



IBM Software Group

IBM WebSphere® Data Interchange V3.3

Using Qualification in Target Based Maps



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This presentation will demonstrate how to use Element, Segment, and Loop Qualifiers in a Data Transformation Target Based Map.

Agenda

- Review common mapping commands
- Define Qualification
- Demonstrate Qualification types
- Summary and references



The presentation will give a review of common mapping commands, define qualification, and demonstrate the qualification types for Data Transformation Target Based maps.

Using Element, Segment and Loop Qualifiers

- Common Data Transformation mapping functions.
 - ▶ Drag/Drop - Map the association from the source compound or simple element to a target.
 - ▶ Assignment – Assign a value to a target
 - ▶ Conditional mapping – If / Elself / Else / Endlf
 - ▶ SetElementAttribute() - &ZEROSIG and left/right pad and adjust.
 - ▶ **Loop Qualification - Multiple Occurrence, Occurrence, Value**
 - ▶ Translation Table - apply value conversions
 - ▶ Validation Table (Code List) - apply validation to values
 - ▶ Use of Variables – Global and Local



Some common Data Transformation mapping functions include: drag/drop, supplying literal values not found in the data, conditional mapping, formatting and validating values, and loop qualification. This presentation will review how to use qualification.

Using Element, Segment and Loop Qualifiers

- What is qualification
 - ▶ Within your document, certain elements and groups of elements can repeat. When you map an element that repeats within the source document (a compound or simple element), you must tell WebSphere Data Interchange which occurrence of the segment or loop you are using as well as the occurrence of the repeating simple element you are using. This is called *qualifying* the segment, element, or loop.



Within your document, certain elements and groups of elements can repeat. When you map an element that repeats within the source document (a compound or simple element), you must tell WebSphere Data Interchange (WDI) which occurrence of the segment or loop you are using as well as the occurrence of the repeating simple element you are using. This is called *qualifying* the segment, element, or loop.

Using Element, Segment and Loop Qualifiers

- Examples of Looping Structures

- ▶ EDI

- NAD Loop, PO1 Loop, HL Loop
 - REF repeating segment
 - repeating elements and composite elements

- ▶ Application data - Data Format

- Records
 - Structures within records
 - Loops

- ▶ XML:

- `<!ELEMENT XMLORDERS (RoutingInfo, BGM, DTM+, PAI?, NAD009*,`



Examples of looping structures for Electronic Data Interchange (EDI) standard NAD or PO1 loop and the REF repeating segment. For application data, data format records, structures within records, and loops. And for XML the DTD element definition for compound elements.

Using Element, Segment and Loop Qualifiers

- WebSphere Data Interchange supports four types of qualification for send and receive maps.
 - ▶ Occurrence
 - ▶ Multiple occurrence
 - ▶ Value
 - ▶ Expression



WebSphere Data Interchange supports four types of qualification for maps. You can qualify by: Occurrence, multiple occurrence, Value, and Expressions.

Using Element, Segment and Loop Qualifiers

- Expressions are literals, elements and variables that are combined using operators
- Expression yield a single value
- Expressions can use
 - ▶ Arithmetic operators: +, -, *, /
 - ▶ Logical operators: AND OR NOT
 - ▶ Relational operators: EQ, NE, LT, GT, LE, GE
- Expressions can be arbitrarily complex
- Example: NumFormat(Quantity * Price, 2)



An expression can be as simple as a source document element, literal value, or a variable, but can contain any number of functions, operators, and delimiters. Expression yield a single value. Expressions can use Arithmetic operators, Logical operators, and Relational operators. Expressions can be arbitrarily complex.

Using Element, Segment and Loop Qualifiers

- Qualification (Multiple Occurrence) use drag /drop

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Multiple Occurrence Qualification is the most common qualification used. Qualify by multiply occurrence when you want to create multiple elements in the target to correspond to repeating elements in the source using the same mapping instructions. All iterations of the repeating element that are not otherwise qualified are handled under the multiple occurrence qualification. To create a multiple occurrence qualification, select the repeating element from the source window (upper left window) or the mapping window (lower left window) and drag and drop to the repeating element in the target window (upper right window).

For example, say you are working on a data format source to EDI standard transaction target map and you find that the LIN loop in an EDI order repeats to handle multiple purchase-order line items. You need WebSphere Data Interchange to create a separate instance of the PO1 loop for each POLINEITEM record and when each occurrence of the PO1 loop is created the same mapping instructions should be executed. Consequently, you would qualify the PO1 loop by multiple occurrence. That way, WebSphere Data Interchange creates as many PO1 loops in your trading partner's transaction as there are occurrences of the POLINEITEM record in your application data.. The mapping commands under the repeating element are executed for each occurrence of the path used for the qualification.

To create a multiple occurrence qualification, select the repeating element from the source window (upper left window) or the mapping window (lower left window) and drag and drop to the repeating element in the target window (upper right window). You can also drag and drop from the target window to the source or mapping window.

Using Element, Segment and Loop Qualifiers

- Multi-Occurrence Qualification
 - ▶ Source-based maps – Mapto() command
 - The qualifications appear directly under the repeating source element.
 - ▶ Target-based maps - ForEach() command
 - Additional qualifications related to that source element appear under the For Each command.
 - ▶ The main difference is that because you can map more than one repeating source element to a repeating target element, the tree display has an extra level of hierarchy.
 - ▶ Implied “Close Occurrence” with each instance of the source or target path.



Source-based maps use the Mapto() qualification command, but target-based maps use the ForEach() qualification command. The main difference between multi-occurrence qualification in source-based and target-based maps is that because you can map more than one repeating source element to a repeating target element, the tree display has an extra level of hierarchy. In a source based map the qualifications appear directly under the repeating source element. In a target based map, each repeating source element associated with the repeating target element results in the creation of a ForEach command under the repeating target element. Additional qualifications related to that source element appear under the ForEach command. For Multi-Occurrence Qualification there is an implied “Close Occurrence” with each instance of the source or target path.

Section

Target Based Multiple Occurrence

Using Element, Segment and Loop Qualifiers

- Qualification (Multiple Occurrence) use drag /drop

The screenshot displays the 'WebSphere Data Interchange for Multiplatforms V3.3' interface. The main window shows a 'Data Transformation Map' for 'WDICONFLB2_S850T'. The source is 'Data Format(WDILAB1_DICTIONARY(WDILAB1))' and the target is 'EDI Standard Transaction(X12V4R1)850'. The map is divided into several panes:

