



IBM Software Group

# 2006 B2B Customer Conference

## *B2B – Catch the Next Wave*

## WDI ERROR HANDLING

WebSphere. software



**ON** DEMAND BUSINESS™

# Objectives

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



## 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



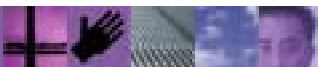
## WDI Print Files

- 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=\***



# 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: POTEST.</Text>  
  <InsertData>POTEST</InsertData>  
</Message>
```



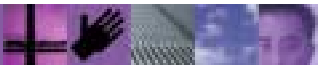
# Data Format Print File – Record Layouts

## 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

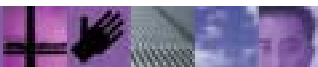
```
char    rectype;        /* Record type (T = Text or I = Imbed) */
char    msgcont;       /* (Y = message record continuation)  */
char    imbcont;       /* (Y = imbed record continuation)    */
char    textlen[3];    /* Length of text to follow            */
char    text[122];     /* Message text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



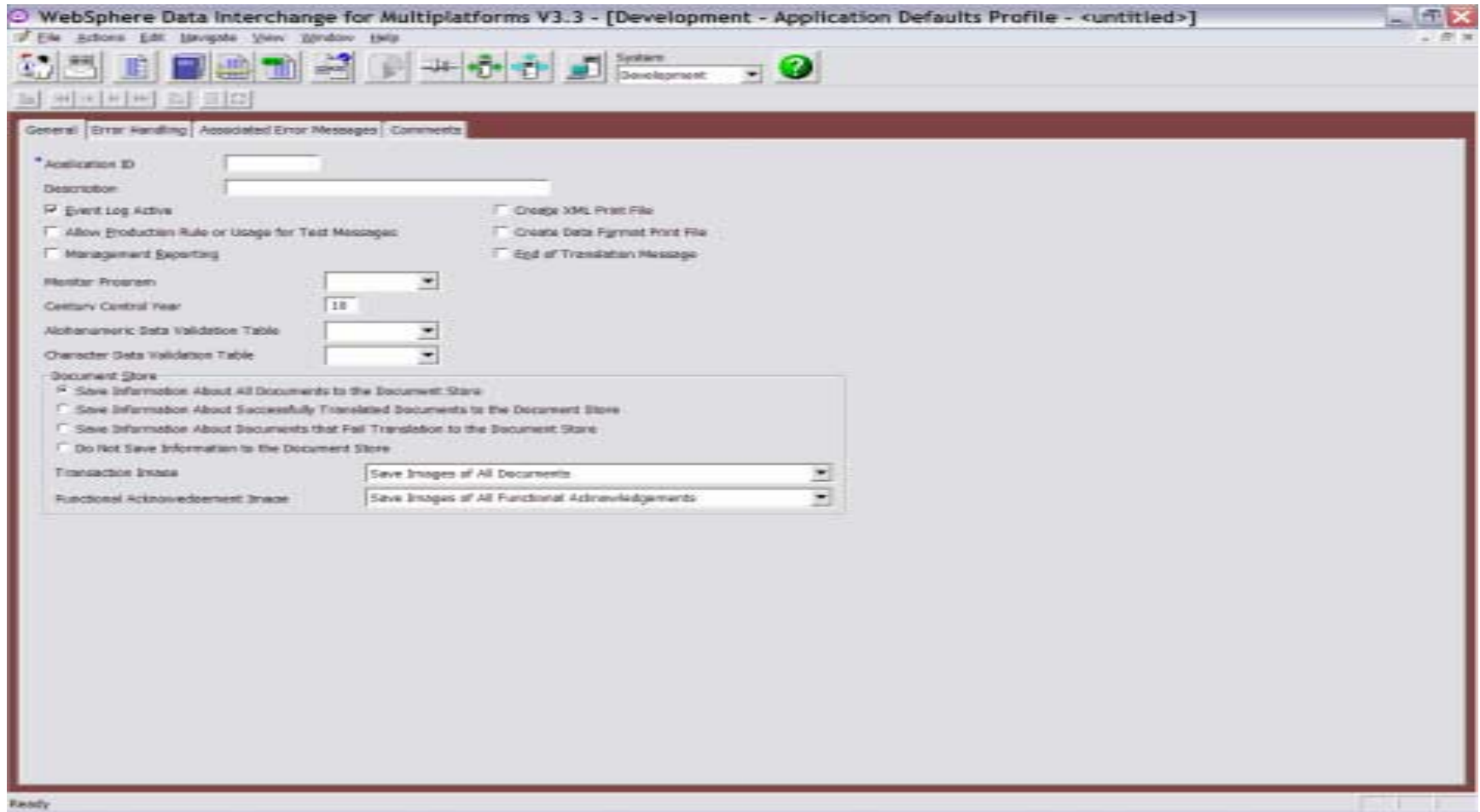
## Application Defaults Profile

- 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

Note: The regular print file is always created.

