IBM Software Group

IBM WebSphere® Data Interchange V3.3

CICS Installation Considerations

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Agenda

- Aspects of the Install process
- Dataset and RDO changes
- XML Support install step, Java
- Error Notification install step, Java
- Utility Control Information block changes
- EDIW changes
- Summary

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Install Guide – Chapter 3

- **WebSphere Data Interchange Version 3.3 Installation Guide for z/OS**
- **Chapter 3 - Installing WebSphere Data Interchange for CICS Transaction Server for z/OS**
  - CICS install steps follow complete z/OS “batch” install
- **CICS Transaction Server for z/OS Version 2.3 (5697-E93) or later is required**
- **For XML translations and/or Error Notification, Java SDK 1.4 or later is required**

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Major CICS Install Changes

- **Improved step descriptions**
- **CSD file utility program used to define WDI resources**
  - The only macro definitions are for the PLT sample
- **WDI Facility removed from product**
- **Persistent Environment (Global Lookaside Buffer) removed from product**
- **No more FCT or file definitions**
- **Improved the XML Support install step**
- **Added the Error Notification (Email Alert) install step**

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LE and C++ Reference Materials

- **Enabling LE in CICS**
  - Section “Installing CICS support for Language Environment” in the *CICS Transaction Server for z/OS Installation Guide*
- **Enabling C++ in CICS**
  - Section “Language Environment support for C and C++” in the *CICS Transaction Server for z/OS Installation Guide*
- **CSD, DFHRPL, and I/O Stream considerations**
  - Section “Preparing CICS for Use with z/OS Language Environment” in the *z/OS C/C++ Programming Guide*

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CICS Installation Datasets

- **EDI.V3R3M0.SEDIDBR2** – DBRMs
  - The name of the CICS DB2 plan is **DIENU33C**
- **EDI.V3R3M0.SEDIHFS2** – HFS files
- **EDI.V3R3M0.SEDIINS2** – Install jobs
- **EDI.V3R3M0.SEDILMD2** – Load modules
- **EDI.V3R3M0.SEDISAM2** – Sample CICS resource definition jobs

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CICS Resource Definition Jobs

- **FXXODCT** – Destination definitions (TDQs)
  - EDI6 - Error notification intra-partition queue
  - EDIJ - XML translation intra-partition queue
- **FXXOPCT** – CICS transaction definitions
  - Removed EDIA - WDI Facility
  - Removed EDIM - DT translations run under the Utility transaction
  - EDIJ - XML parser transaction
  - EDI6 - Error notification transaction
  - EDI7 - Start XML parsers (EDIJs)
  - EDI8 - Stop XML parsers (EDIJs)
  - EDI9 - Monitor XML parsers (EDIJs)

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CICS Resource Definition Jobs - continued

- **FXXOPPT** – Program definitions
  - Removed many programs (mostly Facility-related)
  - Approximately 120 WDI programs defined
  - Several Java programs (for XML translation and Error Notification)
- **FXXORCT** – DB2 resource definitions
  - EDICONN - WDI's DB2/CICS connection attributes
  - EDIENTR1 - Entry definition for 2 threads
    - For example: EDIE (the transaction that writes to the WDI Event Log)
  - EDIENTR2 - Entry definition for 5 threads
    - For example: EDIB (the WDI Utility transaction)
    - User-written transactions that EXEC CICS LINK to EDIFFUT (the WDI Utility program) should be defined with ENTRY(EDIENTR2) or similar

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PLT (Program List Table) Considerations

- A PLT lists programs to be executed either at CICS initialization or at CICS termination (PLTs are optional)
- Improved install step and program descriptions
- Included program EDIJSTRT (the program that starts XML parsers) in the sample CICS initialization list
- Included program EDIJSTOP (the program that stops XML parsers) in the sample CICS termination list
- **FXXOXLT** – Conditional CSD resource update job

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XML Support Install Step

- Improved/simplified install step
- Documented each HFS (Hierarchical File System) change and each ISPF Command screen command
- Showed the CICS SIT (System Initialization Table) change
- Described the XML parser properties file and how to alter it
- Suggested using the default JVM profile DFHJVMPR
- Suggested using /u/edi/cicshome33 as the WDI CICS home directory

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Error Notification Install Step