- Source:** Data Format(WDILAB1_DICTIONARY(WDILAB1))
 - HEADER [header Record WDI User Conference 2006 - Lab 1]
 - LINEITEMS [LineItems Record WDI User Conference 2006 - Lab 1]
 - TRAILER [Trailer Record WDI User Conference 2006 - Lab 1]
- Target:** EDI Standard Transaction(X12V4R1)850
 - Table 1
 - Table 2
 - 10 M PO1 Loop [Baseline Item Data]
 - 10 M PO1 [Baseline Item Data]
 - 15 O LIN [Item Identification]
 - 18 O SI [Service Characteristic Identification]
 - 20 O CUR [Currency]
 - 25 O CN1 [Contract Information]
 - 30 O PO3 [Additional Item Details]
 - 40 O CTP Loop [Pricing Information]
 - 45 O PAM [Period Amount]
 - 49 O MEA [Measurements]
 - 50 O PID Loop [Product/Item Description]
- Map Structure:**
 - WDICONFLB2_S850T
 - SetProperty ("ACField", \HEADER\PONUMBER\)
 - Table 1
 - Table 2
 - 10 M PO1 Loop [Baseline Item Data]
 - ForEach (LINEITEMS\)
 - TO = TO + 1
 - 10 M PO1 [Baseline Item Data]
 - 1 O 350 [Assigned Identification]
 - 2 C 330 [Quantity Ordered]
 - 3 O 355 [Unit or Basis for Measurement Code]
 - 4 C 212 [Unit Price]
 - 5 O 639 [Basis of Unit Price Code]
- Global Variable Table:**

Global Variable Name	Scope	Local Variable Name	Scope	Special Variable Name	Scope
TotalNumEmployees	Ses...	T0	Do...		
svccerrorcount	Ses...			DIOutType	Do...
EmployeeCnt	Ses...			DIOutFile	Do...
trancorror	Ses...			DICUserData	Do...
SNIPType5	Group				
clmerrorcount	Ses...				

Using the drag and drop operation, the result is a ForEach command in a target based map. Which tells the transformation execution that Each occurrence of the “sourcePath” results in a new occurrence of the current target element. Since the ForEach command appears under the repeating target path PO1 loop and the source path is the LINEITEMS record, each occurrence of the LINEITEMS record in the source will create a PO1 loop in the target and all mapping commands under this mapping will be executed for each occurrence of LINEITEMS.

Using Element, Segment and Loop Qualifiers

■ Qualification (Multiple Occurrence) Command

The screenshot shows the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window displays a mapping between a source data format and a target EDI standard transaction. The source is 'Data Format\WDILAB1_DICTIONARY\WDILAB1' and the target is 'EDI Standard Transaction\12V4R1\850'. The mapping window shows a tree view of the source and target, with the 'ForEach' command selected for the '10 M PO1 Loop'. A red arrow points to the 'ForEach' command in the mapping window.

Global Variable Name	Scope	Local Variable Name	Scope	Special Variable Name	Scope
TotalNumEmployees	Ses...	T0	Do...	DIOutType	Do...
svccerrorcount	Ses...			DIOutFile	Do...
EmployeeCnt	Ses...			DICUserData	Do...
tranerror	Ses...				
SNPTType5	Group				
dmerrorcount	Ses...				

You can also select the ForEach command in the mapping window. Right click on the target and select the ForEach command.

Using Element, Segment and Loop Qualifiers

- Qualification (Multiple Occurrence) Command

The screenshot displays the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a Data Transformation Map configuration. The 'Source' pane on the left lists the source data format with segments: HEADER [header Record WDI User Conference 2006 - Lab 1], LINEITEMS [LineItems Record WDI User Conference 2006 - Lab 1], and TRAILER [Trailer Record WDI User Conference 2006 - Lab 1]. The 'Target' pane on the right shows the target EDI Standard Transaction with segments: Table 1, Table 2, and various loops including 10 M PO1 Loop [Baseline Item Data], 15 O LIN [Item Identification], 18 O SI [Service Characteristic Identification], 20 O CUR [Currency], 25 O CN1 [Contract Information], 30 O PO3 [Additional Item Detail], 40 O CTP Loop [Pricing Information], 45 O PAM [Period Amount], 49 O MEA [Measurements], and 50 O PID Loop [Product/Item Description]. A 'Mapping Command Editor' dialog is open in the foreground, showing the 'ForEach' command with 'sourcePath' as the parameter. A red arrow points from the 'LINEITEMS' source segment to the 'sourcePath' parameter in the dialog. The dialog also includes fields for Global Variable Name, Scope, Local Variable Name, Scope, and Special Variable Name, Scope. The bottom of the screenshot shows the Windows taskbar with the date 2/27/2007 and time 12:09 PM. The footer of the slide contains the text 'Using Qualification in Target Based Maps' and '© 2007 IBM Corporation'.

The ForEach command has one parameter sourcePath. The command is used to qualify loops. To add the source path, select the source and drag and drop onto the sourcePath parameter. The source path may also be a function or combination of functions.

Using Element, Segment and Loop Qualifiers

- Qualification (Multiple Occurrence) Command

The screenshot displays the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a Data Transformation Map with a source path and a target path. A 'Mapping Command Editor' dialog is open, showing the 'Qualification (Multiple Occurrence)' command. A red arrow points to the 'sourcePath' field in the dialog. The dialog also shows a list of functions and operators.

Source: Data Format\WDILAB1_DICTIONARY\WDILAB1
 HEADER [Header Record WDI User Conference 2006 - Lab 1]
 LINEITEMS [LineItems Record WDI User Conference 2006 - Lab 1]
 TRAILER [Trailer Record WDI User Conference 2006 - Lab 1]

Target: EDI Standard Transaction\X12V4R1\950
 Table 1
 Table 2
 10 M PO1 Loop [Baseline Item Data]
 10 M PO1 [Baseline Item Data]
 15 O LIN [Item Identification]
 18 O SI [Service Characteristic Identification]
 20 O CUR [Currency]
 25 O CN1 [Contract Information]
 30 O PO3 [Additional Item Detail]
 40 O CTP Loop [Pricing Information]
 45 O PAM [Period Amount]
 49 O MEA [Measurements]
 50 O PID Loop [Product/Item Description]

Mapping Command Editor
 Enter the parameters of the command:
 ForEach (sourcePath) Functions Operators Delimiters Undo Cut Copy Paste Delete Select All

Global Variable Name Scope Local Variable Name Scope Special Variable Name Scope
 UserFile Do...
 UserData Do...

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To select a function, right click on the sourcePath and select functions.

