WebSphere® Process Server for Multiplatforms

IBM

Version 6.1.0

Common Event Infrastructure

WebSphere® Process Server for Multiplatforms

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Note

Before using this information, be sure to read the general information in the Notices section at the end of this document.

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This edition applies to version 6, release 1, modification 0 of WebSphere Process Server for Multiplatforms (product number 5724-L01) and to all subsequent releases and modifications until otherwise indicated in new editions.

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Chapter 1. Common Event Infrastructure

Common Event Infrastructure is an embeddable technology intended to provide basic event management services to applications that require those services.

This event infrastructure serves as an integration point for consolidation and persistence of raw events from multiple, heterogeneous sources, and distribution of those events to event consumers. Events are represented using the Common Base Event model, a standard, XML-based format defining the structure of an event. For more information, see the Common Base Event model sub-topic.

By using this common infrastructure, diverse products that are not tightly coupled with one another can integrate their management of events, providing an end-to-end view of enterprise resources and correlating events across domain boundaries. For example, events generated by a network monitoring application can be correlated with events generated by a security application. Such correlation can be difficult to achieve when each product uses its own approach to event management.

Common Event Infrastructure provides facilities for generation, propagation, persistence, and consumption of events, but it does not define the events themselves. Instead, application developers and administrators define event types, event groups, filtering, and correlation.

Common Event Infrastructure components

Common Event Infrastructure consists of the following major components:

Common Base Event
The Common Base Event component supports the creation of events and access to their property data. Event sources use the Common Base Event APIs to create new events conforming to the Common Base Event model; event consumers use the APIs to read property data from received events. In addition, applications can convert events to and from XML text format, supporting interchange with other tools. The Common Base Event component is part of the Eclipse Test and Performance Tools Platform (TPTP).

Emitter
The emitter component supports the sending of events. After an event source creates an event and populates it with data, the event source submits the event to an emitter. The emitter optionally performs automatic content completion and then validates the event to ensure that it conforms to the Common Base Event specification. It also compares the event to configurable filter criteria. If the event is valid and passes the filter criteria, the emitter sends the event to the event service. An emitter can send events to the event service either synchronously (using Enterprise JavaBeans™ calls) or asynchronously (using a Java™ Message Service queue).

Event service
The event service is the conduit between event sources and event consumers. The event service receives events submitted to emitters by event sources. It stores events in a persistent data store, and then

distributes them asynchronously to subscribed event consumers. In addition, the event service supports synchronous queries of historical events from the persistent store.

Event catalog
The event catalog is a repository of event metadata. Applications use the event catalog to retrieve information about classes of events and their permitted content.

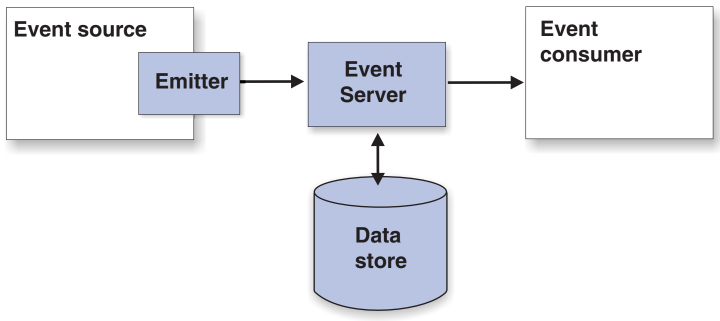
In addition, an application or solution using Common Event Infrastructure might also include the following components (which are not part of the infrastructure itself):

Event source
An event source is any application that uses an emitter to send events to the event service.

Event consumer
An event consumer is any application that receives events from the event service.

Event catalog application
An event catalog application is any application that stores or retrieves event metadata in the event catalog. This might be a management or development tool; it might also be an event source or event consumer.

The following diagram shows the general flow of events from event source to event consumer using Common Event Infrastructure.



Common Base Event model

The Common Base Event model is a standard that defines a common representation of events that is intended for use by enterprise management and business applications. This standard, developed by the IBM® Autonomic Computing Architecture Board, supports encoding of logging, tracing, management, and business events using a common XML-based format, making it possible to correlate different types of events that originate from different applications. The Common Base Event model is part of the IBM Autonomic Computing Toolkit; for more information, see http://www.ibm.com/autonomic.

Common Event Infrastructure currently supports version 1.0.1 of the specification.

The basic concept behind the Common Base Event model is the *situation*. A situation can be anything that happens anywhere in the computing infrastructure, such as a server shutdown, a disk-drive failure, or a failed user login. The

Common Base Event model defines a set of standard situation types that accommodate most of the situations that might arise (for example, StartSituation and CreateSituation).

An *event* is a structured notification that reports information related to a situation. An event reports three kinds of information:
- The situation itself (what has happened)
- The identity of the affected component (for example, the server that has shut down)
- The identity of the component that is reporting the situation (which might be the same as the affected component)

The Common Base Event specification defines an event as an XML element containing properties that provide all three kinds of information. These properties are encoded as attributes and subelements of the root element, CommonBaseEvent.

The Common Base Event format is extensible. In addition to the standard event properties, an event can also contain extended data elements, which are application-specific elements that can contain any kind of information relevant to the situation. The *extensionName* attribute labels an event with an optional classification name (an event class), which indicates to applications what sort of extended data elements to expect. The event catalog stores event definitions that describe these event classes and their allowed content.

For complete details on the Common Base Event format, see the specification document and XSD schema included in the IBM Autonomic Computing Toolkit.

Chapter 2. Configuring Common Event Infrastructure

You can configure Common Event Infrastructure resources, or make changes to existing resources, using the server AdminTask object

About this task

Common Event Infrastructure (CEI) can be installed with a default configuration that is fully functional on a stand-alone server configuration. You would do this only when you create a stand-alone server profile using the Profile Management Tool. In all other cases, you should to use the admin console to configure CEI — such as when you are installing it in an ND environment or in a cluster — to ensure that the configuration is appropriate on your system.

You can also use the wsadmin command to configure CEI, or you can use the command to alter an existing CEI configuration. In either case, you would change the configuration of CEI by using the server AdminTask object to run administrative commands.

After changing CEI configuration, you must restart the server or cluster.

Related tasks

"Administering the event service using the administrative console" on page 39
You can use the Web-based administrative console to perform administrative tasks for the event service.

Common Event Infrastructure components

Common Event Infrastructure components are installed as a set of applications, services, and resources on the server.

When you configure Common Event Infrastructure, a number of components are created and deployed on your server.

Common Event Infrastructure service

A service installed into the server, that enables applications and clients to use Common Event Infrastructure. You can view the configuration of the Common Event Infrastructure service in the administrative console, as follows:

- For a server, select **Servers > Application Servers >** *server_name* **> Business Integration > Common Event Infrastructure > Common Event Infrastructure Service**.
- For a cluster, select **Servers > Clusters >** *cluster_name* **> Business Integration > Common Event Infrastructure > Common Event Infrastructure Service**.

If the check box labeled ″Enable the event infrastructure server″ is selected, then the service is installed and running or it will start after you restart your server or cluster. If it is cleared, then the service is not installed or will be uninstalled after you restart your server or cluster

Event service settings

A set of properties used by the event service that enable event distribution and persistence using the data store. Typically, no configuration is necessary for this resource, but you might need to create additional event service settings if you want to set up multiple event services in the same cell. To view the event service settings, click **Service integration > Event service > Event service settings**.

Event messaging configuration
The resources that support asynchronous event transmission to the event service using the Java Messaging Service (JMS). The default messaging configuration uses the server embedded messaging. You can optionally configure an external JMS provider for event messaging.

Event database
The event database is used to persistently store events received by the event service. The Derby database is included as part of the server, but is not recommended for use in production environments. Instead, you can configure an external event database on the following products: DB2, Oracle, SQLServer, and Informix.

Event filter plug-in
A filter plug-in is used to filter events at the source using XPath event selectors. To configure the filter properties, click **Service Integration > Common Event Infrastructure > Event Emitter Factories > Event Filter Settings**.

Emitter factory
An emitter factory is an object used by event sources to create emitters; an emitter is used to send events to the event service. The properties of an emitter factory affect the behavior of any emitter that is created using that emitter factory. To view the available emitter factories, click **Service Integration > Common Event Infrastructure > Event Emitter Factories**.

Event service transmission
An event service transmission is an object defining properties that determine how emitters access the event service synchronously using EJB calls; these properties are used by emitter factories when creating new emitters. You can view or change the available event service transmissions from the emitter factory settings.

JMS transmission
A JMS transmission is an object that defines properties that determine how emitters access the event service asynchronously using a JMS queue; these properties are used by emitter factories when creating new emitters. You can view or change the available JMS transmissions from the emitter factory settings.

Event group

An event group is a logical collection of events used to categorize events according to their content. When querying events from the event service or subscribing to event distribution, an event consumer can specify an event group to retrieve only the events in that group. Event groups can also be used to specify which events should be stored in the persistent data store. To view the available event groups in the administrative console, click **Service integration > Common Event Infrastructure > Event service > Event services >** ***event_service*** **> Event groups**.

Common Event Infrastructure alternative configuration scenarios

In addition to the default configuration, the Common Event Infrastructure supports several alternative configurations.

The default configuration at the server scope is fully functional, but under some circumstances you might want to use a different configuration:

- Deploying the Common Event Infrastructure in a cluster. If you deploy in a cluster, no default event database is provided; you must manually configure the event database.
- Deploying the Common Event Infrastructure on multiple servers in a cell. In this configuration, each deployed instance of the event service must use the same database type.
- Configuring an external event database. The default event database uses the embedded Derby database. If you want to use a supported external database, you must manually configure the event database using the provided administrative command.
- Configuring an external Java Message Service (JMS) provider. The default event messaging configuration uses the embedded WebSphere® messaging feature. If you want to use a different JMS provider, you must manually configure event messaging using the provided administrative command.

Deploying the Common Event Infrastructure application

Before you can use Common Event Infrastructure, you must first deploy the event service and associated resources in the server runtime environment.

About this task

The Common Event Infrastructure enterprise application includes the runtime components of the event service and the default messaging configuration used for asynchronous event submission.

To deploy the event service:

Procedure

From the wsadmin tool, run the **deployEventService** administrative command in batch or interactive mode. The parameters of the **deployEventService** administrative command are as follows:

nodeName
: The name of the node where the event service should be deployed. This parameter is optional; if you do not specify a node name, the default is the current node. If you specify a node name, then you must also specify the server name using the **serverName** parameter. This parameter is not valid if you are deploying the event service in a cluster.

serverName
: The name of the server where the event service should be deployed. This parameter is required only if you specify a node; it is not valid if you are deploying the event service in a cluster.

clusterName
: The name of the cluster where the event service should be deployed. This parameter is optional and must not be specified if you are deploying at the node or server scope.

enable
: Indicates whether the event service should be started automatically when the server starts. The default value is `true`.

Results

After the administrative command completes, the Common Event Infrastructure event service and default messaging configuration are deployed at the specified scope.

If WebSphere security is enabled, you must also configure the JMS authentication alias and password using the **setEventServiceJmsAuthAlias** administrative command.

If you are deploying the event service in a cluster, you must also manually configure the event database.

Related reference

"deployEventService" on page 89

"setEventServiceJmsAuthAlias" on page 92

Deploying Common Event Infrastructure in a cluster

There are several ways you can deploy Common Event Infrastructure resources in a cluster environment.

Deploying Common Event Infrastructure in an existing cluster

You can deploy the event service application in an existing cluster.

About this task

Deploying the event service application in a cluster is essentially the same as deploying the application on a stand-alone server. However, in a cluster environment, no default event database is configured.

To deploy and configure Common Event Infrastructure in a cluster environment:

Procedure

1. Run the **deployEventService** administrative command as you would for a stand-alone server, but specifying the name of the cluster. Use the clusterName parameter to specify the cluster.
2. On the deployment manager system, run the database configuration administrative command. Specify the cluster name using the clusterName parameter. This command generates the database configuration script.
3. Copy the generated database configuration script to the database system.
4. Run the database configuration script on the database system to create the event database.
5. On the deployment manager system, run the **enableEventService** command to enable the event service. Use the clusterName parameter to specify the name of the cluster.

Related reference

"deployEventService" on page 89

"enableEventService" on page 93

Creating a cluster by converting an existing Common Event Infrastructure server

You can create a new cluster by converting an existing stand-alone server that is already configured with Common Event Infrastructure.

Before you begin

Before you can convert the existing server, make sure it is fully configured for Common Event Infrastructure. This includes deploying the event service application and configuring the event database.

About this task

To create the cluster:

Procedure

1. Follow the typical WebSphere process for converting a stand-alone server into the first member of a new cluster. When the server is converted, the following steps take place:
   - Common Event Infrastructure resources available at the scope of the server are moved to the new cluster scope.

     Default database: If the existing server is configured with the default Derby database, the database resources are not moved to the cluster scope. Instead, these resources are removed. The default database configuration is not supported in a cluster. In this situation, the event service in the cluster is disabled by default.
   - The deployed event service application target list is modified to remove the converted server and add the new cluster.
2. Optional: If the converted server was configured with the default Derby database, you must configure a new event database for the cluster and then enable the event service:
   a. On the deployment manager system, run the database configuration administrative command. Specify the cluster name using the clusterName parameter. This command generates the database configuration script.
   b. Copy the generated database configuration script to the database system.
   c. Run the database configuration script on the database system to create the event database.
   d. On the deployment manager system, run the **enableEventService** command to enable the event service. Use the clusterName parameter to specify the name of the cluster.

   Related reference

   "enableEventService" on page 93

Creating a cluster by using an existing Common Event Infrastructure server as a template

You can create a new cluster by specifying an existing Common Event Infrastructure server as a template.

Before you begin

Before you can create a cluster using this method, you must have an existing server that is fully configured for Common Event Infrastructure. This includes deploying the event service application and configuring the event database.

About this task

To create the cluster:

Procedure

1. Follow the typical WebSphere process for creating a new cluster, using the existing Common Event Infrastructure server as a template for the first cluster member. When the first member is created, the following steps take place:
   - Common Event Infrastructure resources available at the scope of the existing server are copied to the new cluster scope.

     Default database: If the existing server is configured with the default Derby database, the database resources are not copied to the cluster scope. The default database configuration is not supported in a cluster. In this situation, the event service in the cluster is disabled by default.
   - The deployed event service application target list is modified to include the new cluster.
2. Optional: If the existing server was configured with the default Derby database, you must configure a new event database for the cluster and then enable the event service:
   a. On the deployment manager system, run the database configuration administrative command. Specify the cluster name using the clusterName parameter. This command generates the database configuration script.
   b. Copy the generated database configuration script to the database system.
   c. Run the database configuration script on the database system to create the event database.
   d. On the deployment manager system, run the **enableEventService** command to enable the event service. Use the clusterName parameter to specify the name of the cluster.

   Related reference

   "enableEventService" on page 93

Configuring the JMS authentication alias

If WebSphere security is enabled and you want to use asynchronous JMS messaging to submit events to the event service, you must configure the JMS authentication alias.

About this task

To configure the JMS authentication alias:

Procedure

From the wsadmin tool, run the **setEventServiceJmsAuthAlias** administrative command in batch or interactive mode. The parameters of the **setEventServiceJmsAuthAlias** command are as follows:

userName
The name of the user to be used for the JMS authentication alias. This parameter is required.

password
The password of the user to be used for the JMS authentication alias. This parameter is required.

nodeName
The name of the node where you want to update or create the JMS authentication alias. If you specify a node name, you must also specify a server name. Do not specify a node name if you are configuring the authentication alias in a cluster.

serverName
The name of the server where you want to update or create the JMS authentication alias. This parameter is required only if you specify a node; it is not valid if you are configuring the authentication alias in a cluster.

clusterName
The name of the cluster where you want to update or create the JMS authentication alias. Specify this parameter only if you are configuring the authentication alias in a cluster; if you specify a cluster name, do not specify a node or server name.

Results

The JMS authentication alias used by the event service objects is updated at the specified scope; if the authentication does not exist, it is created using the specified values.

Related reference

"setEventServiceJmsAuthAlias" on page 92

Configuring event messaging

You can modify the messaging configuration used for JMS transmission of events to the event service.

About this task

You will create the messaging infrastructure for Common Event Infrastructure when you use the administrative console panel to configure Common Event Infrastructure on a server. Generally, the messaging configuration will use the default messaging provider and create a single JMS queue for asynchronous transmission of events to the event service. You can, if necessary, modify this messaging configuration.

Configuring additional JMS queues

If you are using the default event messaging configuration, you can add additional JMS queues for transmission of events to the event service.

About this task

To configure an additional JMS queues using the default messaging configuration, you can set up multiple JMS queues that are routed to the service integration bus queue destination. The Common Event Infrastructure service integration bus queue destination depends upon the scope at which the event service is deployed:

Scope	Service integration bus queue destination
Server	*node.server*.CommonEventInfrastructureQueueDestination
Cluster	*cluster*.CommonEventInfrastructureQueueDestination

For more information about service integration bus configuration, refer to the documentation.

Configuring event messaging using an external JMS provider

If you do not want to use the default embedded messaging configuration for event transmission, you can configure asynchronous message transport to use an external Java Messaging Service (JMS) provider.

Before you begin

Before you can configure event messaging using an external JMS provider, you must first create a JMS queue and connection factory using the appropriate interfaces for your JMS provider. You must also create a listener port or activation specification.

About this task

To configure event messaging using an external JMS provider:

Procedure

From the wsadmin tool, run the **deployEventServiceMdb** administrative command in batch or interactive mode. The parameters of the **deployEventServiceMdb** command are as follows:

applicationName
The application name of the event service message-driven bean to be deployed. This parameter is required.

nodeName
The name of the node where the event service message-driven bean should be deployed. If you specify a node name, you must also specify a server name. This is an optional parameter; the default value is the current node. Do not specify this parameter if you are deploying the application in a cluster.

serverName
The name of the server where the event service message-driven bean should be deployed. This parameter is required if you are deploying the application at server scope; otherwise it is optional. Do not specify a server name if you are deploying the application in a cluster.

clusterName
The name of the cluster where the event service message-driven bean should be deployed. Specify this parameter only if you are deploying the application in a cluster.

listenerPort
The name of the listener port that should be used by the event service message-driven bean to publish events. The specified listener port must already exist. You must specify either a listener port or an activation specification, but not both.

activationSpec
The JNDI name of the activation specification that should be used by the event service message-driven bean to publish events. The specified activation specification must already exist. You must specify either a listener port or an activation specification, but not both.

qcfJndiName
The JNDI name of the JMS queue connection factory to be used by the event service message-driven bean. This parameter is required if you specify an activation specification; otherwise it is optional. If you specify a queue connection factory and a listener port, the queue connection factory must match the one configured for the listener port.

Results

The **deployEventServiceMdb** administrative command deploys the message-driven bean for the event service, configured for the specified listener port or activation specification. It also creates an emitter factory and JMS transmission using the external JMS configuration. Applications can use either the default emitter factory (which is configured to use the default messaging configuration) or the new emitter factory (which uses the external JMS provider).

What to do next

If you want to set up more than one JMS queue to the event service, you can run this command multiple times, specifying different enterprise application names and JMS queues. Each time you run the script, it deploys an additional message-driven bean and configures new resources to use the specified JMS queue.

Related reference

"deployEventServiceMdb" on page 90

Configuring event messaging in a cluster

If you are configuring the Common Event Infrastructure in a cluster environment, additional manual steps are required to enable event messaging.

About this task

When you deploy the Common Event Infrastructure in a cluster, the required JMS messaging engine is created at the cluster scope. However, the default messaging engine configuration does not include a data store that can be shared by all of the members of the cluster. To enable event messaging, you must configure a data store for the messaging engine in the cluster.

The messaging engine created during deployment of the Common Event Infrastructure is configured by default to use a data store with the data source JNDI name `jdbc/com.ibm.ws.sib/`*`clustername`*`-CommonEventInfrastructure_Bus`. Use this JNDI name for the new data store in the cluster.

For more information about configuring a data store for a messaging engine in a cluster, refer to the WebSphere Application Server Network Deployment, version 6.1 documentation.

Configuring the event database

You can configure the event data source using commands that are specific for each supported database product.

About this task

The event database is required to support persistence of events. If you did not use the Common Event Infrastructure configuration panel in the admin console, you still have the option of creating the event database by using the commands described here.

Event database limitations

Some limitations apply to configurations of the event database using certain database software.

Refer to the following table to see which limitations might apply to your environment.

Table 1. Event database limitations

Database type	**Limitations**
Oracle	• The Oracle 10g JDBC thin driver imposes some size restrictions for string values if you are using a Unicode character set. This can result in an Oracle ORA-01461 error when events containing large values (such as a long message attribute) are stored in the event database. For more information about this restriction, refer to the Oracle 10g documentation. To avoid this problem, use the Oracle 10g OCI driver or the Oracle 9i thin driver. • Oracle database software treats a blank string as a NULL value. If you specify a blank string as an event attribute value, that string is converted to a NULL when it is stored in an Oracle event database.
Informix®	• The JDBC 3.0 driver (or later) is required. Previous versions of the JDBC driver do not provide full support for the required XA transactions. • The database configuration and removal scripts generated by the **configEventServiceInformixDB** administrative command require the **dbaccess** command in order to run SQL scripts. This command might be available only on the Informix server. Therefore, if the Informix server is on a different system from the WebSphere server, the database configuration scripts might need to be copied to the Informix server and run locally.

Table 1. Event database limitations (continued)

Database type	Limitations
SQL Server	• The SQL Server database must be configured to use mixed authentication mode. Trusted connections are not supported. • The XA stored procedures must be installed. These stored procedures are provided with the JDBC driver from Microsoft® Corporation. • The sqljdbc.dll file must be available in a directory specified on the PATH statement. This file is provided with the JDBC driver from Microsoft Corporation. • The Distributed Transaction Coordinator (DTC) service must be started.

Related reference

“configEventServiceInformixDB” on page 83

Configuring a Derby event database

You can configure a Derby event database at the server or cluster scope on a Linux®, UNIX®, or Windows® system.

