

AllFusion™ Endeavor® Change Manager

Installation Guide
4.0



Computer Associates®

SP1
ENINS400

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Chapter 1. Installation Overview

This *Installation Guide* provides the tools you need to install AllFusion Endeavor Change Manager (referred to in this guide as Endeavor) and apply maintenance.

Before you begin an installation, see the appendix "The Installation Checklist." The checklist outlines the steps that your site's system programmer and your Endeavor administrator need to perform.

Before you begin to apply a service pack, see the appendix "Applying Maintenance to Endeavor."

If you are unfamiliar with Endeavor, you can learn about the product's features and functions by reviewing the *Getting Started Guide*.

1.1 Installation Assumptions

The following assumptions have been made for the installation procedure:

- The person installing AllFusion Endeavor Change Manager (referred to in this guide as simply Endeavor) understands OS JCL and the standard IBM utilities, as well as how to use the ISPF/PDF editor.
- The person installing Endeavor knows how to administer VSAM catalog structures.
- The person installing Endeavor has the proper authority to define data sets and perform system authorization functions.
- The site uses 3390-type disk devices. All SPACE parameters are based on 3390 devices and must be adjusted accordingly if the site is using another type of device.
- The TSO profile prefix is set to the user ID or to NOPREFIX.
- The person installing Endeavor must be able to execute the IBM SMP/E utility program, as well as understand it.

1.2 Procedures

There are up to three major procedures that you go through in order to install and customize Endeavor for your site. This manual is written in “procedure order.”

Procedure	Why You Do It
Install the basic Endeavor system software.	You need to prepare for installing Endeavor at your site. In addition, before you can use Endeavor, you must be sure the appropriate files have been installed. The installation tape you receive contains all the files you need.
Implement the sample application provided with the installation tape. This is an optional procedure but is recommended for new clients.	The sample application represents a typical software life cycle. By installing and using the sample application, you can learn about Endeavor and prepare further for Endeavor's use at your site. Refer to the <i>Getting Started Guide</i> for instructions on using the sample application.
Activate Endeavor's optional features. This procedure is optional, and dependent upon your site's requirements.	Endeavor provides several features that add functionality to the basic system. You should be familiar and comfortable with using Endeavor, however, before you use these optional features (see “Activate Endeavor's Optional Features”).

1.3 Tools to Help You

This manual provides you with some installation aids to facilitate the installation process:

- **A sample application** is discussed in detail in the *Getting Started Guide*. Using the sample application allows you to familiarize yourself with the files and JCL you will use to implement Endeavor at your site.
- **An installation checklist** is available in the appendix, “The Installation Checklist.” Review the checklist before you begin the Endeavor installation. The checklist outlines the tasks that your site's system programmer and your Endeavor administrator need to perform.
- **An installation worksheet** is available in the appendix, “The Installation Worksheet.” The worksheet helps you collect the information you need to install Endeavor.
- **A disk space requirements worksheet** is available in the appendix, “Disk Space Requirements Worksheet.” This worksheet helps you calculate the disk space requirements for installation.
- **Applying Maintenance** is discussed in the appendix, “Applying Maintenance for Endeavor.”

1.4 Documentation Overview

This manual is part of a comprehensive documentation set that fully describes the features and functions of Endeavor and explains how to perform everyday tasks. For a complete list of Endeavor manuals, see the PDF Table of Contents file in the PDF directory, or the Bookmanager Bookshelf file in the Books directory.

Please also note the following product abbreviations in use in this guide:

This product ...	Is referred to as ...
AllFusion CA-Panvalet	CA-Panvalet
AllFusion CA-Librarian	CA-Librarian
Advantage CA-Earl	CA-Earl
CA Common Services CA-L-Serv	CA-L-Serv or L-Serv

1.5 Documentation Distribution

The documentation for Release 4.0 of Endeavor is delivered in two formats:

- IBM BookManager (BOO)
- Adobe Acrobat (PDF)

All of the Endeavor documentation is provided in both formats, and can be found on the AllFusion Endeavor Change Manager Documentation CD and the product tape (B4000C).

If you require hardcopy sets of the documentation, we recommend that you print the Acrobat versions of the guides, not the BookManager versions. See the section titled "Printing the Documentation" later in this chapter for more information.

The documentation for Release 4.0 is also available on the Web at esupport.ca.com.

1.5.1 Obtaining Viewers

To obtain a free copy of the IBM BookManager Reader, visit the following Web site and choose the installation program for your environment:

<http://www.ibm.com/software/office/bkmgr>

To obtain a free copy of the Adobe Acrobat Reader, check the AllFusion Endeavor Change Manager Documentation CD. The installation program provided on the CD (rp505enu.exe) can be used to install the Acrobat Reader on Windows machines.

To download free copies of the Acrobat Reader for other operating systems, visit the following Web site:

<http://www.adobe.com/products/acrobat/readermain.html>

Note: Be sure to select the "Include option for searching Adobe PDF files and accessibility support" check box in the Step 1 column on the download page when selecting the version of the Acrobat Reader you want to download. If you do not select this option, you will be unable to utilize Acrobat's cross-book search feature.

1.5.2 Unloading the BookManager Files

To help you unload the BookManager files, sample member BC1JUBKS has been provided. It can be found in *iprfx.igual.JCLLIB*.

Before submitting the job, be sure to add a valid JOBCARD. You will also need to tailor the JCL to meet the requirements of your site. The variables in BC1JUBKS that may need editing are listed in the table below:

Variable	Definition
dvolsr	Volume serial number of the disk used to store permanent data sets. If your site does not require the use of the VOL=SER parameter when storing permanent data sets, enter the following change command to remove this parameter: C 'VOL=SER=DVOLSER,' ' ' ALL
iprfx	Highest-level qualifier used when assigning data set names for the installation and execution data sets.
igual	Second-level qualifier used when assigning data set names for the installation and execution data sets.
pdisk	Unit label for permanent disk data sets.
tape	Unit name for the tape device you are using.
tvolser	Volume serial number of the Endeavor installation tape.

1.5.2.1 BC1JUBKS

```
//*JOB CARD
/*-----
/*
/* (C) 2002 COMPUTER ASSOCIATES INTERNATIONAL, INC.
/*
/* NAME=BC1JUBKS
/*
/* THIS IS SAMPLE JCL TO UNLOAD THE
/* ALLFUSION ENDEVOR CHANGE MANAGER DOCUMENTATION
/* FROM INSTALL TAPE. BEFORE RUNNING PLEASE EDIT JCL
/* WITH WHAT THE STANDARDS ARE AT YOUR SHOP.
/*
/*-----
//STEP1 EXEC PGM=IEBCOPY,REGION=2048K
//SYSPRINT DD SYSOUT=*
//INDD DD DSN=BST.NDVRC1.BOOKS,
// UNIT=TAPE,
// VOL=SER=TVOLSER,
// LABEL=(20,SL),
// DISP=OLD
//OUTDD DD DSN=IPRFX.IQUAL.BOOKS,
// UNIT=PDISK,VOL=SER=DVOLSER,
// SPACE=(CYL,(10,30,10)),
// DISP=(NEW,CATLG,DELETE)
//SYSIN DD *
COPY INDD=INDD,OUTDD=OUTDD
/*
```

1.5.2.2 Downloading the BookManager Files

The table below lists the member names and file extensions of the members that will be unloaded to dataset *iprfx.igual.BOOKS* using sample JCL BC1JUBKS found in *iprfx.igual.JCLLIB*. It also provides descriptions of each of the files.

If you plan to use BookManager on your PC, download the files from *iprfx.igual.BOOKS* using the member names and file extensions shown below. All of the books, as well as the book index, must be downloaded as binary files. However, the bookshelf file (EN400) must be downloaded as text.

If you plan to use BookManager on the mainframe, each member name below must be copied into its own sequential file. Your BookManager Administrator can then make these files known to BookManager for MVS.

Member Name	Description	File Extension
EN400	BKSHELF	BKS
EN400I	BKINDEX	BKI

Member Name	Description	File Extension
ENACM400	Automated Configuration Option Guide	BOO
ENADM400	Administration Guide	BOO
ENAPI400	API Guide	BOO
ENEXI400	Exits Guide	BOO
ENFTP400	Footprints Guide	BOO
ENIMP400	Implementation Guide	BOO
ENINS400	Installation Guide	BOO
ENINV400	Inventory Analyzer Guide	BOO
ENLSR400	CA Common Services CA-L-Serv Technical Bulletin	BOO
ENMSG400	Error Codes and Messages Guide	BOO
ENPDM400	Parallel Development Option Guide	BOO
ENPKG400	Packages Guide	BOO
ENPRO400	Extended Processors Guide	BOO
ENQEU400	Quick Edit User Guide	BOO
ENQRA400	Quick Reference Guide for Administrators	BOO
ENQRU400	Quick Reference Guide for Users	BOO
ENREP400	Reports Guide	BOO
ENRLS400	Release Summary	BOO
ENSCL400	SCL Reference Guide	BOO
ENSEC400	Security Guide	BOO
ENUSR400	User Guide	BOO
ENUTL400	Utilities Guide	BOO

1.5.3 Unloading the Acrobat Files

To help you unload the Acrobat versions of the guides from the product tape, sample member BC1JUADO has been provided. It can be found in *iprfx.iqual.JCLLIB*.

Before submitting the job, be sure to add a valid JOBCARD. You will also need to tailor the JCL to meet the requirements of your site. The variables in BC1JUADO that may need editing are listed in the table below:

Variable	Definition
dvolser	Volume serial number of the disk used to store permanent data sets. If your site does not require the use of the VOL=SER parameter when storing permanent data sets, enter the following change command to remove this parameter: C 'VOL=SER=DVOLSER,' ' ' ALL
iprfx	Highest-level qualifier used when assigning data set names for the installation and execution data sets.
iqual	Second-level qualifier used when assigning data set names for the installation and execution data sets.
pdisk	Unit label for permanent disk data sets.
tape	Unit name for the tape device you are using.
tvolsr	Volume serial number of the Endeavor installation tape.

1.5.3.1 BC1JUADO

```

//*JOB CARD
/*-----*
/*
/*      (C) 2002 COMPUTER ASSOCIATES INTERNATIONAL, INC.
/*
/*      NAME=BC1JUADO
/*
/*      THIS IS SAMPLE JCL TO UNLOAD
/*      THE ALLFUSION ENDEVOR CHANGE MANAGER
/*      DOCUMENTATION FROM INSTALL TAPE. BEFORE RUNNING PLEASE
/*      EDIT JCL WITH WHAT THE STANDARDS ARE AT YOUR SHOP.
/*
/*-----*
//STEP1 EXEC PGM=IEBGENER
//SYSUT3 DD UNIT=TDISK,SPACE=(TRK,(1,1))
//SYSUT4 DD UNIT=TDISK,SPACE=(TRK,(1,1))
//SYSPRINT DD SYSOUT=*
//SYSUT1 DD DSN=BST.NDVRC1.ABOOKS,DISP=OLD,
//      UNIT=TAPE,VOL=SER=TVOLSER,
//      LABEL=(21,SL)
//SYSUT2 DD DSN=IPRFX.IQUAL.ABOOKS,
//      UNIT=PDISK,
//      VOL=SER=DVOLSER,
//      SPACE=(TRK,(235,15)),
//      DISP=(NEW,CATLG,DELETE),
//      DCB=(LRECL=0,BLKSIZE=6160)
//SYSIN DD DUMMY
/*

```

1.5.3.2 Downloading the Acrobat Files

Sample member BC1JUADO holds a compressed archive file that contains all of the Endeavor documentation. Once it has been unloaded, the file can be downloaded using a binary transfer program to a platform that supports the Adobe Acrobat Reader. Download the file with a .tgz file extension (for example, en40bks.tgz). Then use WinZip 8.0 or later to uncompress the archive file and extract the files to the directory of your choice. When you uncompress the file, check the option Use folder names on the WinZip Extract dialog panel. This will ensure that the indexes are extracted to the proper directory structure. After you extract the contents of the archive file using WinZip, in addition to a PDF file for each guide, the directory will contain a PDX file and an index folder that contains nine subfolders, all of which are used by the Search feature.

Note: Although you can copy individual PDF files to other folders, the Adobe Acrobat Search feature that allows you to search across the entire documentation set depends on the proper placement of the index files in the directory structure. The Search feature will not function in any PDFs that are outside of the directory structure.

The directory will contain the following PDF files for the documentation set:

File Name	Description	File Extension
EN400	Table of Contents file	PDF
ENACM400	Automated Configuration Option Guide	PDF
ENADM400	Administration Guide	PDF
ENAPI400	API Guide	PDF
ENEXI400	Exits Guide	PDF
ENFTP400	Footprints Guide	PDF
ENGSG400	Getting Started Guide	PDF
ENIMP400	Implementation Guide	PDF
ENINS400	Installation Guide	PDF
ENINV400	Inventory Analyzer Guide	PDF
ENLSR400	CA Common Services CA-L-Serv Technical Bulletin	PDF
ENMSG400	Error Codes and Messages Guide	PDF
ENPDM400	Parallel Development Option Guide	PDF
ENPKG400	Packages Guide	PDF
ENPRO400	Extended Processors Guide	PDF
ENQEU400	Quick Edit User Guide	PDF
ENQRA400	Quick Reference Guide for Administrators	PDF
ENQRU400	Quick Reference Guide for Users	PDF
ENREP400	Reports Guide	PDF
ENRLS400	Release Summary	PDF
ENSCL400	SCL Reference Guide	PDF
ENSEC400	Security Guide	PDF
ENUSR400	User Guide	PDF
ENUTL400	Utilities Guide	PDF

1.5.4 Printing the Documentation

If you require hardcopy versions of the documentation, you can print either the BookManager (BOO) or the Acrobat (PDF) files. We recommend that you print the Acrobat files, as they will result in a higher-quality print image and can be printed off by the book. BookManager supports printing by topic only.

However, it should be noted that, when printing particularly large PDF files, you may need to print the file in segments. How large a PDF you can print depends on the amount of memory on your printer and/or print server. If you experience problems when printing large PDF files, use Acrobat's print dialog to print the book in sections. For example, first print pages 1-50, followed by pages 51-100, and so on.

Chapter 2. Install Endeavor System Software

2.1 Overview

This chapter explains how to install the Endeavor system software.

2.1.1 Installing Base Endeavor

In this chapter, you will learn about installing the “base” Endeavor product. There are five steps involved in this procedure:

Step	What You Do . . .
1	Prepare for Endeavor
2	Work with the Install Data Set
3	Considerations
4	Define Endeavor to the ISPF Environment
5	Additional Considerations

In many of these steps, you need to define specific JCL variables for your site. Definitions are provided in this chapter. See also the appendix, “The Installation Worksheet”, for more detailed definitions.

2.2 Step 1: Prepare for Endeavor

2.2.1 Product Licensing and Authorization

2.2.1.1 CA Common Services System Requirements

Endeavor Release 4.0 and all sequent releases use CA Common Services for product licensing and authorization.

CA Common Services is a group of system services that protect your investment in software products by helping you manage your data center more efficiently. Each of the CA Common Services components offer individual benefits to the user. The CA Common Services components include:

- CA-Activator is a user-friendly, menu-driven installation facility that greatly simplifies the tasks of installing and maintaining your CA software and the other CA Common Services components.
- CAIRIM, CA LMP, and CAIENF assist you in getting your Endeavor system running, and in keeping it running.
- CAIENF/CICS and CAIENF/DB2 protect your software investments by insulating software products from changes in the operating system and environment.
- CAISSF enables your software products to offer standardized security interfaces.
- CAICCI allows your software products to work together across platforms, making your software more powerful.
- CA-Earl Reporting Services provides basic reporting capabilities to help you in tracking day-to-day operations.

2.2.1.2 CAIRIM

Endeavor uses the CA Common Services Resource Initialization Manager (CAIRIM) component for product license authorization. CAIRIM is one member of a group of routines that comprise CA Common Services. CAIRIM routines are grouped under CA OS/390 Dynamic Service Code S910. Refer to the *CA Common Services Installation and Maintenance Guide* for further details of the features and associated utilities of CAIRIM.

CAIRIM is the common driver for a collection of dynamic initialization routines that eliminate the need for user SVCs, SMF exits, subsystems, and other installation requirements commonly encountered when installing systems software. These routines are grouped under the Computer Associates OS/390 dynamic service code S910. Some of the features of CAIRIM include:

- Obtaining SMF data
- Verification of proper software installation

- Installation of OS/390 interfaces
- Automatic startup of CA and other vendor products
- Proper timing and order of initialization

No other services are required to operate properly.

Note: CAIRIM is now mandatory for Endeavor 4.0. It must be installed and started with Endeavor 4.0 within 30 minutes of IPL time. CAIRIM is part of CA Common Services.

2.2.1.3 CA LMP

Endeavor requires the proper level of the CA License Maintenance Program (LMP) in order to initialize correctly. CA LMP, which provides a standardized, automated approach to the tracking of licensed software, is provided as an integral part of CAIRIM. Authorization codes you may previously have specified in the C1DEFLTS table are no longer processed.

The CA License Management Program uses common real-time enforcement software to validate the user's configuration. CA LMP reports on license, usage, and financial activities of Endeavor. The routines that accomplish this are integrated into the Computer Associates OS/390 dynamic service code S910 (the CAIRIM service). Some of the features of CA LMP include:

- Common key data set can be shared among many CPUs
- “Check digits” are used to detect errors in transcribing key information
- Execution keys can be entered without affecting any CA software solution already running
- No special maintenance requirements

For a full description of the procedure for defining the CA LMP execution key to the CAIRIM parameters, refer to the *CA Common Services Installation and Maintenance Guide*.

Understanding Your LMP Key Certificate: Examine the CA LMP Key Certificate you received with your Endeavor installation or maintenance tape. Your certificate contains the following information:

Certificate Term	Meaning
Product Name	The trademarked or registered name of Endeavor as licensed for the designated site and CPUs.
Product Code	A two-character code that corresponds to one or more Endeavor features.
Supplement	The reference number of your license for the particular Endeavor feature, if applicable.
CPU ID	The code that identifies the specific CPU for which installation of Endeavor is valid.
Execution Key	An encrypted code required by CA LMP for product initialization. Also referred to as the "LMP CODE."
Expiration Date	The date your license for Endeavor expires in the format ddmmyy.
Contact Technical	The name of the designated technical contact at your site who is responsible for installation and maintenance of Endeavor. This is the person to whom CA addresses all CA LMP correspondence.
MIS Director	The name of the Director of MIS or the person who performs this function at your installation. If the title, but not an individual's name, is indicated on the certificate you should supply the actual name when correcting and verifying the certificate.
CPU Location	The address of the building in which the CPU is installed.

Specifying the LMP Execution Key(s): You must add the CA LMP Execution Key(s) provided on the Key Certificate to the CAIRIM parameters to ensure proper initialization of Endeavor. To define a CA LMP Execution Key, modify member KEYS in CALPPOPTION.

The following shows the syntax for statements in the KEYS member and describes the individual parameters:

```
PROD(pp) DATE(ddmmyy) CPU(tttt-mmmm/ssssss) LMPCODE(kkkkkkkkkkkkkkk)
```

Parameter	Meaning
pp	The two-character product code. This required code matches the product code already in use by CAIRIM for any earlier versions of Endeavor, if applicable.
ddmmyy	The licensing agreement expiration date.
tttt-mmmm	The CPU Type and Model on which the product is to run. If the CPU Type or Model requires less than four characters, use blanks for the unused characters. This is a required parameter.
sssss	The serial number on which the product is to execute. This is a required parameter.
kkkkkkkkkkkkkk	The execution key required to run the product. This key is provided on the Key Certificate shipped with each CA software solution.

The following is an example LMP KEYS entry. The product code and execution key values will differ in your installation. Note the trailing blank in the CPU model number.

```
PROD(ZZ) DATE(08DEC99) CPU(3090-600/370623) LMPCODE(0408A0423C0123EF)
```

Refer to the section entitled “Installation Tasks” in the *CA Common Services Installation and Maintenance Guide* for more information on defining the CA LMP Execution Key to CAIRIM.

Install CA Common Services LMP Execution Key(s): Before enabling the test environment, you should ensure that all necessary CA Common Services LMP Execution Keys have been installed as described in the Installation Phase chapter. You can use the same execution key being used for your production environment; a new key is not required when upgrading to a newer release of the product.

Some users may not be licensed for all features of the product. The demonstration job stream that is part of this phase uses facilities from all features of Endeavor.

Remember to ensure that a valid CA LMP Execution Key, supplied by Computer Associates, has been specified to the CA Common Services CAIRIM licensing component.

Note: If you know that you do not have a full feature execution key, you can obtain a temporary one by contacting Computer Associates LMP support group at 1-800-338-6720.

2.2.2 Authorize NDVRC1

Identify the Endeavor load module name NDVRC1 to the authorized TSO program, command, and service facility list. This process varies depending on the TSO environment in which you are operating. If you have performed this procedure for a previous release of Endeavor, you do not need to repeat it.

- Add the load module name NDVRC1 to the AUTHPGM, AUTHCMD, and AUTHTSF sections of member IKJTSO00, in SYS1.PARMLIB. See the IBM TSO/E documentation set for more information.

2.2.3 Data Set Space Requirements

The table below contains the space requirements for the base Endeavor libraries. The primary track allocation values are for 3390 disk drives.

Data Set Name	Primary Tracks	Secondary Tracks	Directory Blocks	Record Format	Record Length	Approximate Number of Members
iprfx.igual.AUTHLIB	60	5	45	U	Zero	64
iprfx.igual.CONLIB	225	15	120	U	Zero	730
iprfx.igual.INSTALL	135	5	45	FB	80	8
iprfx.igual.ISPMLIB	15	5	90	FB	80	280
iprfx.igual.ISPPLIB	75	5	270	FB	80	920
iprfx.igual.ISPSLIB	10	5	45	FB	80	40
iprfx.igual.ISPTLIB	2	2	15	FB	80	1
iprfx.igual.ISRCLIB	20	5	45	FB	80	46
iprfx.igual.JCLLIB	45	5	45	FB	80	225
iprfx.igual.SOURCE	135	5	135	FB	80	620
uprfx.uqual.AUTHLIB	15	5	45	U	Zero	
Total space in tracks	735					

Most of these libraries contain components necessary to execute Endeavor. The iprfx.igual.INSTALL library is used during the Endeavor install process and can be archived after Endeavor is successfully installed. The iprfx.igual.SOURCE library contains macros necessary to assemble user-defined tables, record layouts, and sample user exits. The uprfx.uqual.AUTHLIB data set, allocated during the install, is intended for user-defined tables and programs, such as the defaults table and user exit load modules.

Note: Allocation information related to the sample Endeavor Application can be found in the *Getting Started Guide*.

2.2.4 Activate the Changes

When you have added NDVRC1 to the appropriate lists, and have made the necessary changes to LNKLSTnn and IEAAPFnn, you can use the PARMLIB and SETPROG commands to dynamically activate the changes or re-IPL the system.

2.3 Step 2: Work with the Install Data Set

2.3.1 Overview

This installation step unloads prototype files from the installation tape. These files include the JCL and CLISTS used by subsequent installation steps, sample processors, and customized JCL used during execution of Endeavor.

The procedures for the unload process are summarized below:

Step	Procedure
A	Unload BST.NDVRC1.INSTALL from the installation tape, storing it as the iprfx.igual.INSTALL data set.
B	Read the README member of the INSTALL data set for important features and install notes.
C	Unload the documentation set.
D	Edit the CHM4000 and FAM4001 members to customize with the naming conventions and Endeavor installation options in effect at your site.
E	Edit the BC1JJB01 member to customize it to the naming conventions in effect at your site, then submit for execution to allocate and initialize all SMP/E and Endeavor data sets.
F	Edit the BC1JJB02 member to customize it to the naming conventions in effect at your site, then submit for execution to populate the SMP/E environment.

2.3.2 Step A: Unload BST.NDVRC1.INSTALL

Unload BST.NDVRC1.INSTALL from the installation tape, using JCL similar to the sample shown below. You can either type this JCL manually or copy it from existing JCL.

```

/**(JOB CARD)
/**-----*
/**
/** (C) 2002 COMPUTER ASSOCIATES INTERNATIONAL, INC. (CA)
/**
/** NAME=BC1JJB00
/**
/**THIS IS SAMPLE JCL TO LOAD THE ENDEVOR INSTALLATION JOBSTREAM
/** FROM THE ENDEVOR INSTALL TAPE. REFER TO THE INSTALLATION
/** GUIDE FOR INFORMATION ON HOW TO CUSTOMIZE THIS JCL.
/**
/**-----*
//IEBCOPY EXEC PGM=IEBCOPY,REGION=2048K
//SYSPRINT DD SYSOUT=*
//INDD DD DSN=BST.NDVRC1.INSTALL,
// UNIT=cart, <= CUSTOMIZE
// VOL=SER=tvolsr, <= CUSTOMIZE
// LABEL=(9,SL,EXPDT=98000),
// DISP=OLD
//OUTDD DD DSN=iprfx.igual.INSTALL, <= CUSTOMIZE
// UNIT=pdisk,VOL=SER=dvolsr, <= CUSTOMIZE
// SPACE=(TRK,(135,5,45)),
// DISP=(NEW,CATLG,DELETE),
// DCB=(LRECL=80,RECFM=FB,BLKSIZE=0)
//SYSIN DD *
COPY INDD=INDD,OUTDD=OUTDD
/*

```

This JCL allocates and loads a partitioned data set containing the JCL job streams and associated control statements that, in turn, allocate and load the Endeavor data sets. This is the data set that is used in the remainder of the install.

2.3.2.1 User-Defined Variables

Substitute the appropriate values for the variables in the JCL created in Step A.

Variable	Definition
dvolsr	Volume serial number of the disk used to store permanent data sets.
iprfx	Highest-level qualifier used when assigning data set names for installation and execution data sets.
igual	Second-level qualifier used when assigning data set names for installation and execution data sets.
pdisk	Unit label for permanent disk data sets.
tvolsr	Volume serial number of the Endeavor installation tape.

2.3.2.2 Submit the JCL

After you have changed the variables to meet your site requirements, you must submit the JCL. When the job is complete, the installation JCL and control statements are loaded and ready to be customized.

2.3.3 Step B: Read the README file

The INSTALL data set includes a README file which contains install notes and information on important features. Before continuing with the unload process, be sure to read this file.

2.3.4 Step C: Unload the Documentation Set

See Unloading the BookManager Files and Unloading the Acrobat Files both in the chapter “Installation Overview.”

2.3.5 Step D: Edit the CHM4000 Member

The INSTALL data set includes the following members: *BC1JJB01*, *BC1JJB02*, *BC1JMNT1*, *CHM4000*, *FAM4001*, *README*, and *ROSPTFS*.

- *BC1JJB01* contains a job stream that will allocate and initialize the Endeavor and SMP/E environments.
- *BC1JJB02* contains a job stream that will populate the Endeavor and SMP/E environments.
- *BC1JMNT1* contains a job stream that will execute SMP/E to populate the Endeavor and SMP/E libraries with service pack maintenance.
- *CHM4000* is the SMP/E inline stream that contains the JCL, Skeleton and CLIST members that are customized to reflect the conventions in effect at your site.
- *FAMrrsp* Family PTF for maintenance install.
- *README* contains installation notes and comments.
- *ROSPTFS* contains the SMP/E APARs to be installed with the service pack for the Interface for CA-Roscoe.

Before you run the job *BC1JJB02*, you need to edit the *CHM4000* member to reflect the conventions in effect at your site. You can use the ISPF/PDF Edit Service or any appropriate editor. Use the editor's change commands to modify the JCL.

Important! *If you are using the ISPF/PDF Edit service, enter the CAPS ON command before you perform any edits.*

2.3.5.1 Change Command Syntax

The ISPF/PDF change command syntax is shown below:

```
C 'variable' value ALL
```

For example, to change the tape volume serial number to *B4000C*, use the following command:

```
C 'TVOLSER' 'B4000C' ALL
```

Use global change commands to change all instances of the variables.

2.3.5.2 CHM4000 Member Command Variables

Edits Required for All Users: Change the following variable names to reflect the conventions in effect at your site. After you have made the appropriate changes, save the updated member.

