



IBM Software Group

IBM WebSphere Partner Gateway V6.1

WebSphere Transformation Extender integration



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This presentation discusses WebSphere® Transformation Extender and how the product can be integrated with WebSphere Partner Gateway.

Goals

- For you to understand the purpose of WebSphere Transformation Extender.
- The methods for integrating WebSphere Transformation Extender to WebSphere Partner Gateway



The goal of the presentation is to provide you an understanding the purpose of WebSphere Transformation Extender and how it is integrated with WebSphere Partner Gateway.

Section

WebSphere Transformation Extender overview



The next section provides an overview of WebSphere Transformation Extender.

WebSphere Transformation Extender overview

- WebSphere Transformation Extender
 - ▶ Used for transforming documents
 - ▶ runs on a multitude of platforms
 - ▶ WebSphere Partner Gateway supports WebSphere Transformation Extender V8.1 Fix Pack 1 or above
 - ▶ Can be interfaced using Java™ or WebSphere Message Broker
 - ▶ Windows® based tool available for creating document structure definitions (type trees) and transformation maps
- WebSphere Transformation Extender Trading Manager
 - ▶ A component that uses WebSphere Transformation Extender for processing EDI documents
 - ▶ No specific support level
 - ▶ Has its own partner management
 - ▶ De-envelopes, validates, envelopes and creates Functional Acknowledgements
 - ▶ There are a variety ways of interfacing such as File and JMS



WebSphere Transformation Extender is a powerful, transaction-oriented, data integration solution that automates the transformation of high-volume, complex transactions without the need for hand-coding. WebSphere Transformation Extender performs transformation and routing of data from source systems to target systems in batch and real-time environments.

WebSphere Partner Gateway can interact indirectly with WebSphere Transformation Extender using the WebSphere Message Broker. The other method to interfacing is using User Exit code written in Java. WebSphere Transformation Extender has its own tool that runs on Windows for creating document structure definitions (type trees) and transformation maps.

A transformation map has one or more input cards and one or more output cards depending on the implementation of the map.

WebSphere Transformation Extender Trading Manager has its own Windows based partner management user interface. This component is used for processing EDI documents to perform authorization, validation, de-enveloping, enveloping and functional acknowledgements. Trading Manager uses WebSphere Transformation Extender processing engine that executes a set of EDI specific maps. There are several ways to interface such as File or JMS.

Integration to WebSphere Message Broker

- Document processed outside of WebSphere Partner Gateway
- Integrate to WebSphere Message Broker with the WebSphere Transformation Extender plug-in
- Uses the same configuration as for other integrations to WebSphere Message Broker



WebSphere Transformation Extender integration with WebSphere Message Broker is not related directly to WebSphere Partner Gateway. WebSphere Message Broker has a WebSphere Transformation Extender plug-in that can be used. You just need to configure WebSphere Partner Gateway to integrate WebSphere Message Broker as a backend system. Most use cases in this scenario include pass through processing from the WebSphere Partner Gateway.

Integration using user exit

- Implement a WebSphere Partner Gateway User Exit for use in an Action.
- Calls out to WebSphere Transformation Extender using a WebSphere Transformation Extender API.
- There are two forms of WebSphere Transformation Extender APIs
 - ▶ Local
 - Call WebSphere Transformation Extender locally. Requires WebSphere Transformation Extender to be on the same machine as WebSphere Partner Gateway.
 - ▶ Remote
 - Invoke WebSphere Transformation Extender using a WebSphere Transformation Extender RMI Server.
 - WebSphere Transformation Extender can reside on another machine allowing for multiple WebSphere Partner Gateway instances to use the same WebSphere Transformation Extender instance.
- Either method for invoking WebSphere Transformation Extender requires:
 - ▶ A way to specify the WebSphere Transformation Extender map to use.
 - Either a configuration attribute on the User Exit or a WebSphere Partner Gateway map file (recommended) that has an entry of the WebSphere Transformation Extender map name to use.
 - ▶ A way to know what inputs and outputs there will be.
 - ▶ For WebSphere Transformation Extender to have access to the WebSphere Partner Gateway common file system.



