

# **AllFusion™ Endeavor® Change Manager**

## **Release Summary**

**4.0 SP1**



Computer Associates™

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# New Release 4.0 Features

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## What's New in Release 4.0?

Release 4.0 of AllFusion Endeavor Change Manager (referred to simply as Endeavor) incorporates many new features to enhance your use of the product. Each new feature is described in this *Release Summary*, which is intended to serve as a guide to what is included in the release and to provide a single point of reference for new release functions. The features are also described in the base Endeavor documents, where applicable. This document should provide you with enough information to understand how to use and to implement each new feature.

The following list summarizes new Release 4.0 features. Some features require more in-depth discussion and explanation. When this is the case, the list includes a reference to the appropriate section of the document where more information is included.

**UNIX System Services/Hierarchical File System (UFS/HFS) Support:** Endeavor now supports long path and file names. You can define path names of up to 768 characters, including upper- and lower-case characters and special characters as noted later in this document in [Syntax for Long File and Path Names](#). Path names are valid for base, source-output, and include libraries. The actions that support long path names include ADD, UPDATE, and RETRIEVE.

All element actions support long file names through Enterprise Workbench and the Application Programming Interface (API). The syntax for element names is described later in this document in "[Syntax for Long File and Path Names](#)."

**Site Symbolics:** To implement support of long path names, Endeavor now integrates the use of site-defined symbolics that can be referenced within dataset name specifications for type definitions on base, delta, source output, include libraries, and in processors. 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 C1DEFLT5 table with the name of the site-defined symbolics table. These actions are described later in this document in the section, "[Site-Defined Symbolics](#)."

**Support for HFS JCL Parameters:** The following JCL parameters can now be specified in a processor:

- DSNTYPE
- PATH
- PATHDISP
- PATHMODE
- PATHOPTS

These parameters are fully documented in the IBM JCL documentation.

You can also use the DSNTYPE to create a PDSE data set.

**Element Registration:** The element registration feature enables you to choose whether you want to restrict the use of the same element name at the subsystem or Processor Group level. Endeavor provides two options that govern duplicate element names - one at the system and subsystem level and the other at the Processor Group level. You can implement one or both of these options. For information on this feature, see the section, "[Element Registration](#)," later in this document.

**Element Catalog:** Endeavor incorporates the use of an Element Catalog file to support long element names and to boost performance by reducing the volume of I/O operations. Only one Element catalog is allowed and required per site. It is identified to Endeavor via the ELMCATL field in the TYPE=MAIN section of the C1DEFLT5 Table.

**Automated Configuration Manager Query (ACMQ) Enhancements:** The ACMQ Query pop-up window has been enhanced to be more intuitive, to minimize data entry, and to be more consistent with the Endeavor ISPF interface. Other ACMQ enhancements include:

- The WHERE USED/COMPONENT USED query option has been enhanced to provide much faster search results.
- The BUILD SCL option now supports the COPYBACK option of the BUILD GENERATE action.
- The ACMQ where used report has been enhanced to include *indirect references*; that is, elements that are likely to use the object of your query.

See "[ACMQ Enhancements](#)" later in this document for more information.

**Quick Edit Selection List:** The Quick Edit Selection List is now automatically updated to reflect element changes occurring as a result of EDIT, GENERATE, MOVE, etc actions.

**Email Notification:** Endeavor enables you to generate email notification to users when their attention is required on a package for which they are a designated approver. Users can be notified when they have a package to approve and when their element signout is overridden. See the section, "[Email Notification](#)," later in this document for more information.

**AllFusion Change Manager Enterprise Workbench (Enterprise Workbench):** Enterprise Workstation, the browser-based front-end to Endeavor and AllFusion Harvest Change Manager, enables you to perform actions on elements with long names or mixed case names. You can also perform actions on traditionally named elements as well as package actions through this new interface. See the section, "[Enterprise Workbench](#)," later in this document for more information.

**Improved Masking:** Endeavor's name masking function now supports the use of both the asterisk (\*) as a wildcard character and the percent sign (%) as a placeholder character. For more information on this feature, see the section, "[Improved Masking](#)," later in this document.

**New ISPF Selection List Options:** The following three new options have been added to the ISPF selection list. For additional information, refer to the *User Guide*.

- **EONLY:** Allows you to filter any selection list in Endeavor by either including or excluding rows that match the column filter value that you specify. Before using EONLY, you must build a select list from one of Endeavor's scrollable list panels. To exclude for all rows beginning with a certain column value, type **EONLY columnname value** on the command line, where *columnname* is the name of the column you want to exclude, and *value* is the value that every row must have.

Conversely, to exclude all rows **not** beginning with a certain column value, type **EONLY -columnname value** (note the minus sign), where *columnname* is the name of the column you want to sort by, and *value* is the value that no row can have.

- **EPRINT:** Enables you to print a selection list by issuing the EPRINT command. The command sends the output to an ISPF listing data set.
- **ENCOPTBL Option:** The option, ENHOPT NO\_SYS\_SBS\_SELECTION\_LIST=ON (OFF), enables the processing of all element selection lists to *always* bypass both the System and Subsystem lists and display a consolidated element selection list.

**Processor Group Symbolic in Type Definition DSNAMES:** The processor group symbolic, &C1PRGRP, can now be used on the element type definition as part of the source output library or include library data set name specification. It cannot be used as part of the base or delta library data set name.

**CAST and INSPECT Synchronization:** The CAST and INSPECT commands now perform the same checks when validating a package for execution.

**Additional API Support:** The API Phase III now supports all package and element actions. A new started task, NDVRSAPI, enables the API Phase III to function as a specialized Endeavor API server to support the Enterprise Workbench interface.

**CA-7 Integration:** A new Endeavor package function enables you to schedule package jobs for execution at a later time. For more information on this feature, see the section "[CA-7 Interface for Package Execution](#)," later in this document.

**Component Dependency Information Enhancements:** Informational messages (or Quick-Edit note line) indicate whether an element is referenced by other elements. This optional feature is activated in the ENCOPTBL module. For more information on this feature, see the section, "[Enhanced Component Dependency Information](#)," later in this document.

**Notify Utility:** The Notify Utility (BC1PNTFY) has been enhanced to support email notification. For more information on this feature, see the *Utilities Guide*.

**Site Options Report:** A new site options report enables you to produce a listing of all your Endeavor options settings, including C1DEFLT5, ESYMBOLS, ENCOPTBL, ENDICNFG, BC1TNEQU, and active Endeavor User exits. For more information about this feature, see the section "[Site Options Report](#)" later in this document.

**Catalog Rename Utility:** The Endeavor MCF Catalog Rename Utility was created to allow you to change the catalog name in the MCF's stage record. This utility should be run after you have created a new Catalog and have defined it to the C1DEFLT5 table. For more information about this feature, see the section "[Endeavor MCF Catalog Rename Utility](#)" later in this document.

**CONCALL:** CONCALL serves as a pass-through program that can be invoked by NDVRC1 and then call a user-designated program named in the EXEC PARM. In addition, CONCALL can invoke any program from a specific library. From CONCALL you can invoke user programs from non-authorized libraries. Programs that are invoked directly from NDVRC1 must reside in an authorized library. This enhancement enables you to bypass the STEPLIB (or LINKLST) residency requirement for the program specified in the execution parameter. As a result of this enhancement, CONCALL can be used to invoke any program from a specified library. It can also be used in conjunction with the NDVRC1 server program to invoke batch programs from a non-authorized library:

```
//STEP1 EXEC PGM=NDVRC1,PARM='CONCALL,DDN:MYLOAD,APIPGM, parameter data'
```

## Element Registration

The element registration feature enables you to choose whether you want to allow the use of duplicate element names. Duplicate element names can be problematic if both elements are written to the same library. However, there are situations in which they are desirable – for example, when the same element name is used for a program as well as its JCL.

To account for both situations, Endeavor provides two options that enable you to allow or disallow duplicate element names. One option enables you to control the use of duplicate element names at the system and subsystem level. The other option enables you to control the use of duplicate element names at the processor group level. You can implement one or both of these options as described below.

### Controlling Duplicate Element Names at the System and Subsystem Level

The element registration feature enables you to control whether duplicate element names are allowed across subsystems within the same system. During action processing, when the system associated with the element is validated, Endeavor checks the element registration option to see if duplicate element names are allowed. When element registration is enabled, if Endeavor finds two elements that have the same name, and which exist in different subsystems of the same system, Endeavor issues a message and optionally terminates action processing. The System Definition panel parameter **DUPLICATE ELEMENT NAME CHECK** governs the status of element registration at the system and subsystem level. To activate the checking of duplicate names at the system and subsystem level, enter a Y in this field, which is highlighted in the example below:

```
----- SYSTEM DEFINITION -----
COMMAND ==>

CURRENT ENV: SMPLTEST      NEXT ENV: SMPLPROD
SYSTEM: ADMIN              NEXT SYSTEM ==> ADMIN
SYSTEM TITLE ==> ENDEVOR ADMINISTRATION APPLICATIONS
UPDATED:                   15OCT_1 14:36 BY USER_7

GENERAL OPTIONS:
COMMENT ==> Y (Y/N)        CCID ==> Y (Y/N) REQ ELM JUMP ACK ==> Y (Y/N)
ELEMENT REGISTRATION OPTIONS:
DUPLICATE ELEMENT NAME CHECK ==> Y (Y/N) MSG SEVERITY LVL ==> E (W/C/E)
DUPLICATE PROC O/P TYPE CHECK ==> N (Y/N) MSG SEVERITY LVL ==> (W/C/E)

SIGN-IN/SIGN-OUT OPTIONS:
ACTIVATE OPTION ==> Y (Y/N)
VALIDATE DATA SET ==> N (Y/N)

PROCESSOR TRANSLATION OUTPUT LIBRARIES:
STAGE 1 LOAD LIBRARY ==> CA.ENDEVOR.SMPLEMER.PRCLOAD
STAGE 1 LIST LIBRARY ==> CA.ENDEVOR.SMPLEMER.PRCSLIST
STAGE 2 LOAD LIBRARY ==> CA.ENDEVOR.SMPLPROD.PRCLOAD
STAGE 2 LIST LIBRARY ==> CA.ENDEVOR.SMPLPROD.PRCSLIST
-----
```

Once you have activated element registration at the system and subsystem level, you must indicate the action you want Endeavor to take upon encountering two identically named elements. This is done by setting the MSG SEVERITY LVL parameter next to the DUPLICATE ELEMENT NAME CHECK parameter in the System Definition panel, shown in the previous example. You can specify the following parameter values:

<b>Value</b>	<b>Description</b>
E (Error)	The same element name exists within another subsystem under the same system. The action is terminated, and an error message is issued.
C (Caution)	The same element name exists within another subsystem under the same system. The action is performed, and a caution message is issued.
W (Warning)	The same element name exists within another subsystem under the same system. The action is performed, and a warning message is issued.