Variable	Definition
dvolsr	<p>Volume serial number of the disk used to store permanent data sets.</p> <p>If your site does not require the use of the VOL=SER parameter when storing permanent data sets, enter the following change command to remove this parameter:</p> <pre>C 'VOL=SER=DVOLSER,' '' ALL</pre> <p>Note: The SMP/E SMPTLIB DD is a dynamically allocated work file and requires a volsr. This is an IBM requirement. If you make the above global change to remove all instances of DVOLSER you must put it back on all the SMPTLIB DDs or you will receive a JCL error.</p>
iprfx	Highest-level qualifier used when assigning data set names for installation and execution data sets.
igual	Second-level qualifier used when assigning data set names for installation and execution data sets.
panprfx	<p>Applies only if your site is using CA-Panvalet</p> <p>Highest-level qualifier used to assign the site-specific name of the Panvalet load library.</p>
panqual	<p>Applies only if your site is using CA-Panvalet</p> <p>Second-level qualifier used to assign the site-specific name of the Panvalet Load Library.</p>
pdisk	Unit label for permanent disk data sets.
tdisk	Unit label for temporary disk data sets.

Variable	Definition
tvolser	Volume serial number of the Endeavor installation tape.
uprfx	Highest-level qualifier used when assigning data set names for Endeavor user files.
uqual	Second-level qualifier used when assigning data set names for Endeavor user files.
vvolser	Volume serial number of the disk on which the VSAM data set will be allocated. Note: If your site does not require the use of the VOLUMES parameter when allocating VSAM files, see the note at the end of this table for steps on removing references to vvolser.

Edits Required for the Sample Application: If you are installing the sample application, you need to change the following variable names to reflect the conventions in effect at your site. After you make the appropriate changes, save the updated member.

For information on installing and using the sample application, please refer to the *Getting Started Guide*.

Variable	Definition
MONITOR=COMPONENTS	Indicates whether ACM is in use at your site. <ul style="list-style-type: none">■ If your site received an LMP key for product AY, Automated Configuration Manager, change nothing.■ Otherwise, change this value to <i>MONITOR=NONE</i>
PROC?	Indicates whether processors are in use at your site. <ul style="list-style-type: none">■ If your site received an LMP key for product A9, Extended Processors, change this value to <i>PROC</i>.■ Otherwise, change this this value to <i>NOPROC</i>
SYSMACLIB	The data set name of the system assembler macro library. For example: SYS1.MACLIB

Edits Required If Using Extended Processors: Your site may be using one or more types of extended processors. The sample application installs one COBOL and ASSEMBLER processor. The following variables must be changed in CHM4000 as appropriate for your site in order for the sample application to install properly:

Variable	Definition
C??	CII or CLE. This indicates the version of COBOL in use at your site, either COBOL II or COBOL/LE. If you are using COBOL/LE, change this value to <i>CLE</i> . If you are using COBOL II, then change this value to <i>CII</i> . If your site uses both COBOL/LE and COBOL II, change the value to the version of COBOL you use most often. This version of COBOL becomes the default processor group for COBOL elements delivered with the sample install.
SYSCLECOMP	The COBOL/LE compiler load library. For example: IGY.SIGYCOMP
SYSCLERUN	The OS/390 Language Environment runtime library. For example: CEE.SCEERUN
SYSCLELKED	The OS/390 Language Environment Automatic Call (link) library. For example: CEE.SCEELKED
SYSIIICOMP	The COBOL II compiler load library. For example: SYS1.COB2COMP
SYSIIILIB	The COBOL II Automatic Call (link) library. For example: SYS1.COB2LIB

Note: If your site does not require the use of the `VOLUMES` parameter when allocating VSAM files, complete the following steps to remove all references to `vvolsr`:

- At the command line, enter:

```
X ALL; F ALL VVOLSER
```

and press `ENTER`. All instances of `vvolsr` will be displayed. All other lines are excluded.
- At the command line, enter:

```
DEL ALL NX
```

and press `ENTER`. The instances of `vvolsr` will be deleted.
- Type **RESET** to display the remaining unaffected lines.

2.3.6 Step E: Run BC1JJB01

Note: If this is a maintenance install, see the appendix "Applying Maintenance to Endeavor" and following the instructions there to complete the installation.

Before you run job BC1JJB01, you must change the following variables:

dvolser	Volume serial number of the disk used to store permanent data sets.
iprfx	Highest-level qualifier used when assigning data set names for installation and execution data sets.
iqua	Second-level qualifier used when assigning data set names for installation and execution data sets.
pdisk	Unit label for permanent disk data sets.
smpfx	Highest-level qualifier used when assigning data set names for BASE Endeavor SMPE files.
smqu	Second-level qualifier used when assigning data set names for BASE Endeavor SMPE files.
tdisk	Unit label for temporary disk data sets.
uprfx	Highest-level qualifier used when assigning data set names for Endeavor user files.
uqua	Second-level qualifier used when assigning data set names for Endeavor user files.
vvolser	Volume serial number of the disk on which VSAM data sets are stored.

After you have tailored the JCL, be sure you have a valid jobcard and submit job BC1JJB01 for execution.

The BC1JJB01 JCL is shown below. Space requirements are based on 3390-type disk storage (see the space allocations table in the discussion “Data Set Space Requirements”). If you use another type of device, adjust the **SPACE** parameter accordingly.

```

/*(JOB CARD)
/*-----*
/*
/* (C) 2002 COMPUTER ASSOCIATES INTERNATIONAL, INC.
/*
/* NAME: BC1JJB01
/*
/* PURPOSE: THIS JOB WILL ALLOCATE AND INITIALIZE ALL OF THE SMPE
/* DATASETS REQUIRED FOR THIS INSTALL.
/* IT WILL ALSO ALLOCATE THE REQUIRED DATASETS NEEDED TO COMPLETE
/* THE ALLFUSION ENDEVOR CHANGE MANAGER INSTALL.
/*
/*-----*
//ALLOC EXEC PGM=IEFBRI4
//SMPSCDS DD DSN=IPRFX.IQUAL.SMPSCDS,
// DISP=(NEW,CATLG,DELETE),
// UNIT=PDISK,VOL=SER=DVOLSER,
// SPACE=(TRK,(2,1,45)),
// DCB=(RECFM=FB,LRECL=80,BLKSIZE=9040)
//SMPMTS DD DSN=IPRFX.IQUAL.SMPMTS,
// DISP=(NEW,CATLG,DELETE),
// UNIT=PDISK,VOL=SER=DVOLSER,
// SPACE=(TRK,(2,1,45)),
// DCB=(RECFM=FB,LRECL=80,BLKSIZE=9040)
//SMPPTS DD DSN=IPRFX.IQUAL.SMPPTS,
// DISP=(NEW,CATLG,DELETE),
// UNIT=PDISK,VOL=SER=DVOLSER,
// SPACE=(CYL,(5,5,45)),
// DCB=(RECFM=FB,LRECL=80,BLKSIZE=9040)
//SMPSTS DD DSN=IPRFX.IQUAL.SMPSTS,
// DISP=(NEW,CATLG,DELETE),
// UNIT=PDISK,VOL=SER=DVOLSER,
// SPACE=(TRK,(2,1,45)),
// DCB=(RECFM=FB,LRECL=80,BLKSIZE=9040)
//SMPLOG DD DSN=IPRFX.IQUAL.SMPLOG,
// DISP=(NEW,CATLG,DELETE),
// UNIT=PDISK,VOL=SER=DVOLSER,
// SPACE=(TRK,(5,2)),
// DCB=(RECFM=VB,LRECL=510,BLKSIZE=32000)
//SMPLOGA DD DSN=IPRFX.IQUAL.SMPLOGA,
// DISP=(NEW,CATLG,DELETE),
// UNIT=PDISK,VOL=SER=DVOLSER,
// SPACE=(TRK,(5,2)),
// DCB=(RECFM=VB,LRECL=510,BLKSIZE=32000)
//CAP40BCT DD DSN=IPRFX.IQUAL.CONLIB,
// DISP=(NEW,CATLG,DELETE),
// UNIT=PDISK,VOL=SER=DVOLSER,
// SPACE=(TRK,(225,15,135)),

```

```
//          DCB=(LRECL=0,RECFM=U,BLKSIZE=32760)
//CAP40BAT DD DSN=IPRFX.IQUAL.AUTHLIB,
//          DISP=(NEW,CATLG,DELETE),
//          UNIT=PDISK,VOL=SER=DVOLSER,
//          SPACE=(TRK,(60,5,45)),
//          DCB=(LRECL=0,RECFM=U,BLKSIZE=32760)
//CAP40BAU DD DSN=UPRFX.UQUAL.AUTHLIB,
//          DISP=(NEW,CATLG,DELETE),
//          UNIT=PDISK,VOL=SER=DVOLSER,
//          SPACE=(TRK,(15,5,45)),
//          DCB=(LRECL=0,RECFM=U,BLKSIZE=32760)
//CAP40MLT DD DSN=IPRFX.IQUAL.ISPMLIB,
//          DISP=(NEW,CATLG,DELETE),
//          UNIT=PDISK,VOL=SER=DVOLSER,
//          SPACE=(TRK,(15,5,90)),
//          DCB=(LRECL=80,RECFM=FB,BLKSIZE=0)
//CAP40SRT DD DSN=IPRFX.IQUAL.SOURCE,
//          DISP=(NEW,CATLG,DELETE),
//          UNIT=PDISK,VOL=SER=DVOLSER,
//          SPACE=(TRK,(300,90,300)),
//          DCB=(LRECL=80,RECFM=FB,BLKSIZE=0)
//CAP40BPT DD DSN=IPRFX.IQUAL.ISPPLIB,
//          DISP=(NEW,CATLG,DELETE),
//          UNIT=PDISK,VOL=SER=DVOLSER,
//          SPACE=(TRK,(75,5,270)),
//          DCB=(LRECL=80,RECFM=FB,BLKSIZE=0)
//CAP40CLT DD DSN=IPRFX.IQUAL.ISRCLIB,
//          DISP=(NEW,CATLG,DELETE),
//          UNIT=PDISK,VOL=SER=DVOLSER,
//          SPACE=(TRK,(30,5,90)),
//          DCB=(LRECL=80,RECFM=FB,BLKSIZE=0)
//CAP40BJT DD DSN=IPRFX.IQUAL.JCLLIB,
//          DISP=(NEW,CATLG,DELETE),
//          UNIT=PDISK,VOL=SER=DVOLSER,
//          SPACE=(TRK,(50,5,90)),
//          DCB=(LRECL=80,RECFM=FB,BLKSIZE=0)
//CAP40TBT DD DSN=IPRFX.IQUAL.ISPTLIB,
//          DISP=(NEW,CATLG,DELETE),
//          UNIT=PDISK,VOL=SER=DVOLSER,
//          SPACE=(TRK,(2,2,15)),
//          DCB=(LRECL=80,RECFM=FB,BLKSIZE=0)
//CAP40BST DD DSN=IPRFX.IQUAL.ISPSLIB,
//          DISP=(NEW,CATLG,DELETE),
//          UNIT=PDISK,VOL=SER=DVOLSER,
//          SPACE=(TRK,(20,5,90)),
//          DCB=(LRECL=80,RECFM=FB,BLKSIZE=0)
//CAP40BAD DD DSN=IPRFX.IQUAL.CAP40BAD,
//          DISP=(NEW,CATLG,DELETE),
//          UNIT=PDISK,VOL=SER=DVOLSER,
//          SPACE=(TRK,(60,5,45)),
//          DCB=(LRECL=0,RECFM=U,BLKSIZE=32760)
//CAP40BCD DD DSN=IPRFX.IQUAL.CAP40BCD,
//          DISP=(NEW,CATLG,DELETE),
```

```

//          UNIT=PDISK,VOL=SER=DVOLSER,
//          SPACE=(TRK,(210,5,120)),
//          DCB=(LRECL=0,RECFM=U,BLKSIZE=32760)
//CAP40MLD DD DSN=IPRFX.IQUAL.CAP40MLD,
//          DISP=(NEW,CATLG,DELETE),
//          UNIT=PDISK,VOL=SER=DVOLSER,
//          SPACE=(TRK,(15,5,90)),
//          DCB=(LRECL=80,RECFM=FB,BLKSIZE=0)
//CAP40SRD DD DSN=IPRFX.IQUAL.CAP40SRD,
//          DISP=(NEW,CATLG,DELETE),
//          UNIT=PDISK,VOL=SER=DVOLSER,
//          SPACE=(TRK,(300,90,300)),
//          DCB=(LRECL=80,RECFM=FB,BLKSIZE=0)
//CAP40BPD DD DSN=IPRFX.IQUAL.CAP40BPD,
//          DISP=(NEW,CATLG,DELETE),
//          UNIT=PDISK,VOL=SER=DVOLSER,
//          SPACE=(TRK,(75,5,270)),
//          DCB=(LRECL=80,RECFM=FB,BLKSIZE=0)
//CAP40CLD DD DSN=IPRFX.IQUAL.CAP40CLD,
//          DISP=(NEW,CATLG,DELETE),
//          UNIT=PDISK,VOL=SER=DVOLSER,
//          SPACE=(TRK,(30,5,90)),
//          DCB=(LRECL=80,RECFM=FB,BLKSIZE=0)
//CAP40BJD DD DSN=IPRFX.IQUAL.CAP40BJD,
//          DISP=(NEW,CATLG,DELETE),
//          UNIT=PDISK,VOL=SER=DVOLSER,
//          SPACE=(TRK,(50,5,90)),
//          DCB=(LRECL=80,RECFM=FB,BLKSIZE=0)
//CAP40TBD DD DSN=IPRFX.IQUAL.CAP40TBD,
//          DISP=(NEW,CATLG,DELETE),
//          UNIT=PDISK,VOL=SER=DVOLSER,
//          SPACE=(TRK,(2,2,15)),
//          DCB=(LRECL=80,RECFM=FB,BLKSIZE=0)
//CAP40BSD DD DSN=IPRFX.IQUAL.CAP40BSD,
//          DISP=(NEW,CATLG,DELETE),
//          UNIT=PDISK,VOL=SER=DVOLSER,
//          SPACE=(TRK,(20,5,90)),
//          DCB=(LRECL=80,RECFM=FB,BLKSIZE=0)
/*
//ALLOCSI EXEC PGM=IDCAMS
/*      EXPECTED RETURN CODE:  00
//SYSPRINT DD SYSOUT=*
//SYSIN    DD *
        DEFINE CLUSTER (
                NAME (IPRFX.IQUAL.CSI)
                INDEXED
                RECORDSIZE(24 143)
                SHAREOPTIONS (2)
                KEYS(24 0)
                FREESPACE(10 5))
        DATA (
                NAME (IPRFX.IQUAL.CSI.DATA)
                CONTROLINTERVALSIZE(4096)

```

```

                                CYL(5 3)                -
                                VOLUMES (VVOLSER)        -
                                UNIQUE)                 -
INDEX (
                                NAME (IPRFX.IQUAL.CSI.INDEX) -
                                CONTROLINTERVALSIZE(4096) -
                                TRK(20 10)              -
                                VOLUMES (VVOLSER)        -
                                UNIQUE)
/*
//*****
//*
//*   NOTE:  IF YOU ARE RUNNING JES3, BREAK THIS JOB INTO TWO   *
//*           JOBS AT THIS POINT.  SUBSEQUENT STEPS ASSUME THAT *
//*           THE CSI (A VSAM DATA SET) HAS ALREADY BEEN DEFINED. *
//*
//*****
//* INITIALIZE THE SMP/E CSI FILE
//INITCSI EXEC PGM=IDCAMS
//*   EXPECTED RETURN CODE:  00
//SMPCSI  DD DISP=SHR,DSN=IPRFX.IQUAL.CSI
//ZPOOL   DD DISP=SHR,DSN=SYS1.MACLIB(GIMZPOOL)
//SYSPRINT DD SYSOUT=*
//SYSIN   DD *
        REPRO   OUTFILE(SMPCSI) INFILE(ZPOOL)
/*
//* DEFINE THE CSI GLOBAL, TARGET & DISTRIBUTION ZONES
//SMPZONE EXEC PGM=GIMSMP,REGION=4096K,PARM='DATE=U'
//*   EXPECTED RETURN CODE:  00
//SMPCSI  DD DISP=SHR,DSN=IPRFX.IQUAL.CSI
//SMPPTS  DD DISP=SHR,DSN=IPRFX.IQUAL.SMPPTS
//SMPLOG  DD DUMMY
//SMPLOGA DD DUMMY
//SMPOUT  DD SYSOUT=*
//SMPPUNCH DD SYSOUT=*
//SMRPT   DD SYSOUT=*
//SMPLIST DD SYSOUT=*
//SMPSNAP DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
//SMPWRK1 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK2 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK3 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK4 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK6 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SYSUT1  DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT2  DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT3  DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT4  DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SMPCNTL DD *
        SET BDY(GLOBAL).
        UCLIN.
        ADD GLOBALZONE

```

```

SREL (Z038)
OPTIONS(NDVROPT)
ZONEINDEX(
    (NDVRTGT,IPRFX.IQUAL.CSI,TARGET)
    (NDVRDLB,IPRFX.IQUAL.CSI,DLIB)
).
ADD OPTIONS(NDVROPT)
DSPREFIX(SMPFX.SMQUL)
DSSPACE(300,45,350)
PEMAX(9999)
PAGELEN(60)
RETRYDDN(ALL)
ASM(NDVRASM)
LKED(NDVRLINK)
ZAP(NDVRZAP).
ADD UTILITY(NDVRASM)
NAME(ASMA90)
PARM(NOXREF,NOOBJ,DECK,NORLD)
RC(04).
ADD UTILITY(NDVRLINK)
NAME(IEWL)
PARM(LET,NOMAP,NOXREF,LIST=STMT,SIZE=(924288,95536),NCAL)
RC(04).
ADD UTILITY(NDVRZAP)
NAME(AMASPZAP)
PARM(IGNIDRFULL)
RC(04).
ADD DDDEF (SMPPTS)
DATASET (IPRFX.IQUAL.SMPPTS)
SHR.
ADD DDDEF (SMPCSI)
DATASET (IPRFX.IQUAL.CSI)
SHR.
ADD DDDEF (SYSLIB)
DATASET (SYS1.MACLIB)
SHR.
ENDUCL.
SET BDY(NDVRTGT).
UCLIN.
ADD TARGETZONE(NDVRTGT)
SREL (Z038)
RELATED(NDVRDLB)
OPTIONS(NDVROPT).
ADD DDDEF (SMPPTS)
DATASET (IPRFX.IQUAL.SMPPTS)
SHR.
ADD DDDEF (SMPCSI)
DATASET (IPRFX.IQUAL.CSI)
SHR.
ADD DDDEF (SMPMTS)
DATASET (IPRFX.IQUAL.SMPMTS)
SHR.
ADD DDDEF (SMPSTS)

```

```
DATASET (IPRFX.IQUAL.SMPSTS)
SHR.
ADD DDDEF (SMPSCDS)
DATASET (IPRFX.IQUAL.SMPSCDS)
SHR.
ADD DDDEF (CAP40BAT)
DATASET (IPRFX.IQUAL.AUTHLIB)
SHR.
ADD DDDEF (CAP40BAD)
DATASET (IPRFX.IQUAL.CAP40BAD)
SHR.
ADD DDDEF (CAP40BCD)
DATASET (IPRFX.IQUAL.CAP40BCD)
SHR.
ADD DDDEF (CAP40MLD)
DATASET (IPRFX.IQUAL.CAP40MLD)
SHR.
ADD DDDEF (CAP40SRD)
DATASET (IPRFX.IQUAL.CAP40SRD)
SHR.
ADD DDDEF (CAP40MLT)
DATASET (IPRFX.IQUAL.ISPMLIB)
SHR.
ADD DDDEF (CAP40BCT)
DATASET (IPRFX.IQUAL.CONLIB)
SHR.
ADD DDDEF (CAP40SRT)
DATASET (IPRFX.IQUAL.SOURCE)
SHR.
ADD DDDEF (CAP40CLT)
DATASET (IPRFX.IQUAL.ISRCLIB)
SHR.
ADD DDDEF (CAP40BPT)
DATASET (IPRFX.IQUAL.ISPPLIB)
SHR.
ADD DDDEF (CAP40CLD)
DATASET (IPRFX.IQUAL.CAP40CLD)
SHR.
ADD DDDEF (CAP40BPD)
DATASET (IPRFX.IQUAL.CAP40BPD)
SHR.
ADD DDDEF (CAP40BST)
DATASET (IPRFX.IQUAL.ISPSLIB)
SHR.
ADD DDDEF (CAP40BJT)
DATASET (IPRFX.IQUAL.JCLLIB)
SHR.
ADD DDDEF (CAP40TBT)
DATASET (IPRFX.IQUAL.ISPTLIB)
SHR.
ADD DDDEF (CAP40BSD)
DATASET (IPRFX.IQUAL.CAP40BSD)
SHR.
```

```
ADD DDDEF (CAP40BJD)
DATASET (IPRFX.IQUAL.CAP40BJD)
SHR.
ADD DDDEF (CAP40TBD)
DATASET (IPRFX.IQUAL.CAP40TBD)
SHR.
ADD DDDEF (SYSLIB)
DATASET (SYS1.MACLIB)
SHR.
ENDUCL.
SET BDY(NDVRDLB).
UCLIN.
ADD DLIBZONE(NDVRDLB)
    SREL (Z038)
    RELATED(NDVRTGT)
    OPTIONS(NDVROPT).
ADD DDDEF (SMPPTS)
DATASET (IPRFX.IQUAL.SMPPTS)
SHR.
ADD DDDEF (SMPCSI)
DATASET (IPRFX.IQUAL.CSI)
SHR.
ADD DDDEF (SMPMTS)
DATASET (IPRFX.IQUAL.SMPMTS)
SHR.
ADD DDDEF (SMPSTS)
DATASET (IPRFX.IQUAL.SMPSTS)
SHR.
ADD DDDEF (SMPCDS)
DATASET (IPRFX.IQUAL.SMPSCDS)
SHR.
ADD DDDEF (CAP40BAT)
DATASET (IPRFX.IQUAL.AUTHLIB)
SHR.
ADD DDDEF (CAP40BAD)
DATASET (IPRFX.IQUAL.CAP40BAD)
SHR.
ADD DDDEF (CAP40BCD)
DATASET (IPRFX.IQUAL.CAP40BCD)
SHR.
ADD DDDEF (CAP40MLD)
DATASET (IPRFX.IQUAL.CAP40MLD)
SHR.
ADD DDDEF (CAP40SRD)
DATASET (IPRFX.IQUAL.CAP40SRD)
SHR.
ADD DDDEF (CAP40MLT)
DATASET (IPRFX.IQUAL.ISPMLIB)
SHR.
ADD DDDEF (CAP40BCT)
DATASET (IPRFX.IQUAL.CONLIB)
SHR.
ADD DDDEF (CAP40SRT)
```

```

DATASET (IPRFX.IQUAL.SOURCE)
SHR.
ADD DDDEF (CAP40CLT)
DATASET (IPRFX.IQUAL.ISRCLIB)
SHR.
ADD DDDEF (CAP40BPT)
DATASET (IPRFX.IQUAL.ISPPLIB)
SHR.
ADD DDDEF (CAP40CLD)
DATASET (IPRFX.IQUAL.CAP40CLD)
SHR.
ADD DDDEF (CAP40BPD)
DATASET (IPRFX.IQUAL.CAP40BPD)
SHR.
ADD DDDEF (CAP40BST)
DATASET (IPRFX.IQUAL.ISPSLIB)
SHR.
ADD DDDEF (CAP40BJT)
DATASET (IPRFX.IQUAL.JCLLIB)
SHR.
ADD DDDEF (CAP40TBT)
DATASET (IPRFX.IQUAL.ISPTLIB)
SHR.
ADD DDDEF (CAP40BSD)
DATASET (IPRFX.IQUAL.CAP40BSD)
SHR.
ADD DDDEF (CAP40BJD)
DATASET (IPRFX.IQUAL.CAP40BJD)
SHR.
ADD DDDEF (CAP40TBD)
DATASET (IPRFX.IQUAL.CAP40TBD)
SHR.
ADD DDDEF (SYSLIB)
DATASET (SYS1.MACLIB)
SHR.
ENDUCL.
/*
```

2.3.7 Step F: Run BC1JJB02

Before you run job BC1JJB02, confirm that all the necessary edits have been made to the CHM4000 member as outlined in Step D: Edit the CHM4000 Member. In addition, you must change the following variables:

cart	Unit name for the tape device you are using.
dvolsr	Volume serial number of the disk used to store permanent data sets. If your site does not require the use of the VOL=SER parameter when storing permanent data sets, enter the following change command to remove this parameter: C 'VOL=SER=DVOLSER,' ' ' ALL Note: The SMP/E SMPTLIB DD is a dynamically allocated work file and requires a volsr. This is an IBM requirement. If you make the above global change to remove all instances of DVOLSER you must put it back on all the SMPTLIB DDs or you will receive a JCL error.
iprfx	Highest-level qualifier used when assigning data set names for installation and execution data sets.
igual	Second-level qualifier used when assigning data set names for installation and execution data sets.
tdisk	Unit label for temporary disk data sets.
tvolsr	Volume serial number of the Endeavor installation tape.

