

## **Product Documentation**

# **ER/Studio® Business Architect**

New Features Guide

Version 1.6

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## **Name Change**

EA/Studio Business Modeler Edition has been renamed to ER/Studio Business Architect. Likewise, ER/Studio has been renamed to ER/Studio Data Architect. Shortened forms of these product names and ER/Studio BA and ER/Studio DA respecitively.

## **New Features Summary**

ER/Studio Business Architect 1.6, now includes support for ER/Studio Repository, providing the business modeler with the same version control and collaborative work environment enjoyed by ER/Studio Data Architect users.

## Working with ER/Studio Repository

The Repository provides access to workspaces for one person at a time. Modelers can update or delete model information simultaneously by working with ER/Studio® Business Architect in the normal fashion and by merging their changes into a single model.

To use Repository operations such as check in, check out, and get workspace, you must first specify the Repository connection details and then log in to the Repository.

When you are finished working with the Repository, you should log out. If you close ER/Studio Business Architect, you are automatically logged out of the Repository.

This section provides usage information for Repository Users:

- Specifying Repository Connection Details
- · Logging In and Out of the Repository
- Establishing Security for the Repository
- · Working with Objects in the Repository

**NOTE:** Repository architecture, setup, maintenance, control, and query options are covered in the "Administrator's Reference" of the *ER/Studio Users Guide*.

## **Specifying Repository Connection Details**

Using configurable Repository settings you can specify and modify server check out policy and communication settings.

### **Setting Repository Options**

- 1 Click Window > Preferences.
- 2 Specify your connection details in the Repository Options and click Apply and then click OK to exit the editor.

The following describe options that require additional explanation:

Server Machine: Specify the URL or hostname of the ER/Studio Enterprise Repository.

**Server Port**: Specify the port ER/Studio BA uses to communicate with the Repository server. The default is 54333.

**Check out model when checking out diagram**: Choose what action, if any, you want the system to perform with respect to the models in a diagram, when a diagram is checked out; *always* check out the models, *never* check out the models, or *prompt* you to decide what to do each time a diagram is checked out.

Check out workspace when creating/deleting models: Choose what action, if any, you want the system to perform with respect to the workspace, when a model is checked out and deleted or when diagram is checked out and a new model is added to it; always check out the workspace, never check out the workspace, or prompt you to decide what to do each time a workspace is checked out.

## Logging In and Out of the Repository

### Log in to the Repository

- 1 To log in to the Repository, click Repository > Log In.
- 2 Complete the log in dialog and then click OK.

The following describes the options that require additional explanation:

User Name: Enter your user name. This is case-sensitive.

**Password**: Enter your password. This is case-sensitive. You can change your password, click *Repository > Security > Change Password*.

Remember me: Select this option and ER/Studio BA will remember and then auto complete the User Name and Password for you when you choose to log in.

#### **Notes**

- During the Repository Installation, a default user name and password Admin is set as the default. The
  Administrator should change the Admin password after the initial log in.
- The Admin user can't be deleted. This prevents an accidental lockout. In the ER/Studio Security Center, you can set up additional users with Roles and Privileges to maintain Repository security.
- If an administrator changes the repository security, users must log in again to update their permissions.

### Log out of the Repository

To log out of the Repository, click Repository > Log Out.

## **Establishing Security for the Repository**

Security of the Repository contents is managed through the Repository Security Center by creating and then assigning users particular Roles and Privileges.

**NOTE:** To prevent an accidental lockout, the Admin user can't be deleted.

The Administrator can restrict user access to Repository items at the workspace level. To restrict access to the Repository, the administrator creates users and then assigns the users a role, which grants specific permissions to the user, or the administrator creates new roles to assign to users. Then the Administrator can grant users full access to some Repository items and restrict or deny access to other items.

Before creating users and roles, the Administrator should understand the following Repository concepts:

 Client Side Security Caching: To promote the concept of detached modeling collaboration (e.g. being logged out of ER/Studio Repository and possibly detached from the network), all security associated with the user by diagram is cached on the client when the user logs into ER/Studio Repository.

**NOTE:** When security changes are made, users must re-login to update their permissions.

- Super User: Super User is a default Role created upon installation of ER/Studio Repository. The default 'Admin' user is assigned to the Super User role. This user can do anything to Repository objects, users and roles managed in the ER/Studio Repository as it is granted all privileges. It is not removable or editable, and is only found at the 'Repository' level of the Repository Security area of the Security Center.
- No Access: No Access is a role that can be applied only at the workspace level of the Repository. It is a quick
  and global mechanism to prevent any access whatsoever to certain workspaces.