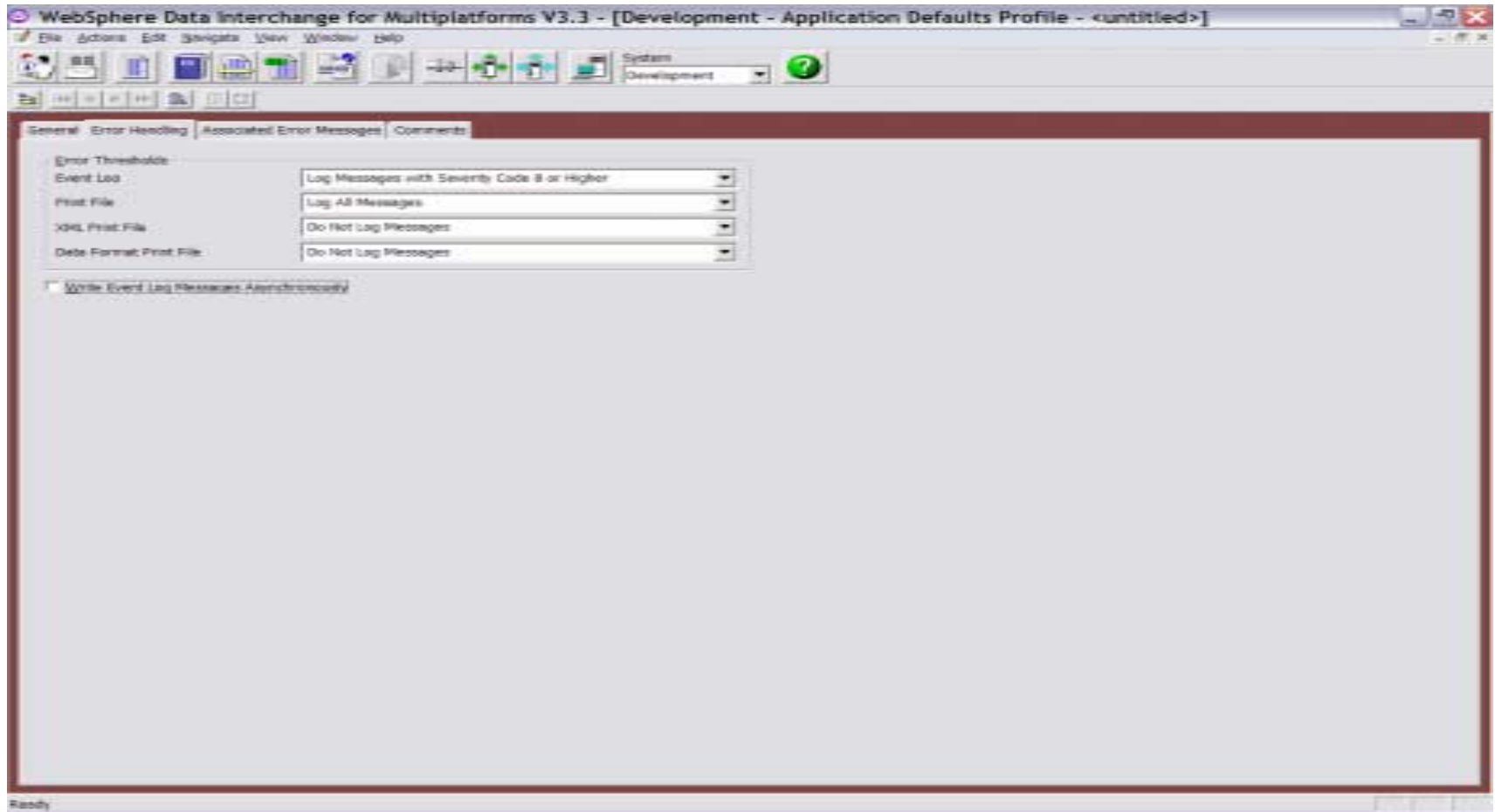


## Application Defaults Profile – General Tab

