Oracle® Enterprise Repository

Advanced Role-based Access Control Guide

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Oracle Enterprise Repository Advanced Role-based Access Control Guide, 10*g* Release 3 (10.3)

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Oracle Enterprise Repository

Role-based Access Control Guide

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Overview

Advanced Role-based Access Control, if enabled, allows organizations to limit access to and visibility of Oracle Enterprise Repository content by role at the asset and file level. This is accomplished by applying custom access settings to assets and/or files in order to limit their accessibility to particular communities of interest.

This foundational capability can be applied to a wide range of organizational initiatives:

- Exposing Web Services to customers and trading partners.

- Limiting the amount of intellectual property that is available to outsourced development teams and managing export control.

- Establishing a Federated Repository that allows everyone to view and access enterprise assets, but limits domain-specific information to relevant domains.

- Managing actions available to users, such as submitting, accepting, and registering assets.

- Limiting visibility of assets under development and retired assets.

- Limiting access to source code files to asset production teams.

- Granting browse-only Oracle Enterprise Repository access to selected groups.

Security Considerations

Role-based Access Control (RBAC) allows Oracle Enterprise Repository to track asset usage and production on a by-user basis, and personalizes the presentation of assets, limiting visibility to designated content in Oracle Enterprise Repository. However, Role-based Access Control is not intended to provide security for asset metadata, nor is it intended to supplement the security of underlying asset repositories.

Oracle Enterprise Repository's access settings provide no additional security for otherwise unsecured assets or data. For maximum security, asset metadata should be managed in a manner that prevents direct access to the metadata in an unsecured database. Confidential information should be embedded in the asset downloadable payload, or attached as documentation files and hosted in a secure repository.

Caution! If you choose to circumvent an authentication and permission challenge from the underlying asset repository, you do so at your own risk.

The following actions also have security implications:

- Configuring SCM systems for access via a single Oracle Enterprise Repository user account

- Allowing system access by unapproved users

Any of these actions has the potential to open the contents of the repository to anyone with network access to Oracle Enterprise Repository.

Access Settings and the Asset Editor

Depending on the specific Access Settings in use, users with access to the **Asset Editor** may be able to see relationships to assets that are otherwise invisible to them in Oracle Enterprise Repository. In this situation, the name of the hidden asset is visible, as is the

detail of the relationship between that asset and an asset to which the users have access. No other information on the hidden asset is visible in the **Asset Editor**. In this situation, it is possible to delete the relationship between the visible and the hidden asset. However, given that the invisible asset is inaccessible to the users in question, the relationship cannot be restored.

Enabling Custom Access Settings

For Oracle Enterprise Repository users, **Custom Access Settings** are normally already enabled and configured properly upon installation. If not, three properties must be configured in order to enable **Custom Access Settings**.

1. Click **System Settings** in the sidebar on the Oracle Enterprise Repository **Admin** page.

   The **System Settings** section opens in the main pane.

2. Enter `cmee.customaccesssettings.enabled` in the **Enable New System Setting** text box.

3. Click the **Enable** button.

   Custom Access Settings appears in the **Advanced Role Based Access Control** group in the **Functional Settings** section.
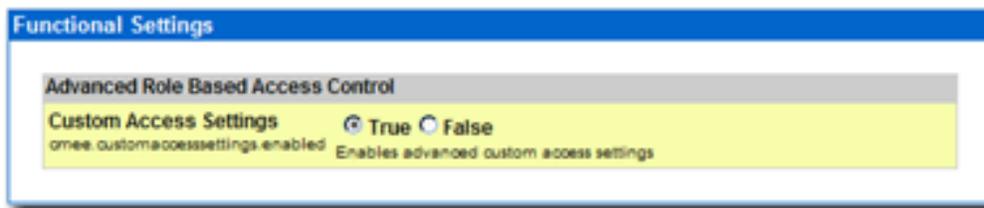
4. Repeat the process to enable each of the following properties:

   ❍ `cmee.customaccesssettings.file`

   ❍ `cmee.customaccesssettings.asset`

   Once enabled, all three CAS system settings will appear in the **Advanced Role Based Access Control** group in the **Functional Settings** section. (Disabling any of the properties turns the feature off.)

Note: If these **Access Settings** are not displayed in the **System Settings: Access** list, contact your System Administrator or Oracle Enterprise Repository Customer Support.

5. Make sure each of the settings is set to **True**.

6. When finished, click **Save**.

   Custom Access Settings now appears in the sidebar on the **Admin** screen.
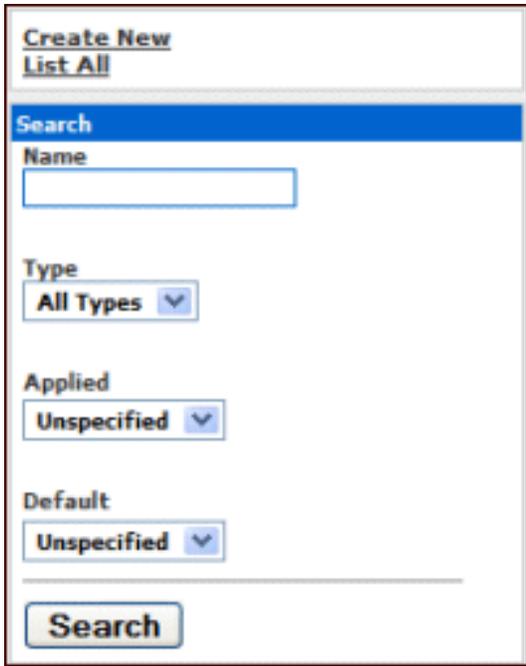
Basic Concepts

Roles

Within the context of Oracle Enterprise Repository, a role is defined by a specific combination of functions and responsibilities. Any given individual may have multiple roles. Access to specific assets or collections of assets, and to various Oracle Enterprise Repository features, is determined by the configuration of Access Settings for each role.

Access Settings

Access settings identify the functions and responsibilities that can be performed by a role. Oracle Enterprise Repository access settings fall into two categories:

- **Basic Access Settings (BAS)** determine the access to all assets in Oracle Enterprise Repository, and to specific tools, such as the **Asset Editor**. Basic Access Settings determine each user's rights to general functionality across the system. For example, a user with **View** permission can view all of the assets in Oracle Enterprise Repository. A user with **Use** and **Download** can download all files for all assets in Oracle Enterprise Repository.

- **Custom Access Settings (CAS)**, if enabled, give users permission to access specific assets and files in Oracle Enterprise Repository. For example, Custom Access Settings can give a user the ability to view a specific group of assets, edit specific assets, view specific files within a particular set of assets, and so on.

All sites have Basic Access Settings enabled. Depending on your repository configuration, Custom Access Settings may be enabled.

