



IBM Software Group

IBM WebSphere® Data Interchange V3.3

Using Element, Segment, and Loop Qualifiers



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This presentation will demonstrate how to use Element, Segment, and Loop Qualifiers in a Send and Receive 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 Send and Receive maps.

Using Element, Segment and Loop Qualifiers

- Common Send/Receive mapping functions.
 - ▶ drag / drop – Map the association from the source compound or simple element to the target compound or simple element. Always from left mapping window pane to right mapping window pane.
 - ▶ literals – provide values, default values, and apply logic for the target simple element
 - ▶ date edits, code lists, and translate tables – apply date conversions, validation, and value conversions.
 - ✓ **qualification – Multiple Occurrence, Occurrence, Value for target compound elements and element qualified pairs for target simple elements.**



Some common Send Receive 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 element), you must tell WebSphere Data Interchange which occurrence of the segment or loop you are using. This is called *qualifying* the segment 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 element), you must tell WebSphere Data Interchange (WDI) which occurrence of the segment or loop you are using. This is called *qualifying* the segment 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
 - ▶ Path – Multiple occurrence
 - ▶ Value
 - ▶ Value pairs

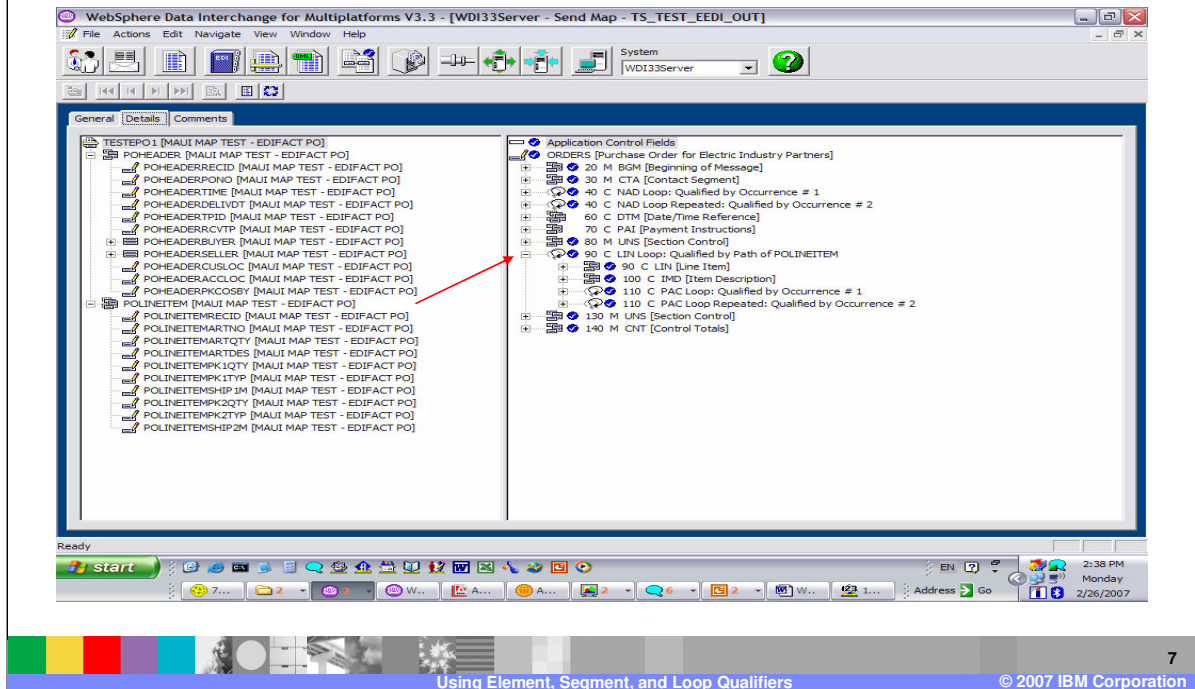


WebSphere Data Interchange supports four types of qualification for maps. You can qualify by: Occurrence, Path which is a multiple occurrence qualification, and Value.

Another level of qualification is also available for Value pairs. With this type 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.

Using Element, Segment and Loop Qualifiers

- Qualification (Multiple Occurrence) use drag /drop



Path or Multiple Occurrence Qualification is the most common qualification used. Qualify by Path or 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.

For example, say you are working on a data format to EDI standard transaction 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 LIN loop for each POLINEITEM record and when each occurrence of the LIN loop is created the same mapping instructions should be executed. Consequently, you would qualify the LIN loop by path or multiple occurrence. That way, WebSphere Data Interchange creates as many LIN 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 Path or multiple occurrence qualification, select the repeating element from the left window and drag and drop to the repeating element in the right window.

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 mapping tree for a PO document. The tree is divided into two panes: 'General' and 'Details'. The 'Details' pane shows a hierarchical structure of elements and segments. Red arrows point to specific elements: '40 C NAD Loop: Qualified by Occurrence # 1' and '40 C NAD Loop Repeated: Qualified by Occurrence # 2'. The 'General' pane lists various PO header and item elements like POHEADERRECID, POHEADERPONO, POADERTIME, etc.

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 name and address for the buyer and seller. The first occurrence of the address compound element has the buyer name and address, the second occurrence has the seller name and address. Map each occurrence to the appropriate target element using occurrence qualification.

