Configuring Environment Components for Oracle® Java CAPS Communications Adapters

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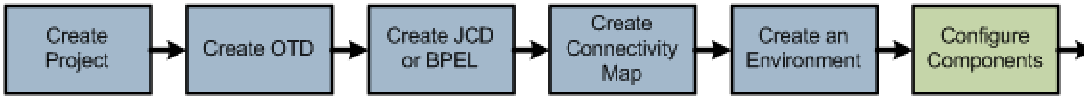


The adapter environment configuration properties contain parameters that define how the adapter connects to and interacts with other Java CAPS components within the environment. The environment properties are accessed from the NetBeans IDE Services window. The following sections provide instructions on how to configure Java CAPS component environment properties and lists the environment properties for the various communications adapters.

What You Need to Do

This topic provides instructions for using the Environment Properties Editor for communications adapters.

- "Configuring Adapter Environment Properties " on page 6

What You Need to Know

These topics provide configuration information used to set the communications adapter environment properties:

- "TCP/IP Adapter Environment Properties" on page 7.
- "EMail Adapter Environment Properties" on page 13.
- "File Adapter Environment Properties" on page 19.
- "MSMQ Adapter Environment Properties" on page 20.
- "CICS Adapter Environment Properties" on page 23.
- "COM/DCOM Adapter Environment Properties" on page 30.
- "HTTPS Adapter Environment Properties" on page 30.
- "IMS Adapter Environment Properties" on page 38.
- "LDAP Adapter Properties" on page 49.
- "Configuring the SNA Adapter Environment Properties" on page 53.

Information and instructions for configuring TCP/IP HL7 Adapter Environment components in provided in the*Oracle Java CAPS Adapter for TCP/IP HL7 User's Guide* in the following section:

- "Configuring Oracle Java CAPS Adapter for TCP/IP HL7 Environment Properties"

Information and instructions for configuring Batch Adapter Environment components in provided in the *Oracle Java CAPS Adapter for Batch User's Guide* in the following sections:

- "Configuring the Batch Adapter"

Related Topics

- *About Oracle Java CAPS Communication Adapters*
- *Developing OTDs for Oracle Java CAPS Communication Adapters*
- *Configuring Project Components for Oracle Java CAPS Communication Adapters*

Configuring Adapter Environment Properties

The Adapter Environment Configuration properties contain parameters that define how the adapter connects to and interacts with other Java CAPS components within the Environment. The Environment properties are accessed from the NetBeans IDE Services window.

▼ To Add an External System to the Environment

1. **Expand the CAPS Environments, and right-click the Environment to which you want to add an External System.**

2. **From the context menu, select the type of External System to add (for example, File External System or Oracle External System).**

3. **Enter a name for the External System and then click OK.**

▼ To Configure the Environment Properties

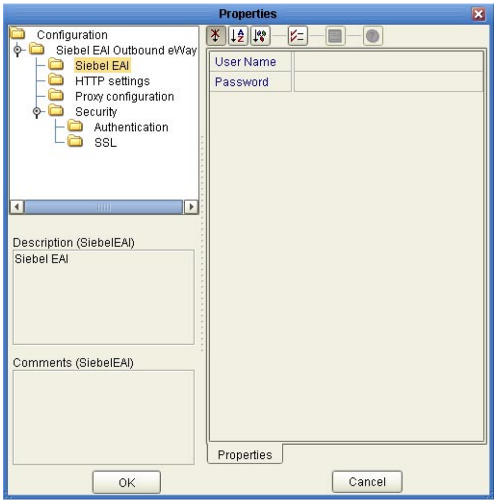
1. **From the NetBeans Services window, expand the CAPS Environment node.**

2. **Expand the Environment created for your project and locate the External System for your specific adapter.**

3. **Right-click the External System and select Properties.**

   The Environment Configuration Properties window appears.

FIGURE 1 Adapter Environment Configuration Properties Editor



4 **From the Properties Editor, click on any folder to display the default configuration properties for that section.**

5 **Click on any property field to make it editable.**

6 **If an ellipsis appears next to a field, you can click the ellipsis button to open an editor for the field.**

This is useful for long field values.

7 **Once you have finished modifying the properties, click OK to save your changes and close the editor.**

Note – The following sections describe the Environment properties for the Application Adapters.

TCP/IP Adapter Environment Properties

The TCP/IP Adapter Environment properties are organized into the following sections:

- "TCPIP Server (Inbound) Adapter - General Inbound Settings" on page 8.
- "TCPIP Server (Inbound) Adapter - TCPIP Inbound Settings" on page 8.
- "TCPIP Server (Inbound) Adapter - MDB Pool Settings" on page 9.
- "TCPIP Client (Outbound) Adapter - General Outbound Settings" on page 10.

- "TCPIP Client (Outbound) Adapter - TCPIP Outbound Settings" on page 10.
- "TCPIP Client (Outbound) Adapter - Connection Pool Settings" on page 11.

TCPIP Server (Inbound) Adapter - General Inbound Settings

The General Inbound Settings properties represents general TCPIP Inbound configuration information. The TCPIPServer (Inbound) Adapter - General Inbound Settings properties contain the top-level parameters displayed in the following table.

TABLE 1 TCPIPServer (Inbound) Adapter - General Inbound Settings Properties

Name	Description	Required Value
Persistence State File Location	Specifies the directory location (a local folder name) where the state files, used to persist the state value, are stored. This property is required when the Scope Of State is set to Persistence.	The file and path. The default value is `C:/temp/tcpipinbound/state` (depending on the environment settings).

TCPIP Server (Inbound) Adapter - TCPIP Inbound Settings

The TCPIP Inbound Settings properties specify the Java Socket and ServerSocket options. For more information, refer to the JDK Javadoc. The TCPIPServer (Inbound) Adapter - TCPIP Inbound Settings properties contain the top-level parameters displayed in the following table.

TABLE 2 TCPIP Server (Inbound) Adapter - MDB Properties

Name	Description	Required Value
Host	Specifies the host name or IP address used to establish a TCPIP connection. This parameter is only used when Connection Type is Client.	A TCP/IP host name or IP address.
ServerPort	Specifies the port number of the TCP/IP destination. This is dependent upon the specified Connection Type. If the value for Connection Type is: ▪ **Server**: the ServerPort value is set to the port number on the local host. ▪ **Client**: the ServerPort value is set to the port number of the external host.	An integer between 0 and 65535, indicating the port number of the TCP/IP destination. The port number of the TCP/IP destination. The default is **8888**. **Note –** TCP/IP server connects binds to random port, if the port number is 0.

TABLE 2 TCPIP Server (Inbound) Adapter - MDB Properties *(Continued)*

Name	Description	Required Value
Backlog	Specifies the maximum length of the queue when creating the ServerSocket. The maximum queue length for incoming connection indications (a request to connect) is set to the backlog parameter. If a connection indication arrives when the queue is full, the connection is refused. **Note –** This parameter is only used when Connection Type is set to Server.	An integer indicting the queue length for incoming connections. The configured default value is **50**.

TCPIP Server (Inbound) Adapter - MDB Pool Settings

Specific to the MDB bean pool of GlassFish Server and Oracle Java CAPS Enterprise Service Bus only. The parameter settings in this section are applied to `sun-ejb-jar.xml`. The TCPIPServer (Inbound) Adapter - MDB Pool Settings properties contain the top-level parameters displayed in the following table.

TABLE 3 TCPIPServer (Inbound) Adapter - MDB Pool Settings Properties

Name	Description	Required Value
Steady Pool Size	Specifies the minimum number of MDB beans to be maintained. When the value is set to a value that is greater than 0, the container not only pre-populates the MDB bean pool with the specified number, but also attempts to ensure that there are always this many MDB beans in the free pool. This ensures that there are enough MDB beans in the "ready to serve" state to process user requests. This parameter does not guarantee that more than the "steady-pool-size" MDB instances will not exist at a given time. It only governs the number of instances that are pooled over a long period of time. For example, suppose an idle stateless session container has a fully-populated pool with a steady-pool-size of 10. If 20 concurrent requests arrive for the MDB bean component, the container creates 10 additional instances to satisfy the burst of requests. This prevents the container from blocking any of the incoming requests. However, if the activity dies down to 10 or fewer concurrent requests, the additional 10 instances are discarded.	An integer indicating the minimum number of Message Driven Beans (MDBs) to be maintained. The configured default is **10**.

TABLE 3 TCPIPServer (Inbound) Adapter - MDB Pool Settings Properties *(Continued)*

Name	Description	Required Value
Max Pool Size	Specifies the maximum number of MDB beans in the pool.	An integer indicating the maximum number of MDB beans in the pool. A value of **0** means the pool is unbounded. The configured default is **60**.
Pool Idle Timeout In Seconds	Specifies the interval at which the "*remove expired MDBs*" thread runs. This thread periodically removes unused MDB beans with expired timeouts. This provides a hint to the server, and allows the user to specify the maximum amount of time that an MDB bean instance can remain idle in the pool. After this period of time, the pool can remove this bean. When Pool Idle Timeout In Seconds is set to a value greater than 0, the removes or destroys any MDB bean instance that is idle for this specified duration. A value of 0 specifies that idle MDB beans can remain in the pool indefinitely.	An integer indicting the Pool Idle Timeout in seconds for unused MDBs. A value of 0 specifies that idle MDBs can remain in the pool indefinitely. The configured default value is **600**.

TCPIP Client (Outbound) Adapter - General Outbound Settings

The General Outbound Settings properties represents general TCPIP outbound configuration information. The TCPIP Client (Outbound) Adapter - General Outbound Settings properties contain the top-level parameters displayed in the following table.

TABLE 4 TCPIPClient (Outbound) Adapter - General Outbound Settings Properties

Name	Description	Required Value
Persistence State File Location	Specifies the File Location (a local folder name). This property is required when the Scope Of State value is set to is Persistence. This file is used to store the state files which are used to persist the state value.	The file and path. The default value is **/temp/tcpipoutbound/state**.

