



IBM Software Group

# ***IBM WebSphere® Data Interchange V3.3***

## ***Using Document Properties***



@business on demand.

© 2007 IBM Corporation

This presentation will review the document properties that can be used in a Data Transformation map.

## Using Document Properties

- Properties contain data that is associated with the document, but not part of the document
  - ▶ Envelope elements, generic and specific (ISA05, IchgSndrQI, etc.)
  - ▶ MQMD and MQRFH2 headers (ROOT.MQMD.MsgId, etc.)
  - ▶ Processing options like “SegOutput”, etc.
- Properties can be set using the SetProperty() command, or you can get the value of one using the GetProperty() function
- Properties override all other sources of a value
  - ▶ IchgSndrQI overrides the envelope profile and trading partner profile



Properties contain data that is associated with the document, but not part of the document. Examples of document properties are Envelope elements, the WebSphere MQ (WMQ) MQMD and MQRFH2 headers, and processing options like “SegOutput”. Properties can be set using the SetProperty() command, or you can get the value of a property using the GetProperty() function. Target document properties override all other sources of a value. For example: IchgSndrQI overrides the envelope profile and trading partner profile.

## Section

# *GetProperty Function*

## Using Document Properties

- Any command that uses expression as an argument
- Get a property of the source message
- If not set in the source message, an empty string is returned



The GetProperty function can be used with any command that has an expression as an argument. This function retrieves values from the source message and if the value is not set an empty string is returned.

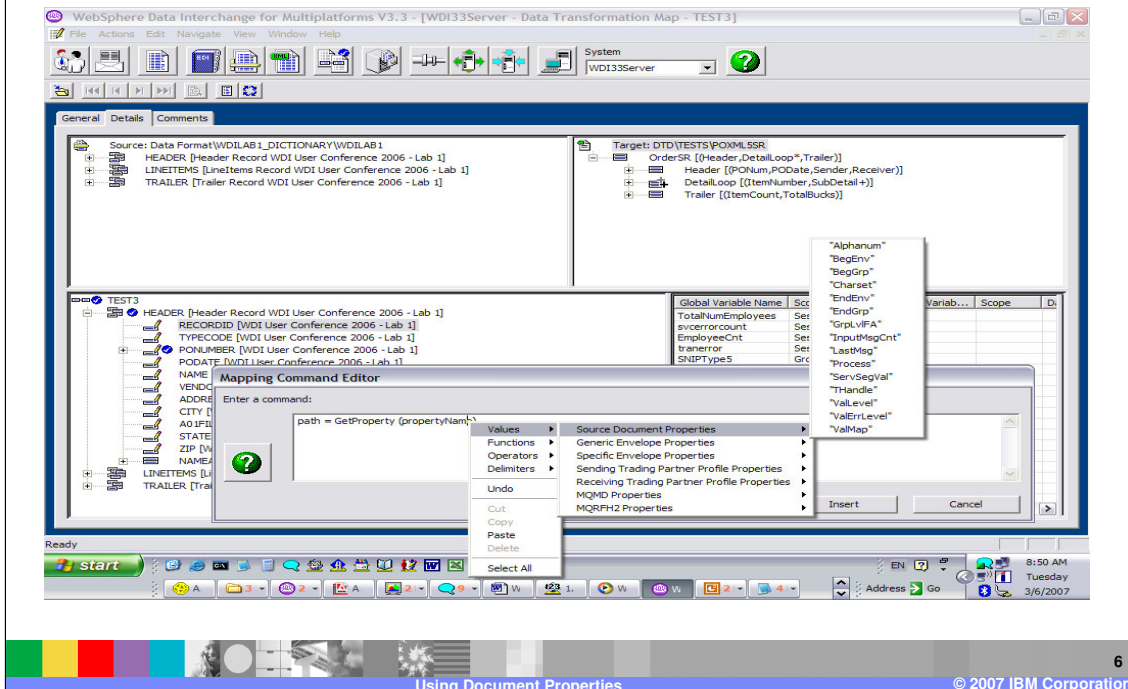
## Using Document Properties

The screenshot shows the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window displays a Data Transformation Map configuration for a test map named 'TEST3'. The source is a Data Format (WDILAB1\_DICTIONARY) and the target is a DTD (TESTS\POXMLSSR). The mapping is defined by several elements: HEADERS, LINEITEMS, and TRAILER. The 'Mapping Command Editor' is open, showing a context menu with 'GetProperty' selected. The 'Global Variable Name' table is visible, listing variables like TotalNumEmployees, ErrorCode, EmployeeCnt, and SNIPType5.