About this task

There are two types of Derby databases that you can use for the event database: Derby Embedded and Derby Network. Both types are shipped with WebSphere Application Server, but they have limited functionality that is not suitable for a production environment. You should, therefore, use Derby as the event database only for purposes such as development or testing. For more information on the Derby databases, see the WebSphere Application Server documentation (linked to at the bottom of this page).

Derby Embedded can only be used with a stand-alone server. Consequently, if you ever federate your stand-alone server to a cluster or ND environment, then you will need to completely re-configure your event data source with another database product. It will automatically start when you start the server.

Derby Network can be used in a clustered or ND environment, although it should still be avoided in use with actual production systems. You need to manually start the database to use it with the server.

To configure a Derby event database:

Procedure

1. Start the wsadmin tool.
2. Use the AdminTask object to run the **configEventServiceDerbyDB** administrative command in batch or interactive mode. The minimum required parameters of the **configEventServerDerbyDB** command are as follows:

   createDB

   Indicates whether the administrative command should create and run the database configuration scripts. Specify `true` or `false`. If this parameter is set to `false`, the scripts are created but are not run. You must then run the database configuration scripts to complete the database configuration.

nodeName
The name of the node that contains the server where the event service data source should be created. If you specify a node name, you must also specify a server name. You must specify one of the following:

- node name and server name
- cluster name

serverName
The name of the server where the event service data source should be created.

clusterName
The name of the cluster where the event service data source should be created. If you specify a cluster name, do not specify node and server names.

Other parameters might be required for your environment. For a complete list of parameters and usage information, refer to the help for the **configEventServiceDerbyDB** administrative command.

Results

The administrative command creates the required data source at the specified scope; if you specified `true` for the createDB parameter, the command also runs the generated database configuration script to create the database.

The generated database configuration scripts are stored by default in the *profile_root*/databases/event/*node*/*server*/dbscripts/derby directory. (In a Network Deployment environment, these scripts are stored under the deployment manager profile directory.) If you specified a value for the optional outputScriptDir parameter, the scripts are stored in that location instead. You can use these scripts to manually configure the event database at any time.

Related information

WebSphere Application Server Network Deployment, Version 6.1: About Cloudscape v10.1.x

i5/OS WebSphere Application Server Network Deployment for i5/OS, Version 6.1: About Cloudscape v10.1.x

Configuring a DB2 event database (Linux, UNIX, and Windows systems)

You can configure an external event database using DB2 Universal Database™ on a Linux, UNIX, or Windows system.

About this task

To configure a DB2® event database on a Linux, UNIX, or Windows system:

Procedure

1. Start the wsadmin tool.

2. Use the AdminTask object to run the **configEventServiceDB2DB** administrative command in batch or interactive mode. The minimum required parameters of the **configEventServiceDB2DB** command are as follows:

   createDB
   Indicates whether the administrative command should create and run the database configuration scripts. Specify `true` or `false`. If this parameter is set to `false`, the scripts are created but are not run. You must then run the database configuration scripts to complete the database configuration.

   nodeName
   The name of the node that contains the server where the event service data source should be created. If you specify a node name, you must also specify a server name. You must specify one of the following:
   - Node name and server name
   - Cluster name

   serverName
   The name of the server where the event service data source should be created.

   clusterName
   The name of the cluster where the event service data source should be created. If you specify a cluster name, do not specify node and server names.

   jdbcClassPath
   The path to the JDBC driver. Specify only the path to the driver file; do not specify the file name.

   dbHostName
   The host name of the server where the database is installed.

   dbUser
   The DB2 user ID to use when creating the event database. The specified user ID must have sufficient privileges to create and drop databases.

   dbPassword
   The DB2 password to use.

   Other parameters might be required for your environment. For a complete list of parameters and usage information, refer to the help for the **configEventServiceDB2DB** administrative command.

Results

The administrative command creates the required data source at the specified scope; if you specified `true` for the createDB parameter, the command also runs the generated database configuration script to create the database.

The generated database configuration scripts are stored by default in the *profile_root*/databases/event/*node*/*server*/dbscripts/db2 directory. (In a Network Deployment environment, these scripts are stored under the deployment manager profile directory.) If you specified a value for the optional outputScriptDir parameter, the scripts are stored in that location instead. You can use these scripts to manually configure the event database at any time.

Related reference

"configEventServiceDB2DB" on page 75

Configuring a DB2 database on a z/OS system

You can configure an event database on a z/OS® system using DB2 database software.

Before you begin

To configure the DB2 database from a remote client, you must have the DB2 Connect™ product installed with the latest fix packs.

About this task

To configure the event database:

Procedure

1. Linux UNIX Windows If you are configuring the z/OS event database from a Linux, UNIX, or Windows client system, follow these steps to create and catalog the database:
   a. On the z/OS system, use the DB2 administration menu to create a new subsystem.
   b. Optional: Create the storage group you want to use for the event database. You can also use an existing storage group (for example, `sysdeflt`).
   c. Enable the 4K, 8K, and 16K buffer pools you want to use for the event database.
   d. Grant the necessary permissions to the user ID you want the data source to use. This user ID must have rights to access the database and storage group you created; it must also have permission to create new tables, table spaces, and indexes for the database.
   e. Catalog the remote database. Run the following commands, either in a script or in a DB2 command-line window:
   ```
   catalog tcpip node zosnode remote hostname server IP_port system db_subsystem
   catalog database db_name as db_name at node zosnode authentication DCS
   ```
   For more information about how to catalog a nodes and databases, refer to the DB2 Connect documentation.
   f. Verify that you can establish a connection to the remote subsystem. You can check this by running the following command:
   ```
   db2 connect to subsystem user userid using password
   ```
   g. Bind to the host database. Run the following commands:
   ```
   db2 connect to db_name user userid using password
   db2 bind db2_root/bnd/@ddcsmvs.lst blocking all sqlerror continue message
        mvs.msg grant public
   db2 connect reset
   ```
   For more information about binding a client to a host database, refer to the DB2 Connect documentation.
2. On the WebSphere system, start the wsadmin tool.
3. Use the AdminTask object to run the **configEventServiceDB2ZOSDB** administrative command in batch or interactive mode. The minimum required parameters of the **configEventServiceDB2ZOSDB** command are as follows:

   createDB

   Linux UNIX Windows Indicates whether the administrative command should create and run the database configuration scripts. This parameter applies only if you are running the administrative command from a Linux, UNIX, or Windows client system. Specify `true` or `false`.

If this parameter is set to `false`, or if you are running the command on the z/OS system, the scripts are created but are not run. You must then run the database configuration scripts to complete the database configuration.

nodeName
The name of the node that contains the server where the event service data source should be created. If you specify a node name, you must also specify a server name. You must specify one of the following:

- Node name and server name
- Cluster name

serverName
The name of the server where the event service data source should be created.

clusterName
The name of the cluster where the event service data source should be created. If you specify a cluster name, do not specify node and server names.

jdbcClassPath
The path to the JDBC driver. Specify only the path to the driver file; do not specify the file name.

dbHostName
The host name of the server where the database is installed.

dbUser
The DB2 user ID to use when creating the event database. The specified user ID must have sufficient privileges to create and drop databases.

dbPassword
The DB2 password to use.

Other parameters might be required for your environment. For a complete list of parameters and usage information, refer to the help for the **configEventServiceDB2ZOSDB** administrative command.

Results

The administrative command creates the required data source at the specified scope; if you are running the command on a Linux, UNIX, or Windows DB2 client and you specified `true` for the createDB parameter, the command also runs the generated database configuration script to create the database. On a z/OS system, you must use the SQL Processor Using File Input (SPUFI) facility to run the generated DDL files. The DDL files are stored in the *profile_root*/databases/event/*node*/*server*/db2zos/ddl directory.

The generated database configuration scripts are stored by default in the *profile_root*/databases/event/*node*/*server*/dbscripts/db2zos directory. (In a Network Deployment environment, these scripts are stored under the deployment manager profile directory.) If you specified a value for the optional outputScriptDir parameter, the scripts are stored in that location instead. You can use these scripts to manually configure the event database at any time.

What to do next

After you have finished configuring the database, you can use the server administrative console to test the database configuration. To do this, navigate to the appropriate JDBC data source and select the **Test Connection** option.

Related reference

"configEventServiceDB2ZOSDB" on page 79

Configuring a DB2 database on an iSeries system

You can configure an event database on an iSeries® system using DB2 database software.

About this task

If you are using a local iSeries server to configure a remote iSeries server, you must specify a remote database entry on your local server as an alias to the target database. To configure the event database:

Procedure

1. Start the wsadmin tool.
2. Use the AdminTask object to run the **configEventServiceDB2iSeriesDB** administrative command in batch or interactive mode. The minimum required parameters of the **configEventServiceDB2iSeriesDB** command are as follows:

   createDB
   Indicates whether the administrative command should create and run the database configuration scripts. Specify `true` or `false`. If this parameter is set to `false`, the scripts are created but are not run. You must then run the database configuration scripts to complete the database configuration.

   Limitation: The administrative command can automatically run the database configuration script only on the iSeries system. If you are running the command on a client system, an error will be returned.

   nodeName
   The name of the node that contains the server where the event service data source should be created. If you specify a node name, you must also specify a server name. You must specify one of the following:

   - Node name and server name
   - Cluster name

   serverName
   The name of the server where the event service data source should be created.

   clusterName
   The name of the cluster where the event service data source should be created. If you specify a cluster name, do not specify node and server names.

   toolboxJdbcClassPath
   The path to the IBM Toolbox for Java DB2 JDBC driver. Use this parameter only if you want to use the Toolbox for Java driver instead of the native JDBC driver. Specify only the path to the driver file; do not include the file name.

   nativeJdbcClassPath
   The path to the DB2 for iSeries native JDBC driver. Use this parameter only

if you want to use the native JDBC driver instead of the Toolbox for Java driver. Specify only the path to the driver file; do not include the file name.

dbHostName
The host name of the server where the database is installed. This parameter is required if you are using the Toolbox for Java JDBC driver.

dbUser
The DB2 user ID to use when creating the event database. The specified user ID must have sufficient privileges to create and drop databases.

dbPassword
The DB2 password to use.

Other parameters might be required for your environment. For a complete list of parameters and usage information, refer to the help for the **configEventServiceDB2iSeriesDB** administrative command.

Results

The administrative command generates scripts to create the required database and data source at the specified scope. These scripts are stored by default in the *profile_root*/databases/event/*node*/*server*/dbscripts/db2iseries directory. If you specified a value for the optional outputScriptDir parameter, the scripts are stored in that location instead. You can use these scripts to manually configure the event database at any time.

If you ran the database configuration administrative command on a client system, you must transfer the generated scripts to the iSeries system and run them to create the required resources.

After you have finished configuring the database, you can use the server administrative console to test the database configuration. To do this, navigate to the appropriate JDBC data source and select the **Test Connection** option.

Related reference

"configEventServiceDB2iSeriesDB" on page 77

Configuring an Informix event database

You can configure an external event database using IBM Informix Dynamic Server on a Linux, UNIX, or Windows system.

About this task

To configure an Informix event database:

Procedure

1. Start the wsadmin tool.
2. Use the AdminTask object to run the **configEventServiceInformixDB** administrative command in batch or interactive mode. The minimum required parameters of the **configEventServiceInformixDB** command are as follows:

   createDB
   Indicates whether the administrative command should create and run the database configuration scripts. Specify `true` or `false`. If this parameter is set to `false`, the scripts are created but are not run. You must then run the database configuration scripts to complete the database configuration.

Privileges: If you specify `true` for this parameter, make sure your user ID has sufficient privileges for creating Informix databases, dbspaces, tables, views, indexes, and stored procedures.

nodeName
The name of the node that contains the server where the event service data source should be created. If you specify a node name, you must also specify a server name. You must specify one of the following:

- Node name and server name
- Cluster name

serverName
The name of the server where the event service data source should be created.

clusterName
The name of the cluster where the event service data source should be created. If you specify a cluster name, do not specify node and server names.

jdbcClassPath
The path to the JDBC driver. Specify only the path to the driver file; do not specify the file name.

dbInformixDir
The directory where the Informix database software is installed. This parameter is required only if you specified `true` for the createDB parameter.

dbHostName
The host name of the system where the database server is installed.

dbServerName
The Informix server name (for example, `ol_servername`).

dbUser
The Informix database schema user ID that will own the event database tables. This must be a user ID with sufficient privileges to create databases and dbspaces. The WebSphere data source uses this user ID to authenticate the Informix database connection.

dbPassword
The password of the specified schema user ID.

Other parameters might be required for your environment. For a complete list of parameters and usage information, refer to the help for the **configEventServiceInformixDB** administrative command.

Results

The administrative command creates the required data source at the specified scope; if you specified `true` for the createDB parameter, the command also runs the generated database configuration script to create the database.

The generated database configuration scripts are stored by default in the *profile_root*/databases/event/*node*/*server*/dbscripts/informix directory. (In a Network Deployment environment, these scripts are stored under the deployment manager profile directory.) If you specified a value for the optional outputScriptDir parameter, the scripts are stored in that location instead. You can use these scripts to manually configure the event database at any time.

Running the scripts: The database configuration and removal scripts generated by the **configEventServiceInformixDB** administrative command require the **dbaccess** command in order to run SQL scripts. This command might be available only on the Informix server. Therefore, if the Informix server is on a different system from the server, the database configuration scripts might need to be copied to the Informix server and run locally.

Configuring an Oracle event database

You can configure an external event database using Oracle Database on a Linux, UNIX, or Windows system.

Before you begin

Before you configure an Oracle event database, you must first create the database. The Oracle SID must already exist before you run the event database configuration command. The default SID for the event database is `event`.

About this task

To configure an Oracle event database:

Procedure

1. Start the wsadmin tool.
2. Use the AdminTask object to run the **configEventServiceOracleDB** administrative command in batch or interactive mode. The minimum required parameters of the **configEventServiceOracleDB** command are as follows:

   createDB
      Indicates whether the administrative command should create and run the database configuration scripts. Specify `true` or `false`. If this parameter is set to `false`, the scripts are created but are not run. You must then run the database configuration scripts to complete the database configuration.

   nodeName
      The name of the node that contains the server where the event service data source should be created. If you specify a node name, you must also specify a server name. You must specify one of the following:
      - Node name and server name
      - Cluster name

   serverName
      The name of the server where the event service data source should be created.

   clusterName
      The name of the cluster where the event service data source should be created. If you specify a cluster name, do not specify node and server names.

   jdbcClassPath
      The path to the JDBC driver. Specify only the path to the driver file; do not specify the file name.

   oracleHome
      The ORACLE_HOME directory. This parameter is required only if you specified `true` for the createDB parameter.

dbPassword
The password to use for the schema user ID created during the database configuration (the default user ID is `ceiuser`. This password is used to authenticate the Oracle database connection.

sysUser
The Oracle SYSUSER user ID. This user ID must have SYSDBA privileges.

sysPassword
The password for the specified SYSUSER user ID.

Other parameters might be required for your environment. For a complete list of parameters and usage information, refer to the help for the **configEventServiceOracleDB** administrative command.

Results

The administrative command creates the required data source at the specified scope; if you specified `true` for the createDB parameter, the command also runs the generated database configuration script to create the database.

The generated database configuration scripts are stored by default in the *profile_root*/databases/event/*node*/*server*/dbscripts/oracle directory. (In a Network Deployment environment, these scripts are stored under the deployment manager profile directory.) If you specified a value for the optional outputScriptDir parameter, the scripts are stored in that location instead. You can use these scripts to manually configure the event database at any time.

Configuring a SQL Server event database

You can configure an external event database using Microsoft SQL Server Enterprise on a Windows system.

About this task

To configure a SQL Server event database:

Procedure

1. On the SQL Server database server system, create the directory used to contain the database files. By default, the files are written to the c:\program files\ibm\event\ceiinst1\sqlserver_data directory. If you need to specify a different location, you must edit the generated database configuration script to modify the value of the ceiInstancePrefix parameter, and then run the script manually.
2. On the server system, start the wsadmin tool.
3. Use the AdminTask object to run the **configEventServiceSQLServerDB** administrative command in batch or interactive mode. The minimum required parameters of the **configEventServiceSQLServerDB** command are as follows:

   createDB
   Indicates whether the administrative command should create and run the database configuration scripts. Specify `true` or `false`. If this parameter is set to `false`, the scripts are created but are not run. You must then run the database configuration scripts to complete the database configuration.

   nodeName
   The name of the node that contains the server where the event service data

source should be created. If you specify a node name, you must also specify a server name. You must specify one of the following:
- Node name and server name
- Cluster name

serverName
The name of the server where the event service data source should be created. If you specify a server name, you must also specify a node name.

clusterName
The name of the cluster where the event service data source should be created. If you specify a cluster name, do not specify node and server names.

dbServerName
The server name of the SQL Server database. This parameter is required only if you specified `true` for the createDB parameter.

dbHostName
The host name of the server where the SQL Server database is running.

dbPassword
The password to use for the user ID created to own the event database tables (the default user ID is ceiuser). The WebSphere data source uses this password to authenticate the SQL Server database connection.

saUser
A user ID with privileges to create and drop databases and users. This parameter is required only if you specified `true` for the createDB parameter.

saPassword
The password for the specified SA user.

Other parameters might be required for your environment. For a complete list of parameters and usage information, refer to the help for the **configEventServiceSQLServerDB** administrative command.

Results

The administrative command creates the required data source at the specified scope; if you specified `true` for the createDB parameter, the command also runs the generated database configuration script to create the database.

The generated database configuration scripts are stored by default in the *profile_root*/databases/event/*node*/*server*/dbscripts/dbscripts/sqlserver directory. (In a Network Deployment environment, these scripts are stored under the deployment manager profile directory.) If you specified a value for the optional outputScriptDir parameter, the scripts are stored in that location instead. You can use these scripts to manually configure the event database at any time.

Manually running database configuration scripts

You can manually run the scripts generated by the database configuration administrative commands at any time.

About this task

Database configuration is a two-step process. The database configuration administrative command first generates a database-specific script for your environment; this generated script then configures the event database and data sources. If you specify `true` for the createDB parameter when running the administrative command, both steps happen automatically.

However, if you specify `false` for the createDB parameter, you must complete the database configuration by manually running the generated script on the target system. You might need to run the script manually in any of the following situations:

- You need to configure the event database on a different system from the one where you ran the administrative command.
- You need to re-create the event database at a later time.
- You need to modify the default options used by the generated script before running it.

Manually creating a Derby event database

About this task

To manually run the generated database configuration script for a Derby event database:

Procedure

1. On the server system, go to the directory containing the generated script. The default location is the *profile_root*/databases/event/*node*/*server*/dbscripts/derby directory; if you specified a value for the outputScriptDir parameter of the database configuration administrative command, the scripts are stored in that location instead.
2. Using an ASCII text editor, make any required modifications to the configuration script. The name of the script varies depending upon the operating system in use:
   - Windows Windows systems: cr_event_derby.bat
   - Linux UNIX Linux and UNIX systems: cr_event_derby.sh
   - i5/OS iSeries systems: cr_event_derby
3. Optional: If you are configuring the database on an iSeries system, start the Qshell interpreter.
4. Run the database creation script using the following syntax (remember to specify the file extension, if applicable):
   ```
   cr_event_derby -p profile_path [-s server_name|-c cluster_name]
   ```

   The parameters are as follows:

   -p *profile_path*
   The path to the WebSphere profile directory. This parameter is required.

   -s *server_name*
   The name of the server. This parameter is required if you are configuring the database at the server scope.

   -c *cluster_name*
   The name of the cluster. This parameter is required if you are configuring the database at the cluster scope.

   For example, the following command would create the Derby database at the scope of the server1 server, using the profile profile1:
   ```
   cr_event_derby -p c:\WebSphere\appserver\profiles\myprofile -s server1
   ```

5. Restart the server. For a federated node, you must also stop and restart the node agent using the **stopNode** and **startNode** commands.

What to do next

After you finish configuring the database, you can use the administrative console to test the database configuration. To do this, navigate to the appropriate JDBC data source and select the **Test Connection** option.

Manually creating a DB2 event database on a Linux, UNIX, or Windows system

About this task

To manually run the generated database configuration script for a DB2 event database on a Linux, UNIX, or Windows system:

Procedure

1. On the server system, go to the directory containing the generated script. The default location is the *profile_root*/databases/event/*node*/*server*/dbscripts/db2 directory; if you specified a value for the outputScriptDir parameter of the database configuration administrative command, the scripts are stored in that location instead.
2. Using an ASCII text editor, make any required modifications to the configuration script. The name of the script varies depending upon the operating system in use:
   - Windows Windows systems: cr_event_db2.bat
   - Linux UNIX Linux and UNIX systems: cr_event_db2.sh
3. Run the database creation script using the following syntax (remember to specify the file extension, if applicable):
   ```
   cr_event_db2 [client|server] db_user [db_password]
   ```
   The parameters are as follows:

   client|server
   Indicates whether the database is a client or server. You must specify either **client** or **server**.

   db_user
   The database user ID. This parameter is required.

   db_password
   The password for the database user. If you do not specify a password for a client database, you are prompted for it.

   For example, the following command would create the DB2 event database for a client database, using the user ID `db2admin` and the password `mypassword`:
   ```
   cr_event_db2 client db2admin mypassword
   ```
4. Restart the server. For a federated node, you must also stop and restart the node agent using the **stopNode** and **startNode** commands.

What to do next

After you finish configuring the database, you can use the administrative console to test the database configuration. To do this, navigate to the appropriate JDBC data source and select the **Test Connection** option.

Manually creating a DB2 event database on a z/OS system

About this task

To manually run the generated database configuration script for a DB2 event database on a z/OS system, using a Linux, UNIX, or Windows client system:

Procedure

1. On the server system, go to the directory containing the generated script. The default location is the *profile_root*/databases/event/*node*/*server*/dbscripts/db2zos; if you specified a value for the outputScriptDir parameter of the database configuration administrative command, the scripts are stored in that location instead.
2. Using an ASCII text editor, make any required modifications to the configuration script. The name of the script varies depending upon the operating system in use:
   - Windows Windows systems: cr_event_db2zos.bat
   - Linux UNIX Linux and UNIX systems: cr_event_db2zos.sh
3. Run the database creation script using the following syntax (remember to specify the file extension, if applicable):

   ```
   cr_event_db2zos [dbName=db_name] db_user [db_password]
   ```

   The parameters are as follows:

   db_name
   : The database name to use. This parameter is optional; if you do not specify a database name, a name is generated.

   db_user
   : The database user ID to use. This parameter is required.

   db_password
   : The password for the database user. If you do not specify the password, the DB2 database prompts you for it.

