

WebSphere Adapters
Version 7 Release 1

*WebSphere Adapter for SAP Software
User Guide
Version 7 Release 1*



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Note

Before using this information and the product it supports, read the information in "Notices" on page 75.

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WebSphere Adapter for SAP Software documentation

WebSphere® Adapter for SAP Software provides the ability for applications in WebSphere Process Server or WebSphere Enterprise Service Bus to interact with the SAP server and perform business functions, without the need for special coding. The adapter works with the SAP server by sending requests to it and by monitoring and responding to events that occur in the SAP server.

What is new in this release

This version includes several new features that enhance the business flexibility, user experience, and performance of the adapter.

Complete information about other supported features is available at the WebSphere Adapter for SAP Software information center, http://publib.boulder.ibm.com/infocenter/dmndhelp/v7r0mx/index.jsp?topic=/com.ibm.wsadapters.jca.sap.doc/doc/stbp_sap_welcome.html, which is periodically updated with the latest information.

The WebSphere Adapter for SAP Software, supports the following new features:

- Processing SAP specific date format
- Trimming leading white spaces in IDoc Data Records
- Sending empty XML tags in a Business Object
- Content Line type support

Note: In WebSphere Integration Developer, ensure that you have only one version of the adapter imported into your workspace. You can either have the adapter Fix Pack version 7.0.0.1 or Feature Pack version 7.0.1.0.

In the runtime environment, the application (EAR) should contain only one version of the embedded RAR file, either the adapter Fix Pack version 7.0.0.1 or Feature Pack version 7.0.1.0. The node level deployed adapter should also have only any one version of the adapter.

Processing SAP specific date format

The adapter now supports certain SAP-specific date formats which are otherwise non-standard. To achieve this, the adapter converts the Date type object into a String value before processing. This feature is configurable using the “Process Date Fields as String” checkbox during the object discovery.

Selecting business objects and services for BAPI inbound processing

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

Before you begin

Make sure you have set the connection properties for the external service wizard.

About this task

Specify search criteria that the external service wizard uses to discover functions on the SAP server. The external service wizard returns a list of functions that meet the search criteria.

To specify the search criteria and select one or more functions, use the following procedure.

Procedure

1. In the Find Objects in the Enterprise System window, indicate which BAPI or set of BAPIs you want to work with.
 - a. Click **RFC** to enable the filter



button.

- b. Click the filter button.

Note: Instead of using the filter capability, you can expand **RFC** and select the function from the list, or you can expand **BOR**, expand the functional grouping (for example, **Cross-Application Components**), and select the BAPI. Then skip ahead to step 4.

2. From the Filter Properties window, specify information about the BAPI or BAPIs you want to discover:
 - a. Select **Discover objects by name** or **Discover objects by description** from the **Object attribute to use for discovery** list.
 - b. Type a search string (for example, BAPI_CUSTOMER*) representing the BAPI you want to call.

This is the name of the BAPI in SAP plus an asterisk as a wild card character to indicate that you want a list of all SAP application components that start with the phrase BAPI_CUSTOMER.
 - c. Indicate the number of functions you want returned by changing the value in the **Maximum number of objects to retrieve** field or by accepting the default value.
 - d. Click **OK**.
3. Select the BAPI or BAPIs.
 - a. Expand **RFC (filtered)**.
 - b. From the Discovered object list, select one or more BAPIs that you want to use.
4. Click the arrow button to add the BAPI or BAPIs to the **Selected objects** list.
5. In the Configuration Parameters window, perform the following steps for each BAPI to add it to the list of business objects to be imported:
 - a. Optionally, select the **Use the original character case of SAP field names to generate business object attribute names** check box. By default (when the check box is not selected), the field descriptions are used to generate properties.
 - b. Optionally, select the **Process Date fields as String** check box. This allows the adapter to retrieve SAP-specific date formats which are otherwise non-standard in Java by using the String type instead of the Date type format.

Note: To use this feature, ensure that the above check box is selected while running the External service wizard. As the date fields are converted to string type, ensure that all downstream dependencies (if any) are taken care of.

- c. If the BAPI has optional parameters associated with it, select the **Select optional parameters to include as child objects** check box, expand **Optional parameters**, and select the type of parameters (import, export, or table) that you want to work with.

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

If you are adding BAPI_CUSTOMER_GETDETAIL function module, you have the option of adding the following parameters:

Optional Import Parameters

PI_PASS_BUFFER
PI_DIVISION
PI_DISTR_CHAN

Optional Export Parameters

PE_ADDRESS
RETURN

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

- d. Click **OK** to add the BAPI 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 the left arrow.

6. Click Next

Results

The external service wizard has returned the function or list of functions that match the search criteria, and you have selected the function or functions you want to work with. The Specify Composite Properties window is displayed.

What to do next

Provide information about the business object (such as the operation associated with the object and the SAP remote function call type).

Selecting business objects and services for BAPI outbound processing

To specify which BAPI function or functions you want to call and which data you want to process, you provide information in the external service wizard.

Before you begin


Make sure you have set the connection properties for the external service wizard.

About this task

Specify search criteria that the external service wizard uses to discover BAPI functions on the SAP server. The external service wizard returns a list of BAPI functions that meet the search criteria.

To specify the search criteria and select one or more BAPI functions, use the following procedure.

Procedure

1. In the Find Objects in the Enterprise System window, indicate which BAPI or set of BAPIs you want to work with.
 - a. Click **RFC** to enable the filter  icon.
 - b. Click the filter button. The Filter Properties window is displayed.

Note: Instead of using the filter capability, you can expand **RFC** and select the function from the list, or you can expand **BOR**, expand the functional grouping (for example, **Cross-Application Components**), and select the BAPI. Then skip ahead to step 4.
2. From the Filter Properties window, specify information about the BAPI or BAPIs you want to discover:
 - a. Select **Discover objects by name** or **Discover objects by description** from the **Object attribute to use for discovery** list.
 - b. Type a search string (for example, BAPI_CUSTOMER*) representing the BAPI you want to call.

This is the name of the BAPI in SAP plus an asterisk as a wild card character to indicate that you want a list of all SAP application components that start with the phrase BAPI_CUSTOMER.
 - c. Indicate the number of functions you want returned by changing the default value in the **Maximum number of objects to retrieve** field or by accepting the default value.
 - d. Click **OK**.
3. Select the BAPI or BAPIs.
 - a. Expand **RFC (filtered)** to show the objects that match the search criteria of BAPI_CUSTOMER*.
 - b. From the Discovered object list, select one or more BAPIs that you want to use.
4. Click the arrow button to add the BAPIs to the **Selected objects** list.
5. In the Configuration Properties window, perform the following steps for each BAPI to add it to the list of business objects to be imported:
 - a. Optionally, select the **Use the original character case of SAP field names to generate business object attribute names** check box. By default (when the check box is not selected), the field descriptions are used to generate properties.
 - b. Optionally, select the **Process Date fields as String** check box. This allows the adapter to retrieve SAP-specific date formats which are otherwise non-standard in Java by using the String type instead of the Date type format.

Note: To use this feature, ensure that the above check box is selected while running the external service wizard. As the date fields are converted to string type, ensure that all downstream dependencies (if any) are taken care of.

- c. If the BAPI has optional parameters associated with it, select the **Select optional parameters to include as child objects** check box, expand **Optional parameters**, and select the type of parameters (import, export, or table) that you want to work with.

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

If you are adding BAPI_CUSTOMER_GETDETAIL function module, you have the option of adding the following parameters:

Optional Import Parameters:

PI_PASS_BUFFER
PI_DIVISION
PI_DISTR_CHAN

Optional Export Parameters:

PE_ADDRESS
RETURN

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

- d. Click **OK** to add the BAPI 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 the left arrow.

6. Click **Next**.

Results

The external service wizard has returned the function or functions that match the search criteria, and you have selected the function or functions you want to work with. The Specify Composite Properties window is displayed.

What to do next

Provide information about the business object (such as the name of the top-level object and associated operation).

Selecting business objects and services for BAPI result set processing

To specify which BAPI functions you want to use and which data you want to process, you provide information in the external service wizard.

Before you begin

Make sure you have set the connection properties for the external service wizard.


About this task

Specify search criteria that the external service wizard uses to discover BAPI functions on the SAP server. The external service wizard returns a list of BAPI functions that meet the search criteria.

To specify the search criteria and select the BAPI functions, use the following procedure.

Procedure

1. In the Find Objects in the Enterprise System window, indicate the BAPIs you want to work with.

- a. Click **RFC** to enable the filter  button.
- b. Click the filter button.

Note: Instead of using the filter capability, you can expand **RFC** and select the function from the list, or you can expand **BOR**, expand the functional grouping (for example, **Cross-Application Components**), and select the BAPI. Then skip ahead to step 4.

2. From the Filter Properties window, specify information about the BAPIs:
 - a. Select **Discover objects by name** or **Discover objects by description** from the **Object attribute to use for discovery** list.
 - b. Type a search string (for example, BAPI_CUSTOMER*) representing the BAPI you want to call.

This is the name of the BAPI in SAP plus an asterisk as a wild card character to indicate that you want a list of all SAP application components that start with the phrase BAPI_CUSTOMER.
 - c. Indicate the number of functions you want returned by changing the value in the **Maximum number of objects to retrieve** field or by accepting the default value.
 - d. Click **OK**.
3. Select the BAPIs.
 - a. Expand **RFC (filtered)**.
 - b. Select two BAPIs—GetList and GetDetail. One BAPI represents the query and one representing the results.

The following figure shows the **Discovered objects** list if you typed BAPI_CUSTOMER_GET* as the filter:
4. Click the arrow button to add the BAPIs to the **Selected objects** list.
5. In the Configuration Properties window, perform the following steps for each BAPI to add it to the list of business objects to be imported:
 - a. Optionally, select the **Use the original character case of SAP field names to generate business object attribute names** check box. By default (when the check box is not selected), the field descriptions are used to generate properties.
 - b. Optionally, select the **Process Date fields as String** check box. This allows the adapter to retrieve SAP-specific date formats which are otherwise non-standard in Java by using the String type instead of the Date type format.

Note: To use this feature, ensure that the above check box is selected while running the external service wizard. As the date fields are converted to string type, ensure that all downstream dependencies (if any) are taken care of.

- c. If the BAPI has optional parameters associated with it, select the **Select optional parameters to include as child objects** check box, expand **Optional parameters**, and select the type of parameters (import, export, or table) that you want to work with.

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

If you are adding BAPI_CUSTOMER_GETDETAIL function module, you have the option of adding the following parameters:

Optional Import Parameters:

PI_PASS_BUFFER
PI_DIVISION
PI_DISTR_CHAN

Optional Export Parameters:

PE_ADDRESS
RETURN

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

- d. Click **OK** to add the BAPI 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 the left arrow.

6. Click **Next**.

Results

The external service wizard has returned the functions that match the search criteria, and you have selected the functions you want to work with. The Specify Composite Properties window is displayed.

What to do next

Provide information about the business object (such as the name of the top-level object and associated operation).

Selecting business objects and services for BAPI work unit processing

To specify which BAPI functions you want to call and which data you want to process, you provide information in the external service wizard.

Before you begin

Make sure you have set the connection properties for the external service wizard.


About this task

Specify search criteria that the external service wizard uses to discover BAPI functions on the SAP server. The external service wizard returns a list of BAPI functions that meet the search criteria.

To specify the search criteria and select the BAPI functions for the work unit, use the following procedure.

Procedure

1. In the Specify the Discovery Properties window, indicate which BAPI you want to work with.

- a. Click **RFC** to enable the filter  button.
- b. Click the filter button.

Note: Instead of using the filter capability, you can expand **RFC** and select the function from the list, or you can expand **BOR**, expand the functional grouping (for example, **Cross-Application Components**), and select the BAPI. Then skip ahead to step 4.

2. From the Filter Properties window, specify information about the BAPIs you want to discover:
 - a. Select **Discover objects by name** or **Discover objects by description** from the **Object attribute to use for discovery** list.
 - b. Type a search string (for example, BAPI_CUSTOMER*) representing the BAPI you want to call.

This is the name of the BAPI in SAP plus an asterisk as a wild card character to indicate that you want a list of all SAP application components that start with the phrase BAPI_CUSTOMER.
 - c. Indicate the number of functions you want returned by changing the value in the **Maximum number of objects to retrieve** field or by accepting the default value.
 - d. Click **OK**.
3. Select the BAPIs.
 - a. Expand **RFC (filtered)**.
 - b. From the Discovered object list, select one or more BAPIs that you want to use.
4. Click the arrow button to add the BAPIs to the **Selected objects** list.
5. In the Configuration Properties window, perform the following steps for each BAPI to add it to the list of business objects to be imported:
 - a. Optionally, select the **Use the original character case of SAP field names to generate business object attribute names** check box. By default (when the check box is not selected), the field descriptions are used to generate properties.
 - b. Optionally, select the **Process Date fields as String** check box. This allows the adapter to retrieve SAP-specific date formats which are otherwise non-standard in Java by using the String type instead of the Date type format.

Note: To use this feature, ensure that the above check box is selected while running the external service wizard. As the date fields are converted to string type, ensure that all downstream dependencies (if any) are taken care of.

- c. If the BAPI has optional parameters associated with it, select the **Select optional parameters to include as child objects** check box, expand **Optional parameters**, and select the type of parameters (import, export, or table) that you want to work with.

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

If you are adding BAPI_CUSTOMER_GETDETAIL function module, you have the option of adding the following parameters:

Optional Import Parameters:

PI_PASS_BUFFER
PI_DIVISION
PI_DISTR_CHAN

Optional Export Parameters:

PE_ADDRESS
RETURN

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

- d. Click **OK** to add the BAPI 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 the left arrow.

6. Click **Next**.

Results

The external service wizard has returned the functions that match the search criteria, and you have selected the functions you want to work with. The Specify Composite Properties window is displayed.

