Oracle® Enterprise Repository

eTrust SiteMinder Setup and Configuration Guide

10*g* Release 3 (10.3)

July 2009

ORACLE®

Oracle Enterprise Repository eTrust SiteMinder Setup and Configuration Guide, 10*g* Release 3 (10.3)

Primary Author: Vimmika Dinesh

Contributing Author: Scott Spieker, Jeff Schieli, Sharon Fay, Atturu Chandra Prasad Reddy

Oracle Enterprise Repository

eTrust™ SiteMinder® Setup and Configuration Guide

Table of Contents

Overview

The Oracle Enterprise Repository **Advanced Container Authentication LoginModule** is used to accept user credentials passed by HTTP Request Headers (potentially populated by an SSO system). This feature allows integration with single-sign-on systems such as eTrust Siteminder.

Configure Oracle Enterprise Repository For Use With SiteMinder Authentication

Access the following configuration properties requires **Access Administrator** rights.

Note about the SSO Soap Header Enhancement - This enhancement allows AdvancedContainerLogin Module to accept user information in SOAP Headers for the AuthtokenCreate REX API method. The username is passed in a SOAP Header with a name that is identified by the Oracle Enterprise Repository system setting enterprise.container.auth.username and has a namespaceUri of www.oracle.com/oer. The value of the SOAP Header is the username of the user. If the username is not passed within a SOAP Header then the Oracle Enterprise Repository system setting enterprise.loginmodules.fallbackauthentication is used. If enterprise.loginmodules.fallbackauthentication is true, then the user is authenticated by the configured PluggableLoginModule for the specified username/password.

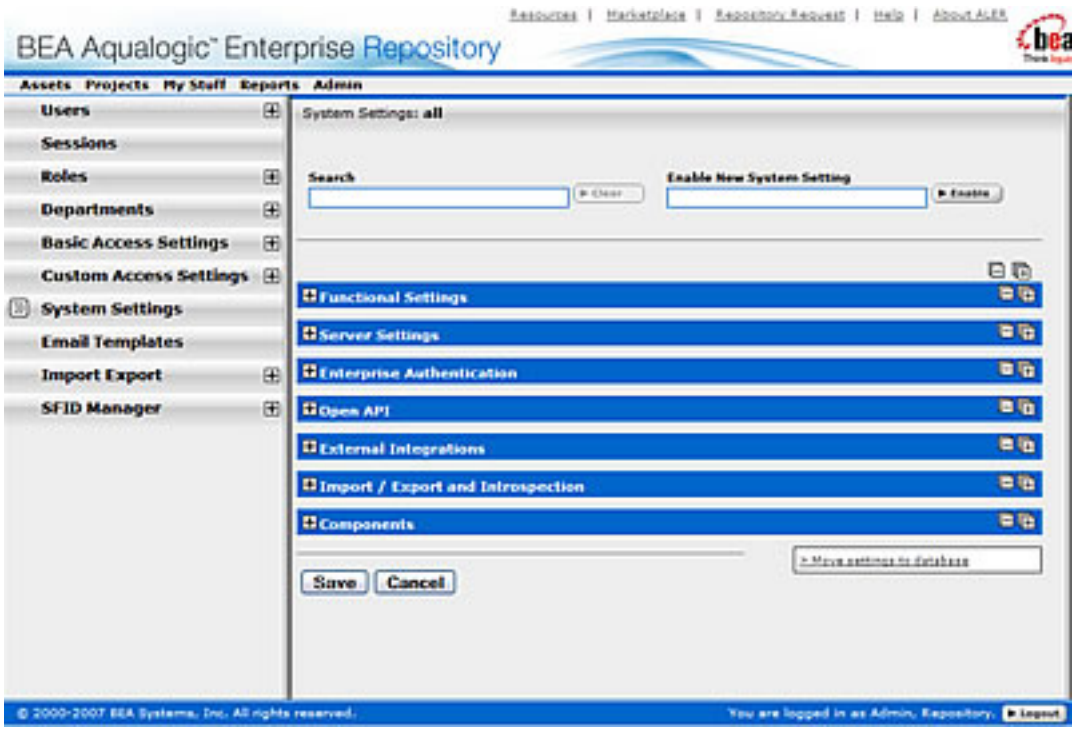
Plugin in Login module is a configuration set up to configure Database login Module, LDAP Login Module, and Custom Login Module. Container Login module can be Container Managed Login Module or Advanced Container Login Module i.e SSO. These can be configured on the System Settings tab.

Note: The Fallback authentication works only with REX API.