- New step for Error Notification (Email Alert) setup
- Documented each HFS (Hierarchical File System) change and each ISPF Command screen command
- If the WDI email notification sample is to be used, then some files need to be downloaded from Sun Microsystems
- If MQ is to be used, then some files from the IBM WebSphere MQ java directory need to be copied to the WDI CICS home directory
- Described the wdi.properties file and how to alter it
- Suggested DFHJVMPR and /u/edi/cicshome33

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HFS File Permissions

To give read permission to everybody, from the ISPF Command screen enter ‘omvs’ and then the following:

chmod 777 /u/edi/cicshome33	Full permissions on cicshome33 directory
chmod 644 /u/edi/cicshome33/*	Read permissions on files in cicshome33
chmod 777 /u/edi/cicshome33/dtds	Full permissions on dtds directory
chmod 644 /u/edi/cicshome33/dtds/*	Read permissions on files in dtds
chmod 777 /u/edi/cicshome33/traces	Full permissions on traces directory

In general, the idea is to have read/write/execute permissions on all directories, and to have read permission on the jar files, dtds, and other files. The owner would have write permission on all files.

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ISPF Command Screen - omvs

- From the **ISPF Primary Option Menu** select **Command**
  - Often option 6
- On the command line enter: omvs
- Then any UNIX command can be entered. For example:
  - mkdir /u/edi/cicshome33
  - cd /u/edi/cicshome33
  - ls –la
- When finished with UNIX commands, enter **exit** to go back to ISPF

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ISPF Command Screen – oedit and obrowse

- From the **ISPF Primary Option Menu** select **Command**
  - Often option 6
- On the command line enter: oedit
  - Directory ===> /u/edi/cicshome33
  - Filename ===> DFHJVMPR
- On the command line enter: obrowse
  - Directory ===> /u/edi/cicshome33
  - Filename ===> DFHJVMPR

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ISPF Command Screen - oput

- ISPF datasets can be copied to the UNIX System Services HFS (Hierarchical File System) using the **oput** command.
- From the **ISPF Primary Option Menu** select **Command**
  - Often option 6
- On the command line enter:

  oput ‘edi.v3r3m0.sedisam2(fxxparse)’

  ‘/u/edi/cicshome33/EDIParser.properties’ text
- This command copies FXXPARSE to the CICS home directory renaming it to EDIParser.properties

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CICS Startup JCL

- **Removed the WDI Facility**
  - The following datasets are no longer used
    - SYS2.GDDMLOAD
    - EDI.V3R2M0.SCREENS
    - EDI.V3R2M0.HELPS
- **Removed the Persistent Environment**
  - The following datasets are no longer used
    - EDI.V3R2M0.GLBDUMP
    - EDI.V3R2M0.GLBFUNC
    - EDI.V3R2M0.GLBTRACE

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CICS Startup JCL - Continued

- **Language Environment** libraries required in the STEPLIB and in the DFHRPL concatenation
- **DB2** libraries required in the STEPLIB and in the DFHRPL concatenation
- **MQ Series** libraries required in the STEPLIB and in the DFHRPL concatenation, if MQ is used

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FFUS Control Block Changes

- User-written applications that invoke the WDI Utility include a copy of the WDI Utility control block (the FFUS block)
- It is not mandatory that these user-written applications be recompiled
- In order to override the default XML and ADF print file names and types, these user-written applications would have to be modified and recompiled with the new FFUS block
- The default in the Application Defaults profile is that XML and ADF print files are not created during WDI Utility invocations

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FFUS Control Block Changes - continued

- For customers who run a lot of concurrent WDI translations and who want to use XML and/or ADF print files, eventually their applications would need to change
  - In order to avoid single threading through one resource name
- The FFUS block has been extended from 248 to 300 bytes
- At offset 211 (position 212) there is a new field that indicates whether the old or new block size is in effect
  - A value of ‘X’ indicates the new block size (300)
- Within the extended part of the FFUS block is where XML and ADF print file names and types can be overridden

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FFUS Control Block Changes - continued

- COBOL copybook

```
01 FFUS-DATA.
    ▼
    03 FFUS-EXTEND     PIC X(1).     Pos 212. Extension field.
    ▼
    03 FFUS-XPRTNAME   PIC X(8).     Pos 249. XML print file name.
    03 FFUS-XPRTTYPE   PIC X(2).     Pos 257. XML print file type.
    03 FFUS-APRTNAME   PIC X(8).     Pos 259. ADF print file name.
    03 FFUS-APRTTYPE   PIC X(2).     Pos 267. ADF Print file type.
    03 FILLER          PIC X(32).    Total block length is 300.
```

Note: A value of ‘X’ in the extension field means that the new block size is in effect, otherwise the old block size (248) is assumed.

