IBM Software Group

IBM WebSphere® Data Interchange V3.3

Validation Maps

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This presentation will review Validation Maps.

Objectives

- Describe validation maps

- Explain abilities and usefulness

- Introduce Service Segment Validation

- Review an example

- Summary

The presentation will describe validation maps and explain how they are used.

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What's a validation map?

- Additional validation beyond what is specified in the EDI Standard.

- Source-based maps

- No target document.

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Validation Maps provide the instructions needed to perform additional validation beyond what is specified in the Electronic Data Interchange (EDI) Standard for your EDI data. You can check whether the data conforms to an implementation guide or other user-defined requirements. Validation maps are source-based maps that do not have a target document. Errors generated in a Validation map are reported in addition to any EDI syntax errors found by the WebSphere Data Interchange (WDI) Validation processing.

Abilities of Validation Maps

- Manipulate data.

- Set fixed values into elements.

- Save data or set flags for later use.

- Validate data.

- Change values of data based on equivalent value specified in a translation table.

- Specify conditional translation processing.

Most data transformation mapping abilities are available in a validation map. You can manipulate data, use variables and flags, validate data against code list, and use conditional processing logic.

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Usefulness of Validation Maps

- What do I do once I find an invalid item?
  - ▶ When an error is detected, the errors can be logged and the error code set.
  - ▶ Errors can also be passed to a Functional Acknowledgement map to generate custom functional acknowledgements.
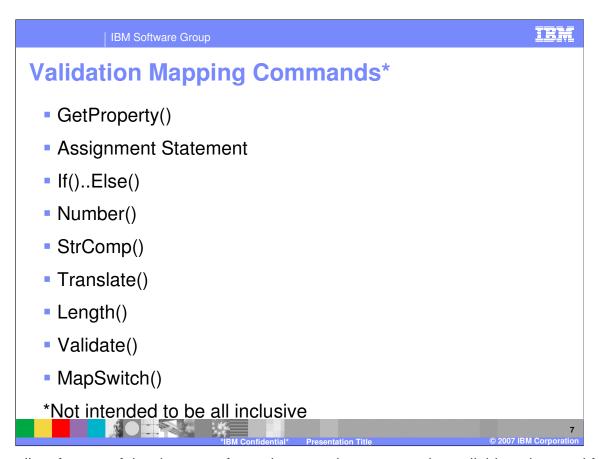
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Validation maps contain a few mapping commands and functions that are not available in data transformation maps. You can report errors that will be logged and also have the error reported in a Functional Acknowledgement.

How do I define a validation map?

- Validation Maps tab of the Mapping Functional Area.

- Specify a name, EDI standard dictionary and EDI standard transaction.

- Many of the concepts for Data Transformation maps also apply to Validation Maps.
  - Because Validation Maps do NOT have a target document, any mapping commands that specify a target document are NOT allowed, i.e. MapTo().

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Validation Maps can be found in the Mapping Functional Area on the Validation Maps tab. The source document definition is EDI and when creating a Validation map you specify the EDI Dictionary and Document or standard transaction. Some data transformation mapping commands are not available to Validation maps for example MapTo because there is no target document.

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Validation Mapping Commands*

- GetProperty()

- Assignment Statement

- If()..Else()

- Number()

- StrComp()

- Translate()

- Length()

- Validate()

- MapSwitch()

*Not intended to be all inclusive

This is a list of some of the data transformation mapping commands available to be used for validation.

Validation Mapping Commands – Now What?

- Issue an error message
  - ▸ Error(level, code, msgText)

- Issue a Functional Acknowledgement error
  - ▸ FAError(level, code, faCode, msgText, errType, segId, eltPos, subEltPos)
  - ▸ FAErrorPath (level, code, faCode, msgText, errType, sourcePath)

- Provide Implementation Guide errors reported in the X12 999 functional acknowledgement.
  - ▸ ErrorContext (text, reference)

The Error Command is available in both data transformation maps and validation maps. It does not report errors for a functional acknowledgement.

