IBM WebSphere® Data Interchange V3.3

Validation Tools

This presentation will review the validation tools that can be used in a Data Transformation map.

Validation Tools

- EDI document Validation

- EDI Implementation Guide Syntax validation

- EDI Service Segment Validation

- The Error Command

The presentation will review tools available for Electronic Data Interchange (EDI) standard document validation, implementation guide syntax validation, and EDI service segment validation. The Error mapping command will also be reviewed.
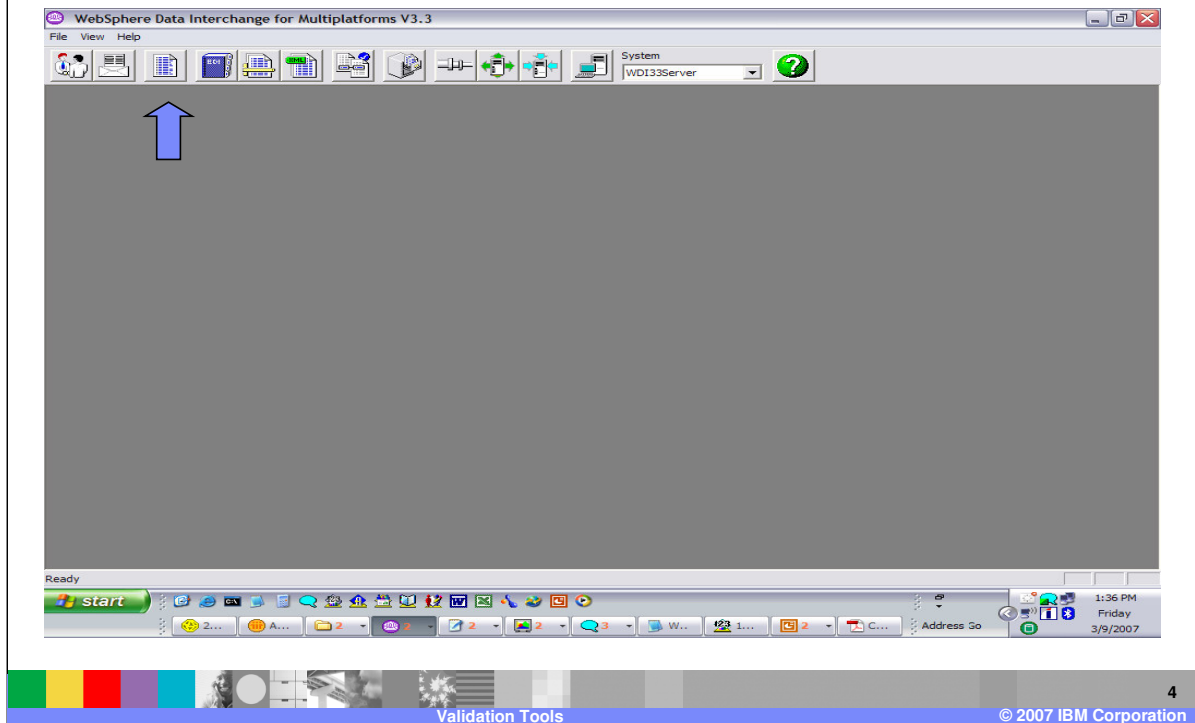
Validation Tools

- EDI document Validation
  - ▶ Inbound validation automatic
  - ▶ Level can be set
  - ▶ Acceptable error level can be set
  - ▶ EDI Standard compliance checks
  - ▶ Additional validation in Validation maps