WebSphere Transformation Extender can also be called from within a WebSphere Partner Gateway action in the variable workflow step. You can implement a User Exit that invokes WebSphere Transformation Extender using the WebSphere Transformation Extender APIs. There are two ways that WebSphere Transformation Extender can be invoked using this APIs. Local or in-process invocation results in WebSphere Transformation Extender running within the same process as WebSphere Partner Gateway. This requires WebSphere Transformation Extender to be installed on the same machine as WebSphere Partner Gateway. WebSphere Transformation Extender can be invoked remotely using WebSphere Transformation Extender RMI Server. The WebSphere Transformation Extender process runs outside of WebSphere Partner Gateway process. This allows WebSphere Transformation Extender to be installed on a remote machine allowing multiple WebSphere Partner Gateway instances to use it.

User exit - Sample

- A WebSphere Transformation Extender User Exit sample is provided with WebSphere Partner Gateway
 - ▶ Integration\WebSphereTransformationExtender\samples
- The sample contains:
 - ▶ The User Exit import XML file and jar file.
 - ▶ Sample input document, output document, WebSphere Transformation Extender maps and WebSphere Partner Gateway maps.
 - ▶ Instructions for manually configuring WebSphere Partner Gateway or a partner migration import file.
 - Note: If there is already an Internal Partner name defined in WebSphere Partner Gateway that is different than the import file then the name in the import file needs to be changed. This is documented in the Readme.txt.



A sample User Exit for invoking WebSphere Transformation Extender from within an Action is provided with the product and would be located under “<install_root>/integration/WebSphere Transformation Extender/samples” folder. The sample can be used to invoke WebSphere Transformation Extender either locally or remotely. Configuration of WebSphere Partner Gateway can be done either manually or using a partner migration import file. Refer to the readme.txt for troubleshooting tips.

WebSphere Transformation Extender Trading Manager integration

- A typical Use Case is an EDI payload using Applicability statement (AS) packaging with the partner.
- Integration is similar to integrating to WebSphere Data Interchange
- Integrate as if WebSphere Transformation Extender Trading Manager is a backend application using:
 - ▶ WebSphere Partner Gateway pass through Action.
 - ▶ None packaging.
 - ▶ File or JMS transport.
- Partner information to be managed in both WebSphere Partner Gateway and WebSphere Transformation Extender Trading Manager.



You can integrate WebSphere Partner Gateway to WebSphere Transformation Extender Trading Manager for EDI processing. If you are going to use WebSphere Transformation Extender Trading Manager for EDI processing, WebSphere Partner Gateway does not need to do any specific EDI processing such as de-enveloping. WebSphere Transformation Extender Trading Manager can be configured as a backend system. Partners will have to be managed in both WebSphere Partner Gateway and WebSphere Transformation Extender.

Section

Summary and references

The next section covers the summary and references.

Summary

- **WebSphere Transformation Extender**
 - ▶ Used for transformation.
 - ▶ Integrated either using Message Broker or User Exit.
- **WebSphere Transformation Extender Trading Manager**
 - ▶ Used for EDI processing.
 - ▶ Integrated as another backend application.
 - ▶ WebSphere Partner Gateway is configured for pass through and None packaging to WebSphere Transformation Extender Trading Manager.
- **References**
 - ▶ WebSphere Partner Gateway Integration Guide
 - ▶ WebSphere Partner Gateway WebSphere Transformation Extender User Exit sample
 - Integration\WebSphereTransformationExtender\samples



In summary WebSphere Transformation Extender is used for transformation. It can be integrated either using WebSphere Message Broker or using User Exits.

WebSphere Transformation Extender Trading Manager is used for EDI processing. It can be integrated as a backend application. WebSphere Partner Gateway is configured for pass through and uses None packaging when using WebSphere Transformation Extender Trading Manager for EDI processing.

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