Enable SiteMinder Integration System Properties

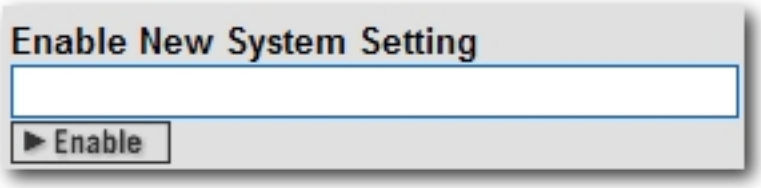
This procedure is performed on the Oracle Enterprise Repository **Admin** screen.

1. Click **System Settings** in the left pane.



2. Enter **`enterprise.authentication.advancedcontainer.enabled`** into the Search box. Set the value to **`True`** and click Save.

3. Enter **`cmee.jws.pass-all-cookies`** in the **Enable New System Setting** text box.



4. Click **Enable**.

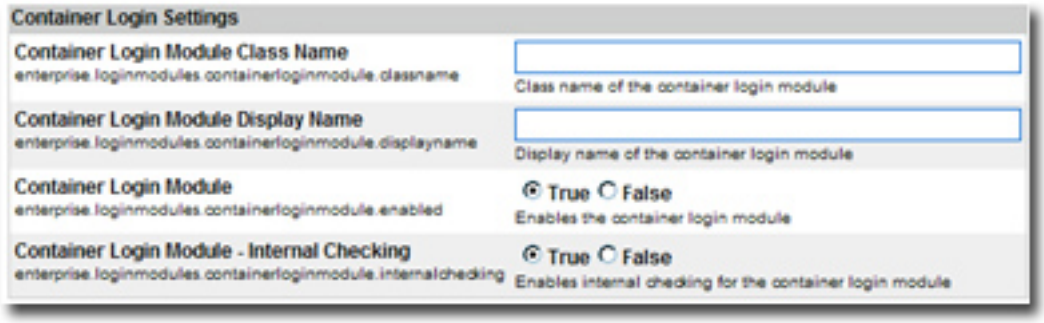
   JWS Pass All Cookies appears in the **Java Web Start (JWS)** section of the **Server Settings** group of system settings.

5. Make sure the property is set to **True**.

6. Click **Save**.

7. Enter `container login module` in the System Settings **Search** text box.

   The **Containter Login Module** section opens in the **Enterprise Authentication** group of system settings.



8. Modify the following properties as indicated:

   - **Container Login Module Class Name**
     - Enter `com.flashline.enterprise.authentication.server.loginmodule.AdvancedContainerLogin` in the text box.

   - **Container Login Module Display Name**
     - Enter `Advanced Container Login Module` in the text box.

   - **Container Login Module**
     - Set the property to **True**.

9. Supply SSO Header Values as indicated (these are often called Responses within the Policy Server). Data types expected, and possible values are listed below the header name. The expected value types apply to the responses supplied by the policy server:

   - **Username Header Name**
     - Set this property to the **Name** of the header that will contain the user's UID value.
       - This header should contain the user's user id **(REQUIRED)**.

   - **Firstname Header Name**

        - Set this property to the **Name** of the header that will contain the user's First Name value. (Alpha String)
            - This header should contain the user's proper name.

- **Middlename Header Name**
    - Set this property to the **Name** of the header that will contain the user's Middle Name value. (Alpha String)
        - This header should contain the user's middle name.

- **Lastname Header Name**
    - Set this property to the **Name** of the header that will contain the user's Last Name value. (Alpha String)
        - This header should contain the user's surname.

- **Status Header Name**
    - Set this property to the **Name** of the header that will contain the user's Active Status value.
        - This header should contain a valid integer value specifying the user's status within OER. Refer to the following table for valid values **(REQUIRED)**.
            - 00 - Active
            - 10 - Unapproved
            - 20 - Locked Out
            - 30 - Inactive

- **Email Header Name**
    - Set this property to the **Name** of the header that will contain the user's Email value.
        - This header should contain the user's e-mail address **(REQUIRED)**.

- **Phone Header Name**
    - Set this property to the **Name** of the header that will contain the user's Phone Number value.
        - This header should contain the user's phone number.

- **Roles Header Name**
    - Set this property to the **Name** of the header that will contain the user's Role(s) value.
        - This header should contain the user's role(s).

- **Department Header Name**
    - Set this property to the **Name** of the header that will contain the user's

Department(s) value.
    - This header should contain the user's department(s).

10. Update the behavior of the SSO module with the following properties:
    - **Use Container passed Departments**
        - Set this value to True if you would like to synchronize the user's department from the policy server responses.