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WebSphere Data Interchange (WDI) will automatically validate inbound and outbound EDI documents that are to be translated for Data Transformation (DT) mapping. The level of validation that will be performed is specified in the Data Transformation Map Rule associated with the map. EDI Standard Transaction documents will be validated to ensure they comply with the corresponding EDI Standard. If you need additional validation beyond what is specified in the corresponding EDI Standard, a Validation Map can be used.
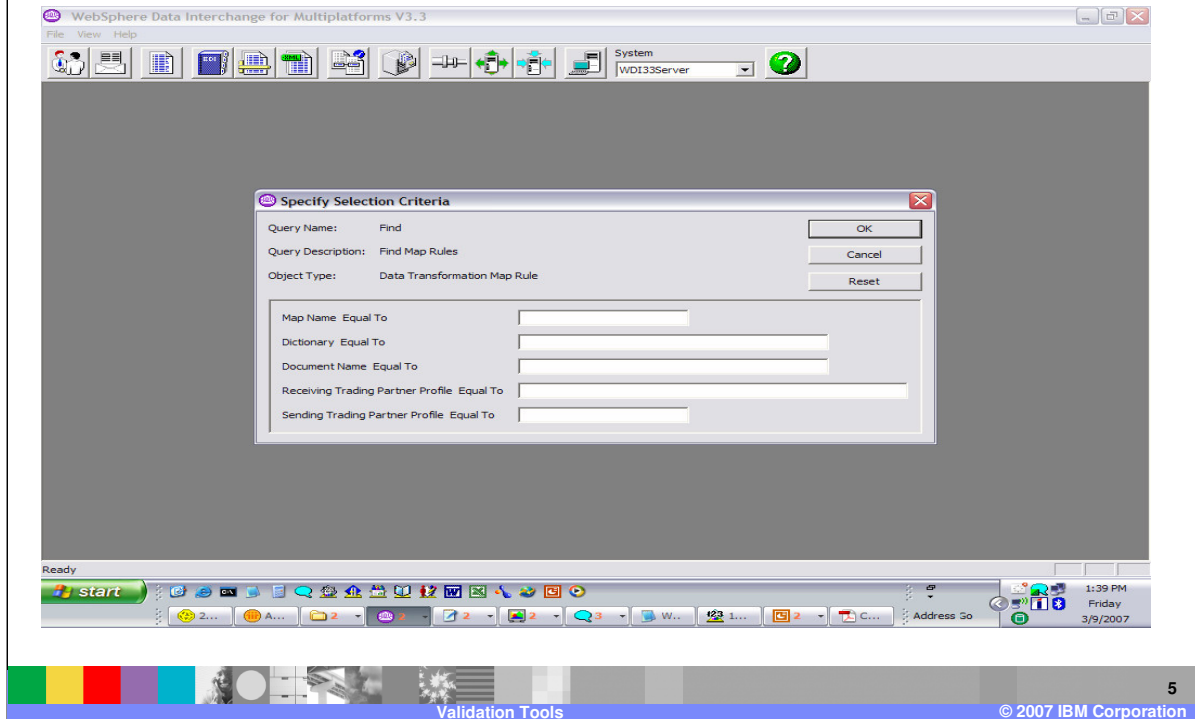
Validation Maps provide the instructions needed to perform additional validation beyond what is specified in the EDI Standard. Validation maps can only be used with the Data Transformation map processing.

Validation Tools

You can view data transformation rules, send, and receive usages in the Rules and Usages functional area.

Validation Tools

WebSphere Data Interchange for Multiplatforms V3.3

File View Help

System
WDI33Server

Specify Selection Criteria

Query Name:	Find
Query Description:	Find Map Rules
Object Type:	Data Transformation Map Rule

OK
Cancel
Reset

Map Name Equal To

Dictionary Equal To

Document Name Equal To

Receiving Trading Partner Profile Equal To

Sending Trading Partner Profile Equal To

Ready

start

Address Go

1:39 PM
Friday
3/9/2007

Validation Tools

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Selection criteria can be entered to view a specific set of rules or usages.

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Validation Tools

There are 3 tabs to view Data transformation Rules, Send Usages, or Receive Usages. The Rules and Usages can be updated from this functional area.

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Validation Tools

You can also go into the Mapping Functional Area, highlight the map and select the Rules and Usages button to see the Rules for a particular map.

Validation Tools

WebSphere Data Interchange for Multiplatforms V3.3 - [WDI33Server (Rules for Data Transformation Map - WDICONFLB2_S850T)]

File   Actions   View   Window   Help

System
WDI33Server

Data Transformation Map Rules

Dictionary Name	Document Name	Map Name	Process	Sending Trading Partner Profile	Receiving Trading Partner Profile	Description	Usage Indic
WDILAB1_DICTIONARY	WDILAB1	WDICONFLB2_S850T		ANY	DIU06		Test