   For example, the following command would create a DB2 event database called `event`, using the user ID `db2admin` and the password `mypassword`:

   ```
   cr_event_db2zos dbName=client db2admin mypassword
   ```
4. Restart the server. For a federated node, you must also stop and restart the node agent using the **stopNode** and **startNode** commands.

What to do next

After you finish configuring the database, you can use the administrative console to test the database configuration. To do this, navigate to the appropriate JDBC data source and select the **Test Connection** option.

Manually creating a DB2 event database on an iSeries system

About this task

To manually run the generated database configuration script for a DB2 event database on an iSeries system:

Procedure

1. On the server system, go to the directory containing the generated script. The default location is the *profile_root*/databases/event/*node*/*server*/dbscripts/

db2iseries directory; if you specified a value for the outputScriptDir parameter of the database configuration administrative command, the scripts are stored in that location instead.

2. Using an ASCII text editor, make any required modifications to the cr_event_db2iseries script.
3. Start the Qshell interpreter.
4. Run the database creation script using the following syntax:

   ```
   cr_event_db2iseries db_user db_password
   ```

   The parameters are as follows:

   db_user
   The database user ID. This parameter is required.

   db_password
   The password for the database user. This parameter is required.

   For example, the following command would create the DB2 event database using the user ID `db2admin` and the password `mypassword`:

   ```
   cr_event_db2iseries db2admin mypassword
   ```

5. Restart the server. For a federated node, you must also stop and restart the node agent using the **stopNode** and **startNode** commands.

What to do next

After you finish configuring the database, you can use the administrative console to test the database configuration. To do this, navigate to the appropriate JDBC data source and select the **Test Connection** option.

Manually creating an Informix event database

You can manually run the scripts generated by the database configuration administrative commands at any time.

About this task

To manually run the generated database configuration scripts for an Informix event database:

Procedure

1. On the server system, go to the directory containing the generated script. The default location is the*profile_root*/databases/event/*node*/*server*/dbscripts/informix directory; if you specified a value for the outputScriptDir parameter of the database configuration administrative command, the scripts are stored in that location instead.
2. Using an ASCII text editor, make any required modifications to the configuration script. The name of the script varies depending upon the operating system in use:
   - Windows Windows systems: cr_event_informix.bat
   - Linux UNIX Linux and UNIX systems: cr_event_informix.sh
3. Run the database creation script, with no parameters.
4. Restart the server. For a federated node, you must also stop and restart the node agent using the **stopNode** and **startNode** commands.

What to do next

After you finish configuring the database, you can use the administrative console to test the database configuration. To do this, navigate to the appropriate JDBC data source and select the **Test Connection** option.

Manually creating an Oracle event database

About this task

To manually run the generated database configuration script for an Oracle event database:

Procedure

1. On the server system, go to the directory containing the generated script. The default location is the*profile_root*/databases/event/*node*/*server*/dbscripts/oracle directory; if you specified a value for the outputScriptDir parameter of the database configuration administrative command, the scripts are stored in that location instead.
2. Using an ASCII text editor, make any required modifications to the configuration script. The name of the script varies depending upon the operating system in use:
   - Windows Windows systems: cr_event_oracle.bat
   - Linux UNIX Linux and UNIX systems: cr_event_oracle.sh
3. Run the database creation script using the following syntax (remember to specify the file extension, if applicable):

   ```
   cr_event_oracle password sys_user  sys_password [sid=sid] [oracleHome=oracle_home]
   ```

   The parameters are as follows:

   password
      The password for the schema user ID. This parameter is required.

   sys_user
      The user ID that has SYSDBA privileges in the Oracle database (typically the sys user). This parameter is required.

   sys_password
      The password for the specified sys user ID. If this user ID does not use a password, type `none`.

   sid=*sid*
      The Oracle system identifier (SID). This parameter is optional.

   oracleHome=*oracle_home*
      The Oracle home directory. This parameter is optional; if you do not specify a value, a generated path is used.

   For example, the following command would create the Oracle event database using the schema user ID `auser` and the sys user ID `sys`:

   ```
   cr_event_oracle auser sys syspassword sid=event oracleHome=c:\oracle
   ```
4. Restart the server. For a federated node, you must also stop and restart the node agent using the **stopNode** and **startNode** commands.

What to do next

After you finish configuring the database, you can use the administrative console to test the database configuration. To do this, navigate to the appropriate JDBC data source and select the **Test Connection** option.

Manually creating a SQL Server event database

About this task

To manually run the generated database configuration script for a SQL Server event database:

Procedure

1. On the server system, go to the directory containing the generated script. The default location is the*profile_root*/databases/event/*node*/*server*/dbscripts/sqlserver directory; if you specified a value for the outputScriptDir parameter of the database configuration administrative command, the scripts are stored in that location instead.
2. Using an ASCII text editor, make any required modifications to the cr_event_mssql.bat script.
3. Run the database creation script using the following syntax:

   ```
   cr_event_mssql user_id password [server=server] sauser=sa_user sapassword=sa_password
   ```

   The parameters are as follows:

   user_id
   : The SQL Server login user ID that will own the created tables. This user ID must be created in SQL Server so that a JDBC connection can be made to the database. (The JDBC drivers do not support trusted connections.)

   password
   : The password for the new login user ID that is created.

   server=*server*
   : The name of the server that contains the SQL Server database. This parameter is optional; the default value is the local host.

   sauser=*sa_user*
   : The sa user ID. This user ID must have sufficient privileges to create databases and user logins.

   sapassword=*sa_password*
   : The sa password, if using mixed authentication mode. If the sa user ID does not have a password set, specify `sapassword=` with no value. Omit this parameter if you are using a trusted connection.

   For example, the following command would create the SQL Server event database using the login user ID `userid`:

   ```
   cr_event_mssql userid apassword server=myserver sauser=sa sapassword=sapassword
   ```
4. Restart the server. For a federated node, you must also stop and restart the node agent using the **stopNode** and **startNode** commands.

What to do next

After you finish configuring the database, you can use the administrative console to test the database configuration. To do this, navigate to the appropriate JDBC data source and select the **Test Connection** option.

Upgrading the event database from a previous version

If you have migrated from a previous version of Common Event Infrastructure and you are using event persistence, you might need to upgrade an existing event database.

About this task

Upgrading the event database is required if you are migrating from Common Event Infrastructure version 5.1 or earlier.

The database upgrade process upgrades the schema and metadata of the existing event database to the current version while preserving existing event data.

The database upgrade script upgrades the schema and metadata of the existing event database to the current version.

Unsupported versions: If your event database uses a version of database software that is no longer supported by Common Event Infrastructure 6.0, you must first migrate the database to a supported version using the appropriate procedure for the database software. You can then follow the event database upgrade process to upgrade the database.

Upgrading a DB2 event database from a previous version

If you have an existing DB2 event database from Version 5.1 of Common Event Infrastructure on a Linux, UNIX, or Windows system, you must upgrade it to the current version.

About this task

To upgrade a DB2 event database on a Linux or UNIX system:

Procedure

1. Make a backup copy of the existing event database.
2. Go to the *profile_root*/bin directory.
3. Run the DB2 upgrade script for your operating system:
   - Windows Windows systems:
     ```
     eventUpgradeDB2 runUpgrade=[true|false] dbUser=user
       [dbName=name] [dbPassword=pw]
       [dbNode=node] [scriptDir=dir]
     ```
   - Linux UNIX Linux and UNIX systems:
     ```
     eventUpgradeDB2.sh runUpgrade=[true|false] dbUser=user
       [dbName=name] [dbPassword=pw]
       [dbNode=node] [scriptDir=dir]
     ```

   The typical required parameters are as follows:

   runUpgrade
   Indicates whether you want the upgrade script to automatically run the generated DDL scripts to complete the database upgrade. This parameter is required. Specify `false` if you want to manually perform the database upgrade at a later time or on a different system.

   dbUser
   Specifies the DB2 user ID to use. This parameter is required.

dbName
: Specifies the DB2 database name. The default name for the event database is `event`. This parameter is required if you specified `runUpgrade=true`.

dbPassword
: Specifies the password for the specified DB2 user ID. This parameter is optional; if you do not specify a password, DB2 prompts you to type it.

dbNode
: Specifies the database node name. This parameter is required if you are running the upgrade script from a DB2 client system.

scriptDir
: Specifies the directory you want to contain the generated DDL scripts. This parameter is optional; if you do not specify a directory, the scripts are stored in the .\eventDBUpgrade\db2 directory.

To see a complete list of parameters and usage information, run the **eventUpgradeDB2** script with no parameters.

Results

The upgrade script generates the required DDL scripts for upgrading the event database. If you specified `runUpgrade=true`, the DDL scripts are automatically run, completing the upgrade.

The following example upgrades an existing DB2 database on a Windows system:

```
eventUpgradeDB2 runUpgrade=true dbUser=db2inst1 dbName=event
```

What to do next

If you specified `runUpgrade=false`, you must manually run the DDL scripts on the database system to complete the database upgrade.

Upgrading a DB2 for z/OS event database from a previous version

If you have an existing DB2 event database from Version 5.1 of Common Event Infrastructure on a z/OS system, you must upgrade it to the current version.

About this task

To upgrade a DB2 event database on a z/OS system:

Procedure

1. Make a backup copy of the existing event database.
2. Go to the *profile_root*/bin directory.
3. Run the DB2 for z/OS upgrade script for your client operating system:
   - Windows Windows systems:
     ```
     eventUpgradeDB2ZOS runUpgrade=[true|false] dbUser=user
       [dbName=name] [dbPassword=pw]
       [scriptDir=dir] storageGroup=group
       bufferPool4K=4kbufpool bufferPool8k=8kbufpool
       bufferPool16K=16kbufpool
     ```
   - Linux UNIX Linux and UNIX systems:

```
eventUpgradeDB2ZOS.sh runUpgrade=[true|false] dbUser=user
  [dbName=name] [dbPassword=pw]
  [scriptDir=dir] storageGroup=group
  bufferPool4K=4kbufpool bufferPool8k=8kbufpool
  bufferPool16K=16kbufpool
```

The typical required parameters are as follows:

runUpgrade
: Indicates whether you want the upgrade script to automatically run the generated DDL scripts to complete the database upgrade. This parameter is required. Specify false if you want to manually upgrade the database at a later time or on a different system.

  z/OS systems: This parameter is ignored on a native z/OS system. Automatically running the generated DDL scripts is supported only on a client system.

dbUser
: Specifies the DB2 user ID to use. This parameter is required.

dbName
: Specifies the DB2 database name. The default name for the event database is `event`. This parameter is required if you specified `runUpgrade=true`.

dbPassword
: Specifies the password for the specified DB2 user ID. This parameter is optional; if you do not specify a password, DB2 prompts you to type it.

scriptDir
: Specifies the directory you want to contain the generated DDL scripts. This parameter is optional; if you do not specify a directory, the scripts are stored in the .\eventDBUpgrade\db2zos directory.

storageGroup
: Specifies the name of the storage group. This parameter is required.

bufferPool4K
: Specifies the name of the 4K buffer pool. This parameter is required.

bufferPool8K
: Specifies the name of the 8K buffer pool. This parameter is required.

bufferPool16K
: Specifies the name of the 16K buffer pool. This parameter is required.

To see a complete list of parameters and usage information, run the **eventUpgradeDB2ZOS** script with no parameters.

Results

The upgrade script generates the required DDL scripts for upgrading the event database. If you specified `runUpgrade=true` on a client system, the DDL scripts are automatically run, completing the upgrade.

The following example upgrades a DB2 for z/OS event database from a Windows client system:

```
eventUpgradeDB2ZOS runUpgrade=true dbUser=db2inst1 dbName=event
  storageGroup=sysdeflt bufferPool4K=BP9 bufferPool8K=BP8K9 bufferPool16K=BP16K9
```

If you specified `runUpgrade=false`, or if you ran the upgrade script on the z/OS system, you must manually run the generated DDL scripts on the z/OS system using the SQL Processor Using File Input (SPUFI) facility. This step completes the database upgrade.

Upgrading an Oracle event database from Version 5

If you have an existing Oracle event database from Version 5.1 of Common Event Infrastructure, you must upgrade it to the current version.

About this task

To upgrade an Oracle event database:

Procedure

1. Make a backup copy of the existing event database.
2. Go to the *profile_root*/bin directory.
3. Run the Oracle upgrade script for your operating system:
   - Windows systems:
     ```
     eventUpgradeOracle runUpgrade=[true|false] schemaUser=schemauser
       [oracleHome=dir] [dbName=name]
       [dbUser=sysuser] [dbPassword=pw]
       [scriptDir=dir]
     ```
   - Linux and UNIX systems:
     ```
     eventUpgradeOracle.sh runUpgrade=[true|false] schemaUser=schemauser
       [oracleHome=dir] [dbName=name]
       [dbUser=sysuser] [dbPassword=pw]
       [scriptDir=dir]
     ```

   The typical required parameters are as follows:

   runUpgrade
   Indicates whether you want the upgrade script to automatically run the generated DDL scripts to complete the database upgrade. This parameter is required. Specify `false` if you want to manually upgrade the database at a later time or on a different system.

   schemaUser
   Specifies the Oracle user ID that owns the database tables. This parameter is required.

   oracleHome
   Specifies the Oracle home directory. This parameter is required if you specified `runUpgrade=true`.

   dbName
   Specifies the Oracle database name. The default name for the event database is `event`. This parameter is required if you specified `runUpgrade=true`.

   dbUser
   Specifies the Oracle sys user ID. This parameter is required if you specified `runUpgrade=true`.

   dbPassword
   Specifies the password for the sys user ID. Do not specify this parameter if the sys user ID has no password.

   scriptDir
   Specifies the directory you want to contain the generated DDL scripts. This

parameter is optional; if you do not specify a directory, the scripts are stored in the .\eventDBUpgrade\oracle directory.

To see a complete list of parameters and usage information, run the **eventUpgradeOracle** script with no parameters.

Results

The upgrade script generates the required DDL scripts for upgrading the event database. If you specified `runUpgrade=true`, the DDL scripts are automatically run, completing the upgrade.

The following example upgrades an existing Oracle database on a Windows system:

```
eventUpgradeOracle runUpgrade=true schemaUser=cei
  dbName=event dbUser=sys
```

What to do next

If you specified `runUpgrade=false`, you must manually run the DDL scripts on the database system to complete the database upgrade.

Removing Common Event Infrastructure configuration

If you need to remove the configuration for Common Event Infrastructure, in preparation for uninstalling WebSphere Process Server, you must first remove the deployed enterprise applications and the database configuration.

About this task

Common Event Infrastructure is installed in the base installation of server, but will not be active unless it is already configured. This topic tells you only how to remove a previously configured instance of Common Event Infrastructure. To remove the configuration for Common Event Infrastructure, follow these steps:

Removing the event database

To remove the event database, you can use the appropriate administrative command for the type of database.

About this task

To remove the event database:

Procedure

1. Start the wsadmin tool.
2. Use the AdminTask object to run the appropriate administrative command for your event database:

Database type	Command
Derby	"removeEventServiceDerbyDB" on page 101
DB2 on Linux, UNIX, and Windows systems	"removeEventServiceDB2DB" on page 98
DB2 on z/OS systems	"removeEventServiceDB2ZOSDB" on page 100

Database type	Command
DB2 on iSeries systems	"removeEventServiceDB2iSeriesDB" on page 99
Informix	"removeEventServiceInformixDB" on page 102
Oracle	"removeEventServiceOracleDB" on page 103
SQL Server	"removeEventServiceSQLServerDB" on page 105

Database-specific notes:

- On a z/OS system, the administrative command only removes the JDBC data source. To remove the database, you must use SPUFI to run the database removal script generated during database creation. By default, this script is located in the *profile_root*/databases/event/*node*/*server*/dbscripts/db2zos directory.
- i5/OS On an iSeries system, the administrative command only removes the JDBC data source. To remove the database on the iSeries system, drop the collection that was created for the database.

The required parameters (for example, user IDs and passwords) vary by database type. For a complete list of parameters and usage information, refer to the help for the administrative command.

Removing the Common Event Infrastructure application

To manually remove the event service enterprise application and resources from the server, you can use the **removeEventService** administrative command.

About this task

To remove the event service enterprise application:

Procedure

1. Start the wsadmin tool.
2. Use the AdminTask object to run the **removeEventService** administrative command in batch or interactive mode. The parameters of the **removeEventService** administrative command are as follows:

   nodeName
   The name of the node where the event service is deployed. This parameter is optional; if you do not specify a node name, the default is the current node. If you specify a node name, then you must also specify the server name using the **serverName** parameter. This parameter is not valid if you are removing the event service from a cluster.

   serverName
   The name of the server where the event service is deployed. This parameter is required only if you specify a node; it is not valid if you are removing the event service from a cluster.

   clusterName
   The name of the cluster where the event service is deployed. This parameter is optional and must not be specified if you are removing the event service from a server.

Related reference

"removeEventService" on page 96

Removing the event messaging enterprise application

To remove the event service messaging configuration for an external JMS provider, you can use the removeEventServiceMdb administrative command.

About this task

This command removes the message-driven bean deployed for the JMS configuration. To remove the event service message-driven bean:

Procedure

1. Start the wsadmin tool.
2. Use the AdminTask object to run the **removeEventServiceMdb** administrative command in batch or interactive mode. The parameters of the **removeEventServiceMdb** administrative command are as follows:

   applicationName
   The application name of the deployed event service message-driven bean.

   nodeName
   The name of the node where the event service message-driven bean is deployed. If you specify a node name, you must also specify a server name. This is an optional parameter; the default value is the current node. Do not specify this parameter if you are removing the application from a cluster.

   serverName
   The name of the server where the event service message-driven bean is deployed. This parameter is required if you are removing the application from a server; otherwise it is optional. Do not specify a server name if you are removing the application from a cluster.

   clusterName
   The name of the cluster where the event service message-driven bean is deployed. Specify this parameter only if you are removing the application from a cluster.

Related reference

"removeEventServiceMdb" on page 96

Chapter 3. Administering Common Event Infrastructure

These topics describe several administrative tasks you can perform to control the operation of the Common Event Infrastructure components at run time.

Administering the event service using the administrative console

You can use the Web-based administrative console to perform administrative tasks for the event service.

Enabling and disabling the event service using the administrative console

You can enable and disable the event service by modifying the properties of the event service in the server administrative console.

About this task

If the event service is enabled, it automatically starts when the server starts.

To enable or disable the event service from the administrative console:

Procedure

1. Select one of the following methods to go to the appropriate administrative console panel:
   - Open the Common Event Infrastructure Server panel of administrative console
     - For servers, select **Servers** → **Application servers** → *server_name* → **Business Integration** → **Common Event Infrastructure** → **Common Event Infrastructure Server**.
     - For clusters, select **Servers** → **Clusters** → *cluster_name* → **Business Integration** → **Common Event Infrastructure** → **Common Event Infrastructure Server**.
   - Alternatively, you can open the Container Services to perform this task:
     - For a servers, click **Servers** → **Application servers** → *server_name* → **Container Services** → **Common Event Infrastructure Service**.
     - For clusters, click **Servers** → **Clusters** → *cluster_name* → **Cluster members** → *server* → **Container Services** → **Common Event Infrastructure Service**.
2. Select or deselect the **Enable service at server startup** property. If the check box is selected, the Common Event Infrastructure service starts when the server starts.
3. Save the configuration changes.
4. In a network deployment environment only, synchronize the node.
5. Restart the servers or cluster.

Creating an event emitter factory using the administrative console

An emitter factory is used by event sources to create emitters.

About this task

The properties of an emitter factory affect the behavior of any emitter that is created using that emitter factory. You can use the default emitter factory or create additional emitter factories for your event sources to use. You might also want to create an additional emitter factory to specify a different transaction mode or event transmission. To view the event emitter that was created after you configured Common Event Infrastructure (CEI) on the Common Event Infrastructure Destination panel:

1.
   - For a single server, select **Servers > Application servers >** *server_name*.
   - For a cluster, select **Servers > Clusters >** *cluster_name*.
2. On the **Configuration** tab, select **Business Integration > Common Event Infrastructure > Common Event Infrastructure Destination**.
3. You can choose an existing event emitter factory from the menu of JNDI names, or specify one in the text field.

You must resolve JNDI names to a remote server if the CEI server not local. See the WebSphere Application Server documentation for more information about naming within an ND environment. To create an emitter factory:

Procedure

1. In the server administrative console, click **Service integration** > **Common Event Infrastructure** > **Event emitter factories** > **New**.
2. Specify the properties of the new emitter factory. Refer to the online help for the Emitter Factory Settings page for detailed information about these properties.
3. Save the configuration changes.
4. In a network deployment environment only, synchronize the node.
5. Restart the server.

Results

Event sources can now use the configured emitter factory to create emitters.

Related information

Naming and directory in WebSphere Application Server Network Deployment, Version 6.1 Information Center

i5/OS Naming and directory in WebSphere Application Server Network Deployment for i5/OS, Version 6.1 Information Center

Creating an event group using the administrative console

An event group defines a logical collection of events based on the content of their property data. An event group can be used when querying events from the event service, and it can optionally be associated with a JMS destination for asynchronous event distribution.

About this task

To create an event group:

Procedure

1. Optional: Set up one or more JMS destinations for the event group. An event group can be associated with one JMS topic, and one or more JMS queues. Refer to the documentation for your JMS provider for information about how to create JMS destinations and connection factories and bind them into a JNDI namespace.

