![embarcadero](embarcadero logo)

Product Documentation

ER/Studio Team Server XE5
Administrator Guide

Version 4.0

Embarcadero Technologies, Inc. is a leading provider of award-winning tools for application developers and database professionals so they can design systems right, build them faster and run them better, regardless of their platform or programming language. Ninety of the Fortune100 and an active community of more than three million users worldwide rely on Embarcadero products to increase productivity, reduce costs, simplify change management and compliance and accelerate innovation. The company's flagship tools include: Embarcadero® ChangeManager™, CodeGear™ RAD Studio, DBArtisan®, Delphi®, ER/Studio®, JBuilder® and RapidSQL®. Founded in 1993, Embarcadero is headquartered in San Francisco, with offices located around the world. Embarcadero is online at www.embarcadero.com.

May, 2014

CONTENTS

Overview of the ER/Studio Team Server Architecture

ER/Studio Team Server is a web server application with a database of its own, the **Reporting Repository**, which is synchronized with **ER/Studio Repository**.
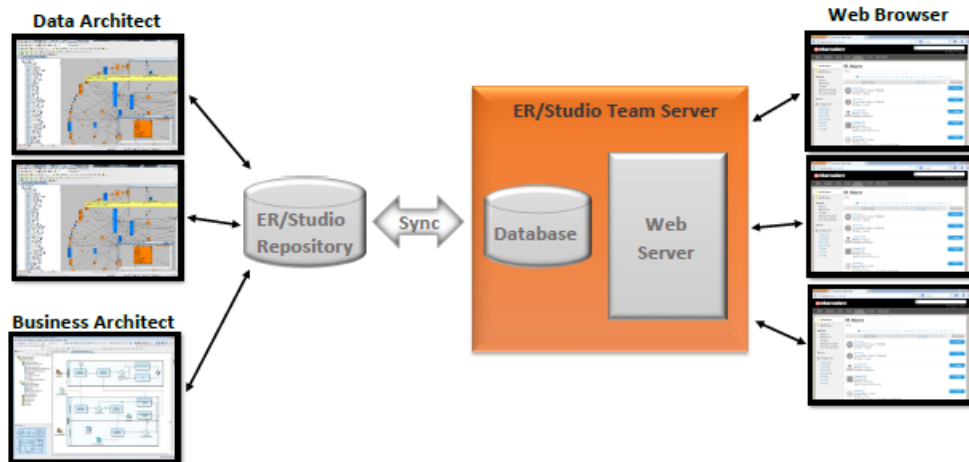
The following list describes the process of creating and accessing the metadata:

1. The metadata is created and maintained by **ER/Studio** clients.

2. That metadata is stored in the **ER/Studio Repository** database.

3. Through an ETL (extract, transform, and load) process that metadata is pulled into the **Reporting Repository** database, which is synchronized on a scheduled basis with the ER/Studio Repository database.

4. **ER/Studio Team Server** users can then browse, search, and generate reports on the synchronized metadata in the ER/Studio Team Server Reporting Repository.

The **Reporting Repository** database contains properties for logical and physical model ER objects, and is optimized for quick and efficient reporting of business-related metadata. The Reporting Repository provides easy access, browser and searching features on the ER/Studio Repository metadata, and allows storing and managing reports from previous queries and the metadata they rely on.

> **Note:** Initially, physical properties that are specific to a relational database platform and/or version will not be extracted from the ER/Studio Repository or transferred to the reporting database.

Backing Up ER/Studio Team Server Data

When you [uninstall ER/Studio Team Server](#), the uninstallation wizard backs up all user-created reports and diagram images. When you reinstall, if you choose to "Connect to existing repository database" on the Reporting Repository page of the installation wizard, the user-created reports and diagram images are available again.

Also, if the current ER/Studio Team Server installation has the license registration, you do not have to re-register for the next installation.

> **Warning:** This restoration function only works for the files backed up immediately prior to reinstallation.

See Also

- [Installing ER/Studio Team Server](#)

- [Uninstalling ER/Studio Team Server](#)

Admin
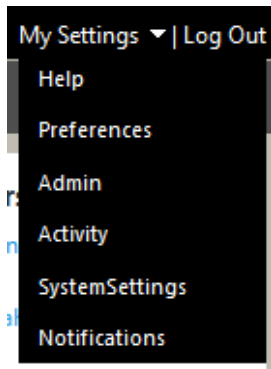
My Settings > Admin (<u>super users</u>)

This section gives you access to pages where you can perform administrative tasks:

Item	Description
Repository Management	Lets you manage the Reporting Repository.
Licenses	Use this page to manage your ER/Studio Team Server licenses and check the activity of the logged-in users.
Permissions	Lets you manage permission on Action Sequences for user and roles.
ER/Studio Synchronization	Use this page to synchronize the **ER/Studio Repository** database with the Reporting Repository database. See Overview of Data Synchronization.
Comments (only non-social users)	Act as a moderator to review, approve, and delete the comments other users have attached to ER objects.
Schedules	Use this page to check the status of the scheduler, suspend the scheduler, resume from suspend, or see a list of the schedule jobs. See Overview of Scheduling.
Subscriptions	A subscription binds an administrative function such as cleaning or synchronizing the repository to a schedule. Use this page to create and manage subscriptions, subscription schedules, and scheduled jobs. See Overview of Scheduling.
Managed Attributes (only social users)	Use this page to manage the attachment attributes of your ER objects.
Interaction Settings	Use this page to manage user interaction settings. You can allow/disallow users to moderate comments, provide the email address of the moderator, enable/disable sending emails for search results and reports.
Object Access Restriction (only social users)	Use this page to manage restrictions for social users to ER objects in the Reporting Repository.
Object Alerts	Use this page to access and edit any alert condition defined in **ER/Studio Team Server**.
Term Entity Types	Use this page to add, edit, or delete Term Entity Types. You can also choose your own nomenclature. For example, Entity Term Type could provide a way to distinguish between different types of terms. This makes it easier for you to see the relationship and understand the distinction. Examples of types might include the Subject Area, Documents, Reports or Domains.
Manage Search Results	Use this page to choose which fields are displayed in the search results for Data Sources.
Glossary Tool Tip	Use this page to manage the glossaries that be returned for each URL Pattern.

Access Control List	Use this page to manage permissions for users and groups.

See Also

- Administrator Guide

Release Notes for ER/Studio Team Server

Thank you for using ER/Studio Team Server, previously known as Embarcadero Connect, the award-winning web-based tool to access, search, edit and manage enterprise metadata. ER/Studio Team Server is a model and metadata collaboration platform that provides greater meaning, understanding and context to enterprise data. Data professionals, developers, and business analysts gain better comprehension and compliance using integrated model, metadata & collaboration tools.

Release Notes

These **Release Notes** contain important information that might not appear in the ER/Studio Team Server documentation. We recommend that you read this page in its entirety. For the most current version of these notes, see the [online documentation](#).

Obtaining This Update

You can download this latest update from [the Embarcadero website](#).

Installing This Update

To apply this update, please follow the [installation guide](#).

New Features

Filter Streams

ER/Studio Team Server introduces a new filtering feature to make your [Social Stream](#) more effective. Show or hide different activities to focus on what you are most interested in.

Login Credentials

Increasing security and ease of use, the new [Login Credentials](#) feature allows you to relate your Data Sources with encrypted and saved Login Credentials. Allowing authorized users to connect to Data Sources without the need to expose the Data Source username and password.

Access Control List

Giving specific users the required access to resources has never been easier. The new ACL delivers a simple but effective way of delegating user permissions.

New Licensing

The licensing model has been updated. To make things simple, there is now only one type of user license. ER/Studio Team Server licenses give all of your users full access to all functionality. To read more on the different licensing options, see the Licensing page.

Data Source Monitoring

As well as making Data Sources easier and more secure to work with, you can now monitor each data source and have a complete set of metrics listed in the data source description. With Metrics such as: Percent Space Used (%), Percent Space Free (%), SQL Statements Executed, Host Ping Time (ms) and Online status you can see critical information right in your browser.

Monitoring Notifications

As well as being able to view the data source metrics in the description, you can also monitor each data source and have notifications in your home stream or email to warn you of any potential future problems.

Bug Fixes

RWP-3639 Security fix

User Connection Licenses

ER/Studio Team Server ships with a license for a base user connection, Base Super User Connection, that allows one super user (administrator) connection with no expiration date.

See **Overview of Connection Licenses** for more information.

Technical Support

If you have a valid maintenance contract with Embarcadero Technologies, our Support team will assist you with any problems you have with our applications. Our maintenance contract also entitles registered users of Embarcadero Technologies products to download free software upgrades during the active contract period.

Evaluators receive free technical support for the term of their evaluation. To download evaluations of Embarcadero Technologies products, go to www.embarcadero.com.

To contact the Support team, go to the Support page.

See Also

- Release Notes for Embarcadero Connect 3.0

Installation Notes for ER/Studio Team Server

These notes provide important information about installing ER/Studio Team Server. You should read this document in its entirety before any install or uninstall procedure.

Minimum Requirements

ER/Studio Team Server is a 32-bit server application that runs in a Microsoft Windows environment. Before installing ER/Studio Team Server, verify that your environment meets the hardware and operating system requirements.

Hardware Requirements

The minimum hardware requirements are:

- CPU: 2 x 3.0 Ghz

- RAM: 4 GB

- Disk space: 740 MB for program installation. You will need additional space available for data storage, for example 100mb per diagram in the Repository.

System Requirements

Your machine must be running the Microsoft Windows operating system. The following versions of Microsoft Windows are supported:

- Microsoft Windows 2012 Server

- Microsoft Windows 2008 R2 Server

- Microsoft Windows 2008 Server (32-bit or 64-bit)

- Microsoft Windows 2003 Server (32-bit only)

Note: ER/Studio Team Server can run on Windows XP, Windows Vista and Windows 7-8, but this is not recommended for an operational system, only for testing purposes.

- To install ER/Studio Team Server on Windows 7, you need to run the installer in Windows XP or Windows Vista compatibility mode.

- If the SQL server is also running when installing on Windows 8, the instance needs to be part of the SQL server name. The services and protocols also need to be running or enabled as documented below for SQL Server 2014.

ER/Studio Repository

ER/Studio Team Server works against an installation of **ER/Studio Repository**. Prior to installing ER/Studio Team Server, you need a working installation of ER/Studio Repository. ER/Studio Team Server supports versions 6.0, and 6.5 of ER/Studio Repository.

If you have enough RAM for both applications, we recommend that you install ER/Studio Team Server on the same machine where the ER/Studio Repository server is installed. Otherwise, the machine where you install ER/Studio Team Server must have network access (over a local network or over the Internet) to the machine where ER/Studio Repository is running.

Supported Database Platforms

The **Reporting Repository** is the database that ER/Studio Team Server uses to store the information that it gathers from the **ER/Studio Repository**. The Reporting Repository database also stores the reports from previous queries and the metadata they rely on.

The Reporting Repository database may run on any of the following database platforms:

- Oracle 9i, 10g, and 11g

- IBM DB2 UDB 8.x, 9.x and 10.x Server

    Note: Before installing ER/Studio Team Server on the DB2 platform, you must first create the Reporting Repository database. Allocate 32K for the tablespace pagesize. Starting with CONNECT version 3.0.4, Unicode is supported. When installing DB2, UTF-8 should be selected when configuring your DB2 DB.

- Microsoft SQL Server 2005 to 2014

Important Information

Ensure that the database is set to case-insensitive, as case-sensitive is not supported. Also set the SQL Server Configuration Properties to allow SQL Server authentication. ER/Studio Team Server only supports SQL Server Authentication.

When installing over SQL Server 2014 (any Operating System), use the SQL Server Configuration Manager and make sure that the following services are running:
SQL Server
SQL Server Agent
Also that following protocols are enabled:
Shared Memory
TCP/IP
Named Pipes

We recommend that you put the Reporting Repository database on a separate machine from the one running the **ER/Studio Repository** database.

Supported Web Browsers

The following web browsers are tested to work with ER/Studio Team Server. Other browsers may work, but are not officially supported:

- Mozilla Firefox

- Google Chrome

- Microsoft Internet Explorer (7.0 or later)

Conflicts

Do not install ER/Studio Team Server on a system where **ER/Studio Data Architect**, **ER/Studio Business Architect** or a previous version of ER/Studio Team Server is installed. If the ER/Studio Team Server installer detects an installation of any of these applications, the installer asks you to uninstall these applications before you proceed.

There may be naming conflicts between the **ER/Studio Repository** and the **Reporting Repository**. If both repositories are installed on the same database server, you should use different schema owners.

Prerequisites

To install ER/Studio Team Server:

- Your user account must have administrative privileges.

- The [ER/Studio Repository](#) server and the database server to be used for the ER/Studio Team Server Reporting repository must be running.

- In order to install, you need to create first an empty database for ER/Studio Team Server, unless you already have a database and will be reinitializing it during the install.

Optional Features

Active Directory Users Support

The installation must include configuration of LDAP functionality to allow directory service users to log in to ER/Studio Team Server. You can alternatively [enable LDAP authentication after the installation](#).

Email Support

SMTP server configuration must be done in order to fully support email notifications based on user activity. You can alternatively [enable email support after the installation](#).

Third-Party Software That Is Installed with ER/Studio Team Server

ER/Studio Team Server depends on some third-party software that the [ER/Studio Team Server installation wizard](#) installs automatically on your system. That third-party includes:

- [Apache Tomcat](#)

- Pentaho BI Platform

Installing and Upgrading

If you meet the minimum requirements, you can proceed to install ER/Studio Team Server. See **Installing ER/Studio Team Server**.

If you have installed a previous version of ER/Studio Team Server (for example, any version of Embarcadero CONNECT or ER/Studio Portal), see **Upgrading ER/Studio Team Server**.

After Installing

After the installation is complete, you must synchronize the ER/Studio Team Server database with the ER/Studio Repository database to ensure that it is up to date.

See Installing ER/Studio Team Server, Next Steps for more information.

See Also

- Release Notes for ER/Studio Team Server

- Upgrading from Previous Versions

Upgrade Notes for ER/Studio Team Server

These **Upgrade Notes** provide important information regarding the process of upgrading to Embarcadero Team Server 4.0 from a previous versions.

Regardless of the process that you must follow to back up your licenses, which depends on the previous version that you are upgrading from and other factors, after you restore your licenses in your new ER/Studio Team Server 4.0 installation, you must log in as a super user and use the **Manage Users** page to assign different types of available licenses to your users.

 Note: Files saved in later versions of ER Studio Data Architect may not work with ER/Studio Team Server if they use new features. For example, if you use SQL Server 2014 for your Physical Model in ER Studio DA 9.7, you will need to update to the corresponding version of ER/Studio Team Server for those files to synchronize.