1 rows

start   1:44 PM   Friday   3/9/2007

Address Go

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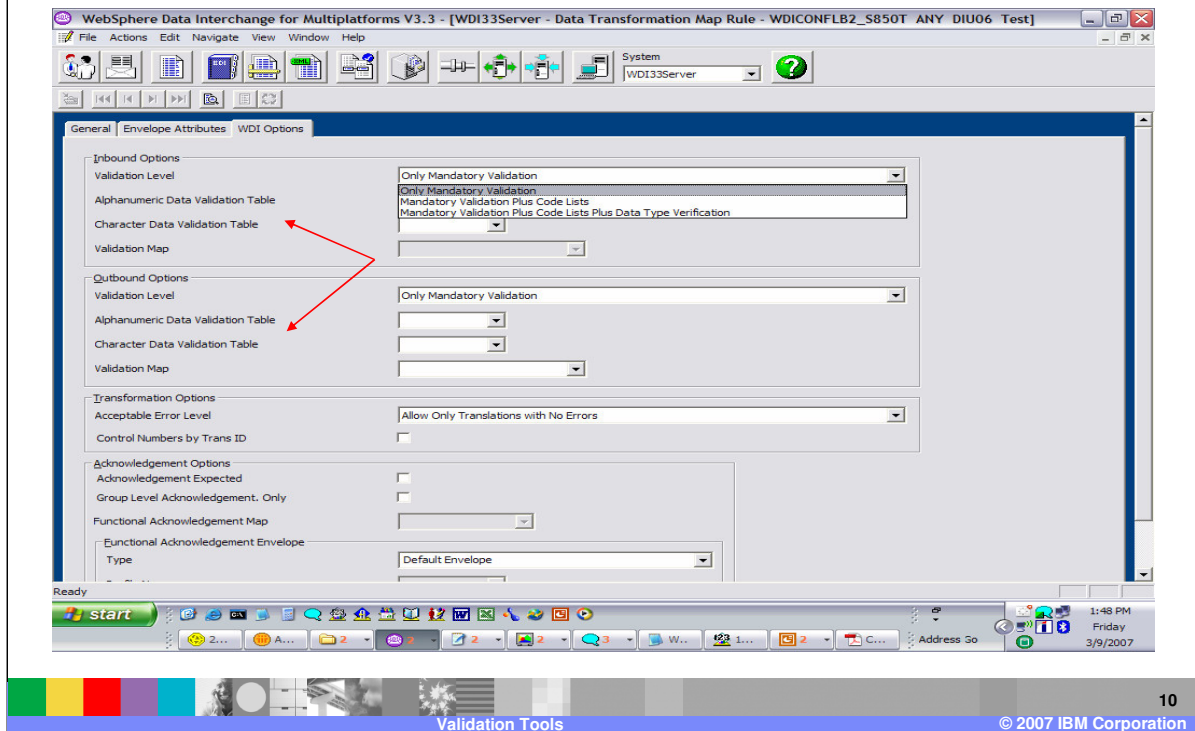Validation Tools   © 2007 IBM Corporation

To update or view the Data Transformation Rule, double click the Rule.

Validation Tools
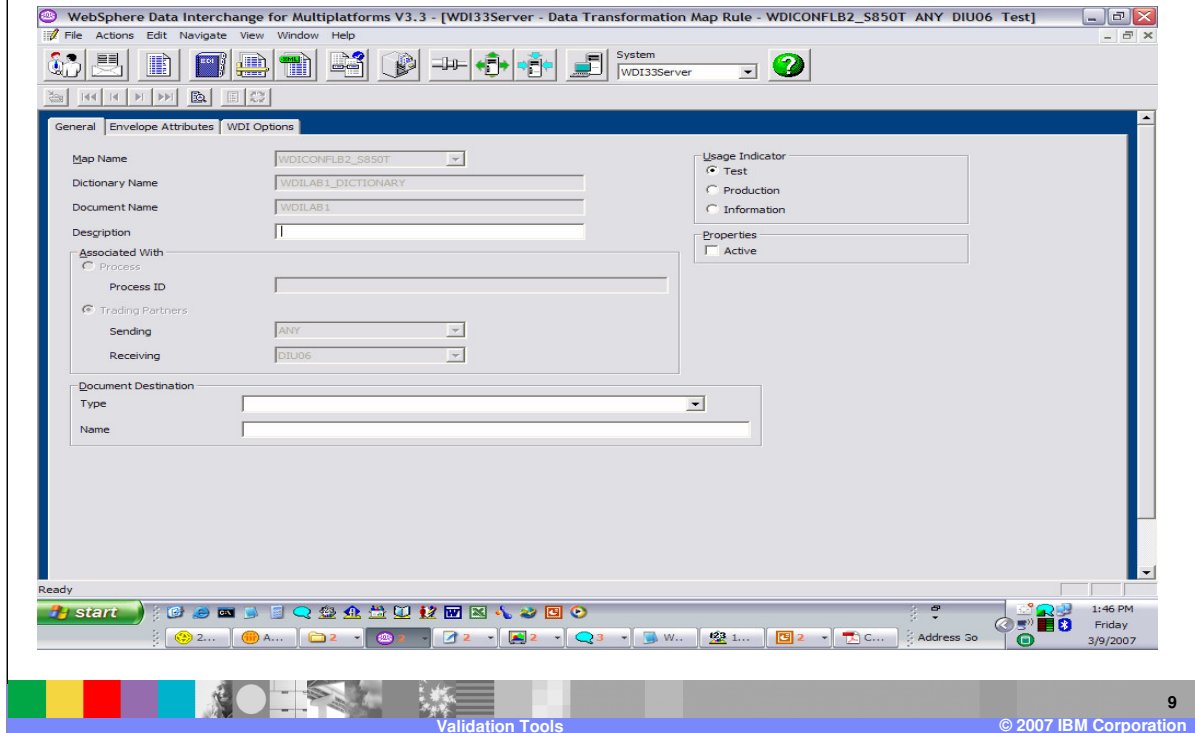
The fields related to the level of validation that will be performed are located on the WDI Options tab.

