StreamServe™ Persuasion™

StreamServe Persuasion SP5 Control Center

User Guide

Rev C

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Contents

About Control Center

Control Center is an administration tool, used to deploy, run, and administer StreamServe applications. The applications are organized in sites, for example by company or organization, and in application domains, for example by department or region.

You also use Control Center to create StreamServe repositories for the sites and the application domains. You can either create the repositories directly from the tool (for Microsoft® SQL Server and Oracle® Database) or you can generate database scripts to be executed later in an external tool. After creation, you can apply database hotfixes to the repositories directly from Control Center.

You can use Control Center to run applications and create repositories on both UNIX and Windows hosts.

Terminology

- StreamServe applications – StreamServer, Archiver, service gateway, and Task Scheduler applications.
- StreamServer applications – StreamServe applications used to run Design Center Projects.

In this section

Component overview

This section describes the StreamServe applications and the components used to deploy, run, and administer these applications.

In this section

Components to run StreamServer applications

To run a Design Center Project, you need:

- A StreamServe Enterprise Repository, which stores information about computers, StreamServe applications, and application domains for a company or an organization.
  See *StreamServe Enterprise Repository* on page 12.
- A site, which represents the company or organization in Control Center.
  See *Site* on page 12.
- A management gateway, which connects the computer where you run the applications to the enterprise repository and to Control Center.
  See *Management gateway* on page 12.
- An application domain, which is a group of one or more applications. All applications in one domain share the same runtime repository (see below).
  See *Application domain* on page 13.
- A StreamServer application, which runs the Design Center Project.
  See *StreamServer application* on page 13.
- A runtime repository, which stores jobs and job related information produced by the StreamServer application. If you run StreamStudio, the repository is also used to store security profiles and web access information.
  See *Runtime repository* on page 13.

You can use the same computer (host) for Control Center, the enterprise repository, the runtime repository, and the StreamServe applications. It is also possible to use different computers for all of these components.

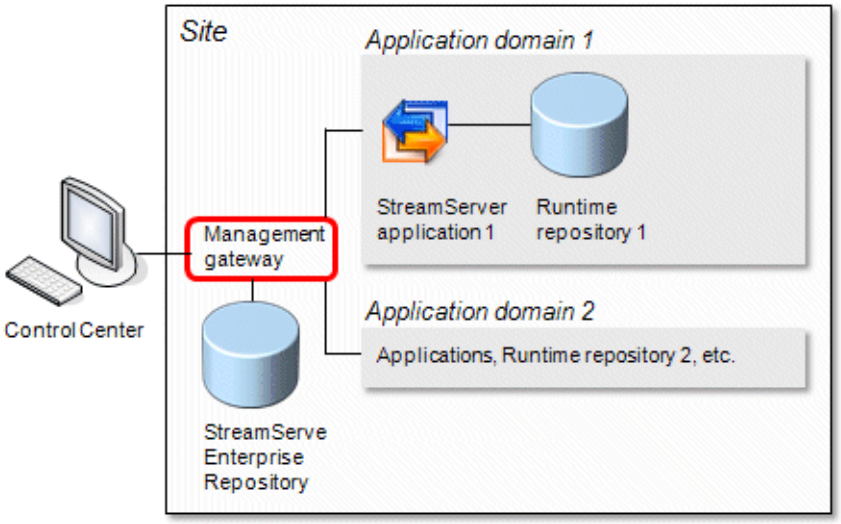


Figure 1 StreamServer components to run Design Center Projects

Components to run StreamStudio web applications

In addition to the components used to run Design Center Projects, you need the following to run StreamStudio:

- A StreamStudio web portal, which contains the StreamStudio web applications. The web portal is configured outside the application domain and can be shared by several application domains.
  See *StreamStudio web portal* on page 14.
- User directories, which contains the user profiles. These profiles are used to access the StreamStudio web applications via the StreamStudio web portal.
  See *User directories* on page 14.
- A service gateway, which is used by the StreamStudio web portal to access the user directories and the runtime repository.
  See *Service gateway* on page 14.

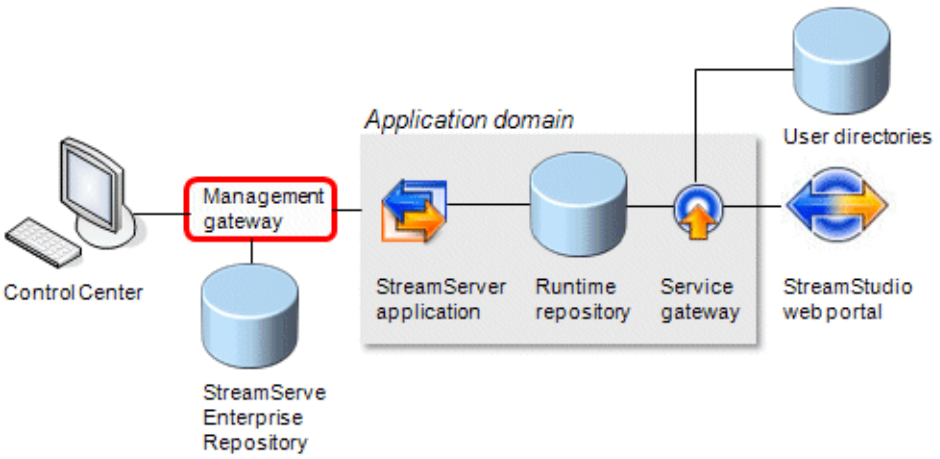


Figure 2 Basic StreamStudio components

Collector specific components

In addition to the basic StreamStudio components, you need the following to run StreamStudio Collector:

- A StreamServe archive, which stores output documents and related metadata that are accessed from StreamStudio Collector. The Collector web application is connected to the StreamServe archive via the service gateway. The StreamServe archive is configured outside the application domain, and can be shared by several application domains.
  See *StreamServe archive* on page 15.
- An Archiver application, which transfers output documents and metadata from the runtime repository to the StreamServe archive.
  See *Archiver application* on page 15.

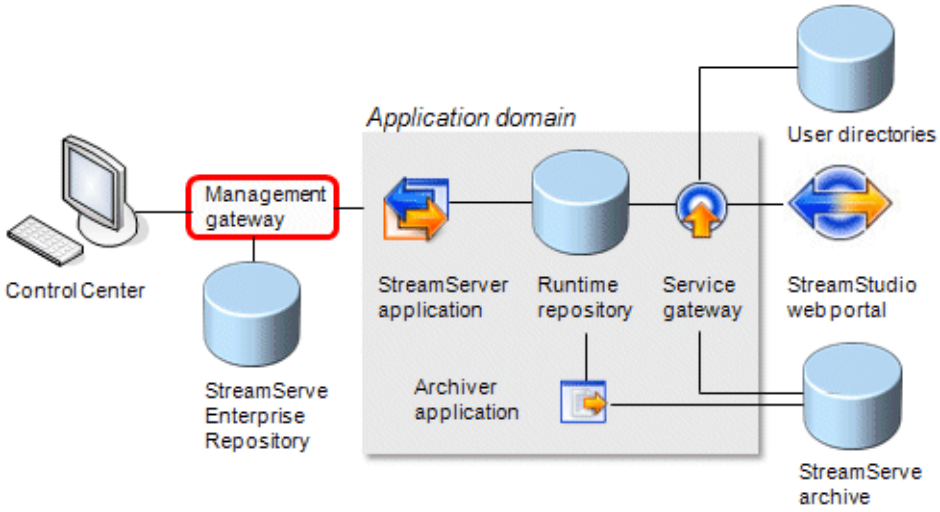


Figure 3 StreamStudio Collector components

Composition Center specific components

In addition to the basic StreamStudio components, you need the following to run StreamStudio Composition Center:

- A web content repository, which is used by the Composition Center web application for storing document definitions, resources, and rules during the document design phase.
  See *Web content repository* on page 15.

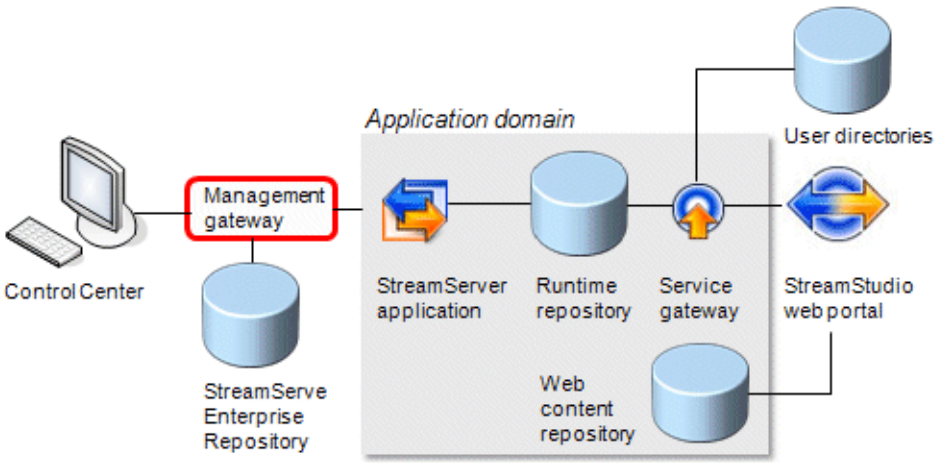


Figure 4 StreamStudio Composition Center components

Component descriptions

In this section

StreamServe Enterprise Repository

StreamServe Enterprise Repository stores information about computers, StreamServe applications, and application domains for a company or organization.

The repository is also the main storage for the document types used by the company or organization. For more information, see *Document type deployment overview* on page 19.

Site

In Control Center, a company or organization is represented by a site. For each site, you configure computers, application domains, and StreamServe applications.

The site is connected to the *StreamServe Enterprise Repository* for the company or organization via a *Management gateway*. If you use more than one computer to run the applications at the site, you must configure all computers to use the same enterprise repository.

Management gateway

Each computer where you run StreamServe applications has its own management gateway. The management gateway is connected to a *StreamServe Enterprise Repository*.

The management gateway is used to:

- Manage the communication between Control Center and the applications on the computer.
- Manage and monitor the applications on the computer.

Management gateway users

To use Control Center to manage and monitor the StreamServe applications on a computer, you must have a user name and password for the management gateway.

For more information about management gateway users, see *Managing users* on page 39.

Application domain

Depending on what you want to achieve in terms of document storage and access, you organize the StreamServe applications in application domains. All applications in one application domain share the same repositories, connection profiles, document types, channels for reprocess and preview, etc.

For example, you can use one application domain per company, department, or geographical region. Or you can use one application domain for the test environment and another application domain for the production environment.

You can configure recovery actions for each application domain. For example, what actions to take if the connection to the runtime repository is lost, and who to notify if one of the applications in the application domain goes down.

Applications domains are independent from computers. This means you can use different computers to run applications in the same domain, or you can use the same computer to run applications in different domains.

For application domain scenarios, see *Scenarios* on page 15.

StreamServer application

A StreamServer application runs an exported Design Center Project. Each Project is deployed to and run by a separate StreamServer application. You can use several StreamServer applications, running different deployed Projects, in the same *Application domain*.

For failover reasons, you can deploy a Project to more than one StreamServer application and let the StreamServer applications share queues. This means that jobs can be reallocated if the StreamServer application processing the job goes down or loses connection to the repositories.

Runtime repository

A runtime repository is used to store jobs and job related information in queues. It is also used to store security profiles and web access information for the StreamStudio web applications. Each *Application domain* uses a separate runtime repository.

The following repositories are included in the runtime repository:

- **Queue** – Stores jobs and job information in input and output queues as specified in the Design Center Project configuration.
- **Security** – Stores security settings, such as user roles, for the StreamStudio web applications as specified in the StreamStudio Administrator and Customers web applications.
- **Web Access** – Stores access information for the user roles as specified in the StreamStudio Administrator and Customers web applications. Depending on role, the StreamStudio user can access certain web applications and documents.

StreamStudio web portal

The StreamStudio web portal contains the StreamStudio web applications. The web applications are based on Java code and must be deployed to a Java application server, for example Apache Tomcat.

Each *Application domain* can access one StreamStudio web portal. One web portal can be shared by several application domains.

In the *User directories*, StreamStudio users are associated with application domains. A user can log on to the application domains that the user is associated with.

User directories

The user directories contain the user profiles for the StreamStudio web applications. These profiles are used to access the web applications and to validate users assigned to StreamServe jobs. The user directories can be connected to an existing directory server, which must support the LDAP protocol.

There are two kinds of user directories:

- **Internal** – Contains user profiles of internal company employees. These are used, for example, to access the StreamStudio web applications and to validate users assigned to StreamServer jobs.
- **External** – Contains user profiles of external customers and clients, used to access the StreamStudio web applications.

Several application domains can share the same user directories.

Note: You can access StreamStudio without a user directory. For example, if no user directory is available, or if you want to demonstrate or test StreamStudio without a directory connection. In this case, the only available user is the application domain administrator. For more information, see *Administrator tab* on page 174.

Service gateway

A service gateway connects the *StreamStudio web portal* to the *Runtime repository*, the *StreamServe archive*, and the *User directories*.

When a user logs in to StreamStudio, the service gateway authenticates the user credentials in the user directory and in the Security repository. The service gateway then gives the user access to certain web applications and documents as defined in the Web Access repository.

Each *Application domain* used to run StreamStudio must include a service gateway application. For failover reasons, you can add a secondary service gateway.

StreamServe archive

A StreamServe archive stores output documents and related metadata that are accessed from the StreamStudio Collector web application. An Archiver application transfers output documents and metadata from the *Runtime repository* to the StreamServe archive. The connection between the Collector web application and the StreamServe archive is handled by the *Service gateway*.

Each *Application domain* can access one StreamServe archive. One StreamServe archive can be shared by several application domains.

Note: If one StreamServe archive is shared by several application domains, a Collector user can access all documents (created via all application domains) in the StreamServe archive.

Archiver application

An Archiver application transfers output documents and metadata from the *Runtime repository* to the *StreamServe archive* according to a specified schedule. Each *Application domain* requires a separate Archiver application. For failover and load balancing reasons, you can add several Archiver applications.

Web content repository

A web content repository is used by Composition Center for storing document definitions, resources, and rules during the document design phase. One web content repository can be used in only one *Application domain*.

When a document definition is published, the document definition together with its resources and rules are copied to the *Runtime repository*, where it is available to the *StreamServer application* that produces the document.

Scenarios

In this section

Application domains for test and production

A company implementing StreamServe is using the same site for the test and production environments. In order not to add any test data to the production runtime repository, the company uses two application domains – one for the test environment and one for the production environment.

As the company only runs small jobs in the test application domain, an SQL Server Express database is used for the test runtime repository.

When the testing is complete, the company starts using the production application domain. In production, the company uses an SQL Server for the production runtime repository. This repository only contains real documents (no test data).

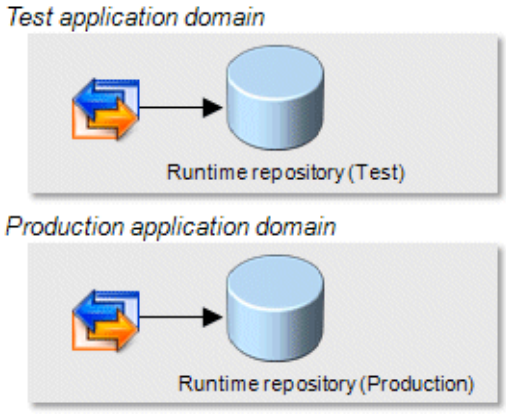


Figure 5 Separate application domains for test and production

Application domains for specific business processes

A financial services company uses StreamServe to:

- Produce and mail out monthly account statements to their customers.
- Produce and email weekly internal financial reports to their branch offices.

The company uses StreamStudio Collector to access the documents.

Two separate StreamServe archives

The company wants to use separate management processes for the applications used to produce the account statements and for the applications used to produce the internal reports. The company also wants to use two different StreamServe archives to store the account statements and financial reports.

Two application domains

The company uses one application domain for the StreamServer applications used to produce the weekly financial reports. The financial reports are stored in the archive for financial reports on an Oracle database instance.

Another application domain is used for the StreamServer applications that produce and mail the account statements. The account statements are stored in the StreamServe archive for account statements on another Oracle database instance. This application domain includes StreamServer applications running on different computers.

Separate failover actions

Separating the applications into two application domains means that the company can set up failover actions specific to the StreamServer applications used to produce the account statements. This enables them to take immediate action if an application goes down due to disc failure, loss of database connection, etc.

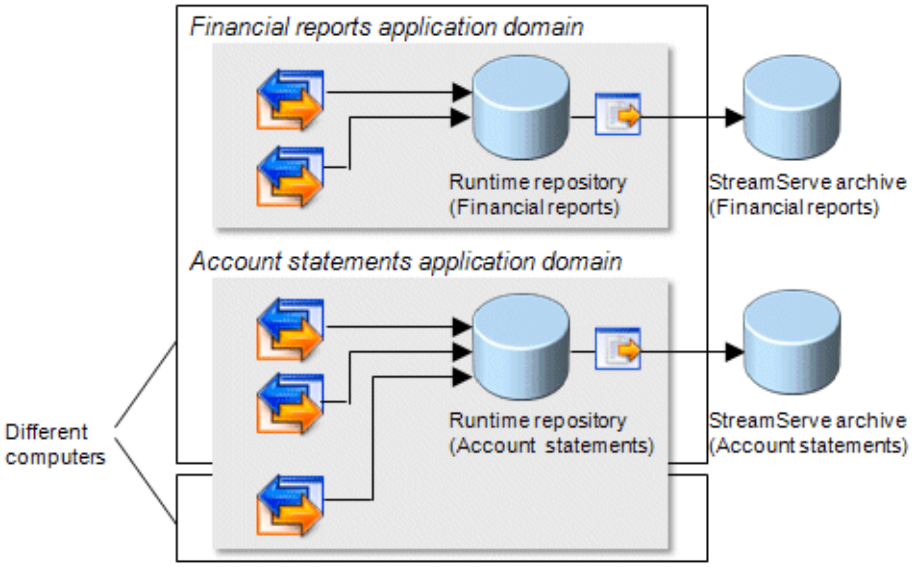


Figure 6 Application domains for different business processes

Application domains for several retailers

A manufacturing company has a central StreamServe installation for a network of several retailers. Each retailer uses StreamStudio Collector to access documents.

One StreamServe archive for each retailer

For document storage, the manufacturing company uses one StreamServe archive for each retailer. Each retailer can then access their own documents, and not the documents stored by any other retailer.

One application domain for each retailer

The manufacturing company uses one application domain for each retailer. Each application domain contains (at least) one StreamServer application, one runtime repository, and one Archiver application. An identical Design Center Project is deployed to all StreamServer applications in all the application domains. Each application domain is connected to a separate StreamServe archive.

Note: If the manufacturing company would want the retailers to access each others documents, a central StreamServe archive could be used instead.

Two StreamStudio web portals

The manufacturing company uses two Java application servers for the StreamStudio web applications for the retailers.

In Control Center, two StreamStudio web portals are configured for the two Java application servers. Each application domain is connected to one of these portals. To enable the use of StreamStudio, each application domain also includes a service gateway.

In the user directory of the manufacturer, each retailer is associated with an application domain. When retailers log in to the Collector web application, each retailer can only access their own application domain. After logging in, the retailer is connected to the StreamServe archive for the retailer's application domain and can access documents created via this application domain.

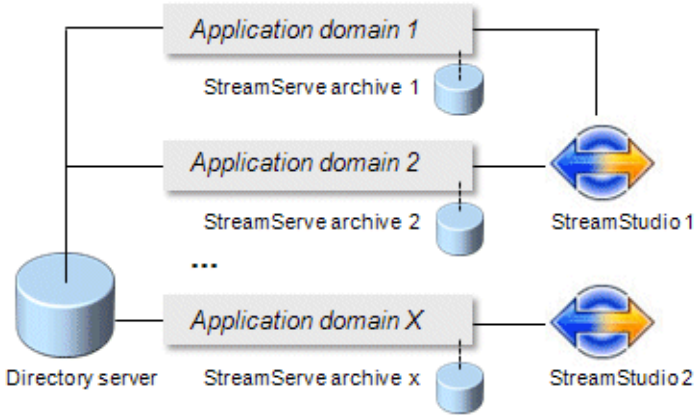


Figure 7 Application domains for several retailers

Document type deployment overview

Document types are used to categorize documents, for example as invoices, orders, etc. For each document type, a number of metadata can be specified, for example, invoice number, customer name, etc. Metadata is used, for example, when searching for documents from StreamStudio Collector or when writing personalized marketing messages in StreamStudio Composition Center. The document types and metadata are configured in Design Center.

The document types (including the metadata) must be stored in StreamServe Enterprise Repository, in the runtime repository, and in the StreamServe archive (if StreamStudio Collector is used). The enterprise repository contains the "master document types", to which the other repositories should comply.

In this section

Document type deployment

After being configured in Design Center, document types are deployed to the StreamServe repositories in the following way:

1. **StreamServe Enterprise Repository** – When you deploy a Project to a StreamServer application in Control Center, the management gateway stores the "master document types" in the enterprise repository.
2. **Runtime repository** – When the StreamServer application is started, the application retrieves the relevant document types from the enterprise repository and stores them in the runtime repository.
3. **StreamServe archive** – When the Archiver application is started, the application retrieves the relevant document types from the enterprise repository and stores them in the StreamServe archive.

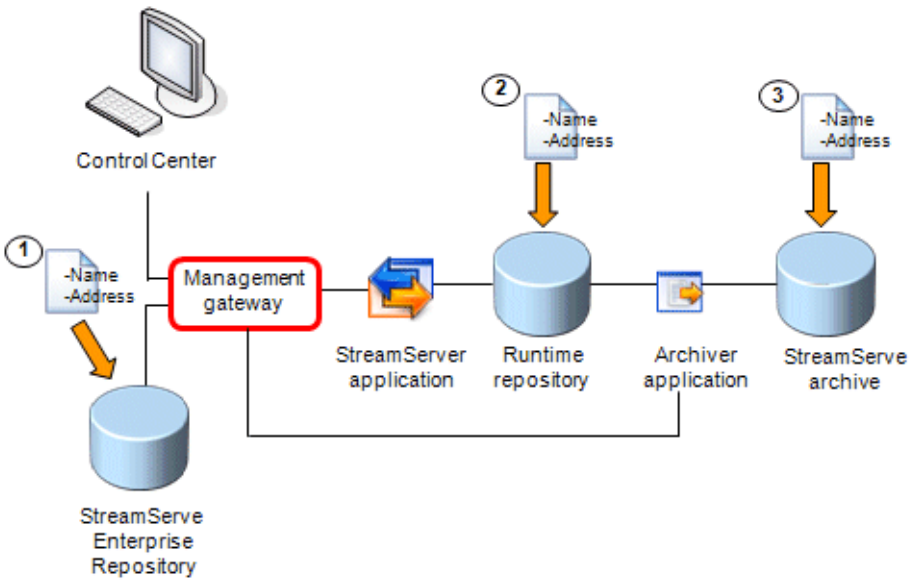


Figure 8 Document type deployment

Document type redeployment

Once a document type is deployed to the StreamServe repositories, there are strict rules for how the document type and metadata can be modified in Design Center. If the rules are fulfilled, the updated document types can be redeployed to the repositories from Control Center, and no further actions are required.

However, if these rules are not fulfilled, you cannot redeploy the Project in Control Center. For example, if a metadata is removed from a document type in Design Center. You can then log in to Control Center as the management gateway administrator user and force the updated document type into the runtime repository. If the force is successful, the redeploy operation is completed. The updated document type is then identical in the enterprise repository and the runtime repository.

Note: Forcing an updated document type into the runtime repository does not affect the document type in the StreamServe archive.

Related topics

For a complete list of consequences in the StreamServe repositories and the StreamStudio web applications when redeploying modified document types, see the *Document types and metadata* documentation.

Document type redeployment scenario

A manufacturing company uses a document type called `Invoice`. Several metadata is defined for this document type, for example `Invoice Number`, `Customer Name`, `Project Number`. The company has already stored 10 million documents in the StreamServe archive with the defined metadata.

Metadata not used in searches

The company uses StreamStudio Collector to access the documents. Since `Project Number` is never used in the Collector searches, the company wants to remove this metadata from the Collector web application and release the corresponding space in the StreamServe archive.

Delete metadata from all repositories

A StreamServe consultant helps the company with the implementation.

In Design Center, the consultant removes the `Project Number` metadata from the `Invoice` document type.

The consultant logs in to Control Center as the management gateway administrator user. When the Archiver application has finished all ongoing archiving tasks, the consultant stops the application. Before redeploying the Project, the consultant ensures there is a complete backup of the runtime repository. At the redeploy, the Compare Document Types tool opens, informing that the document type has been changed. The consultant completes the redeploy operation by forcing the updated document type into the runtime repository. The updated document type, without the `Project Number` metadata, is then stored in the enterprise repository and the runtime repository.

To release space in the StreamServe archive, the `Project Number` metadata must be deleted from the archive. To delete the metadata, the consultant contacts the database administrator for the company. Using the DBMS (Database Management System), the database administrator deletes the metadata from the archive.

Identical document types, without metadata, in all repositories

The `Invoice` document type is now identical in all three repositories.

The consultant restarts the applications and runs the Project. The processed documents are stored in the StreamServe archive without the `Project Number` metadata. The `Project Number` metadata does not appear in Collector, and is not related to any old documents in the StreamServe archive.

Control Center tasks

This section gives an overview of the tasks that can be carried out when managing applications using Control Center.

Control Center task list

1 Getting started in Control Center:
   - Change the password for the Management Gateway Administrator.
   - Configure the connection settings for the enterprise repository.
   - Create the database for the enterprise repository.
   - Rename the site.
   - Create management gateway users.

   See *Getting Started* on page 25.

2 Prepare to run Design Center Projects using StreamServer applications:
   - Create and configure an application domain.
   - Create a runtime repository for the application domain.
   - Add StreamServer applications to the application domain.
   - Deploy Design Center Projects to the StreamServer applications.

   See *StreamServer configurations* on page 45.

3 Prepare to run StreamStudio web applications:
   - Configure the application domain for StreamStudio.
   - Add a service gateway application to the application domain.
   - Add a StreamStudio web portal.
   - Connect the portal to the application domain.

   See *StreamStudio configurations* on page 69.

4 Prepare to run StreamStudio Collector:
   - Add and configure a StreamServe archive.
   - Create the StreamServe archive.
   - Connect the StreamServe archive to the application domain.
   - Add an Archiver application to the application domain and schedule the archiving tasks.

   See *StreamStudio Collector configurations* on page 81.

5 Prepare to run StreamStudio Composition Center:
   - Configure the application domain for Composition Center.
   - Create a web content repository.

   See *StreamStudio Composition Center configurations* on page 97.

6 Manage the applications. For example:

- Start applications.
- Monitor applications.

See *Managing StreamServe applications* on page 105.

Getting Started

This chapter describes the first steps you take to get started in Control Center.

It also includes information about how to work with sites, create the database for StreamServe Enterprise Repository and manage users in Control Center.

In this section

Related topics

For information about:

- Preparations you must make to run StreamServer applications, see *StreamServer configurations* on page 45.
- Additional configurations you must carry out to run StreamStudio, see *StreamStudio configurations* on page 69.

First steps in Control Center

The following steps are required to get started in Control Center:

- Enter a new password for the Management Gateway Administrator.
- Configure the connection settings to the enterprise repository.
- If you are making a new installation of StreamServe Persuasion, you must create the database for the enterprise repository.
- For best practices, you should rename the site node, which is named `New Site` by default.

In this section

Related topics

For information about:

- How to create the database for the enterprise repository, see *Creating StreamServe Enterprise Repository* on page 29.
- How to rename the site, see *Renaming a site* on page 36.
- How to re-connect to an existing site after the first time you open Control Center, see *Connecting to an existing site* on page 36.
- How to connect to a site if you fail to do so the first time you open Control Center, see *Connecting to a site when you fail to the first time you open of Control Center* on page 37.

Opening Control Center and changing the password for the Management Gateway Administrator

The first time you open Control Center you are prompted to enter a new password for the local Management Gateway Administrator.

To open Control Center and change the password for the Management Gateway Administrator

1. From the Start menu, select **All Programs** > **StreamServe Persuasion SP5** > **Control** > **Control Center**. The Welcome to Control Center window opens.
2. Click **OK** to continue. The Change Password dialog box opens.
3. Enter a new (case-sensitive) password for the Management Gateway Administrator and click **OK**.

   The Configure Enterprise Repository dialog box is displayed, which you can use to specify the connection settings to the enterprise repository.

If you have problems changing the password for the Management Gateway Administrator the first time you open Control Center, see *Connecting to a site when you fail to the first time you open of Control Center* on page 37.

Connecting to the enterprise repository

Typically each computer that is used to run StreamServe applications is connected to one StreamServe Enterprise Repository. If there is an existing StreamServe Enterprise Repository at your company or organization, you can connect the computer to that enterprise repository.

If you are making a new installation of StreamServe Persuasion, you can create a new StreamServe Enterprise Repository. To do this, you first configure connection settings and then create the database for the enterprise repository.

In this section

Related topics

- For information about how to create the database for the enterprise repository, see *Creating StreamServe Enterprise Repository* on page 29.

Configuring the connection settings for a new StreamServe Enterprise Repository

1. If the Configure Enterprise Repository dialog box is not displayed automatically, right-click the site node and select **Configuration...**
2. Enter the connection settings for the enterprise repository. See *Configure Enterprise Repository dialog box* on page 165.
3. Click **OK** to close the Configure Enterprise Repository dialog box.

Post requisites

You must now create the database for the enterprise repository. See *Creating StreamServe Enterprise Repository* on page 29.

Configuring the connection settings to an existing StreamServe Enterprise Repository

From Control Center, you can connect to an existing enterprise repository in Microsoft® SQL Server or Oracle® Database.

Prerequisites for Microsoft® SQL Server

To connect to an existing enterprise repository in Microsoft® SQL Server, you need the following information:

- IP Address or host name, and port of the database server.
- Name of the enterprise repository database.
- Enterprise repository user name and password. The default user name is `StrsSERAccess`

Prerequisites for Oracle® Database

To connect to an existing enterprise repository in Oracle® Database, you need the following information:

- IP Address or host name, and port of the database server.
- Service name (SID) of the enterprise repository.
- Enterprise repository schema owner user name and password. The default user name is `StrsSERAccess`

To specify the connection settings to an existing enterprise repository

1. If the Configure Enterprise Repository dialog box is not displayed automatically, right-click the site node and select **Configuration...**
2. Enter the connection settings to the existing enterprise repository. See *Configure Enterprise Repository dialog box* on page 165.
3. Click **OK** to close the Configure Enterprise Repository dialog box.

Creating StreamServe Enterprise Repository

You can create the database for the StreamServe Enterprise Repository directly from Control Center (for Microsoft® SQL Server and Oracle® Database).

You can also create the database for the enterprise repository manually. This may be required if the company security policy prevents Control Center from connecting to the database, or if you want to have full traceability of the repository creation. To do this, you generate the database scripts for the repository in Control Center and then run the scripts using an external tool.

After the enterprise repository is created, you can apply database hotfixes to the repository directly from Control Center.

After creating a repository, always do a sanity check to make sure the repository was created according to your configurations.

Post requisites

An enterprise repository created directly from Control Center is normally sufficient for development and testing purposes, and may also be sufficient for a production environment.

If the enterprise repository is not sufficient for your production environment, you must adjust the repository to fit the actual conditions using an external tool.

In this section

Related topics

- *Configuring the connection settings for a new StreamServe Enterprise Repository* on page 27.

Prerequisites for creating StreamServe repositories

Database access

Before you can create a StreamServe Enterprise Repository, you must have access to a supported database installation.

For information about the supported databases, see *Databases* in the *Supported platforms and software* documentation.

If you plan to use SQL Server or SQL Server Express for the StreamServe repositories, you must configure the database installation for use with StreamServe components.

All StreamServe repositories must use the same database vendor. For example, if the enterprise repository runs on Oracle, the runtime repository, the StreamServe archive, and the web content repository must also run on Oracle.

Configuring SQL Server and SQL Server Express for use with StreamServe components

For SQL Server and SQL Server Express, you must configure your database according to the following:

- Enable TCP/IP.
- Mixed Mode authentication must be specified.
- Specify the static TCP port number that you use for accessing the database, for all IP addresses.
- Do not specify any dynamic TCP ports.

SQL Server Browser service for named instances

- If you use a named instance of SQL Server, the SQL Server Browser service must be started before you create the StreamServe repositories.

Creating an enterprise repository from Control Center

This section applies to Microsoft SQL Server and Oracle.

Prerequisites

- The connection settings to enterprise repository are configured. See *Configuring the connection settings for a new StreamServe Enterprise Repository* on page 27.
- The DBMS (Database Management System) is prepared for use with StreamServe components. See *Prerequisites for creating StreamServe repositories* on page 30.
- The the login details for the database administration user are available.

Note: For Microsoft SQL Server 2008 R2, you cannot create the repository directly from Control Center if the password contains certain characters. For example: `[] {}() , ; ? * ! @`
For more information, see:
http://msdn.microsoft.com/en-us/library/ms161962.aspx

To create the enterprise repository directly from Control Center

1. Right-click the site node and select **Create Database**. The Create Database dialog box opens.
2. In the Operation area, select **Create now**.
3. Select the enterprise repository from the drop-down list.
4. Click **Start** to run the scripts. The Connect dialog box opens.
5. Enter the user name and password for the database administration user.
6. Click **OK**. The scripts to create the enterprise repository are executed. A short version of the log is displayed in the Result log area.

   Note: To view the full log in the default text editor, click **Open Log File**.

   After creating the enterprise repository, the management gateway automatically tries to connect to the new enterprise repository.
7. Click **Close** to close the Create Database dialog box.

Creating an enterprise repository manually

You can create a StreamServe Enterprise Repository manually. To do this, you must first generate the scripts for the repository in Control Center and then run the scripts using an external tool.

Prerequisites

- The connection settings to enterprise repository are configured. See *Configuring the connection settings for a new StreamServe Enterprise Repository* on page 27.
- The DBMS (Database Management System) is prepared. See *Prerequisites for creating StreamServe repositories* on page 30.

In this section

Generating database scripts for the enterprise repository

You can generate the database scripts from the computer used for StreamServe Enterprise Repository or from another computer.

When you generate the scripts from Control Center, the scripts are saved in the directory below. The scripts are saved as a ZIP file, which you can unpack using an archiving application, such as WinZip.

`<Base directory>\<Version>\root\config\database\-<GUID>.zip`

Where:

- `<Base directory>` – Is the path specified for StreamServe Projects during the Framework and Control Center installation.
  For example: `C:\ManagementGateway`
- `<GUID>` – Is a globally unique identifier for the ZIP file.

To generate database scripts for the enterprise repository

1. Right-click the site node and select **Create Database**. The Create Database dialog box opens.
2. In the Operation area, select **Create scripts for later use**.
3. Select the enterprise repository from the drop-down list.
4. Click **Start**. The scripts for the enterprise repository are generated. A short version of the log is displayed in the Result log area.

   Note: To view the full log in the default text editor, click **Open Log File**.
5. A Control Center window opens, asking if you want to save a local copy of the scripts. Click **Yes** or **No**.
6. Click **Close** to close the Create Database dialog box.

Executing the scripts for the enterprise repository (SQL Server)

To create a StreamServe Enterprise Repository, you must:

- Run the `load_as_sys.sql` script to create the database.
- Run the `load.sql` script to create the tables etc. for the repository.

Prerequisites

- The login details for the system administrator user (`sa`) are available.
- A ZIP file (with the scripts for the repository) is generated in Control Center and unpacked using an archiving application, such as WinZip.

Post requisites

- Always do a sanity check to make sure the repository was created according to your configurations.
- Since the scripts contain passwords, it is recommended to delete the scripts after you have created the repository.

To execute the scripts for the repository

1. Open the appropriate SQL Server tool. For example, Microsoft® SQL Server™ Management Studio or SQLCMD.
2. Log in as the system administrator user (`sa`).
3. Run the `load_as_sys.sql` script.
4. Run the `load.sql` script in the database created in step *3* above.

Executing the scripts for the enterprise repository (Oracle)

To create a StreamServe Enterprise Repository, you must:

- Run the `load_as_sys.sql` script to create the schema.
- Run the `load.sql` script to create the tables etc. for the repository.

Prerequisites

- The login details for the `SYS` user and the schema owner are available.
- A ZIP file (with the scripts for the repository) is generated in Control Center and unpacked using an archiving application, such as WinZip.

