IBM WebSphere Business Connection

**IBM**

# Registration Flow Collaboration

*Version 1.1.1*

> **Note!**
>
> Before using this information and the product it supports, be sure to read the general information under "Notices" on page 31.

# Contents

# Registration Flow Collaboration

The Registration and Provisioning component of IBM<sup>(R)</sup> WebSphere<sup>(R)</sup> Business Connection is made up of a variety of programming elements that provide a complete service for organizations to register with trading partners (marketplaces and service providers, for example).

For the organization that wants to register, Registration and Provisioning provides an easy sign-up process. After registering, the administrator of an organization can then subscribe to services of the trading partner as well as update information about the organization.

For the trading partner (the marketplace or service provider), the benefits are an easy-to-use registration for its subscribing organizations and provisioning of services to the subscribers.

A significant and important part of Registration and Provisioning is the BCT_TPRegFlow collaboration, which is activated whenever a new organization registers with the trading partner. The collaboration uses the profile information about an organization to invoke the Federation Service, which exports the profile to the appropriate gateway and which transfers information about the trading partner to the newly registered organization. The result is that both the registering organization and the trading partner have the information needed to communicate with each other.

For information about the BCT_TPRegFlow collaboration, see "BCT_TPRegFlow Collaboration" on page 3.

If you want information on registering as a organization with a trading partner or on administering organization requests, refer to the Administering the System document, which describes the tasks for using this service.

## Use case - Administrator registers organization

This process involves an administrator of an organization who wants to register with a marketplace or service provider as a trading partner.

### Actors

This use case has a single actor, the administrator.

### Course

The following tables describe the main course that may be followed in the case:

*Table 1. Use case description (main course)*

| # | Activity by the actor | System activity | Reference |
|---|---|---|---|
| M1 | Requests registration form by entering URL | Displays initial registration screen | |
| M2 | Enters organization information, which is stored in its own database | Profile is stored | |

*Table 1. Use case description (main course) (continued)*

| # | Activity by the actor | System activity | Reference |
|---|---|---|---|
| M3 | Sends profile information to trading partner | Administrator at trading partner is notified of request | |
| M4 | Receives notification that request is accepted | Registration collaboration kicks off process whereby the trading partner's profile is exported to the customer's Federated Partner Profile | |

# Use case - Administrator at trading partner accepts registration

This process involves the administrator at the trading partner who receives a request for the registration of an organization.

## Actors

This use case has a single actor, the administrator at the trading partner.

## Course

The following tables describe the main course that may be followed in the case:

*Table 2. Use case description (main course)*

| # | Activity by the actor | System activity | Reference |
|---|---|---|---|
| M1 | Receives notification that a registration request has arrived | Request is added to Customer Accounts page as "Guest" | |
| M2 | Approves request | Registration collaboration kicks off process whereby the customer's profile is exported to the appropriate gateway | |

# BCT_TPRegFlow Collaboration

The BCT_TPRegFlow collaboration is used to pass a business object (representing the profile of a registering organization) to the Federation Service, which exports the profile to the appropriate gateways.

BCT_TPRegFlow uses the generic XML_BCTPartnerProfile business object to represent the profile. The XML_BCTPartnerProfile is a child business object of XML_TLO_BCTPartner Profile, which is itself a child object of the top-level BCTPartnerProfileGBO.

## Required documents

The BCT_TPRegFlow collaboration is based on CollaborationFoundation and uses its features, ports, and configuration properties.

To create and configure a BCT_TPRegFlow collaboration object, use the following documents:

- This document for the BCT_TPRegFlow collaboration-specific information.
- *Standard Collaboration Processes* for information about business processes inherited from CollaborationFoundation.
- *Standard Collaboration Properties* for information about configuration properties inherited from CollaborationFoundation.
- *Collaboration Development Guide* for information about Collaboration Foundation, and for general information about creating and configuring collaboration objects.

Note that CrossWorlds development is performed on a Windows[(R)] platform. If you are running WebSphere Business Connection on a UNIX platform, you should have set up a Windows client (per the CrossWorlds *System Installation Guide for UNIX*) to run the CrossWorlds System Manager. You create and configure CrossWorlds artifacts on the Windows client and then run them on the UNIX system.