## Controlling Duplicate Element Names at the Processor Group Level

The element registration feature also enables you to control whether elements that have the same name and processor output type can exist within the same system. Through the use of the new processor output type field, described later in this section, you have the ability to classify the type of output produced by a processor group.

When element registration is enabled at the processor group level, Endeavor performs an additional check during action processing; namely, if an element that already exists within the system has the same processor output type as the element being acted upon, Endeavor issues a message and optionally terminates action processing.

To activate this option, you need to set the appropriate parameter in the System Definition panel. Then, you must define the output type for the processor group. Both tasks are described below.

The System Definition panel parameter DUPLICATE PROC O/P TYPE CHECK governs the status of element registration at the processor group level. To activate the checking of duplicate processor output types, enter a Y in this field, which is highlighted in the example below:

```

----- SYSTEM DEFINITION -----
COMMAND ==>

CURRENT ENV: SMPLTEST          NEXT ENV: SMPLPROD
SYSTEM: ADMIN                  NEXT SYSTEM ==> ADMIN
SYSTEM TITLE ==> ENDEVOR ADMINISTRATION APPLICATIONS
UPDATED: 15OCT_1 14:36 BY USER__7

GENERAL OPTIONS:
COMMENT ==> Y (Y/N) CCID ==> Y (Y/N) REQ ELM JUMP ACK ==> Y (Y/N)
ELEMENT REGISTRATION OPTIONS:
  DUPLICATE ELEMENT NAME CHECK ==> N (Y/N)      MSG SEVERITY LVL ==> (W/C/E)
  DUPLICATE PROC O/P TYPE CHECK ==> Y (Y/N)      MSG SEVERITY LVL ==> W (W/C/E)

SIGN-IN/SIGN-OUT OPTIONS:
ACTIVATE OPTION ==> Y (Y/N)
VALIDATE DATA SET ==> N (Y/N)

PROCESSOR TRANSLATION OUTPUT LIBRARIES:
STAGE 1 LOAD LIBRARY ==> CA.ENDEVOR.SMPLEMER.PRCLOAD
STAGE 1 LIST LIBRARY ==> CA.ENDEVOR.SMPLEMER.PRCSLIST
STAGE 2 LOAD LIBRARY ==> CA.ENDEVOR.SMPLPROD.PRCLOAD
STAGE 2 LIST LIBRARY ==> CA.ENDEVOR.SMPLPROD.PRCSLIST
-----

```

Once you have activated element registration at the processor group level, you must indicate the action you want Endeavor to take upon encountering two elements in the same system that have the same processor output type. This is done by setting the MSG SEVERITY LVL parameter located next to the DUPLICATE PROC O/P TYPE CHECK parameter, shown in the previous example. You can specify the following parameter values:

Value	Description
E (Error)	The same element name and same output type exist within the same system and different type. The action is terminated, and an error message is issued.
C (Caution)	The same element name and same output type exist within the same system and different type. The action is performed, and a caution message is issued.
W (Warning)	The element name already exists within the same system and has the same processor output type associated with it. The action is performed, and a warning message is issued.

After you have enabled element registration at the processor group level and selected the message severity level, you need to define the output type. The default output type is a concatenation of the element type and processor group names. Using the default value will ensure that there are no registration conflicts.

Alternately, you can define the output type using the Processor Group Definition panel. The output type field, PROCESSOR O/P TYPE, supports up to 16 characters.

In the following example, we use LOADMODULE as the output type for the generate processor. The output type is copied to the element catalog record segment when the element is added or updated.

```

DISPLAY ----- PROCESSOR GROUP DEFINITION -----
COMMAND ==>

CURRENT ENV: I4_      STAGE ID: 1      SYSTEM: NDVRMVS      TYPE: ASMPGM
NEXT ENV: I4_        STAGE ID: 2      SYSTEM: NDVRMVS      TYPE: ASMPGM
PROCESSOR GROUP: ASMIRUAL      PROCESSOR O/P TYPE: LOADMODULE
DESCRIPTION: INTERNAL - ASSEM REUSABLE AUTHORIZED
NEXT PRCS GROUP: ASMIRUAL

UPDATED: 13MAR_1 11:_6 BY USER__1

----- OUTPUT MANAGEMENT INFORMATION -----

PROCESSOR TO USE FOR MOVE ACTION: G (M/G)
PROCESSOR TO USE FOR TRANSFER ACTION: G (M/G)
S - Browse Symbolics                L - List Processor

GENERATE PROCESSOR:   GASM                FOREGROUND EXECUTION
DELETE PROCESSOR:    DPDSMBR              :      Y (Y/N)
MOVE PROCESSOR:      *NOPROC*             :      Y (Y/N)

```

You can implement the processor group option for selected inventory. For the inventory that should not be checked, leave the output value as it is originally set; that is, a concatenation of the element type and processor group names. Using the default value will ensure that there are no registration conflicts.

## 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.

## 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
```

When referring to the symbolic, you must include an ampersand (&) before the #symbolname.

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 BC1JSYMT to create the site-defined symbolics table.

## 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
PKGCVL=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.... SUPPORT 4.0 BETA/2
----- Function Controls -----
Site ID..... 0 Access Table..... BC1TNEQU - Options -
Release..... B4000C SMF Record Number. 000 ACM..... Y
Environments..... 2 Library System... PV QuickEdit Y
Userid Start..... 1 Library Program... ELINK... N
Userid Length.... 7 VIO Unit..... SYSDA ESI..... Y
Batch ID..... 0 Work Unit..... SYSDA INFO..... N
SPFEDIT QNAME.... SPFEDIT Work Volser..... LIBENV... Y
SYSIEWL QNAME.... SYSIEWLP Lines per Page... 60 NETMAN... N
Authorized Tables. REQUIRED MODHLI..... PDM..... Y
Gen in place/SO.. N Signout on fetch.. Y PROC..... Y
CA-LSERV JRNL SBS. ELINK XLTE TBL...
PITR Journal Grp.. Mixed Format..... CCID COMMENT DESCRIPTION
SYMBOLICS Table.. ESYMBOLS
(Press Enter for Next Panel)
    
```

The following display shows site symbolics defined in the ESYMBOLS table.

```

DISPLAY ----- SYMBOL TABLE: ESYMBOLS ----- Row 1 of 30
COMMAND ==>>                                     SCROLL ==>> PAGE

SYMBOL      VALUE
-----
#AVWARD     THIS ag HOWARD
#BSSARD     THIS IS HOWARD
#FAWARD     THISaIS HOWARD
#HFSBSB1    /u/users/endeavor/BRSTD/basebr1s1/
#HFSBSB3    /u/users/endeavor/BRSTD/basebr3/
#HFSBSB4    /u/users/endeavor/BRSTD/basebr4/
#HFSFHBB    /u/users/endeavor/bucfr02/bases1
#HFSFHBB    /u/users/endeavor/bucfr02/bases2
#HFSJD0B    /u/users/endeavor/oleju01/bases1
#HFSJD0B    /u/users/endeavor/oleju01/bases2
#HFS04BA    /U/users/ENDVOR/DEV1BASE
#HFS31BA    /u/users/endeavor/base
#HOFAAD     THIS Ia HOWARD
#HOWAAD     THIS IS HOWARD
#HOWARD     THIS IS HOWARD
#HOWZRD     THISaIafHOWARD
#HO15RD     THig IS HOWARD
#I40DELTA   BST. I40.DELTA
#KODAAD     THIS IS HOWARD

```

## ACMQ Enhancements

Beginning with Release 4.0, Automated Configuration Manager Query (ACMQ) is no longer optional. The following ACMQ enhancements have been implemented:

- The ACMQ pop-up window has been enhanced and streamlined to be more intuitive, to minimize data entry, and to be more consistent with the Endeavor ISPF interface.
- The WHERE USED/COMPONENT USED query option has been enhanced to provide much faster search results.
- The BUILD SCL option now supports the COPYBACK option of the BUILD GENERATE action. Previous releases of ACMQ could only construct GENERATE syntax for every occurrence of a “using” element (test, QA, prod). As a result, the user was forced to manually edit the GENERATE SCL to remove unwanted actions.
- The Endeavor LIST action will invoke ACMQ to satisfy simple, component name, inventory location, “WHERE [INPUT | OUTPUT] components criteria. Additional criteria such as CCID or historical dependencies (“ALL” parameter) require Endeavor to search to its base / delta libraries to perform the search. Note that Endeavor will default to using ACMQ whenever possible to perform component-related list processing.

**Note:** The Endeavor Alternate ID can now be used to secure the ACMQ VSAM linear data sets. An Endeavor-supplied SAF exit must be installed to activate this feature.

## ACMQ Panels

ACMQ is composed of three full-size panels:

- ACM Query: Accommodates all online query functions.
- ACMQ SCL Creation Options: Enables the user to specify GENERATE-related options.
- Endeavor ACM JCL Statements: Accepts batch-related user information (JOB CARD).

## Invoking ACMQ

ACMQ can be invoked by entering AC on the command line of any Endeavor panel. It can also be invoked by specifying TSO ACMQ on any ISPF panel. ACMQ is also provided as an option on the User Panel (option U).

