ENDEVOR

We use Endevor for...

- Source control

  To ensure that we always work with the latest version of the source

- Endevor Search

  To search for a string in a large list of sources

- SCL generation

  This is required at the time of migration

Endevor environments...

1 FIX - Alternate/Fix environment

2 **TEST** - Test environment

3 **RELEASE** - Release environment

4 DEMOTEST - Demo test environment

5 DEMOPROD - Demo production envmt.

Endevor Options...

0 DEFAULTS

1 **DISPLAY** **- Display elements, proc groups etc.**

2 **FOREGROUND** **- Foreground actions (*Source Retrieval*)**

3 **BATCH** **- Batch processing (*SCL generation, Search*)**

4 PACKAGE

5 BATCH PACKAGE

U USER MENU

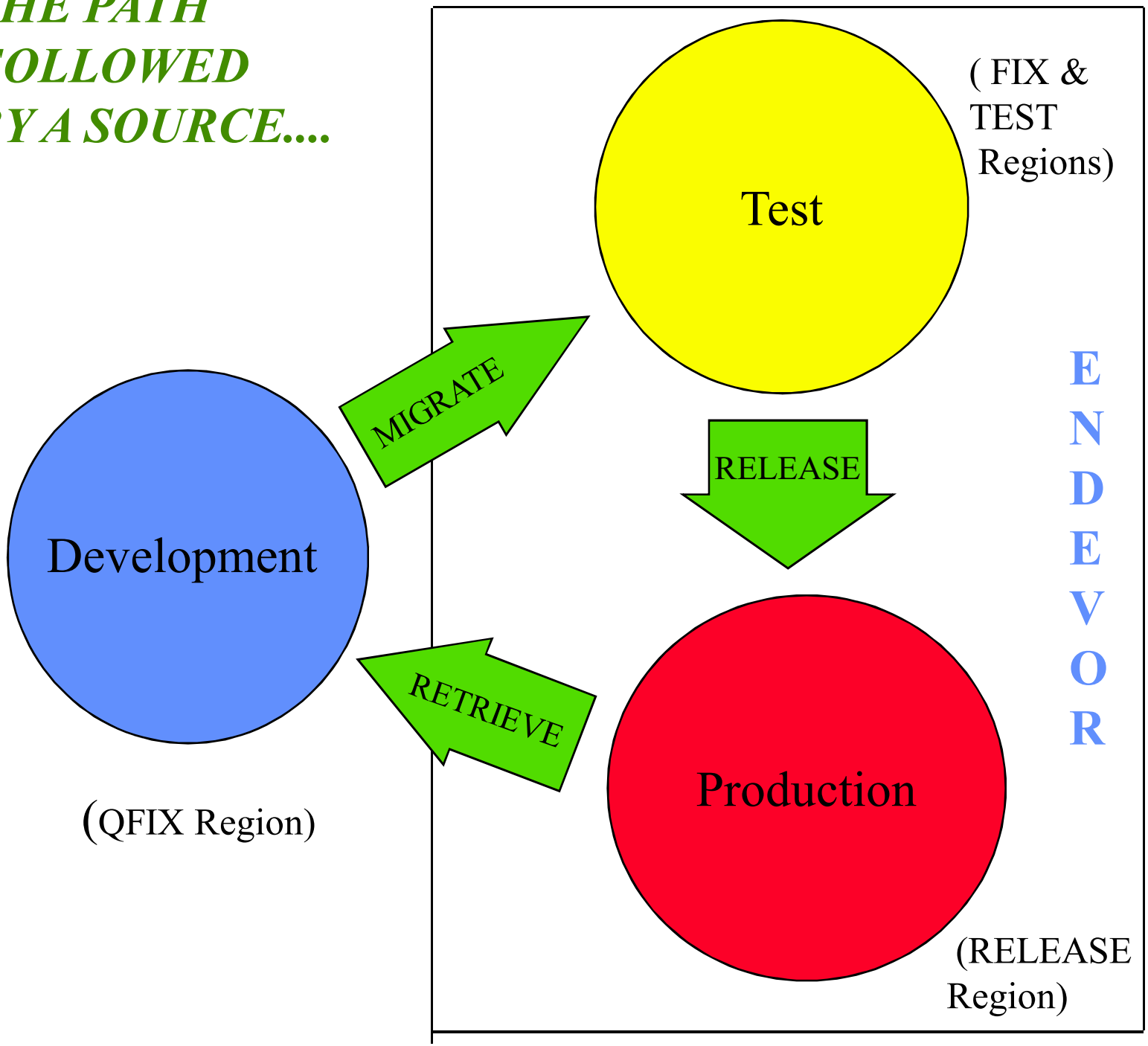
T TUTORIAL

C CHANGES

X EXIT

Source control in Endevor

THE PATH FOLLOWED BY A SOURCE....



A source may reside in any of these stages:

- *Environment FIX, System EAS0,*
  - FIXTEST
  - FIXSHIP
- *Environment TEST, System EAS0,*
  - ACCEPTANCE
  - INTEGRATION
- *Environment RELEASE, System EAS,*
  - SHIP
  - PRODUCTION

Display Options in Endevor

The ‘Display element list’ screen can be accessed in all three environments of Endevor. In RELEASE, it can be accessed by entering option 1 ;1 (i.e, display; element)

Options **B** (*browse*), **C** (*change*), **H** (*history*), **M** (*master*) and **S** (*summary*) can be used to get information on an element.

Display Options in Endevor (contd.)

- Option '**B**' will give a source listing of the element as it currently exists in the region specified
- Option '**C**' can be used to get details of changes made to the current source with respect to the *previous* version