Global Variable Name	Scope	Data Type	Local Variab...	Scope	D
TotalNumEmployees	Ses...	Integer			
ErrorCode	Ses...	Real			
EmployeeCnt	Ses...	Integer			
trancorr	Ses...	Real			
SNIPType5	Group	Character			

This is an example of the Assignment Command. To select the GetProperty function, right click on the expression and select GetProperty.

# Using Document Properties



Source document properties include the flags that signal the begin and end of envelopes, the input message count, a last message indicator, and the WebSphere Data Interchange (WDI) document store handle.

## Using Document Properties

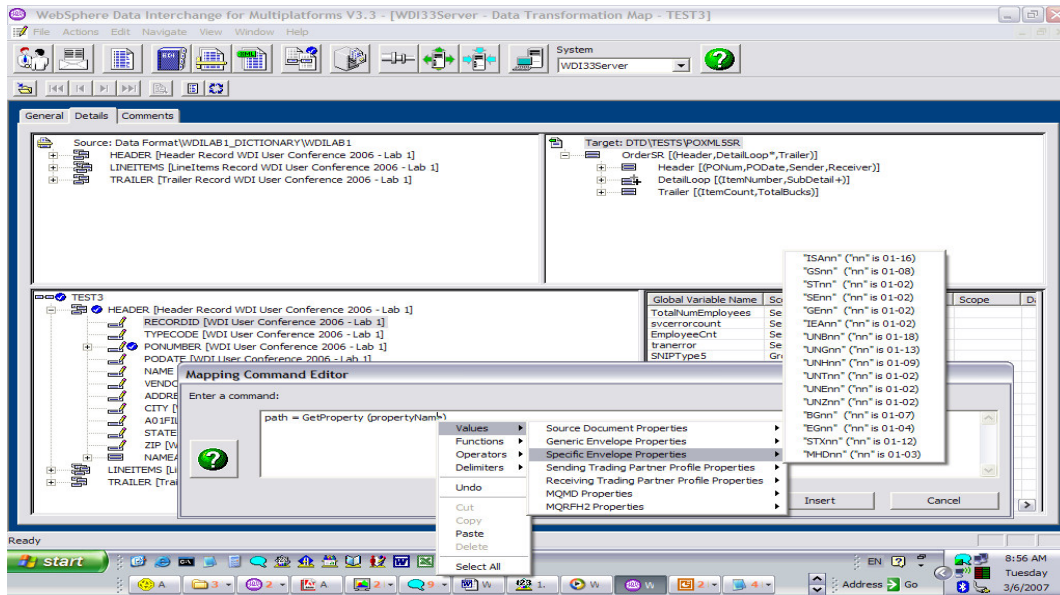
The screenshot displays the IBM WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a mapping configuration for a Data Transformation Map named 'TEST3'. The source is 'Data Format\WDILAB1\_DICTIONARY\WDILAB1' and the target is 'DTD\TESTS\POXMLSSR'. The source document structure includes 'HEADER', 'LINEITEMS', and 'TRAILER'. The target document structure includes 'OrderSR', 'Header', 'DetailLoop', and 'Trailer'. A 'Mapping Command Editor' is open, showing a command: `path = GetProperty (propertyName)`. A context menu is open over the command editor, listing various property categories. A list of generic envelope properties is displayed, including: 'IchgCtlNum', 'IchgSndrQl', 'IchgSndrId', 'IchgRcvrQl', 'IchgRcvrId', 'IchgDate', 'IchgTime', 'IchgPswd', 'IchgUsInd', 'IchgAppRef', 'IchgVerRel', 'IchgGrpCnt', 'IchgCtlTotal', 'IchgTrxCnt', 'GrpCtlNum', 'GrpFuncGrpId', 'GrpAppSndrId', 'GrpAppRcvrId', 'GrpDate', 'GrpTime', 'GrpPswd', 'GrpVer', 'GrpRel', 'GrpTrxCnt', 'TrxCtlNum', 'TrxVer', and 'TrxRel'. The interface also shows a 'Global Variable Name' table with columns for name, type, and scope.

