



IBM Software Group

# IBM WebSphere® Partner Gateway V6.1.1

## *Error flow routing*



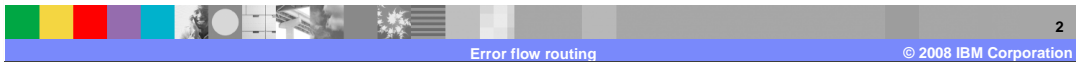
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This presentation covers the new Error Flow Routing feature support in WebSphere Partner Gateway V6.1.1 release.

## Agenda

- Overview
- Error flow document
- Error flow types
- Administration/configuration
- Example
- Summary and references



This slide presents the Agenda for this session.

## Section

# *Overview*



This section provides an overview on Error Flow Routing process.

## Overview

- Error/critical events are generated in case of failure
- Error flow document can be configured for error events
- Error flow document is a xml file that captures all the failure details



WebSphere Partner Gateway is a gateway product that enables exchange of business documents between trading partners. While processing, the document might fail at WebSphere Partner Gateway for various reasons like capability not provided, certificates not uploaded, and so on. The corresponding events with severity 'error' or 'critical' are logged and document processing is marked as failed. The reason for document failure is abstract to the trading partners.

With this enhancement, WebSphere Partner Gateway can initiate an Error Document flow with all the failure details whenever events with severity "error" or "critical" are logged. These can be sent to partners indicating the reason for failure. This error document flow can be of WebSphere Partner Gateway provided format or Web service flow, which you can configure.



## Error flow document

- Error document is an xml document generated by WebSphere Partner Gateway upon receiving of error or critical events
- This document captures all the details for the failure of the document in XML format
- Error flow document can be sent as
  - ▶ XML document
  - ▶ WebSphere Partner Gateway or custom provided Web service
    - RPC style
    - Document style
- Based on the configuration, this is sent to internal or external or both the partners



Error Flow Document is a simple XML document that is automatically generated by WebSphere Partner Gateway whenever an event with severity “error” or “critical” is logged. This document captures all the details of the document failure in the XML format. The document can be sent as XML document or sent over Web service.

Error document can be routed as XML or over Web service. WebSphere Partner Gateway supports both RPC and Document Style encodings. You can also use custom Web service for routing the generated error flow document.

## Error flow document - Sample

```
<?xml version="1.0" encoding="UTF-8"?>
<errf:ErrorFlowDocument xmlns:errf="http://www.ibm.com/websphere/bcg/2007/v1.0/xmlerrorflow" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xsi:schemaLocation="http://www.ibm.com/websphere/bcg/2007/v1.0/xmlerrorflow BCGErrorFlowSchema.xsd">
  <errf:SenderDetails>
    <errf:SenderName>WPG Administrator</errf:SenderName>
    <errf:HostName>kivenkat</errf:HostName>
  </errf:SenderDetails>
  <errf:ErrorEventCode>210012</errf:ErrorEventCode>
  <errf:ErrorEventName>B2B Capability not found</errf:ErrorEventName>
  <errf:ErrorEventID>11966565355460015587E9C350046320000000000000055</errf:ErrorEventID>
  <errf:Timestamp>20071203</errf:Timestamp>
  <errf:ErrorMessage>B2B capability not found 14</errf:ErrorMessage>
  <errf:FailedDocumentInformation>
    <errf:Sender businessId="987654321"/>
    <errf:Receiver businessId="123456789"/>
    <errf:ReferencelD>11966565332030015587E9C350046320000000000000052</errf:ReferencelD>
    <errf:DocumentID/>
    <errf:Timestamp/>
    <errf:RoutingInfo>
      <errf:Package>None</errf:Package>
      <errf:Protocol>EDI-X12</errf:Protocol>
      <errf:Process>ISA</errf:Process>
    </errf:RoutingInfo>
  </errf:FailedDocumentInformation>
</errf:ErrorFlowDocument>
```



This document captures all the details for the failure of the document in the XML format. For example, details include sending partner business ID, receiving partner business ID, error event code, error event name, error message, package, protocol, and process.

## Section

# ***Administration and configuration***



This section provides the administration or configuration steps that are required for routing the error documents.



## Error flow configuration

- Create error flow configuration for the error event for which WebSphere partner gateway should initiate an error document flow
- Error flow can be created only for “error” and “critical” events
- Default configuration is required for error flow routing
  - ▶ Enable the interaction
  - ▶ Enable the business-to-business capabilities for the sending and receiving partner
  - ▶ Enable the participant connections



New screens have been added in WebSphere Partner Gateway for creating error flow configuration. You need to create “Error flow configuration” and other normal configurations that are required for routing the error document; for example, enabling the interaction, enabling B2B capabilities and connections.