Validation Tools

For both Inbound options and Outbound options you can select the Validation Level. Mandatory Validation will perform the basic EDI Standard Syntax checking. Mandatory plus Code List will perform the basic EDI Syntax checking and validate the values in the EDI message against elements in the EDI document definition that contain a code list. Mandatory plus Code List plus data type verification will additionally validate the values in the EDI message against the data type defined in the EDI document definition.

For example, elements with data type Alphanumeric will be checked to ensure all the characters in the value are in the ALPHANUM code list. This code list is the default code list used for Alphanumeric data type checking. You can also create your own Alphanumeric and Character code list and specify them here for this particular Rule or in the Application Defaults profile for your WDI system.
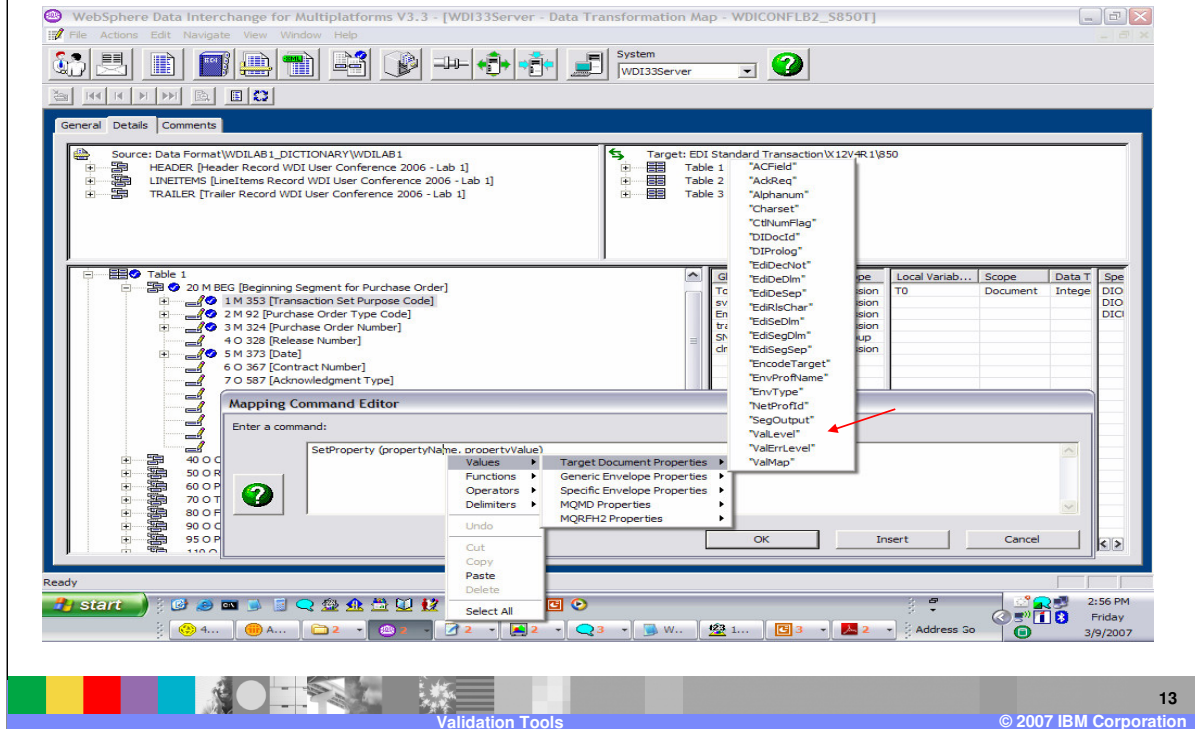
Validation Tools
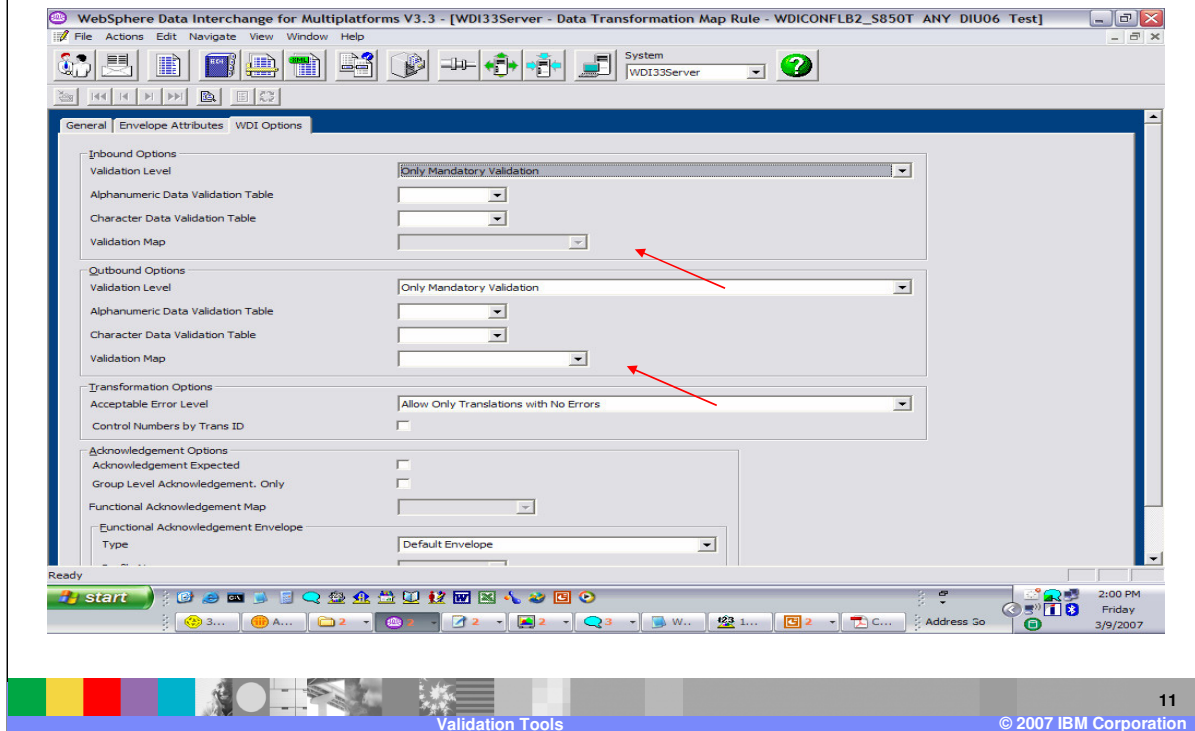
For both Inbound options and Outbound options you can select a Validation map to execute if you need additional validation beyond what is specified in the corresponding EDI Standard, a Validation Map can be used. With this example the Source or Inbound document is not EDI and the Validation map cannot be selected. The Target or Outbound document is EDI and a Validation map can be specified.
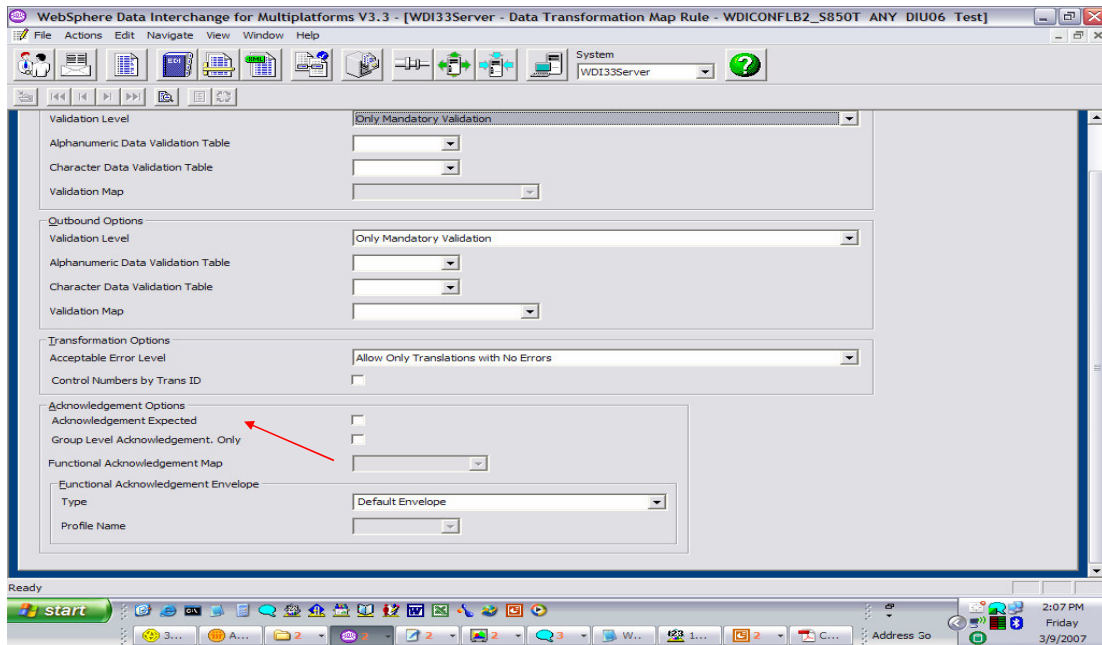
Validation Tools
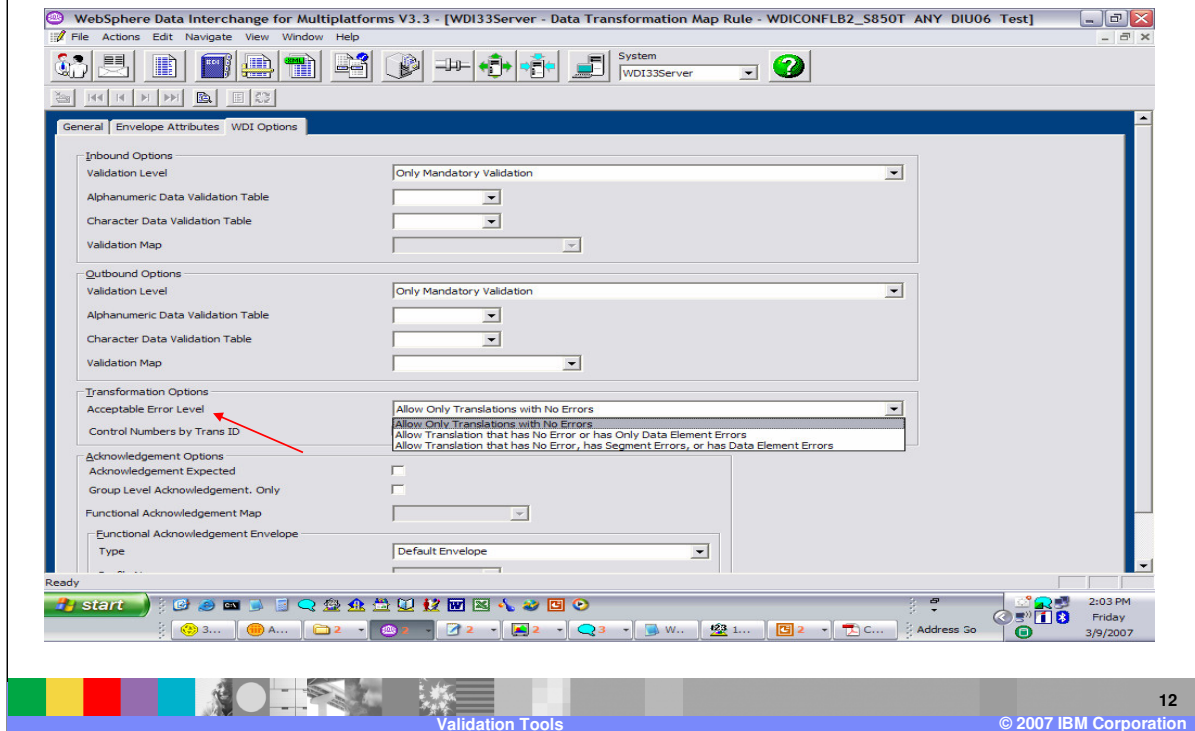
Under the Transformation Options you can select the Acceptable Error Level. You can Allow Translations with no errors, with data element level errors, or with segment or data element errors. For example, a missing mandatory segment will allow the translation to complete with an acceptable error level that allows segment level errors. A message will be issued as a warning.

