



Product Documentation

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# Team Server

Quick Start Guide

Version 2016 (16.1.4)

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May, 2016

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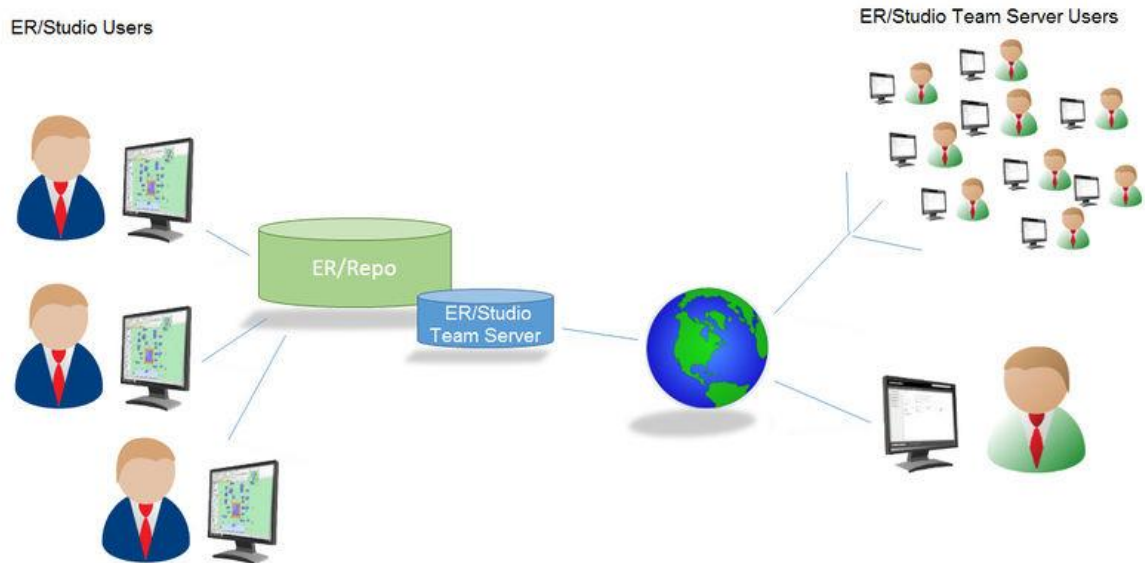
# What Is Team Server

Team Server is a web-based tool to access, search, edit and manage enterprise metadata. It provides access to [metadata from ER/Studio Repository](#), and it allows you to manage additional metadata, such as [glossaries](#) and [terms](#) or [data sources](#).

Team Server allows you to [keep track of your metadata](#) and [discuss its evolution](#) with [other users](#). It also lets you [create reports easily](#) from your data and searches, and export them to different file formats.

Team Server also enables you to:

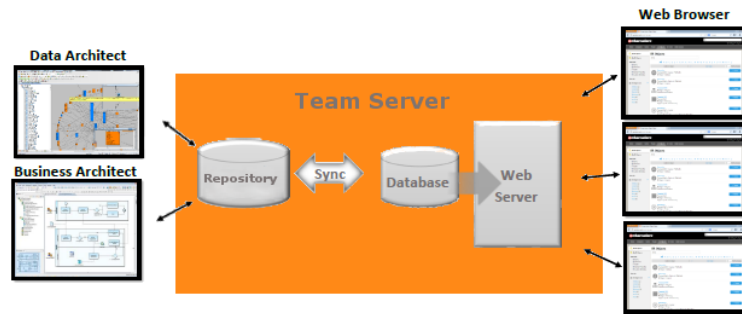
- [Search for all kinds of data](#), such as data definitions and [ER objects](#) in any model of your ER/Studio Repository database, including ER/Studio Data Architect and ER/Studio Business Architect diagrams. Team Server has [simple](#) and [advanced](#) searching capabilities to find ER objects and other resources, as well as their reuse and impact analysis.
- [Browse all the contents](#) of your ER/Studio Repository database, such as models and dictionaries, in a structured way.



Using a [web browser](#), you can [access Team Server](#) internally, via your corporate intranet, or externally, via the internet. This way, you can access all the information you need from anywhere.

# Overview of the Team Server Architecture

Team Server is a web server application with a database of its own, the Reporting Repository, which is synchronized with the 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. **Team Server** users can then [browse](#), [search](#), and [generate reports](#) on the synchronized metadata in the 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 Repository or transferred to the reporting database.

**Team Server** is also a communications hub and information center. Activity streams provide the following:

## Overview of the Team Server Architecture

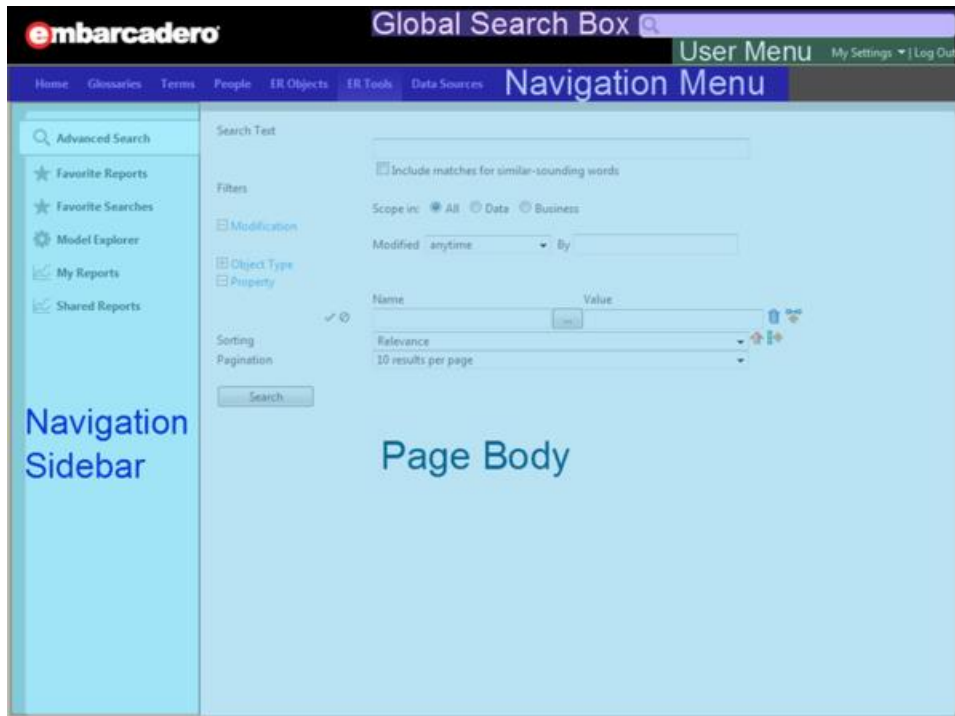
- Add, modify, and delete resource details are logged.
- Users can post comments on resources or to other users.

