the completion of each command.

```

01 Z1-020 GJJ206I JOB SCHEDULER ACTIVE
02 Z1 069 20 &CP Q TA
03 20 &CP Q TA
04 Z1 020 TAPE 0871 ATTACHED TO ASOMAIN 0181 R/W
05 Z1-020 GJJ206I JOB SCHEDULER ACTIVE
06 Z1 069 20 &EVLON
07 20 &EVLON
08 Z1 020 GJJ213I EVENT AUTO LOAD ENABLED
09*Z1-020 GJJ206I JOB SCHEDULER ACTIVE

```

Figure 107. Scheduler Control Commands on the VSE Console

12.2 Generating Jobs for FAQs/PCS

For scheduling purposes, you can generate jobs in several ways:

- As a part of an event
- As a reply to a scheduler partition
- As a nested member
- Using the JCLXCU batch utility
- From a FAQs/ASO-supported interface

- From DCMO CMS or DCMO CICS interface

All job generation commands have a *jobname* within their format.

<i>Table 20. Job Scheduling Rules</i>	
In order to	Use this format
Pass commands to the scheduler (JCLSCHEd) as <ul style="list-style-type: none"> • Part of an event command • A reply to the scheduler partition 	<i>memname</i>
Request a member from a CMS server using JCLSCHEd	&SUB <i>filename.filetype.filemode</i>
Pass commands to JCLXCU	GEN <i>memname</i>
Request a member from a CMS server using JCLXCU	SUB <i>filename.filetype.filemode</i>
Nest a member within a member in a jobstream	./ PROC <i>memname</i>
Pass commands from FAQs/ASO or DCMO interface	<i>.memname</i>

Jobs generated by FAQs/PCS are passed to POWER via the XPCC (Cross Partition Communication Control) interface.

Note: Members referenced by the PROC statement in a CMS server JCL must reside in a FAQs/PCS PDS.

If a JCL member doesn't reside in a PDS, use proper naming convention.

Members that reside in the JCL libraries can be scheduled using their unique command format.

The following lists the command formats for JCL libraries:

FAQS/PCS PDS *ppp:mmmmmmmm.ttt*

Where:

ppp Optional PDS name. Default MON
mmmmmmmm Required 1-8 character PDS member.
ttt Optional member type. Default .MON

VM/CMS *nnn:mmmmmmmm.ttt*

Where:

nnn Required CUU of CMS minidisk.
mmmmmmmm Required 1-8 character CMS filename.
ttt Required first 3 characters of CMS filetype.
 Default MON

CMS SERVER &SUB *fn.ft.fm*

Where:

fn Required 1-8 character CMS filename.
ft Required first 3 characters of CMS filetype.
fm Required 1 character CMS filemode.

VSE LIBRARY S=lib.slib M=memb.mtype
Where:
lib Required VSE library name.
slib Required VSE sublibrary name.
memb Required member name.
mtype Required member type. PHASE and OBJ are invalid.

ICCF D=pppp.ssss M=memb
Where:
ppp Primary ICCF library number
ssss Optional secondary ICCF library number
memb Required ICCF member name.

POWER R:memb
Where:
memb Required POWER member

CA-VOLLIE V=libname M=yyy.memb
Where:
libname Required VOLLIE library name.
yyy Required 3 character VOLLIE opident.
memn Required VOLLIE member name

BIM-EDIT B=libname M=memb
Where:
libname Required BIM-EDIT library name.
memb Required BIM-EDIT member name.

CA-LIBRARIAN L=libname M=memb
Where:
libname Required CA-LIBRARIAN DLBL name.
memb Required CA-LIBRARIAN member name.

PANVALET P=libname M=memb
Where:
libname Required PANVALET DLBL name.
memb Required PANVALET member name.

CONDOR X=libname M=memb
Where:
libname Required CONDOR DLBL name.
memb Required CONDOR member name.

CA-DRIVER W.memb
Where:
memb Required DRIVER member name.

For abbreviated formats of member schedule commands, the default parameters are maintained via the online system configuration external library options panel. See 10.1.1.7, "Defining Library Defaults" on page 118.

The following table lists the abbreviated formats:

<i>Table 21. Abbreviated Member Schedule Commands</i>	
Library	Abbreviated Command Format
PDS	memname
ICCF	D:memname
VSE LIBRARY	S:memname.ttt
CA-VOLLIE	V:yyy.memname
CA-DRIVER	W:memname
CA-LIBRARIAN	L:memname
BIM-EDIT	B:memname
PANVALET	P:memname
CONDOR	X:memname
CMS SERVER	N/A
POWER RDR queue	N/A

12.3 JCL Jobstream Examples

JCL that can be applied to generate job with FAQs/PCS.

```
* $$ JOB JNM=JCLBU
// JOB BACKUP FAQs/PCS
// ASSGN SYS010,280
// EXEC GSPDSU,SIZE=GSPDSU
PDS=MON,BACKUP
/*
/&
* $$ EOJ
```

Figure 108. Sample One-step Job: One Program without Nested Calls

```
* $$ JOB JNM=BACKUP
// JOB BACKUP FAQs/PCS
/. JCLBUM for MON
// ASSGN SYS010,280
// EXEC GSPDSU,SIZE=GSPDSU
PDS=MON,BACKUP
/*
/. JCLBUV for VIO
// ASSGN SYS010,280
// EXEC GSPDSU,SIZE=GSPDSU
PDS=VIO,BACKUP
/*
/&
* $$ EOJ
```

Figure 109. Sample Multi-step Job without Nested Calls


```

* $$ JOB JNM=BACKUP
// JOB BACKUP FAQs/PCS
./ PROC JCLBUM
./ PROC JCLBUV
/&
* $$ EOJ

./ proc JCLBUM      /. JCLBUM for MON
                   // ASSGN SYS010,280
                   // EXEC GSPDSU,SIZE=GSPDSU
                   PDS=MON,BACKUP
                   /*

./ proc JCLBUV     /. JCLBUV for VIO
                   // ASSGN SYS010,280
                   // EXEC GSPDSU,SIZE=GSPDSU
                   PDS=VIO,BACKUP
                   /*

```

Figure 110. Sample Multi-step Job with Nested Calls (./PROC)

It is possible to restart these jobs at the second step, by entering **BACKUP,S=JCLBUV**

```

| PARM &PDS=MON <----- Variable

* $$ JOB JNM=BACKUP
// JOB GSPDSU Backup
// LIBDEF *,SEARCH=(LEGENT.FAQS,LEGENT.BACK)
| IF &PDS EQ 'VIO' GOTO SVIO
// DLBL GSPDSO,'VI.PDS.MON.BACKUP.FILE',0,SD
// EXTENT SYS010,SYSWK2,1,0,3015,150
| GOTO COMMON
| STEP SVIO
// DLBL GSPDSO,'VI.PDS.VIO.BACKUP.FILE',0,SD
// EXTENT SYS010,SYSWK2,1,0,8565,200
// ASSGN SYS010,280
| STEP COMMON
// EXEC GSPDSU,SIZE=GSPDSU
PDS=&PDS,BACKUP
/*
/&
* $$ EOJ

```

Figure 111. Sample Job with User Variable

Chapter 13. Using CMS with FAQs/PCS

This chapter describes how you can use CMS to access the FAQs/PCS online feature and how to define and to activate the CMS Server machine.

13.1 FAQs/PCS CMS Online Interface

If you are a CMS user and you want to use the FAQs/PCS CMS online interface, you should customize the following CMS EXECs supplied with your FAQs/PCS installation:

- DCMO EXEC
- PCSCMS EXEC
- RXSETUP EXEC

13.1.1 DCMO EXEC

The DCMO EXEC enables you to use a CMS interface to access FAQs/PCS features. From the CMS Online Interface Screen, you can:

- Access the DCM-System Editor
- Edit FAQs/PCS PDS members
- Access the FAQs/PCS Online

You should update the *get_disk* statements and *do_filedef* statements to reflect your MON and VIO PDSs and your VSE machine name information. Be sure you are linked read-write to the disks on which the FAQs/PCS PDSs reside.

Follow these steps to tailor your DCMO EXEC:

Step	Action
1	Make sure you have access to: <ul style="list-style-type: none">• DCMSYSE LOADLIB• DCMCOMME LOADLIB• DCMOCMS MODULE
2	Link and access the disks where the PDS files reside
3	Update <i>do_filedef</i> statements for the PDS files

The following example shows the portion of the exec you should change in the supplied DCMO EXEC.

This is the minimum you need to change. Optionally, you can specify other PDSs, SYS\$LOG for example.

```

if mach=ϕV131A94ϕ then do
  call get_disk ϕV131A94 441 MW MDOSϕ
  call get_disk ϕV131A94 440 MW MDOSϕ
  call do_filedef ϕSYS$VIOϕ ϕSYS$VIO.LEGENTϕ
  call do_filedef ϕSYS$MONϕ ϕSYS$MON.LEGENTϕ
  call do_filedef ϕVSESLAϕ ϕDOS.LABEL.FILE.FF1304779121.AREA1ϕ
end
if mach=ϕV131B94ϕ then do
  call get_disk ϕV131B94 444 MW MOSϕ
  call get_disk ϕV131B94 445 MW MDOSϕ
  call do_filedef ϕSYS$VIOϕ ϕSYSVC.PERM.VIO.320ϕ
  call do_filedef ϕSYS$MONϕ ϕSYSVC.PERM.MON.320ϕ
  call do_filedef ϕVSESLAϕ ϕDOS.LABEL.FILE.FF4444449121.AREA2ϕ
end

```

Figure 112. Portion of the DCMO EXEC

Note: Only if FLEE/VSE (LEGENT product) is licensed should you update also the statement for the VSE Label Area.

The following CMS files are supplied on the FAQs/PCS installation tape and are related to using the DCMO EXEC:

Table 23. CMS Files supplied for DCMO EXEC	
File	Function
DCMO EXEC	Executes the DCMO utility. This file is a front end to DCMOCMS MODULE
DCMOCMS MODULE	Manages the screen driver
DCMSYSE LOADLIB	Manages screen, accesses and updates PDSs, and accesses VSE libraries

To access the DCMO CMS Interface, enter **DCMO** at a CMS READY prompt.

The CMS Online/Product Interface Screen is displayed.

```

** LEGENT CMS ONLINE/PRODUCT INTERFACE V4.0.2 **
==>

                                Command Summary

U=*      - Enter DCM-Systems Editor
U=nnnn  - Edit a specific PCS PDS member
PCS      - Enter PCS/Online
FLEE    - Enter FLEE/Online
MCAT    - Enter ISM MASTERCAT Online
X fn    - Edit CMS Member
PF3     - Exit Transaction

```

You can enter the following commands:

U=membername To access PDS members to edit
PCS To access FAQs/PCS online screens
X filename filetype filemode To access a CMS member

The DCMO interface doesn't require any VSE resource:

- VSE doesn't have be active
- VSE LOCK file is not required
- VSE GETVIS is not used

The DCMO CMS interface enables you to file a PDS member on your A disk.

To do this, follow these steps:

<i>Table 24. Filing a PDS Member</i>	
Step	Action
1	On the CMS Online/Product Interface screen, enter U=membername to edit a PDS member
2	Enter PDS=CMS on the editor command line and press ENTER. This command switches you to CMS mode access.
3	Enter FILE on the command line. The PDS member is now on your A disk.

13.1.2 PCSCMS EXEC

The PCSCMS EXEC enables you to use many of the FAQs/PCS batch utilities under native CMS. With this exec you can:

- Manage events
- Manage PDS members
- Produce FAQs/PCS reports

The following table shows the FAQs/PCS batch programs you can execute from the PCSCMS EXEC:

<i>Table 25 (Page 1 of 2). Batch Programs Enabled under PCSCMS</i>	
File	Function
JCLMAN	Executes the JCLMAN program including the JOB generation feature.
JCLCREF	Executes JCLCREF to produce reports on the data collected by a previous JCLMAN run.
GSACCNT	Executes GSACCNT to produce a report on the \$JOBACCT history that has been collected on disk.
PCSCBAT	Executes a PCS REXX procedure that resides in the MON PDS.

Table 25 (Page 2 of 2). Batch Programs Enabled under PCSCMS

File	Function
PCSCPOST	<p>Posts the named event.</p> <p>Following are the return codes associated with PCSCPOST:</p> <p>RC=0000 Event was posted RC=0002 Event was not found, or it is expired or complete RC=0004 Parameter(s) missing RC=0008 Insufficient storage RC=000C A security violation occurred RC=01XX A PDS access failure occurred RC=07XX A storage allocation request failed</p>
GSAUDIT	Executes GSAUDIT to produce a report on the audit log file collected on disk.
GSPDSU	Executes the DIRLIST or ANALYZE functions of GSPDSU.
JCLEVNT	Executes the JCLEVNT batch utility.
PCSERPT	Prints event summary graphs.
GSDSN	Produces reports about the activity collected in SYS\$LOG
PCSEVRP	Produces event reports.

Note: If this EXEC is invoked without any parameters then the program JCLMAN will be invoked.

Remarks:

- Input will be read from IJSYSIN DATA A
- Output will be directed where the FILEDEF statements specify IJSYSLST and IJSYSPH

You should update the *get_disk* statements and *do_filedef* statements to reflect your MON and VIO PDSs and your VSE machine name information. The PDS disks must be linked as MW.

```

call get_disk %V131A94 441 MW MDOS%
call get_disk %V131A94 440 MW MDOS%
call do_filedef %SYS$VIO% %SYS$VIO.LEGENT%
call do_filedef %SYS$MON% %SYS$MON.LEGENT%
call do_filedef %SYS$LOG% %SYS$LOG.LEGENT%

%FILEDEF IJSYSLS PRINTER%
%FILEDEF IJSYSPH PUNCH%
%FILEDEF IJSYSIN DISK IJSYSIN DATA A1%

```

Figure 113. Portion of the PCSCMS EXEC

13.1.3 Using CMS REXX Procedures

A native CMS REXX exec can invoke the **RXPCS** module to:

- Set FAQs/PCS global variables
- Retrieve FAQs/PCS global variables into the exec

Setting a variable

To set a FAQs/PCS global variable, the exec should contain either of the following lines, which use the built-in function PCS to call the RXPCS module.

Use this format to invoke RXPCS as a REXX function:

```
x=PCS('PVAR',var,value)
```

Use this format to invoke RXPCS as an external call:

```
call PCS 'PVAR' var value
```

In both cases:

var FAQs/PCS global variable name
value value of the variable

Retrieving a variable

To retrieve a FAQs/PCS global variable, the exec should contain either of the following lines.

Use this format to invoke RXPCS as a REXX function:

```
x=PCS('GVAR',var)
```

Use this format to invoke RXPCS as an external call:

```
call PCS 'GVAR' var
```

In both cases:

var FAQs/PCS global variable name
x the parameter in which the value will be returned

The best way to understand RXPCS is to look at an example.

The sample CMS exec called **RXSAMP** does the following:

- Invokes the **RXSETUP EXEC** to establish links to the disk where the SYS\$MON and SYS\$VIO PDS files are located
- Sets the FAQs/PCS global variable **COUNT** to value 1
- Extracts the **COUNT** variable value and displays it to the user

```

/*****
/* Name:      RXSAMP
/* Function:  Sample CMS EXEC to extract/set PCS global variable
/* Written:   9 FEB 1993
*****/

call RXSETUP                /* establish libraries and links */
if result =0 then exit result

call setvar %COUNT% %1%    /* set PCS variable %COUNT%=+1+ */

call getvar %COUNT%       /* extract PCS variable COUNT */
say %PCS gvar COUNT=%||result

exit

setvar:
arg var value .
x=PCS(%PVAR%,var,value)    /* set PCS global variable */
return

getvar:
arg var .
x=PCS(%GVAR%,var)         /* get variable from PCS */
return x

```

Figure 114. RXSAMP EXEC

RXSETUP EXEC

This exec is needed to establish links to the disk where the SYS\$MON and SYS\$VIO PDS files are located.