Access Definitions

Assets

Tools regulated: **Asset** tab, **Asset Editor**, **Type Manager** (if enabled in your configuration of the repository).

Permission	Description	BAS	CAS
View	Access to the Asset Detail.	**X**	**X**
Use	Displays the **Use/Download** button in the Asset Detail.	**X**	**X**
Download	Access to file links after clicking an asset's **Use/Download** button.	**X**	**X**
Review	Access to Review function in the Asset Detail.	**X**	**X**
Notify	Notify subscribers about assets via ad-hoc email.	**X**	**X**
Edit	Access to the Asset Editor.	**X**	**X**
Accept	Displays the **Accept** button in the **Asset Editor**.	**X**	**X**
Approve Tabs	Displays the **Approve** button at the bottom of each tab in the **Asset Editor**.	**X**	**X**
Register	Ability to register assets via the **Asset Editor**.	**X**	**X**
Edit Access Settings	(CAS only) Provides the user with the ability to change CAS permissions on all assets.	**X**	**X**
Create/Submit	Ability to submit assets via the Oracle Enterprise Repository **Assets** screen, create new assets via the Asset Editor.	**X**	
Launch Asset Editor	Access to the Asset Editor.	**X**	
Edit Artifact Stores	Ability to create and edit artifact stores via the Asset Editor.	**X**	
Edit Asset Types	Ability to configure Type metadata using the **Type Manager**. Requires Asset Editor permission.	**X**	

Access

Features regulated: **Admin** screen: **Users**, **Sessions**, **Roles**, **Departments**, **File Stores**, **Basic Access Settings**, **Custom Access Settings** (if enabled in your configuration of the repository).

Permission	Description	BAS	CAS
View	View entries in the sections noted above.	X	
Edit	Edit entries in the sections noted above.	X	
Create	Create users, roles, departments, file stores, and custom access settings.	X	
Delete	Delete sessions, roles, and custom access settings.	X	

Policies

Tools regulated: **Policies** screen (if enabled in your configuration of the repository).

Permission	Description	BAS	CAS
Apply Policy	Allows user to apply a policy to other assets.	X	

Projects

Feature regulated: **Projects** screen (if enabled in your configuration of the repository).

Permission	Description	BAS	CAS
View	View projects on the Projects screen.	X	
Edit	Edit projects on the Projects screen.	X	
Create	Create projects on the Projects screen.	X	
Apply Template	Apply compliance templates to projects from the Asset Detail or the **Asset Editor**.	X	

Reports

Feature regulated: **Reports** screen (if enabled in your configuration of the repository).

Permission	Description	BAS	CAS
View	Viewing reports.	X	

System Administration

Features regulated: **Admin** screen: System Settings, Email Templates.

Permission	Description	BAS	CAS
Edit	Ability to edit general, security, authentication, and file store settings.	**X**	
Enable	Ability to enable new general, security, authentication, and file store settings.	**X**	

**Note**: When using BAS or CAS, the following global permissions must be maintained in BAS to grant global feature permissions and functions
- Create/Submit
- Launch Asset Editor
- Edit Artifact Stores
- Edit Types

Process Overview

A few simple steps allow your organization to establish a variety of security models:

- Set up roles
- Assign users to roles
- Grant permissions to roles using BAS and CAS
- Assign CAS to assets or files
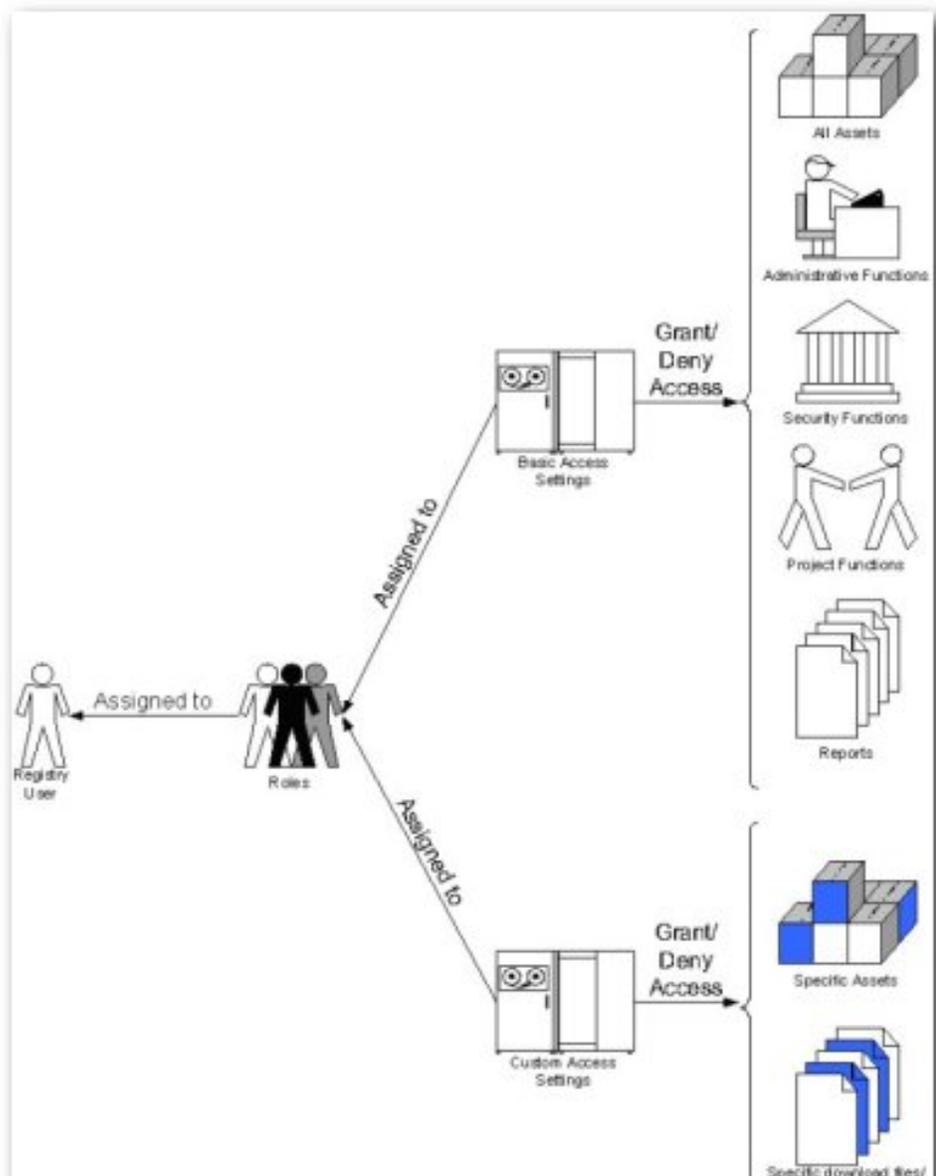
Granting and Denying Permissions

Individual users typically hold multiple Oracle Enterprise Repository Roles. For example, an individual may have both **User** and **Registrar** roles. In this case, the **Registrar** has permissions that are not granted to **User**. Similarly, an outsourced development user may have both **User** and **Outsourced Development** roles. The **User** role might grant access to all assets in the repository, while the **Outsourced Development** role denies access to any assets that have sensitive information.