After you have tailored the JCL, be sure you have a valid jobcard and submit job BC1JJB02 for execution.

```

/*(JOB CARD)
/*-----*
/*
/* (C) 2002 COMPUTER ASSOCIATES INTERNATIONAL, INC.
/*
/*
/* NAME: BC1JJB02
/*
/*
/* PURPOSE: THIS JOB WILL RECEIVE APPLY AND ACCEPT THE
/* ALLFUSION ENDEVOR CHANGE MANAGER INSTALL ELEMENTS
/*
/*-----*
/******
//RECBASE EXEC PGM=GIMSMP,REGION=4096K,PARM='DATE=U'
//SMPCSI DD DISP=SHR,DSN=IPRFX.IQUAL.CSI
//SMPPTFIN DD DSN=BST.NDVRC1.SMPMCS,
// UNIT=CART,
// VOL=SER=TVOLSER,
// LABEL=(32,SL),
// DISP=OLD
//SMPHOLD DD DUMMY
//SMPLOG DD DUMMY
//SMPLOGA DD DUMMY
//SMPOUT DD SYSOUT=*
//SMPPUNCH DD SYSOUT=*
//SMPRPT DD SYSOUT=*
//SMPLIST DD SYSOUT=*
//SMPSNAP DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
/*SYSUDUMP DD SYSOUT=*
//SMPWRK1 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK2 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK3 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK4 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK6 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SYSUT1 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT2 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT3 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT4 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SMPTLIB DD UNIT=TDISK,VOL=SER=DVOLSER,DISP=SHR
//SMPCNTL DD *
SET BOUNDARY(GLOBAL).
RECEIVE SELECT(CHM4000).
/******
//APPBASE EXEC PGM=GIMSMP,REGION=4096K,PARM='DATE=U'
//SMPCSI DD DISP=SHR,DSN=IPRFX.IQUAL.CSI
//SYSLIB DD DISP=SHR,DSN=SYS1.MACLIB
//SMPLOG DD DUMMY
//SMPLOGA DD DUMMY
//SMPOUT DD SYSOUT=*
//SMPPUNCH DD SYSOUT=*

```

```

//SMPRPT DD SYSOUT=*
//SMPLIST DD SYSOUT=*
//SMPSNAP DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//*SYSUDUMP DD SYSOUT=*
//SMPWRK1 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK2 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK3 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK4 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK6 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SYSUT1 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT2 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT3 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT4 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SMPTLIB DD UNIT=TDISK,VOL=SER=DVOLSER,DISP=SHR
//SMPCNTL DD *
SET BOUNDARY(NDVRTGT).
APPLY SELECT(CHM4000).
//*****
//ACCBASE EXEC PGM=GIMSMP,REGION=4096K,PARM='DATE=U'
//SMPCSI DD DISP=SHR,DSN=IPRFX.IQUAL.CSI
//SYSLIB DD DISP=SHR,DSN=SYS1.MACLIB
//SMPLOG DD DUMMY
//SMPLOGA DD DUMMY
//SMPOUT DD SYSOUT=*
//SMPPUNCH DD SYSOUT=*
//SMPRPT DD SYSOUT=*
//SMPLIST DD SYSOUT=*
//SMPSNAP DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//*SYSUDUMP DD SYSOUT=*
//SMPWRK1 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK2 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK3 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK4 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK6 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SYSUT1 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT2 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT3 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT4 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SMPTLIB DD UNIT=TDISK,VOL=SER=DVOLSER,DISP=SHR
//SMPCNTL DD *
SET BOUNDARY(NDVRDLB).
ACCEPT SELECT(CHM4000).
/*
//*-----*
//* NAME: RECEIVE JCLLIB ISRCLIB AND ISPSLIB MEMBERS *
//* THE SET BOUNDARY VALUE WILL ALWAYS BE GLOBAL *
//* *
//*****
//RECJCL EXEC PGM=GIMSMP,REGION=4096K,PARM='DATE=U'
//SMPCSI DD DISP=SHR,DSN=IPRFX.IQUAL.CSI
//SYSUT1 DD UNIT=TDISK,SPACE=(CYL,(5,1))

```

2.3 Step 2: Work with the Install Data Set

```
//SYSUT2 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT3 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT4 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SMP_CNTL DD DDNAME=SYSIN
//SMP_HOLD DD DUMMY
//SMP_LOG DD DUMMY
//SMP_LOGA DD DUMMY
//SMP_OUT DD SYSOUT=*
//SMP_RPT DD SYSOUT=*
//SMP_LIST DD SYSOUT=*
//SYS_PRINT DD SYSOUT=*
//SYSIN DD *
SET BOUNDARY(GLOBAL) .
RECEIVE SELECT (CHM4000) SYSMODS .
//*
//SMPPTFIN DD DSN=IPRFX.IQUAL.INSTALL(CHM4000),DISP=SHR
//*****
//APPJCL EXEC PGM=GIMSMP,REGION=4096K,PARM='DATE=U'
//SMPCSI DD DISP=SHR,DSN=IPRFX.IQUAL.CSI
//SYSLIB DD DISP=SHR,DSN=SYS1.MACLIB
//SMPLOG DD DUMMY
//SMPLOGA DD DUMMY
//SMP_OUT DD SYSOUT=*
//SMPPUNCH DD SYSOUT=*
//SMP_RPT DD SYSOUT=*
//SMP_LIST DD SYSOUT=*
//SMPSNAP DD SYSOUT=*
//SYS_PRINT DD SYSOUT=*
//*SYSUDUMP DD SYSOUT=*
//SMPWRK1 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK2 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK3 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK4 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK6 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SYSUT1 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT2 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT3 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT4 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SMPTLIB DD UNIT=TDISK,VOL=SER=DVOLSER,DISP=SHR
//SMP_CNTL DD *
SET BOUNDARY(NDVRTGT) .
APPLY SELECT(CHM4000) REDO.
//*****
//ACCJCL EXEC PGM=GIMSMP,REGION=4096K,PARM='DATE=U'
//SMPCSI DD DISP=SHR,DSN=IPRFX.IQUAL.CSI
//SYSLIB DD DISP=SHR,DSN=SYS1.MACLIB
//SMPLOG DD DUMMY
//SMPLOGA DD DUMMY
//SMP_OUT DD SYSOUT=*
//SMPPUNCH DD SYSOUT=*
//SMP_RPT DD SYSOUT=*
//SMP_LIST DD SYSOUT=*
//SMPSNAP DD SYSOUT=*
```

```
//SYSPRINT DD SYSOUT=*
//*SYSUDUMP DD SYSOUT=*
//SMPWRK1 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK2 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK3 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK4 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SMPWRK6 DD UNIT=TDISK,SPACE=(CYL,(5,15,15)),DCB=BLKSIZE=3120
//SYSUT1 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT2 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT3 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT4 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SMPTLIB DD UNIT=TDISK,VOL=SER=DVOLSER,DISP=SHR
//SMPCNTL DD *
SET BOUNDARY(NDVRDLB).
ACCEPT SELECT(CHM4000) REDO.
/*
```

2.4 Step 3: Considerations

2.4.1 Authorize Library Considerations

After you have successfully run BC1JJB02, you will see you have created the data sets `iprfx.igual.AUTHLIB` and `uprfx.uqual.AUTHLIB`. Minimally, the load modules contained in `iprfx.igual.AUTHLIB` and `uprfx.uqual.AUTHLIB` must reside in a system-authorized library.

There are two common methods to accomplish this task:

1. Copy the members from the "AUTHLIB" libraries to an existing authorized library
2. Authorize the `iprfx.igual.AUTHLIB` and `uprfx.uqual.AUTHLIB` libraries

If a LINKLSTed library is used, it is likely that the data set is authorized. If an LPA library is used, it will be authorized.

2.4.2 ICHRCX01 Considerations

ICHRCX01 is an Endeavor supplied security exit program used by Endeavor to implement the alternate security userid (altid). ICHRCX01 is required for alternate security ID support for the VSAM linear data sets used by the Endeavor ACMQ facility. In addition, ICHRCX01 supports the PDSe program object libraries when they are updated by the IBM utility program IEBCOPY.

To install ICHRCX01 security user exit:

- Copy the ICHRCX01, ACFRCX01 and TSSRCX01 load modules from the Endeavor authorized load library to the LPA library you use for your security software.
- An IPL with the CLPA option is required to activate the security user exit.

2.4.3 LINKLST/LPA Considerations

The members of `iprfx.igual.AUTHLIB`, `iprfx.igual.CONLIB`, and `uprfx.uqual.AUTHLIB` can be copied to an existing LINKLST or LPA defined library. Alternatively, you can define these data sets as LINKLST or LPA libraries themselves.

Only reentrant load modules can be executed from the LPA. Before copying a library's contents to an LPA defined library or defining a library as an LPA library, the members should be inspected and those that are non-reentrant should be moved to a LINKLST defined library.

A simple way to determine which members are non-reentrant is to use the ISPF Browse facility and follow these steps:

- Display an ISPF browse member selection list for the load library
- Issue the SORT ATTR command
- Scroll to the right to see the Attributes column. (Most members will show attributes of RN RU, for reentrant and re-useable.)
- Members showing spaces instead of RN are non-reentrant and cannot be moved into the LPA

If you elect to use LINKLIST or LPA libraries for the AUTHLIB data sets, the STEPLIB DD statements should be removed from the Endeavor sample job streams. If you choose to use LINKLST and LPA libraries for the CONLIB data sets, the CONLIB DD statements should be removed from the sample job streams.

2.4.4 Determining LPA Load Module Storage Requirements

A simple way to determine storage requirements for LPA-eligible load modules is to use the ISPF Browse facility and follow these steps:

- Display an ISPF browse member selection list for the load library
- Issue the SORT ATTR command
- Scroll to the right to see the Attributes column.
- Eliminate all programs where the reentrant attribute is blank, because these programs are not eligible to be placed into the LPA
- Issue the SORT RMODE command
- To determine the amount of 24-bit storage required:
Add the hexadecimal value found in the Size field for all programs containing the value 24 in the RM (RMODE) field.
- To determine the amount of 31-bit storage required:
Add the hexadecimal value found in the Size field for all programs containing the value ANY in the RM (RMODE) field.

2.5 Step 4: Define Endeavor to the ISPF Environment

2.5.1 Before You Begin

Before you begin this step, consider the following:

- Many factors influence the region size required to execute Endeavor. These factors include split screen processing, the use of CA-Panvalet or CA-Librarian, the maximum size of elements, whether sort work areas are defined in the CLIST, and whether ISPF resides in the LPA. A region size of 4096K is sufficient for most installations.
- The CLIST library delivered is fixed block (FB). If your existing CLIST libraries are variable blocked (VB), use the TSO utilities to create a VB file.

2.5.2 Define Endeavor Data Sets to ISPF

You need to identify the Endeavor data sets to ISPF, using either a CLIST or existing logon procedures. Follow the procedure below:

Step	Action	How to Accomplish the Action
1	Identify the files to ISPF.	Use one of the following methods: <ul style="list-style-type: none">■ Use the ISPF LIBDEF Services. (This is the recommended method.)■ Use the TSO FREE and ALLOCATE CLIST services to reallocate the ISPF libraries.■ Allocate all data sets through TSO logon procedures.
2	Define an ISPF option for Endeavor to the main ISPF dialog.	Add Endeavor as a valid option on an ISPF primary or secondary options panel. (See “Use the ISPF LIBDEF Services” and “Use the TSO FREE and ALLOCATE Services.”)
3	Execute the CLIST.	This happens automatically whenever you select the Endeavor option from the ISPF main dialog. (See “Use the ISPF LIBDEF Services” and “Use the TSO FREE and ALLOCATE Services.”)

2.5.3 Use the ISPF LIBDEF Services

You can use the ISPF LIBDEF services to identify Endeavor libraries to the ISPF environment. Use the CLIST member ENDEVOR provided on the installation tape in the ISRCLIB library. This is the recommended approach.

The CLIST must be copied to a data set that is allocated to the standard SYSPROC DD concatenation.

If the authorized Endeavor load modules have not been placed in LPA, LINKLST or STEPLIB libraries, the ISPF ISPLLIB DD statement can be used as a substitute. However, allocation of an authorized library under ISPLLIB may not support all necessary system authorization requirements. ISPLLIB must be allocated to the Endeavor authorized load libraries prior to invoking ISPF.

A generic LIBDEF CLIST is shown below. The CLIST you see at your site is an edited version, reflecting the information entered during the installation of the INSTALL job.

2.5 Step 4: Define Endeavor to the ISPF Environment

```
PROC 0 DEBUG(NO)
/*-----*/
/*
/* (C) 2002 COMPUTER ASSOCIATES INTERNATIONAL, INC. (CA)
/*
/* NAME: ENDEVOR
/*
/* FUNCTION: THIS CLIST ALLOWS THE ENDEVOR USER TO INVOKE
/* ENDEVOR FROM WITHIN AN ISPF SESSION WITHOUT
/* ALLOCATING THE ENDEVOR LIBRARIES TO THE STANDARD ISPF LIBRARY
/* DEFINITIONS. THE CLIST USES ISPF LIBDEF SERVICES TO ALLOCATE THE
/* PANEL (ISPLLIB), MESSAGE (ISPLMLIB) AND SKELETON (ISPSLIB)
/* DATA SETS.
/* THIS CLIST ALSO ESTABLISH AN ALTERNATE CLIST LIBRARY THROUGH
/* THE TSO/E ATLIB SERVICE. THE ATLIB SERVICE IS AVAILABLE ONLY
/* WITH TSO/E VERSION 2 OR GREATER. IF YOU ARE NOT RUNNING WITH
/* TSO/E VERSION 2 THEN THE TWO ATLIB COMMANDS MUST BE REMOVED OR
/* COMMENTED.
/*
/* NOTE: IF THE ENDEVOR LOAD MODULES HAVE NOT BEEN PLACED IN
/* LPA, LINKLST OR STEPLIB LIBRARIES, THE ISPF ISPLLIB DD
/* STATEMENT CAN BE USED AS A SUBSTITUTE. ISPLLIB MUST BE
/* ALLOCATED TO THE ENDEVOR AUTHORIZED LOAD LIBRARIES
/* PRIOR TO INVOKING ENDEVOR.
/* NOTE: ALL DATA SET NAMES MUST BE CUSTOMIZED TO YOUR SITE'S
/* NAMING STANDARDS.
/*-----*/
CONTROL NOLIST NOMSG NOFLUSH
IF (&STR(&DEBUG) EQ YES) THEN +
    CONTROL LIST MSG

/*-----*/
/* VERIFY THAT ISPF IS ACTIVE. IF ISPF IS NOT ACTIVE, WRITE AN ERROR*/
/* MESSAGE AND TERMINATE THE CLIST.
/*-----*/
IF (&STR(&SYSISPF) NE &STR(ACTIVE)) THEN +
    DO
        WRITE &STR(*-----*)
        WRITE &STR(* THIS CLIST IS AVAILABLE ONLY IF ISPF IS ACTIVE *)
        WRITE &STR(*-----*)
```

```

EXIT CODE(16)
END

/*-----*/
/* ALLOCATE AN ALTERNATE CLIST LIBRARY. IF YOU ARE NOT RUNNING UNDER*/
/* AT LEAST TSO/E VERSION 2 THEN YOU MUST REMOVE THE FOLLOWING */
/* STATEMENT AND YOU WILL HAVE TO EITHER ADD THE ISRCLIB TO THE */
/* SYSPROC LIBRARY OR COPY THE CONTENTS OF THE ISRCLIB INTO A DATASET*/
/* THAT IS PART OF THE SYSPROC CONCATENATION . */
/*-----*/
ATLIB ACTIVATE APPLICATION(CLIST) DATASET('iprfx.igual.ISRCLIB')

/*-----*/
/* ALLOCATE THE CONLIB DATASET. */
/*-----*/
FREE FI(CONLIB)
ALLOC FI(CONLIB) DA('iprfx.igual.CONLIB') SHR

/*-----*/
/* USE THE ISPF LIBDEF SERVICE TO DEFINE PANEL, MESSAGE AND */
/* SKELETON LIBRARIES. */
/* NOTE: IF THE ENDEVOR LOAD MODULES HAVE NOT BEEN PLACED IN */
/* LPA, LINKLST OR STEPLIB LIBRARIES, THE ISPF ISPLLIB DD */
/* STATEMENT CAN BE USED AS A SUBSTITUTE. ISPLLIB MUST BE */
/* ALLOCATED TO THE ENDEVOR AUTHORIZED LOAD LIBRARIES */
/* PRIOR TO INVOKING ENDEVOR. */
/* //ISPLLIB DD DISP=SHR,DSN=uprfx.igual.AUTHLIB */
/* // DD DISP=SHR,DSN=iprfx.igual.AUTHLIB */
/*-----*/
ISPEXEC LIBDEF ISPLLIB DATASET ID('iprfx.igual.ISPLLIB')
ISPEXEC LIBDEF ISPLMLIB DATASET ID('iprfx.igual.ISPLMLIB')
ISPEXEC LIBDEF ISPSLIB DATASET ID('iprfx.igual.ISPSLIB')
ISPEXEC LIBDEF ISPTLIB DATASET ID('iprfx.igual.ISPTLIB')

/*-----*/
/* INVOKE THE ENDEVOR/MVS ISPF DIALOG DRIVER. */
/*-----*/
ISPEXEC SELECT PGM(C1SM1000) NOCHECK NEWAPPL(CTLI) PASSLIB

/*-----*/
/* FREE THE ISPF LIBDEF DEFINITIONS. */
/*-----*/
ISPEXEC LIBDEF ISPLLIB
ISPEXEC LIBDEF ISPLMLIB
ISPEXEC LIBDEF ISPSLIB
ISPEXEC LIBDEF ISPTLIB

/*-----*/
/* DEACTIVATE THE ALTERNATE CLIST LIBRARY. THIS STATEMENT MUST BE */
/* REMOVED IF YOU ARE RUNNING WITH A VERSION OF TSO THAT IS LESS THAN*/
/* TSO/E VERSION 2. */
/*-----*/
ATLIB DEACTIVATE APPLICATION(CLIST)

/*-----*/
/* FREE THE CONLIB ALLOCATION. */
/*-----*/
FREE FI(CONLIB)

/*-----*/
/* TERMINATE WITH A RETURN CODE ZERO. */
/*-----*/
EXIT CODE(0)

```

After you have created the CLIST, you need to change an ISPF primary or secondary options panel to include an option for Endeavor. In the panel shown below, the ISPF/PDF Primary Option Menu has added option *E* for Endeavor. When you select this option, the Endeavor CLIST is invoked to begin the Endeavor dialog.

Note the bold lines. The first line indicates what to enter to select Endeavor. The second line indicates that the Endeavor CLIST should be executed when the defined option is selected. Modify your ISPF panel similarly.

```

%----- ISPF/PDF PRIMARY OPTION MENU -----
%OPTION ==>_ZCMD
%
%                                +USERID - &ZUSER +
% 0 +ISPF PARS - Specify terminal and user parameters +TIME - &ZTIME
% 1 +BROWSE - Display source data or output listings +TERMINAL - &ZTERM
% 2 +EDIT - Create or change source data +PF KEYS - &ZKEYS
% 3 +UTILITIES - Perform utility functions
% 4 +FOREGROUND - Invoke language processors in foreground
% 5 +BATCH - Submit job for language processing
% 6 +COMMAND - Enter TSO Command, CLIST, or REXX exec
% 7 +DIALOG TEST - Perform dialog testing
% 8 +LM UTILITIES- Perform library administrator utility functions
% 9 +IBM PRODUCTS- Additional IBM program development products
% 10 +SCLM - Software Configuration and Library Manager
% E +ENDEVOR - Endeavor Software Management System
% C +CHANGES - Display summary of changes for this release
% T +TUTORIAL - Display information about ISPF/PDF
% X +EXIT - Terminate ISPF using log and list defaults
%
+Enter%END+command to terminate ISPF.
)INIT
)PROC
&ZQ = &Z
IF (&ZCMD = ' ')
  &ZQ = TRUNC(&ZCMD, '.')
IF (&ZQ = ' ')
  .MSG = ISRU000
&ZSEL = TRANS( &ZQ
              0, 'PANEL(ISPOPTA)'
              1, 'PGM(ISRBRO) PARM(ISRBRO01)'
              2, 'PGM(ISREDIT) PARM(P, ISREDM01)'
              3, 'PANEL(ISRUTIL)'
              4, 'PANEL(ISRFPA)'
              5, 'PGM(ISRJB1) PARM(ISRJPA) NOCHECK'
              6, 'PGM(ISRPTC)'
              7, 'PGM(ISPYXDR) PARM(ISR) NOCHECK'
              8, 'PANEL(ISRLPRIM)'
              9, 'PANEL(ISRDIIS)'
              10, 'PGM(ISRSCLM) NOCHECK'
              E, 'CMD(ENDEVOR)'
              C, 'PGM(ISPTUTOR) PARM(ISR00005)'
              T, 'PGM(ISPTUTOR) PARM(ISR00000)'
              ' ', ' '
              X, 'EXIT'
              *, '?' )
&ZTRAIL = .TRAIL
)END

```

2.5.4 Use the TSO FREE and ALLOCATE Services

You can use the TSO FREE and ALLOCATE services to identify Endeavor libraries to the ISPF environment. Use the CLIST provided on the installation tape--member BC1PCLS1 in the ISRCLIB library.

The CLIST must be copied to a data set in the standard SYSPROC DD concatenation and must be invoked at LOGON time.

A generic BC1PCLS1 CLIST is shown below. The CLIST you see at your site is an edited version, reflecting the information entered during the installation of the INSTALL job.

```

/*-----*/
/*                                                    */
/* (C) 2002 COMPUTER ASSOCIATES INTERNATIONAL, INC. (CA) */
/*                                                    */
/* Name: BC1PCLS1 */
/*                                                    */
/* Function: This CLIST allocate the Endeavor libraries for the */
/* Endeavor ISPF dialog. */
/*                                                    */
/* Note: All dataset names will have to be customized to you site */
/* specifications. */
/*                                                    */
/*-----*/
      IF (&DEBUG EQ YES) THEN +
        CONTROL LIST MSG
      ELSE +
        CONTROL NOLIST NOMSG
      GLOBAL PNLCSR PNLMSG CIELM ACTION
      FREE FI(SYSPROC)
      ALLOC FI(SYSPROC) +
        DA('SYS1.ISR.ISRCLIB' +
          'iprfx.igual.ISRCLIB') +
        SHR
      FREE FI(CONLIB)
      ALLOC FI(CONLIB) +
        DA('iprfx.igual.CONLIB') +
        SHR
      FREE FI(ISPPLIB)
      ALLOC FI(ISPPLIB) +
        DA('SYS1.ISR.ISRPLIB' +
          'SYS1.ISP.ISPPLIB' +
          'iprfx.igual.ISPPLIB') +
        SHR
      FREE FI(ISPMLIB)
      ALLOC FI(ISPMLIB) +
        DA('SYS1.ISR.ISRMLIB' +
          'SYS1.ISP.ISPMLIB' +
          'iprfx.igual.ISPMLIB') +
        SHR
      FREE FI(ISPTLIB)
      ALLOC FI(ISPTLIB) +
        DA('SYS1.ISP.ISPTLIB' +
          'iprfx.igual.isptlib') +
        SHR
      FREE FI(ISPSLIB)
      ALLOC FI(ISPSLIB) +
        DA('SYS1.ISR.ISRSLIB' +
          'SYS1.ISP.ISPSLIB' +
          'iprfx.igual.ISPSLIB') +
        SHR
      WRITE Endeavor File allocations are complete
      EXIT(0)
PROC 0 DEBUG(NO)

```

After you have defined the CLIST, you need to change an ISPF primary or secondary options panel to include an option for Endeavor. In the panel shown below, the ISPF/PDF Primary Option Menu has added option *E* for Endeavor. Whenever you select this option, Endeavor is automatically invoked.

Note the lines in bold. The first line indicates what to enter to select Endeavor. The second line indicates that the Endeavor program should be executed when the defined option is selected. Modify your ISPF panel similarly.

```

%----- ISPF/PDF PRIMARY OPTION MENU -----
%OPTION ==>_ZCMD
%
% 0 +ISPF PARMs - Specify terminal and user parameters +USERID - &ZUSER
% 1 +BROWSE - Display source data or output listings +TIME - &ZTIME
% 2 +EDIT - Create or change source data +TERMINAL - &ZTERM
% 3 +UTILITIES - Perform utility functions +PF KEYS - &ZKEYS
% 4 +FOREGROUND - Invoke language processors in foreground
% 5 +BATCH - Submit job for language processing
% 6 +COMMAND - Enter TSO Command, CLIST, or REXX exec
% 7 +DIALOG TEST - Perform dialog testing
% 8 +LM UTILITIES- Perform library administrator utility functions
% 9 +IBM PRODUCTS- Additional IBM program development products
% 10 +SCLM - Software Configuration and Library Manager
% E +ENDEAVOR - Endeavor Software Management System
% C +CHANGES - Display summary of changes for this release
% T +TUTORIAL - Display information about ISPF/PDF
% X +EXIT - Terminate ISPF using log and list defaults
%
+Enter%END+command to terminate ISPF.
)INIT
)PROC
&ZQ = &Z
IF (&ZCMD = ' ')
  &ZQ = TRUNC(&ZCMD, '.')
  IF (&ZQ = ' ')
    .MSG = ISRU000
  &ZSEL = TRANS( &ZQ
    0, 'PANEL(ISPOPTA)'
    1, 'PGM(ISRBRO) PARM(ISRBRO01)'
    2, 'PGM(ISREDIT) PARM(P,ISREDM01)'
    3, 'PANEL(ISRUTIL)'
    4, 'PANEL(ISRFPA)'
    5, 'PGM(ISRJB1) PARM(ISRJPA) NOCHECK'
    6, 'PGM(ISRPTC)'
    7, 'PGM(ISPYXDR) PARM(ISR) NOCHECK'
    8, 'PANEL(ISRLPRIM)'
    9, 'PANEL(ISRDIIS)'
    10, 'PGM(ISRSCLM) NOCHECK'
    E, 'PGM(C1SM1000) NEWAPPL(CTLI) NOCHECK'
    C, 'PGM(ISPTUTOR) PARM(ISR00005)'
    T, 'PGM(ISPTUTOR) PARM(ISR00000)'
    , , ,
    X, 'EXIT'
    *, '?' )
&ZTRAIL = .TRAIL
)END

```

2.5.5 Allocate Data Sets Through TSO Logon Procedures

You can allocate the Endeavor data sets through your existing TSO logon procedures. Allocate the data sets as follows:

DDname	Library Created by the INSTALL Job
SYSPROC	ipfx.igual.ISRCLIB
ISPPLIB	ipfx.igual.ISPPLIB
ISPSLIB	ipfx.igual.ISPSLIB
ISPMLIB	ipfx.igual.ISPMLIB

DDname	Library Created by the INSTALL Job
CONLIB	iprfx.igual.CONLIB (if not in LINKLIST or LPA)
ISPTLIB	iprfx.igual.ISPTLIB

After you have copied these libraries to the logon procedure, you need to change an ISPF primary or secondary options panel to include an option for Endeavor. Make the same changes shown in the ISPF Primary Option Menu in the section “Use the TSO FREE and ALLOCATE Services.”

2.6 Step 5: Additional Considerations

2.6.1 Overview

At this point in the installation process, you may need to consider the following situations:

- Global resource sharing (if your site has multiple CPUs sharing DASD)
- Running concurrent Endeavor releases
- ISP Command table considerations

2.6.2 Global Resource Sharing

If your site has multiple CPUs sharing DASD, you need to define the following queue names. If you are using MIMS or GRS, include the queue names in the appropriate Global Resource Queue Name Table.

Queue Name	Description	Sample MIMS Parameters
CTLIELEM	Used to serialize actions against Endeavor elements. Request types include RESERVE and ENQUEUE.	GDIF=YES SCOPE=SYSTEMS EXEMPT=NO ECMF=YES RPTAFTER=60 RPTCYCLE=60 TRACE=NONE
CTLIMSTR	Used when performing updates to the VSAM Master Control File. Request types include RESERVE and ENQUEUE.	GDIF=YES SCOPE=SYSTEMS EXEMPT=NO ECMF=NO RPTAFTER=60 RPTCYCLE=60 TRACE=NONE
CTLIPROC	Used to allow concurrent executions of Endeavor processors to update a data set. Request types include RESERVE and ENQUEUE.	GDIF=YES SCOPE=SYSTEMS EXEMPT=NO ECMF=YES RPTAFTER=60 RPTCYCLE=60 TRACE=NONE
ENDEVOR	Used to serialize actions against the Endeavor/LIB utility. Request types include RESERVE and ENQUEUE.	GDIF=YES SCOPE=SYSTEMS EXEMPT=NO ECMF=YES RPTAFTER=60 RPTCYCLE=60 TRACE=NONE

Queue Name	Description	Sample MIMS Parameters
spfedit	Used when Endeavor issues an enqueue on a sequential or partitioned data set (not RECFM=U). This queue name should be the name specified on the SPFEDIT parameter in the Endeavor Defaults Table TYPE=MAIN macro (which defaults to <i>SPFEDIT</i>). Request types include RESERVE and ENQUEUE.	GDIF=YES SCOPE=SYSTEMS EXEMPT=YES ECMF=NO RPTAFTER=0 RPTCYCLE=60 TRACE=NONE
sysiewlp	Used when Endeavor issues an enqueue on a partitioned data set defined with RECFM=U (for example, a load library). This queue name should be the name specified on the SYSIEWL parameter in the Endeavor Defaults Table TYPE=MAIN macro (which defaults to <i>SYSIEWLP</i>). Request type is RESERVE.	GDIF=YES SCOPE=SYSTEMS EXEMPT=NO ECMF=YES RPTAFTER=60 RPTCYCLE=60 TRACE=NONE

2.6.3 Running Concurrent Endeavor Releases

In many cases, it is necessary to run two different releases of Endeavor at the same time. You can do this by adding your AUTHLIB and CONLIB to the respective STEPLIB and CONLIB statements in a test TSO logon procedure and to all skeleton JCL (ISPSLIB) and stand-alone JCL members. However, you cannot access both releases in the same TSO/ISPF session. After working with one release, before you can work with the other, you must logoff TSO and logon again, making sure to change logon procs. Failure to do this will result in a message indicating an incompatible C1DEFLT5 Table.

Important!

- You cannot share release 4.0 MCFs between release 4.0 and any prior release. Any updates performed under another release will cause your release 4.0 element catalog to be out of synchronization.
- Concatenation of an authorized library with a non-authorized library results in the loss of system authorization. In addition, allocation of an authorized library under ISPLLIB may not support all necessary system authorization requirements.

2.6.4 ISP Command Table Considerations

Endevor uses an ISP Command table (allocated under the ISPTLIB DD) for some commands (such as ESORT, EONLY, EPRINT, ACMQ, MSGS, and so on). However, unless this facility is specifically enabled, it may be prevented from working by your site's security package. For example, ACF2 has a facility named "TSO Command Limiting", which may need modification.