Post requisites

- Always do a sanity check to make sure the repository was created according to your configurations.
- Since the scripts contain passwords, it is recommended to delete the scripts after you have created the repository.

To execute the scripts for the repository

1. Since the password of the schema owner is the same as the schema owner user name, it is recommended to change the password in the `load_as_sys.sql` script.
2. Open the appropriate Oracle tool. For example, Oracle® SQL Developer or SQL*Plus (requires Oracle® Database Instant Client).
3. Log in as the `SYS` user.
4. Run the `load_as_sys.sql` script.
5. Log in as the schema owner configured for the repository.
6. Run the `load.sql` script.

Listing and applying database hotfixes

You can apply database hotfixes to the StreamServe repositories directly from Control Center.

Before applying a hotfix, you can list all repositories that belong to a site, together with their current schema versions and the latest available hotfixes. This will give you an overview of the current statuses of the repositories and help you to decide whether the repositories need to be upgraded.

Prerequisites

- The login details for the database administration user are available.
- The setup for the hotfix has been run and the database hotfixes are installed in:

  `<Base directory>\<Version>\root\config\database\`

  Where `<Base directory>` is the path specified for StreamServe Projects during the Framework and Control Center installation.
  For example: `C:\ManagementGateway`

In this section

Listing schema versions and applied database hotfixes

In Control Center, you can list all repositories that belong to a site, together with their current schema versions and the latest available hotfixes. This will help you to decide whether a repository needs to be upgraded.

Prerequisites

- See *Prerequisites* on page 34.

To list available and applied database hotfixes

1. Right-click the site node and select **Available Database Hotfixes**. The Available Database Hotfixes dialog box opens.
2. Click **Get List** (if the dialog box is opened for the first time) or **Update List** (if the dialog box was previously opened). The Connect dialog box opens.
3. Enter the user name and password for the database administration user.
4. Click **OK**. In the Overview area, the repositories, current schema versions, and the latest available database hotfixes are listed. A log is displayed in the Result log area.
5. Click **Close** to close the Available Database Hotfixes dialog box.

Applying a database hotfix to the enterprise repository

You can apply the latest available database hotfix to a StreamServe Enterprise Repository directly from Control Center.

Prerequisites and recommendations

- See *Prerequisites* on page 34.
- Before applying a database hotfix, the following is recommended:
  - Make sure that no other users are connected to the repository. If possible, set the repository to single user mode.
  - Stop all applications accessing the repository.
  - Perform a backup of the repository.

  Always read the hotfix documentation for additional preparations for a specific hotfix.

To apply a hotfix from Control Center

1. Right-click the site and select **Create Database**. The Create Database dialog box opens.
2. In the Operation area, select **Apply database hotfix**.
3. Select the enterprise repository from the drop-down list.
4. Click **Start** to apply the latest available database hotfix in the base directory. The Connect dialog box opens.
5. Enter the user name and password for the database administration user.
6. Click **OK**. The database hotfix is applied to the enterprise repository. A short version of the log is displayed in the Result log area.

   Note: To view the full log in the default text editor, click **Open Log File**.
7. Click **Close** to close the Create Database dialog box.

Working with sites

This section describes how to rename a site and how to re-connect to a site each time you open Control Center.

It also includes information about how to use Control Center to:

- Manage StreamServe applications on a management gateway on another computer.
- Manage StreamServe applications at different sites.

In this section

Related topics

For information about:

- How to create and manage users in Control Center, see *Managing users* on page 39.
- The first steps you take to get started in Control Center, see *First steps in Control Center* on page 26.

Renaming a site

1. Right-click the site node and select **Rename**. The Edit Site dialog box opens.
2. Enter a new name for the site and click **OK**. The Edit Site dialog box closes.

Connecting to an existing site

Each time you close Control Center, you are disconnected from all sites. When you open Control Center again, you must re-connect to the appropriate sites.

Prerequisites

Login details (case-sensitive) for a management gateway user.

To connect to a site

1. Right-click the site node and select **Connect**. The Connect dialog box opens.

2 Enter the user name and password for the management gateway user, and click **OK**.

Connecting to a site when you fail to the first time you open of Control Center

If you encounter problems the first time you open Control Center, you can manually configure a site and change the password for the Management Gateway Administrator.

To manually configure a site and change the password for the Management Gateway Administrator

1 Right-click the root node and select **New Site**. The New Site dialog box opens.

2 Enter the parameters for the site. See *New Site dialog box* on page 171.

3 Enter a new password for the Management Gateway Administrator and click **OK**.

Post requisites

You must now specify the connection settings to the enterprise repository. See *Connecting to the enterprise repository* on page 27.

Working at multiple sites and connecting to management gateways other computers

You can connect to a management gateway on another computer. This is necessary if you want to:

- Manage StreamServe applications on a computer at another site.
- Manage the StreamServe applications on a computer that does not run Control Center.

Prerequisites for connecting to a management gateway on another computer

- Host name or IP address of the computer with the management gateway that you want to connect to.
- Login details (case-sensitive) for a management gateway user on the computer.
- A valid root certificate for the management gateway.

To connect to a management gateway on another computer

1 Right-click the root node and select **New Site**. The New Site dialog box opens.

2 Enter the parameters for the management gateway. See *New Site dialog box* on page 171.

3 Click **OK** to connect to the management gateway.

Managing users

To log on to Control Center and manage the StreamServe applications on a computer, each user needs a login for the management gateway. Management gateway users can have different roles, which controls their access rights in Control Center.

Note: Management gateway user names and passwords are case-sensitive.

In this section

Related topics

- *Opening Control Center and changing the password for the Management Gateway Administrator* on page 26.

Management Gateway Administrator

The Management Gateway Administrator is created with the Control Center and Framework setup, or Framework setup on UNIX. This user is assigned the Administrator role and can be used the first time you open Control Center.

User name and password

The default (case-sensitive) user name for the Management Gateway Administrator is `Administrator`

Changing the password

For security reasons, you must enter a new password for the Administrator the first time you open Control Center.

Removing the Management Gateway Administrator

It is possible to remove the Management Gateway Administrator providing you have another user with the Administrator role on the management gateway.

Roles and access rights

Users can be assigned an either an Administrator role or a Basic role.

Access rights for Administrators

Administrators have full access rights on the management gateway. Some examples of the privileges only available to Administrators include:

- Creating repositories and deploying hotfixes.
- Creating application domains.
- Forcing document type updates into the enterprise and runtime repositories when deploying Design Center Projects.
- Managing user accounts.
- Creating applications.

Access rights for basic users

Users assigned the basic role have the following access rights on the management gateway:

- Start/Stop/Restart applications.
- Deploy Design Center Projects, but cannot force document type changes.
- Change their password.
- View properties, logs, etc.

Access to the StreamServe applications on a single management gateway

In Control Center, users are created at management gateway level. This means users can only access the StreamServe applications run on the same management gateway as their user account.

Creating new users

When you create a new user, you must specify a role for the user. For information about roles, see *Roles and access rights* on page 39.

Prerequisites

Before you can create new users, you must:

- Configure an application domain.
- Add an application to the application domain.

Sites using more than one computer or management gateway to run StreamServe applications

In Control Center, users can only access the StreamServe applications on the same management gateway (or computer) as their user account.

If a Control Center user needs to manage StreamServe applications on more than one management gateway (or computer), you must create separate users on each management gateway (or computer).

To create a new user

Note: User names and passwords are case-sensitive.

1. In the tree node in Control Center, select the host you where you want to create the new user.
2. Right-click the host node and select **Manage Users**. The Manage Users dialog box opens.
3. Click **Add**. The Add User dialog box opens.
4. Configure the parameters for the new user. See *Add User dialog box* on page 224.
5. Click **OK** to close the Add User dialog box. The new user is added to the list of users in the Manage Users dialog box.
6. Click **OK** to close the Manage User dialog box.

Removing users

You must have at least one user with the Administrator role on each management gateway.

1. Right-click the host node and select **Manage Users**. The Manage Users dialog box opens.
2. Select the user you want to delete and click **Remove**.
3. Select **Yes** to confirm you want to remove the user. The user is removed.
4. Click **OK** to close the Manage Users dialog box.

Changing the role for a user

1. Right-click the host node and select **Manage Users**. The Manage Users dialog box opens.
2. Select the user you want to change the role for and click **Edit**. The Edit User dialog box opens.
3. In the User privileges area, select the new role for the user. See *Edit User dialog box* on page 225.
4. Click **OK** to close the Edit User dialog box.
5. Click **OK** to close the Manage Users dialog box.

Changing your password

Note: Passwords are case-sensitive.

1. Right-click the host node and select **Change Password**. The Change Password dialog box opens.
2. Enter the old password.
3. Enter and confirm a new password.
4. Click **OK** to close the Change Password dialog box.

Changing a password for another user

Note: Passwords are case-sensitive.

1. Right-click the host node and select **Manage Users**. The Manage Users dialog box opens.
2. Select the user you want to change the password for and click **Edit**. The Edit User dialog box opens.
3. Change the password for the user. See *Edit User dialog box* on page 225.
4. Click **OK** to close the Edit User dialog box.
5. Click **OK** to close the Manage User dialog box.

Finding installed StreamServe components

You can view the StreamServe components and version information installed on a computer. This information is required when you report an incident to StreamServe Support.

Related topics

StreamServe support may also need the schema versions and hotfixes applied to the StreamServe repositories. See *Listing schema versions and applied database hotfixes* on page 34.

To find the StreamServe components installed on a computer

In the Control Center tree view, right-click the host and select **View Installed Software**.

StreamServer configurations

To run Design Center Projects from the Control Center, you must:

- Create an application domain.
- Create a runtime repository for the application domain.
- Add StreamServer applications to the application domain. You need one StreamServer application for each Design Center Project.
- Deploy the Design Center Projects to the StreamServer applications.

In this section

Related topics

For information about:

- The first steps you must take to get started in Control Center and how to create the enterprise repository, see *Getting Started* on page 25.
- The additional configurations you must carry out to run StreamStudio, see *StreamStudio configurations* on page 69.
- How to manage the applications in a domain (starting, stopping, monitoring etc.), see *Managing StreamServe applications* on page 105.

Creating an application domain

Before you can add any StreamServe applications, you must create an application domain for the applications.

In this section

Creating and configuring an application domain

You configure the application domain using the Application Domain Editor.

If you import an application domain configuration, you must adjust the configuration to fit the actual conditions for your application domain. For example, if no user directory is to be used, you must select **Disable directory server settings** on the Directory tab, and if no web content repository is to be used, you must select **Disable web content repository settings** on the Web Content Repository tab.

Related topics

- *Configuring the application domain for StreamStudio* on page 70.
- *Configuring the application domain for Composition Center* on page 98.

Application domain name requirements

The application domain name must:

- Only include ASCII characters (`a-z`, `A-Z`, `0-9`).
- Not include any white spaces.

To create and configure an application domain

1. Right-click the site node and select **New Application Domain**. The New Application Domain dialog box opens.
2. Enter a name for the application domain and select a version. See *New Application Domain dialog box (Adding)* on page 172.
3. Click **OK**. The New Application Domain dialog box opens.
4. Specify how you want to configure the new application domain. See *New Application Domain dialog box (Selecting type)* on page 173.
5. Click **OK**. The Application Domain Editor opens.
6. Configure the application domain. See *Application Domain Editor* on page 174.
7. Click **OK**.

   You must now create the runtime repository for the application domain.

Editing an application domain

You can edit an existing application domain. For example, if you want to move the database server to a different host, or update the passwords for the user accounts. This can be done while the applications in the application domain are running.

After you have edited the application domain, you must apply the changes to the applications and restart the applications. You can apply changes to:

- All the applications in the application domain at once.
- All the applications on a particular host (that are part of the application domain).
- A single application.

The status of the application domain configuration is displayed in the Application Domain property of each application:

- ***<Application domain>* (Current)** – The application is using the most recent version of the application domain configuration.
- ***<Application domain>* Out of date** – The application is using an old version of the application domain. The application domain configuration has been edited, but the new configuration has not been applied to the application.

To edit the application domain

1. Right-click the application domain and select **Edit Application Domain**. The Application Domain Editor opens.
2. Edit the application domain settings. See *Application Domain Editor* on page 174.
3. Click **OK**.

To apply the changes to the applications

1. Right-click the application domain, host, or application to apply the changes to and select **Update Application Domain File**.
2. Restart the affected applications.

Deleting an application domain

Prerequisites

Before you can delete an application domain, you must delete all applications from the application domain.

If you do not have access to the computer (host) where an application was created, you cannot delete the application. You must then remove the application from the application domain.

See *Deleting applications* on page 107.

Repositories are not deleted

When you delete an application domain, the repositories specific for, or connected to, the application domain are not deleted. If you want to delete these repositories, you must do it manually in an external database administration tool.

To delete an application domain

1. Right-click the application domain and select **Delete Application Domain**.
2. Click **Yes** to confirm.

Creating a runtime repository

You must create one runtime repository for each application domain. You can create the runtime repository directly from Control Center (for Microsoft SQL Server and Oracle).

As an alternative, you can create the runtime repository manually. For example, if the company security policy prevents Control Center from connecting to the database, or if you want to have full traceability of the repository creation. First you generate the database scripts for the repository in Control Center and then you run the scripts using an external tool.

When the runtime repository is created, you can apply database hotfixes to the repository directly from Control Center.

After creating a repository, always do a sanity check to make sure the repository was created according to your configurations.

Prerequisites

- The runtime repository must use the same database vendor as StreamServe Enterprise Repository.
- If you use a named instance of SQL Server, the SQL Server Browser service must be started when you create the repository.

Post requisites

The created runtime repository is sufficient for development and testing purposes. In a production environment, you must adjust the runtime repository to fit the actual conditions (for example, configure filegroups, size and file growth parameters, etc). To adjust the runtime repository, you can use the DBMS (Database Management System).

In this section

Creating a runtime repository from Control Center

This option is available for Microsoft SQL Server and Oracle.

Prerequisites

The login details for the database administration user are available:

- SQL Server – The login details for the `sa` user.

  Note: For Microsoft SQL Server 2008 R2, you cannot create the repository directly from Control Center if the password contains certain characters. For example: `[] {}() , ; ? * ! @`
  For more information, see:
  http://msdn.microsoft.com/en-us/library/ms161962.aspx

- Oracle – The login details for the `SYSDBA` user.

To create the runtime repository for the application domain

1. Right-click the application domain and select **Create Database**. The Create Database dialog box opens.
2. In the Operation area, select **Create now**.
3. Select the runtime repository from the drop-down list.
4. Click **Start** to run the scripts. The Connect dialog box opens.
5. Enter the user name and password for the database administration user.
6. Click **OK**. The scripts to create the runtime repository are executed. A short version of the log is displayed in the Result log area.

   Note: To view the full log in the default text editor, click **Open Log File**.

7. Click **Close** to close the Create Database dialog box.

Creating a runtime repository manually

You can create the runtime repository manually. To do this, you must first generate the scripts for the repository in Control Center, and then you must run the scripts using an external tool.

In this section

Generating database scripts for the runtime repository

When you generate the database scripts from Control Center, the scripts are saved in the directory below. The scripts are saved as a ZIP file, which you can unpack using an archiving application, such as WinZip.

`<Base directory>\<Version>\root\config\database\<Application domain>-<GUID>.zip`

Where:

- `<Base directory>` – Is the path specified for StreamServe Projects during the Framework and Control Center installation.
  For example: `C:\ManagementGateway`
- `<Application domain>` – Is the name of the application domain.
- `<GUID>` – Is a globally unique identifier for the ZIP file.

To generate database scripts for the runtime repository

1. Right-click the application domain and select **Create Database**. The Create Database dialog box opens.
2. In the Operation area, select **Create scripts for later use**.
3. Select the runtime repository from the drop-down list.
4. Click **Start**. The scripts for the runtime repository are generated. A short version of the log is displayed in the Result log area.

   Note: To view the full log in the default text editor, click **Open Log File**.
5. A Control Center window opens, asking if you want to save a local copy of the scripts. Click **Yes** or **No**.
6. Click **Close** to close the Create Database dialog box.

Executing the scripts for the runtime repository (SQL Server)

To create a runtime repository, you must:

- Run the `load_as_sys.sql` script to create the database.
- Run the `load.sql` script to create the tables etc. for the repository.

Prerequisites

- The login details for the system administrator user (`sa`) are available.
- A ZIP file (with the scripts for the repository) is generated in Control Center and unpacked using an archiving application, such as WinZip.

Post requisites

- Always do a sanity check to make sure the repository was created according to your configurations.
- Since the scripts contain passwords, it is recommended to delete the scripts after you have created the repository.

To execute the scripts for the repository

1. Open the appropriate SQL Server tool. For example, Microsoft® SQL Server™ Management Studio or SQLCMD.
2. Log in as the system administrator user (`sa`).
3. Run the `load_as_sys.sql` script.
4. Run the `load.sql` script in the database created in step *3* above.

Executing the scripts for the runtime repository (Oracle)

To create a runtime repository, you must:

- Run the `load_as_sys.sql` script to create the schema.
- Run the `load.sql` script to create the tables etc. for the repository.

Prerequisites

- The login details for the `SYSDBA` user and the schema owner are available.
- A ZIP file (with the scripts for the repository) is generated in Control Center and unpacked using an archiving application, such as WinZip.

Post requisites

- Always do a sanity check to make sure the repository was created according to your configurations.
- Since the scripts contain passwords, it is recommended to delete the scripts after you have created the repository.

To execute the scripts for the repository

1. Since the password of the schema owner is the same as the schema owner user name, it is recommended to change the password in the `load_as_sys.sql` script.
2. Open the appropriate Oracle tool. For example, Oracle® SQL Developer or SQL*Plus (requires Oracle® Database Instant Client).
3. Log in as the `SYSDBA` user.
4. Run the `load_as_sys.sql` script.
5. Log in as the schema owner configured for the repository.
6. Run the `load.sql` script.

Listing and applying database hotfixes

You can apply database hotfixes to the StreamServe repositories directly from Control Center.

Before applying a hotfix, you can list all repositories that belong to a site, together with their current schema versions and the latest available hotfixes. This will give you an overview of the current statuses of the repositories and help you to decide whether the repositories need to be upgraded.

Prerequisites

- The login details for the database administration user are available.
- The setup for the hotfix has been run and the database hotfixes are installed in:

  `<Base directory>\<Version>\root\config\database\`

  Where `<Base directory>` is the path specified for StreamServe Projects during the Framework and Control Center installation.
  For example: `C:\ManagementGateway`

In this section

Listing schema versions and applied database hotfixes

In Control Center, you can list all repositories that belongs to a site, together with their current schema versions and the latest available hotfixes. This will help you to decide whether or not a repository needs to be upgraded.

Prerequisites

- See *Prerequisites* on page 54.

To list available and applied database hotfixes

1. Right-click the site node and select **Available Database Hotfixes**. The Available Database Hotfixes dialog box opens.
2. Click **Get List** (if the dialog box is opened for the first time) or **Update List** (if the dialog box was previously opened). The Connect dialog box opens.
3. Enter the user name and password for the database administration user.
4. Click **OK**. In the Overview area, the repositories, current schema versions, and the latest available database hotfixes are listed. A log is displayed in the Result log area.
5. Click **Close** to close the Available Database Hotfixes dialog box.

Applying a database hotfix to the runtime repository

You can apply the latest available database hotfix to a runtime repository directly from Control Center.

Prerequisites and recommendations

- See *Prerequisites* on page 54.
- Before applying a database hotfix, the following is recommended:
  - Make sure that no other users are connected to the repository. If possible, set the repository in single user mode.
  - Make sure that all jobs running against the repository are completed.
  - Stop all applications accessing the repository.
  - Perform a backup of the repository.

  Always read the hotfix documentation for additional preparations for a specific hotfix.

To apply a hotfix from Control Center

1. Right-click the application domain and select **Create Database**. The Create Database dialog box opens.
2. In the Operation area, select **Apply database hotfix**.
3. Select the runtime repository from the drop-down list.
4. Click **Start** to apply the latest available database hotfix in the base directory. The Connect dialog box opens.
5. Enter the user name and password for the database administration user.
6. Click **OK**. The database hotfix is applied to the runtime repository. A short version of the log is displayed in the Result log area.

   Note: To view the full log in the default text editor, click **Open Log File**.
7. Click **Close** to close the Create Database dialog box.

Adding a StreamServer application

You must add the required StreamServer applications to the application domain. You need one StreamServer application for each Design Center Project.

You can add applications on your local host, or on remote hosts that are part of the site. The remote host must be configured to use the StreamServe Enterprise Repository that the site is connected to.

To add a new application

1. Right-click the application domain and select **New Application**. The New Application dialog box opens.
2. From the **Application host** drop-down list, select the host used to run the application.
3. Configure the application properties. See *New Application dialog box* on page 188.
4. Click **OK**.

   You can now deploy a Design Center Project to the application.

To add an application on a remote host

1. Right-click the application domain and select **New Application**. The New Application dialog box opens.
2. From the **Application host** drop-down list, select **Show all**. All the hosts in the site are displayed.
3. Select the host for the application.
4. Configure the application properties. See *New Application dialog box* on page 188.
5. Click **OK**. The Connect dialog box opens.
6. Enter the user name and password for a management gateway user and click **OK**.

   The remote host and application are added to the tree view. You can now deploy a Design Center Project to the application.

Deploying a Design Center Project

To run a StreamServer application, you must deploy an export file for a Project to the application. Each time you export a new version of the Project in Design Center, you must redeploy the export file in Control Center.

You can deploy an export file from the file system or from the version control system.

Extracting the export file to the working directory

When you deploy the export file, the content of the file is extracted to the working directory for the application. The path for this directory is:

`<Base directory>\<Version>\root\applications\<Application name>`

Where:

- `<Base directory>` – Is the path specified for StreamServe Projects during the Framework and Control Center installation.
  For example: `C:\ManagementGateway`
- `<Application name>` – Is the name of the StreamServer application.

Deploying document types

For information about how document types are deployed to the StreamServe repositories, see *Document type deployment overview* on page 19.

In this section

Deploying a Project from the file system

1. Right-click the application domain for the Project and select **Deploy export file**. The Deploy wizard opens.
2. Select the StreamServer application(s) to deploy the export file to and click **Next**.
3. Select **Deploy an export file from the file system,** browse to the export file for the Project and click **Next**.
4. Select the physical layer to deploy and click **Finish**.

Deploying a Project from a version control system

You can connect Control Center to a version control system. This enables you to deploy export files that have been checked in to the version control system in Design Center.

Before you can deploy the export file for a Project from a version control system, you must configure a connection to the system, either in Design Center or in Control Center. Connections configured to version control systems in a Design Center instance running on the same computer are automatically available in Control Center.

In this section

Connecting to a version control system

To configure a connection to a version control system

1. Select **File** > **Version Control** > **Manage VCS Connections**. The Open VCS connection dialog box opens.
2. Click **Add** to add a new connection. The Add VCS connection dialog box opens.
3. Select the VCS system you want to create a connection to, and click **OK**. The Add VCS connection dialog box opens.
4. Enter a name for the connection and click **OK**. The Add connection dialog box opens.
5. Configure the CVS connection, see *Add connection dialog box* on page 163.

To connect to a version control system

1. Select **File** > **Version Control** > **Connect**.
2. Enter a user name and password to login to the version control system if prompted.

To disconnect from a version control system

Select **File** > **Version Control** > **Disconnect**.

Deploying an export file from a version control system

1. Right-click the application domain for the Project and select **Deploy export file**. The Deploy wizard opens.
2. Select the StreamServer application(s) to deploy the export file to and click **Next**.
3. Select **Deploy an export file from a version control system**, the connection profile and click **Next.**
4. Enter the user name and password to connect to the version control system.
5. Browse to the export file for the Project, select the revision of the file to deploy and click **Next.**
6. Select the physical layer and click **Finish**.

Redeploying a Design Center Project

Every time you update a Design Center Project, you must export the Project and redeploy the Project export file to the StreamServer application.

If the Project includes modified document types or modified StoryTeller Processes, that are used as templates in Composition Center, you may not be allowed to redeploy the Project.

All or nothing is deployed

If the redeployment for some reason fails, none of the Project updates are deployed. The export file used before the failed redeployment remains on the StreamServe application. For example, if a Project contains several updated document types and all changes except one are accepted for redeployment, none of the updates are deployed.

Message storages and Post-processing storages

If the Project includes paused Messages in Message storages or documents in Post-processing storages, any updates are applied to these Messages or documents at redeploy. Some updates may corrupt already paused Messages or documents.

To achieve full control over the layout and behavior, you should ensure that any Message and Post-processing storages are empty before redeploying a Project – either by letting the jobs complete or by manually emptying the storages.

You can examine, empty and drop Message and Post-processing storages using Database Administration Tool. You can launch this tool directly from Control Center by right-clicking the application domain and selecting **Launch Database Administration Tool**.

Prerequisites

If the Project includes modified document types and the documents are stored in a StreamServe archive, it is recommended to let the Archiver applications finish any ongoing archiving tasks and then stop the applications.

To redeploy a Project

Right-click the StreamServer application and select **Redeploy**.

To redeploy a Project with modified document types

1. Right-click the StreamServer application and select **Redeploy**. The document types in the updated Project are compared with the existing document types in StreamServe Enterprise Repository.
2. If the document types differ, the *Compare Document Types tool* opens:
   a. Examine the information in the tool. The type of difference determines whether you can complete the redeploy operation.

b Click **OK** or **Cancel**.

If the redeploy succeeds, any modified document types are updated in the enterprise repository. When the StreamServer and Archiver applications are restarted, the document types are updated in the runtime repository and in the StreamServe archive.

If the redeploy fails due to modified document types, you can either:

- Revert to a previous version of the Project, with the existing document types, and redeploy this Project.
- Keep the updated Project and force the modified document types into the enterprise repository and the runtime repository.

To redeploy a Project with modified StoryTeller Processes

1. Right-click the StreamServer application and select **Redeploy**. The StoryTeller Processes in the Project are compared with existing templates in the StreamServe Enterprise Repository.
2. If no differences are found, the Project is successfully redeployed. If there are differences, the *Compare Composition Center Templates tool* opens:
   a Examine the information in the tool. Depending on the type of difference, you must either modify the StoryTeller Process or modify the version number.
   b Click **OK** or **Cancel**.
3. Open the StoryTeller Process in StoryTeller and modify the document or the version number.

In this section

- *Forcing document types into the repositories* on page 62.
- *Deleting document types from the repositories* on page 63.
- *Deleting Composition Center templates from the repositories* on page 64

Related topics

- For a list of consequences (in StreamServe repositories and in StreamStudio) when redeploying modified document types, see *Consequences of redeploying modified document types* in the *Document types and metadata* documentation.
- For information about Composition Center template versioning and what Project changes that can affect the possibility to redeploy Projects used with Composition Center, see *Modifying Composition Center Projects* in the *Composition Center* documentation.

Forcing document types into the repositories

Once a document type is deployed to the StreamServe repositories, there are strict rules for how the document type can be modified in Design Center. Unless these rules are fulfilled, you cannot redeploy the Project in Control Center.

However, if a modification is necessary, you can force a modified document type into the enterprise repository and the runtime repository at redeploy.

Note: Forcing a document type into the enterprise and the runtime repositories does not affect the document type in the StreamServe archive.

Note: You cannot force a document type with a revision that is older than the one in the enterprise repository.

Prerequisites

- Make sure you have a complete backup of the runtime repository.
- Depending on how the document type is modified, you must make different preparations. For lists of the required preparations for different types of modifications, see *Changes that require database manipulation* in the *Document types and metadata* documentation.

At the preparations, you can use Database Administration Tool. You can launch this tool directly from Control Center by right-clicking the application domain and selecting **Launch Database Administration Tool**.

Post requisites

If the document type contains modified metadata used in StreamStudio, the metadata in StreamStudio must be updated accordingly. For example, if the metadata is used in texts and rules in Composition Center, these texts and rules must be updated.

To force a document type into the runtime repository

1. Right-click the StreamServer application and select **Redeploy**. The *Compare Document Types tool* opens.
2. Click **Force update**. The *Force Document Type Update dialog box* dialog box opens.
3. Click **Start** to force the document type into the repositories.

Deleting document types from the repositories

If a document type is deleted from a Design Center Project, and the Project is redeployed, the document type is not automatically removed from the StreamServe repositories.

In Control Center, you can manually delete the removed document type from the enterprise repository and from the runtime repository.

Note: Deleting a document type from the enterprise and the runtime repositories does not affect the document type in the StreamServe archive.

Prerequisites

- Make sure you have a complete backup of the runtime repository.
- For a list of the required preparations before you can delete a document type, see *Deleting document types in enterprise and runtime repository* in the *Document types and metadata* documentation.

At the preparations, you can use Database Administration Tool. You can launch this tool directly from Control Center by right-clicking the application domain and selecting **Launch Database Administration Tool**.

To delete a document type from the enterprise repository

1. Right-click the **Site** node and select **Manage Document Types**. The *Manage Document Types dialog box* opens.
2. Select the document type you want to delete and click **Delete**.

Related topics

For a list of the consequences (in StreamServe repositories and in StreamStudio) when deleting document types, see *Deleting document type resources (redeploy)* in the *Document types and metadata* documentation.

Deleting Composition Center templates from the repositories

If a StoryTeller Process is deleted from a Design Center Project and the Project is redeployed, the corresponding Composition Center template is not automatically removed from the StreamServe repositories.

In Control Center, you can manually delete the removed templates from the enterprise repository and the runtime repository.

Prerequisites

Make sure you have a complete backup of the runtime repository.

To delete a template from the enterprise repository

1. Right-click the **Site** node and select **Manage Templates**. The *Manage Templates dialog box* opens.
2. Select the template you want to delete and click **Delete**.

References

For more information about deleting Composition Center templates, see *Renaming or deleting templates* in the *Composition Center* documentation.

Testing a StreamServer application using FastCopy

You can use FastCopy to test StreamServer applications with one or more Directory input connectors. FastCopy copies files from a source directory to a destination directory. The source and destination directories can be located on a local drive or on a remote host.

To open the FastCopy view

Right-click the application and select **FastCopy View**.

To create a new Source/Destination pair

1. Right-click the FastCopy view and select **Create Pair**. The Source and Destination dialog box opens.
2. Specify the paths to the source and destination directories and click **OK**.

To duplicate an existing Source/Destination pair

Right-click the Source/Destination pair and select **Duplicate**.

To edit a Source/Destination pair

1. Right-click the Source/Destination pair and select **Edit Pair**. The Source and Destination dialog box opens.
2. Specify the paths to the source and destination directories and click **OK**.

To use FastCopy

Right-click the Source/Destination pair and select **Transfer files**.

Note: To be able to use FastCopy, the StreamServer application must be started. See *Starting, stopping, and restarting applications* on page 106.

To edit the source file

1. Right-click the Source/Destination pair and select **Edit Source**. The source file opens in an editor.
2. Edit and save the source file.

To delete a Source/Destination pair

1. Right-click the Source/Destination pair and select **Delete Pair**.
2. Click **OK** to save the changes.

Adding scheduled tasks to the application domain

You can add a Task Scheduler application to your application domain and schedule one or several tasks to be carried out by the application. For example:

- A task that triggers maintenance of the runtime repository each night at 1:00 a.m.
- A task that deletes expired StreamServe jobs from the runtime repository every 60 minutes.

To ensure that the tasks are executed even if the Task Scheduler application goes down, you can add several Task Scheduler applications and schedule the tasks for each one of these applications.

Tasks by default performed by StreamServer applications

By default, the following tasks related to the runtime repository are performed by the StreamServer applications in your application domain:

- Update statuses of top jobs.
- Delete expired jobs.
- Delete expired Messages from Message storages.
- Delete expired documents from Post-processing storages.

You can let one or several Task Scheduler applications perform these tasks instead. For information about when to use Task Scheduler applications for these tasks and how to disable the corresponding tasks for the StreamServer applications, see the *Database Guidelines*.

Repository maintenance

You can set up a task to trigger database maintenance on a specified repository in the application domain. For information about the maintenance package and how to use Task Scheduler applications to trigger database maintenance, see the *Database Guidelines*.

In this section

- *Adding and configuring a Task Scheduler application* on page 67.

Related topics

- *Database Guidelines for SQL Server*
- *Database Guidelines for Oracle*

The guidelines are available at http://streamshare.streamserve.com/Downloads/

Adding and configuring a Task Scheduler application

You can add Task Scheduler applications on your local host, or on remote hosts that are part of the site. The remote host must be configured to use the StreamServe Enterprise Repository that the site is connected to.

Post requisites

To be able to start a Task Scheduler application and run the scheduled tasks, a runtime repository must be created for the application domain.

To add and configure a Task Scheduler

1. Right-click the application domain and select **New Application**. The *New Application dialog box* opens.
2. From the **Application host** drop-down list, select the host used to run the application.
3. Configure the application properties.

   Note: You cannot use the name `Task Scheduler` if you run the application on a Windows host, since this name is used by a Windows service.
4. Click **OK**. The Task Scheduler application is added to the application domain and the Configuration dialog box opens.
5. Configure the application log level and the scheduled tasks, see:
   - *Configuration dialog box (Task Scheduler)* on page 195.
   - *Service Configuration dialog box (Task Scheduler)* on page 196.
   - *Scheduler Configuration dialog box* on page 199.
6. Click **OK**.

To add and configure a Task Scheduler on a remote host

1. Right-click the application domain and select **New Application**. The New Application dialog box opens.
2. From the **Application host** drop-down list, select **Show all**. All the hosts in the site are displayed.
3. Select the host for the application.
4. Configure the application properties.

   Note: You cannot use the name `Task Scheduler` if you run the application on a Windows host, since this name is used by a Windows service.
5. Click **OK**. The Connect dialog box opens.
6. Enter the user name and password for a management gateway user and click **OK**. The remote host and Task Scheduler application are added to the tree view and the Configuration dialog box opens.
7. Configure the application log level and the scheduled tasks.
8. Click **OK**.

StreamStudio configurations

To run StreamStudio web applications in an application domain, you must:

- Configure the application domain for StreamStudio.
- Add a service gateway application to the application domain.
- Add a StreamStudio web portal.
- Connect the web portal to the application domain.

In this section

Related topics

For information about:

- The basic configurations you must carry out to run StreamServer applications, see *StreamServer configurations* on page 45.
- The additional configurations you must carry out to run StreamStudio Collector, see *StreamStudio Collector configurations* on page 81.
- The additional configurations you must carry out to run StreamStudio Composition Center, see *StreamStudio Composition Center configurations* on page 97.
- How to manage the applications in a domain (starting, stopping, monitoring etc.), see *Managing StreamServe applications* on page 105.
- Any StreamStudio administrator's tasks not related to Control Center, see the *StreamStudio Administrator's Guide*. For example, how to install and run StreamStudio, how to load balance service gateways, etc.

Configuring the application domain for StreamStudio

In addition to the basic application domain configurations, you must also configure the application domain for StreamStudio. In the Application Domain Editor, you configure the StreamStudio web access, the user directories, and the service gateway web service(s). To improve robustness, you can also configure recovery settings for the user directories.

For information about basic application domain configurations and how to edit an existing application domain, see *Creating an application domain* on page 46.

After editing or deleting an existing application domain, you must restart the StreamStudio application for the changes to take effect. When adding a new application domain, you do not have to re-start the StreamStudio application.

In this section

Configuring access from StreamStudio

To limit access from StreamStudio to the Queue repository and the StreamServe archive, there are two repositories used to store information about users with web access – the Security repository and the Web Access repository. The Security repository is used by the service gateway to authenticate the user logging in to StreamStudio. The Web Access repository is used by the service gateway to give the StreamStudio user access to web applications and documents.

You can use the default connection profiles to access the repositories, but for security reasons it is recommended to change the connection profiles for both the Security repository user and the Web Access repository user.

To configure StreamStudio access

1. In Control Center, right-click the application domain and select **Edit Application Domain**. The Application Domain Editor opens.
2. Select the **Runtime Repository** tab.
3. Configure the user name and password for the connection profiles for both the Security and the Web Access repositories. See *Runtime Repository tab* on page 175.
4. Click **OK** to save the application domain configuration, or continue the configuration on the next tab.

Configuring user directories

To integrate StreamStudio with a directory server, you must specify the directory settings for external and internal users of the directory server. You can use two separate directories for the internal and external users respectively, or a single directory for all users (with the external and internal users in separate locations).

The directory server must support the LDAP protocol. You can either use Microsoft Active Directory or a generic LDAPv3 compliant directory, for example OpenDS.