## See Also

- [Install and Configure Team Server and Repository](#)

# Overview of the User Interface

The Team Server user interface consists of the following elements:



- [Global Search Box](#). Lets you search for any resource in the [Reporting Repository](#).
- [User Menu](#). Provides access to user features and settings.
- [Navigation Menu](#). Provides access to the main Team Server features.
- [Navigation Sidebar](#). Lets you switch between the different pages of a major section. It changes depending on the current section.
- [Page Body](#). Shows the content of the current page.

In the [Navigation Menu](#) we have eight tabs available:

- [Home](#): Your personal home page, including documentation links, getting started content videos and your **Stream** page, that shows your activity and the activity of the resources that you are following.
- [Glossaries](#): The **Glossaries** page is a search page that allows you to search for glossaries, edit, or create new ones.
- [Terms](#): The **Terms** page is a search page that allows you to search for terms, edit, or create new ones.
- [People](#): The **People** page is a search page that allows you to search, edit, or create new users.



## Overview of the User Interface

- [ER Objects](#): The ER Objects page is a search page that allows you to search for ER objects.
- [ER Tools](#): Allows you to navigate to the business and technical reports, and create custom reports. From here you can also access your favorite and shared searches and reports.
- [Data Sources](#): The Data Sources page is a search page that allows you to create or search for data sources, login credentials and data sources groups.

## See Also

- [User Guide](#)

# Installation Notes

These notes provide important information about installation requirements for new **Team Server** installer which includes **Repository**. You should read this document in its entirety before any [install](#) or [uninstall](#) procedure.



**Note:** The following information is for installation only. If you are upgrading from separate ER/Studio Repository and Team Server installations, please see [Upgrading Team Server and Repository](#) for important upgrade information.

## System Requirements

Before installing **Team Server** and **Repository**, verify that your environment meets the hardware and operating system requirements. Adhering to these requirements optimizes performance. These hardware requirements are based on a 5-10 user environment.





**Tip:** For more than 10 users, ensure your hardware surpasses the previously stated hardware requirements to accommodate the number of transactions that increase as the number of users increases.



**WARNING:** If you are installing the x64 version of our software, you must uninstall any previously installed x32 bit versions

## Minimum Requirements

Hardware	Application Server	
Processor	As required by your database platform	4 x 3.0 Ghz (8 x 3.0 Ghz Recommended) 
RAM		6 GB (8GB Recommended) 
Disk Space		5 GB + 100mb per TS diagram + additional DB growth (if DB is in the same server)
DVD Reader		Depending on install medium
Operating System	As supported by your database platform	Any of the following: <ul style="list-style-type: none"> <li>• Windows Server 2008 (64 bit)</li> <li>• Windows Server 2012 (64 bit)</li> </ul>
Software	Transaction Control Protocol (TCP) up and running Single-byte character sets are supported, as long as the database is set to the required code page (character set). (UNICODE and UTF8 are not supported)	TCP up and running
Privileges	<ul style="list-style-type: none"> <li>• DBMS privileges to create objects on the server</li> <li>• Local administrator privileges</li> </ul>	



**Note:** To provide a great user experience, the following minimum configuration is strongly recommended for **Team Server**.

### Additional Notes:

- If you install the Application and the Database on the same server, consider surpassing the hardware requirements described previously.
- Supported DBMS (see [Database Server Requirements](#))
- Should you be running the minimum spec requirements, it is advised to reduce the maxThreads to a single thread. To do this, edit `...tomcat>webapps>api>WEB-INF>ersportal-app.xml` and change the line `<property name="maxThreads" value="2" />`, to have a value of "1" (a restart is required after saving the change).

## Supported Web Browsers

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

- Mozilla Firefox
- Google Chrome
- Microsoft Internet Explorer (9.0 or later)
- Microsoft Edge



**Note:** To be able to launch the [configurator](#) within Microsoft Edge, follow next steps:

1. Open the Control Panel -> Internet Options dialog.
2. Go to the Security tab.
3. Select 'Local intranet' zone and click "Sites" button.
4. Check the 'Automatically detect intranet network' box.

## Encrypting / SSL enablement requirements

Team Server supports encrypting connections to SQL Server (SSL enabled) with the following environment:

- Windows Server 2008 R2, Microsoft® SQL Server® 2014 Service Pack 1 (SP1).

The hotfix needed is *Cumulative Update 7*: <https://support.microsoft.com/en-us/kb/3046038>

- Windows Server 2008 R2, Microsoft® SQL Server® 2012 Service Pack 2 (SP2):  
<http://www.microsoft.com/en-US/download/details.aspx?id=43340>.

The hotfix needed is *Cumulative Update 6*: <https://support.microsoft.com/en-us/kb/3052468>

## Installation Checklist

- The installation user account must have local administrative privileges.
- To install, you need to create first an empty database for Team Server, unless you already have a database and will be reinitializing it during the install.
- The database server to be used must be running.
- If you want to configure LDAP authentication to allow directory service users to log into **Team Server**, check that your LDAP server is up and running.

- If you want to enable **Team Server** email notifications, check that your SMTP server is up and running. You may want to prepare a special email address on your email server for this purpose.

## Conflicts

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

## See Also

- [Install and Configure Team Server and Repository](#)
- [Database Server Requirements](#)
- [Upgrading Team Server and Repository](#)

# Database Server Requirements

## Supported Database Platforms

Team Server and Repository databases may run on any of the following database platforms:

- Microsoft SQL Server 2008 to 2014.
- Oracle 11g and 12c.
- IBM DB2 UDB 9.x and 10.x Server.

In order for the **Repository** to communicate with the database, the machine running **Team Server** must also have the corresponding RDBMS client utility installed.