When determining how to assign specific permissions to a particular Oracle Enterprise Repository user, keep in mind that permission status is divided into three levels:

- **Granted:**
    - The permission is explicitly granted.
- **Not Granted:**
    - The permission is not explicitly granted nor denied.
- **Denied:**
    - The permission is explicitly denied.

In multiple role situations, Oracle Enterprise Repository recognizes the **Most Restrictive Access**, that is, **Denied** supersedes **Granted** in the permission status settings. Any permission specifically **Denied** to a role to which a user is assigned is also denied to that user in any other role.

Grant/Deny access to specific assets

If Advanced Role Based Access Control is enabled in your configuration, then you can use Custom Access Settings to grant or deny permission to access individual assets and files. In order to create any **Asset CAS**, you must be assigned both the **Access Administrator** role and the following (BAS) permissions:

- **Launch Asset Editor**
- **Edit Access Settings**

Access to the **Asset Editor** and permission to edit assets is required in order to make changes to existing access settings. Oracle Enterprise Repository safeguards eliminate the possibility of locking yourself out of an asset after editing the asset's access settings (it is impossible to save such changes to the asset). However, changes to your role settings may restrict access to certain assets. Exercise caution when editing role settings.

Prerequisites

- Verify that all targeted users exist in Oracle Enterprise Repository.
- Assign global BAS permissions to each user (i.e. **Create/Submit Assets**, **Launch Asset Editor**).

If no existing role encompasses the appropriate users, one must be created. This procedure is performed on the Oracle Enterprise Repository **Admin** page.

1. Click **Roles** in the left sidebar.

   The **Roles** section opens.
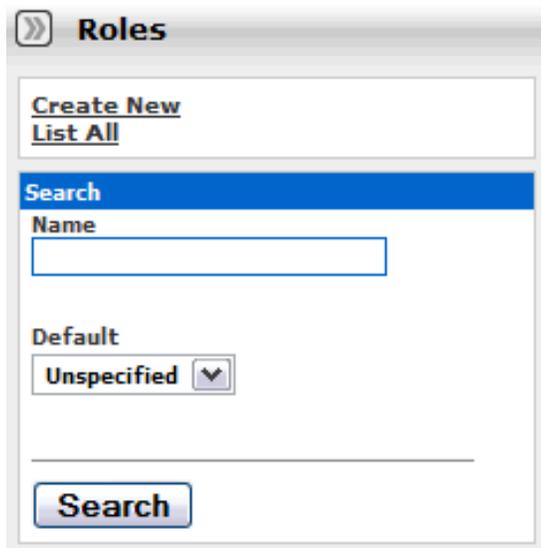
2. Click **Create New**

   The **Create New Role** pop-up opens.

Create New Role

Overview

Name*: [   ]

Description:
[   ]
[   ]
[   ]
[   ]
(Max 500 Characters)

Automatically assign to
new users? ☐

Users

[Edit Users]

*Denotes required field

[Save] [Cancel]

3. Enter the appropriate information in the **Name** and **Description** fields in the **Create New User** pop-up.

4. Click **Save**

Create the Asset CAS

This procedure is performed on the Oracle Enterprise Repository **Admin** page.

1. Click **Roles** in the left sidebar.

   A list of available Roles appears in the main pane.

2. From the list, select the role to be edited.

   The role detail appears in the bottom frame of the main pane.

3. Click the **Edit** button in the role detail.

   The **Edit Role** pop-up opens.

4. Click the **Edit Users** button in the **Users** section of the **Edit Role** pop-up.

   The **Add Users** pop-up opens.
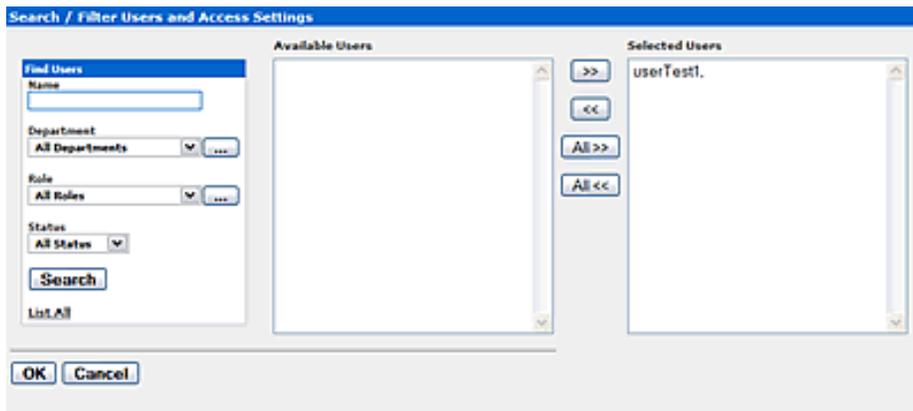
5. Use **Search** or click **List All** to populate the **Available Users** column.

6. Use the **<<** and **>>** buttons to move users from the **Available Users** to the **Selected Users** column.

7. When finished, click **OK**.

   The **Add Users** pop-up closes, and the selected users are listed in the **Users** section of the **Edit Role** pop-up.

8. Click **OK**.

   The **Edit Role** pop-up closes.

9. Click **Custom Access Settings** in the sidebar on the **Admin** screen.

   The **Custom Access Settings** section opens.
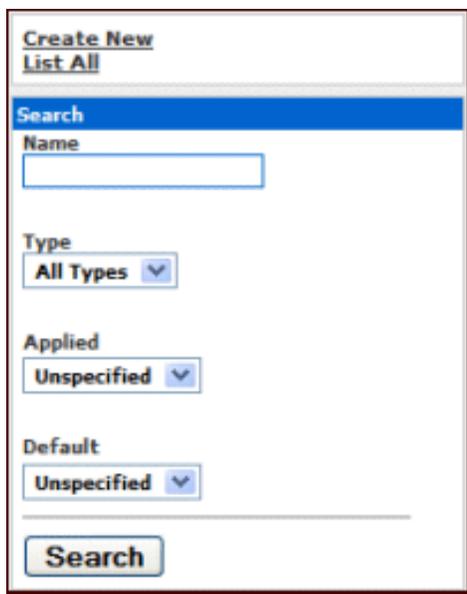
10. Click **Create New**.

