



IBM Software Group

IBM WebSphere® Data Interchange V3.3

T3 – SetElementAttribute



@business on demand.

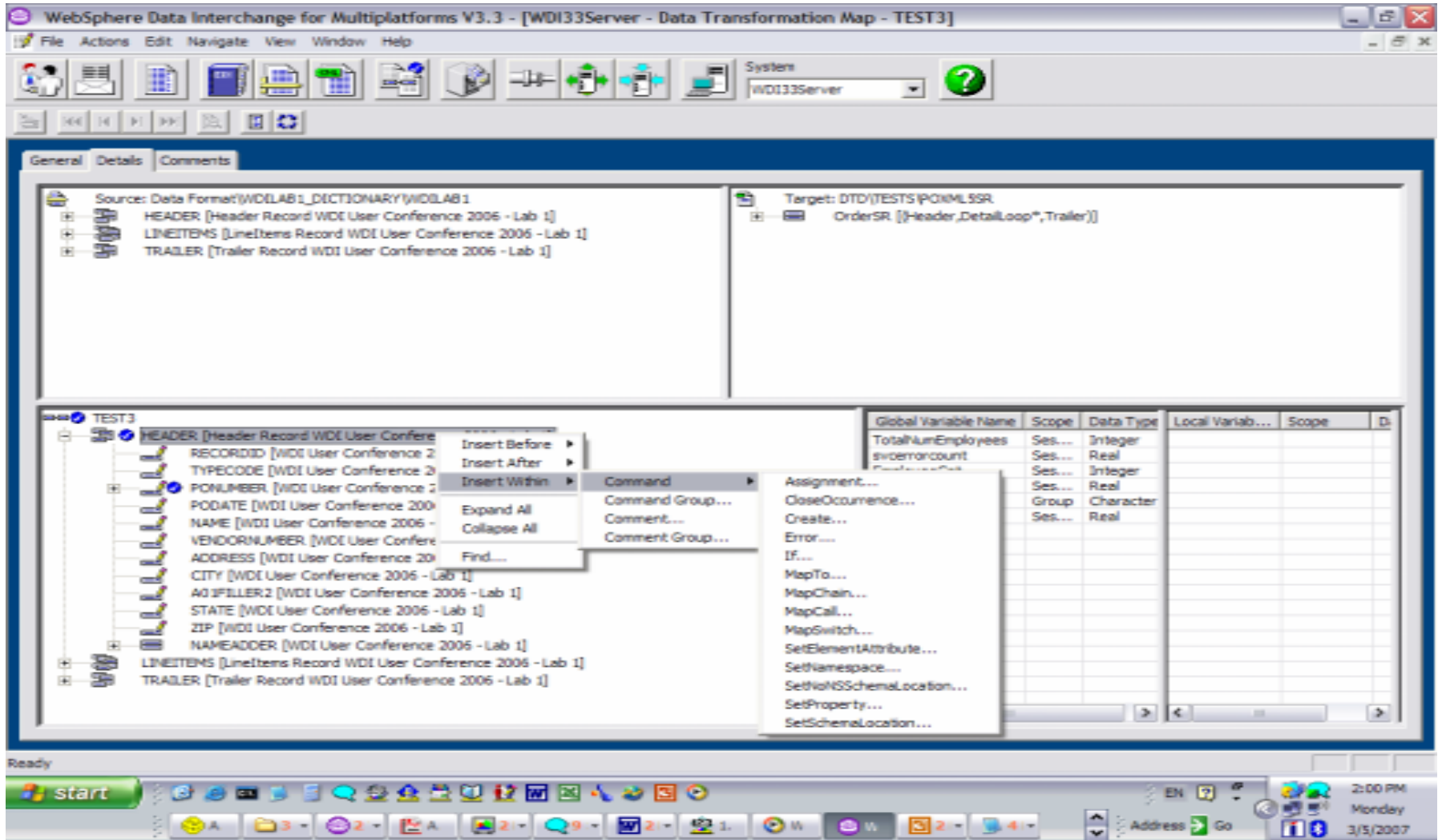
Agenda

- Overview
- Architecture
- Details
- Example
- Problem determination
- Best practice
- Internals (for skill transfer at a later stage)
- Summary and references

SetElementAttribute

- The SetElementAttribute() command is used to provide some control of the automatic formatting of elements that occurs when the element is output. Automatic formatting of values occurs when elements are written to a target document.
- For example, leading and trailing zeros will be removed from EDI numeric Data Elements when they are output. If the value is zero and the Data Element is optional, the value is suppressed in the EDI output.
- With the SetElementAttribute() mapping command you can control certain types of formatting when a simple element is output, such as how zeros and empty elements are handled when the element is written to the target document.
- The SetElementAttribute() command does not affect the values of simple elements during translation itself. It only affects the formatting of elements when they are written to the output document.