Validation Tools

There are also Target Document Properties that can be used the to set the Outbound or EDI Target document Validation Level, Acceptable Error Level, and Validation Map. These are available with the SetProperty Command.
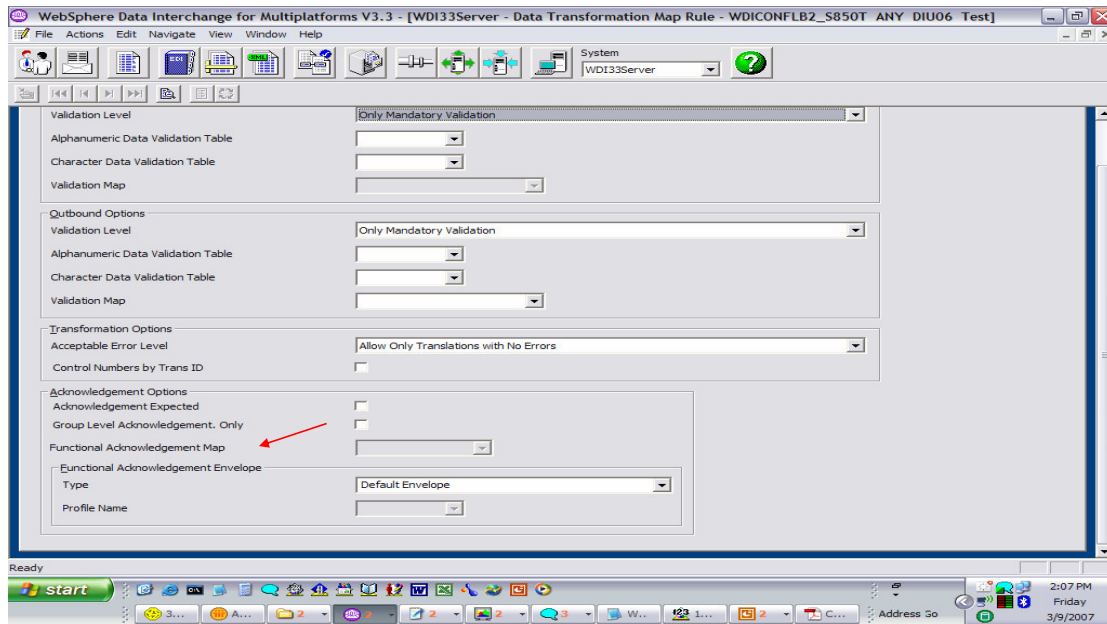
Validation Tools

Under the Acknowledgment Options you can select if an Acknowledgment is expected for EDI Target or outbound messages. When your trading partner sends you the functional acknowledgment this flag will be used to reconcile the acknowledgment with the original EDI outbound message. The WDI Document Store must be active the reconciliation.