Using Element, Segment and Loop Qualifiers

■ Qualification (Occurrence) Send

The screenshot displays the WebSphere Data Interchange interface for configuring a Send Map. The left pane shows a tree view of elements, including POHEADER and POLINEITEM. The right pane shows 'Application Control Fields' with a list of segments. A dialog box titled 'Qualify a Segment by Occurrence Number - DTM' is open, prompting the user to 'Enter the Occurrence Number'. A red arrow points to the '40 C NAD Loop Repeated: Qualified by Occurrence # 2' entry in the right pane, and another red arrow points to the input field in the dialog box.

To create an occurrence mapping, double click the compound element in the right window. A window asking for occurrence number will display.

For the first occurrence in a Send map, you can also expand the target compound element or segment and just map one of the elements. This will automatically create a mapping with Occurrence number 1.

Using Element, Segment and Loop Qualifiers

■ Qualification (Occurrence) Receive

WebSphere Data Interchange for Multiplatforms V3.3 - [WDI33Server - Receive Map - WDI33CONFLAB1_R850]

System: WDI33Server

General Details Comments

WDILAB1 [WDI User Conference 2006 - Lab 1]

- 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]

850 [Purchase Order]

20 M BEG [Beginning Segment for Purchase Order]

Qualify a Segment

Do you want to qualify this Segment by a specific occurrence of the Segment or by the value within an element?

Value...
Occurrence...
Cancel

- 120 O SAC Loop
- 130 O ITD [Terms of Sale/Deferred Terms of Sale]
- 140 O DIS [Discount Detail]
- 145 O INC [Installation Information]
- 150 O DTM [Date/Time Reference]
- 160 O LDT [Lead Time]
- 180 O LIN [Item Identification]
- 185 O SI [Service Characteristic Identification]
- 190 O PID [Product/Item Description]
- 200 O MEA [Measurements]
- 210 O PWK [Paperwork]
- 220 O PKG [Marking, Packaging, Loading]
- 230 O TD1 [Carrier Details (Quantity and Weight)]
- 240 O TD5 [Carrier Details (Routing Sequence/Transit Time)]
- 250 O TD3 [Carrier Details (Equipment)]
- 260 O TD4 [Carrier Details (Special Handling, or Hazardous Ma)]
- 270 O MAN [Marks and Numbers]
- 276 O PCT [Percent Amounts]
- 280 O CTB [Restrictions/Conditions]
- 285 O TXI [Tax Information]

Ready

3:43 PM Monday 2/26/2007

Using Element, Segment, and Loop Qualifiers © 2007 IBM Corporation 10

To create an occurrence mapping in a Receive Map, double click the compound element in the right window. A window will display asking for the qualification type. Select Occurrence.

Using Element, Segment and Loop Qualifiers

- Qualification (Occurrence) Receive

The screenshot displays the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a list of segments for a purchase order, including 850 (Purchase Order), 20 (M - Beginning Segment for Purchase Order), 40 (CUR - Currency), 50 (REF - Reference Identification), 60 (PER - Administrative Communications Contact), 70 (TAX - Tax Reference), 80 (FOB - F.O.B. Related Instructions), 90 (CTP - Pricing Information), 95 (PAM - Period Amount), 110 (CSH - Sales Requirements), 115 (TC2 - Commodity), 120 (SAC - Loop), 210 (PWK - Paperwork), 220 (PKG - Marking, Packaging, Loading), 230 (TD1 - Carrier Details (Quantity and Weight)), 240 (TD5 - Carrier Details (Routing Sequence/Transit Time)), 250 (TD3 - Carrier Details (Equipment)), 260 (TD4 - Carrier Details (Special Handling, or Hazardous Ma)), 270 (MAN - Marks and Numbers), 276 (PCT - Percent Amounts), 280 (CTR - Restrictions/Conditions), and 285 (TXI - Tax Information). A dialog box titled 'Qualify a Segment by Occurrence Number - DTM' is open, prompting the user to 'Enter the Occurrence Number'. A red arrow points to the 'Enter the Occurrence Number' input field. The dialog box also contains 'OK', 'Insert', and 'Cancel' buttons. The Windows taskbar at the bottom shows the system clock as 3:45 PM on Monday, 2/26/2007.

A window asking for occurrence number will display.

Using Element, Segment and Loop Qualifiers

- Qualification (Value) Receive Only

WebSphere Data Interchange for Multiplatforms V3.3 - [WDI33Server - Receive Map - WDI33CONFLAB1_R850]

System: WDI33Server

General Details Comments

WDI33LAB1 [WDI User Conference 2006 - Lab 1]

- HEADER [Header Record WDI User Conference 2006 - Lab 1]
 - RECORDID [WDI User Conference 2006 - Lab 1]
 - TYPECODE [WDI User Conference 2006 - Lab 1]
 - POINUMBER [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]
 - AOFILLER2 [WDI User Conference 2006 - Lab 1]
 - STATE [WDI User Conference 2006 - Lab 1]
 - ZIP [WDI User Conference 2006 - Lab 1]
 - NAMEADDR [WDI User Conference 2006 - Lab 1]
 - BILLTNAME [WDI User Conference 2006 - Lab 1]
 - BILLTOADDRESS [WDI User Conference 2006 - Lab 1]
 - BILLTOCITY [WDI User Conference 2006 - Lab 1]
 - BILLTOSTATE [WDI User Conference 2006 - Lab 1]
 - BILLTOZIP [WDI User Conference 2006 - Lab 1]
 - BUYERNAME [WDI User Conference 2006 - Lab 1]
 - BUYERADDRESS [WDI User Conference 2006 - Lab 1]
 - BUYERCITY [WDI User Conference 2006 - Lab 1]
 - BUYERSTATE [WDI User Conference 2006 - Lab 1]
 - BUYERZIP [WDI User Conference 2006 - Lab 1]
- LINEITEMS [LineItems Record WDI User Conference 2006 - Lab 1]
- TRAILER [Trailer Record WDI User Conference 2006 - Lab 1]