TCPIP Client (Outbound) Adapter - TCPIP Outbound Settings

The TCPIP Outbound Settings properties represents general TCPIP outbound configuration information. The TCPIP Client (Outbound) Adapter - TCPIP Outbound Settings properties contain the top-level parameters displayed in the following table.

TABLE 5 TCPIPClient (Outbound) Adapter - TCPIP Outbound Settings Properties

Name	Description	Required Value
Host	Specifies the host name or IP address used to establish a TCPIP connection. This parameter is only used when the Connection Type is set to Client.	A TCP/IP host name or IP address. The configured default is **localhost**.
ServerPort	Specifies the port number of the TCP/IP destination. This is dependent upon the specified Connection Type. If the value for Connection Type is: ■ **Server**: The ServerPort value is set to the port number on the local host. ■ **Client**: The ServerPort value is set to the port number of the external host.	The port number of the TCP/IP destination. The default is **7777**.
Backlog	Specifies the maximum length of the queue when creating the ServerSocket. The maximum queue length for incoming connection indications (a request to connect) is set to the backlog parameter. If a connection indication arrives when the queue is full, the connection is refused. **Note –** This parameter is only used when Connection Type is set to Server.	An integer indicting the queue length for incoming connections. The configured default value is **50**.

TCPIP Client (Outbound) Adapter - Connection Pool Settings

Specific to the RA connection pool of GlassFish Server or the Oracle Java CAPS Enterprise Service Bus only. The parameter settings in this section are applied to `sun-ra.xml`.

The TCPIPClient (Outbound) Adapter - Connection Pool Settings properties contain the top-level parameters displayed in the following table.

TABLE 6 TCPIPClient (Outbound) Adapter - Connection Pool Settings Properties

Name	Description	Required Value
Steady Pool Size	Specifies the minimum number of RA connections to be maintained. When the value is set to a value that is greater than 0, the container not only pre-populates the RA connection pool with the specified number, but also attempts to ensure that there are always this many RA connections in the free pool. This ensures that there are enough RA connections in the "ready to serve" state to process user requests. For example, suppose an idle stateless session container has a fully-populated pool with a steady-pool-size of 10. If 20 concurrent requests arrive for the RA Connection component, the container creates 10 additional instances to satisfy the burst of requests. This prevents the container from blocking any of the incoming requests. However, if the activity dies down to 10 or fewer concurrent requests, the additional 10 instances are discarded.	An integer indicating the minimum number of RA connections to be maintained. The configured default is **1**.
Max Pool Size	Specifies the maximum number of RA connections in the pool.	An integer indicating the maximum number of RA connections in the pool. A value of **0** indicates that the pool is unbounded. The configured default is **32**.
Pool Idle Timeout In Seconds	Specifies the interval at which the "*remove expired RA connections*" thread runs. This thread periodically removes unused RA connections with expired timeouts. This provides a hint to the server, and allows you to specify the maximum amount of time that an RA connection instance can remain idle in the pool. After this period of time, the pool can remove this bean. When Pool Idle Timeout In Seconds is set to a value greater than 0, the container removes or destroys any RA connection instance that is idle for this specified duration. A value of 0 specifies that idle RA connections can remain in the pool indefinitely.	An integer indicting the Pool Idle Timeout in seconds for unused RA connections. A value of 0 specifies that idle RA connections can remain in the pool indefinitely. The configured default value is **600**.

EMail Adapter Environment Properties

The EMail Adapter configuration parameters, accessed from the EMail Adapter External System in the NetBeans Services window, are organized into the following sections:

- "Inbound Email Adapter ⇒ Connection Settings" on page 13.
- "Inbound Email Adapter ⇒ SSL" on page 14.
- "Inbound Email Adapter ⇒ SSL ⇒ CACerts" on page 14.
- "Inbound Email Adapter ⇒ MDB Settings" on page 15.
- "Outbound Email Adapter ⇒ Connection Settings ⇒ Send SMTP" on page 15.
- "Outbound Email Adapter ⇒ Connection Settings ⇒ Receive POP3" on page 16.
- "Outbound Email Adapter ⇒ SSL" on page 17.
- "Outbound Email Adapter ⇒ SSL ⇒ CACerts" on page 18.

Note – Some EMail Adapter properties can also be set from your Collaboration. Properties set from the Collaboration override the corresponding properties in the Adapter's configuration file. Any properties that are not set from the Collaboration retain their configured default settings.

Inbound Email Adapter ⇒ Connection Settings

The Inbound Email Adapter ⇒ Connection Settings section of the EMail Adapter Environment properties contains the top-level parameters displayed in the following table.

TABLE 7 Environment - Inbound Email Adapter ⇒ Connection Settings

Name	Description	Required Value
Host Receive	Specifies the host name of the server used to receive messages. This is required for "receiving" Adapter connections. This is also required for "sending" Adapter connections when the SessionAuth parameter is set to **Yes** (for POP3 login).	The host name of the server used to receive messages.
Port Receive	Specifies the port number used to connect when receiving Email messages. This is required for "receiving" Adapter connections. This is also required for "sending" Adapter connections when the SessionAuth parameter is set to **Yes** (for POP3 login).	The port number used to connect when receiving Email messages. This is a number between **1** and **65535**. The configured default is **110**.

TABLE 7 Environment - Inbound Email Adapter ⇒ Connection Settings *(Continued)*

Name	Description	Required Value
User Receive	Specifies the user name used when receiving messages. This is required for "receiving" Adapter connections. This is also required for "sending" Adapter connections when the SessionAuth parameter is set to **Yes** (for POP3 login).	The valid user login name used when receiving Email messages.
Password Receive	Specifies the password used when receiving messages. This is required for "receiving" Adapter connections. This is also required for "sending" Adapter connections when the SessionAuth parameter is set to **Yes** (for POP3 login).	The user password used when receiving messages.

Inbound Email Adapter ⇒ SSL

The Inbound Email Adapter ⇒ SSL section of the EMail Adapter Environment properties contains the top-level parameters displayed in the following table.

TABLE 8 Environment - Inbound Email Adapter ⇒ SSL

Name	Description	Required Value
Receive SSL Protocol	Specifies the SSL protocol to use when establishing an SSL connection with the server.	Select the appropriate SSL protocol. The options are: ■ No SSL ■ TLS ■ TLSv1 ■ SSLv3 ■ SSLv2 ■ SSL The configured default is **No SSL**.
X509 Algorithm Name	Specifies the X509 algorithm name to use for the trust and key manager factories.	An X509 algorithm name. The configured default is **SunX509**.

Inbound Email Adapter ⇒ SSL ⇒ CACerts

The Inbound Email Adapter ⇒ SSL ⇒ CACerts section of the EMail Adapter Environment properties contains the top-level parameters displayed in the following table.

TABLE 9 Environment - Inbound Email Adapter ⇒ SSL ⇒ CACerts

Name	Description	Required Value
TrustStore type	Specifies the type of truststore used for CA certificate management when establishing SSL connections.	The trustStore type. The configured default is **JKS**.
TrustStore	Specifies a truststore used for CA certificate management to establish SSL connections. A truststore file is a key database file that contains the public keys for a target server.	The truststore used for CA certificate management.
TrustStore password	Specifies the password for accessing the truststore used for CA certificate management when establishing SSL connections.	The truststore password.

Inbound Email Adapter ⇒ MDB Settings

The Inbound Email Adapter ⇒ MDB Settings section of the EMail Adapter Environment properties contains the top-level parameters displayed in the following table.

TABLE 10 Environment - Inbound Email Adapter ⇒ MDB Settings

Name	Description	Required Value
Max Pool Size	Specifies the maximum pool size. This controls the number of concurrent sessions.	An integer indicating the maximum pool size. The configured default is **10**.

Outbound Email Adapter ⇒ Connection Settings ⇒ Send SMTP

The Outbound Email Adapter ⇒ Connection Settings ⇒ Send SMTP section of the EMail Adapter Environment properties contains the top-level parameters displayed in the following table.

TABLE 11 Environment - Outbound Email Adapter ⇒ Connection Settings ⇒ Send SMTP

Name	Description	Required Value
Host Send	Specifies the host name of the server used to send messages. This is required for the “sending” Adapter connection.	The host name of the server used to send messages.

TABLE 11 Environment - Outbound Email Adapter ⇒ Connection Settings ⇒ Send SMTP *(Continued)*

Name	Description	Required Value
Port Send	Specifies the port number to connect to when sending messages. This is required for “sending” Adapter connections.	An integer indicating the port number. The configured default is **25**.
User Send	Specifies the user name used when sending messages. This is required for “sending” Adapter connections.	The login name used to access the sending host server.
Password Send	Specifies the password used when sending messages. This is required for “sending” Adapter connections.	The user password used to access the sending host server.
Text encoding	Specifies the encoding used for body and header text. Available encoding options are: ■ **ASCII**: for ASCII text. ■ **iso-8859-1**: Latin 1 (Western Europe) text. ■ **iso-2022-jp**: Japanese character text. ■ **ISO2022CN**: Chinese character text. ■ **ISO2022CN_GB**: Simplified Chinese character text. **ISO2022KR**: Korean character text.	Select one of the following: ■ ASCII ■ iso-8859-1 ■ iso-2022-jp ■ ISO2022CN ■ ISO2022CN_GB ■ ISO2022KR
Header encoding	Specifies the encoding used for the header. Available encoding options are: ■ **B**: Identical to the "BASE64" encoding defined by RFC 1341. ■ **Q**: Designed to allow text containing mostly ASCII characters to be deciphered by an ASCII terminal without decoding. Q encoding is similar to "Quoted-Printable" content-transfer-encoding defined in RFC 1341. “Q” encoding is recommended for use with most Latin character sets, while “B” encoding is recommended for all others.	Select one of the following: ■ B ■ Q

Outbound Email Adapter ⇒ Connection Settings ⇒ Receive POP3

The Outbound Email Adapter ⇒ Connection Settings ⇒ Receive POP3 section of the EMail Adapter Environment properties contains the top-level parameters displayed in the following table.