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EDIW Panel Changes

- CICS Transaction EDIW is used to enter ad hoc PERFORM commands
- On the main EDIW panel there is a field where you can indicate that you want to override XML and/or ADF print file names and types
  - XML/ADF Print Files (Y/N)
- A new “Additional Fields” panel allows entering:
  - XML Print File Name
  - XML Print File Type
  - ADF Print File Name
  - ADF Print File Type

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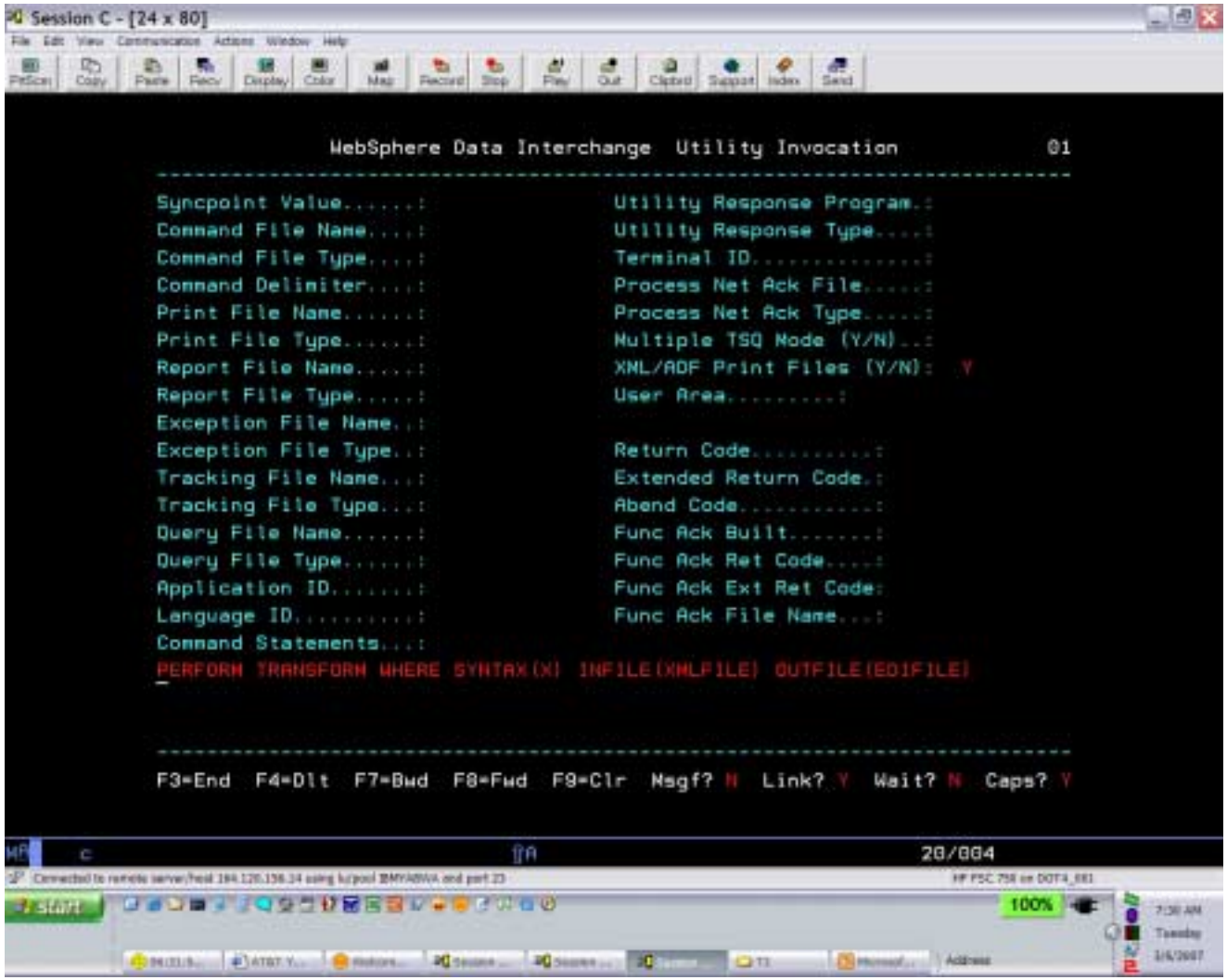
EDIW Panel – main panel



