

IDERA ER/Studio®

Upgrade Guide

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Welcome

This upgrade guide helps you upgrade applications in the ER/Studio suite of products. The most current version of the ER/Studio suite of products is 16.5 (2016+).

When you purchase an upgrade, IDERA support sends you an email that includes the download link for the product and instructions for obtaining the new license. Review that email and the notes found in Best practices.

Where appropriate, step-by-step instructions are provided. Upgrade instructions are provided for the following applications:

- ER/Studio Repository
- ER/Studio Data Architect
- ER/Studio Portal
- ER/Studio Business Architect
- Upgrading AppWave Licenses for IDERA Apps

Best practices

Familiarize yourself with the new features of your products. New Features guides are available for each product. You can find them on their corresponding product page on https://www.idera.com/support/productdocuments.

Make sure you backup your Repository database before upgrading.

If you are running the Repository or Portal on a virtual machine (VM), you should take a snapshot of the VM before upgrading.

You should create a test version of the new Repository. The Repo does not itself contain licensing (licensing is handled by the client) so it is quite easy for you to set up a test version of the Repository in order to validate it and to get familiar with new features before upgrading your entire environment.

You should always upgrade your ER/Studio Repository first.

If you are also using ER/Studio Portal, you must upgrade to the latest version to correspond with the latest ER/Studio Repository version.

ER/Studio Repository

The following topics help you upgrade ER/Studio Repository

- Important notes
- ER/Studio Repository upgrade checklist
- Preparing to upgrade the Repository
- <u>Upgrading ER/Studio Repository</u>

Important notes

- Always backup the Repository database before upgrading.
- The Repository upgrade must be done incrementally from one major version to the next until the target version is reached. You cannot skip major versions during the Repository upgrade as the installer for each major version only contains the database changes between the new version and the previous one. When upgrading from earlier versions, such as from 5.0 to Repository 6.5, you must first uninstall version 5.0, upgrade the Repository to version 5.5, update the database, uninstall version 5.5, then upgrade to 6.0, update the database, uninstall version 6.0, and then upgrade to Repository 6.5 and update the database. Once the Repository upgrade is complete and you have installed the latest version of ER/Studio Data Architect, then you should upgrade your diagrams with the latest version of ER/Studio DA. For more information, see Upgrading ER/Studio Data Architect Enterprise diagrams. Consult IDERA Technical Support when upgrading from versions prior to 4.5.
- If you are upgrading to ER/Studio Repository, upgrade your version of ER/Studio Data Architect also. Ensure the build date of ER/Studio Repository coincides with the build date of ER/Studio Data Architect.
- If you are also using ER/Studio Portal, you must also upgrade it to the latest version.
- You can install ER/Studio Data Architect 9.x and an earlier ER/Studio Data Architect version on the same workstation.
- Upgrading diagrams can be time consuming and memory intensive. The number and size of ER/Studio Data Architect diagrams managed in the upgraded Repository dictates how long the upgrade process takes.

ER/Studio Repository upgrade checklist

Use the following checklist to ensure ER/Studio Repository is correctly upgraded.

- Download ER/Studio Upgrade. To download the most current release, go to the Embarcadero Developer Network, http://edn.embarcadero.com. Log in and go to Registered User Downloads in the Downloads menu, and select your product. All the supported versions, starting with the most recent, are listed on this page.
- 2. Review the ER/Studio ReadMe. For the most current installation and usage information, see the ReadMe at https://www.idera.com/support/productdocuments.
- 3. Prepare to upgrade. For what to do before you upgrade to the latest version, see <u>Preparing</u> to upgrade the <u>Repository</u>.
- 4. Upgrade ER/Studio Repository. For ER/Studio Repository upgrade details, see <u>Upgrading ER/Studio Repository</u>.

Preparing to upgrade the Repository

There are tasks both users and administrators must perform before upgrading the repository:

- ER/Studio Data Architect user preparations
- ER/Studio Repository administrator preparations

ER/Studio Data Architect user preparations

- 1. Ensure you have backed up all your .dm1 files.
- 2. Check in all your diagrams and objects.