## Important Information

### Oracle

- Install both 32-bit and 64-bit version of Oracle Client Utilities.
- Configure your server in one of the Oracle configuration tools: Net Easy Config or Net Configuration Assistant.
- Create a connection alias.
- If you are upgrading using Oracle you need to increase the number of processes (connections) to 200 before running.
- Minimum permissions for owner of Repository and Team Server schema:

- Roles:

SELECT\_CATALOG\_ROLE

- Privileges:

CREATE INDEXTYPE

CREATE PROCEDURE

CREATE SEQUENCE

CREATE SESSION

CREATE SYNONYM

CREATE TABLE

CREATE TRIGGER

CREATE TYPE

CREATE VIEW

## UNLIMITED TABLESPACE

### Microsoft SQL Server

- 64-bit client libraries are already installed on Windows machines.
- Ensure that the database and the instance are set to case-insensitive, as case-sensitive is not supported. Also set the SQL Server Configuration Properties to allow SQL Server authentication. Team Server only supports SQL Server Authentication.
- When using SQL Server, ensure the SQL Server Agent is running.
- **Team Server** on SQL Server only supports the following communication protocols:

Shared Memory

TCP/IP

Named Pipes

- The option **ANSI\_NULLS** (Server Properties > Connections) needs to be set as **On**.
- The default schema for Team Server database needs to be **dbo**. If you were using a different schema please move the tables to **dbo** schema previous to [install](#) or [upgrade](#) Team Server.

### IBM DB2

- Install 64-bit version of IBM DB2 UDB Client Utilities.
- Configure an ODBC data source entry for the IBM DB2 database that you want to access from Team Server.
- Create a connection alias. The data source name must match the connection alias specified in the client connection.
- For all versions of an IBM DB2 UDB server, to ensure optimal Repository performance, you must have a user temporary tablespace with a 32 KB page size and the database must be tuned so it does not run out of memory or log space.

## See Also

- [Installation Notes](#)

# Install and Configure Team Server and Repository

Please ensure that you have read the [Installation Notes](#) before proceeding.



**Note:** Repository 2016 installation is now part of Team Server 2016 installation.

To install Team Server and Repository, you need to run the new installer and follow the steps. You need a user with administrative privileges to run the installation wizard.

In this page, you can find detailed information about the different steps of the installation wizard.



**Tip:** You may have to create a blank database before starting the installation, please check the [Installation Checklist](#).

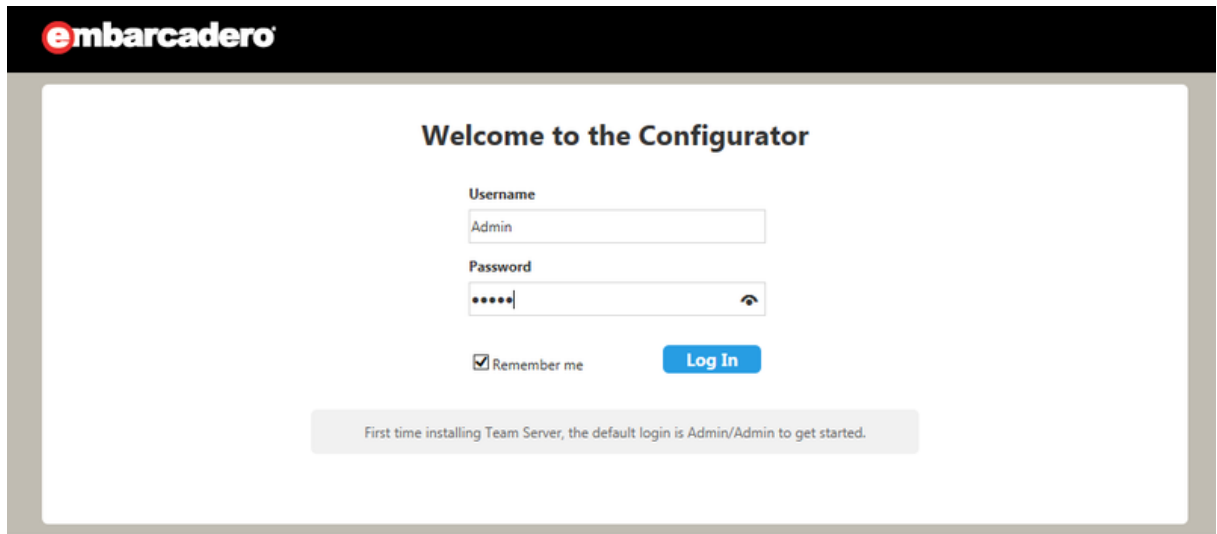
1. Run the installation wizard. Select **I agree...** and click **Install**.



**Note:** In case you need to change the default Port or the Install location, please click **Options** previous to **Install**.

2. In the Configurator Welcome Page, use Admin/Admin (case-sensitive) as the login and password and click *Login* to start the configuration wizard.





3. In the **Repository** page, click on **Select DBMS** to start the Database configuration.



4. In the **Repository Setup** page, you need to specify the information to connect to your Repository database:
  1. Select the DBMS type.
  2. Complete the information about the Repository database:



**Note:** If you have installed Team Server, CONNECT, or Portal in the past, please see [Upgrading Team Server and Repository](#).

1. In the **Host Name:Port** field, enter the hostname of the machine that contains the Repository database. The port number appears by default. Change it if needed.
2. In the **Login** field, enter the username to access the Repository database.
3. In the **Password** field, enter the password for the user specified earlier.

4. On the **Database** field, enter the name of the database that you have previously created to be your Repository database.
5. Login credentials to be used by Team Server to interact with the database (case-sensitive).

**Additional Notes:** Depending on the database platform that you selected previously, complete the following fields:

If you selected **Oracle**:

- On the **SID** field, enter your database identifier.
- If you selected **Use Oracle Service Name**, the **SID** field will be **Oracle Service Name**. Enter the service name you use.

If you selected **Microsoft SQL Server**:

- If the database server is a named instance, specify the **Host Name** in the `HostName\NamedInstanceName` format. For example, `DEWKBOW01\DBServer`.
- Optionally, for Microsoft SQL Server 2012 and 2014 only, you can check **Use SSL** to enable the Secure Sockets Layer (SSL) communication protocol, which encrypts messages. When SSL is enabled, Team Server uses ports 80 and 443 for secure communications. Please check [SSL enablement requirements](#).
- It is possible to have the installer create your MSSQL database for you at this point. If you enter the name of a non-existent database, the installer will pop up a confirmation window and then create the database.
  1. Click **Next** to continue.