    The **Create New Custom Access Setting** pop-up opens.
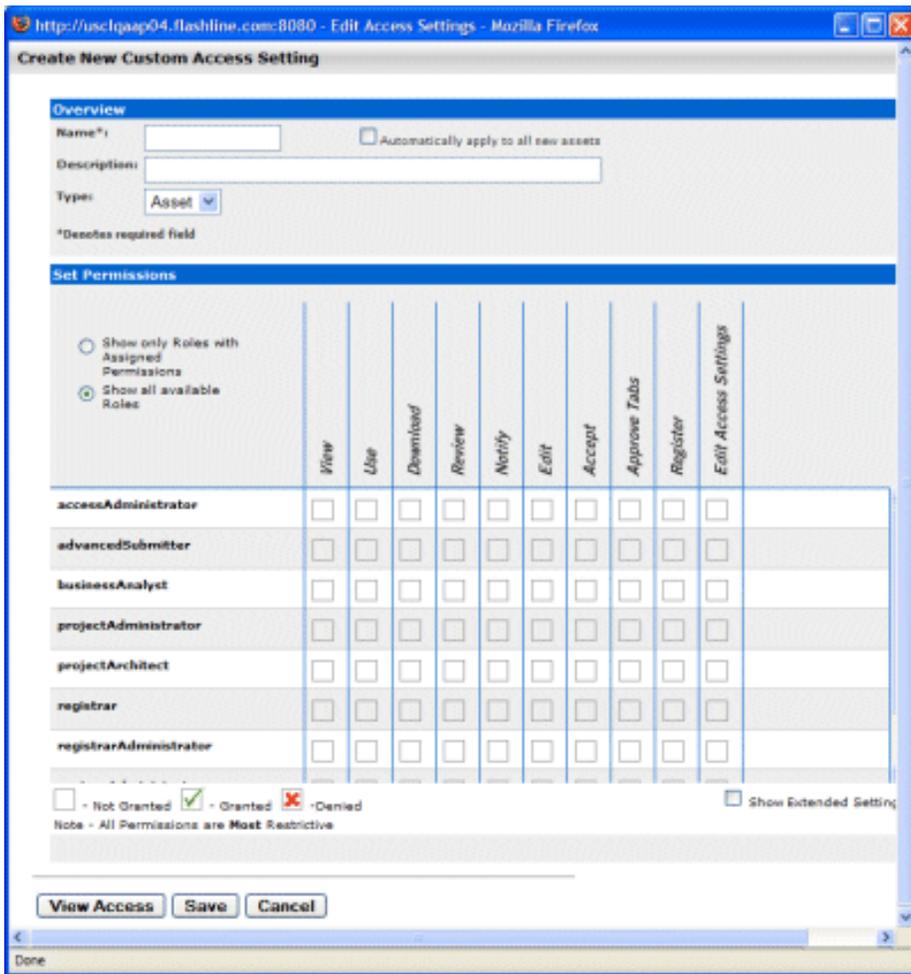
11. Enter text as appropriate in the **Name** and **Description** text boxes.

12. Select **Asset** in the **Type** drop-down.

13. Use the check boxes in the **Set Permissions** section to assign relevant permissions to the appropriate roles.

    ❍ A single click grants permission: ✔

    ❍ A second click denies permission: ✖

    ❍ A third click clears the check box (permission **Not Granted**): ☐

14. When finished, click **Save**.

    The **Create New Custom Access Setting** pop-up closes.

15. Click **Assets** on the Oracle Enterprise Repository menu bar.

16. Click **Edit / Manage Assets**.

The **Asset Editor** launches.
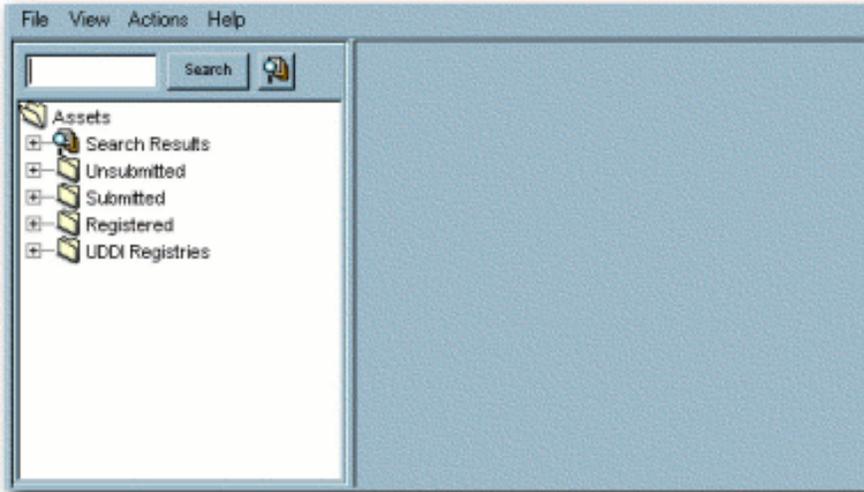
17. Locate and open (or create, if necessary) the asset to which the new Custom Access Settings will be applied.

18. Click the asset's **Administration** tab.
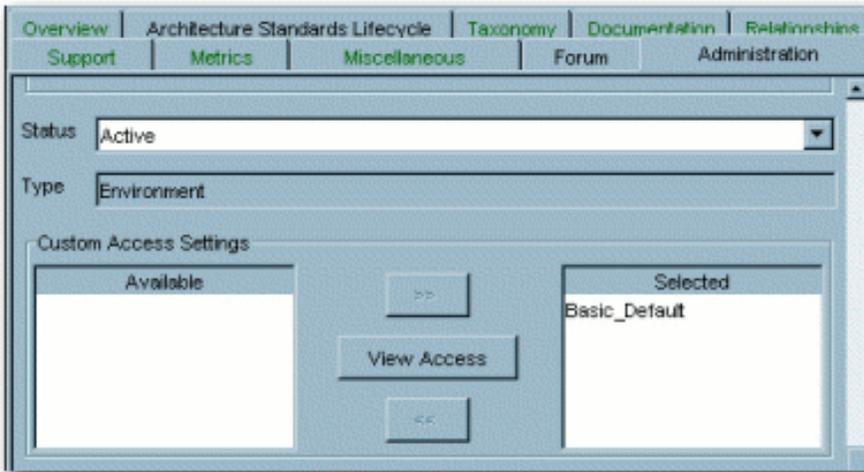
19. Use the **<<** and **>>** buttons as necessary to move the new CAS from the **Available** to the **Selected** column.

20. Test the CAS by checking user permissions within and without the use case. Click the **View Access** button to confirm user access.

