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Introduction

This guide describes how to install the StreamServe software on a variety of platforms.

Before you begin the installation, you should read the following chapters:

• The Supported platforms and software documentation.
• The Hardware Guidelines documentation.
• Introduction on page 7 - This describes the main parts of the StreamServe software, the installation components, and system requirements.
• General installation scenarios on page 15 - This describes the steps to install StreamServe.

Terminology

StreamServe applications – StreamServer, service gateway and StreamStudio applications.

StreamServer applications – StreamServe applications used to run Design Center Projects.

Previous StreamServe installations
For information about upgrading from a previous version, see the StreamServe Persuasion SP4 Upgrading Instructions.

Online Help
To use the Persuasion SP4 Online Help you must install it. See Online Help on page 11.

Known issues
For information about known issues relating the StreamServe installation, see the Installation section in the New Features document.

Troubleshooting
If you have followed the instructions in this guide but still have problems running the setup or using the StreamServe applications, see the Troubleshooting documentation.
Overview

A StreamServe installation can include the following main parts:

- StreamServe Enterprise Repository
- Service Component Framework
- Control Center
- StreamServer
- Design Center
- The management gateway
- The runtime repository
- StreamServe Archive
- StreamStudio web portal
- The service gateway
- The web content repository

You can install all of these parts on the same computer. You can also use different computers for Control Center, Design Center, StreamServer, StreamStudio, and the repositories.

Design Center

This is the tool you use to build StreamServe Projects.

Design Center can only be installed on Windows. Projects built in Design Center can be deployed to StreamServer applications on all the StreamServer supported operating systems, see the Supported platforms and software documentation.
Design Center can be installed on a separate computer or on a computer that runs other StreamServe components, such as the StreamServer.

**Control Center**
This is the tool used to deploy, run and administer StreamServers and other types of StreamServe applications.

Control Center can only be installed on Windows. You can use Control Center to run and administer StreamServe applications on both Windows and UNIX hosts.

Control Center is part of the Framework and Control Center setup. After the installation, you must connect Control Center to the computer hosting StreamServe Enterprise Repository. For more information, see the Control Center documentation.

**StreamServer**
The StreamServer includes the software to run StreamServer applications.

The StreamServer can be installed and run on Windows or UNIX. On Windows, you must install Framework and Control Center before you install StreamServer.

**StreamServe Enterprise Repository**
This database is used for deployment information, such as the StreamServe applications at one company organization and the computers used to run these applications.

In distributed environments, you should have a central Enterprise Repository on one computer in your company or organization. The computers used to run Control Center, and StreamServer and StreamStudio applications, must be configured to use the central Enterprise Repository.

The default name for StreamServe Enterprise Repository is StrsSER.

**Service Component Framework**
This includes the underlying software to run StreamServer applications.

Service Component Framework is part of the Framework and Control Center setup. On UNIX, Service Component Framework is installed with the Framework setup.

**The management gateway**
This is used for managing and monitoring the StreamServe applications on one computer. It is also used for connecting the computer to a StreamServe Enterprise Repository and for communication between Control Center and the StreamServe applications.

The management gateway is part of the Framework and Control Center setup. On UNIX, the management gateway is installed with the Framework setup. One management gateway is installed on each computer.

On Windows, the management gateway consists of two services: StreamServe Management Gateway and StreamServe Management Nanny.
On UNIX, the management gateway consists of two processes: ManagementGateway and ManagementNanny.

The runtime repository
This database is used to store job and document related data for StreamServe applications. The runtime repository is not created as a part of the installation, but must be created in the application domain that you create either in Control Center or using the Command Line Utilities.

You can use several runtime repositories, but only one per application domain. The Streamserve Enterprise Repository (SER) on the other hand is shared among all application domains at the site. Sites are also configured separately from the installation.

For example, you can use one runtime repository for StreamServe applications in Project development, and another for StreamServe applications in production.

For more information, see the Control Center documentation and the Command Line Utilities documentation.

The default name for the runtime repository is StrsData.

StreamServe Archive
A StreamServe archive stores output documents and related metadata that are accessed from the StreamStudio Collector web application. 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.

In the user directory, StreamStudio users are associated with application domains. A user can only access documents created via the application domains that the user is associated with.

StreamStudio
This is the web portal containing the StreamStudio web applications.
StreamStudio can be installed and run on Windows or UNIX.
To install StreamStudio you need a Java application server, for example Tomcat. You can download it from http://tomcat.apache.org/, or install StreamStudio on your current Java application server. See the Supported platforms and software documentation.

The service gateway
This is a web service gateway used to connect the StreamStudio web applications to the runtime repository and user directories.

The service gateway is installed with Framework and Control Center on Windows. On UNIX, the service gateway is installed with Framework.

The service gateway Windows service is called StreamServe Service Gateway. On UNIX, the service gateway process is called ServiceGateway.
The web content repository
The web content repository stores Composition Center resources etc. The repository is only required when running the StreamStudio Composition Center application.

Certificates
The management gateway and service gateway require a server certificate for identification. To connect to the management gateway or service gateway (e.g. from Control Center or StreamStudio), you need a valid root certificate for the server certificate.

On Windows, you select the level of security required when you install Framework and Control Center. On UNIX, this selection is made when you install StreamServer.

There are two options:

- **Basic security** – Uses the default certificates provided by StreamServe for the management gateway and service gateway. These certificates are not unique and provide low security. This option should only be used if you run all components on one computer for demonstration or development purposes.

- **Advanced Security** – Enables you to specify the server and root certificates for the management gateway and service gateway. These certificates should be obtained from a valid certificate authority. This option is recommended for production environments.

License
The license file must be named `strs.lic` and placed in either

```csharp
<StreamServe installation>/Platform/Core\1.3\bin
```

or in the working directories where you deploy Projects.

**License file on UNIX**
Place the license file in the following directory:

```bash
<StreamServe installation>/applications/streamserver/lib
```

Online Help
Before you can use StreamServe Online Help, you must install the online help files. All online help files are included in the zip file Persuasion SP4 online help Rev A.zip. You can copy this file from the User Documentation folder on the installation CD, or download it from StreamServe Download Center.
The online help files on StreamServe Download Center may be updated between service pack releases, and may therefore differ from the online help files delivered on the installation CD. To make sure to install the latest Online Help, choose StreamServe Download Center.

To download the help files from StreamServe Download Center

1  Login to http://download.streamserve.com/index.asp
2  Go to the folder StreamServe Persuasion SP4/User Documentation/Online Help
3  Download the file Persuasion SP4 online help Rev A.zip.
4  Right-click the downloaded zip file and select Properties. The Properties dialog box opens.
5  On the General tab, click Unblock and OK.

To install the help files

Extract the files in Persuasion SP4 online help Rev A.zip to the following folder:

<StreamServe_installation>\Applications\StreamServer\5.4.0\Common\HTMLHelp
Installation components

For information about prerequisites before you can start installing StreamServer components, see Installation prerequisites on page 21.

For information about the steps required to install all components on a computer used for development, see Installing for Project development and testing on page 16.

For information about the steps required to install the components in a production environment, see Installing for production on page 18.

**StreamServe Enterprise Repository**

Installs StreamServe Enterprise Repository. This must be installed before you install any other StreamServe components. The Framework and Control Center setup requires that you specify which installed Enterprise Repository to use.

To install StreamServe Enterprise Repository, see Installing StreamServe Enterprise Repository on Windows on page 23.

**Framework and Control Center**

Installs the underlying software required to run StreamServe applications in a development environment. This includes:

- Control Center
- Service Component Framework (with the management gateway and the service gateway)

The following software is installed with Framework and Control Center unless they are already installed:

- Microsoft Data Access Components (MDAC) 2.8
- Microsoft .NET Framework 2.0

You specify StreamServe Enterprise Repository used by the computer during the installation.

StreamServe Enterprise Repository must be installed on one computer in your company or organization before you install Framework and Control Center.