Global Variable Name	Src	Scope
TotalNumEmployees	Ses	
sverrorcount	Ses	
EmployeeCnt	Ses	
trerror	Ses	
SNIPType5	Grc	

Using Document Properties © 2007 IBM Corporation

Generic envelope properties include values that would be found in an Electronic Data Interchange (EDI) source document. For example the interchange control number, group date, and transaction version.

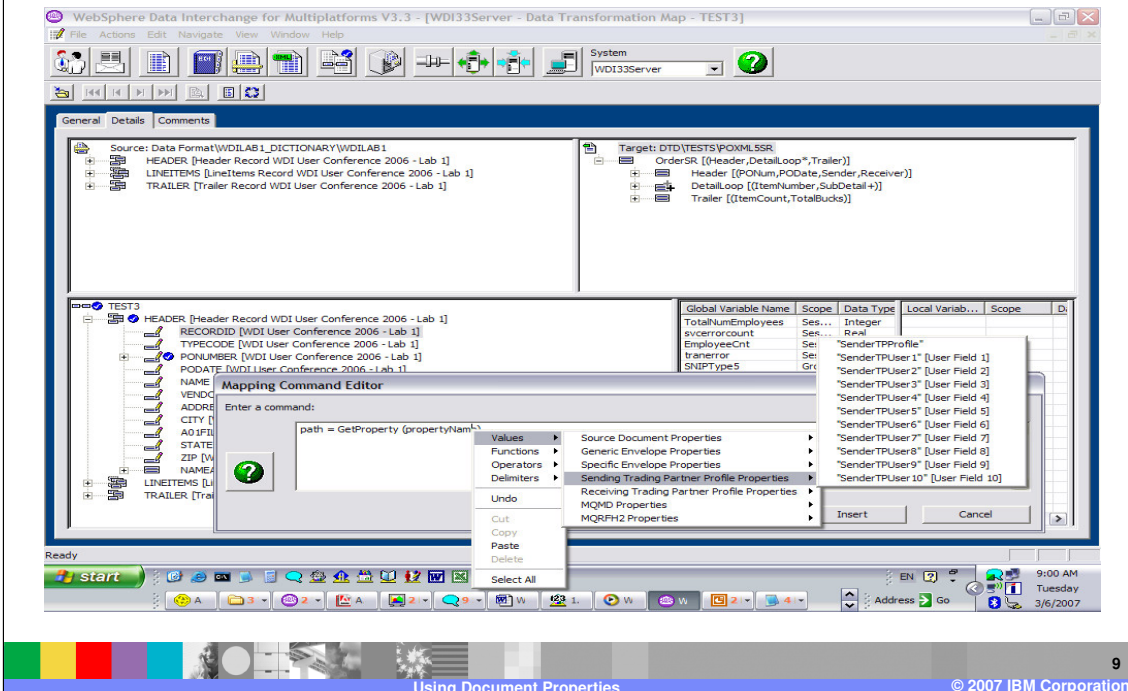
# Using Document Properties



Specific envelope properties also include values that would be found in an EDI source document but use the segment name, element, and sub-element number to retrieve a specific value.

