

WebSphere Adapter for SAP Software Version 6.0.2.1 Fix Pack Guide

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About this information

This document describes the features of the WebSphere^(R) Adapter for SAP Software that are contained in fix pack 6.0.2.1. It contains updates to the topics in the *WebSphere Adapter for SAP Software User Guide*. You can find the information center for WebSphere Adapter for SAP Software at this link: [Adapter for SAP Software User Guide](#)

The information in fix pack 6.0.2.1 includes the following features:

- A Synchronous callback interface to the SAP server is now available.

The Synchronous callback interface is triggered when SAP invokes an RFC-enabled function call (such as a BAPI function). The adapter converts the RFC-enabled function event to a business object and sends the business object to an endpoint in a synchronous manner. See [The Synchronous callback interface](#) for more information.

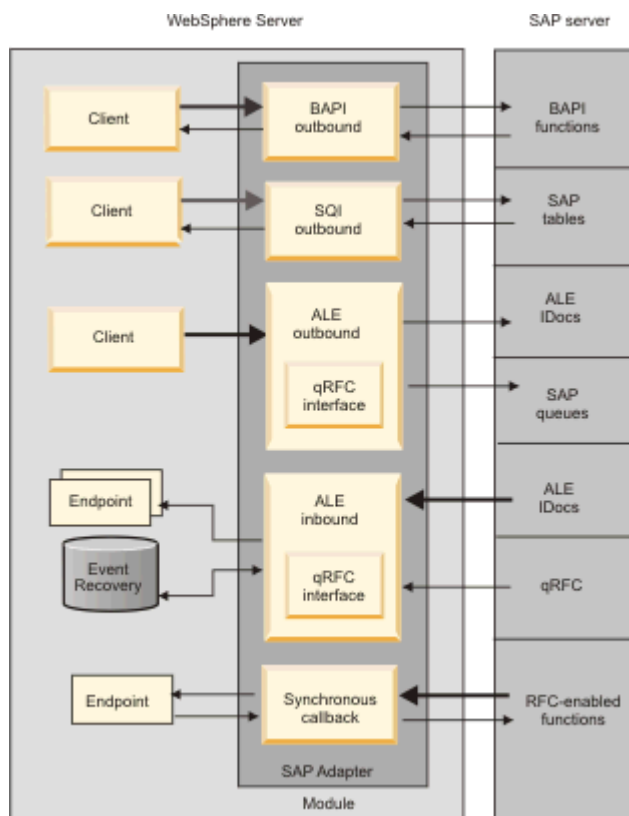
- The ALE interface of the Adapter for SAP Software includes the following new and changed features:
 - For ALE outbound and inbound operations, a qRFC interface is available. Client applications can specify a queue to which IDocs will be delivered, to ensure the order in which the IDocs are delivered and to ensure the order in which the IDocs are processed by an SAP application. You can also set up your inbound module to receive IDocs from a queue on the SAP server. See [The qRFC protocol](#) for more information.
 - For ALE outbound and inbound operations, you can now generate IDoc business objects from a text file that contains IDoc definitions. This is in addition to the existing support for generating IDoc business objects directly from an SAP system. See [Discovering IDocs from a file](#) for more information.
 - Multiple versions of the same IDoc type can be called from the same instance of the adapter. See [ALE business object structure](#) for more information.

Changes to the adapter interfaces

[Figure 1](#) shows the interfaces from the Adapter for SAP Software to the SAP server. Notice that, in the enterprise service discovery wizard, a Synchronous callback interface has been added to the existing BAPI, ALE, and SQI interfaces. Also, the ALE outbound and inbound interfaces now have an added qRFC feature.

- The Synchronous callback interface is triggered when SAP invokes an RFC-enabled function call. The adapter converts the RFC-enabled function event to a business object and sends the business object to the endpoint in a synchronous manner.
- The ALE qRFC interface provides a way for client applications to send requests to queues on the SAP server or for the adapter to receive requests from a queue on the SAP server.

Figure 1. SAP inbound and outbound interfaces



The ALE interface

An overview of the enhancements to the ALE interface of the Adapter for SAP Software is provided in this section.

The qRFC protocol

The adapter uses tRFC (transactional RFC) to guarantee delivery and to ensure that each IDoc is exchanged only once with SAP. In addition, the adapter now uses qRFC (queued transactional RFC) to provide ensured ordering of transactions.

The adapter uses the qRFC protocol to deliver a set of ordered IDocs to a queue on the SAP server or to receive them from a queue on the SAP server. The IDocs are then processed in the order in which they appear in the queue.

The following steps describe how the adapter supports outbound processing with the qRFC protocol.

Note: The client application that makes the request uses the interface information that was generated by the enterprise service discovery wizard. Included in this interface information is the qRFCQueueName property. If the client application does not provide a queue name, the default queue name that was captured when the enterprise service discovery was run is used.

1. The adapter receives a request from a client application.
2. The adapter uses the business object to populate the appropriate RFC-enabled function call used by the ALE interface.
3. The adapter establishes an RFC connection to the ALE interface and passes the IDoc data, in the order in which it is specified in the business graph, to the specified queue on the SAP system.
4. After passing the data to SAP, the adapter returns the transaction ID.

The following steps describe how the adapter supports inbound processing with the qRFC protocol.