What to do next

Provide information about the business objects (such as the name of the top-level object and associated operation).

Trimming leading white spaces in IDoc Data Records

The adapter now optionally trim leading white spaces in IDoc Data Records. This behavior can be controlled using the new Trim ALE IDoc field data (trimAleData) EMD property.

Activation specification properties for ALE inbound processing

Activation specification properties hold the inbound event processing configuration information for a message endpoint.

Activation specification properties are used during endpoint activation to notify the adapter of eligible event listeners. During inbound processing, the adapter uses these event listeners to receive events before forwarding them to the endpoint.

You set the activation specification properties using the external service wizard and can change them using the WebSphere Integration Developer Assembly Editor, or after deployment through the WebSphere Process Server or WebSphere Enterprise Service Bus administrative console.

The following table lists and describes the activation specification properties for ALE inbound processing. A more detailed description of each property is provided in the sections that follow the table. For information on how to read the property detail tables in the sections that follow, see Guide to information about properties.

Table 1. Activation specification properties for ALE inbound processing

Property name		Description
In the wizard	In the administrative console	
"Failure code" on page 12	aleFailureCode	Specifies the status code for dispatch failure.
"Failure text" on page 13	aleFailureText	Specifies the descriptive text for dispatch failure.
"ALE packet audit" on page 13	alePacketUpdate	Specifies if the adapter should send ALEAUD per IDoc or per packet (TID)
"Selective update" on page 13	aleSelectiveUpdate	Specifies which IDoc Type and MessageType combinations are to be updated when the adapter is configured to update a standard SAP status code.
"Status message code" on page 14	aleStatusMsgCode	If required, specifies the message code to use when the adapter posts the ALEAUD Message IDoc (ALEAUD01).
"Success code" on page 14	aleSuccessCode	Specifies the success status code for Application Document Posted.
"Success text" on page 15	aleSuccessText	Specifies the descriptive text for successful Application Document Posted.
"ALE update status" on page 15	aleUpdateStatus	Specifies whether an audit trail is required for all message types.
"Assured once-only delivery" on page 16	AssuredOnceDelivery	Specifies whether to provide assured-once delivery for inbound events.
"Auto create event table" on page 16	EP_CreateTable	Indicates whether the adapter should create the event recovery table automatically if it does not already exist.
"Client" on page 17	Client	The client number of the SAP system to which the adapter connects.
"Codepage number" on page 17	Codepage	Indicates the numeric identifier of the code page.
"Event recovery data source (JNDI) name" on page 18	EP_SchemaName	The schema used for automatically creating the event recovery table.
"Enable Secure Network Connection" on page 18	SncMode	Indicates whether secure network connection mode is used.
"Event recovery data source (JNDI) name" on page 18	EP_DataSource_JNDIName	The JNDI name of the data source configured for event recovery.
"Event recovery table name" on page 19	EP_TableName	The name of the event recovery table.

Table 1. Activation specification properties for ALE inbound processing (continued)

Property name		Description
In the wizard	In the administrative console	
Retry limit for failed events	FailedEventRetryLimit	The number of times the adapter attempts to redeliver an event before marking the event as failed.
“Folder for RFC trace files” on page 20	RfcTracePath	Sets the fully qualified local path to the folder into which the RFC trace files are written.
“Gateway host” on page 20	GatewayHost	The host name of the SAP gateway.
“Gateway service” on page 20	GatewayService	The identifier of the gateway on the gateway host that carries out the RFC services.
“Host name” on page 21	ApplicationServerHost	Specifies the IP address or the name of the application server host that the adapter logs on to.
“IDoc empty tags” on page 21	IDocEmptyTag	Includes empty tags to the unpopulated fields in the IDoc segment, which are sent to a configured endpoint, based on the option selected.
“Ignore IDoc packet errors” on page 22	IgnoreIDocPacketErrors	Determines what the adapter does when it encounters an error while processing the IDoc packet.
“Language code” on page 22	Language code	Specifies the Language code in which the adapter logs on to SAP.
“Logon group name” on page 22	Group	An identifier of the name of the group of application server instances that have been defined in transaction SMLG and linked together for logon load balancing.
“Load Balancing” on page 23	loadBalancing	Specifies if your SAP configuration uses load balancing
“Maximum Number of retries in case of system connection failure” on page 23	connectionRetryLimit	The adapter will try connecting to the Enterprise Information System (EIS) for a specified number of tries. Select only if you want to reduce the number of connection exceptions in the outbound operation. If selected, adapter will validate the connection for each outbound request.
“Message server host” on page 24	MessageServerHost	Specifies the name of the host on which the message server is running.
“Number of listeners” on page 24	NumberOfListeners	Specifies the number of event listeners that are to be started.
“Partner character set” on page 25	PartnerCharset	Specifies PartnerCharset encoding.
“Password” on page 25	Password	The password of the user account of the adapter on the SAP application server.
“Password used to connect to event data source” on page 25	EP_Password	The user password for connecting to the database.
“Retry EIS connection on startup” on page 26	RetryConnectionOnStartup	Controls whether the adapter retries the connection to the EIS if it cannot connect at startup
“RFC program ID” on page 26	RfcProgramID	The remote function call identifier under which the adapter registers in the SAP gateway.
“RFC trace level” on page 27	RfcTraceLevel	Specifies the global trace level.
“RFC trace on” on page 27	RfcTraceOn	Specifies whether to generate a text file detailing the RFC activity for each event listener.

Table 1. Activation specification properties for ALE inbound processing (continued)

Property name		Description
In the wizard	In the administrative console	
"SAP system ID" on page 28	SAPSystemID	Specifies the system ID of the SAP system for which logon load balancing is allowed.
"Secure Network Connection library path" on page 28	SncLib	Specifies the path to the library that provides the secure network connection service.
"Secure Network Connection name" on page 28	SncMyname	Specifies the name of the secure network connection.
"Secure Network Connection partner" on page 29	SncPartername	Specifies the name of the secure network connection partner.
"Secure Network Connection security level" on page 29	SncQop	Specifies the level of security for the secure network connection.
"System number" on page 29	SystemNumber	The system number of the SAP application server.
"Time between retries in case of system connection failure (milliseconds)" on page 30	connectionRetryInterval	Specifies the time interval between attempts to restart the event listeners.
"Trim ALE Idoc field data" on page 30	trimAleData	Specifies if the leading white spaces are to be trimmed by the adapter before sending it to endpoint.
"User name" on page 30	userName	The user account for the adapter on the SAP server.
"User name used to connect to event data source" on page 31	EP_UserName	The user name for connecting to the database.
"X509 certificate" on page 31	X509cert	Specifies the X509 certificate to be used as the logon ticket.

Failure code

The value entered determines how the adapter updates the SAP failure status code after the ALE module has retrieved an IDoc object for event processing.

Table 2. ALE failure code details

Required	Yes if AleUpdateStatus is set to True; no otherwise
Possible values	68 58
Default	40, 51, 68
Property type	Integer
Usage	<p>Set a value for this property only if you set the value for AleUpdateStatus to True.</p> <p>Specify a value 68 for this property to cause the adapter to update the SAP failure status code after the ALE module has retrieved an IDoc object for event processing. SAP converts this value to 40 (Application Document not created in receiving system).</p> <p>When you set the AleUpdateStatus property to True, the adapter updates a standard SAP status code after the adapter retrieves an IDoc object for event processing. An IDoc that is not successfully sent to the endpoint is considered a failure. You use the ALE failure code property to specify the code used to signify this failure.</p>
Globalized	No
Bidi supported	No

Failure text

The text that displays in the event that an IDoc is not successfully sent to the endpoint.

Table 3. ALE failure text details

Required	Yes if AleUpdateStatus is set to True; no otherwise.
Possible values	40, 51, 68
Default	68 Error - no further processing. The values in the text boxes change in accordance with the failure codes.
Property type	String
Usage	Use this property only if you set the AleUpdateStatus property to True. The length of the text string cannot exceed 70 characters. When you set the AleUpdateStatus property to True, the adapter updates a standard SAP status code after the adapter retrieves an IDoc object for event processing. An IDoc that is not successfully sent to the endpoint is considered a failure. You use the ALE failure text property to specify the descriptive text used to signify this failure.
Example	ALE Dispatch Failed
Globalized	Yes
Bidi supported	No

ALE packet audit

ALE update per packet indicates whether the adapter should send ALEAUD audit IDocs per packet or per IDoc.

Table 4. ALE packet audit details

Required	No
Default	False (send ALEAUD per IDoc).
Property type	Boolean
Usage	You can enable/disable this property only if AleUpdateStatus is set to True. When you set this property to true, the adapter sends one ALEAUD per IDoc packet which contains confirmations for all IDocs in the packet. When you set this property to false, the adapter sends one ALEAUD for each IDoc received at the adapter.
Globalized	No
Bidi supported	No

Selective update

Specifies which IDoc Type and MessageType combinations are to be updated.

Table 5. ALE selective update details

Required	No
Default	No default value
Property type	String

Table 5. ALE selective update details (continued)

Usage	<p>You can set values for this property only if AleUpdateStatus has been set to True.</p> <p>When you set the AleUpdateStatus property to True, the adapter updates a standard SAP status code after the adapter retrieves an IDoc object for event processing. You use the ALE selective update property to specify which IDoc Type and MessageType combinations are to be updated.</p> <p>The syntax for this property is: IDocType: MessageType [;IDocType: MessageType [;...]] where a slash (/) delimiter separates each IDoc Type and MessageType, and a semicolon (;) delimiter separates entries in a set.</p>
Example	<p>The following example illustrates two sets. In the example, MATMAS03 and DEBMAS03 are the IDocs, and MATMAS and DEBMAS are the message types:</p> <p>MATMAS03/MATMAS;DEBMAS03/DEBMAS</p>
Globalized	No
Bidi supported	No

Status message code

This property specifies the message code to use when the adapter posts the ALEAUD01 IDoc with message type ALEAUD.

Table 6. ALE status message code details

Required	No
Possible values	For list of available codes, refer to the SAP table TEDS1.
Default	No default value.
Property type	String
Usage	<ul style="list-style-type: none"> You can set a value for this property only if AleUpdateStatus has been set to True. You must configure this message code in the receiving partner profile on SAP.
Globalized	No
Bidi supported	No

Success code

ALE success code for the successful posting of an IDoc.

Table 7. ALE success code details

Required	Yes if AleUpdateStatus is set to True; no otherwise
Possible values	30, 41, 55
Default	55 - Application document posted. The values in the text boxes change in accordance with the success codes
Property type	Integer

Table 7. ALE success code details (continued)

Usage	<p>Use this property only if you set the AleUpdateStatus property to True.</p> <p>When you set the AleUpdateStatus property to True, the adapter updates a standard SAP status code after the adapter retrieves an IDoc object for event processing. You use the ALE success code property to specify the code for IDoc posted as 53.</p> <p>After the IDoc is sent to the endpoint, the IDoc status remains as 03 (IDoc posted to port) in SAP. After posting the IDoc, the adapter posts the audit IDoc with the current IDoc number and status as 53. SAP converts the current IDoc status to 41 (Application Document Created in Receiving System).</p>
Globalized	No
Bidi supported	No

Success text

Indicates the text that displays when an application document is posted successfully.

Table 8. ALE success text details

Required	Yes if AleUpdateStatus is set to True; no otherwise.
Possible values	30, 41, 55
Default	55 - Application document posted. The values in the text boxes change in accordance with the success codes
Property type	String
Usage	<p>Use this property only if you set the AleUpdateStatus property to True.</p> <p>The length of the text string cannot exceed 70 characters.</p> <p>When you set the AleUpdateStatus property to True, the adapter updates a standard SAP status code after the adapter retrieves an IDoc object for event processing. You use the ALE success text property to specify the descriptive text used to signify Application Document Posted.</p>
Example	ALE Dispatch OK
Globalized	Yes
Bidi supported	No

ALE update status

This property specifies whether an audit trail is required for all message types.

Table 9. ALE update status details

Required	Yes
Possible values	True False
Default	False
Property type	Boolean

Table 9. ALE update status details (continued)

Usage	<p>Set this property to True if you want the adapter to update a standard SAP status code after the ALE module has retrieved an IDoc object for event processing.</p> <p>If you set this value to True, you must also set following properties:</p> <ul style="list-style-type: none"> • AleFailureCode • AleSuccessCode • AleFailureText • AleSuccessText.
Globalized	No
Bidi supported	No

Assured once-only delivery

This property specifies whether to provide assured once-only delivery for inbound events.

Table 10. Assured once-only delivery details

Required	No
Default	False
Property type	Boolean
Usage	<p>When this property is set to True, the adapter provides assured once event delivery. This means that each event will be delivered once and only once. A value of False does not provide assured once event delivery, but provides better performance.</p> <p>When this property is set to True, the adapter attempts to store transaction (XID) information in the event store. If it is set to False, the adapter does not attempt to store the information.</p> <p>This property is used only if the export component is transactional. If the export component is not transactional, no transaction can be used, regardless of the value of this property.</p>
Globalized	No
Bidi supported	No

Auto create event table

Determines if the event table is created automatically.

Table 11. Auto create event table details

Required	Yes, if Assured once-only event delivery is set to True, No otherwise.
Possible values	True False
Default	True
Property type	Boolean
Usage	<p>This property indicates whether the adapter should create the event recovery table automatically if it does not already exist.</p> <p>In the administrative console, this property is listed as "EP_CreateTable".</p> <p>If you specify a value of True to automatically create the table, you must specify information about the event table (such as the event recovery table name).</p> <p>The value provided in the Event recovery table name property is used to create the table.</p>

Table 11. Auto create event table details (continued)

Globalized	No
Bidi supported	No

Client

This property is the client number of the SAP system to which the adapter connects.