SetElementAttribute



SetElementAttribute

WebSphere Data Interchange for Multiplatforms V3.1 - [WDI33Server - Data Transformation Map - TEST3]

System: WDI33Server

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: DTD\TESTS\POIMLSSR

- OrderSR [Header,DetailLoop*,Trailer]
- Header [POItem,PODate,Sender,Receiver]
- DetailLoop [ItemNumber,SubDetail+]
- Trailer [ItemCount,TotalBucks]

| Global variable Name | Scope | Data Type | Local Variab... | Scope | D |
|----------------------|--------|-----------|-----------------|-------|---|
| TotalNumEmployees | Ses... | Integer | | | |
| svocmrcount | Ses... | Real | | | |
| EmployeeCnt | Ses... | Integer | | | |
| tranor | Ses... | Real | | | |
| SNEPTy5 | Group | Character | | | |

Mapping Command Editor

Enter a command:

```
SetElementAttribute (targetPath, attributeName, attributeValue)
```

Buttons: OK, Insert, Cancel

Ready

2:01 PM Monday 3/5/2007

SetElementAttribute

- targetPath defines the scope
- The scope can be for the entire document, specific compound elements (including loops, segments and records, and composite elements and structures), and specific simple elements.
- This allows customers to apply the formatting control at specific levels in the mapping without the need of a mapping command for all simple elements involved.
- It is important to understand the scope of the command. Excessive use of the SetElementAttribute() command will increase WDI memory usage during map execution.

SetElementAttribute

The screenshot shows the IBM WebSphere Data Interchange for Multipatforms V3.3 interface. The main window displays a mapping configuration for a Data Transformation Map named 'TEST3'. The source is 'Data Format[WIDELAB1_DICTIONARY[WIDELAB1]' and the target is 'DTD[TEST3POXMLSR]'. The source includes elements: HEADER, LINEITEMS, and TRAILER. The target includes: OrderSR, Header, DetailLoop, and Trailer. A table of global variables is visible:

| Global Variable Name | Scope | Data Type | Local Variab... | Scope | D |
|----------------------|--------|-----------|-----------------|-------|---|
| TotalNumEmployees | Ses... | Integer | | | |
| svomnrcount | Ses... | Real | | | |
| EmployeeCnt | Ses... | Integer | | | |
| trnserror | Ses... | Real | | | |
| SHEPType5 | Group | Character | | | |

The Mapping Command Editor dialog is open, showing the command: `SetElementAttribute (targetPath, attributeName, ...)`. A context menu is displayed over the dialog, listing various transformation functions such as 'CharValueTooShort', 'TrimLeadingBlanks', and 'TrimTrailingBlanks'.

SetElementAttribute

The screenshot shows the 'WebSphere Data Interchange for Multiplatforms V1.3' interface. The main window displays a 'Data Transformation Map' configuration. The 'Source' is 'Data Format\IIDELAB1_DICTIONARY\IIDELAB1' and the 'Target' is 'OYT\TESTS\POXMLSR'. The map includes elements like 'HEADER', 'LINEITEMS', and 'TRAILER'. A 'Mapping Command Editor' dialog is open, showing the command: `SetElementAttribute (targetPath, attributeName, attributeValue)`. A context menu is open over the editor, listing various functions such as 'Concat', 'Created', 'Date', 'DateCnv', 'Exit', 'Find', 'Found', 'GetProperty', 'HexDecode', 'HexEncode', 'IsEmpty', 'Left', 'Length', 'Lower', 'Number', 'NumFormat', 'Occurrence', 'Overlay', 'Right', 'Round', 'StrComp', 'StrCompI', 'StrCompH', 'SubString', 'Time', 'Translate', 'TrimLeft', 'TrimRight', 'Truncate', 'Upper', and 'Validate'. The Windows taskbar at the bottom shows the system time as 2:13 PM on Monday, 3/5/2007.

SetElementAttribute

- SetElementAttribute (TargetRoot, "SuppressZeroValues", 'N')
 - ▶ The default value is 'Y' for target EDI documents. Optional elements with a value 0 are suppressed.
 - ▶ TargetRoot is the scope and a value of 'N' will change this for the entire target document.
 - ▶ Use this If most element mappings should not suppress zeros. Then add the command on just the few elements that should suppress zeros.