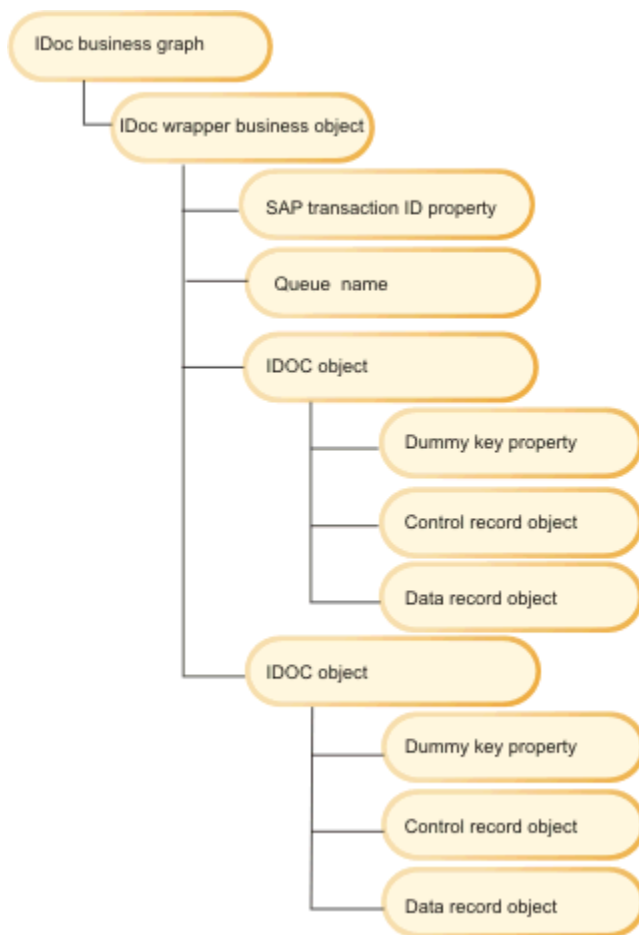
1. The adapter generates event listeners to the SAP server.
2. Whenever an event occurs in SAP, the event is sent to the adapter by way of the event listeners. The event is sent from the queue you specified when you created the inbound processing module.
3. The adapter converts the event into a business object before sending it to the endpoint. The associated IDocs are sent to the endpoint in the order in which they were received, by the adapter, from the queue on the SAP server.

Install the CWYAP_SAPAdapter_Tx.rar version of the adapter when you create a module for transactional (tRFC) or queued transactional (qRFC) processing.

ALE business object structure

The ALE business structure is shown in the following figure. Note that a queue name property has been added. The queue name is provided so that client applications can specify a queue on the SAP server to which IDocs should be delivered or from which events should be received by the adapter. The IDocs are delivered in order and processed in the order in which they appear in the queue.

Figure 2. ALE business structure



Note also that the adapter can now support multiple versions of the same IDoc type. The adapter uses the IDoc version and IDoc type to generate the business-object name. This generated business object is used to map the values from the IDoc to the business object.

The Synchronous callback interface

The Synchronous callback interface of the Adapter for SAP Software provides a means to synchronously call RFC-enabled functions (such as BAPI functions) that are registered with the adapter from the SAP server. The adapter, in turn, invokes the endpoint synchronously and responds back to the SAP application.

Inbound processing

The adapter supports inbound processing (from the SAP system to the adapter) for the Synchronous callback interface. An RFC-enabled function call is sent to an endpoint by way of the adapter, and the response from the endpoint is returned to the SAP system.

Inbound processing consists of the following steps:

1. The adapter starts event listeners, which listen to the specified RFCProgramID on the SAP server.
2. When an RFC-enabled function call is invoked from SAP, the RFC-enabled function event is pushed to the adapter by way of the event listeners.
3. The adapter converts the RFC-enabled function event to a business object.
4. The adapter sends a business graph that includes the business object to an endpoint in a synchronous manner.

The adapter generates the business graph name using the received RFC-enabled function name.

5. The adapter receives the response business object from the endpoint.
6. The adapter maps the response business object back to the RFC-enabled function interface and returns it to the SAP system.

The adapter does not listen for events until the endpoint is active and available.

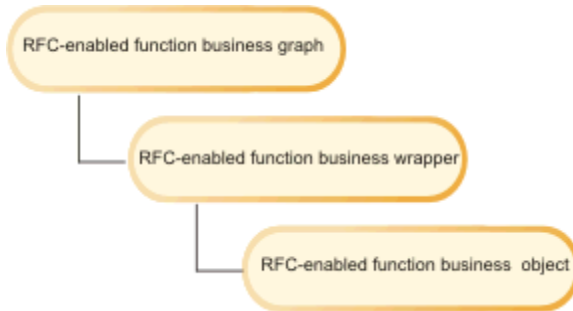
Synchronous callback business objects

A Synchronous callback business object represents an RFC-enabled function in SAP. Each business object property maps to an RFC-enabled function parameter. The metadata of each business-object property indicates the corresponding parameter. The operation metadata determines the correct function to call.

The Synchronous callback business object structure, including the business graph and business wrapper objects, is shown in [Figure 3](#). The business graph contains an RFC-enabled function wrapper business object. The wrapper business object contains the actual reference to the RFC-enabled function business object and the operation ASI information related to it.

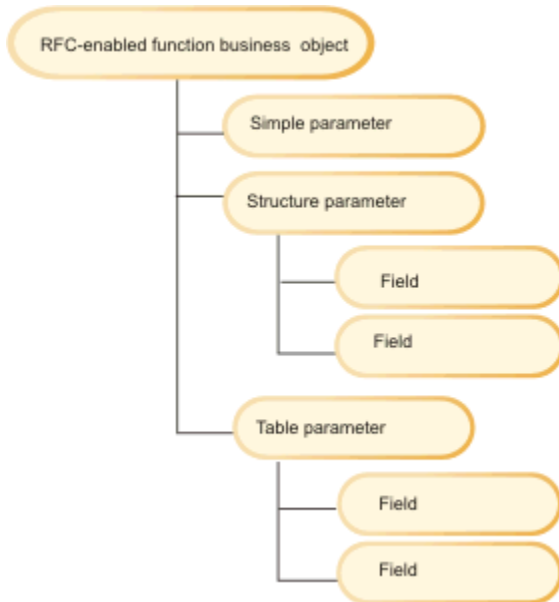
The wrapper business object contains the metadata information for one operation only.

Figure 3. RFC-enabled function business graph structure



The business object represents the actual structure of the RFC-enabled function and can contain import, export, and table parameters.

Figure 4. RFC-enabled function business object structure



Changes to configuring the adapter for ALE processing

This section describes changes in the enterprise service discovery wizard to the Find and Discover Services configuration task. Other configuration tasks for ALE processing remain unchanged.

You can select IDocs in one of two ways.

- You can specify an IDoc or a set of IDocs by entering search criteria (such as the name of the IDoc) and having the enterprise service discovery wizard search the SAP system.
- You can enter the file name with the complete path to its location on the file system.