Table 12. Client details

Required	Yes
Possible values	You can enter a range of values from 000 to 999.
Default	100
Property type	Integer
Usage	When an application attempts to log on to the SAP server, the SAP server requires that the application have a Client number associated with it. The Client property value identifies the client (the adapter) that is attempting to log onto the SAP server.
Globalized	No
Bidi supported	No

Codepage number

The numeric identifier of the code page.

Table 13. Codepage number details

Required	No
Possible values	You can enter a range of values from 0000 to 9999. For a full listing of languages and associated codepage numbers supported by SAP, access SAP Note 7360.
Default	The default value for this property is conditionally determined by the value set for the Language code property.
Property type	Integer
Usage	The value assigned to the Codepage number defines the code page to be used and has a one-to-one relationship with the value set for the Language code property. The Codepage number establishes a connection to the appropriate language. Each language code value has a codepage number value associated with it. For example, the language code for English, is EN. If you selected EN (English) as your language code, the codepage number is automatically set to the numeric value associated with EN (English). The SAP code page number for EN (English) is 1100.
Example	If Language code is set to JA (Japanese), Codepage number is set to 8000.
Globalized	No
Bidi supported	No

Database schema name

This property is the schema used for automatically creating the event recovery table.

Note: In the administrative console, this property is listed as "EP_SchemaName".

Table 14. Database schema name details

Required	No
Default	No default value.
Property type	String
Usage	Specifies the schema name for the database used by the adapters event persistence feature.
Example	ALE_SCHEMA
Globalized	Yes
Bidi supported	No

Enable Secure Network Connection

This property indicates whether secure network connection mode is enabled.

Table 15. Enable Secure Network Connection details

Required	No
Possible values	0 (off) 1 (on)
Default	0
Property type	String
Usage	Set the value to 1 (on) if you want to use secure network connection. If you set this value to 1, you must also set following properties: <ul style="list-style-type: none"> • "Secure Network Connection library path" on page 28 • "Secure Network Connection name" on page 28 • "Secure Network Connection partner" on page 29 • "Secure Network Connection security level" on page 29.
Globalized	No
Bidi supported	No

Event recovery data source (JNDI) name

This property is the JNDI name of the data source configured for event recovery.

Note: In the administrative console, this property is listed as "EP_DataSource_JNDIName".

Table 16. Event recovery data source (JNDI) name details

Required	Yes
Default	No default value.
Property type	String
Usage	Used in event recovery processing. The data source must be created in administrative console. The adapter utilizes data source for <i>persisting</i> the event state.
Example	jdbc/DB2
Globalized	No
Bidi supported	No

Event recovery table name

This property is the name of the event recovery table.

Note: In the administrative console, this property is listed as "EP_TableName".

Table 17. Event recovery table name details

Required	Yes
Default	No default value.
Property type	String
Usage	Used in event recovery processing. Consult database documentation for information on naming conventions. It is recommended that a separate event recovery table is configured for each endpoint. The same data source can be used to hold all of the event recovery tables.
Example	EVENT_TABLE
Globalized	No
Bidi supported	No

Retry limit for failed events (FailedEventRetryLimit)

This property specifies the number of times that the adapter attempts to redeliver an event before marking the event as failed.

Table 18. Retry limit for failed events details

Required	No
Possible values	Integers
Default	5
Property type	Integer
Usage	Use this property to control how many times the adapter tries to send an event before marking it as failed. It accepts the following values: Default If this property is not set, the adapter tries five additional times before marking the event as failed. 0 The adapter tries to deliver the event an infinite number of times. When the property is set to 0, the event remains in the event store and the event is never marked as failed. > 0 For integers greater than zero, the adapter retries the specified number of times before marking the event as failed. < 0 For negative integers, the adapter does not retry failed events.
Globalized	No
Bidi supported	No

Folder for RFC trace files

This property sets the fully qualified local path to the folder in which to write RFC trace files.

Table 19. Folder for RFC trace files details

Required	No
Default	No default value
Property type	String
Usage	Identifies the fully qualified local path into which RFC trace files are written. If RFC trace on is set to False (not selected), you are not permitted to set a value in the Folder for RFC trace files property. This field cannot be edited if you are modifying existing artifacts
Example	c:\temp\rfcTraceDir
Globalized	Yes
Bidi supported	No

Gateway host

This property is the Gateway host name. Enter either the IP address or the name of the Gateway host. Consult with your SAP administrator for information on the Gateway host name.

Table 20. Gateway host details

Required	Yes
Default	No default value
Property type	String
Usage	This property is the host name of the SAP gateway. The gateway enables communication between work processes on the SAP system and external programs. The host identified is used as the gateway for the resource adapter. Maximum length of 20 characters. If the computer name is longer than 20 characters, define a symbolic name in the THOSTS table.
Globalized	No
Bidi supported	No

Gateway service

This property is the identifier of the gateway on the gateway host that carries out the RFC services.

Table 21. Gateway service details

Required	Yes
Default	sapgw00
Property type	String

Table 21. Gateway service details (continued)

Usage	These services enable communication between work processes on the SAP server and external programs. The service typically has the format of sapgw00, where 00 is the SAP system number. Maximum of 20 characters.
Globalized	No
Bidi supported	No

Host name

Specifies the IP address or the name of the application server host that the adapter logs on to.

Table 22. Host name details

Required	Yes (when load balancing is not used).
Default	No default value
Property type	String
Usage	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 on to.
Example	sapServer
Globalized	No
Bidi supported	No

IDoc empty tags

This property includes empty tags to the unpopulated fields in the IDoc segment, which are sent to a configured endpoint, based on the option selected.

Table 23. IDoc empty tags

Required	No
Possible Values	BEFORE_AND_AFTER ONLY_BEFORE ALL_UNPOPULATED_FIELDS_SEGMENTS
Default	ONLY_BEFORE
Property type	String
Usage	Use this property to select the following IDoc empty tag options: <ul style="list-style-type: none"> • BEFORE_AND_AFTER - Include empty tags to the unpopulated fields before and after the populated fields within the IDoc segments. • ONLY_BEFORE - Include empty data for the unpopulated fields within an IDoc segment before the populated field. • ALL_UNPOPULATED_FIELDS_SEGMENTS - Include empty tags to the unpopulated fields in all the IDoc segments.
Globalized	No
Bidi supported	No

Ignore IDoc packet errors

Determines whether or not IDoc packet errors are to be ignored.

Table 24. Ignore IDOC packet errors details

Required	No
Possible values	True False
Default	False
Property type	Boolean
Usage	<p>If the adapter encounters an error while processing the IDoc packet, it can behave in two different ways.</p> <ul style="list-style-type: none">• When this property is set to False, the adapter stops processing further IDocs in that packet and reports an error to the SAP system.• When this property is set to True, the adapter logs an error and continues processing the rest of the IDocs in that packet. <p>The status of the transaction is marked as INPROGRESS. The adapter log would display the IDoc numbers that failed and you need to resubmit those individual IDocs separately. You need to manually maintain these records in the event recovery table.</p> <p>This property is not used for single IDocs and for non-split IDoc packets.</p>
Globalized	No
Bidi supported	No

Language code

This property specifies the Language code in which the adapter logs on.

Table 25. Language code details

Required	Yes
Possible values	For a full listing of languages and associated codepage numbers supported by SAP, access SAP Note 7360.
Default	The default value for the Language code property is based on the system locale.
Property type	String
Usage	<p>Each of the supported languages is preceded by a 2 character language code. The language itself is displayed in parentheses.</p> <p>The language codes that display in the list represent the SAP default set of 41 languages for non Unicode systems plus Arabic.</p> <p>The value you select determines the value of the Codepage number property.</p> <p>If you manually enter a language code, you do not need to enter the language in parentheses.</p>
Example	If the system locale is English, the value for this property is EN (English).
Globalized	No
Bidi supported	No

Logon group name

This property is an identifier for the name of the group of application server instances that have been defined in transaction SMLG and linked together for logon load balancing.

Table 26. Logon group details

Required	Yes (if load balancing is used)
Possible values	Consult SAP documentation for information on creating Logon groups and on calling transaction SMLG.
Default	No default value
Property type	String
Usage	<p>When the adapter is configured for load balancing, this property represents the name of the group of application server instances that have been defined in transaction SMLG and linked together for logon load balancing.</p> <p>Logon load balancing allows for the dynamic distribution of logon connections to application server instances.</p> <p>Maximum of 20 characters. On most SAP systems, the SPACE logon group is reserved by SAP.</p>
Globalized	No
Bidi supported	No

Load Balancing

This property specifies if your SAP configuration uses load balancing

Table 27. Load balancing details

Required	Yes
Possible values	TrueFalse
Default	False
Property type	Boolean
Usage	This value should be set to true if the SAP configuration uses load balancing. If set to true, Message server host, Logon group and SAP System ID need to be specified.
Globalized	No
Bidi supported	No

Maximum Number of retries in case of system connection failure

This property specifies the number of times the adapter attempts to create a connection to the Enterprise Information System (EIS). The adapter will try connecting to the EIS for the specified number of times. Select only if you want to reduce the number of connection exceptions in the outbound operation. If selected, the adapter will validate the connection for each outbound request.

Table 28. Reset Client details

Required	No
Possible values	Integers
Default	0
Property type	Integer

Table 28. Reset Client details (continued)

Usage	<p>Only positive values are valid.</p> <p>When the adapter encounters an error related to the outbound connection, it retries to establish a physical connection (when physical connection is not established) for the number of times specified for this property with a time delay specified in the property Time between retries in case of system connection failure (milliseconds).</p> <p>If the value is 0, the adapter does not perform any EIS connection validation and executes the outbound operation.</p> <p>if the value is > 0, then during each request the adapter validates if the EIS connection is active.</p> <ul style="list-style-type: none"> • If the connection is valid the operation is completed. • if connection is invalid, the adapter invalidates the current managed connection and a new managed connection is created (new physical connection)
Globalized	No
Bidi supported	No

Message server host

This property specifies the name of the host on which the message server is running.

Table 29. Message server host details

Required	Yes (if load balancing is used)
Default	No default value
Property type	String
Usage	<p>This property specifies the name of the host that will inform all the servers (instances) belonging to this SAP system of the existence of the other servers to be used for load balancing.</p> <p>The message server host contains the information about load balancing for RFC clients so that an RFC client can be directed to an appropriate application server.</p>
Example	SAPERP05
Globalized	No
Bidi supported	No

Number of listeners

This property specifies the number of listeners that are started by an event.

Table 30. Number of listeners details

Required	No
Default	1
Property type	Integer
Usage	<p>For event sequencing, this property should be set to 1.</p> <p>To improve adapter performance, you can increase the number of listeners.</p> <p>Note: The adapter will not start if the number of listeners is 0</p>
Globalized	No

Table 30. Number of listeners details (continued)

Bidi supported	No
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Partner character set

This property specifies the partner character set encoding.

Table 31. Partner character set details

Required	No
Default	UTF-8
Property type	String
Usage	When an encoding is specified, it is used; otherwise the default encoding is used.
Globalized	No
Bidi supported	No

Password

This property is the password of the user account of the adapter on the SAP application server.

Table 32. Password details

Required	Yes
Default	No default value
Property type	String
Usage	<p>The restrictions on the password depend on the version of SAP Web Application Server.</p> <ul style="list-style-type: none"> • For SAP Web Application Server version 6.40 or earlier, the password: <ul style="list-style-type: none"> – Must be uppercase – Must be 8 characters in length • For versions of SAP Web Application Server later than 6.40, the password: <ul style="list-style-type: none"> – Is not case-sensitive – Can be up to 40 characters in length
Globalized	No
Bidi supported	Yes

Password used to connect to event data source

This property is the user password for connecting to the database.

Note: In the administrative console, this property is listed as "EP_Password".

Table 33. Password to connect to event data source details

Required	Yes
Default	No default value.
Property type	String
Usage	This property specifies the password used by event persistence processing to obtain the database connection from the data source.
Globalized	Yes

Table 33. Password to connect to event data source details (continued)

Bidi supported	No
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Retry EIS connection on startup

This property controls whether the adapter retries the connection to the EIS if it cannot connect at startup. This property is used in conjunction with “Maximum Number of retries in case of system connection failure” on page 23 and “Time between retries in case of system connection failure (milliseconds)” on page 30.

Table 34. Retry EIS connection on startup

Required	No
Possible Values	True False
Default	False
Property type	Boolean
Usage	If the value is true, it indicates that the adapter will retry the connection to EIS if it cannot connect at startup. The values for the following properties have to be specified: <ul style="list-style-type: none"> • “Maximum Number of retries in case of system connection failure” on page 23 • “Time between retries in case of system connection failure (milliseconds)” on page 30 If the value is false, it indicates that the adapter will not retry the connection to EIS if it cannot connect at startup.
Globalized	No
Bidi supported	No

RFC program ID

This property is the program identifier under which the adapter registers in the SAP gateway.

Table 35. RFC program ID details

Required	Yes
Possible values	Use the SAP transaction SM59 (Display and Maintain RFC Destinations) to see a list of available RFC program IDs.
Default	No default value.
Property type	String
Usage	The adapter registers with the gateway so that listener threads can process events from RFC-enabled functions. This value must match the program ID registered in the SAP application. The maximum length is 64 characters.
Globalized	No
Bidi supported	No

RFC trace level

This property specifies the global trace level.

Table 36. RFC trace level details

Required	No
Possible values	0 - No error 1 - Errors and warnings 2 - Execution path, errors and warnings 3 - Full Execution path, errors and warnings 4 - Execution path, info messages, errors and warnings 6 - Full execution path, info messages, errors and warnings 7 - Debug messages, full execution path, info messages, errors and warnings 8 - Verbose debug messages, full execution path, info messages, errors and warnings
Default	1
Property type	Integer
Usage	If RFC trace on is set to <code>False</code> (not selected), you cannot set a value in the RFC trace level property.
Globalized	No
Bidi supported	No

RFC trace on

This property specifies whether to generate a text file detailing the RFC activity for each event listener.