Grant/Deny access to specific download files within an asset

In order to create this or any File CAS you must be assigned the Access Administrator role and the following (BAS) permissions:

- **Launch Asset Editor**
- **Edit Access Settings**

Prerequisites

- Verify that all targeted users exist in Oracle Enterprise Repository.
- Assign global BAS permissions to each user (i.e. **Create/Submit Assets**, **Launch Asset Editor**) to allow them to submit and edit assets.

If no existing role encompasses the appropriate users, one must be created. This procedure is performed in the Oracle Enterprise Repository **Admin** screen.

1. Click **Roles**

2. Click **Create New**

3. Supply the appropriate information in the **Name** and **Description** fields in the **Create New User** window.

4. Click **Save**

Create the File CAS

This procedure is performed in the Oracle Enterprise Repository **Admin** screen.

1. Click **Roles**.

2. Using the **Edit User** button in the **Edit Role** screen, add the appropriate users to the new role.

3. When finished, click **Save**.

4. Click **Admin** in the Oracle Enterprise Repository's menu bar.

5. Click **Custom Access Settings** in the sidebar on the **Admin** screen.

   The **Custom Access Settings** section opens.

6. Click **Create New**.

    The **Create New Custom Access Setting** pop-up opens.

7. Enter text as appropriate in the **Name** and **Description** text boxes.

8. Select **File** in the **Type** drop-down.

9. In the **Set Permissions** section, select the **appropriate role(s)** and assign the **Download** permission for this CAS.

10. Click **Save**.

11. Click **Assets** on the Oracle Enterprise Repository menu bar.

12. Click **Edit / Manage Assets**.

    The **Asset Editor** launches.

13. Locate and open (or create, if necessary) the asset to which the new Custom Access Settings will be applied.

14. Locate the asset's **File Information** metadata element.

15. Select the targeted file.

16. Click the **Edit** button.

17. In the **Custom Access Settings** section of the **Edit** window, carefully select ONLY the new **File CAS**.

    If the targeted file does not exist, add a new file, and (in the **Custom Access Settings** section) select the new **File CAS**.

18. Click the asset's **Administration** tab.

19. Test the CAS by checking user permissions within and without the use case. Click the **View Access** button on the asset to confirm user access.

Several of the most common security use case scenarios are outlined in the sections below. Before implementing one of the new security models, however, it is necessary to configure the existing roles in your system to support Custom Access Settings.

Configuring Access Settings for Existing Roles

Oracle Enterprise Repository ships with several default roles, as defined below. When configuring Oracle Enterprise Repository for **Custom Access Settings**, these roles must be re-established using a combination of **Basic** and **Custom Access Settings** in order to insure that **Custom Access Settings** do not disrupt existing user access privileges.

User Roles and Default Privileges

- **User**
    - Anyone with an Oracle Enterprise Repository user name and password. This role can be assigned as the default role for any new users at the time the user account is created. All Oracle Enterprise Repository users can:
        - View news on the home page about the host company's initiatives
        - Locate, evaluate, and use assets
        - View projects (if enabled)
        - Generate reports (if enabled)
        - Submit assets to the registrar

- **Access Administrator**
    - The Access Administrator creates all Oracle Enterprise Repository user accounts and assigns permissions. The Access Administrator must be familiar with the functions available on the Oracle Enterprise Repository **Admin** screen. Typically, Access Administrators can:
        - Create, view, and edit users and permissions
        - Generate reports (if enabled)

- **Advanced Submitter**
    - The Advanced Submitter role is typically assigned to asset builders and harvesters. Asset builders focus on building the asset content base in response to organizational asset needs and the needs of individual projects. Harvesters study post-implementation projects for asset reuse potential. Typically, advanced submitters can:
        - Locate, evaluate, and use assets
        - View projects that are associated with assets (if enabled)

- Generate reports (if enabled)
- Submit assets to the registrar
- Edit asset metadata prior to asset registration

- **Registrar**
  - The Registrar is responsible for asset acceptance or rejection and registration. There may be more than one person functioning as a repository registrar, depending on the functions addressed. Typically, registrars can:
    - Locate, evaluate, and use assets
    - View projects that are associated with assets
    - Generate reports (if enabled)
    - Submit assets to the registrar
    - Edit asset metadata prior to asset registration
    - Accept assets for the registration process
    - Approve **Asset Editor** tabs
    - Register assets
    - Edit access settings

- **Registrar Administrator**
  - The Registrar Administrator establishes and manages asset, compliance template, and policy types within Oracle Enterprise Repository using the **Type Manager**, if enabled in your configuration of the repository. Typically, Registrar Administrators can:
    - Locate, evaluate, and use assets
    - View projects that are associated with assets (if enabled)
    - Generate reports (if enabled)
    - Submit assets to the registrar
    - Edit asset metadata prior to asset registration
    - Accept assets for the registration process
    - Approve **Asset Editor** tabs
    - Register assets
    - Edit access settings
    - Edit Artifact Stores
    - Edit Types (if enabled)

- **Project Administrator**
  - If more than one default project is enabled in your configuration of the repository, then Oracle Enterprise Repository tracks asset use at the project level in order to maintain a history for maintenance purposes. Project Administrators create projects and assign users to projects using the Oracle Enterprise Repository **Projects** screen (visible only to users with appropriate permissions). Project Administrators also close projects and indicate which assets were deployed. Typically, Project Administrators can:

- - Create, edit, and view projects (if enabled)
    - Generate reports (if enabled)

- **System Administrator**
  - ○ The System Administrator configures Oracle Enterprise Repository for use. The System Administrator typically can:
    - Enable and edit system settings
    - Generate reports (if enabled)

Access Options

Two options are available for configuring access settings for existing roles, as follows. If Advanced Role Based Access Control is enabled, then access to individual assets and files can be controlled using Custom Access Settings.

- **Option 1 -- Access to Assets**
  - ○ Grant or deny access to assets. This option is beneficial to organizations that want to use Custom Access Settings to expose a subset of assets to developers within a specific domain, to customers or trading partners, to outsourced developers, etc.

    - **Use Option 1 to:**
      - Expose web services to customers and trading partners

      - Limit the exposure of intellectual property to outsourced development teams; manage assets that are subject to export controls

      - Establish a Federated Repository that allows everyone to view and access enterprise assets, but limits domain specific information to users representing relevant domains

      - Manage the asset life cycle by providing limited access to assets under development

      - Restrict certain groups to browse-only access to the repository

- **Option 2 -- File Access**
  - ○ Grant or deny access to download files/payloads within an asset. This option is beneficial to organizations that use Custom Access Settings to support

black box reuse. For example, developers may have access to compiled code, while asset producers and maintainers may have access to both source code and compiled code.