If you choose to discover IDocs from the file, you must first configure the file. The file is generated from information on the SAP server and saved to the local file system.

Whichever method you choose, you can also specify the queue on the SAP server to which IDocs should be delivered or from which IDocs should be received.

Discovering IDocs from a file

To select IDocs from a file, you must first configure an IDoc definition file based on information on the SAP server. You then specify, during enterprise service discovery, the path to the file on your local system.

Creating an IDoc definition file

Before using the enterprise service discovery wizard to generate the business-object definition from an IDoc definition file, you must create an IDoc definition file for each IDoc you want to support. The enterprise service discovery wizard uses this file as input.

Use the following general procedure to create the IDoc definition file. Note that the steps for generating these definitions can vary from system release to release. For example, on some versions of the SAP server, you might need to clear the **IDoc record types** check box if it is checked.

1. In the SAP user interface, select transaction WE63 by entering `/oWE63`.
2. In the **Basic type** field, enter the basic IDoc type (for example, `ALEREQ01`) or browse to see a list of basic types.
3. Click **Documentation** -> **Parser** or click the Parser icon.

The IDoc definition is displayed on the screen.

4. Save the definition to a directory on your local file system by clicking **System** -> **List** -> **Save** -> **Local File**.
5. From the Save list in file window, select **unconverted** and select the check icon.

Note that **unconverted** is the only supported format.

6. Enter the location where the files should be saved (or browse to the location) and click **Generate**.

Selecting IDocs from a file

Use the Discover IDoc From File option to generate IDoc business objects by entering the absolute path to the file that contains the metadata definition of an IDoc or many IDocs of different types.

Before you begin

You must have created an IDoc definition file, as described in [Creating an IDoc definition file](#).

About this task

This section assumes that you have already set the connection properties for enterprise service discovery and that the Find and Discover Enterprise Services window is displayed.

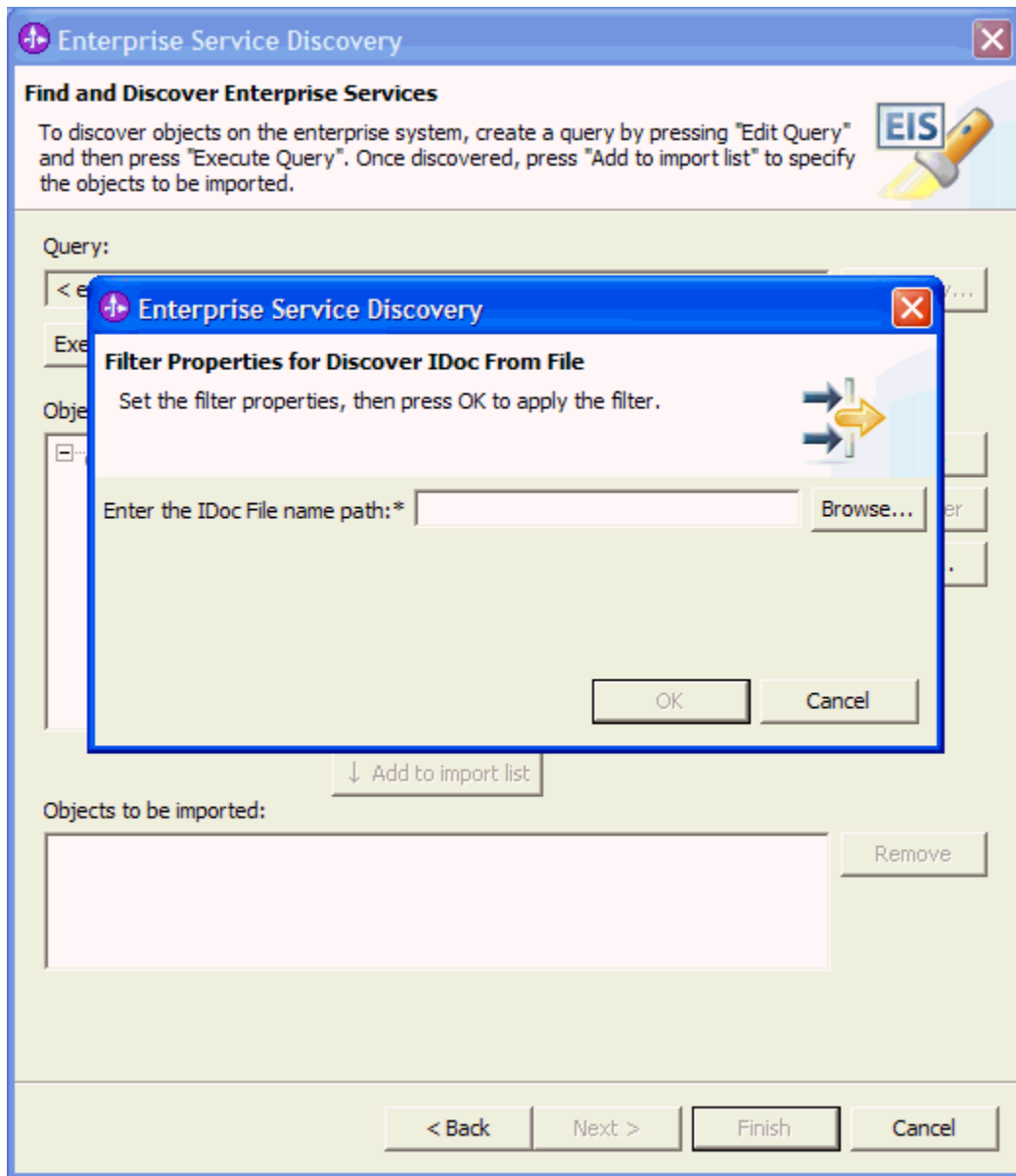
How to perform this task

1. In the Find and Discover Enterprise Services window, click **Execute Query**.
2. Click **Discover IDoc from File**.

The **Filter** button is now enabled.