## Collaboration setup

This section includes the following information:

- "Port information"
- "Setting up the collaboration" on page 5

### Port information

The following diagram illustrates BCT_TPRegFlow's ports, as they are displayed in the IBM CrossWorlds[(R)] System Manager (CSM). The ports and associated connectors are described in the tables that follow:
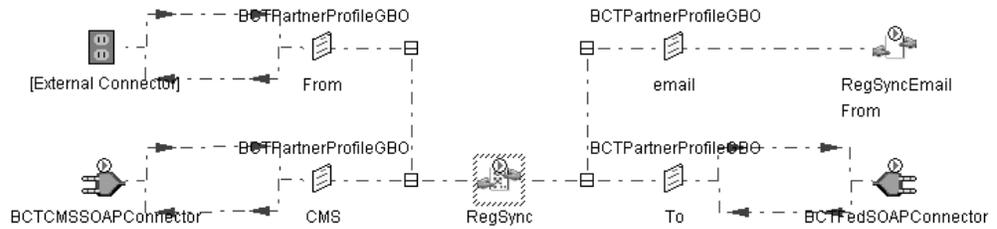
*How the collaboration object connects to ports*

**Note:** To keep the collaboration from using a port, bind that port to the Port connector. Doing so indicates that the port is unused without causing the collaboration to provide additional functionality.

*Table 3. Port name: From*

| Business Object | Bound To | Function | Verbs Used |
|---|---|---|---|
| BCT_Partner ProfileGBO | Source application (Provisioning Handler via the SAI) | Receives the triggering business object. | Retrieve |

*Table 4. Port name: To*

| Business Object | Bound To | Function | Verbs Used |
|---|---|---|---|
| BCT_Partner ProfileGBO | SOAP Connector to Federation Service | Sends the triggering business object to the Federation Service to federate the partner profile | Retrieve |

*Table 5. Port name: CMS*

| Business Object | Bound To | Function | Verbs Used |
|---|---|---|---|
| BCT_Partner ProfileGBO | SOAP Connector to Federation Service | Sends the triggering business object to the Federation Service to update the partner's status in the CMS | Retrieve |

*Table 6. Port name: email*

| Business Object | Bound To | Function | Verbs Used |
|---|---|---|---|
| BCT_Partner ProfileGBO | RegSyncEmail From port | Sends the triggering business object to an E-mail collaboration to update the primary contact on the status of registration | Retrieve |

## Setting up the collaboration

To set up BCT_TPRegFlow as a stand-alone collaboration object, complete the following steps:

1. Create the BCT_TPRegFlow collaboration object.
2. Bind the collaboration object's port to the destination application's connector or to the Port connector.
3. Bind the remaining ports as described in "Port information" on page 3.