You can access StreamStudio without a user directory. For example, if the company is small and does not have a user directory, or if you want to demonstrate or test StreamStudio without a directory connection.

The only available user is then the application domain administrator, by default assigned the StreamStudio System Manager role. The application domain administrator is specified on the Administrator tab in the Application Domain Editor. See *Administrator tab* on page 174.

To access StreamStudio without a user directory

1. In Control Center, right-click the application domain and select **Edit Application Domain**. The Application Domain editor opens.
2. Select the **Directory** tab.
3. Select **Disable directory server settings**.
4. Click **OK** to save the application domain configuration, or continue the configuration on the next tab.

To configure the user directories

1. In Control Center, right-click the application domain and select **Edit Application Domain**. The Application Domain editor opens.
2. Select the **Directory** tab.
3. Configure the internal and external user directories. See:
   - *Directory tab* on page 178.
   - *LDAP attribute syntax* on page 72.
   - *Storing external and internal users in the same directory* on page 73.
4. Click **OK** to save the application domain configuration, or continue the configuration on the next tab.

LDAP attribute syntax

When configuring the user directories for an application domain, you specify LDAP attributes that will be used in queries against the directory server. You specify these attributes on the Directory tab in the Application Domain Editor.

For example, you can specify attributes for controlling senders or receivers of jobs. You can also specify attributes for translating a user logging into StreamStudio into a qualified distinguished name. The distinguished name together with the password that the StreamStudio user specify are used to authenticate the user in the user directory.

For example, for OpenDS, the following default attributes are suggested (in the **Translate name attributes** setting) to translate a StreamStudio user into a qualified distinguished name:

```
uid="%1" || cn="%1"
```

Where:

- `uid` (user ID) and `cn` (common name) are standardized X.500 attributes.
- `||` is a logical "OR"
- `%1` is a placeholder which will be substituted by the user name that the user specify when logging into StreamStudio.

To be translated into a distinguished name, there must be either a user ID or a common name in the user directory. See the example below.

You can also specify additional attributes. For example, to enable the user to log in also with an email address or a phone number, you can add the email and phone attributes:

```
uid="%1" || cn="%1" || mail="%1" || phone="%1"
```

Note: In order to enhance search performance in the user directory, you should only use attributes that are indexed.

Example 1 — Translate name attributes

In this example, the default attributes are used to translate a user logging in to StreamStudio into a qualified distinguished name:

Translate name attributes: `uid="%1" || cn="%1"`

When a user with the user ID `User123` logs on to StreamStudio, the attributes in the query sent to the directory server is as follows:

```
uid="User123" || cn="user123"
```

In order for the user to be translated into a qualified distinguished name, there must be either a user ID called `User123` or a common name called `User123` in the user directory.

Storing external and internal users in the same directory

You can use two separate directories for the internal and external users respectively, or a single directory for all users (with the external and internal users in separate locations).

Example 2 Storing external and internal users in the same directory

In this example, external and internal users are stored in separate locations in the same user directory. In this example, the locations are called `internal` and `external`, but these could be any locations.

In the **Host name** field, the same host is specified for the external and the internal user directories.

In the **DN Base** field for the internal user directory, the internal branch is entered on the level below the organization name:

```
ou=internal, dc=telco, dc=com
```

In the **DN Base** field for the external user directory, the external branch is entered on the level below the organization name:

```
ou=external, dc=telco, dc=com
```

Configuring web service communication

StreamStudio accesses the runtime repository and the user directory using web services, hosted by a service gateway. The service gateway listens to a specified port on the host to which the application domain belongs.

If you add more than one service gateway to the application domain, you must select which is the primary and which is the secondary service gateway in the Application Domain Editor.

In the Application Domain Editor, you can also enable web service security for the web service requests to the service gateways in the application domain.

In this section

Related topics

- *Adding a service gateway application* on page 76.

Selecting primary and secondary service gateways

If you add more than one service gateway application to your application domain, you must select which is the primary and which is the secondary service gateway.

Prerequisites

The service gateway applications must be added to the application domain. See *Adding a service gateway application* on page 76.

To configure service gateways for web services

1. In Control Center, right-click the application domain and select **Edit Application Domain**. The Application Domain Editor opens.
2. Select the **Web Services** tab.
3. Select the primary and secondary service gateway instances. See *Web Services tab* on page 182.
4. Click **OK** to save the application domain configuration, or continue the configuration on the next tab.

Enabling web service security

You can specify that all web service requests to the service gateway(s) in the application domain are authenticated with the credentials of the user logged in.

Post requisites

- If you use Ad Hoc Correspondence or Correspondence Reviewer, you must also specify the user whose credentials will be used for authentication.
- When using web service security, it is recommended to encrypt the communication by configuring a Trusted Communication Channel (TCC).

For more information, see the *Security* documentation, available at StreamShare.

To enable web service security

1. In Control Center, right-click the application domain and select **Edit Application Domain**. The Application Domain Editor opens.
2. Select the **Web Services** tab.
3. Select **Enable Web Service security**.
4. Click **OK** to save the application domain configuration, or continue the configuration on the next tab.

Configuring recovery settings for user directories

To improve robustness, you can configure recovery settings for the user directories. These recovery settings can differ from the recovery settings for the runtime repository.

To configure recovery settings for the user directories

1. In Control Center, right-click the application domain and select **Edit Application Domain**. The Application Domain Editor opens.
2. Select the **Recovery** tab.
3. Configure the recovery settings for the internal and external user directories. See *Recovery tab* on page 181.
4. Click **OK** to save the application domain configuration, or continue the configuration on the next tab.

Adding a service gateway application

To use the StreamStudio web applications, you must add a service gateway application to the application domain. For failover and load balancing reasons, you can add more service gateways.

You can add service gateways to your local host, or to remote hosts that are part of the site. To be a part of the site, the remote hosts must be configured to use the enterprise repository that the site is connected to.

Post requisites

- If you add more than one service gateway to the application domain, you must select which is the primary and which is the secondary service gateway in the Application Domain Editor. See *Selecting primary and secondary service gateways* on page 74
- By default, the first added service gateway listens to port number 2718. For each service gateway that you add, the port number is increased by one. You can update these port numbers in the service gateway properties. See *Updating application properties* on page 109.

To add a new service gateway

1. Right-click the application domain and select **New Application**. The *New Application dialog box* opens.
2. From the **Application host** drop-down list, select the host used to run the service gateway.
3. Configure the service gateway properties.
4. Click **OK**.

To add a service gateway on a remote host

1. Right-click the application domain and select **New Application**. The *New Application dialog box* opens.
2. From the **Application host** drop-down list, select **Show all**. All the hosts in the site are displayed.
3. Select the host for the application.
4. Configure the application properties.
5. Click **OK**. The Connect dialog box opens.
6. Enter the user name and password for a management gateway user.
7. Click **OK**. The remote host and application are added to the tree view.

Related topics

- For information on how to load-balance service gateways, see the *StreamStudio Administrator's Guide*.

Adding a StreamStudio web portal

To use the StreamStudio web applications, you must add a StreamStudio web portal to the StreamStudio Portals folder. The web portal is then available to all application domains at the site. Several application domains can share one web portal.

When you have added the web portal, you must connect the portal to the application domains in which you want to use the portal.

Deploy StreamStudio from Control Center

When you configure the web portal in Control Center, you specify the directory (that is, the portal root) on the Java application server to which you want to deploy the StreamStudio web archive file. The management gateway copies the file to the specified portal root from where the file can be unpacked.

Deploy several StreamStudio web portals

Several StreamStudio web portals can be deployed to the same Java application server. This enables you to run StreamStudio Persuasion SP4 and later Persuasion versions on the same application server. The earliest release must then be installed first.

Deploying several StreamStudio web portals to the same Java application server is resource intensive (i.e. memory) and may result in decreased performance.

Deploy manually in isolated environments

A common production scenario is that Framework and Control Center is installed on a different computer than the Java application server. Using the **Manual deploy** option in the Add StreamStudio Portal dialog box, you can still configure the StreamStudio environment in Control Center. Then you must manually copy the web archive file and the web portal configuration file to the computer where the Java application server is installed. For more information, see the *StreamStudio Administrator's Guide*.

Web portal name requirements

The web portal name must:

- Only include ASCII characters (`a-z`, `A-Z`, `0-9`).
- Not include any white spaces.
- Be unique if you deploy several web portals to the same Java application server.
- Not be the word `applications`.

To add a StreamStudio web portal

1. Right-click the StreamStudio Portals folder and select **Add StreamStudio Portal**. The Add StreamStudio Portal dialog box opens.
2. Configure the StreamStudio web portal. See *Add StreamStudio Portal dialog box* on page 211.
3. Click **OK**.

   The management gateway copies the file to the specified directory from where the file can be unpacked. For information on how to unpack the file, see the user documentation for the Java application server. For Apache Tomcat, the file may be unpacked automatically if you restart the Apache Tomcat service.

   You must now connect the web portal to the application domains in which you want to use the portal.

Connecting the StreamStudio web portal

You must connect the StreamStudio web portal to the application domains in which you want to use the portal. You can either connect the web portal directly from the StreamStudio Portals folder, or from the application domain.

Prerequisites

- The StreamStudio web portal must be available in the StreamStudio Portals folder.
- If you deploy StreamStudio from Control Center, the StreamStudio web archive file must be copied to the portal root and unpacked by the Java application server.

To connect a web portal from the StreamStudio Portals folder

1. In the StreamStudio Portals folder, right-click the StreamStudio web portal and select **Link Application Domain**. The Link Application Domain dialog box opens.
2. In the **Available Application Domains** area, select the application domains to which you want to add the StreamStudio web portal.
3. Click the arrow button to connect the web portal to the application domain.
4. Click **OK**.

To connect a web portal from the application domain folder

1. Right-click the application domain folder and select **Link StreamStudio Portal**. The Link StreamStudio Portal dialog box opens.
2. From the **Available portals** list, select the web portal that you want to add to the application domain.
3. Click **OK**.

StreamStudio Collector configurations

To run StreamStudio Collector in the application domain, you must:

- Add and configure a StreamServe archive.
- Create the StreamServe archive.
- Connect the StreamServe archive to the application domain.
- Add an Archiver application to the application domain and configure the archiving tasks for the application.

In this section

- *Creating a StreamServe archive* on page 82.
- *Connecting the StreamServe archive* on page 90.
- *Adding an Archiver application* on page 91.

Related topics

For information about:

- The basic configurations you must carry out to run StreamServer applications, see *StreamServer configurations* on page 45.
- The basic configurations that you also must carry out to run StreamStudio, see *StreamStudio configurations* on page 69.
- How to manage the applications in a domain (starting, stopping, monitoring etc.), see *Managing StreamServe applications* on page 105.
- Any StreamStudio administrator's tasks not related to Control Center, see the *StreamStudio Administrator's Guide*. For example, how to install and run StreamStudio, how to load balance service gateways, etc.

Creating a StreamServe archive

If you want to store output documents and related metadata, you must create a StreamServe archive. Each application domain can access one archive. One archive can be shared by several application domains. If one StreamServe archive is shared by several application domains, a Collector user can access all documents (created via all application domains) in the StreamServe archive.

First you add a StreamServe archive to the Archives folder and configure the database settings and the connection settings for the archive. Then you create the StreamServe archive according to the configuration you have made.

You can create the StreamServe archive directly from Control Center.

As an alternative, you can create the StreamServe archive manually. For example, if the company security policy prevents Control Center from connecting to the database, or if you want to have full traceability of the archive creation. First you generate the database scripts for the archive in Control Center and then you run the scripts using an external tool.

When the StreamServe archive is created, you can apply database hotfixes to the archive directly from Control Center.

Improve search performance by using indexes

When a Collector user searches for documents in StreamStudio Collector, metadata is used as search criteria. By indexing the metadata in the StreamServe archive, search performance can be improved. However, increasing the number of indexes may have negative effect on the insert performance.

The question of indexing or not must be considered by a DBA (database administrator). The DBA must consult the Collector user for information about which indexes are the most frequently used. The DBA then performs the indexing using the DBMS (Database Management System) for the database.

Prerequisites

- Microsoft SQL Server and Oracle can be used for the StreamServe archive.
- The StreamServe archive must use the same database vendor as the enterprise repository.
  The StreamServe archive can be created in any reachable database – either in the same database as the runtime and web content repositories or on a separate database server. The fact that the StreamServe archive may contain large amounts of data must be considered.
- If you use a named instance of SQL Server, the SQL Server Browser service must be started when you create the repository.

Post requisites

The created StreamServe archive is sufficient for development and testing purposes. In a production environment, you must adjust the archive to fit the actual conditions (for example, configure filegroups, size and file growth parameters, etc). You can use the DBMS to adjust the archive.

In this section

Adding and configuring a StreamServe archive

You must add and configure the StreamServe archive in the Archives folder. After adding and configuring the StreamServe archive, you must also create the archive.

Name limitation

The name of the StreamServe archive cannot include underscore characters ("_").

To add and configure a StreamServe archive

1. Right-click the Archives folder, and select **New Archive**. The New Archive dialog box opens.
2. Configure the new archive. See *New Archive dialog box* on page 213.
3. Click **OK**. The Configuration dialog box opens.
4. Configure the properties for the archive. See *Configuration dialog box (Archive)* on page 214.
5. Click **OK**. The StreamServe archive is added to the Archives folder.

   Note: You must now create the StreamServe archive.

Creating a StreamServe archive from Control Center

You can create the StreamServe archive directly from Control Center.

After creating a repository, always do a sanity check to make sure the repository was created according to your configurations.

Prerequisites

- The login details for the database administration user are available.

  Note: For Microsoft SQL Server 2008 R2, you cannot create the repository directly from Control Center if the password contains certain characters. For example: `[] {}() , ; ? * ! @`
  For more information, see:
  http://msdn.microsoft.com/en-us/library/ms161962.aspx

- A configured StreamServe archive is available in the Archives folder.

To create a StreamServe archive from Control Center

1. In the Archives folder, right-click the StreamServe archive and select **Create Database**. The Create Database dialog box opens.
2. In the Operation area, select **Create now**.
3. Select the StreamServe archive from the drop-down list.

4 Click **Start** to run the scripts. The Connect dialog box opens.

5 Enter the user name and password for the database administration user.

6 Click **OK**. The scripts to create the StreamServe archive are executed. A short version of the log is displayed in the Result log area.

Note: To view the full log in the default text editor, click **Open Log File**.

7 Click **Close** to close the Create Database dialog box.

Creating a StreamServe archive manually

You can create the StreamServe archive manually. To do this, you must first generate the scripts for the archive in Control Center, and then you must run the scripts using an external tool.

After creating a repository, always do a sanity check to make sure the repository was created according to your configurations.

Prerequisites

A configured StreamServe archive is available in the Archives folder.

In this section

Generating database scripts for the StreamServe archive

When you generate the database scripts from Control Center, the scripts are saved in the directory below. The scripts are saved as a ZIP file, which you can unpack using an archiving application, such as WinZip. Since the scripts contains passwords, it is recommended to delete the scripts after you have used them to create the StreamServe archive.

`<Base directory>\<Version>\root\config\database\<StreamServe archive>-<GUID>.zip`

Where:

- `<Base directory>` – Is the path specified for StreamServe Projects during the Framework and Control Center installation.
  For example: `C:\ManagementGateway`
- `<StreamServe archive>` – Is the name of the StreamServe archive.
- `<GUID>` – Is a globally unique identifier for the ZIP file.

To generate database scripts for the StreamServe archive

1. In the Archives folder, right-click the StreamServe archive and select **Create Database**. The Create Database dialog box opens.
2. In the Operation area, select **Create scripts for later use**.
3. Select the StreamServe archive from the drop-down list.
4. Click **Start**. The scripts for the StreamServe archive are generated. A short version of the log is displayed in the Result log area.

   Note: To view the full log in the default text editor, click **Open Log File**.
5. A Control Center window opens, asking if you want to save a local copy of the scripts. Click **Yes** or **No**.
6. Click **Close** to close the Create Database dialog box.

Executing the scripts for the StreamServe archive (SQL Server)

To create a StreamServe archive, you must:

- Run the `load_as_sys.sql` script to create the database.
- Run the `load.sql` script to create the tables etc. for the repository.

Prerequisites

- The login details for the system administrator user (`sa`) are available.
- A ZIP file (with the scripts for the repository) is generated in Control Center and unpacked using an archiving application, such as WinZip.

Post requisites

- Always do a sanity check to make sure the repository was created according to your configurations.
- Since the scripts contain passwords, it is recommended to delete the scripts after you have created the repository.

To execute the scripts for the repository

1. Open the appropriate SQL Server tool. For example, Microsoft® SQL Server™ Management Studio or SQLCMD.
2. Log in as the system administrator user (`sa`).
3. Run the `load_as_sys.sql` script.
4. Run the `load.sql` script in the database created in step *3* above.

Executing the scripts for the StreamServe archive (Oracle)

To create a StreamServe archive, you must:

- Run the `load_as_sys.sql` script to create the schema.
- Run the `load.sql` script to create the tables etc. for the repository.

Prerequisites

- The login details for the `SYS` user and the schema owner are available.
- A ZIP file (with the scripts for the repository) is generated in Control Center and unpacked using an archiving application, such as WinZip.

Post requisites

- Always do a sanity check to make sure the repository was created according to your configurations.
- Since the scripts contain passwords, it is recommended to delete the scripts after you have created the repository.

To execute the scripts for the repository

1. Since the password of the schema owner is the same as the schema owner user name, it is recommended to change the password in the `load_as_sys.sql` script.
2. Open the appropriate Oracle tool. For example, Oracle® SQL Developer or SQL*Plus (requires Oracle® Database Instant Client).
3. Log in as the `SYS` user.
4. Run the `load_as_sys.sql` script.
5. Log in as the schema owner configured for the repository.
6. Run the `load.sql` script.

Listing and applying database hotfixes

You can apply database hotfixes to the StreamServe repositories directly from Control Center.

Before applying a hotfix, you can list all repositories that belong to a site, together with their current schema versions and the latest available hotfixes. This will give you an overview of the current statuses of the repositories and help you to decide whether the repositories need to be upgraded.

Prerequisites

- The login details for the database administration user are available.
- The setup for the hotfix has been run and the database hotfixes are installed in:

  `<Base directory>\<Version>\root\config\database\`

  Where `<Base directory>` is the path specified for StreamServe Projects during the Framework and Control Center installation.
  For example: `C:\ManagementGateway`

In this section

Listing schema versions and applied database hotfixes

In Control Center, you can list all repositories that belongs to a site, together with their current schema versions and the latest available hotfixes. This will help you to decide whether or not a repository needs to be upgraded.

Prerequisites

- See *Prerequisites* on page 88.

To list available and applied database hotfixes

1. Right-click the site node and select **Available Database Hotfixes**. The Available Database Hotfixes dialog box opens.
2. Click **Get List** (if the dialog box is opened for the first time) or **Update List** (if the dialog box was previously opened). The Connect dialog box opens.
3. Enter the user name and password for the database administration user.
4. Click **OK**. In the Overview area, the repositories, current schema versions, and the latest available database hotfixes are listed. A log is displayed in the Result log area.
5. Click **Close** to close the Available Database Hotfixes dialog box.

Applying a database hotfix to a StreamServe archive

You can apply the latest available database hotfix to a StreamServe archive directly from Control Center.

Prerequisites and recommendations

- See *Prerequisites* on page 88.
- Before applying a database hotfix, the following is recommended:
  - Make sure that no other users are connected to the repository. If possible, set the repository in single user mode.
  - Stop all applications accessing the repository.
  - Perform a backup of the repository.

  Always read the hotfix documentation for additional preparations for a specific hotfix.

To apply a hotfix from Control Center

1. In the Archives folder, right-click the StreamServe archive and select **Create Database**. The Create Database dialog box opens.
2. In the Operation area, select **Apply database hotfix**.
3. Select the StreamServe archive from the drop-down list.
4. Click **Start** to apply the latest available database hotfix in the base directory. The Connect dialog box opens.
5. Enter the user name and password for the database administration user.
6. Click **OK**. The database hotfix is applied to the StreamServe archive. A short version of the log is displayed in the Result log area.

   Note: To view the full log in the default text editor, click **Open Log File**.
7. Click **Close** to close the Create Database dialog box.

Connecting the StreamServe archive

To store output documents and related metadata, you must connect the created StreamServe archive to the application domains containing the runtime repositories with the documents you want to archive. One StreamServe archive can be shared by several application domains.

You can either connect the StreamServe archive directly from the Archives folder, or from the application domain.

Note: If you have started the service gateway before you connect the StreamServe archive to the application domain, you must restart the service gateway after you have connected the StreamServe archive.

Prerequisites

The StreamServe archive must be available in the Archives folder.

To connect a StreamServe archive from the Archives folder

1. In the Archives folder, right-click the StreamServe archive and select **Link Application Domain**. The Link Application Domain dialog box opens.
2. In the **Available Application Domains** area, select the application domains you want to connect the StreamServe archive to.
3. Click the arrow button to connect the StreamServe archive to the application domain.
4. Click **OK**.

To connect a StreamServe archive from the application domain

1. Right-click the application domain and select **Link Archive**. The Link Archive dialog box opens.
2. From the **Available Archives** list, select the StreamServe archives you want to connect the application domain to.
3. Click **OK**.

Adding an Archiver application

To enable archiving, you must add an Archiver application to the application domain and configure the archiving tasks to be carried out by the application. For failover and load balancing reasons, you can add additional Archiver applications.

Separate tasks for separate document types

For each Archiver application, you can configure one or several archiving tasks. If you have several document types, you can configure a separate task for each document type. For example, you can configure one task for pick lists which should be available at a warehouse as soon as possible, and another task for invoices which should be available only twice a month.

Batch contra continuous archiving

In the task configuration, you schedule how often the Archiver application should poll the output queue in the runtime repository for documents ready for archiving. When the Archiver application finds such documents, the documents and the related metadata are archived in one of the following ways:

- **Batch archiving** – At the specified polling interval, the Archiver application checks the number of documents in the output queue. If the number of documents equals or exceeds a certain value (the Task trigger (documents) setting in the Configuration dialog box), the Archiver application archives the batch of documents. By using batch archiving and directing the archiving to off peak hours, the load on the StreamServe archive can be decreased.
- **Continuous archiving** – The Archiver application archives any documents marked for archiving based on the specified poll interval. By using continuous archiving, documents are quickly available to the StreamStudio user.

You can configure several archiving tasks for the same Archiver application and combine batch and continuous tasks.

Documents moved per transfer

To reduce the load on a single Archiver application and decrease the impact of an archiving failure, documents are locked and transferred in smaller segments (the Documents moved per transfer setting in the Configuration dialog box). If you add several Archiver applications to an application domain, different segments can be archived by different applications. The workload is thereby spread among the Archiver applications, and the applications act as failover for each other.

Example 3 *Triggered archiving events*

In this example, the following is configured for an Archiver application:

- **Type** – Batch
- **Task trigger (documents)** – 40 documents

- **Documents moved per transfer** – 100 documents

Depending on number of documents ready for archiving in the output queue, different archiving events are triggered.

Number of documents in the output queue	Archiving events by the Archiver application
39	No archiving is triggered
40	The archiving is triggered, and 40 documents are locked and transferred in one segment (with 40 documents in the segment).
201	The archiving is triggered and 201 documents are locked and transferred in three segments (with 100, 100, and 1 documents in the segments).
100 000	The archiving is triggered and 100 000 documents are locked and transferred in 1 000 segments (with 100 documents in each segment).

In this section

Adding and configuring an Archiver application

To enable archiving, you must add an Archiver application to the application domain and configure the archiving tasks to be carried out by the application.

It is possible to add applications on remote hosts that are part of the site, but not visible in Control Center. To do this, the host must be configured to use the StreamServe Enterprise Repository that the site is connected to.

Prerequisites

A Project must be deployed to a StreamServer application in the application domain. The document types are then available to the Archiver application, enabling you to configure different archiving tasks for different document types. See *Deploying a Design Center Project* on page 57.

To add and configure an Archiver application

1. Right-click the application domain and select **New Application**. The New Application dialog box opens.
2. From the **Application host** drop-down list, select the host used to run the application.

3 Configure the application properties. See *New Application dialog box* on page 188.

4 Click **OK**. The Archiver application is added to the application domain and the Configuration dialog box opens.

5 Configure the application log level and the archiving tasks, see:

- *Configuration dialog box (Archiver application)* on page 191.
- *Service Configuration dialog box (Archiver application)* on page 192.
- *Scheduling polling of the output queue* on page 93.

6 Click **OK**.

To add and configure an Archiver application on a remote host

1 Right-click the application domain and select **New Application**. The New Application dialog box opens.

2 From the **Application host** drop-down list, select **Show all**. All the hosts in the site are displayed.

3 Configure the application properties.

4 Select the host for the application.

5 Click **OK**. The Connect dialog box opens.

6 Enter the user name and password for a management gateway user and click **OK**. The remote host and application are added to the tree view and the Configuration dialog box opens.

7 Configure the log level and the archiving tasks for the Archiver application.

8 Click **OK**.

Scheduling polling of the output queue

You must schedule the interval at which the Archiver application polls the output queue for documents ready for archiving. You can set a single time interval, or create more complex schedules.

If you specify a stop time (or end time), all ongoing archiving tasks will continue until the they are finished, even if the stop time is passed.

If a new task is scheduled to start before an on-going task has completed, the application first finalizes the ongoing task before the new task is started.

To open the Scheduler Configuration dialog box

1 Right-click the Archiver application and select **Configuration**. The Configuration dialog box opens.

2 If no archiving tasks are configured, select the **(Item list)** field and click the button to the right of the field. The Service Configuration dialog box opens.

Note: You can edit schedules for already existing tasks directly in the Configuration dialog box.

3 Create a new task.

4 Select the **Schedule** field and click the button to the right of the field. The Scheduler Configuration dialog box opens. See *Scheduler Configuration dialog box* on page 199.

To add an interval

1 In the Scheduler Configuration dialog box, click **New** (Intervals area). A new item is added to the list.

2 In **Define Interval**, select a unit and enter the value.

To set a time frame for a specific interval

1 Select the interval.

2 Click **New** (Apply selected interval area). A new item is added to the area.

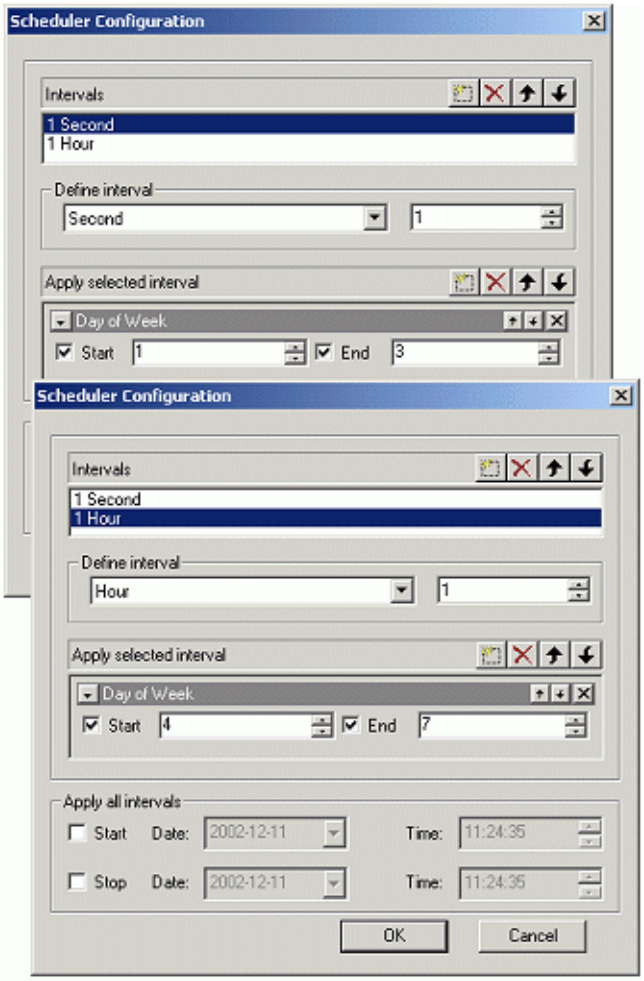
3 Select a unit (Year, Month, etc.) for the item and enter a **Start** and, optionally, an **End** value for the time frame.

To set a time frame for all intervals

You can set a time frame for when to apply all intervals in the list. In the **Apply all intervals** area, use **Date** and **Time** for **Start** and **Stop** to set the frame for all intervals.

Example 4 *Schedule polling intervals*

In this example, a schedule that causes the Archiver application to poll the output queue is configured. The action is triggered once every second Monday to Wednesday, and once every hour Thursday to Sunday is configured.



Editing an Archiver application

You can edit the Archiver application log level and the archiving tasks for an Archiver application. You must restart the Archiver application for the changes to take effect.

To edit an Archiver application

1. Right-click the Archiver application and select **Configuration**. The Configuration dialog box opens.
2. Edit the log level and the archiving tasks. See *Configuration dialog box (Archiver application)* on page 191.
3. Restart the Archiver application.

StreamStudio Composition Center configurations

To run StreamStudio Composition Center in your application domain, you must create a web content repository.

Note: The web content repository must be created before you start the StreamServer applications and before the StreamStudio user logs in to the Composition Center application.

Note: If you do not run StreamStudio Composition Center in the application domain, the **Disable web content repository settings** must be selected on the Web Content Repository tab in the Application Domain Editor.

In this section

Related topics

For information about:

- The basic configurations you must carry out to run StreamServer applications, see *StreamServer configurations* on page 45.
- The basic configurations that you also must carry out to run StreamStudio, see *StreamStudio configurations* on page 69.
- How to manage the applications in a domain (starting, stopping, monitoring etc.), see *Managing StreamServe applications* on page 105.
- Any StreamStudio administrator's tasks not related to Control Center, see the *StreamStudio Administrator's Guide*.

Configuring the application domain for Composition Center

In addition to the basic application domain configuration, you must also configure the application domain for Composition Center. In the Application Domain Editor, you specify the database settings for the web content repository and the connection settings to access the repository.

For information about basic application domain configurations and how to edit an existing application domain, see *Creating an application domain* on page 46.

After editing or deleting an existing application domain, you must restart the StreamStudio application for the changes to take effect. When adding a new application domain, you do not have to re-start the StreamStudio application.

Note: If you do not run StreamStudio Composition Center in the application domain, the **Disable web content repository settings** should be selected on the Web Content Repository tab in the Application Domain Editor.

In this section

Configuring a web content repository

You must specify the database and connection settings for the web content repository.

You can use the default connection profiles to access the repository, but for security reasons it is recommended to change the connection profile.

To configure the web content repository

1. In Control Center, right-click the application domain and select **Edit Application Domain**. The Application Domain Editor opens.
2. Select the **Web Content Repository** tab.
3. Configure the web content repository. See *Web Content Repository tab* on page 183.
4. Click **OK** to save the application domain configuration, or continue the configuration on the next tab.

Creating a web content repository

To run the StreamStudio Composition Center application, you must create a web content repository. You can create the web content repository directly from Control Center.

As an alternative, you can create the repository manually. For example, if the company security policy prevents Control Center from connecting to the database, or if you want to have full traceability of the repository creation. First you generate the database scripts for the repository in Control Center and then you run the scripts using an external tool.

When the web content repository is created, you can apply database hotfixes to the repository directly from Control Center.

After creating a repository, always do a sanity check to make sure the repository was created according to your configurations.

Prerequisites

- Microsoft SQL Server and Oracle can be used for the web content repository.
- The web content repository must use the same database vendor as the enterprise repository.
- If you use a named instance of SQL Server, the SQL Server Browser service must be started when you create the repository.

In this section

Creating a web content repository from Control Center

Prerequisites

The login details for the database administration user are available.

Note: For Microsoft SQL Server 2008 R2, you cannot create the repository directly from Control Center if the password contains certain characters. For example: `[] {}() , ; ? * ! @`
For more information, see:
http://msdn.microsoft.com/en-us/library/ms161962.aspx

To create the web content repository for the application domain

1. Right-click the application domain and select **Create Database**. The Create Database dialog box opens.
2. In the Operation area, select **Create now**.
3. Select the web content repository from the drop-down list.
4. Click **Start** to run the scripts. The Connect dialog box opens.
5. Enter the user name and password for the database administration user.
6. Click **OK**. The scripts to create the web content repository are executed. A short version of the log is displayed in the Result log area.

   Note: To view the full log in the default text editor, click **Open Log File**.
7. Click **Close** to close the Create Database dialog box.

Creating a web content repository manually

You can create the web content repository manually. To do this, you must first generate the scripts for the repository in Control Center, and then you must run the scripts using an external tool.

In this section

Generating database scripts for the web content repository

When you generate the database scripts from Control Center, the scripts are saved in the directory below. The scripts are saved as a ZIP file, which you can unpack using an archiving application, such as WinZip.

`<Base directory>\<Version>\root\config\database\<Application domain>-<GUID>.zip`

Where:

- `<Base directory>` – Is the path specified for StreamServe Projects during the Framework and Control Center installation.
  For example: `C:\ManagementGateway`
- `<Application domain>` – Is the name of the application domain.
- `<GUID>` – Is a globally unique identifier for the ZIP file.

To generate database scripts for the web content repository

1. Right-click the application domain and select **Create Database**. The Create Database dialog box opens.

2 In the Operation area, select **Create scripts for later use**.

3 Select the web content repository from the drop-down list.

4 Click **Start**. The scripts for the web content repository are generated. A short version of the log is displayed in the Result log area.

Note: To view the full log in the default text editor, click **Open Log File**.

5 A Control Center window opens, asking if you want to save a local copy of the scripts. Click **Yes** or **No**.

6 Click **Close** to close the Create Database dialog box.

Executing the scripts for the web content repository (SQL Server)

To create a web content repository, you must:

- Run the `load_as_sys.sql` script to create the database.
- Run the `load.sql` script to create the tables etc. for the repository.

Prerequisites

- The login details for the system administrator user (`sa`) are available.
- A ZIP file (with the scripts for the repository) is generated in Control Center and unpacked using an archiving application, such as WinZip.

Post requisites

- Always do a sanity check to make sure the repository was created according to your configurations.
- Since the scripts contain passwords, it is recommended to delete the scripts after you have created the repository.

To execute the scripts for the repository

1 Open the appropriate SQL Server tool. For example, Microsoft® SQL Server™ Management Studio or SQLCMD.

2 Log in as the system administrator user (`sa`).

3 Run the `load_as_sys.sql` script.

4 Run the `load.sql` script in the database created in step *3* above.

Executing the scripts for the web content repository (Oracle)

To create a web content repository, you must:

- Run the `load_as_sys.sql` script to create the schema.
- Run the `load.sql` script to create the tables etc. for the repository.

Prerequisites

- The login details for the `SYS` user and the schema owner are available.
- A ZIP file (with the scripts for the repository) is generated in Control Center and unpacked using an archiving application, such as WinZip.

Post requisites

- Always do a sanity check to make sure the repository was created according to your configurations.
- Since the scripts contain passwords, it is recommended to delete the scripts after you have created the repository.

To execute the scripts for the repository

1. Since the password of the schema owner is the same as the schema owner user name, it is recommended to change the password in the `load_as_sys.sql` script.
2. Open the appropriate Oracle tool. For example, Oracle® SQL Developer or SQL*Plus (requires Oracle® Database Instant Client).
3. Log in as the `SYS` user.
4. Run the `load_as_sys.sql` script.
5. Log in as the schema owner configured for the repository.
6. Run the `load.sql` script.

Listing and applying database hotfixes

You can apply database hotfixes to the StreamServe repositories directly from Control Center.

Before applying a hotfix, you can list all repositories that belong to a site, together with their current schema versions and the latest available hotfixes. This will give you an overview of the current statuses of the repositories and help you to decide whether the repositories need to be upgraded.

Prerequisites

- The login details for the database administration user are available.
- The setup for the hotfix has been run and the database hotfixes are installed in:

  `<Base directory>\<Version>\root\config\database\`

  Where `<Base directory>` is the path specified for StreamServe Projects during the Framework and Control Center installation.
  For example: `C:\ManagementGateway`

In this section

Listing schema versions and applied database hotfixes

In Control Center, you can list all repositories that belongs to a site, together with their current schema versions and the latest available database hotfixes. This will help you to decide whether or not a repository needs to be upgraded.

Prerequisites

- See *Prerequisites* on page 103.

To list available and applied database hotfixes

1. Right-click the site node and select **Available Database Hotfixes**. The Available Database Hotfixes dialog box opens.
2. Click **Get List** (if the dialog box is opened for the first time) or **Update List** (if the dialog box was previously opened). The Connect dialog box opens.
3. Enter the user name and password for the database administration user.
4. Click **OK**. In the Overview area, the repositories, current schema versions, and the latest available database hotfixes are listed. A log is displayed in the Result log area.
5. Click **Close** to close the Available Database Hotfixes dialog box.