TABLE 12 Environment - Outbound Email Adapter ⇒ Connection Settings ⇒ Receive POP3

Name	Description	Required Value
Host Receive	Specifies the host name of the server used to receive messages. This is required for "receiving" Adapter connections. This is also required for "sending" Adapter connections when the SessionAuth parameter is set to Yes (for POP3 login).	The host name of the server used to receive messages.
Port Receive	Specifies the port number to connect to when receiving messages. This is required for "receiving" Adapter connections. This is also required for "sending" Adapter connection when the Session Authentication parameter is set to Yes (for POP3 login).	An integer indicating the port number used to connect with the receiving host server. The configured default is **110**.
User Receive	Specifies the user name used when receiving messages. This is required for "receiving" Adapter connections. This is also required for "sending" Adapter connections when the Session Authentication parameter is set to Yes (for POP3 login).	The login name used to access the receiving host server.
Password Receive	Specifies the password used when receiving messages. This is required for "receiving" Adapter connections. This is also required for "sending" Adapter connections when the Session Authentication parameter is set to Yes (for POP3 login).	The user password used to access the receiving host server.
Session Authentication	Determines whether a POP3 session authentication is performed before attempting an SMTP connection. This is required by some e-mail services. Set the value to Yes only when necessary. Yes requires that settings for Host Receive, Port Receive, User Receive, and Password Receive are entered for sending the Adapter connection.	Select **Yes** or **No**. **Yes** indicates that POP3 session authentication will be performed before attempting an SMTP connection. The configured default is **No**.

Outbound Email Adapter ⇒ SSL

The Outbound Email Adapter ⇒ SSL section of the EMail Adapter Environment properties contains the top-level parameters displayed in the following table.

TABLE 13 Environment - Outbound Email Adapter ⇒ SSL

Name	Description	Required Value
Send SSL Protocol	Specifies the SSL protocol to use when establishing an SSL connection with the SMTP server.	Select the appropriate SSL protocol. The options are: ■ No SSL ■ TLS ■ TLSv1 ■ SSLv3 ■ SSLv2 ■ SSL The configured default is **No SSL**.
Receive SSL Protocol	Specifies the SSL protocol to use when establishing an SSL connection with the server.	Select the appropriate SSL protocol. The options are: ■ No SSL ■ TLS ■ TLSv1 ■ SSLv3 ■ SSLv2 ■ SSL The configured default is **No SSL**.
X509 Algorithm Name	Specifies the X509 algorithm name to use for the trust and key manager factories.	An X509 algorithm name. The configured default is **SunX509**.

Outbound Email Adapter ⇒ SSL ⇒ CACerts

The Outbound Email Adapter ⇒ SSL ⇒ CACerts section of the EMail Adapter Environment properties contains the top-level parameters displayed in the following table.

TABLE 14 Environment - Outbound Email Adapter ⇒ SSL ⇒ CACerts

Name	Description	Required Value
TrustStore type	Specifies the type of truststore used for CA certificate management when establishing SSL connections.	The trustStore type. The configured default is **JKS**.
TrustStore	Specifies a truststore used for CA certificate management to establish SSL connections.	The truststore used for CA certificate management.
TrustStore password	Specifies the password used to access the truststore used for CA certificate management when establishing SSL connections.	The truststore password.

File Adapter Environment Properties

The File Adapter configuration parameters, accessed from the NetBeans Services window, are organized into the following sections:

- "Inbound File Adapter - Parameter Settings" on page 19.
- "Inbound File Adapter - MDB Settings" on page 19.
- "Outbound File Adapter - Parameter Settings" on page 20.

Inbound File Adapter - Parameter Settings

The Inbound File Adapter - Parameter Settings section of the File Adapter Environment properties contains the top level parameters displayed in the following table.

TABLE 15 File Adapter Environment Properties - Inbound File Adapter - Parameter Settings

Name	Description	Required Value
Directory	Specifies the folder or directory that the Adapter polls for input files.	A folder or directory name. You must use the absolute path; specify paths using the (forward) / slash mark. The configured default is `C:/temp`.

Inbound File Adapter - MDB Settings

The Inbound File Adapter - MDB Settings section of the File Adapter Environment properties contains the top level parameters displayed in the following table.

TABLE 16 File Adapter Environment Properties - Inbound File Adapter - MDB Settings

Name	Description	Required Value
Max Pool Size	Specifies the maximum number of Message Driven Beans instantiated at any one point for message handling. The polling interval and the MDB pool size (Max Pool Size) can be "tuned" based on the expected volume and frequency of incoming messages. A more frequent polling interval, due to a large number of new messages, will trigger the creation of new threads. The number of threads that can be processed, however, is limited by the MDB pool size. When the maximum MDB pool limit is reached, incoming threads are blocked. Increasing the MDB pool size allows more resource adapter threads to send data to the Collaboration. In most cases, the default MDB pool size of 1000 is sufficient.	An integer indicating the maximum MDB pool size. The default configuration is **1000**.

Outbound File Adapter - Parameter Settings

The Outbound File Adapter - Parameter Settings section of the File Adapter Environment properties contains the top level parameters displayed in the following table.

TABLE 17 File Adapter Environment Properties - Outbound File Adapter - Parameter Settings

Name	Description	Required Value
Directory	Specifies the directory to which output files are written.	The absolute path and directory name.

MSMQ Adapter Environment Properties

The MSMQ Adapter Environment properties are organized into the following sections:

- "Inbound MSMQ Adapter — MSMQ Environment" on page 21.
- "Inbound MSMQ Adapter — MDB Settings" on page 21.
- "Inbound MSMQ Adapter — Connection Retry Settings" on page 21.
- "Outbound MSMQ Adapter — MSMQ Environment" on page 22.
- "Outbound MSMQ Adapter — Connection Retry Settings" on page 23.

Inbound MSMQ Adapter — MSMQ Environment

The Inbound MSMQ Adapter — MSMQ Environment section of the MSMQ Adapter Environment properties contains the top-level properties displayed in the following table.

TABLE 18 Environment - Inbound MSMQ Adapter — MSMQ Environment

Name	Description	Required Value
MSMQ Host Name	Specifies the Microsoft Message Queue host name.	The Microsoft Message Queue host name. Avoid using an IP address or "localhost" for the local server. These may not work in your MSMQ Environment. **Note –** If the Host Name contains more than 15 characters, MSMQ will truncate the name. In this case, you must use the truncated Host Name. Refer to the *Queue Properties, General* tab to see the specific Host Name for your system.

Inbound MSMQ Adapter — MDB Settings

The Inbound MSMQ Adapter — MDB Settings section of the MSMQ Adapter Environment properties contains the top-level properties displayed in the following table.

TABLE 19 Environment - Inbound MSMQ Adapter — MDB Settings

Name	Description	Required Value
Max Pool Size	Specifies the maximum number of physical connections the pool can contain. A value of **0** (zero) indicates that there is no maximum.	An integer indicating the maximum pool size. The configured default is **1000**.

Inbound MSMQ Adapter — Connection Retry Settings

The Inbound MSMQ Adapter — Connection Retry Settings section of the MSMQ Adapter Environment properties contains the top-level properties displayed in the following table.

TABLE 20 Environment - Inbound MSMQ Adapter — Connection Retry Settings

Name	Description	Required Value
Connection Retry Count	Specifies the maximum number of attempts made to connect to the destination queue manager or queue. If the queue manager or queue cannot be accessed for any reason, this setting specifies how many reattempts are made to complete the processing.	An integer indicating the maximum number of connection attempts. The configured default is **0**.
Connection Retry Interval	Specifies the amount of time (in milliseconds) between attempts to connect to the destination queue manager or queue. This is the pause between each reattempt to access the destination queue manager or queue. Used in conjunction with the **Connection Retry Count** setting.	An integer indicating the wait time in milliseconds between connection attempts. The configured default is **1000**.

Outbound MSMQ Adapter — MSMQ Environment

The Outbound MSMQ Adapter — MSMQ Environment section of the MSMQ Adapter Environment properties contains the top-level properties displayed in the following table.

TABLE 21 Environment - Outbound MSMQ Adapter — MSMQ Environment

Name	Description	Required Value
MSMQ Host Name	Specifies the Microsoft Message Queue host name.	The Microsoft Message Queue host name. Avoid using an IP address or “localhost” for the local server. These may not work in your MSMQ Environment. **Note –** If the Host Name contains more than 15 characters, MSMQ will truncate the name. In this case, you must use the truncated Host Name. Refer to the **Queue Properties**, **General** tab to see the specific Host Name for your system.

Outbound MSMQ Adapter — Connection Retry Settings

The Outbound MSMQ Adapter — Connection Retry Settings section of the MSMQ Adapter Environment properties contains the top-level properties displayed in the following table.

TABLE 22 Environment - Outbound MSMQ Adapter — Connection Retry Settings

Name	Description	Required Value
Connec tion Retry Count	Specifies the maximum number of attempts made to connect to the destination queue manager or queue. If the queue manager or queue cannot be accessed for any reason, this setting specifies how many reattempts are made to complete the processing.	An integer indicating the maximum number of connection attempts. The configured default is **0**.
Connec tion Retry Interval	Specifies the amount of time (in milliseconds) between attempts to connect to the destination queue manager or queue. This is the pause between each reattempt to access the destination queue manager or queue. Used in conjunction with the Connection Retry Count setting.	An integer indicating the wait time in milliseconds between connection attempts. The configured default is **1000**.

CICS Adapter Environment Properties

The CICS Adapter configuration parameters, accessed from the NetBeans Services window, are organized into the following sections:

- "Oracle Java CAPS CICS Listener" on page 23
- "CICS Gateway" on page 26
- "CICS Client" on page 27
- "Tracing" on page 27
- "Connection Retry Settings" on page 29
- "Connection Pool Settings" on page 29

Oracle Java CAPS CICS Listener

The Oracle Java CAPS CICS Listener section of the CICS Environment properties contains the top-level parameters displayed in the following table.