To install Framework and Control Center on Windows, see Installing Framework and Control Center on page 41.

**StreamServer**

Installs the software to run StreamServer applications.
You must install Framework and Control Center before you install the StreamServer.

To install the StreamServer on Windows, see Installing StreamServer on Windows on page 49.

To install the StreamServer on UNIX, see Installing StreamServer on UNIX on page 59.

**Design Center**
Installs Design Center, StoryTeller, Overlay Editor, the Device Driver tool, etc. You can install the Design Center without installing any other StreamServer components if you only want to design Projects without doing any testing on the workstation.

To install Design Center, see Installing Design Center on page 63.

**StreamStudio**
Installs the StreamStudio web applications.
For information about installing StreamStudio, see Installing StreamStudio on Windows on page 65 or Installing StreamStudio on UNIX on page 69.

**Online Help**
To install Persuasion SP4 Online Help, see Online Help on page 11.
General installation scenarios

This section describes the steps required to install all StreamServe components
• on a workstation for Project development and testing.
• for production in a distributed environment

Note: You can also install Design Center as a stand-alone tool without having to install any other StreamServe components
Installing for Project development and testing

For Project development, testing or demo purposes you can install all StreamServe components on a single computer. You can use SQL Server Express or Oracle Express as a local database for these purposes.

You can also install Design Center and its tools stand-alone if you do not need to test your Projects on the specific machine. In that case, only step 6 below is required.

For more information about supported software, see the Supported platforms and software documentation.

⚠️ If you install in parallel of a previous version of Persuasion, stop the following before installing Persuasion SP4:

- All StreamServer, service gateway, and StreamStudio applications.
- The StreamServe Management Gateway and StreamServe Management Nanny services.
Steps required

1 – Installation prerequisites
If you do not have a supported database on the workstation, you must install one. See Installation prerequisites on page 21.

2 – StreamServe Enterprise Repository
Installs the StreamServer Enterprise Repository on your workstation.
See Installing StreamServe Enterprise Repository on Windows on page 23 or Installing StreamServe Enterprise Repository on UNIX on page 33.

3 – Framework and Control center
Includes:
• Service Component Framework (with the management gateway and the service gateway)
• Control Center
See Installing Framework and Control Center on page 41.

4 – StreamServer
See Installing StreamServer on Windows on page 49 or Installing StreamServer on UNIX on page 59.

5 – Design Center
See Installing Design Center on page 63.

6 – StreamStudio
See Installing StreamStudio on Windows on page 65 or Installing StreamStudio on UNIX on page 69.

After installation
To run StreamServer applications, you must:
• Configure an application domain
• Create a runtime repository

For StreamStudio, you may also need a Web content repository and a StreamServe Archive.
See the Control Center documentation.

If you want to use other users than the default configured in Control Center, you can install the OpenDS directory server. See Installing OpenDS on page 67.
Installing for production

In a production environment you should install StreamServe Enterprise Repository on a central database server used by all computers in your domain, and then install Framework and Control Center on the computers where you will install StreamServer and optionally StreamStudio.

**Note:** StreamServe Enterprise Repository must be installed before installing Framework and Control Center.

From Control Center, you connect to StreamServe Enterprise Repository and configure the computer(s) used to run the StreamServer(s) to use StreamServe Enterprise Repository.

In Control Center you also create the runtime repository on the database server.

If you want to use Control Center to administer StreamStudio, you must also configure the computer used to run StreamStudio to use the central Enterprise Repository. StreamStudio also requires access to a directory server.

For production use, it is recommended to use Microsoft Active Directory as your directory server.

You can install StreamServe Enterprise Repository and the runtime repository in the same database, or in separate databases on separate computers.

**Note:** You can not use IBM DB2 with StreamStudio.

StreamServe Enterprise Repository, the runtime repository, Control Center, the StreamServer and StreamStudio can be run on the same computer or on separate computers.

*Figure 2* StreamServer(s) and Control Center using a central Enterprise Repository.
Prerequisites

- To install StreamServe components in a production environment you must have access to at least one computer with an installation of Microsoft SQL Server, Oracle Database or IBM DB2. See the Supported platforms and software documentation.

  **Note:** You cannot use IBM DB2 with StreamStudio applications.

- If you want to use StreamStudio, you must have access to a directory server, preferably Microsoft Active Directory.

---

⚠️ If you install in parallel of a previous version of Persuasion, stop the following before installing Persuasion SP4

- All StreamServer, service gateway, and StreamStudio applications.
- The StreamServe Management Gateway and StreamServe Management Nanny services.

---

Steps required

1 – Installation prerequisites

If you do not have access to a supported database, see Installation prerequisites on page 21.

2 – Enterprise Repository

Installs the StreamServer Enterprise Repository on a specified database server.

See Installing StreamServe Enterprise Repository on Windows on page 23, or Installing StreamServe Enterprise Repository on UNIX on page 33.

3 – Framework and Control center

Includes:

- Service Component Framework (with the management gateway and the service gateway)
- Control Center

See Installing Framework and Control Center on page 41.

4 – StreamServer


This section also covers the installation of

- **Design Center** See Installing Design Center on page 63.
- **StreamStudio** See Installing StreamStudio on Windows on page 65 or Installing StreamStudio on UNIX on page 69.
After installation

To run StreamServer applications, you must:

- Configure an application domain
- Create a runtime repository

For StreamStudio, you may also need a Web content repository and a StreamServe Archive.

See the Control Center documentation.
Installation prerequisites

Before you can install any of the StreamServe components you must have access to a supported database installation that is configured for use with StreamServe components.

- For a workstation installation for Project development and testing purposes, you can use for example SQL Server Express.
  
  **Note**: SQL Server Express has a 4 GB limit of storage.

  To download SQL Server Express, go to:
  

- For a production environment, you should use an enterprise version of a database, for example SQL Server 2005.

For supported databases, see the **Supported platforms and software** documentation.

**Note**: You can not use IBM DB2 if you run StreamStudio.

**Database configuration**

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.
Installation prerequisites
Installing StreamServe Enterprise Repository on Windows

You install StreamServe Enterprise Repository on one computer at your company or organization. You must install StreamServe Enterprise Repository first, before installing any other StreamServe components.

Note: You can not run StreamServe Enterprise Repository on Oracle if you run the runtime repository on SQL Server or SQL Express.

Prerequisites
You must have access to a database, see Installation prerequisites on page 21.

When installing or removing StreamServe software in a Windows environment, you must have administrator rights.

Database options

For information about using Oracle for StreamServe Enterprise Repository, see Using Oracle for StreamServe Enterprise Repository on page 28.

For information about using IBM DB2 for StreamServe Enterprise Repository, see Using DB2 for StreamServe Enterprise Repository on page 30.
Using Microsoft SQL Server for StreamServe Enterprise Repository

There are two options to install StreamServe Enterprise Repository on SQL Server:

• Create StreamServe Enterprise Repository directly from the StreamServe Setup wizard.

• Generate the scripts to create StreamServe Enterprise Repository and run the scripts manually using an external tool.
  See Generating the scripts and running the scripts manually on page 25.

Prerequisites
A SQL Server instance used for StreamServe Enterprise Repository must be configured to allow TCP/IP connections and use Mixed Mode authentication. See Installation prerequisites on page 21.

⚠️ You can not run StreamServe Enterprise Repository on Oracle if you run the runtime repository on SQL Server or SQL Express.

Creating StreamServe Enterprise Repository from the StreamServe Setup wizard

This can be done from the computer used for StreamServe Enterprise Repository or from another computer.

During the installation you specify:

• The vendor of the database to use for the StreamServe Enterprise Repository.

• The StreamServe Enterprise Repository name. The name must comply with the naming standards in your database server, otherwise the management gateway will not be able to connect to the database.