Applying a database hotfix to a web content repository

You can apply the latest available database hotfix to a web content repository directly from Control Center.

Prerequisites and recommendations

- See *Prerequisites* on page 103.
- Before applying a database hotfix, the following is recommended:
  - Make sure that no other users are connected to the repository. If possible, set the repository in single user mode.
  - Stop all applications accessing the repository.
  - Perform a backup of the repository.

  Always read the hotfix documentation for additional preparations for a specific hotfix.

To apply a hotfix from Control Center

1. Right-click the application domain and select **Create Database**. The Create Database dialog box opens.
2. In the Operation area, select **Apply database hotfix**.
3. Select the web content repository from the drop-down list.
4. Click **Start** to apply the latest available database hotfix in the base directory. The Connect dialog box opens.
5. Enter the user name and password for the database administration user.
6. Click **OK**. The database hotfix is applied to the web content repository. A short version of the log is displayed in the Result log area.

   Note: To view the full log in the default text editor, click **Open Log File**.
7. Click **Close** to close the Create Database dialog box.

Managing StreamServe applications

This section describes how to manage StreamServer applications, Archiver applications, and service gateway applications.

In this section

Related topics

Before you can run the applications, you must configure the administration environment. For more information, see:

Starting, stopping, and restarting applications

To start an application

Right-click the application and select **Start**.

To stop an application

Right-click the application and select **Stop**.

Note: If you stop an Archiver application during an ongoing task, the application stops immediately. When the Archiver application is restarted, it continues the interrupted task and archives the remaining documents with the most recent document types.

To restart an application

Right-click the application and select **Restart**.

Deleting applications

You can delete applications from the tree view in Control Center. This does not delete the configuration files from the working directory. You must manually delete these files.

To delete an application

1. Right-click the application and select **Delete**.
2. Click **OK**.

Refreshing application status information

Refresh updates the status information displayed for applications in Control Center.

To update the status information displayed for an application

Right-click the application and select **Refresh**.

To refresh the status information for all applications on a host

Right-click the host node and select **Refresh**.

To specify a refresh interval for all applications

1. Select **File** > **Settings**. The Control Center Settings dialog box opens.
2. In the **Refresh rate in seconds** text box, enter the interval to refresh the status of the applications.
3. Select the nodes to change the refresh interval for. See *Control Center Settings dialog box* on page 160.
4. Click **OK.**

Updating and exporting application properties

You can update the properties of applications, such as name, description, and startup options. You can also update the runtime properties of StreamServer applications, such as the log level of a StreamServer application.

In this section

Updating application properties

You can update the properties of applications, such as name, description, and startup options.

It is possible to update the application description, startup type, and logon settings while the application is running. To update the name of the application and the application domain, you must stop the application.

To update an application property

1. Select the application.
2. In the Properties view, right-click the property and select **Edit Property**. The Edit Value dialog box opens.
3. Enter the new property value and click **OK**.

Updating runtime properties of StreamServer applications

You can update the runtime properties of StreamServer applications, such as the log level of the StreamServer application. For runtime properties, see *Runtime Property view* on page 144.

Note: If you update the runtime properties of a StreamServer application, the application is run using the updated values until the application is restarted. When you restart the application, the configuration from the working directory takes effect.

To update the runtime properties of a StreamServer application

1. Select the application.
2. In the Runtime properties window, enter the value for the runtime property.

   The application is run using the new value until the application is restarted.

Exporting property information

You can save the properties (name, description, version, etc.) for an application as a text file.

To save property information for an application as a text file

1. Select the application.
2. Select **File** > **Export list**. The Save As dialog box opens.
3. Browse to the location to save the file, and enter a name for the file.

Monitoring applications

You use the surveillance functionality to monitor the status of StreamServe applications.

Surveillance monitors the preferred state of an application. The preferred state of the application is set when the application is started or stopped from Control Center. For example, if you start an application from Control Center, the preferred state is set to Started. However, if applications are started or stopped outside of Control Center, for example from Windows Control Panel, the preferred state does not change.

If an application that is monitored and that has a preferred state of Started goes down, you can use the surveillance functionality to try to restart the application. If this is not successful, it is also possible to:

- Start an external program, which can try to restart the application. For example, by sending an SNMP trap to a Network Management System (NMS), or by executing a BAT file or shell script.
- Send an email to the application domain contact.

In this section

Configuring surveillance actions for the host

You must specify the surveillance failure actions that can be taken for the StreamServe applications on each host.

To configure surveillance actions for all the applications on a host

1. Right-click the host node and select **Surveillance**. The Host Surveillance dialog box opens.
2. Configure the surveillance options. See *Host Surveillance dialog box* on page 208.
3. Click **OK** to save the changes.

Configuring surveillance for the application or service gateway

You must enable surveillance for each StreamServe application that you intend to monitor. You must also specify which of the failure actions are taken for the application. For example, send an email if the preferred state of the application cannot be reestablished.

To activate surveillance for an application

1. Right-click the application and click **Surveillance**. The Application Surveillance dialog box opens.
2. Click **Enabled** to activate surveillance.
3. Configure the surveillance options. See *Application Surveillance dialog box* on page 209.
4. Specify the failure actions.
5. Click **OK** to save the changes.

Configuring arguments for external programs or surveillance emails

You can use surveillance arguments to send information to external programs or to include in surveillance emails. These arguments can relate to all the StreamServe applications on a host, or be specific to an application.

To configure arguments at host level

1. Right-click the host node and select **Surveillance**. The Host Surveillance dialog box opens.
2. In the **Program Arguments** field, enter the arguments used to start the external program.
3. In the **Subject** field, enter the arguments to include in surveillance emails.
4. Click **OK** to save the changes.

To configure arguments for an application

1. Right-click the application and select **Surveillance**. The Application Surveillance dialog box opens.
2. In the **Message** field, enter the arguments.
3. Click **OK** to save the changes.

Surveillance Arguments

Arguments	
Format specifier	**Description**
`%a`	The name of the application.
`%c`	The contact person for the application domain. If no contact is specified for the application domain, it is the alternative contact specified in the Host Surveillance dialog box.
`%f`	The name of the failure action. This is always `KEEP_PREFERRED_STATE`.
`%u`	The time the management gateway has been running.
`%m`	The arguments configured for the application or service gateway in the Application Surveillance dialog box. **Note:** This argument can only be used at host level.

Administering applications on remote hosts

Remote hosts are displayed in the Control Center tree view after you create an application on the host.

To administer applications on a remote host, you must connect to the host. To do this you need the login details (case-sensitive) for a management gateway user on the computer.

To connect to a remote host

1. From the tree view in Control Center, right-click the host node and select **Connect**.
2. Enter the user name and password for the management gateway user and click **OK**.

   After you connect to the host, the StreamServe applications configured on the host are visible in Control Center.

Configuring Java parameters

You can configure Java parameters, such as the target JRE (Java Runtime Environment) vendor and the Java class paths, for each StreamServe application (StreamServer application, Archiver application, or service gateway).

Name/value pairs

You configure the parameters as a name/value pair. The name/value pair must follow the standard syntax for Java properties (`name<Delimiter>value`). For example, for the Java system property `-Djava.library.path=c:\mylibs`:

- **Name**: `java.library.path`
- **Value**: `c:\mylibs`

To configure a parameter with a non-standard syntax, you must enter the full parameter in the name field and leave the value field empty. For example, for the Java option `-Xdebug`:

- **Name**: `Xdebug`
- **Value**: (empty)

To configure Java parameters

1. Right-click the application and select **Java Configuration**. The *Java Configuration dialog box* opens.
2. If required, edit the default parameters directly in the list.
3. To add new parameters, select the **(Item list)** field and click the button to the right of the field. The *Export Parameters dialog box* opens.
4. Add and configure the required parameters.
5. Click **OK** to update the list in the Java Configuration dialog box.
6. Click **OK** to complete the configuration and exit the dialog box.

Managing StreamServe 4.x applications

This section describes how to administer 4.x applications. To run 4.x Communication Server applications on UNIX hosts, you must install Control Center 4.x.

Displaying the node for 4.x services in Control Center

To run and manage 4.x applications from Control Center, you must display the node for 4.x Services. See *Displaying the 4.x Services node in Control Center* on page 118.

Services in general

In this section

Displaying the 4.x Services node in Control Center

1. Select **File** > **Settings**. The Control Center Settings dialog box opens.
2. Select **Display 4.x Services** and click **OK**.
3. Close and restart Control Center for the settings to take effect.

Connecting to, and disconnecting from, remote hosts

To be able to administer services running on remote hosts, you must first connect the Control Center to the remote host.

To connect to a remote host

1. Right-click the **4.x Services** node and select **Connect**. The Connect To Host dialog box opens.
2. Specify the host and click **OK**.

   If you are not an authorized user on the remote host, you can add a new network connection to the remote host. In this case, the Add Network Connection dialog box opens when you try to connect to the remote host. In this dialog box, you specify the user name and password for the new connection. You can, for example, connect as Windows administrator for the remote host.

To disconnect from a remote host

1. Right-click the **4.x Services** node and select **Disconnect**. The Disconnect Host dialog box opens.
2. Specify the host and click **OK**.

Adding and deleting services

To add a service

1 From the **4.x Services** node, right-click the host node (or a group node below the host node) and select **New Configuration**. The Choose Object dialog box opens.

2 Select a service type from the list of available objects and click **OK**.

Depending on the type of service, a configuration wizard or configuration dialog box opens. What to do and what to enter is described in the documentation for the corresponding service type.

To delete a service

Right-click the service and select **Delete Service**.

Configuring startup options for a service

You can specify startup method and logon options for the service.

1 Right-click the service and select **Service Startup**. The Service Startup Configuration dialog box opens.

2 Specify the options and click **OK**.

Startup options	
Startup method	**Automatic –** Starts the service automatically when the system (host for the corresponding service) starts. **Manual –** Starts the service manually. **Disabled –** Disables the service.
Log on as	**System account –** Runs the service under the local system account. With this option you can also enable the service to send messages to your desktop. **This account –** Specifies the user name and password for another account, and runs the service under this account.

Starting and stopping services

To start a service

Right-click the service and select **Start**.

To stop a service

Right-click the service and select **Stop**.

To restart a service

Right-click the service and select **Restart**. This will first stop and then start the service.

Grouping services

You can organize the services into groups. You can create new services from within a group, and you can move services to and from a group.

To create a group

1. Right-click the **Groups** node and select **New Group**. The New group dialog box opens.
2. Enter the name of the group and click **OK**.

To remove a group

Right-click the group and select **Remove Group**.

The group is removed, and any services within are moved directly under the host node.

To move services to and from a group

1. Right-click the group and select **Add/Remove Services**. The Add/Remove Services dialog box opens.
2. Specify which services to include and click **OK**.

   You can also use drag-and-drop to move the services. You can drop a service on any group node or on the host node.

Logs for 4.x Services

The following logs are available:

- Communication Server log file – Displays the log entries for the selected StreamServe service.
- Event log (Application) – Displays the last ten entries in the Event log from the Windows application.
- Event log (System) – Displays the last ten entries in the Event log from the Windows system components.

To view the Event Log for a remote host

1. Select **File** > **Event Log**. The connect to host dialog box opens.
2. Specify the host and click **OK**.

Exporting path information to a file

Information about the paths defined for a service can be exported to a text file.

To export the path information for a service

1 Select the service.

2 Select **File** > **Export list** and specify the location to export the file to.

Administrating 4.x Communication Server services

In this section

Adding Communication Server services for 4.x Projects

1. From the **4.x Services** node, right-click the host node (or a group node below the host node) and select **New Configuration**. The Choose Object dialog box opens.
2. Select **Communication Server Configuration** and click **OK**. The configuration wizard opens.
3. Follow the instructions in the wizard to create the service.

Information to enter	
Descriptive name	A descriptive name for the service.
Project directory	The absolute path to the directory of the Project files.This directory normally contains the design files (from Design Center) for the Project.
Export directory	The directory containing the Project files exported in the Design Center. This can be an absolute path or a relative path to the Project Directory.
Argument file name	The name of the startup argument file.
Temporary files directory	The location where the temporary files will be stored. This can be an absolute path or a relative path to the Export Directory (if there is no export directory the relative path is relative to the Project directory).
License file	The absolute path to the Communication Server license file.

Information to enter	
Executable	The absolute path to the Communication Server executable.
Startup type	See *Configuring startup options for a service* on page 119.
Log on as	See *Configuring startup options for a service* on page 119.

Editing service paths

In the Properties view you can modify the paths for the following Communication Server service directories and files:

- Export directory.
- Temporary directory.
- Executable.
- Argument file.

To edit a path

1. Select the service.
2. In the Properties window, right-click the property and select **Edit Property**. The Edit Value dialog box opens.
3. In the **Value** field, enter the new path and click **OK**.

Exploring the export directory

You can open the export directory for a Communication Server service to view or edit the files and sub-directories.

To open the export directory

Right-click the service and select **Explore**. The export directory opens in a directory browser.

Terminating a Communication Server service for a 4.x Project

If a Communication Server service cannot be stopped with a normal **Stop** you can use the **Terminate Process** option instead. This option will unconditionally terminate the service process, and should be used with caution.

To be able use the Terminate Process option for processes running on Windows you must add the `-pid` argument to the startup argument file. See the *Startup argument* reference for information about `-pid`.

To terminate a service

Right-click the service and select **Terminate Process**. Click **Yes** to confirm the termination.

Using the Communication Server log file

By default the Communication Server log file is continuously scanned, which means that the relevant log messages are displayed in the Control Center.

To open the log file

Right-click the Communication Server and select **Log** > **View Log**. The log file is displayed in a text editor.

To clear the log displayed in the Control Center

Right-click the Communication Server and select **Log** > **Clear Window**.

To stop/start log scanning

Right-click the Communication Server and select **Log** > **Stop/Start Log Scanning**.

To delete the log file

Right-click the service and select **Log** > **Delete Log File**.

Notifications

You must install Control Center 4.x to view or subscribe to notifications configured in 4.x Communication Servers.

Administering Communication Servers on UNIX hosts

You administer Communication Server services on UNIX hosts almost the same way as you administer Communication Server services on Windows hosts.

Export from the Design Center

The export from the Design Center is handled differently when handling Communication Servers on UNIX hosts. See *Exporting the Communication Server configuration to the UNIX host* on page 125.

First time connection to host

The first time you connect to a UNIX host in the Control Center you must activate the Console (select **View** > **Console**). In the Console, you must accept the key sent to you by the host. The next time you connect to the same host you do not have to activate the Console – unless you have changed the host name.

Host name format

When you connect to a UNIX host you use the following host name format:

```
<user>@<host>
```

For example:

```
strs@190.153.8.25
```

If the remote host uses the SSH2 protocol for authentication, you may need to force the remote connection to use SSH2 instead of SSH1 by adding the -2 option to the host argument. For example: `strs@190.153.8.25 -2`

Executable

When you create the service you must specify which Communication Server executable to run. You do this by specifying the shell script `strs_pm.sh`. If this script is missing you can create it with the following command:

```
$ln -s strs.sh strs_pm.sh
```

Terminating a service on UNIX

To be able to use the Terminate Process option for services running on Windows hosts you must add the `-pid` argument to the startup argument file. This is not necessary when terminating a Communication Server service on a UNIX host.

Exporting the Communication Server configuration to the UNIX host

You always export the Communication Server configuration from the Design Center to an Export directory – this applies to Communication Servers running on both Windows and UNIX.

When you administer Communication Server services running on Windows you can point to the same Export directory when you configure the service in the Control Center. This also applies to Communication Server services running on UNIX – provided that the Design Center can export files to the UNIX file system via Samba or NFS.

If you do not have Samba, NFS or similar you must set up your export directory on a Windows host and copy this directory to the UNIX host.

To copy the Export directory to the UNIX host

1. Right-click the service and select **Explore**. The MGW Explorer opens with the Export directory for the service active.
2. From the **Tools** menu, select **Copy directory to remote** and copy the Export directory to the UNIX host.

Note: All sub directories are included. You might not want to include the `temp`, `data\log` and `data\queues` directories.

Copying files from the UNIX host to the Control Center host

1. Right-click the service and select **Explore**. The Explore browser opens with the Export directory for the service active.
2. Browse to the file you want to copy from the UNIX host .
3. Right-click the file and select **Copy to local** or **Copy to local and open**.

Logging

In this chapter

Logs in Control Center

You can view and manage the logs for the applications in Control Center.

Three separate logs

Each application (StreamServer, service gateway, Archiver, and management gateway) generates three separate logs:

- Boot log – early startup messages.
- Platform log – low level details.
- Application log – runtime log messages.

Log files

The log entries for each log are appended to separate log files.

Management gateway logs	
Log	**Log file path**
Boot log	<*ManagementGatewayRoot*>/strs_boot.log
Platform log	<*ManagementGatewayRoot*>/platform.log
Application log	<*ManagementGatewayRoot*>/mgw.log

Service gateway logs	
Log	**Log file path**
Boot log	<*Service gateway wd*>/strs_boot.log
Platform log	<*Service gateway wd*>/platform.log
Application log	<*Service gateway wd*>/servicegateway.log

StreamServer logs	
Log	**Log file path**
Boot log	<*StreamServer wd*>/strs_boot.log
Platform log	<*StreamServer wd*>/platform.log
Application log	<*StreamServer wd*>/<*logfile*> Where <*logfile*> is the log file name specified in Design Center. Default is Log.txt.

Archiver logs	
Log	**Log file path**
Boot log	*<Archiver wd>*/strs_boot.log
Platform log	*<Archiver wd>*/platform.log
Application log	*<Archiver wd>*/archiver.log

Log file entries

Each entry in a log file consists of the following:

<date> <time> (<logMessageID>) <logLevel> <logMessage>

<date>	The date the log entry was created.
<time>	The time the log entry was created.
<logMessageID>	The log message ID. Each type of log message has a unique ID.
<logLevel>	The severity level of the log message.
<logMessage>	The log message.

Example 5 *Log entry.*

```
0309 033344 (0260) 3 SCF started.
```

Logging to database

You can enable database logging for each application. See *Logging to the runtime repository* on page 133.

Control Center log view

The logs can be viewed on separate tabs in the Control Center log view. For example, when a service gateway is selected in the tree view, the log view contains three tabs:

- strs_boot.log
- platform.log
- servicegateway.log

Each tab contains the same information as the corresponding log file. If you want to, you can clear the information displayed on each tab (right-click the log view and select **Clear**). This action clears the log displayed in Control Center, but does not affect the corresponding log file.

If logging to database is enabled for the application, a Database log tab is added to the log view. This tab displays the log information stored in the runtime repository.

Note: In order to display the information on the Database log tab, a service gateway must be connected to the same application domain as the application, and this service gateway must be running.

Specifying log levels

The log level determines which type of messages to include in the platform log and application log. The log level spans from 0 to 4 – the higher the number, the more details are added to the log.

Level	Types of messages included in log
0	Severe errors only.
1	As level 0 plus all other types of errors.
2	As level 1 plus warnings.
3	As level 2 plus information messages.
4	As level 3 plus extended information messages.

Log level for platform logs

You specify the platform log level for each application separately.

To specify the platform log level

1. Stop the application.
2. In the Control Center tree view, right-click the application and select **Log Configuration**. The Log Configuration dialog box opens.
3. Change **Log level** to the appropriate level and click **OK**.
4. Start the application.

Log level for application logs

You can specify the application log level for StreamServer and Archiver applications.

Log level for StreamServer application logs

The log level for a StreamServer application log is specified in Design Center. Each time you start a StreamServer application, the log level is set to the same value as specified in Design Center.

You can change the log level for a running StreamServer application from Control Center, without having to change the log level in Design Center and export/redeploy to the StreamServer application.

To change the log level for a running StreamServer application

1. Select the StreamServer application node in the tree view.

2 In the Runtime Property view, change **Log level** to the appropriate level.

Log level for Archiver application logs

To specify the Archiver application log level

1 Stop the Archiver application.

2 In the Control Center tree view, right-click the Archiver application and select **Configuration**. The Configuration dialog box opens.

Note: The Archiver **application log** level is set in the **Configuration** settings, and not in the Log Configuration settings for the Archiver application.

3 Change **Log level** to the appropriate level and click **OK**.

4 Start the Archiver application.

Debugging applications

You can enable debugging to include more log information in the logs.

The following options are available:

- **Disabled** – Disables debugging.
- **Enabled** – Enables debugging to include extended log information. For example, for ODBC calls, SQL statements are included in the logs.
- **Enabled verbose** – Enables verbose debugging to include all available log information. For example, for ODBC calls, SQL statements and parameters are included in the logs.

  Note: The formats of the parameters presented in the logs may not correspond to the formats actually used in the SQL statements. For example, timestamps are presented differently in the logs.

The configured option applies to all logs (boot log, platform log, and application log), for the selected application.

To enable debugging

1 Select the application node in the tree view.

2 Stop the application.

3 In the Properties view, double-click **Debug mode**. The Edit Debug Mode dialog box opens.

4 Select the appropriate debug option and click **OK**.

5 Start the application.

Logging to the runtime repository

Logging to the runtime repository (application log and platform log) includes not only `date`, `time`, `log message ID`, `log level`, and `log message`, but also `year`, `job ID`, `external job ID`, and `thread ID`. Logging to the runtime repository provides better control of the logs than using log files, since you can examine the logs from several applications using for example `date` and `job ID` as search criteria.

To examine the runtime repository logs, you can use the command line tool `LogWebServiceClient.exe` located in:

`<`*`StreamServe_Installation`*`>\Platform\Core\1.4\bin\`

See the tool help text for information on how to use this tool (enter `LogWebServiceClient.exe -h` in a command prompt).

Enabling logging to the runtime repository

You enable logging to the runtime repository for each application separately.

Note: In order to display the information on the Database log tab in Control Center, a service gateway must be connected to the same application domain as the application, and this service gateway must be running.

To enable logging to the runtime repository

1. Stop the application.
2. In the Control Center tree view, right-click the application and select **Log Configuration**. The Log Configuration dialog box opens.
3. Change **Database logging** to **Enabled** and click **OK**.
4. Start the application.

Removing old log messages from the runtime repository

By default, log messages are kept one day in the runtime repository, and then removed. You can change this time limit for each application separately.

To set a time limit for log messages

1. Stop the application.
2. In the Control Center tree view, right-click the application and select **Log Configuration**. The Log Configuration dialog box opens.
3. Change **Time limit** to the appropriate number of days and click **OK**.
4. Start the application.

Control Center GUI Reference

In this section

Views

Tree view

This is the top left frame in Control Center. The tree view displays applications by application domain and host. If the same host is used to run applications in several application domains, the host is shown under each application domain. The view also displays available StreamStudio web portals in the StreamStudio Portals folder and available StreamServe archives in the Archives folder.

Properties view

This shows the properties for the selected object (application domain, applications, StreamServe archive, etc). See *Properties view* on page 136.

Runtime properties view

This shows the runtime properties for the selected StreamServer application. For example, log level and cache size. It is only displayed for StreamServer applications that are running. See *Runtime Property view* on page 144.

FastCopy view

This shows the FastCopy source and destination pairs for the selected StreamServer application.

To display the FastCopy view, right-click the StreamServer application and select **FastCopy view**. To return to the Properties view, right-click the StreamServer application and select **Properties view**.

Log view

This shows the logs for the selected application.

To display/hide the log view in Control Center, right-click the application and select **View log**.

Properties view

In this section

- *Runtime Property view* on page 144.

Site properties

The properties are described in the table below.

Property	Description
Management gateway host	The host name or IP address of the computer with the management gateway used to communicate with the StreamServe Enterprise Repository.
Gateway port	The port used to communicate with the management gateway. The default port is 28000.
Management gateway send and response time-out (ms)	The time Control Center waits for responses from the management gateway after the initial connection to the management gateway is established. This is specified in milliseconds. If you experience problems with time-out when you deploy a Design Center Project, you can try increasing this value.
Management gateway connection time-out (ms)	The time Control Center waits when trying to establish a new connection to the management gateway. This is specified in milliseconds.
Management gateway certificate file	The path to the root certificate on the local computer. This must be a valid root certificate for the server certificate on the management gateway you are connecting to. The path to the default StreamServe root certificate is: `<StreamServe installation>\Platform\Core\<Version>\bin\security\certificatestore\trusted\authorities\streamserve.ca.crt`
Management gateway user name	The user connected to the management gateway.
Management gateway user role	The role of the management gateway user.
Application domains	The application domains configured at the site.
Enterprise repository vendor	The database vendor used for the enterprise repository.
Enterprise repository name	The name of the enterprise repository database.

Property	Description
Enterprise repository host	The host name or IP address of the computer with the enterprise repository.
Enterprise repository port	The port used for communication with the enterprise repository.

Application domain properties

The properties are described in the table below.

Property	Description
Name	The name of the application domain.
Queue and Archiving database server	The host name or IP address of the computer with the Queue repository.
Web Access database server	The host name or IP address of the computer with the Web Access repository.
Security database server	The host name or IP address of the computer with the Security repository.
Internal user directory	The host name or IP address of the computer with LDAP server used for the internal user directory.
External user directory	The host name or IP address of the computer with the LDAP server used for the external user directory.
Application domain version	The version of the application domain.
StreamStudio Portal	The StreamStudio web portal linked to the application domain.
Archive	The StreamServe archive linked to the application domain.

Host properties

The properties are described in the table below.

Property	Description
Management gateway host	The host name or IP address of the computer.
Gateway port	The port used for communication with the management gateway on the computer. The default port is 28000.

Property	Description
Management gateway send and response time-out (ms)	The time Control Center waits for responses from the management gateway after the initial connection to the management gateway is established. This is specified in milliseconds.
Management gateway connection time-out (ms)	The time Control Center waits when trying to establish a new connection to the management gateway. This is specified in milliseconds.
Management gateway certificate file	The path to the root certificate on the local computer. This must be a valid root certificate for the server certificate on the management gateway you are connecting to. The path to the default StreamServe root certificate is: `<StreamServe installation>\Platform\Core\<Version>\bin\security\certificatestore\trusted\authorities\streamserve.ca.crt`
Management gateway user name	The user connected to the management gateway.
Management gateway user role	The role of the management gateway user.
Application domains	The application domains that the applications on the host belong to.
OS platform	The operating system of the host.
Enterprise repository vendor	The database vendor used for the enterprise repository.
Enterprise repository name	The name of the enterprise repository database.
Enterprise repository host	The host name or IP address of the computer with the enterprise repository.
Enterprise repository port	The port used for communication with the enterprise repository.

Application (StreamServer) properties

The properties are described in the table below.

Property	Description
Name	The name of the StreamServer application.
Description	The description of the StreamServer application.

Property	Description
Application type	The type of application, that is StreamServer.
State	The status of the application, for example running or stopped.
Application Domain	The application domain of the StreamServer application and status of the application domain configuration. **Current** – The most recent version of the application domain configuration is used for the application. **Out of date** – The application domain configuration has been updated, but the new configuration has not been applied to the application. See *To apply the changes to the applications* on page 47.
StreamServer version	The version of the StreamServer used to run the application.
Startup type	How the StreamServer application is started. For example, automatic, manual, or disabled.
Log on	The account used to run the StreamServer application.
Export file	The name of the export file deployed to the StreamServer application.
Working directory	The path to the working directory for the StreamServer application.
Log files	The name of the log files for the StreamServer application.
Management gateway host	The computer used to run the StreamServer application.
Deployment timestamp	The date and time the export file was deployed.
Project name	The name of the Project deployed to the application.
Project export timestamp	The date and time the last export was made in Design Center.
Project label	If the Project is deployed from the file system, this is the creation date and time of the export file. If the Project is deployed from a version control system, this is the label of the export file.
Physical layer	The physical layer of the Platform that is deployed to the StreamServer application.

Property	Description
Temp directory	The directory (relative to the working directory) containing temporary files for the StreamServer application and the platform.
Debug mode	Enables or disables debug mode for the StreamServer application. For example, disabled, enabled, or enabled verbose.
Cache size (KB)	See the *Adobe LiveCycle Designer ES* documentation.

Application (Service Gateway) properties

The properties are described in the table below.

Property	Description
Name	The name of the service gateway.
Description	The description of the service gateway.
Application type	The type of application, that is Service Gateway.
State	The status of the service gateway, for example running or stopped.
Application Domain	The application domain of the service gateway and status of the application domain configuration. **Current** – The most recent version of the application domain configuration is used for the application. **Out of date** – The application domain configuration has been updated, but the new configuration has not been applied to the application. See *To apply the changes to the applications* on page 47.
Service Gateway version	The version of the service gateway used to run the application.
Startup type	How the service gateway is started. For example, automatic, manual, or disabled.
Log on	The account used to run the service gateway.
Working directory	The working directory for the service gateway.
Log files	The log files for the service gateway.
Service gateway port	The port used for communication with the service gateway.

Property	Description
Temp directory	The directory (relative to the working directory) containing temporary files for the platform.
Debug mode	Enables or disables debug mode for the service gateway. For example, disabled, enabled, or enabled verbose.

Application (Archiver) properties

The properties are described in the table below.

Property	Description
Name	The name of the Archiver application.
Description	The description of the Archiver application.
Application type	The type of application, that is Archiver.
State	The status of the Archiver application, for example running or stopped.
Application Domain	The application domain of the Archiver appplication and status of the application domain configuration. **Current** – The most recent version of the application domain configuration is used for the application. **Out of date** – The application domain configuration has been updated, but the new configuration has not been applied to the application. See *To apply the changes to the applications* on page 47.
Version	The version of the Archiver application.
Startup type	How the Archiver application is started. For example, automatic, manual, or disabled.
Log on	The account used to run the Archiver application.
Working directory	The working directory for the Archiver application.
Log files	The log files for the Archiver application.
Temp directory	The directory (relative to the working directory) containing temporary files for the Archiver application and the platform.
Debug mode	Enables or disables debug mode for the Archiver application. For example, disabled, enabled, or enabled verbose.

Application (Task Scheduler) properties

The properties are described in the table below.

Property	Description
Name	The name of the Task Scheduler application.
Description	The description of the Task Scheduler application.
Application type	The type of application, that is Task Scheduler.
State	The status of the Task Scheduler application, for example running or stopped.
Application Domain	The application domain of the Task Scheduler appplication and status of the application domain configuration. **Current** – The most recent version of the application domain configuration is used for the application. **Out of date** – The application domain configuration has been updated, but the new configuration has not been applied to the application. See *To apply the changes to the applications* on page 47.
Version	The version of the Task Scheduler application.
Startup type	How the Task Scheduler application is started. For example, automatic, manual, or disabled.
Log on	The account used to run the Task Scheduler application.
Working directory	The working directory for the Task Scheduler application.
Log files	The log files for the Task Scheduler application.
Temp directory	The directory (relative to the working directory) containing temporary files for the Task Scheduler application and the platform.
Debug mode	Enables or disables debug mode for the Task Scheduler application. For example, disabled, enabled, or enabled verbose.

Resource (StreamStudio portals) properties

The properties are described in the table below.

Property	Description
Name	The name of the StreamStudio web portal.

Property	Description
Description	A description of the StreamStudio web portal.
Host name	The host name or IP address of the computer where the web portal resides.
Application domains	The application domains that the StreamStudio web portal is linked to.
Portal root	The directory on the Java application server to which you want to deploy the StreamStudio web archive `<Portal name>.war` file. For example, for Apache Tomcat: `<TOMCAT_HOME>\webapps\`
Manual deploy path	*Applicable if you select Manual deploy in the web portal configuration.* The path to the directory where the StreamStudio web archive file, `<Portal name>.war`, is stored.

Resource (Archives) properties

The properties are described in the table below.

Property	Description
Name	The name of the StreamServe archive.
Description	A description of the StreamServe archive.
Host name	The host name or IP address of the computer where the StreamServe archive resides.
Application domains	The application domains that the StreamServe archive is linked to.

Runtime Property view

This view displays the runtime properties for the StreamServer application. The properties are described in the table below.

Property	Description
Temp compression enabled	Enables compression of the temporary files to save disc space. Files are gzipped. Enabling temporary compression affects performance.
Temp directory	The directory containing in the temporary files.

Property	Description
LXF cache size	Specifies the number of cache items (LXF documents) that can be stored. The cache will always try to cache static overlays. Static overlays stay in the cache as long as possible, and are only discarded when the StreamServer application is stopped.
LXF cache dynamic	Enables caching of dynamic overlays. Dynamic overlays are not cached by default because they decrease the performance of static overlays during larger jobs. When enabled, dynamic overlays stay in the cache between the preprocess and runtime phases and are not removed until after runtime is finished.
Working directory	The working directory for the StreamServer application.
WSIN enabled	Records a list of all incoming data that the StreamServer identifies. A separate file is created for each Message. This file shows the Fields and Blocks in the Message, and in the order in which the StreamServer processes them.
WSIN file name	If the WSIN property is enabled, the name of the file used for the Message data. You can specify a filename that is relative to the working directory for the application. Or, you can specify an absolute path and filename.
Recording mode enabled	Instructs the StreamServer to record the input data and create a sample file. All pages recorded are appended to the sample file `allpages.<input connector name>`. This file is created in the directory specified in the **Grab file directory** property.
Grab file directory	Specifies where sample files are saved when you use the Recording mode enabled runtime property, or run the StreamServer with the startup arguments `-rec` or `-reconly`.
Log level	Specifies the log level for the StreamServer application log. See *Log level for StreamServer application logs* on page 131.
Log file name	Specifies the name for the StreamServer log file.
Application process ID	An internal number identifying the application process.

Menus and menu commands

In this section

File menu commands

The File menu includes the commands described in the table below.

Command	Description
New > Site	Opens the *New Site dialog box*, which is used to configure a new site and connect the site to a StreamServe Enterprise Repository.
New > Application Domain	Opens the *New Application Domain dialog box (Adding)* and then the *Application Domain Editor*. These are used to configure the name, repositories, connection settings, and recovery settings for an application domain.
New > Application	Opens the *New Application dialog box*, which is used to add a new StreamServer application, Archiver application, or service gateway.

Command	Description
New > Configuration	Opens the *New Site dialog box*, *New Application Domain dialog box (Adding)*, or *New Application dialog box* depending on object selected in the Control Center tree view. From the 4.x Services node, this opens the Choose Object dialog box, which is used to configure a 4.x service.
Connect to Remote Host	Connects to the local computer or a remote computer. From the 4.x Services node, this opens the Connect to host dialog box, which is used to connect to computers that run 4.x services.
Disconnect from Remote Host	Disconnects from the hosts at the site. From the 4.x Services node, this opens the Disconnect Host dialog box, which is used to end connections with remote computers that run 4.x services.
Version Control > Manage VCS Connections	Opens the *Open VCS Connection dialog box*, which is used to: • Create new VCS connections. • Edit VCS connections. • Rename VCS connections. • Delete VCS connections.
Version Control > Connect to	Creates a connection to a version control system.
Version Control > Disconnect	Ends a connection to a version control system.
Export List	Saves a list of the properties for the selected application domain, host, or application as a text file.
Settings	Opens the *Control Center Settings dialog box*, which is used to specify: • The interval at which the status information for applications is updated. • Whether the 4.x Services node is displayed.
Exit	Exits Control Center.

View menu commands

The View menu includes the commands described in the table below.

Command	Description
Status Bar	Displays the status bar at the bottom of the Control Center window.
Console	Enables you to connect to UNIX hosts running 4.x Communication Servers.
Log Window	Displays/hides the log view.
Runtime Properties	Displays/hides the runtime properties view. This view is only displayed for StreamServer applications that are running or that have been run.
Show Gateways	Displays/hides the host nodes in the tree view. When the host nodes are hidden, the applications are sorted by application domain.
Refresh	Refreshes the status information displayed for all applications.
Refresh Item	Refreshes the status information for the selected object (application domain, host, or application).

Format menu commands

The Format menu includes the commands described in the table below.

Command	Description
Word Wrap	Wraps the log messages text displayed in the log view.
Font Size	Specifies the size of the font used for the text in the log view.

Language menu commands

The Language menu includes the command described in the table below.

Command	Description
Select	Specifies the language of the Control Center user interface.

Help menu commands

The Help menu includes the commands described in the table below.

Command	Description
Help Topics	Opens the StreamServe Online Help in a new window.
www.streamserve.com	Opens the StreamServe home page in a new window
About Control Center	Displays the Control Center version and StreamServe license information.