- **Use Option 2 to:**
  - Limit access to source code files to asset production and maintenance teams

The setup process is different for each option. It is easiest to start by granting or denying access to assets (Option 1), and adding file access permissions at a later time, if necessary.

Note Regarding *Option 2 -- File Access*:
Under certain access settings, asset files that are hidden from a particular user's view during the download process will be visible and accessible to that same user when using the **Asset Editor**. In order to totally restrict that user's view of the files it is necessary to also block the user's ability to view the asset in the **Asset Editor**.

Option I: Grant or deny access to specific assets using CAS

Step 1 -- Re-establish default roles using Custom Access Settings.

1. **Create a CAS** for assets called **Basic_Default_Assets**.

2. Add the following roles and associated permissions to the CAS:
   - **Role:** User
   - **Permissions:** View, Use, Download, Review

   - **Role:** Advanced Submitter
   - **Permissions:** View, Use, Download, Review, Edit

   - **Role:** Registrar
   - **Permissions:** View, Use, Download, Review, Edit, Accept, Approve Tabs, Register, Edit Access Settings.
     - Note: Under this configuration, Registrars can view and change Access Settings for all assets. To restrict this privilege, leave the **Edit**

  o **Role:** Registrar Administrator
  o **Permissions:** View, Use, Download, Review, Edit, Accept, Approve Tabs, Register, Edit Access Settings

3. Check **Automatically apply to all new assets** at the top of the screen.

4. Click **Save**.

5. Click **Yes** when the **Apply this new setting to all existing assets** pop-up appears.

The image below illustrates the resulting Custom Access Setting.
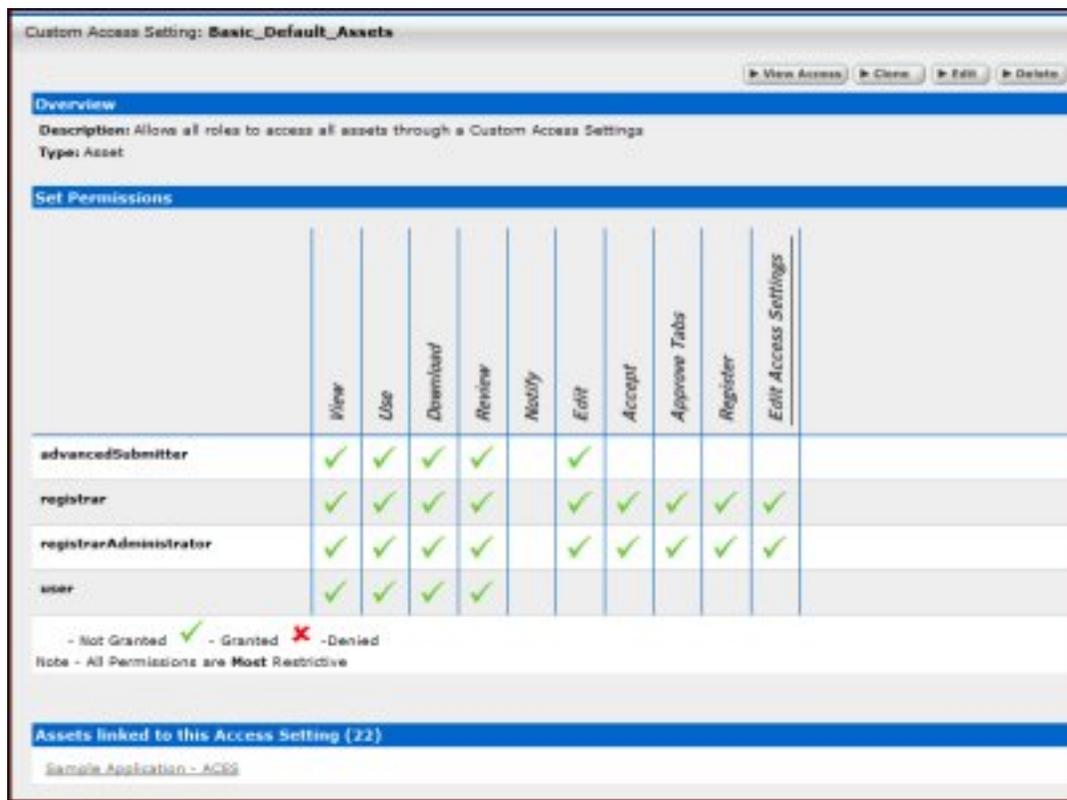
Step 2 -- Enable access to Oracle Enterprise Repository Tools

1. Create the following new Roles: (include the numbers preceding the role to keep them together in the role list)

- ○ 1: Create/Submit
- ○ 2: Launch Asset Editor
- ○ 3: Edit Artifact Stores
- ○ 4: Edit Types

2. Edit current BAS settings to reflect the following:
   - ○ **Role:** 1: Create/Submit
   - ○ **Permission:** Create/Submit

   - ○ **Role:** 2: Launch Asset Editor
   - ○ **Permission:** Launch Asset Editor

   - ○ **Role:** 3: Edit Artifact Stores
   - ○ **Permission:** Edit Artifact Stores

   - ○ **Role:** 4: Edit Types
   - ○ **Permission:** Edit Types

Remove existing BAS permissions for assets so that CAS becomes the default permission set for all assets in Oracle Enterprise Repository.

Note: In order to retain global tool permissions through BAS, each user must be assigned to one of the new functional roles for each of the four previously designated functional or tool permissions, as illustrated below.

Step 3 -- Tie new roles to existing users based on existing roles

1. Edit each role and place all users who should have the ability to create/submit assets, launch the asset editor, edit artifact stores, and/or edit types, respectively, into each of the four roles.
   - Assistance Note: The following table lists the default permissions for Oracle Enterprise Repository's default roles:

Role	Permissions
User	Create/Submit
Advanced Submitter	Create/Submit, Launch Asset Editor
Registrar	Create/Submit, Launch Asset Editor
Registrar Administrator	Create/Submit, Launch Asset Editor, Edit Artifact Stores, Edit Types

Example:

Larry was previously assigned the default role **User** which includes the default

permissions. In order to retain his existing permissions under the new settings he must be reassigned to **User** and also assigned to the new **1: Create/Submit** role.

Similarly, in order to retain the default permissions attached to his previously assigned **Registrar** role, Daryl must be reassigned to **Registrar** and also assigned to **1: Create/ Submit** and **2: Launch Asset Editor**. It is also possible to add users to a role, as opposed to adding roles to users. If the default permissions for the Oracle Enterprise Repository roles are unchanged, each role can be edited to add all of the applicable users at once.