The FAError and FAErrorPath Commands are only available in validation maps and report errors for a functional acknowledgment. The ErrorContext command can be used to provide error message text and references from an implementation guide. The text and reference information can be used in the X12 999 functional acknowledgement. There can be up to 10 ErrorContext commands associated with a previous FAError or FAErrorPath command.
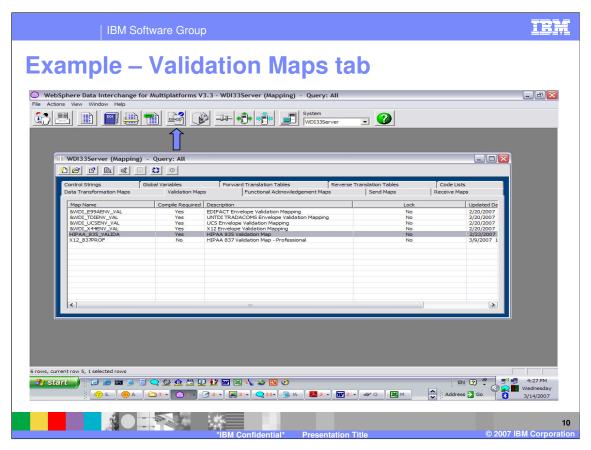

Errors generated in a Validation map that result in functional acknowledgement error reporting are reported in addition to any EDI syntax errors found by the WDI Validation processing.
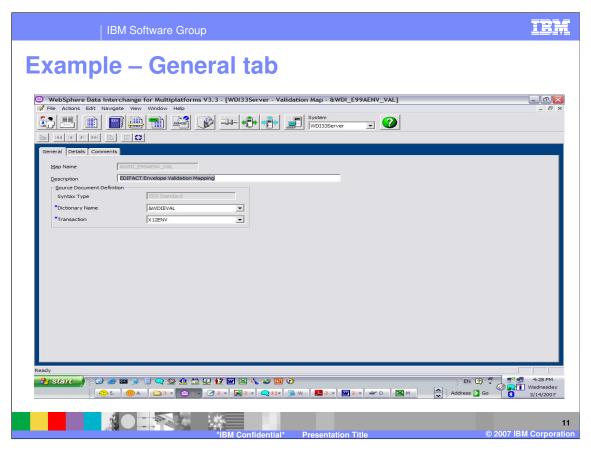
Service Segment Validation

- Service segments are segments used when an EDI transaction is enveloped (ISA, IEA, UNB, UNZ).

- Special validation maps are provided for validating service segments.

- Use SERVICESEGVAL() on the PERFORM command to use these maps.

- Maps provided are: &WDI_E99AENV_VAL, &WDI_UCSENV_VAL, &WDI_TDIENV_VAL, and &WDI_X44ENV_VAL
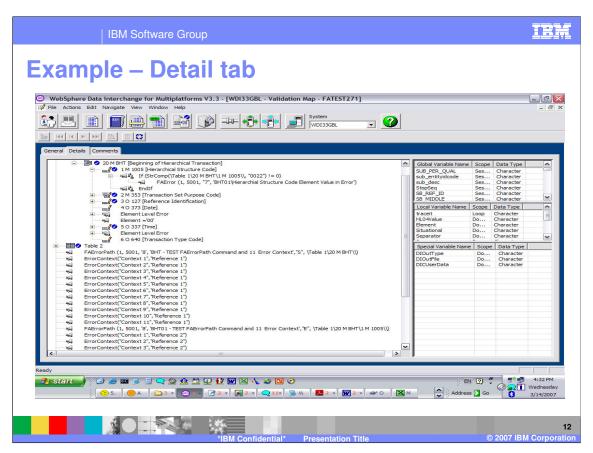
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Service Segment Validation maps are provided with WDI. These validation maps validate the Interchange or service segments. To activate the service segment validation the PERFORM keyword SERVICESEGVAL must be used.
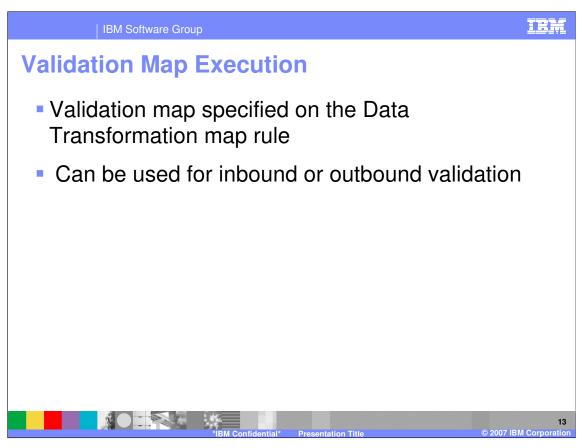
Example – Validation Maps tab