3. Click **Filter**.

Figure 5. The Discover IDoc from File selection



4. Type the file path to the IDoc definition file (or browse to find the file).
5. Click **OK**.

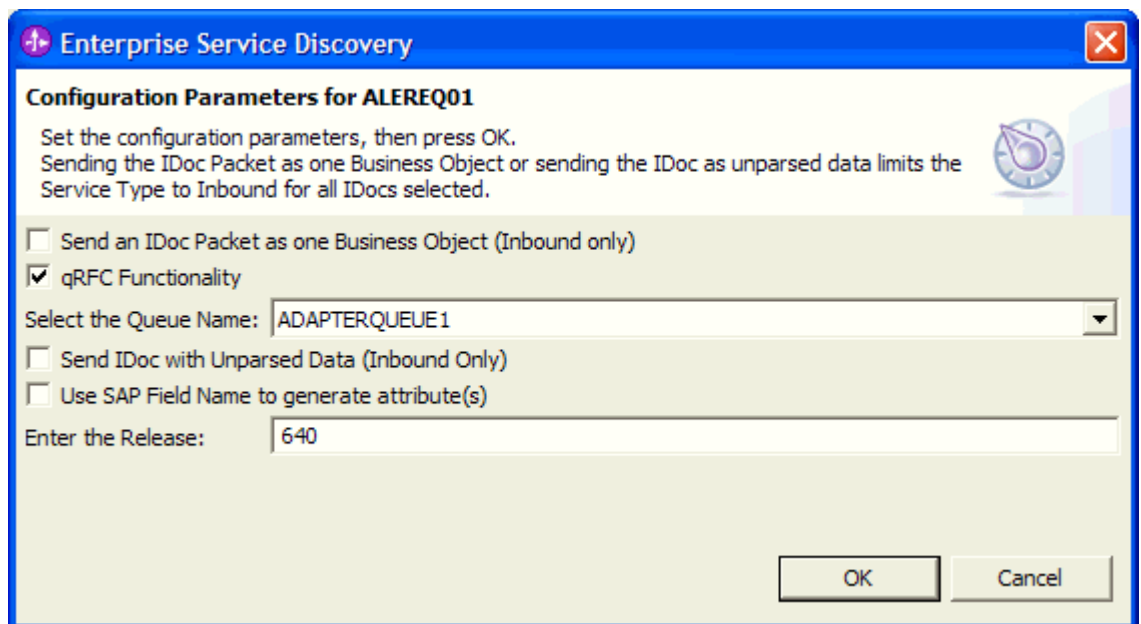
All the IDocs identified in the IDoc definition file are displayed under **Discover IDoc From File**.

6. Click the IDoc you want to use. If you are working with multiple IDocs, click the names of all the IDocs.
7. Click **Add to import list**.
8. In the Configuration Parameters window, perform the following tasks to add the IDoc to the list of business objects to be imported.
 - a. If you are configuring an IDoc packet for inbound processing and you want to specify that the packet not be split, select the **Send an IDoc Packet as one Business Object** check box.

This parameter applies to inbound processing only.

- b. If you want to have IDocs sent to a queue on the SAP server or if you want to receive IDocs from a queue on the SAP server, click **qRFC Functionality** and then select the queue from the **Select the Queue Name** list.

Figure 6. The Configuration parameters window



- c. If you are configuring for inbound processing and you want to send the IDoc in an unparsed form (so that the client application, rather than the adapter, parses the data), select the **Send IDoc with Unparsed Data** check box.

This parameter applies to inbound processing only.

- d. Select the **Use SAP Field Name to generate attribute(s)** check box.
 - e. In the **Enter the Release** field, specify the SAP release number to identify the IDoc type you want the enterprise service discovery wizard to use for creating business objects.
 - f. Click **OK**.
9. Click **Next**.

Result

The enterprise service discovery wizard has returned an IDoc or a list of IDocs, and you have selected the ones you want to work with.

What to do next

Continue with the remaining configuration tasks for ALE processing.

Discovering IDocs from the system

Use the Discover from System option to have the enterprise service discovery wizard search for IDocs based on the criteria you specify.

About this task

This section assumes that you have already set the connection properties for enterprise service discovery and that the Find and Discover Enterprise Services window is displayed. Note that the only change to this procedure is that you can specify the name of a queue on the SAP server to which IDocs will be delivered or from which they will be received.

How to perform this task

1. In the Find and Discover Enterprise Services window, click **Execute Query**.
2. Expand **ALE**.

The objects discovered by the query are grouped into two categories: Basic IDocs and Extension IDocs.

3. Expand either **Basic IDocs** or **Extension IDocs**, depending on the type of IDoc you want to import.
4. Click either **Discover By Name** or **Discover By Description**.

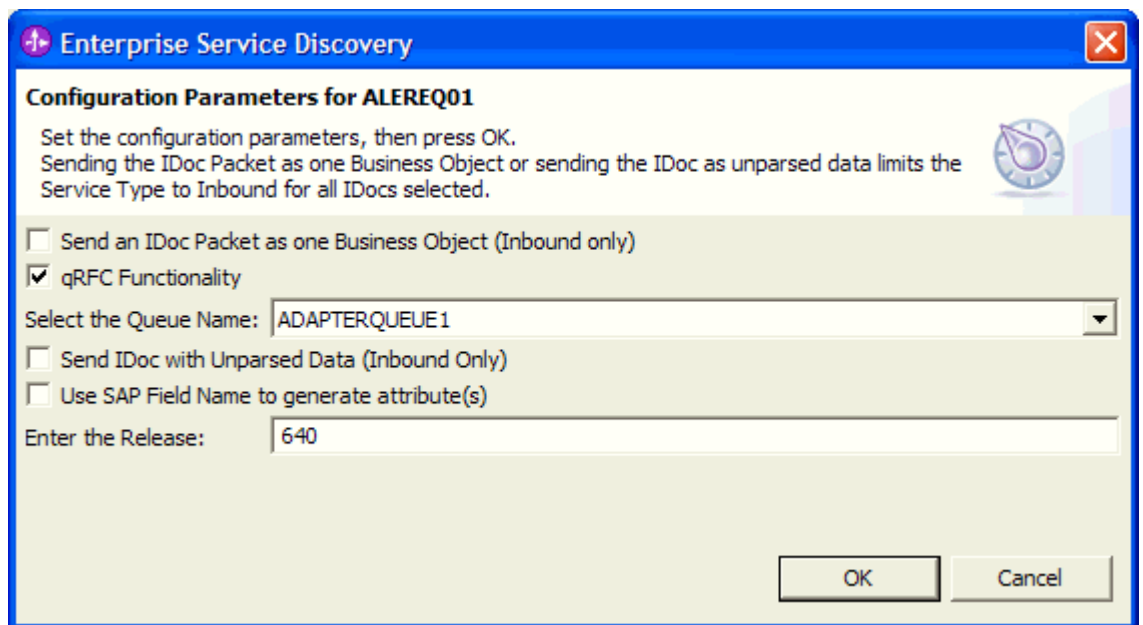
The **Filter** button is now enabled.