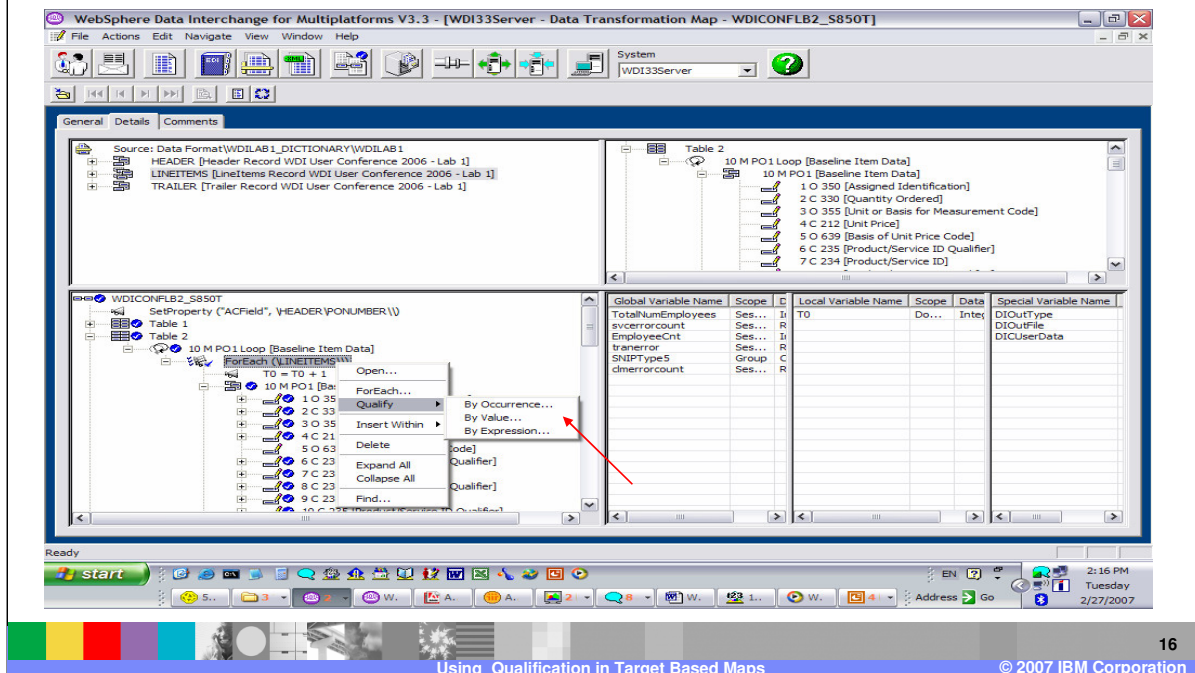
Section

Target Based Occurrence



Using Element, Segment and Loop Qualifiers

- Qualification (Occurrence)



Qualify an element by occurrence when a specific instance of a repeating element requires mapping instructions specific to that occurrence of the repeating element.

For example, say that you are working with a source document that has a buyers part number in the field ITEMNUMBER-BP in the first Occurrence of the LINEITEM record. The first occurrence of the PO1 loop should contain the buyer's part number.

With a Target based map, the Occurrence qualification must go under a ForEach qualification. To add an Occurrence qualification, right click on the ForEach command, choose Qualify, and select By Occurrence.

Using Element, Segment and Loop Qualifiers

■ Qualification (Occurrence)

The screenshot displays the IBM WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a project tree on the left with 'Table 2' selected. The right pane shows the structure of 'Table 2', including a '10 M PO 1 Loop [Baseline Item Data]' with several child elements. A 'Mapping Command Editor' dialog box is open in the foreground, showing the command 'Qualify (Occurrence (sourcePath) EQ num)'. A red arrow points to the 'num' parameter in the command. The dialog box has 'OK', 'Insert', and 'Cancel' buttons. The system tray at the bottom shows the date and time as Tuesday, 2/27/2007, 2:17 PM.

The Occurrence qualification contains a Qualify command with the Occurrence function equal to num. The Occurrence function has one parameter sourcePath. You can use drag and drop to select the source path and drop onto the sourcePath parameter. The num parameter in the Qualify command is the occurrence number you want.

Using Element, Segment and Loop Qualifiers

- Qualification (Occurrence)

WebSphere Data Interchange for Multiplatforms V3.3.3 - [WDI33Server - Data Transformation Map - WDICONFLB2_S850T]

Table 2

10 M PO1 Loop [Baseline Item Data]

1 O 350 [Assigned Identification]

2 C 330 [Quantity Ordered]

3 O 355 [Unit or Basis for Measurement Code]

4 C 212 [Unit Price]

5 O 639 [Basis of Unit Price Code]

6 C 235 [Product/Service ID Qualifier]

7 C 234 [Product/Service ID]

Global Variable Name | Scope | Data | Spe

Global Variable Name	Scope	Data	Spe
TotalNumEmployees	Ses...	I	
sverrorcount	Ses...	R	
EmployeeCnt	Ses...	I	
trmerror	Ses...	R	
SNPType5	Group	C	
clmerrorcount	Ses...	R	

Ready

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This results in a Qualify command with the Occurrence function equal 1.

Using Element, Segment and Loop Qualifiers

■ Qualification (Occurrence)

The screenshot displays the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a Data Transformation Map with a tree view on the left and a detailed view on the right. The tree view shows a '10 M PO1 Loop [Baseline Item Data]' containing a 'ForEach' command. A context menu is open over the 'ForEach' command, with the 'Qualify' option selected. A red arrow points to the 'Qualify' option, and another red arrow points to the 'By Occurrence...' sub-option. The detailed view on the right shows a table of global variables.

Global Variable Name	Scope	Local Variable Name	Scope	Data	Spe
TotalNumEmployees	Ses...	TO	Do...	Intes	DIO
svccerrorcount	Ses...				DIO
EmployeeCnt	Ses...				DIC
tranerror	Ses...				
SNIPType5	Group				
clmerrorcount	Ses...				

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Additional qualifications can be added for the PO1 loop using right click on the ForEach command and selecting Qualify.

Using Element, Segment and Loop Qualifiers

■ Qualification (Occurrence)

The screenshot shows the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window displays a data transformation map with a tree view on the left and a detailed view on the right. A context menu is open over the 'Qualify Occurrence (LINEITEMS\)' element, with the 'Qualify' option selected. The 'Qualify' submenu is also open, showing options: 'By Occurrence...', 'By Value...', and 'By Expression...'. Red arrows point to the 'Qualify' option in the main menu and the 'By Occurrence...' option in the submenu.

Global Variable Name	Scope	Local Variable Name	Scope	Data	Spe
TotalNumEmployees	Ses...	T0	Do...	Inte	DIO
sverrorcount	Ses...				DIO
EmployeeCnt	Ses...				DIC
tranerror	Ses...				
SNPTtype5	Group				
clmerrorcount	Ses...				

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Additional qualifications can also be added under the current Qualification by using right click on the Qualification and selecting Qualify.

Using Element, Segment and Loop Qualifiers

- Qualification (Occurrence)

The screenshot displays the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a Data Transformation Map configuration for 'WDICONFLB2_S850T'. The configuration includes a '10 M PO1 Loop [Baseline Item Data]' with a 'Qualify (Occurrence (V LINEITEMS)) EQ 1' element. A red arrow points to this element. The 'Global Variable Name' table is visible on the right.

Global Variable Name	Scope	C	Local Variable Name	Scope	Data	Spe
TotalNumEmployees	Ses...	I	T0	Do...	Intes	DIO
svccerrorcount	Ses...	R				DIO
EmployeeCnt	Ses...	I				DIC
tranerror	Ses...	R				
SNIPTYPE5	Group	C				
dmererrorcount	Ses...	R				

If a qualification exists and you choose to add a multiple occurrence qualification for the record, this results in the qualification becoming a “default” qualification.