# Install and Configure Team Server and Repository

**Repository Setup**

Please select the DBMS type you would like to use for Team Server repository

Oracle 11g-12c

MS SQL Server 2008-2014

IBM UDB 9.x-10.x (DB2 will not work with Performance IQ, choose either SQL Server or Oracle to host repository)

[Read about configuring ER/Studio Repository database >](#)

**Repository DB**

If you have installed Team Server, CONNECT or Portal in the past,

Specify location of Team Server database if it exists

Host Name	Port
<input type="text" value="SUPESW2012R202"/>	<input type="text" value="1433"/>

Use SSL

Authentication, create database privilege required

**Login**

**Password**

**Database**

Use existing tables or create them if they do not exist

Overwrite existing tables or create them if they do not exist

Specify Login credentials to be used by Team Server to interact with database

**!** Team Server will restart after repository is created, you may be asked to log in again before you can continue.

## Repository Setup

Please select the DBMS type you would like to use for Team Server repository

- Oracle 11g-12c
- MS SQL Server 2008-2014
- IBM UDB 9.x-10.x (DB2 will not work with Performance IQ, choose either SQL Server or Oracle to host repository)

[Read about configuring ER/Studio Repository database >](#)

### Repository DB

If you have installed Team Server, CONNECT or Portal in the past,

- Specify location of Team Server database if it exists

Host Name  Port

Authentication, create database privilege required

Login

Password

Database

- Use existing tables or create them if they do not exist
- Overwrite existing tables or create them if they do not exist
- Specify Login credentials to be used by Team Server to interact with database

**Team Server will restart after repository is created, you may be asked to log in again before you can continue.**

## Repository Setup

Please select the DBMS type you would like to use for Team Server repository

- Oracle 11g-12c
- MS SQL Server 2008-2014
- IBM UDB 9.x-10.x (DB2 will not work with Performance IQ, choose either SQL Server or Oracle to host repository)

[Read about configuring ER/Studio Repository database >](#)

### Repository DB

If you have installed Team Server, CONNECT or Portal in the past,

- Specify location of Team Server database if it exists

Host Name  Port

- Use Oracle Service Name

Authentication, create database privilege required

Login

Password

Oracle SID

- Specify Oracle Client service name for ER/Studio Repository
- Use existing tables or create them if they do not exist
- Overwrite existing tables or create them if they do not exist
- Specify Login credentials to be used by Team Server to interact with database

**Team Server will restart after repository is created, you may be asked to log in again before you can continue.**

[Next](#) [Cancel](#)



Note: If you want to just install the Repository, exit the configurator at this point and [stop](#) the Tomcat service (Team Server).

5. In the Accounts page:

1. In the **Windows User** field, enter the name of a Windows user that Team Server can use to log into the system. The user account must have local administrative privileges. The name should be in the format "machine\_name\username".
2. In the **Password** field, enter the password of the Windows user.
3. Login credentials to be used by Team Server to interact with repository (case-sensitive):
  - Leave it in blank to keep using Admin/Admin to log into ER/Studio Repository.
  - If you want to modify the super user login to enter into ER/Studio Repository, introduce the information. If the login does not exist, it will be created.
4. Click **Next** to continue.

The screenshot shows the 'Windows Service Account' configuration page. On the left is a navigation pane with options: Repository, Accounts, License, HTTPS, Single Sign-On, and Notification. The main content area has the title 'Windows Service Account' and a subtitle 'Specify the user name and password that Team Server should run under. A valid user account is required.' Below this is a warning icon and text: 'Windows User Access Control must be turned off in order for Team Server to work properly'. There are two input fields: 'Windows User (domain\user name)' with the value 'lauraserver\LocalAdmin' and 'Password' with masked characters. Below these is the 'ER/Studio Model Repository Account' section with a subtitle 'Have you changed the admin login password for ER/Studio Model Repository from Admin/Admin? If so specify updated credentials.' It has two input fields: 'Model Repository User' with the value 'Admin' and 'Model Repository Password' with masked characters. At the bottom right are three buttons: 'Back', 'Next', and 'Cancel'.

6. In the **License** page, you can register your licenses.
  1. In the **EDN Login or Email Address** field enter your existing Developer Network account. If you need a new user account, click **Create Account**. Fill in the required information.
  2. In the **Password** field, enter your EDN password.
  3. Specify the serial number to register in the **Serial Number** field.
  4. Click **Next**.



**Note:** If you have a license file, please use the **Import from file** button to register.

7. In the **HTTPS Setup** page, you can optionally choose to enable HTTPS (SSL). It is recommended that you enable secure communications as this will keep your password transmissions secure.
  1. Optionally, select **Enable Secure Communication (HTTPS)** to enable it.
  2. If you do not have SSL set up on your server, you can click the **Self-Signed** button to walk you through the short wizard that will create a Keystore file allowing you to use encryption.
    - Fill out the fields of the *Self-Signed wizard* and click **Generate**. The Keystore file will be created in the location of your choosing.

3. If you already have SSL set up on your server, directly enter the information required.
4. Click Next.

8. In the **Single Sign-On via LDAP** page, optionally, check **Use LDAP server for authentication** to use the *Lightweight Directory Access Protocol* (LDAP) and enable the ability for users to [log into Team Server](#) using their domain username and password. You can [enable LDAP authentication anytime later](#):

1. In the **LDAP URL** field, enter the URL of the server running LDAP.
2. In the **Manager DN** field, enter the distinguished name for the user that is used to authenticate users. Team Server uses this to connect to the LDAP server and validate user credentials. For example, CN=adminimator,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. In 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. Click **Test Connection**. If it is ok, this will enable the **Next** button.
8. Click **Next**.

Repository

Accounts

License

HTTPS

### Single Sign-On via LDAP (Optional)

Team Server can authenticate users via LDAP server.

Use LDAP server for authentication

LDAP URL  
ldap://10.10.1.110

Manager DN  
cn=adminimator, cn=users, dc=embarcadero, dc=com

Manager Password  
\*\*\*\*\*

Search Base  
dc=embarcadero, dc=com

Search Attribute  
sAMAccountName

Test User  
lauram

Test Password  
\*\*\*\*\*

Single Sign-On

Notification



9. In the **Notification Enablement** page, optionally, check **Enable Email Notifications via SMTP** to allow users to send search results and reports by email directly from Team Server. You can [enable notifications anytime later](#):
  1. In the **Email Address** field, enter the email address that you want to use as the sender of the emails sent from Team Server. You may want to prepare a special email address on your email server for this purpose.
  2. In the **Server/Port** field, enter the host name of the email server (for example, "mail"), the fully qualified network name (for example: "mail.example.com"), or the IP address (for example: "10.10.23.250") and the port number where the email server is listening. The default port is 25.
  3. Optionally, check "Requires Authentication" if your email server requires authentication. When you check this option, the **User Name** and **Password** fields are highlighted. Fill them with the required values to authenticate Team Server against your SMTP server.
  4. Click **Next**.

**Notification Enablement (Optional)**

Enable Email Notifications via SMTP

Team Server can use SMTP to send notifications and alerts to users.