270 O MAN [Marks and Numbers]

276 O PCT [Percent Amounts]

280 O CTB [Restrictions/Conditions]

285 O TXI [Tax Information]

287 O AMT Loop

295 O N9 Loop

310 O N1 Loop: Qualified by Element in Position 1, with a Value of ST

- 1 M 98 [Entity Identifier Code]
 - 2 C 93 [Name]
 - BUYERNAME IN HEADER.NAMEADDR
 - 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]
- 330 O N3: Qualified by Occurrence # 1
- 340 O N4: Qualified by Occurrence # 1
- 345 O NX2 [Location ID Component]
- 350 O REF: Qualified by Occurrence # 1
- 360 O PER [Administrative Communications Contact]
- 365 O SI [Service Characteristic Identification]
- 370 O FOB [F.O.B. Related Instructions]
- 380 O TD1 [Carrier Details (Quantity and Weight)]
- 390 O TD3 [Carrier Details (Routing Sequence/Transit Time)]
- 400 O TD3 [Carrier Details (Equipment)]
- 410 O TD4 [Carrier Details (Special Handling, or Hazardous Ma)]
- 420 O PKG [Marking, Packaging, Loading]
- 430 O LM Loop
- 450 O SPT Loop
- 610 O ADV Loop

Ready

8:59 AM Tuesday 2/27/2007

Using Element, Segment, and Loop Qualifiers © 2007 IBM Corporation

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. This qualification is only available in Receive maps.

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

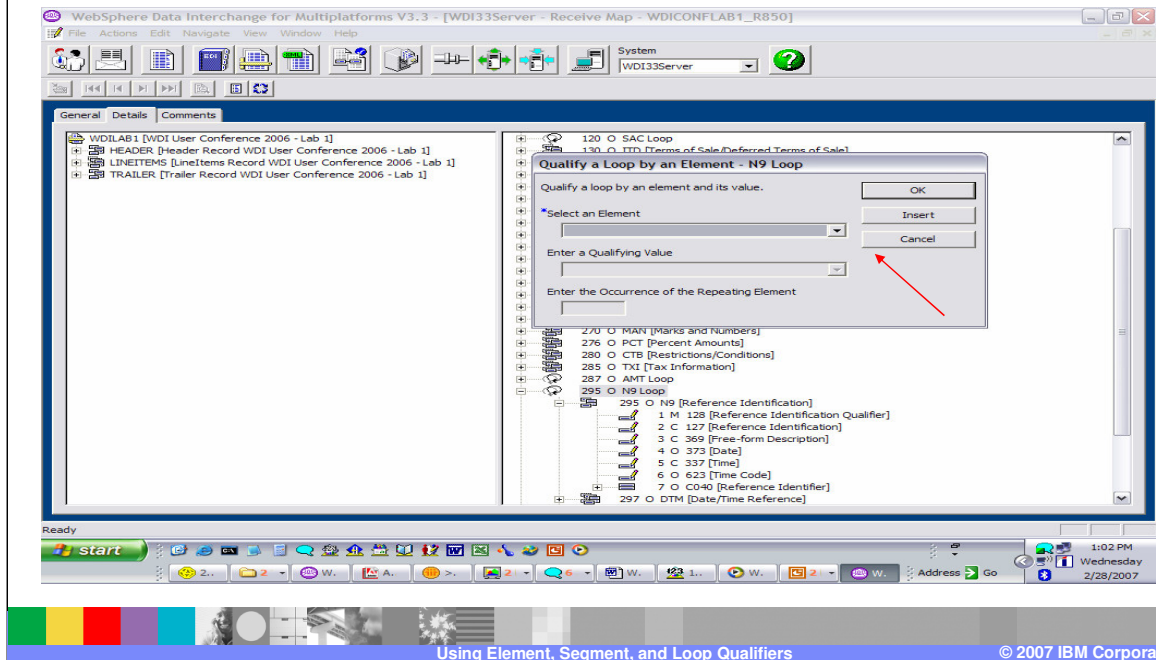
- Qualification (Value) Receive

The screenshot displays the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a tree view of a receive map for 'WDI33Server'. A dialog box titled 'Qualify a Loop' is open, asking: 'Do you want to qualify this Loop by a specific occurrence of this Loop or by the value within an element?'. The dialog has three buttons: 'Value...', 'Occurrence...', and 'Cancel'. A red arrow points to the 'Value...' button. The background shows a tree view with various loops and elements, including 'N9 Loop' and 'DTM [Date/Time Reference]'.

To create a qualify by value mapping, double click the compound element in the right window. A window will display asking for the qualification type. Select Value.