#### **Notes**

- When a user checks out a workspace from the Repository, ER/Studio BA tracks the user and machine
  combination for that particular file. In addition, to enable users to model while they are "offline" or unable to
  connect to the Repository server, when a workspace is checked out, ER/Studio stores information about the
  security rights of the user and the workspace with the file, which has the following effects:
  - When a user is logged into the Repository, and attempts to open a workspace that was retrieved from the Repository by a different user/machine combination than the currently logged in user, ER/Studio BA indicates that the file cannot be opened due to the conflict. This ensures that one user does not attempt to work on or check in changes to a workspace that was originally retrieved by a different user. Because the Repository keeps track of object check outs based on the user and machine, only the user on the machine that originally checked out an object can check it back in.
  - Even if a user is not logged into the Repository, Repository files that have been checked out can be opened
    and worked on in ER/Studio BA. ER/Studio BA will load the security permission data for the user that originally
    retrieved the file from the Repository, and that security data will govern the rest of the working session until the
    user either logs in to the Repository or closes the file. If multiple files are open while the user is NOT logged in
    to the Repository they must all have been retrieved by the same user. Of course, this also applies when the
    user IS logged in.
  - The cached security data stored with each diagram is updated whenever an open Repository file is saved while logged in to the Repository, but if the file is not saved before closing it, then any changes to the security permissions for that user and workspace will not be cached with the file. So, if you plan to work offline, and the security settings have changed since the file was last saved, then you should open each file while logged into the Repository and save it before taking the files to work offline.
- If an admin makes changes to the security UI, such as changing permissions on worspaces to grant or revoke access, users must re-login to update their permissions.

This section includes the following topics:

Creating and Managing Roles

- · Creating and Managing Users
- Granting and Prohibiting User Access to Repository Items

#### See Also

Working with Objects in the Repository

## **Creating and Managing Roles**

ER/Studio BA supports customized roles with different sets of permissions. Repository Object Type Permissions are pre-defined privileges to operate on Repository items. You can assign them to a role, which gives users assigned to that role, permission to perform certain Repository operations. You can use the available privileges to create specific roles to suit your environment.

For example, you can create a role which has the Repository permissions to create, update, and delete workspaces. You can then assign a new user that role for the Repository and then create and assign another role to provide update priveledges to existing workspaces the user may need to update.

**NOTE:** To access, create, update, and delete user and roles, a Repository administrator must have Access Security Info and Update Security Info privileges.

#### Create, Update, Rename, and Delete Roles

- 1 Click Repository > Security > Security Center.
- 2 Select the Manage Roles tab.
- 3 To create a new role, click New.
  - In the Create Repository Role dialog, enter a Name and a Description for the new role.
  - In the **Repository Object Type Permission** area, select the permissions you want to assign to the role for the selected object type.
  - Click Apply and continue changing security settings and then when finished, click OK to exit the security center.
  - To apply the new role to exisiting users, see <u>Assigning Users Roles for Accessing Repository Items</u>.

To update a role, select a role from the list, select or clear the checkboxes to add or remove permission, click **OK**, and then click **OK** again to exit the security center.

To delete a role, select a role from the list and then click **Delete**.

To rename a role, select a role from the list and then click Rename.

- In the Rename Repository Role dialog, enter a new name, click OK, and then click OK again to exit the security center.
- 4 Inform affected users that they should log out of the Repository and then log in again to receive the security updates.

#### **Notes**

- Once created, the Administrator can select the role and update, delete or rename it at any time. Renaming the role does not affect the privileges users have, but if you delete a role users who had access to Repository items through that role, will no longer have access to those items.
- Users cannot modify workspaces without the necessary permissions, regardless of whether the user has the workspace checked out.
- Once you delete a role from the Repository, it will no longer be in the database.

• The following lists the Repository Object Types, the permissions you can grant, and the common operations these permissions give access to:

Repository Object Types	Repository Object Type Permissions	Permitted Operations
Repository	Access Security Info	Security Center: View settings
	Update Security Info	Security Center: View and change settings
	Create Workspace	Add Workspace
	Update Workspace	Check Out Workspace, Check In Workspace Check Out Object(s), Check In Object(s) Undo Check Out Workspace, Undo Check Out Object(s)
	Delete Workspace	Delete Workspace If you delete a workspace in Repository, the file itself remains on the local disk.

## **Creating and Managing Users**

Managing users entails creating, changing, and deleting user account permissions and logins, and activating and deactivating their accounts. Using Roles, you can choose the permissions granted a user for the Repository item.

NOTE: To access, create, update, and delete user information, a Repository administrator must have Repository Object Type Permission, Access Security Info and Update Security Info privileges.