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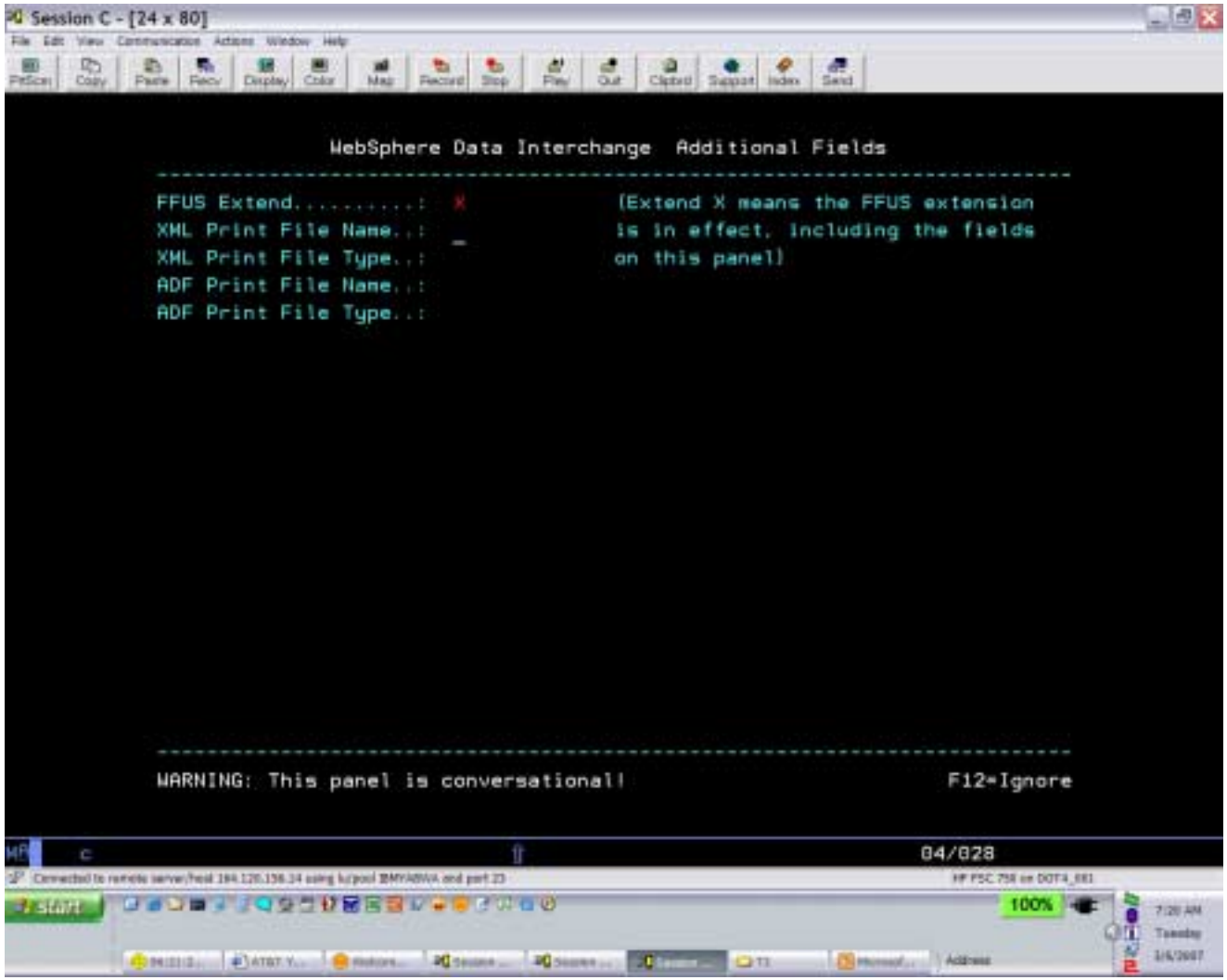
EDIW Panel – additional fields



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Summary

- CICS install step changes
  - RDO now exclusively used to define CICS resources
- Error Notification step has Java install implications
- CICS startup JCL changes
  - VSAM datasets now totally removed – all DB2
  - WDI Facility no longer used – all in WDI Client
  - Persistent Environment no longer used
- Utility Control Information block changes (FFUS block)
- EDIW has been changed to accommodate XML and ADF print file names and types

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