## ACM Query Panel

The ACM Query panel, shown below, is the primary panel. It supports all online query functions.

```

----- ACM QUERY -----
OPTION  ==> _____
BLANK - Perform Element query          C - Perform Comment query
M - Perform Member query              O - Perform Object query

ELEMENT/MEMBER ==> CI01DSCT

ELEMENT Query Information:      Query Options:
ENVIRONMENT ==> P40             Where used/Components used ==> WHE (WHE/COM)
SYSTEM      ==> NDVRB40        Foreground/Batch Mode ==> F (F/B)
SUBSYSTEM   ==> *              Create GENERATE SCL ==> Y (Y/N)
TYPE        ==> *
STAGE NBR   ==> 2

MEMBER Query Information:
DSNAME      ==> *

Comment/Object Query Information:
*
```

ACM Query fields include the following:

- **Option:** Determines the type of query to be performed based on the following values:
  - **BLANK:** Perform an ELEMENT query using the information specified in the ELEMENT/MEMBER and ELEMENT Query Information fields.
  - **M:** Perform a MEMBER query using the information specified in the ELEMENT/MEMBER and MEMBEER Query Information fields.

- **C:** Perform a COMMENT query using the information specified in the Comment/Object Query Information field.
- **O:** Perform an OBJECT query using the information specified in the Comment/Object Query Information field.
- **Element/Member:** The name of the element or member object of the query
- **Element Query Information (ENV, SYSTEM, SUBSYSTEM, TYPE, STG NBR):** Fields used to further qualify the element query object.
- **MEMBER Query Information (DSNAME):** The DSNAME used to further qualify the member query object.
- **Comment/Object Query Information:** The Comment/Object text string to be used as the object of the query
- **Query Options:** Determines the type of query to be performed based on the following values:
  - **Where Used/Components Used:** Directs ACMQ to provide where-used or components-used information. Specify “WHE” for where-used information or “COM” for components-used information.
  - **Foreground/Batch Mode:** Directs ACMQ either to submit a JOB for batch processing or to perform the query processing in foreground mode. (If batch mode is specified, a secondary panel is displayed to allow entry of a JOBCARD.)
  - **Create Generate SCL:** Directs ACMQ to create a standard Where- Used report or Endeavor GENERATE SCL syntax. (This option requires “WHE” to be specified for the Where-Used/Components-Used option. (A secondary panel is displayed to allow entry of GENERATE action-related options.)

## ACMQ SCL Creation Options Panel

ACMQ SCL Creation Options enables users to specify GENERATE-related options.

```
----- ACMQ SCL creation options -----
Generate from location :
Environment . . . . P40
Stage Id . . . . _ or Stage Number . . . . 2
System . . . . . Subsystem . . . . . Type . . . . .

Action Options:
CCID..... LONG NAMES
Comment..... CANNOT CHG TYPE ACROSS MAP
Copyback..... Y (Y/N) Search..... Y (Y/N)

Filter References ==> N (Y/N)
Exclude Related Ref's ==> N (Y/N)

REQUEST DATA SET:
PROJECT ==> MCCPE01
GROUP ==> PGM
TYPE ==> SCL
MEMBER ==> ACMQGEN

OTHER PARTITIONED OR SEQUENTIAL DATA SET:
DSNAME ==> _____
```

These options result in the following GENERATE actions:

```

File Edit Edit_Settings Menu Utilities Compilers Test Help

EDIT      MCCPE01.PGM.SCL(ACMQGEN) - 01.00          Columns 00001 00072
Command ==>                                     Scroll ==> HALF
***** ***** Top of Data *****
==MSG> *-----*
==MSG> * SET BUILD ACTION GENERATE *
==MSG> *      CCID 'LONG NAMES' *
==MSG> *      COMMENT 'CANNOT CHG T' *
==MSG> *      FROM ENVIRONMENT P40 *
==MSG> *      STAGE NUMBER 2 *
==MSG> *      COPYBACK SEARCH *
==MSG> *
==MSG> * LIST USING COMPONENTS FOR *
==MSG> *      ELEMENT: CIO1DSCT ENVIRONMENT : P40 *
==MSG> *      SYSTEM : NDVRB40 SUBSYSTEM : *
==MSG> *      TYPE : * STAGE NUMBER: 2 *
==MSG> *-----*
000001 SET OPTIONS CCID 'LONG NAMES'
000002      COMMENT 'CANNOT CHG TYPE ACROSS MAP'
000003      COPYBACK SEARCH.
000004 SET FROM ENVIRONMENT 'P40'
000005      STAGE NUMBER '2'.
000006 GENERATE ELEMENT 'CIO1DSCT'
000007 FROM SYSTEM 'NDVRB40'
000008      SUBSYSTEM 'BASE'
000009      TYPE 'ASMMAC'.
000010 GENERATE ELEMENT 'ACMQAPI1'
000011 FROM SYSTEM 'NDVRB40'
000012      SUBSYSTEM 'BASE'
000013      TYPE 'ASMPGM'.
000014 GENERATE ELEMENT 'ACMQAPI2'
000015 FROM SYSTEM 'NDVRB40'
000016      SUBSYSTEM 'BASE'
000017      TYPE 'ASMPGM'.

```

ACMQ SCL Creation Options fields include the following:

- **Generate from location (Y/N):** Use these fields to specify the target Endeavor location for the GENERATE action. Environment and Stage are required entries. Other fields are optional.
- **Action Options:** The specified values for the option fields will be used when creating the Endeavor GENERATE SCL syntax. (Refer to the GENERATE Action, as documented in the SCL guide for more information regarding these options.)

## Endevor ACM JCL Statements Panel

The Endevor ACM JCL Statements panel accepts batch-related user information (JOB CARD).

```

----- Endeavor ACM JCL Statements -----
Enter 1-4 lines of Jobcard
//JOBNAME JOB (ACCOUNT)
//*
//*
//*
Press ENTER to Continue

```

## Indirect References

In addition to reporting on the elements that have a direct reference to the object of your search, ACMQ's "where-used" report also returns elements that *likely* use the object of your query – that is, footprinted items whose name and type are exactly the same as a previously found ACMQ item, but whose Endeavor location (environment, stage, system, and subsystem) is different.

For example, suppose you perform a "where-used" query for an element named COPYA. Assume further that COPYA is an input component of an element named PGMB, type COBOL, which in turn is an input component of an element named PGMC, type LNK. All three elements exist in the same environment (ENV1) and stage (STG 1). The output for such a query would look as follows:

LVL	ELEMENT	TYPE	ENVIRON	SYTEM	SUBSYS	STG
1	COPYA	CPY	ENV1	..	..	1
2	PGMB	COBOL	ENV1	..	..	1
3	PGMC	LNK	ENV1	..	..	1

Now suppose that all three of the elements listed in the report above are moved to the next stage (STG 2) using a MOVE processor, meaning that the component list data has been copied, but not rebuilt by a GENERATE processor. In this case, a "where-used" query on COPYA would result in the following output:

LVL	ELEMENT	TYPE	ENVIRON	SYTEM	SUBSYS	STG
1	COPYA	CPY	ENV1	..	..	1
2	PGMB	COBOL	ENV1	..	..	2
2*	PGMB	COBOL	ENV1	..	..	1
3*	PGMC	LNK	ENV1	..	..	2

The first of the two elements that are marked with an asterisk ("\*") has the same name and type as an element that is known to contain direct references to COPYA. However, since this element has been moved to another Endeavor location, without being rebuilt, ACMQ cannot be sure that it still contains references to COPYA. Therefore, ACMQ treats this element as having only an indirect reference to the object of the query. In the report output, these "indirect references" are marked with an asterisk and are displayed after the elements that definitely contain direct references to your search.

Note also that elements that contain a reference to an indirect reference are themselves considered indirect references, unless they also contain a direct reference to your search, or to an element that directly references your search.

The following notes about the report shown above provide additional explanations:

- COPYA has no component list. Thus, when it is moved to the next stage, no component list changes take place, nor do any ACMQ changes take place. Accordingly, ACMQ continues to reference it in ENV1 / STG 1.
- When PGMB COBOL is moved to the next stage, its component list is copied and becomes the component list of PGMB COBOL in STG 2. However, since no changes have been made to the list (other than copying it), the reference in PGMB COBOL in STG 2 to COPYA still remains. ACMQ then determines that PGMB COBOL in ENV1 / STG 1 is an indirect reference because it has the same element name and type as PGMB COBOL in ENV1 / STG 2.
- PGMC LNK in ENV1 / STG 1 had a reference to PGMB COBOL in ENV1 / STG 1. When it was moved, it underwent the same changes as PGMB COBOL; thus, PGMC LNK in ENV1 / STG 2 continues to reference PGMB COBOL in ENV1 / STG 1. Since PGMC LNK refers to an indirect reference (PGMB COBOL in ENV1 / STG 1), ACMQ considers it to be an indirect reference.

## Enhanced Component Dependency Information

Endeavor element action processing and Quick-Edit have been enhanced to invoke the ACMQ query facility to report on existing dependencies on the element modified by the action or Quick-Edit. After Endeavor element action processing is completed, Endeavor invokes ACMQ to determine if the element is referenced by other elements. It then issues a message that appears in the execution message log, indicating the result of the query.

Similarly, Quick-Edit, invokes ACMQ to determine element dependencies when it displays the initial text edit panel. It communicates the results of the query via ISPF “note” lines. (The additional messages appear after the “fetched from location” information note lines, if the element is being fetched to the edit inventory location.)

## Improved Masking

Endevor’s name masking capabilities support the use of both the asterisk (\*) as a wildcard character and the percent sign (%) as a placeholder character. You can use the name masks on ISPF panels, in SCL, report syntax, and API requests.

Use the asterisk to specify all names, or all names beginning with a particular character string. Enter the asterisk as the last or only character in any of the eligible fields, including element name, system name, subsystem name, type name, and stage. Multiple asterisks are not allowed.

Use the percent sign as a substitute for a single character in a name. For example, if you typed **COPY%** as the element name, Endevor would locate all elements with 5 character names beginning with COPY.

You can use:

- Multiple instances of the % character
- Placeholder (%) and wildcard (\*) characters together.
- The placeholder character anywhere you can use the wildcard character

Refer to the appropriate Endevor document for more specific information on using name masks and wildcards in SCL, reports, ISPF panels, and API calls.