    - **Departments passed within single header**
        - Set this value to **True** if more than one department name is passed as a Policy Server response.

    - **Department Delimiter**
        - Set the value of this property to the character that will delimit multiple departments within the single department header. This field can accept Unicode notations such as \u0020 for a space.

    - **Use Container passed Roles**
        - Set this value to True if you would like to synchronize the user's roles from the policy server responses. (NOTE: Setting this value to true prior to verifying the correct configuration may render your Oracle Enterprise Repository application unusable).

    - **Roles passed within single header**
        - Set this value to **True** if more than one role name is passed as a Policy Server response.

    - **Role Delimiter**
        - Set the value of this property to the character that will delimit multiple roles within the single roles header. This field can accept Unicode notations such as \u0020 for a space.

    - **Assign default roles to users**
        - Set this value to True if existing and new users will be assigned all roles marked as 'default' assigned to their user account within Oracle Enterprise Repository.

    - **Auto create missing roles**
        - Set this value to True to allow Oracle Enterprise Repository to create roles included within a user's role header that do not exist currently within Oracle Enterprise Repository. This feature will create a role and assign the user to that role, but the created role(s) will have no permissions assigned.

- **Auto create missing departments**
    - Set this value to True to allow Oracle Enterprise Repository to create departments included within a user's department header that do not exist currently. This feature will create a department and assign the user to that department; the newly created department will not be assign to a project.

11. Enter `cookie login module` in the System Settings **Search** text box.

    The **Cookie Login Settings** section opens in the **Enterprise Authentication** group of system settings.

12. Set the **Cookie Login Module** property to **False**.

13. Enter `plug-in login` in the System Settings **Search** text box.

    The **Plugin Login Settings** section opens in the **Enterprise Authentication** group of system settings.

14. Enter `false` in the **Plug-in Login Module** text box.

15. Click **Save**.

Using the Oracle Enterprise Repository SSO Integration with Basic Authentication

If the SiteMinder installation uses **Basic Authentication**, additional property settings are required to allow the Oracle Enterprise Repository **Asset Editor** to function properly.

1. Using the process described above, enable the following property:
    - `cmee.jws.suppress-authorization-header`

2. Set the property to **True**.

3. Click **Save**

Modify Application Property Files Manually

- **Prerequisite:** Stop the application server.
  - Modifications to properties files may impact any applications running on the application server.

1. Edit the `containerauth.properties` file in `WEB-INF/classes`.

   This file contains a list of header names that are specific to the SiteMinder server. This information represents the Response Headers SiteMinder uses for replies, and should be acquired from your organization's SiteMinder Administrators/Architects.

   If SiteMinder responses do not provide the appropriate value for an **email** header, a blank "" can be substituted instead of a true header value. Other fields that are not supplied or populated by SiteMinder should be left null.

   (An asterisk <*> indicates a required field.)

   - Configure the Header variables that should be mapped to the appropriate Oracle Enterprise Repository user information:

     (**Note:** The values indicated below are examples only and **must** be replaced with the appropriate SiteMinder Response Header names defined by your SiteMinder system.)

     - *enterprise.container.auth.username* = <UID>*
     - *enterprise.container.auth.firstname* = <FIRST_NAME>
     - *enterprise.container.auth.middlename* = <MIDDLE_NAME>
     - *enterprise.container.auth.lastname* = <LAST_NAME>
     - *enterprise.container.auth.status* = <STATUS>
     - *enterprise.container.auth.email* = <MAIL>*
     - *enterprise.container.auth.phone* = <PHONE>
     - *enterprise.container.auth.roles* = <ROLES>
     - *enterprise.container.auth.depts* = <DEPARTMENTS>
     - *enterprise.container.auth.enable-synch-roles* = true
     - *enterprise.container.auth.roles-single-header* = true
     - *enterprise.container.auth.roles-delimiter* = \u0020
     - *enterprise.container.auth.enable-synch-depts* = true
     - *enterprise.container.auth.depts-single-header* = true
     - *enterprise.container.auth.depts-delimiter* = \u0020

Note: The last six properties listed above are utilized when role and/or department synching is enabled, and more than one role or department is supplied in a single header. These additional properties can be disabled/ignored depending on the values supplied in the boolean parameters enable-synch-roles and enable-synch-depts. The delimiter field in this example uses the unicode space character; however, unicode is not required for any other delimeter character.