5. Click **Filter**.
6. Type a search string (for example, ALEREQ*) representing the IDoc you want to call.
7. Expand **Discover By Name** or **Discover By Description** (whichever choice you made in the earlier step).
8. Click the IDoc you want to use. If you are working with multiple IDocs, click the names of all the IDocs.
9. Click **Add to import list**.
10. In the Configuration Parameters window, perform the following tasks to add the IDoc to the list of business objects to be imported.
 - a. If you are configuring an IDoc packet for inbound processing and you want to specify that the packet not be split, select the **Send an IDoc Packet as one Business Object** check box.

This parameter applies to inbound processing only.

- a. If you want to have IDocs sent to a queue on the SAP server or if you want to receive IDocs from a queue on the SAP server, click **qRFC Functionality** and then select the queue from the **Select the Queue Name** list.

Figure 7. The Configuration parameters window



- c. If you are configuring for inbound processing and you want to send the IDoc in an unparsed form (so that the client application, rather than the adapter, parses the data), select the **Send IDoc with Unparsed Data** check box.

This parameter applies to inbound processing only.

- d. Select the **Use SAP Field Name to generate attribute(s)** check box.
- e. In the **Enter the Release** field, specify the SAP release number to identify the IDoc type you want the enterprise service discovery wizard to use for creating business objects.
- f. Click **OK**.

11. Click **Next**.

Result

The enterprise service discovery wizard has returned an IDoc or a list of IDocs, and you have selected the ones you want to work with.

What to do next

Continue with the remaining configuration tasks for ALE processing.

Configuring the adapter for Synchronous callback processing

To configure the adapter for Synchronous callback processing, you use the enterprise service discovery wizard to find an RFC-enabled function. You then configure the business objects that are generated and create a deployable module. Before you complete the tasks outlined in this section, make sure you have created an authentication alias, created an adapter project, and added any external dependencies.

You must also register a program ID with the SAP server before using the Synchronous callback processing interface. The following general steps describe how to set up the ID. Perform these steps using the SAP user interface.

1. Open transaction **SM59** (Display and Maintain RFC Destinations).
2. Click **Create**.
3. Type a name for the RFC destination.
4. In the **Connection Type** field, select **T**.
5. In the **Activation Type** field, select **Registered Server Program**.
6. Type a program ID.

You will use this program ID when you configure the adapter. This value indicates to the SAP gateway which RFC-enabled functions the program ID listens for.

Setting connection properties for enterprise service discovery

To set connection properties for the enterprise service discovery wizard so that it can access the SAP server, specify such information as the user name and password you use to access the server as well as the name or IP address of the server.

How to perform this task

1. In WebSphere Integration Developer, start the enterprise service discovery wizard.
 - a. Switch to the Business Integration Perspective by clicking **Window -> Open Perspective -> Other**. Then click **Business Integration (default)** and click **OK**.
 - b. Right-click **New -> Enterprise Service Discovery**.

If **Enterprise Service Discovery** is not displayed, click **New -> Other**, expand **Business Integration**, and click **Enterprise Service Discovery**. Then click **Next**.