A sample RXSETUP EXEC is supplied with your FAQs/PCS installation and it must be customized as follows:

```

if mach=%V131A94% then do
  call get_disk %V131A94 441 MW MDOS%
  call get_disk %V131A94 440 MW MDOS%
  call do_filedef %SYS$VIO% %SYS$VIO.LEGENT%
  call do_filedef %SYS$MON% %SYS$MON.LEGENT%
end
otherwise do
  say %RXSETUP EXEC has NOT been customized to support the% mach ,
    %virtual machine%
  call all_done
  exit 8

```

Figure 115. Portion of the RXSETUP EXEC

13.2 FAQs/PCS CMS Server

The CMS Server:

- Can submit packet members
- Requires no VSE storage
- Supports pre-existing CMS includes

From a CMS Server you can access only FAQs/PCS PDS members and any minidisk accessible by the Server.

The following command formats are required to access members stored on a CMS Server:

- **JCLSCHED command format**

```
&SUB filename.filetype.filemode
```

- **JCLXCU command format**

```
SUB filename.filetype.filemode
```

13.2.1 Defining CMS Server Machine

The directory definition for a CMS Server machine should be similar to the sample that follows:

```
USER PCSSERV PL0830W 4M 32M G
ACCOUNT PCSSERV PCSSERV
IUCV ALLOW
IPL CMS PARM AUTOCR
CONSOLE 009 3215
SPOOL 00C 2540 READER A
SPOOL 00D 2540 PUNCH A
SPOOL 00E 1403 A
LINK MAINT 190 190 RR
LINK MAINT 19E 19E RR
LINK MAINT 19D 19D RR
LINK ASOMAINT 191 333 RR
MDISK 0191 3390 204 5 IS1VMT MR ALL WRITE
```

Figure 116. Sample Directory Entry for CMS Server

Note: CMS Server machine must be MACHINE 370.

Now you should define the CMS Server to the FAQs/PCS system.

PCSSERV is the default user ID.

To change the user ID, complete the following steps:

Step	Action
1	Access the FAQs/PCS Online panel
2	Select option O , Configuration Option
3	From the Configuration Options panel, select option S , CMS Server Option
4	Define Server user ID and the class to spool the JCL to/from the Server
5	Reinitialize the Scheduler

For more information, see 10.1.1.3, “Defining CMS Server Defaults” on page 114.

13.2.2 Activating CMS Server Machine

Before a member can be scheduled from a CMS server, you must activate the CMS Server machine.

Before activating the CMS Server, make sure the following conditions have been met:

1. PCSSERV must have access to the following CMS files:
 - PCSSUB EXEC
 - PCSSUB MODULE
 - SUBPCS EXEC
 - SUBPCS XEDIT
 - DCMCOMME LOADLIB (V4.0)
 - DCMSYSE LOADLIB (V4.0)
2. Both the PCSSUB EXEC and SUBPCS EXEC must be tailored so that the supplied *get_disk* statements and *do_filedef* statements reflect your MON and VIO PDSs and your VSE machine name.

```
call get_disk %V131A94 441 MW MDOS%
call get_disk %V131A94 440 MW MDOS%
call do_filedef %SYS$VIO% %SYS$VIO.LEGENT%
call do_filedef %SYS$MON% %SYS$MON.LEGENT%
```

Figure 117. Portion of the PCSSUB EXEC

```
/*
/* *****
/* If the disks that contain your JCL, that is submitted via the
/* FAQs/PCS CMS server, can be updated from other userids while
/* the server is active then CMS ACCESS commands should be placed
/* in this EXEC to be sure the minidisk directory is current.
/*
/* EXAMPLE: %ACCESS 192 B/B% This would refresh the 192 mini-
/* disk directory for the server
/* *****
/*
```

Figure 118. Portion of the SUBPCS EXEC

3. If you have a SUBMIT XEDIT file, tailor it so that it creates the file **ZZARZZ**
ZZARZZ A3, rather than spooling the member back to the VSE guest.

The following command issued from the CMS Server machine, activates the CMS Server interface:

```
PCSSUB LOG
```

If you have ALERT installed on VSE, you can add the **ALERT** parameter:

```
PCSSUB LOG ALERT=serverUSERID
```

The *serverUSERID* is your VSE machine.

Note: If you use AUTOLOG, place this command in the PROFILE EXEC of the CMS Server machine.

When the CMS Server machine is activated, the following message is displayed:

```
GJJ900I FAQS/PCS CMS SERVER ACTIVATED COLD LOG  NOSUBSET
```

To stop CMS Server processing, enter **END** on the Server.

Chapter 14. FAQs/PCS CICS Communication

This chapter describes how FAQs/PCS can communicate with the CICS subsystem.

It covers the following topics:

- JCLRCICS Program
- Communication to CICS via REXX

14.1 JCLRCICS Program

You can use several functions with FAQs/PCS, both online and batch.

With the JCLRCICS utility, you can:

- Open or close VSAM files
- Open or close DL/I databases
- Pass CEMT commands to CICS
- Initiate non-terminal CICS transactions
- Initiate simple terminal transactions

To perform these functions, you must update your CICS table entries.

The following statements show the required PCT entries:

```
DFHPCT TYPE=ENTRY,TRANSID=JCLR,PROGRAM=JCLRCICS
DFHPCT TYPE=ENTRY,TRANSID=JCLS,PROGRAM=JCLSCICS
DFHPCT TYPE=ENTRY,TRANSID=JCLX,PROGRAM=JCLXCICS
```

Figure 119. CICS PCT Table Entries

Note: JCLX is needed for CICS 2.2 and above.

The following statements show the required PPT entries:

```
DFHPPT TYPE=ENTRY,PROGRAM=JCLACICS
DFHPPT TYPE=ENTRY,PROGRAM=JCLCCICS
DFHPPT TYPE=ENTRY,PROGRAM=JCLRCICS
DFHPPT TYPE=ENTRY,PROGRAM=JCLSCICS
DFHPPT TYPE=ENTRY,PROGRAM=JCLTCICS
DFHPPT TYPE=ENTRY,PROGRAM=JCLXCICS
```

Figure 120. CICS PPT Table Entries

Note: JCLXCICS is needed for CICS 2.2 and above.

The following statements show the required PLT entries:

- Startup PLT

```
DFHPLT TYPE=ENTRY,PROGRAM=JCLACICS
```

Figure 121. CICS PLTPI Table Entry

- Shutdown PLT

```
DFHPLT TYPE=ENTRY,PROGRAM=JCLTCICS
```

Figure 122. CICS PLTSD Table Entry

When all the CICS table changes have been made, you should reinitialize CICS. Before doing this, make sure the FAQs/PCS library is already in the LIBDEF search chain.

Note: You must have 40K of CICS partition GETVIS for using these functions.

You can enable the communication interface in two ways:

- Entering a specific PLT entry
- Using the **JCLS** transaction

When the online transaction JCLS is entered, the following screen is displayed:

```

                                     FAQs/PCS BATCH CICS COMMAND INTERFACE MENU
=====
====>

                                     COMMAND          FUNCTION
                                     -----          -
                                     START           Enable Batch Command Interface
                                     STOP           Disable Batch Command Interface
                                     END            Exit menu

PF1=Start PF2=Stop PF3=End
                                     CPUID: FF130477  MODEL: 9121 F2  18:20:04

```

JCLS Commands

- START** Enables use of CICS batch commands.
You can also use PF1
- STOP** Disables use of CICS batch commands.
You can also use PF2
- END** Exits the Batch CICS Command Interface Menu.
You can also use PF3

14.1.1 Batch CICS Commands

14.1.1.1 Communicating with CICS via JCLBCICS

The JCLBCICS batch utility enables you to use some CICS commands.

The following batch commands are available:

- /ID USER =USERID,CPU=CPUID,P=pid or J=job
- OPEN filename
- OPEN DL/I filename

- CLOSE *filename*
- CLOSE DL/I *filename*
- CEMT
- SHUTDOWN,(Imm)
- START *non-terminal_transaction* {QUEUE(*dataq*)} {DATA(*data*)}
- STARTT *terminal_transaction* {DATA(*data*)} {TERM(*xxxx*)}
- @*pdsmember*

The following example shows the JCL required to execute the JCLBCICS utility:

```

* $$ JOB JNM=JCLBCICS
// JOB JCLBCICS
// LIBDEF *,SEARCH=(LEGENT.FAQS)
./ ID USER=WILLY,CPU=1.30477,P=F2
CLOSE JOUR
CEMT INQ TAS
CLOSE FILEA
OPEN DL/I LISTA
@BATCHCOM
/*
/&
* $$ EOJ

```

Figure 123. Sample JCLBCICS Job

The output is displayed on the console and sent to SYSLST.

14.1.2 Online CICS Commands

You can use an online interface to pass CICS commands to JCLRCICS for processing. This interface is valid only through the VSE supported interface, it will not work through the CMS DCMO interface.

To access the Online Command Interface, select **M** on the DCM-SYSTEM FAQS/PCS ONLINE panel.

```

====> M

                ** DCM-SYSTEMS FAQS/PCS ONLINE - Menu Index **

C   Current Event Maintenance      E   Master Events Maintenance
U   PDS Update                     P   Event Forecasting
R   Retrieve Member from CMS       T   Transfer to CMS
Y   Verify Process Periods        Z   Account History Display
B   Browse PDS Member             F   FLEE Online
H   General Help                  M   Utilities
V   Define Variables              X   Exit
I   REXX Member Update            J   FAQS/CALL Definitions
W   Work/Data Station             A   Audit History Display
O   Configuration Options         S   System Security
D   Resource Utilization

                PDS ====> MON      (PDS ID for Security Display and Update)

PF1=Help PF3=Return PF4=MSHP PF12=Exit

```

The FAQs/PCS Utility Function panel is now displayed.

```
====>
                                FAQs/PCS UTILITY FUNCTION MENU

S  PDS Statistics
P  Product Code Maintenance
M  Batch GSPDSU Generation
C  Issue CICS Commands
D  MSHP Online

PF1=Help PF3=Return
```

Select **C** to access the FAQs/PCS Online Command Interface.

The following panel is now displayed:

```
====>
                                FAQs/PCS Online Command Interface

Enter a CEMT or OPEN or CLOSE or OPEN DL/I or CLOSE DL/I command
====>
CICS Partition ID ====>

PF1=Help PF3=Return PF4=Execute
```

After entering the command and partition ID, press PF4 to execute the command.

The following online commands are available:

- CEMT
- OPEN *filename*
- OPEN DL/I *filename*
- CLOSE *filename*
- CLOSE DL/I *filename*
- SHUTDOWN,(Imm)
- START *transaction*
- STARTT *transaction*
- STARTT *terminal_transaction* {DATA(*data*)} {TERM(*xxxx*)}

14.2 Communicating with CICS via REXX

With the CICS address environment, you can communicate with CICS from REXX procedures, as shown in the following example.

```
ADDRESS CICS 'F2 OPEN DL/I LISTA'
```

You can include any of the following commands in a REXX IMOD that calls the CICS address environment:

- CEMT
- OPEN *filename*
- OPEN DL/I *filename*
- CLOSE *filename*
- CLOSE DL/I *filename*
- SHUTDOWN,(Imm)
- START *transaction*
- STARTT *terminal_transaction* {DATA(data)} {TERM(xxxx)}

Note: For more information about FAQs/PCS REXX procedures, refer to the *REXX User Guide*.

Chapter 15. Defining and Scheduling Events Online

This chapter describes how to define and to schedule an event using FAQS/PCS online panels.

It covers the following topics:

- How to use the master and the current event files
- Defining event information
- Defining event scheduling information
- How to specify event dependency information

15.1 Using the Master and the Current Event Files

A schedule is a set of events.

Setting up a schedule involves determining when events should run, what events have to run before other events, what events cannot run at the same time and the order of all events in the schedule.

All this information is contained in two FAQS/PCS directories:

Master Event Schedule It is the permanent file that contains all events that have been created in FAQS/PCS.

Current Event Schedule Contains every event that has been created for the current processing period.

The FAQS/PCS scheduler loads a subset of the events contained in the master schedule into the current schedule each day at midnight or at the user defined time.

Before event processing can occur, the event must be loaded into the current event file.

JCLSCHED, the FAQS/PCS scheduler, is the control program that monitors the current event directory. It scans the event in the current file, examines the event commands, locates the commands that are ready to be processed and processes those commands.

To access an Event Maintenance screen, select on the DCM-SYSTEM FAQS/PCS ONLINE panel:

- **E** for the Master Event Maintenance Panel
- **C** for the Current Event Maintenance Panel

====> E or C

** DCM-SYSTEMS FAQS/PCS ONLINE - Menu Index **

C	Current Event Maintenance	E	Master Events Maintenance
U	PDS Update	P	Event Forecasting
R	Retrieve Member from CMS	T	Transfer to CMS
Y	Verify Process Periods	Z	Account History Display
B	Browse PDS Member	F	FLEE Online
H	General Help	M	Utilities
V	Define Variables	X	Exit
I	REXX Member Update	J	FAQS/CALL Definitions
W	Work/Data Station	A	Audit History Display
O	Configuration Options	S	System Security
D	Resource Utilization		

PDS ==> MON (PDS ID for Security Display and Update)

PF1=Help PF3=Return PF4=MSHP PF12=Exit

The following panels are displayed:

====>

** DCM-SYSTEMS FAQS/PCS ONLINE - Event maintenance **

Event Name ==> * Event File ==> MASTER Cpu ==> *
Time ==> * Group ==> * Job ==> * Stat ==> *

Event	Job/Cmd	Day/Cal	C	Early	Group	Cpuid	Description	Stat
_ AEPROC	JOB3	ALL		00:00	AETEST	130477	TESTSEQ123	Mast
_ BACKDTS1	BKICCF	ALL		00:00		130477	BACKUP DTSILE	Mast
_ BKUP-440	FASTCOPY	REQUEST		00:00	BACKUP	130477	BACKUP DOSRES	Mast
_ BKUPMON	BKUPMON	DAILY		09:00	TRIAL	130477	BACUP PDS MON	Mast
_ CREF	CREF	DAILY		00:00	TRIAL	130477	EVENT CROSS REF	Mast
_ EVENTSUM	EVENTSUM	ALL		00:00	TRIAL	130477	GSACCNT EVENTSUM	Mast
_ EXAMPLE1	JCLEX1	WED		00:00	TRIAL	130477	A DAILY EVENT	Mast
_ EXAMPLE2	D	DAILY		00:00	TRIAL	130477	DAILY EVENT TOO	Mast
_ EXAMPLE3	JCLANAL	. .WT...		00:00	TRIAL	130477	MIDWEEK EVENT	Mast
_ EXAMPLE4	JCLJOBP	DAILY		00:00	TRIAL	130477	WAIT ON EXAMPLE2	Mast
_ EXAMPLE5	FORECAST	TUE		00:00	TRIAL	130477	DATA STATION	Mast
_ FCASTOCC	FORECAST	FRI		00:00	TRIAL	130477	FORECAST OCC	Mast
_ JOBCMS	JOBCMS	ALL		00:00	CMSTEST	130477	JOBCMS	Mast
_ JOBSUC	JOB1	TUE		00:00	TEST	130477	TEST SUCCESSORS	Mast
_ JOB2	JOB2	ALL		00:00	FAQS	130477	TESTING FAQS	Mast

Actions: A=Audit C=Data D=Doc F=Dsuc G=Graph J=Job L=Del N=Note
O=Demand T=Tape V=Vars W=Work X=Edit Z=Acct
PF1=Help PF2=Switch PF3=Return PF4=Create PF5=Copy PF6=/st

Figure 124. Master Event File

```

====>
      ** DCM-SYSTEMS FAQS/PCS ONLINE - Event maintenance **
Event Name ==== *          Event File ==== CURRENT   Cpu ==== *
Time ==== *          Group ==== *          Job ==== *          Stat ==== *

   Event  Job/Cmd  Day/Cal N Early Group      CpuId  Description  Stat
_ AEPROC  JOB3     THU      00:00 AETEST  130477  TESTSEQ123  Wait
_ BACKDTS1 BKICCF  THU      00:00      130477  BACKUP DTSILE  Schd
_ BKUPMON  BKUPMON  THU      09:00 TRIAL  130477  BACUP PDS MON  Time
_ CREF     CREF     THU      00:00 TRIAL  130477  EVENT CROSS REF  Comp
_ EVENTSUM EVENTSUM THU      00:00 TRIAL  130477  GSACCNT EVENTSUM Schd
_ EXAMPLE2 D        THU      00:00 TRIAL  130477  DAILY EVENT TOO  Work
_ EXAMPLE3 JCLANAL THU      00:00 TRIAL  130477  MIDWEEK EVENT  Wait
_ EXAMPLE4 JCLJOBP  THU      00:00 TRIAL  130477  WAIT ON EXAMPLE2 Wait
_ JOBCMS  JOBCMS  THU      00:00 CMSTEST 130477  JOBCMS        Abnd
_ JOB2    JOB2    THU      00:00 FAQS    130477  TESTING FAQS  Work

Actions: A=Audit C=Data D=Doc F=Dsuc G=Graph H=Hold J=Job L=Del N=Note
         P=Post R=Reset T=Tape U=Uhld V=Vars W=Work X=Edit Y=Wsuc Z=Ac
PF1=Help PF2=Switch PF3=Return PF4=Create PF6=/st

```

Figure 125. Current Event File

15.1.1 Using the Event Directory Fields

The event directory input fields enable you to search for and display events using specific criteria.