2.7 In Summary

2.7.1 Where Are You in the Installation Process?

These first five steps of the installation process took you through the installation of the Endeavor system software:

- You established OS/390 authorization for the Endeavor load module (NDVRC1).
- You have created an SMP/E environment and installed product software.
- You created the TSO/ISPF data sets and CLIST that will enable Endeavor to run under ISPF.

You are now ready to implement Endeavor at your site. If you are installing Endeavor for the first time, it is highly recommended that you use Endeavor's Sample Application. Existing clients can also use the Sample Application or test with their existing data. Procedures for both methods are described in the *Getting Started Guide*. Once you have verified your Endeavor implementation you can continue with the Optional Features step discussed in the chapter “Activate Endeavor's Optional Features”.

Important! *If you are installing Endeavor for the first time, you should install the sample application.*

Chapter 3. Activate Endeavor's Optional Features

3.1 Endeavor's Optional Features

This chapter describes how to install some of Endeavor's optional features.

If you are a new Endeavor user, it is strongly recommended that you become familiar with Endeavor basics before activating the optional features.

3.1.1 The Features Discussed in This Chapter

Endeavor provides you with several optional features. After you have installed and verified the base Endeavor system, your site can incorporate other, relevant components of Endeavor.

The features discussed in this manual include the following:

Feature	Description
CCID definition data set	This option allows you to predefine the CCIDs to be used at your site.
SMF interface	This option allows you to record each action and each security violation that occurs during Endeavor processing.
Endeavor Panvalet Interface	This option allows you to use Panvalet as the source library manager. The option is also necessary if you want to expand imbedded ++INCLUDE statements.
++CONTROL password	This option is used when you want Endeavor to supply the ++CONTROL password for each Panvalet library that Endeavor accesses.
Endeavor Librarian Interface	This option allows you to use Librarian as the source library manager. The option is necessary if you want to expand imbedded INC statements.
Alternate ID support	This option allows you to protect Endeavor-controlled data sets from direct update by individual users.

Feature	Description
Site-defined Symbolics	This option allows you to reference user-defined, site-wide symbolics from within data set name specifications for base, delta, source output, and include libraries, as well as from processors.

Tip: Enabling some of these features may require that you redefine the Endeavor Defaults Table. To expedite the installation process, read through all sections before making any changes. Then, when you are finished, you can make all necessary changes at one time.

3.1.2 The Features Not Discussed in this Chapter

Endeavor offers several other optional features, which are discussed in detail in separate manuals. See these manuals for the appropriate installation information:

For information about . . .	See this manual
User customizable dialog defaults	“Dialog Options Fields” in this manual.
Site Defaults Table selection exit (ENUXSITE)	“Using an Alternate Defaults Table” in this manual.
Package processing	<i>Packages Guide</i>
Security (all types) ^a	<i>Security Guide</i>
User exits ^b	<i>Exits Guide</i>
Reports	<i>Reports Guide</i>
API (Application Program Interface)	<i>API Guide</i>
CSV(Comma Separated Value Utility)	<i>Utilities Guide</i>
PDM (Parallel Development Option)	<i>Parallel Development Option Guide</i>
ROSCOE	<i>Interface for CA-Roscoe Guide</i>

For information about . . .	See this manual
PITR (Point-in-Time Recovery)	<i>Utilities Guide</i>
Information/Management Interface	<i>Interface for IBM Information/Management Administration Guide</i>
DB2	<i>Endeavor for DB2 Installation Guide and Endeavor for DB2 User Guide</i>
Endeavor/DB-MVS Bridge	<i>Endeavor to CA-Endeavor/DB Bridge Administrator Guide</i>

^a If you are using the security feature, be sure the security tables are copied into the appropriate authorized library. See “Step 4: Populate the Authorized Library with Endeavor Modules” for the name of the library.

^b If you are using user exits, be sure they are copied into the appropriate authorized library. See “Step 4: Populate the Authorized Library with Endeavor Modules” for the name of the library.

3.2 The CCID Definition Data Set

3.2.1 Overview

If you want to use CCID validation, you must build a CCID definition data set. Before you can build the data set, though, you need to specify a CCID validation data set name in the Defaults Table, using the CIPODSN parameter. See the appendix “The Endeavor Defaults Table”, for the definition of the CIPODSN parameter.

3.2.2 Install the CCID Definition Data Set

There are three steps involved in installing the CCID definition data set.

Step	Action
1	Allocate the data set.
2	Initialize the data set.
3	Add the data set name to the Endeavor Defaults Table.

3.2.3 Step 1: Allocate the Data Set

Allocate the CCID validation data set using the standard ISPF data set utilities--option 3.2 from the ISPF/PDF Primary Option Menu. The data set must have the following attributes:

Parameter	Value
LRECL=	80
RECFM=	FB
DSORG=	PS
BLKSIZE=	Any multiple of 80

The data set name you use must be the same as that specified for the CIPODSN parameter in the Defaults Table. The data set name can be any valid name that conforms to your site's naming conventions.

3.2.4 Step 2: Initialize the Data Set

You can initialize the CCID validation data set by copying a Computer Associates-supplied template. Because Endeavor requires information to be placed in certain columns, it is recommended that you copy member *SAMPCIPO* into the data set allocated in Step 1. By using this member as a template, you can ensure that the fields in the data set are positioned in the correct columns.

Use the standard ISPF copy utility--option **3.3** on the ISPF/PDF Primary Option Menu--to copy *SAMPCIPO* from the sample JCL library (*iprfx.igual.JCLLIB*, created during Step 2 of the base installation process) into the data set.

Use the ISPF edit service to tailor the data set to meet the requirements of your site. See the *Administration Guide* for a description of the contents of the data set.

3.2.5 Step 3: Add the Data Set Name to the Defaults Table

After you have allocated and initialized the CCID validation data set, you need to add the data set name to the Endeavor Defaults Table. To do this, add the valid data set name to the *CIPODSN* parameter; see below:

Col	Col	Col
1	16	72
↓	↓	↓
	C1DEFLT5 TYPE=MAIN,	X
	.	
	.	
	CIPODSN=,	CCID VALIDATION DATASET NAME X
	.	
	.	

See the discussion of the Defaults Table in the appendix “The Endeavor Defaults Table”, for additional information about editing the table.

Do not update the *CIPODSN* parameter in the Defaults Table before allocating the CCID validation data set. If *CIPODSN* contains a non-null entry, Endeavor assumes that the entry is a data set name and looks for that data set during initialization. If Endeavor cannot find the data set, it generates an error message. Therefore, before using Endeavor, be sure that the CCID validation data set is allocated and defined appropriately.

3.3 The SMF Interface

3.3.1 Overview

The SMF interface records each action and each security violation that occurs during Endeavor processing. SMF recording is done on an environment-by-environment basis. Therefore, you can selectively enable SMF recording for each of your environments.

For information about SMF recording, see the *Administration Guide*.

3.3.2 Set the SMF Parameters in the Defaults Table

To request this interface, you must modify the Endeavor Defaults Table to include the appropriate SMF parameters. Do this by specifying the following parameters:

- SMFREC#= in the TYPE=MAIN macro
- SMFACT= and SMFSEC= in the TYPE=ENVRNMNT macro

See the discussion of the Defaults Table in the appendix “The Endeavor Defaults Table” for additional information about editing the table.

3.3.3 TYPE=MAIN Parameters

Specify the SMFREC# parameter in the TYPE=MAIN portion of the Defaults Table:

Col	Col	Col
1	16	72
↓	↓	↓
	C1DEFLT TYPE=MAIN,	X
	.	
	.	
	SMFREC#=0,	SMF RECORD NUMBER X
	.	
	.	

This is the SMF record number assigned to SMF records written by Endeavor at this site. See the TYPE=MAIN parameter definitions in the appendix “The Endeavor Defaults Table”, for more information about this SMF parameter.

Tip: Talk to a systems programmer at your site to ensure that you are indeed collecting the SMF records related to the record number specified in the SMFREC# parameter. Recording records is controlled in SYS1.PARMLIB(SMFPRMxx).

3.3.4 TYPE=ENVRNMNT Parameters

You should specify at least one of the following SMF parameters in the TYPE=ENVRNMNT portion of the Defaults Table:

Col	Col		Col
1	16		72
↓	↓		↓
	C1DEFLT	TYPE=ENVRNMNT,	X
	.		
	.		
	SMFACT=N,	SMF ACTIVITY OPTION (Y/N)	X
	SMFSEC=N,	SMF SECURITY OPTION (Y/N)	X
	.		
	.		

These parameters are defined as follows:

Parameter	Definition
SMFACT	Indicates whether Endeavor should write out SMF Action Records. Set this parameter to <i>Y</i> if you want the Action Records written out. Otherwise, set the parameter to <i>N</i> .
SMFSEC	Indicates whether Endeavor should write out SMF Security Records. Set this parameter to <i>Y</i> if you want the Security Records written out. Otherwise, set the parameter to <i>N</i> .

See the TYPE=ENVRNMNT parameter definitions in the appendix “The Endeavor Defaults Table”, for more information about these SMF parameters.

3.4 The Endeavor Panvalet Interface

3.4.1 Overview

If your site is (or will be) using Panvalet as a source library manager, you must link-edit the Panvalet access method (PAM) module into several of the Endeavor Panvalet Interface modules. Installing this interface also allows you to expand ++INCLUDE statements. These statements are expanded from either a Panvalet library or a PDS when the interface is enabled.

Note: Be sure that the Panvalet installation does not suppress level checking on the Panvalet UPDATE ALL command.

3.4.2 Link-Edit the Access Module

There are three steps involved in link-editing the Panvalet access modules to Endeavor Panvalet Interface modules:

Step	Action
1	Edit member BC1JPAN (in the JCL library) to include the name of your Panvalet load library.
2	Link-edit the PAM module, using BC1JPAN. Place the output load module that was created by this job into CONLIB.
3	Redefine the Defaults Table, if necessary, to specify <i>PV</i> in the LIBENV parameter.

3.4.3 Step 1: Edit BC1JPAN

Tailor the BC1JPAN JCL to provide the correct name of your Panvalet load library on the PAMLIB DD statement. BC1JPAN JCL, which is supplied on the installation tape, is shown below.

```

/** ( COPY JOBCARD )
/*******
/**
/** BC1JPAN - THIS JOB WILL LINKEDIT THE NECESSARY PANVALET      *
/**          SOFTWARE TO PROVIDE THE ENDEVOR                      *
/**          PANVALET INTERFACE SUPPORT                          *
/** PAMLIB - IS THE CURRENT SYSTEM PANVALET LIBRARY AND SHOULD  *
/**          BE MODIFIED FOR YOUR SITES NAMING                   *
/*******
/**PANLINK EXEC PGM=IEWL,PARM='LIST,NCAL,REUSE,XREF,SIZE=(256K,64K)'
/**SYSLMOD DD DISP=SHR,DSN=iprfx.iqua1.CONLIB
/**PAMLIB DD DSN=SYS2.PANVALET.LOAD,DISP=SHR
/**SYSUT1 DD UNIT=t disk,SPACE=(CYL,(5,3))
/**SYSPRINT DD SYSOUT=*
/**SYSLIN DD *
.
LINK-EDIT CONTROL STATEMENTS START HERE
.
.
.

```

3.4.4 Step 2: Run BC1JPAN

If you have not already done so, copy your JOBCARD member to the beginning of BC1JPAN. Then submit the job for execution. BC1JPAN link-edits the PAM module and places the output load module in CONLIB.

3.4.5 Step 3: Set the Panvalet Parameters in the Defaults Table

Redefine the Endeavor Defaults Table, if necessary, to specify the value *PV* in the LIBENV parameter (in the TYPE=MAIN macro). Update the LIBENVP parameter to specify that Panvalet is installed at your site.

Col	Col	Col
1	16	72
↓	↓	↓
	C1DEFULTS TYPE=MAIN,	X
	.	
	.	
	LIBENV=PV,	X
	LIBENVP=Y,	X
	.	
	.	
	.	

See the discussion of the Defaults Table in the appendix “The Endeavor Defaults Table”, for additional information about editing the table.

3.5 The ++CONTROL Password Interface

3.5.1 Overview

Endevor provides a ++CONTROL password feature, which is available to the Endevor for Panvalet Interface. This feature is optional, and allows Endevor to supply the ++CONTROL password for each Panvalet library that will be accessed by Endevor. The password interface is intended for Panvalet libraries that are currently password-protected.

3.5.2 Install the ++CONTROL Password Interface

There are three steps involved in installing the ++CONTROL password interface.

Step	Action
1	Edit member BC1JCNTL.
2	Run BC1JCNTL.
3	Copy the output into the Endevor authorized library.

3.5.3 Step 1: Edit BC1JCNTL

To install the ++CONTROL password interface, you need to provide the Panvalet library data set name and password for each library that is password-protected. Use member BC1JCNTL, which is supplied in the installation JCL library, to do this. The JCL contains the instructions you need to define each library and password.

The BC1JCNTL JCL is shown below. The fields you need to edit are highlighted.

```

/**(JOB CARD)
/*******
/** BC1JCNTL - COMPILE PANVALET ++CONTROL PASSWORD TABLE C1PTCNTL.
/**
/** TO DO THIS MAKE THE FOLLOWING CHANGES:
/**
/** 1. FOR EACH LIBRARY THAT IS PASSWORD PROTECTED,
/** CODE IN THE PANVALET LIBRARY DATASET NAME,
/** (PANPRFX.PANQUAL.PANLIBN) AND PASSWORD (CTLCODE)
/** BELOW.
/** - IF MORE ENTRIES ARE NEEDED DUPLICATE THE
/** 3 LINES FOR EACH ENTRY AND INCREMENT
/** THE PANLIBN LABEL FOR EACH.
/** - IF FEWER THAN THE 4 ENTRIES SUPPLIED ARE NEEDED
/** DELETE THE UNNEEDED ENTRIES.
/** 2. LINK MODULE INTO YOUR AUTHORIZED LOAD LIBRARY.
/**
/** NOTE: MODULE MUST BE NAMED C1PTCNTL.
/**
/*******
//STEP1 EXEC PGM=ASMA90,PARM='NODECK,OBJECT,NOTERM'
//SYSLIB DD DISP=SHR,DSN=SYS1.MACLIB

//SYSLIN DD DISP=(,PASS,DELETE),DSN=&&SYSLIN,
// UNIT=tdisk,SPACE=(TRK,(3,5),RLSE),
// DCB=(RECFM=FB,LRECL=80,BLKSIZE=3120)
//SYSUT1 DD UNIT=tdisk,SPACE=(CYL,(5,3))
//SYSUT2 DD UNIT=tdisk,SPACE=(CYL,(5,3))
//SYSUT3 DD UNIT=tdisk,SPACE=(CYL,(5,3))
//SYSPUNCH DD DUMMY
//SYSPOINT DD SYSOUT=*
//SYSIN DD *
C1PTCNTL TITLE 'C1PTCNTL ++CONTROL CODE TABLE'
CSECT

*
* THIS IS A HEADER WHICH IS THE SAME SIZE OF AN ENTRY
* WITHOUT THIS, THE FIRST ENTRY WILL BE SKIPPED.
*
DC X'07FE'
DC CL8'C1PTCNTL'
DC CL54' '

*
* TAGS ARE NOT NEEDED BUT WILL KEEP THE SEPARATION EASIER
*
PANLIBA DC CL44'panprfx.PANQUAL.PANLIBA' <=== PANLIB DSN
CTLCODA DC CL8'0' <=== PASSWORD (8 CHAR MAX)

```

```

          DC    CL12'  '
*
PANLIBB  DC    CL44'panprfx.PANQUAL.PANLIBB' <=== PANLIB DSN
CTLCOB  DC    CL8'0' <=== PASSWORD (8 CHAR MAX)
          DC    CL12'  '
*
PANLIBC  DC    CL44'panprfx.PANQUAL.PANLIBC' <=== PANLIB DSN
CTLCOB  DC    CL8'0' <=== PASSWORD (8 CHAR MAX)
          DC    CL12'  '
*
PANLIBD  DC    CL44'panprfx.PANQUAL.PANLIBD' <=== PANLIB DSN
CTLCOB  DC    CL8'0' <=== PASSWORD (8 CHAR MAX)
          DC    CL12'  '
*
* THIS LAST ENTRY IS REQUIRED OR AN SOC4 ABEND WILL OCCUR
*
LSTENTRY DC    XL4'FFFFFFFF'
*
          END
/* LINK THE TABLE INTO YOUR AUTHORIZED LOAD LIBRARY
//STEP2  EXEC PGM=IEWL,COND=(0,NE),
//        PARM='LIST,NCAL,RENT,XREF,SIZE=(256K,64K)',
//SYSLIN DD DSN=&&SYSLIN,DISP=(OLD,DELETE)
//SYSMOD DD DISP=SHR,DSN=uprfx.UQUAL.AUTHLIB(C1PTCNTL)
//SYSUT1 DD UNIT=t disk,SPACE=(CYL,(5,3))
//SYSPRINT DD SYSOUT=*

```

3.5.4 Step 2: Run BC1JCNTL

If you have not already done so, copy the JOBCARD member (in the JCL library) to the beginning of BC1JCNTL. Then submit the job for execution. Module C1PTCNTL is created and placed in your uprfx.uqual.AUTHLIB.

3.6 The Endeavor Librarian Interface

3.6.1 Overview

If your site is using Librarian as its source library manager, you need to install the Librarian Interface. This interface allows you to access members stored within the Librarian data sets.

Endeavor can add, update, or read from a Librarian data set. Whenever Endeavor adds or updates, it always adds or replaces the entire member, ignoring--but preserving--Librarian sequence numbers.

3.6.2 External and Internal Libraries

The Librarian data sets can be used as external libraries; for example, as development libraries, INCLUDE libraries, or target libraries.

It is **not** recommended that you use Librarian data sets as internal (base and delta) libraries, for performance and external usability issues. If you do use these data sets as Endeavor base and delta libraries, note that members written into the libraries are always stored with sequence numbers in columns 81-86, regardless of the type of language used. This is done to protect Endeavor information.

3.6.3 Set the Librarian Parameters in the Defaults Table

Redefine the Endeavor Defaults Table, if necessary, to accommodate for the Librarian Interface:

- Specify the value *LB* in the LIBENV parameter (in the TYPE=MAIN macro).
- Update the LIBENVP parameter to specify that Librarian is installed at your site.
- Specify the name of the Librarian load module for your site in the LIBRPGM parameter. (In the example below, the load module name is *AFOLIBR*, the default name delivered by CA-Librarian.

Col 1	Col 16	Col 72
↓	↓	↓
	C1DEFLT5 TYPE=MAIN,	X
	.	
	.	
	LIBENV=LB,	X
	LIBENVP=Y,	X
	LIBRPGM=AFOLIBR,	X
	.	
	.	
	.	

See the discussion of the Defaults Table in the appendix “The Endeavor Defaults Table”, for additional information about editing the table.

3.6.4 Should You Customize for Librarian?

Using Librarian may require some customization at your site. Because Endeavor automatically specifies columns 81-86 as the sequence columns for Librarian, and preserves all 80 columns of data (as applicable), it is not absolutely necessary to customize the interface at installation.

- **If you do not require the Sequence Update facility (SEQUPD) of Librarian,** you do not need to customize Endeavor to run the Endeavor Librarian Interface.
- **If you need to control the sequence column numbers by type** (if you are using the Sequence Update facility), you must customize your installation. Customization allows you to keep the Librarian members in external Librarian data sets, which may be updated by using imbedded sequence numbers.

For example, some sites have families of programs that are all updated by a common set of changes to a central copy of a particular type of program, such as a payroll program with several variants. The same set of changes can be applied to all programs by using the Librarian SEQUPD facility. In this example, customization would be required, as the client would need to retain control of the sequence number columns.

3.6.5 Considerations When Customizing

If you decide to customize the Endeavor Librarian Interface for your site, you must consider the following:

- Endeavor must know the sequence columns for the element type being processed.
- Endeavor must preserve the original set of sequence numbers within the element, so subsequent sequence number updates will match correctly.
- Endeavor must always set the sequence columns when writing the element to an external Librarian data set, so Librarian will allow you to use these sequence columns for SEQUPD processing. This procedure informs Librarian that these specific columns are available, which in turn prevents automatic renumbering by Librarian.
- You must ensure that any element types customized for sequence number processing have valid, ascending numeric sequence numbers within the element.

3.6.6 Customize Your Site for the Librarian

There are two steps involved in customizing your installation for the Endeavor Librarian Interface.

Step	Action
1	Assemble and link-edit a language definition table to define the sequence columns by internal language for your installation.
2	Define distinct Endeavor types for those elements that will use SEQUPD processing.

3.6.7 Step 1: Define Sequence Number Columns

Use member BC1JLIBR, which is supplied in the installation JCL library, to define sequence number columns by language.

The BC1JLIBR JCL is shown below.

```

/*(JOB CARD)
/*-----*
/*
/* (C) 2002 COMPUTER ASSOCIATES INTERNATIONAL, INC. (CA)
/*
/* NAME: BC1JLIBR
/*
/* PURPOSE - ASSEMBLE AND LINK LIBRARIAN SEQUENCE NUMBER TABLE
/*
/* STEPS:
/* ASSEMBLE: ASSEMBLE THE LIBRARIAN SEQUENCE NUMBER TABLE
/* LINK: LINK EDIT THE LIBRARIAN SEQUENCE NUMBER TABLE INTO THE
/* ENDEVOR CONLIB LIBRARY.
/* NOTE: THE TABLE NAME MUST BE C1LIBRSQ.
/*-----*
//ASSEMBLE EXEC PGM=ASMA90,REGION=2048K,
//          PARM='OBJ,NODECK,LIST,XREF(SHORT)'
//SYSPRINT DD SYSOUT=*
//SYSLIB DD DISP=SHR,DSN=iprfx.IQUAL.SOURCE
//SYSLIN DD DSN=&&SYSLIN,
//          UNIT=tdisk,
//          SPACE=(TRK,(5,5)),
//          DISP=(NEW,PASS,DELETE),
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=3120)
//SYSUT1 DD UNIT=tdisk,SPACE=(TRK,(5,5))
//SYSUT2 DD UNIT=tdisk,SPACE=(TRK,(5,5))
//SYSUT3 DD UNIT=tdisk,SPACE=(TRK,(5,5))
/*

```

```

/** SAMPLE SEQUENCE NUMBER DEFINITIONS
/**
//SYSIN DD *
        C1LIBRSQ LANG=XXX,SEQCOLS=(N1,N2)
        C1LIBRSQ LANG=XXX,SEQCOLS=(N1,N2)
        C1LIBRSQ LANG=XXX,SEQCOLS=(N1,N2)
        C1LIBRSQ LANG=XXX,SEQCOLS=(N1,N2)
        C1LIBRSQ END=YES
        END
/*
/**-----*
/** LINK EDIT THE TABLE. NOTE: THE OUTPUT LOAD MODULE MUST BE NAMED *
/** C1LIBRSQ *
/**-----*
//LINK EXEC PGM=IEWL,
//      REGION=2048K,
//      PARM='RENT,NCAL,XREF,SIZE=(256K,64K)',
//      COND=(0,NE)
//SYSPRINT DD SYSOUT=*
//SYSLMOD DD DISP=SHR,DSN=iprfx.IQUAL.CONLIB(C1LIBRSQ)
//SYSLIN DD DSN=&&SYSLIN,DISP=(OLD,DELETE)
//SYSUT1 DD UNIT=tdisk,SPACE=(TRK,(1,5))

```

3.6.8 Edit the BC1JLIBR JCL

You need to edit BC1JLIBR to meet the requirements of your site. Note the highlighted lines in the JCL. Edit these lines as follows:

- SYSLMOD DD--Replace iprfx.igual.conlib with the CONLIB data set name you are using.
- C1LIBRSQ lines--Each C1LIBRSQ line defines the sequence number columns to be used for a particular internal language type. Enter the information required by your organization. Each line must specify a language (three characters in length, indicated by xxx), as well as two column numbers--a beginning column number (n1) and an ending column number (n2). You must enter one line per language. You can enter as many lines as necessary.
- The language types are matched against the PV/LB LANG field on the Type Definition panel (see the *Administration Guide*).

The list below reflects the language codes Endeavor uses (see also the **Note** below):

ASM (Assembler)	GOF
COB (COBOL)	JCL
DAT (Data)	PLF
FOR (FORTRAN)	PLI
FRG (FORTRAN G)	RPG

FRH (FORTRAN H)	TXT
GIS	VSB

The examples below illustrate acceptable C1LIBRSQ lines:

```
C1LIBRSQ LANG=COB,SEQCOLS=(1,6)
```

In this example, the language type is COBOL and the sequence number columns are 1 through 6.

```
C1LIBRSQ LANG=ASM,SEQCOLS=(73,80)
```

In this example, the language type is Assembler and the sequence number columns are 73 through 80.

Any languages not specified in the JCL are stored with sequence columns 81 through 86.

Note: If your site uses language codes other than those listed above, contact Endeavor Technical Support. An optional patch is available that allows you to modify the language codes in the JCL to accommodate the codes you are using.

3.6.9 Step 2: Define Endeavor Types

You must determine which Endeavor types require the Librarian SEQUPD capability when you define element types for a system. These types require specific information to be entered on the Type Definition panel (see the *Administration Guide*), as follows:

- The PV/LB LANG field must match one of the languages defined in the language definition table.
- The COMPARE FROM and COMPARE TO fields must include the sequence column fields defined for that language.
- Specify *N* for EXPAND INCLUDES, if the source output library is a Librarian data set. (Expanding INCLUDES makes the sequence numbers invalid.)

Note: If the language does not match or the sequence columns are not included within the compare columns (or both situations occur), Endeavor stores the sequence numbers in columns 81 through 86 when writing to external Librarian data sets.

3.6.10 Points to Remember

When defining types for the Endeavor Librarian Interface, keep in mind the following points.

For element types that are customized for the Endeavor Librarian Interface:

- Avoid EXPAND INCLUDES during add or retrieve processing where the target is a Librarian data set. Expanding INCLUDES makes the sequence numbers invalid.

- Ensure that members have valid sequence numbers in the sequence columns. If the numbers are invalid, Librarian rejects members during Endeavor retrieve processing.
- If an Endeavor member has invalid sequence numbers, retrieve that member into an IBM partitioned data set, adjust the sequence numbers, and add the member back into Endeavor.
- If using reverse formatted Librarian libraries, you should be aware of how -INC is handled. Endeavor will convert the '-' to a hex '02' and be added to the library; Endeavor does not want expansion to happen in the base library. Any Endeavor action will convert the hex '02' back to a '-'.

For element types that are not customized for Librarian:

- Set the Endeavor COMPARE columns to exclude Librarian sequence columns, to avoid sequence number edit rejections by Librarian.

See the discussion of the Defaults Table in “Step 8: Work with the Endeavor Defaults Table” for additional information about editing the table.

Provide information for each parameter as follows:

- RACFGRP--Indicate the name of the security group with which the alternate ID is associated. This parameter is optional.
- RACFPWD--Indicate the password for the alternate ID defined. This parameter is optional.
- RACFUID--Indicate the user ID required for alternate ID support.

3.7.4 Step 2: Build a Security Profile for Endeavor Libraries

See your site's security material, or check with your Security Administrator, to build the profiles required to protect the Endeavor libraries and grant the appropriate authorization to the alternate ID.

For more information on alternate ID support, see the *Security Guide*.

3.8 Site-Defined Symbolics

Site-defined symbolics are user-defined symbolic values that you reference within dataset name specifications for base, delta, source output, include libraries, and processors (that is, you can use them wherever you can use Endeavor symbolics). At execution time, any site-defined symbolics referenced by a processor are stored with the processor symbolics in the component data. If a site-level symbolic is also specified as a processor symbolic, the processor symbolic (and processor symbolic override) take precedence.

When Endeavor is initialized, the site-defined symbolics are placed into memory. When Endeavor is terminated, the site symbolic storage is released. If more than one Endeavor task is executing, each task has its own discrete site symbolic storage.

To implement the use of site-defined symbolics, you must define the symbolic and its data value in a table that is assembled and linked into an authorized load library. Once this is done, you need to update the SYMBOLTBL parameter in the C1DEFLT5 table with the name of the site-defined symbolics table. These actions are described below.