## Error flow configuration

- Create error flow configuration for error event

The screenshot shows the 'Create Error Flow' configuration screen in the WebSphere Partner Gateway Community Console. The interface includes a navigation menu at the top with options like 'Account Admin', 'Viewers', 'Tools', 'Hub Admin', 'RosettaNet Partner Simulator', 'System Administration', and 'Wizards'. The main form contains the following fields and options:

- Name:** My\_Error\_Flow
- Sending Partner:** HubManager
- Partner Type:** Internal Partner (with a Search button)
- Error Event:** BCG210012 B2B Capability Not Found
- Error Flow Type:** Enable Error Flow Document (selected), Invoke a Web Service
- Send To:** Receiver (selected), Sender, Both

Buttons for 'Save' and 'Cancel' are located at the bottom of the form. The footer of the console displays 'Error flow routing' and '© 2008 IBM Corporation'.

Here is an example of error event 210012. 210012 is an error event indicating the “B2B Capability not found” error. You will now see how to create the error flow for this event. The goal is to generate and route error document with the failure details whenever hub manager encounters the error “B2B Capability Not Found.”

Shown on the page is the Error Flow configuration screen in the console.

First Step is to create “Error Flow Configuration” for error event 210012 with some name.

In the **Partner Type** dropdown menu, select **Internal Partner** option and click search. It will display all the Internal Partners next to Sending Partner field; choose “**HubManager.**”

**Error Event** drop down has the list of all error and critical events. Now, from the **Error Event** drop down, select the error event for which you want to configure the error flow routing.

**Error Flow Type** specifies how to send the Error Flow Document. For routing error flow document as XML, select **Enable Error Flow Document**. For routing the document over Web service, choose the “Invoke a Web service”. Select Error Flow Document. **Sent To** specifies the partner to whom all the error flow document must be routed. Error flow document can be routed to “sender”, “receiver”, or to both the partners.

## Error flow configuration

- Enable interactions for error flow routing – XML or Web service

The screenshot shows the 'Create Interaction' page in the IBM Business Process Manager console. The page is divided into two main columns: 'Source' and 'Target'. In the 'Source' column, the 'Document Type: ErrorFlowDocument (1.0)' is selected and highlighted with a red box. In the 'Target' column, the 'Document Type: ErrorFlowDocument (1.0)' is also selected and highlighted with a red box. The interface includes a navigation menu at the top, a title bar, and a footer with the text 'Error flow routing' and '© 2008 IBM Corporation'.

Here is the screen capture of Creating Interaction page.

You need to create the Interaction between None – error flow document on the source side to None – error flow document on the target side for routing Error Flow Document.

## Error flow configuration

- Enable B2B capabilities for error flow routing for both partners

WebSphere Partner Gateway Community Console

Account Admin | Viewers | Tools | Hub Admin | RosettaNet Partner Simulator | System Administration | Wizards | Logout

Profiles | Connections | Alerts | Exclusion List | Error Flow | FTP User Management

Partner | Destinations | **B2B Capabilities** | Certificates | Users | Groups | Contacts | Addresses

Language Locale: en\_US | Format Locale: en\_US | Time Zone: UTC (GMT)

Profile: HubManager : B2B Capabilities

Set Source	Set Target	Enabled	Edit	Document Definition
				0 1 2 3 4 All
		Enabled		Package: AS
				Package: None
				Protocol: Binary (1.0)
		Enabled		Protocol: &FUNC ACK METADATA DICTIONARY (ALL)
		Enabled		Protocol: ErrorFlowDocument (1.0)
		Enabled		Document Type: ErrorFlowDocument (1.0)
		Enabled		Protocol: Web Service (1.0)
		Enabled		Document Type: {http://www.ibm.com/websphere/bcg/2007/v1
		Enabled		Activity: ErrorFlowDocumentOperation (1.0)
		Enabled		Activity: {http://www.ibm.com/websphere/bcg/2007/v1.0,

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Error flow routing © 2008 IBM Corporation

This slide shows the Business-to-business capabilities of HubManager. Enable the capabilities for the partner in order to route the error flow document.

## Error flow configuration

- Create connections for routing error flow doc over XML or Web service

The screenshot displays the IBM Partner Gateway Community Console interface. At the top, the title bar reads "Sphere Partner Gateway Community Console" with the IBM logo on the right. Below the title bar is a navigation menu with items like "Views", "Tools", "Hub Admin", "RosettaNet Partner Simulator", "System Administration", and "Wizards". A secondary menu includes "Connections", "Alerts", "Exclusion List", "Error Flow", and "FTP User Management". The main content area is titled "Manage Connections" and features a search interface with "Source" (set to "HubManager") and "Target" (set to "Partner") dropdowns, along with "Search" and "Reset" buttons. Below this are three tabs: "B2B Capabilities", "Connection Details", and "B2B Capabilities". The "Connection Details" tab is active, showing a table of connections. A blue arrow points to the first connection entry, which has a green background and contains the following details:

Package	Protocol	Document Type	Attributes	Actions	Destinations	Certificates	Attributes
Package: None (N/A)	Protocol: Web Service (1.0)	Document Type: ErrorFlowDocument (1.0)					

The bottom of the slide features a decorative bar with a rainbow color sequence on the left, the text "Error flow routing" in the center, and "13 © 2008 IBM Corporation" on the right.