Using Element, Segment and Loop Qualifiers

- Qualification (Value) Receive



A window will display to define the element containing the qualifying value and the value.

Using Element, Segment and Loop Qualifiers

- Qualification (Value) Receive

The screenshot shows the IBM WebSphere Data Interchange for Multiplatforms V3.3.3 interface. The main window displays a Receive Map for 'WDI33Server' with a tree view of elements. A dialog box titled 'Qualify a Loop by an Element - N9 Loop' is open, prompting the user to 'Qualify a loop by an element and its value.' The dialog box contains a 'Select an Element' dropdown menu and a list of elements. A red arrow points to the 'Cancel' button.

WebSphere Data Interchange for Multiplatforms V3.3.3 - [WDI33Server - Receive Map - WDICONFLAB1_R850]

File Actions Edit Navigate View Window Help

System WDI33Server

General Details Comments

WDILAB1 [WDI User Conference 2006 - Lab 1]

- 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]

120 O SAC Loop

130 O ITD [Terms of Sale/Deferred Terms of Sale]

Qualify a Loop by an Element - N9 Loop

Qualify a loop by an element and its value.

Select an Element

- 128 1 - 0 Reference Identification Qualifier
- 127 2 - 0 Reference Identification
- 369 3 - 0 Free-form Description
- 373 4 - 0 Date
- 337 5 - 0 Time
- 623 6 - 0 Time Code
- 128 7 - 1 Reference Identification Qualifier

270 O MAN [Marks and Numbers]

276 O PCT [Percent Amounts]

280 O CTB [Restrictions/Conditions]

285 O TXI [Tax Information]

287 O AMT Loop

295 O N9 Loop

- 1 M 128 [Reference Identification Qualifier]
- 2 C 127 [Reference Identification]
- 3 C 369 [Free-form Description]
- 4 O 373 [Date]
- 5 C 337 [Time]
- 6 O 623 [Time Code]
- 7 O CO40 [Reference Identifier]
- 297 O DTM [Date/Time Reference]

Ready

start

1:03 PM Wednesday 2/28/2007

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First select the element that contains the qualifying value from the drop down list.

Using Element, Segment and Loop Qualifiers

- Qualification (Value) Receive

The screenshot displays the IBM WebSphere Data Interchange for Multiplatforms V3.3 interface. A dialog box titled "Qualify a Loop by an Element - N9 Loop" is open, allowing the user to specify a loop qualification. The "Select an Element" dropdown is set to "128 I - O Reference Identification Qualifier". The "Enter a Qualifying Value" dropdown shows a list of values: "ZU", "ZV", "ZW", "ZX", "ZY", and "ZZ". A red arrow points to the "Insert" button. The background shows a tree view of data elements, including "295 O N9 Loop" and its sub-elements.

Next select a value from the drop down list or enter the value. The drop down list is the code list associated with this element in the standard definition. When you have finished press ok or insert. Using Insert will allow you to enter multiple qualification values.

Using Element, Segment and Loop Qualifiers

- Qualification (Value) Receive

WebSphere Data Interchange for Multiplatforms V3.3 - [WDI33Server - Receive Map - WDICONFLAB1_R850]

System: WDI33Server

General Details Comments

WDILAB1 [WDI User Conference 2006 - Lab 1]

- 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]

120 O SAC Loop

130 O ITD [Terms of Sale/Deferred Terms of Sale]

140 O DIS [Discount Detail]

145 O INC [Installation Information]

150 O DTM [Date/Time Reference]

160 O LDT [Lead Time]

180 O LIN [Item Identification]

185 O SI [Service Characteristic Identification]

190 O PID [Product/Item Description]

200 O MEA [Measurements]

210 O PWK [Paperwork]

220 O PKG [Marking, Packaging, Loading]

230 O TD1 [Carrier Details (Quantity and Weight)]

240 O TD5 [Carrier Details (Routing Sequence/Transit Time)]

250 O TD3 [Carrier Details (Equipment)]

260 O TD4 [Carrier Details (Special Handling, or Hazardous Ma)]

270 O MAN [Marks and Numbers]

275 O PCT [Percent Amounts]

280 O CTB [Restrictions/Conditions]

285 O TXI [Tax Information]

287 O AMT Loop

295 O N9 Loop: Qualified by Element in Position 1, with a Value of ZZ

- 1 M 128 [Reference Identification Qualifier]
- 2 C 127 [Reference Identification]
- 3 C 369 [Free-form Description]
- 4 O 373 [Date]
- 5 C 337 [Time]
- 6 O 623 [Time Code]
- 7 O C040 [Reference Identifier]
- 297 O DTM [Date/Time Reference]

Ready

start

Address Go

1:07 PM Wednesday 2/28/2007

17

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The results of the Qualify by Value. Any mapping under this Qualification will only be executed when the element containing the value specified is found in the source document.