The following table explains the search directory fields on the master and current event panel.

Table 27 (Page 1 of 2). Explanation of Search Directory Fields

Field	Explanation
Event Name	Selects by the event name. An * displays all event names.
Event File	Selects by either the current or master event file.
CPUID	Selects by CPU id. An * displays all CPUs.
Time	Selects events scheduled for a specific time based on Early Time. An * displays all events. A value of =hh:mm displays all events with an early time of hh:mm A value of >hh:mm displays all events with an early time greater than hh:mm A value of <hh:mm displays all events with an early time less than hh:mm
Group	Selects events based on user assigned group names. An * displays all authorized groups.
Job	Selects by the job named in the event command field. An * displays all events.

Table 27 (Page 2 of 2). Explanation of Search Directory Fields

Field	Explanation
Stat	Selects events based on their current status. An * displays all events. A - preceding a status value selects all events without that status.

The following are some examples:

```

====>
      ** DCM-SYSTEMS FAQs/PCS ONLINE - Event maintenance **
Event Name ====> EXE* Event File ====> MASTER      Cpu ====> *
Time ====> *          Group ====> *          Job ====> *          Stat ====> *

   Event   Job/Cmd  Day/Cal C Early Group      CpuId   Description   Stat
_ EXAMPLE1 JCLEX1   WED     00:00 TRIAL    130477  A DAILY EVENT Mast
_ EXAMPLE2 D         DAILY    00:00 TRIAL    130477  DAILY EVENT TOO Mast
_ EXAMPLE3 JCLANAL  ..WT...  00:00 TRIAL    130477  MIDWEEK EVENT  Mast
_ EXAMPLE4 JCLJOBP  DAILY    00:00 TRIAL    130477  WAIT ON EXEMPLE2 Mast
_ EXAMPLE5 FORECAST TUE     00:00 TRIAL    130477  DATA STATION  Mast

Actions: A=Audit C=Data D=Doc F=Dsuc G=Graph H=Hold J=Job L=Del N=Note
         P=Post R=Reset T=Tape U=Uhld V=Vars W=Work X=Edit Y=Wsuc Z=Ac
PF1=Help PF2=Switch PF3=Return PF4=Create PF6=/st
    
```

Figure 126. Event Name Search Criteria

```

====>
      ** DCM-SYSTEMS FAQs/PCS ONLINE - Event maintenance **
Event Name ====> *          Event File ====> MASTER      Cpu ====> *
Time ====> *          Group ====> TRIAL      Job ====> *          Stat ====> *

   Event   Job/Cmd  Day/Cal C Early Group      CpuId   Description   Stat
_ BKUPMON  BKUPMON  DAILY    09:00 TRIAL    130477  BACUP PDS MON  Mast
_ CREF     CREF     DAILY    00:00 TRIAL    130477  EVENT CROSS REF Mast
_ EVENTSUM EVENTSUM ALL    00:00 TRIAL    130477  GSACCNT EVENTSUM Mast
_ EXAMPLE1 JCLEX1   WED     00:00 TRIAL    130477  A DAILY EVENT  Mast
_ EXAMPLE2 D         DAILY    00:00 TRIAL    130477  DAILY EVENT TOO Mast
_ EXAMPLE3 JCLANAL  ..WT...  00:00 TRIAL    130477  MIDWEEK EVENT  Mast
_ EXAMPLE4 JCLJOBP  DAILY    00:00 TRIAL    130477  WAIT ON EXAMPLE2 Mast
_ EXAMPLE5 FORECAST TUE     00:00 TRIAL    130477  DATA STATION  Mast
_ FCASTOCC FORECAST FRI    00:00 TRIAL    130477  FORECAST OCC   Mast

Actions: A=Audit C=Data D=Doc F=Dsuc G=Graph H=Hold J=Job L=Del N=Note
         P=Post R=Reset T=Tape U=Uhld V=Vars W=Work X=Edit Y=Wsuc Z=Ac
PF1=Help PF2=Switch PF3=Return PF4=Create PF6=/st
    
```

Figure 127. Event Group Search Criteria

```

====>
      ** DCM-SYSTEMS FAQS/PCS ONLINE - Event maintenance **
Event Name ====> *           Event File ====> CURRENT   Cpu ====> *
Time ====> *           Group ====> *           Job ====> *           Stat ====> COMP

   Event   Job/Cmd  Day/Cal N Early Group      CpuId  Description  Stat
_ AEPROC   JOB3     THU      00:00 AETEST    130477 TESTSEQ123  Wait
_ BACKDTS1 BKICCF   THU      00:00          130477 BACKUP DTSILE  Schd
_ BKUPMON  EKUPMON   THU      09:00 TRIAL    130477 BACUP PDS MON  Schd
_ EVENTSUM EVENTSUM THU      00:00 TRIAL    130477 GSACCNT EVENTSUM Schd
_ EXAMPLE2 D         THU      00:00 TRIAL    130477 DAILY EVENT TOO Work
_ EXAMPLE3 JCLANAL THU      00:00 TRIAL    130477 MIDWEEK EVENT  Wait
_ EXAMPLE4 JCLJOBP  THU      00:00 TRIAL    130477 WAIT ON EXAMPLE2 Wait
_ JOBCMS   JOBCMS   THU      00:00 CMSTEST  130477 JOBCMS        Abnd
_ JOB2     JOB2     THU      00:00 FAQS     130477 TESTING FAQS  Work

Actions: A=Audit C=Data D=Doc F=Dsuc G=Graph H=Hold J=Job L=Del N=Note
         P=Post R=Reset T=Tape U=Uhld V=Vars W=Work X=Edit Y=Wsuc Z=Ac
PF1=Help PF2=Switch PF3=Return PF4=Create PF6=/st

```

Figure 128. Status Search Criteria

The following table explains the event directory fields on the master and current event panel:

Table 28. Explanation of Event Directory Fields	
Field	Explanation
Event	Name of the event.
Job/Cmd	The job to be scheduled or the command to be executed when the event is scheduled.
Day/Cal	The event processing period.
N	A "Y" in this field indicates that documentation is available for this event in the Event Note Facility. This field is displayed only on the current event panel.
Early	Earliest time of day the event can be scheduled.
Late	Time of day the event is marked as late. To view this field, enter TIME on the command line
Abort	Latest time of day the event can be scheduled. To view this field, enter TIME on the command line
Group	User assigned group to which the event belongs.
CpuId	The CPUid on which the command is to be scheduled.
Description	Short description of the event (16 characters).
Stat	The event status code.

The following is an example with TIME.

```

====> TIME
          ** DCM-SYSTEMS FAQS/PCS ONLINE - Event maintenance **
Event Name ====> *          Event File ====> CURRENT   Cpu ====> *
Time ====> *          Group ====> *          Job ====> *          Stat ====> *

  Event  Job/Cmd  Day/Cal N Early Late  Abort CpuId  Description  Stat
_ AEPROC  JOB3     THU      00:00 24:00 24:00 130477  TESTSEQ123  Wait
_ BACKDTS1 BKICCF  THU      00:00 24:00 24:00 130477  BACKUP DTSILE  Schd
_ BKUPMON  EKUPMON  THU      09:00 11:00 12:00 130477  BACUP PDS MON  Schd
_ CREF     CREF     THU      00:00 24:00 24:00 130477  EVENT CROSS REF  Comp
_ EVENTSUM EVENTSUM THU      00:00 24:00 24:00 130477  GSACCNT EVENTSUM Schd
_ EXAMPLE2 D       THU      00:00 24:00 24:00 130477  DAILY EVENT TOO  Work
_ EXAMPLE3 JCLANAL THU      00:00 24:00 24:00 130477  MIDWEEK EVENT  Wait
_ EXAMPLE4 JCLJOBP THU      00:00 24:00 24:00 130477  WAIT ON EXAMPLE2 Wait
_ JOBCMS   JOBCMS   THU      00:00 24:00 24:00 130477  JOBCMS         Abnd
_ JOB2     JOB2     THU      00:00 24:00 24:00 130477  TESTING FAQS   Work

Actions: A=Audit C=Data D=Doc F=Dsuc G=Graph H=Hold J=Job L=Del N=Note
         P=Post R=Reset T=Tape U=Uhld V=Vars W=Work X=Edit Y=Wsuc Z=Ac
PF1=Help PF2=Switch PF3=Return PF4=Create PF6=/st

```

Figure 129. Current Event Panel with Abort and Late Fields

15.1.2 Viewing Event Directory Status Codes

On the Master Event panel, the **Stat** column shows the following different status codes:

Status Code	Explanation
Mast	The event is in the master event file
Past	The event is past the end date
Pend	The event is pending the start date

On the Current Event panel, the **Stat** column shows the following different status codes:

Status Code	Explanation
Abnd	Event ended with non-zero RC
Comp	Event has completed
Data	Event is waiting for input data
Exp	Event was not scheduled because the time has elapsed
Freq	Event scheduled but occurs again
Gvar	Event is waiting on global variables
Hold	Event is being held
Late	Event is late but not expired
Post	Event is posted
Reso	Event waiting on resource
Run	Event is ready to run

Table 30 (Page 2 of 2). Current Event Status Codes	
Status Code	Explanation
Schd	Event has been scheduled
Succ	Event target of successor event
Tape	Event waiting for tape drives
Time	Event waiting for early time
Wait	Event conditions not all satisfied
WDSN	Event waiting on DSN trigger
Work	Event has workstation dependency
Xcld	Event waiting on event/JOB exclusion
XDSN	Event waiting on DSN exclusion

15.1.3 Using Event Directory Actions

The FAQs/PCS directory events panel enables you to perform these functions:

- A = Audit History Screen

Displays current online Audit History for this event

```

====>
      Audit History for CREF      EVT
Member  Typ Request  Lib User  Library CPU      E Day Date      Time
CREF    EVT REPLACE  E   SYA    SYSS$MON FF130477 N FRI 94/10/28 08.14.42
CREF    EVT REPLACE  A   SYA    SYSS$MON FF130477 N FRI 94/10/28 08.22.08
CREF    EVT EXEC    A   ADMN   SYSS$MON FF130477 N FRI 94/10/28 08.22.09
CREF    EVT DELETE  A   SYA    SYSS$MON FF130477 N FRI 94/10/28 08.22.25
CREF    EVT REPLACE  E   SYA    SYSS$MON FF130477 N FRI 94/10/28 08.22.37
CREF    EVT REPLACE  A   SYA    SYSS$MON FF130477 N FRI 94/10/28 08.22.40
CREF    EVT EXEC    A   ADMN   SYSS$MON FF130477 N FRI 94/10/28 08.22.40
CREF    EVT DELETE  A   SYA    SYSS$MON FF130477 N FRI 94/10/28 08.26.17
CREF    EVT EXEC    A   ADMN   SYSS$MON FF130477 N SAT 94/10/29 00.00.14
CREF    EVT EXEC    A   ADMN   SYSS$MON FF130477 N SUN 94/10/30 00.00.15
CREF    EVT EXEC    A   ADMN   SYSS$MON FF130477 N MON 94/10/31 00.00.10
CREF    EVT EXEC    A   ADMN   SYSS$MON FF130477 N WED 94/11/02 00.00.15
CREF    EVT EXEC    A   ADMN   SYSS$MON FF130477 N THU 94/11/03 00.00.20
CREF    EVT EXEC    A   ADMN   SYSS$MON FF130477 N FRI 94/11/04 00.00.14
CREF    EVT EXEC    A   ADMN   SYSS$MON FF130477 N SAT 94/11/05 00.00.11
CREF    EVT EXEC    A   ADMN   SYSS$MON FF130477 N SUN 94/11/06 00.00.14
CREF    EVT EXEC    A   ADMN   SYSS$MON FF130477 N MON 94/11/07 00.00.15
CREF    EVT EXEC    A   ADMN   SYSS$MON FF130477 N TUE 94/11/08 00.00.20
CREF    EVT EXEC    A   ADMN   SYSS$MON FF130477 N WED 94/11/09 00.00.24
CREF    EVT EXEC    A   ADMN   SYSS$MON FF130477 N THU 94/11/10 00.00.05

PF1=Help PF2=LIFO PF3=Return PF11=Right

```

- C = Data Station Screen

On the current file displays a screen where the user must supply data input values for this event

```

====>

PLEASE ENTER THE DATA IN YY/MM/DD FORMAT

          <=====
          <=====

PF1=Help PF2=Gener PF3=Return PF4=Update

```

On the master file displays a screen where the user can create variables as data input for this event

```

====>
Variable Name  Global  Data Type  Ver  Imod  Req  Strip
DATE_____   N      CHAR      _____  Y    Y
_____       -      _____  _____  -    -
_____       -      _____  _____  -    -
_____       -      _____  _____  -    -

PF1=Help PF2=Define Text PF3=Return PF4=Update

```

- D = Job Document

Displays documentation for this event only if the event command is the name of a library member that contains a "*" FAQs/PCS comment card.