Table 37. RFC trace on details

Required	No
Possible values	True False
Default	False
Property type	Boolean
Usage	A value of <code>True</code> activates tracing, which generates a text file. This file is created in the directory in which the adapter process was started. The file has a prefix of <code>rfx</code> and a file type of <code>trc</code> (for example, <code>rfc03912_02220.trc</code>). Use these text files in a development environment only, because the files can grow rapidly. If RFC trace on is set to <code>False</code> (not selected), you cannot set values in the Folder for RFC trace files or RFC trace level properties.
Example	Examples of the information in the file are <code>RfcCall FUNCTION BAPI_CUSTOMER_GETLIST</code> , followed by the information for the parameters in the interface, or <code>RFC Info rfctable</code> , followed by the data from one of the interface tables. The trace file is created in the directory where the adapter process has been started. The trace file has a <code>.trc</code> file extension and the file name will start with the letters <code>rfc</code> followed by a unique identifier. For example, <code>rfc03912_02220.trc</code> .
Globalized	No
Bidi supported	No

SAP system ID

This property specifies the system ID of the SAP system for which logon load balancing is allowed.

Table 38. SAP system ID details

Required	Yes (when load balancing is used)
Default	No default value
Property type	String
Usage	Value must be three characters
Example	DYL
Globalized	No
Bidi supported	No

Secure Network Connection library path

This property specifies the path to the library that provides the secure network connection service.

Table 39. Secure Network Connection library path details

Required	Yes, if SncMode is set to 1; no otherwise.
Default	No default value
Property type	String
Usage	If the SncMode property is set to 1 (indicating that you are using a secure network connection), specify the path to the library that provides the service.
Example	/WINDOWS/system32/gssapi32.dll
Globalized	No
Bidi supported	No

Secure Network Connection name

This property specifies the name of the secure network connection.

Table 40. Secure Network Connection name details

Required	Yes, if SncMode is set to 1; no otherwise.
Default	No default value
Property type	String
Usage	If the SncMode property is set to 1 (indicating that you are using a secure network connection), specify a name for the connection.
Example	DOMAINNAME/USERNAME
Globalized	No
Bidi supported	No

Secure Network Connection partner

This property specifies the name of the secure network connection partner.

Table 41. Secure Network Connection partner details

Required	Yes, if SncMode is set to 1; no otherwise.
Default	No default value
Property type	String
Usage	If the SncMode property is set to 1 (indicating that you are using a secure network connection), specify a name for the connection partner.
Example	CN=sap00.saperpdev, OU=Adapter, O=IBM, C=US
Globalized	No
Bidi supported	No

Secure Network Connection security level

This property specifies the level of security for the secure network connection.

Table 42. Secure Network Connection security level details

Required	Yes, if SncMode is set to 1; no otherwise.
Possible values	1 (Authentication only) 2 (Integrity protection) 3 (Privacy protection) 8 (Use the value from snc/data_protection/use on the application server) 9 (Use the value from snc/data_protection/max on the application server)
Default	3 (Privacy protection)
Property type	String
Usage	If the SncMode property is set to 1 (indicating that you are using a secure network connection), specify a value to indicate the level of security for the connection.
Globalized	No
Bidi supported	No

System number

This property is the system number of the SAP application server.

Table 43. System number details

Required	Yes
Possible values	You can enter a range of values from 00 to 99.
Default	00
Property type	Integer
Usage	The system number further identifies the Gateway service.
Globalized	No
Bidi supported	No

Time between retries in case of system connection failure (milliseconds)

This property specifies the time interval between attempts to connect to the Enterprise Information System (EIS).

Table 44. Time between retries in case of system connection failure details

Required	No
Possible Values	Positive Integers
Default	60000
Unit of measure	Milliseconds
Property type	Integer
Usage	When the adapter encounters an error related to the outbound connection, this property specifies the time interval that the adapter waits in between attempts to reestablish an outbound connection. It is disabled by default and is only enabled when the value of Maximum Number of retries in case of system connection failure is greater than 0.
Globalized	No
Bidi supported	No

Trim ALE Idoc field data

This property specifies if the leading white spaces are trimmed by the adapter before sending it to endpoint.

Table 45. Trim ALE Idoc field data

Required	No
Possible Values	True False
Default	True
Property type	Boolean
Usage	Set the value to True, if you want the leading white spaces to be trimmed by the adapter before sending it to endpoint. By default, the value is set to True. Set the value to False, if you do not want the leading white spaces to be trimmed by the adapter.
Globalized	No
Bidi supported	No

User name

This property is the user account for the adapter on the SAP server.

Table 46. User name details

Required	Yes
Default	No default value
Property type	String

Table 46. User name details (continued)

Usage	Maximum length of 12 characters. The user name is not case sensitive. It is recommended that you set up a CPIC user account in the SAP application and that you give this account the necessary privileges to manipulate the data required by the business objects supported by the adapter. For example, if the adapter must perform certain SAP business transactions, the adapter's account in the SAP application must have the permissions set to allow it to perform these transactions.
Example	SapUser
Globalized	Yes
Bidi supported	Yes

User name used to connect to event data source

This property is the user name for connecting to the database.

Note: In the administrative console, this property is listed as "EP_UserName".

Table 47. User name to connect to event data source details

Required	Yes
Default	No default value.
Property type	String
Usage	User name used by event persistence for getting the database connection from the data source. Consult database documentation for information on naming conventions.
Globalized	Yes
Bidi supported	No

X509 certificate

This property specifies the X509 certificate to be used as the logon ticket.

Table 48. X509 certificate details

Required	No.
Default	No default value
Property type	String
Usage	If the SncMode property is set to 1 (indicating that you are using a secure network connection), you can provide a value for the X509 certificate.
Globalized	No
Bidi supported	No

Sending empty XML tags in a Business Object

When sending a processed Business Object to an end-point, the adapter can now send empty tags for fields in the Business Object having no data. This new feature can be enabled using the new Activation Specification property IDoc empty tags (IDocEmptyTag).

Activation specification properties for ALE inbound processing

Activation specification properties hold the inbound event processing configuration information for a message endpoint.

Activation specification properties are used during endpoint activation to notify the adapter of eligible event listeners. During inbound processing, the adapter uses these event listeners to receive events before forwarding them to the endpoint.

You set the activation specification properties using the external service wizard and can change them using the WebSphere Integration Developer Assembly Editor, or after deployment through the WebSphere Process Server or WebSphere Enterprise Service Bus administrative console.

The following table lists and describes the activation specification properties for ALE inbound processing. A more detailed description of each property is provided in the sections that follow the table. For information on how to read the property detail tables in the sections that follow, see Guide to information about properties.

Table 49. Activation specification properties for ALE inbound processing

Property name		Description
In the wizard	In the administrative console	
"Failure code" on page 34	aleFailureCode	Specifies the status code for dispatch failure.
"Failure text" on page 35	aleFailureText	Specifies the descriptive text for dispatch failure.
"ALE packet audit" on page 35	alePacketUpdate	Specifies if the adapter should send ALEAUD per IDoc or per packet (TID)
"Selective update" on page 36	aleSelectiveUpdate	Specifies which IDoc Type and MessageType combinations are to be updated when the adapter is configured to update a standard SAP status code.
"Status message code" on page 36	aleStatusMsgCode	If required, specifies the message code to use when the adapter posts the ALEAUD Message IDoc (ALEAUD01).
"Success code" on page 37	aleSuccessCode	Specifies the success status code for Application Document Posted.
"Success text" on page 37	aleSuccessText	Specifies the descriptive text for successful Application Document Posted.
"ALE update status" on page 37	aleUpdateStatus	Specifies whether an audit trail is required for all message types.
"Assured once-only delivery" on page 38	AssuredOnceDelivery	Specifies whether to provide assured-once delivery for inbound events.
"Auto create event table" on page 38	EP_CreateTable	Indicates whether the adapter should create the event recovery table automatically if it does not already exist.
"Client" on page 39	Client	The client number of the SAP system to which the adapter connects.
"Codepage number" on page 39	Codepage	Indicates the numeric identifier of the code page.
"Event recovery data source (JNDI) name" on page 40	EP_SchemaName	The schema used for automatically creating the event recovery table.

Table 49. Activation specification properties for ALE inbound processing (continued)

Property name		Description
In the wizard	In the administrative console	
"Enable Secure Network Connection" on page 40	SrcMode	Indicates whether secure network connection mode is used.
"Event recovery data source (JNDI) name" on page 40	EP_DataSource_JNDIName	The JNDI name of the data source configured for event recovery.
"Event recovery table name" on page 41	EP_TableName	The name of the event recovery table.
Retry limit for failed events	FailedEventRetryLimit	The number of times the adapter attempts to redeliver an event before marking the event as failed.
"Folder for RFC trace files" on page 42	RfcTracePath	Sets the fully qualified local path to the folder into which the RFC trace files are written.
"Gateway host" on page 42	GatewayHost	The host name of the SAP gateway.
"Gateway service" on page 43	GatewayService	The identifier of the gateway on the gateway host that carries out the RFC services.
"Host name" on page 43	ApplicationServerHost	Specifies the IP address or the name of the application server host that the adapter logs on to.
"IDoc empty tags" on page 43	IDocEmptyTag	Includes empty tags to the unpopulated fields in the IDoc segment, which are sent to a configured endpoint, based on the option selected.
"Ignore IDoc packet errors" on page 44	IgnoreIDocPacketErrors	Determines what the adapter does when it encounters an error while processing the IDoc packet.
"Language code" on page 44	Language code	Specifies the Language code in which the adapter logs on to SAP.
"Logon group name" on page 45	Group	An identifier of the name of the group of application server instances that have been defined in transaction SMLG and linked together for logon load balancing.
"Load Balancing" on page 45	loadBalancing	Specifies if your SAP configuration uses load balancing
"Maximum Number of retries in case of system connection failure" on page 46	connectionRetryLimit	The adapter will try connecting to the Enterprise Information System (EIS) for a specified number of tries. Select only if you want to reduce the number of connection exceptions in the outbound operation. If selected, adapter will validate the connection for each outbound request.
"Message server host" on page 46	MessageServerHost	Specifies the name of the host on which the message server is running.
"Number of listeners" on page 47	NumberOfListeners	Specifies the number of event listeners that are to be started.
"Partner character set" on page 47	PartnerCharset	Specifies PartnerCharset encoding.
"Password" on page 47	Password	The password of the user account of the adapter on the SAP application server.
"Password used to connect to event data source" on page 48	EP_Password	The user password for connecting to the database.
"Retry EIS connection on startup" on page 48	RetryConnectionOnStartup	Controls whether the adapter retries the connection to the EIS if it cannot connect at startup

Table 49. Activation specification properties for ALE inbound processing (continued)

Property name		Description
In the wizard	In the administrative console	
"RFC program ID" on page 48	RfcProgramID	The remote function call identifier under which the adapter registers in the SAP gateway.
"RFC trace level" on page 49	RfcTraceLevel	Specifies the global trace level.
"RFC trace on" on page 49	RfcTraceOn	Specifies whether to generate a text file detailing the RFC activity for each event listener.
"SAP system ID" on page 50	SAPSystemID	Specifies the system ID of the SAP system for which logon load balancing is allowed.
"Secure Network Connection library path" on page 50	SncLib	Specifies the path to the library that provides the secure network connection service.
"Secure Network Connection name" on page 51	SncMyname	Specifies the name of the secure network connection.
"Secure Network Connection partner" on page 51	SncPartnername	Specifies the name of the secure network connection partner.
"Secure Network Connection security level" on page 51	SncQop	Specifies the level of security for the secure network connection.
"System number" on page 52	SystemNumber	The system number of the SAP application server.
"Time between retries in case of system connection failure (milliseconds)" on page 52	connectionRetryInterval	Specifies the time interval between attempts to restart the event listeners.
"Trim ALE Idoc field data" on page 52	trimAleData	Specifies if the leading white spaces are to be trimmed by the adapter before sending it to endpoint.
"User name" on page 53	userName	The user account for the adapter on the SAP server.
"User name used to connect to event data source" on page 53	EP_UserName	The user name for connecting to the database.
"X509 certificate" on page 53	X509cert	Specifies the X509 certificate to be used as the logon ticket.

Failure code

The value entered determines how the adapter updates the SAP failure status code after the ALE module has retrieved an IDoc object for event processing.

Table 50. ALE failure code details

Required	Yes if AleUpdateStatus is set to True; no otherwise
Possible values	68 58
Default	40, 51, 68
Property type	Integer

Table 50. ALE failure code details (continued)

Usage	<p>Set a value for this property only if you set the value for AleUpdateStatus to True.</p> <p>Specify a value 68 for this property to cause the adapter to update the SAP failure status code after the ALE module has retrieved an IDoc object for event processing. SAP converts this value to 40 (Application Document not created in receiving system).</p> <p>When you set the AleUpdateStatus property to True, the adapter updates a standard SAP status code after the adapter retrieves an IDoc object for event processing. An IDoc that is not successfully sent to the endpoint is considered a failure. You use the ALE failure code property to specify the code used to signify this failure.</p>
Globalized	No
Bidi supported	No

Failure text

The text that displays in the event that an IDoc is not successfully sent to the endpoint.

Table 51. ALE failure text details

Required	Yes if AleUpdateStatus is set to True; no otherwise.
Possible values	40, 51, 68
Default	68 Error - no further processing. The values in the text boxes change in accordance with the failure codes.
Property type	String
Usage	<p>Use this property only if you set the AleUpdateStatus property to True.</p> <p>The length of the text string cannot exceed 70 characters.</p> <p>When you set the AleUpdateStatus property to True, the adapter updates a standard SAP status code after the adapter retrieves an IDoc object for event processing. An IDoc that is not successfully sent to the endpoint is considered a failure. You use the ALE failure text property to specify the descriptive text used to signify this failure.</p>
Example	ALE Dispatch Failed
Globalized	Yes
Bidi supported	No

ALE packet audit

ALE update per packet indicates whether the adapter should send ALEAUD audit IDocs per packet or per IDoc.