Validation Tools

For EDI Source or inbound messages you can specify a Functional Acknowledgment Map along with an Envelope profile. WDI will automatically generate the Functional Acknowledgment during the EDI Source document processing.

Validation Tools

- Implementation Guide Syntax (IGS) Validation
  - ▶ Requires Validation Map
  - ▶ Heavily used with HIPAA
  - ▶ Report errors on X12 999 Functional Acknowledgment

Validation maps are heavily used with HIPAA implementations. HIPAA document processing requires additional validation on EDI documents that is not defined within the standard definition. Validation Maps provide the instructions needed to perform additional validation beyond what is specified in the EDI Standard.

Validation Tools

Validation Maps are located in the Mapping Functional Area on the Validation Maps tab.

Validation Tools
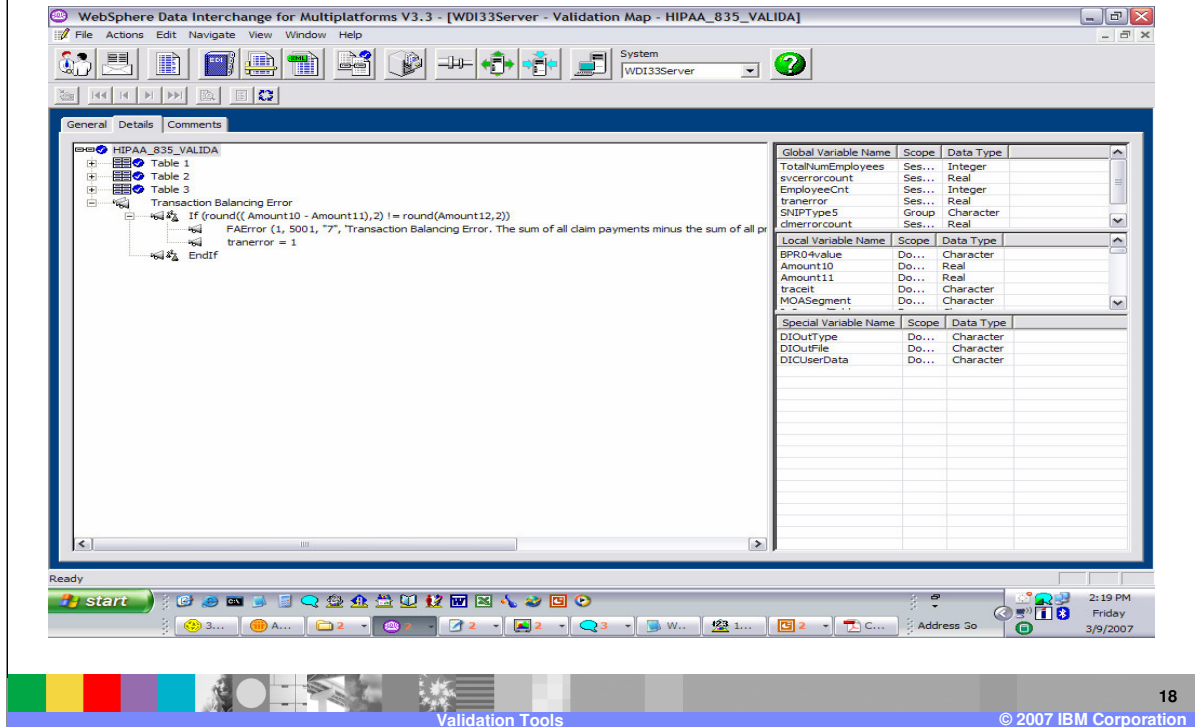
There is a Source document but no Target document because Validation maps are only used to validate and do not produce output. Most mapping commands and functions for Data Transformation mapping are available.