NOTE: If you try to check in a file from the previous version with the same name as a current file, the current file will become corrupted.

- 3. Rename all local copies of Repository diagrams in the active file directory as follows:
 - a. From the ER/Studio Data Architect Main menu, choose **Repository** > **Options**.
 - b. Make note of the Active File Directory.
 - c. Switch to the Windows Explorer and rename all the diagrams in the **Active File Directory**.

ER/Studio Repository administrator preparations

- 1. Ensure no one is logged into the Repository.
- 2. Backup the current Repository database.
- 3. Shutdown the Repository services manually using the Services Control Panel. The following are the names of the services to shut down:
 - IDERA Repository Communication Server
 - IDERA Repository Database Server
 - IDERA Repository Event and Dispatch Server
- 4. Uninstall the previous version of the Repository.
- 5. Restart the Repository host computer.

Upgrading ER/Studio Repository

When you upgrade ER/Studio Data Architect you must also upgrade ER/Studio Repository to correspond with the same build date as ER/Studio Data Architect.

The Repository upgrade must be done incrementally from one major version to the next until the target version is reached. You cannot skip major versions during the Repository upgrade as the installer for each major version only contains the database changes between the new version and the previous one. When upgrading from earlier versions, such as from 4.5 to Repository 6.0, you must first upgrade the Repository to version 5.0, then upgrade to 5.5, and then upgrade to Repository 5.5. Once the Repository upgrade is complete and you have installed the latest version of ER/Studio Data Architect, then you should upgrade your diagrams with the latest version of ER/Studio DA.

- 1. Log on to Windows with local administrator privileges.
- 2. Start the Repository installation program and follow the prompts.
- 3. When prompted to choose the installation directory, specify a directory other than that of an existing repository installation.

The installation program starts the following services:

- IDERA Repository Communication Server
- IDERA Repository Database Server
- IDERA Repository Event and Dispatch Server
- 4. On the Run Database Wizard page, click Yes.
- 5. When the wizard locates your existing database, select **Update previous Version Database** to current version.

The Repository services and your existing database will be upgraded to the current version.

NOTE: If you are upgrading from a Repository version prior to 4.0, you can delete the C:\Program Files\IDERA\Repository\Data directory. This directory is not used with Repository versions 4.0 and later.

ER/Studio Data Architect

The following topics help you upgrade ER/Studio Data Architect

- Important notes
- ER/Studio Data Architect checklist
- Preparing to upgrade ER/Studio Data Architect
- Upgrading ER/Studio Data Architect
- <u>Upgrading diagrams</u>

Important notes

- You can install ER/Studio Data Architect 9.x and an earlier ER/Studio Data Architect version on the same workstation.
- If you install ER/Studio DA 9.5 on a system with an earlier version installed and then uninstall that earlier version, you may have to run a repair install on ER DA 9.5 before you can run it again. Run the ER/Studio Data Architect 9.5 installer and then select Repair.
- If you have an ER/Studio Enterprise installation, which includes ER/Studio Repository, you must also upgrade the Repository released at the same time as the new version of ER/Studio Data Architect. ER/Studio DA 9.5 requires that you use ER/Studio Repository 6.5. However, a "point release", such as ER/Studio Data Architect 9.5.x, does not require you to upgrade the Repository.
- Any *.dm1 files from the previous version you open will be upgraded to 9.x format when you open them for the first time. You can then choose to save the file in the new format using the same or a different name. Previous versions of ER/Studio Data Architect cannot read version 9.x files.
- For ER/Studio Repository users only. Upgrading diagrams can be time consuming and memory intensive. The number and size of ER/Studio Data Architect diagrams managed in the upgraded Repository will dictate how long the upgrade process takes. Be sure to read the section on upgrading the Repository first before upgrading your local ER/Studio Data Architect installation.
- For diagrams from ER/Studio DA versions prior to 9.0. Since the denormalization feature has changed in 9.0, any documents containing denormalization mappings will be upgraded to use the new feature of ER/Studio DA 9.0 and beyond. Denormalization mappings are now retained with the table data and can be viewed and edited on the Where Used tab of the Table Editor. Denormalization history, including Columns, Indexes, and Relationships of pre-map tables, is no longer retained, so the undo and make permanent functions specifically for denormalizations are no longer available. Denormalization mappings have been worked into the normal undo function of the product allowing them to be undone like other operations. However, the names of the pre-map tables are retained. Retaining only essential pre-map information means that the DM1 file with denormalizations is smaller and therefore opens faster.
- If you decide to uninstall a previous version, you will be given the option of saving your existing license. If you decide to reinstall the previous version, you will have the option to restore your license or to use a trial license.