Table 52. ALE packet audit details

Required	No
Default	False (send ALEAUD per IDoc).
Property type	Boolean

Table 52. ALE packet audit details (continued)

Usage	<p>You can enable/disable this property only if AleUpdateStatus is set to True.</p> <p>When you set this property to true, the adapter sends one ALEAUD per IDoc packet which contains confirmations for all IDocs in the packet.</p> <p>When you set this property to false, the adapter sends one ALEAUD for each IDoc received at the adapter.</p>
Globalized	No
Bidi supported	No

Selective update

Specifies which IDoc Type and MessageType combinations are to be updated.

Table 53. ALE selective update details

Required	No
Default	No default value
Property type	String
Usage	<p>You can set values for this property only if AleUpdateStatus has been set to True.</p> <p>When you set the AleUpdateStatus property to True, the adapter updates a standard SAP status code after the adapter retrieves an IDoc object for event processing. You use the ALE selective update property to specify which IDoc Type and MessageType combinations are to be updated.</p> <p>The syntax for this property is: IDocType: MessageType [;IDocType: MessageType [;...]] where a slash (/) delimiter separates each IDoc Type and MessageType, and a semicolon (;) delimiter separates entries in a set.</p>
Example	<p>The following example illustrates two sets. In the example, MATMAS03 and DEBMAS03 are the IDocs, and MATMAS and DEBMAS are the message types:</p> <p>MATMAS03/MATMAS;DEBMAS03/DEBMAS</p>
Globalized	No
Bidi supported	No

Status message code

This property specifies the message code to use when the adapter posts the ALEAUD01 IDoc with message type ALEAUD.

Table 54. ALE status message code details

Required	No
Possible values	For list of available codes, refer to the SAP table TEDS1.
Default	No default value.
Property type	String
Usage	<ul style="list-style-type: none"> You can set a value for this property only if AleUpdateStatus has been set to True. You must configure this message code in the receiving partner profile on SAP.
Globalized	No
Bidi supported	No

Success code

ALE success code for the successful posting of an IDoc.

Table 55. ALE success code details

Required	Yes if AleUpdateStatus is set to True; no otherwise
Possible values	30, 41, 55
Default	55 - Application document posted. The values in the text boxes change in accordance with the success codes
Property type	Integer
Usage	<p>Use this property only if you set the AleUpdateStatus property to True.</p> <p>When you set the AleUpdateStatus property to True, the adapter updates a standard SAP status code after the adapter retrieves an IDoc object for event processing. You use the ALE success code property to specify the code for IDoc posted as 53.</p> <p>After the IDoc is sent to the endpoint, the IDoc status remains as 03 (IDoc posted to port) in SAP. After posting the IDoc, the adapter posts the audit IDoc with the current IDoc number and status as 53. SAP converts the current IDoc status to 41 (Application Document Created in Receiving System).</p>
Globalized	No
Bidi supported	No

Success text

Indicates the text that displays when an application document is posted successfully.

Table 56. ALE success text details

Required	Yes if AleUpdateStatus is set to True; no otherwise.
Possible values	30, 41, 55
Default	55 - Application document posted. The values in the text boxes change in accordance with the success codes
Property type	String
Usage	<p>Use this property only if you set the AleUpdateStatus property to True.</p> <p>The length of the text string cannot exceed 70 characters.</p> <p>When you set the AleUpdateStatus property to True, the adapter updates a standard SAP status code after the adapter retrieves an IDoc object for event processing. You use the ALE success text property to specify the descriptive text used to signify Application Document Posted.</p>
Example	ALE Dispatch OK
Globalized	Yes
Bidi supported	No

ALE update status

This property specifies whether an audit trail is required for all message types.

Table 57. ALE update status details

Required	Yes
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Table 57. ALE update status details (continued)

Possible values	True False
Default	False
Property type	Boolean
Usage	Set this property to True if you want the adapter to update a standard SAP status code after the ALE module has retrieved an IDoc object for event processing. If you set this value to True, you must also set following properties: <ul style="list-style-type: none"> • AleFailureCode • AleSuccessCode • AleFailureText • AleSuccessText.
Globalized	No
Bidi supported	No

Assured once-only delivery

This property specifies whether to provide assured once-only delivery for inbound events.

Table 58. Assured once-only delivery details

Required	No
Default	False
Property type	Boolean
Usage	When this property is set to True, the adapter provides assured once event delivery. This means that each event will be delivered once and only once . A value of False does not provide assured once event delivery, but provides better performance. When this property is set to True, the adapter attempts to store transaction (XID) information in the event store. If it is set to False, the adapter does not attempt to store the information. This property is used only if the export component is transactional. If the export component is not transactional, no transaction can be used, regardless of the value of this property.
Globalized	No
Bidi supported	No

Auto create event table

Determines if the event table is created automatically.

Table 59. Auto create event table details

Required	Yes, if Assured once-only event delivery is set to True, No otherwise.
Possible values	True False
Default	True
Property type	Boolean

Table 59. Auto create event table details (continued)

Usage	<p>This property indicates whether the adapter should create the event recovery table automatically if it does not already exist.</p> <p>In the administrative console, this property is listed as "EP_CreateTable".</p> <p>If you specify a value of True to automatically create the table, you must specify information about the event table (such as the event recovery table name).</p> <p>The value provided in the Event recovery table name property is used to create the table.</p>
Globalized	No
Bidi supported	No

Client

This property is the client number of the SAP system to which the adapter connects.

Table 60. Client details

Required	Yes
Possible values	You can enter a range of values from 000 to 999.
Default	100
Property type	Integer
Usage	When an application attempts to log on to the SAP server, the SAP server requires that the application have a Client number associated with it. The Client property value identifies the client (the adapter) that is attempting to log onto the SAP server.
Globalized	No
Bidi supported	No

Codepage number

The numeric identifier of the code page.

Table 61. Codepage number details

Required	No
Possible values	<p>You can enter a range of values from 0000 to 9999.</p> <p>For a full listing of languages and associated codepage numbers supported by SAP, access SAP Note 7360.</p>
Default	The default value for this property is conditionally determined by the value set for the Language code property.
Property type	Integer
Usage	<p>The value assigned to the Codepage number defines the code page to be used and has a one-to-one relationship with the value set for the Language code property. The Codepage number establishes a connection to the appropriate language.</p> <p>Each language code value has a codepage number value associated with it. For example, the language code for English, is EN. If you selected EN (English) as your language code, the codepage number is automatically set to the numeric value associated with EN (English). The SAP code page number for EN (English) is 1100.</p>
Example	If Language code is set to JA (Japanese), Codepage number is set to 8000.

Table 61. Codepage number details (continued)

Globalized	No
Bidi supported	No

Database schema name

This property is the schema used for automatically creating the event recovery table.

Note: In the administrative console, this property is listed as "EP_SchemaName".

Table 62. Database schema name details

Required	No
Default	No default value.
Property type	String
Usage	Specifies the schema name for the database used by the adapters event persistence feature.
Example	ALE_SCHEMA
Globalized	Yes
Bidi supported	No

Enable Secure Network Connection

This property indicates whether secure network connection mode is enabled.

Table 63. Enable Secure Network Connection details

Required	No
Possible values	0 (off) 1 (on)
Default	0
Property type	String
Usage	Set the value to 1 (on) if you want to use secure network connection. If you set this value to 1, you must also set following properties: <ul style="list-style-type: none"> • "Secure Network Connection library path" on page 50 • "Secure Network Connection name" on page 51 • "Secure Network Connection partner" on page 51 • "Secure Network Connection security level" on page 51.
Globalized	No
Bidi supported	No

Event recovery data source (JNDI) name

This property is the JNDI name of the data source configured for event recovery.

Note: In the administrative console, this property is listed as "EP_DataSource_JNDIName".

Table 64. Event recovery data source (JNDI) name details

Required	Yes
Default	No default value.
Property type	String
Usage	Used in event recovery processing. The data source must be created in administrative console. The adapter utilizes data source for <i>persisting</i> the event state.
Example	jdbc/DB2
Globalized	No
Bidi supported	No

Event recovery table name

This property is the name of the event recovery table.

Note: In the administrative console, this property is listed as "EP_TableName".

Table 65. Event recovery table name details

Required	Yes
Default	No default value.
Property type	String
Usage	Used in event recovery processing. Consult database documentation for information on naming conventions. It is recommended that a separate event recovery table is configured for each endpoint. The same data source can be used to hold all of the event recovery tables.
Example	EVENT_TABLE
Globalized	No
Bidi supported	No

Retry limit for failed events (FailedEventRetryLimit)

This property specifies the number of times that the adapter attempts to redeliver an event before marking the event as failed.

Table 66. Retry limit for failed events details

Required	No
Possible values	Integers
Default	5
Property type	Integer

Table 66. Retry limit for failed events details (continued)

Usage	<p>Use this property to control how many times the adapter tries to send an event before marking it as failed. It accepts the following values:</p> <p>Default</p> <p>If this property is not set, the adapter tries five additional times before marking the event as failed.</p> <p>0</p> <p>The adapter tries to deliver the event an infinite number of times. When the property is set to 0, the event remains in the event store and the event is never marked as failed.</p> <p>> 0</p> <p>For integers greater than zero, the adapter retries the specified number of times before marking the event as failed.</p> <p>< 0</p> <p>For negative integers, the adapter does not retry failed events.</p>
Globalized	No
Bidi supported	No

Folder for RFC trace files

This property sets the fully qualified local path to the folder in which to write RFC trace files.

Table 67. Folder for RFC trace files details

Required	No
Default	No default value
Property type	String
Usage	<p>Identifies the fully qualified local path into which RFC trace files are written.</p> <p>If RFC trace on is set to False (not selected), you are not permitted to set a value in the Folder for RFC trace files property.</p> <p>This field cannot be edited if you are modifying existing artifacts</p>
Example	c:\temp\rfcTraceDir
Globalized	Yes
Bidi supported	No

Gateway host

This property is the Gateway host name. Enter either the IP address or the name of the Gateway host. Consult with your SAP administrator for information on the Gateway host name.

Table 68. Gateway host details

Required	Yes
Default	No default value
Property type	String

Table 68. Gateway host details (continued)

Usage	This property is the host name of the SAP gateway. The gateway enables communication between work processes on the SAP system and external programs. The host identified is used as the gateway for the resource adapter. Maximum length of 20 characters. If the computer name is longer than 20 characters, define a symbolic name in the THOSTS table.
Globalized	No
Bidi supported	No

Gateway service

This property is the identifier of the gateway on the gateway host that carries out the RFC services.

Table 69. Gateway service details

Required	Yes
Default	sapgw00
Property type	String
Usage	These services enable communication between work processes on the SAP server and external programs. The service typically has the format of sapgw00, where 00 is the SAP system number. Maximum of 20 characters.
Globalized	No
Bidi supported	No

Host name

Specifies the IP address or the name of the application server host that the adapter logs on to.

Table 70. Host name details

Required	Yes (when load balancing is not used).
Default	No default value
Property type	String
Usage	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 on to.
Example	sapServer
Globalized	No
Bidi supported	No

IDoc empty tags

This property includes empty tags to the unpopulated fields in the IDoc segment, which are sent to a configured endpoint, based on the option selected.

Table 71. IDoc empty tags

Required	No
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Table 71. IDoc empty tags (continued)

Possible Values	BEFORE_AND_AFTER ONLY_BEFORE ALL_UNPOPULATED_FIELDS_SEGMENTS
Default	ONLY_BEFORE
Property type	String
Usage	Use this property to select the following IDoc empty tag options: <ul style="list-style-type: none"> BEFORE_AND_AFTER - Include empty tags to the unpopulated fields before and after the populated fields within the IDoc segments. ONLY_BEFORE - Include empty data for the unpopulated fields within an IDoc segment before the populated field. ALL_UNPOPULATED_FIELDS_SEGMENTS - Include empty tags to the unpopulated fields in all the IDoc segments.
Globalized	No
Bidi supported	No

Ignore IDoc packet errors

Determines whether or not IDoc packet errors are to be ignored.

Table 72. Ignore IDOC packet errors details

Required	No
Possible values	True False
Default	False
Property type	Boolean
Usage	If the adapter encounters an error while processing the IDoc packet, it can behave in two different ways. <ul style="list-style-type: none"> When this property is set to False, the adapter stops processing further IDocs in that packet and reports an error to the SAP system. When this property is set to True, the adapter logs an error and continues processing the rest of the IDocs in that packet. <p>The status of the transaction is marked as INPROGRESS. The adapter log would display the IDoc numbers that failed and you need to resubmit those individual IDocs separately. You need to manually maintain these records in the event recovery table.</p> <p>This property is not used for single IDocs and for non-split IDoc packets.</p>
Globalized	No
Bidi supported	No

Language code

This property specifies the Language code in which the adapter logs on.

Table 73. Language code details

Required	Yes
Possible values	For a full listing of languages and associated codepage numbers supported by SAP, access SAP Note 7360.

Table 73. Language code details (continued)

Default	The default value for the Language code property is based on the system locale.
Property type	String
Usage	Each of the supported languages is preceded by a 2 character language code. The language itself is displayed in parentheses. The language codes that display in the list represent the SAP default set of 41 languages for non Unicode systems plus Arabic. The value you select determines the value of the Codepage number property. If you manually enter a language code, you do not need to enter the language in parentheses.
Example	If the system locale is English, the value for this property is EN (English).
Globalized	No
Bidi supported	No

Logon group name

This property is an identifier for the name of the group of application server instances that have been defined in transaction SMLG and linked together for logon load balancing.

