



Safeguard Authentication Services 6.2

Active Roles Integration Pack  
Administration Guide

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One Identity LLC.  
Attn: LEGAL Dept  
4 Polaris Way  
Aliso Viejo, CA 92656

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For the most recent documents and product information, see [Online product documentation](#).

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## About this guide

The Safeguard Authentication Services ActiveRoles Integration Pack Administration Guide is intended for Windows, UNIX, Linux, and Mac system administrators, network administrators, consultants, analysts, and any other IT professionals installing the Integration Pack for the first time.

**NOTE:** To perform the exercises described in this guide, One Identity assumes you have the necessary permissions to manage users or groups.

The Safeguard Authentication Services ActiveRoles Integration Pack integrates ActiveRoles Server and Safeguard Authentication Services Active Roles Integration Pack. This chapter explains the key features of the Integration Pack and summarizes how it provides value by lowering costs and simplifying management.

## Prerequisites

This version of the Safeguard Authentication Services ActiveRoles Integration Pack has been updated to take advantage of the latest features of both Safeguard Authentication Services Active Roles Integration Pack and ActiveRoles Server.

You must install the following software on the computer where you will install the Integration Pack:

- ActiveRoles Server 7.1 or higher, including the Administration Service, Web interface, and ActiveRoles Server console.
- Safeguard Authentication Services Active Roles Integration Pack 4.2.5 or higher.

You must install the Integration Pack on a computer running the ActiveRoles Server Administration Service. The Administration Service must be running to make all the necessary changes to ActiveRoles Server.

**NOTE:** For older versions of ActiveRoles Server or Safeguard Authentication Services Active Roles Integration Pack, install the Safeguard Authentication Services Active Roles Integration Pack Support Pack for ActiveRoles Server Web Interface 2.0.5.

# About ActiveRoles Server

ActiveRoles Server offers a practical approach to automated user provisioning and administration, for maximum security and efficiency. It provides total control of user provisioning and administration for Active Directory.

ActiveRoles Server can help you manage, automatically provision, deprovision and undo deprovision on users efficiently and securely in Active Directory, AD LDS (formerly ADAM) and beyond. ActiveRoles Server provides strictly enforced role-based security, automated group management, change approval and web interfaces for self-service to achieve practical user and group lifecycle management for the Windows enterprise.

# About Safeguard Authentication Services Active Roles Integration Pack

Safeguard Authentication Services Active Roles Integration Pack integrates system-provided UNIX and Linux authentication and identity subsystems with Active Directory. It eliminates key vulnerabilities and end-user downtime to minimize risk and lower costs.

At its core, Safeguard Authentication Services Active Roles Integration Pack provides centralized authentication for UNIX, Linux, and Mac systems to Active Directory (AD). With more than 500 current customers and 3 million seats, Safeguard Authentication Services Active Roles Integration Pack is the clear market leader in Active Directory integration.

## Key features of the Integration Pack

The Safeguard Authentication Services ActiveRoles Integration Pack extends the capabilities of the ActiveRoles Server Web Interface to include the management of UNIX and Linux identities, such as UNIX-enabled users and groups. You define all management operations by means of the ActiveRoles Server Console. Then, when managing the users and groups in the Web Interface, the defined provisioning and security policies will be followed.

You can also use the ActiveRoles Server change-tracking features, such as management history, to monitor changes made to UNIX-related data. ActiveRoles Server gives you a clear log, which documents the changes made to a given identity, such as a UNIX-enabled user account. The log includes entries detailing actions performed, success or failure of the actions, as well as which properties were changed.

The Integration Pack provides ActiveRoles policy types that enable automatic provisioning and deprovisioning of UNIX account attributes for users and groups. You can incorporate these provisioning actions into custom work flows.

The following sections describe these Integration Pack components:

- [Access Templates](#)
- [Managed Units](#)
- [Policies](#)
- [Web Interface extensions](#)

**NOTE:** For more information on how to use these Integration Pack components, see [Administration tasks](#).

## Access Templates

You use standard ActiveRoles Server functionality to delegate management tasks on UNIX data. You implement a delegation scheme by applying Access Templates included with the integration pack. For example, to delegate all UNIX-related management tasks on Windows user accounts, link the **Users - Modify All UNIX Properties** template to a certain Organizational Unit and select the appropriate group as Trustee. As a result, any member of that group is authorized to perform the tasks on any user account held in that Organizational Unit.

To locate the Access Templates provided by the Integration Pack, in the ActiveRoles Server Console, navigate to **Configuration > Access Templates > Safeguard Authentication Services Active Roles Integration Pack Integration v2.6.x**.

The following table summarizes the Access Templates included with the Integration Pack.