3.8.1 Defining Site Symbolics

Use the following format to define a symbolic and its data value in the site-defined symbolics table:

```
$ESYMBOL SYMNAME=#symbolname,SYMDATA=symbolvalue
```

Item	Description
symbolname	The symbol name must begin with the # character and is 1 to 11 characters in length. The # indicates that the symbol is defined in the site-defined symbolics table.
symbolvalue	The data value associated with the site symbolic is 1 to 70 characters in length, with no restrictions on the content of the data. If you do not specify a data value for a symbolic, Endeavor treats it as a null variable.

Use the JCL member contained in the element BC1JSYMT to create the site-defined symbolics table.

3.8.2 Updating C1DEFLT5

After creating the symbolics table, update C1DEFLT5 to reflect the table name. Use the SYMBOLTBL= parameter to define the table name as shown below:

```

SPFEDIT=SPFEDIT, X
SYMBOLTBL=ESYMBOLS, X
SYSIEWL=SYSIEWLP, X
MIXEDFMT=(DESCRIPTION,COMMENT), X
UIDLOC=(1,7), X
VIOUNIT=VIO, X
WRKUNIT=SYSDA, X
RACFUID=NDVUSER, X
RACFGRP=NDVALT0, X
PKGSEC=N, X
PGKVAL=0, X
PKGSEC=ESI, X
PRBLKSZ=00000, X
PRLNKSZ=(896K,96K), X
PRLSTSZ=10, X
MODHLI=BST
C1DEFLT5 TYPE=ENVRNMNT, X
ENVNAME=D40, X
ENVTITL='Development Rel 4.0', X

```

The Site Information from C1DEFLT5 panel displays the parameter value in the SYMBOLICS Table field highlighted below:

```

----- Site Information from C1DEFLT5 -----
Command ==>

Customer Name.... Computer Associates Inc., Endeavor Development
----- Function Controls ----- - Options -
Site ID..... 0 Access Table..... ASCM.... Y
Release..... B4000C SMF Record Number. 230 DB2..... Y
Environments.... 4 Library System... PV EDITELM.. Y
Userid Start.... 1 Library Program... LIBRARV ELINK.... Y
Userid Length... 7 VIO Unit..... VIO ESSI.... N
Batch ID..... 1 Work Unit..... SYSDA INFO.... N
SPFEDIT QNAME.... SPFEDIT Work Volser..... LIBENV... Y
SYSIEWL QNAME.... SYSIEWLP Lines per Page... 60 NETMAN... N
Authorized Tables. IGNORE MODHLI..... BST PDM..... Y
Gen in place/SO... N Signout on fetch.. N PROC..... Y
CA-LSERV JRNL SBS. ELINK XLTE TBL...
PITR Journal Grp.. Mixed Format..... COMMENT DESCRIPTION
SYMBOLICS Table... ESYMBOLS
(Press Enter for Next Panel)

```


Appendix A. The Endeavor Defaults Table

A.1 Overview

This chapter provides detailed information about the Endeavor Defaults Table (C1DEFLT), and explains how to update it. The sections are:

- Overview
- The TYPE=MAIN Macro
- The TYPE=ENVRNMNT Macro
- The TYPE=END Macro

A.1.1 About the Defaults Table

The Endeavor Defaults Table contains your global system information, such as Endeavor options installed at your site, Endeavor control data set names, and settings available for Endeavor features. Although all of these parameters are set at system installation, you may need to change the Defaults Table if your site purchases a new Endeavor product, your library names change, or you want to tailor the information entered by the system installer. The table comprises a set of "C1DEFLT" macros which, when assembled and link-edited, are known collectively as the Defaults Table.

The Defaults Table should reside in an authorized data set.

A.1.2 The C1DEFLT Macro

There are three occurrences of the C1DEFLT macro:

- TYPE=MAIN macro defines site-specific information. It must be the first macro specified in the table source. Only one TYPE=MAIN macro can be specified.
- TYPE=ENVRNMNT macro defines environment information. You can have any number of these macros in the table, but you must have one macro for each environment in your configuration. The TYPE=ENVRNMNT macros follow the TYPE=MAIN macro.
- TYPE=END indicates the end of the table definition. It follows the last TYPE=ENVRNMNT macro.

A.1.3 Editing the Defaults Table

When you edit the C1DEFLT macro, follow standard IBM rules.

- Place all macro specifications between columns 2 and 71.
- To continue across lines, place an *X* in position 72 and start the continuation card at position 16 of the next line. Leave at least one blank space between the end of one card (usually a comma) and the continuation character in position 72.

- Include at least one space between the macro name—`C1DEFLTS`—and the first keyword parameter—`TYPE`.
- Within each parameter specification, do not include any spaces. If you are using literal operands that include a space, enclose the operand in single quotes.

A.1.4 Warning

When editing the macros, pay special attention to the comma and continuation character (*X*) that follow all but the last parameter within each macro. If either of these are inadvertently deleted, the table assembles with a return code of zero, but problems will result at Endeavor execution.

A.1.5 Assembling the Defaults Table

When you have edited the Defaults Table, you need to assemble and link-edit the table. Use `BC1JDEFT JCL`, shown below, to do this. Store the load module in your authorized library as member `C1DEFLTS`.

If you have not already done so, copy your `JOBCARD` member to the beginning of `BC1JDEFT`. Be sure the edited macros are placed correctly in the job stream, then submit the job for execution.

```
/*(JOB CARD)
/*-----*
/*
/* (C) 2002 Computer Associates International, Inc. (CA)
/*
/* NAME: BC1JDEFT
/*
/* PURPOSE: BC1JDEFT IS USED TO ASSEMBLE AND LINK EDIT THE
/* ENDEVOR DEFAULTS TABLE. BY DEFAULT, THE TABLE IS NAMED
/* C1DEFLT. THE INSTALLATION CAN OVERRIDE THE DEFAULT TABLE
/* NAME BY WRITING A CUSTOMIZED VERSION OF THE ENXUSITE USER EXIT
/*
/*-----*
/*-----*
/*
/* STEP 1: ASSEMBLE THE ENDEVOR DEFAULTS TABLE
/*
/*-----*
//ASM      EXEC PGM=ASMA90,
//          REGION=3072K,
//          PARM='NODECK,OBJECT,NOTERM,LIST,XREF(SHORT)'
//SYSLIB   DD DISP=SHR,DSN=iprfx.iqua1.SOURCE
//SYSLIN   DD DSN=&&SYSLIN,
//          UNIT=tdisk,
//          SPACE=(TRK,(3,5)),
//          DISP=(NEW,PASS,DELETE),
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=3200)
//SYSPUNCH DD DUMMY
//SYSUT1   DD UNIT=tdisk,SPACE=(TRK,(5,15))
//SYSPRINT DD SYSOUT=*
//SYSIN    DD *

          .
          .
          C1DEFLT MACROS GO HERE
          .
          .

/*
/*-----*
/*
/* STEP 2: LINK EDIT THE DEFAULTS TABLE.
/*
/* THE SYSLMOD DD STATEMENT DEFINES THE LOCATION AND THE NAME OF THE
/* DEFAULTS TABLE. THE DEFAULT TABLE NAME IS C1DEFLT. IF YOU ARE
/* USING A ENXUSITE USER EXIT, YOU CAN CHANGE THE TABLE NAME AS
/* APPROPRIATE.
/*
/* THE LOAD MODULE CREATED BY THIS STEP IS PLACED INTO THE USER
/* DEFINED AUTHLIB DATA SET. THE ENDEVOR DEFAULTS TABLE MUST
/* RESIDE IN AN AUTHORIZED LIBRARY.
/*
/*-----*
```

```
//LINK EXEC PGM=IEWL,  
// REGION=2048K,  
// PARM='LIST,NCAL,XREF,LET,RENT,REUS',  
// COND=(0,NE)  
//SYSPRINT DD SYSOUT=*  
//SYSLIN DD DSN=&&SYSLIN,  
// DISP=(OLD,DELETE,DELETE)  
//SYSLMOD DD DISP=SHR,DSN=uprfx.uqua1.AUTHLIB(C1DEFLTS)  
//SYSUT1 DD UNIT=tdisk,SPACE=(TRK,(5,15))
```

The job steps in job BC1JDEFT do the following:

Step	Action
Step 1	Assembles macros and passes the assembled Defaults Table to Step 2.
Step 2	Link-edits the Defaults Table and stores it in the load module into uprfx.uqua1.AUTHLIB as member C1DEFLTS.

A.2 The TYPE=MAIN Macro

A.2.1 Example

The TYPE=MAIN macro defines site-specific information. It must be the first macro specified in the table source. Only one TYPE=MAIN macro can be specified.

The TYPE=MAIN macro is shown below.

```

C1DEFLT TYPE=MAIN,
  ACCSTBL=,          ACCESS SECURITY TABLE NAME      X
  ACMROOT=,         ACM INDEX ROOT DATA SET NAME    X
  ACMXREF=,         ACM INDEX XREF DATA SET NAME    X
  APRVFLG=N,       APPROVAL PROCESSING (Y/N)         X
  ASCM=N,          ACM CONTROL OPTION                X
  AUTHTBLS=REQUIRED, REQUIRED|ALLOW|IGNORE          X
  BATCHID=0,       BATCH UID FROM JOBNAME/USER=      X
  CA7CCINODE=,     CA-7 ADDR SPACE NODE (CAICCI)     X
  CA7JCLID=,       CA-7 JCL DATASET INDEX NUMBER    X
  CA7JCLLIB=,     CA-7 JCL DATASET SYMBOIC INDEX    X
  CA7JCLDSN=,     CA7JCLID/CA7JCLLIB DSNNAME        X
  CIPODSN=,       CCID VALIDATION DATASET NAME      X
  CUNAME='*** PUT YOUR COMPANY NAME HERE ***', (50 CHAR) X
  DB2=N,          DB2 CONTROL OPTION                X
  EDITELM=N,      EDIT ELEMENT DIALOG OPTION        X
  ELINK=N,        ENDEVOR/LINK CONTROL OPTION        X
  ELNKXTBL=,     E/LINK DATA STREAM XLATE TBL      X
  ELMCATL='UPRFX.UQUAL.ELMCATL', E/MVS CATALOG      X
  ESSI=N,         ESI CONTROL OPTION                X
  GNIPSOUT=Y,     GENERATE INPLACE                  X
  INFO=N,        INFO/MAN CONTROL OPTION            X
  JRNLGRP=,      PTR JOURNAL GROUP ID                X
  LIBENV=,       LIBRARIAN (LB), PANVALET (PV)      X
  LIBENVP=N,     LIBRARIAN/PANVALET OPTION          X
  LIBRPGM=,     LIBRARIAN BATCH PROGRAM NAME        X
  LINESPP=60,    LINES PER PAGE                      X
  MACDSN='IPRFX.IQUAL.SOURCE', E/MVS SOURCE LIBRARY X
  MIXEDFMT=,     ALL|(CCID,COMMENT,DESCRIPTION)    X
  MODHLI=,       HLQ FOR TEMPORARY DATA SETS )     X
  NMAN=N,        CA-NETMAN INTERFACE OPTION        X
  PDM=N,         PDM CONTROL OPTION                X
  PKGDSN='UPRFX.PACKAGE.MASTER', PACKAGE DATASET    X
  PKGTSO=N,     FOREGROUND PACKAGE EXEC (Y/N)      X
  PKGCSEC=N,    PACKAGE CAST SECURITY (Y/N)        X
  PKGCVL=0,     PKG COMPONENT VALIDATION Y/N/O     X
  PKGSEC=APPROVER, APPROVER/ESI/MIGRATE           X
  PRBLKSZ=0,    BLKSIZE PROC LISTING                X
  PRLNKSZ=(896K,96K), LINKAGE SIZE FOR PROCS      X
  PRLSTSZ=10,   SIZE ALLOC FOR PROCS LISTINGS      X
  PROC=N,       PROCESSOR OPTION                  X
  RACFGRP=,     ALTERNATE ID RACF GROUP            X

```

RACFPWD=,	ALTERNATE ID PASSWORD	X
RACFUID=,	ALTERNATE ID USERID	X
RJCLROOT=,	SHIP REMOTE JCL MODEL MBR ROOT	X
SITEID=0,	ENDEVOR/MVS SITE IDENTIFIER	X
SYMBOLTBL=,	SITE-DEFINED SYMBOL TBL NAME	X
SMFREC#=0,	SMF RECORD NUMBER	X
SOFETCH=N,	SIGNOUT UPON FETCH (Y/N)	X
SPFEDIT=SPFEDIT,	DEFAULT PDS RESERVE	X
SYSIEWL=SYSIEWLP,	DEFAULT PDS/LINK EDIT RESERVE	X
UIDLOC=(1,7),	UID/JOBNAME START/LENGTH POS	X
VIUNIT=TDISK,	UNIT FOR VIO-ELIGIBLE ALLOC	X
WRKUNIT=TDISK,	UNIT NAME FOR WORK SPACE	X
WORKVOL=	VOL SER NUMBER FOR WRKUNIT	

Each TYPE=MAIN parameter is defined in the table below.

Parameter	Definition
ACCSTBL	<p>The 1- to 8-character name of the Endeavor Access Security Table used at your site. You must enter a valid name.</p> <p>If you are using native security and leave the field blank, no security checking will be done.</p> <p>If you are using the Endeavor ESI feature and leave this field blank, the Access Security Table name defaults to BC1TNEQU.</p>
ACMROOT	<p>The data set name of the VSAM file your site will use to store the name of each Endeavor element and all its related components. The recommended name is uprfx.uqual.ACMROOT.</p> <p>This data set is required if your site plans to use the ACM Query Facility.</p> <p>See the <i>Automated Configuration Option Guide</i> for more information.</p>
ACMXREF	<p>The data set name of the VSAM file you will use to store the name of each component relationship. The recommended name is uprfx.uqual.ACMXREF.</p> <p>The data set is required if your site plans to use the ACM Query Facility.</p> <p>See the <i>Automated Configuration Option Guide</i> for more information.</p>

Parameter	Definition
APRVFLG	<p>Indicates whether approval processing is required. Set this parameter to Y if approval processing is required.</p> <p>If you set this parameter to N, approval processing will not be active no matter what approver group relationships have been defined.</p>
ASCM	<p>Indicates whether the Endeavor Automated Configuration Manager (ACM) facility is enabled at your site. If your site is using ACM, specify Y. Otherwise, specify N.</p> <p>For more information, see the <i>Automated Configuration Option Guide</i>.</p>
AUHTBLS	<p>Indicates whether Endeavor's security tables must be loaded from authorized libraries. Values are:</p> <ul style="list-style-type: none"> ▪ REQUIRED—Authorized libraries are required. This is the default value. ▪ ALLOW—Unauthorized libraries are allowed, but Endeavor will issue a warning message. ▪ IGNORE—Endeavor does not check the libraries' authorization.
BATCHID (Required entry)	<p>Indicates whether the Endeavor user ID associated with a batch job should be determined by the JOBNAME or the USER parameter specified on the jobcard. Values are:</p> <ul style="list-style-type: none"> ▪ 0—determined by JOBNAME (this is the default value) ▪ 1—determined by the USER parameter ▪ 2—determined by the USER parameter if specified, otherwise by the JOBNAME <p>See "Selecting a BATCHID Option" later in this appendix.</p>
CA7CCINODE	<p>Specifies the CAICCI node name where the CA-7 address space executes. If no name is specified, local mode is assumed.</p>
CA7JCLID	<p>Provides Endeavor with the CA-7 parameter information required by CA-7 to schedule JOB execution. Parameter values should be obtained from the CA-7 implementation. Mutually exclusive with CA7JCLLIB.</p>
CA7JCLLIB	<p>Provides Endeavor with the CA-7 parameter information required by CA-7 to schedule JOB execution. Parameter values should be obtained from the CA-7 implementation. Mutually exclusive with CA7JCLID.</p>

Parameter	Definition
CA7JCLDSN	The data set name associated with CA7JCLID or CA7JCLLIB.
CIPODSN	<p>The data set name of the sequential file your site plans to use to store valid CCID values. The recommended name is uprfx.uqual.VALCCID.</p> <p>This data set is required if you want to use the CCID validation facility.</p> <p>See the <i>Administration Guide</i> for more information.</p>
CUNAME (Required entry)	The 1- to 50-character name that describes your site. This name is used in report headings.
DB2	<p>Indicates whether the Endeavor for DB2 application is enabled at your site. If your site is using Endeavor for DB2, specify Y. Otherwise, enter N.</p> <p>For more information, see the <i>Endeavor for DB2 Guide</i>.</p>
EDITELM	<p>Indicates whether the Endeavor Quick Edit feature is enabled at your site. If your site is using this feature, specify Y. Otherwise, enter N.</p> <p>For more information, see the <i>Quick Edit Option Guide</i>.</p>
ELINK	<p>Indicates whether Endeavor Link is enabled at your site. If your site is using Endeavor Workstation product, specify Y. Otherwise, enter N.</p> <p>For more information, see the letter that accompanies the Endeavor Link tape.</p>
ELNKXTBL	Defines the ELink translation tables. See the <i>Endeavor Link Administrator Guide</i> for more information.
ELMCATL	The name of the element catalog VSAM file.
ESSI	<p>Indicates whether the Endeavor ESI facility is enabled at your site. If your site is using Endeavor ESI, specify Y. Otherwise, enter N.</p> <p>For more information, see the <i>Security Guide</i>.</p> <p>Note: Do <i>not</i> activate this option until all of the security rules are written and in place.</p>

Parameter	Definition
GNIPSOUT	<p data-bbox="794 310 1360 373">Indicates whether Endeavor is to perform a Generate in-place with or without signout.</p> <p data-bbox="794 394 1425 489">When GNIPSOUT=Y, an element will be signed out to a user who performs a Generate in-place action. This is the default.</p> <p data-bbox="794 510 1425 604">When GNIPSOUT=N, an element will retain its original signout setting. Endeavor will not signout an element to a user who performs a Generate in-place action.</p>
INFO	<p data-bbox="794 625 1425 720">Indicates whether the Endeavor Information/Management interface (Info/Man) is enabled at your site. If your site is using Info/Man, specify Y. Otherwise, enter N.</p> <p data-bbox="794 741 1320 804">For more information, see the <i>Interface for IBM Information/Management Administration Guide</i>.</p> <p data-bbox="794 825 1360 888">Note: Do <i>not</i> activate this option until the Information/Management interface is fully installed.</p>
JRNLGRP	<p data-bbox="794 909 1425 1035">An L-Serv journal group ID which, when entered, relates the package data set named in this macro to a specific set of L-Serv journal files. Use of this parameter enables journaling in the Package Control File.</p> <p data-bbox="794 1056 1089 1087">The format is: (gggg,nnnn)</p> <p data-bbox="794 1108 919 1140">Values are:</p> <ul data-bbox="810 1161 1373 1266" style="list-style-type: none"> <li data-bbox="810 1161 1373 1224">■ gggg—The journal group ID associated with the package journal files. <li data-bbox="810 1245 1287 1266">■ nnnn—The journal group subsystem ID. <p data-bbox="794 1287 1295 1318">For more information, see the <i>Utilities Guide</i>.</p>

Parameter	Definition
LIBENV	<p>This parameter serves two purposes depending upon the LIBENV parameter.</p> <ul style="list-style-type: none"> ■ If LIBENV=Y, then <ul style="list-style-type: none"> – LIBENV=PV indicates that Panvalet is installed; – LIBENV=LB indicates that Librarian is installed. ■ If LIBENV=N (default), then the include member syntax is used by CONWRITE and/or the Expand Include Utility as follows: <ul style="list-style-type: none"> – LIBENV=PV tells Endeavor to check for Panvalet include member syntax (++INCLUDE) or COBOL COPY statements, – LIBENV=LB tells Endeavor to check for Librarian include member syntax (-inc) or COBOL COPY statements – LIBENV=blank (default), no syntax checking or expanding will occur.
LIBENV	<p>Indicates whether your site is using Librarian or Panvalet with Endeavor. If your site is using one of these library management applications, specify Y. Otherwise, N.</p>
LIBRPGM	<p>Applicable only if the LIBENV value is LB. This is the name of the Librarian load module for your site.</p>
LINESPP	<p>The number of lines per printed page for output generated by Endeavor. Default is 60. Valid entries are 1-99.</p>
MACDSN (Required entry)	<p>The data set name of the library containing the Endeavor macros. This library was created during the Endeavor installation procedure. The recommended name is iprfx.igual.SOURCE.</p> <p>The data set is used by many Endeavor functions and is required.</p>

Parameter	Definition
MIXEDFMT	<p>Determines whether Endeavor accepts mixed-case entries in CCID, COMMENT, and DESCRIPTION fields.</p> <p>Values are:</p> <ul style="list-style-type: none"> ▪ CCID—Accept mixed case in CCID fields. ▪ COMMENT—Accept mixed-case in COMMENT fields. ▪ DESCRIPTION—Accept mixed-case in DESCRIPTION fields. ▪ ALL—Accept mixed-case in all three fields. ▪ NONE—Do not accept mixed-case in any field. <p>Multiple values can be specified by enclosing the values in () and separating them by a comma. For example, =(CCID,COMMENT).</p>
MODHLI	<p>Allows you to assign a prefix other than SYSydd to a temporary data set, creating a pseudo-temporary data set. This applies to those temporary data sets which are allocated DISP=MOD at any step in a processor only. Regular temporary data sets, which are not DISP=MOD, use the standard OS/390 temporary data set name. This prefix appears as the first node of the data set name.</p> <p>The value specified should be a high-level qualifier, which all Endeavor users are authorized to use when allocating, deleting, and opening files for output.</p> <p>The effective name generated is:</p> <p>modhli.Dydd.Thhmmss.RA0.jobname.ddname</p> <p>Values are:</p> <ul style="list-style-type: none"> ▪ modhli—the data specified in the MODHLI operand ▪ yyddd—the Julian date ▪ hhmmss—the time in hours, minutes, and seconds ▪ jobname—the same value as jobname ▪ ddname—the DDname specified in the processor JCL <p>RA0 is used instead of RA000 to make room for 8-byte MODHLI and 8-byte DDnames.</p> <p>If MODHLI is not specified in the Defaults Table, the effective name is:</p> <p>SYSydd.Thhmmss.RA0.jobname.ddname</p>

Parameter	Definition
NMAN	<p>Indicates whether the Endeavor Netman Interface is enabled at your site. If your site is using the Netman Interface, specify Y. Otherwise, enter N.</p> <p>See the <i>Interface for Unicenter CA-Netman Administration Guide</i> for more information.</p>
PDM	<p>Indicates whether the Endeavor Parallel Development Manager (PDM) facility is enabled at your site. If your site is using PDM, specify Y. Otherwise, enter N.</p> <p>For more information, see the <i>PDM User Guide</i>.</p>
PKGDSN (Required entry if you are using packages)	<p>The data set name of the VSAM file your site will use to store package information. This library was created during the Endeavor installation procedure. The recommended name is uprfx.uqual.PACKAGE.</p> <p>The data set is required if your site plans to use any of the package processing features.</p> <p>See the <i>Packages Guide</i> for more information.</p> <p>Be sure you use the same data set name for both definition of and allocation of the package data set.</p>
PKGTSO	<p>Indicates whether foreground package processing is allowed. Set this parameter to Y if foreground processing is allowed at your site. Otherwise, set the parameter to N.</p> <p>When a processor runs as part of a package, the PKGTSO flag overrides the foreground execution flag in the processor group. This means that if PKGTSO=Y, all processors in that package will execute, regardless of the value in the foreground execution field for the processor group.</p>
PKGSEC	<p>Indicates whether actions should incur a security check at package cast time. Set this parameter to Y to have each Endeavor action checked during the package cast operation.</p> <p>If you set this parameter to N, no action security check is performed during the package cast operation.</p>

Parameter	Definition
PKGCVAL	<p>Indicates whether component validation is required when packages are cast. Values are:</p> <ul style="list-style-type: none"> ▪ Y—Component validation is required, no matter who is working with the package. ▪ O—Component validation is optional. Whether validation takes place is determined by the person working with the package.
PKGSEC	<p>Indicates the type of security which controls the package options.</p> <ul style="list-style-type: none"> ▪ APPROVER—This value indicates that the site would like to restrict package actions to package approvers. ▪ ESI—Indicates that the site would like to control package options through an external security package such as ACF/2, Top Secret, and IBM RACF via the ESI interface. ▪ MIGRATE—Indicates that the site is in transition between Approver security and ESI security. Both will be checked. <p>Note: The approver security rules take precedence over ESI security rules. If the user is granted access to the package by the approver rules, ESI will not be invoked. ESI will be invoked only when the user does not belong to any approver groups associated with the package (If there are no approver groups associated with the package (this is true for ALL packages before they are CAST), no access restrictions apply.)</p>
PRBLKSZ=0	<p>Indicates the blocksize to be used for temporary files when compiling processors. If you are on a version of OS/390 that does not support BLKSIZE=0, you must specify the value for this parameter that is a multiple of 121.</p>
PRLNKSZ=(256K,64K)	<p>Indicates the size parameter used by the linkage editor. When adding very large processors with many symbolics, this parameter may need to be increased. For example, use (384K,64K).</p>
PRLSTSZ=10	<p>The value of PRLSTSZ is used for both the primary and secondary space allocation parameters (in cylinders) for processor listings. The value of PRLSTSZ may need to be increased for very large processors.</p>

Parameter	Definition
PROC	<p>Indicates whether processors are enabled at your site. If your site is using processors, specify Y. Otherwise, enter N.</p> <p>For more information, see the <i>Extended Processors Guide</i>.</p>
RACFGRP	The name of the security group with which the alternate user ID (RACFUID) is associated. This is an optional parameter.
RACFPWD	The security password for the defined alternate user ID. This is an optional parameter.
RACFUID	The alternate user ID for data set authorization checking.
RJCLROOT	<p>Controls the choice of remote JCL generation. There are three choices:</p> <ul style="list-style-type: none"> ■ RJCLROOT - Not specified. Causes the job stream to be programatically generated without the use of model members. ■ RJCLROOT=FCPY which specifies the job stream is generated through a set of model members beginning with the character string #RJFCPY ■ RJCLROOT=ICPY which specifies the job stream is generated through a set of model members beginning with the character string #RJICPY
SITEID (Required entry)	<p>The 1-character name that identifies your site. It is used internally to differentiate between sites. Default is 0 (zero).</p> <p>SITEID is an integral part of the Endeavor footprint. Any changes to this parameter for existing Endeavor installations will result in a footprint-compromised error for each element within that installation's environments.</p>
SYMBOLTBL	<p>Indicates the name of the symbolics table in use at your site if you are using site-defined symbolics.</p> <p>See the section, "Site-Defined Symbolics" in Chapter 3 for more information.</p>

Parameter	Definition
SMFREC#	<p>The SMF record number assigned to SMF records written by ENDEVOR at this site. Set this value to 0 (zero) until you implement the optional SMF interface.</p> <p>If you want to write out SMF Action Records or SMF Security Records or both, you must enter a value for this parameter. The parameters controlling which records are actually written are SMFACT and SMFSEC in the TYPE=ENVRNMT macro. For more information, see SMFACT.</p>
SOFETCH	<p>Indicates whether the element that is fetched should be signed out to you, if not already signed out to someone else Y, or not signed out N.</p> <p>This value will come into play with Add (Fetch), Generate (Copyback), Move (Fetch), Transfer (Fetch), Search and Replace (Fetch) and Quick-Edit.</p> <p>See the <i>User Guide</i> for a table that shows how SOFETCH values together with actions affect signout.</p>
SPFEDIT	<p>The queue name used when Endeavor issues an enqueue on a sequential file or partitioned data set (not RECFM=U). This may be a source library, object library, or other user library. Default is SPFEDIT.</p> <p>The resource name for the enqueue name is the data set name.</p>
SYSIEWL	<p>The queue name used when Endeavor issues an enqueue on a partitioned data set defined with RECFM=U (for example, a load library). Default is SYSIEWL.</p> <p>The resource name for the enqueue is the data set name.</p>
UIDLOC	<p>The character positions of the user ID that should be compared for ownership (that is, for element signout and signout override check) in batch. You specify a starting position and number of characters.</p> <p>For example, if you wanted to take the first three characters of the user ID, then you would specify UIDLOC=(1,3). Default is the first seven characters: UIDLOC=(1,7).</p>
VIOUNIT (Required entry)	The unit name for temporary disk data sets that are stored on a virtual I/O unit.
WRKUNIT (Required entry)	The unit name for temporary disk data sets that are <i>not</i> stored on a virtual I/O unit.