Table 74. Logon group details

Required	Yes (if load balancing is used)
Possible values	Consult SAP documentation for information on creating Logon groups and on calling transaction SMLG.
Default	No default value
Property type	String
Usage	When the adapter is configured for load balancing, this property represents the name of the group of application server instances that have been defined in transaction SMLG and linked together for logon load balancing. Logon load balancing allows for the dynamic distribution of logon connections to application server instances. Maximum of 20 characters. On most SAP systems, the SPACE logon group is reserved by SAP.
Globalized	No
Bidi supported	No

Load Balancing

This property specifies if your SAP configuration uses load balancing

Table 75. Load balancing details

Required	Yes
Possible values	TrueFalse
Default	False
Property type	Boolean
Usage	This value should be set to true if the SAP configuration uses load balancing. If set to true, Message server host, Logon group and SAP System ID need to be specified.

Table 75. Load balancing details (continued)

Globalized	No
Bidi supported	No

Maximum Number of retries in case of system connection failure

This property specifies the number of times the adapter attempts to create a connection to the Enterprise Information System (EIS). The adapter will try connecting to the EIS for the specified number of times. Select only if you want to reduce the number of connection exceptions in the outbound operation. If selected, the adapter will validate the connection for each outbound request.

Table 76. Reset Client details

Required	No
Possible values	Integers
Default	0
Property type	Integer
Usage	<p>Only positive values are valid.</p> <p>When the adapter encounters an error related to the outbound connection, it retries to establish a physical connection (when physical connection is not established) for the number of times specified for this property with a time delay specified in the property Time between retries in case of system connection failure (milliseconds).</p> <p>If the value is 0, the adapter does not perform any EIS connection validation and executes the outbound operation.</p> <p>if the value is > 0, then during each request the adapter validates if the EIS connection is active.</p> <ul style="list-style-type: none"> • If the connection is valid the operation is completed. • if connection is invalid, the adapter invalidates the current managed connection and a new managed connection is created (new physical connection)
Globalized	No
Bidi supported	No

Message server host

This property specifies the name of the host on which the message server is running.

Table 77. Message server host details

Required	Yes (if load balancing is used)
Default	No default value
Property type	String
Usage	<p>This property specifies the name of the host that will inform all the servers (instances) belonging to this SAP system of the existence of the other servers to be used for load balancing.</p> <p>The message server host contains the information about load balancing for RFC clients so that an RFC client can be directed to an appropriate application server.</p>
Example	SAPERP05
Globalized	No

Table 77. Message server host details (continued)

Bidi supported	No
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Number of listeners

This property specifies the number of listeners that are started by an event.

Table 78. Number of listeners details

Required	No
Default	1
Property type	Integer
Usage	<p>For event sequencing, this property should be set to 1.</p> <p>To improve adapter performance, you can increase the number of listeners.</p> <p>Note: The adapter will not start if the number of listeners is 0</p>
Globalized	No
Bidi supported	No

Partner character set

This property specifies the partner character set encoding.

Table 79. Partner character set details

Required	No
Default	UTF-8
Property type	String
Usage	When an encoding is specified, it is used; otherwise the default encoding is used.
Globalized	No
Bidi supported	No

Password

This property is the password of the user account of the adapter on the SAP application server.

Table 80. Password details

Required	Yes
Default	No default value
Property type	String
Usage	<p>The restrictions on the password depend on the version of SAP Web Application Server.</p> <ul style="list-style-type: none"> • For SAP Web Application Server version 6.40 or earlier, the password: <ul style="list-style-type: none"> – Must be uppercase – Must be 8 characters in length • For versions of SAP Web Application Server later than 6.40, the password: <ul style="list-style-type: none"> – Is not case-sensitive – Can be up to 40 characters in length

Table 80. Password details (continued)

Globalized	No
Bidi supported	Yes

Password used to connect to event data source

This property is the user password for connecting to the database.

Note: In the administrative console, this property is listed as "EP_Password".

Table 81. Password to connect to event data source details

Required	Yes
Default	No default value.
Property type	String
Usage	This property specifies the password used by event persistence processing to obtain the database connection from the data source.
Globalized	Yes
Bidi supported	No

Retry EIS connection on startup

This property controls whether the adapter retries the connection to the EIS if it cannot connect at startup. This property is used in conjunction with "Maximum Number of retries in case of system connection failure" on page 46 and "Time between retries in case of system connection failure (milliseconds)" on page 52.

Table 82. Retry EIS connection on startup

Required	No
Possible Values	True False
Default	False
Property type	Boolean
Usage	If the value is true, it indicates that the adapter will retry the connection to EIS if it cannot connect at startup. The values for the following properties have to be specified: <ul style="list-style-type: none"> • "Maximum Number of retries in case of system connection failure" on page 46 • "Time between retries in case of system connection failure (milliseconds)" on page 52 If the value is false, it indicates that the adapter will not retry the connection to EIS if it cannot connect at startup.
Globalized	No
Bidi supported	No

RFC program ID

This property is the program identifier under which the adapter registers in the SAP gateway.

Table 83. RFC program ID details

Required	Yes
Possible values	Use the SAP transaction SM59 (Display and Maintain RFC Destinations) to see a list of available RFC program IDs.
Default	No default value.
Property type	String
Usage	The adapter registers with the gateway so that listener threads can process events from RFC-enabled functions. This value must match the program ID registered in the SAP application. The maximum length is 64 characters.
Globalized	No
Bidi supported	No

RFC trace level

This property specifies the global trace level.

Table 84. RFC trace level details

Required	No
Possible values	0 - No error 1 - Errors and warnings 2 - Execution path, errors and warnings 3 - Full Execution path, errors and warnings 4 - Execution path, info messages, errors and warnings 6 - Full execution path, info messages, errors and warnings 7 - Debug messages, full execution path, info messages, errors and warnings 8 - Verbose debug messages, full execution path, info messages, errors and warnings
Default	1
Property type	Integer
Usage	If RFC trace on is set to False (not selected), you cannot set a value in the RFC trace level property.
Globalized	No
Bidi supported	No

RFC trace on

This property specifies whether to generate a text file detailing the RFC activity for each event listener.

Table 85. RFC trace on details

Required	No
Possible values	True False
Default	False
Property type	Boolean

Table 85. RFC trace on details (continued)

Usage	<p>A value of True activates tracing, which generates a text file.</p> <p>This file is created in the directory in which the adapter process was started. The file has a prefix of rfx and a file type of trc (for example, rfc03912_02220.trc).</p> <p>Use these text files in a development environment only, because the files can grow rapidly.</p> <p>If RFC trace on is set to False (not selected), you cannot set values in the Folder for RFC trace files or RFC trace level properties.</p>
Example	<p>Examples of the information in the file are RfcCall FUNCTION BAPI_CUSTOMER_GETLIST, followed by the information for the parameters in the interface, or RFC Info rftable, followed by the data from one of the interface tables.</p> <p>The trace file is created in the directory where the adapter process has been started. The trace file has a .trc file extension and the file name will start with the letters rfc followed by a unique identifier. For example, rfc03912_02220.trc.</p>
Globalized	No
Bidi supported	No

SAP system ID

This property specifies the system ID of the SAP system for which logon load balancing is allowed.

Table 86. SAP system ID details

Required	Yes (when load balancing is used)
Default	No default value
Property type	String
Usage	Value must be three characters
Example	DYL
Globalized	No
Bidi supported	No

Secure Network Connection library path

This property specifies the path to the library that provides the secure network connection service.

Table 87. Secure Network Connection library path details

Required	Yes, if SncMode is set to 1; no otherwise.
Default	No default value
Property type	String
Usage	If the SncMode property is set to 1 (indicating that you are using a secure network connection), specify the path to the library that provides the service.
Example	/WINDOWS/system32/gssapi32.dll
Globalized	No
Bidi supported	No

Secure Network Connection name

This property specifies the name of the secure network connection.

Table 88. Secure Network Connection name details

Required	Yes, if SncMode is set to 1; no otherwise.
Default	No default value
Property type	String
Usage	If the SncMode property is set to 1 (indicating that you are using a secure network connection), specify a name for the connection.
Example	DOMAINNAME/USERNAME
Globalized	No
Bidi supported	No

Secure Network Connection partner

This property specifies the name of the secure network connection partner.

Table 89. Secure Network Connection partner details

Required	Yes, if SncMode is set to 1; no otherwise.
Default	No default value
Property type	String
Usage	If the SncMode property is set to 1 (indicating that you are using a secure network connection), specify a name for the connection partner.
Example	CN=sap00.saperpdev, OU=Adapter, O=IBM, C=US
Globalized	No
Bidi supported	No

Secure Network Connection security level

This property specifies the level of security for the secure network connection.

Table 90. Secure Network Connection security level details

Required	Yes, if SncMode is set to 1; no otherwise.
Possible values	<ul style="list-style-type: none"> 1 (Authentication only) 2 (Integrity protection) 3 (Privacy protection) 8 (Use the value from snc/data_protection/use on the application server) 9 (Use the value from snc/data_protection/max on the application server)
Default	3 (Privacy protection)
Property type	String
Usage	If the SncMode property is set to 1 (indicating that you are using a secure network connection), specify a value to indicate the level of security for the connection.
Globalized	No
Bidi supported	No

System number

This property is the system number of the SAP application server.

Table 91. System number details

Required	Yes
Possible values	You can enter a range of values from 00 to 99.
Default	00
Property type	Integer
Usage	The system number further identifies the Gateway service.
Globalized	No
Bidi supported	No

Time between retries in case of system connection failure (milliseconds)

This property specifies the time interval between attempts to connect to the Enterprise Information System (EIS).

Table 92. Time between retries in case of system connection failure details

Required	No
Possible Values	Positive Integers
Default	60000
Unit of measure	Milliseconds
Property type	Integer
Usage	When the adapter encounters an error related to the outbound connection, this property specifies the time interval that the adapter waits in between attempts to reestablish an outbound connection. It is disabled by default and is only enabled when the value of Maximum Number of retries in case of system connection failure is greater than 0.
Globalized	No
Bidi supported	No

Trim ALE Idoc field data

This property specifies if the leading white spaces are trimmed by the adapter before sending it to endpoint.

Table 93. Trim ALE Idoc field data

Required	No
Possible Values	True False
Default	True
Property type	Boolean
Usage	Set the value to True, if you want the leading white spaces to be trimmed by the adapter before sending it to endpoint. By default, the value is set to True. Set the value to False, if you do not want the leading white spaces to be trimmed by the adapter.

Table 93. Trim ALE Idoc field date (continued)

Globalized	No
Bidi supported	No

User name

This property is the user account for the adapter on the SAP server.

Table 94. User name details

Required	Yes
Default	No default value
Property type	String
Usage	Maximum length of 12 characters. The user name is not case sensitive. It is recommended that you set up a CPIC user account in the SAP application and that you give this account the necessary privileges to manipulate the data required by the business objects supported by the adapter. For example, if the adapter must perform certain SAP business transactions, the adapter's account in the SAP application must have the permissions set to allow it to perform these transactions.
Example	SapUser
Globalized	Yes
Bidi supported	Yes

User name used to connect to event data source

This property is the user name for connecting to the database.

Note: In the administrative console, this property is listed as "EP_UserName".

Table 95. User name to connect to event data source details

Required	Yes
Default	No default value.
Property type	String
Usage	User name used by event persistence for getting the database connection from the data source. Consult database documentation for information on naming conventions.
Globalized	Yes
Bidi supported	No

X509 certificate

This property specifies the X509 certificate to be used as the logon ticket.

Table 96. X509 certificate details

Required	No.
Default	No default value
Property type	String
Usage	If the SncMode property is set to 1 (indicating that you are using a secure network connection), you can provide a value for the X509 certificate.

Table 96. X509 certificate details (continued)

Globalized	No
Bidi supported	No

Activation specification properties for Advanced event processing

Activation specification properties are properties that hold the inbound event processing configuration information for a message endpoint.

Activation specification properties are used during endpoint activation to notify the adapter of eligible event listeners. During inbound processing, the adapter uses these event listeners to receive events before forwarding them to the endpoint.

You set the activation specification properties using the external service wizard and can change them using the WebSphere Integration Developer Assembly Editor, or after deployment through the WebSphere Process Server or WebSphere Enterprise Service Bus administrative console.

The following table lists the activation specification properties for Advanced event inbound processing. A complete description of each property is provided in the sections that follow the table. For information on how to read the property detail tables in the sections that follow, see Guide to information about properties.

Table 97. Activation specification properties for Advanced event processing

Property name		Purpose
In enterprise service wizard	In administrative console	
"Adapter Instance for event filtering (AdapterInstanceEventFilter)" on page 56	AdapterInstanceEventFilter	Identifier that determines whether this adapter instance processes specific events in the event store.
"Assured once-only delivery" on page 57	AssuredOnceDelivery	Specifies whether to provide assured-once delivery for inbound events.
"Client" on page 58	Client	The client number of the SAP system to which the adapter connects.
"Codepage number" on page 59	Codepage	Indicates the numeric identifier of the code page.
"Enable Secure Network Connection" on page 59	SnCMode	Indicates whether secure network connection mode is used.
"Delivery type (DeliveryType)" on page 59	DeliveryType	Determines the order in which events are delivered by the adapter to the export.
"Event types to process (EventTypeFilter)" on page 60	EventTypeFilter	A delimited list of event types that indicates to the adapter which events it should deliver.
Retry limit for failed events	FailedEventRetryLimit	The number of times the adapter attempts to redeliver an event before marking the event as failed.
"Folder for RFC trace files" on page 61	RfcTracePath	Sets the fully qualified local path to the folder into which the RFC trace files are written.
"Gateway host" on page 61	GatewayHost	The host name of the SAP gateway.