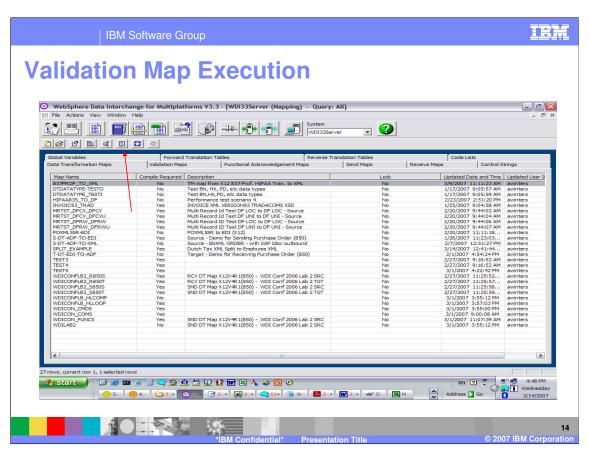This is an example of the Validation Maps tab in WDI Client.

Example – General tab

The General tab contains the Source document definition or metadata.
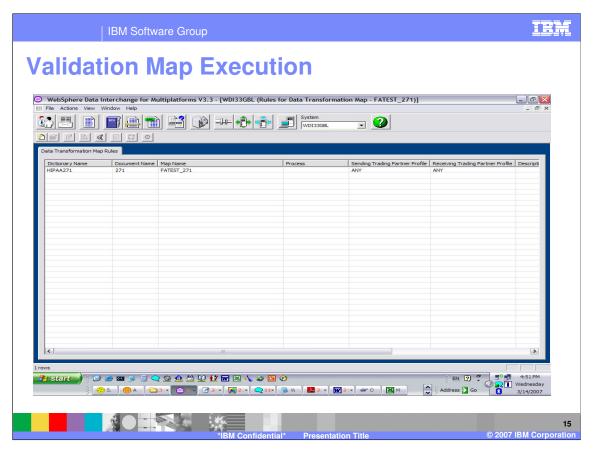
Example – Detail tab

On the Detail tab the mapping commands are located under the source document. This is an example of using the FAError, ErrorContext, and FAErrorPath commands. Mapping commands are created in the Validation maps in the same manner as with data transformation maps.

Validation Map Execution

- Validation map specified on the Data Transformation map rule

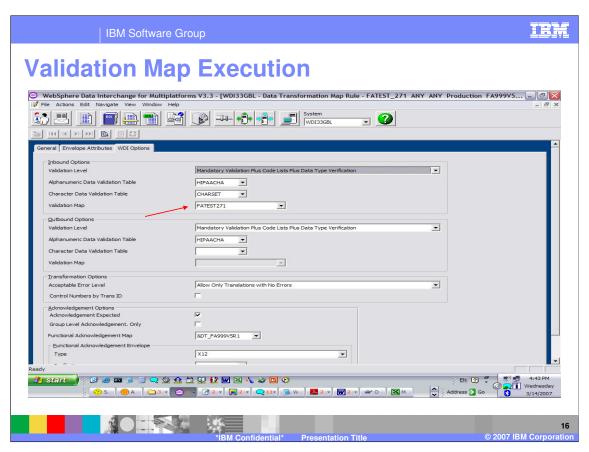- Can be used for inbound or outbound validation

When the Validation map is ready to use, you can specify the map the use on the Data Transformation map rule. The validation map can be executed for either inbound or outbound validation depending on the Data Transformation map source and target document type.

Validation Map Execution

Data Transformation map rules for a specific map can be created and updated using the View Rules and Usages button.

To view the Rule, double click on the Rule in the list.

Validation Map Execution

The Validation map is specified on the WDI Options tab. In this data transformation map rule example, the source document is EDI and the target document is not EDI. The Inbound Options contain the Validation map to be executed.

Summary

- Validation Maps provided extended validation of EDI data.

- The abilities of a Validation Map makes it a powerful tool.

- Defined much like Data Transformation maps, but no target document.

- Service Segment Validation maps are provided

Validation maps provide extended validation beyond the WDI EDI standard syntax validation processing. Mapping commands can be entered the same as with Data Transformation maps. Service Segment Validation maps are provide to validate the EDI Interchange or Service segments.

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