Using Element, Segment and Loop Qualifiers

■ Qualification (Occurrence)

The screenshot shows the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window displays a Data Transformation Map for 'WDICONFLB2_S850T'. The left pane shows a tree view of source elements, including 'UNITPRICE', 'ITEMDESC', 'ITEMNUMBER-BN', 'ITEMCODE1', 'ITEMNUMBER-B1', 'ITEMCODE2', 'ITEMNUMBER-BC', 'ITEMCODE3', 'ITEMNUMBER-BP', 'ITEMCODE4', and 'TRAILER'. The right pane shows a target table structure for 'Table 2' with columns for '10 M PO 1 Loop [Baseline Item Data]', '10 M PO 1 [Baseline Item Data]', '1 O 350 [Assigned Identification]', '2 C 330 [Quantity Ordered]', '3 O 355 [Unit or Basis for Measurement Code]', '4 C 212 [Unit Price]', '5 O 639 [Basis of Unit Price Code]', '6 C 235 [Product/Service ID Qualifier]', and '7 C 234 [Product/Service ID]'. A context menu is open over the '620 O LM Loop [Code Sp...]' element, with the 'Command' option selected. A red arrow points to the 'CloseOccurrence...' option in the 'Command' submenu.

When doing Occurrence qualification with additional qualification, there should also be a CloseOccurrence command to close the target Occurrence after all the mapping has been executed. You can place a CloseOccurrence command anywhere in the mapping window. To place the command at the end of the Occurrence Qualification, right click the last source element, choose insert after, select Command, then CloseOccurrence. The close occurrence can also be placed as the first command before an qualification.

Using Element, Segment and Loop Qualifiers

■ Qualification (Occurrence)

The screenshot shows the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window displays a Data Transformation Map for 'WDI33Server'. The map structure includes a 'Table 2' with a '10 M PO1 Loop' containing several elements like '10 M PO1 [Baseline Item Data]', '1 O 350 [Assigned Identification]', '2 C 330 [Quantity Ordered]', etc. A 'Mapping Command Editor' dialog is open in the foreground, showing the command 'CloseOccurrence(targetPath)'. A red arrow points from this command to the '10 M PO1 Loop' element in the map's tree view.

Mapping Command Editor

Enter a command:

```
CloseOccurrence(targetPath)
```

Global Variable Name | Scope | Local Variable Name | Scope | Data | Spt

Global Variable Name	Scope	Local Variable Name	Scope	Data	Spt
TotalNumEmployees	Ses...	TD	Do...	Intes	DIO
svccerrorcount	Ses...				DIO
EmployeeCnt	Ses...				DIO
tranerror	Ses...				DIC
SNPTtype5	Group				
dmerrorcount	Ses...				

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The targetPath parameter should be the target that was created by the Occurrence qualification.

Using Element, Segment and Loop Qualifiers

- Qualification (Occurrence)

The screenshot displays the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a data transformation map configuration for 'WDI33Server - Data Transformation Map - WDI33CONFLB2_S850T'. The 'Table 2' section is expanded, showing a '10 M PO1 Loop [Baseline Item Data]' with a 'CloseOccurrence' command highlighted. A red arrow points to this command. The interface also shows a tree view of the map structure and a table of global and local variables.

Global Variable Name	Scope	Local Variable Name	Scope	Date	Sp
TotalNumEmployees	Ses...	T0	Do...	Inte...	DIO
svccorrcount	Ses...				DIO
EmployeeCnt	Ses...				DIC
tranerror	Ses...				
SNIPType5	Group				
clmerrorcount	Ses...				

This will close the occurrence for PO1 loop before executing the default qualification which is a multiple occurrence qualification. Remember that multiple occurrence qualifications have an implied close occurrence and do not need this command.

Section

Target Based Value

Using Element, Segment and Loop Qualifiers

- Qualification (Value)

The screenshot displays the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a Data Transformation Map configuration for 'WDICONFLB2_R850T'. The configuration includes a loop (310 O N1) and a qualification (310 O N1 Loop\310 O N1\1 M 98) that filters data based on the value of 'ST' in Element 98. The configuration also shows various data elements like BILLTOADDRESS, BUYERNAME, and BUYERSTATE, and a table of global variables.

Global Variable Name	Scope	Local Variable Name	Scope	Data	Spec
TotalNumEmployees	Seq...	Prod_ID_Value	Do...	Char	DIO...
svccorrcount	Seq...	N1_Code	Do...	Char	DIO...
EmployeeCnt	Seq...	Prod_ID_Qual	Do...	Char	DIO...
tranerror	Seq...	TO	Do...	Inte...	
SNPITypeS	Group				
cherrorrcount	Seq...				

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Using Qualification in Target Based Maps

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Qualify an element by value when you want the value of data in a simple element or variable to drive WebSphere Data Interchange's translation of a repeating element.

For example, say you want to qualify the N1 loop with the value of ST in Element 98, which is the "Entity Identifier Code," received in a purchase order to create a buyer record or to populate the buyer fields in a record. Further, say that you want the buyer's name to be mapped into the header record depending on the value in Element 98 of the N1 loop.

Using Element, Segment and Loop Qualifiers

■ Qualification (Value)

The screenshot shows the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window displays a Data Transformation Map with a tree view of data elements. A context menu is open over the 'ForEach' command, with the 'Qualify' option selected. The 'By Value...' sub-option is highlighted with a red arrow. The 'Global Variable Name' and 'Local Variable Name' tables are visible on the right.

Global Variable Name	Scope	Local Variable Name	Scope	Data	Spe
TotalNumEmployees	Ses...	Prod_ID_Value	Do...	Char	DICL
svccerrorcount	Ses...	N1_Code	Do...	Char	DICL
EmployeeCnt	Ses...	Prod_ID_Qual	Do...	Char	DICL
tranerror	Ses...	T0	Do...	Inte	
SNIPType5	Group				
cmerrorcount	Ses...				

To add a Value qualification, right click on the ForEach command, choose Qualify, and select By Value.

Using Element, Segment and Loop Qualifiers

■ Qualification (Value)

The screenshot displays the IBM WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a Data Transformation Map with a tree view of nodes and a table of variable names. A 'Mapping Command Editor' dialog box is open, showing the command: `Qualify (StrComp (path, 'value') EQ 0)`. A red arrow points to the '0' in the command. The dialog box has 'OK', 'Insert', and 'Cancel' buttons.

Global Variable Name	Scope	Local Variable Name	Scope	Data	Spe
TotalNumEmployees	Ses...	Prod_ID_Value	Do...	Char	DIO...
svccentrcount	Ses...	N1_Code	Do...	Char	DIO...
EmployeeCnt	Ses...	Prod_ID_Qual	Do...	Char	DICL
tranerror	Ses...	TD	Do...	Inte...	
SNIPType5	Group...				

This results in a Qualify command with the StrComp function equal 0. The StrComp function contains two parameters path and a literal value. The path should be a source path but can be a variable or function. The literal value can also be a variable or function. Use right click on the parameter to select from a list of functions.

Using Element, Segment and Loop Qualifiers

■ Qualification (Value)

The screenshot shows the configuration of a Data Transformation Map. The 'Foreach' loop is qualified with the condition: `(StrComp (Table 1|310 O N1 Loop|310 O N1|1 M 98\ 'ST') EQ 0)`. This condition ensures that the mapping commands within the loop are only executed when the value 'ST' is found in element 98 of the N1 segment.

Global Variable Name	Scope	D	Local Variable Name	Scope	Data	Spe
TotalNumEmployees	Ses...	I	Prod_ID_Value	Do...	Char	DIO
svccerrorcount	Ses...	R	N1_Code	Do...	Char	DIO
EmployeeCnt	Ses...	I	Prod_ID_Qual	Do...	Char	DIO
tranerror	Ses...	R	T0	Do...	Intes	DIO
SNIPType5	Group	C				
dmerrorcount	Ses...	R				

The mapping commands under this qualification will only be executed with the value "ST" is found in element 98 in the N1 segment.