- Option '**H**' can be used to get details of *all* changes ever made to the source. For each line of the source code, the appropriate version number is indicated at the extreme left
- Option '**M**' can be used to get information about the current status of the source (i.e whether it has been retrieved, if so, by whom and on what CCID etc.)

Getting Summary Information

This will give a list of all versions of sources that have existed in endevor ***to date.***

- Enter the 'Display element list' screen (= en ; e ; 3 ; 1; 1)
- Enter the element name and type, with environment as RELEASE and stage as Production.
- Type in option 'S' - summary. Press enter

Any version may be selected from this list giving the options B, C or H

Display options with 'Summary'

- Option 'B' can be used to browse the selected version of the source
- Option 'C' can be used to get details of changes made to the current (selected) version with respect to the *previous* version
- Option 'H' can be used to get details of *all* changes ever made upto the selected version. For each line of the source code, the version number is indicated at the extreme left

Current Source Information

- Enter the ‘Display element list’ screen (= en ; e ; 2 ; 1; 1)
- Enter the element details, with environment as TEST and stage as Integration (this is the lowest level in endevor)
- Set ‘Build Using Map’ option to ‘Y’. Press enter

*This will give a listing of the sources **currently** existing in endevour (e.g versions of the same source may be existing in Integration, Ship and Production)*

Retrieval

- For purposes of modification, we will normally retrieve elements from *Production.*
- Elements must always be retrieved *without a signout.*