## Synchronization process

The following diagram illustrates BCT_TPRegFlow's process logic and shows how the business object is sent to the To port (to federate the partner profile), to the CMS port (to update the repository), and to the email port, to send an update on the status of the registration.
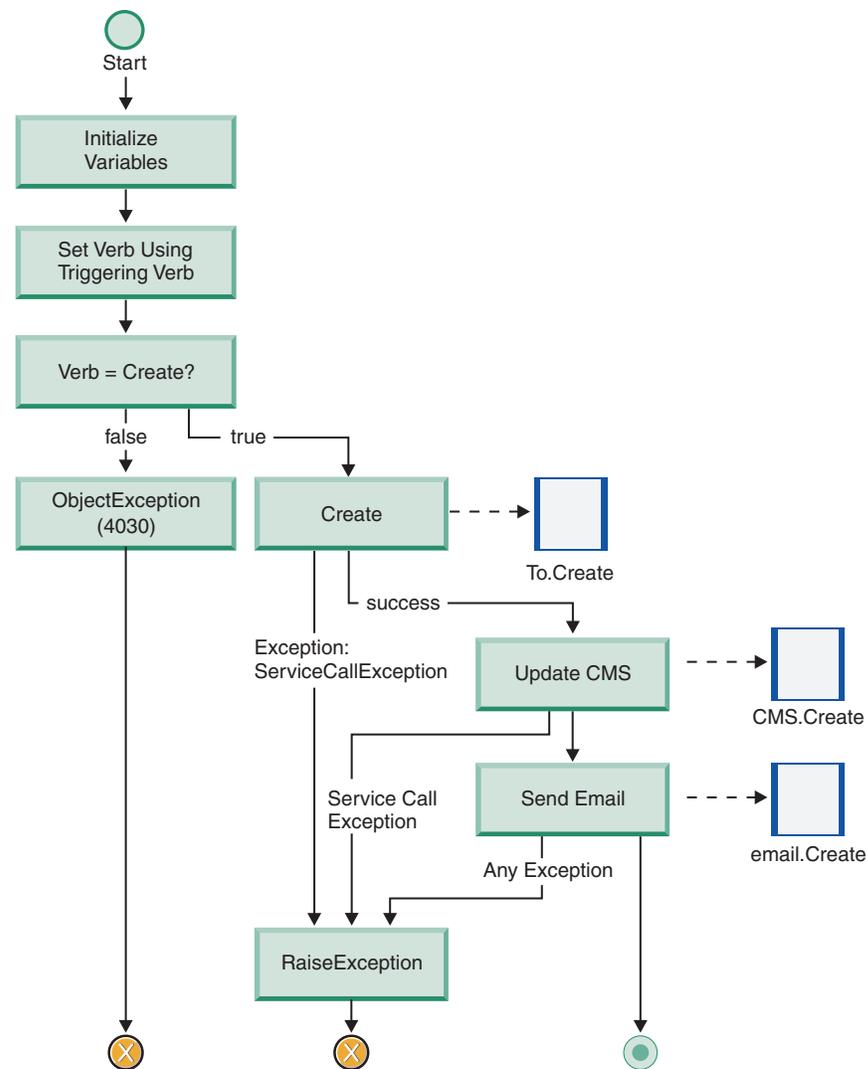


*Registration flow process diagram*

## Viewing collaboration messages

To view an explanation of this collaboration's messages, invoke Message Browser and open the collaboration's message file. The Message Browser, which is part of the CrossWorlds System Manager, can be run only from a Windows platform.

To invoke Message Browser and open the collaboration message file, complete the following actions:

1. In the Start menu, click **Programs > CrossWorlds > Server and Tools > Message Browser**.
2. On the **File** menu, click **Open**.
3. Use the **Look In** field to change the current folder to: **\collaborations\messages\BCT_TPRegFlow.txt**

## See also

- "BCTPartnerProfileGBO" on page 7
- "XML_TLO_BCTPartnerProfile business object" on page 9
- "XML_BCTPartnerProfile business object" on page 11

# BCTPartnerProfileGBO

The generic BCTPartnerProfileGBO business object is used to carry information about a registering trading partner. It is a top-level business object and has one child attribute, XML_TLO_BCTPartnerProfile.

## Business object structure

BCTPartnerProfileGBO includes the following attributes:

*Table 7. Business object attributes*

| Name | Type | Key | Cardinality |
| --- | --- | --- | --- |
| URL | String | x | |
| MimeType | String | | |
| BOprefix | String | | |
| XMLDeclaration | String | | |
| DocType | String | | |
| UpdateStatus | String | | |
| TLO | XML_TLO_BCTPartner Profile | | 1 |
| ObjectEventId | String | | |

## Supported verbs

The generic BCTPartnerProfileGBO business object supports the Retrieve verb.

## Examining the object

To examine a listing of the attributes of the generic BCTPartnerProfileGBO business object, use CrossWorlds System Manager or CrossWorlds Business Object Designer.

## See also

For more information on related business objects and collaborations, see the following documents:

- "BCT_TPRegFlow Collaboration" on page 3
- "XML_TLO_BCTPartnerProfile business object" on page 9

# XML_TLO_BCTPartnerProfile business object

The generic XML_TLO_BCTPartnerProfile business object is used to bundle business objects for translation from XML.

## Business object structure

XML_TLO_BCTPartnerProfile includes the following attributes:

*Table 8. Business object attributes*

| Name | Type | Key | Cardinality |
|------|------|-----|-------------|
| BCTPartnerProfile | XML_BCTPartnerProfile | | 1 |
| ObjectEventId | String | | |

## Supported verbs

The generic XML_TLO_BCTPartnerProfile business object supports the Retrieve verb.