Root menu commands

The Root menu includes the command described in the table below.

Command	Description
New Site	Opens the *New Site dialog box*, which is where you configure a new site and connect the site to a StreamServe Enterprise Repository.
Clear Log	Clears the entries in the log view.
View Log	Displays/hides the log view in Control Center.

Site menu commands

The Site menu includes the commands described in the table below.

Command	Description
Connect	Creates a connection to a site. The user name and password for the management gateway are required to connect to the site.
Disconnect	Disconnects from the site.
New Application Domain	Opens the *New Application Domain dialog box (Adding)* and then the *Application Domain Editor*. These are used to configure the administrator, name, repositories, connection settings, and recovery settings for an application domain.
Refresh	Updates the status information displayed for applications at the site.
Rename	Renames the site node.

Command	Description
Remove	Removes the site from the tree view in Control Center. This does not delete the application domains or applications at the site.
Clear Log	Clears the entries in the log view.
View Log	Displays/hides the log view in Control Center.
Manage Document Types	Opens the *Manage Document Types dialog box*, which displays the document types in the enterprise repository. In this dialog box, you can delete document types from the enterprise and the runtime repositories.
Manage Templates	Opens the *Manage Templates dialog box*, which displays the Composition Center templates in the enterprise repository. In this dialog box, you can delete templates from the enterprise and the runtime repositories.
Create Database	Opens the *Create Database dialog box*, which is used to create a StreamServe Enterprise Repository for the site, generate the database scripts used to create the repository, or apply hotfixes to the repository.
Available Database Hotfixes	Opens the *Available Database Hotfixes dialog box*, which is used to list all repositories that belong to a site, together with their current schema versions and the latest available hotfixes.
Configuration	Opens the *Configure Enterprise Repository dialog box*, which is used to edit the configuration for a StreamServe Enterprise Repository for the site.

Domain menu commands

The Domain menu includes the commands described in the table below.

Command	Description
New Application	Opens the *New Application dialog box*, which is used to add a new StreamServer application, Archiver application, or service gateway.
Start All Applications	Starts all the applications in the application domain.
Restart All Applications	Stops and restarts all the running applications in the application domain.

Command	Description
Stop All Applications	Stops all the running applications in the application domain.
Refresh All Applications	Updates the status information for the applications in the application domain.
Deploy Export File	Opens the *Deploy wizard*, which is used to select a StreamServer application and Project export file, and deploy the export file to the application.
Update Application Domain File	Updates the application domain configuration for the applications in the application domain. Changes are applied when the applications are restarted.
Rename	Renames the application domain. The application domain name must: • Only include ASCII characters (`a-z`, `A-Z`, `0-9`). • Not include any whitespaces.
Edit Application Domain	Opens the *Application Domain Editor*, which is used to edit the administrator, repositories, connection settings, and recovery settings for an application domain.
Link Archive	Opens the *Link Archive dialog box*, which is used to link a StreamServe archive to the application domain.
Link StreamStudio Portal	Opens the *Link StreamStudio Portal dialog box*, which is used to link a StreamStudio web portal to the application domain.
Export Application Domain	Saves the application domain configuration as an XML file.
Create Database	Opens the *Create Database dialog box*, which is used to create a runtime repository and web content repository for the site, or generate the database scripts used to create the repositories, or apply hotfixes to the repositories.
Retrieve Document Types File	Saves the document types used in the application domain in the specified file.
Launch Database Administration Tool	Launches the Database Administration Tool, which is used to administer the runtime repository for the application domain. For more information, see the *Database Administration Tool* documentation.

Command	Description
Delete Application Domain	Deletes the application domain and related applications from the tree view in Control Center. This does not delete the configuration files for the applications in the application domain or the runtime repository for the application domain.

Host menu commands

The Host menu includes the commands described in the table below.

Command	Description
Connect	Creates a connection to the host. The user name and password for the management gateway must be entered. These are case-sensitive.
Disconnect	Disconnects from the host.
New Application	Opens the *New Application dialog box*, which is used to add a new StreamServer application, Archiver application, or service gateway.
Start All Applications	Starts all the applications on the host.
Restart All Applications	Stops and restarts all the applications on the host.
Stop All Applications	Stops all the running applications on the host.
Refresh	Updates the status displayed for all the applications on the host.
Deploy Export file	Opens the *Deploy wizard*, which is used to select a StreamServer application and Project export file, and deploy the export file to the application.
Update Application Domain File	Updates the application domain configuration for the applications on the host. Changes are applied when the applications are restarted.
Change Password	Changes the password for the management gateway user currently logged in to Control Center.
Manage Users	Opens the *Manage Users dialog box* on page 223, which is used to add and remove users from the management gateway, and to change passwords and roles for users.

Command	Description
Surveillance	Opens the *Host Surveillance dialog box*, which is used to specify the surveillance actions that can be taken for applications on the host.
Clear Log	Clears the entries in the log view.
View Log	Displays/hides the log view in Control Center.
Explore	Opens the *MGW Explorer dialog box*, which is used to manage files and directories.
View Installed Versions	Opens the View software versions window, which displays the StreamServe components, with version information, installed on a computer.

Application (StreamServer) menu commands

The Application (StreamServer) menu includes the commands described in the table below.

Command	Description
Start	Starts the StreamServer application.
Stop	Stops the StreamServer application.
Restart	Stops and restarts the StreamServer application.
Properties View	Displays the Properties view for the StreamServer application.
FastCopy View	Displays the FastCopy view for the StreamServer application.
Refresh	Updates the status of the StreamServer application.
Redeploy	Redeploys the export file to the StreamServer application. You must restart the StreamServer application for the new configuration to take effect.
Deploy Export File	Opens the *Deploy wizard*, which is used to select a Project export file, and deploy the export file to the application.
Update Application Domain Information	Updates the application domain configuration for the StreamServer application. Changes are applied when the application is restarted.
Rename	Renames the StreamServer application.

Command	Description
Delete	Deletes the StreamServer application. The application node is removed from the tree view, however the configuration files are not deleted from the working directory.
Surveillance	Opens the *Application Surveillance dialog box*, which is used to enable surveillance and specify which surveillance actions are taken for the application.
Clear Log	Clears the entries in the log view for the StreamServer application.
View Log	Displays/hides the log view in Control Center.
Log Configuration	Opens the *Log Configuration dialog box*, which is used to set the platform log level, and to enable/disable logging to the runtime repository.
Java Configuration	Opens the *Java Configuration dialog box*, which is used to configure Java parameters for the StreamServer application.
Explore	Opens the *MGW Explorer dialog box*, which is used to manage files and directories.

Application (Service Gateway) menu commands

The Application (Service Gateway) menu includes the commands described in the table below.

Command	Description
Start	Starts the service gateway.
Stop	Stops the service gateway.
Restart	Stops and restarts the service gateway.
Refresh	Updates the status of the service gateway.
Change Application Domain	*Applicable if there is more than one application domain configured for the site.* Changes the application domain for the service gateway. After the change, the service gateway must be restarted in the new application domain.
Update Application Domain Information	Updates the application domain configuration for the service gateway. Changes are applied when the service gateway is restarted.

Command	Description
Rename	Renames the service gateway.
Delete	Deletes the service gateway node from Control Center.
Surveillance	Opens the *Application Surveillance dialog box*, which is used to enable surveillance for a service gateway and specify which surveillance actions are taken for the service gateway.
Clear Log	Clears the entries in the log view for the service gateway.
View Log	Displays/hides the log view in Control Center.
Log Configuration	Opens the *Log Configuration dialog box*, which is used to set the platform log level, and to enable/disable logging to the runtime repository.
Java Configuration	Opens the *Java Configuration dialog box*, which is used to configure Java parameters for the service gateway application.

Application (Archiver) menu commands

The Application (Archiver) menu includes the commands described in the table below.

Command	Description
Start	Starts the Archiver application.
Stop	Stops the Archiver application.
Restart	Stops and restarts the Archiver application.
Refresh	Updates the status of the Archiver application.
Update Application Domain Information	Updates the application domain configuration for the Archiver application. Changes are applied when the Archiver application is restarted.
Rename	Renames the Archiver application.
Delete	Deletes the Archiver application from Control Center.
Surveillance	Opens the *Application Surveillance dialog box*, which is used to enable surveillance and specify which surveillance actions are taken for the Archiver application.
Clear Log	Clears the entries in the log view for the Archiver application.

Command	Description
View Log	Displays/hides the log view in Control Center.
Log Configuration	Opens the *Log Configuration dialog box*, which is used to set the platform log level, and to enable/disable logging to the runtime repository.
Java Configuration	Opens the *Java Configuration dialog box*, which is used to configure Java parameters for the Archiver application.
Configuration	Opens the *Configuration dialog box (Archiver application)*, which is used to configure the Archiver application. For example, in this dialog, you configure the archiving tasks and the application log level.

Application (Task Scheduler) menu commands

The Application (Task Scheduler) menu includes the commands described in the table below.

Command	Description
Start	Starts the Task Scheduler application.
Stop	Stops the Task Scheduler application.
Restart	Stops and restarts the Task Scheduler application.
Refresh	Updates the status of the Task Scheduler application.
Update Application Domain Information	Updates the application domain configuration for the Task Scheduler application. Changes are applied when the Task Scheduler application is restarted.
Rename	Renames the Task Scheduler application.
Delete	Deletes the Task Scheduler application from Control Center.
Surveillance	Opens the *Application Surveillance dialog box*, which is used to enable surveillance and specify which surveillance actions are taken for the Task Scheduler application.
Clear Log	Clears the entries in the log view for the Task Scheduler application.
View Log	Displays/hides the log view in Control Center.

Command	Description
Log Configuration	Opens the *Log Configuration dialog box*, which is used to set the platform log level, and to enable/disable logging to the runtime repository.
Java Configuration	Opens the *Java Configuration dialog box*, which is used to configure Java parameters for the Task Scheduler application.
Configuration	Opens the *Configuration dialog box (Task Scheduler)*, which is used to configure the Task Scheduler application.

StreamStudio Portals menu commands

The StreamStudio Portals menu includes the command described in the table below.

Command	Description
Add StreamStudio Portal	Opens the *Add StreamStudio Portal dialog box*, which is used to add a StreamStudio web portal to the StreamStudio Portals folder.

Archives menu commands

The Archives menu includes the command described in the table below.

Command	Description
New Archive	Opens the *New Archive dialog box*, which is used to add a StreamServe archive.

Resource (StreamStudio Portals) menu commands

The Resource (StreamStudio Portals) menu includes the commands described in the table below.

Command	Description
Link Application Domain	Opens the *Link Application Domains dialog box*, which is used to link the StreamStudio web portal or StreamServe archive to the application domains.
Update Domain Information	Updates the application domain configuration for the StreamStudio portal.

Command	Description
Unregister	Unregisters the StreamStudio web portal. Before the web portal is unregistered, any links to application domains are automatically removed. The actual StreamStudio web portal is not deleted, only removed from the Control Center Tree view.
Launch Database Administration Tool	Launches the Database Administration Tool, which is used to administer a web content repository in a linked application domain. For more information, see the *Database Administration Tool* documentation.

Resource (Archives) menu commands

The Resource (Archives) menu includes the commands described in the table below.

Command	Description
Link Application Domain	Opens the *Link Application Domains dialog box*, which is used to link the StreamStudio web portal or StreamServe archive to the application domains.
Unregister	Unregisters the StreamServe archive. Before the archive is unregistered, any links to application domains are automatically removed. The actual StreamServe archive is not deleted, only removed from the Control Center Tree view.
Create Database	Opens the *Create Database dialog box*, which is used to create the StreamServe archive, or generate the database scripts used to create the archive, or apply hotfixes to the archive.
Configuration	Opens the *Configuration dialog box (Archive)* on page 214, which is used to configure the database settings for the StreamServe archive and the connection settings to access the StreamServe archive.
Launch Database Administration Tool	Launches the Database Administration Tool, which is used to examine the StreamServe archive.

Dialog boxes, wizards, and tools

In this section

- *Add User dialog box* on page 224.
- *Edit User dialog box* on page 225.
- *Manage Templates dialog box* on page 227.
- *Compare Composition Center Templates tool* on page 228.

Control Center Settings dialog box

The Control Center Settings dialog box is used to:

- Define the interval at which status information displayed for StreamServer applications is updated.
- Display/hide the 4.x Service node in the tree view.

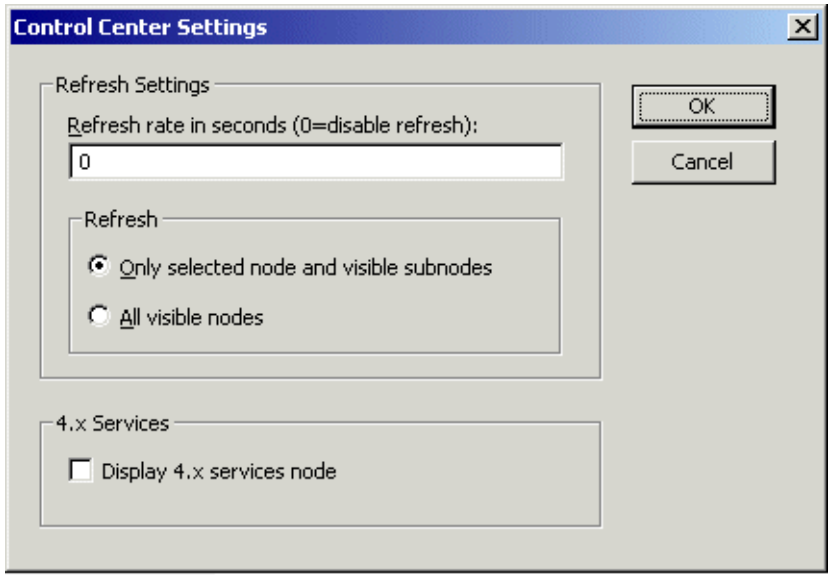


Figure 9 The Control Center Settings dialog box

The settings are described in the table below.

Setting	Description
Refresh rate in seconds	The time interval at which the status information displayed for applications is updated. For example, if you enter 5, the status information is updated every 5 seconds.

Setting	Description
Refresh	**Only selected node and visible subnodes** – Refreshes the status information for applications in the node selected and the subnodes of that node. **All visible nodes** – Refreshes the status information for all the nodes of the host.
4.x Services	Displays/hides the 4.x Services node in Control Center. You run 5.x SAP StreamServer applications under this node. You must restart Control Center for changes to this option to take effect.

Log Configuration dialog box

The Log Configuration dialog box is used to:

- Specify the platform log level for the selected application.
- Enable/disable logging to the runtime repository for the selected application.

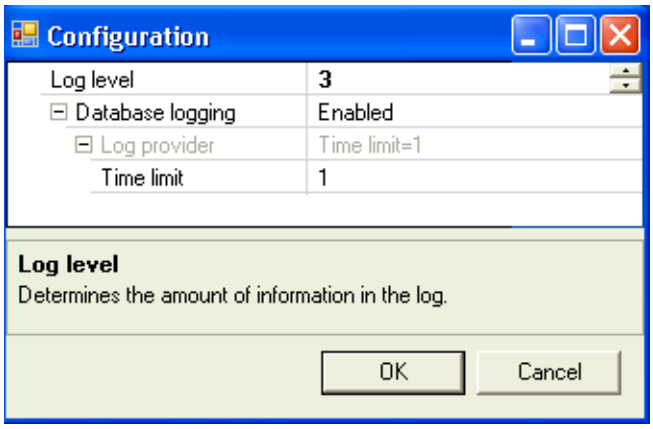


Figure 10 The Log Configuration dialog box

The settings are described in the table below.

Setting	Description
Log level	The log level for the platform log. See *Specifying log levels* on page 131.
Database logging	Enable/disable logging to the runtime repository.
Time limit	The number of days to keep the log in the runtime repository.

Open VCS Connection dialog box

The Open VCS Connection dialog box is used to manage all connections to version control systems.

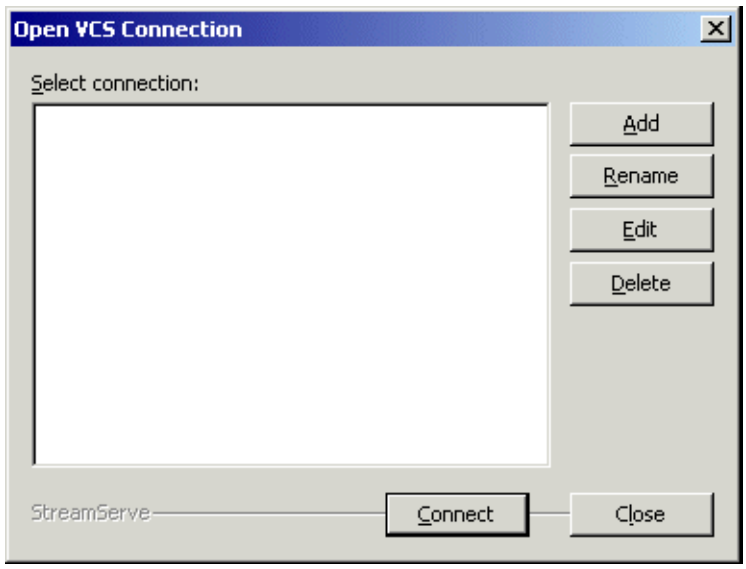


Figure 11 The Open VCS Connection dialog box

The settings are described in the table below.

Setting	Description
Select connection	Lists all available VCS connections.
Add	Opens the *Add connection dialog box*, which is used to add a new VCS connection. Before this dialog opens, you are prompted to select the type of connection, and to specify a name for the connection. Currently, the types CVS and CVSNT are available.
Rename	Renames the VCS connection selected in the Select connection list. This option is disabled if the connection is active.
Edit	Opens the *Editing connections dialog box*, which is used to edit a VCS connection. This option is disabled if the connection is active.
Delete	Deletes a VCS connection. This option is disabled if the connection is active.
Connect	Connects Design Center to the version control system using the connection selected.
Close	Closes the Open VCS Connection dialog box.

Add connection dialog box

The Add connection dialog box is used to configure a connection to a CVS or CVSNT version control system.

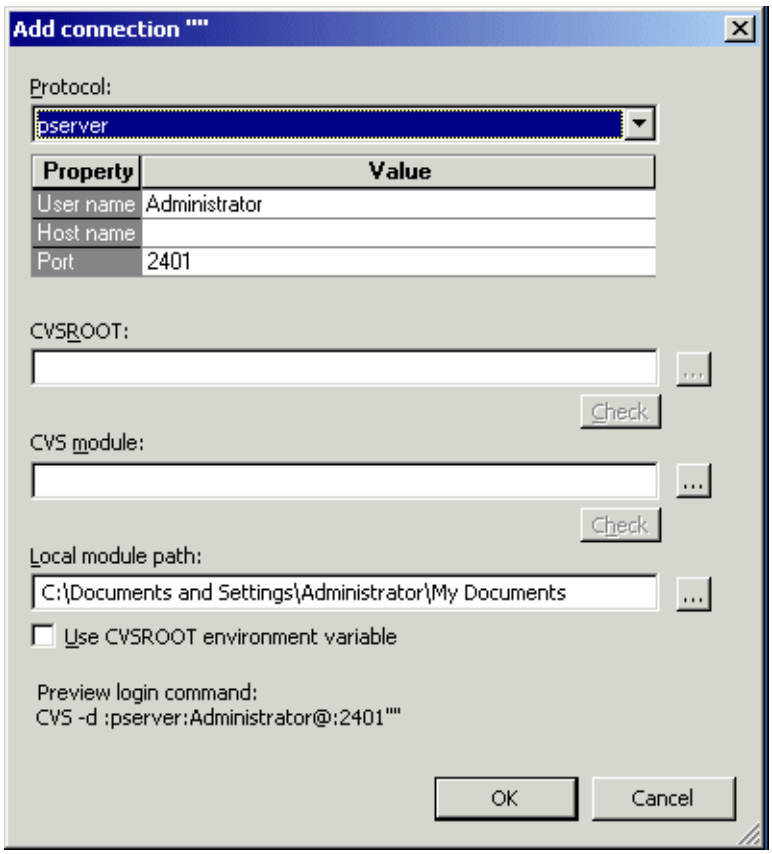


Figure 12 The Add connection dialog box

The settings are described in the table below.

Setting	Description
Protocol	Specifies the access method to the CVS/CVSNT. **local** – Access a CVS/CVSNT repository directory on the same computer. Used if Control Center and the VCS run on the same computer. **pserver** – Access a CVS/CVSNT repository on a remote computer via a password authenticating server. **server** – Access a CVS/CVSNT repository on a remote computer using an internal rsh client. **ssh** – Access a CVS/CVSNT repository on a remote machine using SSH. **ext** – Access a CVS/CVSNT repository on a remote computer using an external rsh program.
Property/Value list	**User name** – A user name to access the CVS/CVSNT. **Host name –** The host name or IP address of the CVS/CVSNT computer. **Port** – The port number to access CVS/CVSNT. The default is 2401.
CVSROOT	The CVS/CVSNT repository address.
CVS module	The base module for the Project in the CVS/CVSNT.
Local module path	The path to the folder that contains the Design Center files you are working with.
Use CVSROOT environment variable	Adds a connection to CVS/CVSNT using values defined in the `CVSROOT` environment variable. If you select this option, you only have to enter the CVS Module name. For more information, see the CVS documentation.

Editing connections dialog box

The Editing connections dialog box is used to edit the settings for existing connections to a version control system.

For settings, see *Add connection dialog box* on page 163.

Configure Enterprise Repository dialog box

The Configure Enterprise Repository dialog box is used to edit the database settings for the StreamServe Enterprise Repository and the connection settings to access the enterprise repository.

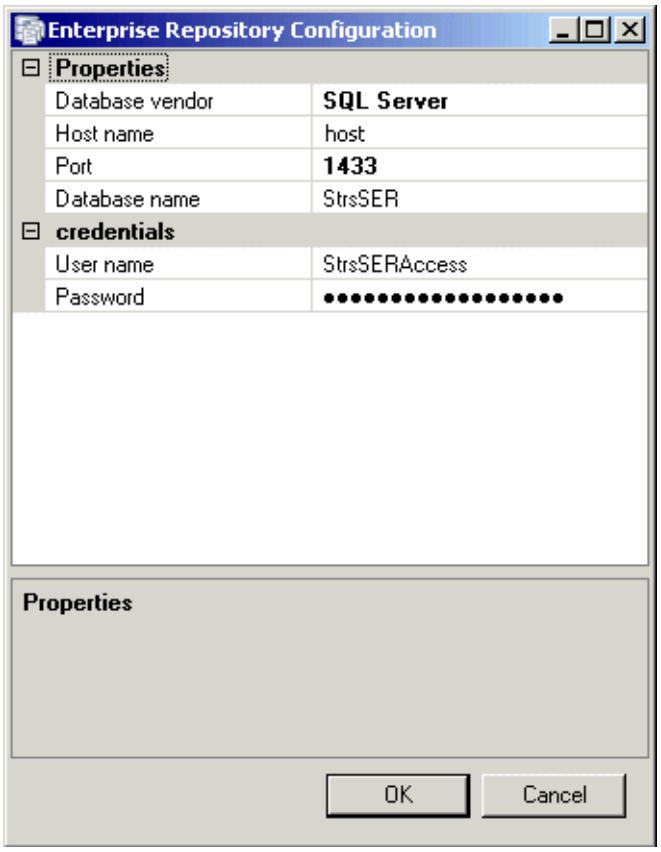


Figure 13 The Configuration dialog box for StreamServe Enterprise Repository

The settings are described in the table below.

Setting	Description
Database vendor	The database vendor for the enterprise repository.
Host name	The IP address or host name of the database server. If you use a named instance of SQL Server, you must specify the host name and instance name using the syntax *<hostname>**<instancename>*. For example: `gbg5000\instance1`

Setting	Description
Port	The port used for communication with the database server. Contact your database administrator to find the port for your database server. • The default port for Microsoft SQL Server is 1433. • The default port for Oracle database is 1521.
Database name	*Applicable for Microsoft SQL Server.* A name for the enterprise repository. The name should comply with the naming standards in your database server. Contact your database administrator for more information.
Service name (SID)	*Applicable for Oracle.* The name of the enterprise repository. The name should comply with the naming standards in your database server. Contact your database administrator for more information.
User name	The user name to access the enterprise repository. The user is automatically created when the enterprise repository is created. For Oracle, the user name setting is also used as schema owner. The user name should comply with the naming standards in your database server. Contact your database administrator for more information. **Note:** You cannot use the system administrator as user name (for example, `sa` for SQL Server).
Password	The password to access the enterprise repository. The password should comply with the naming standards in your database server. Contact your database administrator for more information.

Create Database dialog box

The Create Database dialog box is used to create the repositories for a selected node. For example, if a site node is selected, StreamServe Enterprise Repository for the site can be created from the dialog box. Or if an application domain node is selected, the runtime repository and the web content repository for the application domain can be created.

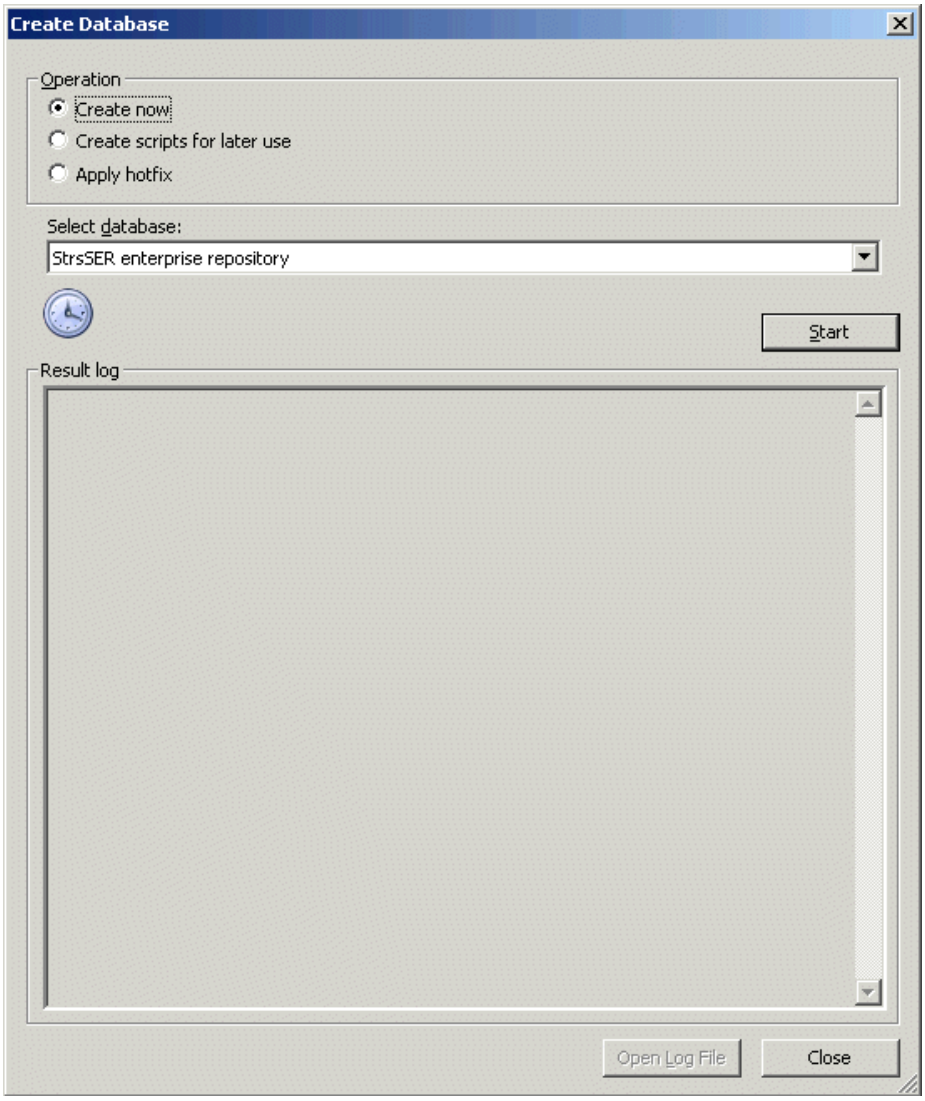


Figure 14 The Create Database dialog box

The settings are described in the table below.

Setting	Description
Create now	*Applicable for Microsoft SQL Server and Oracle.* Runs the scripts to create the repository selected in the drop down list. You must enter the database administrator user name and password. **Note:** For Microsoft SQL Server 2008 R2, you cannot create the repository directly from Control Center if the password contains certain characters. For example: `[] {}() , ; ? * ! @` For more information, see: http://msdn.microsoft.com/en-us/library/ms161962.aspx
Create scripts for later use	Generates the SQL scripts used to create the repository selected in the drop down list. You can run these scripts using an external tool at a later stage. The scripts are saved in the following zip file: `<Base directory>\<Version>\root\config\database\<GUID>.zip` Where: • `<Base directory>` – Is the path specified for StreamServe Projects during the Framework and Control Center installation. For example: `C:\ManagementGateway` • `<GUID>` – Is a globally unique identifier for the zip file.
Apply hotfix	Applies hotfixes to the repository selected in the drop down list. You must enter the database administrator user name and password. The hotfixes must be installed in the following directory: `<Base directory>\<Version>\root\config\database\` Where `<Base directory>` is the path specified for StreamServe Projects during the Framework and Control Center installation. For example: `C:\ManagementGateway`
Select database	A list populated with the possible repositories for the selected node.
Start	Starts the selected operation.
Close	Closes the Create Database dialog box.

Setting	Description
Open Log File	Opens the full log in the default text editor.

Available Database Hotfixes dialog box

The Available Database Hotfixes dialog box is used to list all repositories that belong to a site, together with their current schema versions and the latest available hotfixes. This gives an overview of the current statuses of the repositories and helps to decide whether the repositories need to be upgraded.

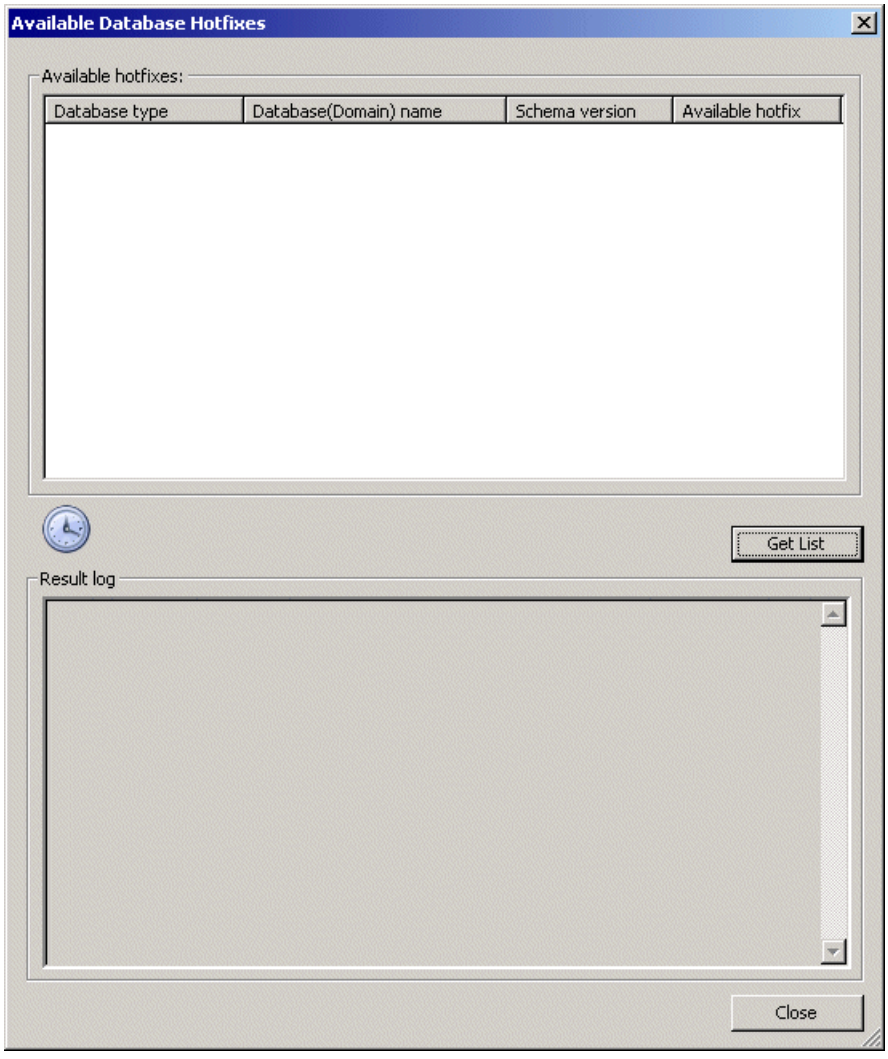


Figure 15 The Available Database Hotfixes dialog box

The settings are described in the table below.

Setting	Description
Overview	An area that displays a list of repositories, schema versions, and available hotfixes: • **Repository type** – Enterprise, Runtime, Web Content, or Archive • **Name / Application domain** – The name of the repository and, for the runtime and web content repositories, the application domain that the repository belongs to. • **Schema version** – The current database schema version. • **Available hotfix** – The latest available hotfix installed in: `<Base directory>\<Version>\root\config\database\` Where `<Base directory>` is the path specified for StreamServe Projects during the Framework and Control Center installation. For example: `C:\ManagementGateway`
Get list	Populates the list in the Overview area the first time the dialog box is opened.
Update list	Updates the list in the Overview area.
Close	Closes the Apply Database Hotfixes dialog box.

New Site dialog box

The New Site dialog box is used to create a site and connect the site to a StreamServe Enterprise Repository. To do this, you connect to the management gateway that is used to communicate with the enterprise repository. You need the login details for a management gateway user (case-sensitive).

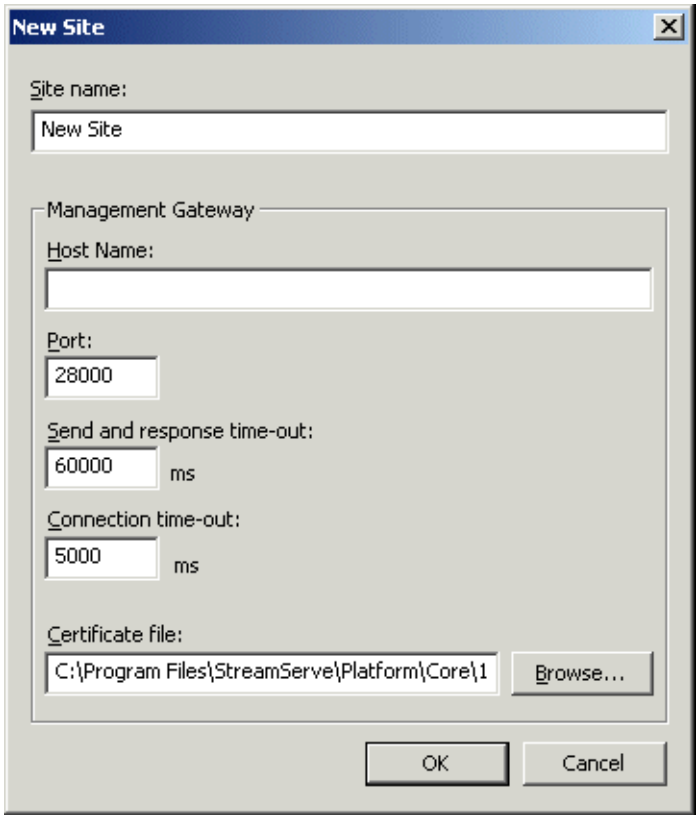


Figure 16 The New Site dialog box

The settings are described in the table below.

Setting	Description
Site name	A name for the site.
Host name	The IP address or host name of the computer with the management gateway used to connect to the enterprise repository.
Port	The port used for communication with the management gateway.
Send and response time-out	The time Control Center waits for responses from the management gateway after the initial connection to the management gateway is established. This is specified in milliseconds.

Setting	Description
Connection time-out	The time Control Center waits when trying to establish a new connection to the management gateway. This is specified in milliseconds.
Certificate file	The path to the root certificate on the local computer. This must be a valid root certificate for the server certificate on the management gateway you are connecting to. The path to the default StreamServe root certificate is: `<StreamServe installation>\Platform\Core\<Version>\bin\security\certificatestore\trusted\authorities\streamserve.ca.crt`

New Application Domain dialog box (Adding)

The New Application Domain dialog box is used to add a new application domain.