TABLE 23 Environment Properties - Oracle Java CAPS CICS Listener Section

Name	Description	Required Value
Host	Specifies the name of the mainframe host you are connecting.	Enter CICS. The value always defaults to **CICS** for CICS connections.
Port	Specifies the TCP/IP port where the Oracle Java CAPS CICS Listener (and the CICS Listener) is listening. This is the port to which the CICS Adapter will connect.	The TCP/IP port to which Oracle Java CAPS CICS Listener is listening.
Oracle Java CAPS CICS Listener TransId	Specifies the Oracle Java CAPS CICS Listener TransId on the mainframe host. This is the CICS Transaction that the Oracle Java CAPS CICS Listener is installed under.	The valid TransId of the Oracle Java CAPS CICS Listener. The default is **STCL**.
Start Type	Specifies the startup type. This can be either IC for CICS interval control, or TD for CICS transient data. This is the CICS Startup type for the program being executed.	Select **IC** or **TD** . The default value is **IC**.
Start Delay	Specifies the hours, minutes and seconds (interval of time) to delay starting the transaction program (TP) on the CICS server for the IC Start Type. This field is optional, but must specify all 6 digits if used.	A 6 digit integer. All 6 digits must be given if this is specified (for example, 123456). The default value is **000000**.
Listener Timeout	Specifies the amount of time (in milliseconds) for the Oracle Java CAPS CICS Listener to wait for the next incoming transaction program request from the CICS Adapter.	A number indicating the Listener timeout in milliseconds (for example, 120000 milliseconds equals 2 minutes).
TP Timeout	Specifies the amount of time the CICS Adapter will wait for the Oracle Java CAPS CICS Listener to return results for a current transaction program request.	A number indicating the TP Timeout in milliseconds (for example, 120000 milliseconds equals 2 minutes).
Polling Rate	Specifies the polling rate. This is the number of times the Oracle Java CAPS CICS Listener queries the current TCP connection for incoming traffic before issuing an EXEC CICS DELAY for one second.	An integer indicating the Oracle Java CAPS CICS Listener polling rate.
Transport Timeout	Specifies the timeout used by both the local and host side for send or receive.	A number indicating the Transport Timeout in milliseconds (for example, 5000 milliseconds equals 5 seconds).

TABLE 23 Environment Properties - Oracle Java CAPS CICS Listener Section *(Continued)*

Name	Description	Required Value
COMMAREA Padding Character	Specifies the EBCDIC code for the character used by the SBYND listener to pad the COMMAREA at the CICS server when the actual length of the payload in the COMMAREA is shorter than the length given by CommAreaLength. The default value is hexadecimal 40 - EBCDIC space.	A character value coded in Hexadecimal. For example: 40 for Blanks, 00 for Low Values, FF for High Values, and so forth. The default value is **40**.
SendBufSize	Specifies the Send Buffer Size (in bytes) for the underlying socket.	A number indicating the Buffer Size in bytes (for example, 2048 bytes equals 2 KB).
ReceiveBufSize	Specifies the Receive Buffer Size (in bytes) for the underlying socket (provided as a hint).	A number indicating the Receive Buffer Size in bytes (for example, 10240 bytes equals 10 kilobytes).
NoDelay	Specifies whether the system can delay connections or requests. Generally, True (no delay) is required for high-volume or critical transactions. In cases of low-volume and noncritical transactions, you can use False. (Specifies whether to disable Nagle's Algorithm.)	Enter **True**or **False**. **True** is the default.

TABLE 23 Environment Properties - Oracle Java CAPS CICS Listener Section *(Continued)*

Name	Description	Required Value
KeepAlive	Specifies whether to enable the socket's SO_KEEPALIVE option when it creates a socket connection to the CICS listener. SO_KEEPALIVE maintains active connections by enabling periodic transmission of messages (if this is supported by the protocol). If the connected socket fails to respond to these messages, the connection is broken and the processes writing to that socket are notified with an ENETRESET errno. This option takes an int value in the optval argument. This is a BOOL option. The socket's SO_KEEPALIVE option is used to enable pinging of the connection to the peer during connection to keep the connection "alive". This is used to prevent connections from going idle and timing out. SO_KEEPALIVE periodically sends a message to the connection socket of the peer to ensure that the connection is still "alive" (active). One of three responses is expected: 1. The peer responds with the expected ACK. The application is not notified (since everything is OK). TCP will send another probe following another 2 hours of inactivity. 2. The peer responds with an RST, which tells the local TCP that the peer host has crashed and rebooted. The socket is closed. 3. The peer fails to return a response. The socket is closed. The purpose of this option is to detect whether the peer host has crashed.	Enter **True** to enable SO_KEEPALIVE, or **False** to disable the option. **True** is the configured default.

CICS Gateway

The CICS Gateway section of the CICS Environment properties contains the top-level parameters displayed in the following table.

TABLE 24 Environment Properties - CICS Gateway Section

Name	Description	Required Value
URL	Specifies the remote or local Gateway to which you are connecting. **Note –** This parameter requires specific JAR files when using `local:` as the value. The default value **local:**, does not work with CTG running on z/OS. For CTG running on a z/OS system, the URL property value must be set to localhost or to the server name.	The remote or local Gateway node name or IP address. The configured default is **local**.
Port	Specifies the TCP/IP port where CTG is running.	An number indicating the TCP/IP port.
Server	Specifies a server to use from the servers listed in the CTG configuration.	The name of a server as specified in the CTG server list. If this value is left blank, the first server specified in the list is used by default.
SSL KeyRing Class	Specifies the classname of the SSL KeyRing class.	The full classname of the SSL KeyRing class.
SSL KeyRing Password	Specifies the password for the encrypted KeyRing class.	The password for the SSL KeyRing class.

CICS Client

The CICS Gateway section of the CICS Environment properties contains the top-level parameters displayed in the following table.

TABLE 25 Environment Properties - CICS Client Section

Name	Description	Required Value
CICS UserId	Specifies the ID of the CICS user. Maximum length is eight characters.	A CICS user ID that uses eight characters or less.
CICS Password	Specifies the password for the CICS user. Maximum length is eight characters.	A password of eight characters or less.

Tracing

The Tracing section of the CICS Environment properties contains the top-level parameters displayed in the following table.

TABLE 26 Environment Properties - Tracing Section

Name	Description	Required Value
Level	CTG specific. Specifies the level of trace information recorded available. The options are: **0: None**. No CICS Java client application tracing. **1: Standard**. Only the first 128 bytes of any data block (for example the COMMAREA, or network flows) are displayed by default. This trace level is equivalent to the Gateway trace set by the ctgstart -trace option. (This can also be set using the system property **gateway.T.trace=on**). **2: Full Debug**. Traces out the whole of any data blocks by default. The trace contains more information about CICS Transaction Gateway than the standard trace level. This trace level is equivalent to the Gateway debug trace set by the ctgstart -x option. (This can also set using the system property **gateway.T=on**). **3: Exception Stacks**. Traces most Java exceptions, including exception which are expected during normal operation of the CICS Transaction Gateway. No other tracing is written. This trace level is equivalent to the Gateway stack trace set by the ctgstart -stack option. (This can also set using the system property **gateway.T.stack=on**).	An integer from **0** to **3** that indicates the specified trace information level. The configured default is **0**.
Filename	CTG specific. Specifies a file location for writing the trace output. This is an alternative to the default output on stderr. Long filenames must be surrounded by quotation marks; for example, "trace output file.log". **Note –** The filename can also be set using the system property **gateway.T.setTFile=xxx**, where **xxx** is a filename.	The output file name.
Truncation Size	CTG specific. Specifies the maximum size of any data blocks written in the trace. **Note –** The truncation size can also be set using the system property **gateway.T.setTruncationSize=xxx**, where **xxx** is a number.	A number indicating the maximum data block size. A value of **0** indicates that no data blocks will be written in the trace. No value (leaving the property blank) indicates that no truncation size is specified.

TABLE 26 Environment Properties - Tracing Section *(Continued)*

Name	Description	Required Value
Dump Offset	CTG specific. Specifies the offset from which the display of any data blocks will start. **Note –** The dump offset can also be set using the system property **gateway.T.setDumpOffset=xxx**, where **xxx** is a number.	CTG specific. Specifies the offset from which the display of any data blocks will start.
Timing	Specifies whether or not to display timestamps in the trace.	Select **On** or **Off**. **On** indicates that the timestamp is displayed in the trace. The default setting is **On**. **Note –** Timing can also set using the system property **gateway.T.timing=on**.

Connection Retry Settings

The Connection Retry Settings section of the CICS Environment properties contains the top-level parameters displayed in the following table.

TABLE 27 Environment Properties - Connection Retry Settings Section

Name	Description	Required Value
Maximum Retries	Specifies the maximum number of connection retries.	A number indicating the number of times the Adapter will try to establish a connection. The configured default is **5**.
Retry Interval [ms]	Specifies the number of milliseconds to wait between connection retries.	A number indicating the time (in milliseconds) that the Adapter waits between connection attempts. The configured default is **5000** (or 5 seconds).

Connection Pool Settings

The Connection Pool Settings section of the CICS Environment properties contains the top-level parameters displayed in the following table.

TABLE 28 Environment Properties - Connection Pool Settings Section

Name	Description	Required Value
Steady Pool Size	Specifies the initial and minimum number of connections to be maintained.	A number indicating the initial and minimum number of connections to be maintained. The configured default is **2**.
MaxPool Size	Specifies the maximum size of the connection to EIS.	A number indicating the maximum size of the connection to EIS. The configured default is **10**.

COM/DCOM Adapter Environment Properties

The DCOM section of the COM/DCOM Environment property contains the top-level parameter displayed in the following table.

Name	Description	Required Value
Server	Specifies the default server used when creating an instance of a DCOM component (that is, a remote server executable). This property is not required when using an in-process component (for example, a .dll).	The name of the server on which the DCOM component is to be created. If the name is not specified, then objects are created on the local host. **Note –** This property can also be configured dynamically from the Collaboration.

HTTPS Adapter Environment Properties

Adapter External System properties must be configured from within the Environment. Until you have successfully configured all Adapters for your Java CAPS project, your project cannot be properly executed or deployed. The following list identifies the HTTPS Adapter properties. There are four Environment Configuration categories that the HTTPS Adapter implements.