2. Select **IBM WebSphere Adapter for SAP Software** and click **Next**.

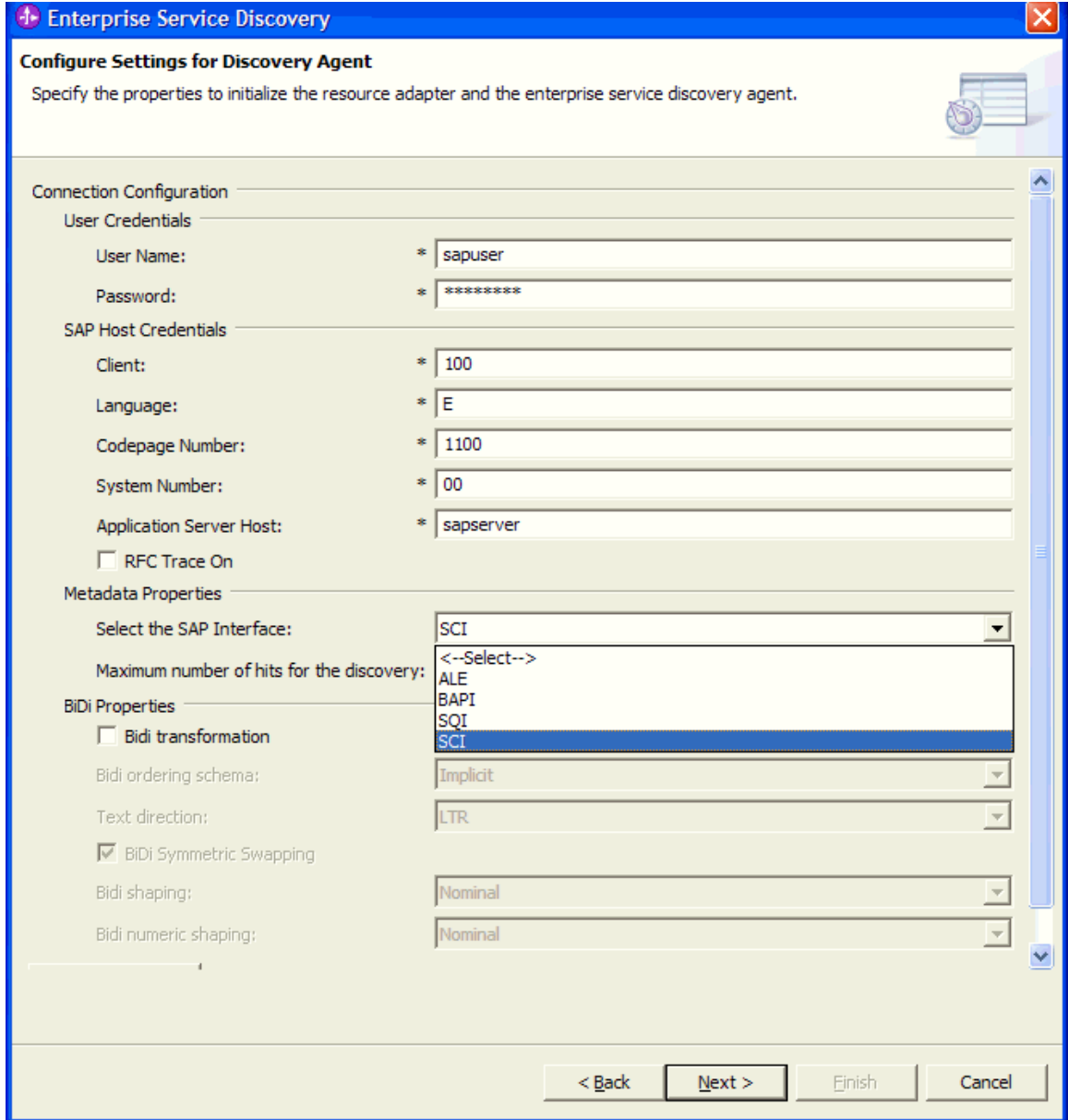
If you previously ran the enterprise service discovery wizard, your connection properties appear when you expand the adapter name node by clicking the plus symbol (+). You can select the saved connection properties if you plan to connect to the SAP application you used the last time you ran the enterprise service discovery wizard.

Note: Properties marked with an asterisk (*) are required.

3. Specify the configuration properties to initialize the discovery agent:
 - a. Type the name and password you use to access the SAP system.

The password is case-sensitive.
 - b. Type your client ID.
 - c. Optionally change the default settings for **Language**, **Codepage Number**, and **System Number**.
 - d. In the **Application Server Host** field, type the name (or IP address) of your SAP server.
4. Optional: Select the **RFC Trace On** check box if you want to generate a text file that details the RFC activity for event listeners. Use these text files in a development environment only, because the fields can grow rapidly.
5. Select **SCI** from the **Select the SAP interface** list.

Figure 8. Selecting the Synchronous callback interface



6. Optional: Indicate the number of functions you want returned by changing the value in the **Maximum number of hits for the discovery** field or by accepting the default value.
7. Optional: If you need to set bidirectional properties, perform the following steps:
 - a. Select **Bidi transformation**.
 - b. Set properties for your environment.

8. Optional: To change the logging level for enterprise service discovery, perform the following steps:
 - a. At the bottom of the window, click **Show Advanced**.
 - b. Set the **Logging Level**.

In a test environment, select **FINEST**, which provides the highest level of logging. In a production environment, choose a level lower than **FINEST** to optimize the logging process.

Note: This log pertains to enterprise service discovery only, not to the operation of the adapter.

9. Click **Next**.

Result

The enterprise service discovery wizard contacts the SAP server, using the information you provided (such as user name and password) to log in. You see the Find and Discover Enterprise Services window.

Selecting business objects and services

To specify which function you want to process, you provide information in the enterprise service discovery wizard.

How to perform this task

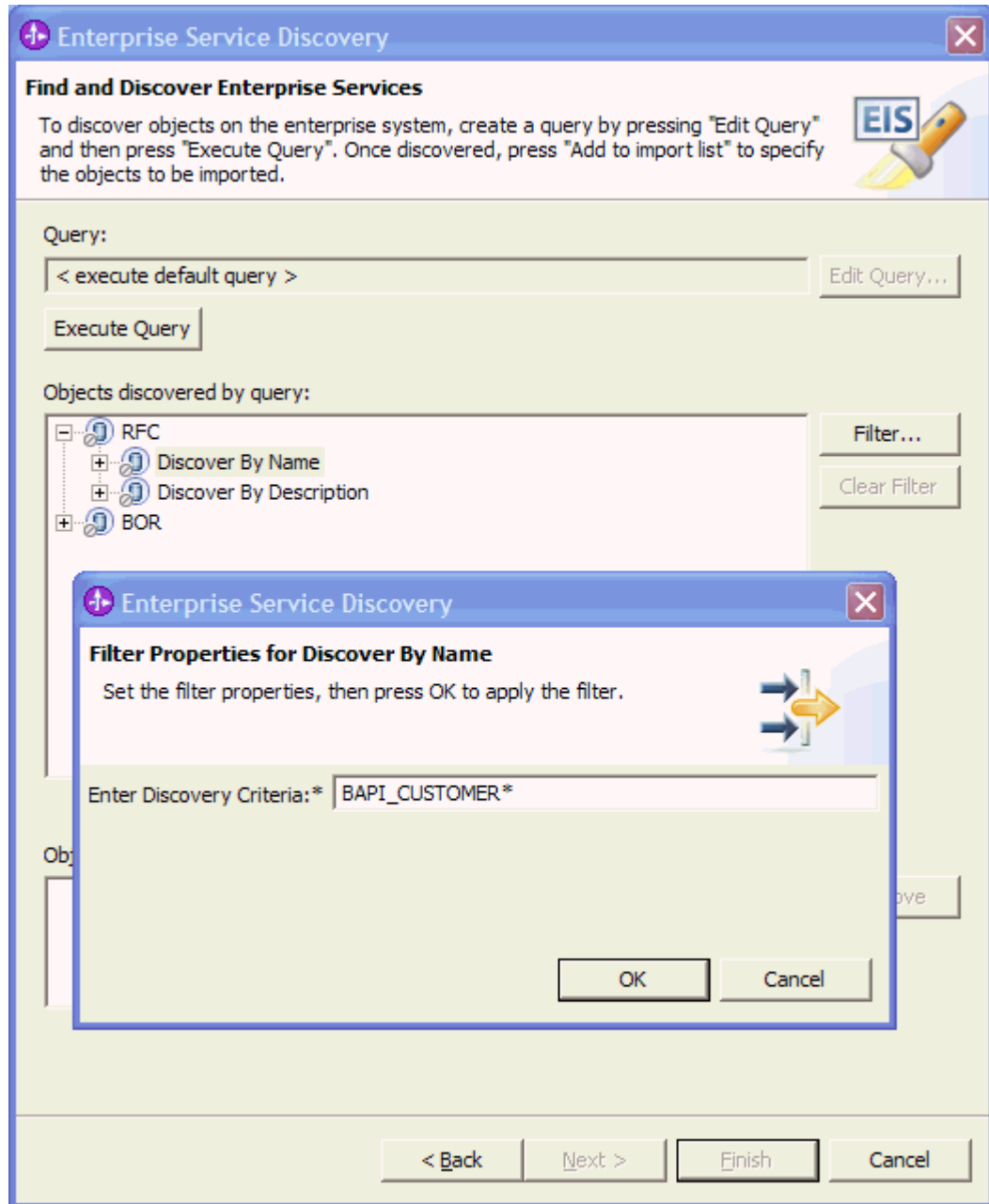
1. In the Find and Discover Enterprise Services window, click **Execute Query**.
2. Under **Objects discovered by query**, indicate which function or set of functions you want to work with. You use the **RFC** choice to search for the function by its name or description. You use the **BOR** choice to select from a functional grouping.
 - To select the function by its name or description, expand **RFC** and click either **Discover By Name** or **Discover By Description**.
 - To select the function by its functional grouping, expand **BOR** and click one of the functional groupings (for example, **Cross-Application Components**).