   Security: If WebSphere security is enabled, the configuration for the JMS destination must specify an authentication alias.
2. Create the new event group. In the server administrative console, click **Service Integration** > **Common Event Infrastructure** > **Event Service** > **Event Services** > *event_service* > **Event Groups** > **New**.
3. Specify the properties of the new event group, including the event selector and optional JMS destinations.
4. Save the configuration changes.
5. In a network deployment environment only, synchronize the node.
6. Restart the server.

Results

Event consumers can now specify the event group when querying events. If event distribution is enabled in the event service settings, events belonging to the event group are also published to any JMS destinations specified in the event group. Event consumers can then receive events asynchronously by subscribing to the appropriate destinations.

Creating an event filter using the administrative console

An event filter defines properties used by the default filter plug-in, which is used by emitters to filter events at the source.

About this task

An event filter can be specified as part of the configuration of an emitter factory. Any emitter created using that emitter factory then uses the specified filter to determine which event should be sent to the event service.

To create an event filter:

Procedure

1. In the server administrative console, click **Service Integration** > **Common Event Infrastructure** > **Event Emitter Factories** > *emitter_factory* > **Event Filters** > **New**.
2. Specify the properties of the new event filter. Refer to the online help for the Event Filter Settings page for detailed information about these properties.
3. Save the configuration changes.
4. In a network deployment environment only, synchronize the node.
5. Restart the server.

Results

Event emitters can now use the configured filter to determine which events to send to the event service.

Administering the event service using scripting

You can use scripting interfaces to perform administrative tasks for the event service.

Enabling the event service using scripting

You can enable the event service by running an AdminTask administrative command using the wsadmin tool.

About this task

If the event service is enabled, it automatically starts when the server starts.

To enable the event service using the wsadmin tool:

Procedure

1. Start the wsadmin tool.
2. Use the AdminTask object to run the **enableEventService** administrative command:
   - Using Jacl:
     ```
     # enable event service at server scope
     $AdminTask enableEventService { -nodeName node1 -serverName server1 }

     # enable event service at cluster scope
     $AdminTask enableEventService  { -clusterName cluster1 }
     ```
   - Using Jython:
     ```
     # enable event service at server scope
     AdminTask.enableEventService('[ -nodeName node1 -serverName server1 ]')

     # enable event service at cluster scope
     AdminTask.enableEventService('[ -clusterName cluster1 ]')
     ```

   The parameters of the **enableEventService** command are as follows:

   nodeName
   The name of the node where the event service should be enabled. This is an optional parameter; the default value is the current node. If you specify a node name, you must also specify a server name. Do not specify a node if you are enabling the event service in a cluster.

   serverName
   The name of the server where the event service should be enabled. This parameter is required if you specify a node name. Do not specify a server name if you are enabling the event service in a cluster.

   clusterName
   The name of the cluster where the event service should be enabled. This parameter is required if you are enabling the event service in a cluster.
3. Restart the server.

Disabling the event service using scripting

You can disable the event service by running an AdminTask administrative command using the wsadmin tool.

About this task

If the event service is disabled, it does not automatically start when the server starts.

To disable the event service using the wsadmin tool:

Procedure

1. Start the wsadmin tool.
2. Use the AdminTask object to run the **disableEventService** administrative command:
   - Using Jacl:
     ```
     # disable event service at server scope
     $AdminTask disableEventService { -nodeName node1 -serverName server1 }

     # disable event service at cluster scope
     $AdminTask disableEventService  { -clusterName cluster1 }
     ```
   - Using Jython:
     ```
     # disable event service at server scope
     AdminTask.disableEventService('[ -nodeName node1 -serverName server1 ]')

     # disable event service at cluster scope
     AdminTask.disableEventService('[ -clusterName cluster1 ]')
     ```

   The parameters of the **disableEventService** command are as follows:

   nodeName
   The name of the node where the event service should be disabled. This is an optional parameter; the default value is the current node. If you specify a node name, you must also specify a server name. Do not specify a node if you are disabling the event service in a cluster.

   serverName
   The name of the server where the event service should be disabled. This parameter is required if you specify a node name. Do not specify a server name if you are disabling the event service in a cluster.

   clusterName
   The name of the cluster where the event service should be disabled. This parameter is required if you are disabling the event service in a cluster.
3. Restart the server.

Creating an emitter factory with scripting

You can create an emitter factory using a Jacl or Jython script.

Before you begin

Before starting this task, the wsadmin tool must be running. See the WebSphere Application Server documentation for more information.

About this task

Perform the following steps to configure a new emitter factory.

Procedure

1. Identify the Common Event Infrastructure provider ID.
   - Using Jacl:

```
set providerid [$AdminConfig getid \
/Cell:mycell/Node:mynode/Server:myserver/ \
EventInfrastructureProvider:/]
```

- Using Jython:

```
providerid =
AdminConfig.getid('/Cell:mycell/Node:mynode/Server:myserver/EventInfrastructureProvider:/')
print providerid
```

Example output:

```
EventInfrastructureProvider(cells/mycell/nodes/mynode/servers/myserver|resources-cei.xml#
  EventInfrastructureProvider_1)
```

2. Set the required attributes.
   - Using Jacl:

```
set Name [list name "EmitterName"]
set JndiName [list jndiName "Put JNDI name for new emitter factory here"]
set Description [list description "Put description here"]
set Category [list category "Put category here"]

# set TransactionMode to true to send each event in a new transaction
set TransactionMode [list preferredTransactionMode "false"]

# set SynchronizationMode to true to use synchronous event transmission
# as the preferred synchronization mode
set SynchronizationMode [list preferredSynchronizationMode "true"]

# leave blank if synchronous transmission is not supported
set SyncJNDIName [list synchronousTransmissionProfileJNDIName \
  "Put JNDI name of synchronous transmission profile here "]

# leave blank if asynchronous transmission is not supported
set AsyncJNDIName [list asynchronousTransmissionProfileJNDIName \
  "Put JNDI name of asynchronous transmission profile here "]

set FilteringEnabled [list filteringEnabled "false"]

# leave blank if filtering is not enabled
set FilterJNDIName [list filterFactoryJNDIName \
  "Put JNDI name of event filter here"]

# custom properties include compatibility mode
set CompatibilityMode [list [list name compatibilityMode] \
  [list description ""] \
  [list required false] \
  [list type java.lang.Boolean] \
  [list value "false"] ] \
set resProp [list [list resourceProperties [list \
  $CompatibilityMode ]]]
```

   - Using Jython:

```
Name = ['name', 'EmitterName']
JndiName = ['jndiName', 'Put JNDI name for new emitter factory here']
Description = ['description', 'Put description here']
Category = ['category', 'Put category here']

# set TransactionMode to true to send each event in a new transaction
TransactionMode = ['preferredTransactionMode', 'false']

# set SynchronizationMode to true to use synchronous event transmission
# as the preferred synchronization mode
SynchronizationMode = ['preferredSynchronizationMode', 'true']

# leave blank if synchronous transmission is not supported
SyncJNDIName = ['synchronousTransmissionProfileJNDIName', \
                'Put JNDI name of synchronous transmission profile here']
```

```
# leave blank if asynchronous transmission is not supported
AsyncJNDIName = ['asynchronousTransmissionProfileJNDIName', \
                 'Put JNDI name of asynchronous transmission profile here']

FilteringEnabled = ['filteringEnabled', 'false']

# leave blank if filtering is not enabled
FilterJNDIName = ['filterFactoryJNDIName', 'Put JNDI name of event filter here']

# custom properties include compatibility mode
compatibilityName = ['name','compatibilityMode']
compatibilityDescription = ['description','']
compatibilityRequired = ['required', 'false']
compatibilityType = ['type', 'java.lang.Boolean']
compatibilityValue = ['value', 'false']
CompatibilityMode = [compatibilityName, compatibilityDescription, compatibilityRequired, \
                     compatibilityType, compatibilityValue]
customProperties = ['propertySet', [['resourceProperties', [CompatibilityMode]]]]
```

3. Set the properties for the new emitter factory.
   - Using Jacl:

     ```
     set properties "[list $Name $JndiName $Description $Category \
       $TransactionMode $SynchronizationMode $AsyncJNDIName \
       $SyncJNDIName $FilteringEnabled $FilterJNDIName \
                    [list propertySet $resProp]]"
     ```

   - Using Jython:

```
properties = [Name,JndiName,Description,Category,TransactionMode,
SynchronizationMode,AsyncJNDIName,SyncJNDIName,FilteringEnabled,
FilterJNDIName, customProperties]
print properties
```

   Example output:

   ```
   [['name', 'EmitterName'], ['jndiName', 'Put JNDI name for new
   emitter factory here'], ['description', 'Put description here'],
   ['category', 'Put category here'], ['preferredTransactionMode',
   'false'], ['preferredSynchronizationMode', 'true'],
   ['asynchronousTransmissionProfileJNDIName', 'Put JNDI name of
   asynchronous transmission profile here '],
   ['synchronousTransmissionProfileJNDIName', 'Put JNDI name of
   synchronous transmission profile here '], ['filteringEnabled',
   'false'], ['filterFactoryJNDIName', 'Put JNDI name of event
   filter here'], ['propertySet', [['resourceProperties', [[['name',
   'compatibilityMode'], ['description', ''], ['required', 'false'],
   ['type', 'java.lang.Boolean'], ['value', 'false']]]]]]]
   ```

4. Create the emitter factory.
   - Using Jacl:

     ```
     set emitterProf [$AdminConfig create EmitterFactoryProfile \
     $providerid $properties]
     ```

   - Using Jython:

     ```
     print AdminConfig.create('EmitterFactoryProfile', providerid, properties)
     ```

   Example output:

```
EmitterName(cells/mycell/nodes/mynode/servers/myserver|resources-cei.xml#EmitterFactoryProfile_1)
```

5. Save the configuration changes.
6. In a network deployment environment only, synchronize the node.
7. Restart the server.

Creating an event group with scripting

You can create an event group using a Jacl or Jython script.

Before you begin

Before starting this task, the wsadmin tool must be running. See the WebSphere Application Server documentation for more information.

About this task

Perform the following steps to configure a new event group.

Procedure

1. Identify the Common Event Infrastructure provider ID.
   - Using Jacl:

     ```
     set providerid [$AdminConfig getid \
     /Cell:mycell/Node:mynode/Server:myserver/ \
     EventInfrastructureProvider:/]
     ```
   - Using Jython:

```
providerid =
AdminConfig.getid('/Cell:mycell/Node:mynode/Server:myserver/EventInfrastructureProvider:/')
print providerid
```

   Example output:

```
EventInfrastructureProvider(cells/mycell/nodes/mynode/servers/myserver|resources-cei.xml#
EventInfrastructureProvider_1)
```

2. Obtain the event group list.
   - Using Jacl:

     ```
     set eventGroupProfileId [lindex [$AdminConfig list
     EventGroupProfileList $providerid] 0]
     ```
   - Using Jython:

     ```
     eventGroupProfileId = AdminConfig.list('EventGroupProfileList',providerid)
     ```
3. Set the required attributes.
   - Using Jacl:

     ```
     set name [ list eventGroupName "EventGroupName" ]

     # escape all '[' characters in the event selector string.
     set selectorString [ list eventSelectorString "Set event selector here"]

     # leave blank if events should not be published using JMS
     set JNDIName [ list topicJNDIName "Set topic JNDI name here"]

     # leave blank if events should not be published using JMS
     set connectionFactoryJNDIName [ list topicConnectionFactoryJNDIName \
                                   "Set topic connection factory JNDI name here" ]

     set persistEventsFlag [ list persistEvents "true" ]

     # custom properties include compatibility mode
     set CompatibilityMode [list [list name compatibilityMode] \
       [list description ""] \
       [list required false] \
       [list type java.lang.Boolean] \
       [list value "false"] ] \
     set resProp [list [list resourceProperties [list \
       $CompatibilityMode ]]]
     ```
   - Using Jython:

```
Name = ['eventGroupName', 'EventGroupName' ]
SelectorString = ['eventSelectorString', 'Set event selector here']

# leave blank if events should not be published using JMS
JNDIName = [ 'topicJNDIName', 'Set topic JNDI name here']

# leave blank if events should not be published using JMS
```

```
ConnectionFactoryJNDIName = ['topicConnectionFactoryJNDIName', \
                             'Set topic connection factory JNDI name here']

PersistEventsFlag = ['persistEvents', 'true']

# custom properties include compatibility mode
compatibilityName = ['name','compatibilityMode']
compatibilityDescription = ['description','']
compatibilityRequired = ['required', 'false']
compatibilityType = ['type', 'java.lang.Boolean']
compatibilityValue = ['value', 'false']
CompatibilityMode = [compatibilityName, compatibilityDescription, compatibilityRequired, \
                     compatibilityType, compatibilityValue]
customProperties = ['propertySet', [['resourceProperties', [CompatibilityMode]]]]
```

4. Set the properties for the new event group.
   - Using Jacl:
     ```
     set properties [ list $name $selectorString $JNDIName \
     $connectionFactoryJNDIName $persistEventsFlag [list propertySet \
     $resProp]]
     ```
   - Using Jython:
     ```
     properties = [Name,SelectorString,JNDIName,ConnectionFactoryJNDIName, \
                   PersistEventsFlag,customProperties]
     ```

   Example output:
   ```
   [['eventGroupName', 'EventGroupName'], ['eventSelectorString',
   'Set event selector here'], ['topicJNDIName', 'Set topic JNDI
   name here'], ['topicConnectionFactoryJNDIName', 'Set topic
   connection factory JNDI name here'], ['persistEvents','true'],
   ['propertySet', [['resourceProperties', [[['name',
   'compatibilityMode'], ['description', ''], ['required', 'false'],
   ['type', 'java.lang.Boolean'], ['value', 'false']]]]]]]
   ```
5. Create the event group.
   - Using Jacl:
```
set result [ $AdminConfig create EventGroupProfile $eventGroupProfileId $properties ]
```
   - Using Jython:
     ```
     print AdminConfig.create('EventGroupProfile', eventGroupProfileId, properties)
     ```

   Example output:
```
(cells/mycell/nodes/mynode/servers/myserver|resources-cei.xml#EventGroupProfile_1)
```
6. Save the configuration changes.
7. In a network deployment environment only, synchronize the node.
8. Restart the server.

Creating an event filter with scripting

You can create an event filter using a Jacl or Jython script.

Before you begin

Before starting this task, the wsadmin tool must be running. See the WebSphere Application Server documentation for more information.

About this task

Perform the following steps to configure a new event filter.

Procedure

1. Identify the Common Event Infrastructure provider ID.

- Using Jacl:

  ```
  set providerid [$AdminConfig getid \
  /Cell:mycell/Node:mynode/Server:myserver/ \
  EventInfrastructureProvider:/]
  ```
- Using Jython:

```
providerid =
AdminConfig.getid('/Cell:mycell/Node:mynode/Server:myserver/EventInfrastructureProvider:/')
print providerid
```

  Example output:

```
EventInfrastructureProvider(cells/mycell/nodes/mynode/servers/myserver|resources-cei.xml#
EventInfrastructureProvider_1)
```

2. Set the required attributes.
   - Using Jacl:

     ```
     set Name [list name "EventFilterName"]
     set JndiName [list jndiName "Put JNDI name for new event filter here"]
     set Description [list description "Set description of event filter here"]
     set Category [list category "Set category for event filter here"]

     # escape all '[' characters in the configuration string
     # (for example, "CommonBaseEvent\[@severity=50\]"
     set filterConfigurationString [list filterConfigurationString \
       "Set filter configuration string here"]
     ```
   - Using Jython:

     ```
     Name = ['name', 'EventFilterName']
     JndiName = ['jndiName',  'Put JNDI name for new event filter here']
     Description = ['description', 'Set description of event filter here']
     Category = ['category', 'Set category for event filter here']
     FilterConfigurationString = ['filterConfigurationString', \
       'Set filter configuration string here']
     ```
3. Set the properties for the new event filter.
   - Using Jacl:

     ```
     set properties [list $name $jndiName $description $category \
     $filterConfigurationString]
     ```
   - Using Jython:

     ```
     properties = [Name,JndiName,Description,Category,FilterConfigurationString]
     print properties
     ```

   Example output:

   ```
   [['name', 'EventFilterName'], ['jndiName', 'Put JNDI name for new
   event filter here'], ['description', 'Set description of event
   filter here'], ['category', 'Set category for event filter
   here'], ['filterConfigurationString', 'Set filter configuration
   string here']]
   ```
4. Create the event filter.
   - Using Jacl:

     ```
     set filterProf [$AdminConfig create FilterFactoryProfile \
     $providerid $properties]
     ```
   - Using Jython:

     ```
     print AdminConfig.create('FilterFactoryProfile', providerid, properties)
     ```

   Example output:

```
EventFilterName(cells/mycell/nodes/mynode/servers/myserver|resources-cei.xml#FilterFactoryProfile_1)
```

5. Save the configuration changes.
6. In a network deployment environment only, synchronize the node.
7. Restart the server.

Logging and tracing Common Event Infrastructure components

You can enable logging and tracing in order to debug problems with an application using Common Event Infrastructure.

About this task

Common Event Infrastructure components use the JSR47 Java logging framework, which is available in Common Event Infrastructure server and client environments. For more information about using the logging framework, refer to the WebSphere Application Server Network Deployment, version 6.1 troubleshooting documentation.

The following table indicates the logger names used by the Common Event Infrastructure components.

Table 2. Logger names

Component	Logger name
Root logger name	com.ibm.events
Event catalog	com.ibm.events.catalog
Event service subcomponents	com.ibm.events.access com.ibm.events.bus com.ibm.events.distribution com.ibm.events.server
Default data store plug-in	com.ibm.events.datastore
Event emitter	com.ibm.events.emitter
Notification helper	com.ibm.events.notification
Configuration	com.ibm.events.configuration com.ibm.events.admintask
Database configuration	com.ibm.events.install.db
Migration	com.ibm.events.migration
Miscellaneous utilities	com.ibm.events.util

Maintaining the event database

If you are using an external event database, you should periodically perform database maintenance by running the provided scripts.

Updating DB2 event database statistics

To enable a DB2 database on Linux, UNIX, or Windows to optimize queries and find free space, you can update the database statistics by running the **runstats** script.

About this task

Updating DB2 database statistics is recommended on a regular basis, and especially under any of the following circumstances:

- Events have been deleted from the database, using either the event deletion interfaces of the event service or the rapid event purge utility of the default data store plug-in
- A large number of events have been inserted into the database

- Tables have been reorganized using the **reorg** script
- Indexes have been added or removed from a table

The **runstats** script is located in the *profile_root*/event/*node_name*/*server_name* or *cluster_name*/dbscripts/db2 directory.

Procedure

To update the database statistics, run one of the following commands:

- Windows On Windows systems:

  ```
  runstats.bat db_user [password=db_password]
  ```

- Linux UNIX On Linux and UNIX systems:

  ```
  runstats.sh db_user [password=db_password]
  ```

The parameters are as follows:

db_user
: The database user ID to use. This parameter is required.

db_password
: The database password. This parameter is optional; if you do not specify the password on the command line, the DB2 database prompts you for it.

For example, running the following command updates the DB2 database statistics on a Windows system, using the database user ID `dbadmin` and the password `mypassword`:

```
runstats.bat dbadmin mypassword
```

Reorganizing DB2 event database tables

After events are purged or deleted from a DB2 event database on Linux, UNIX, or Windows, you can reorganize the database tables using the **reorg** script.

About this task

The **reorg** script is located in the *profile_root*/event/*node_name*/*server_name* or *cluster_name*/dbscripts/db2 directory.

Procedure

To reorganize the event database tables, run one of the following commands:

- Windows On Windows systems:

  ```
  reorg.bat db_alias db_user [password=db_password]
  ```

- Linux UNIX On Linux and UNIX systems:

  ```
  reorg.sh db_alias db_user [password=db_password]
  ```

The parameters are as follows:

db_alias
: The database alias. The event database must be catalogued on the DB2 client; if you are running the script on the DB2 server, the database is already catalogued.

db_user
: The database user ID to use. This parameter is required.

db_password
: The database password. This parameter is optional; if you do not specify the password on the command line, the DB2 database prompts you for it.

For example, the following command reorganizes the event database tables on a Windows system, using the database alias `eventdb`, user ID `dbadmin` , and the password `mypassword`:

```
reorg.bat eventdb dbadmin mypassword
```

After running the **reorg** script, you should update the database statistics using the **runstats** script. For more information, see "Updating DB2 event database statistics" on page 49.

Purging events from the event database

You can run the provided scripts to purge large numbers of events from the event database.

About this task

The default data store plug-in provides a set of utilities you can run periodically to purge large numbers of old events from the event database. These utilities are different from the eventpurge event service command, which deletes events matching specified criteria.

Derby databases: The database purge utility is not supported for a Derby event database.

The database purge capability uses the concept of *buckets*. A bucket is a set of tables used to store events in the event database. The default data store plug-in uses two buckets:
- The active bucket is the bucket containing the most recent events; new events are stored in the active bucket. The active bucket cannot be purged using the database purge utility.
- The inactive bucket contains older events. Events stored in the inactive bucket can be queried, deleted, or modified, but typically no new events are stored in the inactive bucket. The inactive bucket can be purged by the database purge utility.

Each event is stored in only one bucket. From the perspective of an event consumer, there is no distinction between the active and inactive buckets; a consumer can query, modify, or delete a specific event without knowing which bucket the event is stored in. The advantage of this approach is that the inactive bucket can be purged using database-specific interfaces without affecting the active bucket; typical event traffic can continue even while the purge operation is taking place.

After the inactive bucket is purged, you can then swap the buckets so that the active bucket becomes inactive and the inactive bucket becomes active. You can swap the buckets only when the inactive bucket is empty.

Although new events are generally stored only in the active bucket, under some circumstances events might be stored in the inactive bucket immediately after the buckets are swapped. The data store plug-in checks periodically to determine which bucket is currently marked as active, but until the next check takes place, some events might continue to be stored in the inactive bucket. Similarly, events sent as part of a batch are all stored in the same bucket, even if that bucket becomes inactive while the batch is still being processed.

If you want to use the fast purge capability, it is your responsibility to determine how frequently to swap buckets or purge the inactive bucket, depending upon event traffic, storage space, archival requirements, or other considerations.