- E = DSN Dependencies

Displays event data set definition screen

```

====>

* PCS EVENT DATASET DEFINITIONS FOR EVENT EXAMPLE5 *

Dataset Name                S  Trigger  Mode
_____                    -      _____  _____
_____                    -      _____  _____
_____                    -      _____  _____
_____                    -      _____  _____
_____                    -      _____  _____
_____                    -      _____  _____
_____                    -      _____  _____

PF1=Help PF3=Return PF4=Update PF8=Fwd PF9=Delete PF11=Right

```

- F = Define Successors

Displays a successor definition screen

```

====>
      * PCS EVENT SUCCESSOR COMMANDS AND EVENTS FOR EVENT EXAMPLE3 *

Command ====> _____ $MRC Cond  Abnd
Command ====> _____ $MRC Cond  Abnd

Event  ====> EXAMPLE2  0000 EQ   N   Event  ====> _____ $MRC Cond  Abnd
Event  ====> _____  _____  _____  Event  ====> _____ $MRC Cond  Abnd
Event  ====> _____  _____  _____  Event  ====> _____ $MRC Cond  Abnd

PF1=Help PF3=Return PF4=Update PF9=Delete
  
```

- G = Event Summary

Displays event history summary information

```

====>
      FAQS/PCS EVENT HISTORY SUMMARY

Event name ====> BKUPMON   CPU ====> *

      EVENT  CPUID      LAST LOGGED          OVERALL AVERAGES
      DATE    TIME      DURATION  CPUS    SIOS    START
_ BKUPMON  FF130477  94/11/09 19.28.43   1:47:13   0.22    560 09:29:09

Options: C=CPU D=Duration S=SIO T=Time
PF1=Help PF3=Return
  
```

- H = Hold Event

Holds the event and does not schedule it

- I = Relationships

Displays the event relationship summary. This enables you to see that other events and WHEN conditions are related to the specific event.

```

====>
      FAQS/PCS EVENT RELATIONSHIP SUMMARY FOR EXAMPLE2

      Requirements                      Dependent Events
      Resrce  Type  Resrce  Type  _ EXAMPLE4
_ EXAMPLE1 EVENT  WORK  AUX
_ EXAMPLE3 EVENT

JCLEVNT CREF Created: 10/28/94

PF1=Help PF3=Return
  
```

- J = Edit Job

Edits the event job

```

=>
MEM=JCLANAL
1...5...10...15...20...25...30...35...40...45...50...55...60...65...70...
* * * * B E G I N   F I L E * * * *
|PARM &PDS=MON
|*
|* ---> PERFORM PDS ANALYZE FUNCTION ON PDS SYSS$MON.
|*
|* GENERATE AS JCLANAL;PDS=CAT TO ANALYZE SYSS$VIO.
|*
* DD JOB JNM=JCLANAL
// JOB JCLANAL
// EXEC GSPDSU
PDS=&PDS;ANALYSE
/*
* * * * E N D   F I L E * * * *

```

- K - Data Set Information

Displays data set history information

```

====>

** FAQs/PCS Dataset Audit Log **

          DataSet Name                DATE      TIME  DAY  RQST
ICCF.LIBRARY                111111      94/10/27 10.53.31 THU  OPEN
          111111                94/10/27 10.54.42 THU  CLOS
ICCF.LIBRARY                111111      94/10/27 11.21.48 THU  OPEN
          111111                94/10/27 11.21.48 THU  OPEN

PF1=Help PF2=LIFO PF3=Return PF11=Right

```

- L = Delete Event

Deletes the event

- N = Event Notes

Displays event documentation. This can be updated only in the master file.

```

====>

** ADDITIONAL NOTES FOR EVENT BACKDTS1 **

This job backups the DTSFILE.
It has to run every day after CICS shutdown.

PF1=Help PF3=Return PF4=Update PF9=Delete

```

- O = Demand/Request

Transfers the event from the master to the current file


```

====>
                FAQs/PCS EVENT MANUAL WORK STATION PANEL

Event Name ====> EXAMPLE2

_ ====> CHECK FOR THIS CONDITION
  ====>
  ====>

_ ====>
  ====>
  ====>

PF1=Help PF3=Return PF4=Update PF8=Fwd PF9=Delete

```

- X = Edit Event
Edits this event also for update
- Y = Wait Successor
Displays all the events that have this event as a successor condition

```

====>
                Events That Have Event EXAMPLE2 Listed as a Successor

Event   Day S   Event   Day S   Event   Day S   Event   Day S
EXAMPLE3 THU N

PF1=Help PF3=Return

```

- Z = Accounting Information
Displays the event accounting information

```

====>
                Account history information

Event   DJOB   Phase   PN CC $RC  SIO   CPUT   Date   Time   Duration
EXAMPLE5 FORECAST JCLEVNT  BG 10 0008 000180 000.06 94/10/27 08.06.42 00.02.12
EXAMPLE5 FORECAST JCLEVNT  BG 10 0008 000179 000.06 94/10/27 08.09.49 00.00.06
EXAMPLE5 FORECAST JCLEVNT  BG 10 0008 000242 000.09 94/10/27 08.35.24 00.00.05
EXAMPLE5 FORECAST JCLEVNT  BG 10 0000 000254 000.09 94/10/27 08.40.15 00.00.06
EXAMPLE5 FORECAST JCLEVNT  BG 10 0000 000254 000.09 94/10/27 08.44.56 00.00.05
EXAMPLE5 FORECAST JCLEVNT  BG 10 0000 000266 000.10 94/10/27 14.57.08 00.00.04
EXAMPLE5 FORECAST JCLEVNT  BG 10 0000 000221 000.08 94/10/28 08.47.50 00.00.04

PF1=Help PF2=LIFO PF3=Return PF11=Right

```

Note: For more information about the previous panels, see the *FAQS/PCS Operation Guide*.

15.2 Defining a New Event

To define an event you have to access FAQs/PCS online and follow these steps:

Step	Action
1	Access the FAQs/PCS Online panel
2	Select option E , Master Event Maintenance
3	On the master event directory press PF4 to create a new event

The following panel will be displayed:

```

====>

      ** Event Maintenance for File=MASTER --- Status=      **

Event Name  ===>                               Group Name  ===>
Description ===>                               Event Hold  ===>
Event Cpuid ===>                               ABND RC    ===>
Command    ===>                               Target Node ===>
CSPD      ===> _____

Early Time  ===>                               Late Time  ===>
Abort Time  ===>                               XDATE OR   MIWIFSS  CYCLE H Hol-id  W
Event Day   ===>                               _ _ _ _ _ _ _ _ _ _
Occurrences ===>                               Frequency  ===>
Start Date  ===>                               End Date   ===>

When Cond.  ===> N                               Successors  ===> N
Variables   ===> N                               Data Sets  ===> N
Tape Reels  ===>                               Cartridges  ===>
Resources   ===> N                               Excl type  ===>
Exclude     ===>

PF1=Hlp PF2=Tra PF3=Ret PF4=Upd PF5=New PF8=Fwd PF9=Del PF10=When PF11=For

```

15.2.1 Defining Event Information

When you create a new event, you should specify the following:

Field	Explanation
Event name	Name of the event
Group name	Group to which the defined event should belong
Description	Information about the event
Event Hold	Enables HOLD status when job transferred to the current event file
CPU ID	CPU ID of the system that will schedule the event
ABND RC	Maximum return code allowed at completion
Command	Command to be executed when the event will be scheduled

<i>Table 32 (Page 2 of 2). Creating an Event</i>	
Field	Explanation
CSPD	POWER override parameter
Target Node	Identifies a remote system that will execute the event (only LU6.2 protocol)

15.2.2 Defining Event Scheduling Information

When you create a new event, you should specify also when this event will be processed. To specify the time for a new event, you should define the following fields:

<i>Table 33. Defining Event Scheduling</i>	
Field	Explanation
Early Time	The earliest time of day the event can be scheduled
Late Time	The late time for the event to be scheduled
Abort Time	The latest time of day the event can be scheduled
Event Day	The days when the event will be scheduled
Occurrences	The number of times this event can occur during a processing period
Frequency	The time interval between each occurrence of a recurring event
Start Date	The date when an event is eligible for the current processing period (yy/mm/dd)
End Date	The date when an event is no longer eligible for the current processing period (yy/mm/dd)

Note: The Event Day Field can contain a valid day keyword (for example, daily). For more information, see the *FAQS/PCS Operation Guide*.

15.2.3 Defining Event Dependency Information

An event could have some dependencies, to specify these you should complete the following fields:

<i>Table 34 (Page 1 of 2). Defining Event Dependency Information</i>	
Field	Explanation
When Cond.	Whether the event has predecessor conditions defined
Successors	Whether the event has additional commands to be executed once the event has completed
Variables	Global variable conditions exist for this event
Data Sets	DSN (data set) dependencies exist for this event
Tape Reels	The number of tape reels this event needs to execute the event command
Cartridges	The number of available cartridge drives this event needs to execute the event command
Resources	The user-defined resource dependencies existing for this event

<i>Table 34 (Page 2 of 2). Defining Event Dependency Information</i>	
Field	Explanation
Exclude	Specifies the names of DOS jobs or events that cannot be running when this event is scheduled
Excl type	Type of job to identify excluded DOS jobs/events.

15.2.4 Defining Event Commands

When you create an event, you must define the command to be executed when the event will be scheduled.

The valid commands are:

<i>Table 35. Defining Event Commands</i>		
Command type	Command format	Example
Operation command	OP cmd	OP PRTY J
VSE POWER command	p cmd	D LST,*job
VM CP command	&CP cmd	&CP ATT cuu *
CMS server command	&CMS cmd	&CMS filel pcs* * a
FAQS Rexx procedure	&AO imod	&AO \$GETVIS
FAQS/PCS schedule command	&cmd	&EVLOAD
FAQS/PCS command	@indname	@JCLT1000

If a library member command is used as the event command, please see 12.2, “Generating Jobs for FAQS/PCS” on page 143.

15.3 Defining Event Dependencies

After you have defined a new event, you may need to define some dependencies for this event.

The following are the FAQS/PCS event dependencies:

- Variables
- WHEN predecessor conditions
- Successors
- Calendars
- Work stations
- Data stations
- Resource dependencies
- Data set dependencies
- Tape drive dependencies

15.3.1 Event Variable Conditions

Global variables can trigger an event.

If an event has a variable condition, it will be scheduled only if the value matches the setting condition.

```

Event Name  ===> WORK1                      Group Name  ===> FAQs
-----
When Cond.  ===> N                          Successors  ===> N
Variables   ===> Y                          Data Sets   ===> N
Tape Reels  ===> 00                         Cartridges  ===> 00
Resources   ===> N                          Excl type   ===>
Exclude     ===> _____
-----

```

You can determine the variables set up for an event by:

- Entering **V** in the input field of the event in the current file
- Placing the cursor on the variable field of the event edit screen
- Entering **VAR** on the command line of the event edit screen

The following panel will be displayed:

```

====>
                                FAQs/PCS EVENT VARIABLE PANEL
Event Name ===> WORK1
VARIABLE NAME      COND          VARIABLE VALUE      AND/OR
_ &WEIGHT          GT    ===> 1500
                   ===>
-                  ===>
                   ===>
                   ===>
                   _____

L=Delete  V=Current Value
PF1=Help  PF3=Return  PF4=Update  PF8=Fwd  PF9=Delete

```

The event variable panel enables you to define or view the current variable condition and the value for this event.

If a jobstream or a user sets the &WEIGHT variable to 1530, the event variable condition is satisfied and the event WORK1 is scheduled.

15.3.1.1 Defining Global Variables for the System

You can define and manage variables online by selecting **V** on the DCM-SYSTEMS FAQs/PCS ONLINE panel.

====> V

** DCM-SYSTEMS FAQS/PCS ONLINE - Menu Index **

C	Current Event Maintenance	E	Master Events Maintenance
U	PDS Update	P	Event Forecasting
R	Retrieve Member from CMS	T	Transfer to CMS
Y	Verify Process Periods	Z	Account History Display
B	Browse PDS Member	F	FLEE Online
H	General Help	M	Utilities
V	Define Variables	X	Exit
I	REXX Member Update	J	FAQS/CALL Definitions
W	Work/Data Station	A	Audit History Display
O	Configuration Options	S	System Security
D	Resource Utilization		

PDS ====> MON (PDS ID for Security Display and Update)

PF1=Help PF3=Return PF4=MSHP PF12=Exit

The following panel is displayed:

====>

** FAQS/PCS Global Variable Maintenance **

VARIABLE VARIABLE VARIABLE

L=Delete U=Update
PF1=Help PF3=Return PF4=Add PF7=Bwd PF8=Fwd

You can:

- Update a global variable
- Add a global variable
- Delete a global variable

To add a global variable press PF4, the following panel is displayed:

```
====> Enter the new variable name and value

                ** Global Variable definition panel **

Variable name   ====>

Last set       ====>                by

Variable value  ====>                <====
               ====>                <====

PF1=Help PF3=Return PF4=Update PF9=Delete
```

Note: It is possible to set variables using REXX procedures. For more information, see the *REXX User Guide*.

15.3.2 WHEN Predecessor Condition

If an event can be scheduled only after certain conditions, you can specify these conditions on the Event Maintenance WHEN condition panel.

The possible WHEN predecessor conditions are the following:

- Event
- DOS Job
- POWER Job
- Phase
- Group
- PCS Proc
- LEGENT Product
- Message
- POWER User
- PDS Member Update
- Work Station
- Data Station
- Global Variable
- User Posted

All WHEN conditions have two clauses:

1. To specify the condition that is to occur
2. To define the details of the condition

```

Event Name  ===> JOB2                Group Name  ===> FAQs
-----
When Cond.  ===> Y                    Successors  ===> N
Variables   ===> N                    Data Sets   ===> N
Tape Reels  ===> 00                   Cartridges  ===> 00
Resources   ===> N                    Excl type   ===>
Exclude     ===> _____
-----

```

When you press PF8 or PF10 on the Event Maintenance Edit panel, you can set up specific WHEN predecessor conditions valid for this event.

The following panel is displayed with the PF8 key.

```

===>
** Event Maintenance for File=MASTER --- Event= **
S      Type   Primary      Q Qualifier  $MRC-Cond  CC-Cond
_ WHEN1 ===> _____ - _____ - _____
_ WHEN2 ===> _____ - _____ - _____
_ WHEN3 ===> _____ - _____ - _____
_ WHEN4 ===> _____ - _____ - _____
_ WHEN5 ===> _____ - _____ - _____
_ WHEN6 ===> _____ - _____ - _____
_ WHEN7 ===> _____ - _____ - _____
_ WHEN8 ===> _____ - _____ - _____

PF1=Help PF3=Return PF7=Bwd PF11=Right

```

The best way to understand how to define WHEN predecessor conditions is to look at an example.

The event JOB2 is scheduled only after the successful completion of the event JOB1 in the F4 static partition with MaxRC=0.

In this case you have to define the following WHEN predecessor conditions:

```

====>
_ Or Condition With Next  _ Condition Has Occurred          WHEN1
      Primary Condition                                Primary Qualifier
X Event          _ Power User                          _ Dos Job
_ Dos Job        _ PDS Member Update                  _ Power Job
_ Power Job      _ Work Station                        _ Event
_ Phase          _ Data Station                       _ Group
_ Group          _ Global Variable
_ PCS Proc       _ User Posted
_ LEGENT Product
_ Message

Condition Value ====> JOBCMS          Qualifier Value ====>

Secondary Qualifiers          EQ NE GE LE GT LT
PCS User Id    ====> _____    _ _
Partition Id   ====> F4            X _
IBM CC         ====> _            _ _ _ _ _ _
$SRC Value     ====> _____    _ _ _ _ _ _
$MRC Value     ====> 0000          X _ _ _ _ _
CPU Id         ====> _____    _ _
Time Frame     ====> ____ : ____   _ _

PF1=Help PF2=Insert PA3=Return PF7=Bwd PF8=Fwd PF9=Delete

```

WHEN Condition primary values

These fields are used together to specify the type of predecessor condition to detect.