Table 97. Activation specification properties for Advanced event processing (continued)

Property name		Purpose
In enterprise service wizard	In administrative console	
"Gateway service" on page 62	GatewayService	The identifier of the gateway on the gateway host that carries out the RFC services.
"Host name" on page 62	ApplicationServerHost	Specifies the IP address or the name of the application server host that the adapter logs on to.
"IDoc empty tags" on page 62	IDocEmptyTag	Includes empty tags to the unpopulated fields in the IDoc segment, which are sent to a configured endpoint, based on the option selected.
"Language code" on page 63	Language code	Specifies the Language code in which the adapter logs on to SAP.
"Logon group name" on page 63	Group	An identifier of the name of the group of application server instances that have been defined in transaction SMLG and linked together for logon load balancing.
"Load Balancing" on page 64	loadBalancing	Specifies if your SAP configuration uses load balancing
"Maximum number of events collected during each poll" on page 64	PollQuantity	The number of events that the adapter delivers to the export during each poll period
"Maximum number of retries in case of system connection failure" on page 64	RetryLimit	The number of times the adapter tries to reestablish an inbound connection after an error.
"Message server host" on page 65	MessageServerHost	Specifies the name of the host on which the message server is running.
"Partner character set" on page 65	PartnerCharset	Specifies PartnerCharset encoding.
"Password" on page 65	Password	The password of the user account of the adapter on the SAP application server.
"Retry EIS connection on startup" on page 66	RetryConnectionOnStartup	Controls whether the adapter retries the connection to the EIS if it cannot connect at startup
"RFC trace level" on page 66	RfcTraceLevel	Specifies the global trace level.
"RFC trace on" on page 67	RfcTraceOn	Specifies whether to generate a text file detailing the RFC activity for each event listener.
"SAP system ID" on page 67	SAPSystemID	Specifies the system ID of the SAP system for which logon load balancing is allowed.
"Secure Network Connection library path" on page 68	SncLib	Specifies the path to the library that provides the secure network connection service.
"Secure Network Connection name" on page 68	SncMyname	Specifies the name of the secure network connection.
"Secure Network Connection partner" on page 69	SncPartnername	Specifies the name of the secure network connection partner.
"Secure Network Connection security level" on page 69	SncQop	Specifies the level of security for the secure network connection.

Table 97. Activation specification properties for Advanced event processing (continued)

Property name		Purpose
In enterprise service wizard	In administrative console	
“Stop the adapter when an error is encountered while polling (StopPollingOnError)” on page 69	StopPollingOnError	Specifies whether the adapter stops polling for events when it encounters an error during polling.
“System number” on page 70	SystemNumber	The system number of the SAP application server.
“Time between polling for events (milliseconds)” on page 70	PollPeriod	The length of time that the adapter waits between polling periods
“Time between retries in case of system connection failure (milliseconds)” on page 71	RetryInterval	The length of time that the adapter waits between attempts to establish a new connection after an error during inbound operations
“User name” on page 71	userName	The user account for the adapter on the SAP server.
“X509 certificate” on page 72	X509cert	Specifies the X509 certificate to be used as the logon ticket.

Adapter Instance for event filtering (AdapterInstanceEventFilter)

This property controls whether the adapter instance processes specific events in the event store.

Table 98. Adapter Instance for event filtering details

Required	No
Default	null
Property type	String

Table 98. Adapter Instance for event filtering details (continued)

Usage	<p>This property helps you migrate from WebSphere Business Integration Adapter for mySAP to WebSphere Adapter for SAP Software. WebSphere Business Integration Adapter for mySAP allows you to perform load balancing on high-volume event types by allowing multiple adapter instances to process events of the same type. When load balancing is not required, a single adapter instance processes all events of a given type. This property is to enable seamless migration for WBIA customers to JCA for customers who are currently taking advantage of the connectorID filtering.</p> <p>WebSphere Adapter for SAP Software typically does not require load balancing in this way, but supports it so that you can migrate without modifying the database triggers or other mechanisms that write events to the event store.</p> <p>The AdapterInstanceEventFilter property corresponds to the ConnectorID property of the WebSphere Business Integration Adapter for mySAP.</p> <p>To use this feature, the database triggers or other mechanisms that create events in the event store must assign the appropriate value to the ConnectorId column.</p> <p>Table 99 shows the interaction between the AdapterInstanceEventFilter property and the value in the ConnectorId column in the event store.</p> <p>If the EventTypeFilter and AdapterInstanceEventFilter properties are both set, the adapter processes only events that meet both criteria. That is, it processes only those events whose type is specified in the EventTypeFilter property and whose ConnectorId column matches the AdapterInstanceEventFilter property.</p>
Example	See Table 99.
Globalized	Yes
Bidi supported	Yes

Table 99. Interaction of the AdapterInstanceEventFilter property with the ConnectorId column in the event store

AdapterInstanceEventFilter property	ConnectorId column of an event	Result
null	null	The adapter processes the event
null	Instance1	The adapter processes the event, because the ConnectorId column is not checked
Instance1	Instance1	The adapter processes the event
Instance1	Instance2	The adapter does not process the event, because the instance IDs do not match
Instance1	null	The adapter does not process the event, because the instance IDs do not match

Assured once-only delivery

This property specifies whether to provide assured once-only delivery for inbound events.

Table 100. Assured once-only delivery details

Required	Yes
Default	True
Property type	Boolean
Usage	<p>When this property is set to True, the adapter provides assured once event delivery. This means that each event will be delivered once and only once. A value of False does not provide assured once event delivery, but provides better performance.</p> <p>When this property is set to True, the adapter attempts to store transaction (XID) information in the event store. If it is set to False, the adapter does not attempt to store the information.</p> <p>This property is used only if the export component is transactional. If the export component is not transactional, no transaction can be used, regardless of the value of this property.</p>
Globalized	No
Bidi supported	No

Client

This property is the client number of the SAP system to which the adapter connects.

Table 101. Client details

Required	Yes
Possible values	You can enter a range of values from 000 to 999.
Default	100
Property type	Integer
Usage	When an application attempts to log on to the SAP server, the SAP server requires that the application have a Client number associated with it. The Client property value identifies the client (the adapter) that is attempting to log onto the SAP server.
Globalized	No
Bidi supported	No

Client

This property is the client number of the SAP system to which the adapter connects.

Table 102. Client details

Required	Yes
Possible values	You can enter a range of values from 000 to 999.
Default	100
Property type	Integer
Usage	When an application attempts to log on to the SAP server, the SAP server requires that the application have a Client number associated with it. The Client property value identifies the client (the adapter) that is attempting to log onto the SAP server.
Globalized	No
Bidi supported	No

Codepage number

The numeric identifier of the code page.

Table 103. Codepage number details

Required	No
Possible values	You can enter a range of values from 0000 to 9999. For a full listing of languages and associated codepage numbers supported by SAP, access SAP Note 7360.
Default	The default value for this property is conditionally determined by the value set for the Language code property.
Property type	Integer
Usage	The value assigned to the Codepage number defines the code page to be used and has a one-to-one relationship with the value set for the Language code property. The Codepage number establishes a connection to the appropriate language. Each language code value has a codepage number value associated with it. For example, the language code for English, is EN. If you selected EN (English) as your language code, the codepage number is automatically set to the numeric value associated with EN (English). The SAP code page number for EN (English) is 1100.
Example	If Language code is set to JA (Japanese), Codepage number is set to 8000.
Globalized	No
Bidi supported	No

Delivery type (DeliveryType)

This property specifies the order in which events are delivered by the adapter to the export.

Table 104. Delivery type details

Required	No
Possible values	ORDERED UNORDERED
Default	ORDERED
Property type	String
Usage	The following values are supported: <ul style="list-style-type: none"> ORDERED: The adapter delivers events to the export one at a time. UNORDERED: The adapter delivers all events to the export at once.
Globalized	No
Bidi supported	No

Enable Secure Network Connection

This property indicates whether secure network connection mode is enabled.

Table 105. Enable Secure Network Connection details

Required	No
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Table 105. Enable Secure Network Connection details (continued)

Possible values	0 (off) 1 (on)
Default	0
Property type	String
Usage	Set the value to 1 (on) if you want to use secure network connection. If you set this value to 1, you must also set following properties: <ul style="list-style-type: none"> • “Secure Network Connection library path” on page 68 • “Secure Network Connection name” on page 68 • “Secure Network Connection partner” on page 69 • “Secure Network Connection security level” on page 69.
Globalized	No
Bidi supported	No

Event types to process (EventTypeFilter)

This property contains a delimited list of event types that indicates to the adapter which events it should deliver.

Table 106. Event types to process details

Required	No
Possible values	A comma-delimited (,) list of business object types
Default	null
Property type	String
Usage	Events are filtered by business object type. If the property is set, the adapter delivers only those events that are in the list. A value of null indicates that no filter will be applied and that all events will be delivered to the export.
Example	To receive events related to the Customer and Order business objects only, specify this value: Customer,Order If the EventTypeFilter and AdapterInstanceEventFilter properties are both set, the adapter processes only events that meet both criteria. That is, it processes only those events whose type is specified in the EventTypeFilter property and whose ConnectorId column matches the AdapterInstanceEventFilter property.
Globalized	No
Bidi supported	No

Retry limit for failed events (FailedEventRetryLimit)

This property specifies the number of times that the adapter attempts to redeliver an event before marking the event as failed.

Table 107. Retry limit for failed events details

Required	No
Possible values	Integers
Default	5

Table 107. Retry limit for failed events details (continued)

Property type	Integer
Usage	<p>Use this property to control how many times the adapter tries to send an event before marking it as failed. It accepts the following values:</p> <p>Default If this property is not set, the adapter tries five additional times before marking the event as failed.</p> <p>0 The adapter tries to deliver the event an infinite number of times. When the property is set to 0, the event remains in the event store and the event is never marked as failed.</p> <p>> 0 For integers greater than zero, the adapter retries the specified number of times before marking the event as failed.</p> <p>< 0 For negative integers, the adapter does not retry failed events.</p>
Globalized	No
Bidi supported	No

Folder for RFC trace files

This property sets the fully qualified local path to the folder in which to write RFC trace files.

Table 108. Folder for RFC trace files details

Required	No
Default	No default value
Property type	String
Usage	<p>Identifies the fully qualified local path into which RFC trace files are written.</p> <p>If RFC trace on is set to False (not selected), you are not permitted to set a value in the Folder for RFC trace files property.</p> <p>This field cannot be edited if you are modifying existing artifacts</p>
Example	c:\temp\rfcTraceDir
Globalized	Yes
Bidi supported	No

Gateway host

This property is the Gateway host name. Enter either the IP address or the name of the Gateway host. Consult with your SAP administrator for information on the Gateway host name.

Table 109. Gateway host details

Required	Yes
Default	No default value
Property type	String

Table 109. Gateway host details (continued)

Usage	This property is the host name of the SAP gateway. The gateway enables communication between work processes on the SAP system and external programs. The host identified is used as the gateway for the resource adapter. Maximum length of 20 characters. If the computer name is longer than 20 characters, define a symbolic name in the THOSTS table.
Globalized	No
Bidi supported	No

Gateway service

This property is the identifier of the gateway on the gateway host that carries out the RFC services.

Table 110. Gateway service details

Required	Yes
Default	sapgw00
Property type	String
Usage	These services enable communication between work processes on the SAP server and external programs. The service typically has the format of sapgw00, where 00 is the SAP system number. Maximum of 20 characters.
Globalized	No
Bidi supported	No

Host name

Specifies the IP address or the name of the application server host that the adapter logs on to.

Table 111. Host name details

Required	Yes (when load balancing is not used).
Default	No default value
Property type	String
Usage	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 on to.
Example	sapServer
Globalized	No
Bidi supported	No

IDoc empty tags

This property includes empty tags to the unpopulated fields in the IDoc segment, which are sent to a configured endpoint, based on the option selected.

Table 112. IDoc empty tags

Required	No
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Table 112. IDoc empty tags (continued)

Possible Values	BEFORE_AND_AFTER ONLY_POPULATED_FIELDS
Default	ONLY_POPULATED_FIELDS
Property type	String
Usage	Use this property to select the following IDoc empty tag options: <ul style="list-style-type: none"> BEFORE_AND_AFTER - Include empty tags to the unpopulated fields before and after the populated fields within the IDoc segments. ONLY_POPULATED_FIELDS - Do not include any empty tags to the unpopulated fields.
Globalized	No
Bidi supported	No

Language code

This property specifies the Language code in which the adapter logs on.

Table 113. Language code details

Required	Yes
Possible values	For a full listing of languages and associated codepage numbers supported by SAP, access SAP Note 7360.
Default	The default value for the Language code property is based on the system locale.
Property type	String
Usage	Each of the supported languages is preceded by a 2 character language code. The language itself is displayed in parentheses. The language codes that display in the list represent the SAP default set of 41 languages for non Unicode systems plus Arabic. The value you select determines the value of the Codepage number property. If you manually enter a language code, you do not need to enter the language in parentheses.
Example	If the system locale is English, the value for this property is EN (English).
Globalized	No
Bidi supported	No

Logon group name

This property is an identifier for the name of the group of application server instances that have been defined in transaction SMLG and linked together for logon load balancing.

Table 114. Logon group details

Required	Yes (if load balancing is used)
Possible values	Consult SAP documentation for information on creating Logon groups and on calling transaction SMLG.
Default	No default value
Property type	String

Table 114. Logon group details (continued)

Usage	When the adapter is configured for load balancing, this property represents the name of the group of application server instances that have been defined in transaction SMLG and linked together for logon load balancing. Logon load balancing allows for the dynamic distribution of logon connections to application server instances. Maximum of 20 characters. On most SAP systems, the SPACE logon group is reserved by SAP.
Globalized	No
Bidi supported	No

Load Balancing

This property specifies if your SAP configuration uses load balancing

Table 115. Load balancing details

Required	Yes
Possible values	TrueFalse
Default	False
Property type	Boolean
Usage	This value should be set to true if the SAP configuration uses load balancing. If set to true, Message server host, Logon group and SAP System ID need to be specified.
Globalized	No
Bidi supported	No

Maximum number of events collected during each poll

This property specifies the number of events that the adapter delivers to the export during each poll period.