Section

Target Based Expression

Using Element, Segment and Loop Qualifiers

■ Qualification (Expression)

The screenshot displays the IBM WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a Data Transformation Map (DTM) for 'WDICONFLB2_R850T'. The left pane shows a tree view of the map's structure, including loops and data nodes. A context menu is open over a 'ForEach' loop, with the 'Qualify' option selected. The 'Qualify' submenu is visible, showing options: 'By Occurrence...', 'By Value...', 'By Expression...', and 'Multi-Occurrence'. A red arrow points to the 'By Expression...' option. The right pane shows a list of variables and their scopes. The bottom status bar indicates the date and time: Wednesday, 2/28/2007, 2:13 PM.

To add the qualification you must first qualify using the ForEach qualification, then right click on the ForEach command to add the qualification by Expression.

Using Element, Segment and Loop Qualifiers

- Qualification (Expression)

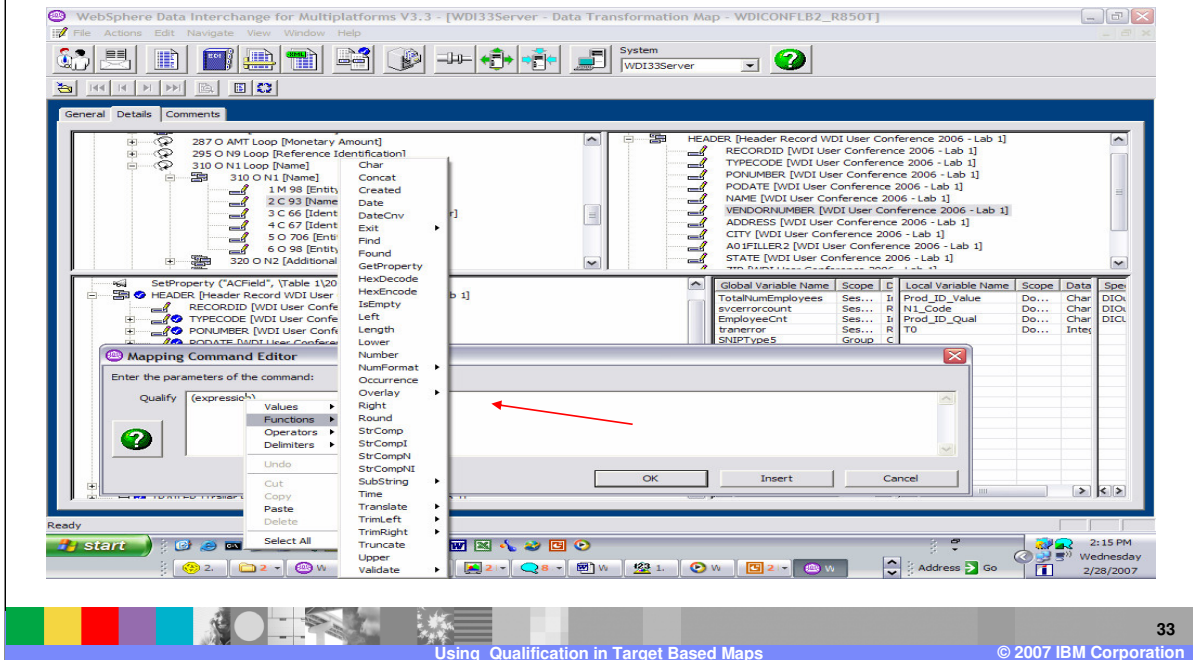
The screenshot shows the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window displays a Data Transformation Map with various elements and loops. A 'Mapping Command Editor' dialog is open, showing a list of values for qualification. A red arrow points to the 'Values' list.

Global Variable Name	Scope	Local Variable Name	Scope	Data	Spe
TotalNumEmployees	Ses...	Prod_ID_Value	Do...	Char	DIO...
sverrorcount	Ses...	N1_Code	Do...	Char	DIO...
EmployeeCnt	Ses...	Prod_ID_Qual	Do...	Char	DIO...
trerror	Ses...	T0	Do...	Inte...	
SNDPTYPES	Group	C			

Any number of Values and Functions can be combined to use as an expression. This is a list of Values.

Using Element, Segment and Loop Qualifiers

- Qualification (Expression)



This is a list of functions.

Using Element, Segment and Loop Qualifiers

- Qualification (Expression)

WebSphere Data Interchange for Multiplatforms V3.3.3 - [WDI33Server - Data Transformation Map - WDICONFLB2_R850T]

System: WDI33Server

General Details Comments

287 O AMT Loop [Monetary Amount]
 295 O N9 Loop [Reference Identification]
 310 O N1 Loop [Name]
 310 O N1 [Name]
 1 M 98 [Entity Identifier Code]
 2 C 93 [Name]
 3 C 66 [Identification Code Qualifier]
 4 C 67 [Identification Code]
 5 O 706 [Entity Relationship Code]
 6 O 98 [Entity Identifier Code]
 320 O N2 [Additional Name Information]

HEADER [Header Record WDI User Conference 2006 - Lab 1]
 RECORDID [WDI User Conference 2006 - Lab 1]
 TYPECODE [WDI User Conference 2006 - Lab 1]
 PONUMBER [WDI User Conference 2006 - Lab 1]
 PODATE [WDI User Conference 2006 - Lab 1]
 NAME [WDI User Conference 2006 - Lab 1]
 VENDORNUMBER [WDI User Conference 2006 - Lab 1]
 ADDRESS [WDI User Conference 2006 - Lab 1]
 CITY [WDI User Conference 2006 - Lab 1]
 ADJFILLER2 [WDI User Conference 2006 - Lab 1]
 STATE [WDI User Conference 2006 - Lab 1]

Global Variable Name	Scope	Data	Specialization
TotalNumEmployees	Ses...	Prod_ID_Value	Do... Char DICL
sicerrorcount	Ses...	N1_Code	Do... Char DICL
EmployeeCnt	Ses...	Prod_ID_Qual	Do... Char DICL
tranerror	Ses...	T0	Do... Inte
SNIPType5	Group		
dmerrorcount	Ses...		

SetProperty ("ACField", Table 1\20 M BEG\3 M 324\)
 HEADER [Header Record WDI User Conference 2006 - Lab 1]
 RECORDID [WDI User Conference 2006 - Lab 1]
 TYPECODE [WDI User Conference 2006 - Lab 1]
 PONUMBER [WDI User Conference 2006 - Lab 1]
 PODATE [WDI User Conference 2006 - Lab 1]
 NAME [WDI User Conference 2006 - Lab 1]
 VENDORNUMBER [WDI User Conference 2006 - Lab 1]
 ForEach ((Table 1\310 O N1 Loop\310 O N1\1 M 98\ _VN) EQ 0 OR StrComp ((Table 1\310 O N1 Loop\310 O N1\1 M 98\ _ZZ) EQ 0))
 MapFrom ((Table 1\310 O N1 Loop\310 O N1\4 C 67\))
 ADDRESS [WDI User Conference 2006 - Lab 1]
 CITY [WDI User Conference 2006 - Lab 1]
 ADJFILLER2 [WDI User Conference 2006 - Lab 1]
 STATE [WDI User Conference 2006 - Lab 1]
 ZIP [WDI User Conference 2006 - Lab 1]
 NAMEADDER [WDI User Conference 2006 - Lab 1]

Ready

start

Address Go

2:18 PM Wednesday 2/28/2007

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Continuing with this example, say you want to populate the vendor number field in a record when the N1 loop contains the values of VN or ZZ in Element 98, which is the “Entity Identifier Code,” received in a purchase order. Further, say that you want the vendor number to be mapped into the header record depending on the value in Element 98 of the N1 loop.