Property Categories Configured in the Application Server Environment

- "HTTPS Adapter HTTP Settings" on page 31.
- "HTTPS Adapter Proxy Configuration" on page 32.
- "HTTPS Adapter Security" on page 34.
- "HTTPS Adapter Connection Pool Settings" on page 38.

HTTPS Adapter HTTP Settings

HTTP Settings includes the configuration parameters listed in the following table.

Caution – Calling the `clear()` method in the Collaboration Editor (Java) clears all properties in this HTTP Settings section. Once the properties have been cleared, you must manually rebuild the header and payload sections of the Request message in the Transformation Designer.

TABLE 29 Environment Configuration—HTTP Settings

Name	Description	Required Value
URL	Specifies the default URL to be used for establishing an HTTP or HTTPS connection. When a URL is not assigned to the HTTP OTD, the default value is used as the URL for both the `GET` and `POST` commands. See GET and POST Methods. If "https" protocol is specified, SSL must be enabled. See the *SSL properties table*.	A valid URL. You must include the full URL. For example, `http://google.yahoo.com/bin/query` If using GET functionality, you can provide the properties, using encoded query string notation. For example (all on one line). `http://www.ee.cornell.edu/cgi-bin/cgiwrap/~wes/pq?FirstName=John&LastName=Doe` **Note –** For international URLs, be sure the targeting URL supports the encoding used in this property. A list of the character encoding supported by the Java 2 platform is at the Oracle documentation site.

TABLE 29 Environment Configuration—HTTP Settings *(Continued)*

Name	Description	Required Value
Content Type	The default Content type header value to include when sending a request to the server. If no value is specified, a default value of **application/x-www-form-urlencoded** is supplied by the Adapter. **Note –** A change of the configuration value will only alter the header value, and not the actual Content type. When necessary, you can undertake any conversion or transformation of data manually.	A valid string.
Encoding	The default encoding used when reading or writing textual data.	A valid entry. The default is ASCII.
Connect Timeout	The timeout value, in milliseconds, when opening a communication link to the URL. A value of 0 (zero) indicates an infinite timeout period.	The number of milliseconds. The default is 0 (zero).
Read Timeout	The timeout value, in milliseconds, when reading from an input stream when a connection is established to a URL resource. A value of 0 (zero) indicates an infinite timeout period.	The number of milliseconds. The default is 0 (zero).

HTTPS Adapter Proxy Configuration

The properties in this section specify the information required for the Adapter to access the external systems through a proxy server.

Use the Proxy Configuration settings in the client HTTPS Environment properties, when setting the desired URL dynamically within a Collaboration (Java) or Business Process.

Note – It is a known behavior of the Java Virtual Machine (JVM) to bypass an invalid proxy server through a local connection. As a result, you may still get a response, even if the proxy setting is invalid. This false response only happens with an HTTP connection. An HTTPS connection ensures authenticated handshaking from the proxy.

The HTTPS Adapter client bypasses the proxy server when accessing local addresses. This contrasts a web browser's behavior where all requests are sent to a proxy even if they are local.

Proxy Configuration includes the configuration parameters listed in the following table.

TABLE 30 Environment Configuration—Proxy Configuration

Name	Description	Required Value
Proxy Host	Specifies the host name of the HTTP proxy. This specifies the HTTPS proxy host to which requests to an HTTP server or reception of data from an HTTP server may be delegated to a proxy. This sets the proxy port for secured HTTP connections.	A valid HTTPS proxy host name.
Proxy Port	Specifies the port of the HTTPS proxy. This specifies the HTTPS proxy port to which requests to an HTTP server or reception of data from an HTTP server may be delegated to a proxy. This sets the proxy port for secured HTTP connections.	A valid HTTPS proxy port. The default is **8080**.
Proxy Username	Specifies the user name necessary for authentication to access the proxy server.	A valid user name. **Note –** The user name is required by URLs that require HTTP basic authentication to access the site. Be sure to enter a value for this property before you enter a value for the Proxy password properties.
Proxy Password	Specifies the password required for accessing the HTTPS proxy.	The appropriate password. **Note –** Be sure to enter a value for the Proxy username properties before entering this property.

An additional task to properly configure the Proxy properties is to edit the PropertyPermission utility of the `server.policy` file in the application server:

▼ To Edit the Property Permission Utility of the server.policy File

1 Navigate to

JavaCAPS_Home`\appserver\is\lib\install\templates\`

where, *JavaCAPS_Home* is the location of your installation.

2 Add the following syntax to the `server.policy` file:

```
permission java.util.PropertyPermission “*”, “read,write”;
```

3 For the permission changes to take place, you need to create a new domain.

See *Creating and Starting the Domain* to create a new domain.

HTTPS Adapter Security

The Environment Configuration Security properties are used to perform HTTP authentication and SSL connections. They include the following configuration sections:

- Table 31.
- Table 32.

HTTPS Adapter Authentication

Details for the Authentication settings used for HTTP authentication are detailed in the following table.

TABLE 31 Environment Configuration — Security, Authentication

Name	Description	Required Value
HTTP Username	Specifies the user name for authenticating the web site specified by the URL.	A valid user name. **Note** – Enter a value for this property before you enter a value for the HTTP password properties.
HTTP Password	Specifies the password used for authenticating the web site specified by the URL.	A valid password. **Note** – Be sure to enter a value for the HTTP username properties before entering this property.

HTTPS Adapter SSL

Details for the SSL settings used for SSL connections are detailed in the following table.

TABLE 32 Environment Configuration — Security, SSL

Name	Description	Required Value
Protocol SSL	The SSL protocol to use when establishing an SSL connection with the server. If the protocol is not set by this method, the default protocol type, TLS (JSSE), is used. If an SSL connection is not required, leave the default No SSL option.	If you are using the default JSSE provider, choose one of the following settings: ■ TLSv1 ■ TLS ■ SSLv2 ■ SSLv3 ■ SSL If you are running the GlassFish Server on AIX, choose or enter one of the following settings: ■ SSL-TLS ■ TLSv1 ■ TLS ■ SSLv3 ■ SSLv2 ■ SSL For details on these settings, see the appropriate *JSSE* documentation.

JSSE Provider Class	Specifies the fully qualified name of the JSSE provider class. For more information, see the Oracle web site.
	It is assumed that the provider class is in the runtime classpath.
		The name of a valid JSSE provider class. The default is
		`com..net.ssl.internal.ssl.Provider`
		If you are running the application server on AIX, specify
		`com.ibm.jsse.IBMJSSEProvider`

X509 Algorithm Name	Specifies the X509 algorithm name to use for the trust and key manager factories.	The name of a valid X509 algorithm. The default is **X509**. If you are running the GlassFish server on AIX, specify **IbmX509**.
KeyStore Type	Specifies the default KeyStore type. The keystore type is used for key/certificate management when establishing an SSL connection. If the default KeyStore type is not set by this method, the default KeyStore type, JKS, is used.	

TABLE 32 Environment Configuration — Security, SSL *(Continued)*

Name	Description	Required Value
KeyStore	Specifies the default KeyStore file. The keystore is used for key/certificate management when establishing SSL connections.	A valid package location. There is no default value. It is recommended to use `<c:\JavaCAPS>\appserver\is\domains<MyDomain>\config\keystore.jks` where, *c:\JavaCAPS* is the directory where Java CAPS is installed and *MyDomain* is the name of your domain.
KeyStore Username	The username for accessing the keystore used for key/certificate management when establishing SSL connections. **Note –** If the keystore type is PKCS12 or JKS, the keystore username properties is not used. PKCS12 and JKS keystore types require passwords for access but do not require user names. If you enter a value for this property, it is ignored for PKCS12 and JKS.	
KeyStore Password	Specifies the default KeyStore password. The password is used to access the KeyStore used for key/certificate management when establishing SSL connections; there is no default.	
TrustStore Type	The TrustStore type of the TrustStore used for CA certificate management when establishing SSL connections. If the TrustStore type is not set by this method, the default TrustStore type, **JKS**, is used.	A valid **TrustStore** type.
TrustStore	Specifies the default TrustStore. The TrustStore is used for CA certificate management when establishing SSL connections.	A valid **TrustStore** name. There is no default value. It is recommended to use `<c:\JavaCAPS>\appserver\is\domains<MyDomain>\config\cacerts.jks` where, *c:\JavaCAPS*is the directory where the Java CAPS is installed and *MyDomain* is the name of your domain.

TABLE 32 Environment Configuration — Security, SSL (Continued)

Name	Description	Required Value
TrustStore Password	Specifies the default TrustStore password. The password is for accessing the TrustStore used for CA certificate management when establishing SSL connections.	A valid **TrustStore** password. There is no default value.

Additional SSL Section Notes

Following are additional notes related to the properties in the SSL section.

Verify Hostname

Description

Determines whether the host name verification is done on the server certificate during the SSL handshake.

You can use this property to enforce strict checking of the server host name in the request URL and the host name in the received server certificate.

- **Required Values**.
- Select **True** or **False**.

  The default is **False**.

Additional information

Under some circumstances, you can get different Java exceptions, depending on whether you set this property to **True** or **False**. This section explains what causes these exceptions.

For example, suppose the host name in the URL is `localhost`, and the host name in the server certificate is `localhost.stc.com`. Then, the following conditions apply:

- If **Verify hostname** is set to **False**:

  Host name checking between the requested URL and the server certificate is turned *off*.

  You can use an incomplete domain host name, for example, `https://localhost:444`, or a complete domain host name, for example, `https://localhost.stc.com:444`, and get a positive response in each case.
- If **Verify hostname** is set to **True**:

  Host name checking between the requested URL and the server certificate is turned *on*.

Note – If you use an incomplete domain host name, for example, `https://localhost:444`, you can get the exception `java.io.IOException: HTTPS hostname wrong`.

You must use a complete domain host name, for example, `https://localhost.stc.com:444`.

HTTPS Adapter Connection Pool Settings

Connection Pool Settings include the configuration parameters listed in the following table.