**Table 1: Access templates included with the integration pack**

Access template	Description
Groups-Modify All UNIX Properties	Permissions to view and modify these UNIX-related properties of Windows groups: <ul style="list-style-type: none"> <li>• UNIX name</li> <li>• Group ID</li> </ul>
Users-Modify All UNIX Properties	Permissions to view and modify these UNIX-related properties of Windows user accounts: <ul style="list-style-type: none"> <li>• UNIX name</li> <li>• User ID</li> <li>• Primary Group ID</li> <li>• Comments (GECOS)</li> <li>• Home Directory</li> <li>• Login Shell</li> </ul>

# Managed Units

Managed Units allow you to locate the UNIX users and groups in your ActiveRoles Server managed environment.

You use standard ActiveRoles Server functionality to provide administrative views of user and group accounts with UNIX attributes.

To locate the Managed Units provided by the Integration Pack, in the ActiveRoles Server Console, navigate to **Configuration > Managed Units > Safeguard Authentication Services Active Roles Integration Pack Integration v2.6.x**.

The following table summarizes the Managed Units included with the Integration Pack.

**Table 2: Managed units included with the integration pack**

Managed unit	Description
UNIX-enabled groups	Administrative view of all UNIX-enabled groups that exist in the domains registered with ActiveRoles Server (managed and unmanaged domains).
UNIX-enabled users	Administrative view of all UNIX-enabled users that exist in the domains registered with ActiveRoles Server (managed and unmanaged domains)

# Policies

Use standard ActiveRoles Server functionality to provide UNIX data management policies. You can create custom policy objects based on the policy types provided to allow for automated UNIX account provisioning and de-provisioning.

To locate the Policy Types provided by the Integration Pack, in the ActiveRoles Server Console, navigate to **Configuration > Server Configuration > Policy Types > Safeguard Authentication Services Active Roles Integration Pack Integration v2.6.x**.

The following table summarizes the Policy Types included with the Integration Pack.

**Table 3: Policy types included with the integration pack**

Policy type	Description
Deprovision UNIX Group	Enables automatic de-provisioning of UNIX attributes when group objects are de-provisioned.
Deprovision UNIX User	Enables automatic de-provisioning of UNIX attributes when users are de-provisioned.

Policy type	Description
Provision UNIX Group	Enables automatic provisioning of UNIX attributes when new group objects are provisioned.
Provision UNIX User	Enables automatic provisioning of UNIX attributes when new user objects are provisioned

Refer to [Administration Tasks](#) for procedures on how to enable automatic provisioning and de-provisioning of UNIX account attributes for users and groups.

## Web Interface extensions

The Integration Pack extends the ActiveRoles Server Web Interface to include pages and commands that allow you to perform management tasks.

Tasks specific to UNIX user accounts:

- Block or unblock UNIX account
- View or modify UNIX account properties
- Clear all UNIX attributes

Tasks specific to UNIX groups:

- Block or unblock UNIX group
- View or modify UNIX properties
- Clear all UNIX attributes

The Integration Pack uses Access Templates to delegate these tasks.

**NOTE:** The Integration Pack installation process configures the Web interface extensions. To remove the Web Interface extensions after the Integration Pack is installed and functioning, click **Customization > Restore** in the Web Interface. To regain the Web Interface extension functionality, run the ActiveRoles Integration Configuration Wizard from the Start menu.

## Deploying the Integration Pack

The Integration Pack consists of a single Windows.msi installer. This installer checks that the necessary prerequisite software is installed on the local machine before it installs the Integration Pack.

There are two steps to deploying the Integration Pack:

1. Install the Integration Pack configuration modules and Web Interface extensions.
2. Configure ActiveRoles Server.

## Installing the Integration Pack

This section describes how to install the Safeguard Authentication Services Active Roles Integration Pack.

### *To install the Safeguard Authentication Services Active Roles Integration Pack*

1. To start the InstallShield Wizard, double-click `arsqas-2.6.x.msi`.
2. On the **Welcome** page, click **Next**.
3. On the **Licence Agreement** page, accept the terms in the license and click **Next**.
4. On the **Ready to Install** page, click **Install**.
5. When the InstallShield Wizard completes, leave the **Launch setup wizard** option selected and click **Finish**.

Wait while the ActiveRoles Integration Configuration Wizard starts.

6. Select the ActiveRoles Server websites that you want to extend for Safeguard Authentication Services Active Roles Integration Pack, then click **Continue**.