Endevor Retrieval Screen

```
OPTION  ===> R

                                        ELEMENT DISPLAY OPTIONS:
    blank - Element list                   S - Summary   B - Browse    H - History
    R - Retrieve element                   M - Master    C - Changes

 FROM ENDEVOR:                                ACTION OPTIONS:
   ENVIRONMENT ===> RELEASE                      CCID                ===>
   SYSTEM      ===> EAS                          EXPAND INCLUDES     ===> N (Y/N)
   SUBSYSTEM   ===> EAS                          SIGNOUT ELEMENT     ===> N (Y/N)
   ELEMENT     ===> IOINTEG1                     OVERRIDE SIGNOUT    ===> N (Y/N)
   TYPE        ===> COBOL                        REPLACE MEMBER      ===> N (Y/N)
   STAGE       ===> P          S - SHIP                P - PROD
   COMMENT     ===>

 TO ISPF LIBRARY:                             LIST OPTIONS:
    PROJECT ===> EASV11                           DISPLAY LIST        ===> Y (Y/N)
    LIBRARY ===> QFIX                             WHERE CCID EQ       ===>
    TYPE    ===> COBOL                            WHERE PROC GRP EQ   ===>
    MEMBER  ===>                                  BUILD USING MAP     ===> N (Y/N)
                                                  FIRST FOUND         ===> Y (Y/N)
 TO OTHER PARTITIONED OR SEQUENTIAL DATA SET:
    DATA SET NAME ===>
```

Endevor Search

Using Endevor Search

The search option can be used to search a large list of sources for the occurence of a given string. Follow the steps as given below:

1. Select the desired endevor environment (Usually RELEASE)
2. Select the BATCH option
3. Select the ‘BUILD SCL’ option giving a temporary member name

(*please see next slide for the Batch Options Menu)*

Batch Options menu

```
OPTION  ===> 1

    1 BUILD SCL - Build batch SCL actions
    2 EDIT      - Edit request data set
    3 SUBMIT    - Submit job for batch processing
    4 VALIDATE  - Check request data set for syntax errors
    5 BUILD JCL - Enter additional JCL to be included with the
job

  REQUEST DATA SET:
     PROJECT  ===> AMV3710          APPEND      ===> N  (Y/N)
     GROUP    ===> SOURCES          INCLUDE JCL ===> N  (Y/N)
     TYPE     ===> COBOL
     MEMBER   ===> SEARCH

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

  JOB STATEMENT INFORMATION:
     ===>
     ===>
     ===>
     ===>
```

Endevor search (continued)

4. Select option 11 (To list elements)
5. Enter the the partial names of the of the elements you wish to scan, and the corresponding type

   (e.g. IO* & COBOL);

   Set Display List to ‘N’;

   Select Option ‘L’;

   Type in the string to be searched for.

(*see next slide for the List Element Action screen)*

List Element Action

```
OPTION  ===> L
                                    ELEMENT DISPLAY OPTIONS:
    blank - Element list              S - Summary   B - Browse    H - History
    L - LIST element action           M - Master    C - Changes

 FROM ENDEVOR:                              LIST OPTIONS:
   ENVIRONMENT ===> RELEASE                   DISPLAY LIST      ===> N (Y/N)
   SYSTEM      ===> EAS                       WHERE CCID EQ     ===>
   SUBSYSTEM   ===> EAS                       WHERE PROC GRP EQ ===>
   ELEMENT     ===> IO*                       BUILD USING MAP   ===> N (Y/N)
   TYPE        ===> COBOL
   STAGE       ===> P          S - SHIP          P - PROD

 TEXT STRING:
    ===> 'CONSOLLT'
 SCAN COLUMNS:
   START ===>      END ===>
   SHOW TEXT ===> Y (Y/N)

 ACTION TO BE GENERATED WHEN LIST IS CREATED ===>
 WRITE LIST TO OUTPUT DATA SET ===> N (Y/N)
 WHERE COMPONENT EQ ===>
```

Endevor search (continued)

6. Press enter- SCL will be generated; then press F3
7. Again press F3 to return to the Batch Options Menu
8. Enter option 3 to Submit the SCL
9. Scan the held output under DDNAME C1MSG1
10. Search for the return code of ‘0000’. Any element which has ‘0000’ against it has the string you are looking for.

SCL Generation

SCLs are generally used to migrate sources from the Development region to TEST. The steps involved in the preparation of an SCL are listed in the following slides...