Using Element, Segment and Loop Qualifiers

- Qualification (Expression)

WebSphere Data Interchange for Multiplatforms V3.3 - [WDI33Server - Data Transformation Map - WDI CONFLB2_R850T]

System: WDI33Server

General Details Comments

287 O AMT Loop [Monetary Amount]
 295 O N9 Loop [Reference Identification]
 310 O N1 Loop [Name]
 310 O N1 [Name]
 1 M 98 [Entity Identifier Code]
 2 C 93 [Name]
 3 C 66 [Identification Code Qualifier]
 4 C 67 [Identification Code]
 5 O 706 [Entity Relationship Code]
 6 O 98 [Entity Identifier Code]
 320 O N2 [Additional Name Information]

HEADER [Header Record WDI User Conference 2006 - Lab 1]
 RECORDID [WDI User Conference 2006 - Lab 1]
 TYPECODE [WDI User Conference 2006 - Lab 1]
 PONUMBER [WDI User Conference 2006 - Lab 1]
 PODATE [WDI User Conference 2006 - Lab 1]
 NAME [WDI User Conference 2006 - Lab 1]
 VENDORNUMBER [WDI User Conference 2006 - Lab 1]
 ADDRESS [WDI User Conference 2006 - Lab 1]
 CITY [WDI User Conference 2006 - Lab 1]
 A0 IFILLER2 [WDI User Conference 2006 - Lab 1]
 STATE [WDI User Conference 2006 - Lab 1]

Global Variable Name Scope E Local Variable Name Scope Data Spe
 TotalNumEmployees Ses... B Prod_ID_Value Do... Char DIO
 svcerrorcount Ses... R N1_Code Do... Char DIO
 EmployeeCnt Ses... I Prod_ID_Qual Do... Char DIO
 tranerror Ses... R T0

Mapping Command Editor

Enter the parameters of the command:

Qualify (StrComp (Table 1\310 O N1 Loop\310 O N1\1 M 98\, '\N') EQ 0 OR StrComp (charValue1, charValue2))

OK Cancel

Ready

Using Qualification in Target Based Maps © 2007 IBM Corporation

You can construct this qualification using an Expression containing functions and operators. In this example the operator OR was used.

Using Element, Segment and Loop Qualifiers

- Qualification (Expression)

WebSphere Data Interchange for Multiplatforms V3.3 - [WDI33Server - Data Transformation Map - WDICONFLB2_R850T]

System: WDI33Server

General Details Comments

287 O AMT Loop [Monetary Amount]
 295 O I9 Loop [Reference Identification]
 310 O N1 Loop [Name]
 310 O N1 [Name]
 1 M 98 [Entity Identifier Code]
 2 C 93 [Name]
 3 C 66 [Identification Code Qualifier]
 4 C 67 [Identification Code]
 5 O 706 [Entity Relationship Code]
 8 O 98 [Entity Identifier Code]
 320 O N2 [Additional Name Information]

HEADER [Header Record WDI User Conference 2006 - Lab 1]
 RECORDID [WDI User Conference 2006 - Lab 1]
 TYPECODE [WDI User Conference 2006 - Lab 1]
 PONUMBER [WDI User Conference 2006 - Lab 1]
 POIDATE [WDI User Conference 2006 - Lab 1]
 NAME [WDI User Conference 2006 - Lab 1]
 VENDORNUMBER [WDI User Conference 2006 - Lab 1]
 ADDRESS [WDI User Conference 2006 - Lab 1]
 CITY [WDI User Conference 2006 - Lab 1]
 AOIFILLER2 [WDI User Conference 2006 - Lab 1]
 STATE [WDI User Conference 2006 - Lab 1]

Global Variable Name Scope Local Variable Name Scope Data Spec
 TotalNumEmployees Ses... I Prod_ID_Value Do... Char DIO
 gycerrorcount Ses... R N1_Code Do... Char DIO
 EmployeeCnt Ses... I Prod_ID_Qual Do... Char DIO
 tranerror Ses... R TO Do... Intey

Mapping Command Editor

Enter the parameters of the command:

Qualify {StrComp ((Table 1\310 O N1 Loop\310 O N1\1 M 98\ \ "N") EQ 0 OR StrComp ((Table 1\310 O N1 Loop\310 O N1\1 M 98\ \ "Z") EQ 0)

OK Cancel

Ready

start

Address Go

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This is the completed Expression for our example.

Using Element, Segment and Loop Qualifiers

- WebSphere Data Interchange supports four types of qualification for send and receive maps.
 - ▶ Occurrence
 - ▶ Multiple occurrence
 - ▶ Value
 - ▶ Expression



WebSphere Data Interchange supports four types of qualification for maps. You can qualify by: Occurrence, multiple occurrence, Value, and Expressions. With the exception of Multiple occurrence, you can also use logic in the mapping to execute mapping based on a condition.

Using Element, Segment and Loop Qualifiers

Logic

The screenshot displays the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows XSLT logic for mapping data. A red arrow points to the 'Product/Service ID Qualifier' element in the source data list.

The XSLT logic includes the following code snippets:

```

<!-- Product ID Qual/ID Pairs Elements 6 and 7 -->
<!-- Product ID Qual = \Table 2\10 M PO1 Loop\10 M PO16 C 235\ -->
<!-- Prod_ID_Value = \Table 2\10 M PO1 Loop\10 M PO1\7 C 234\ -->
<!-- If (StrCompN (Prod_ID_Qual, "BN", 2) = 0) -->
<!-- Endif -->
<!-- If (StrCompN (Prod_ID_Qual, "B1", 2) = 0) -->
<!-- Endif -->
<!-- If (StrCompN (Prod_ID_Qual, "BC", 2) = 0) -->
<!-- Endif -->
<!-- If (StrCompN (Prod_ID_Qual, "BP", 2) = 0) -->
<!-- Endif -->
<!-- Product ID Qual/ID Pairs Elements 8 and 9 -->
<!-- Product ID Qual = \Table 2\10 M PO1 Loop\10 M PO18 C 235\ -->
<!-- Prod_ID_Value = \Table 2\10 M PO1 Loop\10 M PO1\9 C 234\ -->
<!-- If (StrCompN (Prod_ID_Qual, "BN", 2) = 0) -->
<!-- Endif -->
<!-- If (StrCompN (Prod_ID_Qual, "B1", 2) = 0) -->
<!-- Endif -->
<!-- If (StrCompN (Prod_ID_Qual, "BC", 2) = 0) -->

```

The right-hand pane shows a table of global variables:

Global Variable Name	Scope	Local Variable Name	Scope	Data	Spe
TotalNumEmployees	Ses...	Prod_ID_Value	Do...	Char	DIO.
sverrorcount	Ses...	NI_Code	Do...	Char	DIO.
EmployeeCount	Ses...	Prod_ID_Qual	Do...	Char	DIO.
tranerror	Ses...	TO	Do...	Inte	
SNPIType	Group				
cherrorcount	Ses...				