Table 116. Maximum number of events collected during each poll details

Required	Yes
Default	10
Property type	Integer
Usage	The value must be greater than 0
Globalized	No
Bidi supported	No

Maximum number of retries in case of system connection failure

This property specifies the number of times the adapter tries to reestablish an inbound connection. If the Retry EIS connection on startup property is set to true it also indicates the maximum number of times the adapter will retry the inbound connection to the EIS if it cannot connect at startup.

Table 117. Maximum number of retries in case of system connection failure details

Required	No
Possible values	Integers

Table 117. Maximum number of retries in case of system connection failure details (continued)

Default	0
Property type	Integer
Usage	<p>Only positive values are valid.</p> <p>When the adapter encounters an error related to the inbound connection, this property specifies the number of times the adapter tries to restart the connection. A value of 0 indicates an infinite number of retries.</p> <p>Negative values indicate that the adapter will not attempt to establish the inbound connection</p>
Globalized	No
Bidi supported	No

Message server host

This property specifies the name of the host on which the message server is running.

Table 118. Message server host details

Required	Yes (if load balancing is used)
Default	No default value
Property type	String
Usage	<p>This property specifies the name of the host that will inform all the servers (instances) belonging to this SAP system of the existence of the other servers to be used for load balancing.</p> <p>The message server host contains the information about load balancing for RFC clients so that an RFC client can be directed to an appropriate application server.</p>
Example	SAPERP05
Globalized	No
Bidi supported	No

Partner character set

This property specifies the partner character set encoding.

Table 119. Partner character set details

Required	No
Default	UTF-8
Property type	String
Usage	When an encoding is specified, it is used; otherwise the default encoding is used.
Globalized	No
Bidi supported	No

Password

This property is the password of the user account of the adapter on the SAP application server.

Table 120. Password details

Required	Yes
Default	No default value
Property type	String
Usage	<p>The restrictions on the password depend on the version of SAP Web Application Server.</p> <ul style="list-style-type: none"> • For SAP Web Application Server version 6.40 or earlier, the password: <ul style="list-style-type: none"> – Must be uppercase – Must be 8 characters in length • For versions of SAP Web Application Server later than 6.40, the password: <ul style="list-style-type: none"> – Is not case-sensitive – Can be up to 40 characters in length
Globalized	No
Bidi supported	Yes

Retry EIS connection on startup

This property controls whether the adapter retries the connection to the EIS if it cannot connect at startup. This property is used in conjunction with “Maximum number of retries in case of system connection failure” on page 64 and “Time between retries in case of system connection failure (milliseconds)” on page 71.

Table 121. Retry EIS connection on startup

Required	No
Possible Values	<p>True</p> <p>False</p>
Default	False
Property type	Boolean
Usage	<p>If the value is true, it indicates that the adapter will retry the connection to EIS if it cannot connect at startup. The values for the following properties have to be specified:</p> <ul style="list-style-type: none"> • “Maximum number of retries in case of system connection failure” on page 64 • “Time between retries in case of system connection failure (milliseconds)” on page 71 <p>If the value is false, it indicates that the adapter will not retry the connection to EIS if it cannot connect at startup.</p>
Globalized	No
Bidi supported	No

RFC trace level

This property specifies the global trace level.

Table 122. RFC trace level details

Required	No
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Table 122. RFC trace level details (continued)

Possible values	0 - No error 1 - Errors and warnings 2 - Execution path, errors and warnings 3 - Full Execution path, errors and warnings 4 - Execution path, info messages, errors and warnings 6 - Full execution path, info messages, errors and warnings 7 - Debug messages, full execution path, info messages, errors and warnings 8 - Verbose debug messages, full execution path, info messages, errors and warnings
Default	1
Property type	Integer
Usage	If RFC trace on is set to False (not selected), you cannot set a value in the RFC trace level property.
Globalized	No
Bidi supported	No

RFC trace on

This property specifies whether to generate a text file detailing the RFC activity for each event listener.

Table 123. RFC trace on details

Required	No
Possible values	True False
Default	False
Property type	Boolean
Usage	A value of True activates tracing, which generates a text file. This file is created in the directory in which the adapter process was started. The file has a prefix of rfx and a file type of trc (for example, rfc03912_02220.trc). Use these text files in a development environment only, because the files can grow rapidly. If RFC trace on is set to False (not selected), you cannot set values in the Folder for RFC trace files or RFC trace level properties.
Example	Examples of the information in the file are RfcCall FUNCTION BAPI_CUSTOMER_GETLIST , followed by the information for the parameters in the interface, or RFC Info rftable , followed by the data from one of the interface tables. The trace file is created in the directory where the adapter process has been started. The trace file has a .trc file extension and the file name will start with the letters rfc followed by a unique identifier. For example, rfc03912_02220.trc .
Globalized	No
Bidi supported	No

SAP system ID

This property specifies the system ID of the SAP system for which logon load balancing is allowed.

Table 124. SAP system ID details

Required	Yes (when load balancing is used)
Default	No default value
Property type	String
Usage	Value must be three characters
Example	DYL
Globalized	No
Bidi supported	No

Secure Network Connection library path

This property specifies the path to the library that provides the secure network connection service.

Table 125. Secure Network Connection library path details

Required	Yes, if SncMode is set to 1; no otherwise.
Default	No default value
Property type	String
Usage	If the SncMode property is set to 1 (indicating that you are using a secure network connection), specify the path to the library that provides the service.
Example	/WINDOWS/system32/gssapi32.dll
Globalized	No
Bidi supported	No

Secure Network Connection library path

This property specifies the path to the library that provides the secure network connection service.

Table 126. Secure Network Connection library path details

Required	Yes, if SncMode is set to 1; no otherwise.
Default	No default value
Property type	String
Usage	If the SncMode property is set to 1 (indicating that you are using a secure network connection), specify the path to the library that provides the service.
Example	/WINDOWS/system32/gssapi32.dll
Globalized	No
Bidi supported	No

Secure Network Connection name

This property specifies the name of the secure network connection.

Table 127. Secure Network Connection name details

Required	Yes, if SncMode is set to 1; no otherwise.
Default	No default value

Table 127. Secure Network Connection name details (continued)

Property type	String
Usage	If the SncMode property is set to 1 (indicating that you are using a secure network connection), specify a name for the connection.
Example	DOMAINNAME/USERNAME
Globalized	No
Bidi supported	No

Secure Network Connection partner

This property specifies the name of the secure network connection partner.

Table 128. Secure Network Connection partner details

Required	Yes, if SncMode is set to 1; no otherwise.
Default	No default value
Property type	String
Usage	If the SncMode property is set to 1 (indicating that you are using a secure network connection), specify a name for the connection partner.
Example	CN=sap00.saperpdev, OU=Adapter, O=IBM, C=US
Globalized	No
Bidi supported	No

Secure Network Connection security level

This property specifies the level of security for the secure network connection.

Table 129. Secure Network Connection security level details

Required	Yes, if SncMode is set to 1; no otherwise.
Possible values	1 (Authentication only) 2 (Integrity protection) 3 (Privacy protection) 8 (Use the value from snc/data_protection/use on the application server) 9 (Use the value from snc/data_protection/max on the application server)
Default	3 (Privacy protection)
Property type	String
Usage	If the SncMode property is set to 1 (indicating that you are using a secure network connection), specify a value to indicate the level of security for the connection.
Globalized	No
Bidi supported	No

Stop the adapter when an error is encountered while polling (StopPollingOnError)

This property specifies whether the adapter will stop polling for events when it encounters an error during polling.

Table 130. Stop the adapter when an error is encountered while polling details

Required	No
Possible values	True False
Default	False
Property type	Boolean
Usage	If this property is set to True, the adapter stops polling when it encounters an error. If this property is set to False, the adapter logs an exception when it encounters an error during polling and continues polling.
Globalized	No
Bidi supported	No

System number

This property is the system number of the SAP application server.

Table 131. System number details

Required	Yes
Possible values	You can enter a range of values from 00 to 99.
Default	00
Property type	Integer
Usage	The system number further identifies the Gateway service.
Globalized	No
Bidi supported	No

Time between polling for events (milliseconds)

This property specifies the length of time that the adapter waits between polling periods.

Table 132. Time between polling for events (milliseconds)

Required	Yes
Possible values	Integers greater than or equal to 0.
Default	2000
Unit of measure	Milliseconds
Property type	Integer
Usage	The time interval between polling events is established at a fixed rate, which means that if running the poll cycle is delayed for any reason (for example if a prior poll cycle takes longer than expected to complete) the next poll cycle will occur immediately to make up for the lost time caused by the delay.
Globalized	No
Bidi supported	No

Time between retries in case of system connection failure (milliseconds)

This property specifies the time interval between attempts to reestablish an inbound connection. If the “Retry EIS connection on startup” on page 66 property is set to true it also indicates the time interval that the adapter will wait in between attempts to retry the inbound connection to the EIS if it cannot connect at startup.

Table 133. Time between retries in case of system connection failure details

Required	No
Possible Values	Positive Integers
Default	60000
Unit of measure	Milliseconds
Property type	Integer
Usage	When the adapter encounters an error related to the inbound connection, this property specifies the time interval the adapter waits in between attempts to reestablish an inbound connection.
Globalized	No
Bidi supported	No

User name

This property is the user account for the adapter on the SAP server.

Table 134. User name details

Required	Yes
Default	No default value
Property type	String
Usage	Maximum length of 12 characters. The user name is not case sensitive. It is recommended that you set up a CPIC user account in the SAP application and that you give this account the necessary privileges to manipulate the data required by the business objects supported by the adapter. For example, if the adapter must perform certain SAP business transactions, the adapter's account in the SAP application must have the permissions set to allow it to perform these transactions.
Example	SapUser
Globalized	Yes
Bidi supported	Yes

User name

This property is the user account for the adapter on the SAP server.

Table 135. User name details

Required	Yes
Default	No default value
Property type	String

Table 135. User name details (continued)

Usage	Maximum length of 12 characters. The user name is not case sensitive. It is recommended that you set up a CPIC user account in the SAP application and that you give this account the necessary privileges to manipulate the data required by the business objects supported by the adapter. For example, if the adapter must perform certain SAP business transactions, the adapter's account in the SAP application must have the permissions set to allow it to perform these transactions.
Example	SapUser
Globalized	Yes
Bidi supported	Yes

X509 certificate

This property specifies the X509 certificate to be used as the logon ticket.

Table 136. X509 certificate details

Required	No.
Default	No default value
Property type	String
Usage	If the SncMode property is set to 1 (indicating that you are using a secure network connection), you can provide a value for the X509 certificate.
Globalized	No
Bidi supported	No

Content Line Type support

The adapter now supports BAPIs containing **Table Type** fields of either **Table Type** or **Data Element** subtype. The adapter also supports table type fields of the **Predefined Type** subtype. With this added feature, BAPIs containing any of these types can be discovered using WebSphere Adapter for SAP Software

The BAPI interfaces

The WebSphere Adapter for SAP Software supports outbound processing and inbound processing for simple BAPIs. In outbound processing, client applications call BAPIs and other RFC-enabled functions on the SAP server. In inbound processing, the SAP server sends an RFC-enabled function (such as a BAPI function) through the adapter to an endpoint.

Suppose you want to build a service that creates a new customer on the SAP server. You first run the external service wizard to discover the BAPI_CUSTOMER_CREATEFROMDATA function. The wizard then generates the business object definition for BAPI_CUSTOMER_CREATEFROMDATA along with other SCA service artifacts. During BAPI outbound processing, the adapter receives the service request and converts the data into a BAPI invocation.

A simple BAPI performs a single operation, such as retrieving a list of customers. The adapter supports simple BAPI calls by representing each with a single business object schema.

Simple BAPIs can be used for outbound or inbound processing. You can specify synchronous RFC processing or asynchronous transactional RFC (tRFC) processing when you configure a module for a simple BAPI. In addition, for outbound processing, you can specify asynchronous queued RFC (qRFC) processing, in which BAPIs are delivered to a predefined queue on the SAP server.

- In synchronous RFC processing, the SAP server and the adapter must be available during processing.
 - In outbound processing, the client application sends a request and then waits for a response from the SAP server.
 - In inbound processing, the SAP server sends a request through the adapter to an endpoint and waits for a response from the adapter.
- In asynchronous tRFC outbound processing, the adapter associates a transaction ID with the function call to the SAP server. The adapter does not wait for a response from the SAP server. If the delivery is unsuccessful, the client application can use the TID to make the request again.
- In asynchronous tRFC inbound processing, the adapter does not have to be available when the SAP server invokes the function call. The function call is placed on a list of functions to be invoked, and the call is attempted until it is successful.

To send function calls from a user-defined outbound queue on the SAP server, you also specify asynchronous tRFC inbound processing.

- In asynchronous qRFC outbound processing, the process is similar to asynchronous tRFC outbound processing. A TID is associated with the function call, and the adapter does not wait for a response from the SAP server. Additionally, the BAPIs are delivered to a predefined queue on the SAP server. By sending BAPIs to the predefined queue, you can ensure the order in which they are delivered.

The adapter supports the following data types in the import, export and changing parameter list:

1. Elementary types
2. Complex data type
 - a. Table types
 - 1) Line types
 - a) Structure (example - BAPIRET2)
 - b) Table type (example - TRTEXTS)
 - c) Data Element (example - TRACKTEXT)
 - d) Views (example - T001W_BIW)
 - 2) Predefined types (example - BIC_ADD_DATA_TT)
 - b. Structure

The adapter supports the following data types in the table parameter list -

1. Tables with flat line structure (example - BAPIRET2)

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