ER/Studio Data Architect checklist

Use the following checklist to ensure ER/Studio Data Architect is correctly upgraded.

- 1. Download the latest version of ER/Studio Data Architect. To download the most current release, go to the Embarcadero Developer Network, http://edn.embarcadero.com. Log in and go to Registered User Downloads in the Downloads menu, and then select your product. All the supported versions, starting with the most recent, are listed on this page.
- 2. Review the ER/Studio Data Architect Read Me. For the most current installation and usage information, see the Read Me at https://www.idera.com/support/productdocuments.
- 3. Prepare to Upgrade. For what to do before you upgrade to the latest version, see <u>Preparing</u> to Upgrade ER/Studio Data Architect.
- 4. Upgrade ER/Studio Data Architect. For ER/Studio Data Architect upgrade details, see Upgrading ER/Studio Data Architect.
- 5. Upgrade ER/Studio Data Architect Diagrams. For ER/Studio Data Architect diagram upgrade details, see <u>Upgrading Diagrams</u>.

Preparing to upgrade ER/Studio Data Architect

The steps that follow are for ER/Studio Enterprise installations only, which include ER/Studio Repository.

- 1. Ensure you have backed up all your .dm1 files.
- 2. Check in all your diagrams and objects. If you attempt check in a file from a previous-version that has the same name as an existing file, the existing file will become corrupted.
- 3. Rename all local copies of Repository diagrams in the active file directory as follows:
 - a. From the ER/Studio Data Architect Main menu, choose **Repository** > **Options**.
 - b. Make note of the name of the Active File Directory.
 - c. Switch to Windows Explorer and rename all the diagrams in the Active File Directory.
- 4. Wait for the Repository Administrator to upgrade the Repository and complete the Diagram Data Version Upgrade.

Upgrading ER/Studio Data Architect

Follow the instruction for installing ER/Studio Data Architect, as follows:

NOTE: To ensure compatibility, the release dates of ER/Studio Repository and ER/Studio Data Architect must be the same.

- 1. Log on to Windows with local administrator privileges.
- 2. Start the ER/Studio Data Architect installation program.

NOTE: To do a silent install, you can run the installation program from the command prompt with the -s parameter.

3. Walk through the installation wizard following the onscreen prompts.

The following provides additional information for some options that are not self-explanatory:

- o **Default Notation**: Choose the notation type you want ER/Studio Data Architect to use by default to display the model.
- o **IDEF1X**: Data modeling technique used by many branches of the United States Federal Government.
- o **IE (Martin/Finkelstein)**: Information Engineering (IE) as developed by Martin and later revised by Finkelstein.
- o **IE (Crow's Feet)**: Uses IE notation and represents relationships with connecting lines between entities, and symbols at the ends of those lines to represent the cardinality of the relationship. This is the notation used in Oracle texts and in other applications such as Visio. Foreign keys are displayed in entity boxes.
- o **IE (Hide Foreign Keys)**: Uses standard IE notation, but foreign keys are not displayed in entity boxes.
 - NOTE: You can change the notation setting at a later time. To change the notation, choose Tools > Options from the ER/Studio Data Architect Main menu, and then click the Logical or Physical tab where you can choose the notation type.
- o **Shared Application Data Location**: By default, ER/Studio Data Architect installs shared directories and application files such as the DatatypeMapping, Macros, and sample Models directories in the following locations:
- o Windows XP:

C:\Documents and Settings\All Users\Application
Data\IDERA\ERStudio_X.X

o Windows 8, Windows 7, and Windows Vista:

C:\ProgramData\IDERA\ERStudio_X.X

If you prefer to store these files in another directory, follow the procedure in <u>Changing the Location of ER/Studio Data Architect Shared Files</u>.