The following table shows the valid values:

<i>Table 36. WHEN Clauses</i>	
Type	Primary
\$JOB	8 character POWER Job name
\$USE	16 character description of POWER User field
DATA	PCS member name of the format ppp:nnnnnnnn.ttt
GROUP	8 character event group name (all events in event group complete)
JOB	8 character DOS JOB name
MSG	12 character message text
PHASE	8 character Phase name from VSE EXEC statement
PROC	8 character PCS PROC name
PROD	8 character LEGENT product name
EVENT	8 character EVENT name
AUX	WORK for workstation support
AUX	DATA for data station support
USER	8 character user name
VAR	16 character variable name

WHEN Condition primary qualifiers

These fields enable you to further qualify the primary WHEN predecessor conditions. Only types of PHASE, JOB and \$JOB may have primary condition qualifiers.

The following table shows the valid qualifiers:

Type	Explanation
\$	Qualify by POWER job name
E	Qualify by event name
G	Qualify by event group
J	Qualify by DOS job name

The following table shows the valid qualifier values:

Type	Explanation
POWERjobname	8 character POWER job name
Eventname	8 character EVENT name
Group	8 character event group name
Jobname	8 character DOS job name

WHEN parameter second values

These parameter values define the details of the WHEN condition.

The following table shows the valid values:

Parameter	Value
\$MRC	nnnn
CC	nn
USERID	uuuuuuuu
PN	id
\$RC	nnn
Cpuid	nnnnnn
Timeframe	hhmm:hhmm

Other parameters

S = WHEN Predecessor Status

This field displays the status of the WHEN predecessor condition. If a WHEN condition is specified, this field will contain either a "Y" or an "N" indicating the condition has been met or not. The status can be manually changed to "Y" or "N".

OP:

This field specifies in the event whether the current predecessor condition is to be "OR"ed or "AND"ed with the next condition.

Note: For more information about WHEN predecessor conditions, see the *FAQS/PCS Operation Guide*.

15.3.3 Successors

Event successors are used to establish dynamic relationships among events.

Successor events follow the completion of another specific event.

Defining event successors is one way to specify in what order the events will be scheduled.

Note: If an event is deleted, FAQS/PCS removes any dependencies in the current file.

If an event is aborted and has a successor event defined, the successor condition will not be removed.

To set up a successor condition, you must define an event that has a successor as condition:

Event Name	====> JOB3	Group Name	====> FAQS

When Cond.	====> N	Successors	====> Y
Variables	====> N	Data Sets	====> N
Tape Reels	====> 00	Cartridges	====> 00
Resources	====> N	Excl type	====>
Exclude	====> _____		

To access the Event Successor definition screen you can do one of the following:

- Enter **F** in the input field of the desired event in the master file
- Place the cursor on the Successor field of the event edit screen
- Enter **SUCC** on the command line of the event edit screen

The following panel is displayed:


```

====>
      * PCS EVENT SUCCESSOR COMMANDS AND EVENTS FOR EVENT JOBSUC *

Command ====> _____ $MRC Cond  Abnd
Command ====> _____  ___  ___  -

Event  ====> _____ $MRC Cond  Abnd
Event  ====> _____  ___  ___  -
Event  ====> _____  ___  ___  -
Event  ====> _____  ___  ___  -
Event  ====> _____  ___  ___  -
Event  ====> _____  ___  ___  -
Event  ====> _____  ___  ___  -
Event  ====> _____  ___  ___  -
Event  ====> _____  ___  ___  -
Event  ====> _____  ___  ___  -
Event  ====> _____  ___  ___  -
Event  ====> _____  ___  ___  -
Event  ====> _____  ___  ___  -
Event  ====> _____  ___  ___  -
Event  ====> _____  ___  ___  -
Event  ====> _____  ___  ___  -
Event  ====> _____  ___  ___  -
Event  ====> _____  ___  ___  -
Event  ====> _____  ___  ___  -
Event  ====> _____  ___  ___  -

PF1=Help PF3=Return PF4=Update PF9=Delete

```

The best way to understand how to define successor conditions is to look at an example.

The event JOB3 must run before the event JOB1. That is, the event JOB3 must successfully complete before the event JOB1 can be scheduled.

In this case you have to define this successor condition:

```

====>
      * PCS EVENT SUCCESSOR COMMANDS AND EVENTS FOR EVENT JOB3 *

Command ====> _____ $MRC Cond  Abnd
Command ====> _____  ___  ___  -

Event  ====> JOB1      0000 EQ  N
Event  ====> _____  ___  ___  -

```

Note: The successor conditions can be commands or events.

15.3.4 Calendars

You may need to use a user calendar as an event day keyword.

```

Event Name  ===> JOB7                      Group Name  ===> FAQs
-----
Early Time  ===> 0000                      Late Time  ===> 2400
Abort Time  ===> 2400                      XDATE OR  MIWTFSS  CYCLE H Hol-id W
Event Day   ===> cccc  _ _ _ _            000  _  000  _
Occurrences ===>                               Frequency  ===>
Start Date  ===>                               End Date   ===>
-----

```

cccc This is a user specified calendar whose name in the PDS is **#EVTcccc.CAL**.

To define a user calendar follow these steps:

On the FAQs/PCS Configuration Options panel, select **F**.

The FAQs/PCS Holiday and Cycle definition screen is now displayed.

```

====>

** FAQs/PCS Online - Holiday and Cycle definition entry panel **

Selection Panel for maintaining and displaying Holiday and Cycle
definitions. Also, if any user defined calendars have been set
up, a user may display and edit them.
Enter A B C D E or F for the appropriate selection.

A Holiday Definition List by IDs
B Holiday Id 000 Display and Edit
C Cycle Definition List by IDs
D Cycle Id 000 Display and Edit
E Display and Edit any Existing User Defined Calendar
F Exception Date Definition List by IDs

PF1=Help PF3=Return

```

Select **E** to access the user defined calendars.

The following panel is displayed:

```

====>

List of User Calendars by name
User Calendar                      Update Timestamp
_ CALH                             11/11/94 07.30.59
_ PAY1                             11/07/94 08.24.58

Actions: L=Delete X=Edit
PF1=Help PF2=Refresh PF3=Return PF4=Add

```

User calendars are displayed with their four character calendar name and last date and time the calendar was updated.

Note: For information about all user defined calendars, see the *FAQS/PCS Implementation Guide*.

15.3.5 Work Station

FAQS/PCS allows to define an event with non-CPU oriented conditions, where some type of manual intervention is needed.

An event work station can define a manual condition you want to satisfy before an event can run.

Using work station you can eliminate the possibility that important non-CPU oriented conditions may go unrecognized and unsatisfied before an event is scheduled.

To set up a work station, you must define an event that has a work station as a WHEN condition.

```
Event Name  ==> JOB4                      Group Name  ==> FAQS
-----
When Cond.  ==> Y                        Successors  ==> N
Variables   ==> N                        Data Sets   ==> N
Tape Reels  ==> 00                       Cartridges  ==> 00
Resources   ==> N                        Excl type   ==>
Exclude     ==> _____
-----
```

You should define the primary condition as **AUX WORK** (see Table 36 on page 184).

```
Primary Condition
_ Event          _ Power User
_ Dos Job        _ PDS Member Update
_ Power Job      X Work Station
_ Phase          _ Data Station
_ Group          _ Global Variable
_ PCS Proc       _ User Posted
_ LEGENT Product
_ Message

Condition Value ==> WORK
```

Once you have defined a WHEN condition as AUX WORK, you can access the Event Manual Work Station Panel and set up the tasks that need to be completed.

To access the Event Manual Work Station panel you should:

- Enter **W** in the input field of the desired event in the master file
- Enter **WORK** on the command line of the event edit screen

The following panel is displayed:

```
====>
                FAQS/PCS EVENT MANUAL WORK STATION PANEL

Event Name ====> JOB4

_  ====> CHECK THIS CONDITION WHEN YOU HAVE RECEIVED CONFIRMATION TO RUN
    ====> THIS JOB.
    ====>

_  ====>
    ====>
    ====>

_  ====>
    ====>
    ====>

_  ====>
    ====>
    ====>
```

Up to three lines of text may be filled in per work station entry.

This panel gives the user a simple way to document up to 33 of these work station conditions per event.

The input field to the left of the text lines should be left blank if the condition has not occurred and have an "X" next to it when the condition has occurred.

In the current file WORK appears as an event's status when a work station is waiting to be met. This status code signals that a user must access the work station and satisfy all work stations before the event can continue.

To complete a work station condition you can follow these steps:

1. Enter **W** on the Current Event Maintenance Screen in the input field of the event.
2. In the Event Manual Work Station Panel enter **X** next to the condition.
3. Press PF4 to update.

15.3.6 Data Station

FAQS/PCS allows the definition of an event that requires a user to manually enter data in order for the event to complete.

Since some events require manual data entry, using a data station eliminates the possibility that important variable information needed to correctly run an event has not been forgotten before the event runs.

To set up a data station, you must define an event that has a data station as a WHEN condition.

```

Event Name  ===> JOB5                      Group Name  ===> FAQS
-----
When Cond.  ===> Y                        Successors  ===> N
Variables   ===> N                        Data Sets   ===> N
Tape Reels  ===> 00                       Cartridges  ===> 00
Resources   ===> N                        Excl type   ===>
Exclude     ===> _____
-----

```

You should define the primary condition as **AUX DATA** (see Table 36 on page 184).

```

                Primary Condition
_ Event          _ Power User
_ Dos Job        _ PDS Member Update
_ Power Job      _ Work Station
_ Phase          X Data Station
_ Group          _ Global Variable
_ PCS Proc       _ User Posted
_ LEGENT Product
_ Message

Condition Value ===> DATA

```

Once you have defined a WHEN condition as AUX DATA, you can access the Define User Input Data Definitions panel by entering **DATA** on the command line of the event edit panel.

The following panel is displayed:

```

====>
Variable Name  Global  Data Type  Ver  Imod  Req  Strip
DATE_____    N      CHAR      _____  Y    Y
_____        -      CHAR      _____  -    -
_____        -      CHAR      _____  -    -
_____        -      CHAR      _____  -    -

PF1=Help PF2=Define Text PF3=Return PF4=Update

```

This panel allows the user defining the event to specify up to twenty variables that the end user must provide. These variables, data input, can be local to the event or global to the entire PCS system.

The user creating the data definition must specify:

- The variable name that will receive the data event
- Whether the variable (data) is local to the event or global to PCS
- The datatype of the variable

Global Maintained across all CPUs
EXPLORE for VSE Detected by the EXPLORE LEGENT product

To set up a resource dependency, you must define an event that has a resource dependency condition.

```

Event Name  ==> JOB6                Group Name  ==> FAQS
-----
When Cond.  ==> N                    Successors ==> N
Variables   ==> N                    Data Sets  ==> N
Tape Reels  ==> 00                   Cartridges ==> 00
Resources   ==> Y                    Excl type  ==>
Exclude     ==> _____
-----

```

To define Event Resources for a specific event do one of the following:

- From the Event Maintenance Edit Screen place the cursor on the Resource field
- Enter **RES** on the command line.

The Event Resource Definition panel enables you to create resource definitions and dependencies for a specific event.

```

==>

* PCS EVENT RESOURCE DEFINITIONS FOR EVENT EXAMPLE3 *

Resource Name                Util/Rate  Type AND/OR
-----
_____  _____  %  -  _____
_____  _____  %  -  _____
_____  _____  %  -  _____
_____  _____  %  -  _____
_____  _____  %  -  _____
_____  _____  %  -  _____
_____  _____  %  -  _____
_____  _____  %  -  _____
_____  _____  %  -  _____
_____  _____  %  -  _____
_____  _____  %  -  _____

PF1=Help PF3=Return PF4=Update PF8=Fwd

```

Complete the Event Resource Definition panel and press PF4 to update.

Note: An event may have up to 32 resource dependencies.

15.3.8 Data Set Dependencies

FAQS/PCS enables you to define an event to be dependent upon the activity of a data set. You can specify that an event is scheduled only if a file is open, closed or being updated.

To set up a data set dependency, you must define an event that has a data set dependency condition.

```

Event Name  ===> JOB7                      Group Name  ===> FAQS
-----
When Cond.  ===> N                          Successors  ===> N
Variables   ===> N                          Data Sets   ===> Y
Tape Reels  ===> 00                         Cartridges  ===> 00
Resources   ===> N                          Excl type   ===>
Exclude     ===> _____
-----

```

There are three types of DSN triggers that can be specified for an event:

- Data set exclusion** Used to identify a data set that must not be open when the event is scheduled.
- Data set OPEN request** Used to identify a data set that when opened will allow the event to be scheduled.
- Data set CLOSE request** Used to identify a data set that when closed will allow the event to be scheduled.

To define data set dependencies for an event you should:

- From the Event Maintenance Edit panel place the cursor on the data set field
- Enter **DSN** on the command line.

The following panel is displayed:

```

===>

      * PCS EVENT DATASET DEFINITIONS FOR EVENT EXAMPLE5 *

Dataset Name                S   Trigger   Mode
-----
_____                    -           -
_____                    -           -
_____                    -           -
_____                    -           -
_____                    -           -
_____                    -           -
_____                    -           -

PF1=Help PF3=Return PF4=Update PF8=Fwd PF9=Delete PF11=Right

```

Complete the Event Data Set Definition panel and press PF4 to update.

Note: A maximum of 32 data set trigger conditions may be specified per event.

15.3.9 Tape Drive Dependencies

FAQS/PCS allows you to schedule an event with tape or cartridge dependencies. When you define these dependencies for an event, this will not be dispatched unless the specific number of tapes or cartridges is available.

When the event command is ready to be scheduled, FAQS/PCS scans the VSE control tables on the CPU where the scheduler is executing (PCS can only interrogate tape drives on the current CPU) to determine whether there are enough tape drives available. If there are not enough, the event waits for tapes. In the current file the event's status is **TAPE**.

To set up a tape drive dependency, you must define an event that has a tape reel or a cartridge dependency condition.

```

Event Name  ===> JOB8                Group Name  ===> FAQS
-----
When Cond.  ===> N                    Successors  ===> N
Variables   ===> N                    Data Sets   ===> N
Tape Reels  ===> XX                   Cartridges  ===> XX
Resources   ===> N                    Excl type   ===>
Exclude     ===> _____
-----

```

XX The number of available tape drives this event needs to execute the event command.

15.3.10 Example

The sample event is named `PAYROLL` and is defined to update the payroll for a company's accounting office. The event `PAYROLL` has the following definitions:

- Only members of the group `ACCT` can access this event.
- Member `PAYROL2.JCL` will be processed when the event is scheduled.
- Scheduled `PRODVSE` will dispatch the event command.
- The event will be marked with a status of `ABND` only if the `PAYROL2.JCL` finishes with a `MAXRC` greater than 0008.
- The event will run in a partition with class `J`.
- The earliest time of day the event can be scheduled is 9:00 AM. The time the event is marked as late is 13:00. The latest time the event can be scheduled is 13:30.
- `PAYROLL` updates its information every weekday or Sunday.
- `PAYROLL` cannot be placed in the current event file until October 7, and will no longer be scheduled after December 31.
- If other payroll DOS jobs are running in any partition on the same CPU, this event will not be scheduled.

```

====>

          ** Event Maintenance for File=MASTER --- Status=          **

Event Name  ===> PAYROLL          Group Name  ===> ACCT
Description ===> UPDATE PAYROLL  Event Hold  ===>
Event Cpuid ===> PRODVSE         ABND RC    ===> 0008
Command    ===> PAYROL2.JCL
CSPD       ===> J___             Target Node ===>

Early Time  ===> 0900            Late Time  ===> 1300
Abort Time  ===> 1330            XDATE OR  MIWTFSS  CYCLE H Hol-id W
Event Day   ===> WEEKDAYS        ___ X _ ___ X ___ _ 000 _
Occurrences ===>                 Frequency  ===>
Start Date  ===> 94/10/07        End Date   ===> 94/12/31

When Cond.  ===> Y               Successors ===> N
Variables   ===> N               Data Sets  ===> N
Tape Reels  ===>
Resources   ===> N               Cartridges ===>
Exclude     ===> PAY*            Excl type  ===> JOB

PF1=Hlp PF2=Tra PF3=Ret PF4=Upd PF5=New PF8=Fwd PF9=Del PF10=When PF11=For

```

Note: It is also possible to define events invoking the event batch utility **JCLEVNT**.

```

* $$ JOB JNM=EVENT
// JOB EVENT
// LIBDEF PHASE,SEARCH=Lib.Sub
// EXEC JCLEVNT,SIZE=JCLEVNT
FILE MASTER
EVENT INVENTORY
GROUP INVU
CLASS 6
DAY EOMWORK
ABNDRC 0008
/*
/&
* $$ EOJ

Lib.Sub is the FAQs/PCS Library.