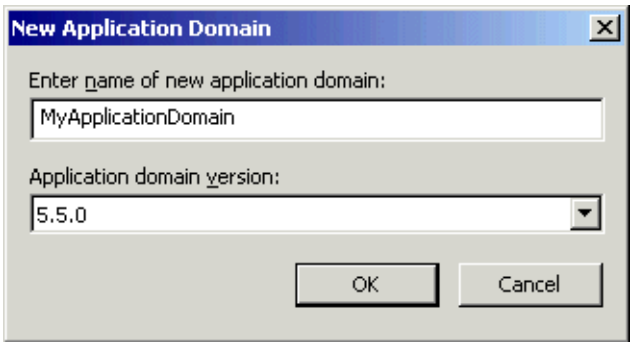


Figure 17 The New Application Domain dialog box

The settings are described in the table below.

Setting	Description
Enter name of new application domain	The name of the application domain. The application domain name must: • Only include ASCII characters (`a-z`, `A-Z`, `0-9`). • Not include any white spaces.
Application domain version	The version of the application domain. For example: 5.5.0

New Application Domain dialog box (Selecting type)

The New Application Domain dialog box is used to specify how you want to configure the new application domain.

From the New Application Domain dialog box, the *Application Domain Editor* opens, enabling you to edit the new application domain.

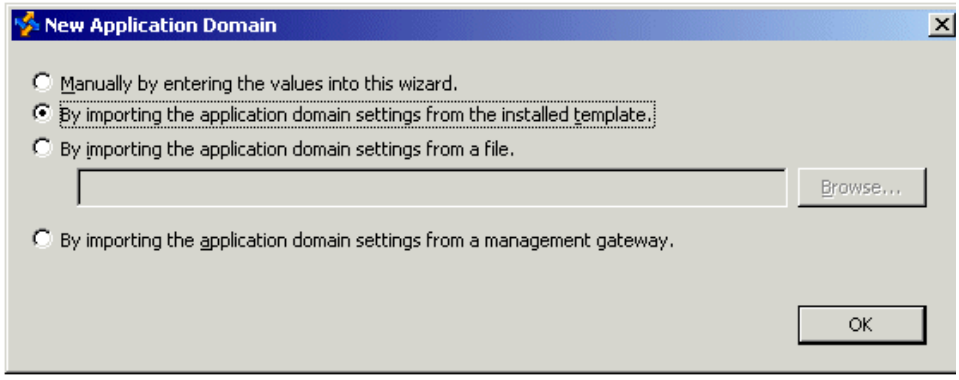


Figure 18 The New Application Domain dialog box

The settings are described in the table below.

Setting	Description
Manually by entering values into this wizard	Select to specify an application domain configuration manually using the *Application Domain Editor*.
By importing the application domain settings from the installed template	Imports an application domain configuration from the application domain template provided in the installation. The template includes preconfigured connection settings for a runtime repository in SQL Server and to the OpenDS directory server. You can make changes to the imported configuration using the *Application Domain Editor*.
By importing the application domain settings from a file	Imports an application domain configuration from a file. The passwords to access the repositories are not imported. You can make changes to the imported configuration using the *Application Domain Editor*.
By importing the application domain settings from a management gateway	Imports an application domain from a management gateway via the *Import from Gateway dialog box*. The user names and passwords to access the repositories are not imported. You can make changes to the imported configuration using the *Application Domain Editor*.

Application Domain Editor

The Application Domain Editor is used to configure the administrator, repositories, connection settings, and recovery actions for an application domain.

In this section

Administrator tab

The Administrator tab is used for specifying the application domain administrator.

The application domain administrator is automatically assigned the System Manager role in StreamStudio. The administrator can always be used for StreamStudio log on, regardless of user directory vendor or even without a user directory.

The first time you log on to StreamStudio, you must log on as the application domain administrator.

Do not use an existing user from the user directory as application domain administrator, since this may cause conflicts when logging on to StreamStudio

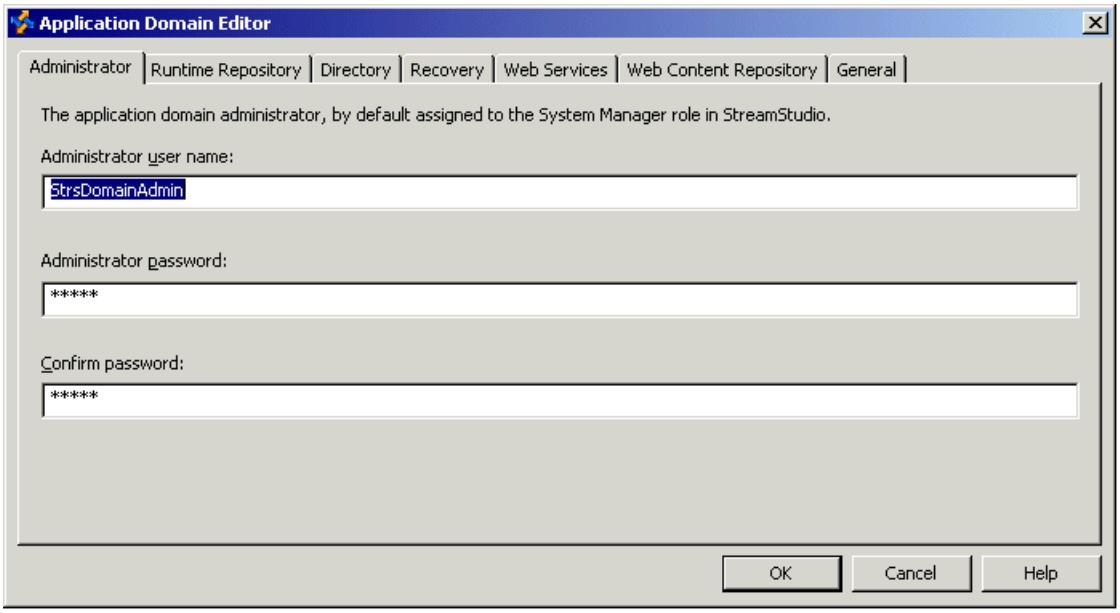


Figure 19 The Application Domain Editor, Administrator tab

The settings are described in the table below.

Setting	Description
Administrator user name	The user name for the application domain administrator.
Administrator password	The password for the application domain administrator.
Confirm password	A confirmation of the password for the administrator.

Runtime Repository tab

The Runtime Repository tab is used for specifying the connection settings for the runtime repository, which includes the Queue, Security, and Web Access repositories.

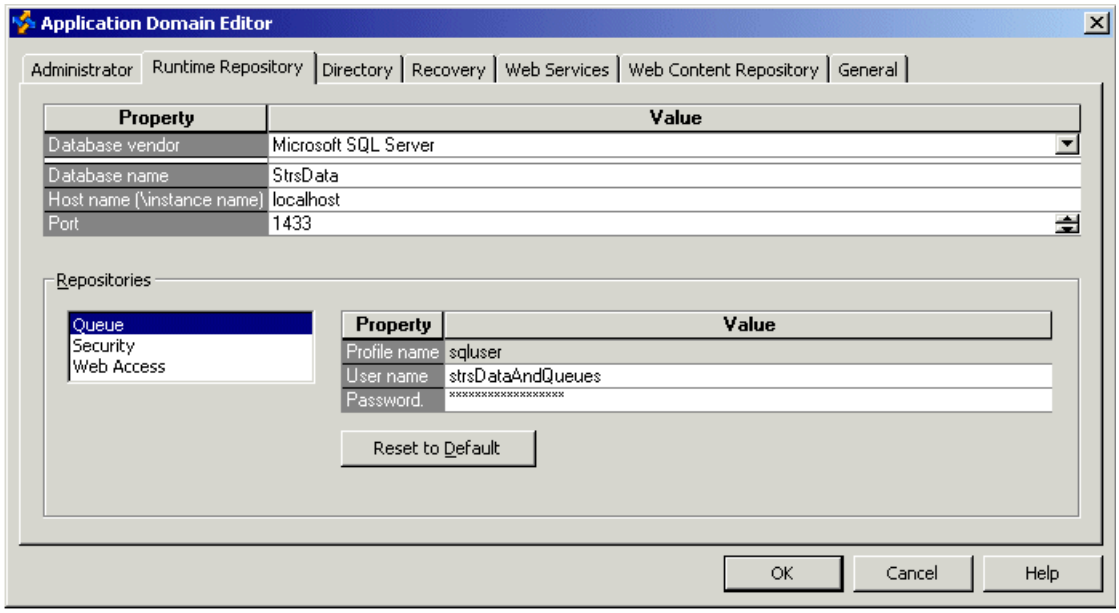


Figure 20 The Application Domain Editor, Runtime Repository tab

The settings are described in the table below.

Setting	Description
Database vendor	The database vendor to use for the runtime repository, which includes the Queue, Security, and Web Access repositories.
Database name	*Applicable for Microsoft SQL Server.* A name for the runtime repository. The name you specify should comply with the naming standards in your database server. Contact your database administrator for more information.
Schema owner	*Applicable for Oracle.* The schema owner of the tables, functions, users, etc. for the Queue, Security, and Web Access repositories. The schema owner should be unique for each application domain.
Host name (\instance name)	The IP address or host name of the database server. If you use a named instance of SQL Server, you must specify the hostname and instance name of the database using the syntax `<hostname>\<instance name>`. For example: `gbg5000\instance1`

Setting	Description
Port	The port used for communication with the database server. Contact your database administrator to find the port for your database server. • The default port for Microsoft SQL Server is 1433. • The default port for Oracle Database is 1521.
Service name (SID)	*Applicable for Oracle.* The name of the runtime repository.

Repositories

In the repositories area, the connection profiles for each of the Queue, Security, and Web Access repositories are displayed.

The users are created in the runtime repository when you create the repository. The users are assigned the permissions required for applications in the application domain to read and update data in the Queue, Security, and Web Access repositories.

Setting	Description
Profile name	A name for the user profile.
User name	The user name to access the repository. The user name should comply with the naming standards in your database server. Contact your database administrator for more information. The user is automatically created when the runtime repository is created. **Note:** You cannot use the system administrator as user name (for example, `sa` for SQL Server). • If you use the same Oracle database server for more than one application domain, you must configure unique user names in each application domain. • If you use the same Microsoft SQL Server instance for more than one application domain, where possible you should configure unique user names in each application domain. If you use the same user name in more than one application domain, you must also use the same password in each application domain.

Setting	Description
Password	The password to access the repository. The password should comply with the naming standards in your database server. Contact your database administrator for more information.
Reset to Default	Resets the settings for the selected repository to the default values.

Directory tab

The Directory tab is used for specifying the connection settings to access the internal and external user directories.

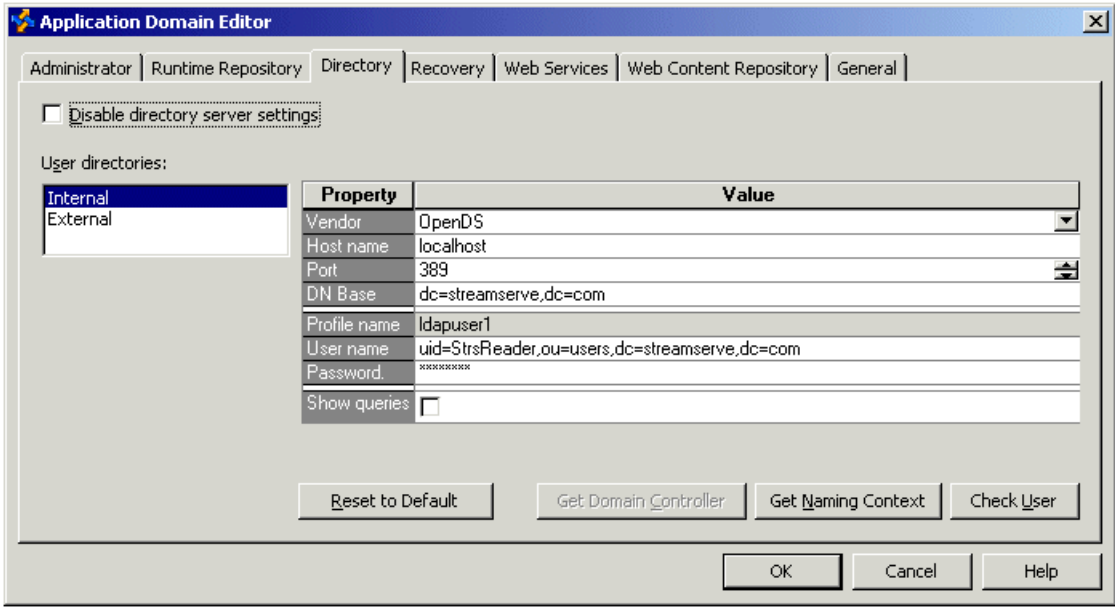


Figure 21 The Application Domain Editor, Directory tab

The settings are described in the table below.

Setting	Description
Disable directory server settings	Select if you run without user directories in your application domain.
Reset to Default	Resets the connection settings for the selected user directory to the default values.

Setting	Description
Get Domain Controller	*Applicable for Microsoft Active Directory.* Tries to translate the **Host name** setting (see below) into the format *<Host>@<Domain>*. First by using the Host name setting as host name and trying to resolve the domain. Then by using the Host name setting as a domain name and trying to resolve the host. If both fails, you must manually specify the Host name setting.
Default Naming Context	Gets the default naming context (the **DN Base** setting below) from the directory server specified in the **Host name** setting. To be able to use this option, a valid **User name** and **Password** (see below) must be specified.
Check User	Authenticates the user in the **User name** and **Password** settings against the user directory. For Active Directory, you can choose to translate the alias of an authenticated user into a qualified distinguished name.

User directories

In the User directories area, the connection options for the internal and external user directories are displayed. To configure the connection settings for the internal and external user directories, you need the login details for a user with read access to the LDAP server.

Setting	Description
Vendor	The vendor of the LDAP server.
Host name	The IP address or host name of the LDAP server. The following formats are compatible on all platforms: • *<Host>* • *<Host>@<Domain>* (only Active Directory) For Active Directory, you can enter *<Host>* or *<Domain>* and then translate the name into the *<Host>@<Domain>* format by clicking **Get Domain Controller**.
Port	The port used for communication with the LDAP server.

Setting	Description
DN Base	The distinguished name base. For example: `dc=itdept,dc=telco,dc=com` The LDAP queries will run against the specified name base and all underlying branches. For performance reasons, it is recommended to set the DN Base as exact and narrow as possible. Click **Default Naming Context** to get the default naming context (the distinguished name base) from the directory server specified in the **Host name** setting. You can use this as a basis when specifying the DN Base setting. See also *Storing external and internal users in the same directory* on page 73.
Profile name	A name for the connection profile to the directory.
User name	The distinguished name of the authorized LDAP reader user. This user must exist in the user directory and have read access to the directory server. For example: `cn=reader,cn=users,dc=itdept,dc=telco,dc=com` For Active Directory, you can enter the alias of the user and then translate the alias into a qualified distinguished name by clicking **Check User** and then answer **Yes**.
Password	The password to access the LDAP server for the user specified in the **User name** setting.
Show queries	Select to show the queries below, to be executed against the directory server. **Verify user attributes** – An LDAP string with attributes for controlling the sender or receiver of a job. **Translate name attributes** – An LDAP string with attributes for translating an alias into a qualified distinguished name which is used to authenticate the user in the user directory. For syntax, see *LDAP attribute syntax* on page 72.

Recovery tab

The Recovery tab is used for specifying the recovery options for the runtime repository and the user directories.

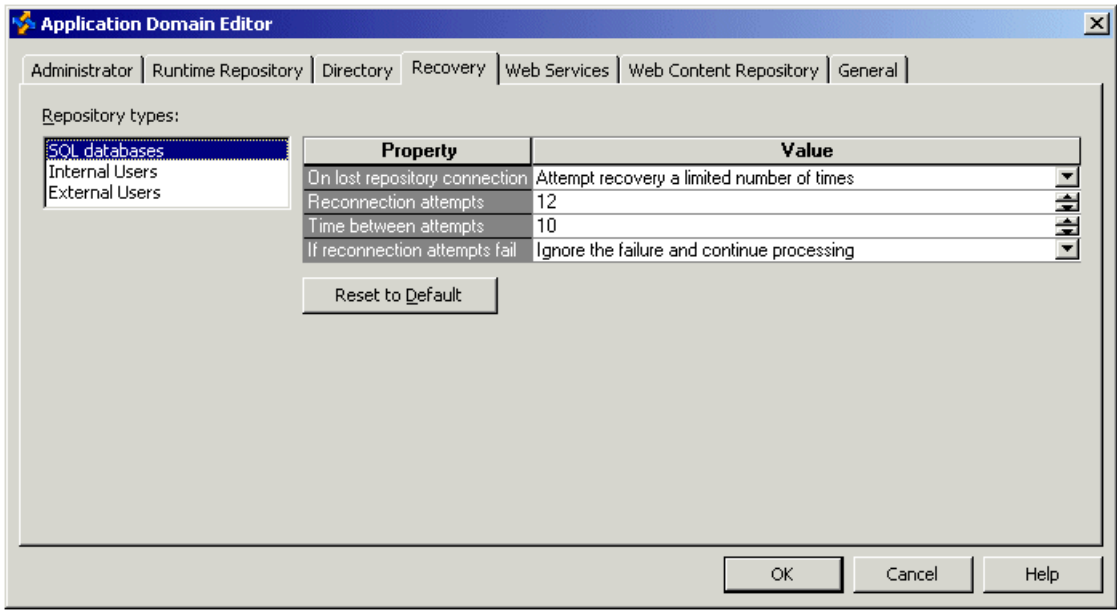


Figure 22 The Application Domain Editor, Recovery tab

The settings are described in the table below.

Setting	Description
On lost repository connection	Specifies how StreamServer should reconnect to the repository in case of a lost connection. **Do not attempt recovery** – StreamServer does not try to reconnect to the repository. **Attempt recovery an unlimited number of times** – StreamServer tries to reconnect to the repository until a connection has been successfully established. **Attempt recovery a limited number of times** – StreamServer tries to make <*x*> number of Reconnection attempts to the repository.
Reconnection attempts	The number of times StreamServer attempts to reconnect the repository.
Time between attempts	The time period between the reconnection attempts.

Setting	Description
If reconnection attempts fail	**Ignore the failure and continue processing** – StreamServer application continues to process the current job. **Stop processing on the affected StreamServer** – The current job is aborted and StreamServer is stopped.
Reset to Default	Resets the recovery options for the selected item to the default values.

Web Services tab

The Web Services tab is used for specifying the communication settings for the primary and secondary service gateways, and for enabling web service security.

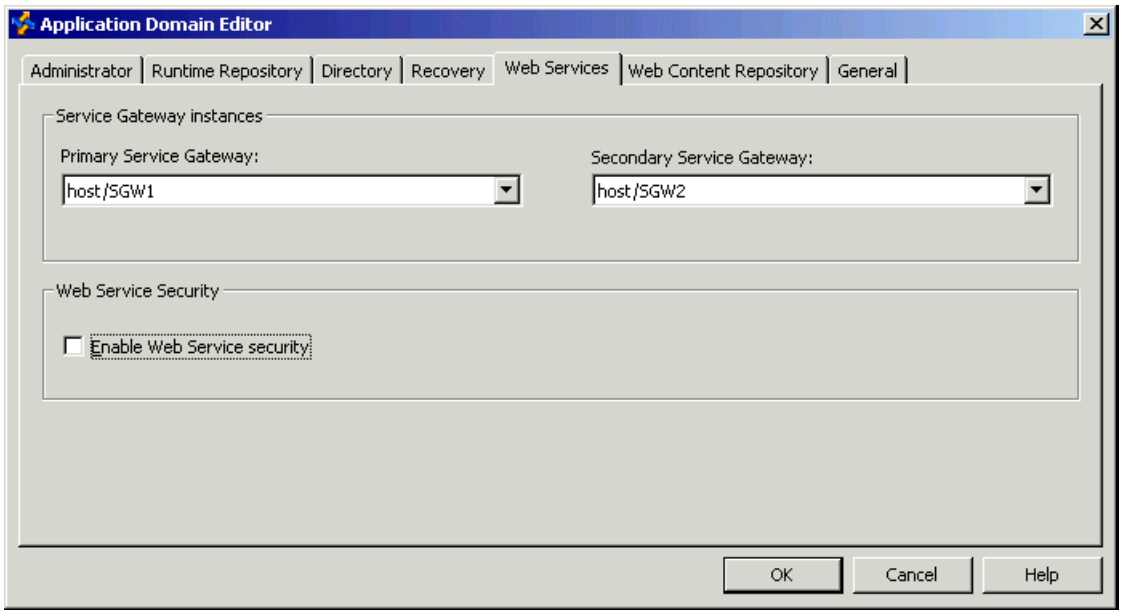


Figure 23 The Application Domain Editor, Web Services tab

The settings are described in the table below.

Setting	Description
Service Gateway instances	**Primary Service Gateway** – The primary service gateway, used to host the web services. **Secondary Service Gateway** – The secondary service gateway, used for failover and load balancing reasons.

Setting	Description
Web Service Security	**Enable Web Service security** – Enables web service security for all service gateways in the application domain. This is recommended for test and production environments. For more information, see *Enabling web service security* on page 75.

Web Content Repository tab

The Web Content Repository tab is used for specifying the database settings for the web content repository and the connection settings to access the repository.

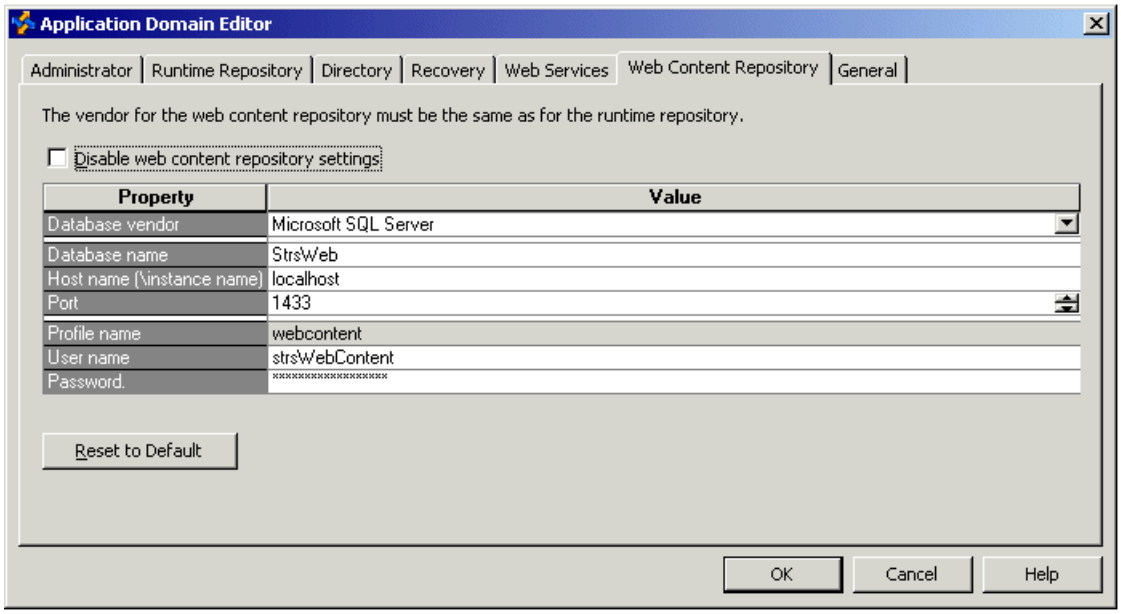


Figure 24 The Application Domain Editor, Web Content Repository tab

The settings are described in the table below.

Setting	Description
Disable web content repository settings	Select if you are not running StreamStudio Composition Center in the application domain.
Database vendor	The database vendor to use for the web content repository. You must use the same vendor as for the runtime repository.

Setting	Description
Database name	*Applicable for SQL Server.* A name for the database instance. The name you specify should comply with the naming standards in your database server. Contact your database administrator for more information.
Schema owner	*Applicable for Oracle databases.* The schema owner. The schema owner for the web content repository should be unique for each application domain.
Host name (\instance name)	The IP address or host name of the database server. If you use a named instance of Microsoft SQL Server, you must specify the hostname and instance name of the database using the syntax `<hostname>\<instance name>`. For example: `gbg5000\instance1`
Port	The port used for communication with the database server. Contact your database administrator to find the port for your database server. • The default port for Microsoft SQL Server is 1433. • The default port for Oracle is 1521.
Service name (SID)	*Applicable for Oracle databases.* The name of the web content repository.
Profile name	A name for the user profile.
User name	The user name to access the repository. The user name should comply with the naming standards in your database server. Contact your database administrator for more information. The user is automatically created when the web content repository is created. **Note:** You cannot use the system administrator as user name (for example, `sa` for SQL Server). If you use the same SQL Server instance for more than one application domain, where possible you should configure unique user names in each application domain. If you use the same user name in more than one application domain, you must also use the same password in each application domain.

Setting	Description
Database name	*Applicable for SQL Server.* A name for the database instance. The name you specify should comply with the naming standards in your database server. Contact your database administrator for more information.
Schema owner	*Applicable for Oracle databases.* The schema owner. The schema owner for the web content repository should be unique for each application domain.
Host name (\instance name)	The IP address or host name of the database server. If you use a named instance of Microsoft SQL Server, you must specify the hostname and instance name of the database using the syntax `<hostname>\<instance name>`. For example: `gbg5000\instance1`
Port	The port used for communication with the database server. Contact your database administrator to find the port for your database server. • The default port for Microsoft SQL Server is 1433. • The default port for Oracle is 1521.
Service name (SID)	*Applicable for Oracle databases.* The name of the web content repository.
Profile name	A name for the user profile.
User name	The user name to access the repository. The user name should comply with the naming standards in your database server. Contact your database administrator for more information. The user is automatically created when the web content repository is created. **Note:** You cannot use the system administrator as user name (for example, `sa` for SQL Server). If you use the same SQL Server instance for more than one application domain, where possible you should configure unique user names in each application domain. If you use the same user name in more than one application domain, you must also use the same password in each application domain.

Setting	Description
Password	The password to access the repository. The password should comply with the naming standards in your database server. Contact your database administrator for more information.

General tab

The General tab is used for updating the description and contact person for the application domain.

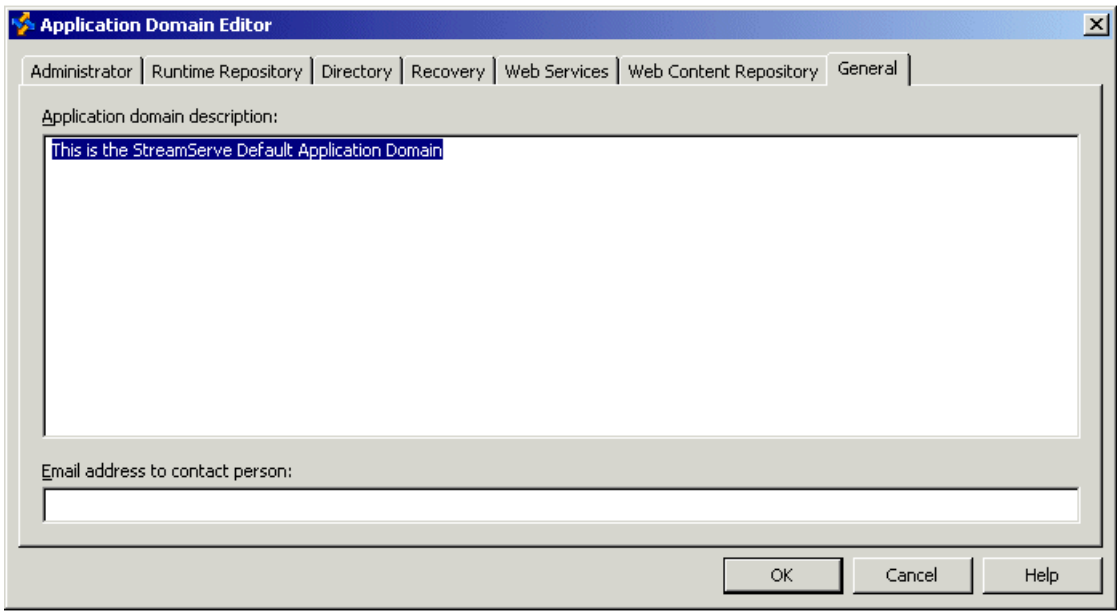


Figure 25 The Application Domain Editor, General tab

The settings are described in the table below.

Setting	Description
Application domain description	The description of the application domain.
Email address to contact person	The email address for the person responsible for the application domain. If the surveillance functionality is used, surveillance emails will be sent to this address.

Import from Gateway dialog box

The Import from Gateway dialog box is used to import an application domain configuration file from a management gateway.

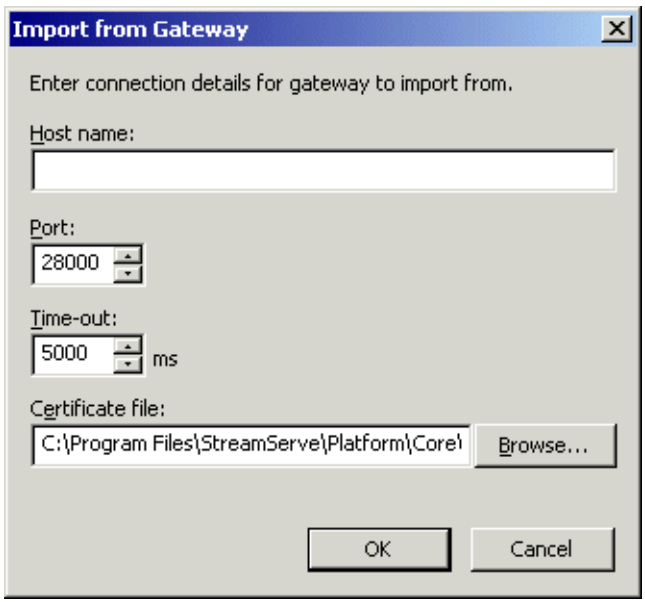


Figure 26 The Import from Gateway dialog box

The settings are described in the table below.

Setting	Description
Host name	The hostname or IP address of the computer with the management gateway.
Port	The port used for communication with the management gateway.
Time-out	The time Control Center waits for a response from the management gateway. This is specified in milliseconds.
Certificate file	The path to the root certificate on the local computer. This must be a valid root certificate for the server certificate on the management gateway you are connecting to.

New Application dialog box

The New Application dialog box is used to add a new StreamServer application, Archiver application, service gateway, or Task Scheduler application.

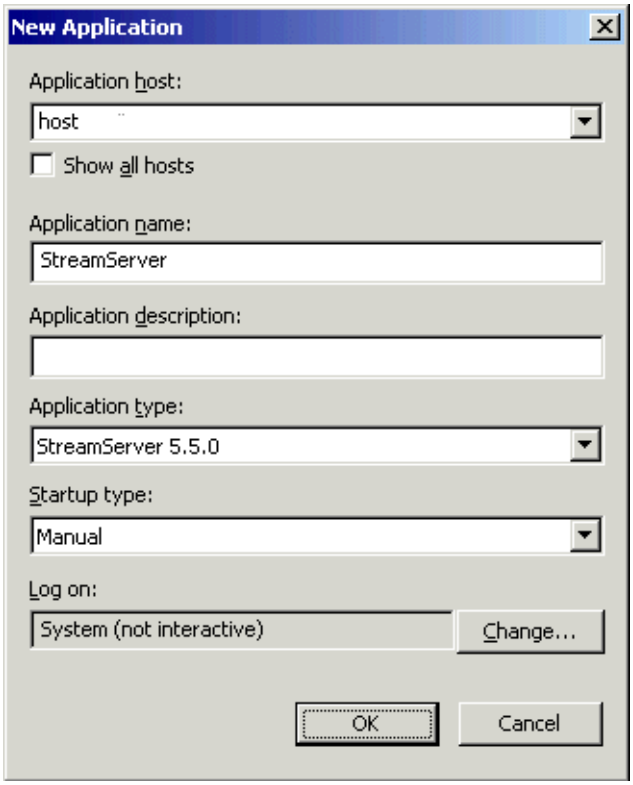


Figure 27 The New Application dialog box

The settings are described in the table below.

Setting	Description
Application host	The computer used to run the application. Select **Show all hosts** to display all the hosts that are part of the site.
Application name	A name for the application.
Application description	A description of the application.
Application type	The type and version of the application (Archiver, Service Gateway, StreamServer, or Task Scheduler).

Setting	Description
Startup type	Specifies how the application is started. **Automatic** – Starts the application automatically when the system (host for the corresponding application) starts. The application must be started *after* the database server is started. **Note:** If the system is set up to start the application *before* the database server is started, you must use the Control Center surveillance functionality to restart the application. For more information, see *Monitoring applications* on page 111. **Manual** – Starts the application manually. **Disabled** – Disables the application.
Log on	The account used to run the application. See *Edit Log On dialog box* on page 189.

Edit Log On dialog box

The Edit Log On dialog box is used to specify the account that is used to run the application.

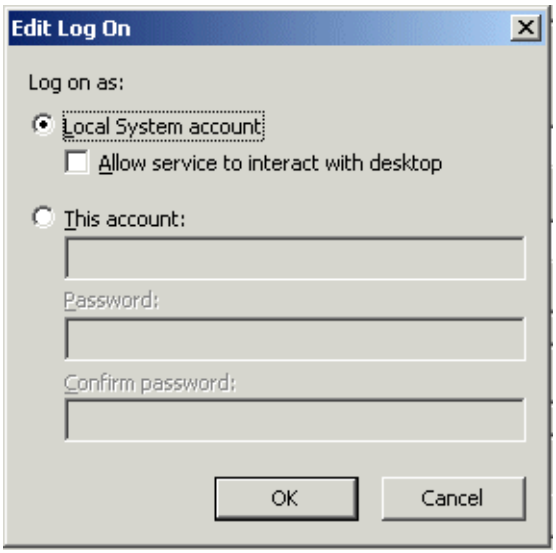


Figure 28 The Edit Log On dialog box

The settings are described in the table below.

Setting	Description
Log on as: Local System account	Runs the application under the local system account.
Log on as: This account	Specifies the user name and password for another account, and runs the application under that account. You must use this option to run applications on UNIX hosts. You must enter a user name and password. The application is run as a management gateway user. **Note:** You must enter `.\` in front of the user name. For example: `.\my_account`

Configuration dialog box (Archiver application)

The Configuration dialog box is used to configure an Archiver application. For example, schedule the document archiving in the StreamServe archive and to set the application log level for the Archiver.

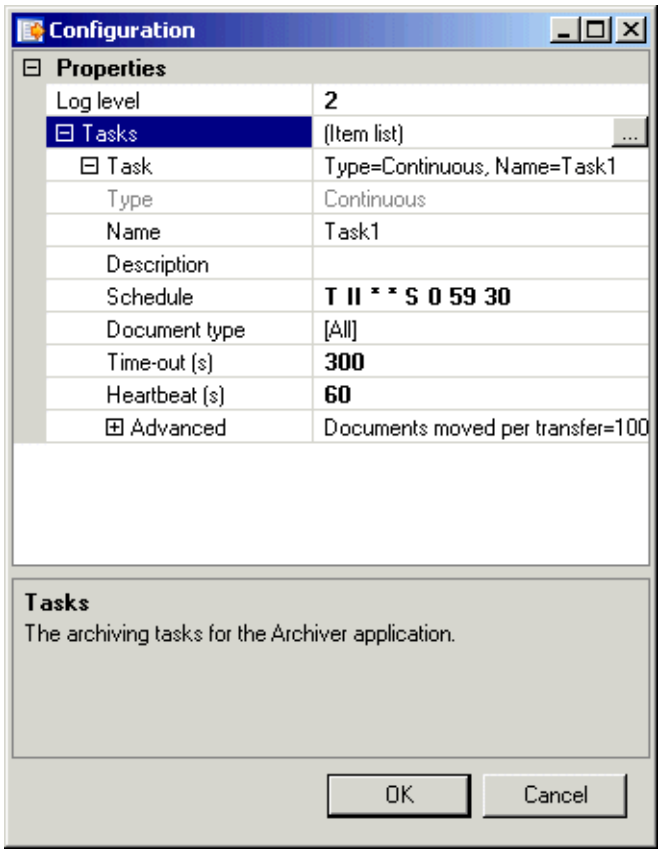


Figure 29 The Configuration dialog box for the Archiver application

The settings are described in the table below.

Setting	Description
Log level	The application log level for the Archiver.

Setting	Description
Tasks	The tasks for the Archiver application. For example, an archiving task defining how and when documents and metadata are archived in the StreamServe archive. You set up the tasks in the *Service Configuration dialog box (Archiver application)*. You reach the Service Configuration dialog box by selecting the **(Item list)** field and clicking the button to the right of the field. Once a task is set up, you can edit the task directly in the Configuration dialog box.