Upgrading from Embarcadero CONNECT 3.0.x

If your previous installation is CONNECT 3.0.x, the installation with automatically detect an upgrade to ER/Studio Team Server.

We always recommend backing up your data before starting the process. You may have to back up your database, Repository database and export your Glossaries and Terms. We also recommend that you back up any licenses. To do this, please follow the steps in Upgrading from ER/Studio Portal 2.0.x.

Upgrading from ER/Studio Portal 2.0.x

If your previous installation is ER/Studio Portal 2.x, you will need to back up your licenses manually.

Make a copy of the license files, for example: license.txt, ao_12345678.txt or .slip until the upgrade has completed. Then copy to the license folder in the installation directory of the new Embarcadero Connect 3.0 installation folder.

Depending on your installation location, you can find the license file in the program directory. For example:

- C:\Embarcadero\ERStudio Portal 2.0\license

If you have previously used the uninstaller, you may also have a license backup in the following location:

-
    o 32-bit Windows: C:\Program Files (x86)\Common Files\ersEnterprisePortalBackup\license

- o 64-bit Windows: C:\Program Files\Common Files\ersEnterprisePortalBackup\license

- If you have installed ER/Studio Portal 2.0.x on one computer and now want to install Embarcadero Connect 3.0 on a different computer, there is no license to back up, so you must use the license file from the previous installation. Copy the license\license.txt file from the previous installation folder into the new Embarcadero Connect 3.0 installation folder.

After copying over the license.txt file to the license folder within the installation folder of Embarcadero Connect 3.0, log in to Embarcadero Connect as a super user, select **My Settings > Admin > Licenses** and click **Refresh** for Embarcadero Connect to recognize your licenses.

Upgrading from ER/Studio Portal 1.6.x

ER/Studio Portal 1.6.x uses two databases, the solution and the reporting repositories. Because of this, you need to follow these steps to upgrade to Embarcadero Connect 3.0:

1. Consolidate the two databases:

    1. Stop the Tomcat service and run the 1.6.x Portal Configuration Manager.

    2. Select the **Solution Database** tab.

    3. Change the connection information to match that of the Reporting database.

    4. Select **Initialize Existing Database** and click **Apply**.

    5. Click **OK**. The Solution tables will be placed into the Reporting database.

    6. Restart the Tomcat service.

2. Log in to the Portal and make sure that everything works correctly.

3. Uninstall Portal 1.6.x.

4. Install Embarcadero Connect 3.0.

5. When prompted to specify the Reporting Database information, specify the connection information, select **Connect to Existing Database**, and click **Next**. You are prompted to specify the Solution database information. It should default to the Reporting database.

6. Specify the password for the Reporting database and click **Next**.

7. Finish the installation.

8. After installing Embarcadero Connect 3.0, synchronize Embarcadero Connect with the ER/Studio Repository database to ensure that it is up to date.

Upgrading ER/Studio Team Server

Before you begin, please review the <u>Upgrade Notes</u> specific to your previous version and the <u>Release Notes</u>.

To upgrade your ER/Studio Team Server installation to a newer version:

1. Run the installer for ER/Studio Team Server, this will automatically <u>uninstall</u> your current ER/Studio Team Server installation. If you wish to <u>uninstall</u> your previous version of ER/Studio Team Server manually, please review the information below regarding the backing up of your licenses.

2. <u>Install</u> your new version of ER/Studio Team Server.

Supported Versions for Upgrading

Upgrading releases of ER/Studio Portal prior to 2.0 is not supported for this release. Please review the <u>Upgrade Notes</u> for further information.

Note: In previous versions of ER/Studio Portal it was possible to split the Reporting and Solutions database in to two separate databases. If you have your Portal data in two separate databases, you will need to use your database supporting client tools to merge the data in to one database prior to installation. Team Server no longer uses the solutions/reporting database structure. Should you have any concerns regarding this, please contact <u>Support</u> before starting your upgrade.

Keeping Your Licenses When Upgrading

If you have previously installed ER/Studio Portal 2.x you will need to manually back up your license file as explained below. If you are upgrading from Connect 3.x the Embarcadero Connect installer will automatically back up and use your existing add-on license files. But there are two exceptions:

- You are upgrading and during the installation you choose a different Reporting repository than the one used in your previous installation. In this case you must copy the license.txt file from the backup directory to the license directory in the new Embarcadero Connect license directory, <installation folder>\license\. Depending on the operating system, you can find the license file at one of these backup locations:

    o C:\Program Files (x86)\Common Files\ersEnterprisePortalBackup\license

    o C:\Program Files\Common Files\ersEnterprisePortalBackup\license

- You have installed a previous version on one computer and now want to install Embarcadero Connect 3.0 on a different computer. In this case, there is no license to back up so you must use the license file from the previous installation. Copy the license.txt file from the previous installation to the new installation. The license file resides in <installation folder>\license\.

After copying over the license file to <installation folder>\license\, from the Embarcadero Connect console, go to **Admin > Licenses**, and click **Refresh**, so that Embarcadero Connect recognizes and uses the license.

Reports Update when Upgrading

This section explains how to deal with the upgrade from previous versions when the adhoc report metadata changes with respect to the new version. Changes include adding new model into an adhoc report, or changing field name in the existing adhoc report.

> **Note:** The following instructions affect the upgrade from previous versions in which the adhoc report metadata changes with respect to the actual version. For example, The **Connect Model** option is not available until Connect 3.0.2. For this reason, when upgrading from releases prior to Connect 3.0.1 to versions Connect 3.0.2 or higher, you should follow these steps. Particularly, when upgrading from Connect 3.0.2, the **Connect Model** option appears on the **New Report** page but if you move to the next page, the custom attribute options are missing until these steps are executed.

If the adhoc report metadata changes when you upgrade from a previous version, you should follow the following steps after installing the new version:

1. Select **My Settings > Admin > Repository Management**.

2. Click **More** button.

3. Click on the options in the following order:

    1. **Refresh Reporting Metadata**.

    2. **Execute Global Action**.

    3. **Refresh System Settings**.

4. Click **Close**.

5. Click on **Update Solution Repository** in **My Settings > Admin > Repository Management**.

6. Wait until a message of successful update appears.

After you upgrade ER/Studio Team Server

- Update the search index.

See Also

- Installing ER/Studio Team Server

- Uninstalling ER/Studio Team Server

Installing ER/Studio Team Server

Please ensure that you have read the <u>Installation Notes</u> before proceeding.

To install ER/Studio Team Server on <u>a machine that meets the minimum system requirements</u>, you need to run the ER/Studio Team Server installation wizard and follow the steps. In this page you can find detailed information about the different steps of the installation wizard, as well as <u>suggestions on what to do after the installation</u>.

Note: The <u>ER/Studio Repository</u> server and the database server to be used for the ER/Studio Team Server Reporting repository must be running before installing ER/Studio Team Server. You may also have to create a blank database prior to starting the installation, please check the <u>Prerequisites</u>

<u>Download the ER/Studio Team Server installer</u>, run it and follow these steps to install ER/Studio Team Server:

Note: You need a user with administrative privileges to run the ER/Studio Team Server installation wizard.

1.

   On the **Welcome** page, click **Next**.

   Note: Do not install ER/Studio Team Server on a system where **ER/Studio Portal** or a previous version of ER/Studio Team Server is installed, if the ER/Studio Team Server installation wizard detects an installation of any of these applications it will ask to automatically uninstall these. If **ER/Studio Data Architect** or **ER/Studio Business Architect** are installed you must exit the wizard and uninstall these applications. Then, restart the installation wizard.

2.

On the **Software License and Support Agreement** page:

1. Check **I accept the terms of the license agreement** if you do accept them. Otherwise, click **Cancel** to abort the installation.

2. Click **Next** to continue.

3.

On the **Installation Directory and Email** page:

1. Right under the **Directory Name** field, click **Browse** to choose the directory where you want to install ER/Studio Team Server. The selected directory must be empty.

Note: If the selected directory is not empty, an error dialog appears. Click **OK** to close the error dialog, and make sure that the selected directory is empty.

2. Optionally, you can check "Enable Sending of Email" to be able to allow users to send search results and reports by email directly from ER/Studio Team Server. When you check this option, additional fields appear:

Note: You can enable or disable this feature later, after the installation, using the ER/Studio Team Server Configuration Manager.

1. In the **Host** field, enter the host name of the email server (for example: ETMAIL01), the fully qualified network name (for example: ETMAIL01.embarcadero.com), or the IP address (for example: 10.10.23.250).

2. In the **Port** field, enter the port number where the email server is listening. The default port is 25.

3. In the **From Address** field, enter the email address that you want to use as the sender of the emails sent from ER/Studio Team Server. You may want to prepare a special email address on your email server for this purpose.

4. Optionally, check "Use Authenticated SMTP" if your email server requires authentication. When you check this option, additional fields appear. Fill **User Name** and **Password** with the required values to authenticate ER/Studio Team Server against your STMP server.

4.

On the **ER/Studio Team Server Tomcat Server** page:

1. In the **Host Name** field, enter the host name to run the ER/Studio Team Server server (for example: DEWKBROW01), the fully qualified network name (for example: DEWKBROW01.embarcadero.com), or the IP address (for example: 10.10.23.250).

2. In the **Port** field, enter the port number where the ER/Studio Team Server server must listen for connections. The default port is 80. If another application on your system is already using the default port (for example, another web-based application), enter an unused port number (a commonly-used alternative is 8).

Tip: Network ports may be a number between 0 and 65535. The ports in use depend on the platform and the services installed on your system. For example, you cannot use 0 or 139 on Windows as they are used for the NetBios Session Service. Higher numbers are less likely to be already in use.

3. In the **Shutdown Port** field, enter the port number where the ER/Studio Team Server server must listen for the shutdown command. The default port is 8006. If another application on your system is already using the default port, enter an unused port number.

Note: You can change the shutdown port later, after the installation, using the [ER/Studio Team Server Configuration Manager](#).

4. If you are using a Windows version newer than Windows XP, such as Windows Vista, Windows 7, and Windows 2008, you must also specify the following to enable ER/Studio Team Server to synchronize with the **ER/Studio Repository**:

1. In the **Windows User** field, enter the name of a Windows user that ER/Studio Team Server can use to log in to the system. The name should be in the format "domain\username". If the user is a local , out of the domain, enter the machine name instead of the domain name, using the format "machine_name\username".

2. In the **User Password** field, enter the password of the Windows user.

5. Click **Next** to continue.

5. On the **Secure Communications** page you can optionally choose to enable SSL and HTTPS. It is recommended that you enable secure communications as this will keep your password transmissions secure.

1. If you do not have SSL set up on your server, you can click the Self-Signed button to take you through the short wizard which will create a Keystore file allowing you to use encryption.

2. Fill out the fields of the *Self-Signed wizard* and click **Next**. The Keystore file will be created in the location of your choosing.

3. Click **Next**.

6. On the **Enable LDAP Authentication** page, optionally, check "Enable LDAP Authentication" to use the Lightweight Directory Access Protocol (LDAP) to enable users to log in to ER/Studio Team Server using their domain username and password. You can also enable LDAP authentication after the installation):

    1. In the **LDAP URL** field, enter the URL of the server running LDAP. For example, ldap://10.40.40.94:389 for normal connections, or if you wish to use ldaps://10.40.40.94:636 for secure connections then you can enable this after installation with the ER/Studio Team Server Configuration Manager.

    2. In the Manager DN field, enter the distinguished name for the user that is used to authenticate users. ER/Studio Team Server uses this to connect to the LDAP server and validate user credentials. For example, CN=administrator,CN=Users,DC=mydomain,DC=com.

    Note: In this example, administrator has been used. In which case, **Users** is defined as a container rather than an organizational unit as is the Microsoft Active Directory default. Your user accounts may be in an organizational unit, in this case you would specify it differently, for example, CN=user1,OU=sales,DC=mydomain,DC=com.

    3. In the **Manager Password** field, enter the password for the administrative user.

    4. In the **Search Base DN** field, enter the name of the root node in LDAP from which to search for users. For example, CN=Users,DC=mydomain,DC=com.

    5. In the **Search Attribute** field, enter the attribute in LDAP holding the user's login name. For example, sAMAccountName (for ActiveDirectory).

    6. On the **Test User/Password** field, enter the username and password of a sample user to attempt to authenticate against the LDAP server. The installer uses this information to validate the given LDAP information before moving to the next page.

7. On the **Repository Information** page you can specify the target instance of **ER/Studio Repository** that is the information source for ER/Studio Team Server:

   1. Complete the information about the ER/Studio Repository server:

      1. On the **Version** field, select the corresponding version of the ER/Studio Repository.

      2. On the **Repo Server Name** field, enter the name of the machine where the ER/Studio Repository is installed.

      3. On the **Super User Login** field, enter the username for a user with the Super User role in the ER/Studio Repository.

      4. On the **Password** field, enter the password for the specified user.

   2. Complete the information about the ER/Studio Repository database:

      1. On the **DBMS Server Type** field, select a <u>supported database platform</u> from the list.

      2. On the **DBMS Host/Port** field, enter the hostname of the machine that contains the ER/Studio Repository database.

      Note: For Microsoft SQL Server only, if ER/Studio Repository runs on a Microsoft SQL Server database that is a named instance, specify the host name in the format HostName\NamedInstanceName. For example, DEWKBOW01.embarcadero.com\RepositoryServer.

      3. On the **DataBase Name** field, enter the name of the ER/Studio Repository database.

      4. Optionally, for Microsoft SQL Server only, you can check "Enable Encryption" to enable the Secure Sockets Layer (SSL) communication protocol, which encrypts messages between ER/Studio Team Server users and the ER/Studio Repository. When SSL is enabled, ER/Studio Team Server uses ports 80 and 443 for secure communications.

      5. On the **User Name** field, enter the username to access the ER/Studio Repository database.

6. On the **Password** field, enter the password for the user specified above.

![Note icon] **Note:** The password fields are preserved when navigating back and forth during the installation process.

3. After you have entered the required information, click **Connect** to test the JDBC connection. The **Next** button, to continue the installation, is disabled until the installer successfully establishes a connection to the ER/Studio Repository and validates the specified username and password.

4. Click **Next** to continue.

8.

On the **Reporting Repository** page you can specify the details for the Reporting Repository:

Additional Notes:

o You should have an empty database for the Reporting Repository on your database server. **If you do not have one, create one now.** In the screenshot example here we have created a new blank database on our DBMS using the SQL Management Studio, called **ERSRepoRpt**

o If ER/Studio Repository and the Reporting Repository are installed on the same database server, you must use different schema owners for each database. There might be naming conflicts between ER/Studio Repository and the Reporting Repository otherwise.

3. On the **DBMS Server Type** field, select a <u>supported database platform</u> from the list.

![Note icon] **Note:** The DBMS server type must match that of the ER/Studio Repository.