2. Most SiteMinder web agent applications are deployed against an HTTP server that is separate from the Application Server. In this scenario, an AJP type connector (**`mod_jk/mod_jk2`** for Apache HTTP Servers, **`mod_was_ap20_http`** for IBM HTTP Server, etc.) will link the HTTP server to the application server. Typically, the HTTP server runs on a seperate machine for performance or resource pooling reasons. In this scenario it is necessary to modify the **`cmee.properties`** file to reflect the new name for your application, as outlined below.

    - Edit the `cmee.properties` file in `WEB-INF/classes`.

        - Original Configuration (Tomcat with Coyote)
            - *cmee.server.paths.image=http\://tomcat.example.com\:8080/flashline-web/images*
            - *cmee.server.paths.jsp=http\://tomcat.example.com\:8080/flashline*
            - *cmee.server.paths.servlet=http\://tomcat.example.com\:8080/flashline*
            - *cmee.server.paths.jnlp-tool=http\://tomcat.example.com\:8080/flashline-web/webstart*
            - *cmee.server.paths.resource=http\://tomcat.example.com\:8080/flashline-web*
            - *cmee.enterprisetab.homepage=http\://tomcat.example.com\:8080/flashline/custom/home.jsp*
            - *cmee.assettab.asset-detail-page=http\://tomcat.example.com\:8080/flashline/cmee/index.jsp*

        - New configuration (Apache HTTP with mod_jk2 to Tomcat)
            - *cmee.server.paths.image=http\://apache.example.com/flashline-web/images*
            - *cmee.server.paths.jsp=http\://apache.example.com/flashline*
            - *cmee.server.paths.servlet=http\://apache.example.com/flashline*
            - *cmee.server.paths.jnlp-tool=http\://apache.example.com/flashline-web/webstart*
            - *cmee.server.paths.resource=http\://apache.example.com/flashline-web*
            - *cmee.enterprisetab.homepage=http\://apache.example.com/*

flashline/custom/home.jsp

- *cmee.assettab.asset-detail-page=http\://apache.example.com/flashline/cmee/index.jsp*

- In this example the new URL to connect to the Repository will be: **`http://apache.example.com/flashline/index.jsp`**

3. Restart the Oracle Enterprise Repository application.

Advanced SiteMinder Options

The following options add functionality for assigning default roles, new user creation/ notification, syncing departments, and syncing roles.

Creating/Assigning Default Roles for New Users

With Advanced RBAC:

1. Click **Admin** on the Oracle Enterprise Repository menu bar.
2. On the **Admin** screen, click **Roles**.
3. Click **Create New**.
4. Enter **Browse_Only** in the name field.
    - Check **Automatically assign to new users**
    - Add any existing users who fit this profile.
5. Click **Save**.
6. Click the role **1: Create/Submit**.
7. Click **Edit**
    - Uncheck **Automatically assign to new users**.
8. Click **Save**.
9. Click the role **User**
10. Click **Edit**.
    - Uncheck **Automatically assign to new users**. (**User** is the default role and automatically assigned to new users as shipped with the Oracle Enterprise Repository.)
11. Click **Save**.
12. Click **Custom Access Settings**.
13. Click **Create New**.
14. Enter **Browse_Only** in the name field.
    - Check **Automatically assign to all new assets**.
    - Locate **Browse_Only** in the list of roles.
    - Check **View**.
15. Click **Save**.

16. Click **OK** to apply to all assets.

With Basic Access Settings:

1. Click **Admin** on the Oracle Enterprise Repository menu bar.
2. On the **Admin** screen, click **Roles**.
3. Click **Create New**.
4. Enter **Browse_Only** in the name field.
    - Check **Automatically assign to new users**
    - Add any existing users who fit this profile.
5. Click the role **User**
6. Click **Edit**.
    - Uncheck **Automatically assign to new users**. (**User** is the default role and automatically assigned to new users as shipped with Oracle Enterprise Repository.)
7. Click **Save**.

Create New Users/Allow Unapproved Users

The Oracle Enterprise Repository SiteMinder authentication integration will automatically create new users within the Oracle Enterprise Repository database once they are successfully authenticated. The specific access and permissions granted to new users is determined by the configuration of the default **New User Role(s)**, as described in the previous section. Upon approval by the access administrator, new users may be assigned to other roles with different access settings. However, if the SiteMinder integration is configured with role synchronization enabled, then the user will be assigned the roles provided by SiteMinder response headers.

Enable Unapproved/New User Login

When enabled, this option allows unapproved/new Oracle Enterprise Repository users to access the application after SiteMinder authentication. If disabled, new or unapproved users cannot access Oracle Enterprise Repository. This feature is particularly useful when a manual approval process is required before accessing the application.