Service Configuration dialog box (Archiver application)

In the Service Configuration dialog box, you set up the tasks for an Archiver application. For more information about the options in this dialog box, see *Adding an Archiver application* on page 91.

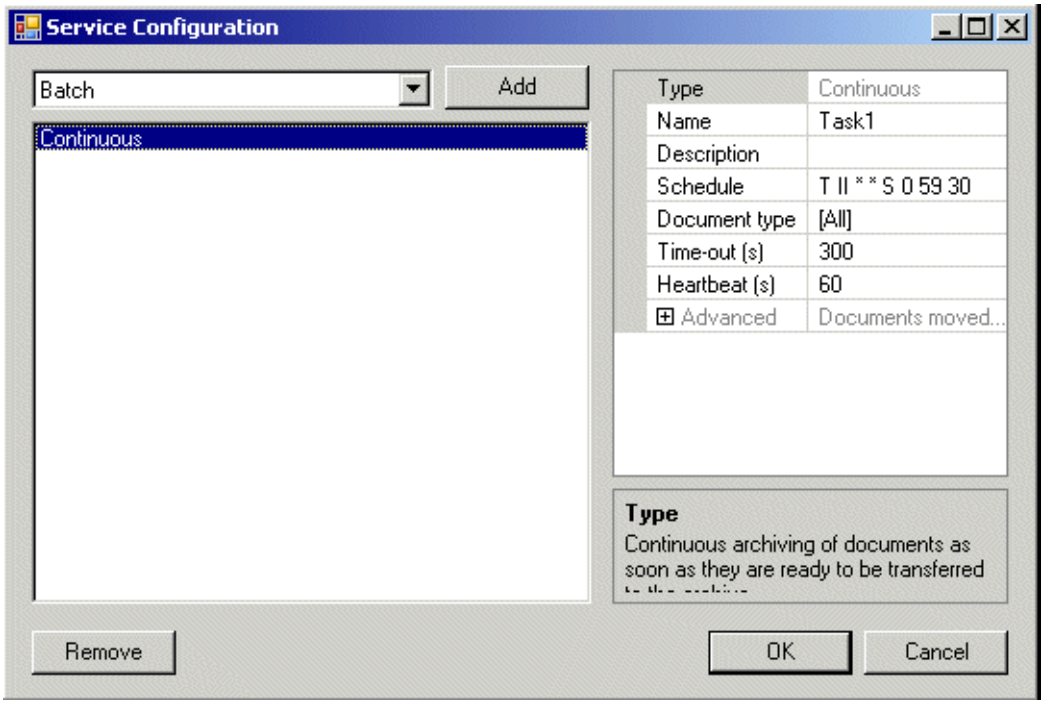


Figure 30 The Service Configuration dialog box

The settings are described in the table below.

Setting	Description
Continuous	Select to create a task for continuously archiving documents and metadata. When the Archiver application polls the output queue and finds documents ready for archiving, the documents are immediately archived.
Batch	Select to create a task for archiving batches of documents and metadata. When the Archiver application polls the output queue and finds documents ready for archiving and the number of documents exceeds the **Task trigger (documents)**, the documents are archived.
Archive time-stamping	Select to create a task for archive time-stamping. For information about the option and the corresponding settings, see the *E-Invoice Center* documentation.
Migration	Select to create a migration task. For information about the option and the corresponding settings, see the *Upgrading Instructions*.
Add	Click to add a new task.
Remove	Click to remove the selected task.

For each added task, the settings below are available.

Setting	Description
Type	The type of archiving task (**Continuous**, **Batch** or **Archive time-stamping** or **Migration**).
Name	A name for the task.
Description	A description of the archiving task.
Schedule	The polling interval at which the Archiver application polls the output queue for documents and metadata ready to be archived. You set up the polling interval in the *Scheduler Configuration dialog box*. You reach the Scheduler Configuration dialog box by selecting the field and clicking the button to the right of the field.
Document type	Select the document type(s) to be archived within the task.

Setting	Description
Time-out (s)	The time after which documents held by an Archiver application are unlocked if the Archiver application has not updated its heartbeat. The unlocked documents are then available to all Archiver applications within the application domain. For granularity reasons, it is not recommended to set the time-out to less than 60 seconds. **Note:** The time-out must be larger than the **Heartbeat**.
Heartbeat	The heartbeat at which the status and health of the Archiver application are monitored. For each heartbeat, the Archiver application updates the runtime repository with status information. For granularity reasons, it is not recommended to set the heartbeat to less than 10 seconds. **Note:** The heartbeat must be less than the **Time-out (s)**. **Note:** If you use one single Archiver application, and want to enhance performance by disabling the heartbeat, you can set the heartbeat to `0`. You must then set the **Time-out (s)** to `0`.
Advanced	Advanced settings for the archiving task. **Documents moved per transfer** – The maximum number of documents that the Archiver application locks and transfers in each archiving operation within the schedule.
Task trigger (documents)	*Applicable for Batch tasks.* The minimum number of documents that must exist in the output queue before the archiving task is triggered.

Configuration dialog box (Task Scheduler)

The Configuration dialog box is used to configure system command tasks and log level for a Task Scheduler application. The Task Scheduler application can perform one or several tasks at the scheduled intervals. For example:

- A task that triggers maintenance of the runtime repository each night at 1:00 a.m.
- A task that deletes expired StreamServe jobs from the runtime repository every 60 minutes.

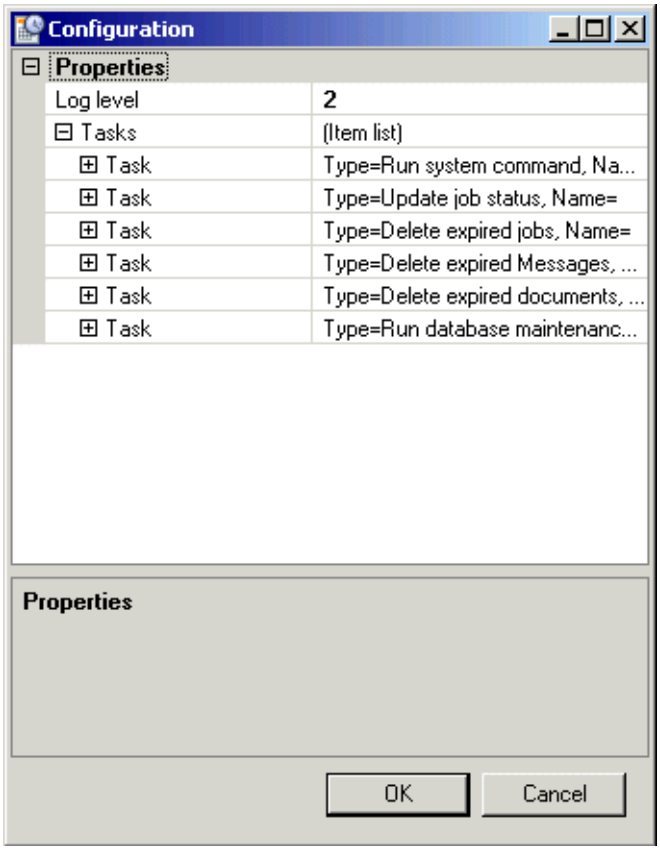


Figure 31 The Configuration dialog box for the Task Scheduler application

The settings are described in the table below.

Setting	Description
Log level	The application log level.

Setting	Description
Tasks	The tasks for the application. You set up the tasks in the *Service Configuration dialog box (Task Scheduler)*. You reach the Service Configuration dialog box by selecting the **(Item list)** field and clicking the button to the right of the field. Once a task is set up, you can edit the task directly in the Configuration dialog box.

Service Configuration dialog box (Task Scheduler)

In the Service Configuration dialog box, you set up the tasks for a Task Scheduler application. You can add several tasks to the same application.

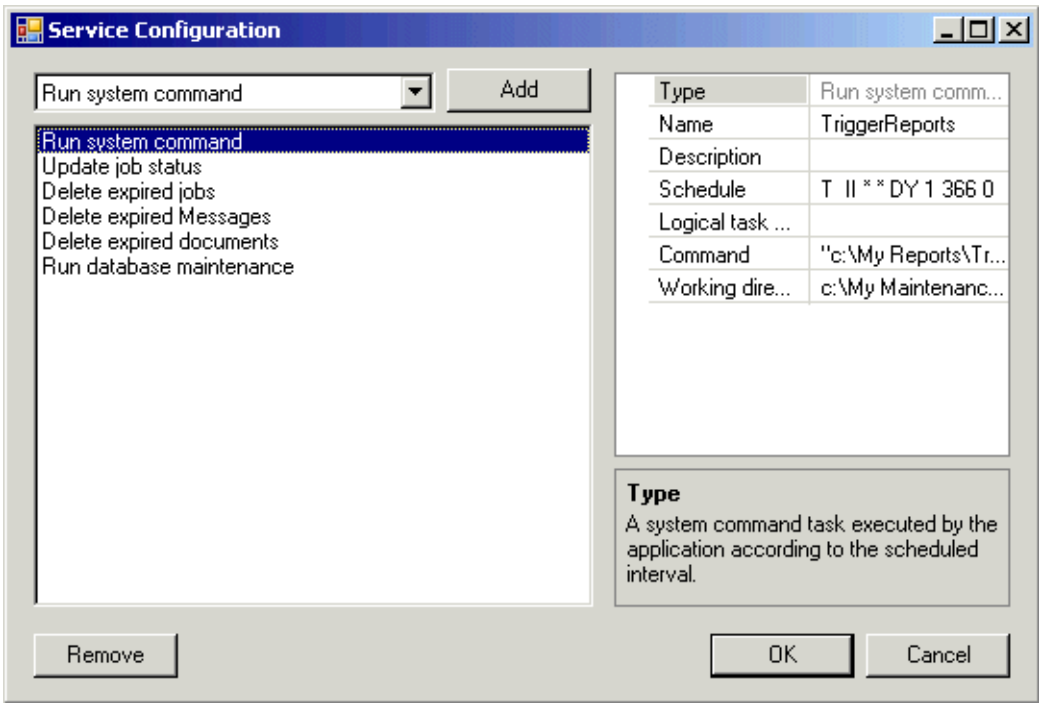


Figure 32 The Service Configuration dialog box

The settings are described in the table below.

Setting	Description
Run system command	Select to create a system command task to be executed according to the specified schedule.

Setting	Description
Update job status	Select to update and report the statuses of top jobs. For information about this task and the corresponding settings, see the *Database Guidelines*.
Delete expired jobs	Select to delete expired StreamServe jobs from the runtime repository according to the specified schedule. For information about this task and the corresponding settings, see the *Database Guidelines*.
Delete expired Messages	Select to delete expired Messages from Message storages in the runtime repository according to the specified schedule. For information about this task and the corresponding settings, see the *Database Guidelines*.
Delete expired documents	Select to delete expired documents from Post-processing storages in the runtime repository according to the specified schedule. For information about this task and the corresponding settings, see the *Database Guidelines*.
Run database maintenance	Select to perform database maintenance on a specified repository according to the specified schedule. For information about this task and the corresponding settings, see the *Database Guidelines*.
Add	Click to add a new task.
Remove	Click to remove the selected task.

For each added task, the settings below are available.

Setting	Description
Type	The type of task.
Name	A descriptive name for the scheduled task.
Description	A description of the scheduled task.
Schedule	The interval at which the application performs the scheduled task. You set up the interval in the *Scheduler Configuration dialog box*. You reach the Scheduler Configuration dialog box by selecting the field and clicking the button to the right of the field.

Setting	Description
Logical task name	*Applicable for Run system command tasks.* The logical name of the system command, to be used in the log file. This parameter is optional.
Command	*Applicable for Run system command tasks.* The system command, including parameters, to be executed by the application. The command must follow the syntax of the operating system where the application is run. For example, on Windows, use backslash (\) as a directory separator and quotes ("") for arguments containing spaces. For example, the following command runs a batch file that triggers reports according to the specified schedule: `"c:\My Reports\TriggerReport.bat –type ReportType –SortOrder Alpabethical"`

Working directory	*Applicable for Run system command tasks.*
	The name and path of the working directory for the system command task.
	For example, for the command above you can specify the following working directory for the reports:
	`c:\My Maintenance Reports`
	If you leave this option empty, the working directory for the application is used:
	`<Base directory>\<Version>\root\applications\<Task Scheduler name>\wd`
	Where:
	• `<Base directory>` – Is the path specified for StreamServe Projects during the Framework and Control Center installation. For example: `C:\ManagementGateway`
	• `<Task Scheduler name>` – Is the name of the Task Scheduler application.

Scheduler Configuration dialog box

The Scheduler Configuration dialog box is used to schedule the interval at which an application performs a task. For example, the interval at which an Archiver application polls the output queue for documents and metadata ready to be archived. Or the interval at which a Task Scheduler application performs a system command task.

You can set a single interval, or create more complex schedules.

If you specify a stop time (or end time), all ongoing tasks will continue until they are finished, even if the stop time is passed.

If a new task is scheduled to start before an on-going task has completed, the application first finalizes the ongoing task before the new task is started.

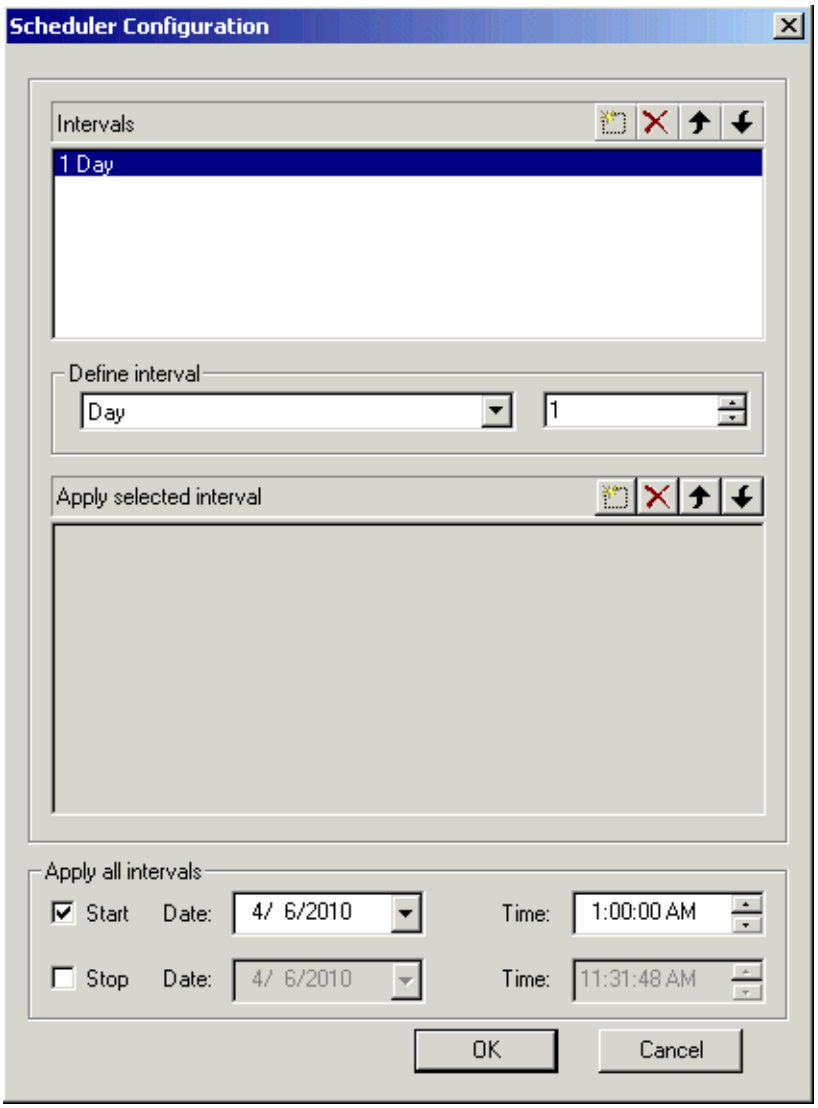


Figure 33 The Scheduler Configuration dialog box. The task is set up to run once a day, starting June 4, 2010.

The settings are described in the table below.

Setting	Description
Intervals	The scheduled interval for the action. **New** – Click to add an interval for the action. Edit the default interval in the Define interval area below. **Delete** – Click to delete a selected interval. **Move up** – Click to move up a selected interval. **Move down** – Click to move down a selected interval. **Define interval** – Select a time unit (Year, Month, etc.) and a frequency for the action. For example, by adding an interval and selecting **Seconds** and **30** in the Define interval area, you specify that the action should be triggered every thirty second.
Apply selected intervals	Optional. The time frame for the selected interval for the action. **New** – Click to add a time frame for the selected interval. **Delete** – Click to delete a selected time frame. **Move up** – Click to move up a selected time frame. **Move down** – Click to move down a selected time frame. Select a time unit (Year, Month, Week of Year, etc.), start value, and (optionally) stop value for the time frame. For example, by adding a time frame and selecting **Day of Week**, and specifying the start value **1** and stop value **3**, you specify that the selected interval should be applied Monday to Wednesday each week.
Apply all intervals	Optional. The main time frame for when to apply all intervals in the list. **Start** – Select to add a start date and time for all intervals. **Stop** – Select to add a stop date and time for all intervals. Add a start date and time and (optionally) stop date and time for all scheduled intervals within the configuration. For example, by selecting **Start** and specifying the current day and time and selecting **Stop** and specifying a day and time next year, you specify that all listed intervals should be ran from today until the specified stop date and time.

Deploy wizard

The Deploy wizard is used to select a Project export file, and deploy the export file to a StreamServer application.

In this section

Select the StreamServer application(s) to deploy the export file to

You can deploy the export file to an existing StreamServer application or create a new application.

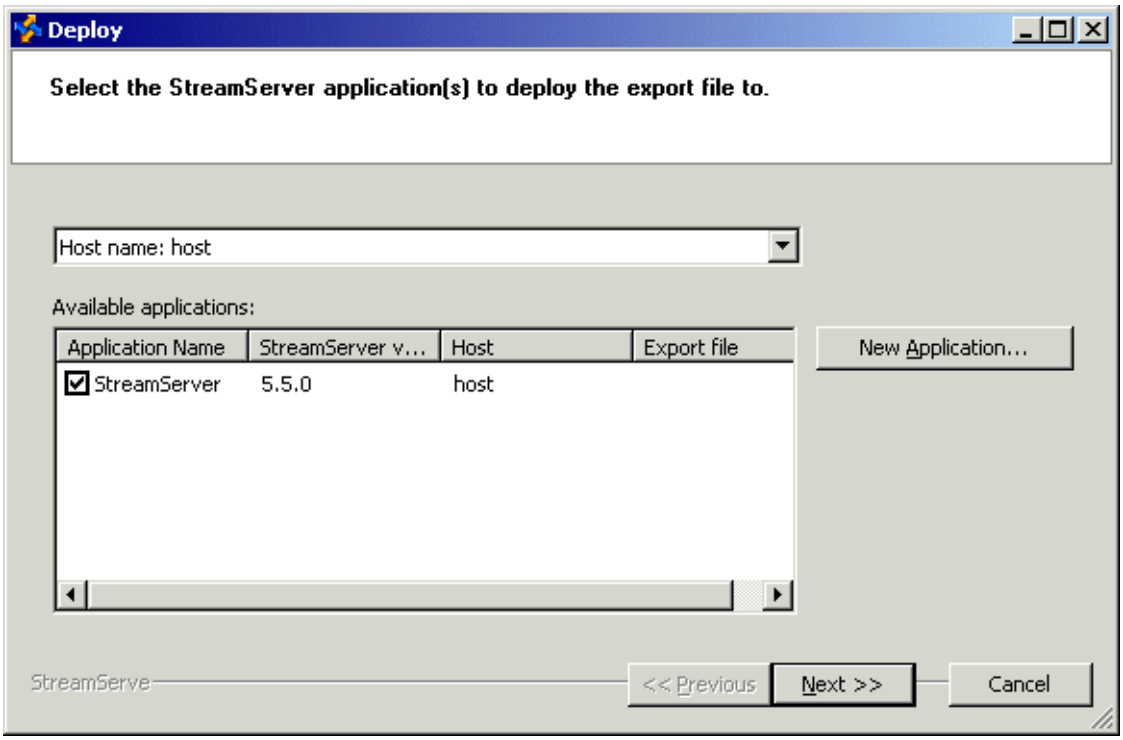


Figure 34 Select StreamServer application(s) to deploy

The settings are described in the table below.

Setting	Description
All Hosts	Displays the existing applications on all hosts at the site.

Setting	Description
Host name <*host name*>	Displays the existing applications on the selected host.
Available applications	Lists the existing applications at the site or for the host. **Application Name** – The name of the application. **StreamServer version** – The version of the application. **Host** – The host used to run the application. **Export file** – If there is already an export file deployed to the application, the name of the export file.
New Application	Opens the *New Application dialog box*, which is used to create a new application.

Where do you want to deploy the file from?

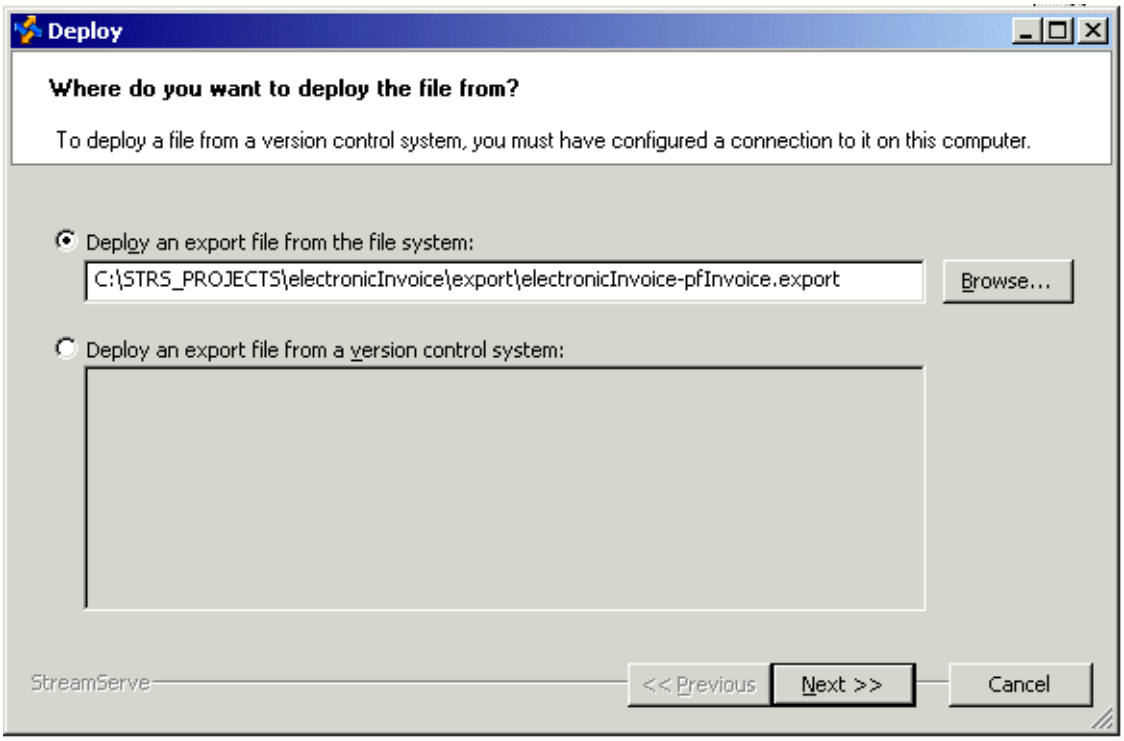


Figure 35 Where do you want to deploy the file from

The settings are described in the table below.

Setting	Description
Deploy an export file from the file system	Used to select an export file from the file system. Click **Browse** to select the file.
Deploy an export file from a version control system	Used to select an export file from a version control system. You must select the connection profile to connect to the version control system and enter the user name and password.

Select the physical layer to deploy

Select the physical layer of the Project to deploy.

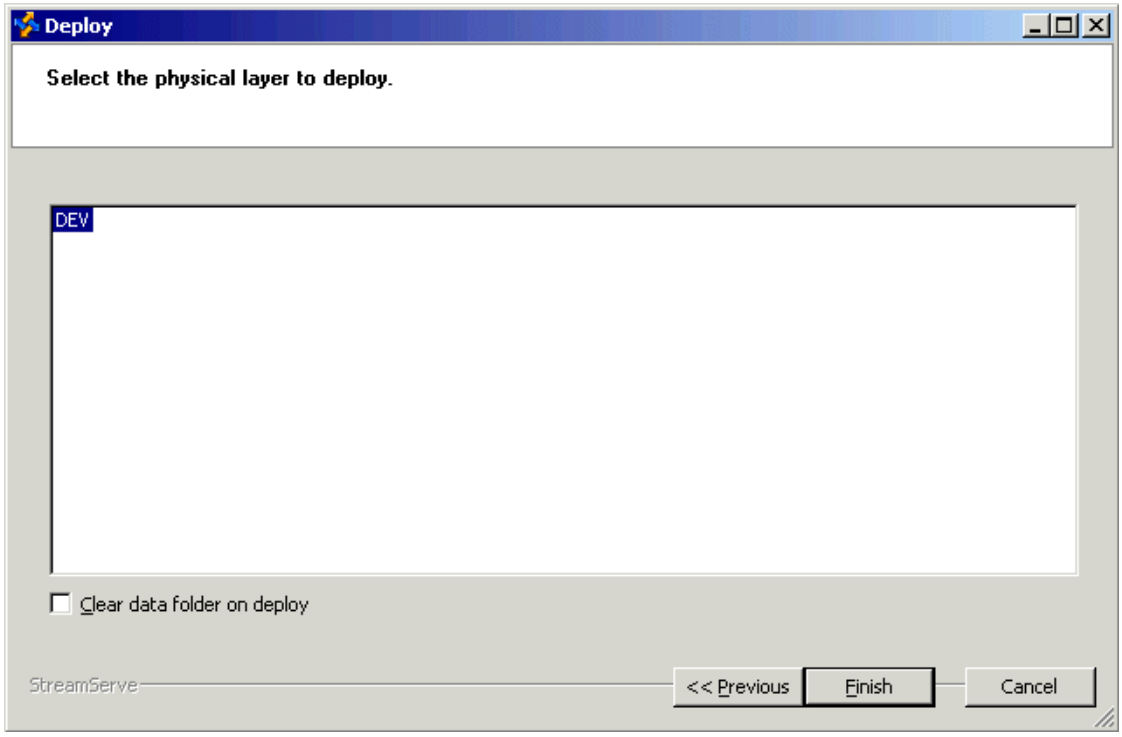


Figure 36 Select the physical layer to deploy

The setting is described in the table below.

Setting	Description
Clear data folder on deploy	Removes the following folder at deploy: `<Base directory>\<Version>\root\applications\<Application_Name>\data` Where: • `<Base directory>` – Is the path specified for StreamServe Projects during the Framework and Control Center installation. For example: `C:\ManagementGateway` • `<Application name>` – Is the name of the StreamServer application. Clear this option if you have stored non-Project related data in this folder.

Java Configuration dialog box

The Java Configuration dialog box is used to configure Java parameters for a StreamServe application (StreamServer application, Archiver application, or service gateway). For example, the target JRE (Java Runtime Environment) vendor and the Java class paths.

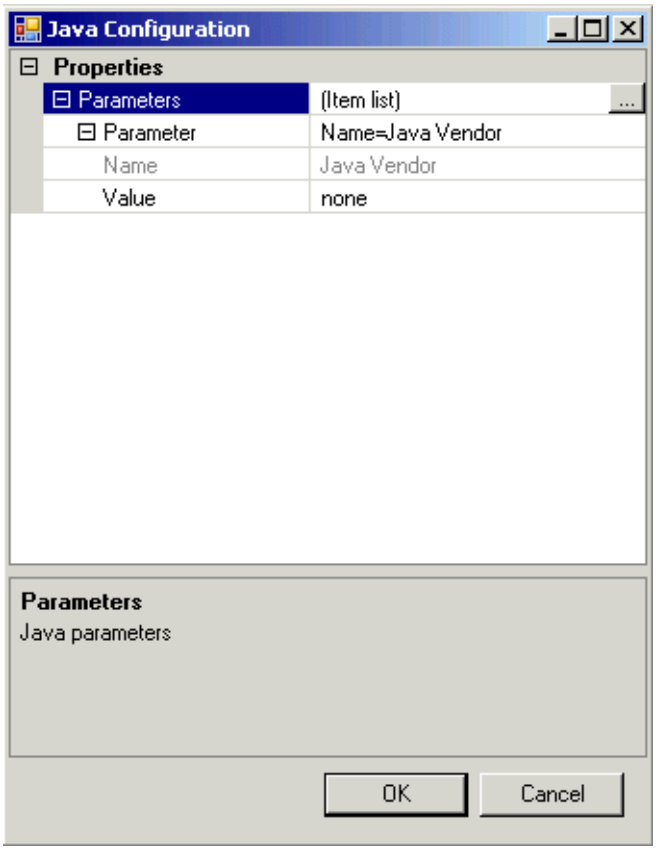


Figure 37 The Java Configuration dialog box

The settings are described in the table below.

Setting	Description
Parameters	The Java parameters for the application. For example, the target JRE (Java Runtime Environment) vendor and the Java class paths. You set up new parameters in the *Export Parameters dialog box* on page 206. You reach the Export Parameters dialog box by selecting the **(Item list)** field and clicking the button to the right of the field. Once a parameter is set up, you can edit the parameter directly in the Java Configuration dialog box.

Export Parameters dialog box

The Configure Platform Export Settings dialog box is used to add and configure Java parameters for a StreamServe application (StreamServer application, Archiver application, or service gateway). For example, the target JRE (Java Runtime Environment) vendor and the Java class paths.

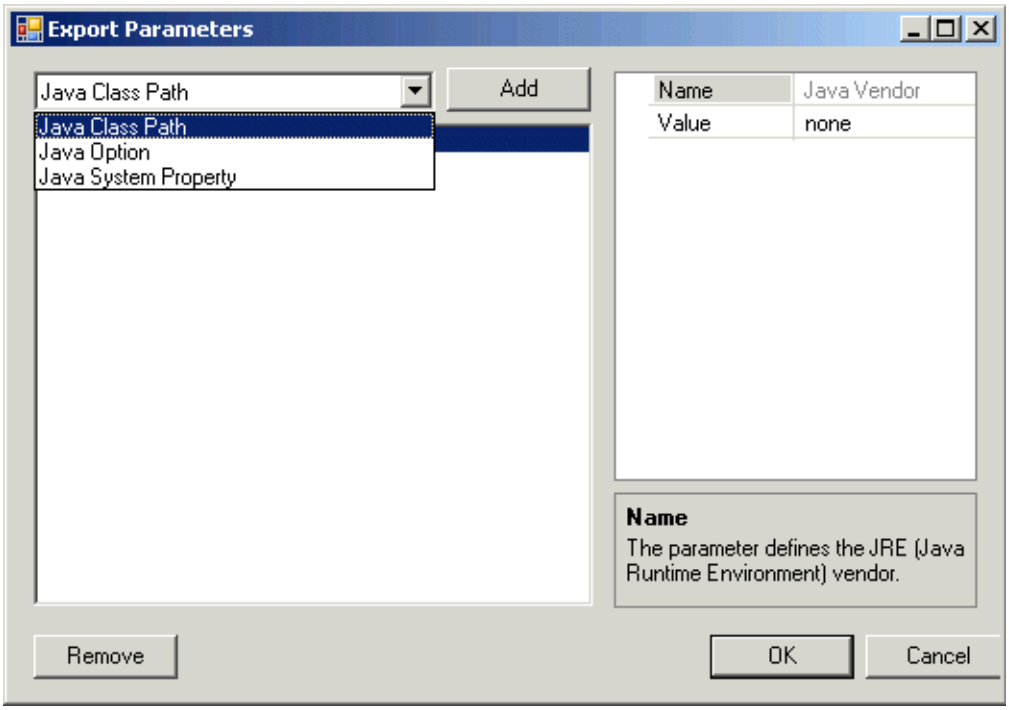


Figure 38 The Export Parameters dialog box

The settings are described in the table below.

Setting	Description
Java Vendor	The JRE (Java Runtime Environment) vendor. • **Name**: **Java Vendor** • **Value**: **none** (default), **Sun**, or **IBM** The option **none** means that the Java support is disabled. No JVM (Java Virtual Machine) will be loaded.

Setting	Description
Java Class Path	A semicolon separated list of directories, JAR (Java ARchive) files, and ZIP archives to search for class files. If all class files are located in one of the following directories, you do not have to specify the Java class path: • *<Working directory>*\java • *<Working directory>*\..\data\java (only for StreamServer applications) For example: • **Name**: **Java Class Path** • **Value**: c:\jndi.jar; c:\myjavaclasses
Java Option	A Java option. **Note:** Do not include "-" in the name. For example: • **Name**: verbose • **Value**: jni
Java System Property	A Java system property. **Note:** Do not include "D" in the name. For example: • **Name**: java.library.path • **Value**: c:\mylibs
Add	Click to add a new parameter.
Remove	Click to remove the selected parameter.

Host Surveillance dialog box

The Host Surveillance dialog box is used to define surveillance actions that can be taken for StreamServer applications, Archiver applications, or service gateways on the host.

If the preferred state of an application cannot be reestablished by the surveillance actions, an email can be sent to the application domain contact. The application domain contact is defined in the Application Domain Editor, on the General tab.

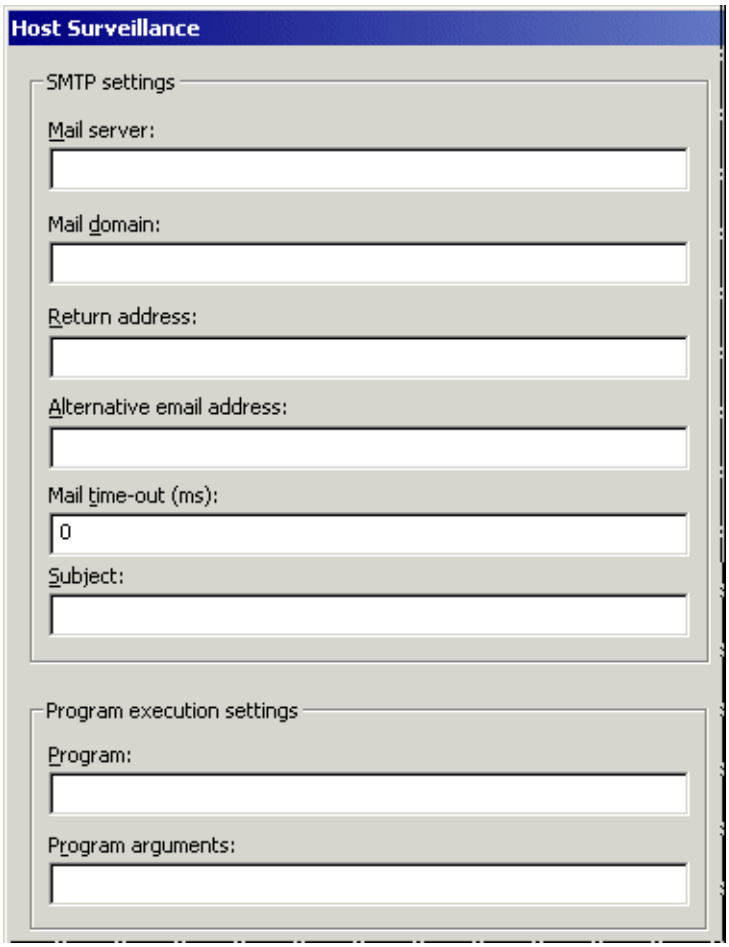


Figure 39 The Host Surveillance dialog box

The settings are described in the table below.

Setting	Description
Mail server	The IP address or host name of the mail server used to send surveillance emails.
Mail domain	The domain name for the mail server. For example: `streamserve.com`

Setting	Description
Return address	The return address for surveillance emails. This address is displayed in the sender field.
Alternative email address	The email address to use if no contact is specified for the application domain or if the email sent to the application domain contact fails.
Mail time-out (ms)	The time the management gateway waits for a response from the mail server. This is specified in milliseconds.
Subject	The text displayed in the Subject line of surveillance emails. You can use arguments in this field, see *Surveillance Arguments* on page 113. For example: The application `%a` is down.
Program	The path to a program used to attempt to restart the applications.
Program arguments	Arguments used by the program. See *Surveillance Arguments* on page 113.

