



IBM Software Group

IBM WebSphere® Data Interchange V3.3

Common Event Handling



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This presentation will review the Common Event Handling feature.

Objectives

- Discuss WDI error handling features
- Discuss the setup involved with the features
- Discuss how these features might be used in various environments
- Discuss operational requirements involved with the features
- Discuss default actions associated with the features



The presentation will discuss WDI error handling features, the setup involved, how the features might be used, and operational requirements.

WDI 3.3 Error Handling Features

- XML version of the print file
- Data format (fixed record) version of the print file
- Ability to route print files to destinations based on error severity and/or the occurrence of a specific error
- Greater flexibility with regard to filtering error messages to print files (and event log)
- Provide more information about the documents involved with an error
- Write print file messages during DT processing



Common Event Handling provides the capability to output the Print File in a variety of formats and destination types. Multiple formats and destinations can be configured. Error filtering and can be used to condition output. Document information can also be included in the output.

WDI Print Files

- Created when running PERFORM commands
- Regular print file: PRTFILE
- XML print file: XMLPRNT
 - ▶ Defined VB, greater than or equal to 132
- Data format print file: ADFPRNT
 - ▶ Defined FB or VB, 132 bytes
- If one of these files is to be routed, the file must be able to be opened for write and read
 - ▶ JCL invocations: No `//PRTFILE DD SYSOUT=*`



The WDI Server creates the print files and then at termination reads and routes them to each of the selected destinations.

XML Print File - Sample

```
<DocInfo>
  <DocId>2222222222</DocId>
  <SenderId>ANY</SenderId>
  <SenderQual>ANY</SenderQual>
  <Syntax>edi</Syntax>
</DocInfo>
<Message>
  <MsgId>UT0008</MsgId>
  <DocId>2222222222</DocId>
  <Severity>0</Severity>
  <Text>Map name being processed: POTESE.</Text>
  <InsertData>POTESE</InsertData>
</Message>
```



Here is a sample XML formatted print file with the Document Information included.

Data Format Print File – Record Layouts

Message Record

```
char  rectype;      /* Record type (M = Message)      */
char  msgcont;     /* (Y = message record continuation) */
char  msgid[6];    /* Error message ID                */
char  sev[2];      /* Severity of error                 */
char  docid[20];   /* Document ID                       */
char  numimbed[2]; /* Number of imbeds                  */
```

Text or Imbed Record

```
char  rectype;     /* Record type (T = Text or I = Imbed) */
char  msgcont;     /* (Y = message record continuation) */
char  imbcont;     /* (Y = imbed record continuation) */
char  textlen[3];  /* Length of text to follow           */
char  text[122];   /* Message text or imbed text         */
```



Application Data Formatted print files have a fixed record layout ready for processing.

Application Defaults Profile

- Select whether to create an XML print file (default: no)
- Select whether to create an ADF print file (default: no)
- Select whether event log is active (default: yes)
- Choose error severity thresholds for the three print files and the event log
- Select specific error messages that can override severity thresholds
 - ▶ To be included or to be omitted from print files and event log regardless of severity



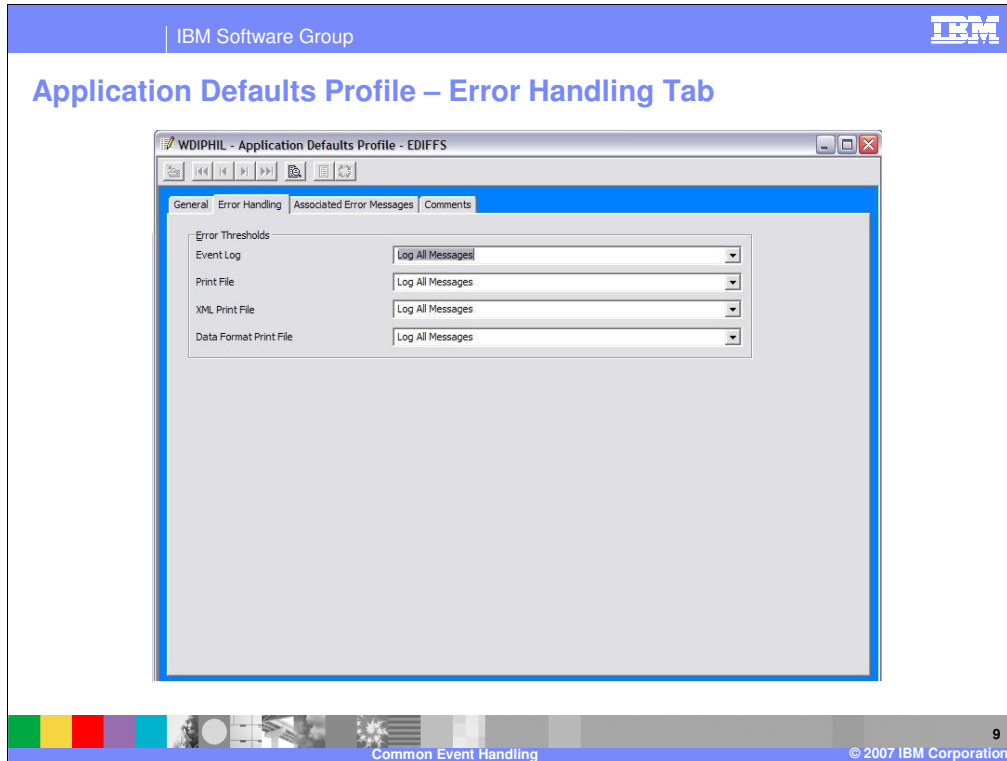
Destinations are selected by Application Defaults Profile. The type of print file is specified in the Application Defaults Profile. The print files can be conditioned by error severity. Specific Error messages can be specified that will trigger the creation of a print file. Specific Error messages can be omitted or included in the print file.