## Syntax for Long File and Path Names

The following considerations apply to the Path clause for ADD, UPDATE, COPY and RETRIEVE statements. For more detailed information about long file names, see the *Administration Guide*.

- The PATH clause is mutually exclusive with the FILE or Data Set clauses.
- The HFSfile clause is mutually exclusive with a Member clause.
- The path name must begin with a “/” and be terminated with a “/” and cannot be followed by the file name.
- The HFS file name can be up to 255 bytes in length.

- The path name can be up to 768 bytes in length.

## HFSFile Syntax Rules

A filename can be up to 255 characters long. To be portable, the filename should use only the characters in the POSIX portable filename character set:

- Uppercase or lowercase A to Z
- Numbers 0 to 9
- Period (.)
- Underscore (\_)
- Hyphen (-)

Do not include any nulls or slash characters in a filename.

Doublebyte characters are not supported in a filename and are treated as singlebyte data. *Using doublebyte characters in a filename may cause problems.* For instance, if you use a doublebyte character in which one of the bytes is a . (dot) or / (slash), the file system treats this as a special delimiter in the pathname.

The shells are case-sensitive, and distinguish characters as either uppercase or lowercase. Therefore, **FILE1** is not the same as **file1**.

A filename can include a suffix, or *extension*, that indicates its file type. An extension consists of a period (.) and several characters. For example, files that are C code could have the extension **.c**, as in the filename **dbmod3.c**. Having groups of files with identical suffixes makes it easier to run commands against many files at once.

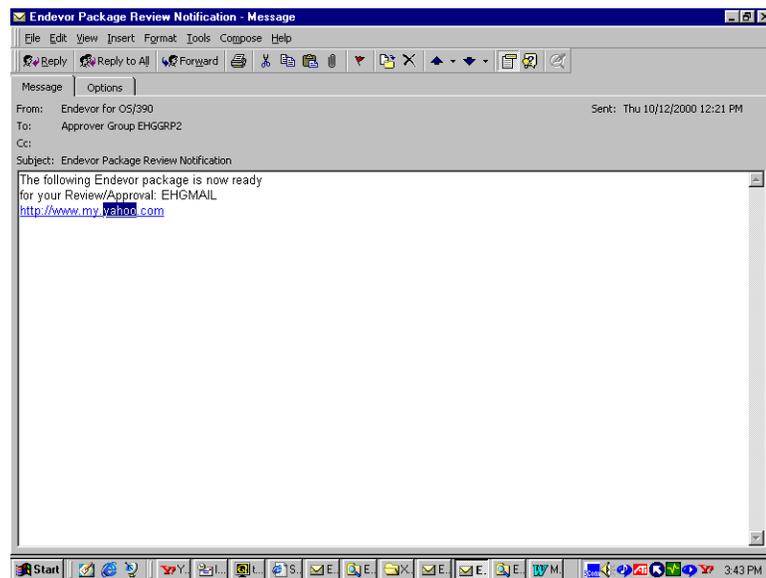
## Path Name Syntax Rules

The path name value can be up to 768 characters long. It can contain only the following characters:

- Uppercase letters
- Lowercase letters
- Numbers
- National characters
- Slash (/)
- Plus (+)
- Hyphen (-)
- Period (.)



- When element signout is overridden, the program searches the table for the user ID that the element is signed out to. If a match is found, an email is addressed to the signout user.
- When a package that requires approval is successfully cast, the program searches for a match on approver groups associated with the package. If no match is found on approver groups, then the program scans for a match on individual approver names. If a match is found, an email (similar to the sample shown below) is addressed to the email ID associated with the approver group or approver. By including the URL of [Enterprise Workbench](#) in the email, the recipient can access the Login Page with a single click.



**Note:** If an approver is a member of multiple approver groups, only one email notification is sent to that approver. To prevent multiple emails from being sent to the same recipient, Endevor builds a list of up to 255 approver IDs. If there are more than 255 approvers associated with a package, it is possible that multiple emails may be sent.

## Email Notification Components

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

Component	Description
XIT7MAIL	Email Notification exit program
\$ESMTP	Macro that builds a table (ESMTP_TBL) that maps mainframe IDs to email IDs

Component	Description
ESMTPTBL	Table created by the macro \$ESMTP to map mainframe IDs to email IDs
BC1JSMTP	JCL used to assemble and link edit the ESMTPTBL table.

## XIT7MAIL

The package exit, XIT7MAIL, is provided as a source member in Endeavor's source library, iprfx.iqual.SOURCE. JCL member, BC1JASMX, found in iprfx.iqual.JCLLIB can be used to assemble it.

To activate this option, add XIT7MAIL to user exits table, C1UEXITS (exit #7).

## \$ESMTP Macro

A new macro, \$ESMTP, builds the mainframe ID/email ID table, ESMTPTBL. 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.iqual.jcllib. The resulting load module, ESMTPTBL, must reside in uprfx.uqual.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 be as long as 16 characters.
Email ID	The portion of the email ID that proceeds the "@".
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.

## Sample ESMTPBL

```
*****
* 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=cai.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
```

## BC1JSMTP

```

/** (JOB CARD)
/**-----*
/**
/** (C) 1987,2001 COMPUTER ASSOCIATES INTERNATIONAL, INC.
/**
/** NAME: BC1JSMTP
/**
/** PURPOSE: BC1JSMTP 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))
//SYSPRINT 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
*    BC1JSMTP 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,
          DFTURL='http://defturl'

```

```

*****
* SUBSEQUENT INVOCATIONS - DEFINE APPROVER GROUP NAME OR USERIDS
*-----*
      $ESMTP MFID=usrid,EMAILID=emailaddr
      $ESMTP MFID=usrid,EMAILID=emailaddr,                                X
      DOMAIN=usrname,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))

```

## AllFusion Change Manager Enterprise Workbench

AllFusion Change Manager Enterprise Workbench (or simply Enterprise Workbench) uses the intuitive environment of the Web to provide a new way to access Endeavor through the internet/intranet. This is especially useful for non-technical users who may not be familiar with the Endeavor ISPF interface. It also enables users to bypass the TSO logon without bypassing associated security. Endeavor users can quickly and easily access information about their mainframe development projects from anywhere using a Web browser.

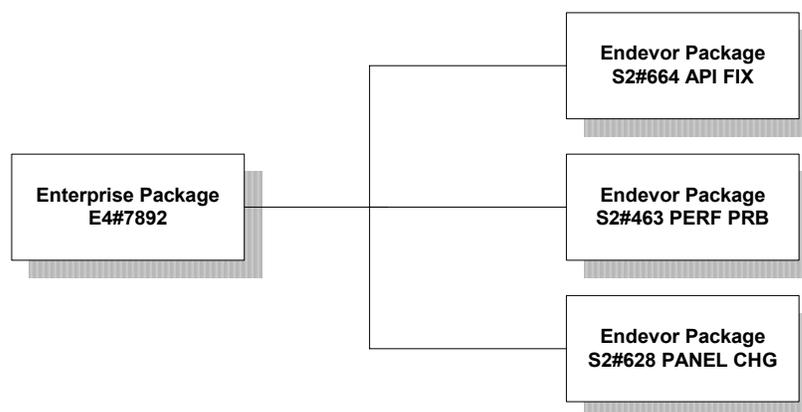
From the Enterprise Workbench Home Page, Endeavor users can quickly see any packages that may be awaiting their approval, any Enterprise Packages they are tracking, as well as the specific projects they are working on. The Home Page is customizable, allowing Endeavor users to choose the projects and Enterprise Packages that are displayed.

## Simplified Approval Processing

Enterprise Workbench provides convenient, easy-to-use approval facilities. Through the email notification feature (described earlier in this document in the section “[Email Notification](#)”), you can notify selected approvers when a package is ready for review. You can also include a link to the Enterprise Workbench Login Page. By single-clicking on the link, the user automatically accesses the Login Page. After login, the user’s Home Page opens, displaying the packages awaiting review. With just a few additional mouse clicks, the approval process is complete.

## Enterprise Package Processing

Enterprise Workbench supports the concept of a ‘*package hierarchy*’, through Enterprise Package processing. Enterprise Packages enable you to group related change packages and control the order in which they are processed. As illustrated in the diagram below, an *Enterprise Package* is a ‘super’ package containing multiple Endeavor Packages.



By combining multiple packages into a single Enterprise Package, you can associate related change packages and manage them as a single unit to ensure that they are synchronized appropriately throughout their life cycle.

Through Enterprise Workbench you can exercise the following Enterprise Package functions:

- Create
- Execute
- Backout
- Backin
- Reset
- Display

- Cancel
- Delete

Since the Enterprise Workbench Home page is customizable, you can choose the Enterprise Packages that you want to display there.

## Managing Endeavor Packages

You can manage Endeavor packages directly through Enterprise Workbench, using the following package functions:

- Cast
- Approve/Deny
- Execute
- Backout
- Backin
- Reset
- Commit
- Delete

All of these functions are quickly accomplished through an intuitive web-based point-and-click interface.

## Performing Element Actions

Enterprise Workbench enables you to quickly and easily perform all element actions that you can do through the ISPF Foreground Options Menu panel, including:

- Display
- Add/Update
- Retrieve
- Generate
- Move
- Delete
- Print
- Signin

## Site Options Report

The site options report enables you to produce a listing of all your Endeavor options settings.