Parameter	Definition
WORKVOL	The volume serial number of the disk used to store temporary data sets.

A.3 The TYPE=ENVRNMNT Macro

A.3.1 Example

The TYPE=ENVRNMNT macro defines environment information. You can have any number of these macros in the table, but you must have one macro for each environment in your configuration. The TYPE=ENVRNMNT macros follow the TYPE=MAIN macro.

The TYPE=ENVRNMNT macro is shown below:

```

C1DEFLT5 TYPE=ENVRNMNT,
    ENDBACT=N,
    ENDBAVL=N,
    ENVNAME='Environment Name',
    ENVTITL='Environment Title',
    JRNLGRP=,
    NEXTENV=(Environment Name,Stage ID),
    RSCETBL=,
    SMFACT=N,
    SMFSEC=N,
    STG1ID=Stage 1 ID,
    STG1NME='Stage 1 Name',
    STG1TTL='Stage 1 Title',
    STG1VSM='Stage 1 MCF Data set name',
    STG2ID=Stage 2 ID,
    STG2NME='Stage 2 Name',
    STG2TTL='Stage 2 Title',
    STG2VSM='Stage 2 MCF Data set name',
    USERTBL=

```

To specify more than one environment, copy this macro as many times as necessary.

Note: If you are creating an environment map, you need to specify the next environment in each definition. Make sure that you code them in the proper order, starting with the first environment and continuing to the last environment (in other words, start with the top and work down).

The illustration below shows an example for three environments:

```

C1DEFLT5 TYPE=ENVRNMNT,                                     X
      .
      .
      .
      USERTBL=
C1DEFLT5 TYPE=ENVRNMNT,                                     X
      .
      .
      .
      USERTBL=
C1DEFLT5 TYPE=ENVRNMNT,                                     X
      .
      .
      .
      USERTBL=

```

Each TYPE=ENVRNMNT macro is defined in the table below:

Parameter	Definition
ENDBACT ENDBAVL	Parameters related to the Endeavor/DB-MVS Bridge. For more information, see the <i>Endeavor to CA-Endeavor/DB Administrator Guide</i> .
ENVNAME (Required entry)	The 1- to 8-character name of the Endeavor environment to which this macro applies. This value must be unique within this Defaults Table (that is, to this site). The name can include any of (but only) the following characters: A-Z, 0-9, @, #, \$. ENVNAME is an integral part of the Endeavor footprint. Any change to this parameter for existing OS/390 environments will result in a footprint-compromised error for each element within that environment.
ENVTITL (Required entry)	The 1- to 40-character descriptive title for the environment.
JRNLGRP	An L-Serv journal group ID which, when entered, relates the Master Control Files named in this macro to a specific set of L-Serv journal files. Use of this parameter enables journaling in the Master Control File base and delta libraries (both VSAM and non-VSAM). The format is: (gggg,nnnn) Values are: <ul style="list-style-type: none"> ▪ gggg—The journal group ID associated with the MCF and delta journal files. ▪ nnnn—The journal group subsystem ID. For more information, see the <i>Utilities Guide</i> .

Parameter	Definition
NEXTENV	<p>The next environment/stage location on the environment map. The format is: (<i>environment name, stage id</i>)</p> <p>Values are:</p> <ul style="list-style-type: none"> ▪ environment name—The 1- to 8-character name of the next environment. ▪ stage id—The identifier (1 or 2) of the stage in that environment. If you do not provide a stage ID, Endeavor defaults to STAGE ID=1. <p>For more information on maps, see the <i>Administration Guide</i>.</p>
RSCETBL	<p>The 1- to 8-character name of the Endeavor Resource Security Table for this environment. The Resource Security Table allows you to restrict one or more elements to a specific system(s) and subsystem(s) within an environment. Define one Resource Security Table for each environment (as necessary).</p> <p>Leave this field blank if you do not want to restrict elements to a specific system(s) and subsystem(s). If you do want to use restriction, fill in this field and prepare the Resource Security Table as described in the <i>Security Guide</i> (only applies to native security).</p>
SMFACT	<p>Indicates whether Endeavor should write out SMF Action Records. Set this parameter to Y if you want Action Records written out. Otherwise, set the parameter to N. Default is N.</p> <p>If you set this parameter to Y, you must specify a value for the SMFREC# in the TYPE=MAIN macro. If you do not specify SMFREC#, Endeavor ignores the SMFACT parameter.</p> <p>See the <i>Administration Guide</i> for more information on SMF Recording.</p>
SMFSEC	<p>Indicates whether Endeavor should write out SMF Security Records. Set this parameter to Y if you want Security Records written out. Otherwise, set the parameter to N. Default is N.</p> <p>If you set this parameter to Y, you must specify a value for the SMFREC# in the TYPE=MAIN macro. If you do not specify SMFREC#, Endeavor ignores the SMFSEC parameter.</p> <p>For more information, see the <i>Administration Guide</i>.</p>

Parameter	Definition
STG1ID (Required entry)	The 1-character identifier for the first stage, used during processing to select (or identify) the stage you want. Commonly used identifiers are 1 or A. Default is 1 .
STG1NME (Required entry)	The 1- to 8-character name assigned to Stage 1 for this environment. The stage name must be unique across all environments within a site (that is, within the Defaults Table). The stage name can include any of (but only) the following characters: A-Z, 0-9, @, #, \$. Some commonly used Stage 1 names are: PREPROD, QA, STAGE1ID, and TEST.
STG1TTL (Required entry)	The 1- to 20-character descriptive title for the first stage. This name is used on various panels and reports to describe this stage.
STG1VSM (Required entry)	The Master Control File data set name for Stage 1, as defined during installation. The data set name defaults to: uprfx.uqual.STAGE1.
STG2ID (Required entry)	The 1-character identifier for the second stage, used during processing to select (or identify) the stage you want. Commonly used identifiers are 2 or B. Default is 2 .
STG2NME (Required entry)	The 1- to 8-character name assigned to Stage 2 for this environment. The stage name must be unique across all environments within a site (that is, within the Defaults Table). The stage name can include any of (but only) the following characters: A-Z, 0-9, @, #, \$
STG2TTL (Required entry)	The 1- to 20-character descriptive title for the second stage. This name is used on various panels and reports to describe this stage.
STG2VSM (Required entry)	The Master Control File data set name for Stage 2, as defined during installation. The data set name defaults to: uprfx.uqual.STAGE2.
USERTBL	The 1- to 8-character name of the Endeavor User Security Table for this environment. The User Security Table allows you to control the systems and subsystems available to all users within an environment. Define one User Security Table for each environment (as necessary). Leave this field blank if you do not want to control systems and subsystems within an environment. If you do want to control the availability of systems and subsystems, fill in this field and prepare the User Security Table as described in the <i>Security Guide</i> (only applies to native security).

A.3.2 Selecting a BATCHID Option

When executing Endeavor element actions in batch (C1BM3000) Endeavor uses the values specified for BATCHID and UIDLOC in the C1DEFLT5 table to derive the value to be used as the Endeavor userid.

The BATCHID parameter is specified in the TYPE=MAIN section of your C1DEFLT5 table. It determines whether the Endeavor userid associated with a batch job will be determined by the JOBNAME, the USER= parameter specified on the jobcard the userid of the submitter. One of the following values must be specified:

- 0-- determined by JOBNAME (this is the current default value, future releases will default to 2).
- 1-- determined by the USER parameter, or if not present, the userid of the submitter.
- 2-- determined by the USER parameter (or submitter as described above) if specified, otherwise by the JOBNAME.

The UIDLOC parameter of the C1DEFLT5 table (also TYPE=MAIN), tells us the character positions of the Endeavor userid that should be compared for ownership, (that is, for element signout/override signout check) in batch. UIDLOC specifies the starting position and the number of characters. The default is the first seven characters UIDLOC=(1,7).

In the following example, user PAND and user NDVR attempt to RETRIEVE an element that is currently "owned" by user NDVR. UIDLOC=(1,4). Neither user has the authority to use the "OVERRIDE SIGNOUT" option. The following chart shows the results of their attempts:

JOBNAME	SUBMITTER	Userid Assigned by Endeavor/Action Allowed (Y/N)			
		USER= (1)	BATCHID=0 (2)	BATCHID=1	BATCHID=2
ABCDJ	PAND	PAND	ABCD/N	PAND/N	PAND/N
ABCDJ	PAND	n/a	ABCD/N	PAND/N	PAND/N
ABCDJ	NDVR	NDVR	ABCD/N	NDVR/Y	NDVR/Y
ABCDJ	NDVR	n/a	ABCD/N	NDVR/Y	NDVR/Y
PANDJ	PAND	PAND	PAND/N	PAND/N	PAND/N
PANDJ	PAND	n/a	PAND/N	PAND/N	PAND/N
PANDJ	NDVR	NDVR	PAND/N	NDVR/Y	NDVR/Y
PANDJ	NDVR	n/a	PAND/N	NDVR/Y	NDVR/Y
NDVRJ	PAND	PAND	NDVR/Y (2)	PAND/N	PAND/N
NDVRJ	PAND	n/a	NDVR/Y (2)	PAND/N	PAND/N
NDVRJ	NDVR	NDVR	NDVR/Y	NDVR/Y	NDVR/Y
NDVRJ	NDVR	n/a	NDVR/Y	NDVR/Y	NDVR/Y

Notes

1. Several security packages have an optional feature to automatically append the user=/password= parameters on the job card at job submission. If this is the case at your shop, then BATCHID=1 is recommended.
2. Many sites have job submission exits that ensure the jobname matches the submitter's userid. If your site does not utilize this feature, it is strongly recommended you DO NOT USE BATCHID=0.

A.4 The TYPE=END Macro

A.4.1 Example

The TYPE=END macro indicates the end of the table definition. It follows the last TYPE=ENVRNMNT macro.

The TYPE=END macro is shown below:

```
C1DEFLTS TYPE=END
```

Do not change this macro.

Appendix B. Installation Checklist

Use this checklist when you are upgrading from release 3.9 to release 4.0. This checklist is comprised of two parts. Part 1 lists all the steps your site's system programmer needs to perform. Part 2 lists all steps your site's Endeavor Administrator needs to perform. Each step in the checklist references the Endeavor documentation set where you can find detailed information that will enable you to complete the step.

CAUTION:

DO NOT SHARE 4.0 MCFs between release 4.0 and any prior releases. Any updates performed under another release will cause your 4.0 element catalog to be out of synchronization.

B.1 Part 1. Steps To Be Executed By System Programmers

	Step to be completed	Where to find more information
1	Download the INSTALL file.	<i>Installation Guide 2.3.2</i>
2	Read the README member in the iprfx.iqua.INSTALL library.	<i>Installation Guide 2.3.4</i>
3	Unload the documentation set.	<i>Installation Guide 1.5.2, 1.5.3</i>
4	Edit BC1JJB01, BC1JJB02 and CHM4000 and change the variables. (Optionally change the SMP/E defines in BC1JJB01.)	<i>Installation Guide 2.3.4.2</i>
5	Submit job BC1JJB01 to define the Endeavor SMP/E environment.	<i>Installation Guide 2.3.5</i>
6	Submit job BC1JJB02 to Receive, Apply and Accept Endeavor release 4.0.	<i>Installation Guide 2.3.6</i>
7	Install the ICHRCX01 security exit for alternate id support. ACF2 users will need apar QO11791 and QO11792. TSS users will need to install apar QO12982. All sites need to copy ICHRCX01 and its aliases into a valid LPA library	<i>Installation Guide 2.4.2</i>
8	Authorize the AUTHLIB or move the contents to an existing authorized library. NOTE: Existing installations that need to run their current release and 4.0 on the same system/LPAR need to ensure the 4.0 libraries cannot be used by accident.	<i>Installation Guide 2.4.1, 2.6.4</i>
9	Create an Endeavor 4.0 environment under TSO.	<i>Installation Guide 2.5</i>
10	Define Endeavor to GRS (if not already done).	<i>Installation Guide 2.6.2</i>
11	ACF2 users only: Modify TSO Command Limiting Facility to allow ISPTLIB commands (ACMQ, ESORT, EONLY, EM, QM, etc.).	<i>Installation Guide 2.6.4</i>

B.2 Part 2. Steps To Be Executed by Endeavor Administrator

B.2.1 Part 2 A. Implement a 4.0 Test Environment

	Step to be completed	Where to find more information
12	Read the FAQs.	<i>Getting Started Guide</i> Appendix B
13	Read Upgrading To Release 4.0.	<i>Getting Started Guide</i> Appendix A
14	Read the README member in the iprfx.iqual.INSTALL library.	<i>Installation Guide</i> 2.3.4
15	Optionally, implement the Sample Application.	<i>Getting Started Guide</i> Chapter 3

B.2.2 Part 2 B. Migrate Your Existing Environments

	Step to be completed	Where to find more information
16	Define the Element Catalog.	<i>Getting Started Guide</i> Appendix A For size calculations, see the Element Catalog in Appendix D.
17	Allocate and convert the release 4.0 MCFs and PKG files.	<i>Getting Started Guide</i> Appendix A
18	Consider defining/using the Site Defined Symbolics Table.	<i>Installation Guide</i> 3.8 <i>Administration Guide</i> Chapter 4
19	Create your release 4.0 C1DEFLTS and ENDICNFG tables.	<i>Getting Started Guide</i> Appendix A
20	Create your release 4.0 ENCOPTBL table.	<i>Installation Guide</i> , README, FAQs
21	If necessary apply other needed optional PTFs.	README, <i>Getting Started Guide</i> Appendix B
22	Load the Element Catalog Files.	<i>Getting Started Guide</i> Appendix A
23	Allocate and build or convert the release 4.0 ACMQ files. Existing users can convert their data. New ACMQ users MUST build their data from their existing component lists	<i>Getting Started Guide</i> Appendix A
24	Synchronize the element catalog. (If RC=04, re-run in UPDATE mode.)	<i>Getting Started Guide</i> Appendix A
25	Re-compile any exits and API programs.	<i>Getting Started Guide</i> Appendix B

	Step to be completed	Where to find more information
26	Optionally copy over your existing base/delta/source-output and processor libraries and change the system definitions that use these libraries.	<i>Getting Started Guide</i> Appendix A
27	Foreground validation of user table modifications (C1DEFLTS, ENDICNFG, ENCOPTBL, SYMBOL TABLE).	<ul style="list-style-type: none">- Allocate file EN\$TROPT under TSO: TSO ALLOC FI (EN\$TROPT) SYSOUT REUSE- Bring Endeavor up in Foreground- Split screen and look at the file under your TSU session in SDSF DA queue.- Confirm all selected options/table settings are correct.
28	Batch Validation of user parameter modifications (C1DEFLTS, ENDICNFG, ENCOPTBL, SYMBOL TABLE).	<p>Submit a batch SCL job with additional DD statement:</p> <pre>//EN\$TROPT DD SYSOUT=*</pre> <p>After job completes, view output in SDSF and do the same validation as in item 27.</p>

Appendix C. The Installation Worksheet

This appendix provides a worksheet you can use to collect the information you need to install Endeavor at your site.

Note: For your convenience, the Installation Worksheet is on two separate pages at the end of the appendix. It is recommended that you take the worksheet out of the manual and keep it next to you when reviewing the qualifiers and parameter definitions.

This Appendix contains two items:

- Lists of detailed definitions for several of the variables you find in the different installation JCL jobs. The definitions are grouped by type; for example, qualifiers or cluster parameters. Many of the variables have been defined in earlier chapters, but some of the definitions given here provide more details.
- An installation worksheet you can use to gather the information you need to install Endeavor. It is recommended that you copy the worksheet for use during the installation. Keep the original worksheet for future use.

The Installation Worksheet is at the end of the appendix.

Note: The appendix “The Endeavor Defaults Table,” contains the definitions for each parameter in the Endeavor Defaults Table. See that appendix when creating or updating the Defaults Table.

C.1 Variable Definitions

C.1.1 Qualifiers

Variable	Definition
iprfx	Highest-level qualifier used when assigning data set names for installation and execution data sets. This prefix is used for data sets that store Endeavor software. It is recommended, therefore, that the software release number be coded as part of iprfx or iqual (see below).
iqual	Second-level qualifier used when assigning data sets for installation and execution data sets. This prefix is used for data sets that store Endeavor software. It is recommended, therefore, that the software release number be coded as part of iqual or iprfx (see above).
panprfx	Highest-level qualifier used when assigning Panvalet-related data set names.
uprfx	Highest-level qualifier used when assigning data set names for Endeavor user files. This prefix is used for data sets that store user modules. It is recommended, therefore, that the software release number <i>not</i> be coded as part of the prefix, because these data sets are independent of the release.
uqual	Second-level qualifier used when assigning data set names to Endeavor user files. This prefix is used for data sets that store user modules. It is recommended, therefore, that the software release number <i>not</i> be coded as part of the prefix, because these data sets are independent of the release.
sprfx	Highest-level qualifier used when assigning data set names for Endeavor's sample application libraries and files.
squal	Second-level qualifier used when assigning data set names for Endeavor's sample application libraries and files.

C.1.2 Sample Application Variables

Variable	Definition
SYSDB2LIB	Data set name of the DB2 system load library.
DB2SYSTEM	The name of the DB2 subsystem.
SYSCLECOMP	The COBOL/LE compiler load library.
SYSCLERUN	The COBOL/LE runtime library.
SYSCLELKED	The COBOL/LE Automatic Call (link) library.
SYSCIICOMP	The COBOL II compiler load library.
SYSCIILIB	The COBOL II Automatic Call (link) library.

C.1.3 Symbolic Device Assignment

Variable	Definition
pdisk	Symbolic device label for permanent disk data sets.
tape	Symbolic device name for tape data sets.
tdisk	Symbolic device label for temporary disk data sets.

C.1.4 Volume Serial Numbers

Variable	Definition
tvolsr	The volume serial number of the Endeavor installation tape.
vvolser	The volume serial number of the disk used to store VSAM clusters (See the definition of <i>VOLUMES</i> under "MCF Cluster Parameters.")
dvolsr	The volume serial number of the disk used to store permanent data sets. If your site does not require the use of the VOL=SER parameter when storing permanent data sets, enter the following change command to remove this parameter: C 'VOL=SER=DVOLSER,' ' ' ALL

C.1.5 MCF Cluster Parameters

If you have any questions regarding these parameters, please call Endeavor Technical Support.

Variable	Definition
CYLINDERS (n n)	Primary and secondary space allocations, respectively. The default value is (5 1) for Stage 1 and (5 1) for stage 2, which is sufficient for a system with up to 750 elements in each stage. See Appendix C, “Disk Space Requirements Worksheet”, for additional space computation information.
VOLUMES	The volume serial number for the disk on which this Master Control File will reside (see vvolser under “Volume Serial Numbers”).

C.1.6 MCF Allocations for the Sample Application

SMPLJOB4 allocates the following VSAM structures:

Stage	Library	Data Set Name
1	VSAM cluster	iprfx.igual.SMPLTEST.MCF
	cluster data component	iprfx.igual.SMPLTEST.MCF.DATA
	cluster index component	iprfx.igual.SMPLTEST.MCF.INDEX
2	VSAM cluster	iprfx.igual.SMPLQA.MCF
	cluster data component	iprfx.igual.SMPLQA.MCF.DATA
	cluster index component	iprfx.igual.SMPLQA.MCF.INDEX
3	VSAM cluster	iprfx.igual.SMPLEMER.MCF
	cluster data component	iprfx.igual.SMPLEMER.MCF.DATA
	cluster index component	iprfx.igual.SMPLEMER.MCF.INDEX
4	VSAM cluster	iprfx.igual.SMPLPROD.MCF
	cluster data component	iprfx.igual.SMPLPROD.MCF.DATA
	cluster index component	iprfx.igual.SMPLPROD.MCF.INDEX

C.1.7 Package Data Set Cluster Parameters

If you have any questions regarding these parameters, please call Endeavor Technical Support.

Variable	Definition
CYLINDERS (n n)	Primary and secondary space allocations, respectively. The default value is (8 2), which is sufficient for 50 packages averaging 50 elements, with BACKOUT enabled and averaging 4 outputs per element. See “Disk Space Requirements Worksheet” for additional space computation information.
VOLUMES	The volume serial number for the disk on which this package data set will reside.

C.2 The Installation Worksheet

Use the worksheet to enter the values you are going to use when installing Endeavor at your site. Refer to the definitions at the beginning of the appendix as necessary.

The following variables do not appear on the worksheet. Use the default values given for these variables:

MCF Cluster Parameters:

FREESPACE (30 30)
RECORDSIZE (640 1017)
KEYS (28 0)
SHR (SHR(3 3))

Package Data Set Cluster Parameters:

FREESPACE (30 30)
RECORDSIZE (640 1017)
KEYS (64 8)
SHR (SHR(3 3))

C.2.1 Installation Worksheet

C.2.1.1 QUALIFIERS:

Variable	Your Site's Value
iprfx	
iqua	
panprfx	
sasprfx	
uprfx	
uqua	

C.2.1.2 SAMPLE APPLICATION VARIABLES:

Variable	Your Site's Value
SYSD2LIB	
DB2SYSTEM	
SYSCLECOMP	
SYSCLERUN	
SYSCLELKED	

Variable	Your Site's Value
SYSCIICOMP	
SYSCIILIB	

C.2.1.3 SYMBOLIC DEVICE ASSIGNMENTS:

Variable	Your Site's Value
pdisk	
tape	
tdisk	

C.2.1.4 VOLUME SERIAL NUMBERS:

Variable	Your Site's Value
tvolser	
vvolser	
dvolser	

C.2.1.5 MASTER CONTROL FILE CLUSTER PARAMETERS:

Variable	Your Site's Value
CYLINDERS	
VOLUMES	

C.2.1.6 PACKAGE DATA SET CLUSTER PARAMETERS:

Variable	Your Site's Value
CYLINDERS	
VOLUMES	

C.2.1.7 DEFAULTS TABLE TYPE=MAIN PARAMETERS:

Variable	Your Site's Value
ACCSTBL	
ACMROOT	

Variable	Your Site's Value
ACMXREF	
APRVFLG	
ASCM	
AUHTBLS	
BATCHID	
CA7CCINODE	
CA7JCLID	
CA7JCLLIB	
CA7JCLDSN	
CIPODSN	
CUNAME	
DB2	
EDITELM	
ELINK	
ELNKXTBL	
ELMCATL	
ESSI	
GNIPSOUT	
INFO	
JRNLGRP	
LIBENV	
LIBENVP	
LIBRPGM	
LINESPP	
MACDSN	
MIXEDFMT	
MODHLI	
NMAN	
PDM	
PKGDSN	
PKGTSO	

Variable	Your Site's Value
PKGCSEC	
PKGCVAL	
PKGSEC	
PRBLKSZ=0	
PRLNKSZ=(896K,96K)	
PRLSTSZ=10	
PROC	
RACFGRP	
RACFPWD	
RACFUID	
RJCLROOT	
SITEID	
SYMBOLTBL	
SMFREC#	
SOFETCH	
SPFEDIT	
SYSIEWL	
UIDLOC	
VIUNIT	
WRKUNIT	
WORKVOL	

C.2.1.8 DEFAULTS TABLE TYPE=ENVRNMNT PARAMETERS:

Variable	Your Site's Value
ENDBACT	
ENDBAVL	
ENVNAME	
ENVTITLE	
JRNLGRP	
NEXTENV	
RSCETBL	

Variable	Your Site's Value
SMFACT	
SMFSEC	
STG1ID	
STG1NME	
STG1TTL	
STG1VSM	
STG2ID	
STG2NME	
STG2TTL	
STG2VSM	
USERTBL	

Appendix D. Disk Space Requirements Worksheet

This appendix provides you with a worksheet you can use to estimate your disk space requirements during installation.

This Appendix provides you with a disk space requirements worksheet that you can use during installation. The worksheet is formatted as follows:

- Data set name and description
- Default values, where appropriate
- Space for your specifications

It is recommended that you copy the worksheet for use during installation, and keep the original for future use.

D.1.1 Default Disk Space Allocations

The default disk space allocations provided in the installation JCL are large enough to accommodate a pilot project (about 500 elements). The information may vary depending on factors such as the average number of lines per code per element, blocking factors, and disk device types.

Use the information and examples in this appendix to assist you in determining the requirements for your site.

D.2 Considerations

D.2.1 Before You Begin

Take into consideration the following when preparing the disk space requirements worksheet:

- This appendix assumes you are using 3380-type disk devices. Adjust the SPACE parameters accordingly if you are using another type of device.
- All libraries can be defined as OS partitioned data sets (or, with the exception of a load library, as Panvalet, Librarian, or Endeavor LIB). If you are defining Panvalet or Librarian data sets, be sure to allocate storage equivalent to the storage defined in the worksheet.
- For information about computing disk space allocation for Endeavor LIB, see the *Utilities Guide*.
- When allocating a partitioned data set, be aware of the following:
 - For efficiency, directory blocks are allocated in increments of 45 (which is the number that can fit on a single track of a 3380-type device).
 - In each library, there is one directory block for every four elements.
- Endeavor compresses blank spaces from the base, delta, and processor listing libraries (assuming the base and delta libraries are OS/PDS or Endeavor LIB files).
- The libraries described in this appendix require routine maintenance, just like any file. See the *Utilities Guide* manual for information about maintaining your files.
- The number of members stored in a single partitioned data set should not exceed 5,000, as this could cause contention problems such as severe disk contention, heavy updating, and excessive wait time for rewriting partitioned data set directories. Up-front planning in this area helps avoid problems. Keep in mind that base and delta libraries can be defined by element types.

For additional assistance, contact Endeavor Technical Support.

D.2.2 Reverse Delta vs. Forward Delta

Elements can be stored in either *reverse delta* or *forward delta* format. The Disk Space Requirements Worksheet provides information for both formats, in the descriptions of the base library and the delta library. See the *Implementation Guide* for more information about these element storage formats.

Note: The Endeavor sample application uses reverse delta format for storing elements.

D.3 The Disk Space Requirements Worksheet

D.3.1 Element Catalog

For the element catalog, allocate 1 cylinder 3390 for every 600 elements in PROD.
For the element index, allocate 1 cylinder 3390 for every 2,000 elements in PROD.

D.3.2 Base Library

Data Set Name: BASE

Format:

- For *forward delta*:

PDS: DCB=(RECFM=VB,LRECL=259,BLKSIZE=0)

- For *reverse delta*:

PDS: DCB=(RECFM=FB,LRECL=80,BLKSIZE=0)

Description:

This library contains element source as initially defined to Endeavor. The space requirements are a function of the number of elements (members) to be stored, the number of source lines per element, and the library manager in use. For existing PDS members to be loaded into the base library, use ISPF/PDF option 3.2 (UTILITIES, then DATASETS) to estimate the space required. To calculate the total amount of space needed, multiply the estimated space by an expansion factor (such as 1.2) that is appropriate to the expected library expansion beyond these members. The example below illustrates this concept:

There are two existing PDS libraries placed under the control of Endeavor, and the total space currently occupied by members in the library takes up 100 cylinders. You can allocate a base library of 120 cylinders ($100 \times 1.2 = 120$), to leave 20 percent free space to allow for expansion:

To estimate the number of PDS directory blocks needed, assume there is one directory block for every four elements. For efficiency, directory blocks should be allocated in increments of 45 for a 3380-type device (or whatever number can fit on a single track for another type of device). To calculate the number of directory blocks, divide the estimated number of elements (members) to be stored in the library by 4. Round that result to an even multiple of 45 (for a 3380-type device). The number should be the same for base and delta libraries.

The values below apply if you are storing elements in *forward delta* format:

Default for PDS:		
Primary (CYL)	Secondary (CYL)	Dir Blk
80	10	180

Your Specifications:		
Primary (CYL)	Secondary (CYL)	Dir Blk

The values below apply if you are storing elements in *reverse delta* format:

Default for PDS:		
Primary (CYL)	Secondary (CYL)	Dir Blk
90	15	90

Your Specifications:		
Primary (CYL)	Secondary (CYL)	Dir Blk

D.3.3 Delta Library

Data Set Name: uprfx.uqual.DELTA

Format: PDS: DCB=(RECFM=VB,LRECL=28332,BLKSIZE=0)\

This format is the same for both forward and reverse delta formats.