**Email Address**  
teamserver@escmlauram02.com

**Server** : **Port**  
192.168.95.110 : 25

Use TLS

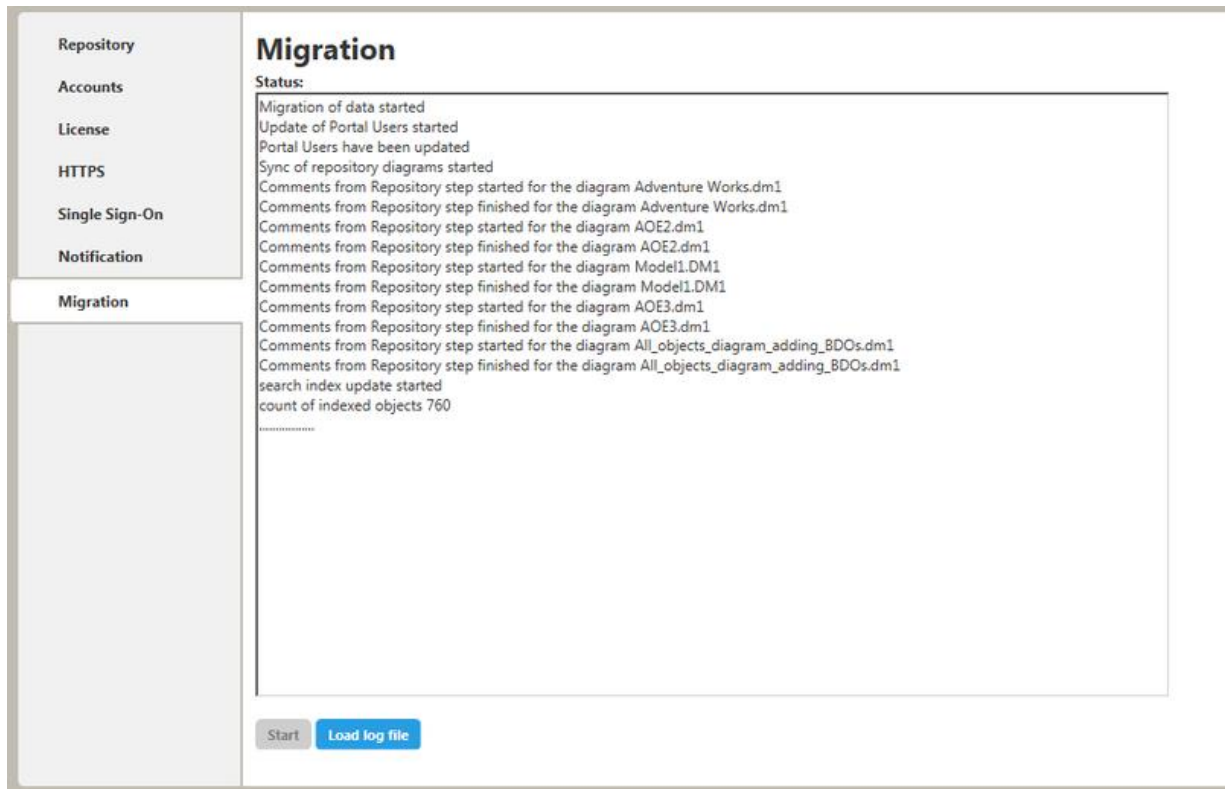
Requires Authentication

**User Name**  
teamserver

**Password**  
\*\*\*\*\*

[Back](#) [Finish](#) [Cancel](#)

10. In the **Migration** page, you perform the data migration during an upgrade. Click the **Start** button for this purpose. You can load or save the log file generated by clicking **Load log file**.



The screenshot shows a web-based configurator interface. On the left is a vertical navigation menu with the following items: Repository, Accounts, License, HTTPS, Single Sign-On, Notification, and Migration. The 'Migration' tab is selected and highlighted. The main content area is titled 'Migration' and contains a 'Status:' section with a text box displaying the following log output:

```
Migration of data started
Update of Portal Users started
Portal Users have been updated
Sync of repository diagrams started
Comments from Repository step started for the diagram Adventure Works.dm1
Comments from Repository step finished for the diagram Adventure Works.dm1
Comments from Repository step started for the diagram AOE2.dm1
Comments from Repository step finished for the diagram AOE2.dm1
Comments from Repository step started for the diagram Model1.DM1
Comments from Repository step finished for the diagram Model1.DM1
Comments from Repository step started for the diagram AOE3.dm1
Comments from Repository step finished for the diagram AOE3.dm1
Comments from Repository step started for the diagram All_objects_diagram_adding_BDOs.dm1
Comments from Repository step finished for the diagram All_objects_diagram_adding_BDOs.dm1
search index update started
count of indexed objects 760
.....
```

At the bottom of the main content area, there are two buttons: 'Start' and 'Load log file'.



**Note:** Please note that the configurator will show the **Migration** tab only if you are upgrading.

Team Server and Repository are now installed and configured on your system.

### Modify Configuration

You can modify the configuration at any moment:

- Use Configure Team Server. From Windows: **Start > All Programs > Team Server 2016 > Configure Team Server.**
- Select **My Setting > Configurator** once you are logged as Admin in Team Server.

### See Also

- [Tomcat Configuration Application](#)
- [Upgrading Team Server and Repository](#)

# Overview of User Connections

Team Server supports the following types of user connection:

## Base - Admin Connection

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

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

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

## ERSTeamServer - Team Server User Connection

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

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



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

## TeamServer - Basic Connection

This basic unlimited connection comes for free with Team Server. The [basic navigation menu](#) will be available.

## Concurrent User Connection

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

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

## Exclusive User Connection

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

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

## See Also

- [Overview of User Experiences](#)

# Manage Licenses

To manage your licenses go to [My Settings > Admin > Licences](#)

The Licenses Administration page is divided in three different parts:

1. License Add-on Status table indicates how many user connections are allowed and the license type.
2. Three action links:
  - **Refresh:** Updates the Add-on Licenses status by reading the licenses files from the specific folder.
  - **Register Add-on License:** Opens the [License](#) page where you can register your licenses.
  - **Manage Users:** Opens the user connection administration page where the administrator can allocate licenses to ER/Studio Enterprise users, up to the maximum number shown in the License Add-on Status.
3. Current User Sessions table lists the users that are currently using the application. This table also shows the remote host id, remote IP address, the date and time when the user logged in, and how long the user has been inactive. The Connection Type column display depends on the license type the user is using for this connection. The Action column in this section allows the administrator to log off (disconnect) users. The current user cannot disconnect himself.