• The host (Database Server) where StreamServe Enterprise Repository will be installed and whether you connect to the database server with your Windows login or a database server login. You can only use Windows login if you are installing and running the StreamServe components as well as the databases in a pure Windows environment. Also, the password used must comply with the requirements for your database.
• An administration user for StreamServe Enterprise Repository. The user name and password you specify must comply with the naming standards in your database server, otherwise the management gateway will not be able to connect to the database.

• The destination folder for StreamServe Enterprise Repository.

To create StreamServe Enterprise Repository from the Setup wizard

You install the software from the installation CD.

1 If autostart is enabled on your computer, the StreamServe Setup wizard opens automatically. Otherwise, double-click the mssetup.exe file to open the StreamServe Setup wizard.

2 From the StreamServe Setup wizard, select StreamServe Enterprise Repository.

3 Select Microsoft SQL Server and click Next.

4 Optionally, enter a name of StreamServe Enterprise Repository other than the default StrsSER.

5 Select Install StreamServe Enterprise Repository.

6 From the Database Server drop-down list, browse to the server and instance, for example (local)\SQLEXPRESS.

7 If you use database server login, enter the user name and password for the system administrator that you specified during the database installation and click OK.

   Note: Use only Windows authentication if you install the StreamServe components and its databases in a pure Windows environment and the password used comply with the requirements for your database. It is recommended to use the database server login.

8 Enter database credentials that will be used by StreamServe applications to access the StreamServe Enterprise Repository, and click Next.

   Note: Remember the user name and password you enter, you will need them when you install the Framework and Control Center.

9 Specify the destination folder (or accept the default) and click Next.

10 Click Install to start the installation.

Generating the scripts and running the scripts manually

You can generate the scripts from the StreamServe Setup wizard to create StreamServe Enterprise Repository. To do this you must:

• Run the StreamServe Setup wizard to generate the scripts. See Generating the SQL Server scripts for StreamServe Enterprise Repository on page 26.

• Execute the scripts using an external tool. See Executing the scripts to create StreamServe Enterprise Repository on page 26.
Generating the SQL Server scripts for StreamServe Enterprise Repository

This can be done from the computer used for StreamServe Enterprise Repository or from another computer.

During the installation you specify the name of StreamServe Enterprise Repository and an administration user for StreamServe Enterprise Repository. StreamServe Enterprise Repository name, user name and password you specify must comply with the naming standards in your database server, otherwise the management gateway will not be able to connect to the database.

To generate the SQL Server scripts for StreamServe Enterprise Repository

You install the software from the installation CD.

1. If autostart is enabled on your computer, the StreamServe Setup wizard opens automatically. Otherwise, double-click the `mssetup.exe` file to open the StreamServe Setup wizard.

2. From the StreamServe Setup wizard, select **StreamServe Enterprise Repository**.

3. Select **Microsoft SQL Server** and click **Next**.

4. Select **Extract database scripts to disc**.

5. Follow the wizard which guides you through the installation of StreamServe Enterprise Repository.

   The scripts are saved in the following directory:

   `<StreamServe installation>\Enterprise Repository\1.3\5.4.0\sqlserver`

Executing the scripts to create StreamServe Enterprise Repository

You can run the `msqterritoryinstall.bat` file from a command prompt using the following parameters:

```
<system_administrator_username> <system_administrator_password>
<database_name> <log_file_path> <db_script_path>
<databaseserver_hostname>:<port>
```

Where:

- **<system_administrator_username>** – The user name of the database administrator.
- **<system_administrator_password>** – The password for the database administrator user.
- **<database_name>** – The name of StreamServe Enterprise Repository.
- **<log_file_path>** – The path and name for the log file. This file is created when the scripts are run. Where possible use an absolute path.
- **<db_script_path>** – The path to the directory with the `msqterritoryinstall.bat` file.
• `<databaseserver_hostname>\<named_instance>:<port>]`
  The IP address or host name of the computer with the database server.
  If the SQL Server is using a named instance, append a backslash and the
  instance name to the hostname.
  If the SQL Server is not running on the default TCP port (1433), append a
  colon and the port number.

• `<port>` – Is the port used for communication with the database server. This
  parameter is optional. You must specify the port number if you use SQL
  Server 2005 and do not use the default TCP port.

**Example 1** Parameters to run the `msqlterritoryinstall.bat` file, on host with default instance and default port

In this example, a database for StreamServe Enterprise Repository is created in
the SQL Server instance on the `gbg5000`, with the name `StrsSER`. The user name
and password for the database administrator are `sa` and `sapassword`. The default
port is used to communicate with the database server. Since we are in the
`\sqlserver` folder with the bat file, a dot (.) is specified for the
`<db_script_path>`.

```
msqlterritoryinstall.bat sa sapassword StrsSER "C:\sqllog.txt" .
```
gbg5000

**Example 2** Parameters to run the `msqlterritoryinstall.bat` file, on host with a named instance and non-default port

In this example, a database for StreamServe Enterprise Repository is created in
the SQL Express instance on the `gbg5000`, with the name `StrsSER`. The user name
and password for the database administrator are `sa` and `sapassword`. The server
is running on port 1499.

```
msqlterritoryinstall.bat sa sapassword StrsSER "C:\sqllog.txt" .
```
gbg5000\sqlexpress:1434
Using Oracle for StreamServe Enterprise Repository

To install StreamServe Enterprise Repository in Oracle, you must:

- Generate the scripts to create StreamServe Enterprise Repository from the StreamServe Setup wizard. This can be done from the computer used for StreamServe Enterprise Repository or from another computer. See Generating the Oracle scripts for StreamServe Enterprise Repository on page 28.

Generating the Oracle scripts for StreamServe Enterprise Repository

During the installation you specify a user for Enterprise Repository. The user name and password you specify must comply with the naming standards in your database server, otherwise the management gateway will not be able to connect to the database.

To generate the Oracle scripts for StreamServe Enterprise Repository

You generate the scripts from the StreamServe Setup wizard on the installation CD.

1. If autostart is enabled on your computer, the StreamServe Setup wizard opens automatically. Otherwise, double-click the mssetu.exe file to open the StreamServe Setup wizard.

2. From the StreamServe Setup wizard, select StreamServe Enterprise Repository.

3. Select Oracle.

4. Enter a user name and password for StreamServe Enterprise Repository administration user and click Next.

5. Follow the wizard which guides you through the installation of StreamServe Enterprise Repository.

The scripts are by default saved in the following directory:

<StreamServe installation>\Enterprise Repository\1.3\5.4.0\oracle
Creating StreamServe Enterprise Repository in Oracle

To create StreamServe Enterprise Repository in Oracle, you must:

- Run the script to install the user schema for StreamServe Enterprise Repository. See Creating the user schema for StreamServe Enterprise Repository on page 29.
- Run the script to create the tables, etc for StreamServe Enterprise Repository. See Creating the tables for StreamServe Enterprise Repository on page 29.

Creating the user schema for StreamServe Enterprise Repository

This script creates the user schema for StreamServe Enterprise Repository administration user. This script must be run as:

- a user with database administration privileges, or
- a user with the privileges to create users, grant object privileges, grant privileges, grant roles and create public synonyms.

For example, the SYSTEM user.

To create the user schema for StreamServe Enterprise Repository

1. From the `\oracle` directory, connect to SQL*Plus as the SYSTEM user or a user with sufficient privileges, for example:
   
   ```
   $ORACLE_HOME/bin/sqlplus SYSTEM/password@XE
   
   Where SYSTEM is the system user, password is the system user password, and XE is the service name.
   ```

2. Run the file `loadappdomainuser_as_system.sql` by issuing the command:
   
   ```
   @loadappdomainuser_as_system.sql
   
   You can view the results in `strsdata_orainstallterruser_log`
   
   Note: Since the password of the installed schema owner is the same as the schema owner user name (by default `strsSERAccess`), it is recommended to change the password by editing the script.
   ```

Creating the tables for StreamServe Enterprise Repository

You must run this script as the schema owner.