Description:

This library contains change levels for elements defined to Endeavor. The space requirements for the library are a function of the number of elements to be stored, the volatility of the elements (that is, the number of changes that are expected and the extent of those changes), and the library manager in use. A good starting point is a size that is half as large as the base library. The number of directory blocks should be the same as for the base library.

Note: If Endeavor ACM is installed at your site, increase the file size by 33 percent and triple the number of directory blocks.

The values below apply if you are storing elements in *forward delta* format:

Default for PDS:

Primary (CYL)	Secondary (CYL)	Dir Blk
40	10	180

Your Specifications:

Primary (CYL)	Secondary (CYL)	Dir Blk

The values below apply if you are storing elements in *reverse delta* format:

Default for PDS:

Primary (CYL)	Secondary (CYL)	Dir Blk
40	15	270

Your Specifications:

Primary (CYL)	Secondary (CYL)	Dir Blk

D.3.4 Package Data Set

Data Set Name: uprfx.uqual.PACKAGE

Format: VSAM

Description:

This data set stores all packages for the entire site. The size of this file is determined by the number of packages to be stored at any given time, and the average size of each. The size can be difficult to compute because packages vary greatly in size, based on number of actions and whether BACKOUT/BACKIN is enabled. The maximum size of a package record is 1017 bytes.

To determine the size of an individual package, consider the following:

Package Entity	Size (Bytes)	Number of Records
Package Header	415	1
Approver Record	456	1
SCL	100 prefix + 80 per line (max=992 bytes)	1 per 10 lines of SCL
Package ID Record	335	1
Package Backout Record	185	1 per backout member (source/target)

The example below illustrates how to compute the size of a package:

A package that consists of 60 elements has 300 lines of SCL (averaging 5 lines of SCL per element). Package backout is enabled. There are two processor outputs that exist on both source and target. The following computation can be used:

$$\begin{aligned}
 &1 \text{ package header} + 1 \text{ approver record} + 1 \text{ ID record} = 1215 \\
 &300 \text{ lines SCL} + 10 = 30 \times 992 = 29760 \\
 &60 \text{ elements} \times 4 = 240 \times 185 = 44400 \\
 &75375 \text{ bytes} / 1017 = 75 \text{ package records} \\
 &75/26 \text{ (no. of records per 3380 trk)} = 3 \text{ tracks}
 \end{aligned}$$

The JCL provided in SMPLJOB3 allows for 50 packages, averaging 50 elements (5 lines per element). BACKOUT is enabled, averaging 4 outputs per element. A secondary allocation has provided a 25% growth factor.

Default:	
Primary (CYL)	Secondary (CYL)
8	2
Your Specifications:	
Primary (CYL)	Secondary (CYL)

D.3.5 Processor Load Library for Stage 1

Data Set Name: uprfx.uqual.PRCLOAD

Format: DCB=(RECFM=U,LRECL=0,BLKSIZE=32760)

Description:

This library contains Stage 1 processor load modules. The GPPROCSS processor writes to this library, for elements defined with the element type *PROCESS*.

The size of this library is a function of the number of processors added to the system(s) with which the library is associated, and the number of lines in each processor. Estimate the total number of generate, move, and delete processors to be stored for Stage 1. Allow 1.5 tracks for each processor. For example, for a library targeted to store 15 processors, use a primary allocation of 10 tracks and a secondary allocation of 1 track.

To determine the number of directory blocks needed, assume there is one directory block for every four processors. Proceed as described for the base library (see “Base Library”).

Default:		
Primary (CYL)	Secondary (CYL)	Dir Blk
10	5	45

Your Specifications:		
Primary (CYL)	Secondary (CYL)	Dir Blk

D.3.6 Listing Libraries for Stage 1

Data Set Names:

- uprfx.uqual.LISTING1
- uprfx.uqual.PRC1LIST

Format: PDS: DCB=(RECFM=VBA,LRECL=28332,BLKSIZE=0)

Description:

These libraries contain listings that correspond to either a Stage 1 user-defined listing library (uprfx.uqual.LISTING1) or the Stage 1 processor load modules (uprfx.uqual.PRC1LIST).

Size information for each library is discussed below. To determine the number of directory blocks needed for either library, assume there is one directory block for every four listings. Proceed as described for the base library (see “Base Library”).

D.3.6.1 User Listing Library

The CONLIST utility writes to the user listing library, for those elements defined with a type associated with a processor containing this utility. To estimate the size of the user listing library, allocate 1 track per member. The item being stored can greatly influence the overall size of the library, however. For example, a 1-page printout takes up much less space than a 600-page compile.

A good estimate for compile listings is two tracks per member. With a user library targeted to store 100 compile listings, for example, use a primary allocation of 200 tracks and a secondary allocation of 10 tracks.

D.3.6.2 Processor List Library

The GPPROCSS processor writes to the processor list library, for those elements defined with the type *PROCESS*. The size of the processor list library is a function of the number of processors added to the system(s) with which the library is associated, and the number of lines in each processor. Estimate the total number of generate, move, and delete processors to be stored for Stage 1. Allow 1 track for each processor.

For example, for a library targeted to store 15 processors, use a primary allocation of 15 tracks and a secondary allocation of 5 tracks.

Default:			
Primary (CYL)	Secondary (CYL)	Dir Blk	Library
10	5	45	PRC1LIST
200	10	45	LISTING1
Your Specifications:			
Primary (CYL)	Secondary (CYL)	Dir Blk	Library
			PRC1LIST
			LISTING1

D.3.7 Stage 1 Data Set (MCF)

Data Set Name: uprfx.uqual.STAGE1

Format: VSAM

Description:

This data set contains the Stage 1 Master Control File entries. The size of this file is based on the number of systems, subsystems, elements, types, and processor groups to be stored at Stage 1.

To calculate the total amount of space needed, determine the total number of systems, subsystems, elements, types, and processor groups in the library. Divide that sum by 26 (the maximum record is 1017 bytes, which equals 26 per track of 3380 DASD). Divide this result by 15 (15 tracks per cylinder) to produce the primary cylinder allocation. A secondary allocation of 20 percent is generally recommended for expansion ($n \times 1.2$).

Default:	
Primary (CYL)	Secondary (CYL)
5	1
Your Specifications:	
Primary (CYL)	Secondary (CYL)

D.3.8 COPYLIB for Stage 1

Data Set Name: uprfx.uqual.COPYLIB1

Format: DCB=(RECFM=FB,LRECL=80,BLKSIZE=0)

Description:

This library contains the latest full source of each element created during output management at Stage 1. The size of this library is a function of the exact amount of space the members consume outside of Endeavor.

For existing partitioned data set members, use the ISPF/PDF option **3.2** (UTILITIES, then DATASETS) to estimate the space required. Multiply the space required by an expansion factor (such as 1.2) that is appropriate to the expected library growth beyond these members.

To determine the number of directory blocks needed, assume there is one directory block for every four members. Proceed as described for the base library (see “Base Library”).

Your Specifications:

Primary

Secondary

Notes:

- If you are using forward deltas, a source output library must be defined.
- If you are using reverse deltas, defining a source output library is optional. The base image library performs the same function as the source output library.

D.3.9 Processor Load Library for Stage 2

Data Set Name: uprfx.uqual.PRC2LOAD

Format: DCB=(RECFM=U,LRECL=0,BLKSIZE=32760)

Description:

This library contains Stage 2 processor load modules. Determine the size and number of directory blocks for this file as you would for the Stage 1 library, uprfx.uqual.PRC1LOAD (see “Processor Load Library for Stage 1”).

Default:		
Primary (CYL)	Secondary (CYL)	Dir Blk
10	5	45

Your Specifications:		
Primary (CYL)	Secondary (CYL)	Dir Blk

D.3.10 Listing Libraries for Stage 2

Data Set Names:

uprfx.uqual.LISTING2

uprfx.uqual.PRC2LIST

Format: PDS: DCB=(RECFM=VBA,LRECL=28332,BLKSIZE=0)

Description:

These libraries contain listings that correspond to either a Stage 2 user-defined listing library (uprfx.uqual.LISTING2) or the Stage 2 processor load modules (uprfx.uqual.PRC2LIST). Determine the size and number of directory blocks for this file as you would for the Stage 1 libraries, uprfx.uqual.LISTING1 and uprfx.uqual.PRC1LIST (see "Listing Libraries for Stage 1").

Default:			
Primary (CYL)	Secondary (CYL)	Dir Blk	Library
10	5	45	PRC2LIST
200	10	45	LISTING2
Your Specifications:			
Primary (CYL)	Secondary (CYL)	Dir Blk	Library
			PRC2LIST
			LISTING2

D.3.11 Stage 2 Data Set (MCF)

Data Set Name: uprfx.uqual.STAGE2

Format: VSAM

Description:

This data set contains the Stage 2 Master Control File entries. Determine the size of this file as you would for the Stage 1 data set, uprfx.uqual.STAGE1 (see “Stage 1 Data Set (MCF)”).

Default:	
Primary (CYL)	Secondary (CYL)
5	1
Your Specifications:	
Primary (CYL)	Secondary (CYL)

D.3.12 COPYLIB for Stage 2

Data Set Name: uprfx.uqual.COPYLIB2

Format: DCB=(RECFM=FB,LRECL=80,BLKSIZE=0)

Description:

This library contains the latest full source of each element created during output management at Stage 2. Determine the size of this library as you would for the Stage 1 library, uprfx.uqual.COPYLIB1 (see "COPYLIB for Stage 1").

Your Specifications:

Primary

Secondary

Notes:

- If you are using forward deltas, a source output library must be defined.
- If you are using reverse unencrypted deltas, defining a source output library is optional. The base image library performs the same function as the source output library.

Appendix E. The ISPF Dialog Options Configuration Table

This appendix explains how you can customize the Endeavor ISPF dialog options configuration table for your site.

E.1.1 What Is This Feature?

The dialog options configuration table feature allows you to override default values set for specific options associated with Endeavor actions. The defaults are assigned in an ISPF dialog configuration table that is shipped with the Endeavor installation files. You can override the assigned default values by updating and assembling the ISPF configuration table, ENDICNFG (see “The ISPF Dialog Configuration Table”).

If you do not want to change the dialog default field values, you do not need to take any action. Endeavor uses the configuration table that is shipped with the installation tape.

***Important!** This feature allows you to establish the default values that appear automatically on the foreground action panels. During an Endeavor session, however, a user can still change the value for one or more options on an individual panel(s).*

E.1.2 What You Can Change

You can set default values for all *Y/N* action option fields and for most list fields. You can also set the default package selection fields. See the table in “Dialog Options Fields” for a list of the dialog fields that can be updated.

E.1.3 What You Cannot Change

You cannot set default values for the CCID, COMMENT, PROCESSOR GROUP fields, the list option WHERE fields, or data set name fields.

E.2 The Default Configuration Table

E.2.1 Overview

The Endeavor files contain the default configuration table, *ENDICNFG*, and the JCL you can use to reassemble and link-edit the table. This table contains the existing default values.

To change the default of any dialog field, proceed as follows:

Step	Action
1	Edit the parameters you want to change.
2	Reassemble and link-edit the configuration table.

The default configuration table is shown on the next page. The JCL you use to reassemble and link-edit the table is shown in the section “JCL (BC1JCNFG)”.

The parameters are discussed in the section “Dialog Options Fields”.

The table shown below is the default configuration table provided with the Endeavor installation files as a member in the installation SOURCE library.

Note: The default configuration table is regularly updated until the time of shipping. For the most recent version of *ENDICNFG*, refer to the member *ENDICNFG* in *iprfx.iqual.SOURCE*.

```

TITLE 'ENDICNFG - ENDEVOR/MVS ISPF DIALOG CONFIGURATION TABLE'
*-----*
*
* (C) 2002 COMPUTER ASSOCIATES INTERNATIONAL, INC. (CA)
*
* NAME: ENDICNFG
*
* PURPOSE: THIS IS THE ENDEVOR/MVS ISPF DIALOG CONFIGURATION TABLE.
* THE CONFIGURATION TABLE DEFINES THE INSTALLATION DEFAULTS FOR
* CERTAIN DIALOG PANEL FIELDS. THE INSTALLATION CAN CUSTOMIZE THIS
* TABLE TO PROVIDE A LIMITED AMOUNT OF FLEXIBILITY IN SETTING THE
* VALUES THAT THE DIALOG WILL USE TO INITIALIZE PANEL FIELDS.
*
* ATTRIBUTES: REENTRANT, REUSABLE
*              NON-EXECUTABLE
*              AMODE(31), RMODE(ANY)
*-----*
END$CNFG TYPE=CONFIG, X
      ACKNOWLEDGE_ELEMENT_JUMP=N, X
      APPEND_SCL=N, X
      APPEND_SCL_PKG=N, X
      APPROVED=Y, X
      BUILD_USING_MAP=Y, X
      COMMITTED=Y, X
      COMPONENT_LIST_WORD=LIST, X
      COMPONENTS_ONLY=N, X
      COPYBACK=N, X
      DELETE_AFTER_ARCHIVE=N, X
      DELETE_AFTER_MOVE=Y, X
      DELETE_AFTER_TRANSFER=Y, X
      DELETE_INPUT_SOURCE=N, X
      DELETE_MODE=F, X
      DENIED=Y, X
      DISPLAY_PROC_GROUP=N, X
      ENABLE_BACKOUT=Y, X
      ENTERPRISE_PKG=A, X
      EXECUTED=Y, X
      EXPAND_INCLUDES=N, X
      GENERATE_ELEMENT=Y, X
      GENERATE_MODE=F, X
      IN_APPROVAL=Y, X
      IN_EDIT=Y, X
      IN_EXECUTION=Y, X
      INCLUDE_JCL=N, X
      INCREMENT_JOBNAME=Y, X
      INTERCEPT_ISPF_RETURN=N, X
      JCL_PROCEDURE_NAME=ENDEVOR, X
      MOVE_MODE=F, X
      OVERRIDE_SIGNOUT=N, X
      PROCESSOR_GROUP_DEFAULT_CHAR=-, X
      PROCESSOR_GROUP_OVERRIDE_CHAR=0, X
      QE_BUILD_USING_MAP=Y, X

```

E.2 The Default Configuration Table

QE_GENERATE_IN_PLACE=N,	X
QE_RETURN_FIRST_FOUND=Y	X
REPLACE_MEMBER=N,	X
RETAIN_SIGNOUT=N,	X
RETURN_FIRST_FOUND=Y,	X
SHARABLE_PACKAGE=N,	X
SHOW_TEXT=Y,	X
SIGNIN_MODE=F,	X
SIGNOUT_ELEMENT=Y,	X
SIGNOUT_MODE=F,	X
SORT_BY_DESTINATION_ID=2,	X
SORT_BY_PACKAGE_ID=3,	X
SORT_BY_SHIP_DATE=1,	X
SYNCHRONIZE=N,	X
UPDATE_IF_PRESENT=N,	X
VALIDATE_COMPONENTS=Y,	X
WITH_HISTORY=N,	
WORKLIST_PRIMARY=1	
WORKLIST_SECONDARY=1	

END

E.3 Dialog Options Fields

Each option is a dialog field in the configuration table. There are two kinds of fields: those that affect how Endeavor processes the action and those that affect the information returned or presented by Endeavor.

The table below lists each of the Endeavor dialog fields for which your site can override the default value. The first column contains the field names as they appear in the configuration table. These names map to the action option or list option names that appear on the element or package action panels. The last column in the table indicates whether this is an action option (*A*), a list or filter option (*F*), or an option that influences Endeavor's behavior (*O*).

ISPF Dialog Field Name	Valid Values	Current Default	Panel Field Description	Action, Filter, or Other
ACKNOWLEDGE_ELEMENT_JUMP	Y or N	N	Acknowledge element jump.	A
APPEND_SCL	Y or N	N	Default value for the "APPEND" field on the Batch Options panel.	F
APPEND_SCL_PKG	Y or N	N	Default value for the "APPEND TO PACKAGE" field on the Create/Modify Package panel.	F
APPROVED	Y or N	Y	Include APPROVED packages.	F
BUILD_USING_MAP	Y or N	Y	Build the element selection list using the Environment Map.	F
COMMITTED	Y or N	Y	Include COMMITTED packages.	F
COMPONENT_LIST_WORD	User-defined	LIST	Text string used to identify the listing data set name when the LL option is selected in Quick-Edit.	F

ISPF Dialog Field Name	Valid Values	Current Default	Panel Field Description	Action, Filter, or Other
COMPONENTS_ ONLY	Y or N	N	Delete only the element Component List.	A
COPYBACK	Y or N	N	Copy an element from up the map during generate processing.	A
DELETE_ AFTER_ ARCHIVE	Y or N	N	Delete the element or package after the ARCHIVE action completes.	A
DELETE_ AFTER_ MOVE	Y or N	Y	Delete the source element after the MOVE action completes.	A
DELETE_ AFTER_ TRANSFER	Y or N	Y	Delete the source element after a TRANSFER action completes.	A
DELETE_ INPUT_ SOURCE	Y or N	N	Delete the input source after an ADD action completes.	A
DELETE_ MODE	F or B	F	Default mode when executing the delete action in Quick-Edit; F for foreground, B for batch.	A
DENIED	Y or N	Y	Include denied packages.	F
DISPLAY_ PROC_GROUP	Y or N	N	Default value for the “DISPLAY PROC GRP NAME” field on the Display Elements/Component Lists panel.	F
ENABLE_ BACKOUT	Y or N	Y	Enable package backout.	A

ISPF Dialog Field Name	Valid Values	Current Default	Panel Field Description	Action, Filter, or Other
ENTERPRISE_ PKG	A or E or X	A	ISPF Package Selection list filter option. If A, lists enterprise and non-enterprise packages. If E, lists enterprise packages only. If X, lists non-enterprise packages only.	F
EXECUTED	Y or N	Y	Include executed packages	F
EXPAND_ INCLUDES	Y or N	N	Expand imbedded INCLUDES during a RETRIEVE action.	A
GENERATE_ ELEMENT	Y or N	Y	Generate an element as part of quick-edit or transfer processing.	A
GENERATE_ MODE	F or B	F	Generate the element in Foreground (F) or Batch (B) in Quick-Edit.	F
IN_APPROVAL	Y or N	Y	Include packages that are in the approval process.	F
IN_EDIT	Y or N	Y	Include packages that have not yet been cast.	F
IN_EXECUTION	Y or N	Y	Include packages that are executing.	F
INCLUDE_JCL	Y or N	N	Default value for the "INCLUDE JCL" field on the Batch Options panel.	F

ISPF Dialog Field Name	Valid Values	Current Default	Panel Field Description	Action, Filter, or Other
INCREMENT_ JOBNAME	Y or N	Y	Indicates whether the Batch Package Facility increments the last character in the jobcard you provide when you submit a package jobstream.	O
INTERCEPT_ ISPF_RETURN	Y or N	N	Instruct Endeavor whether to intercept ISPF RETURN and JUMP commands.	O
JCL_ PROCEDURE_ NAME	1-8 alphanumeric characters	Endeavor	The name of the Endeavor procedure that the SUBMIT PACKAGE action will use to create JCL. A sample procedure can be found in iprfx.igual. JCLLIB, member name PACKAGE. Use this as a model for your own Submit procedure.	A
MOVE_MODE	F or B	F	Default mode when executing the move action in Quick-Edit; F for foreground, B for Batch.	A
OVERRIDE_ SIGNOUT	Y or N	N	Override the element signout status.	A
PROCESSOR_ GROUP_ DEFAULT_CHAR		--	Specify the character to be used to indicate that the processor group symbol is using the default from the PROC statement of the processor.	O

ISPF Dialog Field Name	Valid Values	Current Default	Panel Field Description	Action, Filter, or Other
PROCESSOR_ GROUP_ OVERRIDE_ CHAR		O	Specify the character to be used to indicate that the processor symbol has been overridden by the processor group symbol.	O
QE_BUILD_ USING_MAP	Y or N	Y	Quick-Edit ISPF display option. If set to N, display includes elements in Stage 1 and Stage 2. If set to Y, display includes elements from all stages and environment in the map.	
QE_GENERATE_ IN_PLACE	Y or N	N	Quick-Edit ISPF panel action option. If Y, element will be generated in the stage where it is found. If N, element will be copied back into the entry stage.	
QE_RETURN_ FIRST_FOUND	Y or N	Y	If Y, returns only the first occurrence of the requested element(s). If N, returns all occurrences of the requested element(s) found along the map route.	
REPLACE_ MEMBER	Y or N	N	Replace an existing member in a partitioned data set.	A
RETAIN_ SIGNOUT	Y or N	N	Retain the signout during move or transfer processing.	A

ISPF Dialog Field Name	Valid Values	Current Default	Panel Field Description	Action, Filter, or Other
RETURN_ FIRST_FOUND	Y or N	Y	Include only the first occurrence of the element found in the environment map.	F
SHARABLE_ PACKAGE	Y or N	N	Identify whether a package is sharable.	A
SHOW_TEXT	Y or N	Y	Show text during list action processing.	A
SIGNIN_ MODE	F or B	F	Default mode when executing the signin action in Quick-Edit; F for foreground, B for batch.	A
SIGNOUT_ ELEMENT	Y or N	Y	Signout an element during RETRIEVE processing.	A
SIGNOUT_ MODE	F or B	F	Default mode when executing the signout action in Quick-Edit; F for foreground, B for batch.	A
SORT_BY_ DESTINATION_ ID	1 or 2 or 3	2	Sort the package shipment list by destination ID.	F
SORT_BY_ PACKAGE_ID	1 or 2 or 3	3	Sort the package shipment list by package ID.	F
SORT_BY_ SHIP_DATE	1 or 2 or 3	1	Sort the package shipment list by shipment date.	F
SYNCHRONIZE	Y or N	N	Create a synchronization level as part of move or transfer processing.	A

ISPF Dialog Field Name	Valid Values	Current Default	Panel Field Description	Action, Filter, or Other
UPDATE_IF_PRESENT	Y or N	N	Update an element on an ADD action if the element already exists at Stage 1.	A
VALIDATE_COMPONENTS	Y or N or W	See the Note at the end of this table	Validate the components of a package as part of cast processing.	A
WITH_HISTORY	Y or N	N	Maintain the element change history.	A
WORKLIST_PRIMARY	1 to 999	1	Set the primary defaults for the WORK DATASET ALLOCATION and the LIST DATASET ALLOCATION.	O
WORKLIST_SECONDARY	1 to 999	1	Set the secondary defaults for the WORK DATASET ALLOCATION and the LIST DATASET ALLOCATION.	O

Note: For VALIDATE_COMPONENTS the default value depends on the value of the PKGCVAL= parameter in the Endeavor Defaults Table.

E.3.1 JCL (BC1JCNFG)

The JCL shown below can be used to assemble and link-edit the ISPF configuration table. This JCL is provided on the Endeavor installation files, as member *BC1JCNFG* in the installation JCL library.

```

/*(JOB CARD)
/*-----*
/*
/* (C) 2002 COMPUTER ASSOCIATES INTERNATIONAL, INC. (CA)
/*
/* NAME: BC1JCNFG
/*
/* PURPOSE: THIS JCL IS USED TO ASSEMBLE AND LINK EDIT THE
/* ENDEVOR/MVS ISPF CONFIGURATION TABLE.
/*
/* TO EXECUTE THIS JCL:
/* 1) ADD THE APPROPRIATE JOB CARD
/* 2) MODIFY THE //SYSLIB AND //SYSIN DD STATEMENTS IN THE ASM
/* STEP TO REFER TO THE ENDEVOR INSTALLATION DATA SETS.
/* 3) MODIFY THE //SYSLMOD DD STATEMENT IN THE LINK STEP TO REFER
/* TO THE INSTALLATION AUTHLIB DATA SET
/*
/*-----*
//ASM EXEC PGM=ASMA90,
// REGION=4096K,
// PARM=('NOTERM,NODECK,LIST,OBJECT,XREF(SHORT)')
//SYSPRINT DD SYSOUT=*
//SYSUT1 DD UNIT=tdisk,SPACE=(CYL,(1,2))
//SYSUT2 DD UNIT=tdisk,SPACE=(CYL,(1,2))
//SYSUT3 DD UNIT=tdisk,SPACE=(CYL,(1,2))
//SYSLIN DD DSN=&&OBJECT,
// UNIT=tdisk,
// SPACE=(TRK,(1,5)),
// DISP=(NEW,PASS,DELETE),
// DCB=(LRECL=80,RECFM=FB,BLKSIZE=3200)
//SYSLIB DD DISP=SHR,DSN=iprfx.iqua1.SOURCE
//SYSIN DD DISP=SHR,DSN=iprfx.iqua1.SOURCE(ENDICNFG)
//LINK EXEC PGM=IEWL,
// REGION=2048K,
// PARM='LIST,MAP,XREF,RENT,REUS'
//SYSPRINT DD SYSOUT=*
//SYSLIN DD DSN=&&OBJECT,
// DISP=(OLD,DELETE,DELETE)
//SYSUT1 DD DSN=&&SYSUT1,
// UNIT=tdisk,
// SPACE=(TRK,(2,5)),
// DISP=(NEW,DELETE,DELETE),
// DCB=BLKSIZE=1024
//SYSLMOD DD DISP=SHR,DSN=iprfx.iqua1.AUTHLIB(ENDICNFG)

```

Appendix F. Using an Alternate Defaults Table

F.1 About ENUXSITE

This appendix explains how to use the ENUXSITE exit to select an alternate Endeavor Defaults Table.

F.1.1 What Is the ENUXSITE Program?

ENUXSITE is an exit, called at Endeavor initialization, that allows your site to identify the name of an alternate Defaults Table based on a user ID or other criteria. An alternate Defaults Table might be used as a mechanism to test a new configuration at your site. Or, you may want to provide a specific Defaults Table for a group of users based on particular installation criteria.

Note:

- The alternate Defaults Table must exist before you implement the exit.
- The ENUXSITE program must be linked as an authorized program and must reside in an authorized library. (See the discussion about authorized programs and authorized libraries in the section “Step 4: Populate the Authorized Library with Endeavor Modules.”)

F.1.2 Parameters Passed to the ENUXSITE Program

When Endeavor initializes a session, it searches the authorized library for a user-written program named ENUXSITE. If the program is found, Endeavor passes to the exit, using standard linkage conventions, a single, 16-character data field. The first eight characters of the field contain the name *CIDEFLTS*. The remaining eight characters contain the user ID associated with the current Endeavor session.

Note: When running in batch, the value specified as the user ID will be either one of the following:

- The job name specified on the jobcard.
- The value specified on the USER= parameter of the jobcard. This value, if provided, takes precedence over use of the job name.

F.1.3 How to Use the ENUXSITE Program

There are two ways to select an alternate Defaults Table:

- Modify the parameter by changing the first eight characters to the name of the Defaults Table you want to use. ENUXSITE returns control to Endeavor to load the named table and use it as the Endeavor Defaults Table.
- Use the OS/390 LOAD service to load an alternate table. Use the IDENTIFY service to identify the table as the “CIDEFLTS.” The exit returns control to Endeavor, leaving the 16-character parameter unmodified.

F.1.4 How to Create an Alternate Defaults Table

To create an alternate Defaults Table, follow the instructions provided in the discussion “Step 8: Work with the Endeavor Defaults Table.” Change the name *CIDEFLTS* to the name you want to assign the alternate Defaults Table. Verify that the link-edit output member name--DD SYSLMOD--specifies the correct name.