Viewing or changing the event database active bucket status

The active bucket status indicates which bucket is currently active and which is currently inactive.

Procedure

To view or change the active bucket status, use the eventbucket command:

```
eventbucket [-status] [-change]
```

This command has the following options:

-status
: Use this option to see information about the current bucket configuration, including the active bucket setting and the bucket check interval (the frequency with which the data store plug-in checks to determine which bucket is active).

-change
: Use this option to swap the active and inactive buckets. The inactive bucket must be empty before you can use this option.

Purging the event database inactive bucket

The method used to purge the inactive bucket varies depending on the database software.

About this task

Derby databases: The rapid purge utility is not supported for a Derby event database.

Purging the inactive bucket for a DB2 event database (Linux, UNIX, or Windows systems):

On Linux, UNIX, and Windows systems, the database purge utility for a DB2 database is implemented as a shell script or batch file.

Procedure

To purge the inactive bucket, run one of the following commands:

- To purge the inactive bucket, run the following command:

  ```
  fastpurge dbalias dbuser [password=dbpassword] [copydir=copydir]
  ```

The parameters of this command are as follows:

dbalias
: The database alias. The event database must be catalogued on the DB2 client; if you are running the script on the DB2 server, the database is already catalogued.

dbuser
: The database user ID to use when connecting to the event database.

dbpassword
The password to use for the specified user ID. This parameter is optional; if you do not specify the password, the DB2 database prompts you for it.

copydir
The path to a directory to be used for the files generated by the load utility. This parameter is required only if you have enabled forward recovery for the event database (with the LOGRETAIN or USEREXIT database configuration settings enabled). By default, the event database does not use forward recovery.

Purging the inactive bucket for a DB2 event database (z/OS systems):

On z/OS systems, the database purge utility for a DB2 event database is implemented using the DB2 load utility.

About this task

To purge the inactive bucket:

Procedure

1. Run the eventbucket command to identify the inactive bucket (bucket 0 or bucket 1).
2. Upload the appropriate utility control file. These files are generated during database configuration and are located in the *profile_root*/event/dbscripts/db2zos directory. Upload one of the following files:
   - If bucket 0 is inactive, upload the fastpurge00.ctl file.
   - If bucket 1 is inactive, upload the fastpurge01.ctl file.

   Upload format: The control file must be uploaded with a fixed record format and a logical record length of 80.
3. On the z/OS host, go to the ISPF DB2I Primary Option Menu and select the **Utilities** option.
4. Specify the following information:

Field	Value
Function	`EDITJCL`
Utility	`LOAD`
Statement Data Set	The name of the data set containing the uploaded control file
LISTDEF	`NO`
Template	`NO`

5. Press Enter to continue to the next panel.
6. In the recdsn entry field, type the name of the data set containing the uploaded control file.
7. Press Enter. The JCL script to purge the inactive bucket is generated.
8. Press Enter to clear the output messages.
9. Edit the generated JCL script as needed.
10. Submit the JCL script.

Results

The generated JCL script can be reused. After you create the scripts for purging both buckets (0 and 1), you do not need to repeat this entire procedure.

Purging the inactive bucket for a DB2 event database (iSeries systems):

On iSeries systems, the database purge utility for a DB2 event database is implemented as a stored procedure.

About this task

To purge the inactive bucket:

Procedure

1. Connect to the iSeries system using a terminal application that emulates a 5250 terminal, such as IBM Personal Communications.
2. Log in with a user ID that has sufficient privileges to run the fast purge stored procedure. The user ID used to create the event database is recommended.
3. Run the **strsql** command.
4. Type the following SQL statement:
   ```
   call collection/fast_purge()
   ```
   collection is the name of the collection that contains the event database. The default collection is `event`:
   ```
   call event/fast_purge()
   ```

Purging the inactive bucket for an Oracle event database:

The database purge utility for an Oracle event database is implemented as a stored procedure.

Before you begin

Before you can use the database purge utility for an Oracle database, SQL*Plus must be installed on the Oracle client, and the client must be configured to communicate with the Oracle database (the tnsnames.ora file must be configured properly). Refer to the Oracle documentation for more information.

Procedure

To purge the inactive bucket, run the stored procedure using SQL*Plus:

```
sqlplus connect_string @fastpurge.sql
```

The fastpurge.sql file is stored in the same location as the other scripts generated during database configuration (the default location is *profile_root*/databases/event/*node_name*/*server_name* or *cluster_name*/dbscripts/oracle).

The *connect_string* parameter is the Oracle connection string. Use the same database user ID used to create the event database.

Purging the inactive bucket for an Informix event database:

The database purge utility for an Informix event database is implemented as a stored procedure.

Before you begin

To use the utility for an Informix database, you must run the Informix dbaccess command in an environment that has been properly sourced for the Informix environment variables. Refer to the Informix documentation for more information.

Procedure

1. To purge the inactive bucket, run the stored procedure using dbaccess:

   ```
   dbaccess - fastpurge.sql
   ```

   The fastpurge.sql file is stored in the same location as the other scripts generated during database configuration (the default location is *profile_root*/databases/event/*node*/*server*/dbscripts/informix).
2. Run the eventpurgepool script to purge the connection pool:
   - Windows On Windows systems: `eventpurgepool.bat`
   - Linux UNIX On Linux or UNIX systems: `eventpurgepool.sh`

Purging the inactive bucket for a SQL Server event database:

The database purge utility for a SQL Server event database is implemented as a stored procedure.

Before you begin

To use the utility for a SQL Server database, you must have the osql utility installed on the SQL Server client. Refer to the SQL Server documentation for more information.

Note: Do not use the isql utility for running the database purge stored procedure.

Procedure

To purge the inactive bucket, run the stored procedure using the osql utility:

```
osql -Sserver_name -Udbuser -Pdbpassword -deventdb -Q"fast_purge"
```

The fast_purge file is stored in the same location as the other scripts generated during database configuration (the default location is *profile_root*/databases/event/*node*/*server*/dbscripts/sqlserver).

The parameters of this command are as follows:

server_name
: The database server name.

dbuser
: The database user ID to use when connecting to the event database.

dbpassword
: The password to use for the specified user ID. This parameter is optional; if you do not specify the password, the osql utility prompts you for it.

eventdb
: The name of the event database (typically `event`).

Changing the event database bucket check interval

The bucket check interval specifies how frequently the data store plug-in checks to determine which bucket is active. This value is specified as a custom property in the data store settings.

About this task

The default bucket check interval is 5 minutes (300 seconds). A shorter interval reduces the likelihood that events will be stored in the inactive bucket after swapping, but might decrease performance.

To change the bucket check interval:

Procedure

1. In the administrative console, click **Service integration** > **Common Event Infrastructure** > **Event service** > **Event services** > *event_service* > **Event data store**.
2. Modify the value of the BucketCheckInterval property to specify the bucket check interval in seconds.

Results

The change takes effect the next time the server is started.

Implementing an event data store plug-in.

The default data store plug-in handles persistence of event data in the event database. If you want to use a different data store, you can implement a custom data store plug-in with Java programming.

About this task

To implement a data store plug-in:

Procedure

1. Develop your data store plug-in as an enterprise bean with the provided local interface. Your data store plug-in must implement the interface com.ibm.events.datastore.DataStoreLocal. The DataStoreLocal interface defines the following methods (refer to the Javadoc API documentation for complete information):

   createEvent(CommonBaseEvent)
   Stores a new event in the data store.

   createEvents(EventCreationRequest[])
   Stores multiple new events in the data store.

   eventExists(String)
   Returns a boolean indicating whether any events currently in the data store match the specified event selector.

   purgeEvents(String[])
   Deletes events matching the specified global instance identifiers.

   purgeEvents(String,int)
   Deletes events matching the specified event selector, with the specified maximum transaction size.

   queryEventByGlobalInstanceId(String)
   Returns the event whose global instance identifier matches the specified value (or null if no matching event is found).

   queryEvents(String, boolean)
   Returns an array of events that match the specified event selector.

queryEvents(String, boolean, int)
: Returns an array of events that match the specified event selector, limiting the array to the specified size.

queryEventsByAssociation(String, String)
: Returns an array of events that satisfy the specified relationship to a known event.

queryGlobalInstanceIds(String, int)
: Returns an array of global instance identifiers for events that match a specified event selector, limiting the array to the specified size.

updateEvents(EventUpdateRequest[])
: Updates events stored in the event database.

getMetaData()
: Returns metadata describing the data store plug-in, including the version of the Common Base Event specification it supports. The metadata must be represented as an instance of DataStoreMetaData.

A data store plug-in must also satisfy the following requirements:

- It must use XPath syntax, or a subset of XPath syntax, for specifying event selectors.
- It must store all of the data associated with each received event.
- Its query methods must return event objects that are identical to those originally stored.

2. Deploy your data store plug-in on the server. See the Common Event Infrastructuredocumentation for more information about how to deploy an application.
3. In the server administrative console, modify the event service settings. In the **Event data store EJB JNDI name** field, specify the JNDI name of your data store plug-in. For more information about the event service settings, see the online help for the administrative console.

Results

When the event service starts, it uses the specified JNDI name to access the local home interface of the data store enterprise bean. It then uses the local home interface to create an instance of the data store plug-in bean.

Implementing an event filter plug-in

The default filter plug-in handles filtering of events at the event source, based on XPath event selectors. If you want to use a different filtering engine, you can implement a custom filter plug-in with Java programming.

About this task

To implement a filter plug-in:

Procedure

1. Develop your filter plug-in as a Java class implementing the interface com.ibm.events.filter.Filter. This interface defines the following methods:

isEventEnabled(CommonBaseEvent)
: Returns a boolean value indicating whether the specified event passes the filter criteria. Each time an event is submitted to an emitter, the emitter calls this method, passing the submitted event. If the return

value is `true`, the emitter sends the event to the event service for persistence and distribution. If the return value is `false`, the emitter discards the event.

getMetaData()
: Returns information about the filter plug-in, such as the provider name and version number.

close()
: Frees all resources used by the filter plug-in. This method is called when the close() method of an emitter is called.

2. Develop a filter factory class that implements the interface com.ibm.events.filter.FilterFactory. This interface defines a single method, getFilter(), which returns an instance of your filter class (an implementation of the Filter interface).
3. Bind an instance of your filter factory into a JNDI namespace. During initialization, an emitter performs a JNDI lookup to access the filter factory.
4. In the server administrative console, modify your emitter factory settings or create a new emitter factory. In the **JNDI name for event filter** field, specify the JNDI name of your FilterFactory implementation. For more information about emitter factory profiles, see the online help for the administrative console.

Results

When you create an emitter using the emitter factory profile that specifies your filter factory, the new emitter uses an instance of your filter implementation. You can now send events using the standard emitter interfaces, and your filter plug-in is used.

Chapter 4. Securing accessing to Common Event Infrastructure functions

You can use WebSphere method-level declarative security to restrict access to Common Event Infrastructure functions.

Common Event Infrastructure defines seven security roles, each one associated with a related group of functions. These security roles control access to both programming interfaces and commands.

The following table describes the security roles and the types of users associated with each role.

Table 3. Security roles and user types

Security role	User types
eventCreator	Event sources that need to submit events to an emitter using synchronous EJB calls. This role provides access to the following interfaces: • Emitter.sendEvent() • Emitter.sendEvents() • **eventemit** command The eventCreator role restricts access to event submission only if the emitter is configured to use synchronous EJB calls for event transmission. If the emitter uses asynchronous JMS messaging for event transmission, you must use JMS security to restrict access to the destination used to submit events.
eventUpdater	Event consumers that need to update events stored in the event database. This role provides access to the following interfaces: • EventAccess.updateEvents() • EventAccess.eventExists() • EventAccess.queryEventByGlobalInstanceId() • EventAccess.queryEventsByAssociation() • EventAccess.queryEventsByEventGroup() • **eventquery** command
eventConsumer	Event consumers that need to query events stored in the event database. This role provides access to the following interfaces: • EventAccess.eventExists() • EventAccess.queryEventByGlobalInstanceId() • EventAccess.queryEventsByAssociation() • EventAccess.queryEventsByEventGroup() • **eventquery** command

Table 3. Security roles and user types (continued)

Security role	User types
eventAdministrator	Event consumers that need to query, update, and delete events stored in the event database. This role provides access to the following interfaces: • EventAccess.purgeEvents() • EventAccess.eventExists() • EventAccess.queryEventByGlobalInstanceId() • EventAccess.queryEventsByAssociation() • EventAccess.queryEventsByEventGroup() • EventAccess.updateEvents() • Emitter.sendEvent() • Emitter.sendEvents() • **eventquery** command • **eventpurge** command • **eventemit** command • **eventbucket** command
catalogReader	Event catalog applications that need to retrieve event definitions from the event catalog. This role provides access to the following interfaces: • EventCatalog.getAncestors() • EventCatalog.getChildren() • EventCatalog.getDescendants() • EventCatalog.getEventDefinition() • EventCatalog.getEventDefinitions() • EventCatalog.getEventExtensionNamesForSourceCategory() • EventCatalog.getEventExtensionToSourceCategoryBindings() • EventCatalog.getParent() • EventCatalog.getRoot() • EventCatalog.getSourceCategoriesForEventExtension() • **eventcatalog** command (-listdefinitions option) • **eventcatalog** command (-listcategories option) • **eventcatalog** command (-exportdefinitions option)
catalogAdministrator	Event catalog applications that need to create, update, delete, or retrieve event definitions in the event catalog. This role provides access to all methods of the EventCatalog interface and all functions of the **eventcatalog** command. Because changes to the event catalog can result in generation of events, this role also provides access to event submission interfaces.

The event service message-driven bean runs using the server user identity. If you are using asynchronous JMS transmission to submit events to the event service, and you have enabled method-based security, you must map this user identity to the eventCreator role.

Security: If your event source is running with Java 2 security enabled, and you want to generate your own globally unique identifiers (GUIDs), you must modify your policy file to enable correct processing. Add the following entries:

```
permission java.io.FilePermission "${java.io.tmpdir}${/}guid.lock",
  "read, write, delete";
permission java.net.SocketPermission "*", "resolve";
```

Chapter 5. Troubleshooting Common Event Infrastructure

These topics provide troubleshooting information for the event service based on the task or activity you were doing when you encountered the problem.

Problems during startup

Event service does not start (message CEIDS0058E)

The event service does not start and outputs message CEIDS0058E to the WebSphere log file.

Cause

The event service uses SQL statements qualified with the user name. This error indicates that the user name used by the event service to connect to the event database is not the same as the user ID that was used to create the database.

Remedy

The user ID used to connect to the event database must be the same one used to create the event database. To correct this problem:

1.
   - For a single server, select **Servers > Application servers >** ***server_name***.
   - For a cluster, select **Servers > Clusters >** ***cluster_name***.
2. From the **Configuration** tab, select **Business Integration > Common Event Infrastructure > Common Event Infrastructure Server**.
3. Change the specified user ID and password to match those used to create the database.
4. Save the configuration changes.
5. Restart the server.

Problems when sending events

Error when sending event (message CEIDS0060E)

My event source encounters an error when trying to send an event, and message CEIDS0060E appears in the WebSphere log file.

Cause

The event service uses metadata stored in the event database to map Common Base Event elements and attributes to database tables and columns. This information is read from the database the first time an application attempts to use the event service after startup.

The metadata tables are populated when the event database is created. This error occurs if the tables do not contain the required metadata at run time.

Remedy

To correct this problem, you need to recreate the required metadata. When the event database is created, the database configuration administrative command also generates a database script that can be used to repopulate the metadata at a later time. The name of this script depends on the database type:

Database type	Script name
Derby	ins_metadata.derby
DB2	ins_metadata.db2
Informix	ins_metadata.sql
Oracle	ins_metadata.ora
SQL Server	ins_metadata.mssql
DB″ UDB for iSeries	ins_metadata.db2

By default, the script is created in the *profile_root*/dbscripts/*CEI_database_namenode* directory. You can run this script at any time.

To re-create the metadata, use the appropriate SQL processor to run the script:

- Windows Linux UNIX DB2: db2
- Windows Linux UNIX Oracle: SQL*Plus
- Windows Linux UNIX Informix: dbaccess
- Windows SQL Server: osql
- i5/OS DB2 UDB for iSeries: run the script in QShell

After repopulating the metadata, restart the server.

Error when sending event (ServiceUnavailableException)

My event source application encounters an error when trying to send an event to the event server. The log file indicates a ServiceUnavailableException with the message "A communication failure occurred while attempting to obtain an initial context with the provider URL."

Cause

This problem indicates that the event source application cannot connect to the server. This might be caused by either of the following conditions:

- The server is not running.
- The event source application is not configured to use the correct JNDI provider URL.

Remedy

To correct this problem, follow these steps:

1. To check the status of the server, go to the *profile_root*/bin directory and run the **serverStatus** command:

   ```
   serverStatus servername
   ```
2. If the server is not running, use the **startServer** command to start it:

   ```
   startServer servername
   ```

3. Check the host name and Remote Method Invocation (RMI) port for the server, and confirm that the same values are specified in the JNDI URL configured for the event source application. If the CEI server is located on another server, then the JNDI needs to be resolved with that remote deployment target.

Error when sending event (NameNotFoundException)

My event source application encounters an error when trying to send an event to the event service. The log file indicates a NameNotFoundException with a message like "First component in name events/configuration/emitter/Default not found."

Cause

This problem indicates that the event service is not available. This might be caused by either of the following conditions:

- The event service has not been deployed.
- The event service is disabled.

Remedy

To deploy the event service:

1. Start the wsadmin tool.
2. Use the AdminTask object to run the deployEventService administrative command.
3. Restart the server.

To enable the event service using the wsadmin tool:

1. Start the wsadmin tool.
2. Use the AdminTask object to run the enableEventService administrative command.
3. Restart the server.

To enable the event service using the administrative console:

1. Click **Applications** → *server* → **Container Services** → **Common Event Infrastructure Service**.
2. Select the Enable service at server startup property.
3. Click **OK** to save your changes.
4. Restart the server.

Error when sending event (message CEIEM0025E)

My event source application encounters an error when trying to send an event to the event server. The log file indicates a DuplicateGlobalInstanceIdException.

Cause

This problem indicates that the emitter submitted the event, but the event service rejected it because another event already exists with the same global instance identifier. Each event must have a unique global instance identifier, specified by the globalInstanceId property.

Remedy

To correct this problem, do one of the following:

- Make sure your event source application generates a unique global instance identifier for each event.
- Leave the globalInstanceId property of your submitted events empty. The emitter then automatically generates a unique identifier for each event.

Error when sending event (message CEIEM0034E)

My event source encounters an error when trying to send an event to the event service. The log file indicates an EmitterException with the message "The JNDI lookup of a JMS queue failed because the JNDI name defined in the emitter profile is not bound in the JNDI."

Cause

This problem indicates that the JMS transmission configuration being used by the emitter specifies one or more JMS resources that are not defined in the JMS configuration.

Remedy

To correct this problem:

1. In the administrative console, click **Service integration** > **Common Event Infrastructure** > **Event emitter factories** > *emitter_factory* > **JMS transmission settings**. Make sure you are viewing the JMS transmission for the emitter factory used by your event source application.
2. Check the values specified for the **Queue JNDI name** and **Queue connection factory JNDI name** properties. Make sure the specified JNDI names exist in the JNDI namespace and are valid JMS objects. If necessary, modify these properties or create the required JMS resources.

Event is not valid (message CEIEM0027E)

My event source is trying to send an event, but the emitter does not submit it to the event service and outputs message CEIEM0027E to the log file ("The emitter did not send the event to the event server because the Common Base Event is not valid").

Cause

This message indicates that one or more of the event properties contain data that does not conform to the Common Base Event specification. There are many ways in which event data might not be valid, including the following:

- The global instance identifier must be at least 32 characters but no more than 64 characters in length.
- The severity must be within the range of 0 - 70.

Remedy

To correct this problem:

1. Check the detailed exception message in the log file to determine which event property is not valid. For example, this messages indicates that the length of the global instance identifier (`ABC`) is not valid:

```
Exception: org.eclipse.hyades.logging.events.cbe.ValidationException  : IWAT0206E
The length of the identifier in the specified Common Base Event property is
outside the valid range of 32 to 64 characters.
Property: CommonBaseEvent.globalInstanceId
Value: ABC
```

2. Correct the event content at the source so it conforms to the Common Base Event specification.
3. Resubmit the event.

Synchronization mode not supported (message CEIEM0015E)

My event source is trying to send an event, but the emitter does not submit it to the event service and outputs message CEIEM0015E to the log file ("The emitter does not support the specified synchronization mode").

Cause

This problem indicates that the parameters passed by the event source when sending the event specify a synchronization mode that is not supported by the emitter. This can be caused be either of the following conditions:

- The event source is specifying a synchronization mode that is not valid. This is indicated by an IllegalArgumentException with the message ″Synchronization mode *mode* is not valid.″
- The event source is specifying a synchronization mode that the emitter is not configured to support. This is indicated by a SynchronizationModeNotSupportedException with the message ″The emitter does not support the specified synchronization mode: *mode*.″

Remedy

If the exception message indicates that your event source is specifying a synchronization mode that is not valid (IllegalArgumentException), check the method call that is trying to send the event. Make sure the method parameters specify one of the valid synchronization modes:

- SynchronizationMode.ASYNCHRONOUS
- SynchronizationMode.SYNCHRONOUS
- SynchronizationMode.DEFAULT

These constants are defined by the com.ibm.events.emitter.SynchronizationMode interface.

If the exception message indicates that the specified synchronization mode is not supported by the emitter (SynchronizationModeNotSupportedException), check the emitter factory configuration:

1. In the administrative console, click **Service Integration** > **Common Event Infrastructure** > **Event Emitter Factories** > *emitter_factory*. Make sure you are viewing the emitter factory used by the event source application.
2. Check the emitter factory settings to see which synchronization modes are supported:
   - If the **Support Event Service transmission** property is selected, synchronous mode is supported.
   - If the **Support JMS transmission** property is selected, asynchronous mode is supported.