TABLE 33 Environment Configuration — Connection Pool Settings

Name	Description	Required Value
Steady Pool Size	Specifies the minimum number of physical connections the pool should keep available at all times. 0 (zero) indicates that there should be no physical connections in the pool and the new connections should be created as needed.	A valid numeric value. The default is **1**.
Maximum Pool Size	Specifies the maximum number of physical connections the pool should keep available at all times. 0 (zero) indicates that there is no maximum.	A valid numeric value. The default is **10**.
Maximum Idle Timeout	Specifies the number of seconds that a physical connection may remain unused before it is closed. 0 (zero) indicates that there is no limit.	A valid numeric value. The default is **300**.

IMS Adapter Environment Properties

The IMS Adapter configuration parameters, accessed from the NetBeans Services window, are organized into the following sections:

- "IMS Adapter TCP/IP Configuration" on page 38.
- "IMS Adapter IRM Header" on page 39.
- "IMS Adapter Serial Mode Settings" on page 47.
- "IMS Adapter Connection Retry Settings" on page 48.
- "IMS Adapter Connection Pool Settings" on page 48.

IMS Adapter TCP/IP Configuration

The TCPIP Configuration section contains information for connecting to the Portal Infranet. This section contains the top level parameters, as displayed in the following table.

TABLE 34 Environment TCP/IP Configuration Settings

Name	Description	Required Value
Server	Specifies the name of the server host. This parameter is mandatory.	The server host name.
Port	Specifies the port that IMS Connect is listening on. This parameter is mandatory.	A number indicating the port on which IMS Connect is listening. The default is **7777**.

IMS Adapter IRM Header

The IRM (IMS Request Message) Header section contains the top-level parameters displayed in the following table.

Note – For a full description of the IRM header, see *IBM's IMS Connect Guide and Reference (SC27-0946-00)*.

TABLE 35 Environment IRM Header Settings

Name	Description	Required Value
IRM_LEN	Specifies the length of the IRM structure. The user written exits minimum size is 36. HWSIMSO0 and HWSSMPL1 have a minimum IRM length of 80.	An integer indicating valid IRM structure length. The configured default is **80**.
IRM_ID	Specifies the identifier (character string) of the user exit that is driven after the complete message is received. In a program, an exit is used to move from the called routine back to the calling routine. A routine can have more than one exit point, thus allowing termination based on various conditions. The following IDs are used by the IMS Connect-supplied user message exits: ■ *IRMREQ* (for HWSIMSO0) ■ *SAMPL1* (for HWSSMPL1)	The appropriate identifier character string. The configured default is ***SAMPL1***.

TABLE 35 Environment IRM Header Settings *(Continued)*

Name	Description	Required Value
IRM_TIMER	Specifies the time delay for the receive to the Datastore after an ACK or RESUME TPIPE. One of following three predefined timer options can be selected: ■ **.25 SEC**: .25 seconds. ■ **No_Wait**: Timer is not set and no delay occurs. ■ **Block**: The receive waits indefinitely. This setting is used to support the Auto option of the asynchronous output function. OR One of the following hex values can be entered as a timer value: ■ **X01 - X19**: Range from 0.01 to 0.25 second, 0.01 second increments. ■ **X19 - X28**: Range from 0.25 to 1 second, 0.05 second increments. ■ **X28 - X63**: Range from 1 to 60 second, 1 second increments. ■ **X63 - X9E**: Range from 1 to 70 minutes, 1 minute increments.	Select one of the three predefined options or enter a valid hex value. The configured default is **.25 SEC**. **Note –** The following hex values correspond to the three predefined choices in the drop-down menu: ■ X00 = Default - .25 secs ■ XE9 = No_Wait - Does not set the timer ■ XFF = Block
IRM_SOCT	Specifies the socket connection type. ■ **Transaction**: Transaction socket. The socket connection lasts across a single transaction. ■ **Persistent**: Persistent socket. The socket connection lasts across multiple transactions. ■ **Non_Persistent**: Non-persistent socket. The socket connection lasts for a single exchange consisting of one input and one output. Do not use Non_Persistent when implementing conversational transactions because this type causes multiple connects and disconnects.	Select one of the three options. The configured default is **Persistent**. **Note –** The default for this property was changed from the previous version.

TABLE 35 Environment IRM Header Settings *(Continued)*

Name	Description	Required Value
IRM_CLIENTID	Specifies the name of the client ID (character string) to be used by IMS Connect. IMS Adapter supports both Serial and Parallel mode. ■ Serial mode is supported by specifying a ClientID. ■ Parallel mode is supported by specifying a ClientID with an *. **Note –** In each deployment, the ClientID must be unique.	The client ID to be used by IMS Connect.
IRM_F1 (MFS MOD Names)	Specifies whether the MFS Message Output Descriptor (MOD) is returned as part of the output. ■ **MFS**: The user requests that MFS MOD name be returned. ■ **NO_MFS**: The user requests that no MFS MOD name be returned. When MFS is specified, a Request Mod Message (RMM) is returned as the first structure of the output message. This structure contains an ID of *REQMOD* followed by the MFS MOD name. For details, see *IBM's IMS Connect Guide and Reference, (SC27-0946-00)*.	Select **MFS** or **NO_MFS**. The default is **NO_MFS**.
IRM_F2 (COMMIT MODE)	Specifies the Commit Mode. ■ **COMMIT_MODE_0** - Also known as commit-then-send. ■ **COMMIT_MODE_1** - Also known as send-then-commit. For a full description of the IRM header, see IBM's *IMS Connect Guide and Reference (SC27-0946-00)*.	Select **COMMIT_MODE_0** or **COMMIT_MODE_1**. The default is **COMMIT_MODE_1**. **Note –** The default for this property was changed from the previous version.

TABLE 35 Environment IRM Header Settings *(Continued)*

Name	Description	Required Value
IRM_F3 (Sync Level)	Specifies whether the message is to be confirmed with an ACK for Commit Mode 1 processing. For Commit Mode 0, IRM_F3 must be set to SYNC_LEVEL_CONFIRM. ■ **SYNC_LEVEL_CONFIRM**: Must be used when the IRM_F2 parameter (commit mode) is set to COMMIT_MODE_0. ■ **SYNC_LEVEL_NONE**: No Sync level.	Select **SYNC_LEVEL_CONFIRM** or **SYNC_LEVEL_NONE**. If the IRM_F2 property is set to COMMIT_MODE_0, the Sync level must be set to SYNC_LEVEL_CONFIRM. The default is **SYNC_LEVEL_NONE**. **Note –** The default for this property was changed from the previous version.

TABLE 35 Environment IRM Header Settings *(Continued)*

Name	Description	Required Value
IRM_F4 (ACK/NAK/ Response)	Specifies the ACK/NAK (positive/negative acknowledgement) response expression sent to IMS Connect and forwarded to IMS. The ACK/NAK/DEALLOCATE /RESUME [A/N/D/R] values must be sent to IMS Connect with no data element. ■ **NO_ACK**: No request for acknowledgment or deallocation. When a response mode transaction or conversational transaction is being sent to IMS Connect, IRM_F4 must be set to NO_ACK. ■ **ACK**: Positive acknowledgment, used in response to a message sent to the client where the SYNC level is set to CONFIRM (SYNC _LEVEL_CONFIRM). ■ **DEALLOCATE**: Deallocate connection. Used to terminate a conversation before the conversation is complete. ■ **NACK**: Negative acknowledgment. Used in response to a message sent to the client where the SYNC level is set to CONFIRM (SYNC _LEVEL_CONFIRM). ■ **RESUME**: Resume TPIPE. Used to request Asynchronous output data from IMS. Resume must execute on a transaction socket as COMMIT_MODE_0. ■ **SENDONLY**: Send only, used for a non-response transaction and for sending data to IMS. SENDONLY must execute as COMMIT_MODE_0.	Select one of the six options. The configured default is **NO_ACK**.

TABLE 35 Environment IRM Header Settings *(Continued)*

Name	Description	Required Value
IRM_F5 (Flow Control)	Specifies Flow Control properties. Oracle recommends using the default value **No_Auto_Flow**. **Note –** : Contact Oracle Support before using any value other than *No_Auto_Flow*. ■ **Client_Translation**: Translation is done by the client. ■ **Single_Message**: Returns only one message on receive following the resume TPIPE. ■ **No_Auto_Flow**: No message auto flow (see meaning for No_Auto_Flow_Out). ■ **Auto_Flow_Out**: Auto message flow. Returns all current messages, one at a time, and waits on the last receive for the next message for IRM_TIMER value. Set the IRM_TIMER high. Use this only for a dedicated output client. ■ **No_Auto_Flow_Out**: No message auto flow. Returns all current messages one at a time, and waits on the last receive for the next message for IRM_TIMER value. Set the IRM_TIMER low. Use this only for a dedicated output client. This value is similar to *Auto_Flow_Out*, as described above, except that the IRM_TIMER causes the last receive to terminate.	The recommended default setting is **No_Auto_Flow**.
IRM_TRNCOD	Specifies the default IMS transaction code.	A valid transaction code.
IRM_TRNCOD _SRC	Specifies where the transaction code is taken. ■ **CFG**: The transaction code is to be taken from the configuration file. ■ **MESSAGE**: the transaction code is the first 8 bytes of the message.	Select one of the two options. The configured default is **CFG**.
IRM_DESTID	Specifies the Datastore name (IMS destination ID). This field is required.	String-set. A Datastore name/IMS destination ID (character string).
IRM_LTERM	Specifies the IMS LTERM override name. This field can be set to a name or blank.	The appropriate LTERM name or blank.
IRM_RACF_ GRNAME	Specifies the RACF Group Name. The client must provide the RACF group name if RACF is to be used.	The appropriate RACF group name.