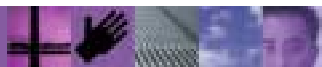
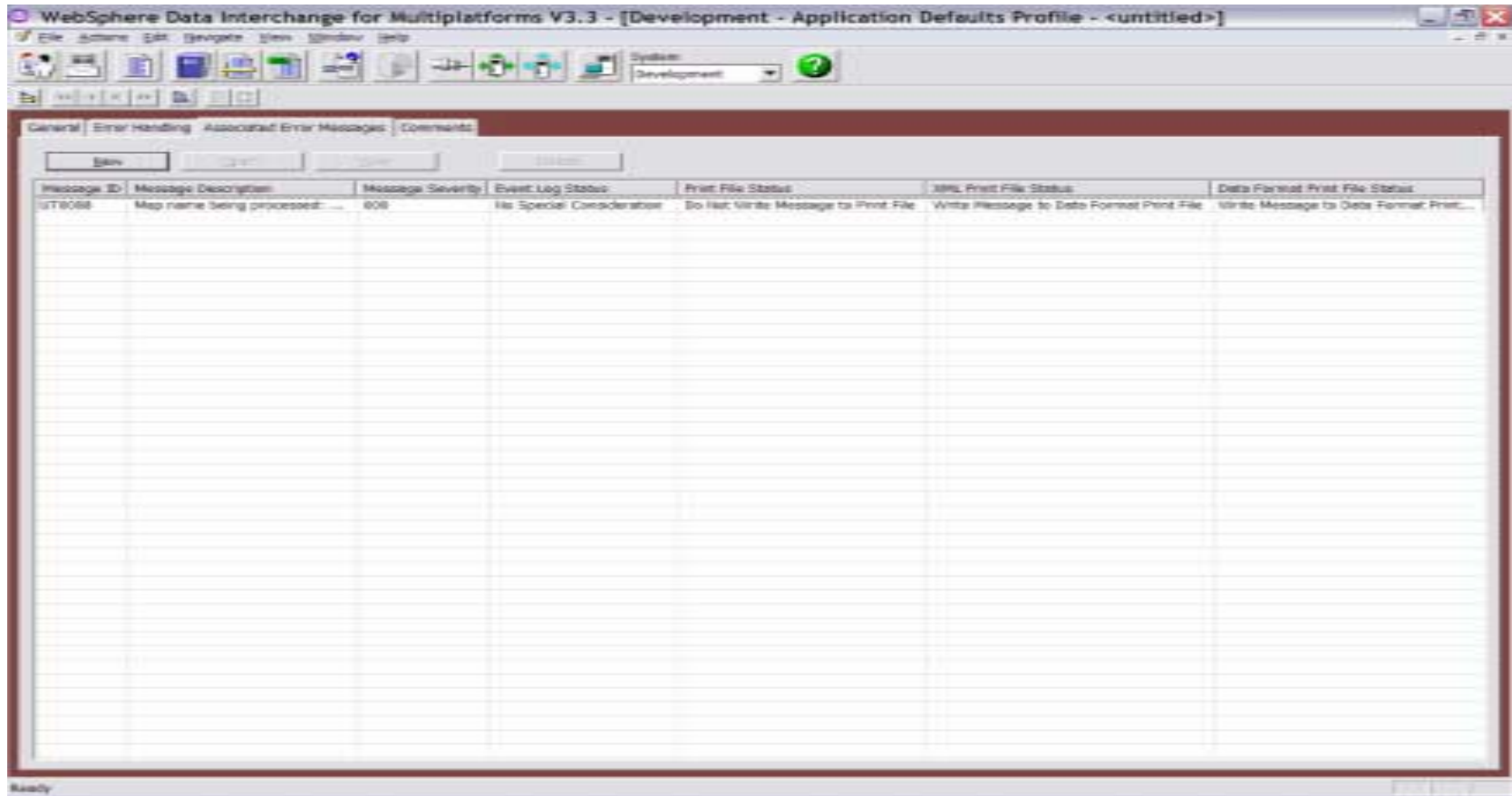