## See Also

- [Next Tutorial: Add Users](#)

# Uninstalling Team Server

To remove an [installation of Team Server and Repository](#):

1. Select **Start > Programs > Team Server X.X > Uninstall 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**.

## Notes:

- The Team Server uninstaller does not uninstall the [Team Server Reporting Repository database](#). It is the Database Administrator's responsibility to delete the Reporting Repository database if you decide to permanently delete Team Server.
- When Team Server is uninstalled, the backup folder remains in the disk. In case you are uninstalling Team Server with no plans to install it again, remember you can delete this folder manually. You may find backup folder in the following location:
  - Team Server 4.0.8 and previous versions: `C:\Program Files (x86)\Common Files\ersEnterprisePortalBackup`
  - Team Server 4.1: `C:\Program Files\Common Files\ersEnterprisePortalBackup`
  - Team Server 2016:  
`C:\Users\username\AppData\Local\Temp\ersEnterprisePortalBackup`  
(Please see [known issue](#) about backing up 16.0.0 version.)

## See Also

- [Install and Configure Team Server and Repository](#)
- [Upgrading Team Server and Repository](#)

# Tutorials

These short tutorials are designed to give you a quick introduction to some common tasks that you might want to perform with **Team Server**.

Choose a topic to work with:

- [Manage Licenses](#)
- [Add Users](#)
- [Connect and Publish on Team Server](#)
- [View/Follow/Relate Objects](#)
- [Add a Glossary](#)
- [Import Glossaries and Terms](#)
- [Add Custom Attributes](#)
- [Auditing the Usage of Login Credentials by other Product](#)
- [Receiving Notifications](#)

## See Also

- [What's New](#)
- [Troubleshooting](#)

# Connect and Publish on Team Server

Team Server now includes Repository and has automatized the synchronization process.

In addition you will need to have ER Studio Data Architect installed to synchronize your models. To better understand the structure required, read the [overview of the ER/Studio Team Server architecture](#).

## Connect ER/Studio Repository with ER/Studio Data Architect

1. Start ER/Studio Data Architect. Click **Repository > Options** to configure the connection with Repository. Enter the required details and click **Ok**.



**Note:** In *Server Machine* box, enter the name of the Server where you have Team Server installed. For example, *MyServer01*.

2. On the **Repository** menu, click **Log In** to connect with the repository. Users to connect with Team Server need to be [created](#) previously.

## Add a Diagram to ER/Studio Repository

1. Open or create a new model in ER/Studio Data Architect. There are many sample models shipped with ER Studio Data Architect. If you do not have a current set of working data, you can open one of these from the templates folder.



**Note:** The default path to these models is `C:\ProgramData\Embarcadero\ERStudioDA_2016\Sample Models`.

2. Click **Repository > Diagrams > Add Diagram**.

Alternatively, from the navigation window on the left of the ER Studio Data Architect interface, right-click the diagram and then click **Add Diagram**.

- This will open the **Add Diagram to ER/Studio Repository** options window.
3. Click **OK** to synchronize the diagram with the Repository server.



**Note:** If you want to use these templates for other tutorials, you may want to save as a different filename before proceeding.

Your model is now stored on the **Repository** database. To view the data on **Team Server**, complete the next section to publish the diagram on your Team Server installation.

## Publish a Diagram on Team Server

1. Open in a web browser the URL that you specified in your Team Server installation. For example, <http://localhost:8080>.
2. Log in as Admin with the password you specified upon installation.



**Note:** The default password is Admin if you have not changed the default super user of your Repository installation.

3. [ClickMy Settings](#) > [Admin](#) > [ER/Studio Publications](#).
4. On the **ER/Studio Publications** page, select those resources that you want to publish in the **Selection** column.
5. Click **Publish Selected** to start the publication process. The **Status** column will show **Published** when the publication process ends successfully.

## See Also

- o [What Is ER/Studio Team Server](#)
- o [Overview of the Diagram Synchronization Process](#)
- o [Next Tutorial: View/Follow/Relate Objects](#)



# View/Follow/Relate Objects

If you have not [added and published](#) a model on Team Server, you will need to do that first.

## View Objects

Select [ER Tools](#) > [Model Explorer](#).

Browse the hierarchy of ER objects from the Model Explorer page. In this hierarchy, expand every folder and ER object to see its contents. At this point you can:

- Hover over certain ER objects, such as diagrams, to view detailed information about the ER object.
- Hover over the name of an ER object with an eye icon, such as a model or a submodel, to view a miniature picture of the ER object (clicking the icon shows the complete diagram in a new window/tab).
- Click an ER object to access its [description page](#), which contains links that you can use to continue browsing your ER objects.

## Follow Objects

Open the description page of an ER Object. Click + **Follow** on the upper-right corner of the resource page header.

You are now following the resource, and its activity is displayed in your [Home page](#).

## Relate Objects

Certain ER/objects such as models, can be related with [terms](#) and with [data sources](#). You can:

- Click [Related Terms](#) and then go to relate tab. On the right-hand side of the term entries, you can click **Relate** to relate a term to the current model.
- Click [Related Data Sources](#) and then go to relate tab. On the right-hand side of the data sources entries, you can click **Relate** to relate a data source to the current model.

## See Also

- [Working with Resources](#).
- [Working with ER Objects](#).
- [Next Tutorial: Add a Glossary](#)

# Add Users

You have the following options to add users to Team Server:

- You can directly [create](#) users within the tool. But the users you create with this tool will be just Team Server exclusive users, not being able to connect to Repository.
- Use the ER Studio Data Architect [Security Center](#) to add and remove users, groups, or roles. This gives you many options to allow different Users and Groups, varying levels of access to your Repository Projects, Diagrams, and Diagram objects.

## Add Users using Security Center

1. Start ER/Studio Data Architect.
2. On the **Repository** menu, point to **Security** and then click **Security Center**.
3. To add a user, go to **Manage Users** tab on the ER/Studio Repository Security Center window and click the "New" button. Include user name, password, and description on the pop-up window, then click **Ok**.
4. Now you have this user created in the Repository database and can log in with it.

### Notes:

- For LDAP users, select **Directory Service User** check box and include the user name as Domain\Username.
- For LDAP users, you need to [enable LDAP](#) on Team Server prior to synchronizing.
- User/Role security center changes are not synchronized separately. They need to be synchronized with diagram/model changes.

## See Also

- [Enabling LDAP Authentication](#)
- [Access Control Permissions](#)
- [Next Tutorial: Connect and Publish on Team Server](#)

# Add a Glossary

Glossaries are collections of terms, such as "Human Resources", "Accounting", or "Customer Service". Glossaries can contain many [terms](#), and each term can be associated with many glossaries.

Open in a web browser the URL that you specified in your **Team Server** installation and log in.