How to generate an SCL

1. Select option 2, i.e., ‘TEST’.
2. Select option 3, i.e., ‘BATCH’
3. To build an SCL for the first time, enter options as given below and press ENTER. *whenever you want to build a fresh SCL, set the append option to ‘N’. If you want to append elements to an existing SCL, then set this option to ‘Y”.*

(‘The Batch Options Menu’ screen follows)

Batch Options menu

```
OPTION  ===> 1

    1 BUILD SCL - Build batch SCL actions
    2 EDIT      - Edit request data set
    3 SUBMIT    - Submit job for batch processing
    4 VALIDATE  - Check request data set for syntax errors
    5 BUILD JCL - Enter additional JCL to be included with the job

  REQUEST DATA SET:
     PROJECT  ===> EASV11           APPEND      ===> N (Y/N)
     GROUP    ===> QFIX             INCLUDE JCL ===> N (Y/N)
     TYPE     ===> SCL
     MEMBER   ===> SCLTEST

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

  JOB STATEMENT INFORMATION:
     ===>
     ===>
     ===>
     ===>
```

SCL Generation (continued)

4. On pressing ENTER on the previous screen, the SCL GENERATION screen is brought up. Enter option ‘2’ (ADD/UPDATE) regardless of whether you are creating a new SCL or updating an existing one.
5. In the ‘Add/Update Elements’ screen, type in the fields as shown in the next slide.

(‘Add/Update Element’ screen follows)

Add/Update Elements

```
OPTION  ===> A

    blank - Member list     A - Add an element    U - Update an element

 TO ENDEVOR:                                ACTION OPTIONS:
    ENVIRONMENT ===> TEST                    CCID                    ===> EASY2KUU4
    SYSTEM      ===> EAS0                    GENERATE ELEMENT        ===> Y (Y/N)
    SUBSYSTEM   ===> EAS                     DELETE INPUT SOURCE     ===> N (Y/N)
    ELEMENT     ===> DC1005                  NEW VERSION             ===>
    TYPE        ===> COBOL                   OVERRIDE SIGNOUT        ===> Y (Y/N)
    STAGE:           I                       PROCESSOR GROUP         ===> CIINCL
                                             UPDATE IF PRESENT       ===> N (Y/N)
    COMMENT     ===>

 FROM ISPF LIBRARY:                         LIST OPTIONS:
    PROJECT ===> EASV11                      DISPLAY LIST      ===> Y (Y/N)
    LIBRARY ===> LR11
    TYPE    ===> COBOL
    MEMBER  ===> DC1005       THRU MEMBER ===>

 FROM OTHER PARTITIONED OR SEQUENTIAL DATA SET:
    DATA SET NAME ===>
```

Add/Update elements...

- Use option ‘A’ when you are adding new elements to the SCL. The same option will hold even when we are appending members to an existing SCL.
- Ensure that the member names match in the ‘TO’ and ‘FROM’ libraries. This is very important !
- The Processor group field will depend on the **type** of program. This field is mandatory when new sources are being added to the system. Use the following key:

Source Type	*Processor Group*
Batch cobol program	CIINBL
CICS cobol program	CIINCL
Copybook	CPYNNN
Controlcard	SRCNNS
Bind card	BNDSUBX

(Continued)

Source Type	*Processor Group*
Batch IO Module (TDM)	CIITBL
CICS IO Module (TDM)	CIITCL
Batch IO Module (without TDM)	CIIDBL
CICS IO Module (without TDM)	CIIDCL

SCL Generation (contd.)

Pressing the enter key now will add a member to the SCL

6. Add the remaining members by repeating step 5. Make sure that the member name, type and processor group are correctly entered.
7. Press PF03 to save the SCL. Inform the on-site team giving them the name of the SCL that has been built

   [eg. 'EASV11.QFIX.SCL(SCLTEST)'] .

   SCL Submission will be done on-site.

NOTES

After building the SCL, it is advisable to manually browse it. For this, use the EDIT option shown in the first screen.

Check for :

a) Mismatched member name

b) Repeated entries for same element

c) Wrong Processor group.

Hope that was useful !