Changing the location of ER/Studio Data Architect shared files

NOTE: You must have local administrator privileges to change the location where ER/Studio Data Architect stores and searches for shared application data.

- 1. Choose Help > About ER/Studio Data Architect, and then click File Path.
- 2. In the **File Path** dialog, browse to an existing directory where you want to store your shared files.

NOTE: The directory path you choose must be the location where you have created an IDERA\ERStudioDA_X.X directory or where you want ER/Studio Data Architect to create this directory.

- 3. In the **File Path** dialog, click **OK**, and then in the **About ER/Studio** dialog, click **OK** again. ER/Studio Data Architect searches for the datatype mappings in this directory.
- 4. Choose **Tools** > **Options** > **Directories**, specify where you want to store your macros, and then click **OK**.
- 5. Copy the contents of the DatatypeMapping, Macros, and Sample Models directories to the new location.
- 6. To effect the changes, restart ER/Studio Data Architect.

Upgrading diagrams

If you have an ER/Studio Data Architect installation that does not include ER/Studio Repository, see <u>Upgrading ER/Studio Data Architect Standard Diagrams</u>.

If you have ER/Studio Enterprise, which includes ER/Studio Repository, see <u>Upgrading ER/Studio Data Architect Enterprise Diagrams</u>.

If you are upgrading from a version of ER/Studio Data Architect before 9.0, see also <u>Upgrading diagrams with denormalization mappings</u>.

Upgrading ER/Studio Data Architect standard diagrams

NOTE: This procedure is for ER/Studio Data Architect Standard installations only, which do not include the Repository.

Once you have installed the new version of ER/Studio Data Architect, from the new version of ER/Studio Data Architect, open each of your old *.dm1 files. ER/Studio Data Architect will convert the files to the new format before opening them. Then save the files with a new name or overwrite the previous version by using the same name.

Upgrading ER/Studio Data Architect Enterprise diagrams

NOTE: This procedure is for the Repository Administrator of ER/Studio Enterprise installations only, which include ER/Studio Repository. ER/Studio Data Architect users should wait until this process is done and then do a clean get of any diagrams they want to work on with the upgraded version of ER/Studio DA. The diagrams will already have been upgraded at that time.

Update your existing diagrams before you check out any diagrams or do any work with the new version of ER/Studio Data Architect.

Upgrading diagrams can be time consuming and memory intensive. The number and size of ER/Studio Data Architect diagrams managed in the upgraded Repository will dictate how long the upgrade process takes.

- 1. Start ER/Studio Data Architect.
- 2. Update the Repository Options to recognize the new ER/Studio Repository as follows:
 - a. From the ER/Studio Data Architect Main menu, choose **Repository** > **Repository** Options.
 - b. In the Server Machine box, type the host name or IP address of the Repository machine, and then click **OK**.
- 3. Log on to the Repository using an account with Super User privileges.
 - NOTE: Ensure no diagrams are open. The Repository Administration menu will not be available if there are any diagrams open.
- 4. Run the **Diagram Data Version Upgrade** utility as follows: from the ER/Studio Data Architect Main menu, choose **Repository** > **Administration** > **Diagram Data Version Upgrade**.

This will update all diagrams in the Repository to the latest version.

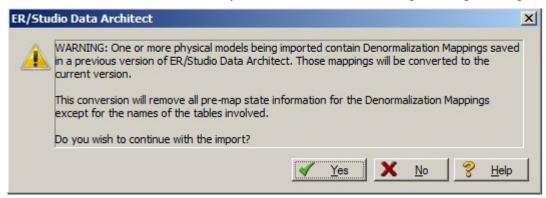
Notes

- By default, the Super User role is assigned to the Admin user. The default Admin user name and password are: Admin and Admin.
- Named Releases are not upgraded in the Repository. You can upgrade your local copy by opening it in the current version of ER/Studio Data Architect and then checking it into the Repository.
- After the diagrams are updated, each user must perform a clean get of all Repository diagrams they were working on previously.