The report includes several sections, each of which documents a separate option category. These include:

- Site Options Table - C1DEFLT5
- Site Symbolics Table Symbols - ESYMBOLS
- Optional Features Table - ENCOPTBL
- Endeavor Panel Field Default Table - ENDICNFG
- Active Endeavor User Exits
- ESI Security Table - BC1TNEQU

To generate the report, include the following DD statement before executing Endeavor.

```
//EN$TROPT DD SYSOUT=*
```

If using TSO, include the following:

```
ALLOC DD(EN$TROPT) DS(*) REUS
```

# Sample Report

## Site Options Table – C1DEFLT5

1 (C) 2002 Computer Associates International, Inc.		XXXXXXXX XX:XX:XX	PAGE 1
AllFusion Endeavor Change Manager Site Options Settings		RELEASE X.X	SERIAL B4000C
SITE OPTIONS TABLE - C1DEFLT5 CREATED: XX/XX/XX - XX.XX			
Site.....Computer Associates Inc., Endeavor Development			
----- - Options -			
Site ID.....0	Access Tbl.....BC1TNEQU	ACM.....Y	
Release.....B4000C	SMF Record Number.230	DB2.....Y	
Environments....4	Library System...LB	QuickEdit.Y	
Userid Start....1	Librarian Program.AFOLIBR	ELINK.....Y	
Userid Length...7	VIO Unit Name....	ESI.....Y	
Batch ID.....1	Work Unit Name....	INFO.....N	
SPFEDIT QNAME...SPFEDIT	Work VOLSER.....	LIBENV....Y	
SYSIEWL QNAME...SYSIEWLP	Lines Per Page...60	NETMAN...N	
Authorized TBLs..IGNORE	MODHLI.....BST	PDM.....Y	
Gen-In-Place SO..N	Signout on Fetch..N	PROC.....Y	
CA-Lserv SUBSYS..	ELink Tran Tbl...		
PITR Journal Grp.	Mixed Format Fllds.COMMENT DESCRIPTION		
SYS/SBS Repr Sev.0	PROC O/P Repr Sev.E		
Site Symbol Tbl..ESYMBOLS			
----- Package Processing Options -----			
Approval Reqd...Y	CAST Security....N	Security..ESI	
Foreground Exec..Y	Comp Validation...0		
Generated High-lvl Index for Remote PKG JCL.....			
----- Control Data sets -----			
Element Catalog.....BST.DEVEL.ELMCATL			
Package Control File.....BST.DEVR40.VSAMRLS.PACKAGE			
Endeavor Macro Library.....BST.P40B4052.MACLIB			
CCID Validation Data Set.....			
ACM Query Root Data Set.....BST.NDVR400.ACMROOT			
ACM Query Xref Data Set.....BST.NDVR400.ACMXREF			
----- CA-7 Interface Values -----			
CA-7 Region CCI Node Name.....A44SENF			
JCL Data Set Index Seq Nbr.....			
JCL Data Set Index Symbol.....&ENDEVOR			
JCL Data Set Name.....APCDAL.ENDEVOR.JCLLIB			

Site Symbolics Table Symbols – ESYMBOLS

SYMBOL	Data Value
#999ARD	THIS IS HOWARD
#90WARD	THIS IS HOWARD
#80WARD	THIS IS HOWARD
#00WARD	THIS IS HOWARD
#ZZZZRD	THIS IS HOWARD
#YYWWMX	ALL YS AND WS AND ONE X
#SUFFOBJ	OBJLIB
#SUFFLOAD	LOADLIB
#PRFX	BST
#0DWARD	THIS IgaHOWARD
#MIDDLE	I40MVS
#KODAAD	THIS IS HOWARD
#I40DELTA	BST.I40.DELTA
#HO15RD	THIg IS HOWARD
#HOWZRD	THISaIafHOWARD
#HOWARD	THIS IS HOWARD
#HOWAAD	THIS IS HOWARD
#HOFAAD	THIS Ia HOWARD
#HFS31BASE	/u/users/endeavor/base
#HFS04BASE	/U/users/ENDVOR/DEV1BASE
#HFSOLS2	/u/users/endeavor/bucfr02/sols2
#HFSOLS1	/u/users/endeavor/bucfr02/sols1
#HFSJD0B2	/u/users/endeavor/oleju01/bases2
#HFSJD0B1	/u/users/endeavor/oleju01/bases1
#HFSFHBB2	/u/users/endeavor/bucfr02/bases2
#HFSFHBB1	/u/users/endeavor/bucfr02/bases1
#HFSBSB41	/u/users/endeavor/BRSTD/basebr4/
#HFSBSB31	/u/users/endeavor/BRSTD/basebr3/
#HFSBSB11	/u/users/endeavor/BRSTD/basebr1s1/
#HFSBAS2R	/u/users/endeavor/bucfr02/bases2r
#HFSBAS2F	/u/users/endeavor/bucfr02/bases2f
#HFSBAS1R	/u/users/endeavor/bucfr02/bases1r
#HFSBAS1F	/u/users/endeavor/bucfr02/bases1f
#FAWARD	THISaIS HOWARD
#BSSARD	THIS IS HOWARD
#AVWARD	THIS ag HOWARD

## Optional Features Table – ENCOPTBL

1 (C) 2002 Computer Associates International, Inc. XX/XX/XX XX:XX:XX PAGE 3  
 AllFusion Endeavor Change Manager Site Options Settings RELEASE X.X SERIAL B4000C  
 Optional Features Table - ENCOPTBL CREATED: XX/XX/XX - XX.XX

----- Enabled Options -----  
 PKG\_ELEMENT\_LOCK E840  
 PKGID\_PROMPT 0001  
 ELMNM\_PROMPT 0001  
 ISSUE\_ELEMENT\_REFERENCED\_MSGS 0003  
 NO\_SYS\_SBS\_SELECTION\_LIST 0001

----- Options Not Enabled -----  
 MSGSEVERITY\_SMGR116  
 XFER\_COMMENTS  
 QE\_CMDCHAR  
 QE\_MIXED  
 UNLOAD\_NOSHARE  
 INCLUDE\_COB  
 NO\_PROC\_PRINT  
 NO\_LMOD\_FP  
 ATTACH\_BM3000  
 BANNER\_PAGES  
 DELETE\_NO\_FP\_CHK  
 MSGSEVERITY\_C1G0295  
 C1SORTIO\_SMALL  
 C1SORTIO\_MODE  
 NO\_EXCP  
 USE\_CONCOMP1  
 NO\_ALTID\_EXIT  
 PARSER\_HEAP\_SIZE  
 VALIDATE\_PVLB  
 NEW\_COMPARE  
 UNAUTH\_DFLT\_EXIT  
 VSAM\_INPUT\_OK  
 BC1PSRVL\_USE  
 ALLOW\_NON\_PKG\_ACTIONS  
 RESERVE\_OPSYS\_STG  
 BYPASS\_C1G0501  
 GEN\_WHERE\_SCL  
 FIXED\_PANEL\_OPT#S  
 VFY\_FP\_FAILURES  
 ALTID\_SYSOUT  
 BLKSIZE\_CONCAT  
 CCID\_LST\_LAST\_ACT  
 CCID\_WHERE\_ALL  
 DS\_CITEMPR1\_SUFFIX  
 DS\_INTERNAL\_TEMP  
 MONOCASE\_SEARCH  
 IGNORE\_SKIP\_ALLOC  
 INFO\_API\_MSGS  
 INFO\_DATE\_FORMAT  
 INFO\_PKG\_ACTY  
 RESTRICT\_BACKOUT  
 LB\_CNTL\_CHAR  
 LB\_SEQNUM  
 LB\_SUPPRESS\_AUDIT  
 PKG\_ACTIONS\_NO\_APPRVR  
 PROC\_MOVE\_DFLT  
 PV\_CNTL\_CHAR  
 SEC\_BY\_P\_LST\_PRT  
 SEC\_MOVE\_TARGET  
 SHP\_DISP\_SHR  
 SHP\_EXEC\_FAIL  
 ALLOW\_DUP\_SYMBOLS  
 UNLOCK\_FAILED\_ACTION  
 SYMB\_UNDERSCORE

1 (C) 2002 Computer Associates International, Inc. XX/XX/XX XX:XX:XX PAGE 4  
AllFusion Endeavor Change Manager Site Options Settings RELEASE X.X SERIAL B4000C  
Optional Features Table - ENCOPTBL CREATED: XX/XX/XX - XX.XX

TRANSFER\_NO\_VVLL  
BYPASS\_GENERATE\_XFER  
DEFAULT\_REVERSE  
RESTORE\_GENERATE\_DATE  
DONT\_SAVE\_AO  
SCAN\_STOP  
KEEP\_PDM\_OTHERDSN  
DYNAM\_PANELS\_UPPER  
BYPASS\_C1G0333W  
SET\_STOPRC12  
BYPASS\_C1G0147E  
BYPASS\_C1G0334W  
NO\_SECURITY\_USERID  
ACM\_USE\_ELEMENT\_NAME  
NO\_VERSION\_LEVEL  
EXIT\_LOAD  
SAVE\_CCIDCOMM  
EXIT2\_FAIL\_EXIT3  
MSGSEVERITY\_C1X0103  
MSGSEVERITY\_IMGR009  
MSGSEVERITY\_C1G0119  
MSGSEVERITY\_C1G0272  
MSGSEVERITY\_C1G0231  
MSGSEVERITY\_ENBX043  
MSGSEVERITY\_FPVL004  
MSGSEVERITY\_C1G0507  
MSGSEVERITY\_C1G0336  
LIBR\_INC\_STMT  
MSGSEVERITY\_ENBE027  
ALWAYS\_CALL\_GENPKGID  
MSG\_C1G0208  
QE\_BUILD\_MAP  
RESERVED\_OTHERDSN  
BYPASS\_CII00092  
BYPASS\_PKMR514E