Using Element, Segment and Loop Qualifiers

- Qualification (Value pairs) Receive

The screenshot shows the WebSphere Data Interchange for Multiplatforms V3.3.3 interface. The main window displays a Receive Map configuration for WDI33Server. The left pane shows a tree view of data elements, including 'LINEITEMS' and its sub-elements like 'ITEMNUMBER-B1', 'ITEMNUMBER-BN', and 'ITEMNUMBER-BP'. The right pane shows the detailed configuration for these elements, including their qualifiers and values. Red arrows point to the 'ITEMNUMBER-B1', 'ITEMNUMBER-BN', and 'ITEMNUMBER-BP' elements in the right pane, highlighting their qualification by their values (B1, BN, BP) in Position 6. The 'ITEMNUMBER-BP' element is also qualified by its value (BP) in Position 6. The 'ITEMNUMBER-B1' and 'ITEMNUMBER-BN' elements are qualified by their values (B1 and BN) in Position 6. The 'ITEMNUMBER-BP' element is qualified by its value (BP) in Position 6.

This is an example of element qualified 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 is an element qualification and is only available in Receive maps.

Using Element, Segment and Loop Qualifiers

- Qualification (Value pairs) Receive

The screenshot shows the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window displays a list of elements for a 'WDI User Conference 2006 - Lab 1' segment. Element 235 is highlighted, and a dialog box titled 'Qualified Element Support' is open. The dialog contains the following text:

WebSphere Data Interchange has optional support for qualified elements. Please select whether you want this support for this element. All mappings of the element will be affected.

If you change your mind later, delete all mappings of this element and this choice will be given to you again.

The dialog has three buttons: 'Normal', 'Qualified', and 'Cancel'. A red arrow points to the 'Qualified' button, and another red arrow points to element 235 in the list.

For example, say you want to map the buyers part number to the application field ITEMNUMBER-BP. The code value BP is located in element 235 the product/service id qualifier and the buyers part number is in element 234 the product/service id. The EDI document contains several of these pairs so we need to use qualification for value pairs. To create the qualification, double click on the element containing the code value. A window will display asking for the qualification type. Select Qualified.

Using Element, Segment and Loop Qualifiers

- Qualification (Value pairs) Receive

The screenshot shows the 'Add an Element Qualification' dialog box in the IBM WebSphere Data Interchange for Multiplatforms V3.3 interface. The dialog is titled 'Add an Element Qualification - 235'. It has a 'Qualifying Element' field containing '235 - 0 Product/Service ID Qualifier'. Below this is a 'Select Elements' list with the following items: '350 1 - 0 Assigned Identification', '235 - 0 Product/Service ID', '234 5 - 0 Product/Service ID', '235 6 - 0 Product/Service ID', '234 7 - 0 Product/Service ID', '235 8 - 0 Product/Service ID', '234 9 - 0 Product/Service ID', and '235 10 - 0 Product/Service ID'. To the right of the 'Select Elements' list are four arrow buttons: '>>', '>', '<', and '<<'. The '>>' button is highlighted with a red arrow. Below the arrow buttons are three buttons: '< Previous', 'Next >', and 'Cancel'. The 'Next >' button is also highlighted with a red arrow. The background shows a map editor with a tree view on the left and a list of elements on the right. The tree view includes 'WDILAB1 [WDI User Conference 2006 - Lab 1]', 'HEADER [header Record WDI User Conference 2006 - Lab 1]', 'LINEITEMS [lineItems Record WDI User Conference 2006 - Lab 1]', 'RECORDID [WDI User Conference 2006 - Lab 1]', 'QTYORDERED [WDI User Conference 2006 - Lab 1]', 'UNITOFMEAS [WDI User Conference 2006 - Lab 1]', 'UNITPRICE [WDI User Conference 2006 - Lab 1]', 'ITEMDESC [WDI User Conference 2006 - Lab 1]', 'ITEMNUMBER-BN [WDI User Conference 2006 - Lab 1]', 'ITEMCODE1 [WDI User Conference 2006 - Lab 1]', 'ITEMNUMBER-B1 [WDI User Conference 2006 - Lab 1]', 'ITEMCODE2 [WDI User Conference 2006 - Lab 1]', 'ITEMNUMBER-BC [WDI User Conference 2006 - Lab 1]', 'ITEMCODE3 [WDI User Conference 2006 - Lab 1]', 'ITEMNUMBER-BP [WDI User Conference 2006 - Lab 1]', 'ITEMCODE4 [WDI User Conference 2006 - Lab 1]', and 'TRAILER [Trailer Record WDI User Conference 2006 - Lab 1]'. The list of elements on the right includes '1 O 350 [Assigned Identification]', '2 M 235 [Product/Service ID Qualifier]', '3 M 234 [Product/Service ID]', '4 C 235 [Product/Service ID Qualifier]', '5 C 234 [Product/Service ID]', '6 C 235 [Product/Service ID Qualifier]', '7 C 234 [Product/Service ID]', '8 C 235 [Product/Service ID Qualifier]', '9 C 234 [Product/Service ID]', '10 C 235 [Product/Service ID Qualifier]', '11 C 234 [Product/Service ID]', '12 C 235 [Product/Service ID Qualifier]', '13 C 234 [Product/Service ID]', '14 C 235 [Product/Service ID Qualifier]', '15 O LIN [Item Identification]', '16 C 234 [Product/Service ID]', '17 C 235 [Product/Service ID Qualifier]', '18 C 234 [Product/Service ID]', '19 C 235 [Product/Service ID Qualifier]', '20 C 234 [Product/Service ID]', '21 C 235 [Product/Service ID Qualifier]', '22 C 234 [Product/Service ID]', '23 C 234 [Product/Service ID]', '24 C 235 [Product/Service ID Qualifier]', '25 C 234 [Product/Service ID]', '26 C 235 [Product/Service ID Qualifier]', '27 C 234 [Product/Service ID]', '28 C 235 [Product/Service ID Qualifier]', '29 C 234 [Product/Service ID]', and '30 C 235 [Product/Service ID Qualifier]'. The Windows taskbar at the bottom shows the 'start' button, several application icons, and the system tray with the date 'Tuesday 2/27/2007' and time '9:46 AM'.