4. On the **DBMS Service Host: Port** field, enter the hostname and port number of the DBMS Service.

![Note icon] **Note:** For Microsoft SQL Server only, if the Reporting Repository runs on a Microsoft SQL Server database that is a named instance, specify the host name in the format HostName\NamedInstanceName. For example, DEWKBOW01.embarcadero.com\ReportingRepository.

---

5. Depending on the database platform that you selected above, complete the following fields:

- If you selected **Oracle**:

    1. On the **SID** field, enter your database identifier.

    2. On the **Tablespace** field, enter your database tablespace.

- If you selected **IBM DB2 Universal Database**:

    1. On the **DBName** field, enter your database name.

    2. On the **Tablespace** field, enter your database tablespace.

- If you selected **Microsoft SQL Server**:

    1. On the **Database Name** field, enter your database name.

    2. Optionally, you can check "Enable Encryption" to enable the Secure Sockets Layer (SSL) communication protocol, which encrypts messages between ER/Studio Team Server users and the Reporting Repository.

6. On the **Database Admin User** field, enter the username of an Admin User that has the privilege to create reporting database tables, etc.

7. On the **Database Admin Password** field, enter the password for the user specified above.

8. For Microsoft SQL Server only:

    0. Optionally, check "Same as Admin" so that the **User Name** and **Password** fields below disappear, and the installer uses the admin username and password specified above instead.

    1. On the **User Name** field, enter the username of a user with read and write access to the Reporting Repository database.

    2. On the **Password** field, enter the password for the user specified above.

9. Select one of the following options for connecting to the Reporting Repository:

- Select "Initialize an existing, empty database" if the Reporting Repository database exists and it is empty with no tables. The installation wizard creates the Reporting Repository database schema, so the "Admin" user must have that privilege.
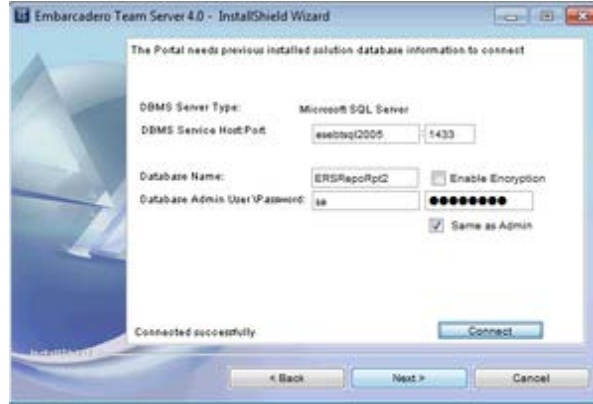
- If you are upgrading ER/Studio Team Server, select "Connect to an existing Repository database".

- Select "Reinitialize current Repository database" if the Reporting Repository database exists. The installation wizard drops all the Reporting Repository database tables and creates a new database schema, so the "Admin" must have that privilege.

Warning: This is a destructive action.

10. Click **Connect** to establish a connection to the Reporting Repository database. After a connection is established, the **Next** button is enabled.

11. Click **Next** to continue.

9. On the **Solution Database** page you can specify the details for the **Solution Database**.

0. Click **Connect** to establish a connection to the previously installed **Solution Database**. After the connection is established, the **Next** button is enabled. This page will only appear on a reinitialization or connection to an existing installation.

10.

On the **Summary Information** page review all the summary information. Click **Back** if you want to make any changes; otherwise, click **Install** to start the installation process. A panel appears showing the progress of the installation. When the installation wizard finishes, the final page appears.

Note: You may see a message indicating that start up of the [Apache Tomcat](#) service is in progress. However this occurs only if the service is still in the process of starting when the installation is complete.

11.

Click **Finish** to exit the installation wizard.

ER/Studio Team Server is now installed on your system.

Additional Notes:

- You can use the ER/Studio Team Server Configuration Manager to prevent [Apache Tomcat](#) from interacting with the desktop, so that next time that you start up ER/Studio Team Server, the [Apache Tomcat](#) service window does not appear. For more information, see **[ER/Studio Team Server Configuration Manager](#)**.

- If any errors occur during the installation, an error page opens, which directs you to the log file located in the directory where you were installing ER/Studio Team Server. For example: C:\Program Files\Embarcadero\Team Server X.X\log.txt.

Next Steps

After you install ER/Studio Team Server, you should:

1. [Start ER/Studio Team Server](#).

2. [Manage your ER/Studio Team Server licenses](#).

3. [Synchronize with ER/Studio Repository](#).

See Also

- [ER/Studio Team Server Configuration Manager](#)

- [Tomcat Configuration Application](#)

Configuration

This page contains some helpful topics to configure ER/Studio Team Server.

Topics

- [Manage Search Results](#)
- [Changing the Interface of ER/Studio Team Server](#)
- [Manage Glossary Tool Tips](#)
- [Optimizing System Performance](#)

See Also

- [Administrator Guide](#)
- [User Guide](#)

Changing the Memory Limit of ER/Studio Team Server

You can use the **Tomcat Configuration Application** to configure the maximum amount of memory that ER/Studio Team Server can use.

To change the memory limit of ER/Studio Team Server:

1. From Windows, select **Start > All Programs > ER/Studio Team Server 4.0 > Configure ER/Studio Team Server**.

2. On the **Java** tab, change the number on the **Maximum memory pool** field.
   Note: The Java Virtual Machine cannot use more than 1.5 GB of memory.

3. Click **Apply** to apply your changes.

For the changes to take effect, you need to restart ER/Studio Team Server.

See Also

- Tomcat Configuration Application

Optimizing System Performance

To get the best performance from your ER/Studio Team Server installation, there are a couple of changes of the underlying system that will benefit your installation by granting more system resources.

1. Increase the physical memory on the Operating System to be 5GB of RAM.

2. Increase the memory values for the catalina.bat file.
   The Path to the catalina.bat file is:..Embarcadero\Embarcadero Team Server x.x\tomcat\bin\catalina.bat.

   o Edit the file and change the following line to allow a greater *MaxPermSize*.

   ```
   set JAVA_OPTS=%JAVA_OPTS% –Xms512m –Xmx1536m –XX:MaxPermSize=1536M
   ```

3. Increase the Maximum Memory Pool for the Java Virtual Machine.
   The connect service available memory was increased to the maximum size, following the procedure as listed in [Changing the Memory Limit of ER/Studio Team Server](#).

Note: On systems running faster SSD drives, benefits can also be made from increasing Virtual Memory settings.

- Recommended Virtual Memory settings:

Set initial size to 1.5x that of the system RAM. Set max size to 2x that of the initial virtual memory size.
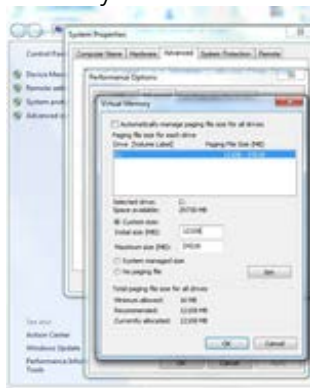
See Also

- [Changing the Memory Limit of ER/Studio Team Server](#)

Configuring the Search Index

You can configure ER/Studio Team Server to apply custom filters to searches, so that you can exclude certain ER object types and properties from the search index and results.

Filters may work either on a certain ER object type and all its properties, or on a specific property of an ER object type. An ER object or property affected by a filter does not appear in the Search Results page, neither among the results, nor in the filters panel.

To exclude an ER object type or property from the search results, edit the RepoRpt.xml configuration file. You can find this file inside the solutions\etl\config directory, within the ER/Studio Team Server installation folder.

All the various ER objects types and combinations of ER object types and properties are included in RepoRpt.xml, commented. All you have to do is uncomment the appropriate line in the XML file to create a search filter.

After you change the content of the RepoRpt.xml, update the search index.

Excluding an ER Object Type

To exclude an ER object type and all its properties, add an Object element to RepoRpt.xml, inside the Objects element, using the following syntax: <ObjectOBJECT_TYPE="ER Object Type"SEARCH="FALSE"/>; where **ER Object Type** is the type of ER object to exclude.

For example, to filter tables:

```
<Object OBJECT_TYPE="Table" SEARCH="FALSE"/>
```

Excluding a Property

To exclude a specific property of an ER object type, add an Object element to RepoRpt.xml, inside the Objects element, using the following syntax: <ObjectOBJECT_TYPE="ER Object Type"PROPERTY_TYPE="Property"SEARCH="FALSE"/>; where **ER Object Type** is the type of ER object that contains the property, and **Property** is the name of the property to exclude.

For example, to filter the DataType property of columns:

```
<Object OBJECT_TYPE="Column" PROPERTY_TYPE="DataType" SEARCH="FALSE"/>
```

See Also

- Searching
- Search Results page

Enabling Comment Moderation

To enable comment moderation, so that ER/Studio Team Server does not publish user comments until a <u>super user</u> reviews them, do the following:

1. Select My Settings > Admin > <u>Interaction Settings</u>.

2. Click **Edit**.

3. Under **Comments**:

    1. Check "Enable Comment Moderation".

    2. Enter in **Moderator Email Address** an email address. ER/Studio Team Server sends a notification to that address when a user posts a comment that requires moderation.

4. Click **Apply Changes** to save your changes.

You can now moderate any new comment from My Settings > Admin > <u>Comments</u>.

See Also

- <u>Interaction Settings</u>
- <u>Comment Moderation Page</u>

Enabling Emailing Search Results and Reports

If you have an email server, you can configure ER/Studio Team Server to allow sending advanced searches and shared reports by email.

Enabling email sending from ER/Studio Team Server is a two-steps process. First you must configure ER/Studio Team Server to connect to your email server:

1. Open the **ER/Studio Team Server Configuration Manager**.

2. On the **Email Server** tab:

   1. Check **Enable Sending of Email**.

   2. In **Host/Port** enter the address of your email server.

   3. In **From Address** enter the email address that should appear as the sender in emails sent from ER/Studio Team Server.

   4. If your SMTP server requires user credentials:

      1. Check **Use Authenticated SMTP**.

      2. In **User Name** enter a username to log into the email server.

      3. In **Password** enter the password of your the user account.

   5. Click **Apply** to save your email server connection settings.

3. Click **OK** to close the ER/Studio Team Server Configuration Manager.

Once the connection to the email server is properly configured:

1. Start ER/Studio Team Server and log in as a super user.

2. Select **My Settings > Admin**.

3. On the page that opens, click Interaction Settings on the sidebar.

4. Click **Edit**.

5. Check the email options:

   1. "Enable Sending of Standard Reports by Email".

   2. "Enable Sending of Search Results by Email".

6. Click **Apply Changes** to save your changes.

ER/Studio Team Server users can now send searches by email and send reports by email.

See Also

- [ER/Studio Team Server Configuration Manager](#)

- [Sending Searches By Email](#)

Manage Search Results

My Settings > Admin > Managed Search Results (super users)

The **Manage Search Results** page allows administrators to choose which fields are displayed in the search results for Data Sources. **Name** is always displayed and **Definition** is selected by default for display.

The page contains a tab for Data Sources allowing you to selectively manage the search results that appear when users perform a search. There are two columns:

- On the left-hand side column you can see the search fields available in ER/Studio Team Server that are not currently displayed in the results.

- On the right-hand side column you can see the search fields currently displayed in the search results.

On the right-hand side of each column you can access the following icons that let you manage the search fields associated with the Data Source search:

Item	Description
➡ Add search field	Adds the search field selected in the left-hand side column to the right-hand column, causing that field to appear in the search results.
⬅ Remove search field	Removes the selected search field from the right-hand side column, removing it from the search results. As a result, the search field becomes available in the left-hand side column, so that you can add it back.
⬆ Move search field up	Moves the selected search field one position up in the right-hand side column. This changes the position of the field when the search results are displayed by moving it up the results.
⬇ Move search item down	Moves the selected search field one position down in the right-hand side column. This changes the position of the field when the search results are displayed by moving it further down the results.

See Also

[Admin Pages](#)

[Searching](#)

Manage Glossary Tool Tips

My Settings > Admin > Glossary Tool Tip (<u>super users</u>)

The **Glossary Tool Tip Admin** page allows administrators to choose which web sites are associated with <u>Glossary Tool Tips</u> and to which <u>Glossaries</u>.

To associate a URL to a specific Glossary:

1. Click **My Settings > Admin**

2. From the left navigation bar, click **Glossary Tool Tip**.

3. In the top right of the page, click .

4. Fill out the fields of the **New Association** pop-up window, clicking **Add** to save each field before adding another.

   1. URL Patterns - The URL list of the web sites/pages that you would like to associate with your Glossary. There are *wildcard* matches available:

   - **?** To match a single character.

   - ***** To match zero or more characters.

   - ****** To match zero or more directories.

   Tip: You will see from the example image that the wikipedia URL concludes with a double asterisk (**) rather than a single asterisk (*). In this example we want to include all sub directories. A single asterisk would only match zero or more characters rather than a general wildcard for all directories and characters as it is sometimes used.

   2. Glossaries - A list of one or more Glossaries that you would like to associate with the web sites in the *URL Patterns* field.

   3. Definitions - You can add a definition of your association between the URL and Glossary.

5. Click **Save**.

See Also

- [Admin Pages](#)
- [Glossary Tool Tip](#)
- [Installing Glossary Tool Tips](#)

Changing the Repository

You can change the **ER/Studio Repository** that ER/Studio Team Server is connected to using the ER/Studio Team Server Configuration Manager.

1. To open ER/Studio Team Server Configuration Manager first you must stop the ER/Studio Team Server service:

    1. From Windows, select **Start > All Programs > ER/Studio Team Server 4.0 > Configure ER/Studio Team Server**

    2. On the **General** tab, click **Stop**.

        ▪ **Note:** If the **Stop** button is disabled, ER/Studio Team Server is not running.

2. Open the **ER/Studio Team Server Configuration Manager**.

3. On the **ER/Studio Repository** tab change the **ER/Studio Repository** settings to the new location.

    1. On the **Host** field, enter the new location of your ER/Studio Repository.

    2. On the **Super User** field, enter a username to log into the Repository server.

    3. On the **Password** field, enter the password of the Super User account.

    o   **Note:** If your Repository DBMS is not located on your **ER/Studio Repository** server, you may not need to change the **Repository DBMS - Microsoft SQL Server** settings. However if your **ER/Studio Repository** and databases were all hosted on the same server, you may need to restore/move your databases to the new server and chose **Reconnect to existing database** during **ER/Studio Repository** installation.

4. Click **Apply** to save your server connection settings.

5. Click **OK** to close the ER/Studio Team Server Configuration Manager.

Tip: If you have connection problems, verify you have access through the firewall to the hosts on the required ports.