```

Figure 130. Sample JCLEVNT Jobstream

For more information, see the *FAQS/PCS Operations Guide*.

Chapter 16. Monitoring Schedule Activity

This chapter describes some utilities that allow you to review the schedule history of your FAQS/PCS system.

It covers the following topics:

- Overview of monitoring tools
- Using the batch monitoring utilities
- Using the online monitoring panels
- Using the cross-referencing events

16.1 Overview of the Monitoring Tools

Once your schedule is established and operating, you probably want to determine how effectively it is running:

- Verify that events and jobs ran at the correct time
- Determine why specific jobs didn't run
- See how long an event ran
- Check the duration of the job, the total I/Os and CPU time

FAQS/PCS provides both batch and online tools for monitoring your schedule activity.

GSACCNT

This *batch* utility produces archived job accounting history file. Job accounting lets you determine when a job ran and the resources it used. Use GSACCNT to set up accounting reports, which are useful as diagnostic tools, for example, to determine why a successor event was not triggered.

Along with the history file merge utility, GSACCNT creates a history archive file, updates the previously archived history file and resets the account log file.

GSAUDIT

This *batch* program produces PDS member auditing reports and a history archive file. Job auditing can help you to review all maintenance performed on JCL members and events. For example, you can obtain reports showing events that were posted.

Along with the history file merge utility, GSAUDIT creates a history archive file, updates the previously archived history file and resets the account log file.

GSDSN

This *batch* utility produces archived data set history file. Data set monitoring is useful for determining when a data set request is issued. You can use the GSDSN program to set up data set logging reports.

Along with the history file merge utility, GSDSN creates a history archive file, updates the previously archived history file and resets the account log file.

ACCOUNTING HISTORY PANEL

This FAQs/PCS panel allows to view job accounting history online in detail and summary formats. Cancel codes, return codes and maximum return codes for events are also reported as part of online job accounting.

AUDIT HISTORY PANEL

This online panel enables you to view maintenance history on PDS members or events. For example, you can view all events executed on October 1, 1994 or you can view all activity on all members in a specific JCL library.

DATA SET LOGGING PANEL

This online panel allows you to view data set history online.

EVENT FORECASTING PANEL

This online panel enables you to view forecasts. Use the Event Forecast report to view events scheduled for a specific data or calendar. This is helpful if you are setting up successor or predecessor events. You can also use this panel to view event status.

PROCESSING PERIOD PANEL

This online panel allows you to view different processing period schedules and to verify system or user defined processing periods. If you have defined cycle or holiday schedules, you can use this panel to see when those processing days occur and how they might affect your event processing.

16.2 Using the Batch Monitoring Utilities

16.2.1 Setting Up Schedule Monitoring

To collect accounting data for jobs submitted via FAQs/PCS and to collect data set information, specify the following with the JCLXCU utility at startup:

```
ENABLE (Load=Y|N), Log=Y (,Job=$jobex0n), Dsn=Y, Dsnlog=Y
```

LOG	Enables job account logging
DSN	Enables data set detection and activates \$\$BOPEN and \$\$BCLOSE hooks
DSNLOG	Enables data set logging to the PDS

The following components are required for job accounting:

- The JCLACCT exit, which captures data for the account log file
- The GSACCNT report writer and history file merge utility, which creates a history archive file and updates the previous one
- The account log file LACCNT.CTL, which is the current data capture file

The following components are required for data set monitoring:

- The SYS\$LOG PDS, which creates the data set log file *PCSDSNOC.CTL*

- The PCSSRV program, which monitors all data set activity and performs data set logging

16.2.2 Using GSACCNT Utility

You can use this utility to produce an archived data set history file.

You can specify the following control statements:

Statement	Function
ACTION	Supplies option and control information
SELECT	Selects records to be processed
SORT	Determines sequence of output
PRINT	Determines report contents
OUTPUT	Determines output file contents
MERGE	Updates a history archive file
EVTSUM	Establishes event summary options
DEFINE	Changes item names or report headings

The following table lists *item names* that identify the type of information to appear on a report. Item names are translated into *report headings*.

Item name	Default Heading	Description	Length (chars)
EVENT	EVENT	PCS event name that caused a DOS job to execute	8
DJNM	DOS JOB	DOS jobname	8
PHASE	PHASE	PHASE that executed during a particular jobstep	8
PN	PN	VSE partition where the FAQs/PCS activity occurred	2
CC	CC	IBM cancel code for the job	2
\$RC	\$RC	IBM return code of the jobstep	2
PROC	PROC	PCS proc that caused a DOS job to execute	8
PJNM	PWR JOB	POWER jobname	8
DAY	DAY	Day of the week when a particular job or step ended	3
\$MRC	\$MRC	IBM maximum return code of the job	4
USER	USER ID	PCS user who either submitted the PCS proc or caused the event to be scheduled	8

Table 41 (Page 2 of 2). DSACCNT Utility Item Names

Item name	Default Heading	Description	Length (chars)
STAMP		Timestamp in <i>day mm/dd/yy hh.mm.ss</i> format. Depending on the type of record, STAMP reflects end-of-step or the end-of-job information	27
DATE	DATE	Date in <i>yy/mm/dd</i> format, for sorting purposes. Depending on the type of record, STAMP reflects end-of-step or the end-of-job information	8
TIME	TIME	Time in <i>hh.mm.ss</i> format. Depending on the type of record, STAMP reflects end-of-step or the end-of-job information	8
PUSR	PWR USR	POWER user information	16
CPUID	CPU ID	CPU ID serial number on which the job executed	8
CPUTT	FINLCPU	Total CPU time in <i>mmm.SSS</i> format used by the particular PCS proc or event. If the proc or event contained multiple DOS jobs, its cumulative duration is shown	7
DURT	FINLDUR	Total duration in <i>hh:mm:ss</i> format of the PCS proc or event. If the proc or event contained multiple DOS jobs, its cumulative duration is shown	8
SIOT	FINLSIO	Total Start I/Os issued on behalf of a particular proc or event. If the proc or event contained multiple DOS jobs, its cumulative SIOs are shown	7
START	START	Start time of the jobstep in <i>hh.mm.ss</i> format	8
STARTT	STARTT	Start time of the entire job in <i>hh.mm.ss</i> format	8
CPUTS	STEPCPU	Total CPU ID time in <i>mmm.SSS</i> format used by a particular jobstep	7
DURS	STEPDUR	Step duration in <i>hh:mm:ss</i> format of a particular jobstep	8
SIOS	STEPSIO	Total SIOs issued for a particular jobstep	7
T	T	Jobstep type. S indicates a multiple-step job and L indicates the last step of the DOS job	1

Note: To run GSACCNT under CMS, use the PCSCMS EXEC.


```

* $$ JOB JNM=UPDHIST
// JOB UPDATE ACCOUNT HISTORY
// LIBDEF PHASE,SEARCH=Lib.Sub
// TLBL ACCNTHI,†GSACCNT.HISTORY¢
// ASSGN SYS004,780
// TLBL ACCNTHO,†GSACCNT.HISTORY¢
// ASSGN SYS005,781
// EXEC GSACCNT,SIZE=GSACCNT
MERGE IN=SYS004,OUT=SYS005,RESET=YES
/*
/&
* $$ EOJ

```

Lib.Sub is the FAQs/PCS Library.

Figure 134. Sample GSACCNT Jobstream to Update a History Archive File

```

* $$ JOB JNM=EVENTSUM
// JOB EVENTSUM
// LIBDEF PHASE,SEARCH=Lib.Sub
// EXEC GSACCNT,SIZE=GSACCNT
EVENTSUM PRINT
/*
/&
* $$ EOJ

```

Lib.Sub is the FAQs/PCS Library.

Figure 135. Sample GSACCNT Jobstream to Produce Event Summary Information

The preceding example generates the following report:

```

JOB EVENTSUM 11/11/94 17.11.51 VSE5.2.2 GSACCNT DCM-SYSTEMS FAQs/PCS V4.0.2
EVENT      CPUID      LAST LOGGED      AVG DURATION      AVG CPUS      AVG SIOS      AVG
AEPROC    FF130477  94/10/26 15.46.54  000:00:04      0000.05      207      13
AVERAGES   10/94     11/94     12/94     01/95     02/95     03/95     04/95
  DUR      000:00:04 000:00:00 000:00:00 000:00:00 000:00:00 000:00:00 000:00:00
  CPU      0000.05  0000.00  0000.00  0000.00  0000.00  0000.00  0000.00
  SIO      207      0      0      0      0      0      0
EVENT      CPUID      LAST LOGGED      AVG DURATION      AVG CPUS      AVG SIOS      AVG
BACKDTS1  FF130477  94/11/10 12.59.22  016:16:32      0000.19      654      05
AVERAGES   10/94     11/94     12/94     01/95     02/95     03/95     04/95
  DUR      001:26:21 028:59:33 000:00:00 000:00:00 000:00:00 000:00:00 000:00:00
  CPU      0000.36  0000.05  0000.00  0000.00  0000.00  0000.00  0000.00
  SIO      1258     136      0      0      0      0      0
EVENT      CPUID      LAST LOGGED      AVG DURATION      AVG CPUS      AVG SIOS      AVG
BACKDTS2  FF130477  94/10/28 07.33.47  002:31:58      0000.05      131      07
AVERAGES   10/94     11/94     12/94     01/95     02/95     03/95     04/95
  DUR      002:31:58 000:00:00 000:00:00 000:00:00 000:00:00 000:00:00 000:00:00
  CPU      0000.05  0000.00  0000.00  0000.00  0000.00  0000.00  0000.00
  SIO      131      0      0      0      0      0      0

```

Figure 136. Report from EVTSUM

16.2.3 Using GSAUDIT Utility

Use the GSAUDIT utility to maintain library maintenance history. This records auditing data and maintains an audit log file that reports all maintenance performed on any JCL library members.

You can specify the following control statements:

Statement	Function
ACTION	Supplies option and control information
SELECT	Selects records to be processed
SORT	Determines sequence of output
PRINT	Determines report contents
OUTPUT	Determines output file contents
MERGE	Updates a history archive file
DEFINE	Changes item names or report headings

The following table lists *item names* that identify the type of information to appear on a report. Item names are translated into *report headings*

Item name	Default Heading	Description	Length (chars)
TNAME	TNAME	Member affected	10
TLIB	TLIB	PDS affected	7
TSUBL	TSUB	Member type affected	3
GSID		FAQS/PCS component that created the audit record	4
LTYPE		Library type	1
LACERR		LAC error code	1
TEST	Y/N	Action test	1
ERROR	E	Types of errors encountered: N None P Security	1
DJNM	DOS JOB	DOS jobname	8
PN	PN	VSE partition where the FAQS/PCS member was generated	2
PJNM	PWR JOB	POWER jobname	8
PUSR	PWR USR	POWER user information	16

Table 43 (Page 2 of 2). GSAUDIT Utility Item Names

Item name	Default Heading	Description	Length (chars)
GSOP		Operation performed. Can be one of the following FAQs/PCS operations: 40 DIR 41 ADD 42 COPY 43 DELETE 44 EXEC 45 MOVE 46 REPLACE 47 UPDATE 48 DISPLAY 49 RSGEN 4A EVENT POST 4B EVENT RESET 4C EVENT UNHOLD 4D EVENT HOLD 4E EVENT SATISFY 54 EVENT LATE 55 EVENT ABORT	2
DAY	DAY	Day of the week	3
STAMP		Timestamp in <i>day mm/dd/yy hh.mm.ss</i> format	27
DATE	DATE	Date in <i>yy/mm/dd</i> format, for sorting purposes	8
TIME	TIME	Time in <i>hh.mm.ss</i> format	8
CPUID	CPU ID	CPU ID serial number on which the job executed	8

Note: To run GSAUDIT under CMS, use the PCSCMS EXEC.

Some examples

```

* $$ JOB JNM=HISTREP
// JOB AUDIT HISTORY REPORT
// LIBDEF PHASE,SEARCH=Lib.Sub
// EXEC GSAUDIT,SIZE=GSAUDIT
SELECT GSOP EQ C OR GSOP EQ K AND TLIB EQ IJSYSRS
/*
/&
* $$ EOJ

Lib.Sub is the FAQs/PCS Library.
    
```

Figure 137. Sample GSAUDIT Jobstream to Produce Audit Report

The preceding example generates the following report:

JOB	AUDIT	11/11/94	17.15.53	VSE5.2.2	GSAUDIT	DCM-SYSTEMS	FAQS/PCS	V4.0.2						
PN	PWR	JOB	DOS	JOB	REQUEST	TLIB	TNAME	TSERIAL	DAY	DATE	TIME	PWR	USER	INFO
BG	FLEET1	FLEET1	CATALOG	IJSYSRS	XXYYCTED	2	FRI	94/11/11	18.10.52	TEST	PWR			
BG	FLEET1	FLEET1	CATALOG	IJSYSRS	XXYY1	2	FRI	94/11/11	18.10.52	TEST	PWR			
BG	EDECK	FLIM1	CATALS	IJSYSRS	E.DOSDEF	4	FRI	94/11/11	19.02.34	POWER	USR			
BG	COMPILE	COBOL	CATALR	IJSYSRS	INV500	23	FRI	94/11/11	19.13.12	INV	JOB	6		

Figure 138. Report from Audit Log File

```

* $$ JOB JNM=HISTREP
// JOB AUDIT HISTORY REPORT
// LIBDEF PHASE,SEARCH=Lib.Sub
// TLBL AUDITHI,†GSAUDIT.HISTORY¢
// ASSGN SYS004,780
// EXEC GSAUDIT,SIZE=GSAUDIT
MERGE IN=SYS004
SELECT GSOP EQ C AND TLIB EQ IJSYSRS
/*
/&
* $$ EOJ

Lib.Sub is the FAQS/PCS Library.

```

Figure 139. Sample GSAUDIT Jobstream for Report from History and Audit Log File

16.2.4 Using GSDSN Utility

Use the GSDSN utility to set up a data set logging report. Data set monitoring is useful for determining when a data set request was issued.

You can specify the following control statements:

Statement	Function
ACTION	Supplies option and control information
SELECT	Selects records to be processed
SORT	Determines sequence of output
PRINT	Determines report contents
OUTPUT	Determines output file contents
MERGE	Updates the archived history file
DEFINE	Changes item names or report headings

The following table lists *item names* that identify the type of information to appear on a report. Item names are translated into *report headings*.