Select the element or elements that will be mapped based on this elements value and click the arrow buttons in the center of the window. When selection is complete, click next.

Using Element, Segment and Loop Qualifiers

- Qualification (Value pairs) Receive

The screenshot displays the 'WebSphere Data Interchange for Multiplatforms V3.3' interface. A dialog box titled 'Add an Element Qualification - 235' is open, showing a tree view of data elements. The dialog prompts the user to 'Now enter the values of the qualifying element that will trigger these mappings.' It includes a 'Qualifying Element' dropdown menu, an 'Enter a Value' field, and a 'Qualifying Values' list. Red arrows highlight the 'Enter a Value' dropdown and the '>>' button. The background shows a mapping tree with elements like 'ITEMNUMBER-B1' and 'ITEMNUMBER-BP'.

Enter the value to be used to select the mapping. The drop down list contains the code list for the element containing the qualifying value. Click the arrow buttons in the center of the window.

Using Element, Segment and Loop Qualifiers

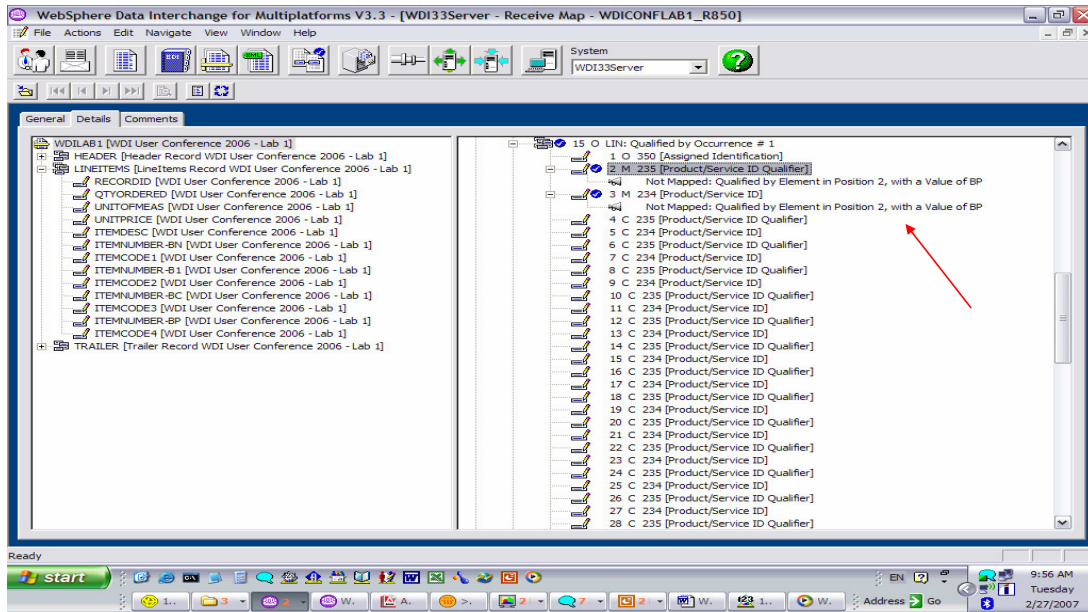
- Qualification (Value pairs) Receive

The screenshot shows the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window displays a data map for 'WDILAB1 [WDI User Conference 2006 - Lab 1]'. A dialog box titled 'Add an Element Qualification - 235' is open, prompting the user to enter values for a qualifying element. The 'Qualifying Element' field is set to '235 - 0 - Product/Service ID Qualifier', and the 'Qualifying Values' field contains 'BP'. A red arrow points to the 'Finish' button, indicating the completion of the selection process.

When selection is complete, click finish.

Using Element, Segment and Loop Qualifiers

- Qualification (Value pairs) Receive



The pairs are now qualified but contain no mapping.

Using Element, Segment and Loop Qualifiers

- Qualification (Value pairs) Receive

The screenshot displays the 'WebSphere Data Interchange for Multiplatforms V3.3' interface. The title bar indicates the current configuration is '[WDI33Server - Receive Map - WDI33CONFLAB1_R850]'. The main workspace is divided into two panes. The left pane, titled 'General', shows a hierarchical tree of data elements for 'WDI User Conference 2006 - Lab 1', including 'HEADER', 'LINEITEMS', 'RECORDID', 'QTYORDERED', 'UNITOFMEAS', 'UNITPRICE', 'ITEMDESC', 'ITEMNUMBER-BN', 'ITEMCODE1', 'ITEMNUMBER-B1', 'ITEMCODE2', 'ITEMNUMBER-BC', 'ITEMCODE3', 'ITEMNUMBER-BP', 'ITEMCODE4', and 'TRAILER'. The right pane shows a list of mapped elements with their qualifiers, such as '15 LIN: Qualified by Occurrence # 1', '1 O 350 [Assigned Identification]', '2 M 235 [Product/Service ID Qualifier]', '3 M 234 [Product/Service ID]', and '4 C 235 [Product/Service ID Qualifier]'. A red arrow points from the 'ITEMNUMBER-BP' element in the left pane to the corresponding entry in the right pane. The bottom of the window shows a Windows taskbar with the date '2/28/2007' and time '1:12 PM'. The footer of the slide contains the text 'Using Element, Segment, and Loop Qualifiers' and '© 2007 IBM Corporation'.