Once the connection to the ER/Studio Repository is properly configured, you need to start the ER/Studio Team Server service using the Configure ER/Studio Team Server as described in Starting ER/Studio Team Server. You may also need to change the **ER/Studio Repository** server details in the **Repository Options** of **ER/Studio Business Architect** or **ER/Studio Data Architect**.

See Also

* ER/Studio Team Server Configuration Manager

* ER/Studio Synchronization

- [Backing Up ER/Studio Team Server Data](#)

Overview of Data Synchronization

ER/Studio Team Server provides features on top of data from **ER/Studio Repository**, which can store data from **ER/Studio Business Architect** and **ER/Studio Data Architect**.

However, the data you see in ER/Studio Team Server does not come directly from ER/Studio Repository. Instead, ER/Studio Team Server has a repository of its own, the [Reporting Repository](#), which holds a copy of the data from ER/Studio Repository. As data changes in ER/Studio Repository (ER objects, users and roles are added, deleted or updated), you must update ER/Studio Team Server to keep both repositories in sync.

For example, when a user is assigned to a role in **ER/Studio Business Architect** or **ER/Studio Data Architect**, the new permissions of the user are not available to that user when he logs in to ER/Studio Team Server, until you [run a synchronization process](#). Similarly, a new user added to ER/Studio Team Server does not have access to any ER object of the Reporting Repository until you [synchronize ER/Studio Team Server with ER/Studio Repository](#).

You can synchronize the data shared between the ER/Studio Repository database and the ER/Studio Team Server Reporting Repository database on demand or in a schedule, and you can perform the synchronization continuously or periodically.

You should start by [configuring which content you want to synchronize](#), and then proceed to [synchronize it](#). See in [ER/Studio Repository Data that ER/Studio Team Server Supports](#) which data you can synchronize with ER/Studio Team Server.

Note: Files saved in later versions of ER Studio Data Architect may not work with ER/Studio Team Server if they use new features. For example, if you use SQL Server 2014 for your Physical Model in ER Studio DA 9.7, you will need to update to the corresponding version of ER/Studio Team Server for those files to synchronize.

Topics

- [Configuring Which Content to Synchronize](#)
- [Synchronizing with ER/Studio Repository](#)
- [Stopping the Synchronization Process](#)
- [ER/Studio Repository Data that ER/Studio Team Server Supports](#)
- [Optimizing the Synchronization Process](#)
- [Viewing Synchronization Logs](#)
- [Overview of the Diagram Synchronization Process](#)

See Also

- [ER/Studio Synchronization](#) page

Configuring Which Content to Synchronize

There are two different procedures that you can follow to customize what supported content to synchronize from ER/Studio Repository into ER/Studio Team Server:

- Configure which resources to synchronize from the ER/Studio Synchronization page.

- Define synchronization filters in the RepoRpt.xml configuration file of the ER/Studio Team Server server.

Configuring Which Resources to Synchronize

> **Note:** You cannot change the synchronization settings during a synchronization process.

To configure which resources to synchronize from ER/Studio Team Server:

1. Select **My Settings > Admin > ER/Studio Synchronization**.

2. In the **ER/Studio Synchronization** page, there is a table. In that table:

   1. Select under **Action** what to do with each resource during the synchronization. You can choose one of:

      - **Update**. Changes in ER/Studio Repository are propagated to the ER/Studio Team Server Reporting Repository. The Reporting Repository is updated.

      - **Ignore**. Changes in ER/Studio Repository are not synchronized back to the ER/Studio Team Server Reporting Repository. The Reporting Repository is not updated.

      - **Delete**. The target resource is deleted from the ER/Studio Team Server Reporting Repository.

      When you change an action for a resource, an asterisk (*****) appears below the **Action** combo box of that resource.
      Tip: When you select an action for a node in the tree, the same action is selected in all its subnodes.

   2. Check **Images** in a resource to synchronize the resource images as well.
      Tip: When you check or uncheck a node in the tree, the action affects all its subnodes.

3. Click **Apply Changes** to save your synchronization settings.

After you change your synchronization settings, upcoming synchronization operations use these settings, updating, ignoring, and deleting resources from the Reporting Repository according to those settings.

Defining Synchronization Filters

If the ER/Studio Synchronization page is not flexible enough for you, you can optionally of an XML configuration file in the ER/Studio Team Server server, RepoRpt.xml, to define synchronization rules that exclude or include specific files and patterns. You can find the

RepoRpt.xml file inside solutions\etl\config, within the ER/Studio Team Server installation folder.

To create a rule, add a Diagram element to RepoRpt.xml, inside the Diagrams element, using the following syntax: <DiagramFILE_NAME="Filename Pattern"FILTER="Filter Value"/>; where:

- **Filename Pattern** is a pattern representing the name of one or more diagrams. When defining a file pattern, you can use the **?** and ***** wildcard characters:

    - **?** represents a single characters. For example, *D?.dm1* matches the diagrams D1.dm1 and D2.dm2, but not D10.dm1.

    - ***** represents zero or more characters. For example, you can use **1.dm1* if you want the rule to affect any diagram that ends in "1".

- **Filter Value** is either TRUE, to include files matching the filename pattern, or FALSE, to exclude files matching the filename pattern.

For example, to include diagram names such as CorDM2_v6B.dm1 and CorDM_v6B.dm1, use <DiagramFILE_NAME="???dm*.dm1"FILTER="TRUE"/>.

Rules to exclude files take precedence over rules to include files. For example, the following rules includes all diagrams that start with the letter "D" except for the diagram named "Diagram123":

```
<Diagram FILE_NAME="D*.dm1"          FILTER="TRUE"  />
<Diagram FILE_NAME="Diagram123.dm1" FILTER="FALSE" />
```

Synchronization filters take precedence over synchronization settings defined in the ER/Studio Synchronization page. Files excluded from the synchronization process using this method do not show up in the ER/Studio Synchronization page. If you exclude a file that is already available in the Reporting Repository, ER/Studio Team Server removes the file from the Reporting Repository.

See Also

- Synchronizing with ER/Studio Repository

- ER/Studio Repository Data that ER/Studio Team Server Supports

- ER/Studio Synchronization page

ER/Studio Repository Data that ER/Studio Team Server Supports

ER/Studio Team Server can synchronize the following data from **ER/Studio Repository**:

- [Most ER objects](#).

- [Users and roles](#).

- [Comments](#).

ER Objects

ER/Studio Team Server can synchronize the following **ER/Studio** object types from **ER/Studio Repository**:

ER/Studio Business	ER/Studio Data Architect		
Architect Object	Model Object	Dictionary Object	Data Lineage Object
Assignment Attribute Comment Incoming/Outgoing Condition Description Entity Event Gateway Group Interaction Link Message Flow Model Notes Project Property Process Relationship Sequence Flow Subject Area Task Trigger Usage (CRUD) Verb/Inverse Verb Phrase Workspace	Attribute Comment Diagram Entity Entity Display Project Relationship Relationship Display Submodel Nested Submodel View View Column View Display	Attachment Text List Attachment Type Bound Attachment Bound Domain Bound Default Bound Rule Bound Reference Value Bound Security Property Bound User Datatype Comment Domain Dictionary Default Dictionary Reference Value Reference Value Pair Rule Security Property Security Text List Security Type User Datatype	Comment Data Flow Data Lineage Column Data Lineage Component Data Lineage Component Display Data Lineage Display Data Lineage Rule Data Lineage Source Data Lineage Table Data Lineage View Data Movement Column Data Movement Model Data Movement Rule Link Data Stream Transformation Display Transformation Field Transformation Object

Users and Roles

ER/Studio Team Server synchronizes users and roles from **ER/Studio Repository**. This means that users of ER/Studio Repository can log in to ER/Studio Team Server using the same user credentials that they use to log in to ER/Studio Repository.

> **Note:** Do not forget to synchronize ER/Studio Team Server with ER/Studio Repository after you add, modify or remove users and roles in ER/Studio Repository.

Comments

Comments are synchronized both ways:

- Comments made in ER/Studio Team Server by non-social users are synchronized with ER/Studio Repository.

- Comments by users of **ER/Studio Business Architect** or **ER/Studio Data Architect** added to ER/Studio Repository are synchronized with ER/Studio Team Server.

This enables ER/Studio Team Server to fully share comments with users of **ER/Studio Business Architect** and **ER/Studio Data Architect**.

See Also

- [Synchronizing with ER/Studio Repository](#)

- [Overview of Security](#)

Optimizing the Synchronization Process

By default, the synchronization process runs at least two instances of PortalIntf.exe, so that ER/Studio Team Server can process smaller diagrams and large in parallel.

To configure the number of PortalInf.exe processes that run simultaneously, go into the ER/Studio Team Server installation folder, open tomcat/webapps/root/web-inf/ersportal-app.xml, and locate the following lines:

```
<bean id="syncProperties"
class="com.embarcadero.embarcadero.erstudio.portal.etl.parallelrun.SyncProperties">
  <property name="maxThreads" value="2" />
  <property name="filterSubModelImages" value="true" />
```

The value of the property with name="maxThreads" represents the number of instance of PortalInf.exe that can run simultaneously. Increase this value to optimize the synchronization process.

You can also change the value of the property with name="filterSubModelImages". Set it to "false" to turn off the selective Submodel Export functionality. In this case, the query does not run and, therefore, all submodel images are generated.

See Also

- Synchronizing with ER/Studio Repository

Overview of the Diagram Synchronization Process

When you synchronize ER/Studio Team Server with ER/Studio Repository, ER/Studio Team Server uses a separate Java Virtual Machine (JVM) invocation for the synchronization process.

When the synchronization process starts, **ER/Studio Team Server** detects which diagrams in ER/Studio Repository have changed since the last synchronization. ER/Studio Team Server selects those diagrams and spawns another instance of a JVM for each diagram. This allows diagrams to be processed one at a time so that access to a given diagram becomes available within the portal as soon as possible.

Extracting Diagrams from ER/Studio Repository

ER/Studio Team Server follows these steps to extract each selected diagram:
> **Note:** If diagram extraction takes longer than three hours, ER/Studio Team Server presumes an error has occurred and terminates the extraction.

1. Uses the `RepoGetDiagram` function to download the DM1 file from ER/Studio Repository.

2. Creates an XML file containing the latest data for all in-scope objects in the diagram.

3. Creates a JPEG image file for each submodel in the diagram.
   Note: Images are stored in the ER/Studio Team Server web server, not in the Reporting Repository database, so that you can access them from the model and submodel the model and submodel detail reports.

The extraction of data from ER/Studio Repository relies on invoking ERSTUDIO.EXE, or its equivalent, to access the ER/Studio object API. During the data extraction, object metadata is output in XML format by using Microsoft's XML v6 parser.

Loading the Diagrams Data Back into ER/Studio Team Server

Diagrams of the ER/Studio Team Server Reporting Repository are stored in XML files on the ER/Studio Team Server web server.

ER/Studio Team Server follows these steps to process each diagram and update its data with the new data from ER/Studio Repository:

1. Removes all the current data, if any, in the Reporting Repository database for that diagram. This includes purging the submodel image files on the server and the properties from the search index.

2. Populates the appropriate table(s) for each object.

---

3. Populates the search index as appropriate for each text field that is searchable. By default, all text properties are searchable, but you can [exclude ER object types and properties from being processed](#).

4. Archives the diagram XML files to a backup folder.

See Also

- [ER/Studio Repository Data that ER/Studio Team Server Supports](#)

- [Synchronizing with ER/Studio Repository](#)

Stopping the Synchronization Process

To stop the current synchronization process:

1. Open the [My Reports](#) page.

2. Under **Waiting**, click **Cancel** in the **Actions** column of the "Synchronize" entry.

The synchronization process stops.

Alternative, you can click **Stop Synchronization Process** from the [ER/Studio Synchronization](#) page to stop the synchronization process.

When you invoke this option, ER/Studio Team Server changes the synchronization status to "Stopping" and stops the synchronization process after finishing synchronizing the current ER object. This may take a while, depending on the size of the ER object that ER/Studio Team Server is currently synchronizing. The synchronization status changes to "Not Running" when the synchronization process stops.

See Also

-   [Synchronizing with ER/Studio Repository](#)

-   [My Reports](#) page

-   [ER/Studio Synchronization](#) page

Synchronizing with ER/Studio Repository

To synchronize the ER/Studio Team Server Reporting Repository database with the **ER/Studio Repository** database:

1. Select **My Settings > Admin > ER/Studio Synchronization**.

2. In the **ER/Studio Synchronization** page table, check in the **Selection** column those resources that you want to synchronize.
   Tip: When you check or uncheck a node in the tree, the action affects all its subnodes.

3. Click **Synchronize Selected** to start the synchronization process.
   Tip: You can click **Execute Synchronization Process** to synchronize all resources at once, instead of checking those resources that you want to synchronize.

ER/Studio Team Server displays a dialog box with the following message:

> "Job is scheduled for background execution."

Click **View All Scheduled Content** in the dialog box to open the My Reports page, where you can optionally click **Cancel** to abort the scheduled synchronization process.

The initial synchronization takes much longer than subsequent synchronizations, and the synchronization process can be quite lengthy depending on the size of **ER/Studio Repository**. Once the initial synchronization is complete, you can then schedule a daily synchronization using the default schedule via the **Schedule Synchronization Process** action on the ER/Studio Synchronization page, or prepare a custom schedule from the Subscriptions page.

During the synchronization, ER/Studio Team Server takes all your synchronization settings into account to update, ignore or delete resources from the Reporting Repository.

After the synchronization, you can delete the .dm1 files in the following directories within the ER/Studio Team Server installation folder to free disk space:

- PortalInf\

- etlvar\data\backup\

See Also

- Configuring Which Content to Synchronize

- ER/Studio Synchronization page

Viewing Synchronization Logs

ER/Studio Team Server provides different types of synchronization logs:

- In the <u>ER/Studio Synchronization</u> page:

    o Click **Latest Logs** to open a plain text file with a synchronization log, which includes detailed information about the latest or current synchronization process. See <u>ER/Studio Synchronization Status</u>.

    o ER Object rows provide links to logs about the synchronization of each ER object. See <u>ER/Studio Synchronization Table</u>.

- In the <u>My Reports</u> page, click **View** in a "Synchronize" report to open the report of that synchronization process.

Logs are located in the ER/Studio Team Server installation directory, inside etlvar\log\. There, each synchronization process has its own directory, called log_<timestamp>. For example: etlvar\log\log_20081119210946\.

To save disk space, ER/Studio Team Server creates .zip files from previous synchronization logs, and removes their directory. For example, during the next synchronization the etlvar\log\log_20081119210946\ directory becomes the etlvar\log\log_20081119210946.zip archive.

Because ER/Studio Team Server archives previous synchronization logs, when the synchronization process fails for an ER object, you can only see the error log if the synchronization of the ER object failed during the latest synchronization process. To access logs of previous synchronization processes, you cannot use the ER/Studio Team Server web interface. You must access the logs folder in the ER/Studio Team Server server instead. server file system.