The status bar at the bottom indicates the title "Using Qualification in Target Based Maps" and the copyright "© 2007 IBM Corporation".

In this example logic is used to accomplish the mapping for qualified element pairs. With this type of qualification the segment contains elements that are repeated and paired with one element containing a code which identifies the type of value in the other element. These elements can occur in any order which requires the element containing the code to be scanned. This qualification type is an element qualification.

Using Element, Segment and Loop Qualifiers

Logic

The screenshot shows the WebSphere Data Interchange for Multiplatforms V3.3.3 interface. The main window displays a Data Transformation Map editor. The mapping tree on the left shows a 'ForEach' loop element. A context menu is open over this element, with the 'If' option highlighted by a red arrow. The background shows various data elements like 'UNITPRICE', 'ITEMDESC', and 'ITEMNUMBER'.

To add logic to a map, right click the element in the mapping window where you want the logic, choose Insert within, select Command, and the If command.

Using Element, Segment and Loop Qualifiers

Logic

The screenshot displays the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a Data Transformation Map configuration for 'WDICONFLB2_R850T'. The map structure includes a 'SetProperty' command, a 'HEADER' record, and a 'LINEITEMS' record with a 'ForEach' loop. A 'Mapping Command Editor' dialog is open, showing the 'If' condition field with the placeholder '(expression)'. A red arrow points to this field. The background shows a tree view of the map structure and a table of global and local variables.

Global Variable Name	Scope	Local Variable Name	Scope	Data	Spe
TotalNumEmployees	Ses...	Prod_ID_Value	Do...	Char	DIO.
svcerrortcount	Ses...	N1_Code	Do...	Char	DIO.
EmployeeCnt	Ses...	Prod_ID_Qual	Do...	Char	DIO.
tranerror	Ses...	TO	Do...	Inte	
SNPType5	Group				
dimerrortcount	Ses...				

Enter the condition or expression.

Using Element, Segment and Loop Qualifiers

- Logic

The screenshot shows the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window displays a Data Transformation Map (DTM) for 'WDICONFLB2_R850T'. The map is structured as follows:

- General:**
 - 1 O 350 [Assigned Identification]
 - 2 C 350 [Quantity Ordered]
 - 3 O 355 [Unit or Basis for Measurement Code]
 - 4 C 212 [Unit Price]
 - 5 O 639 [Basis of Unit Price Code]
 - 6 C 235 [Product/Service ID Qualifier]
 - 7 C 234 [Product/Service ID]
 - 8 C 235 [Product/Service ID Qualifier]
- Details:**
 - LINEITEMS [LineItems Record WDI User Conference 2006 - Lab 1]
 - ForEach (Table 2\10 M PO1 Loop\1)
 - If (StrCompN (Table 2\10 M PO1 Loop\10 M PO1\6 C 235\, "BP", 2) EQ 0)
 - TO = TO + 1
 - Product ID Qual/ID Pairs Elements 6 and 7
 - Prod_ID_Qual = \Table 2\10 M PO1 Loop\10 M PO1\6 C 235\
 - Prod_ID_Value = \Table 2\10 M PO1 Loop\10 M PO1\7 C 234\
 - If (StrCompN (Prod_ID_Qual, "BN", 2) = 0)
 - EndIf
 - If (StrCompN (Prod_ID_Qual, "B1", 2) = 0)
 - EndIf
 - If (StrCompN (Prod_ID_Qual, "BC", 2) = 0)
 - EndIf
 - If (StrCompN (Prod_ID_Qual, "BP", 2) = 0)
 - EndIf
 - Product ID Qual/ID Pairs Elements 8 and 9
 - Prod_ID_Qual = \Table 2\10 M PO1 Loop\10 M PO1\8 C 235\
 - Prod_ID_Value = \Table 2\10 M PO1 Loop\10 M PO1\9 C 234\

The right-hand pane shows a list of global and local variables:

Global Variable Name	Scope	Local Variable Name	Scope	Data	Spe
TotalNumEmployees	Ses...	Prod_ID_Value	Do...	Char	DIO...
svcerrortcount	Ses...	N1_Code	Do...	Char	DIO...
EmployeeCnt	Ses...	Prod_ID_Qual	Do...	Char	DIO...
tranerror	Ses...	TO	Do...	Inte...	
SNIPType5	Group				
dimerrortcount	Ses...				

The bottom of the screenshot shows the Windows taskbar with the date Wednesday 2/28/2007 and time 2:32 PM. The footer of the slide contains the text 'Using Qualification in Target Based Maps' and '© 2007 IBM Corporation'.

This results in an If and EndIf command.

Using Element, Segment and Loop Qualifiers

Logic

The screenshot shows the WebSphere Data Interchange (WDI) interface for a Data Transformation Map (DTM). The main workspace displays a tree view of the DTM structure, including a loop and an if-then-else block. A context menu is open over the 'If' block, with 'Insert Within' selected, and a sub-menu showing 'Command' as the chosen option. A red arrow points to the 'Command' option in the sub-menu. The right pane shows a list of global variables and their properties.

Global Variable Name	Scope	Local Variable Name	Scope	Data	Spe
TotalNumEmployees	Ses...	Prod_ID_Value	Do...	Char	DIO
sverrorcount	Ses...	N1_Code	Do...	Char	DIO
EmployeeCnt	Ses...	Prod_ID_Qual	Do...	Char	DIO
trerror	Ses...	TO	Do...	Inte	
SNIPType5	Group				
clmercount	Ses...				

To add mapping commands under the If, right click the If, choose Insert Within, select Command and the command to be executed. Continue adding commands within the If command using these steps.

Using Element, Segment and Loop Qualifiers

Logic

The screenshot shows the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window displays a Data Transformation Map (DTM) for a 'Data Transformation Map - WDI33Server'. The map is structured with a 'HEADER' element containing a 'LINEITEMS' loop. Inside the loop, there is an 'If' command with a context menu open over it. The context menu options are: 'Open...', 'Insert Before', 'Insert After', 'Insert Within', 'Delete', and 'Find...'. The 'ElseIf...' and 'Else' options are visible, with a red arrow pointing to 'Else'. The background shows a tree view of the DTM structure and a table of global and local variable names.

Global Variable Name	Scope	Local Variable Name	Scope	Data	Spe
TotalnumEmployees	Ses...	Prod_ID_Value	Do...	Char	DICL
svccerrorcount	Ses...	N1_Code	Do...	Char	DICL
EmployeeCnt	Ses...	Prod_ID_Qual	Do...	Char	DICL
tranerror	Ses...	T0	Do...	Inte	
SNIPType5	Group				
dmerrorcount	Ses...				