## Examining the object

To examine a listing of the attributes of the generic XML_TLO_BCTPartnerProfile business object, use CrossWorlds System Manager or CrossWorlds Business Object Designer.

## See also

For more information on related business objects and collaborations, see the following documents:

- "BCT_TPRegFlow Collaboration" on page 3
- "BCTPartnerProfileGBO" on page 7
- "XML_BCTPartnerProfile business object" on page 11

# XML_BCTPartnerProfile business object

The generic XML_BCTPartnerProfile business object is used to carry information about a registering trading partner.

## Business object structure

XML_BCTPartnerProfile includes the following attributes:

*Table 9. Business object attributes*

| Name | Type | Key | Cardinality |
|---|---|---|---|
| email_message_text | String | | |
| email_message_ subject | String | | |
| correlationID | String | | |
| serviceURL | String | | |
| companyName | String | x | |
| interchangeType | String | | |
| interchangeId | String | | |
| addressLine1 | String | | |
| addressLine2 | String | | |
| addressLine3 | String | | |
| city | String | | |
| state | String | | |
| postalCode | String | | |
| primaryContact Name | String | | |
| primaryContact Phone | String | | |
| primaryContactFax | String | | |
| primaryContactEmail | String | | |
| secondaryContact Name | String | | |
| secondaryContact Phone | String | | |
| secondaryContact Fax | String | | |
| secondaryContact Email | String | | |
| ebXMLinfo | XML_BCTPartner Profile_ebXMLInfo | | 1 |
| TPIServerProfile | XML_BCTPartner Profile_TPIServerProfile | | 1 |
| WSGWProfile | XML_BCTPartner Profile_WSGWProfile | | 1 |

*Table 9. Business object attributes (continued)*

| Name | Type | Key | Cardinality |
|------|------|-----|-------------|
| TPIConnector Profile | XML_BCTPartnerProfile_ TPIConnectorProfile | | 1 |
| ServiceInfo | XML_BCTPartner Profile_ServiceInfo | | n |
| CMSProfile | XML_BCTPartner Profile_CMSProfile | | 1 |
| DIServiceProfile | XML_BCTPartner Profile_DIServiceProfile | | 1 |
| ObjectEventId | String | | |

## Supported verbs

The generic XML_BCTPartnerProfile business object supports the Retrieve verb.

## Examining the object

To examine a listing of the attributes of the generic XML_BCTPartnerProfile business object, use CrossWorlds System Manager or CrossWorlds Business Object Designer.

## See also

For more information on related business objects and collaborations, see the following documents:

- "BCT_TPRegFlow Collaboration" on page 3
- "BCTPartnerProfileGBO" on page 7
- "XML_TLO_BCTPartnerProfile business object" on page 9
- "XML_BCTPartnerProfile_ebXMLInfo business object" on page 13
- "XML_BCTPartnerProfile_TPIServerProfile business object" on page 15
- "XML_BCTPartnerProfile_WSGWProfile business object" on page 17
- "XML_BCTPartnerProfile_TPIConnectorProfile business object" on page 19
- "XML_BCTPartnerProfile_ServiceInfo business object" on page 21
- "XML_BCTPartnerProfile_CMSProfile business object" on page 23
- "XML_BCTPartnerProfile_DIServiceProfile business object" on page 25

# XML_BCTPartnerProfile_ebXMLInfo business object

The generic XML_BCTPartnerProfile_ebXMLInfo business object is reserved for future use.

## Business object structure

XML_BCTPartnerProfile_ebXMLInfo includes the following attributes:

*Table 10. Business object attributes*

| Name | Type | Key | Cardinality |
|------|------|-----|-------------|
| CPAId | String | | |
| CPALocation | String | | |
| version | String | | |
| ObjectEventId | String | | |

## Supported verbs

The generic XML_BCTPartnerProfile_ebXMLInfo business object supports the Retrieve verb.

## Examining the object

To examine a listing of the attributes of the generic XML_BCTPartnerProfile_ebXMLInfo business object, use CrossWorlds System Manager or CrossWorlds Business Object Designer.