See Also

- <u>My Reports</u> page

- <u>ER/Studio Synchronization</u> page

Overview of Scheduling

ER/Studio Team Server lets any user [with permissions enough](#) to schedule an action sequence for execution, that is, to have ER/Studio Team Server execute an action sequence following a schedule.

Action sequences are sets of actions that you can execute, such as [synchronizing ER/Studio Team Server with ER/Studio Repository](#). Action sequences may take input and generate output, and [reports](#) are based on them; that is, ER/Studio Team Server reports are action sequences that take some input (the report settings) and generate a report as output.

ER/Studio Team Server comes with several action sequences. To see a list of all the action sequences that you can schedule for execution, select **My Settings > Admin > [Subscriptions](#)** and click **Set Content**. You can also use the [Web Adhoc Query and Reporting wizard](#) to create action sequences that can generate custom reports from input parameters, or [create your own action sequences from scratch](#).

To schedule an action sequence for execution, as a [super user](#) you must enable the combination of the target action sequence and a schedule for subscription:

1. [Create a schedule](#) that defines when to execute the target action sequence.

2. [Enable the target action sequence for scheduling](#).

3. [Enable the target action sequence and the created schedule for subscription](#).

   o **Note:** For subscription purposes, you can associate several action sequences with the same schedule, and associate an action sequence with several schedules.

Once you enable the combination of the action sequence and the schedule for subscription, users [with enough permissions](#) such as yourself can [subscribe to that combination](#). Subscribing to a combination of an action sequence and a schedule enables that combination in the ER/Studio Team Server scheduler. **That is, as long as there is at least one user subscribed to a combination of an action sequence and a schedule, ER/Studio Team Server executes that action sequence following the defined schedule.**

Topics

- [Creating a Schedule](#)

- [Enabling Action Sequences for Scheduling](#)

- [Enabling an Action Sequence and Schedule for Subscription](#)

- [Subscribing to an Action Sequence](#)

- [Editing a Schedule](#)

- [Writing a CRON Expression](#)

See Also

- [Schedules](#) page

- [Subscriptions](#) page

Creating a Schedule

To add a new schedule to ER/Studio Team Server:

1. Select **My Settings > Admin > Subscriptions**.

2. Click **Add Schedule**.

3. In the page that opens:

    1. Enter the name of a **Group** for the new schedule.

    2. Enter a descriptive, short **Name**.

    3. Enter a **Title** for the schedule. You can see the title of the schedule when you subscribe to an action sequence.

    4. Provide a complete **Description** of the schedule.

    5. In the **Cron Exp** field, enter a CRON expression that determines when to run the schedule.

    6. Click **Add** to add the new subscription.

See Also

- Schedules page

- Subscriptions page

Editing a Schedule

To edit a scheduler job:

1. Select **My Settings > Admin > <u>Subscriptions</u>**.

2. Locate the target scheduler job in one of the <u>subscriptions tables</u>.

3. On the row of the target scheduler job, click **Edit** in the **Action** column.

In the page that opens you can edit the scheduler job properties and the action sequences associated with the scheduler job.

To modify the properties of the scheduler job, change their values in the fields at the beginning of the page, and click **Modify** when you finish to save your changes.

To add or remove action sequences from the scheduler job:

1. Click **Set content for this schedule**.

2. On the page that opens:

    1. Check or uncheck action sequences from the list of <u>enabled action sequences</u> to add or remove them from the scheduler job, respectively.

    2. Click **Submit** to save your changes.

See Also

- <u>Subscriptions</u> page

Enabling Action Sequences for Scheduling

To enable (or disable) action sequences so that ER/Studio Team Server includes them in the list of action sequences that you can run on a schedule:

1. Select **My Settings > Admin > [Subscriptions](#)**.

2. Click **Set Content**.

3. On the page that opens:

    1. Check or uncheck the actions sequences in the tree view to enable or disable them, respectively. For example, if you wanted to run a synchronization action, expand **etl : actions :** and then select the **Synchronize.xaction** option.

    2. Click **Set Content** at the end of the page to save your changes.

Action Sequences Details

ER/Studio Team Server comes with several action sequences. The following table lists some examples of the action sequences that you can schedule for execution:

Action Sequence	Purpose
clean_repository.xaction	Removes files from the content repository that are more than 180 days old.
schedule-clean.xaction	Schedules the clean content repository action to run daily.
schedule-etl.xaction	Schedules the ER/Studio repository synchronization.
ObjectHistoryDetail.xaction	Recent object activity for the Authenticated User.
Synchronize.xaction	Configure the synchronization process schedule.
SynchronizeDebug.xaction	Data Integration Synchronization.
CommonReferenceValues.xaction	Run a report that includes information about the reference values for attributes within a specified entity..
EntitySubmodelModelDiagram.xaction	Run a report that includes information about all of the entities in a specified diagram.
GetUserName.xaction	Get Logged in User.
SecurityClassifications.xaction	Run a report that includes information about the security classifications of a specified entity..

See Also

- [Subscriptions](#) page

Enabling an Action Sequence and Schedule for Subscription

After you create a schedule and enable an action sequence for scheduling, you can enable their combination for scheduling, so users with enough permissions can subscribe to them.

To enable the combination of your action sequence and your schedule for subscription:

1. Select **My Settings > Admin > Subscriptions**.

2. Locate the target action sequence in the **Action Sequence** list.

3. In the **Action** column, click **Edit** .

4. In the next page, click **Set schedules for this content**.

5. The page that opens contains a list of schedules. Mark the checkboxes on the **Schedule** columns of those schedules that you want to enable for subscription with the target action sequence.

6. Click **Submit** to apply your changes.

You can now subscribe to the target action sequence using the selected schedule.

Alternatively, you can enable a combination of an action sequence and a schedule the other way around, editing the schedule instead of the action sequence:

1. Select **My Settings > Admin > Subscriptions**.

2. Locate the target schedule in the **Scheduled Subscriptions** list.

3. In the **Action** column, click **Edit** .

4. In the next page, click **Set content for this schedule**.

5. The page that opens contains a list of action sequences. Mark the checkboxes on the left-hand side of those action sequences that you want to enable for subscription with the target schedule.

6. Click **Submit** to apply your changes.

See Also

- Creating a Schedule

- Enabling Action Sequences for Scheduling

- Subscriptions page

Subscribing to an Action Sequence

To make **ER/Studio Team Server** execute an action sequence following a <u>schedule</u>, you must <u>enable the combination of both for scheduling</u> and subscribe to that combination. ER/Studio Team Server only executes an action following a schedule if there is at least a user subscribed to that combination of an action sequence and a schedule.

To subscribe to an action sequence on a schedule:

1. Enter in your web browser the following URL:
    <u>http://**domain:port**/ViewAction?solution=**solution**&path=**path**&action=**action**&subscrib</u>
    <u>epage=yes</u>

    o **domain** is the domain name, host name or IP address of the machine running your **ER/Studio Team Server** web server. You only need to specify the **port** number if you do not choose the default port number (80) <u>during the installation</u>.

    o The values of **solution**, **path** and **action** depend on the action sequence you want to subscribe. For example:

        ▪ To subscribe to etl\actions\Synchronize.xaction, **solution** is "etl", **path** is "actions", and **action** is "Synchronize.xaction". For example <u>http://localhost/ViewAction?&solution=etl&path=actions&action=Synchr</u> <u>onize.xaction&subscribepage=yes</u>

    1.

        o

        ▪ To subscribe to admin\clean_repository.xaction, **solution** is "admin", **action** is "clean_repository.xaction", and there is no **path**. If there is no path, you must specify it in the URL without a value: <u>http://localhost/ViewAction?solution=admin**&path=**&action=clean_repos</u> <u>itory.xaction&subscribepage=yes</u>

2. On the page that opens:

    1. Click **Show Scheduling Options**.

    2. Write a report name in the **Report Name** text field. This is the name that ER/Studio Team Server shows in your <u>My Reports</u> page.

    3. Select the target schedule from the **Schedule For** combo box.

    4. Click **Save** to subscribe.

You can now access the output of any future execution of the target action sequence from your <u>My Reports</u> page. There you can also run the target action sequence instantly.

See Also

-   <u>Enabling an Action Sequence and Schedule for Subscription</u>

- [Subscriptions](#) page

Writing a CRON Expression

A CRON expression is a string of 6 or 7 fields, separated by a white space, that represents a schedule.

A CRON expression takes the [following format](#) (years are optional):

```
<seconds> <minutes> <hours> <days of month> <months> <days of week>
<years>
```

The string represents a set of times, which are the times that match the CRON expression. For example, `0 0 0 * * *` is a daily schedule, because it matches combinations of date and time where seconds, minutes and hours are 0. If you change the hours field to 6, `0 0 6 * * *`, your string represents every day at 6:00 AM. For more examples, see the [list of examples](#) below.

In each field you can use a number, a special character, or a combination of both. See [Using Special Characters](#).

CRON Expression Format Details

Use the following rules to create a CRON expression:

Field	Allowed Values	Allowed [Special Characters](#)
Seconds	0-59	, - * /
Minutes	0-59	, - * /
Hours	0-23	, - * /
Day of month	1-31	, - * ? / L W
Month	1-12 or JAN-DEC	, - * /
Day of week	1-7 or SUN-SAT	, - * ? / L #
Year (optional)	1970-2099	, - * /

Notes:

- You must specify either day of month or day of week, but not both. Insert a question mark (?) as a placeholder for the one not specified.

- If you do not specify the year, the year will be automatically determined by taking into consideration whether the date (month and day) inserted has already passed when compared to the current date of the system. If the date has not already passed, the current year is inserted. If the date has already passed, the next year is inserted.

- The names of months and days of the week are not case sensitive. "MON" is the same as "mon".

Using Special Characters

The following table describes the legal special characters and how you can use them in a CRON expression:

Special Character	Description
* (all values)	Selects all values within a field. For example, * in the minute field selects "every minute".
? (no specific value)	Used to specify something in one of the two fields in which the character is allowed, but not the other. For example, to make the trigger fire on a particular day of the month (say, the 10th), when it does not matter what day of the week that happens to be, put `10` in the day-of-month field, and `?` in the day-of-week field.
– (range)	Used to specify ranges. For example, `10-12` in the hour field selects the hours 10, 11 and 12.
, (comma)	Used to specify additional values. For example, `MON,WED,FRI` in the day-of-week field means the days Monday, Wednesday, and Friday.
/ (forward slash)	Used to specify increments. For example, `0/14` in the seconds field means the seconds 0, 14, 28, and 42; and `2/14` in the seconds field means the seconds 2, 16, 30, and 44.
L (last)	Used differently in each of the two fields in which it is allowed: • In the day-of-month field, `L` selects the last day of the month, which is 31 for January and 29 for February on leap years. • When used in the day-of-week field by itself, it means Saturday. But if used in the day-of-week field after another value, L selects the last xx day of the month. For example, `6L` selects the last Friday of the month. When using the `L` special character, do not specify lists, or ranges of values, because this may give confusing results.
W (weekday)	Used to specify the weekday (Monday-Friday) nearest to the given day. For example, if you specify `15W` as the value for the day-of-month field, the nearest weekday to the 15th of the month is selected. So if the 15th is a Saturday, Friday the 14th is selected. If the 15th is a Sunday, Monday the 16th is selected. If the 15th is a Tuesday, Tuesday the 15th is selected. However if you specify `1W` as the value for day-of-month, and the 1st is a Saturday, Monday the 3rd is selected, as the selection rules do not allow for crossing over the boundary of a month's days to the previous or the subsequent month. The `W` character can only be used to specify a single day, not a range or list of days.
#	Used to specify the nth XXX (or XX) day of the month. For example, the value `FRI#3` or `6#3` in the day-of-week field means the third Friday of the month (6 or `FRI` = Friday, and `#3` = the 3rd one in the month).

> **Note:** The `L` and `W` characters can also be combined in the day-of-month field to yield `LW`, which translates to "last weekday of the month".

CRON Expression Examples

The following table lists some examples of CRON expressions:

CRON Expression	Meaning
`0 0 12 * * ?`	12 PM (noon) every day.
`0 15 10 ? * *`	10:15 AM every day.
`0 15 10 * * ?`	10:15 AM every day.
`0 15 10 * * ? *`	10:15 AM every day.
`0 15 10 * * ?` `2005`	10:15 AM every day during the year 2005.
`0 * 14 * * ?`	Every minute starting at 2 PM and ending at 2:59 PM, every day.
`0 0/5 14 * * ?`	Every 5 minutes starting at 2 PM and ending at 2:55 PM, every day.
`0 0/5 14,18 * * ?`	Every 5 minutes starting at 2 PM and ending at 2:55 PM, and every 5 minutes starting at 6 PM and ending at 6:55 PM, every day.
`0 0-5 14 * * ?`	Every minute starting at 2 PM and ending at 2:05 PM, every day.
`0 10,44 14 ? 3` `WED`	2:10 PM and at 2:44 PM every Wednesday in the month of March.
`0 15 10 ? * MON-` `FRI`	10:15 AM every Monday, Tuesday, Wednesday, Thursday and Friday.
`0 15 10 15 * ?`	10:15 AM on the 15th day of every month.
`0 15 10 L * ?`	10:15 AM on the last day of every month.
`0 15 10 ? * 6L`	10:15 AM on the last Friday of every month.
`0 15 10 ? * 6L` `2002-2005`	10:15 AM on every last Friday of every month during the years 2002, 2003, 2004 and 2005.
`0 15 10 ? * 6#3`	10:15 AM on the third Friday of every month.
`0 0 12 1/5 * ?`	12 PM (noon) every 5 days every month, starting on the first day of the month.
`0 11 11 11 11 ?`	Every November 11th at 11:11 AM.

See Also

- [Creating a Schedule](#)
- [Subscriptions](#) page

Overview of Security

To log in to **ER/Studio Team Server** you need both a valid user connection and a valid user account.

User connections determine the user sessions that **ER/Studio Team Server** can host, as well as the type of user experience of each one of those sessions. You can purchase licenses for the types of user connections that you want (Reader, Author or Portal etc), and register those licenses in ER/Studio Team Server to enable your user connections.

User accounts and user roles are not defined within **ER/Studio Team Server** itself. To log in to ER/Studio Team Server, you must use the credentials of an **ER/Studio Repository** user account or, if you configure ER/Studio Team Server to support LDAP, the credentials of an LDAP user account.

> **Note:** To log in to ER/Studio Team Server with ER/Studio Repository user accounts, you must synchronize ER/Studio Team Server with ER/Studio Repository first.

When you log in to **ER/Studio Team Server**, the authentication process assigns you a user experience based on the available user connections. Depending on your user experience, ER/Studio Team Server provides a different user interface with access to a different set of features.