1. From the directory with the scripts, connect to SQL*Plus as StreamServe Enterprise Repository administration user, for example:
   
   ```
   $ORACLE_HOME/bin/sqlplus strsSERAccess/Changeoninstall768@XE
   ```

2. Run the file `loadappdomain.sql` by issuing the command:
   
   ```
   @loadappdomain.sql
   
   You can view the results in `strsdata_orainstallterr_log`
   ```
Using DB2 for StreamServe Enterprise Repository

To install StreamServe Enterprise Repository in DB2, you must:

- Generate the scripts to create StreamServe Enterprise Repository from the StreamServe Setup wizard. This can be done from the computer used for StreamServe Enterprise Repository or from another computer. See Generating the DB2 scripts for StreamServe Enterprise Repository on page 30.
- Execute the scripts in DB2 using an external tool. See Executing the scripts to create StreamServe Enterprise Repository on page 31.

Generating the DB2 scripts for StreamServe Enterprise Repository

During the installation you specify the name of StreamServe Enterprise Repository and an administration user for StreamServe Enterprise Repository. The database name, user name and password you specify must comply with the naming standards in your database server, otherwise the management gateway will not be able to connect to the database.

To generate the DB2 scripts for StreamServe Enterprise Repository

You install the software from the installation CD.

1. If autostart is enabled on your computer, the StreamServe Setup wizard opens automatically. Otherwise, double-click the mssetup.exe file to open the StreamServe Setup wizard.
2. From the StreamServe Setup wizard, select StreamServe Enterprise Repository.
3. Select DB2 and click Next.
4. Enter the user name and password for StreamServe Enterprise Repository administration user and click Next.
5. Optionally, specify the path where you want the setup files to be extracted.
6. Follow the wizard which guides you through the installation of StreamServe Enterprise Repository.

The scripts are saved in the following directory:

<StreamServe installation>\Enterprise Repository\1.3\5.4.0\db2
Executing the scripts to create StreamServe Enterprise Repository

To create a DB2 enterprise repository, you must be logged in as a system administrator of the operating system with rights to create database objects in the schema of the user you are logged in as.

You can run the `createstrsser.bat` file from a command prompt using the following parameters:

```
<log_file_path> <system_administrator_username> <system_administrator_password> <database_name>
```

Where:

- `<log_file_path>` – Is the path and name for the log file. This file is created when the scripts are run. Where possible use an absolute path.
- `<system_administrator_username>` – Is the user name of the database administrator.
- `<system_administrator_password>` – Is the password for the database administrator user.
- `<database_name>` – Is the name of StreamServe Enterprise Repository.

**Example 3**  Parameters to run the `createstrsser.bat` file

In this example, a database for StreamServe Enterprise Repository is created in the DB2 instance, with the name `StrsSER`. The user name and password for the database administrator are `sa` and `sapassword`.

```
createstrsser.bat "C:\db2log.txt" sa sapassword StrsSER
```
Installing StreamServe Enterprise Repository on UNIX

Parts included in the StreamServer setup
The following main parts are included in the StreamServe Enterprise Repository setup for UNIX:

- StreamServe Enterprise Repository
  For a description, see Overview on page 8.

Required information
During the installation you specify the host and user credentials for accessing StreamServe Enterprise Repository.

Database options
For information about using Oracle for the Enterprise Repository, see Using SQL Server for StreamServe Enterprise Repository on page 38.

For information about using DB2 for the Enterprise Repository, see Using DB2 for StreamServe Enterprise Repository on page 39.
Generating the scripts for StreamServe Enterprise Repository

To generate the scripts for the StreamServe Enterprise Repository on UNIX, you must:

- Extract the StreamServe setup files. See Extracting the StreamServe setup files on page 34.
- Run the StreamServe setup script. See Running the StreamServe setup script on page 35.

Extracting the StreamServe setup files

The StreamServe setup files are archived in a gzipped file. There is one archive for each Unix platform operating system type.

For example:

streamserve-5.4.0.GA.353-sparc-sun-solaris2.10-release.tar.gz

To extract the setup files

1. Create a folder to extract the StreamServe files to, for example /opt/streamserve
2. Copy the gzipped file for the appropriate UNIX platform to the new directory.
3. From the StreamServe directory, extract the gzipped file using the following command:
   
   gunzip < StreamServe_Installation_File> | tar xf -

   For example:

   gunzip < streamserve-5.4.0.GA.353-sparc-sun-solaris2.10-release.tar.gz | tar xf -

   The files are extracted to a new folder in the StreamServe directory called streamserve-<release_and_build_nr> For example:

   /opt/streamserve/streamserve-5.4.0.GA.353
Running the StreamServe setup script

To run the script, root privileges are not required.

After the script is run, a file is created with the values you entered during the setup. You can use this file to run the setup again using the same values. See Running the setup script using a file (silent install) on page 35.

For information about the structure of the StreamServe directory, see the README file in the folder created when extracting the setup file.

Running the StreamServe setup script manually

1 Browse to the folder created when extracting the setup file, for example:
   /opt/streamserve/streamserve-5.4.0.GA.353
2 Run ./setup
3 Select to install StreamServe Enterprise Repository.
4 Select the database vendor (and for Oracle, the schema owner and password) to use for the enterprise repository. A StrsSERCreateDatabaseScripts.tar file is created.
5 Quit the setup.

To extract the tar file in the StreamServe home directory

Extract the tar file by for example running the following command:
tar -xvf StrsSERCreateDatabasescripts.tar
   A ./databasescripts/<version>/<database_vendor> folder is created with the database scripts.

To access the help during the installation

Enter ? to display help text for an option.

Running the setup script using a file (silent install)

When you run the setup a file called .operatorInput is created.

You can use this file to run the setup again without being prompted to enter values for StreamServe Enterprise Repository, management gateway, etc.

To run the setup script using a file

1 Browse to the folder created when extracting the setup folder, for example:
   /opt/streamserve/streamserve-5.4.0.GA.353
2 Run ./setup -file .operatorInput
Installation log

An installation log file called setup.log is created in the directory where you run the setup.

System information

A system information XML file is created in the systeminfo folder.
Using Oracle for StreamServe Enterprise Repository

Prerequisites
The Oracle scripts for the Enterprise repository must be generated. See Generating the scripts for StreamServe Enterprise Repository on page 34.

Using Oracle for the Enterprise Repository
To create StreamServe Enterprise Repository in Oracle, you must:

• Run the script to install the user schema for StreamServe Enterprise Repository. See Creating the user schema for StreamServe Enterprise Repository on page 29.
• Run the script to create the tables, etc for StreamServe Enterprise Repository. See Creating the tables for StreamServe Enterprise Repository on page 29.
Using SQL Server for StreamServe Enterprise Repository

Prerequisites
The SQL Server scripts for the Enterprise repository must be generated. See Generating the scripts for StreamServe Enterprise Repository on page 34.

Using SQL Server for the Enterprise Repository
To create StreamServe Enterprise Repository in Oracle, you must:

• Run the script to create the StreamServe Enterprise Repository. See Executing the scripts to create StreamServe Enterprise Repository on page 26.
Using DB2 for StreamServe Enterprise Repository

Prerequisites
The DB2 scripts for the Enterprise repository must be generated. See Generating the scripts for StreamServe Enterprise Repository on page 34.

Using DB2 for the Enterprise Repository
To install StreamServe Enterprise Repository in DB2, you must execute the createstrsser.sh script in DB2 using an external tool. For parameters, see Executing the scripts to create StreamServe Enterprise Repository on page 31.
Installing Framework and Control Center

This setup is used to install the underlying software required to run StreamServe applications in a production environment. Control Center is part of this setup. During the installation you configure a connection to StreamServe Enterprise Repository.