Application Defaults Profile – General Tab

The screenshot shows a window titled "WDIPHIL - Application Defaults Profile - EDIFFS". The window has a standard Windows-style title bar with minimize, maximize, and close buttons. Below the title bar is a toolbar with several icons. The main content area is divided into tabs: "General", "Error Handling", "Associated Error Messages", and "Comments". The "General" tab is selected and contains the following settings:

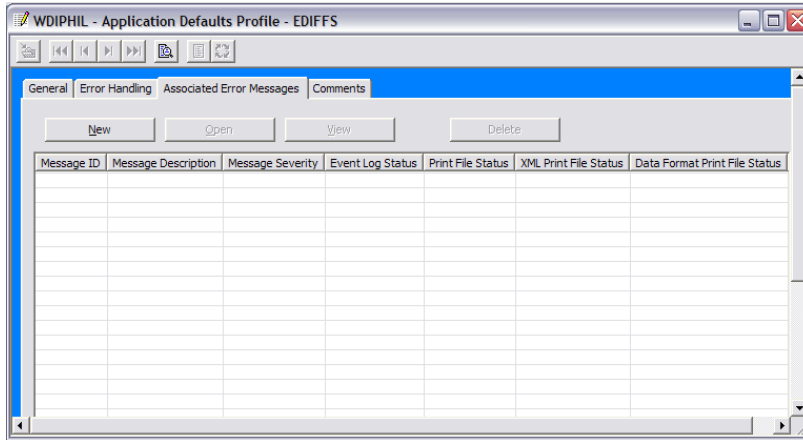
- Application ID: EDIFFS
- Description: (empty text box)
- Event Log Active
- Allow Production Rule or Usage for Test Messages
- Management Reporting
- Create XML Print File
- Create Data Format Print File
- End of Translation Message
- Monitor Program: (dropdown menu)
- Century Control Year: 10
- Alphanumeric Data Validation Table: ALPHANUM
- Character Data Validation Table: CHARSET
- Document Store:
 - Save Information About All EDI Documents to the Document Store
 - Save Information About All Documents to the Document Store (all syntaxes)
 - Save Information About Successfully Translated EDI Documents to the Document Store
 - Save Information About EDI Documents that Fail Translation to the Document Store
 - Do Not Save Information to the Document Store
- Transaction Image: Do Not Save Images of Documents
- Functional Acknowledgement Image: Do Not Save Images of Functional Acknowledgements

This is the Application Defaults profile, General Tab. It is located in the WDI Client, Environment functional area.



On the Error Handling tab you can specify the error thresholds conditioning creation of the various print files.

Application Defaults Profile – Associated Error Messages Tab



Associated Error Messages provides the capability of conditioning specific error messages in the print files.

Filtering Messages To Event Log – Order of Precedence

- **Event Log Active** box not checked in the APPDEFS profile, no logging will occur
- **Write Message To Event Log** specified in the APPDEFS profile, the message will be written when it occurs regardless of severity
- **Do Not Write Message To Event Log** specified in the APPDEFS profile, the message will not be written regardless of severity
- Messages with severities that meet the **Event Log Error Threshold** in the APPDEFS profile will be written
 - ▶ Default is to log messages with severity 8 and higher



The criteria for logging messages to the Event Log have an order of precedence. Event Log Active, Write Message to Event Log, Do Not Write Message, Message with an Event Log Error Threshold.