Once you are logged in, your user account and roles determine what content of **ER/Studio Team Server** you can access, and which actions you can perform. Some of those restrictions come from ER/Studio Repository, other restrictions are specific to ER/Studio Team Server and super users can configure them in ER/Studio Team Server. With new licensing options, Author, Reader and Portal licenses give you more choices for your users. The Author license giving full access to all functionality and the new Reader license giving users a read-only experience. To read more on the different licensing options, see the connections page.

When you create resources in **ER/Studio Team Server** (glossaries, terms, or data sources), you become their author. Only authors, super users and stewards can edit those resources, and add or remove stewards from them. This does not apply to Reader licenses as the read-only license cannot be assigned as Steward. Nor create, modify, or delete Team Server objects. To change an Author licensed user to a Reader, they can not be a current Steward of any resources.

If you configure **ER/Studio Team Server** to work with Microsoft SQL Server as the database platform for the Reporting Repository database, ER/Studio Team Server offers the facility to enable encryption of all communications between ER/Studio Team Server and the Reporting Repository.

Topics

- Overview:

    o Connection Licenses

    o User Accounts

    o User Authentication

- o [User Experiences](#)

- o [User Roles](#)

- o [User Permissions](#)

- o [Stewards](#)

- [Enabling Secure HTTP Connections](#)

- [Modifying the User Session Idle Time Limit](#)

- [Tracking User Activity](#)

See Also

- [Quick Start Guide: Log In to ER/Studio Team Server](#)

- [Overview of the ER/Studio Team Server Architecture](#)

- [Overview of Data Synchronization](#)

Overview of Connection Licenses

To log in to **ER/Studio Team Server** you need a valid user connection. <u>User connections</u> determine the type of <u>user experience</u> of each one of those sessions.

When you log in, ER/Studio Team Server assigns you a <u>user experience</u> based on the available <u>user connections</u>. You need to <u>register your licenses in ER/Studio Team Server</u> to enable your user connections.

ER/Studio Team Server ships with a free <u>social super user connection</u> that you can use to <u>connect to ER/Studio Team Server</u> and <u>configure your ER/Studio Team Server licenses</u>.

Topics

- <u>User Connections</u>

- <u>Registering Connection Licenses</u>

See Also

- <u>Licenses page</u>

Overview of User Connections

Go Up to [Overview of Connection Licenses](#)

ER/Studio Team Server supports the following types of user connection:

- [Base Super User Connection](#).
- [Team Server User Connection](#).
- [Concurrent User Connection](#).
- [Exclusive User Connection](#).

Base Admin Connection

This [social super user](#) connection comes for free with **ER/Studio Team Server** so that you can [connect to ER/Studio Team Server](#) and [configure your ER/Studio Team Server licenses](#).

By default, you can [log in to ER/Studio Team Server](#) with this account using the credentials of your **Admin** account from ER/Studio Repository.

This user connection provides [social user access](#).

Team Server User Connection

This is the standard ER/Studio Team Server license. Users with a Team Server user connection can connect to ER/Studio Team Server and access all features.

This connection provides [social user access](#).

Note:[LDAP users](#) can only use this type of connection.

Concurrent User Connection

Deprecated but still supported. This is a license for the older Portal product.

This connections provide [non-social user access](#).

Exclusive User Connection

Deprecated but still supported. This is a license for the older Portal product.

These connections provide [non-social user access](#).

See Also

- [Overview of User Experiences](#)

Registering Connection Licenses

To register a user connection license, log in to ER/Studio Team Server as a super user and do the following:

1. Select **My Settings > Admin > Licenses**.

2. Under **Action**, click **Register Add-on License**. A product registration page appears.

3. Enter the serial number that you received from your license administrator, and click **Next**.
    Notes:

    o   You must have a serial number for each license add-on. For example, if you bought 25 licenses you would receive two serial numbers, one for 20 connections and one for 5. You must register each serial number in order to have the 25 connections. You must complete all the licensing steps for each serial number to register each license add-on.

    o   The **Registration Code** is a number that identifies the machine where your ER/Studio Team Server installation is running, and is generated by the licensing module.

4. If you are not logged in, the **Embarcadero Product Registration Login** page loads. You can log in using your existing Developer Network account, or you can create a new account:

    o   If you have an existing account, enter your username or e-mail address, your password, and click **Next**.

    o   If you need a new user account click **Create Account**. Fill in the required information and click **Next**.

5. On the **Product Registration** page:

    1. Review your license information (**Product**, **Serial Number**, **Registration Code**, and so on).

    2. Under **Download or email the activation file**, select one of those choices and click **Register**:

        ▪   If you select **Download**, a **File Download** dialog opens. Click **Save** and save the file in the appropriate Windows folder: <product install folder>\license (for example: C:\Program Files\ER/Studio Team ServerX.X\license).

        ▪   If you choose to have the activation file e-mailed to you, you will get an auto-generated message from Embarcadero-licensing. Open the e-mail and save the attached reg*.txt file in the appropriate Windows folder: <product install folder>\license (for example: C:\Program Files\ER/Studio Team ServerX.X\license).

6. Close the **Product Registration Page**.

Back to your ER/Studio Team Server installation, on the Licenses page, you can click **Refresh** to reload the license add-on information. Your new license add-on is listed in the license add-on status table.

You can now use the Manage Users page to assign your newly-registered licenses to existing users.

See Also

- Quick Start Guide: Install Connection Licenses

- Manage Users page

Overview of User Accounts

To log in to **ER/Studio Team Server** you need a valid user account.

User accounts, as [user roles](#), are not defined within **ER/Studio Team Server** itself. To [log in to ER/Studio Team Server](#), you must use the credentials of a user account from one of the following sources:

- [ER/Studio Repository](#).

- [LDAP](#), if you enable LDAP support in ER/Studio Team Server.

ER/Studio Repository User Accounts

You can use any **ER/Studio Repository** user account to log in to ER/Studio Team Server. Users and roles of ER/Studio Repository [are synchronized with ER/Studio Team Server](#).

Notes:

- To log in to ER/Studio Team Server with ER/Studio Repository user accounts, you must [synchronize ER/Studio Team Server with ER/Studio Repository](#) first.

- Users of ER/Studio Team Server do *not* have to be users **ER/Studio Data Architect** or **ER/Studio Business Architect**. The licensing for ER/Studio Team Server is separate from that of ER/Studio Data Architect and ER/Studio Business Architect.

LDAP User Accounts

If you [install ER/Studio Team Server](#) with [support for the Lightweight Directory Access Protocol (LDAP)](#), users can log in to **ER/Studio Team Server** using their domain username and password. To ensure security of domain passwords across the network, [encryption](#) should be enabled.

ER/Studio Team Server assigns LDAP users the [authenticated](#) user role.

See Also

- [Overview of User Connections](#)

- [Overview of User Experiences](#)

- [Overview of Stewards](#)

Enabling LDAP Authentication

To enable the **Lightweight Directory Access Protocol (LDAP)** so that LDAP users can <u>log in to</u> <u>ER/Studio Team Server</u>, do the following:

1. Open the **ER/Studio Team Server Configuration Manager**.

2. On the **LDAP Server** tab, check **Enable LDAP Authentication**.
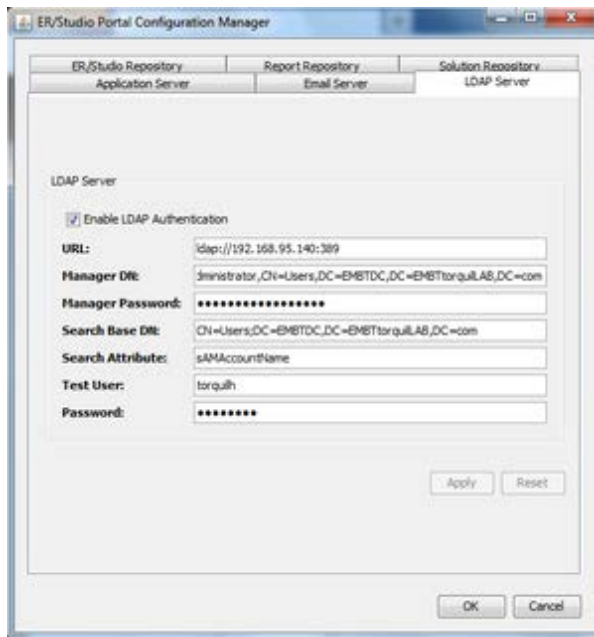
3. In the **URL** field, enter the URL of the server running LDAP. For example, ldap://10.40.40.94:389 for normal connections, or ldaps://10.40.40.94:636 for secure connections.

4. In the **Manager DN** field, enter the distinguished name for the user that is used to authenticate users. ER/Studio Team Server uses this account to connect to the LDAP server and validate user credentials. For example, CN=administrator,CN=Users,DC=mydomain,DC=com.
   Note: In this example, administrator has been used, it does not need to be administrator but an account able to authenticate via LDAP. In which case the **Users** is defined as a container rather than an organizational unit as is the Microsoft Active Directory default. Your user accounts may be in an organizational unit, in this case you would specify it differently, for example, CN=user name,OU=sales,DC=mydomain,DC=com
   To find the correct DN for your user in Microsoft Active Directory you can use the dsquery command from a command prompt. For example: `dsquery user -name admin*`

1. In the **Manager Password** field, enter the password for the validating user account.

2. In the **Search Base DN** field, enter the name of the root node in LDAP from which to search for users. For example, CN=Users;DC=mydomain,DC=com.

3. In the **Search Attribute** field, enter the attribute in LDAP holding the user's login name. For example, sAMAccountName (for ActiveDirectory).

4. In the **Test User** field, enter the username of a sample user account to attempt to authenticate against the LDAP server. The **Apply** button uses this information to validate the given LDAP information before continuing.

5. In the **Password** field, enter the password of the specified **Test User** account.

6. Click **Apply**.

LDAP authentication is now enabled.

See Also

- [Installing ER/Studio Team Server](#)
- [ER/Studio Team Server Configuration Manager](#)

Overview of User Authentication

When you try to [log in to ER/Studio Team Server](#), ER/Studio Team Server follows these steps after it confirms that your credentials are valid:

1. If there is a [Team Server user connection](#) associated with your account, ER/Studio Team Server logs you in as a [social user](#).

2. If there is no Team Server user connection associated with your account, but there is a [concurrent user connection](#) available, ER/Studio Team Server logs you in as a [non-social user](#).

3. If you are trying to log in with the [base super user connection](#), ER/Studio Team Server logs you in as a [non-social user](#).

4. If there is no concurrent user connection available, you cannot access ER/Studio Team Server.

Inactive users are automatically timed out 30 minutes after the last user interaction, to free [concurrent user connections](#) even if users forget to close the web browser or log out. See [Modifying the User Session Idle Time Limit](#).

> **Note:** Each web browser may manage user sessions in a different way. Depending on your web browser, you may not be able to log in using the same user credentials for two different sessions, or using two different sets of user credentials. Some web browsers treat windows and tabs as one instance, and will not let you run two sessions simultaneously. However, you can open multiple instances of Internet Explorer and log in multiple time using the same concurrent user credentials, or create several different sessions using a mix of concurrent and social connections.

See Also

- [Tracking User Activity](#)

- [Overview of Connection Licenses](#)

- [Modifying the User Session Idle Time Limit](#)

Overview of User Experiences

ER/Studio Team Server provides two different user experiences: social and non social. Which experience you enjoy depends on the user connection that a super user assigns you to connect to **ER/Studio Team Server**.

The interface of ER/Studio Team Server is different for each type of user, and the available features change as well. For example, special search pages are only available for social users.

The following sections provide an overview of the differences between each type of user. In the User Guide you can find separated sections for social and non-social users that might help you understand the differences as well.

Social Users

Social users have access to several features and additional data of the **ER/Studio Repository** database that non-social users cannot access, including:

- ER Object activity:

    o   Metadata changes (additions, deletions, modifications).

    o   Changes to domains and terms pages.

    o   Domain and term page wiki edits.

- Activity of other ER/Studio Team Server users:

    o   User comments in metadata, glossaries, terms, and domain pages.

    o   New friends added to pages.

    o   Reports (new, changed, deleted reports).

    o   Shared searches (additions, deletions, modifications).

- Data Sources Management:

    o   Create and edit data sources.

    o   Relate Objects.

    o   Monitoring

You can restrict social users from accessing specific diagrams. You can also assign a read-only access to them.

Non-Social Users

Non-social users can use comments and labels in addition to the basic features that social and non-social users have in common.

> **Note:** Many features that social users can use make comments and labels redundant. Social users can use the Stream, Discussions, and more to interact with resources.

See Also

- [Overview of User Roles](#)

Overview of User Roles

User roles, as user accounts, are not defined within **ER/Studio Team Server** itself. Users and roles of ER/Studio Repository are synchronized with ER/Studio Team Server.

In **ER/Studio Repository**, the following user roles are available by default:

- Super User.

- Authenticated.

Super User

Super users can perform actions that authenticated users cannot perform, such as managing licenses, permissions, data synchronization, schedules, and refreshing ER/Studio Team Server settings on the Admin page.

ER/Studio Team Server provides a social super user **Admin** account for free, giving instant access to the new social user experience.

Authenticated

Authenticated users have a set of permissions more limited than that of administrators. Enough permissions to use all ER/Studio Team Server features, but not to manage ER/Studio Team Server.

See Also

- Overview of User Permissions

- Overview of Connection Licenses

- Overview of Stewards

Overview of User Permissions

ER/Studio Team Server can limit the access and permissions on <u>ER objects</u>, activities and <u>reports</u>.

ER/Studio Team Server applies ER/Studio Repository users the access restrictions configured in ER/Studio Repository. ER/Studio Repository users can only access in ER/Studio Team Server those ER objects that they can access from ER/Studio Repository as well.

However, ER/Studio Repository does not handle permissions for <u>LDAP accounts</u>. By default, users logging in with an <u>LDAP account</u> can access any <u>ER object</u> in **ER/Studio Team Server**. You can <u>configure access of LDAP users to ER objects</u> from the **<u>Object Access Restriction</u>** page.

Any logged-in user can create and access other types of ER/Studio Team Server resources: <u>glossaries</u>, <u>terms</u>, and <u>data sources</u>. Only <u>super users</u> and the authors of those resources can edit or delete them.

You can define permissions for specific <u>user roles</u> and <u>user accounts</u> to limit the use of action sequences in ER/Studio Team Server.

Topics

- <u>Managing Access of LDAP Users to ER Objects</u>

- <u>Managing Permissions on Action Sequences</u>

See Also

- <u>Overview of User Accounts</u>

- <u>Overview of User Roles</u>

- <u>Overview of Stewards</u>

Managing Access of LDAP Users to ER Objects

By default, users logging in with an **LDAP account** can access any **ER object** in **ER/Studio Team Server**.