   Querying transaction modes: An event source can programmatically query the supported transaction modes for a particular emitter by using the isSynchronizationModeSupported() method. Refer to the Javadoc API documentation for more information.

3. If the emitter does not support the synchronization mode you are trying to use, you must either change the emitter factory configuration or modify your event source to use a supported synchronization mode.

Transaction mode not supported (message CEIEM0016E)

My event source is trying to send an event, but the emitter does not submit it to the event service and outputs message CEIEM0016E to the log file ("The emitter does not support the specified transaction mode").

Cause

This problem indicates that the parameters passed by the event source when sending the event specify a transaction mode that is not supported by the emitter. This can be caused be either of the following conditions:

- The event source is specifying a transaction mode that is not valid.
- The event source is specifying a synchronization mode that is not supported by the emitter environment. Transactions are supported only in a J2EE container.

Remedy

To correct this problem, check the method call that is trying to send the event and make sure the method parameters specify the correct transaction mode:

- If the emitter is running in a J2EE container, make sure the method parameters specify one of the valid transaction modes:
  - TransactionMode.NEW
  - TransactionMode.SAME
  - TransactionMode.DEFAULT

  These constants are defined by the com.ibm.events.emitter.TransactionMode interface.
- If the emitter is not running in a J2EE container, make sure the method parameters specify TransactionMode.DEFAULT.

Problems when receiving or querying events

Error when querying events (message CEIDS0060E)

My event consumer encounters an error when trying to query events from the event service, and message CEIDS0060E appears in the WebSphere log file.

Cause

The event service uses metadata stored in the event database to map Common Base Event elements and attributes to database tables and columns. This information is read from the database the first time an application attempts to use the event service after startup.

The metadata tables are populated when the event database is created. This error occurs if the tables do not contain the required metadata at run time.

Remedy

To correct this problem, you need to recreate the required metadata. When the event database is created, the database configuration administrative command also generates a database script that can be used to repopulate the metadata at a later time. The name of this script depends on the database type:

Database type	Script name
Derby	ins_metadata.derby
DB2	ins_metadata.db2
Informix	ins_metadata.sql
Oracle	ins_metadata.ora
SQL Server	ins_metadata.mssql
DB2 UDB for iSeries	ins_metadata.db2

By default, the script is created in the *profile_root*/dbscripts/*CEI_database_namenode* directory. You can run this script at any time.

To re-create the metadata, use the appropriate SQL processor to run the script:
- Windows Linux UNIX DB2: db2
- Windows Linux UNIX Oracle: SQL*Plus
- Windows Linux UNIX Informix: dbaccess
- Windows SQL Server: osql
- i5/OS DB2 UDB for iSeries: run the script in QShell

After repopulating the metadata, restart the server.

Events not being stored in the persistent data store

My event source application is successfully submitting events to the emitter, but when an event source queries the events, they are not in the persistent data store.

Cause

This problem indicates that the emitter is not sending events to the event service, or that the event service is not storing the events to the persistent data store. This can be caused be any of the following conditions:
- The persistent data store not enabled for the event service.
- The events do not belong to an event group that is configured for event persistence.
- The events are being filtered out by the emitter.

Remedy

To verify that the persistent data store is enabled for the event service:
1. In the administrative console, click **Service integration** > **Common Event Infrastructure** > **Event service** > **Event services** > *event_service*.
2. Make sure the **Enable event data store** check box is selected.
3. Click **OK** to save any changes.

To verify that the event group is configured for event persistence:
1. In the administrative console, click **Service integration** > **Common Event Infrastructure** > **Event service** > **Event services** > *event_service* > **Event groups** > *event_group*.

2. Make sure the **Persist events to event data store** check box is selected.
3. Click **OK** to save any changes.

Multiple event groups: An event might belong to multiple event groups. If any applicable event group is configured for persistence, and the data store is enabled, the event is stored in the data store.

To check the filter settings:
1. In the administrative console, click **Service integration** > **Common Event Infrastructure** > **Event emitter factories** > *emitter_factory* > **Event filter**. (Make sure you are viewing the settings for the emitter factory your event source application is using.)
2. Check to see whether the filter configuration string excludes the events you are trying to send to consumers. If so, you can either modify the filter configuration string or modify the event data so the events are not filtered out.
3. Click **OK** to save any changes.

Events not being received by consumers (no error message)

My event source application is successfully submitting events to the emitter, but the events are not received by consumers using the JMS interface.

Cause

This problem can be caused be any of the following conditions:
- Event distribution is not enabled for the event service.
- The events are being filtered out by the emitter.
- The events are being filtered out by the notification helper.
- The event consumer is not specifying the correct event group.
- The JMS connection is not started.

Remedy

The remedy for this problem depends upon the underlying cause.
- **To verify that event distribution is enabled for the event service:**
  1. In the administrative console, click **Service integration** > **Common Event Infrastructure** > **Event service** > **Event services** > *event_service*.
  2. If the **Enable event distribution** property is not selected, select the check box.
  3. Click **OK** to save any changes.
- **To check the event filter settings for the emitter:**
  1. In the administrative console, click **Service integration** > **Common Event Infrastructure** > **Event emitter factories** > *emitter_factory* > **Event filter**. (Make sure you are viewing the settings for the emitter factory your event source application is using.)
  2. Check to see whether the filter configuration string excludes the events you are trying to send to consumers. If so, you can either modify the filter configuration string or modify the event data so the events are not filtered out.
  3. Click **OK** to save any changes.
- **To check the event filter settings for the notification helper:**

1. Check your event consumer application to see if an event selector is specified for the notification helper using the NotificationHelper.setEventSelector method.
2. If an event selector is specified, make sure it does not exclude the event you are trying to receive. (A null event selector passes all events.)

- **To check the event group specified by the event consumer:**
  1. In the administrative console, click **Service integration** > **Common Event Infrastructure** > **Event service** > **Event services** > *event_service* > **Event groups**. The table shows a list of all event groups defined for the event service.
  2. Select the event group your event consumer subscribes to.
  3. Find the **Event selector string** property.
  4. Make sure the specified event selector matches the content of the event you are trying to receive. If it does not match, you might want to make one of the following changes:
     – Modify the event selector so the event is included in the event group.
     – Modify the event data so the event matches the event group.
     – Modify your event consumer to subscribe to a different event group that includes the event.
- **To start the JMS connection:**

  In your event consumer, use the QueueConnection.start() method or the TopicConnection.start() method before attempting to receive events.

Events not being received by consumers (NameNotFoundException)

My event source application is successfully submitting events to the emitter, but the events are not published to consumers using the JMS interface, and the log file indicates a NameNotFoundException.

Cause

This problem indicates that the event group configuration specifies one or more JMS resources that do not exist.

Remedy

To correct this problem:

1. In the administrative console, click **Service integration** > **Common Event Infrastructure** > **Event service** > **Event services** > *event_service* > **Event groups** > *event_group*.

   Multiple event groups: An event might belong to more than one event group.
2. Check the values of the **Topic JNDI name** and **Topic connection factory JNDI name** properties. Verify that the specified JMS resources exist. If necessary, use the configuration interface of your JMS provider to create the necessary resources.

Event group with extended data elements contains no events

I have defined an event group that specifies extended data element predicates, but queries on the event group do not return the expected events.

Cause

The event data might be valid XML but not conform with the Common Base Event specification. This can cause unexpected results without any error messages.

Consider an event with the following content:

```
<?xml version="1.0" encoding="ASCII"?>
<!-- Event that will match the XPath expression CommonBaseEvent[@globalInstanceId] -->
<CommonBaseEvent
        xmlns:xsi="http://www.w3.org/TR/xmlschema-1/"
        xmlns:="http://www.ibm.com/AC/commonbaseevent1_0_1"
        version="1.0.1"
        creationTime="2005-10-17T12:00:01Z"
        severity="10"
        priority="60"
    >
    <situation categoryName="RequestSituation">
        <situationType xsi:type="RequestSituation"
            reasoningScope="INTERNAL"
            successDisposition="Suceeded"
            situationQualifier="TEST"
        />
    </situation>
    <sourceComponentId
        component="component"
        subComponent="subcomponent"
        componentIdType="componentIdType"
        location="localhost"
        locationType="Hostname"
        componentType="sourceComponentType"
    />
    <extendedDataElement name="color" type="string">
        <values>red</values>
    </extendedDataElement>
</CommonBaseEvent>
```

This event contains a single extended data element with a single child element.

Now consider an event group definition configured with the following XPath event selector string:

```
CommonBaseEvent[extendedDataElements[@name='color' and @type='string' and @values='red']]
```

This event selector fails to match the event because the XML definition of the event contains a misspelling. In the event data, the `extendedDataElements` element is misspelled as `extendedDataElement`. Because this is well-formed XML, it does not cause an error; instead, it is treated as an `any` element, which is not searchable.

Remedy

Make sure the XML data for submitted events conforms to the Common Base Event specification.

Error when querying an event group (message CEIES0048E)

My event consumer application encounters an error when trying to query events from an event group. The log file indicates an EventGroupNotDefinedException and shows message CEIES0048E ("The event group is not defined in the event group list that the event server instance is using.")

Cause

This problem indicates that the event consumer application performed a query using the EventAccess bean, but the consumer specified an event group name that does not correspond to any existing event group.

Remedy

To correct this problem:

1. In the administrative console, click **Service integration** > **Common Event Infrastructure** > **Event service** > **Event services** > *event_service* > **Event groups**. The table shows a list of all event groups defined for the event service.
2. Make sure the event source specifies a defined event group name in the parameters of the query method call.

Miscellaneous problems

Event catalog pattern query fails on a Windows system

I am trying to do a pattern query for event definitions on a Windows system using the ***eventcatalog*** *command. For example: eventcatalog -listdefinitions -name EVENT% -pattern. I don't get the expected results.*

Cause

The percent character (%) is a reserved character in the Windows command-line interface and is not passed properly to the **eventcatalog** command.

Remedy

On Windows systems, you must escape the percent character character by typing %%:

```
eventcatalog -listdefinitions -name EVENT%% -pattern
```

Chapter 6. Common Event Infrastructure commands

Commands used by Common Event Infrastructure for creating and removing event databases and services

Commands for creating event data sources on specific databases:

- DB2 multiplatform — "configEventServiceDB2DB"
- DB2 iSeries — "configEventServiceDB2iSeriesDB" on page 77
- DB2 zOS — "configEventServiceDB2ZOSDB" on page 79
- Derby — "configEventServiceDerbyDB" on page 81
- Informix — "configEventServiceInformixDB" on page 83
- Oracle — "configEventServiceOracleDB" on page 85
- SQL Server — "configEventServiceSQLServerDB" on page 87

Generic Common Event Infrastructure commands used by the server to handle the event service:

- Deploy the event service application — "deployEventService" on page 89
- Deploy the event service application message driven bean — "deployEventServiceMdb" on page 90
- Create the authentication alias used by Common Event Infrastructure for messaging — "setEventServiceJmsAuthAlias" on page 92
- Enabling the event service upon the restart of the server — "enableEventService" on page 93
- Disabling the event service upon the restart of the server — "disableEventService" on page 94
- Return the event service status — "showEventServiceStatus" on page 95
- Remove the event service application — "removeEventService" on page 96
- Remove the event service application message driven bean — "removeEventServiceMdb" on page 96

Commands for removing event data sources on specific databases:

- DB2 multiplatform — "removeEventServiceDB2DB" on page 98
- DB2 iSeries — "removeEventServiceDB2iSeriesDB" on page 99
- DB2 zOS — "removeEventServiceDB2ZOSDB" on page 100
- Derby — "removeEventServiceDerbyDB" on page 101
- Informix — "removeEventServiceInformixDB" on page 102
- Oracle — "removeEventServiceOracleDB" on page 103
- SQL Server — "removeEventServiceSQLServerDB" on page 105

configEventServiceDB2DB

Purpose

The configEventServiceDB2DB command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to create the event service database and data sources for DB2 on a server or cluster. For more information about the AdminTask object, see the WebSphere Application

Server Network Deployment, version 6.1 documentation.

Parameters

- createDB
The command generates the DDL database scripts and creates the database when this parameter is set to `true`. The command only generates the DDL database scripts when this parameter is set to `false`. To create the database, the current server must be already configured to run the database commands. The default value is `false` if not specified.

- overrideDataSource
Optional database script output directory. When this parameter is specified, the command generates the event service database scripts in the specified directory. If the specified directory does not contain a full path, the command creates the specified directory in *profile_root*/bin. The default database script output directory is *profile_root*/databases/event/*node*/*server*/dbscripts/*dbtype* if this parameter is not specified.

- nodeName
The name of the node that contains the server where the event service data source should be created. If this parameter is specified, then the **serverName** parameter must be set. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
The name of the server where the event service data source should be created. If this parameters is specified without the **nodeName** parameter, the command will use the node name of the current WebSphere profile. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
The name of the cluster where the event service data source should be created. If this parameter is specified, then the **serverName** and **nodeName** parameters must not be set. You must not specify this parameter if the **serverName** and **nodeName** parameters are specified.

- jdbcClassPath
The path to the JDBC driver. Specify only the path to the driver file; do not include the file name in the path. This parameter is required.

- dbNodeName
The DB2 node name (this must be 8 characters or less). This node must be already catalogued and configured to communicate with the DB2 server. This parameter must be set if the current server is configured as a DB2 client and the parameter **createDB** is set to `true`.

- dbHostName
The host name of the server where the database server is installed. This parameter is required.

- dbPort
DB2 instance port. The default value is 50 000 if not specified.

- dbName
The database name to be created. The default value is `event` if not specified.

- dbUser
DB2 user ID that has privileges to create and drop the databases. The default value is `db2inst1` if not specified.

- dbPassword
DB2 password. This parameter is required.

- outputScriptDir
Optional database script output directory. When this parameter is specified, the command generates the event service database scripts in the specified directory. If the specified directory does not contain a full path, the command creates the specified directory in *profile_root*/bin. The default database script output directory is *profile_root*/databases/event/*node*/*server*/dbscripts/db2 if this parameter is not specified.

Sample

Batch mode example usage:

- Using Jacl:

```
$AdminTask configEventServiceDB2DB {-createDB true -overrideDataSource true
 -nodeName nodename -serverName servername -jdbcClassPath c:\sqllib\java
 -dbUser db2inst1 -dbPassword dbpassword  -dbHostName host_name -dbPort 50000 }
```

- Using Jython string:

```
AdminTask.configEventServiceDB2DB('[-createDB true -overrideDataSource true
 -nodeName nodename  -serverName servername -jdbcClassPath c:\sqllib\java
 -dbUser db2inst1 -dbPassword dbpassword -dbHostName host_name -dbPort 50000 ]')
```

- Using Jython list:

```
AdminTask.configEventServiceDB2DB(['-createDB', 'true', '-overrideDataSource',
 'true', '-nodeName', 'nodename', '-serverName', 'servername', '-jdbcClassPath',
 'c:\sqllib\java', '-dbUser', 'db2inst1', '-dbPassword', 'dbpassword ',
 '-dbHostName', 'host_name', '-dbPort', '50000 '])
```

Interactive mode example usage:

- Using Jacl:

```
$AdminTask configEventServiceDB2DB -interactive
```

- Using Jython string:

```
AdminTask.configEventServiceDB2DB('[-interactive]')
```

- Using Jython list:

```
AdminTask.configEventServiceDB2DB(['-interactive'])
```

configEventServiceDB2iSeriesDB

Purpose

The configEventServiceDB2iSeriesDB command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use it to generate the DDL database scripts for use on remote database servers, create the event service database for DB2 iSeries on a local server, and creates data sources on a server or cluster. For more information about the AdminTask object, refer to the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- createDB
The command generates the DDL database scripts and creates the database when this parameter is set to `true`. The command only generates the DDL database scripts when this parameter is set to `false`. To create the database, the current server must be already configured to run the database commands. The default value is `false` if not specified.

- overrideDataSource
When this parameter is set to `true`, the command removes any existing event service data source at the specified scope before creating a new one. When this parameter is set to `false`, the command does not create an event service data source at the specified scope if another event service data source is found at the same scope. The default value is `false` if not specified.

- nodeName
The name of the node that contains the server where the event service data source should be created. If this parameter is specified, then the **serverName** parameter must be set. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
The name of the server where the event service data source should be created. If this parameters is specified without the **nodeName** parameter, the command will use the node name of the current WebSphere profile. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
The name of the cluster where the event service data source should be created. If this parameter is specified, then the **serverName** and **nodeName** parameters must not be set. You must not specify this parameter if the **serverName** and **nodeName** parameters are specified.

- toolboxJdbcClassPath
The path to the IBM Toolbox for Java DB2 JDBC driver. Specify only the path to the driver file; do not include the file name. You must specify either this parameter or the **jdbcClassPath** parameter.

Note: You must specify **toolboxJdbcClassPath** path if you are creating the database on an iSeries server.

- nativeJdbcClassPath
The path to the DB2 for iSeries native JDBC driver. Specify only the path to the driver file; do not include the file name in the path. You must specify either this parameter or the **toolboxJdbcClassPath** parameter.

Note: You must specify the **nativeJdbcClassPath** if you are using an iSeries server to create the database on a non-iSeries server. Specify the DB2 Universal Driver if you are creating the database on DB2 Universal Database for multiplatforms or DB2 Universal Database for z/OS. Specify a type 4 driver if you are creating the database on Informix, Oracle, or Microsoft SQL Server.

- dbHostName
The host name of the server where the DB2 for iSeries database server is installed. This parameter is required if you are using the IBM Toolbox for Java DB2 JDBC driver.

- dbName
The DB2 for iSeries database name. The default value is `*LOCAL` if not specified.

- collection
DB2 for iSeries library SQL collection. The maximum length for the collection name is 10 characters. The default value is an empty string if not specified.

- dbUser
DB2 user ID that has privileges to create and drop the databases. This parameter is required.

- dbPassword
Password of the database user ID. This parameter is required.

- outputScriptDir
Optional database script output directory. When this parameter is specified, the command generates the event service database scripts in the specified directory. If the specified directory does not contain a full path, the command creates the specified directory in *profile_root*/bin. The default database script output directory is *profile_root*/databases/event/*node*/*server*/dbscripts/db2iseries if this parameter is not specified.

Sample

Batch mode example usage:

- Using Jacl:
```
$AdminTask configEventServiceDB2iSeriesDB {createDB true -overrideDataSource true
 -nodeName nodename -serverName servername -dbUser db2user -dbPassword dbpassword
 -nativeJdbcClassPath /myDB2ClassPath -collection event}
```
- Using Jython string:
```
AdminTask.configEventServiceDB2iSeriesDB('[-createDB true -overrideDataSource true
 -nodeName nodename -serverName servername -nativeJdbcClassPath /myDB2ClassPath
 -collection event]')
```
- Using Jython list:
```
AdminTask.configEventServiceDB2iSeriesDB(['-createDB', 'true', '-overrideDataSource',
 'true', '-nodeName', 'nodename', '-serverName', 'servername', '-nativeJdbcClassPath',
 '/myDB2ClassPath', '-collection', 'event'])
```

Interactive mode example usage:

- Using Jacl:
```
$AdminTask configEventServiceDB2iSeriesDB -interactive
```
- Using Jython string:
```
AdminTask.configEventServiceDB2iSeriesDB('[-interactive]')
```
- Using Jython list:
```
AdminTask.configEventServiceDB2iSeriesDB(['-interactive'])
```

configEventServiceDB2ZOSDB

Purpose

The configEventServiceDB2ZOSDB command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to create the event service database and data sources for DB2 z/OS on a server or cluster. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- createDB
The command generates the DDL database scripts and creates the database when this parameter is set to `true`. The command only generates the DDL database scripts when this parameter is set to `false`. To create the database, the current server must be already configured to run the database commands. The default value is `false` if not specified.

- overrideDataSource
When this parameter is set to `true`, the command removes any existing event

service data source at the specified scope before creating a new one. When this parameter is set to `false`, the command does not create an event service data source at the specified scope if another event service data source is found at the same scope. The default value is `false` if not specified.

- nodeName
The name of the node that contains the server where the event service data source should be created. If this parameter is specified, then the **serverName** parameter must be set. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
The name of the server where the event service data source should be created. If this parameters is specified without the **nodeName** parameter, the command will use the node name of the current WebSphere profile. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
The name of the cluster where the event service data source should be created. If this parameter is specified, then the **serverName** and **nodeName** parameters must not be set. You must not specify this parameter if the **serverName** and **nodeName** parameters are specified.

- jdbcClassPath
The path to the JDBC driver. Specify only the path to the driver file; do not include the file name in the path. This parameter is required.

- dbHostName
The host name of the server where the database is installed. This parameter is required.

- dbPort
DB2 for z/OS instance port. The default value is 5027 if not specified.

- dbName
The DB2 database name. On the DB2 client, this is the name of the catalogued database. On the native z/OS server, it is the name of the database subsystem. The default value is event if not specified.

- dbDiskSizeInMB
Specify the disk size in MB for the event service database. This value must be at least 10 MB. The default value is 100 MB if not specified.

- dbUser
DB2 user ID that has privileges to create and drop the databases. This parameter is required.

- dbPassword
Password of the database user ID. This parameter is required.

- storageGroup
The storage group for the event database and the event catalog database. The storage group must already be created and active.

- bufferPool4K
The name of the 4K buffer pool. This buffer pool must be active before the database DDL scripts can be run.

- bufferPool8K
The name of the 8K buffer pool. This buffer pool must be active before the dabase DDL scripts can be run.

- bufferPool16K
The name of the 16K buffer pool. This buffer pool must be active before the database DDL scripts can be run.

- outputScriptDir
Optional database script output directory. When this parameter is specified, the command generates the event service database scripts in the specified directory. If the specified directory does not contain a full path, the command creates the specified directory in *profile_root*/bin. The default database script output directory is *profile_root*/databases/event/*node*/*server*/dbscripts/db2zos if this parameter is not specified.