### Create, Edit, Delete, Deactivate, Reactivate, and Check In Users

- 1 Log in to the Repository.
- 2 Click Repository > Security > Security Center.
- 3 Click the Manage Users tab.
- 4 On the **Manage Users** tab, you can manage users by clicking their name in the list and then clicking a management option and following the prompts as required.
- 5 Continue making security changes and then click **OK** to exit the security center.
- 6 To assign permissions to users, see Assigning Users Roles for Accessing Repository Items.
- 7 Notify users that they must log out and then log in again to receive the security updates.

#### Notes

- You cannot delete or deactivate the Admin user, but you should change the Admin password from the default, which is Admin.
- The new user appears in the user list with a star indicating that this user does not yet have any roles assigned to
  it for any Repository items.
- Users must log out and log in again to receive any security updates.
- The Admin does not need to know the user's password to create a new password for the user.

- The Admin can look to the Manage Users tab to find out which users are logged in to the Repository and whether or not they currently have items checked out. Knowing if users have items checked out is particularly useful when upgrading the Repository, because after before upgrading the Repository the users should check all their items in and then do a clean get and check out of the items when the upgrade is complete. Knowing which users are logged in is useful when changing security center settings because after making any setting changes, the Admin should request online users to log off and log in again to receive the security center updates.
- The Aministrator may want to deactivate a user to prevent the user from logging into the server while the Repository is being updated. Once deactivated the user must be reactivated before they can log in to the Repository.

## **Granting and Prohibiting User Access to Repository Items**

On the Repository Security tab of the Security Center, users with the appropriate privileges can assign other users the appropriate access privileges for different objects, granting them permission to perform specific operations on a Repository item and prohibiting them from performing other operations on the same object.

## **Assigning Users Roles for Accessing Repository Items**

- 1 Log in to the Repository.
- 2 Click Repository > Security > Security Center.
- 3 Click the **Manage Roles** tab; explore the available roles to determine if an existing role provides the access you want to grant the user. If necessary, create a new role with the appropriate permissions.
- 4 To grant permission to access and update security information, or to view only workspaces, in the Repository Object pane, select Repository.
  - To grant permission to update or delete an existing workspace, in the **Repository Object** pane, expand **Repository** and select the name of a workspace.
- 5 In the **Available Users** pane, click and drag a user name onto the name of the role you want to apply to the user for the Repository or for the selected workspace.
- 6 Click Apply and then click OK to exit the Security Center.
- 7 Notify users that the must log out and then log in again to receive the security updates.
  - TIP: To remove the role assignment of a user to a Repository item, click the Repository item, drag the user name from under role onto another role in the Available Roles area or drag the user name back to the Available Users pane.

#### **Notes**

- A user can only have one role for each object. But a user can have different roles for different objects.
- If a user is listed in the Available Users area, but is unselectable, the user has been deactivated and must be reactivated before you can modify the user.

### **Prevent Users from Accessing Specific Repository Items**

The system-defined No Access role can prevent a user from accessing selected projects or diagrams

- 1 Log in to the Repository.
- 2 Click Repository > Security > Security Center.
- In the Repository Object area, navigate to and then click to select the workspace you want to secure from specific users.

- 4 From the list of users in the **Available Users** area, click a user name or **CTRL-click** several names and then drag the users onto the **No Access** role in the **Available Roles** area.
- 5 Repeat step 3 and step 4 as required to secure other diagrams and projects.
- 6 Click Apply, continue changing security settings if required, and then click **OK** to exit the security center.

#### **Change User Access to Repository Items**

To change user access to Repository items, change the permissions of the role the user has for the Repository item or assign another role to the user for that particular Repository item.

## Working with Objects in the Repository

The Repository performs version control and allows other users to retrieve a copy of the workspace to view or edit on their local machines if they have permission.

The Repository includes a robust features set for working with workspaces. Detailed procedures for using these features are provided in subsequent sections.

- Adding a Workspace to the Repository
- Retrieving a Repository Workspace
- Getting the Latest Version of a Workspace
- · Saving Changed Items to the Repository (Checking In)
- Checking Out Repository Items
- Discarding Changes Made to a Checked Out Workspace
- Deleting Workspaces from the Repository

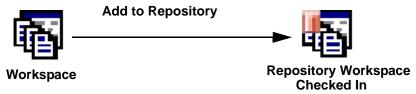
## Adding a Workspace to the Repository

Using the Add Workspace operation you can add the active workspace to the Repository.

**NOTE:** You cannot add data model objects to the Repository without first adding the workspace containing them.

- 1 Log in to the Repository.
- 2 Click Repository > Workspace > Add Workspace.
- 3 Enter a comment if you want to and then click **OK** to exit the dialog and complete the operation.