## Endevor Panel Field Default Table – ENDICNFG

```

1 (C) 2002 Computer Associates International, Inc.                XX/XX/XX XX:XX:XX      PAGE 5
                        AllFusion Endevor Change Manager Site Options Settings  RELEASE X.X  SERIAL B4000C
                        Endevor Panel Field Default Table - ENDICNFG CREATED: XX/XX/XX - XX.XX

ACKNOWLEDGE_ELEMENT_JUMP      N
APPEND_SCL                     N
APPEND_SCL_PKG                 N
APPROVED                       Y
BUILD_USING_MAP                Y
COMMITTED                     Y
COMPONENT_LIST_WORD           LIST
COMPONENTS_ONLY                N
COPYBACK                      Y
DELETE_AFTER_ARCHIVE          N
DELETE_AFTER_MOVE              Y
DELETE_AFTER_TRANSFER         Y
DELETE_INPUT_SOURCE           N
DELETE_MODE                    F
DENIED                        Y
DISPLAY_PROC_GROUP            N
ENABLE_BACKOUT                 Y
EXECUTED                      Y
EXPAND_INCLUDES               N
GENERATE_ELEMENT              Y
QE_GENERATE_IN_PLACE          N
GENERATE_MODE                  F
IN_APPROVAL                   Y
IN_EDIT                       Y
IN_EXECUTION                  Y
INCLUDE_JCL                   N
INCREMENT_JOBNAME             Y
INTERCEPT_ISPF_RETURN       N
JCL_PROCEDURE_NAME            ENDEVOR
MOVE_MODE                     F
MULTIPLE_JOBSTREAMS           N
OVERRIDE_SIGNOUT              N
PROCESSOR_GROUP_DEFAULT_CHAR  -
PROCESSOR_GROUP_OVERRIDE_CHAR 0
REPLACE_MEMBER                N
RETAIN_SIGNOUT                N
RETURN_FIRST_FOUND            Y
SHARABLE_PACKAGE              N
SHOW_TEXT                     Y
SIGNIN_MODE                   F
SIGNOUT_ELEMENT               Y
SIGNOUT_MODE                  F
SORT_BY_DESTINATION_ID        2
SORT_BY_PACKAGE_ID            3
SORT_BY_SHIP_DATE             1
SYNCHRONIZE                   N
UPDATE_IF_PRESENT             N
VALIDATE_COMPONENTS           Y
WITH_HISTORY                   N
ENTERPRISE_PKG                A
QE_BUILD_USING_MAP            Y
QE_RETURN_FIRST_FOUND         Y
TABLE_NAME                    END$CNFG

```

### Active Endeavor User Exits

1 (C) 2002 Computer Associates International, Inc.		XX/XX/XX XX:XX:XX	PAGE 6
AllFusion Endeavor Change Manager Site Options Settings		RELEASE X.X	SERIAL B4000C
Active Endeavor User Exits			
Exit Nbr	Program Name	Authorized Library	Required
-----			
01	C1UEXT01	YES	
02	C1UEXT02	YES	
03	C1UEXT03	YES	
04	C1UEXT04	YES	
05	C1UEXT05	YES	
06	C1UEXT06	YES	

## ESI Security Table – BC1TNEQU

```

1 (C) 2002 Computer Associates International, Inc.
AllFusion Endeavor Change Manager Site Options Settings
ESI Security TABLE - BC1TNEQU CREATED: DD/MM/YY - HH.MM
XX/XX/XX XX:XX:XX PAGE 7
RELEASE X.X SERIAL B4000C

Using BC1TNEQU table entitled 'BC1TNEQU SECURITY INTERFACE TABLE'
The table was assembled on XX/XX/XX at XX.XX
ESI defaults:
ESIDFLTS DESC=(6), +
ROUTCDE=(11), +
WARN=NO, +
HEADER=YES, +
LATSIZ=2, +
TITLE='BC1TNEQU SECURITY INTERFACE TABLE'
Function authorization equates:
FUNCEQU SAFAUTH=NONE, +
C1ACTNS=(CHGTYPE,PSHIP)
FUNCEQU SAFAUTH=READ, +
C1ACTNS=(ADD,ARCHIVE,DELETE,DISPLAY,ENVRNMR,MOVE,
GENERATE,RETRIEVE,SIGNOVR,UPDATE,TRANSFER,RESTORE,
SIGNIN,PBACKOUT,PCAST,PCOMMIT,PCREATE,PDISPLAY,PEXECUTE,
PLIST,PMODIFY,PREVIEW,PUTILITY)
Format definitions:
NAMEQU ENVIRONMENT_ACCESS, +
CLASS='DATASET', +
WARN=NO, +
LOG=NONE, +
L1=('C1'), +
L2=('ENVIRON'), +
L3=(ENVIRONMENT)
NAMEQU PRIMARY_OPTIONS, +
CLASS='DATASET', +
WARN=NO, +
LOG=NONE, +
L1=('C1'), +
L2=(ENVIRONMENT), +
L3=('PMENU'), +
L4=(MENUITEM)
NAMEQU FOREGROUND_OPTIONS, +
CLASS='DATASET', +
WARN=NO, +
LOG=NONE, +
L1=('C1'), +
L2=(ENVIRONMENT), +
L3=('FORACTN'), +
L4=(MENUITEM)
NAMEQU ACTION_INITIATION, +
CLASS='DATASET', +
WARN=NO, +
LOG=NONE, +
L1=('C1'), +
L2=(ENVIRONMENT), +
L3=(SYSTEM), +
L4=(SUBSYSTEM)
NAMEQU ACTION_INITIATION, +
CLASS='DATASET', +
WARN=NO, +
LOG=NONE, +
L1=('C1'), +
L2=(MENUAUTH)

```

1 (C) 2002 Computer Associates International, Inc. XX/XX/XX XX:XX:XX PAGE 8  
AllFusion Endeavor Change Manager Site Options Settings RELEASE X.X SERIAL B4000C  
ESI Security TABLE - BC1TNEQU CREATED: DD/MM/YY - HH.MM

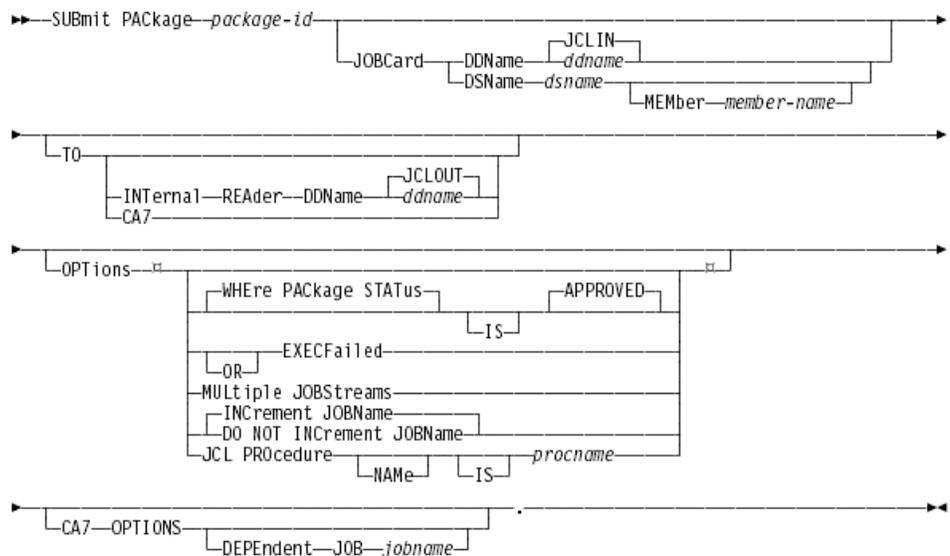
NAMEQU PACKAGE_ACTIONS,	+
CLASS='DATASET',	+
WARN=NO,	+
LOG=NONE,	+
L1=('C1'),	+
L2=('PACKAGE'),	+
L3=(MENUITEM),	+
L4=(PKGSUBFC),	+
L5=(PKGID)	

## CA-7 Interface for Package Execution

You can schedule package executions using the CA-7 interface. This feature enables you to automatically initiate the promotion of online program changes after the online region has quiesced. It also provides you with the ability to define execution parameters; for example, you can schedule a package execution dependent upon the completion of another CA-7 job or based upon the execution window.

When accessing a package that has associated CA-7 information, Endeavor queries CA-7 to determine if the information is still applicable. If the CA-7 information is no longer applicable (for example, the job has been cancelled), Endeavor removes it.

Scheduling is accomplished using the package SUBMIT action. Two additional clauses have been added to the SUBMIT syntax to define CA-7 information, as shown below:



**Note:** The following restrictions apply to the use of the CA-7 clause:

- If you specify the TO CA7 clause, you cannot specify the MULTIPLE JOBSTREAMS or the INCREMENT JOBNAME parameters.
- If you do not specify the TO CA7 clause, the CA7 OPTIONS are ignored.

The Package Submit ISPF panel, shown below, can be used to build package SCL to submit to CA-7.

```

Package Submit ISPF PANEL:
----- Submit Package -----
Command ==>

Complete the Submit action information below and select an action:
  1 1 Submit package      2 Cancel the Submit action
  @N Display Package Notes

Package ID..... PGMASMPGM1
Description..... move 1

JOB Card data set name:
Project.. ENDEVOR
Group... PGM
Type.... CNTL
Member.. JOBCARD

Other partitioned or sequential JOB Card data set:
Data set name.. _____

Submit options
JCL procedure name... ENDEVOR          Submit to CA-7... Y (Y/N)
                                         CA-7 Dependent JOB... CICSWRGN
    
```

## Implementing the CA-7 Interface

To implement the CA-7 interface, you must first define the following C1DEFLT5 parameters that enable Endeavor to communicate with CA-7:

BC1JDEFT changes: (C1DEFLT5)

```

C1DEFLT5 TYPE=MAIN,          X
.
.
CA7CCINODE=,                CA-7 ADDR SPACE NODE (CAICCI)    X
CA7JCLDSN=,                 CA-7 CA7JCLID/CA7JCLLIB DSNAME   X
CA7JCLID=,                  CA-7 JCL DATASET INDEX NUMBER   X
CA7JCLLIB=,                 CA-7 JCL SYMBOLIC INDEX         X
    
```

Parameter	Description
CA7CCINODE	Defines the CAICCI node name where the CA-7 address space executes. If this parameter is not defined, local mode is assumed.
CA7JCLDSN	Defines the data set name associated with CA7JCLID or CA7JCLLIB..
CA7JCLID	Provides Endeavor with the CA-7 parameter information required by CA-7 to schedule JOB execution. The parameter values should be obtained from the CA-7 implementation. The CA7JCLID and CA7JCLLIB parameters are mutually-exclusive.

---

Parameter	Description
CA7JCLLIB	Provides Endeavor with the CA-7 parameter information required by CA-7 to schedule JOB execution. The parameter values should be obtained from the CA-7 implementation. The CA7JCLID and CA7JCLLIB parameters are mutually-exclusive.