Filtering Messages To Print Files – Order of Precedence

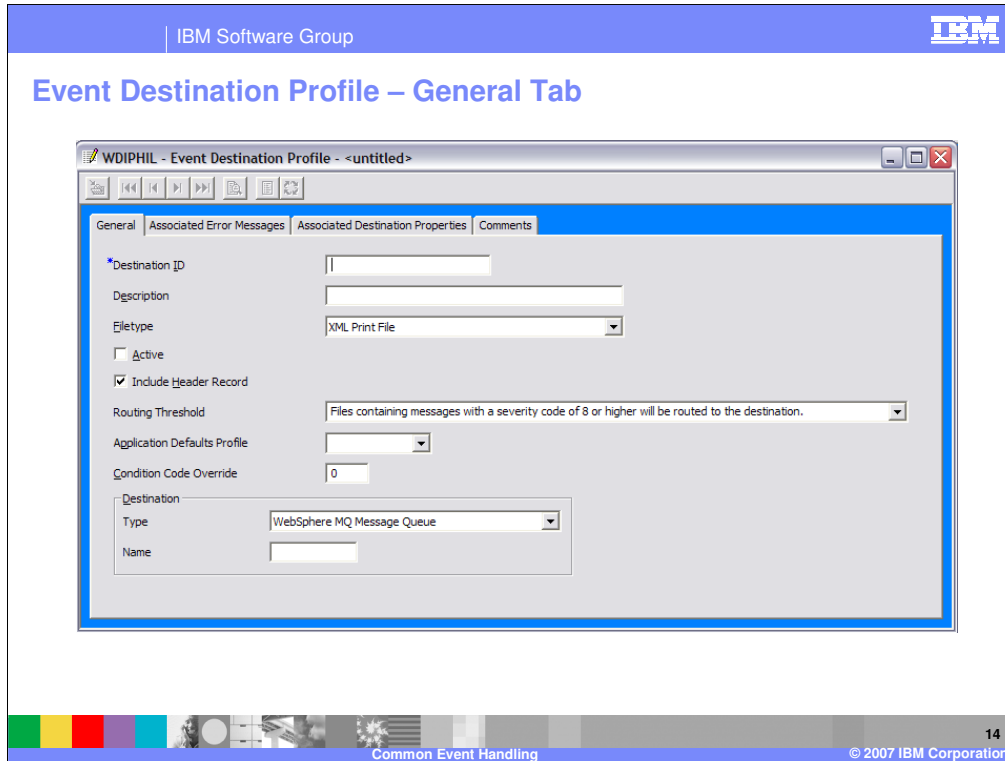
- Utility keywords **IGNOREINFO** and **IGNOREWARN** will filter severity 0 and 4 messages respectively
- Utility keyword **FILTERMSG** will filter specified messages with severity less than 8
- **Write Message To Print File** specified in the APPDEFS profile, the message will be written when it occurs regardless of severity
- **Do Not Write Message To Print File** specified in the APPDEFS profile, the message will not be written regardless of severity
- Messages with severities that meet the **Print File Error Threshold** in the APPDEFS profile will be written
 - ▶ Default for regular print file: Log All Messages
 - ▶ Default for XML and ADF print files: Do Not Log Messages

Filtering Messages to Print Files have an order of precedence. Utility Keywords, APPDEFS Write Message To Print File, APPDEFS Do not write message to print file, and Messages with Print File Error Threshold. The defaults for the regular print file is to log all messages. For XML and ADF formatted print files is to not log messages.

Event Destination Profile

- New 3.3 profile
- Used for routing print files to destinations for further processing
- Primarily this profile specifies:
 - ▶ What type of print file is to be routed (regular, XML, ADF)
 - ▶ The triggering criteria (severity threshold or specific message)
 - ▶ The destination (MQ queue, file, directory, or CICS TSQ, TDQ, or ESDS VSAM file)

The Event Destination Profile is new for WebSphere Data Interchange V3.3. Controls the routing of print files to various destinations. Multiple Event Destination Profiles can be selected by APPDEF Profile name.



Unique destination IDs must be given. The print file type must be XML, regular print file, or ADF. Active selects whether the profile is selectable to be used. Include header record allows Associated destination properties to be included in the output. The Destination can be conditioned by the message maximum error severity. Application Defaults Profile is used to select the Destination Profile. Destination Type specifies where to print file data is placed. On an MQ Queue, TDQ, TSQ, Dataset or HFS text file.