SetElementAttribute

WebSphere Data Interchange for Multiplatforms V3.1 - [WDC3Server - Data Transformation Map - TEST3]

System: WDC3Server

Source: Data Format (WDLAB1_DICTONARY) (WDLAB1)

- 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: DTD (TESTS) (XMLSSR)

- OrderSR [-Header,DetailLoop*,Trailer]]
 - Header [(PONum,PODate,Sender,Receiver)]
 - DetailLoop [(ItemNumber,SubDetail+)]
 - Trailer [(ItemCount,TotalBucks)]

| Global Variable Name | Scope | Data Type | Local Variab... | Scope |
|----------------------|--------|-----------|-----------------|-------|
| TotalNumEmployees | Ses... | Integer | | |
| svocmancount | Ses... | Real | | |
| EmployeeCnt | Ses... | Integer | | |
| tranamr | Ses... | Real | | |
| SNEPType5 | Group | Character | | |

TEST3

- HEADER [Header Record WDI User Conference 2006 - Lab 1]
 - RECORDED [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
 - VENDC
 - ADDRE
 - CITY [
 - AGJFD
 - STATE
 - ZIP [N
 - NAME
 - LINEITEMS [L
 - TRAILER [Tra

Mapping Command Editor

Enter a command:

```
SetElementAttribute (TargetRoot, 'SuppressZeroValues', 'Y')
```

Buttons: OK, Insert, Cancel

Ready

Windows taskbar: 2:24 PM Monday 3/5/2007

SetElementAttribute

WebSphere Data Interchange for Multiplatforms V3.3 - [WDI33Server - Data Transformation Map - TEST3]

File Actions Edit Navigate View Window Help

System: WDI33Server

Source: Data Format\j\WDI3LAB1_DICTIONARY\j\WDI3LAB1

- 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: DTD (TESTS\POINLSR)

- OrderSR [Header,DetailLoop,Trailer]
- Header [POINum,PODate,Sender,Receiver]
- DetailLoop [ItemNumber,SubDetail+]
- Trailer [ItemCount,TotalBucks]

TEST3

- HEADER [Header Record WDI User Conference 2006 - Lab 1]
 - SetElementAttribute (TargetRoot, "SuppressZeroValues", N)
 - 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]
 - AD1FILLER2 [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]
- LINEITEMS [LineItems Record WDI User Conference 2006 - Lab 1]
- TRAILER [Trailer Record WDI User Conference 2006 - Lab 1]

| Global Variable Name | Scope | Data Type | Local Variab... | Scope | D |
|----------------------|--------|-----------|-----------------|-------|---|
| TotalNumEmployees | Ses... | Integer | | | |
| svormancount | Ses... | Real | | | |
| EmployeeCnt | Ses... | Integer | | | |
| tranerror | Ses... | Real | | | |
| SNEPTType5 | Group | Character | | | |
| clnerrorcount | Ses... | Real | | | |

Ready

start

2:25 PM Monday 3/5/2007

SetElementAttribute

- **TrimLeadingZeros (Y | N)** – Indicates how to treat leading zeros for values of simple elements declared to be of a numeric type.
- **XML** – The default setting for this element attribute is “N” (do not remove leading zeros). All XML values have a minimum length 1.
- **EDI Standard** – The default setting for this element attribute is “Y” (remove leading zeros). The minimum length is specified in the definition of the Data Element..
- **Data Format** – The default setting for this element attribute is “N” (do not remove leading zeros). The minimum length for a fixed length Data Format Field will always be the same as the Field’s defined maximum length. The minimum length of a Field in a comma delimited Data Format is one unless dictated otherwise by the data type.



SetElementAttribute

- TrimTrailingZeros (Y | N) – Indicates how to treat trailing zeros to the right of the decimal point for values of simple elements declared to be of a numeric type.
- TrimLeadingBlanks (Y | N) – Indicates how to treat leading white space at the beginning of a simple element value. White space includes blanks, carriage returns, line feeds and tab characters.
- TrimTrailingBlanks (Y | N) – Indicates how to treat trailing white space at the end of a simple element value. White space includes blanks, carriage returns, line feeds and tab characters.
- SuppressEmptyElements (Y | N) – Indicates whether or not to output the value of a simple element if it has no value. A value is considered to have no value when it has a length of zero or it contains only white space. White space includes blanks, carriage returns, line feeds and tab characters.
- NumValueTooShort (RB | RZ | LB | LZ | IG) – This element attribute indicates how to handle numeric values that are shorter than the minimum length defined for the simple element. It is only useful when the simple element is defined with a numeric data type.
- CharValueTooShort (RB | RZ | LB | LZ | IG) – This element attribute indicates how to handle character values that are shorter than the minimum length defined for the simple element. Elements that are defined as a numeric data type that is written as characters can utilize this element attribute effectively.

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 | CICS | IMS | WMQ | Tivoli |
| IBM (logo) | Cloudscape | Informix | OS/390 | WebSphere |
| e (logo) business | DB2 | iSeries | OS/400 | xSeries |
| AIX | DB2 Universal Database | Lotus | pSeries | 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 NONINFRINGEMENT. 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.