The **Filter** button is now enabled.

3. Click **Filter**.

4. Type a search string to narrow the search. For example, if you selected **Discover By Name**, type a search string (such as `BAPI_CUSTOMER*`), representing the function you want to call.

Figure 9. Selecting an RFC-enabled function



5. Click **OK**.
6. Expand **Discover By Name** or **Discover By Description** or the functional grouping (whichever choice you made in the earlier step).

7. Click the function you want to use. If you are working with multiple functions, click the names of all the functions.
8. Click **Add to import list**.
9. In the Configuration Parameters window, perform the following tasks for each function to add it to the list of business objects to be imported:
 - a. Optionally select the **Use Field Name to generate attribute(s)** check box. By default (when the check box is not selected), the field descriptions are used to generate attributes.
 - b. If the function has optional parameters associated with it, select the **Check if you want to select optional parameters for this interface** check box and then select the optional parameters you want included in your business object definition.

By default, enterprise service discovery generates all the parameters required for the selected interface, so select this check box and then clear the check boxes for any parameters you do not want to include in your business object.

For example, if you are adding the CUSTOMER_CHANGEFROMDATA BAPI, you have the option of adding the following parameters:

- PI_DIVISION
- PI_DISTR_CHAN

Refer to the SAP documentation for a list and description of the optional parameters.

- c. Click **OK** to add the function to the list of business objects to be imported.

If you want to remove an object from the list, select the object name and click **Remove**.

10. Repeat step 9 until you have configured all functions.
11. Click **Next**.

Result

The enterprise service discovery wizard has returned a list of the function or functions that match the search criteria, and you have selected the function or functions you want to work with.

Configuring the selected objects

To configure the business object, you specify information about the object (such as the name of the object and the operation associated with the object).

How to perform this task

1. In the Configure Objects window, type the name of the object location (where the object is stored).
2. In the **Namespace** field, use the default namespace (<http://www.ibm.com/xmlns/prod/websphere/j2ca/sap>) except in the following circumstance. If you are adding the business object to an existing module and the module already includes that business object (for example, if you previously ran the enterprise service discovery), change the namespace value.

For example, you could change the namespace to <http://www.ibm.com/xmlns/prod/websphere/j2ca/sap1>.

3. Indicate which operation you want performed on the function.
 - a. Click **Add**.
 - b. Select **Create**, **Updatewithdelete**, or **Delete**.
 - c. Click **OK**.
4. Click **Next**.

Result

You have selected a location where the object is stored, optionally changed the namespace, indicated that this is an inbound operation, and associated an operation with the object. The Generate Artifacts window is displayed.

Generating artifacts

To generate the module, which is the artifact that is deployed on WebSphere Process Server or WebSphere Enterprise Service Bus, you create the module, include the adapter in the module, and specify an alias used to authenticate the caller to the SAP server.

How to perform this task

1. In the Generate Artifacts window, create a new module.
 - a. Click **New**.
 - b. Click **Create a module project** and click **Next**.
 - c. Type a name for the module.

As you type the name, it is added to the workplace specified in the **Directory** field.

- d. Click **Finish**.
2. If you want to change the default namespace, clear the **Use Default Namespace** check box and type a new path in the **Namespace** field.
3. In the Generate Artifacts window, specify the folder within the module where the service description should be saved by typing a name in the **Folder** field or browsing for a folder.
4. Optionally change the name of the interface and add a description.
5. Optionally select **Edit operations** if you want to change the default operation name. Then, in the Edit Operation Names window, type a new name and optional description, and click **OK**.
6. Select the **Deploy connector with module** check box.
7. Click **Use discovered connection properties** to set properties at this time.

If you select **Use connection properties specified on server**, you can configure properties later, using the WebSphere Process Server or WebSphere Enterprise Service Bus administrative console.

8. In the **J2C Authentication Data Entry** field, enter the name you specified in the Security section of the administrative console.
9. Set the required inbound connection properties.

As shown in the following figure, properties that you previously specified (for example, **Client**) are already filled in.

Figure 10. Connection properties

Enterprise Service Discovery

Generate Artifacts

Gateway Host: cannot be empty.