<i>Table 45. DSDSN Utility Item Names</i>			
Item name	Default Heading	Description	Length (chars)
EVENT	EVENT	PCS event name that caused a DOS job to execute	8
DJNM	DOS JOB	DOS jobname	8
PHASE	PHASE	PHASE that executed during a particular jobstep	8
PN	PN	VSE partition where the FAQs/PCS activity occurred	2
PROC	PROC	PCS proc that caused a DOS job to execute	8
PJNM	PWR JOB	POWER jobname	8
DSN	DATASET NAME	Name of the data set accessed	44
FNAME	DTF/ACB	Internal DTF or ACB name used to reference the file	7
FTYPE	FTYPE	Type of DFT or ACB used to access the file	5
MAINTASK	MAINTASK	Program name from the EXEC statement	8
MODE	MODE	Access mode (INPUT, OUTPUT, WORK)	6
REQUEST	RQST	File access request (OPEN or CLOSE)	4
DAY	DAY	Day of the week when a particular job or step ended	3
STAMP		Timestamp in <i>day mm/dd/yy hh.mm.ss</i> format. Depending on the type of record, STAMP reflects end-of-step or the end-of-job information	27
DATE	DATE	Date in <i>yy/mm/dd</i> format, for sorting purposes. Depending on the type of record, STAMP reflects end-of-step or the end-of-job information	8
TIME	TIME	Time in <i>hh.mm.ss</i> format. Depending on the type of record, STAMP reflects end-of-step or the end-of-job information	8
CPUID	CPU ID	CPU ID serial number on which the job executed	8

Note: To run GSDSN under CMS, use the PCSCMS EXEC.

Some examples

```

* $$ JOB JNM=HISTREP
// JOB DSN HISTORY REPORT
// LIBDEF PHASE,SEARCH=Lib.Sub
// EXEC GSDSN,SIZE=GSDSN
SELECT PJNM EQ BKUPMON AND DATE LE 94/11/11
/*
/&
* $$ EOJ

Lib.Sub is the FAQs/PCS Library.

```

Figure 140. Sample GSDSN Jobstream to Produce Data Set Report

The preceding example generates the following report:

JOB	GSDSN	11/11/94	18.38.08	VSE5.2.2	GSDSN	DCM-SYSTEMS	FAQS/PCS									
DATASET NAME		DAY	DATE	TIME	RQST	MODE	PN	PWR	JOB	DOS	JOB	PHASE	CPUID			
SYSSMON.BACKUP		THU	94/10/27	09.29.42	OPEN	OUTPUT	BG	BKUPMON	1e	461e	46SPDSU	FF130477				
SYSSMON.BACKUP		THU	94/10/27	10.13.06	OPEN	OUTPUT	BG	BKUPMON			BKUPMON	GSPDSU	FF130477			
SYSSMON.BACKUP		THU	94/10/27	10.13.58	CLOS	OUTPUT	BG	BKUPMON			BKUPMON	GSPDSU	FF130477			
SYSSMON.BACKUP		THU	94/10/27	10.18.53	OPEN	OUTPUT	BG	BKUPMON			BKUPMON	GSPDSU	FF130477			
SYSSMON.BACKUP		THU	94/10/27	10.19.38	CLOS	OUTPUT	BG	BKUPMON			BKUPMON	GSPDSU	FF130477			

Figure 141. Report from Data Set Log File

```

* $$ JOB JNM=HISTREP
// JOB DSN HISTORY REPORT
// LIBDEF PHASE,SEARCH=Lib.Sub
// TLBL AUDITHO,†GSDSN.HISTORY‡
// ASSGN SYS005,780
// EXEC GSDSN,SIZE=GSDSN
MERGE IN=NONE,OUT=SYS005,RESET=YES
/*
/&
* $$ EOJ

Lib.Sub is the FAQs/PCS Library.

```

Figure 142. Sample GSDSN Jobstream to Create History Archive File

Note: For more information about the batch utilities, see the *FAQS/PCS Implementation Guide*.

16.3 Using the Online Monitoring Panels

16.3.1 Viewing Account History Online

You can view job accounting information online to help you determine specific event information. Both detail and summary reports are available to view event history.

To access job accounting information perform the following:

- Enter **Z** at the command prompt from the FAQs/PCS Menu.

====> Z

** DCM-SYSTEMS FAQs/PCS ONLINE - Menu Index **

C	Current Event Maintenance	E	Master Events Maintenance
U	PDS Update	P	Event Forecasting
R	Retrieve Member from CMS	T	Transfer to CMS
Y	Verify Process Periods	Z	Account History Display
B	Browse PDS Member	F	FLEE Online
H	General Help	M	Utilities
V	Define Variables	X	Exit
I	REXX Member Update	J	FAQS/CALL Definitions
W	Work/Data Station	A	Audit History Display
O	Configuration Options	S	System Security
D	Resource Utilization		

PDS ====> MON (PDS ID for Security Display and Update)

PF1=Help PF3=Return PF4=MSHP PF12=Exit

The following panel is displayed:

====>

** FAQs/PCS ACCOUNT HISTORY SELECTION PANEL **

Event	====>	(Event name Generics supported)
Proc	====>	(Proc name Generics supported)
Djob	====>	(Dos Job Name Generics supported)
Pjob	====>	(Power Job Name Generics supported)
Phase	====>	(Phase Name Generics supported)
Pid	====>	(Partition Id or *)
Date	====>	(= > < YY/MM/DD or *)
CC	====>	(= > < CC or *)
\$SRC	====>	(= > < \$SRC or *)
\$MRC	====>	(= > < \$MRC or *)
Type	====>	(Record type L, S, C, or *)

Fill in information for one or more of the above listed selections. Any selection that is not specified will default to *.

PF1=Help PF2=Summary PF3=Return

From this panel you can access detailed or summary event reports. It allows you to view all current account records based on your selection.

- Press **ENTER** to access all the detailed reports.

The following panel is displayed:

====>

Account history information

Event	DJOB	Phase	PN	CC	\$RC	SIO	CPUT	Date	Time	Duration
EXAMPLE2	N/A		Z1					94/10/26	17.12.13	
EXAMPLE4	JCLJOBP	JCLDUMMY	BG	10	0000	000179	000.04	94/10/26	17.12.21	00.00.04
JOB CMS	JOB CMS	LIBR	F4	10	0000	000280	000.12	94/10/27	07.51.45	00.00.04
JOB CMS	JOB CMS	LIBR	F4	10	0000	000218	000.13	94/10/27	08.06.39	00.01.53
EXAMPLE5	FORECAST	JCLEVNT	BG	10	0008	000180	000.06	94/10/27	08.06.42	00.02.12
EXAMPLE5	FORECAST	JCLEVNT	BG	10	0008	000179	000.06	94/10/27	08.09.49	00.00.06
MYJOB	FORECAST		F4	FF	0000	000117	000.09	94/10/27	08.24.20	00.00.49
MYJOB	FORECAST		F4	FF	0000	000104	000.08	94/10/27	08.27.02	00.00.29
MYJOB	FORECAST	JCLEVNT	F4	10	0000	000498	000.59	94/10/27	08.28.14	00.00.48
MYJOB	FORECAST	JCLEVNT	F4	10	0000	000518	000.60	94/10/27	08.32.43	00.00.50
EXAMPLE5	FORECAST	JCLEVNT	BG	10	0008	000242	000.09	94/10/27	08.35.24	00.00.05
EXAMPLE5	FORECAST	JCLEVNT	BG	10	0000	000254	000.09	94/10/27	08.40.15	00.00.06
EXAMPLE1	DIRLIST	LIBR	BG	10	0000	004004	000.54	94/10/27	08.41.40	00.00.13
EXAMPLE3	JCLANAL	GSPDSU	BG	10	0000	000770	000.19	94/10/27	08.41.58	00.00.14
EXAMPLE2	N/A		Z1					94/10/27	08.43.20	
EXAMPLE4	JCLJOBP	JCLDUMMY	BG	10	0000	000179	000.04	94/10/27	08.43.26	00.00.04
EXAMPLE5	FORECAST	JCLEVNT	BG	10	0000	000254	000.09	94/10/27	08.44.56	00.00.05
BKUPMON	BKUPMON	GSPDSU	BG	19	0000	000254	000.12	94/10/27	09.34.39	00.05.01
BKUPMON	BKUPMON		BG	24	0000	000100	000.04	94/10/27	10.10.32	00.01.05
BKUPMON	BKUPMON	GSPDSU	BG	10	0000	003570	001.36	94/10/27	10.14.01	00.00.58

PF1=Help PF2=LIFO PF3=Return PF7=Bwd PF8=Fwd PF11=Right

To access the summary report, press **PF2** on the Account History Selection Panel.

The following panel is displayed:

====>

FAQS/PCS EVENT HISTORY SUMMARY

Event name ====> *

CPU ====> *

EVENT	CPUID	LAST LOGGED		OVERALL AVERAGES			START
		DATE	TIME	DURATION	CPUS	SIOS	
_ AEPROC	FF130477	94/10/26	15.46.54	0:00:04	0.05	207	13:19:48
_ BACKDTS1	FF130477	94/11/10	12.59.22	16:16:32	0.19	654	05:10:04
_ BACKDTS2	FF130477	94/10/28	07.33.47	2:31:58	0.05	131	07:25:58
_ BKUP-440	FF130477	94/10/25	00.00.45	0:00:08		18	10:08:12
_ BKUPMON	FF130477	94/11/10	12.59.46	1:41:34	0.21	549	09:40:13
_ BKUPVIO	FF130477	94/10/27	10.39.30	0:04:18	0.37	946	10:27:01
_ CREF	FF130477	94/11/11	00.00.17	0:00:05	0.12	256	01:07:12
_ EVENTSUM	FF130477	94/11/10	12.59.30	0:00:03	0.08	217	08:40:25
_ EXAMPLE1	FF130477	94/10/27	08.41.40	0:00:13	0.54	4004	13:55:07
_ EXAMPLE2	FF130477	94/10/27	08.43.20				14:03:48
_ EXAMPLE3	FF130477	94/10/27	08.41.58	0:00:14	0.19	770	08:41:44
_ EXAMPLE4	FF130477	94/10/27	08.43.26	0:00:04	0.04	179	12:57:49
_ EXAMPLE5	FF130477	94/10/28	08.47.50	0:00:22	0.08	227	09:25:37
_ FCASTOCC	FF130477	94/11/11	00.00.27	0:00:09	0.20	270	02:58:22
_ JOBCMS	FF130477	94/11/11	00.00.42	0:00:06	0.06	116	06:05:58
_ JOBDATA	FF130477	94/10/26	12.21.09	0:00:14	0.07	215	12:43:29
_ JOBSUC	FF130477	94/10/26	15.46.32	0:00:18	0.04	155	15:33:52
_ JOBX	FF130477	94/10/25	10.35.14				10:35:14
_ JOB2	FF130477	94/10/25	16.00.25	0:00:13	0.05	207	13:00:37
_ JON	FF130477	94/10/18	16.16.20				16:16:20
_ MYJOB	FF130477	94/10/27	08.32.43	0:00:44	0.34	309	08:27:20

Options: C=CPU D=Duration S=SIO T=Time
PF1=Help PF3=Return PF8=Fwd

Summary information includes for each event:

- average duration
- average CPU seconds
- average SIO count
- the start time

The averages are maintained based on event data collected over the last 12 months that event occurred.

The following are some examples for the event BKUPMON.

- **CPU Report for the Event BKUPMON**


```

===>
BKUPMON  FF130477      FAQS/PCS EVENT HISTORY SUMMARY
 0.45      .....
           .....
 0.39      .....
           .....
 0.34      .....
           .....
 0.28      .....
           .....
 0.23      .....
           .....
 0.17      .....
           .....
 0.11      .....
           .....
 0.06      .....
           .....
 0.00      .....
           .....

CPU SECS   10/94   11/94   12/94   01/95   02/95   03/95

PF1=Help PF2=Zoom PF3=Return PF4=SIOs PF5=DUR PF6=CPU PF9=Time PF11=Right

```

• **uration Report for the Event BKUPMON**

```

===>
BKUPMON  FF130477      FAQS/PCS EVENT HISTORY SUMMARY
 2.6      .....
           .....
 2.3      .....
           .....
 1.9      .....
           .....
 1.6      .....
           .....
 1.3      .....
           .....
 1.0      .....
           .....
 0.6      .....
           .....
 0.3      .....
           .....
 0.0      .....
           .....

DUR HOURS  10/94   11/94   12/94   01/95   02/95   03/95

PF1=Help PF2=Zoom PF3=Return PF4=SIOs PF5=DUR PF6=CPU PF9=Time PF11=Right

```

• **IO Count Report for the Event BKUPMON**

```

====>
BKUPMON  FF130477      FAQS/PCS EVENT HISTORY SUMMARY
1148      .....
          .....
1005      .....
          .....
          .....
861       .....
          .....
          .....
718       .....
          .....
          .....
574       .....
          .....
          .....
431       .....
          .....
          .....
287       .....
          .....
          .....
144       .....
          .....
          .....
0         .....
          .....
          .....
SIO COUNT 10/94    11/94    12/94    01/95    02/95    03/95

PF1=Help PF2=Zoom PF3=Return PF4=SIOs PF5=DUR PF6=CPU PF9=Time PF11=Right

```

- **ime Report for the Event BKUPMON**

```

====>
BKUPMON  FF130477      FAQS/PCS EVENT HISTORY SUMMARY      10/94-09/95

Top 10 Most Frequent Event Start Time Intervals

TIME RANGE  0...10...20...30...40...50...60...70...80...90..100 PCT

07:15-07:30 ..... 21.05%
09:00-09:15 ..... 21.05%
10:00-10:15 ..... 10.53%
10:15-10:30 ..... 10.53%
07:30-07:45 .. 5.26%
09:15-09:30 .. 5.26%
10:30-10:45 .. 5.26%
10:45-11:00 .. 5.26%
12:00-12:15 .. 5.26%
12:45-13:00 .. 5.26%

Number of sampled events: 19

PF1=Help PF3=Return

```

Event summary data is collected by the EVTSUM control statement of the GSACCNT utility. We recommend that you execute this utility to provide more accurate and useful data. For more information about the EVTSUM control statement see the *FAQS/PCS Implementation Guide*.

16.3.2 Viewing Audit History Online

You can view audit history online to determine specific PDS member or event information.

To access audit history information perform the following:

- Enter **A** at the command prompt from the FAQS/PCS Menu.

====> A

** DCM-SYSTEMS FAQS/PCS ONLINE - Menu Index **

C	Current Event Maintenance	E	Master Events Maintenance
U	PDS Update	P	Event Forecasting
R	Retrieve Member from CMS	T	Transfer to CMS
Y	Verify Process Periods	Z	Account History Display
B	Browse PDS Member	F	FLEE Online
H	General Help	M	Utilities
V	Define Variables	X	Exit
I	REXX Member Update	J	FAQS/CALL Definitions
W	Work/Data Station	A	Audit History Display
O	Configuration Options	S	System Security
D	Resource Utilization		

PDS ====> MON (PDS ID for Security Display and Update)

PF1=Help PF3=Return PF4=MSHP PF12=Exit

The following panel is displayed:

====>

FAQS/PCS AUDIT HISTORY SELECTION PANEL

Name ====> (Event or PDS member name Generics support)
Date ====> (= > < YY/MM/DD or *)
Lib ====> (PDS DLBL name or External Library Name)

Functions	Member Type
_ All Functions	_ All Types of Members
_ ADD	_ Events (Current and Master File)
_ COPY	_ Master Event File
_ DELETE	_ Current Event File
_ EXEC	_ PDS Members
_ MOVE	_ Source or GSEEDIT Submit
_ REPLACE	_ ICCF Members
_ UPDATE	_ VSE Library Members
_ DSPL	_ BIM-EDIT Members
_ RSGE	_ CONDOR Members
_ POST	_ LIBRARIAN Members
_ RESET	_ PANVALET Members
_ UNHOLD	_ VOLLIE Members
_ HOLD	_ USER Members
_ LATE	_ POWER RDR Queue
_ ABORT	

PF1=Help PF3=Return

This panel allows you to view all current audit history records based on your selection. The following is an example for all events that begin with **E**.