Sample

Batch mode example usage:

- Using Jacl:

```
$AdminTask configEventServiceDB2ZOSDB {-createDB true -overrideDataSource true
 -nodeName nodename -serverName servername -jdbcClassPath c:\sqllib\java
 -dbUser db2user -dbPassword dbpassword -dbHostName host_name -dbPort 5027
 -storageGroup sysdeflt -bufferPool4K BP9 -bufferPool8K BP8K9
 -bufferPool16K BP16K9}
```

- Using Jython string:

```
AdminTask.configEventServiceDB2ZOSDB('[-createDB true -overrideDataSource true
 -nodeName nodename -serverName servername -jdbcClassPath c:\sqllib\java
 -dbUser db2user -dbPassword dbpassword -dbHostName host_name -dbPort 5027
 -storageGroup sysdeflt -bufferPool4K BP9 -bufferPool8K BP8K9
 -bufferPool16K BP16K9]')
```

- Using Jython list:

```
AdminTask.configEventServiceDB2ZOSDB(['-createDB', 'true', '-overrideDataSource',
 'true', '-nodeName', 'nodename', '-serverName', 'servername', '-jdbcClassPath',
 'c:\sqllib\java', '-dbUser', 'db2user', '-dbPassword', 'dbpassword',
 '-dbHostName', 'host_name', '-dbPort', '5027', '-storageGroup', 'sysdeflt',
 '-bufferPool4K', 'BP9', '-bufferPool8K', 'BP8K9', '-bufferPool16K', 'BP16K9'])
```

Interactive mode example usage:

- Using Jacl:

```
$AdminTask configEventServiceDB2ZOSDB -interactive
```

- Using Jython string:

```
AdminTask.configEventServiceDB2ZOSDB('[-interactive]')
```

- Using Jython list:

```
AdminTask.configEventServiceDB2ZOSDB ['-interactive'])
```

configEventServiceDerbyDB

Purpose

The configEventServiceDerbyDB command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to create the event service database and data sources for Derby on a server or cluster. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- createDB
The command generates the DDL database scripts and creates the database

when this parameter is set to `true`. The command only generates the DDL database scripts when this parameter is set to `false`. To create the database, the current server must be already configured to run the database commands. The default value is `false` if not specified.

- overrideDataSource
When this parameter is set to `true`, the command removes any existing event service data source at the specified scope before creating a new one. When this parameter is set to `false`, the command does not create an event service data source at the specified scope if another event service data source is found at the same scope. The default value is `false` if not specified.

- nodeName
The name of the node that contains the server where the event service data source should be created. If this parameter is specified, then the **serverName** parameter must be set. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
The name of the server where the event service data source should be created. If this parameters is specified without the **nodeName** parameter, the command will use the node name of the current WebSphere profile. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
The name of the cluster where the event service data source should be created. If this parameter is specified, then the **serverName** and **nodeName** parameters must not be set. You must not specify this parameter if the **serverName** and **nodeName** parameters are specified.

- dbHostName
The host name of the network Derby database. To create the Derby network data source, specify this parameter and the **dbPort** parameter. To create the Derby local data source, do not specify this parameter and the **dbPort** parameter.

- dbPort
The port number of the network Derby database. To create the Derby network data source, specify this parameter and the **dbHostName** parameter. To create the Derby local data source, do not specify this parameter and the **dbHostName** parameter.

- dbName
The database name to be created. The default value is `event` if not specified.

- dbUser
The user ID used by the data source for the Derby database authentication. This parameter is optional when the WebSphere domain security is disabled. If you specify this parameter, you also must specify the **dbPassword** parameter. This parameter is required when the WebSphere domain security is enabled.

- dbPassword
The password used by the data source for the Derby database authentication. This parameter is optional when the WebSphere domain security is disabled. If you specify this parameter, you also must specify the **dbUser** parameter. This parameter is required when the WebSphere domain security is enabled.

- outputScriptDir
Optional database script output directory. When this parameter is specified, the command generates the event service database scripts in the specified directory. If the specified directory does not contain a full path, the command

creates the specified directory in *profile_root*/bin. The default database script output directory is *profile_root*/databases/event/*node*/*server*/dbscripts/derby if this parameter is not specified.

Sample

Batch mode example usage:

- Using Jacl:

```
$AdminTask configEventServiceDerbyDB {-createDB true -overrideDataSource true
 -nodeName nodename -serverName servername}
```

- Using Jython string:

```
AdminTask.configEventServiceDerbyDB( '[-createDB true -overrideDataSource true
 -nodeName nodename -serverName servername]')
```

- Using Jython list:

```
AdminTask.configEventServiceDerbyDB(['-createDB', 'true', '-overrideDataSource',
 'true', '-nodeName', 'nodename', '-serverName', 'servername'])
```

Interactive mode example usage:

- Using Jacl:

```
$AdminTask configEventServiceDerbyDB -interactive
```

- Using Jython string:

```
AdminTask.configEventServiceDerbyDB('[-interactive]')
```

- Using Jython list:

```
AdminTask.configEventServiceDerbyDB(['-interactive'])
```

configEventServiceInformixDB

Purpose

The configEventServiceInformixDB command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to create the event service database and data sources for Informix on a server or cluster. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- createDB
: The command generates the DDL database scripts and creates the database when this parameter is set to `true`. The command only generates the DDL database scripts when this parameter is set to `false`. To create the database, the current server must be already configured to run the database commands. The default value is `false` if not specified.

- overrideDataSource
: Optional database script output directory. When this parameter is specified, the command generates the event service database scripts in the specified directory. If the specified directory does not contain a full path, the command creates the specified directory in *profile_root*/bin. The default database script output directory is *profile_root*/databases/event/*node*/*server*/dbscripts/*dbtype* if this parameter is not specified.

- nodeName
: The name of the node that contains the server where the event service data

source should be created. If this parameter is specified, then the **serverName** parameter must be set. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
The name of the server where the event service data source should be created. If this parameters is specified without the **nodeName** parameter, the command will use the node name of the current WebSphere profile. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
The name of the cluster where the event service data source should be created. If this parameter is specified, then the **serverName** and **nodeName** parameters must not be set. You must not specify this parameter if the **serverName** and **nodeName** parameters are specified.

- jdbcClassPath
The path to the JDBC driver. Specify only the path to the driver file; do not include the file name in the path. This parameter is required.

- dbInformixDir
The directory where the Informix database is installed. This parameter must be specified when the parameter **createDB** is set to `true`. This parameter is required.

- dbHostName
The host name of the server where the database is installed. This parameter is required.

- dbServerName
Informix server name (for example, `ol_servername`). This parameter is required.

- dbPort
Informix instance port. The default value is 1526 if not specified.

- dbName
The database name to be created. The default value is `event` if not specified.

- dbUser
The Informix database schema user ID that will own the event service database tables. The WebSphere data source uses this user ID to authenticate the Informix database connection. This parameter is required.

- dbPassword
The password of the schema user ID that owns the event service Informix tables. The WebSphere data source uses this password to authenticate the Informix database connection. This parameter is required.

- ceiInstancePrefix
The command uses the event service instance name to group the database files in a directory with unique names. The default value is `ceiinst1` if not specified.

- outputScriptDir
Optional database script output directory. When this parameter is specified, the command generates the event service database scripts in the specified directory. If the specified directory does not contain a full path, the command creates the specified directory in *profile_root*/bin. The default database script output directory is *profile_root*/databases/event/*node*/*server*/dbscripts/informix if this parameter is not specified.

Sample

Batch mode example usage:

- Using Jacl:

```
$AdminTask configEventServiceInformixDB {-createDB true -overrideDataSource true
 -nodeName nodename -serverName servername -jdbcClassPath
 "c:\program files\ibm\informix\jdbc\lib" -dbInformixDir
 "c:\program files\ibm\informix" -dbUser informix -dbPassword dbpassword
 -dbHostName host_name -dbPort 1526 -dbServerName ol_server }
```

- Using Jython string:

```
AdminTask.configEventServiceInformixDB('[-createDB true -overrideDataSource true
 -nodeName nodename -serverName servername -jdbcClassPath
 "c:\program files\ibm\informix\jdbc\lib"
 -dbInformixDir "c:\program files\ibm\informix" -dbUser informix
 -dbPassword dbpassword -dbHostName host_name -dbPort 1526 -dbServerName ol_server]')
```

- Using Jython list:

```
AdminTask.configEventServiceInformixDB(['-createDB', 'true',
 '-overrideDataSource', 'true', '-nodeName', 'nodename',
 '-serverName', 'servername', '-jdbcClassPath',
 'c:\program files\ibm\informix\jdbc\lib', '-dbInformixDir',
 'c:\program files\ibm\informix', '-dbUser', 'informix ',
 '-dbPassword', 'dbpassword', '-dbHostName', 'host_name',
 '-dbPort', '1526', '-dbServerName', 'ol_server'])
```

Interactive mode example usage:

- Using Jacl:

```
$AdminTask configEventServiceInformixDB -interactive
```

- Using Jython string:

```
AdminTask.configEventServiceInformixDB('[-interactive]')
```

- Using Jython list:

```
AdminTask.configEventServiceInformixDB(['-interactive'])
```

configEventServiceOracleDB

Purpose

The configEventServiceOracleDB command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to create the event service tables and data sources for Oracle on a server or cluster. The command does not create the database; the Oracle SID must already exist. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- createDB
The command generates the DDL database scripts and creates the database when this parameter is set to `true`. The command only generates the DDL database scripts when this parameter is set to `false`. To create the database, the current server must be already configured to run the database commands. The default value is `false` if not specified.

- overrideDataSource
Optional database script output directory. When this parameter is specified, the command generates the event service database scripts in the specified directory. If the specified directory does not contain a full path, the command

creates the specified directory in *profile_root*/bin. The default database script output directory is *profile_root*/databases/event/*node*/*server*/dbscripts/*dbtype* if this parameter is not specified.

- nodeName
The name of the node that contains the server where the event service data source should be created. If this parameter is specified, then the **serverName** parameter must be set. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
The name of the server where the event service data source should be created. If this parameters is specified without the **nodeName** parameter, the command will use the node name of the current WebSphere profile. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
The name of the cluster where the event service data source should be created. If this parameter is specified, then the **serverName** and **nodeName** parameters must not be set. You must not specify this parameter if the **serverName** and **nodeName** parameters are specified.

- jdbcClassPath
The path to the JDBC driver. Specify only the path to the driver file; do not include the file name in the path. This parameter is required.

- oracleHome
The ORACLE_HOME directory. This parameter must be set when the parameter **createDB** is set to `true`.

- dbHostName
The host name of the server where the Oracle database is installed. The default value is `localhost` if not specified.

- dbPort
Oracle instance port. The default value is 1521 if not specified.

- dbName
The Oracle system identifier (SID). The SID must already exist and must be available for the event service command to create the tables and populate the tables with data. The default value is `orcl` if not specified.

- dbUser
The Oracle schema user ID that will own the event service Oracle tables. The user ID will be created during the database creation; the WebSphere data source uses this user ID to authenticate the Oracle database connection. The default value is `ceiuser` if not specified.

- dbPassword
The password of the schema user ID. The password will be created during the database creation; the WebSphere data source uses this password to authenticate the Oracle database connection. This parameter is required.

- sysUser
Oracle sys user ID. This must be a user that has SYSDBA privileges. The default value is `sys` if not specified.

- sysPassword
The password for the user specified by the **sysUser** parameter. The default value is an empty string if not specified.

- ceiInstancePrefix
The command uses the event service instance name to group the database files in a directory with unique names. The default value is `ceiinst1` if not specified.

- outputScriptDir
Optional database script output directory. When this parameter is specified, the command generates the event service database scripts in the specified directory. If the specified directory does not contain a full path, the command creates the specified directory in *profile_root*/bin. The default database script output directory is *profile_root*/databases/event/*node*/*server*/dbscripts/oracle if this parameter is not specified.

Sample

Batch mode example usage:

- Using Jacl:

```
$AdminTask configEventServiceOracleDB {-createDB true -overrideDataSource true
 -nodeName nodename -serverName servername -jdbcClassPath c:\oracle\ora92\jdbc\lib
 -oracleHome c:\oracle\ora92 -dbUser ceiuser -dbPassword ceipassword
 -dbHostName host_name -dbPort 1521 -sysUser sys -sysPassword syspassword}
```

- Using Jython string:

```
AdminTask.configEventServiceOracleDB( '[-createDB true -overrideDataSource true
 -nodeName nodename -serverName servername -jdbcClassPath c:\oracle\ora92\jdbc\lib
 -oracleHome c:\oracle\ora92 -dbUser ceiuser -dbPassword ceipassword
 -dbHostName host_name -dbPort 1521 -sysUser sys -sysPassword syspassword]' )
```

- Using Jython list:

```
AdminTask.configEventServiceOracleDB(['-createDB', 'true', '-overrideDataSource',
 'true', '-nodeName', 'nodename', '-serverName', 'servername', '-jdbcClassPath',
 'c:\oracle\ora92\jdbc\lib', '-oracleHome', 'c:\oracle\ora92', '-dbUser', 'ceiuser',
 '-dbPassword', 'ceipassword', '-dbHostName', 'host_name', '-dbPort', '1521',
 '-sysUser', 'sys', '-sysPassword', 'syspassword'])
```

Interactive mode example usage:

- Using Jacl:

```
$AdminTask configEventServiceOracleDB -interactive
```

- Using Jython string:

```
AdminTask.configEventServiceOracleDB('[-interactive]')
```

- Using Jython list:

```
AdminTask.configEventServiceOracleDB(['-interactive'])
```

configEventServiceSQLServerDB

Purpose

The configEventServiceSQLServerDB command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to create the event service database and data sources for SQL Server on a server or cluster. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- createDB
The command generates the DDL database scripts and creates the database when this parameter is set to `true`. The command only generates the DDL

database scripts when this parameter is set to `false`. To create the database, the current server must be already configured to run the database commands. The default value is `false` if not specified.

- overrideDataSource
Optional database script output directory. When this parameter is specified, the command generates the event service database scripts in the specified directory. If the specified directory does not contain a full path, the command creates the specified directory in *profile_root*/bin. The default database script output directory is *profile_root*/databases/event/*node*/*server*/dbscripts/*dbtype* if this parameter is not specified.

- nodeName
The name of the node that contains the server where the event service data source should be created. If this parameter is specified, then the **serverName** parameter must be set. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
The name of the server where the event service data source should be created. If this parameters is specified without the **nodeName** parameter, the command will use the node name of the current WebSphere profile. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
The name of the cluster where the event service data source should be created. If this parameter is specified, then the **serverName** and **nodeName** parameters must not be set. You must not specify this parameter if the **serverName** and **nodeName** parameters are specified.

- dbServerName
The server name of the SQL Server database. This parameter must be set when the parameter **createDB** is set to `true`.

- dbHostName
The host name of the server where the SQL Server database is running.

- dbPort
SQL Server port. The default value is 1433 if not specified.

- dbName
The database name to be created. The default value is `event` if not specified.

- dbUser
The SQL Server user ID that will own the event service tables. The default value is `ceiuser` if not specified.

- dbPassword
The password of the SQL Server user ID specified by the **dbUser** parameter. This parameter is required.

- saUser
User ID that has privileges to create and drop databases and users. This parameter is required when the **createDB** parameter is set to `true`. The default value is `sa` if not specified.

- saPassword
The sa password. You must not specify this parameter if the sa user ID does not have a password.

- ceiInstancePrefix
The command uses the event service instance name to group the database files in a directory with unique names. The default value is `ceiinst1` if not specified.

- outputScriptDir
Optional database script output directory. When this parameter is specified, the command generates the event service database scripts in the specified directory. If the specified directory does not contain a full path, the command creates the specified directory in *profile_root*/bin. The default database script output directory is *profile_root*/databases/event/*node*/*server*/dbscripts/sqlserver if this parameter is not specified.

Sample

Batch mode example usage:

- Using Jacl:

```
$AdminTask configEventServiceSQLServerDB {-createDB true -overrideDataSource true
 -nodeName nodename -serverName servername -dbUser ceiuser -dbPassword ceipassword
 -dbServerName sqlservername -dbHostName host_name -dbPort 1433 -saUser sa
 -saPassword sapassword}
```

- Using Jython string:

```
AdminTask.configEventServiceSQLServerDB('[-createDB true -overrideDataSource true
 -nodeName nodename -serverName servername -dbUser ceiuser -dbPassword ceipassword
 -dbServerName sqlservername -dbHostName host_name -dbPort 1433 -saUser sa
 -saPassword sapassword]')
```

- Using Jython list:

```
AdminTask.configEventServiceSQLServerDB(['-createDB', 'true',
 '-overrideDataSource', 'true', '-nodeName', 'nodename',
 '-serverName', 'servername', '-dbUser', 'ceiuser'
, '-dbPassword', 'ceipassword', '-dbServerName', 'sqlservername',
 '-dbHostName', 'host_name',
 '-dbPort', '1433', '-saUser', 'sa', '-saPassword', 'sapassword'])
```

Interactive mode example usage:

- Using Jacl:

```
$AdminTask configEventServiceSQLServerDB -interactive
```

- Using Jython string:

```
AdminTask.configEventServiceSQLServerDB('[-interactive]')
```

- Using Jython list:

```
AdminTask.configEventServiceSQLServerDB(['-interactive'])
```

deployEventService

Purpose

The deployEventService command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to deploy and configure the event service on a server or cluster. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- nodeName
The name of the node where the event service should be deployed. If this

parameter is specified, then the serverName parameter must be specified. You must not specify this parameter if the clusterName parameter is specified.

- serverName
The name of the server where the event service should be deployed. You must specify this parameter if the **nodeName** parameter is specified. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
The name of the cluster where the event service should be deployed. You must not specify this parameter if the **nodeName** or **serverName** parameter are specified.

- enable
Set this parameter to `true` if you want the event service to be started after the next restart of the server. The default value is `true`.

Sample

Batch mode example usage:

- Using Jacl:

```
$AdminTask deployEventService {-nodeName nodename -serverName servername}
$AdminTask deployEventService {-clusterName clustername -enable false}
```

- Using Jython string:

```
AdminTask.deployEventService('[-nodeName nodename -serverName servername]')

AdminTask.deployEventService('[-clusterName clustername -enable false]')
```

- Using Jython list:

```
AdminTask.deployEventService(['-nodeName', 'nodename', '-serverName', '-servername'])
AdminTask.deployEventService(['-clusterName', 'clustername', '-enable', 'false]')
```

Interactive mode example usage:

- Using Jacl:

```
$AdminTask deployEventService {-interactive}
```

- Using Jython string:

```
AdminTask.deployEventService('[-interactive]')
```

- Using Jython list:

```
AdminTask.deployEventService(['-interactive'])
```

deployEventServiceMdb

Purpose

The deployEventServiceMdb command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to deploy the event service MDB to a server or cluster. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- nodeName
The name of the node where the event service MDB should be deployed. If this parameter is specified, then the **serverName** parameter must be specified. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
The name of the server where the event service MDB should be deployed. You must specify this parameter if the **nodeName** parameter is specified. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
The name of the cluster where the event service MDB should be deployed. You must not specify this parameter if the **nodeName** and **serverName** parameters are specified.

- applicationName
The name of the event service MDB application to be deployed on a server or cluster.

- listenerPort
The name of the listener port where the event service MDB should publish the events. The listener port must already be created. You must not specify this parameter if the **activationSpec** parameter is specified.

- activationSpec
The JNDI name of activation specification where the event service MDB should publish the events. The activation specification must already be created. You must not specify this parameter if the **listenerPort** parameter is specified.

- qcfJndiName
The JNDI name of the JMS queue connection factory object to be used by the event service MDB. You must specify this parameter if the **activationSpec** parameter is specified.

Sample

Batch mode example usage:

- Using Jacl:

```
$AdminTask deployEventServiceMdb {-applicationName appname -nodeName nodename
 -serverName servername -listenerPort lpname}$AdminTask deployEventServiceMdb
 {-applicationName appname -clusterName clustername -activationSpec asjndiname
 -qcfJndiName qcfjndiname}
```

- Using Jython string:

```
AdminTask.deployEventServiceMdb('[-applicationName appname -nodeName nodename
 -serverName servername -listenerPort lpname]')AdminTask.deployEventServiceMdb
 ('[-applicationName appname -clusterName clustername -activationSpec asjndiname
 -qcfJndiName qcfjndiname]')
```

- Using Jython list:

```
AdminTask.deployEventServiceMdb(['-applicationName', 'appname', '-nodeName',
 'nodename', '-serverName', '-servername', ' -listenerPort', 'lpname'])
AdminTask.deployEventServiceMdb(['-applicationName', 'appname',
 '-clusterName', 'clustername', '-activationSpec', 'asjndiname',
 '-qcfJndiName', 'qcfjndiname'])
```

Interactive mode example usage:

- Using Jacl:

```
$AdminTask deployEventServiceMdb {-interactive}
```

- Using Jython string:

```
AdminTask.deployEventServiceMdb('[-interactive]')
```

- Using Jython list:

```
AdminTask.deployEventServiceMdb(['-interactive'])
```

setEventServiceJmsAuthAlias

Purpose

The setEventServiceJmsAuthAlias command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to update the authentication alias used by the event service JMS objects on a server or cluster. If the JMS authentication alias does not exist, it is created. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- nodeName
The name of the node where the event service JMS authentication alias should be updated. If this parameter is specified, then the **serverName** parameter must be specified. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
The name of the server where the event service JMS authentication alias should be updated. If this parameter is specified, then the **serverName** parameter must be specified. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
The name of the cluster where the event service JMS authentication alias should be updated. You must not specify this parameter if the **nodeName** and **serverName** parameters are specified.

- userName
The name of the user to be used in the update of the event service JMS authentication alias on a server or cluster.

Important: You must specify a valid user ID; this field cannot be empty.

- password
The password of the user to be used in the update of the event service JMS authentication alias on a server or cluster.

Important: You must specify a valid password; this field cannot be empty.