You can now use the drag/drop from the left window to the right window to add the mapping for this qualification. When you have completed the first set of element pairs, you may want to map the next pair. If the mapping is the same for the other pairs you can use the `&SAMEAS` keyword instead of re-entering all the qualification and mapping for each pair. The `&SAMEAS` keyword indicates when a mapping for a current Data Element should be exactly the same as the Data Element identified by the element sequence number. For example, if the mapping for element 2 of the POC Segment should be exactly the same as the mapping for element 1 of the POC Segment, then specify the special literal value of `'&SAMEAS 1'` when mapping element 2. This results in the mapping for element 2 being the same as element 1,

Using Element, Segment and Loop Qualifiers

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



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

Using Element, Segment and Loop Qualifiers

- Qualification (Value pairs) Receive

WebSphere Data Interchange for Multiplatforms V3.3.3 - [WDI33Server - Receive Map - WDI33CONFLAB1_R850]

General Details Comments

WDILAB1 [WDI User Conference 2006 - Lab 1]

HEADER [Header Record WDI User Conference 2006 - Lab 1]

LINEITEMS [LineItems Record WDI User Conference 2006 - Lab 1]

RECORDID [WDI User Conference 2006 - Lab 1]

QTYORDERED [WDI User Conference 2006 - Lab 1]

UNITOFMEAS [WDI User Conference 2006 - Lab 1]

UNITPRICE [WDI User Conference 2006 - Lab 1]

ITEMDESC [WDI User Conference 2006 - Lab 1]

ITEMNUMBER-BN [WDI User Conference 2006 - Lab 1]

ITEMCODE1 [WDI User Conference 2006 - Lab 1]

ITEMNUMBER-B1 [WDI User Conference 2006 - Lab 1]

ITEMCODE2 [WDI User Conference 2006 - Lab 1]

ITEMNUMBER-BC [WDI User Conference 2006 - Lab 1]

ITEMCODE3 [WDI User Conference 2006 - Lab 1]

ITEMNUMBER-BP [WDI User Conference 2006 - Lab 1]

ITEMCODE4 [WDI User Conference 2006 - Lab 1]

TRAILER [Trailer Record WDI User Conference 2006 - Lab 1]

15 LIN: Qualified by Occurrence # 1

1 C 350 [Assigned Identification]

2 M 235 [Product/Service ID Qualifier]

3 M 234 [Product/Service ID]

4 C 235 [Product/Service ID Qualifier]

5 C 234 [Product/Service ID]

6 C 235 [Product/Service ID Qualifier]

7 C 234 [Product/Service ID]

8 C 235 [Product/Service ID Qualifier]

22 C 235 [Product/Service ID Qualifier]

23 C 234 [Product/Service ID]

24 C 235 [Product/Service ID Qualifier]

25 C 234 [Product/Service ID]

26 C 235 [Product/Service ID Qualifier]

27 C 234 [Product/Service ID]

28 C 235 [Product/Service ID Qualifier]

29 C 234 [Product/Service ID]

Qualified Element Support

WebSphere Data Interchange has optional support for qualified elements. Please select whether you want this support for this element. All mappings of the element will be affected.

If you change your mind later, delete all mappings of this element and this choice will be given to you again.