When an object has been added to the Repository, the object icon changes to include a little database icon in the upper left-hand corner.



## **Retrieving a Repository Workspace**

Retrieving a workspace in the Repository downloads a copy of the selected workspace from the Repository onto your local machine. If a local version of the workspace exists, the *Get from Repository* operation refreshes the local copy with the version from the Repository.

**NOTE:** Permissions assigned to your user account in the Repository Security Center determine what type of access you have to Repository objects. For more information, see <a href="About Repository">About Repository</a> <a href="Permissions">Permissions</a>.

- 1 Log in to the Repository.
- 2 Click Repository > Workspace > Get Worspace.
- 3 In the **Repository Get Workspace Selection** dialog, scroll through the list of available workspaces, select the workspace you want, and then click **OK**.

**NOTE:** You can also get a workspace through the Welcome to ER/Studio Business Architect dialog that appears each time ER/Studio BA is started.

## Getting the Latest Version of a Workspace

The Get Latest Version function synchronizes the local version of the open workspace with the version in the Repository, copying the Repository version to local storage and overwriting the local copy. For example, if another user has changed the workspace since you last checked it in, you can get the latest version to update your local version after they submit their changes.

Click Repository > Workspace > Get Latest Version.

## Saving Changed Items to the Repository (Checking In)

The check in process synchronizes the changes made to the local checked out item with the Repository version by updating the Repository version.

The check in process lets you check in an object, such as an diagram or a model, when you are done working with it.

### **Checking In Objects**

When you check in an object, all object components are checked in as well. You can check in a newly created object, such as a model which you added to a checked-out workspace or you can check in multiple, selected objects simultaneously to the Repository.

The procedure to check in an object into the Repository is basically the same for all object types.

#### To check in a project, diagram or model

- 1 Save the changes you have made to the workspace; click **File > Save**.
- 2 Click the object you want to check in or CTRL-click several objects to check in more than one object.
- 3 Right-click and then select Repository > Check In Object(s).
- 4 Enter a comment in the Repository Check In Object(s) dialog and then click OK to start the check-in process.

### To check in a workspace

- 1 Save the changes you have made to the workspace; click **File > Save**.
- 2 Click Repository > Check In Workspace.

3 Enter a comment in the Repository Check In Object(s) dialog and then click OK to start the check-in process.

## **Checking Out Repository Items**

Checking out write enables items previously added to the Repository, such a workspace, project, diagram or model. The procedure to check out an item from the Repository is the same for all object types.

#### To check out a project, diagram or model

If you have a workspace checked out, and have checked in some objects, you can check them back out using this procedure.

- 1 Open a Repository workspace; a workspace that was previously added to the Repository.
- 2 Click the item you want to check out or CTRL-click several items to check out more than one.
- 3 Select Repository > Workspace > Check Out Object(s).
- 4 In the **Repository Check Out Object(s)** dialog, enter a comment if you want to and then click **OK** to start the check-out process.

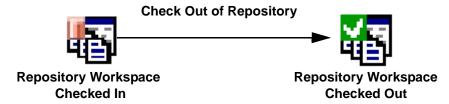
**NOTE:** Checked out objects appear in the workspace explorer tree with a check mark in the top left-corner of the object icon.

#### To check out a workspace

If the active workspace was previously added to or retrieved from the Repository, you can check it out.

- Open a Repository workspace.
- 2 Select Repository > Workspace > Check Out Workspace.
- 3 In the Repository Check Out Workspace dialog, enter a comment if you want to and then click OK.

**NOTE:** Checked out objects, including the workspace, appear in the workspace explorer tree with a check mark in the top left-corner of the object icon.



## Discarding Changes Made to a Checked Out Workspace

If you have checked out a workspace, made changes to it, and want to undo all the changes you made you can undo the check out.

- 1 Log in to the Repository and open the target workspace.
- 2 To discard the changes, click Repository > Workspace > Undo Check Out Workspace.

## **Deleting Workspaces from the Repository**

The Delete Workspace operation lets you delete a workspace from the Repository.

- 1 Log in to the Repository.
- 2 On the Repository toolbar, click the **Delete Workspace** icon.
- 3 In the Repository Delete Workspace Selection dialog, select the diagram to delete and then click OK.

#### **Notes**

- · When you delete a Workspace from the Repository, the local copy of the Workspace is not deleted.
- When deleting a workspace, the Repository leaves workspace data behind and marks it as deleted. If deleted, data is still present in the Repository but visible only when querying the Repository directly, not through ER/Studio BA.