## See also

For more information on related business objects and collaborations, see the following documents:
- "BCT_TPRegFlow Collaboration" on page 3
- "XML_BCTPartnerProfile business object" on page 11

# XML_BCTPartnerProfile_TPIServerProfile business object

The generic XML_BCTPartnerProfile_TPIServerProfile business object is used to carry information about a trading partner's TPI server.

## Business object structure

XML_BCTPartnerProfile_TPIServerProfile includes the following attributes:

*Table 11. Business object attributes*

| Name | Type | Key | Cardinality |
|------|------|-----|-------------|
| filename | String | | |
| ObjectEventId | String | | |

## Supported verbs

The generic XML_BCTPartnerProfile_TPIServerProfile business object supports the Retrieve verb.

## Examining the object

To examine a listing of the attributes of the generic XML_BCTPartnerProfile_TPIServerProfile business object, use CrossWorlds System Manager or CrossWorlds Business Object Designer.

## See also

For more information on related business objects and collaborations, see the following documents:
- "BCT_TPRegFlow Collaboration" on page 3
- "XML_BCTPartnerProfile business object" on page 11

# XML_BCTPartnerProfile_WSGWProfile business object

The generic XML_BCTPartnerProfile_WSGWProfile business object is used to carry information about a trading partner's Web Services Gateway setup.

## Business object structure

XML_BCTPartnerProfile_WSGWProfile includes the following attributes:

*Table 12. Business object attributes*

| Name | Type | Key | Cardinality |
|---|---|---|---|
| password | String | | |
| userid | String | | |
| authType | String | | |
| authCertType | String | | |
| authCertKeyLength | String | | |
| authOrgCertSource | String | | |
| authCertIssuerName | String | | |
| encryptType | String | | |
| encryptCertType | String | | |
| encryptCertKeyLength | String | | |
| encryptOrgCert Source | String | | |
| encryptCertIssuer Name | String | | |
| filename | String | | |
| ObjectEventId | String | | |

## Supported verbs

The generic XML_BCTPartnerProfile_WSGWProfile business object supports the Retrieve verb.

## Examining the object

To examine a listing of the attributes of the generic XML_BCTPartnerProfile_WSGWProfile business object, use CrossWorlds System Manager or CrossWorlds Business Object Designer.

## See also

For more information on related business objects and collaborations, see the following documents:

- "BCT_TPRegFlow Collaboration" on page 3
- "XML_BCTPartnerProfile business object" on page 11

# XML_BCTPartnerProfile_TPIConnectorProfile business object

The generic XML_BCTPartnerProfile_TPIConnectorProfile business object is used to carry information about a trading partner's TPI connector.

## Business object structure

XML_BCTPartnerProfile_TPIConnectorProfile includes the following attributes:

*Table 13. Business object attributes*

| Name | Type | Key | Cardinality |
|------|------|-----|-------------|
| xmlMIMEType | String | | |
| ediMIMEType | String | | |
| binaryMIMEType | String | | |
| configfilename | String | | |
| filename | String | | |
| ObjectEventId | String | | |

## Supported verbs

The generic XML_BCTPartnerProfile_TPIConnectorProfile business object supports the Retrieve verb.

## Examining the object

To examine a listing of the attributes of the generic XML_BCTPartnerProfile_TPIConnectorProfile business object, use CrossWorlds System Manager or CrossWorlds Business Object Designer.

## See also

For more information on related business objects and collaborations, see the following documents:

- "BCT_TPRegFlow Collaboration" on page 3
- "XML_BCTPartnerProfile business object" on page 11

# XML_BCTPartnerProfile_ServiceInfo business object

The generic XML_BCTPartnerProfile_ServiceInfo business object is used to carry information about a trading partner's Web services.

## Business object structure

XML_BCTPartnerProfile_ServiceInfo includes the following attributes:

*Table 14. Business object attributes*

| Name | Type | Key | Cardinality |
|------|------|-----|-------------|
| name | String | | |
| type | String | | |
| invocationType | String | | |
| roleName | String | | |
| roleType | String | | |
| roleId | String | | |
| IsAdmin | String | | |
| description | String | | |
| privilegeMask | String | | |
| gatewayType | String | | |
| channelType | String | | |
| transportType | String | | |
| serviceURL | String | | |
| serviceURI | String | | |
| serviceId | String | | |
| Communication Information | XML_BCTPartnerProfile_ CommunicationInformation business object | | 1 |
| ObjectEventId | String | | |

## Supported verbs

The generic XML_BCTPartnerProfile_ServiceInfo business object supports the Retrieve verb.