Upgrading diagrams with denormalization mappings

Instead of showing Denormalizations in the Data Model Tree, denormalizations such as Horizontal and Vertical Splits, and Rollups and Rolldowns, are maintained with the table data and appear on the Where Used tab of the Table Editor. From the Where Used tab you can see the denormalization history of the table.

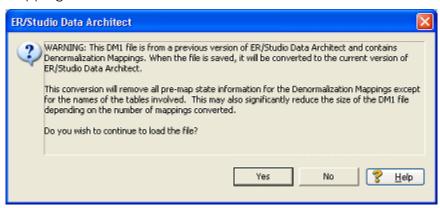
Since the denormalization feature changed in 9.0, any documents containing denormalization mappings will be upgraded to use the new features of ER/Studio DA 9.0 and higher. For example, when you import a physical model from a file that uses the denormalization mappings from earlier versions of ER/Studio, you will receive the following warning message:



Denormalization mappings are now retained with the table data and can be viewed and edited on the Where Used tab of the Table Editor. Denormalization history, including Columns, Indexes, and Relationships of pre-map tables, is no longer retained, so the undo and make permanent functions specifically for denormalizations are no longer available. Denormalization mappings have been worked into the normal undo function of the product allowing them to be undone like other operations. However, the names of the pre-map tables are retained. Retaining only essential pre-map information means that the DM1 file with denormalizations is smaller and therefore opens faster.

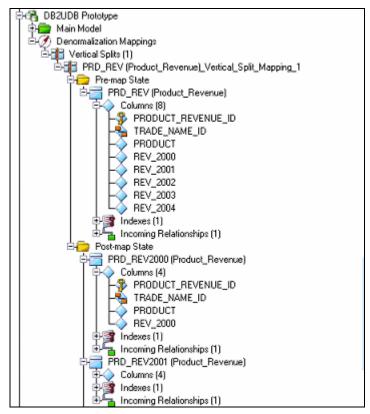
For more information, see "Optimizing Query Performance on the Physical Model (Denormalizing the Physical Model)" in the *ER/Studio Data Architect User Guide*.

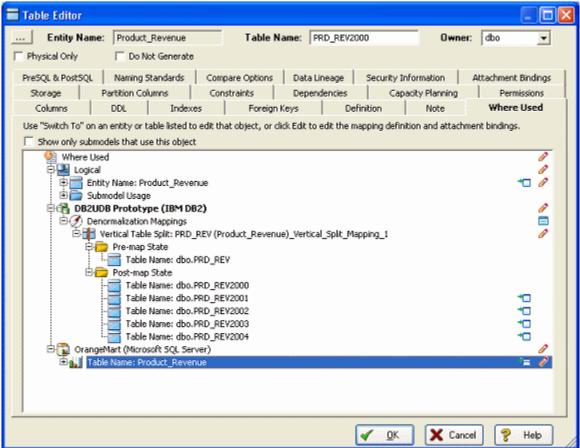
When upgrading version 8.5 and earlier dm1 files to version 9.0 and higher, you will see the following message when you attempt to open a diagram that contains denormalization mappings.



A similar message displays when you run the Diagram Data Version Upgrade utility on the Repository.

Converting the file to 9.x format changes the denormalization information from something similar to the following in version 8.5.





ER/Studio Portal

The following provides information for upgrading ER/Studio Portal:

- <u>Upgrading ER/Studio Portal from 1.6.x to 2.0.1</u>
- Upgrading ER/Studio Portal from 2.0 to 2.0.1

Upgrading ER/Studio Portal from 1.6.x to 2.0.1

ER/Studio Portal 1.6.3 uses two databases, the solution and the reporting repositories. Because

- 1. Consolidate the two databases:
 - a. Stop the Tomcat service and run the 1.6.x Portal Configuration Manager.
 - b. b. Select the **Solution Database** tab.
 - c. Change the connection information to match that of the **Reporting** database.
 - d. Select Initialize Existing Database and click Apply.
 - e. Click **OK**. The Solution tables will be placed into the Reporting database. f. Restart the Tomcat service.
- 2. Login to the Portal and make sure everything works okay.
- 3. Uninstall Portal 1.6.3.
- 4. Install Portal 2.0.x.
- 5. When prompted to specify the Reporting Database information, specify the connection information and select **Connect to Existing Database**, and then click **Next**.
 - You will then be prompted to specify the Solution database information. It should default to the Reporting database.
- 6. Specify the password for the Reporting database, and then click **Next**.
- 7. Finish the installation.
- 8. After installing ER/Studio Portal 2.0, synchronize the Portal with the ER/Studio Repository database to ensure that it is up to date.