Step 4 -- Validate the changes

1. Create five users, and assign each to one of the following role combinations:
   ○ User, 1: Create/Submit
   ○ Advanced Submitter, 1: Create/Submit, 2: Launch Asset Editor
   ○ Registrar, 1: Create/Submit, 2: Launch Asset Editor
   ○ Registrar Administrator, 1: Create/Submit, 2: Launch Asset Editor, 3: Edit Artifact Stores, 4: Edit Types
   ○ Project Administrator.

2. Verify that each user assigned to each role listed above can see the following items:

   ○ **User**
     ▪ Can see the **Assets**, **Projects**, **My Stuff**, and **Reports** links on the Oracle Enterprise Repository menu bar.

     ▪ The **Submit an Asset** link is visible on the **Assets** screen. (The **Edit / Manage Assets** link *should not* be visible.)

     ▪ A list of assets is visible after clicking the **Search** button on the **Asset** screen. The **Subscribe** and **Use/Download** buttons should be visible in each asset. (The **Edit** button *should not* be visible.) The **User** should also be able to post reviews.

     ▪ After clicking the **Use/Download** button on an asset that includes downloadable files, the **User** should be able to download the files.

   ○ **Advanced Submitter**
     ▪ Can see the **Assets**, **My Stuff**, and **Reports** links on the Oracle

Enterprise Repository menu bar.

- Both the **Submit an Asset** and **Edit / Manage Assets** links are visible on the **Assets** screen.

- A list of assets is visible after clicking the **Search** button on the **Assets** screen. The **Subscribe**, **Use/Download**, and **Edit** buttons should be visible in each asset. The **Advanced Submitter** should also be able to post reviews.

- After clicking the **Use/Download** button on an asset that includes downloadable files, the **Advanced Submitter** should be able to download the files.

- Can click the **Edit / Manage Assets** link on the **Assets** screen to launch the **Asset Editor**.
  - *Verify:*
    - The **Approve** button at the bottom of each **Asset Editor** tab is inactive.
    - The **Register** button on the **Administration** tab in the **Asset Editor** is inactive.

○ **Registrar**
  - Can see the **Assets**, **My Stuff**, and **Reports** links on the Oracle Enterprise Repository menu bar.

  - Both the **Submit an Asset** and **Edit / Manage Assets** links are visible on the **Assets** screen.

  - A list of assets is visible after clicking the **Search** button on the **Assets** screen. The **Subscribe**, **Use/Download**, and **Edit** buttons should be visible in each asset. The **Registrar** should also be able to post reviews.

  - After clicking the **Use/Download** button on an asset that includes downloadable files, the **Registrar** should be able to download the files.

  - Can click the **Edit / Manage Assets** link on the **Assets** screen to launch the **Asset Editor**.
    - *Verify:*
      - The **Approve** button at the bottom of each **Asset Editor**

tab is active.
- The **Register** button on the **Administration** tab in the **Asset Editor** is active.
- In the **Asset Editor**, the **Accept** button is visible on assets submitted via the **Submit an Asset** link on the Oracle Enterprise Repository **Assets** screen.
- The **Registrar** can change an asset's access setting (if enabled in CAS).

- ○ **Registrar Administrator**
  - Can see the **Assets**, **My Stuff**, and **Reports** links on the Oracle Enterprise Repository menu bar.

  - Both the **Submit an Asset** and **Edit / Manage Assets** links are visible on the **Assets** screen.

  - A list of assets is visible after clicking the **Search** button on the **Assets** screen. The **Subscribe**, **Use/Download**, and **Edit** buttons should be visible in each asset. The **Registrar Administrator** should also be able to post reviews.

  - After clicking the **Use/Download** button on an asset that includes downloadable files, the **Registrar** should be able to download the files.

  - Can click the **Edit / Manage Assets** link on the **Assets** screen to launch the **Asset Editor**.
    - *Verify:*
      - The **Approve** button at the bottom of each **Asset Editor** tab is active.
      - The **Register** button on the **Administration** tab in the **Asset Editor** is active.
      - In the **Asset Editor**, the **Accept** button is visible on assets submitted via the **Submit an Asset** link on the Oracle Enterprise Repository **Assets** screen.
      - The **Registrar Administrator** can change an asset's access setting.
      - The **Actions** menu of the **Asset Editor** should include **Configure Artifact Stores** and **Manage Asset Types**.

- ○ **Project Administrator**
  - Can see the **Assets**, **Projects**, and **My Stuff** links on the Oracle

Enterprise Repository menu bar.
- *Verify:*
  - The **Submit an Asset** and **Edit / Manage Assets** links are **NOT** visible on the **Assets** screen.
  - No search results appear after clicking the **Search** button.

Option II: Grant or deny access to specific files and assets using CAS

Create custom access settings that determine user access to assets, as well as to specific files within an asset.

Step 1 -- Enable all three CAS settings under System Settings

Step 2 -- Allow all roles that currently access the download files for all assets to get the same functionality through a File CAS

1. Create a CAS for files called Basic_Default_Files.

2. Add the following roles, each with download privileges:
   - User
   - Advanced Submitter
   - Registrar
   - Registrar Administrator

3. Check **Automatically apply to all new files**.

4. Click **Yes** when the **Apply this new setting to all existing files?** pop-up appears.

Step 3 -- Allow all roles that currently access all assets to get the same functionality through an Asset CAS

1. Create a CAS for assets called **Basic_Default_Assets**. Add the following roles and associated permissions:
   - **Role:** User

○ **Permissions:** View, Use, Review

○ **Role:** Advanced Submitter
○ **Permissions:** View, Use, Review, Edit

○ **Role:** Registrar
○ **Permissions:** View, Use, Review, Edit, Accept, Approve Tabs, Register, Edit Access Settings

○ **Role:** Registrar Administrator:
○ **Permissions:** View, Use, Review, Edit, Accept, Approve Tabs, Register, Edit Access Settings

2. Check **Automatically apply to all new assets** at the top of the screen.

3. Click **Yes** when the **Apply this new setting to all existing assets?** pop-up appears.

Step 4 -- Remove existing BAS permissions for assets

CAS becomes the default set of permissions for all assets in Oracle Enterprise Repository.

Note: In order to retain global tool permissions through BAS, each user must be assigned to one of the new functional roles for each of the four previously designated functional or tool permissions, as illustrated below.

Basic Access Settings for: **Assets**

Set Permissions

	View	Use	Download	Review	Notify	Edit	Accept	Approve Tabs	Register	Edit Access Settings	Create / Submit *	Launch Asset Editor *	Edit Artifact Stores *	Edit Types *
1: Create/Submit											✓			
2: Launch Asset Editor												✓		
3: Edit Artifact Stores													✓	
4: Edit Types														✓
advancedSubmitter	✓	✓	✓	✓	✓	✓					✓	✓		
registrar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
registrarAdministrator	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
user	✓	✓	✓	✓							✓			

Global Permissions

- Not Granted   ✓ - Granted   ✗ - Denied
Note - All Permissions are **Most Restrictive**
* - These are **Global Permissions**. These permissions should be set here in **Basic Access Settings** only.