**Note:** Your user needs to have permission to view and create glossaries. Administrator can manage this permission on the [Permissions](#) page.

From the top navigation bar, select **Glossaries**, and then click **New Glossary** on the top right of the page.

In the **New Glossary** dialog box that opens:

1. Enter a **Name** to identify your new glossary.
2. Write in **Parent Glossary** the name of an existing glossary if you want your new glossary to be a child of an existing glossary. Click **Add** to set the parent.
3. Define the **Status** of the glossary using nomenclature you decide upon. You can use for example the following nomenclature: "Approved", "Not Yet Approved", "Implemented", "Not Yet Implemented", or "Deprecated".
4. Write a **Definition** that provides detailed information about the glossary, such as its purpose and audience.
5. Click **Save** to save your new glossary.

## See Also

- [Manage User Permissions on a Resource](#)
- [Working with Glossaries](#)
- [Next Tutorial: Import Glossaries and Terms](#)

# Import Glossaries and Terms

Creating a term is very much like creating a [new glossary](#). However, you can import a large number of Terms using the Import function.

You can load [glossaries](#) and [terms](#) from a CSV file into Team Server if you have a CSV file that follows the [required format](#).

To load glossaries and terms from a CSV file:

1. Select [Glossaries](#) on the [navigation menu](#).
2. Click Load Glossaries on the upper-right corner of the Glossaries page.
3. On the [Load CSV File](#) page that opens:
  1. Click **Browse** and choose the target CSV file.
  2. Click **Load**.

Team Server loads the glossaries and terms on the CSV file.

If you do not have a CSV file ready, you can create it. Paste the following into a simple text file and save as a .csv file. For example, Terms.csv.

## Import Glossaries and Terms

+++ Glossaries Begin +++

```
Key,Name,Status,Definition,Abbreviations,Aliases,AdditionalNotes,Stewards,ParentGlossary,,  
,,,,  
,"My Company Business Glossary",Approved,"Glossary of all commonly used terms used for  
conducting business at My Company.",,,,admin,,,,,  
,Accounting,Approve,"Glossary of commonly used accounting terms.",,,,admin,"My  
Company Business Glossary",,,,,  
,"Customer Service",,"Glossary of commonly used customer service terms.",,,,admin,"My  
Company Business Glossary",,,,,  
,"Human Resources",,"Glossary of commonly used human resources terms.",,,,admin,"My  
Company Business Glossary",,,,,
```

+++ Glossaries End +++

+++ Terms Begin +++

```
Key,Name,Status,Definition,Abbreviations,Aliases,AdditionalNotes,Stewards,RelatedGlossari  
es,RelatedTerms,TermEntityType  
,AMT,Approved,"Tax imposed to back up the regular income tax imposed on  
CORPORATION and individuals to assure that taxpayers with economically measured income  
exceeding certain thresholds pay at least some income tax.",,,,admin,Accounting,,  
,Abatement,Approved,"Complete removal of an amount due, (usually referring to a tax  
ABATEMENT a penalty abatement or an INTEREST abatement within a governing  
agency).",,,,admin,Accounting,AMT,
```

+++ Terms End +++

## See Also

- [CSV Format to Load Glossaries and Terms](#)
- [Working with Terms](#)

# Add Custom Attributes

You can associate enterprise data dictionary attachments with the following **Team Server** resource types: glossaries, terms, people, data sources, and the following ER objects: tables, columns, logical entities, logical attributes, business entities and business attributes.

When you associate an attachment to a resource type, the Description subpage of the pages of that type of resource include the associated attachment as a custom attribute which you can edit from **Team Server**.

## Add Attachments on ER/Studio Data Architect

In the Data Dictionary, right-click the Attachments folder and then click **New Attachment Type**. Define the attachment type as required and then click **OK** to complete the editor.

In the Attachment type folder created, right-click and then click **New Attachment**.

1. In the **Name** tab define the name of the attachment type and provide a description (optional) of the attachment type, such as when and why attachments of this type are used.
2. In the **Value** tab select the data type from the lists all supported data types. Optionally, you can define a default value.

## Add Diagram Changes and Synchronize

You can either:

- [Adding a Diagram or Data Dictionary to the Repository](#)
- If the diagram already exist and you are just adding the attachments, right-click de Data Dictionary and then click **Check In Data Dictionary**.

## Publish and Add the Custom Attributes

Go to **Team Server** and [publish](#) the diagram.

Then [add the custom attribute](#) to the specific attribute type. For example: [Terms](#).

## Add terms with custom attributes

You can either:

- [Add a term](#) and [edit it](#) to see and fill the custom attributes.
- [Load it](#) from a CSV File. The custom attributes will be added at the end in order.

For example:

## Add Custom Attributes

```
+++ Terms Begin +++,,,,,,,,,
Key,Name,Status,Definition,Abbreviations,Aliases,AdditionalNotes,Stewards,Relat
edGlossaries,RelatedTerms,TermEntityType,ER1,ER2
,TestCA10b,Locked,,,,,,,,,"Business Terms",False,10
,TestCA16b,Locked,,,,,,,,,"Business Terms",True,16
+++ Terms End +++,,,,,,,,,
```

## See Also

- [CSV Format to Load Glossaries and Terms](#)