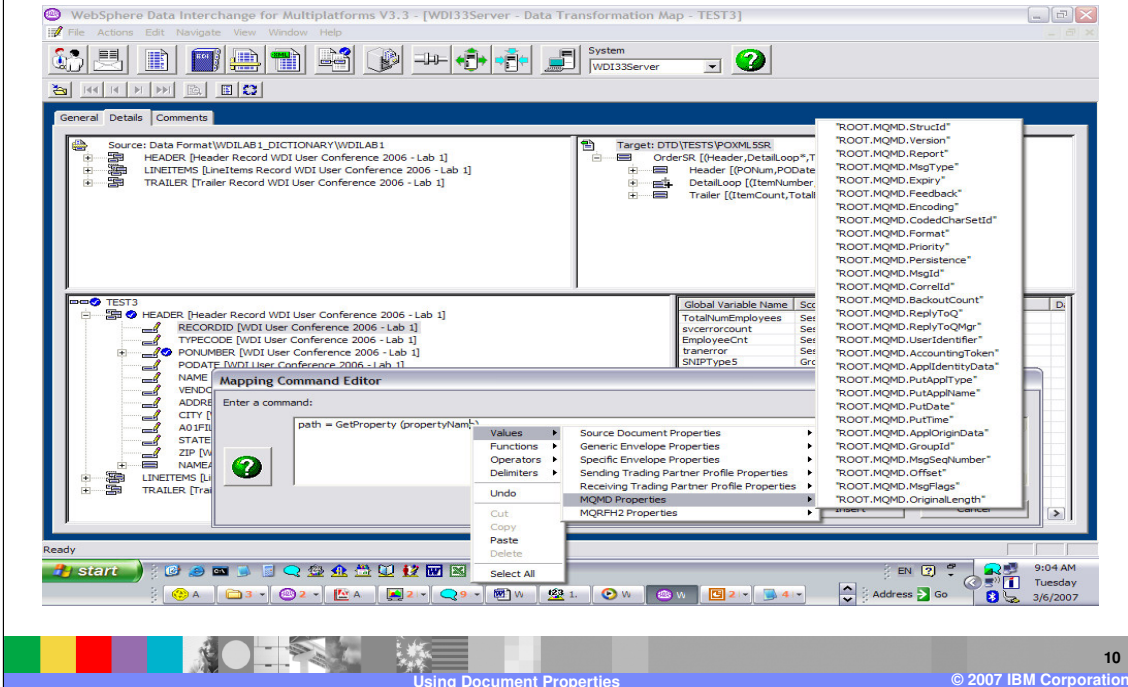


# Using Document Properties



The Sending and Receiving trading partner profile names and the user fields from these profiles related to the source document are available. The user fields in the profiles can be useful to save information for example the codepage for the target document. You can get the property from the user field and use the SetProperty command to set the codepage for the target document.

# Using Document Properties



The WebSphere MQ (WMQ) MQMD and MQRFH2 header information from the source document is also available.

## Section

# *SetProperty Command*

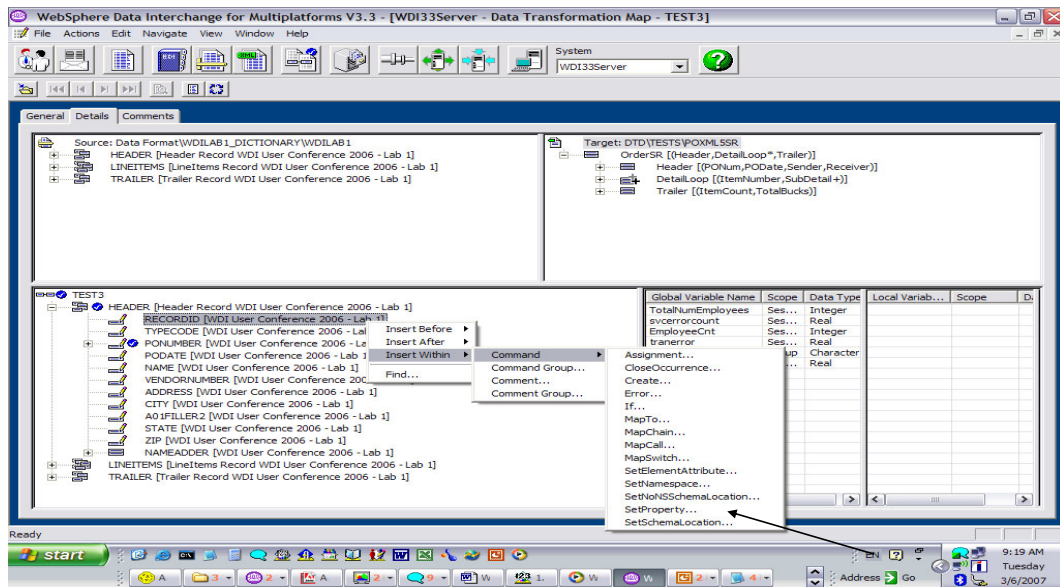
## Using Document Properties

- SetProperty (propertyName, propertyValue)
- Used to set a special processing property of the target message
- propertyName is a predefined list.
- propertyValue can use functions to return the value for the property



The SetProperty command can be used to set properties to control processing and override values for the target message. The propertyValue argument can use functions to set the value for the property.