Normal

Qualified

Cancel

Ready

start

Address Go

1:20 PM Wednesday 2/28/2007

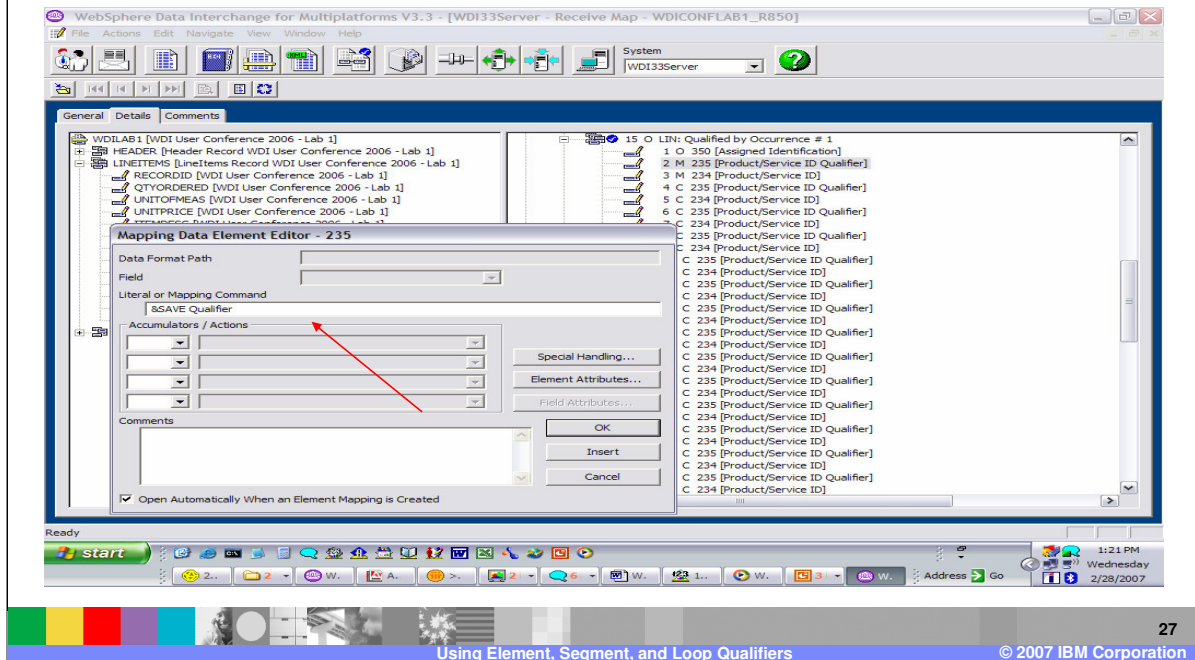
26

Using Element, Segment, and Loop Qualifiers © 2007 IBM Corporation

To use logic, you will need to save the value of an element. Double click on the element and select Normal mapping.

Using Element, Segment and Loop Qualifiers

- Qualification (Value pairs) Receive



The Literal or Command line is used for logic. The &SAVE command, indicates to save the value. When finished you can enter ok or Insert. Insert will allow you to enter more commands.

Using Element, Segment and Loop Qualifiers

- Qualification (Value pairs) Receive

The screenshot shows the WebSphere Data Interchange (WDI) configuration interface. The main window is titled 'WebSphere Data Interchange for Multiplatforms V3.3.3 - [WDI33Server - Receive Map - WDICONFLAB1_R850]'. The interface is divided into two panes. The left pane shows a tree view of data elements for 'WDILAB1 [WDI User Conference 2006 - Lab 1]', including elements like 'HEADER', 'LINEITEMS', 'RECORDID', 'QTYORDERED', 'UNITFORMEAS', 'UNITPRICE', 'ITEMDESC', 'ITEMNUMBER-BN', 'ITEMCODE1', 'ITEMNUMBER-B1', 'ITEMCODE2', 'ITEMNUMBER-BC', 'ITEMCODE3', 'ITEMNUMBER-BP', and 'ITEMCODE4'. The right pane shows a list of mapped elements, including '15 O LIN: Qualified by Occurrence # 1', '1 O 350 [Assigned Identification]', 'M 235 [Product/Service ID Qualifier]', '3 M 234 [Product/Service ID]', '4 C 235 [Product/Service ID Qualifier]', '5 C 234 [Product/Service ID]', '6 C 235 [Product/Service ID Qualifier]', '7 C 234 [Product/Service ID]', '8 C 235 [Product/Service ID Qualifier]', '9 C 234 [Product/Service ID]', '10 C 235 [Product/Service ID Qualifier]', '11 C 234 [Product/Service ID]', '12 C 235 [Product/Service ID Qualifier]', '13 C 234 [Product/Service ID]', '14 C 235 [Product/Service ID Qualifier]', '15 C 234 [Product/Service ID]', '16 C 235 [Product/Service ID Qualifier]', '17 C 234 [Product/Service ID]', '18 C 235 [Product/Service ID Qualifier]', '19 C 234 [Product/Service ID]', '20 C 235 [Product/Service ID Qualifier]', '21 C 234 [Product/Service ID]', '22 C 235 [Product/Service ID Qualifier]', '23 C 234 [Product/Service ID]', '24 C 235 [Product/Service ID Qualifier]', '25 C 234 [Product/Service ID]', '26 C 235 [Product/Service ID Qualifier]', '27 C 234 [Product/Service ID]', and '28 C 235 [Product/Service ID Qualifier]'. A red arrow points to the 'M 235 [Product/Service ID Qualifier]' entry.

Using Element, Segment, and Loop Qualifiers

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28

You now have the value of element 235 saved in the variable Qualifier. There are a number of ways to map to the target and use logic. In this example you want to map element 234 Product/Service Id to the application field ITEMNUMBER-BP when the value of element 235 Product/Service ID Qualifier equal the value BP.

Using Element, Segment and Loop Qualifiers

- Qualification (Value pairs) Receive

The screenshot displays the WebSphere Data Interchange for Multiplatforms V3.3.3 interface. The main window shows a tree view of data elements for 'WDILAB1 [WDI User Conference 2006 - Lab 1]'. A 'Mapping Data Element Editor' dialog is open for element 234. The dialog shows the 'Field' dropdown set to 'ITEMNUMBER-BP' and the 'Literal or Mapping Command' field containing '&IF Qualifier EQ "BP"'. Red arrows indicate the mapping of the field and the qualification logic.

To map element 234 to the application field ITEMNUMBER-BP, use drag and drop. Now you can enter the logic on the Literal or Command Line to execute this mapping when the variable Qualifier equal the value BP.

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
 - Path – Multiple occurrence
 - Value
 - Value pairs
 - Logic may be used as an alternative to Value and Value pairs qualification.



WebSphere Data Interchange supports four types of qualification for maps. You can qualify by: Occurrence, Path which is a multiple occurrence qualification, Value, and Value pairs. With Value and Value pairs, 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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