# Auditing the Usage of Login Credentials by other Product

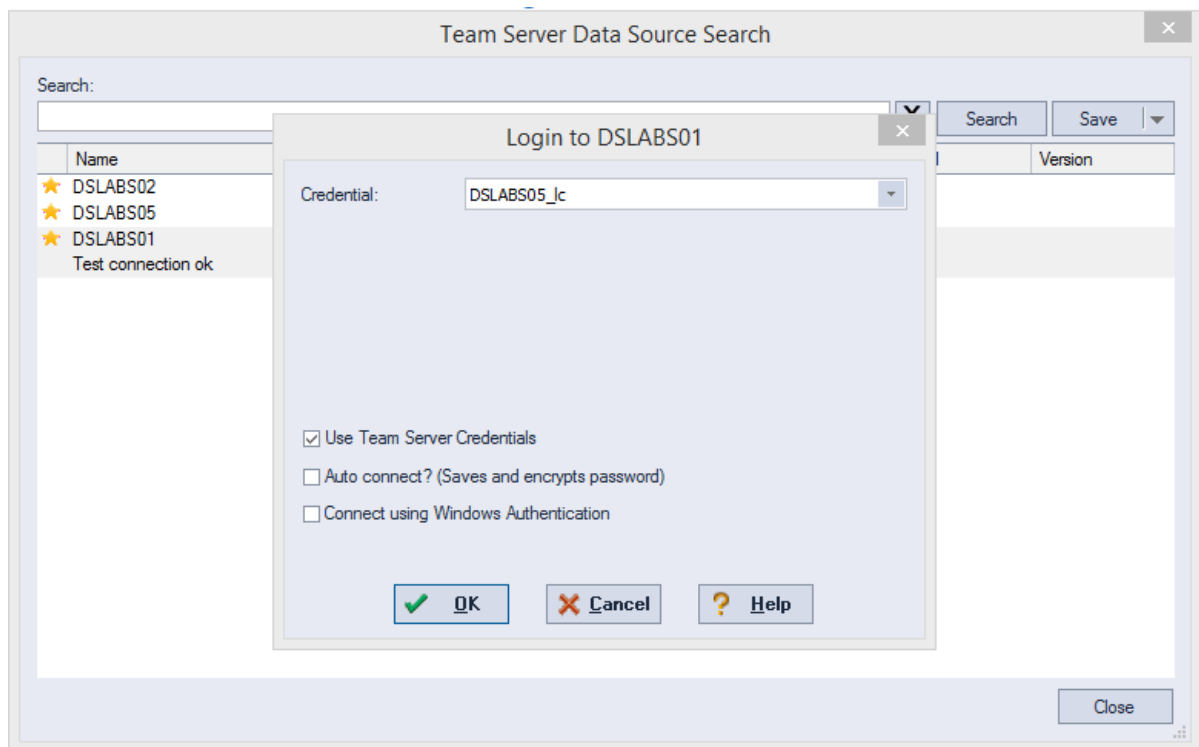
## Creating a Data Source and the Related Login Credential on Team Server

- [Creating a Data Source](#)
- [Creating Login Credentials](#)
- [Associating a Data Source with a Login Credential](#)

## Using the Login Credential from other Product

In this tutorial we will use [DBArtisan](#) as the product that uses Team Server login credentials to connect.

1. [Set up the connection and connect](#) to Team Server from DBArtisan.
2. [Set up](#) the data sources.
3. Connect to the data source using the Team Server login credential.





## Auditing the Usage

Now if you go to the [Password Locker Audit](#) page on Team Server you can audit what login credentials are being used. You can filter by product, login credential, and date.

### Password Locker Audit

Use this page to audit every connection to Password Lockers

Application: All	Login Credentials: All	From: 2015/10/22	To: 2015/10/30	Search												
<table><thead><tr><th>Application</th><th>User Name</th><th>Login Credentials</th><th>Date</th></tr></thead><tbody><tr><td>DBArtisan</td><td>admin</td><td>DSLABS05_lc</td><td>2015-10-29 16:24:56</td></tr><tr><td>DBArtisan</td><td>admin</td><td>saDS</td><td>2015-10-29 14:30:07</td></tr></tbody></table>					Application	User Name	Login Credentials	Date	DBArtisan	admin	DSLABS05_lc	2015-10-29 16:24:56	DBArtisan	admin	saDS	2015-10-29 14:30:07
Application	User Name	Login Credentials	Date													
DBArtisan	admin	DSLABS05_lc	2015-10-29 16:24:56													
DBArtisan	admin	saDS	2015-10-29 14:30:07													

## See Also

- [Password Locker Audit](#)
- [Working with Login Credentials](#)
- [DBArtisan Wiki](#)

# Receiving Notifications

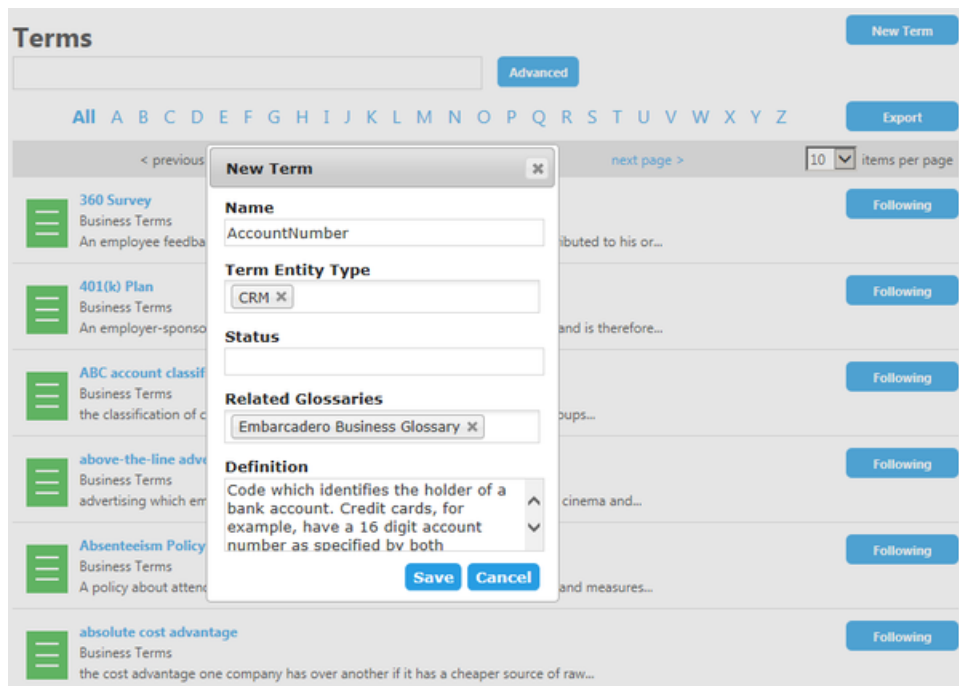
Team Server allows you to receive notifications about the activity in your stream. Posting, comments, following on the resources you have created will generate and email that will be sent to the account you defined on your profile.

In this tutorial we are going to explain step by step what to do to receive email notifications:

1. First of all, configure Team Server for being able to send emails. Yo can do it in the [Notification Enablement](#) page of the [configurator](#).
2. Include the email where yoy want to receive the notifications when [creating/editing](#) the user.
3. Make sure you have checked the [options](#) you prefer about receiving notification.
4. Test with some posting.

## Example

- o *Admin* user creates a [new term](#).

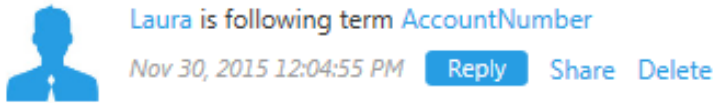


- o User *Laura* [follows](#) this new term.



## Receiving Notifications

- Admin user can see this activity in his [stream page](#).



- Admin user receive an email on the configured email account similar to the following:



## See Also

- [Notifications](#)
- [Team Server Configuration Manager](#)