Prerequisites

- Before you can install Framework and Control Center, you must install StreamServe Enterprise Repository on one computer in your company or organization.
- Microsoft Data Access Components (MDAC) 2.8 is automatically installed with Framework and Control Center. If you have an earlier version of MDAC installed, it is upgraded to version 2.8. This upgrade may affect non-StreamServe applications.
- When installing or removing StreamServe software in a Windows environment, you must have administrator rights.

Parts included

The following is installed:

- Service Component Framework (including the management gateway and the service gateway)
- Control Center. The tool is available after the installation through the Start > All Programs > StreamServe Persuasion SP4 > Control menu.

The following third part software is installed if they are not already installed on your computer:

- Java 2 Standard Edition Runtime Environment 5.0 Update 14
- Microsoft Data Access Components (MDAC) 2.8
- Microsoft .NET 2.0
Installing Framework and Control Center

During the installation you configure a connection to StreamServe Enterprise Repository. If you install Persuasion SP4 in parallel to a previous installation of Persuasion with a StreamServe Enterprise Repository, the StreamServe Enterprise Repository connection information is preconfigured and you should not modify these settings.

Options specified during the installation

- **Framework - Destination folder** – The destination folder for Service Component Framework.
- **Framework - Enterprise Repository database vendor** – The database vendor you are using for the StreamServe Enterprise Repository.
- **Host instance name** – The host name of the computer with StreamServe Enterprise Repository. If you use a named instance of SQL Server 2005, you need the host name and instance name. For example: gbg5000\instance1.

If you use SQL Express, you must add \SQLEXPRESS after the host name. Otherwise you will not be able to connect to the management gateway in Control Center.

You can use the browse button to select the target database server, including the instance name, for example (local)\SQLEXPRESS.

- **Database Name** – The name of StreamServe Enterprise Repository that you created in StreamServe Enterprise Repository setup. (SQL Server and DB2 only).
- **Database Port** – The port used by the database server with StreamServe Enterprise Repository.
- **Management gateway - Enterprise Repository connection credentials**

  The user name and password for StreamServe Enterprise Repository administration user that you created in StreamServe Enterprise Repository setup (SQL Server only).

  - Schema owner user name and password (Oracle and DB2 only).
  - Service name/SID (Oracle only).

You can test the connection to the database with your credentials before you continue with the setup, by clicking **Test connection**.
• **Management Gateway - Location of base directory** – This directory is used for the working directories for StreamServe applications. When you deploy a Project in Control Center, the Project is deployed to the working directory.

• **Management Gateway - Security configuration**
  - **Basic security** – The demonstration certificates provided by StreamServe are used for the management gateway and service gateway. These certificates are not unique and provide a basic level of security. This option is not recommended for production environments.
  - **Advanced security** – Enables you to specify the server and root certificates for the management gateway and service gateway on the computer. These certificates should be obtained from a valid certificate authority. This option is recommended for production environments. See **Setup security options** on page 43.

• **Management Gateway - Login credentials** – Specify a user name and password for the management gateway administrator on the local computer. These are needed when you connect to the computer and run StreamServe applications from Control Center. The user name and password are case sensitive.

  **Note:** If you install Persuasion SP4 in parallel to a previous Persuasion installation, the management gateway administrator account for the previous installation is modified according to what you specify here.

**Setup security options**

If you select the Setup Security option, you must configure the following:

- **Server identity file** – The server identity file used to authenticate the management gateway and service gateway to connecting clients (e.g. Control Center). This must be a PKCS12 formatted file.
- **Protocol version** – The version of the security protocol used by the management gateway and service gateway to communicate with clients.
- **Trusted certificate authority file(s)** – The file(s) used by the management gateway and service gateway to identify clients. These files are also known as root certificate authorities and root certificates.
- **Trusted peer certificate file(s)** – The file(s) used to identify specific client(s), for example StreamStudio, that are trusted by the management gateway and service gateway.

**To install Framework and Control Center**

You install the software from the installation CD.

1. If autostart is enabled on your computer, the StreamServe Setup wizard opens automatically. Otherwise, double-click the `mssetup.exe` file to open the StreamServe Setup wizard.

2. Select **Framework and Control Center**.

3. Follow the wizard which guides you through the installation.
Installing Framework on UNIX

Before you can install Framework on UNIX, you must:

• **Install StreamServe Enterprise Repository** – This must be installed on one computer at your company or organization. See *Installing StreamServe Enterprise Repository on UNIX* on page 33.

**Parts included in the Framework setup**
The following main parts are included in the Framework setup:

• Service Component Framework
• The management gateway
• The service gateway
• The Archiver application

For a description of these parts, see *Overview* on page 8.

**Required information**

**Enterprise Repository**
During the installation you configure connections to StreamServe Enterprise Repository.

The following information is needed for this:

• Hostname of the computer with the database and the database port number.
• Database name (SQL Server and DB2 only) – The default name is *StrsSER*.
• User name and password for StreamServe Enterprise Repository administration user (SQL Server only).
• Schema owner user name and password (Oracle and DB2 only).
• Service name/SID (Oracle only).

**Security**
During the installation you must specify the level of security required:

• **Basic security** – The demonstration certificates provided by StreamServe are used for the management gateway and service gateway. These certificates are not unique and provide a basic level of security. This option is not recommended for production environments.

• **Advanced security** – Enables you to specify the server and root certificates for the management gateway and service gateway on the computer. These certificates should be obtained from a valid certificate authority. This option is recommended for production environments.
Setup security options

If you select the Setup Security option, you must configure the following:

- **Server identity** – The server identity file used to authenticate the management gateway and service gateway to connecting clients (e.g. Control Center). This must be a PKCS12 formatted file.

- **Trusted communication channel** – The version of the security protocol used by the management gateway and service gateway to communicate with clients.

- **Trusted certificate authorities** – The file(s) used by the management gateway and service gateway to identify clients. These files are also known as root certificate authorities and root certificates.

- **Trusted peers** – The file(s) used to identify specific client(s), for example StreamStudio, that are trusted by the management gateway and service gateway.
Installing Framework on UNIX

To install Framework on UNIX, you must:

- Extract the StreamServe setup files. See Extracting the StreamServe setup files on page 34.
  
  Note: If you already have installed StreamServe Enterprise Repository on the same machine you do not have to do this again.

- Run the StreamServe setup script. See Running the StreamServe setup script on page 47.

During the setup, the ManagementGateway and ManagementNanny processes are started.

After you have installed Framework, you can manage and administer applications on the host from Control Center (on a Windows computer). For more information, see the Control Center user guide.

Running the StreamServe setup script

To run the script, root privileges are not required.

After the script is run, a file is created with the values you entered during the setup. You can use this file to run the setup again using the same values. See Running the setup script using a file (silent install) on page 48.

After the script is run, the ManagementGateway and ManagementNanny processes are started if they are not already running.

Note: To start the Service Gateway, Control Center must be used.

For information about the structure of the StreamServe directory, see the README file in the folder created when extracting the setup file.

Running the StreamServe setup script manually

1. Browse to the folder created when extracting the setup folder, for example:
   
   /opt/streamserve/streamserve=5.4.0.GA.353

2. Run ./setup

3. Select to install Streamserve Framework. An EULA text is displayed

4. After reading the text, enter q to continue.

5. Accept by entering Yes.

6. Follow the prompts to complete the installation. For information on the parameters to specify, see Required information on page 45.

To access the help during the installation

Enter ? to display help text for an option.
Running the setup script using a file (silent install)

When you run the setup a file called .operatorInput is created.

You can use this file to run the setup again without being prompted to enter values for StreamServe Enterprise Repository, the management gateway, etc.

To run the setup script using a file

1. Browse to the folder created when extracting the setup folder, for example:
   
   /opt/streamserve/streamserve-5.4.0.GA.353

2. Run . SETUP -file .operatorInput

Installation log

An installation log file called setup.log is created in the directory where you run the setup.