You can configure access of LDAP users to ER objects from the **Object Access Restriction** page.

Topics

- Forbidding Access of LDAP Users to a Project

- Allowing Access of an LDAP User to a Restricted Project

See Also

- Object Access Restriction page

- Overview of User Accounts

Forbidding Access of LDAP Users to a Project

To forbid all [users logging in with an LDAP account](#) from accessing an [ER object](#):

1. Select **My Settings > Admin > Object Access Restriction**.

2. Check the box on the left-hand side of the target project.

3. Click **Save Changes** to apply your new restriction.

[LDAP users](#) no longer can access the target project, and an icon to [allow access of specific LDAP users](#), , appears on the right-hand side of the project entry.

See Also

- [Enabling LDAP Authentication](#)

- [Allowing Access of an LDAP User to a Restricted Project](#)

- [Object Access Restriction](#)

Allowing Access of an LDAP User to a Restricted Project

To allow specific LDAP users to access a project that is restricted by default for LDAP users:

1. Select **My Settings > Admin > Object Access Restriction**.

2. Click on the right-hand side of the target project entry. The **Exclusive Users for Diagram "<diagram name>"** dialgo box appears.

3. On the dialog box, enter the name of an LDAP user, and click add. You can repeat this step as many times as you want.

4. After you select the LDAP users to give access to the project, click **Save**.

The specified LDAP users can now access the target project.

A new icon appears on the right-hand side of the project entry: . You can click this icon to edit the list of LDAP users that can access the target project.

See Also

- Forbidding Access of LDAP Users to a Project

- Object Access Restriction page

Managing Permissions on Action Sequences

You can limit the use of action sequences in **ER/Studio Team Server** using [roles](#) and [users](#).

ER/Studio Team Server gives administrative permissions to users with the "Super User" role by default. Users assigned to the [Super User](#) role in **ER/Studio** can assign permissions to other roles and users in ER/Studio Team Server from the [Permissions](#) page.

In the [Permissions](#) page there is a tree view of items. You can configure access permissions for every item in the tree. Higher level entries provide the default setting for lower level entries. Lower level entries override higher level entries.

For each item in the tree view you can define a list of roles and users, and the permissions each of them has on the target item. You can assign any combination of the following permissions to any role or user:

- **Execute**. Ability to run the target [actions sequence](#).

- **Subscribe**. Ability to [subscribe to the target action sequence](#).

- **Write**. Provides both the **Execute** and **Subscribe** permissions.

ER/Studio Team Server only applies your changes to permissions after a [restart](#).

Topics

- [Adding Permissions on an Action Sequence](#)

- [Editing Permissions on an Action Sequence](#)

- [Removing Permissions on an Action Sequence](#)

See Also

- [Permissions](#) page

Adding Permissions on an Action Sequence

To add permissions to a role or user over an item:

1. Select **My Settings > Admin > Permissions**.

2. Select the target item from the **Solution Repository** column.

3. Click **Add** in the **Settings** column.

4. In the **Add New Permission** column:

    1. Select under **Role** the target role or user.

    2. Check the permissions that you want the target role or user to have (**Write**, **Execute**, **Subscribe**).

    3. Click **Add**.

ER/Studio Team Server add the new permissions entry to the table in the **Settings** column.
    Note: You need to restart ER/Studio Team Server for your changes to take effect.

See Also

- Editing Permissions on an Action Sequence

- Removing Permissions on an Action Sequence

Editing Permissions on an Action Sequence

To edit the permissions of an item:

1. Select **My Settings > Admin > Permissions**.

2. Select the target item from the **Solution Repository** column.

3. Check or uncheck the **Write**, **Execute** and **Subscribe** columns to set or unset (respectively) those permissions.

4. Click **Update** to save your changes.
   Note: You need to restart ER/Studio Team Server for your changes to take effect.

See Also

- Adding Permissions on an Action Sequence

- Removing Permissions on an Action Sequence

Removing Permissions on an Action Sequence

To remove the permissions of a role or user over an item:

1. Select **My Settings > Admin > Permissions**.

2. Select the target item from the **Solution Repository** column.

3. Check the **Delete** field of the row of the target role or user.

4. Click **Update** to remove the role or user permissions from the list.
   Note: You need to restart ER/Studio Team Server for your changes to take effect.

See Also

- Adding Permissions on an Action Sequence

- Editing Permissions on an Action Sequence

Overview of Stewards

The stewards of a resource (glossaries, terms, or data sources) are users who are neither the authors or the resource nor super users, but who are allowed to modify or remove that resource.

The author of a resource, its stewards and any super user can add or remove stewards from a resource.

> **Note:** You can add or remove authors or super users from the list of stewards of a resource. However, even if you remove them, they still have the permissions that being an author or a super user grants them.

See Also

- Editing the Stewards of a Resource
- Overview of User Accounts
- Overview of User Roles
- Overview of User Permissions

Enabling Secure HTTP Connections

Secure HTTP connections to **ER/Studio Team Server** are optional during <u>install</u>. To enable them post-install :

1. Open the **<u>ER/Studio Team Server Configuration Manager</u>**.

2. On the **<u>Application Server</u>** tab:

    1. Check **Enable Security Communications (HTTPS)**.

    2. In **HTTP Secure Port**, enter the port number that you want to use for HTTPS connections.

    3. In **KeyStore Password** enter the password of your SSL KeyStore file.

    4. In **Path to KeyStore**, click browse and select your SSL KeyStore file.

    5. Click **Apply** to save your application server settings.

3. Click **OK** to close the <u>ER/Studio Team Server Configuration Manager</u>.

See Also

- <u>Enabling Secure API Requests</u>

- <u>ER/Studio Team Server Configuration Manager</u>

Modifying the User Session Idle Time Limit

By default, after 30 minutes of user inactivity, ER/Studio Team Server closes user sessions.

To change this value:

1. Open the web.xml file, inside the \tomcat\webapps\ROOT\WEB-INF\ directory within the installation folder.

2. Change the integer value (in minutes) of the session-timeout:

```
<session-config>
    <session-timeout>30</session-timeout>
</session-config>
```

Your change has effect as soon as you restart ER/Studio Team Server.

See Also

- Overview of User Authentication

Tracking User Activity

You can view the current user sessions in ER/Studio Team Server on the [Licenses](#) page. The Licenses page displays the amount of time users have been inactive.

The user activity is archived so that you can see how the activity has evolved over time, and determine if you need to purchase more licenses. The [Activity](#) page shows information on both login and connection activity that can help you determine whether you need to purchase new licenses.

See Also

- [Overview of User Authentication](#)

- [Activity](#) page

Overview of the ER/Studio Team Server Tools

ER/Studio Team Server provides some tools for you to customize the configuration of your ER/Studio Team Server installation:

- [Tomcat Configuration Application](#). Start, stop and restart the ER/Studio Team Server server, and to change configuration parameters such as the amount of memory assigned to the ER/Studio Team Server server.

- [ER/Studio Team Server Configuration Manager](#). Change settings that you chose when you [installed ER/Studio Team Server](#).

See Also

- [Admin](#) page

ER/Studio Team Server Configuration Manager

Stop ER/Studio Team Server | From Windows: **Start > All Programs > ER/Studio Team Server 4.0 > ER/Studio Team Server Configuration Manager**

You can use the **ER/Studio Team Server Configuration Manager** to change the settings that you can choose when you install ER/Studio Team Server. These settings include those related to ER/Studio Team Server, **ER/Studio Repository**, LDAP user authentication, email server, and Reporting Repository.

After you perform any change in this configuration application, click **OK** to apply the changes and close the dialog. You can click **Cancel** to close the configuration application without saving any change.

> **Note:** Remember to restart ER/Studio Team Server after you close the **ER/Studio Team Server Configuration Manager**. Some changes might require you to perform additional administrative actions, such as synchronizing ER/Studio Team Server with ER/Studio Repository.

The **ER/Studio Team Server Configuration Manager** provides the following tabs:

- Application Server
- Email Server
- LDAP Server
- ER/Studio Repository
- Report Repository
- Solution Repository

After you change any setting in a tab, **ER/Studio Team Server Configuration Manager** disables all other tabs, and enables the **Apply** and **Reset** buttons:

> **Note:** Click any of these buttons to enable the other tabs back.

Item	Description
Apply	Applies your configuration changes.
Reset	Undoes your configuration changes, restoring the last saved configuration.

Application Server Tab

On the **Application Server** tab you can access the following items:

Item	Description
Server Host	The address of the server where ER/Studio Team Server is installed. This address can be: • A host name. For example: DEWKBROW01. • A fully qualified network name. For example: DEWKBROW01.example.com. • An IP address. For example: 10.10.23.255.
Server Port	The network port where ER/Studio Team Server listens for connections. The default port number is 80. If another application, such as another web server application, is already using this port on your system, enter an unused port number between 0 and 65535. The ports in use depend on the services running on your system. A commonly-used alternative is 8, although using a high number, such as 10000, reduces the chance of a conflict.
Shutdown Port	The network port where ER/Studio Team Server listens for the shutdown command. The default port number is 8006. If another application is already using this port on your system, enter an unused port between 0 and 65535.
Windows User	The domain and username of the user account to run ER/Studio Team Server. For example: MyDomain\MyUser.
User Password	The password of the specified Windows user account.
Enable Security Communication (HTTPS)	Check this option to enable the Hyptertext Transfer Protocol Secure (HTTPS) network protocol for connections to ER/Studio Team Server. HTTPS is a combination of the Hypertext Transfer Protocol with the Secure Socket Layer (SSL)/Transport Layer Security (TLS) to provide encryption and secure identification of the server. Select this option to provide a secure channel between web browsers and ER/Studio Team Server when transferring private information such as user credentials.
HTTP Secure Port (only when using HTTPS)	The network port to use for connections using the HTTPS secure network protocol.
KeyStore Password (only when using HTTPS)	The password of your KeyStore file. The KeyStore file is a password-protected file that contains the private and public keys used for SSL encryption.
Path to KeyStore (only when using HTTPS)	The path to your KeyStore file. Click **Browse** to browse your file system, find your KeyStore file, select it and click **OK**.

Email Server Tab

On the **Email Server** tab you can [enable email support](#) for users to send search results and reports. This tab provides the following items:

Item	Description
Enable Sending of Email	Check this option to give ER/Studio Team Server the ability to send emails.
Host/Port (only after enabling sending email)	The **Host** field is the address of the email server. This address can be: • A host name. For example: MSMAILOW01. • A fully qualified network name. For example: MSMAILOW01.example.com. • An IP address. For example: 10.10.23.255. The **Port** field is the network port where the email server listens for connections. The default port number is 25.
From Address (only after enabling sending email)	The email address that you want to use as the author of emails sent from ER/Studio Team Server. You may want to prepare a special email address on your email server for this purpose.
Use Authenticated SMTP (only after enabling sending email)	Use the Authenticated SMTP (Simple Mail Transfer Protocol) network protocol to connect to the email server.
User Name (only after enabling Authenticated SMTP)	The username to log in to the email server.
Password (only after enabling Authenticated SMTP)	The user password.

LDAP Server Tab

On the **LDAP Server Tab** tab, check the "Enable LDAP Authentication" option to let users log in to ER/Studio Team Server using their LDAP accounts.

If you check this option, you can access the following items:

Item	Description
URL	The URL of the server running LDAP. For example: ldap://10.40.40.94:389.
Manager DN	The domain name for the administrative user that is used to authenticate users. For example: CN=User1,OU=Users,OU=ER STUDIO,DC=Torlabdomain,DC=com. This is the account that ER/Studio Team Server uses to connect to the LDAP server, to validate the user credentials.
Manager Password	Password of the administrative user.
Search Base DN	Name of the root node in LDAP from which to search for users. For example: OU=Users,OU=ER STUDIO,DC=Torlabdomain,DC=com.
Search Attribute	The attribute in LDAP holding the login name of a user. For example: sAMAccountName (for ActiveDirectory).
Test User	A sample username to attempt to authenticate against the LDAP server. ER/Studio Team Server uses this user to validate the specified LDAP information.
Password	The password for the test user.

ER/Studio Repository Tab

On the **ER/Studio Repository** tab you can access the following items:

Item	Description
ER/Studio Repository <n>.<n>	
Host	The name of the machine where **ER/Studio Repository** is installed.
Super User	The username of a user with the Super User role in **ER/Studio Repository**.
Password	The user password.
Repository DBMS - <DBMS>	
Enable Encrypted Connection (only Microsoft SQL Server)	Check this option to enable the Secure Sockets Layer (SSL) communication protocol, which encrypts messages between **ER/Studio Team Server** and **ER/Studio Repository**.
Host/Port	The host name and port number of the machine that contains the **ER/Studio Repository** database. For Microsoft SQL Server only, if **ER/Studio Repository** runs on a Microsoft SQL Server database that is a named instance, specify the host name in the format `HostName\NamedInstanceName`. For example: `DEWKBOW01.embarcadero.com\RepositoryServer`.
Database Name	The name of the **ER/Studio Repository** database.
User Name	The username of the user account to access the **ER/Studio Repository** database.
Password	The user password.

Report Repository Tab

On the **Report Repository** tab you can access the following items:

Item	Description
Enable Encrypted Connection (only Microsoft SQL Server)	Check this option to enable the Secure Sockets Layer (SSL) communication protocol, which encrypts messages between **ER/Studio Team Server** and the [Reporting Repository](#).
Host/Port	The host name and port number of the machine that contains the [Reporting Repository](#) database. For Microsoft SQL Server only, if the **Reporting Repository** runs on a Microsoft SQL Server database that is a named instance, specify the host name in the format `HostName\NamedInstanceName`. For example: `DEWKBOW01.embarcadero.com\ReportingRepositoryServer`.
Database Name (only Microsoft SQL Server)	The name of the database.
SID (only Oracle)	The identifier of the database.
DBName (only DB2)	The name of the database.
Tablespace (only Oracle and DB2)	The Tablespace information.
Admin User	An super user, a user with the privilege to create database tables, etc.
Admin Password	The super user password.
Same as Admin (only Microsoft SQL Server)	Use the **Admin User** and **Admin Password** values for the **User Name** and **Password** fields.
User Name (only Microsoft SQL Server)	The name of a user to read and write on the target database.
Password (only Microsoft SQL Server)	The user password.

Connection Options	You can choose one of the following connection options:
	• **Initialize an existing, empty database**. Select this option to create a new Reporting Repository database. This option assumes that a Reporting Repository exists and is empty, and that the specified super user has the privileges required to create the Reporting Repository schema.
	• **Connect to an existing Repository database**. Select this option so that ER/Studio Team Server connects to an existing Reporting Repository. This assumes that the Reporting Repository exists and that ER/Studio Team Server can access all the Reporting Repository tables. **Note:** If you are upgrading ER/Studio Team Server, select this option to retain your connection to **ER/Studio Repository**. Permissions are preserved, but some of the solution repository information such as logs, become obsolete. If you choose this option, after the installation you must update the solution repository from the Admin page. If you used inherited roles, you must synchronize the repository.
	• **Reinitialize current Repository database**. Select this option to reinitialize the current Reporting Repository database. This option drops all solution tables and creates a new Reporting Repository schema. The super user must have the privilege to drop the tables and create the Reporting Repository schema.