TABLE 35 Environment IRM Header Settings *(Continued)*

Name	Description	Required Value
IRM_RACF_ USERID	Specifies the RACF User ID. The client must provide the RACF user ID if RACF is used.	A valid RACF user ID.
IRM_RACF_PW	Specifies the RACF PASSTICKET. The client must provide the RACF PASSTICKET, if RACF is to be used.	The appropriate RACF PASSTICKET.
IRM_HEADER_ ENCODING	Specifies the encoding of the IRM Header properties sent to IMS Connect. ■ Set the value to ISO-8859-1 if the message body is ASCII text. The IMS Connect *SAMPL1* user exit converts the data to EBCDIC. ■ Set the value to an EBCDIC code set, such as cp500, if the message is EBCDIC text or binary data. No data translation occurs.	ISO-8859-1 for ASCII transaction content, or an EBCDIC code, such as cp500, for EBCDIC transaction content.
SEND_DATA_ ENCODING	Specifies the encoding translation (if any) to apply to the message body sent to IMS Connect. ■ Set to NO TRANSLATION to send the message body to IMS Connect without translation, or when using the *SAMPL1* user exit when the IRM Headers and message body are in ASCII. ■ Set to an EBCDIC code, such as cp500, to translate the message body from ASCII to EBCDIC before sending to IMS Connect. ■ If the content is a double-byte character set such as Japanese, set to the EBCDIC code page for that language (for example, cp930 for Japanese).	Enter NO TRANSLATION or the appropriate code page as follows: ■ Enter NO TRANSLATION when using the *SAMPL1* user exit and IRM Headers and message content is in ASCII. ■ Enter an EBCDIC code, such as cp500, to translate ASCII message content to EBCDIC before sending it to IMS Connect. ■ For double-byte character sets, enter the appropriate code page for that language (for example, cp390 for Japanese).
REPLY_DATA_ ENCODING	Specifies the encoding of the message body received back from IMS Connect. Set to ISO-8859-1 if the message text is ASCII. ■ Set to an EBCDIC code, such as cp500, if the return message is EBCDIC and/or no content translation is needed. ■ If the content set is a double-byte character, such as Japanese, set the appropriate EBCDIC code page for that language (for example, cp930 for Japanese).	The appropriate code page. For ASCII transactions, enter ISO-8859-1. ■ For EBCDIC transactions, enter an EBCDIC code, such as cp500. ■ For double-byte character sets, enter the appropriate code page for that language (for example, cp390 for Japanese).

Configuring the Client ID for the IMS Adapter

The following topics describe the configuration of Client IDs for the IMS Adapter.

▼ To configure the IMS Adapter for Parallel Processing

In this mode, the IMS Adapter is configured to handle multiple requests simultaneously (parallel mode).

1. **Set the Client ID in the IRM_Header section to a string which contains one or more trailing asterisks. For example, "Oracle*".**

   The Adapter will generate the rest of the Client ID string filling it with randomly generated alphanumeric characters. The length of the Client ID is 8. If you use a static Client ID, it must be unique (across deployments) if the IMS external systems which are being used are configured to connect to the same IMS Connect.

2. **Set the IRM_SOCT in the IRM_Header section to Persistent.**

   This allows the Adapter to retain the physical connection so that it can leverage the use of connection pooling as a resource adapter. If this is not set to Persistent and the Client ID is configured to use dynamic generation (that is, with an "*"), then a protocol error will occur.

   No other IRM_SOCT type can be used in parallel mode; as noted a protocol error will result if Persistent is not used.

   For the acknowledgement response expression (IRM_F4 - ACK/NAK Response), the following additional parameters must be set (in addition to the above):

   a. **Set the IRM_F2 (commit mode) to COMMIT_MODE_0.**

   b. **Set the IRM_F3 (sync level) to SYNC_LEVEL_CONFIRM.**

▼ To Configure the IMS Adapter for Serialized Processing

In this mode, the IMS Adapter is configured to handle one single request at a time. Multiple requests are serialized by the IMS Adapter through an internal locking mechanism.

● **Set the Client ID in the IRM_Header section to a string which does NOT contain an asterisk. For example, "OracleIMS".**

The Adapter will generate the rest of the Client ID string filling it with randomly generated alphanumeric characters. The length of the Client ID is 8. If you use a static Client ID, it must be unique (across deployments) if the IMS external systems which are being used are configured to connect to the same IMS Connect.

For the acknowledgement response expression (IRM_F4 - ACK/NAK Response), the following additional parameters must be set (in addition to the above):

a. **Set the IRM_SOCT to Transaction.**

b. **Set the IRM_F2 (commit mode) to COMMIT_MODE_0.**

c. **Set the IRM_F3 (sync level) to SYNC_LEVEL_CONFIRM.**

Duplicate Client IDs

When sending an IMS Connect interaction on a given port, an error will occur when using a ClientID which is already in use on that port. This can happen when you are executing an interaction with a ClientID, which is the same as that used by another interaction that ended as a result of a socket timeout. If this new interaction is received by IMS Connect while IMS Connect is still waiting for a response from IMS for the original interaction that received the socket timeout, a duplicate ClientID error could occur.

This can also occur if the socket timeout being used for the original interaction is set to a value which is less than the timeout set by the IRM_TIMER or the IMS Connect default timeout (set in the HWSCFGxx member). IMS Connect is not aware that the original socket has been disconnected as a result of the socket timeout until it does a subsequent read on that socket. This means it would consider the original socket still active, even though that socket has already been disconnected from the client end. Once you get to this situation, you will receive DUPECLNT errors until the IRM_TIMER expires on the IMS Connect side.

Note – For a full discussion of Client ID and timer issues, refer to *IMS Connectivity in the On Demand Environment - A Practical Guide to IMS Connectivity* (IBM Publication SG24-6794-00).

IMS Adapter Serial Mode Settings

The Serial Mode Settings section of the Outbound IMS Adapter Environment contains the top-level parameters displayed in the following table.

TABLE 36 Outbound IMS Adapter Environment - Serial Mode Settings

Name	Description	Required Value
Wait Timeout	When IRM_CLIENTID is static, which results in requests being serialized, multiple threads using the same Client ID will contend for a request lock. Threads contending for a request lock, being held by another thread, will wait until the pending request thread releases the lock. This parameter controls how long, in milliseconds, a request thread will wait for the lock.	An integer indicating the configured length of the time a thread will wait for the lock. The default is **6000** (milliseconds).

IMS Adapter Connection Retry Settings

The Connection Retry Settings section of the Outbound IMS Environment contains the top-level parameters displayed in the following table.

TABLE 37 Outbound IMS Adapter Environment - Connection Retry Settings

Name	Description	Required Value
Maximum Retries	Specifies the number of retries to establish a connection with the IMS Adapter database upon a failure to acquire one.	An integer indicating the number of attempts allowed to establish a connection. The configured default is **5**.
Retry Interval [ms]	Specifies the configured length of the pause before each reattempt to access the destination file. This property is used in conjunction with the property Maximum Retries.	An integer indicating the configured length of the time (in milliseconds) before each reattempt to access the destination file. The configured default is **5000** (1 second).

IMS Adapter Connection Pool Settings

The Connection Retry Settings section of the Outbound IMS Adapter Environment contains the top-level parameters displayed in the following table.

TABLE 38 Outbound IMS Adapter Environment - Connection Pool Settings

Name	Description	Required Value
Steady Pool Size	Specifies the initial and minimum number of connections to be maintained.	A number indicating the initial and minimum number of connections to be maintained. The configured default is **2**.
MaxPoolSize	The maximum number of physical connections the pool keeps available at all times. 0 (zero) indicates that there is no maximum.	A valid numeric value. The default is **10**.

LDAP Adapter Properties

The Adapter External System consists of the following properties categories.

- "LDAP Adapter Connection Properties" on page 49.
- "LDAP Adapter Security/SSL Properties" on page 50.
- "LDAP Adapter Connection Retry Settings" on page 52.
- "LDAP Adapter Connection Pool Settings" on page 53.

LDAP Adapter Connection Properties

The LDAP Adapter Connection Section Properties allow you to define the connection to the LDAP system.

TABLE 39 LDAP Adapter— Connection Settings

Name	Description	Required Value
Authentication	Allows you to select the authentication to be used (none or simple). Select the desired authentication as follows: ■ **None**: No authentication, that is, an anonymous login. If you use this setting, ensure that the LDAP server supports anonymous logins. ■ **Simple**: Authentication is based on a user name and password. You must provide the user name and password in the appropriate fields (Principal and Credentials).	Select **None** or **Simple**. The default is **None**.
Credentials	Allows you to enter the credentials needed when using an authentication mechanism other than anonymous login (authentication = None).	The appropriate credentials, in the form of a valid password.

TABLE 39 LDAP Adapter— Connection Settings *(Continued)*

Name	Description	Required Value
InitialContext Factory	Allows you to enter the factory to be used for creating the initial context for the LDAP server. By default, the LDAP service provider provided as part of the Java Software Developers' Kit (SDK) is used.	A valid Java factory name; the default is: `com.sun.jndi.ldap.LdapCtxFactory` It is recommended that you do not change this value unless you want to use an LDAP service provider other than the default.
Principal	Allows you to specify the principal needed when using an authentication mechanism other than anonymous login (authentication = None).	The fully qualified Distinguished Name (DN) of the user, for example: `CN=Administrator,CN=Users,DC=stc,dc=com`
ProviderURL	Allows you to specify the URL of the LDAP Server.	A valid URL with the protocol as **ldap**.

LDAP Adapter Security/SSL Properties

The LDAP Adapter Security/SSL Section Properties are used to set the basic security features for SSL. For more information on SSL Section properties, refer to "Additional Security/SSL Property Notes" in *Configuring Project Components for Oracle Java CAPS Communication Adapters*.

TABLE 40 LDAP Adapter— Security/SSL Settings

Name	Description	Required Value

JSSE Provider Class	Specifies the fully qualified name of the JSSE provider class. For more information, see the Oracle documentation site.	The name of a valid JSSE provider class; the default is:
		`com.sun.net.ssl.internal.ssl.Provider`
		If you are running the application server on AIX, specify:
		`com.ibm.jsse.IBMJSSEProvider`

KeyStore	Specifies the default KeyStore file. The keystore is used for key/certificate management when establishing SSL connections.	A valid package location; there is no default value.