Validation Tools
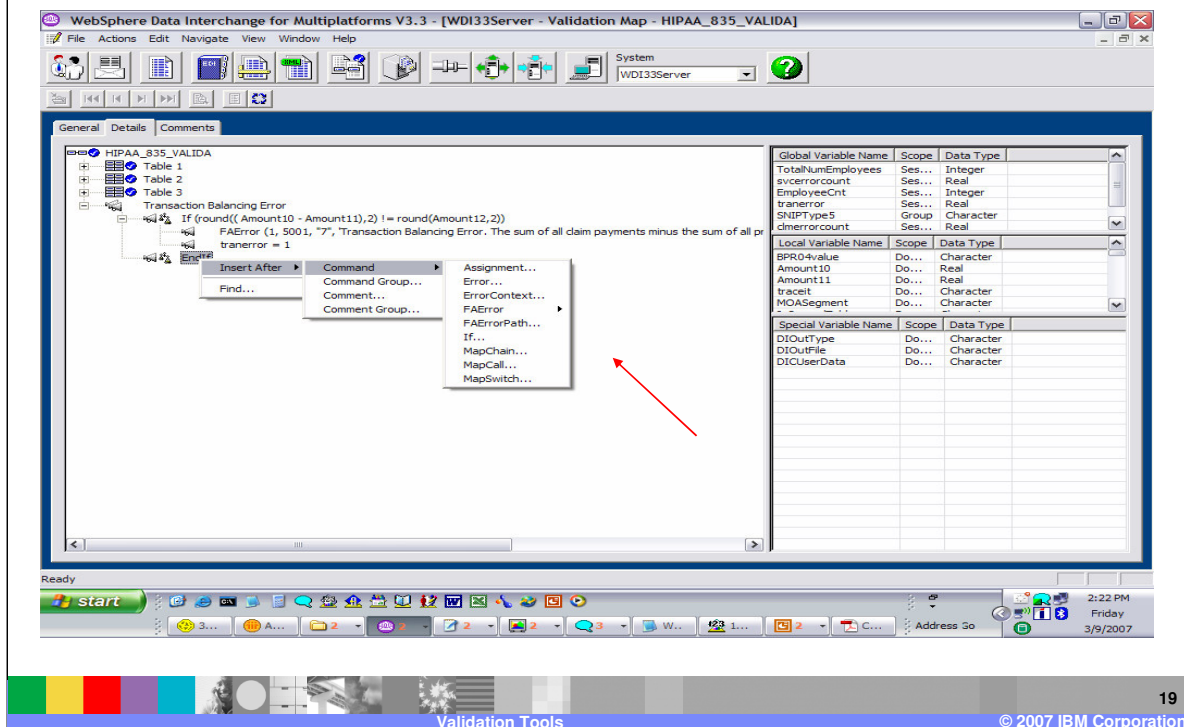
Functional Acknowledgment errors may be issued with the FAError or FAErrorPath commands. The ErrorContext Command is used to report the Implementation Guide Syntax Error.

Both the WDI EDI Syntax validation and the results of the FAError commands in a validation map will produce a Source Message to be processed using a Functional Acknowledgment Map. This is the layout of the Source Message generated during Validation.

Validation Tools

- **Service Segment Validation**
  - ▶ Optional
  - ▶ PERFORM keyword SERVICESEGVAL
  - ▶ Validates Inbound Envelope Segments
    - Interchange
    - Group
    - Transaction
  - ▶ X12 TA1 Acknowledgment
    - Reports Service Segment Errors
    - Functional Acknowledgment Map supplied

Service Segment validation is optional. This level of validation is for the inbound or source EDI Envelope Segments. To request this level of validation the PERFORM command keyword SERVICESEGVAL must be specified. A value of 1 indicates mandatory and minimum maximum length checking for the Envelope elements. A value of 2 indicates the value should also be validated using a code list. The X12 TA1 reports Service Segment Errors.

Validation Tools

- Service Segment Validation
  - ▶ Accomplished using Validation Maps
  - ▶ Can be Modified
  - ▶ MapSwitch ONLY
  - ▶ Can copy and Modify

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Service Segment validation is accomplished using WDI Validation Maps. Although these maps may be modified it is recommended that you copy the maps that are supplied and do a MapSwitch from the maps supplied to your modified version. The names of these validation maps cannot be changed which requires that you add the MapSwitch command to execute your version.

Validation Tools

There are 4 Service Segment Validation maps supplied. One for each envelope type supported.

Validation Tools

- Error Command
  - ▶ Flag an error condition
  - ▶ Logs UT0033 messages
  - ▶ Does not generate error with Functional Acknowledgments

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Use the **Error** command to issue an error condition. This command enables you to establish your own errors for a translation. Typically, the error is issued from within an If conditional block. This command generates UT0033 messages. It cannot be used to issue an error in a functional acknowledgment message.

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Validation Tools

- Error(real level, real code, char text)
  - **level -** Indicates the severity of the error. It is a value of 0, 1, or 2.
  - **code -** Is the unique error code that is associated with the error. This can be any value from 5000 to 5999.
  - **Text -** Is the string value, which is included in an error message issued by WebSphere Data Interchange when this command is executed.

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This is the syntax of the Error Command. **Level i**ndicates the severity of the error. It is a value of 0, 1, or 2. **Code i**s the unique error code that is associated with the error. This can be any value from 5000 to 5999. **Text i**s the string value, which is included in an error message issued by WebSphere Data Interchange when this command is executed.

Reference

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

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

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