To add Else and Elseif, right click the If command, choose Insert After, select Else or Elseif.

Using Element, Segment and Loop Qualifiers

Logic

The screenshot displays the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a mapping tree with various qualifiers and a table of global and local variables. A 'Mapping Command Editor' dialog is open, prompting the user to 'Enter the parameters of the command:'. The 'Elseif' field contains '(expression)'. A red arrow points to the text '(expression)'. The background shows a complex mapping tree with various qualifiers and a table of global and local variables.

Global Variable Name	Scope	Local Variable Name	Scope	Data	Spe
TotalNumEmployees	Ses...	Prod_ID_Value	Do...	Char	DICL
svccerrorcount	Ses...	N1_Code	Do...	Char	DICL
EmployeeCnt	Ses...	Prod_ID_Qual	Do...	Char	DICL
transerr	Ses...	T0	Do...	Integ	
SNIPType5	Group				
clmerrorcount	Ses...				

Enter the condition or expression.

Using Element, Segment and Loop Qualifiers

Logic

The screenshot shows the WebSphere Data Interchange (WDI) V3.3 interface. The main window displays a Data Transformation Map (DTM) for a 'WDI User Conference 2006 - Lab 1'. The map structure includes a loop and an if-else block. A context menu is open over the 'Elseif' element, with 'Insert Within' selected. A sub-menu is also open, showing 'Command' as the chosen option. A red arrow points to the 'Command' option in the sub-menu. The background shows a Windows XP desktop with a taskbar and system tray.

Similar to the If command, to add mapping commands under the Elseif, right click the Elseif, choose Insert Within, select Command and the command to be executed.

Using Element, Segment and Loop Qualifiers

Logic

The screenshot shows the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window displays a Data Transformation Map (DTM) for 'WDICONFLB2_R850T'. The map is structured with various elements and loops. A context menu is open over a loop structure, showing options such as 'Open...', 'ForEach...', 'Qualify', 'Insert Within', 'Delete', 'Expand All', 'Collapse All', 'Find...', 'Command Group...', 'Comment...', and 'Comment Group...'. A red arrow points to the 'Command Group...' option. The right-hand pane shows a list of variables and their scopes, including 'Global Variable Name', 'Scope', 'Local Variable Name', 'Scope', 'Data', and 'Spe'.

Global Variable Name	Scope	Local Variable Name	Scope	Data	Spe
TotalNumEmployees	Ses...	I	Prod_ID_Value	Do...	Char
sverrorcount	Ses...	R	N1_Code	Do...	Char
EmployeeCnt	Ses...	I	Prod_ID_Qual	Do...	Char
tranerror	Ses...	R	TO	Do...	Inte
SNIPType5	Group	C			
cmerrorcount	Ses...	R			

When using logic that will be used on several elements for example element pairs, consider using Command Groups. With Command Groups you can group the mapping commands and copy the commands to different elements.

Using Element, Segment and Loop Qualifiers

Logic

The screenshot displays the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a Data Transformation Map with a list of qualifiers on the left and a table of variable names on the right. A 'Command Group Editor' dialog box is open in the foreground, with a text area for entering a description. The dialog box has 'OK', 'Insert', and 'Cancel' buttons. The background window shows a list of qualifiers including '1 O 350 [Assigned Identification]', '2 C 330 [Quantity Ordered]', '3 C 355 [Unit or Basis for Measurement Code]', '4 C 212 [Unit Price]', '5 O 639 [Basis of Unit Price Code]', '6 C 235 [Product/Service ID Qualifier]', '7 C 234 [Product/Service ID]', and '8 C 235 [Product/Service ID Qualifier]'. The table on the right lists variable names such as 'UNITPRICE', 'ITEMDESC', 'ITEMNUMBER-BN', 'ITEMCODE1', 'ITEMNUMBER-B1', 'ITEMCODE2', 'ITEMNUMBER-BC', 'ITEMCODE3', and 'ITEMNUMBER-BP'.

When defining a command group, enter a description for the Command Group.

Using Element, Segment and Loop Qualifiers

Logic

The screenshot displays the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main workspace shows a Data Transformation Map (DTM) with the following logic:

```

TO = TO + 1
Product ID Qual/ID Pairs Elements 6 and 7
  Prod_ID_Qual = \Table 2\10 M PO1 Loop\10 M PO1\6 C 235\
  Prod_ID_Value = \Table 2\10 M PO1 Loop\10 M PO1\7 C 234\
  If (StrCompN (Prod_ID_Qual, "BN", 2) = 0)
  EndIf
  If (StrCompN (Prod_ID_Qual, "B1", 2) = 0)
  EndIf
  If (StrCompN (Prod_ID_Qual, "BC", 2) = 0)
  EndIf
  If (StrCompN (Prod_ID_Qual, "BP", 2) = 0)
  EndIf
Product ID Qual/ID Pairs Elements 8 and 9
  Prod_ID_Qual = \Table 2\10 M PO1 Loop\10 M PO1\8 C 235\
  Prod_ID_Value = \Table 2\10 M PO1 Loop\10 M PO1\9 C 234\
  If (StrCompN (Prod_ID_Qual, "BN", 2) = 0)
  EndIf
  If (StrCompN (Prod_ID_Qual, "B1", 2) = 0)
  EndIf
  If (StrCompN (Prod_ID_Qual, "BC", 2) = 0)
  EndIf
  
```

The right-hand pane shows a table of variable declarations:

Global Variable Name	Scope	Local Variable Name	Scope	Data	Spe
TotalNumEmployees	Ses...	Prod_ID_Value	Do...	Char	DIO
svccerrorcount	Ses...	N1_Code	Do...	Char	DIO
EmployeeCnt	Ses...	Prod_ID_Qual	Do...	Char	DIO
tranerror	Ses...	TO	Do...	Integ	
SNPType5	Group				
cmerrorcount	Ses...				

At the bottom of the screenshot, the text "Using Qualification in Target Based Maps" and "© 2007 IBM Corporation" are visible.

To add commands within a command group use right click on the command group and select insert within. Or you can use drag and drop to move commands within the command group. This is an example of command groups. To Copy command groups or any other mapping command, press the Shift key on the command or command group, then drag and drop. Don't forget to check and change the source and target paths with the copied mapping. With command groups this will copy or move all commands within the command group.

Using Element, Segment and Loop Qualifiers

- Mapping Tip:
 - ▶ With complex qualifications, try doing the qualification and only map a few elements.
 - ▶ Test and check the source and target looping to ensure it is correct before completing the mapping.



With complex qualifications, try doing the qualification and only map a few elements. Test and check the source and target looping to ensure it is correct before completing the mapping.

Using Element, Segment and Loop Qualifiers

- Summary

- ▶ WebSphere Data Interchange supports four types of qualification for send and receive maps.
 - Occurrence
 - Multiple occurrence
 - Value
 - Expression
 - Logic may be used as an alternative to Occurrence, Value and Expression qualification.



WebSphere Data Interchange supports four types of qualification for maps. You can qualify by: Occurrence, multiple occurrence, Value, and Expressions. With the exception of Multiple occurrence, you can also use logic in the mapping to execute mapping based on a condition.

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.

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