To move from the first panel to the second you should press PF11, to return to the first from the second press PF10.

====> D

** DCM-SYSTEMS FAQs/PCS ONLINE - Menu Index **

C	Current Event Maintenance	E	Master Events Maintenance
U	PDS Update	P	Event Forecasting
R	Retrieve Member from CMS	T	Transfer to CMS
Y	Verify Process Periods	Z	Account History Display
B	Browse PDS Member	F	FLEE Online
H	General Help	M	Utilities
V	Define Variables	X	Exit
I	REXX Member Update	J	FAQS/CALL Definitions
W	Work/Data Station	A	Audit History Display
O	Configuration Options	S	System Security
D	Resource Utilization		

PDS ====> MON (PDS ID for Security Display and Update)

PF1=Help PF3=Return PF4=MSHP PF12=Exit

The following panel is displayed:

====>

FAQS/PCS RESOURCE DISPLAY MENU

L Display Local Resource Utilization
G Display Global Resource Utilization
E Display EXPLORE/VSE Resources
D Display Dataset History Log

PF1=Help PF3=Return

- Select **D** to access the Dataset History Log.

The following panel is displayed:

====>

**** FAQs/PCS DATASET LOG SELECTION PANEL ****

DSN ====> *
Request ====> * (Request type Open, Close)
Mode ====> * (Mode of use Input, Output, Work)
Date ====> =* (= > < YY/MM/DD or *)
Djob ====> * (DOS jobname)
Pjob ====> * (POWER jobname)
Phase ====> * (PHASE name)
Event ====> * (EVENT name)
Pid ====> * (Partition id)
Type ====> * (Type of file)

Fill in information for one or more of the above listed selections. Any selection that is not specified will default to *.

PF1=Help PF3=Return PF4=Flush DSN buffer

This panel enables you to select criteria to produce a display of data set history information.

The following two panels show an example of the full screen of the Dataset Audit Log. To move from the first panel to the second you should press PF11, to return to the first from the second press PF10.

====>

**** FAQs/PCS Dataset Audit Log ****

Dataset Name	DATE	TIME	DAY	RQST
VSESP.USER.CATALOG	94/10/24	16.24.53	MON	OPEN
CICS.DUMPB	94/10/24	16.24.56	MON	OPEN
CICS.DUMPB	94/10/24	16.24.58	MON	OPEN
CICS.RSD	94/10/24	16.25.02	MON	CLOS
CICS.RSD	94/10/24	16.25.03	MON	OPEN
CICS.TD.INTRA	94/10/24	16.25.08	MON	OPEN
DFHTEMP	94/10/24	16.25.12	MON	OPEN
CICS.RSD	94/10/24	16.25.15	MON	CLOS
CICS.RSD	94/10/24	16.25.16	MON	OPEN
ICCF.LIBRARY	94/10/24	16.25.32	MON	OPEN
VSE.ONLINE.PROB.DET.FILE	94/10/24	16.25.34	MON	OPEN
VSE.CONIROL.FILE	94/10/24	16.25.36	MON	OPEN
VSE.MESSAGE.ROUTING.FILE	94/10/24	16.25.39	MON	OPEN
VSE.TEXT.REPSTORY.FILE	94/10/24	16.25.40	MON	OPEN
VSE.MESSAGES.ONLINE	94/10/25	11.08.03	TUE	OPEN
VSAM.MASTER.CATALOG	94/10/25	11.08.04	TUE	OPEN
VSESP.USER.CATALOG	94/10/25	11.08.05	TUE	OPEN
VSE.MESSAGES.ONLINE	94/10/25	12.38.58	TUE	CLOS

PF1=Help PF2=LIFO PF3=Return PF7=Bwd PF8=Fwd PF11=Right

```

====>

                                ** FAQs/PCS Dataset Audit Log **

DTF/ACB  MODE  TYPE  PN  POWJOB   DOSJOB  MAINTASK  PHASE   CPUID
VSESPUC  OUTPUT VSAM  F2  CICSICCF CICSICCF DFHSIP   DFHSIP  FF130477
DFHDMPB  WORK   DTFSD F2  CICSICCF CICSICCF DFHSIP   DFHSIP  FF130477
DFHDMPB  OUTPUT VSAM  F2  CICSICCF CICSICCF DFHSIP   DFHSIP  FF130477
DFHRSD   OUTPUT VSAM  F2  CICSICCF CICSICCF DFHSIP   DFHSIP  FF130477
DFHRSD   OUTPUT VSAM  F2  CICSICCF CICSICCF DFHSIP   DFHSIP  FF130477
DFHNTRA  OUTPUT VSAM  F2  CICSICCF CICSICCF DFHSIP   DFHSIP  FF130477
DFHTEMP  OUTPUT VSAM  F2  CICSICCF CICSICCF DFHSIP   DFHSIP  FF130477
DFHRSD   OUTPUT VSAM  F2  CICSICCF CICSICCF DFHSIP   DFHSIP  FF130477
DFHRSD   OUTPUT VSAM  F2  CICSICCF CICSICCF DFHSIP   DFHSIP  FF130477
DTSFILE  OUTPUT DTFPH F2  CICSICCF CICSICCF DFHSIP   DTSCOPCM FF130477
IESPRB   OUTPUT VSAM  F2  CICSICCF CICSICCF DFHSIP   DFHSKP  FF130477
IESCNL   OUTPUT VSAM  F2  CICSICCF CICSICCF DFHSIP   DFHSKP  FF130477
IESROUT  OUTPUT VSAM  F2  CICSICCF CICSICCF DFHSIP   DFHSKP  FF130477
IESIRFL  OUTPUT VSAM  F2  CICSICCF CICSICCF DFHSIP   DFHSKP  FF130477
IESMSGS  INPUT  VSAM  F2  CICSICCF DTSIESDC DFHSIP   DTSIESDC FF130477
IJSYSCT  OUTPUT VSAM  F2  CICSICCF DTSIESDC DFHSIP   DTSIESDC FF130477
VSESPUC  OUTPUT VSAM  F2  CICSICCF DTSIESDC DFHSIP   DTSIESDC FF130477

PF1=Help PF3=Return PF7=Bwd PF8=Fwd PF10=Left

```

16.3.4 Viewing Event Forecasts

You can view event forecasting reports for specific dates or event day keywords.

To access event forecast information perform the following:

- Enter **P** at the command prompt from the FAQs/PCS Menu.

```

====> P

                                ** DCM-SYSTEMS FAQs/PCS ONLINE - Menu Index **

C   Current Event Maintenance      E   Master Events Maintenance
U   PDS Update                      P   Event Forecasting
R   Retrieve Member from CMS        T   Transfer to CMS
Y   Verify Process Periods          Z   Account History Display
B   Browse PDS Member              F   FLEE Online
H   General Help                    M   Utilities
V   Define Variables                X   Exit
I   REXX Member Update              J   FAQs/CALL Definitions
W   Work/Data Station               A   Audit History Display
O   Configuration Options           S   System Security
D   Resource Utilization

PDS ====> MON      (PDS ID for Security Display and Update)

PF1=Help PF3=Return PF4=MSHP PF12=Exit

```

The following panel is displayed:

```

====>

** DCM-SYSTEMS FAQS/PCS ONLINE - Event Forecasting Selection **

Enter A or B on the command line or position the cursor on the
appropriate selection and depress the enter key after specifying
the associated forecasting argument.

Selection Criteria for Event Forecasting

A CALKEY - By calendar/keyword Cal ====> Calendar/Keyword
B DATE - By specific date Date ====> YY/MM/DD

PF1=Help PF3=Return

```

This panel allows you to view an event forecasting report based on your selection. The following shows an example of the Event Forecasting panel with an event directory for a specific date.

```

====>

** DCM-SYSTEMS FAQS/PCS ONLINE - Event Forecasting **
Event Forecast Report for Friday 94/11/11
Event Job/Cmd Start M S Cpid Pn Duration Description
_ AEPROC JOB3 13:19 * A 130477 BG 0:00:04 TESTSEQ123
_ BACKDTS1 BKICCF 05:10 A 130477 BG 16:16:32 BACKUP DTSILE
_ BKUPMON BKUPMON 09:40 A 130477 BG 1:41:34 BACUP PDS MON
_ CREF CREF 01:07 * A 130477 F6 0:00:05 EVENT CROSS REF
_ EVENTSUM EVENTSUM 08:40 * A 130477 BG 0:00:03 GSACCNT EVENTSUM
_ EXEMPLE2 D 14:03 A 130477 Z1 DAILY EVENT TOO
_ EXEMPLE4 JCLJOBP 12:57 A 130477 BG 0:00:04 WAIT ON EXEMPLE2
_ FCASTOCC FORECAST 02:58 * A 130477 Z1 0:00:09 FORECAST OCC
_ GSACCNT1 GSACCNT1 00:00 * D 130477 GSACCNT SELECT
_ JOBCMS JOBCMS 06:05 A 130477 Z1 0:00:06 JOBCMS
_ JOB2 JOB2 13:00 A 130477 BG 0:00:13 TESTING FAQS

Actions: A=Audit D=Doc G=Graph I=Refs J=Job N=Note X=Edit Z=Acct
PF1=Help PF3=Return PF6=/ST PF9=/SN PF12=Exit

```

On the forecast you can see events that are scheduled and perform the following functions:

- Edit or browse an event
- Display a job on the Event Job Edit panel
- Display documentation for a job

16.3.5 Checking Processing Periods

Before defining an event using the various FAQS/PCS features, you can:

- Determine the scheduling effects event day keywords will have
- Determine how event day keywords, day selection, holiday and cycle definitions work together for scheduling
- View holiday ID and cycle ID definitions

To access the Processing Period Verification panel perform the following:

- Enter **Y** at the command prompt from the FAQS/PCS Menu.


```

====>
                                Month of November 94
                                Sun  Mon  Tue  Wed  Thu  Fri  Sat
Event Day
WORKDAYS                                1    2    3    4    5
OR MIWIFSS    6    7    8    9   10   11   12
Cycle
000           13   14   15   16   17   18   19
H W           20   21   22   23   24   25   26
Hol-ID
000           27   28   29   30
XDATE
-----
PF1=Help PF3=Return PF7=Bwd PF8=Fwd

```

16.4 Using Cross-Referencing Events

FAQS/PCS provides a batch utility to view the current schedule information. This utility called **CREF** (Cross-Reference) allows you to verify that your system is running smoothly and efficiently. For example, you can:

- List all events in a specific directory
- See what conditions events are waiting for
- Display information about current resource usage
- Verify event processing periods

The following condition values are used for cross-referencing with the CREF command:

- DOS jobname
- POWER jobname
- POWER user field
- Event name
- Data set name
- Resources
- Phase name
- LEGENT product
- Work station
- Message ID
- PCS data members
- PCS global variables

FORMAT and PARAMETERS

The following format is required for the CREF command:

```

CREF (EVENT=mask=) (DATE=yy/mm/dd) (BUILD)

```

- EVENT** Selects only those events that match the *mask* value.
- A plus sign (+) represents an unconditional match on a specific character
 - An asterisk (*) represents an unconditional match on a group of characters
- DATE** Selects only those events matching the *yy/mm/dd* value in the current event file
- BUILD** Creates a cross-reference file to be used to display event relationships online. This parameter does not produce a report
- Note:** If you don't specify any parameters, CREF will cross-reference all events in the master event file.

Sample jobstream

The following sample CREF jobstream shows how to cross-reference all *example* events for 94/11/11.

```

* $$ JOB JNM=CROSS
// JOB CROSS REFERENCE INVENTORY EVENTS
// LIBDEF PHASE,SEARCH=Lib.Sub
// EXEC JCLEVNT,SIZE=JCLEVNT
CREF EVENT=EX* DATE=94/11/11
/*
/&
* $$ EOJ

Lib.Sub is the FAQs/PCS Library.

```

Figure 143. Sample CREF Jobstream

```

JOB CREF      11/12/94 18:56:17 VSE5.2.2 JCLEVNT DCM-SYSTEMS FAQs/PCS V4.0.2  EVENT SCHEDULER UTILITY      LEGENT
                ** DCM-SYSTEMS  FAQs/PCS  BATCH EVENT SCHEDULER INTERFACE UTILITY **                PAGE 001

CREF EVENT=EX* DATE=94/11/11
JOB CREF      11/12/94 18:56:17 VSE5.2.2 JCLEVNT DCM-SYSTEMS FAQs/PCS V4.0.2  EVENT SCHEDULER UTILITY      LEGENT
                ** DCM-SYSTEMS  FAQs/PCS  BATCH EVENT SCHEDULER INTERFACE UTILITY **                PAGE 002

                ** CROSS REFERENCE BY AUX TYPE **

DATA          EXAMPLE5
-----
WORK          EXAMPLE2
-----
JOB CREF      11/12/94 18:56:17 VSE5.2.2 JCLEVNT DCM-SYSTEMS FAQs/PCS V4.0.2  EVENT SCHEDULER UTILITY      LEGENT
                ** DCM-SYSTEMS  FAQs/PCS  BATCH EVENT SCHEDULER INTERFACE UTILITY **                PAGE 003

                ** CROSS REFERENCE BY EVENT NAMES **

EXAMPLE2      EXAMPLE3
-----
EXAMPLE1      EXAMPLE2 EXAMPLE3
-----
EXAMPLE2      EXAMPLE4
-----
JOB CREF      11/12/94 18:56:17 VSE5.2.2 JCLEVNT DCM-SYSTEMS FAQs/PCS V4.0.2  EVENT SCHEDULER UTILITY      LEGENT
                ** DCM-SYSTEMS  FAQs/PCS  BATCH EVENT SCHEDULER INTERFACE UTILITY **                PAGE 004

                ** CROSS REFERENCE BY VARIABLE NAME **

&DATE        EXAMPLE5
-----

```

Figure 144. Sample CREF Report

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in a VM/VSE Environment
March 1995**

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UASOS5	FAQVACH6	55	58
UASOS6	FAQVACH6	56	59
UASOS7	FAQVACH6	56	60
UASOS8	FAQVACH6	57	61
UASOS9	FAQVACH6	57	62
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Processing Options

Runtime values:

Document fileid	GG244269 SCRIPT
Document type	USERDOC
Document style	IBMXAGD
Profile	EDFPRF30
Service Level	0029
SCRIPT/VS Release	4.0.0
Date	95.03.03
Time	08:43:54
Device	3820A
Number of Passes	4
Index	YES
SYSVAR D	YES
SYSVAR G	INLINE
SYSVAR V	ITSCEVAL

Formatting values used:

Annotation	NO
Cross reference listing	YES
Cross reference head prefix only	NO
Dialog	LABEL
Duplex	YES
DVCF conditions file	(none)
DVCF value 1	(none)
DVCF value 2	(none)
DVCF value 3	(none)
DVCF value 4	(none)
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DVCF value 6	(none)
DVCF value 7	(none)
DVCF value 8	(none)
DVCF value 9	(none)
Explode	NO
Figure list on new page	YES
Figure/table number separation	YES
Folio-by-chapter	NO
Head 0 body text	Part
Head 1 body text	Chapter
Head 1 appendix text	Appendix
Hyphenation	NO
Justification	NO
Language	ENGL
Layout	OFF
Leader dots	YES
Master index	(none)
Partial TOC (maximum level)	4
Partial TOC (new page after)	INLINE
Print example id's	NO
Print cross reference page numbers	YES
Process value	(none)
Punctuation move characters	,
Read cross-reference file	(none)
Running heading/footing rule	NONE
Show index entries	NO
Table of Contents (maximum level)	3
Table list on new page	YES
Title page (draft) alignment	RIGHT
Write cross-reference file	(none)

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