# Using Document Properties



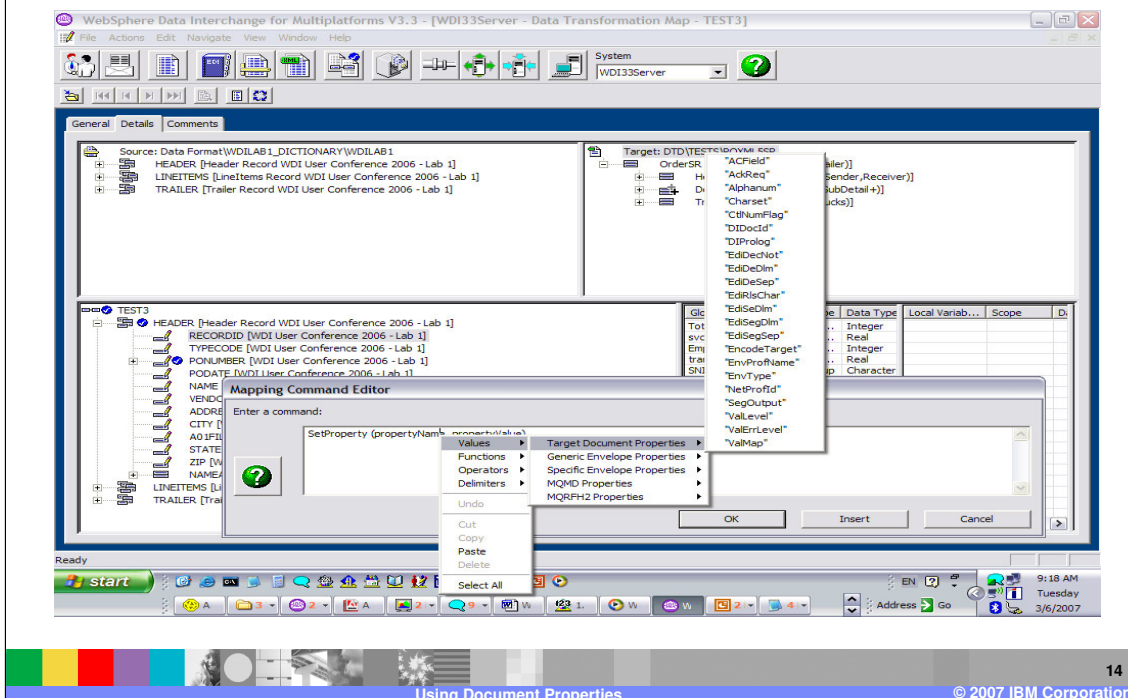
13

Using Document Properties

© 2007 IBM Corporation

To select the SetProperty command, right click on an element in the mapping window, choose where to insert the command, select Command, and select SetProperty.

## Using Document Properties



Target document properties include the application control field, EDI delimiters, and the code page for the target message.

## Using Document Properties

The screenshot displays the IBM WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a mapping configuration for a Data Transformation Map. The 'Source' is 'Data Format\WDILAB1\_DICTIONARY\WDILAB1' and the 'Target' is 'DTD\TEST3'. The 'Mapping Command Editor' is open, showing a command: `SetProperty (propertyName)`. A context menu is open over the command, listing various options including 'Values', 'Functions', 'Operators', 'Delimiters', 'Undo', 'Cut', 'Copy', 'Paste', and 'Delete'. The 'Values' option is expanded, showing a list of 'Generic Envelope Properties' such as `'TchgCtnNum'`, `'TchgSndrQl'`, `'TchgSndrId'`, `'TchgRcvrQl'`, `'TchgRcvrId'`, `'TchgDate'`, `'TchgTime'`, `'TchgPswd'`, `'TchgUsgrInd'`, `'TchgAppRef'`, `'TchgVerRef'`, `'TchgGrpCnt'`, `'TchgCtTotal'`, `'TchgTrxCnt'`, `'GrpCtnNum'`, `'GrpFuncGrpId'`, `'GrpAppSndrId'`, `'GrpAppRcvrId'`, `'GrpDate'`, `'GrpTime'`, `'GrpPswd'`, `'GrpVer'`, `'GrpRel'`, `'GrpTrxCnt'`, `'TrxCtnNum'`, `'TrxCnt'`, `'TrxCode'`, `'TrxVer'`, and `'TrxRel'`. The interface also shows a tree view of the source data structure and a table for defining data types and local variables.