TABLE 40 LDAP Adapter— Security/SSL Settings *(Continued)*

Name	Description	Required Value
KeyStore password	Specifies the default KeyStore password. The password is used to access the KeyStore used for key/certificate management when establishing SSL connections; there is no default.	A valid **KeyStore** password. There is no default value.
KeyStore type	Allows you to specify the default KeyStore type. The keystore type is used for key/certificate management when establishing SSL connections. If the KeyStore type is not specified, the default KeyStore type, JKS, is used.	A valid **KeyStore** type.
KeyStore username	The user name for accessing the keystore used for key/certificate management when establishing SSL connections. **Note –** If the keystore type is PKCS12 or JKS, the keystore user name property is not used. PKCS12 and JKS keystore types require passwords for access but do not require user names. If you enter a value for this property, it is ignored for PKCS12 and JKS.	A valid KeyStore user name.
SSL Connection Type	Allows you to specify the type of SSL connection to be used.	Select None, Enable SSL, or TLS On Demand. Enter the desired value as follows: ■ **None**: No SSL, simple plain connection. ■ **Enable SSL**: SSL is enabled. All communication to the LDAP server uses a secure communication channel. **Note –** If you are using the Enable SSL option, the ProviderURL property must point to a secure LDAP port (the default is 636). For additional information on required values for this property, see SSL Connection Type.
SSL Protocol	The SSL protocol to use when establishing an SSL connection with the LDAP server.	Select one of the following: ■ TLS ■ TLSv1 ■ SSLv3 ■ SSLv2 ■ SSL

TABLE 40 LDAP Adapter— Security/SSL Settings *(Continued)*

Name	Description	Required Value
TrustStore	Specifies the default TrustStore. The TrustStore is used for CA certificate management when establishing SSL connections.	A valid TrustStore file; there is no default value.
TrustStore password	Allows you to specify the default TrustStore password. The password is for accessing the TrustStore used for CA certificate management when establishing SSL connections.	A valid TrustStore password; there is no default value.
TrustStore type	Allows you to specify the TrustStore type of the TrustStore used for CA certificate management when establishing an SSL connection. If the TrustStore type is not specified, the default TrustStore type, JKS, is used.	A valid TrustStore type.
Verify hostname	Determines whether the host name verification is done on the server certificate during the SSL handshake. You can use this property to enforce strict checking of the server host name in the request URL and the host name in the received server certificate.	Select **True** or **False**. The default is **False**. For additional information on required values for this property, see *Verify Hostname*.
X509 Algorithm Name	Specifies the X509 algorithm name to use for the trust and key manager factories.	The name of a valid **X509** algorithm. The default is SunX509. If you are running the application server on AIX, specify **IbmX509**.

LDAP Adapter Connection Retry Settings

The LDAP Adapter Connection Retry Settings properties include the following parameters:

TABLE 41 LDAP External Adapter Properties— Connection Retry Settings

Name	Description	Required Value
Maximum Retries	Maximum number of retries to establish a connection upon failure to acquire one.	There is no required value. The default value is **5**.
Retry Interval	The number of Milliseconds to wait between connection retries.	Any valid number. The default value is **10000**.

LDAP Adapter Connection Pool Settings

The LDAP Adapter Connection Pool Settings properties include the following parameters:

TABLE 42 LDAP External Adapter Properties— Connection Pool Settings

Name	Description	Required Value
Steady Pool Size	The minimum number of connections that must be maintained in the pool.	The default value is **1**.
Maximum Pool Size	The maximum number of connections allowed in the pool. 0 (zero) indicates that there is no maximum.	The default value is **10**.
Maximum Idle Timeout	The maximum time in Seconds that a connection can remain idle in the pool. Zero indicates that there is no limit.	The default value is **300**.

Note – The current Connection Pool behavior of LDAP Adapter uses the steady pool size from the Environment and the outbound LDAP connection from the Connectivity Map properties. The two values are multiplied to determine the number of connection established at runtime.

As an example, the properties are set to the following values:

1. Steady Pool Size is **3**.
2. Outbound LDAP connections used in the Connectivity Map is **5**.

   At runtime, **3*5=15** connections are established.

Configuring the SNA Adapter Environment Properties

This task describes how to set the environment properties of the SNA Adapter.

The Adapter Environment Configuration properties contain parameters that define how the adapter connects to and interacts with other Oracle Java CAPS Enterprise Service Bus components within the Environment. When you create a new SNA External System, you may configure the type of External System required.

Available External System properties include:

- "SNALU62 Inbound Adapter Properties" on page 54.
- "SNALU62 Outbound Adapter Properties" on page 55.

Property Categories Configured in the Application Server Environment

SNALU62 Inbound Adapter Properties

Before deploying your adapter, you will need to set the Environment properties. The Inbound SNA Adapter includes the following configuration sections:

- SNA Settings
- General Settings
- MDB Pool Settings

SNA Settings

Details for the SNALU62 Inbound Adapter SNA Settings are listed in the table.

TABLE 43 SNALU62 Inbound Adapter—SNA Settings

Name	Description	Required Value
Host Name	Specifies the host name where the LU62 Server runs. **Note –** This parameter is only required for the Brixton LU62 server and is ignored on other platforms.	Any valid string. The default is **localhost**.
Symbolic Dest Name	Specifies the symbolic destination name associated with a side information entry loaded from the configuration file. Refer to your SNA documentation for more information.	Any valid string. **Note –** This parameter is case-sensitive.
Local LU Name	Specifies the local LU name defined to the SunLink LU62 server. Refer to your SNA documentation for more information. **Note –** This parameter is required for SunLink P2P LU6.2 9.1 and is ignored on other platforms.	Any valid string. **Note –** This parameter is case-sensitive.
Local TP Name	Specifies the local Transaction Program (TP) name that is running on the local LU. Refer to your SNA documentation for more information.	Any valid string. **Note –** This parameter is case-sensitive.

General Settings

Details for the SNALU62 Inbound Adapter General Settings are listed in the table.

TABLE 44 SNALU62 Inbound Adapter—General Settings

Name	Description	Required Value
Persistent Storage Location	Specifies the Persistent Location (a local folder path and name) that contains the file used to store the persistent data. The base file name will be generated according to the project, deployment, and Collaboration information.	The absolute path and name of the directory. The default is **/temp/snalu62inbound/persist**.

MDB Pool Settings

Details for the SNALU62 Inbound Adapter MDB Pool Settings are listed in the table.

TABLE 45 SNALU62 Inbound Adapter—MDB Pool Settings

Name	Description	Required Value
Steady Pool Size	Specifies the minimum number of physical connections the pool should keep available at all times. 0 (zero) indicates that there should be no physical connections in the pool and the new connections should be created as needed. If the pool size is too small, you may experience a longer connection time due to the existing number of physical connections. A connection that stays in the pool allows transactions to use it through a logical connection which is faster.	A valid numeric value. The default is **10**.
Max Pool Size	Specifies the maximum number of physical connections the pool should keep available at all times. 0 (zero) indicates that there is no maximum. The pool size you set depends on the transaction volume and response time of the application. If the pool size is too big, you may end up with too many connections to the SNA destination.	A valid numeric value. The default is **60**.
Pool Idle Timeout in Seconds	Specifies the maximum number of seconds that a physical connection may remain unused before it is closed. 0 (zero) indicates that there is no limit.	A valid numeric value. The default is **600**.

SNALU62 Outbound Adapter Properties

Before deploying your adapter, you will need to set the Environment properties. The Outbound SNA Adapter includes the following configuration sections:

- SNA Settings
- General Settings

- Connection Pool Settings

SNA Settings

Details for the SNALU62 Outbound Adapter SNA Settings are listed in the table.

TABLE 46 SNALU62 Outbound Adapter—SNA Settings

Name	Description	Required Value
Host Name	Specifies the host name where the LU62 Server runs. **Note –** This parameter is only required for the Brixton LU62 server and is ignored on other platforms.	Any valid string. The default is localhost.
Symbolic Dest Name	Specifies the symbolic destination name associated with a side information entry loaded from the configuration file. Refer to your *SNA documentation* for more information.	Any valid string. **Note –** This parameter is case-sensitive.
Local LU Name	Specifies the local LU name defined to the SunLink LU62 server. Refer to your SNA documentation for more information. **Note –** This parameter is required for SunLink P2P LU6.2 9.1 and is ignored on other platforms.	Any valid string. **Note –** This parameter is case-sensitive.
Local TP Name	Specifies the local Transaction Program (TP) name that is running on the local LU. Refer to your *SNA documentation* for more information.	Any valid string. **Note –** This parameter is case-sensitive.

General Settings

Details for the SNALU62 Outbound Adapter General Settings are listed in the table.

TABLE 47 SNALU62 Outbound Adapter—General Settings

Name	Description	Required Value
Persistent Storage Location	Specifies the Persistent Location (a local folder path and name) that contains the file used to store the persistent data. The base file name will be generated according to the project, deployment, and Collaboration information.	The absolute path and name of the directory. The default is **/temp/snalu62outbound/persist**.

Connection Pool Settings

Details for the SNALU62 Outbound Adapter Connection Pool Settings are listed in the table.

TABLE 48 SNALU62 Outbound Adapter—Connection Pool Settings

Name	Description	Required Value
Steady Pool Size	Specifies the minimum number of physical connections the pool should keep available at all times. 0 (zero) indicates that there should be no physical connections in the pool and the new connections should be created as needed. If the pool size is too small, you may experience a longer connection time due to the existing number of physical connections. A connection that stays in the pool allows transactions to use it through a logical connection which is faster.	A valid numeric value. The default is **1**.
Max Pool Size	Specifies the maximum number of physical connections the pool should keep available at all times. 0 (zero) indicates that there is no maximum. The pool size you set depends on the transaction volume and response time of the application. If the pool size is too big, you may end up with too many connections to the SNA destination.	A valid numeric value. The default is **32**.
Pool Idle Timeout in Seconds	Specifies the maximum number of seconds that a physical connection may remain unused before it is closed. 0 (zero) indicates that there is no limit.	A valid numeric value. The default is **300**.