## Examining the object

To examine a listing of the attributes of the generic XML_BCTPartnerProfile_ServiceInfo business object, use CrossWorlds System Manager or CrossWorlds Business Object Designer.

## See also

For more information on related business objects and collaborations, see the following documents:

- "BCT_TPRegFlow Collaboration" on page 3
- "XML_BCTPartnerProfile business object" on page 11
- "XML_BCTPartnerProfile_CommunicationInformation business object" on page 27

# XML_BCTPartnerProfile_CMSProfile business object

The generic XML_BCTPartnerProfile_CMSProfile business object is used to carry information about a trading partner's information relating to CMS.

## Business object structure

XML_BCTPartnerProfile_CMSProfile includes the following attributes:

*Table 15. Business object attributes*

| Name | Type | Key | Cardinality |
|------|------|-----|-------------|
| filename | String | | |
| ObjectEventId | String | | |

## Supported verbs

The generic XML_BCTPartnerProfile_CMSProfile business object supports the Retrieve verb.

## Examining the object

To examine a listing of the attributes of the generic XML_BCTPartnerProfile_CMSProfile business object, use CrossWorlds System Manager or CrossWorlds Business Object Designer.

## See also

For more information on related business objects and collaborations, see the following documents:

- "BCT_TPRegFlow Collaboration" on page 3
- "XML_BCTPartnerProfile business object" on page 11

# XML_BCTPartnerProfile_DIServiceProfile business object

The generic XML_BCTPartnerProfile_DIServiceProfile business object is used to carry information about a trading partner's EDI setup.

## Business object structure

XML_BCTPartnerProfile_DIServiceProfile includes the following attributes:

*Table 16. Business object attributes*

| Name | Type | Key | Cardinality |
|---|---|---|---|
| filename | String | | |
| ObjectEventId | String | | |

## Supported verbs

The generic XML_BCTPartnerProfile_DIServiceProfile business object supports the Retrieve verb.

## Examining the object

To examine a listing of the attributes of the generic XML_BCTPartnerProfile_DIServiceProfile business object, use CrossWorlds System Manager or CrossWorlds Business Object Designer.

## See also

For more information on related business objects and collaborations, see the following documents:

- "BCT_TPRegFlow Collaboration" on page 3
- "XML_BCTPartnerProfile business object" on page 11

# XML_BCTPartnerProfile_CommunicationInformation business object

The generic XML_BCTPartnerProfile_CommunicationInformation business object is used to carry communication information about a trading partner's web services.

## Business object structure

XML_BCTPartnerProfile_CommunicationInformation includes the following attributes:

*Table 17. Business object attributes*

| Name | Type | Key | Cardinality |
|------|------|-----|-------------|
| messageType | String | | |
| outboundDirectory | String | | |
| ObjectEventId | String | | |

## Supported verbs

The generic XML_BCTPartnerProfile_CommunicationInformation business object supports the Retrieve verb.

## Examining the object

To examine a listing of the attributes of the generic XML_BCTPartnerProfile_CommunicationInformation business object, use CrossWorlds System Manager or CrossWorlds Business Object Designer.

## See also

For more information on related business objects and collaborations, see the following documents:

- "BCT_TPRegFlow Collaboration" on page 3
- "XML_BCTPartnerProfile_ServiceInfo business object" on page 21

# Connectors

The Registration flow collaboration communicates with the following connectors:

*Table 18. BCT_RegistrationFlow collaboration connectors*

| Registration Flow Connector | Based on CrossWorlds: |
|---|---|
| External Connector | Server Access Interface |
| BCT_CMSSOAPConnector | SOAP Connector |
| BCT_FedSOAPConnector | SOAP Connector |

The External connector (Server Access Interface) receives the partner profile generic business object and forwards it to the collaboration. The collaboration forwards the information to the BCT_FedSOAPConnector, which is based on the CrossWorlds SOAP connector. It also passes it to the BCT_CMSSOAPConnector, which interacts directly with the database.

The Server Access Interface and SOAP connectors are described in the CrossWorlds documentation.

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