Solution Repository Tab

On the **Solution Repository** tab you can access the following items:

Item	Description
Enable Encrypted Connection (only Microsoft SQL Server)	Check this option to enable the Secure Sockets Layer (SSL) communication protocol, which encrypts messages between **ER/Studio Team Server** and the Solution Repository.
Host/Port	The host name and port number of the machine that contains the Solution Repository database. For Microsoft SQL Server only, if the **Solution Repository** runs on a Microsoft SQL Server database that is a named instance, specify the host name in the format `HostName\NamedInstanceName`. For example: `DEWKBOW01.embarcadero.com\SolutionRepositoryServer`.
Database Name (only Microsoft SQL Server)	The name of the database.
SID (only Oracle)	The identifier of the database.
DBName (only DB2)	The name of the database.
Tablespace (only Oracle and DB2)	The Tablespace information.
Admin User	An super user, a user with the privilege to create database tables, etc.
Admin Password	The super user password.
Same as Admin (only Microsoft SQL Server)	Use the **Admin User** and **Admin Password** values for the **User Name** and **Password** fields.
User Name (only Microsoft SQL Server)	The name of a user to read and write on the target database.
Password (only Microsoft SQL Server)	The user password.

Connection Options	You can choose one of the following connection options: • **Initialize an existing, empty database**. Select this option to create a new Solution Repository database. This option assumes that a Solution Repository exists and is empty, and that the specified super user has the privileges required to create the Solution Repository schema. • **Connect to an existing Repository database**. Select this option so that ER/Studio Team Server connects to an existing Solution Repository. This assumes that the Solution Repository exists and that ER/Studio Team Server can access all the Solution Repository tables. **Note:** If you are upgrading ER/Studio Team Server, select this option to retain your connection to **ER/Studio Repository**. Permissions are preserved, but some of the solution repository information such as logs, become obsolete. If you choose this option, after the installation you must update the solution repository from the Admin page. If you used inherited roles, you must synchronize the repository. • **Reinitialize current Repository database**. Select this option to reinitialize the current Solution Repository database. This option drops all solution tables and creates a new Solution Repository schema. The super user must have the privilege to drop the tables and create the Solution Repository schema.

See Also

- [Installing ER/Studio Team Server](#)

- [Tomcat Configuration Application](#)

Tomcat Configuration Application

From Windows: **Start > All Programs > ER/Studio Team Server 4.0 > Configure ER/Studio Team Server**

You can use the **Tomcat Configuration Application** to start, stop and restart the **ER/Studio Team Server** server, and to change configuration parameters such as the amount of memory assigned to the ER/Studio Team Server server.

After you perform any change in this configuration application, click **OK** to apply the changes and close the dialog. You can click **Apply** to apply your changes immediately without closing the **Tomcat Configuration Application**, or **Cancel** to close the configuration application without saving any change that you did not apply yet.

The **Tomcat Configuration Application** provides the following tabs:

- [General](#)
- [Log On](#)
- [Logging](#)
- [Java](#)
- [Startup](#)
- [Shutdown](#)

General Tab

On the **General** tab you can access the following items:

Item	Description
Service Name	The name of the ER/Studio Team Server system service. You cannot change this name.
Display Name	The display name of the ER/Studio Team Server system service.
Description	A description of the ER/Studio Team Server system service.
Path to executable	Path to the executable that starts the service.
Startup type	Use this combo box to choose how to start ER/Studio Team Server up. You can select any of the following options: • **Automatic**. Windows starts the service automatically when the system starts. • **Manual**. Windows only starts the service when another service needs it, or if you start the service manually. • **Disabled**. Windows disables starting the service. You cannot start the service, not even manually.
Service Status	Indicates whether ER/Studio Team Server is running ("Started") or not ("Stopped").
Start (only when ER/Studio Team Server is stopped)	Starts the ER/Studio Team Server system service.
Stop (only when ER/Studio Team Server is running)	Stops the ER/Studio Team Server system service.
Pause	Pauses the ER/Studio Team Server system service.
Restart	Restarts the ER/Studio Team Server system services.

Log On Tab

On the **Log On** tab you can choose which account you want to use when you start the ER/Studio Team Server system service.

To use a local system account, check "Local System account" and optionally check "Allow service to interact with desktop" if you need to be able to interact with the ER/Studio Team Server system service from a graphical application.

If you want to use a custom user account for the ER/Studio Team Server system service, check "This account" instead, and enter a custom username and a password.

Logging Tab

On the **Logging** tab you can access the following items:

Item	Description
Level	ER/Studio Team Server only logs messages that have the level of severity specified here. By default, ER/Studio Team Server logs only information messages.
Log path	Path to the folder where logs are saved.
Log prefix	Prefix of the ER/Studio Team Server system service log files. The name of the resulting log file is <prefix>.<year>-<month>-<day>.log. For example: mylog-2014-05-12.log.
Pid file	If you specify here the path to a file, ER/Studio Team Server stores its process identifier in that file.
Redirect Stdout	Where to redirect the standard output. Enter "auto" to use the default value, or click the ... button to select a file to write the output.
Redirect Stderror	Where to redirect the standard error output. Enter "auto" to use the default value, or click the ... button to select a file to write the output.

Java Tab

On the **Java** tab you can access the following items:

Item	Description
Use default	Check this option to use the default Java Virtual Machine.
Java Virtual Machine	Path to the Java Virtual Machine.
Java Classpath	List of locations to look for Java classes and packages.
Java Options	Additional startup options to use when ER/Studio Team Server starts the Java Virtual Machine.
Initial memory pool	The initial amount of memory that ER/Studio Team Server uses, in MB.
Maximum memory pool	The maximum amount of memory that you allow ER/Studio Team Server to use, in MB. **Note:** The Java Virtual Machine cannot use more than 1.5 GB of memory.
Thread stack size	Maximum size of the thread stack, in KB.

Startup Tab

On the **Startup** tab you can access the following items:

Item	Description
Class	Main Java class to start ER/Studio Team Server.
Image (only in exe mode)	Image to start ER/Studio Team Server.
Working Path	Working path to start ER/Studio Team Server. ER/Studio Team Server relative paths are relative to this path.
Method	Method to invoke on start.
Arguments	Arguments to include on the start command.
Timeout	Maximum startup time, in seconds. If the startup take more time, it automatically fails.
Mode	How to start ER/Studio Team Server. You can choose any of the following modes: **exe**. Use a Windows executable to start ER/Studio Team Server. **jvm**. Use the Java Virtual Machine to start ER/Studio Team Server. **Java**. Use the Java executable to start ER/Studio Team Server.

Shutdown Tab

On the **Shutdown** tab you can access the following items:

| Item	Description
Class	Main Java class to shutdown ER/Studio Team Server.
Image (only in exe mode)	Image to shutdown ER/Studio Team Server.
Working Path	Working path to shutdown ER/Studio Team Server. ER/Studio Team Server relative paths are relative to this path.
Method	Method to invoke on shutdown.
Arguments	Arguments to include on the shutdown command.
Timeout	Maximum shutdown time, in seconds. If the shutdown take more time, it automatically fails.
Mode	How to shutdown ER/Studio Team Server. You can choose any of the following modes: • **exe**. Use a Windows executable to shutdown ER/Studio Team Server. • **jvm**. Use the Java Virtual Machine to shutdown ER/Studio Team Server. • **Java**. Use the Java executable to shutdown ER/Studio Team Server.

See Also

- [ER/Studio Team Server Configuration Manager](#)

Changing the Interface of ER/Studio Team Server

You can change some aspects of the ER/Studio Team Server interface to your own liking by editing the HTML and images in the program folders.

> ⚠️ **WARNING:** The interface is not meant to be changed and any changes made will be overwritten if the product is reinstalled or upgraded. These instructions are solely for those who require changes and any files you intend to change should be backed up prior to making any changes.
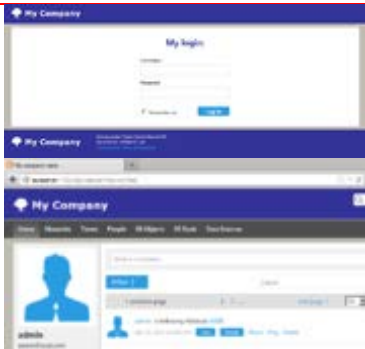
To change the Login page of ER/Studio Team Server:

1. From Windows, browse to your install directory. ..\Embarcadero Team Server 4.0\tomcat\webapps\ROOT\jsp\Login.jsp.

2. Open Login.jsp in a text editor (For example: Notepad.exe), scroll down to the section beginning `<div id="site-content">`

3. Change the text inside the header tags `<h1>Welcome to Embarcadero_Connect</h1>` to change the title of the login page to the text of your choice.

There are two methods to change the **Embarcadero** logo to your own image:

1. From Windows, browse to your install directory. Open ..\Embarcadero Team Server 4.0\tomcat\webapps\ROOT\themes\new\assets

2. Replace the embarcadero_logo.png with an image of equal size and name.

OR:

1. From Windows, browse to your install directory. Open ..\Embarcadero Team Server 4.0\tomcat\webapps\ROOT\WEB-INF\jsp\template directory.

2. Here there are jsp files that have entries referencing the css files. Open the jsp files in a text editor (notepad.exe) and scroll to the sections you wish to view.
   o **NewMainTemplate.jsp**
   ▪ `<title>Embarcadero_Connect</title>` is the title of the page in the browser.
     `<div id="site-footer">` is the css match for the page footer.

> `<div id="site-header">` is the css match for the page header.
> o **Header.jsp**
> ▪ `<div id="company-logo"></div>` is the match for the logo in the css file.
> **Footer.jsp** is where you will find css references for the logo at the bottom of the web page and the version number.

3. The css matches in the above jsp files are referenced in ..\Embarcadero Team Server 4.0\tomcat\webapps\ROOT\themes\new\global.css. You can see all the referenced areas that you may wish to change. For example, in the below selection from the css file, you can see the position, size and name of the png image file used for the logo. This is the image you would change to affect the site-header and company-logo in the templates.

```
#site-header #company-logo { position: absolute; top: 18px; left: 0; width:
200px; height: 28px; background:
url(http://docwiki.embarcadero.com/TeamServer/ERStudio/en/Changing_the_Interf
ace_of_ER/assets/embarcadero_logo.png) no-repeat; }
```

For the changes to take effect, you may need to refresh/restart your browser.

See Also

- [Tomcat Configuration Application](#)

Performing Maintenance Tasks

Here you can find a list of topics that can help you keep ER/Studio Team Server in good shape.

Topics

- [Cleaning the Content Repository](#)
- [Updating the Search Index](#)

See Also

- [Repository Management](#) page

Cleaning the Content Repository

The content repository consists of temporary files, such as run-time and history information maintained by the [Pentaho BI Platform](). Cleaning the content repository consists of removing files from the content repository that are more than 180 days old.

To clean the content repository:

- Select **My Settings > Admin > [Repository Management]()**.

- Click **Clean Content Repository** ( ).

A dialog box appears with the following message confirming that ER/Studio Team Server successfully completed the task:

"Action Successful! Found and deleted <number> file(s) more than 180 days old."

See Also

- [Repository Management]() page

Updating the Search Index

To update the search index:

- Select **My Settings > Admin > Repository Management**.

- Click **Update Search Index** ().

- Click **OK** on the confirmation dialog that appears.

A dialog box appears confirming that ER/Studio Team Server successfully completed the task.

See Also

- Configuring the Search Index

- Repository Management page

Restarting ER/Studio Team Server

To restart ER/Studio Team Server:

1. From Windows, select **Start > All Programs > ER/Studio Team Server 4.0 > Configure ER/Studio Team Server**

2. On the **General** tab, click **Stop**. Wait for the dialog box that appears to close.
   Note: If the **Stop** button is disabled, ER/Studio Team Server is not running. You can just start it.

3. Click **Start**.

A dialog box with a progress bar appears. The dialog box closes automatically when ER/Studio Team Server is completely restarted.

See Also

- Starting ER/Studio Team Server

- Stopping ER/Studio Team Server

- Tomcat Configuration Application

- ER/Studio Team Server Configuration Manager

Starting ER/Studio Team Server

To start ER/Studio Team Server:

1. From Windows, select **Start > All Programs > ER/Studio Team Server 4.0 > Configure ER/Studio Team Server**.

2. On the **General** tab, click **Start**.
   Notes:

   o   If the **Start** button is disabled, ER/Studio Team Server is already running.

   o   If **ER/Studio Team Server** fails to start, check that you have assigned enough memory.

A dialog box with a progress bar appears. The dialog box closes automatically when ER/Studio Team Server is completely started.

See Also

- Connecting to ER/Studio Team Server

- Restarting ER/Studio Team Server

- Stopping ER/Studio Team Server

- Installing ER/Studio Team Server

- Tomcat Configuration Application

- ER/Studio Team Server Configuration Manager

Stopping ER/Studio Team Server

To stop ER/Studio Team Server:

1. From Windows, select **Start > All Programs > ER/Studio Team Server 4.0 > Configure ER/Studio Team Server**

2. On the **General** tab, click **Stop**.
   Note: If the **Stop** button is disabled, ER/Studio Team Server is not running.

A dialog box with a progress bar appears. The dialog box closes automatically when ER/Studio Team Server is completely stopped.

See Also

- Starting ER/Studio Team Server

- Restarting ER/Studio Team Server

- Tomcat Configuration Application

- ER/Studio Team Server Configuration Manager

Uninstalling ER/Studio Team Server

To remove an [installation of ER/Studio Team Server](#):

1. Select **Start > Programs > ER/Studio Team Server X.X > Uninstall ER/Studio Team Server** to start the uninstallation wizard.

2. On the **Welcome** page, click **Next**.

3. On the **Summary Information** page, review the information and click **Uninstall**.

4. Once the uninstallation process is completed, click **Finish** to close the uninstallation wizard.

5. After you close the uninstallation wizard, you are given the choice to reboot immediately or at a later time. For a complete uninstallation, a system reboot may be required. Make your selection and click **Finish**.

The ER/Studio Team Server uninstaller does not uninstall the [ER/Studio Team Server Reporting Repository database](#). It is the Database Administrator's responsibility to delete the Reporting Repository database if you decide to permanently delete ER/Studio Team Server.

See Also

- [Installing ER/Studio Team Server](#)

- [Upgrading ER/Studio Team Server](#)