---

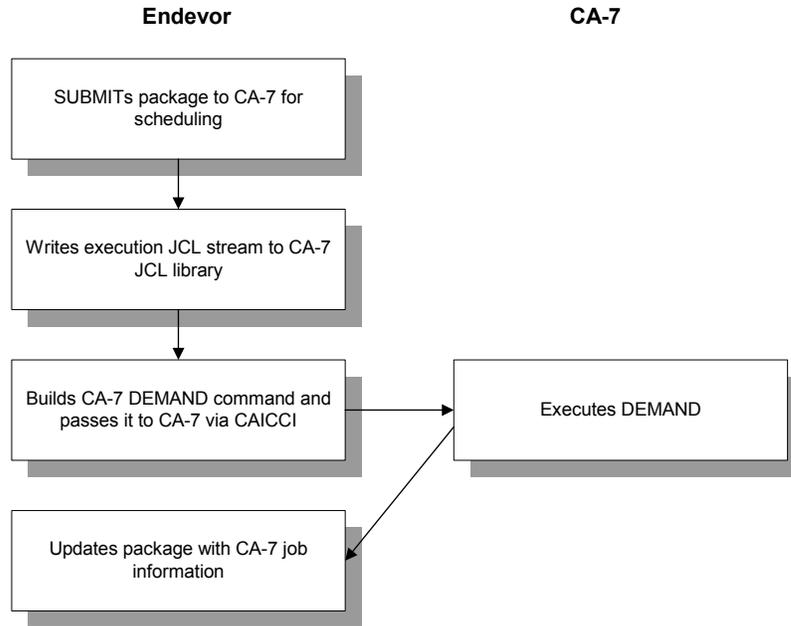
## Processing Flow

The processing flow in the Endeavor CA-7 interface includes the following events:

- Endeavor SUBMITs a package to CA-7 for scheduling and builds the execution JCL based on the parameters specified in the package SUBMIT action.
- Endeavor writes the JCL stream to the CA-7 JCL library specified in the C1DEFLT5 table.
- Endeavor builds and executes the CA-7 DEMAND command via the CA-7 CAICCI interface.
- Endeavor updates the information for packages in the job to include the CA-7 job number, the CA-7 SUBMIT date and time, and the dependent job name, if specified on the package SUBMIT.

**Note:** Once a job is submitted to CA-7, you cannot perform package actions against it in Endeavor until it is executed or cancelled via CA-7.

The following diagram summarizes Endeavor and CA-7 Interface processing steps.



## Displays and Reports

The Package Display ISPF panel has been updated to include CA-7 information highlighted below.

```

DISPLAY ----- PACKAGE DISPLAY -----
OPTION  ==>

    blank - Display Action Summary          B - Display Backout Information
    A - Display Approvers                   S - Display SCL
    R - Display Cast Report
    N - Display Package Notes
PACKAGE ID: PGM A                          STATUS: APPROVED
DESCRIPTION: CA-7-Scheduled package        ENTERPRISE PKG: N
PACKAGE TYPE: STANDARD                      CA-7 SCHEDULED PKG EXEC JOB: MCCPE01C(0038)
SHARABLE PACKAGE: Y                        DEPENDENT JOB: CICSWEST
BACKOUT ENABLED: N
EXECUTION WINDOW FROM: 15MAY02 00:00      TO: 31DEC79 00:00

      USER ID  DATE   TIME
CREATED:      MCCPE01 20AUG01 16:06
LAST UPDATED: MCCPE01 15MAY02 11:38
CAST:         MCCPE01 15MAY02 21:55
APPROVED/DENIED: 15MAY02 21:55
EXECUTED:
BACKED OUT:
BACKED IN:
COMMITTED:
                                ENDEVOR RC:
  
```

The Package Detail Report (Report 72) has been enhanced to include the CA-7 information as well.

```

1 (C) 2002 Computer Associates International, Inc           Endeavor                XX/XX/XX XX:XX:XX   PAGE   3
                                                    RELEASE X.X        SERIAL B4000C

                CONRPT72: PACKAGE DETAIL REPORT

PACKAGE      STATUS      TYPE BACKOUT      LAST   UPDATE   CAST   CAST   APP/DEN   EXECUTE   WINDOW_START   WINDOW_END
NAME         STATUS      TYPE BACKOUT      UPDATED USER ID   DATE   USER   DATE     DATE     DATE  TIME     DATE  TIME
PGM A        APPROVED   ST                15MAY02 MCCPE01  15MAY02 MCCPE01  15MAY02          15MAY02 00:00  31DEC79 00:00
CA-7 SCHEDULED JOB: MCCPE01C(0019) ****ANY TIME  DEPENDENT JOB: CICSWEST

-----
                U S E R   N O T E S   S E C T I O N
-----
                THERE ARE NO USER NOTES ASSOCIATED WITH THE PACKAGE
    
```

```

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                                                    RELEASE X.X        SERIAL B4000C

                CONRPT72: PACKAGE DETAIL REPORT

PACKAGE      STATUS      TYPE BACKOUT      LAST   UPDATE   CAST   CAST   APP/DEN   EXECUTE   WINDOW_START   WINDOW_END
NAME         STATUS      TYPE BACKOUT      UPDATED USER ID   DATE   USER   DATE     DATE     DATE  TIME     DATE  TIME
PGM A        APPROVED   ST                15MAY02 MCCPE01  15MAY02 MCCPE01  15MAY02          15MAY02 00:00  31DEC79 00:00
CA-7 SCHEDULED JOB: MCCPE01C(0019) ****ANY TIME  DEPENDENT JOB: CICSWEST

-----
                S C L   S E C T I O N
-----

1 RETRIEVE ELEMENT 'C1GSDATE'
  VERSION 01 LEVEL 05
  FROM ENVIRONMENT 'P40' SYSTEM 'NDVRB40' SUBSYSTEM 'BASE'
  TYPE 'ASMPGM' STAGE 2
  TO DSNAME 'BST.I40MVS.SRCLIB'
  OPTIONS CCID 'TEST' COMMENTS "TEST" NO SIGNOUT NOSEARCH
    
```

```

1 (C) 2002 Computer Associates International, Inc           Endeavor                XX/XX/XX XX:XX:XX   PAGE   5
                                                    RELEASE X.X        SERIAL B4000C

                CONRPT72: PACKAGE DETAIL REPORT

PACKAGE      STATUS      TYPE BACKOUT      LAST   UPDATE   CAST   CAST   APP/DEN   EXECUTE   WINDOW_START   WINDOW_END
NAME         STATUS      TYPE BACKOUT      UPDATED USER ID   DATE   USER   DATE     DATE     DATE  TIME     DATE  TIME
PGM A        APPROVED   ST                15MAY02 MCCPE01  15MAY02 MCCPE01  15MAY02          15MAY02 00:00  31DEC79 00:00
CA-7 SCHEDULED JOB: MCCPE01C(0019) ****ANY TIME  DEPENDENT JOB: CICSWEST

-----
                A C T I O N   S U M M A R Y
-----

1 RETRIEVE P40      NDVRB40 BASE      C1GSDATE ASMPGM  01.05 P40STG2
  BST.I40MVS.SRCLIB
  CCID: TEST          COMMENT: TEST
    
```

```

1 (C) 2002 Computer Associates International, Inc           Endevor           XX/XX/XX XX:XX:XX   PAGE   6
                                                    RELEASE X.X       SERIAL B4000C

CONRPT72: PACKAGE DETAIL REPORT

  PACKAGE      STATUS      TYPE BACKOUT      LAST   UPDATE   CAST   CAST   APP/DEN  EXECUTE  WINDOW_START  WINDOW_END
  NAME         STATUS         TYPE BACKOUT     UPDATED USER ID  DATE   USER   DATE    DATE    DATE  TIME    DATE  TIME
PGM A         APPROVED      ST              15MAY02 MCCPE01  15MAY02 MCCPE01  15MAY02      15MAY02 00:00  31DEC79 00:00
  CA-7 SCHEDULED JOB: MCCPE01C(0019) ****ANY TIME  DEPENDENT JOB: CICSWEST
-----
                        C A S T   S E C T I O N
-----

```

## Endevor MCF Catalog Rename Utility

With the implementation of the Element Catalog, all MCF's will have the catalog name recorded in its stage record. The first time Endevor is invoked just after migration from a prior release, the MCF's, at open time, are updated with the Element Catalog name. From that point on, (at open time) Endevor checks the stage record's catalog name against the name specified in the C1DEFLT5 table. If the names are not equal, the MCF open will fail. This check was added to prevent MCF's from belonging to more than one catalog.

The Endevor MCF Catalog Rename Utility was created to allow you to change the catalog name in the MCF's stage record. This utility should be run after you have created a new Catalog and have defined it to the C1DEFLT5 table.

The utility can run in two modes, validate and update.

- Under Validate mode, all environments defined in the C1DEFLT5 table are examined. A report is produced showing the current MCF catalog name and a statement as to whether or not the name agrees or disagrees with the C1DEFLT5 table. A return code of 0 indicates that all environments match the table's definition. A return code of 4 indicates that some or all environments are not current with the table's definition.
- Under Update mode, all environments defined in the C1DEFLT5 table are examined, but instead of just reporting the mismatches, the utility rewrites the stage records with the name defined from the C1DEFLT5 table. A return code of 0, under Update mode, indicates that all environments match the table's definition. A return code of 4 indicates that some or all of the stages were updated with the table's name.