## Application Defaults Profile – Error Handling Tab



# Application Defaults Profile – Associated Error Messages Tab



## 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



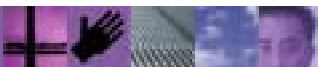
## Filtering Messages To Print Files – Order of Precedence

- Utility keywords **IGNOREINFO** and **IGNOREWARN** will filter severity 0 and 4 messages respectively
- Utility keyword **FILTERMSGs** 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



# 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)



## Event Destination Profile – General Tab

The screenshot displays the 'General' tab of the 'Event Destination Profile' configuration window. The window title is 'WebSphere Data Interchange for Multipatforms V3.3 - [Development - Event Destination Profile - <untitled>]'. The interface includes a menu bar (File, Actions, Edit, Navigate, View, Window, Help) and a toolbar with various icons. The main configuration area contains the following fields and controls:

- Destination ID:** A text input field.
- Description:** A text input field.
- Filetype:** A dropdown menu currently set to 'Print File'.
- Active:** A checkbox that is currently unchecked.
- Include Header Record:** A checkbox that is currently checked.
- Routing Threshold:** A dropdown menu with the text 'Files containing messages with a severity code of 8 or higher will |'.
- Application Defaults Profile:** A dropdown menu.
- Condition Code Override:** A text input field containing the value '0'.
- Destination:** A section containing:
  - Type:** A dropdown menu set to 'WebSphere MQ Message Queue'.
  - Name:** A text input field.

The status bar at the bottom left of the window shows 'Ready'.

## Event Destination Profile – Associated Error Messages Tab

WebSphere Data Interchange for Multiplatforms V3.3 - [Development - Event Destination Profile - <untitled>]

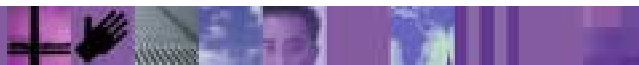
File Actions Edit Navigate View Window Help