Business Object Namespace: http://www.ibm.com/xmlns/prod/websphere/j2ca/sap

Gateway Host: *

Gateway Service: *

RFC Program ID: *

Client: * 100

Number Of Listeners: * 1

User Name: sapuser

Password:

Language: * E

Codepage Number: * 1100

Partner Charset:

Application Server Host: * sapserver

System Number: * 00

Name of the group of application servers(logonGroup):

Message Server Host:

SAP System ID:

RFC Trace On

FTS Connection Retrv Limit:

< Back Next > Finish Cancel

The fields are described in the following table.

Option	Description
Gateway Host	Specify the SAP gateway host where the gateway service is running.
Gateway Service	Specify the gateway server identifier. This value is often <code>sapgw00</code> .
RFC Program ID	Specify the program identifier under which the RFC server program registers.
Client	Specify the SAP client number under which the adapter logs in. This value is often 100.
Number of Listeners	Specify the number of event listeners that are to be started.
Language	Use the value already filled in for language, or change it (if necessary).
Codepage Number	Use the value already filled in for codepage number, or change it (if necessary).
Application Server Host	Use the value already filled in for your application server host, or change it (if necessary).
System Number	Use the value already filled in for system number, or change it (if necessary).

10. Optionally, change or set any of the other inbound connection properties.

See [Activation specification properties - Synchronous callback](#) for more information about these properties.

11. Set or change any resource adapter properties that apply to your configuration.

Properties marked with an asterisk (*) are required.

Result

The new module is added to the Business Integration perspective.

What to do next

Export the module as an EAR file for deployment.

Reference information

This section includes new reference information for the Synchronous callback interface: information about the operation and verbs of the Synchronous callback interface, naming conventions for its business objects, and the activation specification properties for the Synchronous callback interface.

Operations and verbs of Synchronous callback business objects

The adapter uses the wrapper business object ASI metadata information to find the operation associated with the received RFC-enabled function name. After the adapter determines the operation, it sets it as the verb on the business object before sending it to endpoint.

Supported operations

The following table lists the operations that the adapter supports for Synchronous callback business objects.

Table 1. Supported operations: Synchronous callback business objects

Operation	Definition
Create	The top-level business object and all contained children are created.
UpdateWithDelete	The top-level business object is to be modified. This operation can include adding and deleting child objects. Any deleted child objects are known and reflected.
Delete	The top-level business object and any contained children are deleted.

Supported verbs

The following table lists the verbs that the adapter supports for Synchronous callback business objects.

Table 2. Supported verbs: Synchronous callback business objects

Verb	Definition
Create	The top-level business object and all contained children have been created.
UpdateWithDelete	The top-level business object has been modified; this might include addition or deletion of children as well.
Delete	The top-level business object and any contained children have been deleted.

For verbs that are not supported, the adapter produces a ResourceException error.

[Naming conventions for Synchronous callback business objects](#)

The enterprise service discovery wizard provides names for the Synchronous callback business graph, top-level business object, and the business object itself.

The following table shows the naming convention for a Synchronous callback business graph, a top-level wrapper object, and the business object.

Table 3. Naming conventions for Synchronous callback business objects

Element	Naming convention
Name of the business graph	Sap + <i>Nameoffunction</i> + WrapperBG
Name of the top-level wrapper object	Sap + <i>Nameoffunction</i> + Wrapper
Name of the business object	Sap + <i>Nameoffunction</i>

Activation specification properties - Synchronous callback

Activation specification properties hold the inbound event processing configuration information for a message endpoint. The Synchronous callback interface has its own set of activation specification properties. You can set the properties through the enterprise service discovery wizard or the administrative console.

When you configure the adapter for the Synchronous callback interface, specify the activation specification properties listed below.

Table 4. Activation specification properties

Property name in enterprise service discovery	Property name in administrative console	Type	Description	Default value
Application Server Host	applicationServerHost	String	When the adapter is configured to run without load balancing, this property specifies the IP address or the name of the application server that the adapter logs in to. Regardless of whether it is configured for load balancing, the adapter assumes that the name of the gateway host is the same as the value specified for this property.	None
Client	client	String	SAP Client number under which the adapter logs in. This value is often 100.	100
Gateway Host	gatewayHost	String	SAP gateway host where the gateway service is running.	None

Gateway Service	gatewayService	String	The gateway server identifier. This value is often <code>sapgw00.00</code> is the system number of the server running the SAP gateway (which is usually an application server). This value cannot be <code>00</code> if you have more than one server.	None
Group	logonGroup	String	When the adapter is configured for load balancing, this property specifies the name of the logon group that represents a group of application servers.	None
Language	language	String	Language in which the adapter logs in.	E for English
Message Server Host	messageServerHost	String	When the adapter is configured for load balancing, this property specifies the name of the message server.	None
Number Of Listeners	numberOfListeners	Integer	Specifies the number of event listeners that are to be started.	1
Partner Charset	partnerCharset	String	Specifies PartnerCharset encoding. When an encoding is specified, it is used; otherwise the default encoding is used.	None
Password	password	String	Password for the adapter user account on the SAP system.	None
Retry Interval	retryInterval	Integer	Specifies the time delay before trying to restart the RFC server event listeners. The value should be specified in milliseconds.	
Retry Limit	retryLimit	Integer	Specifies the number of times the adapter tries to restart the RFC server event listeners. A value of <code>0</code> indicates an infinite number of retries.	0

RFC Program ID	rfcProgramID	String	Program identifier under which the RFC server program registers.	None
RFC Trace On	RFCTraceOn	Boolean	Specifies whether to generate a text file detailing the RFC activity for each event listener. You can specify a value of <code>true</code> or <code>false</code> . A value of <code>true</code> activates tracing, which generates a text file. Use these text files in a development environment only, because the files can grow rapidly.	False
SAP System ID	SAPSystemID	String	When the adapter is configured for load balancing, this property specifies the logical name of the SAP system (also known as <i>R3name</i>).	None
System Number	systemNumber	String	System number of the application server. The value, which is a two-digit number, is often <code>00</code> .	00
User Name	userName	String	Name of the adapter user account on the SAP system.	None