## Sample JCL (BC1JXCNM):

To invoke Validate or Update mode, change the PARM= parameter on the execute statement.

```

/** (COPY JOBCARD)
/*******
/**
/** (C) 2002 COMPUTER ASSOCIATES INTERNATIONAL, INC.
/**
/** BC1JXCNM - RENAME THE MCF'S CATALOG NAME TO THE NAME SPECIFIED
/** IN THE C1DEFLT5 TABLE.
/**
/** THE FOLLOWING CHANGES MUST BE MADE BEFORE THIS JOB CAN BE RUN:
/**
/** 1. ADJUST THE PARM STATEMENT ON THE EXECUTE STATEMENT TO
/** EITHER VALIDATE OR UPDATE.
/** PARM='BC1PXCNMUPDATE' -OR-
/** PARM='BC1PXCNMVALIDATE'
/**
/** NOTE: STEP IS CURRENTLY SET TO VALIDATE.
/*******
/** BC1PXCNM RUNS IN TWO MODES: VALIDATE AND UPDATE.
/**
/** IN VALIDATE MODE, THE PROGRAM WILL EXAMINE ALL MCF'S DEFINED IN
/** C1DEFLT5 TABLE AND WILL REPORT BACK WHICH MCF'S AGREE OR DISAGREE
/** WITH THE C1DEFLT5 CATALOG NAME.
/**
/** IN UPDATE MODE, THE PROGRAM WILL EXAMINE ALL MCF'S DEFINED IN THE
/** C1DEFLT5 TABLE AND WILL ALSO REPORT BACK WHICH MCF'S AGREE AND
/** DISAGREE WITH THE C1DEFLT5 CATALOG NAME, BUT FOR EACH DISAGREEMENT*
/** THOSE MCF'S WILL BE UPDATED TO REFLECT THE C1DEFLT5 CATALOG NAME.
/**
/*******
/**-----
/** STEP1 - BC1PXCNM: RENAME OR VALIDATE MCF'S CATALOG NAME.
/**-----
/**STEP1 EXEC PGM=NDVRC1,PARM='BC1PXCNMVALIDATE',
/** REGION=4096K,COND=(0,LE)
/**STEPLIB DD DISP=SHR,DSN=UPRFX.UQUAL.AUTHLIB
/** DD DISP=SHR,DSN=IPRFX.IQUAL.AUTHLIB
/**CONLIB DD DISP=SHR,DSN=IPRFX.IQUAL.CONLIB
/**BSTLST DD SYSOUT=*
/**SYSUDUMP DD SYSOUT=*
/**BSTERR DD SYSOUT=*
/**NOJRNL DD DUMMY
/**

```



# Moving to Release 4.0

---

## What's Involved in Moving to Release 4.0

In moving to Endeavor Release 4.0, you need to perform several post-installation steps to prepare for implementing the new release. These steps are summarized below and described in detail in the following sections.

- Create C1DEFLT5 Table
- Assemble installation-specific tables and programs
- Create the Element Catalog
- Convert the MCF
- Convert the Package File
- Allocate ACMQ files
- Load the Element Catalog
- Synchronize the Element Catalog with MCFs

## Creating Your C1DEFLT5 Table

Before you can use any of your newly converted files, you must first identify them to Endeavor via the C1DEFLT5 table. The BC1JDEFT member, found in the *iprfx.iqual.JCLLIB* will assemble and link your Defaults Table. Make sure that you have updated the table with the new Element Catalog, MCF file names, Package Master File, and ACMQ files, if applicable. The updated table must reside in the authorized library established during the install process. Verify this information with the person who installed the product at your site. For detailed information on the C1DEFLT5 Table, please refer to the *Installation Guide*.

## Assemble Installation-Specific Tables/Programs

Before performing the file-related conversion steps, reassemble the following installation-specific tables and programs with the current release libraries:

- ENDICNFG
- ENCOPTBL
- User Exit Programs
- User API Programs
- Security Tables (ESI or Native Security)

## Creating Your Element Catalog

Endevor incorporates an Element Catalog file to support long element names and to boost performance by reducing the volume of I/O operations. The Element Catalog file is required and only one is allowed per site. The Element Catalog is identified to Endevor via the ELMCATL field in the TYPE=MAIN section of the C1DEFLT5 Table. To create your Element Catalog, run job BC1JJB07. This member can be found in the *iprfx.igual.JCLLIB* that is delivered with the product.

## Converting the Master Control Files (MCFs)

The MCF data set's maximum record length has changed. As a result, you need to redefine your MCFs. Use member BC1JXMCF located in *iprfx.igual.JCLLIB*. This job will REPRO your pre-4.0 MCFs into sequential datasets, create your new 4.0 MCFs, and then REPRO the old data from the sequential files into your 4.0 files. The following sample illustrates what this job might look like for one stage. For more information on this job see the *Release Summary*.

## Converting the Package File

The Package data set's maximum record length has changed. If you want to test using a copy of your existing package file, use member BC1JXPCF from your Endevor JCL library. This job backs up your existing data set to a sequential file, deletes and redefines the package file, then populates the records back into the newly-defined VSAM package file. If you want to test with a new package file, create a new PDS member using only Step 3A and submit it for execution.

## Allocating ACMQ Files

If your site is licensed for Automated Configuration Manager (ACM), and you specify `ASCM=Y` in your `C1DEFLTS` Table, the ACM query files, `ACMROOT` and `ACMXREF` must be allocated. Use job `BC1JACMD` in the Endeavor `iprfx.igual.JCLLIB` to allocate them. If you want to make copies of your existing ACMQ files, you can use `IDCAMS` to `REPRO` them to a sequential file (attributes `FB 4096`) and then `REPRO` them back into your test files.

Submit Job `BC1JACMO` in the `iprfx.igual.JCLLIB` to convert the ACMQ data to the new release format.

## Loading the Element Catalog

To load the element catalog with the existing data in your MCFs, run job `BC1JXCNV` found in the Endeavor JCL library, '`iprfx.igual.JCLLIB`'. This job constructs element catalog data and populates this information in the catalog and cross-reference files. Read carefully all the notes and comments in each step of the JCL before running this job.

## Synchronizing the Element Catalog with Your MCFs

To ensure the Element Catalog that you just loaded is properly referenced by the MCFs defined in your `C1DEFLTS` Table, run job `BC1JXCNM`. Make sure that you run it in `UPDATE` mode. In this mode, the program examines all the MCFs defined in the `C1DEFLTS` table and stamps the MCFs with the Element Catalog data set name. Use member `BC1JXCNM` in '`iprfx.igual.JCLLIB`'.

**Note:** Be sure that you change the execution parameter to `UPDATE` before submitting the job.

## Upgrade Considerations

In upgrading to Release 4.0, the following considerations apply:

- "NEXT TYPE" name can no longer differ from "this" TYPE (No type name changes across the map are allowed.)
- If long element names are used, the `LRECL` of the delta library must be at least 259.

- RLS or CA-Lserv implementation is highly recommended for the Endeavor R4.0 Catalog data set, MCFs and the PCF (Package Control File).
- Due to the key structure of the catalog, it is highly recommended that element searches are done with an element and type specification. (The catalog key is element name + type name.)
- Endeavor R4.0 is downwardly compatible with Endeavor R3.9, provided that no Endeavor R4.0-only features were implemented (long element names, etc.)
- Endeavor control tables (C1DEFLTS, ENDICNFG, ENCOPTBL, etc.) are now validated at Endeavor start-up time to ensure that all tables are R4.0-compatible.
- The Endeavor R4.0 Element Registration feature can be activated in WARN, CAUTION or ERROR mode (and switched from one mode to the other at any time).

# New Features for SP1

---

## What's New in Release 4.0 SP1?

Beginning with SP1, the Interface for CA-Roscoe, Interface for CA-Netman, and the Interface for IBM Tivoli Information/Management are compatible with Endeavor 4.0. Also, the Point-In-Time-Recovery (PITR) feature is now compatible. In addition, a new Comma Separated Value (CSV) list utility has been added.

## Comma Separated Value Utility

This utility allows you to extract Endeavor Master Control File (MCF) and Package file information and write it to a Comma Separated Value (CSV) formatted file. The CSV record format is used by PC products such as Microsoft Excel and Microsoft Access to import data. You can use the CSV files for any other programs that support this file type.

The CSV utility runs as a stand-alone program under NDVRC1. You build or modify the SCL statements that determine the CSV output. The utility analyzes the contents of the SCL statements passed by means of the BSTIPT01 DD statement. Then it calls API functions to obtain the data. Finally, it reformats the API response blocks data into the CSV format and returns to the API where the data is written to the CSV list file. SCL is used as input to the CSV Utility to request functions. The SCL follows the same conventions as batch requests.

For details see the AllFusion Endeavor Change Manager *Utilities Guide*.

## Point-In-Time-Recovery

Release 4.0 of Endeavor introduced two new control files – the element catalog and the element index. SP1 introduces Point-in-Time-Recovery (PITR) support for these additional files. In addition to the two additional control files, release 4.0 introduced support for long element path and file names (HFS). PITR supports this change.

For details see the AllFusion Endeavor Change Manager *Utilities Guide*.

## Interface Compatibility

Due to underlying product architecture changes made as part of the Endeavor release 4.0, changes were required to make the Interface for CA-Roscoe, Interface for CA-Netman, and the Interface for IBM Tivoli Information Manager compatible.

### Interface for CA-Roscoe

With SP1, CA-Roscoe works with Endeavor 4.0. The Interface for CA-Roscoe has been integrated with Endeavor 4.0 control blocks that were modified to support long element and path names. Because CA-Roscoe does not support long or mixed cased element names, these elements have been removed from the element display lists.

For details see the AllFusion Endeavor Change Manager *Interface for CA-Roscoe Administration Guide*.

### Interface for CA-Netman

With SP1, the Interface for CA-Netman functions with Endeavor 4.0. With Endeavor 4.0, the Interface for CA-Netman Log records are affected by the introduction of long element names. This component only affects the data record population module that is distributed in source to users. Prior to SP1, MCF element names (10 character) were used when logging action activity to the database. SP1 uses the actual element name which can be as large as 255 characters.

For details see the AllFusion Endeavor Change Manager *Interface for CA-Netman Administration Guide*.

## Interface for IBM Tivoli Information/Management

With SP1, the Interface for IBM Tivoli Information/Management functions with Endeavor 4.0. Endeavor 4.0 introduced data areas which house long element names, path and file names. The Interface for IBM Tivoli Information/Management has been updated to access these new areas.

Also, with Endeavor 4.0, new package inspect logic was added to verify action CCID values during cast time. If you wish to have the CCID validation done through the interface, remove the Create Activity Use block, setup before action script block(s) defining the action to be taken when the CCID value is found or not found. This means that you will need to define all package CCID values to the interface prior to package cast.

For details see the AllFusion Endeavor Change Manager *Interface for IBM Tivoli Information/Management Administration Guide*.