F.1.5 Example

The example below shows a COBOL program written to allow *USER1* to have a different version of the Defaults Table than other users. The name of *USER1*'s Defaults Table is *TABLE1*.

```
IDENTIFICATION DIVISION.  
PROGRAM-ID. ENUXSITE.  
ENVIRONMENT DIVISION.  
DATA DIVISION.  
LINKAGE SECTION.  
01 LS-PARM-FROM-ENDEAVOR.  
   05 LS-TABLE-NAME          PIC X(8).  
   05 LS-USER-ID            PIC X(8).  
PROCEDURE DIVISION USING LS-PARM-FROM-ENDEAVOR.  
  IF LS-USER-ID = 'USER1 '  
  THEN MOVE 'TABLE1 ' TO LS-TABLE-NAME.  
  GOBACK.
```


Appendix G. Endeavor Optional Feature Table

G.1 ENCOPTBL

The optional feature table (OFT) supplied with Endeavor provides you with a simple, easy-to-use mechanism to customize the product for use at your site. This facility enables you to configure your implementation of Endeavor by specifying which features you want to activate. After modifying the OFT source, you must assemble and link the table, placing the output into the Endeavor execution library.

Prior releases of Endeavor support the ability for the user to activate optional features by means of an optional feature table embedded in ENCOPTNS. A description of each option is provided in the table, along with detailed information on parameter values and downstream effects. If you require assistance or information beyond what is provided in the table, please contact Endeavor support.

The OFT source, as distributed, contains each option already coded, but inactive. To activate an entry, remove the asterisk (*) in column 1 and verify that the second parameter, if required, contains the appropriate value. Assemble and link-edit the table using member BC1JOPTF, located in Endeavor's .JCLLIB.

Optional Feature Table Source: The sample optional feature table is provided with the Endeavor installation files as member ENCOPTBL in the installation SOURCE library.

Appendix H. Applying Maintenance to Endeavor

Endeavor is installed using SMP/E. Maintenance for the product is provided in two formats: service packs and individual program temporary fixes (PTFs). Service packs are delivered from the Endeavor product team at regular intervals and contain all the PTFs that have been written since the base product was created. Individual PTFs fix a particular problem that users have encountered and can be obtained through StarTCC or Endeavor technical support. The remainder of this chapter details how the two types of maintenance for Endeavor can be implemented.

H.1 Implementing Service Packs

You can use service packs to install Endeavor for the first time, or to upgrade the release of Endeavor to the most current maintenance available. The tape will contain the base software as well as all maintenance that has been published up to the tape creation date. Maintenance is published in the form of: Load Module replacements; or panel, source, JCL corrections; or both.

Note: If this is the first installation of this release of Endeavor, see the chapter “Install Endeavor System Software”. The instructions in this appendix are specifically for applying maintenance to an already-installed release.

We recommend that you install the maintenance as a complete installation of the product maintenance. The maintenance installation JCL executes a SMP/E RECEIVE, APPLY, and ACCEPT of the published maintenance (PTFs) through a replacement mechanism of SMP/E. Packaging of the service pack published PTFs is accomplished by an application to a Release Integration CSI through SMP/E. The distribution libraries are then used to build a Family of PTFs.

The Family PTFs are a collection of all the modules that have had maintenance applied to them as related elements. The RECEIVE, APPLY and ACCEPT of this Family will supply the installation with all the published maintenance within the modules and will update CSI information with SUPERCEDE information for all the published PTFs. For the service pack maintenance installation, the Family member has a naming convention of *FAMrrsp*, where *rr* equals the Endeavor Release level, and *sp* equals the Service Pack number.

Using this approach ensures that the upgrade of the Endeavor environment is clean and up-to-date with all the current published maintenance. At the end of the upgrade, you need to re-apply any SMP/E usermods you may have implemented, or apply any optional PTFs you may have obtained from Endeavor technical support, or both.

Note: Usermods and optional PTFs can be stored in Endeavor. The processor associated with these types can do the implementation work involved. By storing these elements in Endeavor, the user is able to track any changes and more easily implement them with each maintenance release.

Because Endeavor is usually executed directly from the SMP/E target data sets, which get updated during the SMP/E APPLY step, it is only necessary to receive and apply PTFs.

To install the maintenance tape, execute the JCL member BC1JMNT1, which is found in the installation library, *iprfx.igual.INSTALL*.

BC1JMNT1 will RECEIVE, APPLY, and ACCEPT all PTFs that have been published thus far.

H.1.1 Step 1: Run BC1JMNT1

Before submitting BC1JMNT1 for execution, you must change the variables to reflect the conventions in effect at your site. For descriptions of the variables, see CHM4000 Member Command Variables in the chapter "Install Endeavor System Software".

After the JCL has been edited and supplied with a valid jobcard, submit job BC1JMNT1 for execution. The BC1JMNT1 JCL is shown below. Space requirements are based on 3390-type disk storage. See the space allocations table in the discussion Space Allocation in this appendix. If you use another type of device, adjust the SPACE parameter accordingly.

```
//* (JOB CARD)
/*-----*
/*
/* (C) 2002 COMPUTER ASSOCIATES INTERNATIONAL, INC.
/*
/* NAME: BC1JMNT1
/*
/* PURPOSE: THIS JOB WILL RECEIVE, APPLY AND ACCEPT ALL ENDEVOR
/* FOR MVS MAINTENANCE PTF'S SINCE THE BASE RELEASE.
/*
/*-----*
/* STEP 1: DELETE AND REDEFINE THE INSTALL LOAD LIBRARY.
/* STEP 2: UNLOAD FROM THE CART, THE LOAD MODULE REPLACEMENTS.
/* STEP 3: SMP/E MODIFY ENVIRONMENT.
/* STEP RECPTFS: SMP/E RECEIVE THE MAINTENANCE.
/* STEP APPPTF : SMP/E APPLY THE MAINTENANCE.
/* STEP ACCPTF : SMP/E ACCEPT THE MAINTENANCE.
/*
/*-----*
/******
```

```

//STEP1 EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=*
//SYSIN DD *
DELETE 'IPRFX.IQUAL.RELOAD' PURGE NONVSAM
SET MAXCC=0
/*
//STEP2 EXEC PGM=IEBCOPY,REGION=2048K
//SYSPRINT DD SYSOUT=*
//SYSUT3 DD UNIT=TDISK,SPACE=(CYL,(1))
//SYSUT4 DD UNIT=TDISK,SPACE=(CYL,(1))
//INDD DD DSN=BST.NDVRC1.RELOAD,
// DISP=(OLD,PASS),
// UNIT=CART,
// VOL=SER=TVOLSER,
// LABEL=(15,SL)
//OUTDD DD DSN=IPRFX.IQUAL.RELOAD,
// DISP=(NEW,CATLG,DELETE),
// UNIT=PDISK,VOL=SER=DVOLSER,
// SPACE=(TRK,(300,45,120)),
// DCB=(LRECL=0,RECFM=U,BLKSIZE=32760)
//SYSIN DD *
COPY INDD=INDD,OUTDD=OUTDD
/*
//*-----*
//* PURPOSE: THIS STEP WILL MODIFY THE LOCATION OF SMP/E ELEMENTS *
//* THAT WERE DISPLACED BY MAINTENANCE. FOR EXAMPLE, IF *
//* ORIGINALLY THE ELEMENT WAS A MEMBER OF THE AUTHORIZED *
//* LIBRARY AND AFTER MAINTENANCE MOVED TO THE CONLIB. *
//* *
//* IN ADDITION, THIS JCL WILL ADD AN SMP/E DDEF STATEMENT *
//* FOR THE ENDEVOR FOR ROSCOE LIBRARY USED FOR THE INSTALL *
//* OF THE ROSCOE PTFs REQUIRED FROM THIS SERVICE PACK. *
//* *
//* EDITING OF THE DATASET NAMES IS REQUIRED FOR THIS JCL. *
//* *
//*-----*
//STEP3 EXEC PGM=GIMSMP,REGION=8192K,PARM='DATE=U'
//* EXPECTED RETURN CODE: 00
//SMPCSI DD DISP=SHR,DSN=IPRFX.IQUAL.CSI
//SMPPTS DD DISP=SHR,DSN=IPRFX.IQUAL.SMPPTS
//SMPLOG DD DUMMY
//SMPLOGA DD DUMMY
//SMPOUT DD SYSOUT=*
//SMPPUNCH DD SYSOUT=*
//SMPRPT DD SYSOUT=*
//SMPLIST DD SYSOUT=*
//SMPSNAP DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*

```

```

//SMPWRK1 DD UNIT=TDISK,SPACE=(TRK,(1,1,5)),DCB=BLKSIZE=3120
//SMPWRK2 DD UNIT=TDISK,SPACE=(TRK,(1,1,5)),DCB=BLKSIZE=3120
//SMPWRK3 DD UNIT=TDISK,SPACE=(TRK,(1,1,5)),DCB=BLKSIZE=3120
//SMPWRK4 DD UNIT=TDISK,SPACE=(TRK,(1,1,5)),DCB=BLKSIZE=3120
//SMPWRK6 DD UNIT=TDISK,SPACE=(TRK,(1,1,5)),DCB=BLKSIZE=3120
//SYSUT1 DD UNIT=TDISK,SPACE=(TRK,(5,1))
//SYSUT2 DD UNIT=TDISK,SPACE=(TRK,(5,1))
//SYSUT3 DD UNIT=TDISK,SPACE=(TRK,(5,1))
//SYSUT4 DD UNIT=TDISK,SPACE=(TRK,(5,1))
//SMPCNTL DD *
SET BDY(NDVRTGT).
UCLIN.
DEL LMOD (BC1PCSV0) .
ENDUCL.
SET BDY(NDVRTGT).
UCLIN.
DEL MOD (BC1PCSV0).
ADD DDDEF (ROSPTF)
DATASET (IPRFX.IQUAL.INSTALL)
SHR.
ENDUCL.
SET BDY(NDVRDLB).
UCLIN.
DEL MOD (BC1PCSV0).
ADD DDDEF (ROSPTF)
DATASET (IPRFX.IQUAL.INSTALL)
SHR.
ENDUCL.
/*
/*-----
/* NAME: DELETE LOAD MODULES FROM THEIR ORIGINAL REPOSITORIES.
/*-----
//DELMEM EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=*
//SYSIN DD *
DELETE 'IPRFX.IQUAL.AUTHLIB(BC1PCSV0)' -
PURGE
DELETE 'IPRFX.IQUAL.CAP40BAD(BC1PCSV0)' -
PURGE
/*
/******
/* NAME: RECEIVE PTFS WRITTEN FOR RELEASE *
/* *
/******
//RECPTFS EXEC PGM=GIMSMP,REGION=4096K,PARM='DATE=U'
//DDLKLIB DD DISP=SHR,DSN=IPRFX.IQUAL.RELOAD
//SMPCSI DD DISP=SHR,DSN=IPRFX.IQUAL.CSI
//SYSUT1 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT2 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT3 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SYSUT4 DD UNIT=TDISK,SPACE=(CYL,(5,1))
//SMPCNTL DD DDNAME=SYSIN

```

```

//SMPHOLD DD DUMMY
//SMPLOG DD DUMMY
//SMPLOGA DD DUMMY
//SMPOUT DD SYSOUT=*
//SMPRPT DD SYSOUT=*
//SMPLIST DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//SYSIN DD *
    SET BOUNDARY(GLOBAL) .
    RECEIVE FORFMID(CHM4000) .
//*
//SMPPTFIN DD DSN=IPRFX.IQUAL.INSTALL(FAM4001),DISP=SHR
//*****
//*
//* NAME: APPLY PTFS WRITTEN FOR RELEASE
//*
//*****
//APPPTF EXEC PGM=GIMSMP,REGION=4096K,PARM='DATE=U'
//DDLKLIB DD DISP=SHR,DSN=IPRFX.IQUAL.RELOAD
//SMPCSI DD DISP=SHR,DSN=IPRFX.IQUAL.CSI
//SYSLIB DD DISP=SHR,DSN=SYS1.MACLIB
//SMPLOG DD DUMMY
//SMPLOGA DD DUMMY
//SMPOUT DD SYSOUT=*
//SMPPUNCH DD SYSOUT=*
//SMPRPT DD SYSOUT=*
//SMPLIST DD SYSOUT=*
//SMPSNAP DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//*SYSUDUMP DD SYSOUT=*
//SMPWRK1 DD UNIT=TDISK,SPACE=(CYL,(15,15,45)),DCB=BLKSIZE=3120
//SMPWRK2 DD UNIT=TDISK,SPACE=(CYL,(15,15,45)),DCB=BLKSIZE=3120
//SMPWRK3 DD UNIT=TDISK,SPACE=(CYL,(15,15,45)),DCB=BLKSIZE=3120
//SMPWRK4 DD UNIT=TDISK,SPACE=(CYL,(15,15,45)),DCB=BLKSIZE=3120
//SMPWRK6 DD UNIT=TDISK,SPACE=(CYL,(15,15,45)),DCB=BLKSIZE=3120
//SYSUT1 DD UNIT=TDISK,SPACE=(CYL,(15,1))
//SYSUT2 DD UNIT=TDISK,SPACE=(CYL,(15,1))
//SYSUT3 DD UNIT=TDISK,SPACE=(CYL,(15,1))
//SYSUT4 DD UNIT=TDISK,SPACE=(CYL,(15,1))
//SMPTLIB DD UNIT=TDISK,VOL=SER=DVOLSER,DISP=SHR
//SMPCNTL DD *
    SET BOUNDARY(NDVRTGT) .
    APPLY SELECT (P003282
                  P003323
                  P003324
                  P003340
                  P003341
                  P003342

```

P003348
P003349
P003350
P003351
P003352
P003353
P003354
P003355
P003356
P003357
P003358
P003359
P003360
P003361
P003362
P003363
P003364
P003365
P003366
P003367
P003368
P003369
P003370
P003371
P003372
P003373
P003374
P003375
P003376
P003377
P003378
P003379
P003380
P003381
P003382
P003383
P003384
P003385
P003386
P003387
P003388
P003389
P003390
P003391
P003392
P003393
P003394
P003395
PRLSP01
) .

```

//*****
//*
//* NAME: ACCEPT PTFS WRITTEN FOR RELEASE
//*
//*****
//ACCTF EXEC PGM=GIMSMP,REGION=4096K,PARM='DATE=U'
//DDLKLIB DD DISP=SHR,DSN=IPRFX.IQUAL.REPLOAD
//SMPCSI DD DISP=SHR,DSN=IPRFX.IQUAL.CSI
//SYSLIB DD DISP=SHR,DSN=SYS1.MACLIB
//SMPLOG DD DUMMY
//SMPLOGA DD DUMMY
//SMPOUT DD SYSOUT=*
//SMPPUNCH DD SYSOUT=*
//SMRPT DD SYSOUT=*
//SMPLIST DD SYSOUT=*
//SMPSNAP DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//*SYSUDUMP DD SYSOUT=*
//SMPWRK1 DD UNIT=TDISK,SPACE=(CYL,(15,15,45)),DCB=BLKSIZE=3120
//SMPWRK2 DD UNIT=TDISK,SPACE=(CYL,(15,15,45)),DCB=BLKSIZE=3120
//SMPWRK3 DD UNIT=TDISK,SPACE=(CYL,(15,15,45)),DCB=BLKSIZE=3120
//SMPWRK4 DD UNIT=TDISK,SPACE=(CYL,(15,15,45)),DCB=BLKSIZE=3120
//SMPWRK6 DD UNIT=TDISK,SPACE=(CYL,(15,15,45)),DCB=BLKSIZE=3120
//SYSUT1 DD UNIT=TDISK,SPACE=(CYL,(15,1))
//SYSUT2 DD UNIT=TDISK,SPACE=(CYL,(15,1))
//SYSUT3 DD UNIT=TDISK,SPACE=(CYL,(15,1))
//SYSUT4 DD UNIT=TDISK,SPACE=(CYL,(15,1))
//SMPTLIB DD UNIT=TDISK,VOL=SER=DVOLSER,DISP=SHR
//SMPCNTL DD *
SET BOUNDARY(NDVRDLB).
ACCEPT SELECT (P003282
                P003323
                P003324
                P003340
                P003341
                P003342
                P003348
                P003349
                P003350
                P003351
                P003352
                P003353
                P003354
                P003355
                P003356
                P003357
                P003358
                P003359

```

P003360
P003361
P003362
P003363
P003364
P003365
P003366
P003367
P003368
P003369
P003370
P003371
P003372
P003373
P003374
P003375
P003376
P003377
P003378
P003379
P003380
P003381
P003382
P003383
P003384
P003385
P003386
P003387
P003388
P003389
P003390
P003391
P003392
P003393
P003394
P003395
PRLSP01

) .

/*

H.2 PTF Naming Conventions

Endevor PTF names are seven characters in length and conform to the following format:

Characters	Description
1	O or P or T for Optional or Problem or TEST PTF
2-7	Zero-filled right-justified StarTCC problem #

Published PTFs supercede Test PTFs.

H.3 Interfaces

This service pack includes interfaces to program products that are supported by Endeavor, but which were not originally supplied by the base installation for this release of Endeavor. These interfaces are:

- CA-Roscoe
- CA-Netman
- Info/Man
- Point-in-Time Recovery
- CSV Extract Utility

H.3.1 Interface Installation

Except for CA-Roscoe, the interfaces are automatically installed by executing the BC1JMNT1 JCL. The FAM4001 member in iprfx.igual.install contains APARs that when SMP/E Received, Applied, and Accepted will supply the modules and elements for each interface. Prior to the submission of BC1JMNT1, FAM4001 variables must be adjusted using the information provided in Step 1: Run BC1JMNT1.

H.3.2 Roscoe Install

The execution of BC1JMNT1 will populate the libraries for the interfaces, and supply an update to the iprfx.igual.source library that will contain the PTFs necessary for the implementation of the CA-Roscoe interface. Then, to install the Endeavor for CA-Roscoe interface, the user must execute BC1JRALC and BC1JRUNL from the iprfx.igual.jcllib library. BC1JRALC will allocate the libraries and define the CSI environment. For details, see the Endeavor for Roscoe Installation guide. BC1JRUNL will execute an SMP/E receive, apply, and accept of the components for the interface. For details, see the Endeavor Change Manager Interface for CA-Roscoe Installation guide. After successful completion of these jobs, see the AllFusion Endeavor Change Manager Interface for CA-Roscoe Installation Guide for further implementation directions.

H.3.3 CSV Utility, CA-Netman Interface, Infoman Interface, PITR Interface Installs

The elements that compose these interfaces are installed using the BC1JMNT1 job execution. Further information regarding each of these interfaces is found in their installation guides, except that the PITR interface and CSV utility are described in the Utilities Guide.

H.4 Load Module Replacement Installation

The second method of installing maintenance is through downloads of the published Family PTFs from eSupport. Each PTF that consists of a Load module replacement will contain instructions in the PTF for preparation of the PTF for application. The PTF will consist of two or more parts. The primary part of the PTF will contain the instructions and the SMP/E MCS information identifying the Load Module. The secondary part(s) will contain the Load Modules in binary format.

Once the download is complete, the primary and secondary part(s) of the PTF must be then placed into the appropriate, site-specific libraries on the mainframe.

Sample instructions are shown next:

1. Download the PTF and models(s) from StarTCC to your PC.
2. Upload the PTF from your PC to the data set referenced by the SMPPTFIN SMP/E JCL statement.
3. Upload the module(s) from your PC to sequential file(s) defined as RECFM=U, LRECL=80.
4. Use the JCL below to move the module(s) into the LOAD LIBRARY referenced by the DDLKLIB SMP/E JCL statement.
5. RECEIVE and APPLY the downloaded PTF.

```

/* (JOB CARD)
/*-----
/* THIS TSO RECEIVE JOB WILL DIRECT THE DOWNLOADED MODULE THAT
/* RESIDES IN A SEQUENTIAL FILE WITH RECFM=U, LRECL=80 TO AN
/* EXECUTABLE LOAD LIBRARY.
/* MODIFY IT TO CONFORM TO JCL AND SITE STANDARDS.
/*
/* LITERAL      | CHANGE DESCRIPTION
/*-----
/* WRITER       | TSO USERID OF EXECUTOR OF JCL
/* IPRFX        | HIGH LEVEL QUALIFIER
/* IQUAL        | SECOND LEVEL QUALIFIER
/* SEQFILE      | SEQUENTIAL LOAD LIBRARY - DOWNLOADED MODULE
/* LOADLIB      | PDS LOAD LIBRARY - DDLKLIB
/*-----
/*
//IKJEFT01 EXEC PGM=IKJEFT01
//SYSUDUMP DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//SYSPRTPR DD SYSOUT=*
//SYSTSIN DD *
        RECEIVE USERID(WRITER ) INDATASET('IPRFX.IQUAL.SEQFILE') -
        NODISPLAY NONAMES
        DSNAME('IPRFX.IQUAL.LOADLIB')
/*

```

H.5 Confirmation

Upon successful completion of the installation execution, and thorough analysis of installation job output, it is recommended that the Endeavor Footprint Reports be executed analyzing the Load libraries populated by the installation. In addition, an SMP/E ListZone All can be executed to analyze the contents of the installed CSI for elements supplied during the process.

Appendix I. Email Notification

I.1 ESMTPTBL

Email notification within Endeavor is enabled by creating the mainframe ID and email ID table, ESMTPTBL. This table maps mainframe user IDs to email IDs or group names. When an email notification event occurs, the invoked program scans the ESMTPTBL table for an appropriate match. The program searches the table for a matching mainframe ID. If a match is found, an email addressed to the associated email ID is sent. If no match is found, no email is sent.

I.2 Email Notification Components

The following components are provided as part of the Email Notification Facility.

Component	Description
\$ESMTP	Macro that builds a table (ESMTPTBL) that maps mainframe IDs to email IDs.
ESMTPTBL	Table created by the macro \$ESMTP to map mainframe IDs to email IDs.
BC1JSMTF	JCL used to assemble and link the ESMTPTBL table.

I.3 \$ESMTP Macro

A new macro, \$ESMTP, builds the mainframe ID and email ID table, ESMTPPTBL. The macro has a section for global information and a section for each mainframe user ID.

The JCL to assemble and link this macro is located in iprfx.igual.jcllib. The resulting load module, ESMTPPTBL, must reside in the Endeavor authorized library (uprfx.igual or iprfx.igual.AUTHLIB).

The global information section includes the following fields.

Item	Description
Host Name	NJE node name of the OS/390 system where SMTP is running.
Default Domain	Domain name to be used in email addresses. You can override this field in the mainframe ID section.
Default URL	URL where Enterprise Workbench is running. You can override this field in the mainframe ID section.
SMTP Task Name	The name of the SMTP address space. The default is SMTP and is rarely subject to change.
SMTP SYSOUT CLASS	The SYSOUT CLASS associated with the SMTP task. The default is B and is rarely subject to change.

The mainframe ID/email ID section includes the following fields.

Item	Description
Host Name	NJE node name of the OS/390 system where SMTP is running.
Mainframe ID	The mainframe user ID or package approver group name. This field can contain up to 16 character.
Email ID	The portion of the email ID that precedes the @. This field size is unlimited.
Domain	The portion of the email ID that follows the @. If not specified, the global default domain is used. This parameter supports an environment where email IDs might be defined in multiple domains.
URL	The URL where Enterprise Workbench is running. If not specified, the global default URL is used. This parameter enables you to point users to different implementations of Enterprise Workbench.

I.4 Sample ESMTPTBL

```
*****
* FIRST INVOCATION - DEFINE "GLOBAL" VALUES
*-----*
      $ESMTP HOSTNAME=USILDAMA,DFTDOMAIN=ca.com, X
      DFTURL='http://endevor0/ccm1002/webpages/login.jsp'
*****
* SUBSEQUENT INVOCATIONS - DEFINE APPROVER GROUP NAME OR USERIDS
*-----*
      $ESMTP MFID=APPRV01,EMAILID=Approver1
      $ESMTP MFID=APPRV02,EMAILID=Approver2
      $ESMTP MFID=APPRV03,EMAILID=Approver3, X
      DOMAIN=caj.com,url='http://www.my.yahoo.com'
      $ESMTP MFID=APPRV04,EMAILID=Approver4
      $ESMTP MFID=APPRV05,EMAILID=Approver5
      $ESMTP MFID=APPRV06,EMAILID=Approver6
      $ESMTP MFID=PGH-MIM,EMAILID=PGH.MIM
*****
* LAST INVOCATION - END THE TABLE GENERATION
*-----*
      $ESMTP CALL=END
```

I.5 BC1JSMTF

```

/*(JOB CARD)
/*-----*
/*
/* (C) 1987,2001 COMPUTER ASSOCIATES INTERNATIONAL, INC.
/*
/* NAME: BC1JSMTF
/*
/* PURPOSE: BC1JSMTF IS USED TO ASSEMBLE AND LINK EDIT THE ENDEVOR
/*           EMAIL USERID / EMAIL ID TABLE. THE TABLE IS NAMED
/*           ESMTPTBL.
/*
/*-----*
/* STEP 1: ASSEMBLE THE ENDEVOR EMAIL MAINFRAME ID / EMAIL ID TABLE
/*-----*
//ASM      EXEC PGM=ASMA90,
//          REGION=3072K,
//          PARM='NODECK,OBJECT,NOTERM,LIST,XREF(SHORT)'
//SYSLIB   DD DISP=SHR,DSN=IPRFX.IQUAL.SOURCE
//SYSLIN   DD DSN=&&SYSLIN,
//          UNIT=TDISK,
//          SPACE=(TRK,(3,5)),
//          DISP=(NEW,PASS,DELETE),
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=3200)
//SYSPUNCH DD DUMMY
//SYSUT1   DD UNIT=TDISK,SPACE=(TRK,(5,15))
//SYSPRIN  DD SYSOUT=*
//SYSIN    DD *
ESMTPTBL TITLE 'ENDEVOR SMTP EMAIL TABLE'
*****
* (C) 1987,2001 COMPUTER ASSOCIATES INTERNATIONAL, INC.
*
* NAME:          ESMTPTBL
*
* DESCRIPTION:   ENDEVOR SMTP EMAIL ADDRESS TABLE.
*
* FUNCTION:      THIS TABLE CONTAINS MAINFRAME USER ID TO EMAIL
*                ID INFORMATION.
*
* INSTRUCTIONS:
*
* 1. TAILOR THIS TABLE AS NEEDED.
*    hname = SMTP HOST NAME
*    dftdmn = default EMAIL DOMAIN NAME
*    dfturl = URL FOR ECCM OR ENDEVOR WEBSTATION SERVER
*    usrid = TSO userid of approver or approver grp name
*    emailaddr = e-mail address of the user
*    usrname = domain name if different from default
*    usrurl = url for eccm or webstation if different
*             from the default
*
* 2. ASSEMBLE AND LINKEDIT THE TABLE USING THE MEMBER
*    BC1JSMTF CONTAINED IN THE EXAMPLE SOURCE LIBRARY.
*

```

```

* ASSEMBLY RETURN CODES: *
* 0 - NORMAL *
* 12 - PARAMETER ERROR, TABLE SHOULD NOT BE LINKED. *
* CONTACT ENDEVOR SUPPORT. *
* *
*****
* FIRST INVOCATION - DEFINE "GLOBAL" VALUES
*-----*
$ESMTP HOSTNAME=hname,DFTDOMAIN=dftdmn, X
DFTURL='http://defturl'
*****
* SUBSEQUENT INVOCATIONS - DEFINE APPROVER GROUP NAME OR USERIDS
*-----*
$ESMTP MFID=usrid,EMAILID=emailaddr
$ESMTP MFID=usrid,EMAILID=emailaddr, X
DOMAIN=usrdname,URL='http://usrurl'
*****
* LAST INVOCATION - END THE TABLE GENERATION
*-----*
$ESMTP CALL=END

//*-----*
//* STEP 2: LINK EDIT THE TABLE. *
//* THE SYSLMOD DD STATEMENT DEFINES THE LIBRARY FOR ESMTPTBL. THIS *
//* STEP PLACES THE ESMTPTBL LOAD MODULE INTO THE USER AUTHLIB DATA *
//* SET. *
//*-----*
//LINK EXEC PGM=IEWL,
// REGION=2048K,
// PARM='LIST,NCAL,XREF,LET,RENT,REUS',
// COND=(0,NE)
//SYSPRINT DD SYSOUT=*
//SYSLIN DD DSN=&&SYSLIN,
// DISP=(OLD,DELETE,DELETE)
//SYSLMOD DD DISP=SHR,DSN=UPRFX.UQUAL.AUTHLIB(ESMTPTBL)
//SYSUT1 DD UNIT=TDISK,SPACE=(TRK,(5,15))

```


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