System information

A system information XML file is created in the systeminfo folder.
Installing StreamServer on Windows

Prerequisites

- You must install Framework and Control Center before you install StreamServer.
- When installing or removing StreamServe software in a Windows environment, you must have administrator rights.

⚠ Make sure the StreamServe Management Gateway and StreamServe Management Nanny services are running before installing StreamServer.

Configuring a port monitor and a printer queue

To use the Microsoft Windows spool system when sending data to a StreamServer application, you must configure a StreamServe port monitor after installing StreamServer. You must connect the data source to the StreamServer application via a printer queue. All required components are automatically installed.

See Configuring a port monitor and printer queue on page 51.

Configuring a StreamServer application for IBM AS/400

To use a StreamServer application to process output from an AS/400 environment, you must configure AS/400 for the StreamServer application.

See Sending data from an AS/400 environment to a StreamServer application on page 57.
Installing StreamServer

You install the software from the installation CD.

1. If autostart is enabled on your computer, the StreamServe Setup wizard opens automatically. Otherwise, double-click the mssetup.exe file to open the StreamServe Setup wizard.

2. Select StreamServer.

3. Follow the wizard which guides you through the installation.

Java environment

StreamServer uses the environment variable $STRS_JAVA_HOME to point out the Java Runtime Environment that is used when running Java components.
Configuring a port monitor and printer queue

The StreamServe port monitor (strsmon.dll) responds to requests from the Windows spool system and writes data to files.

The port monitor ensures that all files delivered to the StreamServer application from the data source have unique file names. The file extension used is *.dsi. A StreamServe port monitor also functions as a logical printer in Windows environments.

Using a port monitor ensures that you can access StreamServe as a logical printer with an IP address and that the data source can direct its output to the IP address. This is the usual way of handling output, for example, from AS/400 systems to StreamServer applications.

User requirements

When configuring a port monitor and printer queue on Windows, you must have administrator rights.

To configure a port monitor and printer queue you need to:
• Create a printer port monitor.
• Configure the printer port.

Creating a printer port monitor

On your local computer, start the Add Printer Wizard and configure a local printer with a port of StreamServe type, with settings as described below.

<table>
<thead>
<tr>
<th>Printer port and queue settings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Local or Network Printer</strong></td>
</tr>
<tr>
<td><strong>Printer port</strong></td>
</tr>
</tbody>
</table>
Configuring a port monitor and printer queue

Installing StreamServer on Windows

Configuring the printer port

StreamServer can only process files in RAW format. If incoming data files are modified before entering the printer queue, StreamServer will not process the files correctly.

To ensure that StreamServer receives the files in RAW format, you need to configure the Passthru function to collect the data files before any changes are made, and send the files directly to the printer queue.

To configure the printer port

1. Select Printer > Properties > Advanced.
2. Verify the option Enable advanced printing features is not selected.
3. Click Print Processor and select a Passthru print processor and RAW as the default data type.

<table>
<thead>
<tr>
<th>Printer port and queue settings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Port definition</strong></td>
<td><strong>Port name</strong> — The port name must match the host printer name specified for the output device used for sending data to StreamServe.</td>
</tr>
</tbody>
</table>
| | **Destination path/Named pipe** — The destination path/pipe to the spool directory from where the StreamServer application receives data, for example:
| | C:\Program Files\StreamServe\Applications\StreamServer\5.4.0\Server\spool or \host_name\pipe
| | This is the directory from which the input connector retrieves data.
The path must be an absolute path and the directory must already exist. |
| **Manufacturer** | Select Generic. |
| **Model** | Select Generic/Text only. |
| **Printer Name** | Enter a name for the printer. Do not specify the printer as the default printer. |
| **Shared as** | Enter a share name for the printer. For output from AS/400, the name of the shared resource must correspond to the name of the AS/400 remote output queue. For AS/400, uppercase letters should be used for the name. |
Installing StreamServe Port Monitor on MS Cluster

Setup the Virtual Print Server:

To set up the virtual print server, follow the instruction in the Print Server Configuration on a Cluster section of the Microsoft white paper Creating and Configuring a Highly Available Print Server under Microsoft Windows Server 2003 on www.microsoft.com.

Installation of port monitor on each node of the Cluster

1. Copy the strsmon.dll and strsmonui.dll to \windir\system32.
   Note: Note: There are versions for 64 bit, AMD and Intel CPU.

2. Add the following new records to the nodes’ registry:
   Key root : HKEY_LOCAL_MACHINE
   SubKey : Cluster\Resources\a945f7b9-2575-42dd-8141-d5353a74e2c\Parameters\Monitors\StreamServe
   Value : Driver
   Data : strsmon.dll
   Note: The key a945f7b9-2575-42dd-8141-d5353a74e2c differs from machine to machine. This is the Global Unique Identifier (GUID) number of the print spooler cluster resource.

   Key root : HKEY_LOCAL_MACHINE
   SubKey : SOFTWARE\Microsoft\Windows\CurrentVersion\SharedDlls
   Value : C:\WINDOWS\system32\strsmon.dll
   Data : 0x00000002 (2)

   Key root : HKEY_LOCAL_MACHINE
   SubKey : SYSTEM\CurrentControlSet\Control\Print\Monitors\StreamServe
   Value : Driver
   Data : strsmon.dll

3. Restart each node one at a time, and make sure to monitor that the spooler cluster group fails over to the node that is up and running.

4. The Print Migrator 3.1 tool is used to backup and migrate your printer and port monitors to the virtual print server. The tool can be downloaded from www.microsoft.com. For more information about the tool, see the document Microsoft Print Migrator 3.1 on www.microsoft.com.
   Run the printmig.exe.
5 Select **Actions > Backup** to backup the current Print configurations for the nodes.

6 Select **View > Target** and type the UNC path with the Spooler Network Name of the print server. Here you can restore the configuration of nodes to ensure that the port monitor is installed on the virtual print server.

---

### Installing the port monitor printer

1. Use one of the nodes that is currently owning the shared spooler disk and connect to the Print Server Spooler Network Name by the UNC path `\\<PrintServer Spooler Network Name>`.

2. Double-click on **Printer and Faxes** and add your printer. Use the `<port monitor printer>` port.

3. To connect to the print processor printer from a windows client, add the printer `\\<Spooler Network Name>\<Port Monitor Printer>`.
Installing StreamServe Print Processor on MS Cluster

Setting up the Virtual Print Server

To set up the virtual print server, follow the instruction in the Print Server Configuration on a Cluster section of the Microsoft white paper Creating and Configuring a Highly Available Print Server under Microsoft Windows Server 2003 on www.microsoft.com.

Installing a Print Processor on each node of the Cluster

Make sure you have the print processor software installed on each node of the cluster.

Registry configuration on each node

1. Open the registry editor and browse to the following resource:
   HKEY_LOCAL_MACHINE\Cluster\Resources\"PRINT_SPOOLER_SID"\Parameters\Environments\Windows NT x86\Print Processors.

   You can identify the cluster-resource key \"PRINT_SPOOLER_SID\" on its String="Name" and Value="PRINT_SPOOLER_Resource_Name".

2. Create the following entries:
   - the key "StrsPrint"
   - the string value "Strsprint.dll" named "Driver"

   Copy the STRSPRINT.DLL to the cluster directory.

   1. Copy the strsprint.dll from the default
      \WINDIR\system32\spool\prtprocs\w32x86\strsprint.dll to
      \WINDIR\system32\spool\drivers\PRINT_SPOOLER_SID\prtprocs\w32x86\strsprint.dll.

   2. Restart each node one at a time, make sure you see that the spooler cluster group is failing over to the node that is up and running.

Print Migration tool

The Print Migrator 3.1 tool is used to backup and migrate your printer and port monitors to the virtual print server. The tool can be downloaded from www.microsoft.com. For more information about the tool, see the document Microsoft Print Migrator 3.1 on www.microsoft.com.