Application Surveillance dialog box

The Application Surveillance dialog box is used to enable surveillance for a StreamServer application, Archiver application, or service gateway, and to select the surveillance actions can be taken for the application.

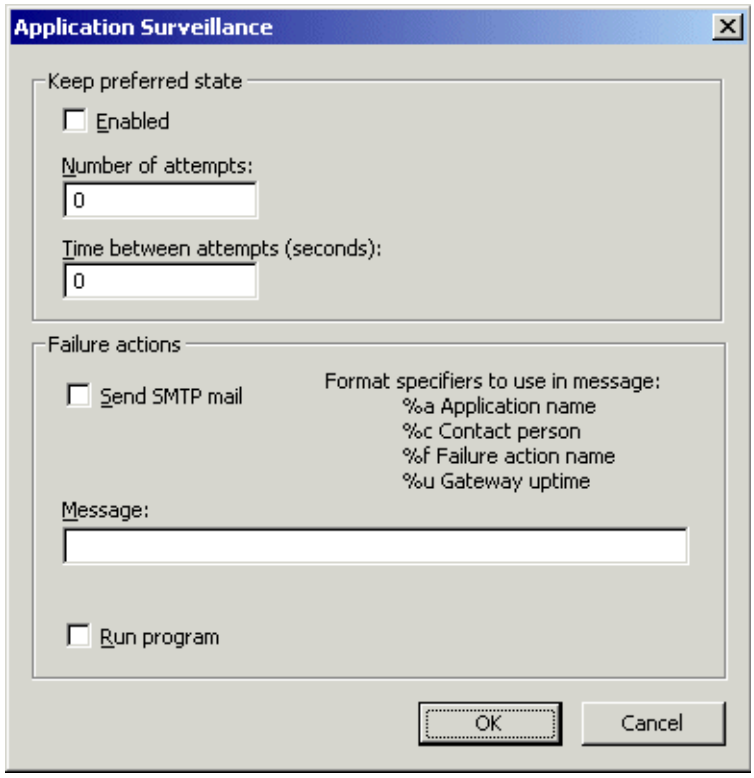


Figure 40 The Application Surveillance dialog box

The settings are described in the table below.

Setting	Description
Enabled	Switches on the surveillance functionality for the application.
Number of attempts	The number of attempts made to reestablish the preferred state of the application. For example, to restart the application if it goes down.
Time between attempts	The interval between the attempts. This is specified in seconds.
Send SMTP mail	Sends an email if the preferred state of the application cannot be reestablished. For example, if the application cannot be restarted. This email is sent using the options specified at host level. See *Host Surveillance dialog box* on page 208.

Setting	Description
Message	The information included in the body of the surveillance email. You can use arguments in this field, see *Surveillance Arguments* on page 113. For example: `The application %a is down.`
Run program	Executes an external program if the preferred state of the application cannot be reestablished. For example, if the application cannot be restarted. The path to the program and the startup options are specified at host level. See *Host Surveillance dialog box* on page 208.

Add StreamStudio Portal dialog box

The Add StreamStudio Portal dialog box is used to add a StreamStudio web portal to the StreamStudio Portals folder. The configured portal is then available to all application domains at the site.

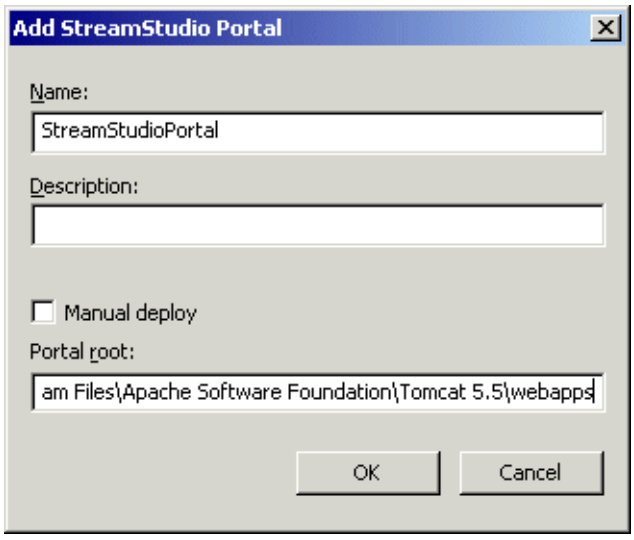


Figure 41 The Add StreamStudio Portal dialog box

The settings are described in the table below.

Setting	Description
Name	A name for the web portal. The web portal name must: • Only include ASCII characters (`a-z`, `A-Z`, `0-9`). • Not include any white spaces. • Be unique if you deploy several web portals to the same Java application server. • Not be the word `applications`.
Description	A description of the web portal.
Manual deploy	Select this option if you run in an isolated environment. **Destination folder** – The directory where the StreamStudio web archive file, *<Portal name>*`.war`, is stored. When the Control Center configuration is completed, you must manually copy the web archive file and the application domain configuration file for StreamStudio to the Java application server. See the *StreamStudio Administrator's Guide*.
Portal root	The directory on the Java application server to which you want to deploy the StreamStudio web archive file, *<Portal name>*`.war`. For example (for Apache Tomcat): *<TOMCAT_HOME>*`\webapps\` The management gateway copies the file to the specified directory from where the file can be unpacked. For information on how to unpack the file, see the user documentation for the Java application server. For Apache Tomcat, the file may be unpacked automatically if you restart the Apache Tomcat service.

Link StreamStudio Portal dialog box

The Link StreamStudio portal dialog box is used to link an application domain to a StreamStudio web portal. You can link the application domain to one web portal. One web portal can be shared by several application domains.

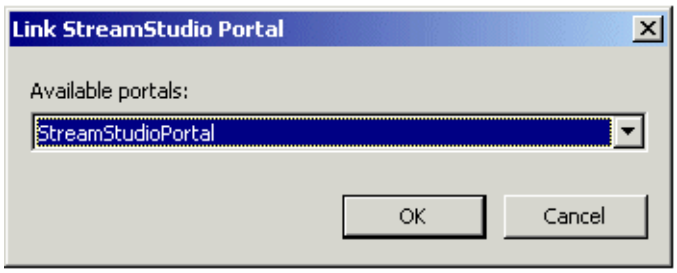


Figure 42 The Link StreamStudio Portal dialog box

The settings are described in the table below.

Setting	Description
Available portals	Lists the StreamStudio web portals available in the StreamStudio Portals folder. Select **New** to open the *Add StreamStudio Portal dialog box* and add a new StreamStudio web portal.

New Archive dialog box

The New Archive dialog box is used to add a new StreamServe archive to the Archives folder. The archive is then available to all application domains at the site.

Note: After adding and configuring the StreamServe archive, you must also create the archive.

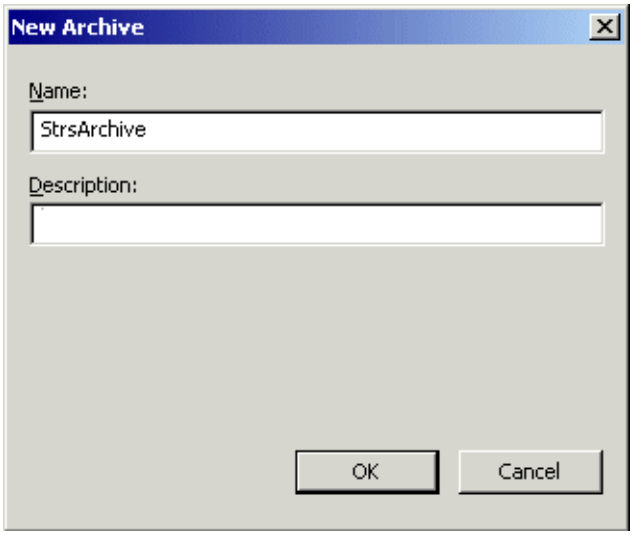


Figure 43 The New Archive dialog box

The settings are described in the table below.

Setting	Description
Name	A name for the StreamServe archive. The name of the StreamServe archive cannot include underscore characters ("_"). In the *Configuration dialog box (Archive)*, the name will be suggested as Database name (for SQL Server) or Service name (SID) for Oracle.
Description	A description of the StreamServe archive.

Configuration dialog box (Archive)

The Configuration dialog box is used to configure the database settings for the StreamServe archive and the connection settings to access the StreamServe archive. The settings are used when the StreamServe archive is created.

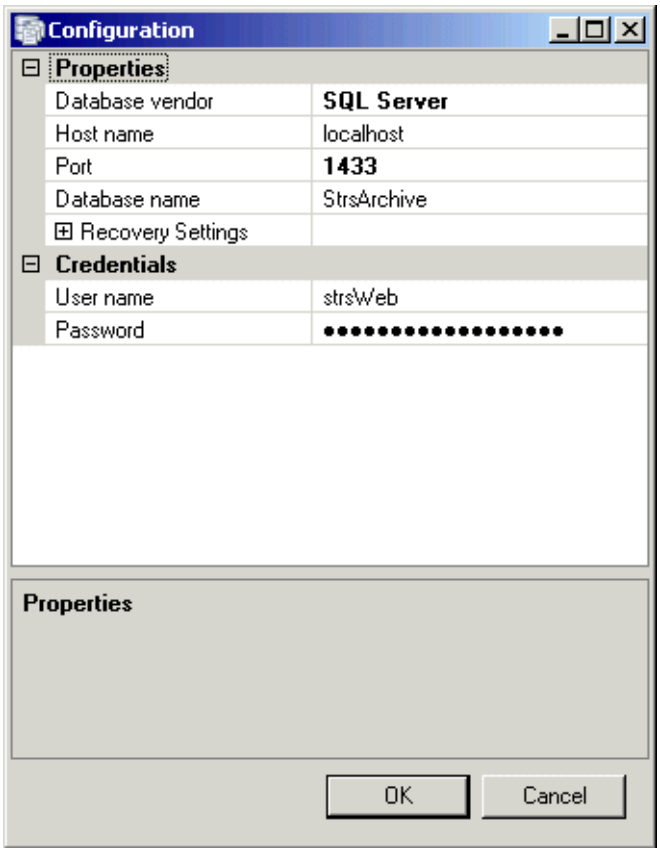


Figure 44 The Configuration dialog box for the StreamServe archive

The settings are described in the table below.

Setting	Description
Database vendor	The database vendor for the StreamServe archive. You must use the same vendor as for the runtime repository.
Host name	The IP address or host name of the database server. If you use a named instance of SQL Server, you must specify the host name and instance name using the syntax *<hostname>\<instancename>*. For example: `gbg5000\instance1`
Port	The port used for communication with the database server. Contact your database administrator to find the port for your database server. • The default port for Microsoft SQL Server is 1433. • The default port for Oracle database is 1521.
Database name	*Applicable for Microsoft SQL Server.* A name for the StreamServe archive. By default, the name you entered in the *New Archive dialog box* is suggested as Database name. The name should comply with the naming standards in your database server. Contact your database administrator for more information.
Service name (SID)	*Applicable for Oracle.* The name of the StreamServe archive. The name should comply with the naming standards in your database server. Contact your database administrator for more information.
Recovery Settings > On lost repository connection	Recovery options for the StreamServe archive. Specifies how the Archiver application should reconnect to the repository in case of a lost connection. **Attempt recovery a limited number of times** – The Archiver application tries to make <*x*> number of Reconnection attempts to the repository. **Attempt recovery an unlimited number of times** – The Archiver application tries to reconnect to the repository until a connection has been successfully established. **Do not attempt recovery** – The Archiver application does not try to reconnect to the repository.

Setting	Description
Recovery Settings > If reconnection attempts fail	Recovery options for the StreamServe archive. The action to take if the reconnection fails. **Stop processing on the affected Archiver** – The current job is aborted and the Archiver application is stopped. **Ignore the failure and continue processing** – The Archiver application continues to process the current job.
Recovery Settings > Reconnection attempts	Recovery options for the StreamServe archive. The number of times the Archiver application attempts to reconnect the repository.
Recovery Settings > Time between attempts	Recovery options for the StreamServe archive. The time period between the reconnection attempts.
User name	The user name to access the StreamServe archive. For Oracle, the user name setting is also used as schema owner. The user name should comply with the naming standards in your database server. Contact your database administrator for more information. The user is automatically created when the StreamServe archive is created. **Note:** You cannot use the system administrator as user name (for example, `sa` for SQL Server).
Password	The password to access the StreamServe archive. The password should comply with the naming standards in your database server. Contact your database administrator for more information.

Link Archive dialog box

The Link Archive dialog box is used to link an application domain to a StreamServe archive. You can link the application domain to one StreamServe archive. One StreamServe archive can be shared by several application domains.

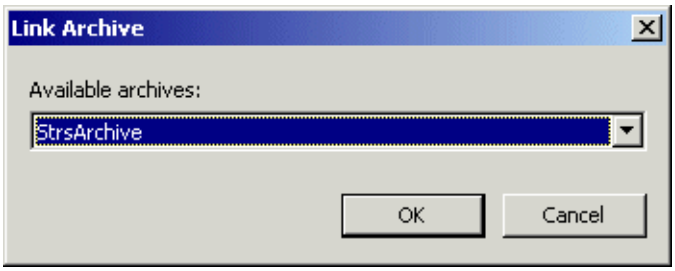


Figure 45 The Link Archive dialog box

The settings are described in the table below.

Setting	Description
Available archives	Lists the StreamServe archives available in the Archives folder. Select **New** to open the *New Archive dialog box* and add a new StreamServe archive.

Link Application Domains dialog box

The Connect Application Domains dialog box is used to link a StreamStudio web portal or a StreamServe archive to one or more application domains.

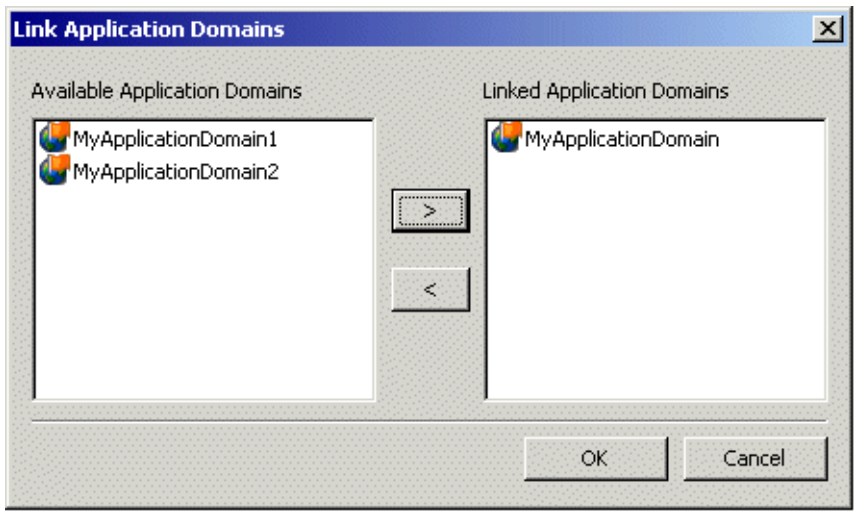


Figure 46 The Link Application Domains dialog box

The settings are described in the table below.

Setting	Description
Available Application Domains	A list of all available application domains at the site (that is, all applications domains on the local host and any remote hosts included in the site).
Linked Application Domains	A list of the application domains that the StreamStudio web portal or StreamServe archive is linked to.

Manage Document Types dialog box

The Manage Document Types dialog box is used to display:

- The document types available in the StreamServe Enterprise Repository.
- The application domain(s) associated each document type.
- The revision of each document type.

From this dialog, you can delete document types from the enterprise and the runtime repositories. You can also compare two document types in the enterprise repository.

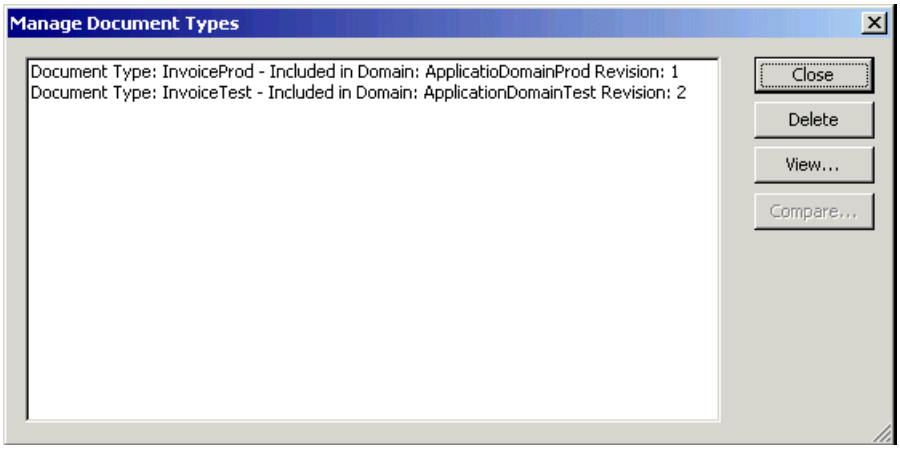


Figure 47 The Manage Document Types dialog box

The settings are described in the table below.

Setting	Description
Close	Closes the Document Types dialog box.
Delete	Deletes the selected document type from the enterprise and the runtime repositories.
View	Opens the Document Type Content dialog box, where the XML file for the selected document type is displayed.
Compare	Compares two selected document types in the enterprise repository. You can use this function before redeploying a Project to check which impact the redeployment will have. For example, you can compare a document type used in the development environment with the one used in the production environment.

Compare Document Types tool

The Compare Document Types tool is used to compare an updated document type with an existing document type, already deployed to the StreamServe Enterprise Repository.

The document types are configured in Design Center. Each document type is stored in a separate XML file. When you redeploy a Project in Control Center, the XML file for the updated document type is compared with the XML file for the existing document type. If there is a difference between the document types, the Compare Document Types tool opens. Both document types are displayed and any differences are marked with colors:

- **Green** – Information that differs between the document types. For example, an updated revision number.
- **Yellow** – New information in the updated document type. For example, new metadata.
- **Red** – Information deleted from the existing document type. For example, removed metadata.

Depending on type of difference, you may or may not be able to redeploy the Project and update the document type in the enterprise repository. For example, if a document type includes new metadata, you can redeploy the Project. If metadata is removed from a document type, you cannot redeploy the Project. However, if certain prerequisites are fulfilled (see *Changes that require database manipulation* in the *Document types and metadata* documentation), you can force such an update into the enterprise and the runtime repositories and thereby complete the redeploy operation.

If the Project includes several updated document types, one document type is displayed at a time. You toggle between the document types using the navigation buttons.

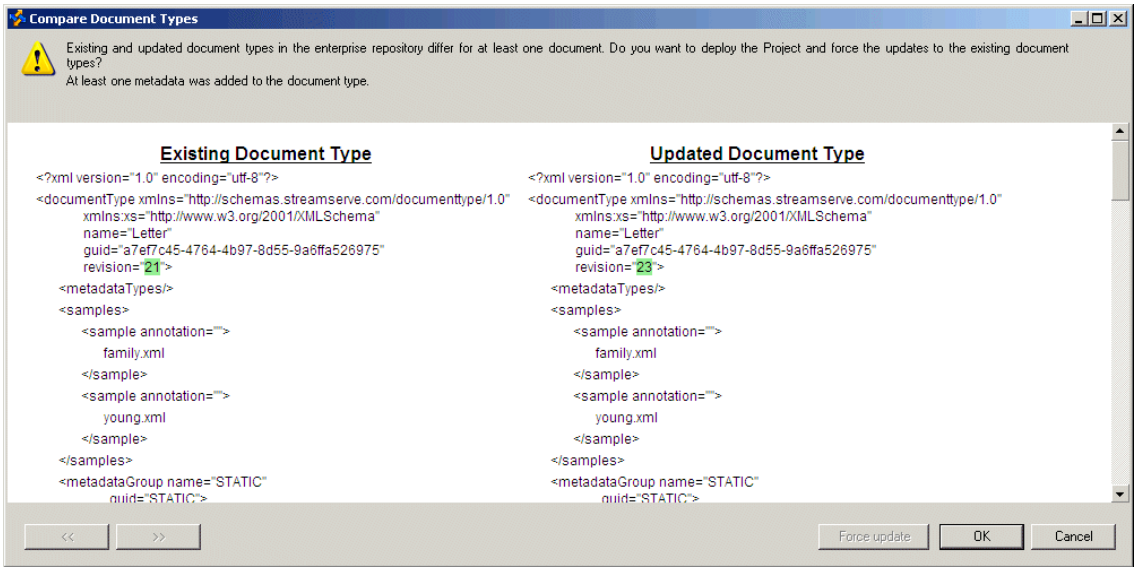


Figure 48 The Compare Document Types tool

Force Document Type Update dialog box

The Force Document Type Update dialog box is used to force a modified document type into the enterprise and runtime repositories at redeploy.

Note: Forcing a modified document type into the enterprise and runtime repositories does not affect the document type in the StreamServe archive.

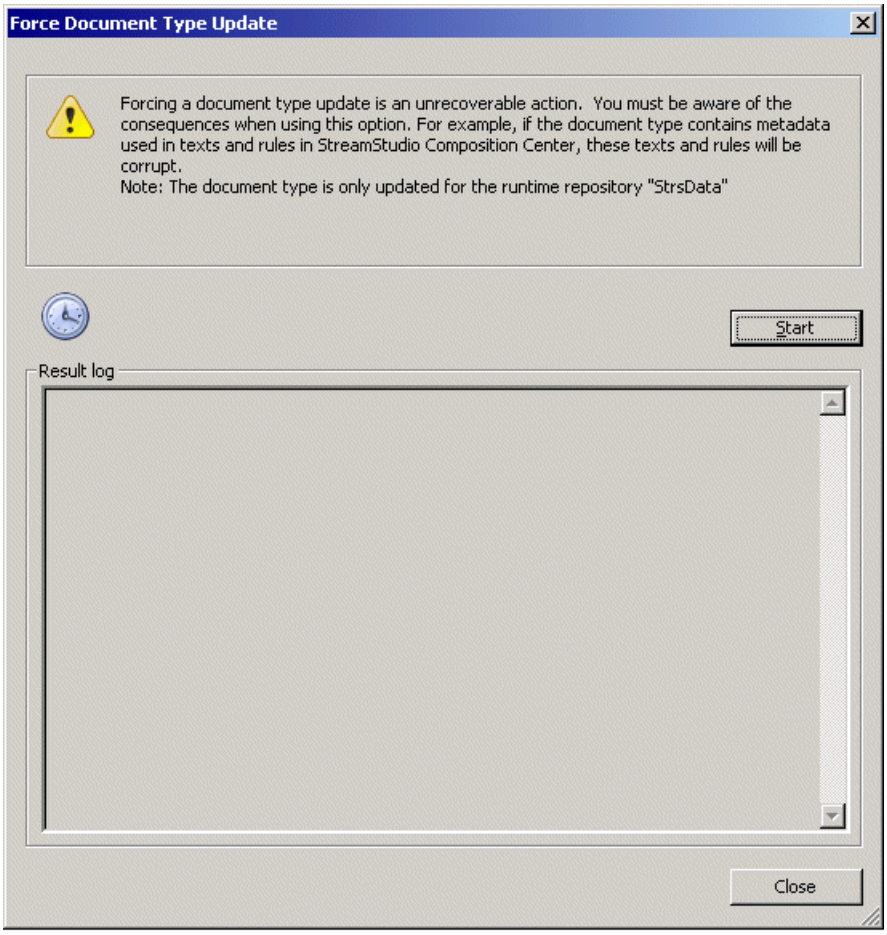


Figure 49 The Force Document Type Update dialog box

The settings are described in the table below.

Setting	Description
Start	Starts the force operation.
Close	Closes the Force Document Type Update dialog box.

MGW Browser dialog box

The MGW Browser dialog box is used to create a Source/Destination pair when using FastCopy for testing StreamServer applications. The source file and the destination directory can be located on the local host or any remote host with a management gateway that is connected to the site, both on Windows and UNIX.

The MGW Browser dialog box opens when you click a browse button in the Source and destination dialog box.

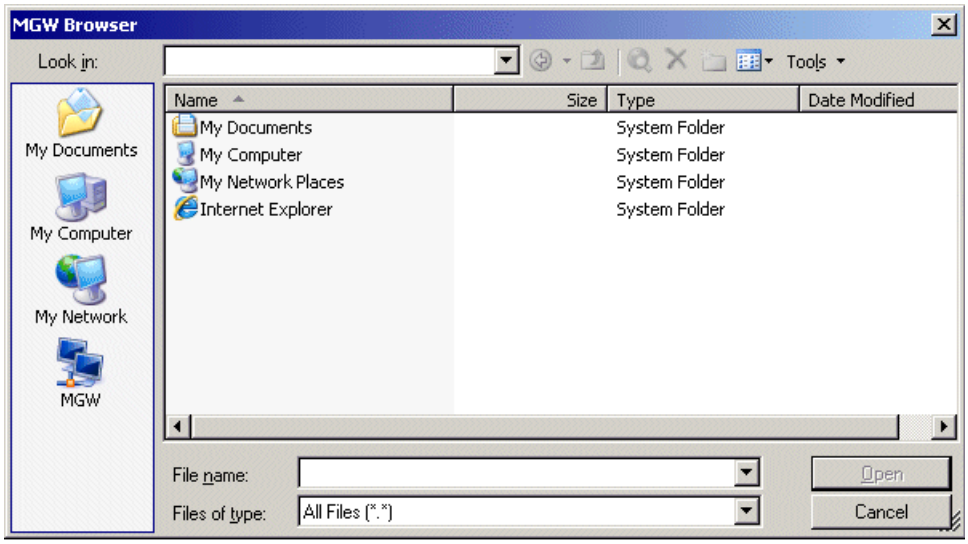


Figure 50 The MGW Browser dialog box

MGW Explorer dialog box

The MGW Explorer dialog box is used to manage files and directories. The files and directories can be located on the local host or any remote host with a management gateway that is connected to the site, both on Windows and UNIX.

You can, for example:

- Create and delete directories.
- Cut, copy, and paste single files from one location to another.

The MGW Explorer dialog box opens when you select **Host** > **Explore**.

To access the working directory for a StreamServer application directly, right-click the application and select **Explore**.

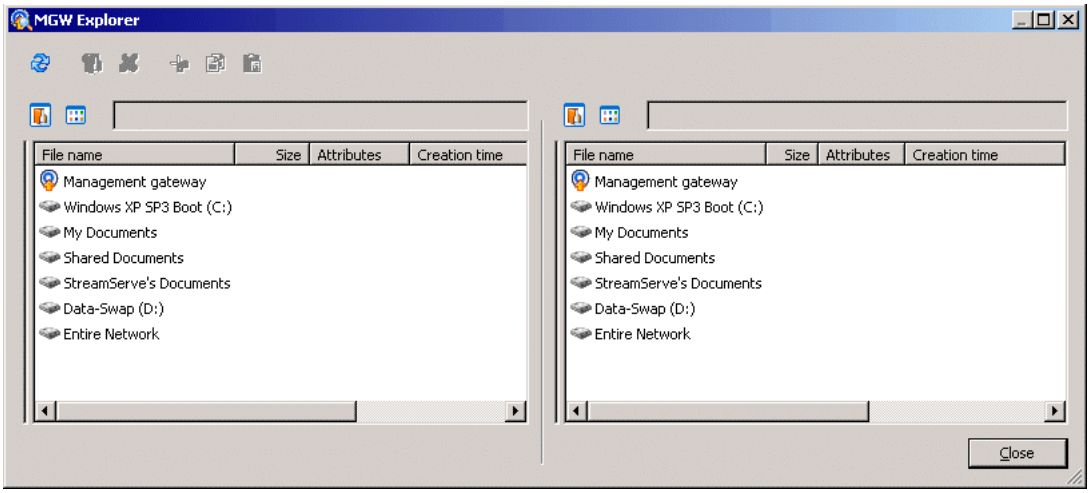


Figure 51 The MGW Explorer dialog box

Manage Users dialog box

The Manage Users dialog box is used to:

- Create a new user on the management gateway.
- Remove a user from the management gateway.
- Change a password.
- Change the role for a user.

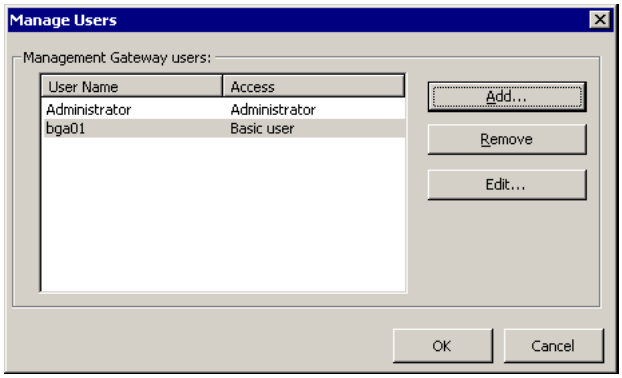


Figure 52 The Manage Users dialog box

The settings are described in the table below.

Option	Description
Management Gateway users	Lists all the users on the management gateway.
Add	Adds a new user to the management gateway. See *Add User dialog box* on page 224.
Remove	Removes a management gateway user.
Edit	Changes the password for a user, or changes the role for a user. See *Edit User dialog box* on page 225.

Add User dialog box

The Add User dialog box is used to add a new management gateway user.

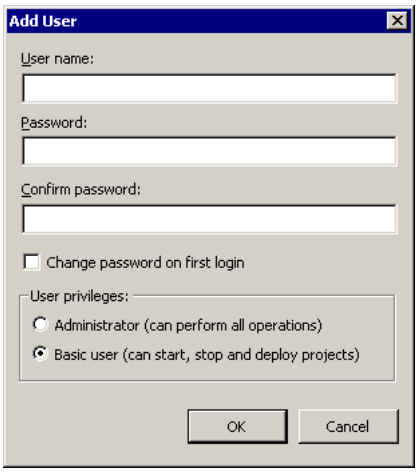


Figure 53 The Add User dialog box

The settings are described in the table below.

Setting	Description
User name	A user name. This cannot be changed after the user is created.
Password	A password for the user.
Confirm password	Confirmation of the password.

Setting	Description
Change password on first login	Prompts the user to change their password on first log on to Control Center.
User privileges	**Administrator** – Grants the Administrator role to the user. See *Access rights for Administrators* on page 40. **Basic** – Grants the Basic role to the user. See *Access rights for basic users* on page 40.

Edit User dialog box

The Edit User dialog box is used to:

- Change a password for a user.
- Change the role for a user.

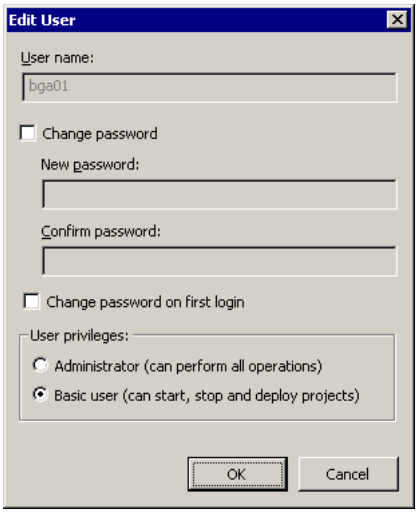


Figure 54 The Edit User dialog box

The settings are described in the table below.

Setting	Description
User name	The user name for the user. This cannot be changed.
Change password	Select to change the password for a user. **New password** – A new password for the user. **Confirm password** – Confirmation of the password.

Setting	Description
Change password on first login	Prompts the user to change their password on first log on to Control Center.
User privileges	**Administrator** – Grants the Administrator role to the user. See *Access rights for Administrators* on page 40. **Basic** – Grants the Basic role to the user. See *Access rights for basic users* on page 40.

Manage Templates dialog box

The Manage Templates dialog box is used to display:

- The Composition Center templates available in the StreamServe Enterprise Repository.
- The application domain(s) associated with each Composition Center template.
- The revision of each Composition Center template.

From this dialog, you can delete Composition Center templates from the enterprise and the runtime repositories. You can also compare two Composition Center templates in the enterprise repository.

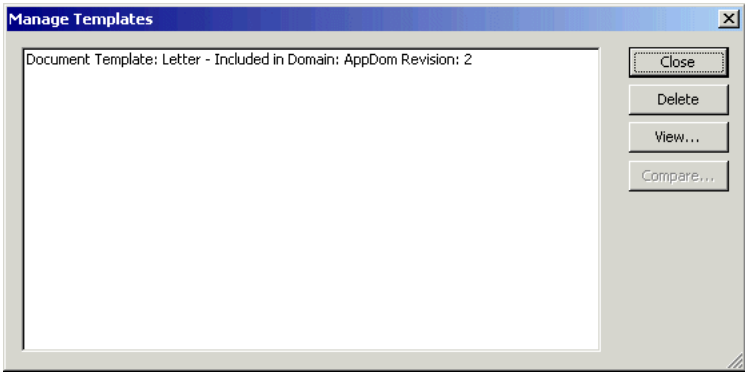


Figure 55 The Manage Templates dialog box

The settings are described in the table below.

Setting	Description
Close	Closes the Manage Templates dialog box.
Delete	Deletes the selected Composition Center templates from the enterprise and the runtime repositories.
View	Opens the Document Template Content dialog box, where the XML file for the selected Composition Center template is displayed.
Compare	Compares two selected Composition Center templates in the enterprise repository. You can use this function before redeploying a Project to check which impact the redeployment will have. For example, you can compare a Composition Center template used in the development environment with the one used in the production environment.

Compare Composition Center Templates tool

The Compare Composition Center Templates tool is used when redeploying Projects containing StoryTeller Processes that are used as templates in Composition Center.

If the version number of the redeployed StoryTeller Process is lower than the version number in the enterprise repository, the Compare Composition Center Templates tool opens. The tool also opens if the version numbers are the same, but the template is modified.

The tool displays information that helps you make the necessary corrections in StoryTeller. The corrections are required for redeploying the template, since you cannot force an updated version into the repository.

Any differences between the templates are marked with colors:

- **Green** – Information that differs between the templates. For example, the template version numbers differ or a section is renamed.
- **Yellow** – New information is added in the updated template. For example, a new exposed story.
- **Red** – Information is removed in the updated template. For example, a story or section is removed.

If the Project includes several updated StoryTeller Processes, one template is displayed at a time. You can toggle between the templates using the navigation buttons.

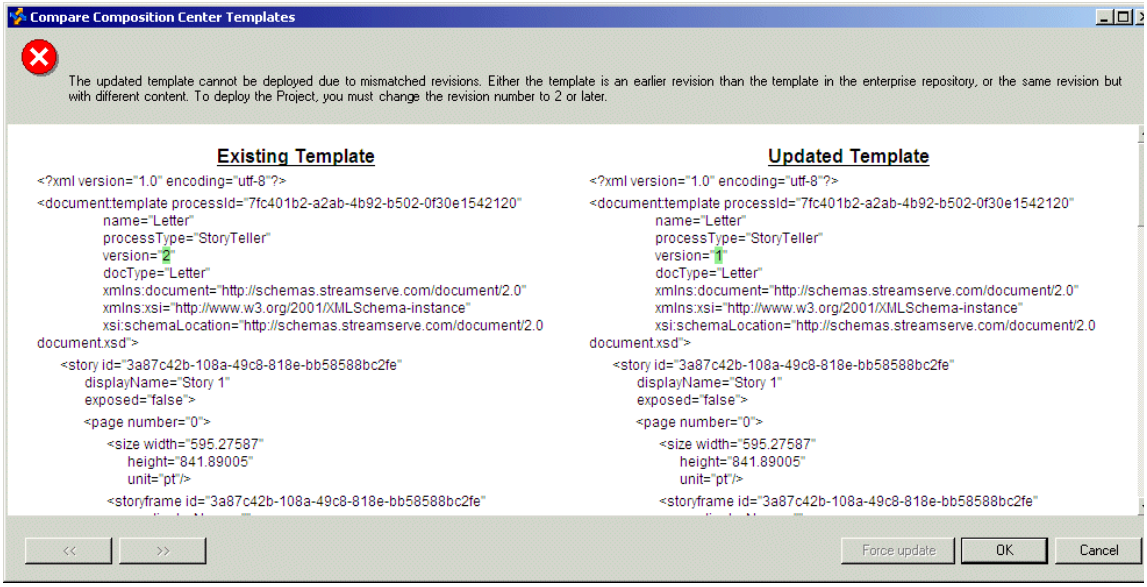


Figure 56 The Compare Composition Center Templates tool

Related topics

- For information about Composition Center template versioning and updates that affect the possibility to redeploy Projects used with Composition Center, see *Modifying Composition Center Projects* in the *Composition Center* documentation.