This slide shows the partner connection that needs to be enabled for routing the error flow document. It is basically None to None packaging.

## Error flow configuration

- Route document none – none without enabling B2B capabilities

**Document Events**

Event Filter:  Debug  Information  Warning  Error  Critical

Total Event Count: 2

Event Name	TimeStamp	Type	Event Code	Location	Source IP
B2B Capability Not Found	12/3/07 4:35:35 AM	Error	BCG210012	Unknown	192.168.1.2
Document Rejected	12/3/07 4:35:36 AM	Error	BCG210004	Unknown	192.168.1.2

**Document Viewer** Welcome, Hub Administrator

[Show Criteria](#) [Help](#)

Page 1 of 1 Total Rows: 2

Resend | All  Inbound  Outbound

Partners	Time Stamps	Protocol/Document Type	Operation Mode	Synchronous	Status
<b>Document ID:</b> -					
<b>Doc Time Stamp:</b> -					
<input type="checkbox"/> Source: HubManager	In: 12/3/07 4:35:36 AM (1.277 kb)	None (N/A) ErrorFlowDocument(1.0) ErrorFlowDocument(1.0)			
<input type="checkbox"/> Target: Partner	Out: 12/3/07 4:35:40 AM (1.277 kb)	None (N/A) ErrorFlowDocument(1.0) ErrorFlowDocument(1.0)	Production		
<b>Document ID:</b> JMS123456789					
<b>Doc Time Stamp:</b> 010122-1253					
<input type="checkbox"/> Source: HubManager	In: 12/3/07 4:35:33 AM (1.424 kb)	None (N/A) EDI-X12 (ALL) ISA(ALL)			
<input checked="" type="checkbox"/> Target: Partner	Out: 12/3/07 4:35:36 AM	Unknown (Unknown) (Unknown)	Production		

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Here is the procedure to route EDI-X12 payload from the HubManager to trading partner.

Since the Business-to-business capabilities are not enabled, and error flow for the “B2B capability not found error” has been configured. The document fails in WebSphere Partner Gateway. The WebSphere Partner Gateway generates the error flow document for this error, which can be seen in the events.

## Error flow configuration

- Error flow document generated for error event 210012

The screenshot shows a browser window titled "Raw Document Viewer" displaying an XML document. The document is an ErrorFlowDocument with the following details:

Partners	Business IDs	Document Type
Source: HubManager	987654321	ErrorFlowDocument (1.0)
Target: Partner	123456789	ErrorFlowDocument (1.0)

The XML content is as follows:

```
<?xml version="1.0" encoding="UTF-8"?>
<errf:ErrorFlowDocument xmlns:errf="http://www.ibm.com/websphere/bcg/2007/v1.0/xmlerrorflow"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.ibm.com/websphere/bcg/2007/v1.0/xmlerrorflow
BCGErrorFlowSchema.xsd">
  <errf:SenderDetails>
    <errf:SenderName>WPG Administrator</errf:SenderName>
    <errf:HostName>kivenkat</errf:HostName>
  </errf:SenderDetails>
  <errf:ErrorEventCode>210012</errf:ErrorEventCode>
  <errf:ErrorEventName>B2B Capability not found</errf:ErrorEventName>
  <errf:ErrorEventID>11966565355460015587E9C35004632000000000000055</errf:ErrorEventID>
  <errf:Timestamp>20071203</errf:Timestamp>
  <errf:ErrorMessage>B2B capability not found 14</errf:ErrorMessage>
  <errf:FailedDocumentInformation>
    <errf:Sender businessId="987654321"/>
    <errf:Receiver businessId="123456789"/>
    <errf:ReferenceID>11966565332030015587E9C350046320000000000000052</errf:ReferenceID>
    <errf:DocumentID/>
    <errf:Timestamp/>
    <errf:RoutingInfo>
      <errf:Package>None</errf:Package>
      <errf:Protocol>EDI-X12</errf:Protocol>
      <errf:Process>ISA</errf:Process>
    </errf:RoutingInfo>
  </errf:FailedDocumentInformation>
</errf:ErrorFlowDocument>
```

The screen capture displays the Error Flow Document that is generated for the error event 210012.

## Section

# *Summary*



This section summarizes the Error Flow Routing feature.



## Summary

- WebSphere Partner Gateway V6.1.1 supports error flow routing
- Error flow can be created for all “error and “critical” events
- Error flow doc type can be “XML” or “web service”
- Error flow doc can be routed to “internal partner” or external partner or both



Here is the summary of what you learned in this session. Error flow is the new functionality that has been added in WebSphere Partner Gateway V6.1.1, and it can be configured for all error and critical events.

You saw how to configure and route error flow document over XML or over Web service. Error flow document can be routed to internal or external partner alone or to both the partners.

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