Event Destination Profile – Associated Error Messages Tab

WDIPHIL - Event Destination Profile - <untitled>

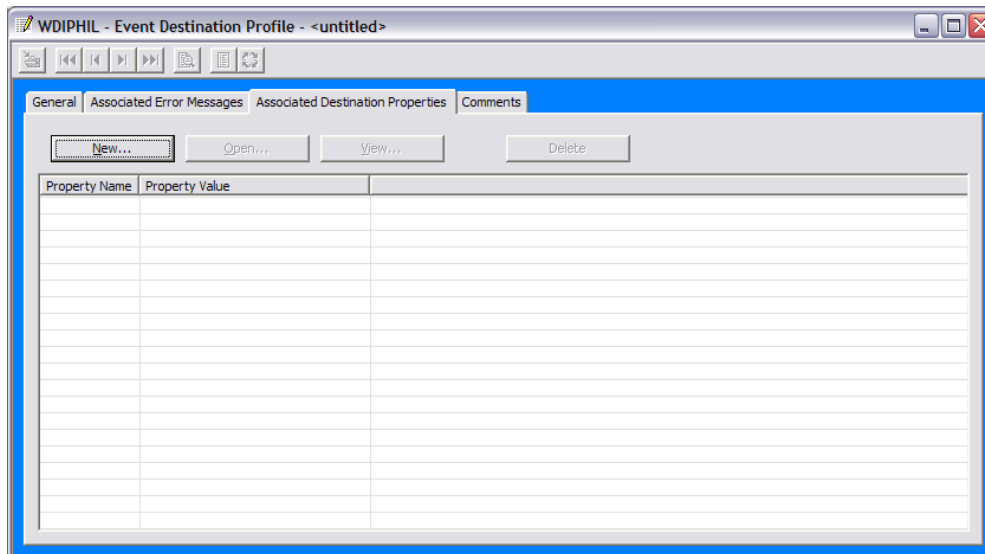
General Associated Error Messages Associated Destination Properties Comments

New... Open... View... Delete

Message ID	Message Description	Message Severity	Print File Status	XML Print File Status	Data Format Print File Status

This is the Event Destination Profile. It is located in the WDI Client Processing functional area.

Event Destination Profile – Associated Destination Properties Tab



The Associated Destination Properties tab contains a list of all the associated error messages and edit fields that display information about these properties.

Print Files To Be Routed

- The print file is opened for write as well as opened for read
- Messages that pass filtering and are written to the print file are routed



The print file to be routed (whether PRTFILE, XMLPRNT, or ADFPRNT) must be able to be opened for write as well as opened for read. Only messages that pass filtering and are written to the print file, will be used to determine whether the print file gets routed.

XML Routed Print Files

- Can include a header
 - ▶ This is indicated by a check box in the Event Destination (ED) profile
 - ▶ Includes the name of the ED profile that triggered the routing
 - ▶ The properties associated with the ED profile
- Include document information (within the DocInfo tags)
 - ▶ Document ID, syntax, dictionary, document
 - ▶ Sender and Receiver trading partner nickname
 - ▶ Sender and Receiver ID and qualifier



XML routed print files Can include a header. This is indicated by a check box in the Event Destination (ED) profile that includes the name of the ED profile that triggered the routing, and the properties associated with the ED profile. The document information is within the DocInfo tags and includes document information and trading partner information.

CICS Operational Considerations

- Default XML print file name: XMLPRNT
- Default ADF print file name: ADFPRNT
- Default XML and ADF print file type: TS
- These defaults can be overridden in the FFUS structure
- The size of the FFUS structure has increased from 248 to 300
- A new field within the original 248 bytes is used to indicate if the structure is 248 or 300 in length
- Current applications do not need to be changed
- Default file names (XMLPRNT and ADFPRNT) will be used unless overridden in the FFUS extension area
- Whether the XML or ADF print files are used at all, is determined in the Application Defaults profile



These are some considerations when using the event handling in the CICS environment.

How a Routed Print File Might Be Handled

- z/OS Batch: A job step subsequent to WDI can attempt to open the previously established destination file, and if the file was written to by WDI, then process the data
- CICS: A destination file can be defined in the Event Destination profile as being an intra-partition TDQ, defined to trigger a CICS transaction that will process the data
- All Platforms: The destination can be defined to be an MQ queue and the data processed off the queue as desired



These are some examples on how a routed print file might be handled in various environments.

Summary

- Two types of print files
- Filtering mechanisms control what gets written to the print files and the event log
- Ability to route print files based on certain criteria
- Default settings mean that current applications do not need to change



There are two types of print files, XML and data format. Filtering mechanisms control what is written to the print files and event log. Event handling gives you the ability to route print files based on specific criteria for example error message severity or the occurrence of a specific message.

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