Sample

Batch mode example usage:

- Using Jacl:

```
$AdminTask setEventServiceJmsAuthAlias{-nodeName nodename
 -serverName servername username -password pwd}
$AdminTask setEventServiceJmsAuthAlias {-clusterName clustername
 -userName username -password pwd}
```

- Using Jython string:

```
AdminTask.setEventServiceJmsAuthAlias('[-nodeName nodename
 -serverName servername -userName username -password pwd]')
AdminTask.setEventServiceJmsAuthAlias('[-clusterName clustername
 -userName username -password pwd]')
```

- Using Jython list:

```
AdminTask.setEventServiceJmsAuthAlias(['-nodeName', 'nodename',
 '-serverName', '-servername', '-userName', 'username', '-password', 'pwd'])
AdminTask.setEventServiceJmsAuthAlias(['-clusterName',
 'clustername', '-userName', 'username', '-password', 'pwd'])
```

Interactive mode example usage:

- Using Jacl:

```
$AdminTask setEventServiceJmsAuthAlias {-interactive}
```

- Using Jython string:

```
AdminTask.setEventServiceJmsAuthAlias( '[-interactive]')
```

- Using Jython list:

```
AdminTask.setEventServiceJmsAuthAlias(['-interactive'])
```

enableEventService

Purpose

The enableEventService command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to enable the event service to be started after the next restart of the server(s) designated by the nodeName, serverName, or clusterName parameters. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

DITA

Parameters

- nodeName
: The name of the node where the event service should be enabled. If this parameter is specified, then the **serverName** parameter must be specified. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
: The name of the server where the event service should be enabled. You must specify this parameter if the **nodeName** parameter is specified. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
: The name of the cluster where the event service should be enabled. You must not specify this parameter if the **nodeName** and **serverName** parameters are specified.

Sample

Batch mode example usage:

- Using Jacl:

```
$AdminTask enableEventService {-nodeName nodename -serverName servername}
$AdminTask enableEventService {-clusterName clustername}
```

- Using Jython string:

```
AdminTask.enableEventService('[-nodeName nodename -serverName servername]')

AdminTask.enableEventService('[-clusterName clustername]')
```

- Using Jython list:

```
AdminTask.enableEventService(['-nodeName', 'nodename', '-serverName', '-servername'])
AdminTask.enableEventService(['-clusterName', 'clustername'])
```

Interactive mode example usage:

- Using Jacl:

```
$AdminTask enableEventService {-interactive}
```

- Using Jython string:

```
AdminTask.enableEventService('[-interactive]')
```

- Using Jython list:

```
AdminTask.enableEventService(['-interactive'])
```

disableEventService

Purpose

The disableEventService command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to disable the event service from starting after the next restart of the server(s) designated by the nodeName, serverName, or clusterName parameters. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- nodeName
The name of the node where the event service should be disabled. If this parameter is specified, then the **serverName** parameter must be specified. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
The name of the server where the event service should be disabled. You must specify this parameter if the **nodeName** parameter is specified. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
The name of the cluster where the event service should be disabled. You must not specify this parameter if the **nodeName** and **serverName** parameters are specified.

Sample

Batch mode example usage:

- Using Jacl:

```
$AdminTask disableEventService {-nodeName nodename -serverName servername}
$AdminTask disableEventService {-clusterName clustername}
```

- Using Jython string:

```
AdminTask.disableEventService('[-nodeName nodename -serverName servername]')
AdminTask.disableEventService('[-clusterName clustername]')
```

- Using Jython list:

```
AdminTask.disableEventService(['-nodeName', 'nodename', '-serverName', '-servername'])
AdminTask.disableEventService(['-clusterName', 'clustername'])
```

Interactive mode example usage:

- Using Jacl:

```
$AdminTask disableEventService {-interactive}
```

- Using Jython string:

```
AdminTask.disableEventService('[-interactive]')
```

- Using Jython list:

```
AdminTask.disableEventService(['-interactive'])
```

showEventServiceStatus

Purpose

The showEventServiceStatus command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to return the status of the event service in a server or cluster. If the task is executed with no parameters, the status of all event services is displayed. To filter the list of event services to be displayed, provide nodeName, serverName, or clusterName. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- nodeName
Use this parameter to display only the status of the event services that belong to the specified node. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
Use this parameter to display only the status of the event services that belong to the specified server. You can use this parameter with the **nodeName** parameter to display the status of the event service belonging to the specified node and server. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
Use this parameter to only display the status of the event services that belong to the specified cluster. You must not specify this parameter if the **nodeName** or **serverName** parameters are specified.

Sample

Batch mode example usage:

- Using Jacl:

```
$AdminTask showEventServiceStatus {-nodeName nodename -serverName servername}
$AdminTask showEventServiceStatus {-clusterName clustername}
```

- Using Jython string:

```
AdminTask.showEventServiceStatus('[-nodeName nodename -serverName servername]')
AdminTask.showEventServiceStatus('[-clusterName clustername]')
```

- Using Jython list:

```
AdminTask.showEventServiceStatus(['-nodeName', 'nodename', '-serverName', '-servername'])
AdminTask.showEventServiceStatus(['-clusterName', 'clustername'])
```

Interactive mode example usage:

- Using Jacl:

```
$AdminTask showEventServiceStatus {-interactive}
```

- Using Jython string:

```
AdminTask.showEventServiceStatus('[-interactive]')
```

- Using Jython list:

```
AdminTask.showEventServiceStatus(['-interactive'])
```

removeEventService

Purpose

The removeEventService command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to remove the event service from a server or cluster. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- nodeName
The name of the node from which the event service should be removed. If this parameter is specified, then the **serverName** parameter must be specified. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
The name of the server from which the event service should be removed. You must specify this parameter if the **nodeName** parameter is specified. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
The name of the cluster from which the event service should be removed. You must not specify this parameter if the **nodeName** and **serverName** parameters are specified.

Sample

Batch mode example usage:

- Using Jacl:

```
$AdminTask removeEventService {-nodeName nodename -serverName servername}
$AdminTask removeEventService {-clusterName clustername}
```

- Using Jython string:

```
AdminTask.removeEventService('[-nodeName nodename -serverName servername]')

AdminTask.removeEventService('[-clusterName clustername]')
```

- Using Jython list:

```
AdminTask.removeEventService(['-nodeName', 'nodename', '-serverName', '-servername'])
AdminTask.removeEventService(['-clusterName', 'clustername'])
```

Interactive mode example usage:

- Using Jacl:

```
$AdminTask removeEventService {-interactive}
```

- Using Jython string:

```
AdminTask.removeEventService('[-interactive]')
```

- Using Jython list:

```
AdminTask.removeEventService(['-interactive'])
```

removeEventServiceMdb

Purpose

The removeEventServiceMdb command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to remove the event service MDB from a server or cluster. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- nodeName
The name of the node where the event service MDB should be removed. If this parameter is specified, then the **serverName** parameter must be specified. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
The name of the server where the event service MDB should be removed. If this parameter is specified, then the **serverName** parameter must be specified. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
The name of the cluster where the event service MDB should be removed. You must not specify this parameter if the **nodeName** and **serverName** parameters are specified.

- applicationName
The name of the event service MDB application to be removed from a server or cluster.

Sample

Batch mode example usage:

- Using Jacl:

```
$AdminTask removeEventServiceMdb {-applicationName appname
 -nodeName nodename -serverName servername}
$AdminTask removeEventServiceMdb {-applicationName appname
 -clusterName clustername}
```

- Using Jython string:

```
AdminTask.removeEventServiceMdb('[-applicationName appname
 -nodeName nodename -serverName servername]')
AdminTask.removeEventServiceMdb('[-applicationName appname
 -clusterName clustername]')
```

- Using Jython list:

```
AdminTask.removeEventServiceMdb (['-applicationName',
 'appname', '-nodeName', 'nodename', '-serverName', 'servername'])
AdminTask.removeEventServiceMdb (['-applicationName',
 'appname', '-clusterName', 'clustername'])
```

Interactive mode example usage:

- Using Jacl:

```
$AdminTask removeEventServiceMdb {-interactive}
```

- Using Jython string:

```
AdminTask.removeEventServiceMdb('[-interactive]')
```

- Using Jython list:

```
AdminTask.removeEventServiceMdb(['-interactive'])
```

removeEventServiceDB2DB

Purpose

The removeEventServiceDB2DB command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to removes the event service database and data sources for DB2 from a server or cluster. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- removeDB
: The command removes the database when this parameter is set to `true` and does not remove the database when set to `false`. To remove the database, the current server must already configured to run the database commands.

- nodeName
: The name of the node that contains the server where the event service data source should be removed. If this parameter is specified, then the **serverName** parameter must be set. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
: The name of the server where the event service data source should be removed. If this parameter is specified without the **nodeName** parameter, the command will use the node name of the current WebSphere profile. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
: The name of the cluster where the event service data source should be removed. If this parameter is specified, then the **serverName** and **nodeName** parameters must not be set. You must not specify this parameter if the **serverName** and **nodeName** parameters are specified.

- dbUser
: DB2 user ID that has privileges to create and drop the databases. This parameter must be set when the parameter **removeDB** is set to `true`. The default value is `db2inst1` if not specified.

- dbPassword
: DB2 password. This parameter must be set when the parameter **removeDB** is set to true.

- dbScriptDir
: The directory containing the database scripts generated by the event service database configuration command. If specified, the command will run the scripts in this directory to remove the event service database. The default database script output directory is *profile_root*/databases/event/*node*/*server*/dbscripts/db2.

Sample

Batch mode example usage:

- Using Jacl:

```
$AdminTask removeEventServiceDB2DB {-removeDB true -nodeName nodename -serverName servername -dbUs
```

- Using Jython string:

```
AdminTask.removeEventServiceDB2DB('[-removeDB true -nodeName nodename -serverName servername -dbUs
```

- Using Jython list:
```
AdminTask.removeEventServiceDB2DB(['-removeDB', 'true', '-nodeName', 'nodename', '-serverName',
```

Interactive mode example usage:

- Using Jacl:
```
$AdminTask removeEventServiceDB2DB -interactive
```
- Using Jython string:
```
AdminTask.removeEventServiceDB2DB('[-interactive]')
```
- Using Jython list:
```
AdminTask.removeEventServiceDB2DB(['-interactive'])
```

removeEventServiceDB2iSeriesDB

Purpose

The removeEventServiceDB2iSeriesDB command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to remove the DB2 for iSeries data sources from a server or cluster. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- nodeName
The name of the node that contains the server where the event service data source should be removed. If this parameter is specified, then the **serverName** parameter must be set. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
The name of the server where the event service data source should be removed. If this parameter is specified without the **nodeName** parameter, the command will use the node name of the current WebSphere profile. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
The name of the cluster where the event service data source should be removed. If this parameter is specified, then the **serverName** and **nodeName** parameters must not be set. You must not specify this parameter if the **serverName** and **nodeName** parameters are specified.

Sample

Batch mode example usage:

- Using Jacl:
```
$AdminTask removeEventServiceDB2iSeriesDB {-nodeName nodename
 -serverName servername }
```
- Using Jython string:
```
AdminTask.removeEventServiceDB2iSeriesDB('[-nodeName nodename
 -serverName servername]')
```
- Using Jython list:
```
AdminTask.removeEventServiceDB2iSeriesDB(['-nodeName', 'nodename',
 '-serverName', 'servername'])
```

Interactive mode example usage:

- Using Jacl:

  ```
  $AdminTask removeEventServiceDB2iSeriesDB -interactive
  ```
- Using Jython string:

  ```
  AdminTask.removeEventServiceDB2iSeriesDB('[-interactive]')
  ```
- Using Jython list:

  ```
  AdminTask.removeEventServiceDB2iSeriesDB(['-interactive'])
  ```

removeEventServiceDB2ZOSDB

Purpose

The removeEventServiceDB2ZOSDB command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to remove the event service database and data sources for DB2 z/OS from a server or cluster. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- removeDB
: The command removes the database when this parameter is set to `true` and does not remove the database when set to `false`. To remove the database, the current server must already configured to run the database commands.

- nodeName
: The name of the node that contains the server where the event service data source should be removed. If this parameter is specified, then the **serverName** parameter must be set. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
: The name of the server where the event service data source should be removed. If this parameter is specified without the **nodeName** parameter, the command will use the node name of the current WebSphere profile. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
: The name of the cluster where the event service data source should be removed. If this parameter is specified, then the **serverName** and **nodeName** parameters must not be set. You must not specify this parameter if the **serverName** and **nodeName** parameters are specified.

- dbName
: The DB2 database name. On the DB2 client, it is the name of the catalogued database. On the native z/OS server, it is the name of the database subsystem. This parameter must be set when the parameter **removeDB** is set to `true`. The default value is `event` if not specified.

- dbUser
: DB2 user ID that has privileges to create and drop the databases. This parameter must be set when the parameter **removeDB** is set to true.

- dbPassword
: DB2 password. This parameter must be set when the parameter **removeDB** is set to true.

- dbScriptDir
: The directory containing the database scripts generated by the event service database configuration command. If specified, the command will run the

scripts in this directory to remove the event service database. The default database script output directory is *profile_root*/databases/event/*node*/*server*/dbscripts/db2zos.

Sample

Batch mode example usage:

- Using Jacl:

```
$AdminTask removeEventServiceDB2ZOSDB {-removeDB true -nodeName nodename
 -serverName servername -dbUser db2user -dbPassword dbpassword
```

- Using Jython string:

```
AdminTask.removeEventServiceDB2ZOSDB('[-removeDB true -nodeName nodename
 -serverName servername -dbUser db2user -dbPassword dbpassword]')
```

- Using Jython list:

```
AdminTask.removeEventServiceDB2ZOSDB(['-removeDB', 'true', '-nodeName',
 'nodename', '-serverName', 'servername', '-dbUser', 'db2user',
 '-dbPassword', 'dbpassword'])
```

Interactive mode example usage:

- Using Jacl:

```
$AdminTask removeEventServiceDB2ZOSDB -interactive
```

- Using Jython string:

```
AdminTask.removeEventServiceDB2ZOSDB('[-interactive]')
```

- Using Jython list:

```
AdminTask.removeEventServiceDB2ZOSDB(['-interactive'])
```

removeEventServiceDerbyDB

Purpose

The removeEventServiceDerbyDB command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to remove the Event Service database and data source for Derby from a server or cluster. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- removeDB
The command removes the database when this parameter is set to `true` and does not remove the database when set to `false`. To remove the database, the current server must already configured to run the database commands.

- nodeName
The name of the node that contains the server where the event service data source should be removed. If this parameter is specified, then the **serverName** parameter must be set. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
The name of the server where the event service data source should be removed. If this parameter is specified without the **nodeName** parameter, the command will use the node name of the current WebSphere profile. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
The name of the cluster where the event service data source should be removed. If this parameter is specified, then the **serverName** and **nodeName** parameters must not be set. You must not specify this parameter if the **serverName** and **nodeName** parameters are specified.

- dbScriptDir
The directory containing the database scripts generated by the event service database configuration command. If specified, the command will run the scripts in this directory to remove the event service database. The default database script output directory is *profile_root*/databases/event/*node*/*server*/dbscripts/derby.

Sample

Batch mode example usage:

- Using Jacl:

```
$AdminTask removeEventServiceDerbyDB {-removeDB true -nodeName nodename
 -serverName servername}
```

- Using Jython string:

```
AdminTask.removeEventServiceDerbyDB('[-removeDB true -nodeName nodename
 -serverName servername]')
```

- Using Jython list:

```
AdminTask.removeEventServiceDerbyDB(['-removeDB', 'true', '-nodeName',
 'nodename', '-serverName', 'servername'])
```

Interactive mode example usage:

- Using Jacl:

```
$AdminTask removeEventServiceDerbyDB -interactive
```

- Using Jython string:

```
AdminTask.removeEventServiceDerbyDB( '[-interactive]')
```

- Using Jython list:

```
AdminTask.removeEventServiceDerbyDB(['-interactive'])
```

removeEventServiceInformixDB

Purpose

The removeEventServiceInformixDB command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to create the event service database and data sources for Informix on a server or cluster. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- removeDB
The command removes the database when this parameter is set to `true` and does not remove the database when set to `false`. To remove the database, the current server must already configured to run the database commands.

- nodeName
The name of the node that contains the server where the event service data

source should be removed. If this parameter is specified, then the **serverName** parameter must be set. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
The name of the server where the event service data source should be removed. If this parameter is specified without the **nodeName** parameter, the command will use the node name of the current WebSphere profile. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
The name of the cluster where the event service data source should be removed. If this parameter is specified, then the **serverName** and **nodeName** parameters must not be set. You must not specify this parameter if the **serverName** and **nodeName** parameters are specified.

- dbScriptDir
The directory containing the database scripts generated by the event service database configuration command. If specified, the command will run the scripts in this directory to remove the event service database. The default database script output directory is *profile_root*/databases/event/*node*/*server*/dbscripts/informix.

Sample

Batch mode example usage:

- Using Jacl:

```
$AdminTask removeEventServiceInformixDB {-removeDB true -nodeName nodename
 -serverName servername}
```

- Using Jython string:

```
AdminTask.removeEventServiceInformixDB('[-removeDB true -nodeName nodename
 -serverName servername]')
```

- Using Jython list:

```
AdminTask.removeEventServiceInformixDB(['-removeDB', 'true', '-nodeName',
 'nodename', '-serverName', 'servername'])
```

Interactive mode example usage:

- Using Jacl:

```
$AdminTask removeEventServiceInformixDB -interactive
```

- Using Jython string:

```
AdminTask.removeEventServiceInformixDB('[-interactive]')
```

- Using Jython list:

```
AdminTask.removeEventServiceInformixDB(['-interactive'])
```

removeEventServiceOracleDB

Purpose

The removeEventServiceOracleDB command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to removes the event service tables and data sources for Oracle from a server or cluster. The command does not remove the database. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- removeDB
The command removes the event service tables when this parameter is set to `true` and does not remove the tables when set to `false`.

- nodeName
The name of the node that contains the server where the event service data source should be removed. If this parameter is specified, then the **serverName** parameter must be set. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
The name of the server where the event service data source should be removed. If this parameter is specified without the **nodeName** parameter, the command will use the node name of the current WebSphere profile. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
The name of the cluster where the event service data source should be removed. If this parameter is specified, then the **serverName** and **nodeName** parameters must not be set. You must not specify this parameter if the **serverName** and **nodeName** parameters are specified.

- sysUser
Oracle database sys user ID. The default value is `sys` if not specified.

- sysPassword
The password for the user specified by the sysUser parameter.

- dbScriptDir
The directory containing the database scripts generated by the event service database configuration command. If specified, the command will run the scripts in this directory to remove the event service database. The default database script output directory is *profile_root*/databases/event/*node*/*server*/dbscripts/oracle.

Sample

Batch mode example usage:

- Using Jacl:
```
$AdminTask removeEventServiceOracleDB {-removeDB true -nodeName nodename
 -serverName servername -sysUser sys -sysPassword syspassword}
```
- Using Jython string:
```
AdminTask.removeEventServiceOracleDB('[-removeDB true -nodeName nodename
 -serverName servername -sysUser sys -sysPassword syspassword]')
```
- Using Jython list:
```
AdminTask.removeEventServiceOracleDB(['-removeDB', 'true', '-nodeName',
 'nodename', '-serverName', 'servername', '-sysUser', 'sys',
 '-sysPassword', 'syspassword'])
```

Interactive mode example usage:

- Using Jacl:
```
$AdminTask removeEventServiceOracleDB -interactive
```
- Using Jython string:
```
AdminTask.removeEventServiceOracleDB('[-interactive]')
```
- Using Jython list:
```
AdminTask.removeEventServiceOracleDB(['-interactive'])
```

removeEventServiceSQLServerDB

Purpose

The removeEventServiceSQLServerDB command is a Common Event Infrastructure administrative command is available for the AdminTask object. Use this command to removes the event service database and data sources for SQL Server from a server or cluster. For more information about the AdminTask object, see the WebSphere Application Server Network Deployment, version 6.1 documentation.

Parameters

- removeDB
The command removes the database when this parameter is set to `true` and does not remove the database when set to `false`. To remove the database, the current server must already configured to run the database commands.

- nodeName
The name of the node that contains the server where the event service data source should be removed. If this parameter is specified, then the **serverName** parameter must be set. You must not specify this parameter if the **clusterName** parameter is specified.

- serverName
The name of the server where the event service data source should be removed. If this parameter is specified without the **nodeName** parameter, the command will use the node name of the current WebSphere profile. You must not specify this parameter if the **clusterName** parameter is specified.

- clusterName
The name of the cluster where the event service data source should be removed. If this parameter is specified, then the **serverName** and **nodeName** parameters must not be set. You must not specify this parameter if the **serverName** and **nodeName** parameters are specified.

- dbServerName
The server name of the SQL Server database. This parameter must be set when the parameter **removeDB** is set to `true`.

- dbUser
SQL Server user ID that owns the event service tables. The default value is `ceiuser` if not specified.

- saUser
User ID that has privileges to drop the databases and users. The default value is `sa` if not specified.

- saPassword
The password specified by the **saUser** parameter. This parameter is required when the parameter **removeDB** is set to `true`.

- dbScriptDir
The directory containing the database scripts generated by the event service database configuration command. If specified, the command will run the scripts in this directory to remove the event service database. The default database script output directory is *profile_root*/databases/event/*node*/*server*/dbscripts/sqlserver.

Sample

Batch mode example usage:

- Using Jacl:

```
$AdminTask removeEventServiceSQLServerDB {-removeDB true -nodeName nodename
 -serverName servername -dbUser ceiuser -saUser sa -saPassword sapassword
 -dbServerName sqlservername}
```

- Using Jython string:

```
AdminTask.removeEventServiceSQLServerDB('[-removeDB true -nodeName nodename
 -serverName servername -dbUser ceiuser -saUser sa -saPassword sapassword
 -dbServerName sqlservername]')
```

- Using Jython list:

```
AdminTask.removeEventServiceSQLServerDB(['-removeDB', 'true', '-nodeName',
 'nodename', '-serverName', 'servername', '-dbUser', 'ceiuser', '-saUser','sa',
 '-saPassword', 'sapassword', '-dbServerName', 'sqlservername'])
```

Interactive mode example usage:

- Using Jacl:

```
$AdminTask removeEventServiceSQLServerDB -interactive
```

- Using Jython string:

```
AdminTask.removeEventServiceSQLServerDB('[-interactive]')
```

- Using Jython list:

```
AdminTask.removeEventServiceSQLServerDB(['-interactive'])
```

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