1. Run the printmig.exe.

2. Select Actions > Backup to backup the current Print configurations for the nodes.
3 Select View > Target and type the UNC path with the Spooler Network Name of the print server. Here you can restore the configuration of nodes to ensure that the port monitor is installed on the virtual print server.

Installing the Print Processor printer

1 Use one of the nodes that is currently owning the shared spooler disk and connect to the Print Server Spooler Network Name by the UNC path: \<PrintServer Spooler Network Name>.

2 Double-click Printer and Faxes and add your printer. Use a printer port.

   Note: Avoid using a Null port.

3 In the Advanced tab make sure that Start printing after last page is spooled is enabled. Click Print Processor and in the Print processor area select StrsPrint.

   For more information how to use the print processor please consult the document EMF Print Processor.pdf.

4 To connect to the print processor printer from a windows client, add the printer \<Spooler Network Name>\<Print Processor Printer>.
Sending data from an AS/400 environment to a StreamServer application

The OS/400 operating system you are using to run StreamServer, must have a level that supports TCP/IP. The minimum level is 3.2.

To configure the StreamServer application for an AS/400 environment you must:

• Create a text driver for the AS/400 output queue.
  Output sent to the StreamServer application must not contain control codes from HP printer driver source code. These codes might affect the operation of the StreamServer application. To avoid problems caused by control characters in the data stream, you must remove all control codes from the HP printer driver source code that might affect the operation of the StreamServer application. You do this by creating a text driver for use with the AS/400 output queue to the StreamServer application.

• Create a remote output queue to the StreamServer application.
  On the AS/400 platform, you must create a remote output queue to the StreamServer application. This output queue uses the text driver to create pure text files. When you print to this output queue from your AS/400 application, the spool file is sent via TCP/IP to the computer where you have installed the StreamServe port monitor.

• Configure a port monitor on the Windows system.
  On the computer on which you installed the StreamServe port monitor, you must also configure the port monitor to have the same name as the AS/400 output queue to the StreamServer application. The port monitor receives the spool file and saves it in a directory in the computer. The StreamServer application polls this directory to check for files for processing.

  To enable output to the StreamServe port monitor, you must define the port monitor as a local printer and as a shared resource. The name of the shared resource must correspond to the name of the remote print queue in AS/400.

  **Note:** Use UPPERCASE letters for the printer name.

On your Windows computer, ensure the TCP/IP print server is running in services.

**Note:** The default port for LPR is 515.

For details on how to configure the AS/400 environment, see the AS/400 documentation.
Installing StreamServer on UNIX

Before you can install the StreamServer on UNIX, you must:

• Install StreamServe Enterprise Repository – This must be installed on one computer at your company or organization. See Installing StreamServe Enterprise Repository on UNIX on page 33.

Before you can run the StreamServer on UNIX after the installation, you must

• Configure a runtime repository – This can be done by configuring an application domain and a database for the runtime repository from Control Center (on a Windows computer). See the Control Center documentation.

Parts included in the StreamServer installation

The following main parts are included in the StreamServer setup:

• StreamServer

For a description of this part, see Overview on page 8.
Installing the StreamServer on UNIX

To install the StreamServer on UNIX, you must:

- Run the StreamServe setup script. See *Running the StreamServe setup script* on page 60.

After the script is run, the ManagementGateway and ManagementNanny processes are started if they are not already running.

After you have installed the StreamServer, you can manage and administer applications on the host from Control Center. For more information, see the *Control Center* user guide.

**Note:** If you use Java connectors, you must set the STRS_JAVA_HOME environment variable to point to your Java runtime environment version. You configure this after the StreamServer installation in the bootloader.sh file found in the applications/streamserver folder under the folder created when extracting the setup file. For example:

```
/opt/streamserve/streamserve-5.4.0.GA.3126/applications
/streamserver
```

### Running the StreamServe setup script

To run the script, root privileges are not required.

After the script is run, a file is created with the values you entered during the setup. You can use this file to run the setup again using the same values. See *Running the setup script using a file (silent install)* on page 60.

For information about the structure of the StreamServe directory, see the README file in the folder created when extracting the setup file.

### Running the StreamServe setup script manually

1. Browse to the folder created when extracting the setup folder, for example:
   ```
   /opt/streamserve/streamserve-5.4.0.GA.353
   ```
2. Run `./setup`
3. Select to install the StreamServer.
4. Follow the prompts to complete the installation.

**To access the help during the installation**

Enter `?` to display help text for an option.

### Running the setup script using a file (silent install)

When you run the setup a file called `.operatorInput` is created.

You can use this file to run the setup again without being prompted for any values
To run the setup script using a file

1. Browse to the folder created when extracting the setup folder, for example:
   /opt/streamserve/streamserve-5.4.0.GA.353
2. Run `./setup -file .operatorInput`

Installation log

An installation log file called `setup.log` is created in the directory where you run the setup.

System information

A system information XML file is created in the `systeminfo` folder.
Installing Design Center

Prerequisites

• If you want to install Design Center as a part of a workstation installation for Project developing and testing you must first install StreamServe Enterprise Repository, Framework and Control Center, and StreamServer.

• If you only want to run Design Center as a stand-alone tool, you can install only Design Center on your computer.

  Note: Microsoft .NET 2.0 and a StreamServer service is installed with Design Center if they are not installed already. The included StreamServer enables preview in e.g. PageOUT.

• Microsoft Internet Explorer 6.x or 7.x must be installed on the computer.

• When installing or removing a Design Center installation on Windows, you must have administrator rights.

• To install the Lotus Notes wizard, you must have a Lotus Notes client installed on the computer.

To install Design Center

You install the software from the installation CD.

1 If autostart is enabled on your computer, the StreamServe Setup wizard opens automatically. Otherwise, double-click the mssetup.exe file to open the StreamServe Setup wizard.

2 Select Design Center.

3 Follow the wizard which guides you through the installation.

Available tools after installation

The following tools are available through the Start > All Programs > StreamServe Persuasion SP4 > Design menu:

• Design Center
• Overlay Editor
• StoryTeller
• StreamServe Help

The following tools are available through the Start > All Programs > StreamServe Persuasion SP4 > Utilities menu:

• Device Tool
• Post-processor Repository Tool
• Print Processor Configuration (installed with StreamServer)
• Repository Tool
Installing Design Center

- UTF Edit
- Windows Driver Tool
Installing StreamStudio on Windows

Prerequisites
If you want to use Control Center to administer StreamStudio, you must also install:

- StreamServe Enterprise Repository
- Framework and Control Center


The StreamStudio applications must be deployed to a Java application server, for example Tomcat. For information on Tomcat, see http://tomcat.apache.org/

The installation files are copied to disk in the following folder:

<Streamserve installation>\Applications\Management\5.4.0\etc\Portals\5.4.0

Deploy directly with Control Center
If you have installed Framework & Control Center, you can use Control Center to deploy StreamStudio to a Java application server. See the Control Center documentation.

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. In such a scenario, you can still configure the StreamStudio environment in Control Center. Then you can manually copy the StreamStudio files to the computer where the Java application server is installed. For more information, see the StreamStudio Administrator’s Guide.

User requirements
When installing or removing StreamServe software in a Windows environment, you must have administrator rights.

StreamStudio components
- DataDirect JDBC driver 5.2 (for Oracle)
- JTDS driver (for SQL Server)
- StreamStudio applications
A Java Runtime Environment is not installed with StreamStudio. If you do not have it on the machine where you are installing StreamStudio, you must install it yourself. You can download it e.g. from http://www.java.com

See Supported software and platforms documentation.

Java environment

If you use Tomcat, you can configure the Java Virtual Machine in e.g. Start > All Programs > Apache Tomcat 5.5 > Configure Tomcat.

To install StreamStudio

You install the software from the installation CD.

If autostart is enabled on your computer, the StreamServe Setup wizard opens automatically. Otherwise, double-click the mssetup.exe file to open the StreamServe Setup wizard.