NOTE: For information on synchronizing ER/Studio Portal, see the "Administrative Tasks" section of the online help or *ER/Studio Portal User Guide*.

Upgrading ER/Studio Portal from 2.0 to 2.0.1

If your previous Portal installation is version 2.0, the Portal 2.0.1 installer will automatically backup and use your version 2.0 "Register Add-on" license files for you. But there are two exceptions:

- You are upgrading from version 2.0 to 2.0.1 and during the installation you choose a different Reporting repository than used in your version 2.0 installation. In this case you must copy the license.txt file from the backup directory to the license directory in the new Portal 2.0.1 license directory..\installation folder\license\ Depending on the operating system, you can find the license file at one of these backup locations:
 - C:\Program Files (x86)\Common Files\ersEnterprisePortalBackup\license
 C:\Program Files\Common Files\ersEnterprisePortalBackup\license
- You have installed Portal 2.0 on one computer and now want to install Portal 2.0.1 on a different computer. In this case, there is no license to backup so you must use the license file from the previous installation. Copy the license.txt file from the 2.0 installation to the new 2.0.1 installation. The license file resides in ..\installation folder\license\ After copying over the license file to ..\installation folder\license\, from the Portal console, go to Admin > License > Refresh and Portal will recognize and use the license.

ER/Studio Business Architect

The following provides information for upgrading ER/Studio Business Architect.

Upgrading ER/Studio Business Architect

- 1. Uninstall the previous version of ER/Studio Business Architect before upgrading to the latest version.
- 2. Run the ER/Studio Business Architect installation program and follow the prompts.
 If you are upgrading from version 1.0 to version the latest version, you will be prompted to upgrade your workspace when you first open the workspace in the new ER/Studio Business Architect application.

Important notes

If you have an existing version of EA/Studio or ER/Studio Business Architect, the new version will install to a new directory labeled ER/Studio Business Architect 1.7.0 by default.

NOTE: The setup program looks for existing user preferences previously set on the machine. These settings are automatically applied to the new installation configuration.

CAUTION: If you have installed the newer version of ER/Studio BA, your workspaces must be upgraded before they can be used. Therefore, it is not recommended to keep both versions on your computer as workspace files are not always compatible.

Upgrading AppWave licenses for IDERA apps

When you renew or upgrade your IDERA licenses, such as for ER/Studio Data Architect or DB Power Studio, you need to update them in AppWave. IDERA customer service will send you an email containing a special login name, password, and license certificate number that you use to retrieve the upgraded license.

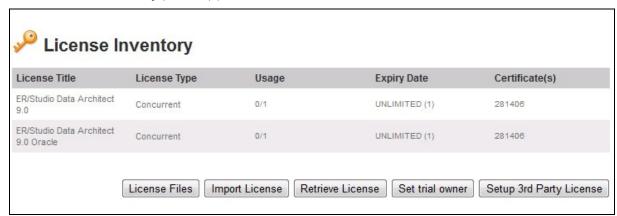
The following are the steps you take to upgrade your IDERA licenses on AppWave.