- **Enable Unapproved User Login = true** (file: enterprise.properties)
    - enterprise.security.unapproveduser.allowlogin=true

New User Notification

When enabled, this property will notify the access adminstrator via email when a new user account is added to Oracle Enterprise Repository via SiteMinder.

- **Enable New User Notification = true** (file: cmee.properties)
  - cmee.new.unapproved.users.notify=true

Syncing Departments

When enabled, this property will synchronize department names from SiteMinder response header values.

- **Enable Department Syncing = true** (file: *containerauth.properties*)
  - enterprise.container.auth.enable-synch-depts - Set to true if known departments are to be synchronized with users, set to false otherwise.

- **Enable Department Creation = true** (file: *containerauth.properties*)*
  - enterprise.container.auth.auto-create-missing-depts - Set to true if user's departments are to be automatically created at login, set to false otherwise.

Notes on Department Synchronization

The SiteMinder integration will **not** create new departments. It will only link users to departments that already exist within Oracle Enterprise Repository and have the same name as that provided in the SiteMinder response header value(s).

The SiteMinder server may be configured to pass multiple headers of the same name but different values for each department a user is assigned, or one header containing all of the departments that a user is assigned.

- Configuration 1 - A multiple headers of the same name, with a different value in each:

  enterprise.container.auth.enable-synch-depts= **true**
  enterprise.container.auth.depts-single-header= **false**
  enterprise.container.auth.depts-delimiter= **""**
  enterprise.container.auth.depts= **DEPT_HEADER_NAME**

  DEPT_HEADER_NAME=DEPTA
  DEPT_HEADER_NAME=DEPTB
  DEPT_HEADER_NAME=DEPTC

and NOT

DEPT_HEADER_NAME=DEPTA DEPTB DEPTC ...

- Configuration 2 - One header with multiple values seperated by a delimeter:

  enterprise.container.auth.enable-synch-depts= **true**
  enterprise.container.auth.depts-single-header= **true**
  enterprise.container.auth.depts-delimiter= **"^"**
  enterprise.container.auth.depts= **DEPT_HEADER_NAME**

  DEPT_HEADER_NAME=DEPTA^DEPTB^DEPTC^ ...

  and NOT

  DEPT_HEADER_NAME=DEPTA
  DEPT_HEADER_NAME=DEPTB
  DEPT_HEADER_NAME=DEPTC

Syncing Roles

When enabled, this property will synchronize role names from SiteMinder response header values.

- **Enable Role Syncing = true** (file: containerauth.properties)
  - enterprise.container.auth.auto-create-missing-roles - Set to true if unknown roles are to be auto-created, set it to false otherwise.

Notes on Role Synchronization

The SiteMinder integration **can** create new roles. The integration will link users to roles that previously exist within the Oracle Enterprise Repository and have the same name as that provided in the SiteMinder response header value(s). In addition to linking to existing roles, the integration will also create roles found in the header values that do not already exist within the Oracle Enterprise Repository. Roles created in this way will have no rights assigned to them by default.

- **Enable Missing Role Creation = true** (file: containerauth.properties)
  - *enterprise.container.auth.auto-create-missing-roles* = ***true***

The Siteminder server may be configured to pass one header value for each role a user is assigned

- Configuration 1 - A multiple headers of the same name, with a different value in each:

  enterprise.container.auth.enable-synch-roles= **true**
  enterprise.container.auth.roles-single-header= **false**
  enterprise.container.auth.roles-delimiter= **""**
  enterprise.container.auth.roles= **ROLE_HEADER_NAME**

  ROLE_HEADER_NAME=ROLEA
  ROLE_HEADER_NAME=ROLEB
  ROLE_HEADER_NAME=ROLEC

  and NOT

  DEPT_HEADER_NAME=ROLEA ROLEB ROLEC ...

- Configuration 2 - One header with multiple values seperated by a delimeter:

  enterprise.container.auth.enable-synch-roles= **true**
  enterprise.container.auth.roles-single-header= **true**
  enterprise.container.auth.roles-delimiter= **"^"**
  enterprise.container.auth.roles= **ROLE_HEADER_NAME**

  DEPT_HEADER_NAME=ROLEA^ROLEB^ROLEC^ ...

  and NOT

  ROLE_HEADER_NAME=ROLEA
  ROLE_HEADER_NAME=ROLEB
  ROLE_HEADER_NAME=ROLEC

Enable Debug Logging

Enable debug logging by appending the following line in the log4fl.properties file:

```
log4j.category.com.flashline.enterprise.authentication.client.LoginContext=debug, cmeeLog
```