Select StreamStudio to start the wizard that will lead you through the installation.

After the installation

After running the setup, see the Control Center documentation for configuring StreamStudio, and StreamStudio Administrator’s guide for more advanced administrative tasks.

For testing and Project development purposes, you can use OpenDS as a directory server for storing StreamStudio users. See Installing OpenDS on page 67.
Installing OpenDS

You can install OpenDS and use a set of demo users to test or demo StreamStudio. If you want to load the demo users during the OpenDS setup, you must install Framework and Control Center before you install OpenDS.

Note: It is not recommended to use OpenDS in a production environment, if possible use Microsoft Active Directory.

Prerequisites
See https://opends.dev.java.net/

Note: The Framework and Control Center setup installs the J2SE Runtime Environment 5.0 Update 14 if it is not already installed.

To load StreamServe demo users during the OpenDS setup
The following options must be specified during the setup

• **Directory Base DN** – specify `dc=streamserve,dc=com` which is the domain name the LDIF file is based on.

• **Directory Data** – specify to import data from LDF file and browse to `<StreamServe installation>\Platform\Core\1.3\etc\strsdefaultusers.ldif`

• Optionally, select to run OpenDS as a service.

To install OpenDS
1. Download and install OpenDS from https://opends.dev.java.net/

To login to StreamStudio as the demo users
If you have imported the `strsdefaultusers.ldif` file to your directory server, you can login with the following users:

User name: strsAdmin Password: insecure
User name: strsReader Password: insecure

Note: Before logging in, update the application domain information in Control Center and restart your Java application server (e.g. Tomcat).
Installing StreamStudio on UNIX

Prerequisites
A Java Development Kit must be installed on the host where you install StreamStudio, for download and installation information, see http://java.sun.com

The StreamStudio applications must be deployed to a Java application server, for example Tomcat. See http://tomcat.apache.org/

For deploying tasks etc, see the Control Center documentation or the Command Line Utilities documentation.

Parts included in the StreamStudio installation
The following main parts are included in the StreamStudio installation:

• DataDirect JDBC driver 5.2 (for Oracle Database and SQL Server)
• JTDS driver (for SQL Server)
• StreamStudio web applications

For a description of these parts, see Overview on page 8.

For more information on Tomcat, see http://jakarta.apache.org
Installing StreamStudio on UNIX

To install Framework on UNIX, you must:

- Extract the StreamServe setup files. See Extracting the StreamServe setup files on page 34.
  
  **Note:** If you already have installed extracted the setup file on the same machine you do not have to do this again.

- Run the StreamServe setup script. See Running the StreamServe setup script on page 70.

After you have installed StreamStudio, you can deploy and administer StreamStudio on the host from Control Center. For more information, see the Control Center documentation and StreamStudio Administrator’s guide.

Running the StreamServe setup script

To run the script, root privileges are not required.

After the script is run, a file is created with the values you entered during the setup. You can use this file to run the setup again using the same values. See Running the setup script using a file (silent install) on page 70.

After the script is run, the ManagementGateway and ManagementNanny processes are started if they are not already running.

**Note:** To start the Service Gateway, Control Center must be used, or the Command Line Utilities. See the Control Center documentation or the Command Line Utilities documentation.

For information about the structure of the StreamServe directory, see the README file in the /Server directory.

Running the StreamServe setup script manually

1. Browse to the folder created when extracting the setup folder, for example: /opt/streamserve/streamserve-5.4.0.GA.353
2. Run ./setup
3. Select to install StreamStudio.
4. Follow the prompts to complete the installation.

**To access the help during the installation**
Enter ? to display help text for an option.

Running the setup script using a file (silent install)

When you run the setup a file called .operatorInput is created.
You can use this file to run the setup again without being prompted to enter values for StreamServe Enterprise Repository, management gateway, etc.

**To run the setup script using a file**

1. Browse to the folder created when extracting the setup folder, for example:
   ```bash
   /opt/streamserve/streamserve-5.4.0.GA.353
   ```
2. Run `./setup -file .operatorInput`

**Installation log**

An installation log file called `setup.log` is created in the directory where you run the setup.

**System information**

A system information XML file is created in the `systeminfo` folder.
Installing EMF Print Processor

The EMF Print Processor enables you to convert documents from any Windows application into LXF (StreamServe Layout eXchange Format) files.

The EMF Print Processor only runs on Windows.
Installing the EMF Print Processor

The EMF Print Processor is included in the StreamServer setup. However, you can install the EMF Print Processor in a separate setup to use the EMF Print Processor without StreamServer. For example to convert a Microsoft Office document to LXF format, for later use in a StreamServer installation on another computer.

When you have installed the EMF Print Processor, you configure the options for the Processor using the StreamServe Print Processor configuration utility. See the EMF Print Processor documentation.

You download the software from the Streamserver Download Center

**To install the EMF Print Processor as a stand-alone application**

1 Double-click the `setup.exe` file to open the StreamServe Setup wizard.
2 Follow the wizard which guides you through the installation.
Uninstalling and repairing StreamServe components

You can uninstall the StreamServer and Design Center from the StreamServe installation DVD.

For Streamserver and Design Center, you can use the repair option that removes the current installation and installs the new one.

You can use Add or Remove Programs in Control Panel to uninstall Framework and Control Center, the StreamServe Enterprise Repository, and StreamStudio.

**Note:** You must remove StreamServer before removing Service Component Framework.

**Note:** If you want to uninstall StreamStudio, shutdown the StreamServe Management Gateway and StreamServe Management Nanny services before re-installing.

To upgrade from previous versions of StreamServer components, see the StreamServe Upgrading Instructions documentation.

**To uninstall the StreamServer or Design Center**

If autostart is enabled on your computer, the StreamServe Setup wizard opens automatically. Otherwise, double-click the `mssetup.exe` file to open the StreamServe Setup wizard.

Select the component you want to uninstall, and the appropriate option

<table>
<thead>
<tr>
<th>Options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Repair</strong></td>
<td>Reinstalls the StreamServer or Design Center components previously installed.</td>
</tr>
<tr>
<td></td>
<td>All files for the component are updated.</td>
</tr>
</tbody>
</table>
Replacing certificates files

Uninstalling and repairing StreamServe components

To uninstall in Control Panel

1. In Control Panel, open **Add or Remove Programs**.
2. Select the program to remove and click **Remove**.

This way you can uninstall Service Component Framework, the management gateway, the service gateway and Control Center, the StreamServe Enterprise Repository, and Streamstudio web applications, as well as your Java application server, e.g. Tomcat. The actual enterprise and runtime repositories are not deleted. You can use an external tool if you want to delete these databases.

Replacing certificates files

You can replace the certificate files used by the management gateway and service gateway. For example, when you have renewed a certificate file.

If you replace a certificate file, the new certificate must have the same file name as the old certificate.

The certificate files are located in the following directories:

<table>
<thead>
<tr>
<th>Certificate</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trusted certificate authority file(s)</td>
<td><code>&lt;StreamServe installation&gt;\Platform\Core\1.2\bin\security\certificatetore\trusted\authorities</code></td>
</tr>
<tr>
<td>Trusted peer certificate file(s)</td>
<td><code>&lt;StreamServe installation&gt;\Platform\Core\1.2\bin\security\certificatetore\trusted\peers</code></td>
</tr>
<tr>
<td>Server identity file</td>
<td><code>&lt;StreamServe installation&gt;\Platform\Core\1.2\bin\security\certificatetore\trusted\Keystore\private</code></td>
</tr>
</tbody>
</table>

To replace to a certificate file

1. Browse to the directory that contains the certificate file you want to replace.
2 Copy the new certificate file to the directory.
3 Restart the following Windows services:
   StreamServe Service Gateway
   StreamServe Management Gateway
   StreamServe Management Nanny
Replacing certificates files

Uninstalling and repairing StreamServe components