System: Development

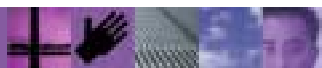
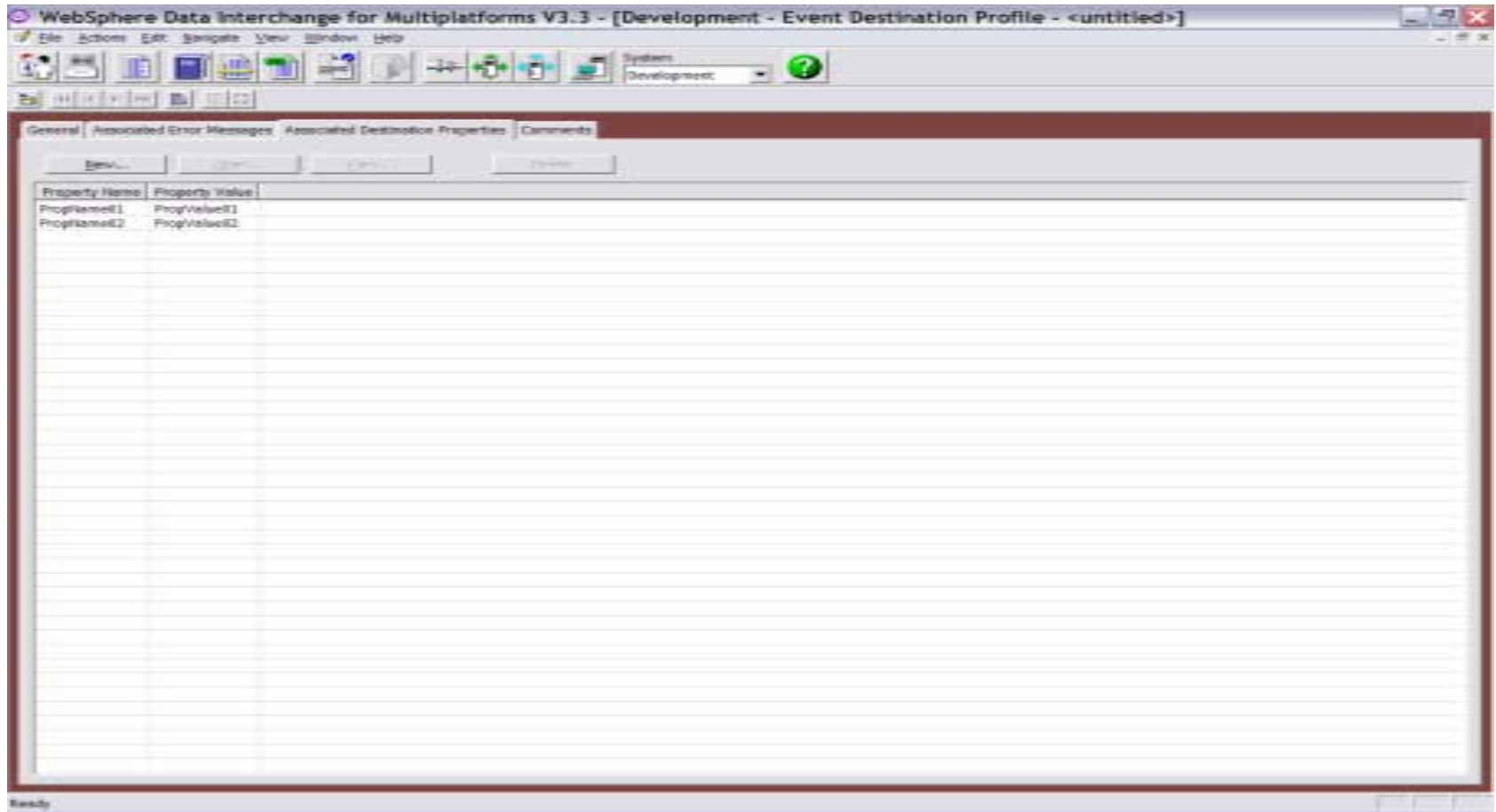
General Associated Error Messages Associated Destination Properties Comments

Message ID	Message Description	Message Severity	Print File Status	JMS Print File Status	Data Format Print File Status
UT0641	Transition table lookup entry ...	004	Force Routing To Destination	No Special Consideration	No Special Consideration
UT0638	A user exit returned a non-zero...	008	Ignore From Routing Consideration	No Special Consideration	No Special Consideration

Ready



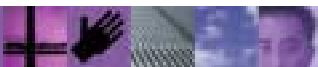
## Event Destination Profile – Associated Destination Properties Tab





## Print Files To Be 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 profile) that includes the name of the ED profile that triggered the routing, and 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



# 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



## 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



# Summary

- Two new types of print files (XML and data format)
- New filtering mechanisms control what gets written to the print files and the event log
- Ability to route print files based on certain criteria (error message severity or the occurrence of a specific message)
- Default settings mean that current applications do not need to change