- Retrieving and Hosting the New License
- Caching the New Version of the App
- Assigning Network Named User Licenses to Users and Groups

Retrieving and hosting the new license

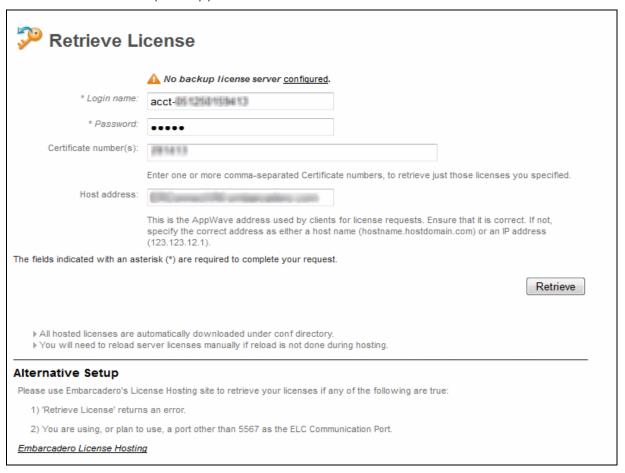
1. From the MANAGE LICENSES menu, click License Inventory.

The License Inventory pane appears.

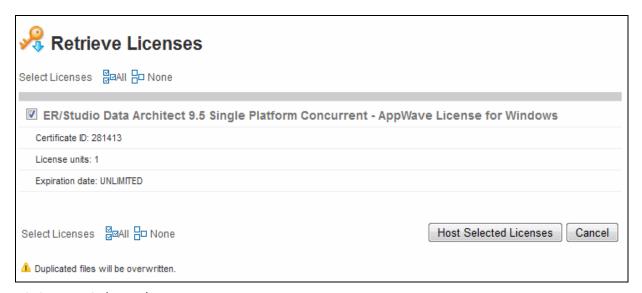


2. On the Set Up Licenses pane, click Retrieve License.

The Retrieve License pane appears.



- 3. Enter the **Login name** and **Password** provided to you in the email IDERA sent to you with your license certificate number when you purchased the license.
- 4. Enter the license certificate number you received from IDERA in the email sent to you when you purchased the license. You may have more than one license certificate if you have previously purchased licensed products from IDERA. You can add these license certificates one at a time. Multiple certificates can be specified, separated by a comma.
- 5. Verify that the AppWave **Host address** name or IP number is correct. Enter the correct value if necessary.
- 6. Click **Retrieve** and the **Retrieve Licenses** pane appears



7. Click Host Selected Licenses.

The licenses will be registered with AppWave and IDERA License Center. The **License Retrieved** pane appears and AppWave is now licensed.



8. Click Finish.

Next, you'll want to cache the app to make it immediately available to your users. See Caching the New Version of the App.

Caching the new version of the app

- 1. From MANAGE APPS, select App Inventory.
- 2. In the search field, enter the name of the app and then select Apps, Installers, and Only latest versions.

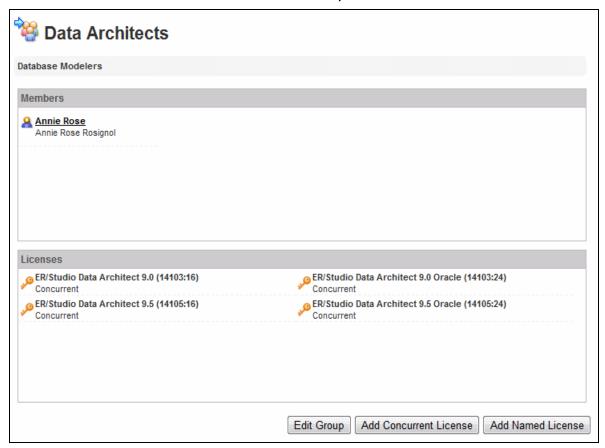


3. Select the check box next to the new apps and then click **Cache Apps**.

If the upgrade license is Named Network User type, you must then assign the license to the users and/or groups who you want to permit to use the apps. For more information, see Assigning Network Named User Licenses to Users and Groups.

Assigning network named user licenses to users and groups

1. From MANAGE USERS & GROUPS, select Groups.



2. Click Add Named License.



- 3. From the **Offline usage** list, specify the number of days to permit a user to check out a license and use it when not connected to AppWave.
- 4. In the **Licenses** area, click **Add Licenses** and from the results of the AppWave search for Network Named Licenses, choose the relevant license, and then click **Select**.
- 5. In the **Users and Groups** area, click **Add Users & Groups** and from the list of all AppWave users and groups, select the checkbox for the appropriate users and groups, and then click **Select**.
- 6. Click Save.