1. Create four new Roles with the following names: (include the numbers preceding the role to keep them together in the role list)
    - 1: Create/Submit
    - 2: Launch Asset Editor
    - 3: Edit Artifact Stores
    - 4: Edit Types

2. Edit current BAS settings to reflect the following:
    - **Role:** 1: Create/Submit
    - **Permission:** Create/Submit

    - **Role:** 2: Launch Asset Editor
    - **Permission:** Launch Asset Editor

    - **Role:** 3: Edit Artifact Stores
    - **Permission:** Edit Artifact Stores

    - **Role:** 4: Edit Types
    - **Permission:** Edit Types

Step 5 -- Tie new roles to existing users based on existing roles

1. Edit each role and place all users who should have the ability to create/submit assets, launch the asset editor, edit artifact stores, and/or Edit Types, respectively, into each of the four roles.

The following table lists the default permissions for Oracle Enterprise Repository's default roles:

Role	Permissions
User	Create/Submit
Advanced Submitter	Create/Submit, Launch Asset Editor
Registrar	Create/Submit, Launch Asset Editor
Registrar Administrator	Create/Submit, Launch Asset Editor, Edit Artifact Stores, Edit Types

Example:

Daryl was previously assigned the default role **User**, which includes the default permissions. In order to retain his existing permissions under the new settings he must be reassigned to **User** and also assigned to the new **1: Create/Submit** role.

Similarly, in order to retain the default permissions attached to his previously assigned **Registrar** role, Larry must be reassigned to **Registrar** and also assigned to **1: Create/ Submit** and **2: Launch Asset Editor**.

It is also possible to add users to a role, as opposed to adding roles to users. If the default permissions for the Oracle Enterprise Repository roles are unchanged, each role can be edited to add all of the applicable users at once.

Step 6 -- Validate the changes

1. Create five users, and assign each to one of the following role combinations:
   ○ User, 1: Create/Submit

- ❍ Advanced Submitter, 1: Create/Submit, 2: Launch Asset Editor
- ❍ Registrar, 1: Create/Submit, 2: Launch Asset Editor
- ❍ Registrar Administrator, 1: Create/Submit, 2: Launch Asset Editor, 3: Edit Artifact Stores, 4: Edit Types
- ❍ Project Administrator.

2. Verify that each user assigned to each role listed above can see the following items:
   - ❍ **User**
     - Can see the **Assets**, **Projects**, **My Stuff**, and **Reports** links on the Oracle Enterprise Repository menu bar.

     - The **Submit an Asset** link is visible on the **Assets** screen. (The **Edit / Manage Assets** link should not be visible.)

     - A list of assets is visible after clicking the **Search** button on the **Asset** screen. The **Subscribe** and **Use/Download** buttons should be visible in each asset. (The **Edit** button should not be visible.) The **User** should also be able to post reviews.

     - After clicking the **Use/Download** button on an asset that includes downloadable files, the **User** should be able to download the files.

   - ❍ **Advanced Submitter**
     - Can see the **Assets**, **My Stuff**, and **Reports** links on the Oracle Enterprise Repository menu bar.

     - Both the **Submit an Asset** and **Edit / Manage Assets** links are visible on the **Assets** screen.

     - A list of assets is visible after clicking the **Search** button on the **Assets** screen. The **Subscribe**, **Use/Download**, and **Edit** buttons should be visible in each asset. The **Advanced Submitter** should also be able to post reviews.

     - After clicking the **Use/Download** button on an asset that includes downloadable files, the **Advanced Submitter** should be able to download the files.

     - Can click the **Edit / Manage Assets** link on the **Assets** screen to launch the **Asset Editor**.
       - *Verify:*
         - The **Approve** button at the bottom of each **Asset Editor**

tab is inactive.
- The **Register** button on the **Administration** tab in the **Asset Editor** is inactive.

- ❍ **Registrar**
  - Can see the **Assets**, **My Stuff**, and **Reports** links on the Oracle Enterprise Repository menu bar.

  - Both the **Submit an Asset** and **Edit / Manage Assets** links are visible on the **Assets** screen.

  - A list of assets is visible after clicking the **Search** button on the **Assets** screen. The **Subscribe**, **Use/Download**, and **Edit** buttons should be visible in each asset. The **Registrar** should also be able to post reviews.

  - After clicking the **Use/Download** button on an asset that includes downloadable files, the **Registrar** should be able to download the files.

  - Can click the **Edit / Manage Assets** link on the **Assets** screen to launch the **Asset Editor**.
    - *Verify:*
      - The **Approve** button at the bottom of each **Asset Editor** tab is active.
      - The **Register** button on the **Administration** tab in the **Asset Editor** is active.
      - In the **Asset Editor**, the **Accept** button is visible on assets submitted via the **Submit an Asset** link on the Oracle Enterprise Repository **Assets** screen.
      - The **Registrar** can change an asset's access setting (if enabled in CAS).

- ❍ **Registrar Administrator**
  - Can see the **Assets**, **My Stuff**, and **Reports** links on the Oracle Enterprise Repository menu bar.

  - Both the **Submit an Asset** and **Edit / Manage Assets** links are visible on the **Assets** screen.

  - A list of assets is visible after clicking the **Search** button on the **Assets** screen. The **Subscribe**, **Use/Download**, and **Edit** buttons should be

visible in each asset. The **Registrar Administrator** should also be able to post reviews.

- After clicking the **Use/Download** button on an asset that includes downloadable files, the **Registrar** should be able to download the files.

- Can click the **Edit / Manage Assets** link on the **Assets** screen to launch the **Asset Editor**.
    - *Verify:*
        - The **Approve** button at the bottom of each **Asset Editor** tab is active.
        - The **Register** button on the **Administration** tab in the **Asset Editor** is active.
        - In the **Asset Editor**, the **Accept** button is visible on assets submitted via the **Submit an Asset** link on the Oracle Enterprise Repository **Assets** screen.
        - The **Registrar Administrator** can change an asset's access setting.
        - The **Actions** menu of the **Asset Editor** should include **Configure Artifact Stores** and **Manage Asset Types**.

- **Project Administrator**
    - Can see the **Assets**, **Projects**, **My Stuff**, and **Reports** links on the Oracle Enterprise Repository menu bar.
        - *Verify:*
            - The **Submit an Asset** and **Edit / Manage Assets** links are NOT visible on the **Assets** screen.
            - No search results appear after clicking the **Search** button.