Generic envelope properties include values that would be found in an EDI target document for example the interchange sender and receiver id and qualifier, group version, and transaction control number. Not all properties listed can be used to override values. Properties that are available in the Envelope Profile can be used to override values.

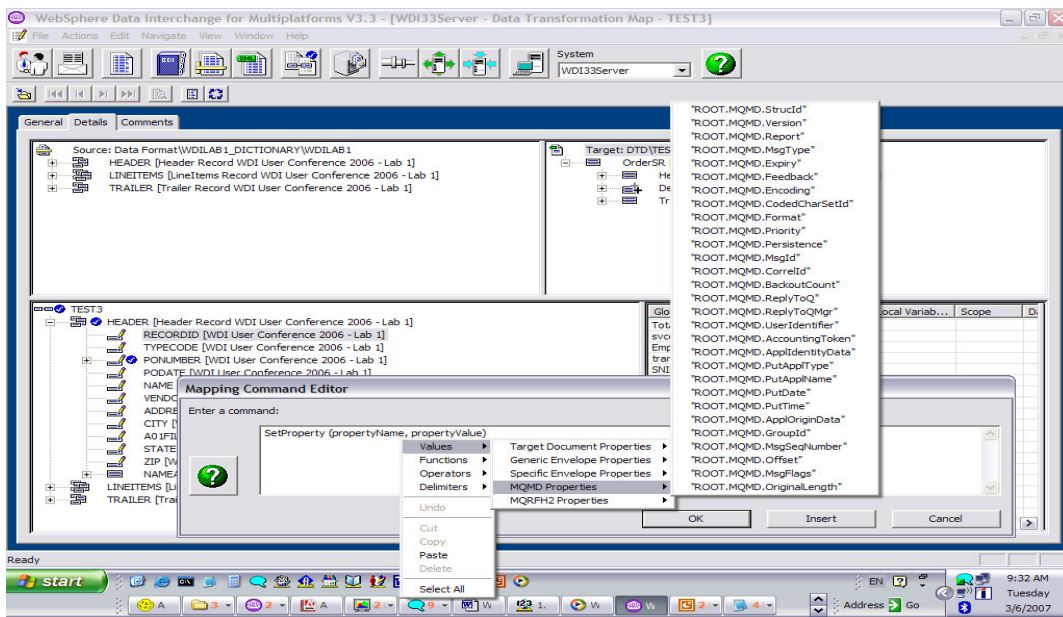
## Using Document Properties

The screenshot displays the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a mapping configuration for a Data Transformation Map named 'TEST3'. The source is 'Data Format(WDILAB1\_DICTIONARY(WDILAB1))' and the target is 'DTD(TESTS/POXMLSR)'. The source tree includes elements like 'HEADER', 'RECORDID', 'TYPECODE', 'PONUMBER', 'PODATE', 'NAME', 'VENDOR', 'ADDRESS', 'CITY', 'ADJFL', 'STATE', 'ZIP', 'NAME4', 'LINEITEMS', and 'TRAILER'. The target tree includes 'OrderSR' with sub-elements 'Header', 'Detailloop', and 'Trailer'. The 'Mapping Command Editor' dialog is open, showing a 'SetProperty' command. A context menu is visible over the dialog, listing various document properties such as 'ISAnn', 'GSnn', 'STnn', 'SEnn', 'GEnn', 'TEAnn', 'UNBnn', 'LUNGnn', 'LUNHnn', 'LUNTrnn', 'LUNEnn', 'LUNZnn', 'BGnn', 'EGnn', 'STXnn', and 'MHOnn'. The background shows a source tree with elements like 'HEADER', 'RECORDID', 'TYPECODE', 'PONUMBER', 'PODATE', 'NAME', 'VENDOR', 'ADDRESS', 'CITY', 'ADJFL', 'STATE', 'ZIP', 'NAME4', 'LINEITEMS', and 'TRAILER'. The target tree shows 'OrderSR' with sub-elements 'Header', 'Detailloop', and 'Trailer'.

Specific envelope properties also include values that would be found in an EDI target document but use the segment name, element, and sub-element number to set a specific value.



# Using Document Properties



The WebSphere MQ (WMQ) MQMD and MQRFH2 header information for the target document is also available.

## Using Document Properties

- Examples:
  - ▶ `WDIHandle = GetProperty ("THandle")`
  - ▶ `If (StrCompN (GetProperty ("GrpAppSndrId"), "XYZ", 3) = 0)`
  - ▶ `SetProperty ("SegOutput", 'Y')`
  - ▶ `If (StrCompN (GetProperty ("UNB0101"), "UNOB", 4) = 0)`
  - ▶ `SetProperty ("EncodeTarget", GetProperty("SenderTPUser1"))`



Here are a few examples for using properties. The WDI Document Store THANDLE. An EDI group application sender id from an EDI source document. Segmented output for an EDI target document. The target codepage from the trading partner profile user field 1.

## Reference

- More information can be found in the WDI V3.3 Mapping Guide.



More information can be found in the WebSphere Data Interchange Version 3.3 Mapping Guide.

# Trademarks, copyrights, and disclaimers

The following terms are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both:

IBM  
IBM (logo)  
e/Logo/business  
AIX

CICS  
Cloudscape  
DB2  
DB2 Universal Database

IMS  
Informix  
iSeries  
Lotus

WMO  
OS/390  
OS/400  
pSeries

Tivoli  
WebSphere  
xSeries  
zSeries

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are registered trademarks of Microsoft Corporation in the United States, other countries, or both.

Intel, ActionMedia, LANDesk, MMX, Pentium and ProShare are trademarks of Intel Corporation in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Linux is a registered trademark of Linus Torvalds.

Other company, product and service names may be trademarks or service marks of others.

Product data has been reviewed for accuracy as of the date of initial publication. Product data is subject to change without notice. This document could include technical inaccuracies or typographical errors. IBM may make improvements and/or changes in the product(s) and/or program(s) described herein at any time without notice. Any statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only. References in this document to IBM products, programs, or services does not imply that IBM intends to make such products, programs or services available in all countries in which IBM operates or does business. Any reference to an IBM Program Product in this document is not intended to state or imply that only that program product may be used. Any functionally equivalent program, that does not infringe IBM's intellectual property rights, may be used instead.

Information is provided "AS IS" without warranty of any kind. THE INFORMATION PROVIDED IN THIS DOCUMENT IS DISTRIBUTED "AS IS" WITHOUT ANY WARRANTY, EITHER EXPRESS OR IMPLIED. IBM EXPRESSLY DISCLAIMS ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. IBM shall have no responsibility to update this information. IBM products are warranted, if at all, according to the terms and conditions of the agreements (e.g., IBM Customer Agreement, Statement of Limited Warranty, International Program License Agreement, etc.) under which they are provided. Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products in connection with this publication and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. IBM makes no representations or warranties, express or implied, regarding non-IBM products and services.

The provision of the information contained herein is not intended to, and does not, grant any right or license under any IBM patents or copyrights. Inquiries regarding patent or copyright licenses should be made, in writing, to:

IBM Director of Licensing  
IBM Corporation  
North Castle Drive  
Armonk, NY 10504-1785  
U.S.A.

Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. All customer examples described are presented as illustrations of how those customers have used IBM products and the results they may have achieved. The actual throughput or performance that any user will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput or performance improvements equivalent to the ratios stated here.

© Copyright International Business Machines Corporation 2006. All rights reserved.

Note to U.S. Government Users - Documentation related to restricted rights-Use, duplication or disclosure is subject to restrictions set forth in GSA ADP Schedule Contract and IBM Corp.