**NOTE:** You can manage your ActiveRoles Server websites using standard ActiveRoles Server functionality. To start the wizard which will help you configure websites including newly created websites for the ActiveRoles Server Web Interface, from the **Start** menu, navigate to **All Programs > Quest Software > Safeguard Authentication Services Active Roles Integration Pack**

## **ActiveRoles Integration > ActiveRoles Integration Configuration Wizard.**

**NOTE:** Every time you create and configure a new website for the ActiveRoles Server Web Interface, you must run the ActiveRoles Integration Configuration Wizard.

7. When the configuration setup wizard completes, click **Restart ActiveRoles Now**.
8. When it becomes available, click **Close** and wait for a minute while ActiveRoles Server loads the startup information.

**NOTE:** Once the service restarts, wait a few minutes before you open the ActiveRoles Server Console.

9. There are two ways to start the ActiveRoles Server Console:
  - a. From the **Start** menu, navigate to **All Programs > Quest Software > ActiveRoles Server > ActiveRoles Server Console**.
  - b. You can also access the ActiveRoles Server Console from the Safeguard Authentication Services Active Roles Integration Pack Control Center. Navigate to **Start > All Programs > Quest Software > Quest Safeguard Authentication Services Active Roles Integration Pack > Safeguard Authentication Services Active Roles Integration Pack Control Center**.

Once the Console is open, look for the **Safeguard Authentication Services Active Roles Integration Pack Integration Pack v2.6.x** folder under these nodes:

- **Access Templates**
- **Managed Units**
- **Policies > Administration**
- **Script Modules**
- **Server Configuration > Policy Types**
- **Applications**

## **Upgrading the Integration Pack**

The Integration Pack is not meant to be upgraded. Each version of the Integration Pack installs its Policy Objects, Access Templates, Script Modules and Managed Units into a version-specific container to isolate the data objects for each version. However, the Integration Pack shares Web Interface modifications between all versions. For this reason, One Identity recommends that you uninstall the previous version before installing the new version.

When upgrading from one version of the Integration Pack to another, any customizations to Integration Pack data objects will be lost. To preserve Integration Pack customizations, One Identity recommends that you backup the modified objects before you uninstall the previous version. That is, copy or move the Access Templates, Policy Objects, Script Modules, or Virtual Attributes created by the old version of the Safeguard Authentication Services Active Roles Integration Pack Support Pack for ActiveRoles Server Web Interface

to a new location using ActiveRoles Server management console. These objects are located in the ActiveRoles Server configuration container.

## Uninstalling Safeguard Authentication Services Active Roles Integration Pack

This section describes how to uninstall the Safeguard Authentication Services Active Roles Integration Pack.

### *To uninstall the Safeguard Authentication Services Active Roles Integration Pack*

1. Navigate to the **Control Panel > Programs > Programs and Features**.
2. Right-click **Safeguard Authentication Services Active Roles Integration Pack ActiveRoles Integration**, and click **Uninstall**.
3. In the **Programs and Features** dialog click **Yes**.
4. When prompted,
  - a. To remove the ActiveRoles Server configuration, click **Yes**.  
This removes the server and Web Interface extensions from ActiveRoles Server.
  - b. To uninstall the Integration Pack but retain the ActiveRoles Server configuration, click **No**.  
This leaves the ActiveRoles Server integration extensions in the console.

## Administration tasks

The Integration Pack allows you to automate the provisioning and deprovisioning of UNIX account attributes. You can also delegate rights to manage UNIX accounts that reside in Active Directory. Managed Units (MUs) allow you to locate the UNIX users and groups in your Active Roles managed environment.

### *To access the Active Roles Console*

1. From the **Start** menu, navigate to **Program Files > Quest Software > Active Roles > Active Roles Console**.

## Provisioning UNIX Users

You can automatically UNIX-enable users that are provisioned in ActiveRoles Server.

### *To automatically UNIX-enable users*

1. In the ActiveRoles Server Console, navigate to **Configuration > Policies > Administration**.
2. From the **Action** menu, select **New > Provisioning Policy**.
3. When the **New Provisioning Policy Object Wizard** starts, click **Next**.
4. On the **Name and Description** page, in the **Name** box, enter **UNIX-enable new users**, then click **Next**.
5. On the **Policy to Configure** page, locate the Safeguard Authentication Services Active Roles Integration Pack Integration Pack, select the **Provision UNIX User** policy type, then click **Next**.
6. On the **Policy Parameters** page, select the **AutoUnixEnable** parameter and click **Edit**.
7. On the **Edit Parameter** page, from the **Value:** drop-down menu, select **True**, then click **OK**.
8. On the **Policy Parameters** page, click **Next**.
9. On the **Enforce Policy** page, click **Add**.

10. On the **Select Objects** page, click **Browse**, select **Active Directory** (to apply this policy to all new Active Directory users), and click **OK**.
11. On the **Select Objects** page, select the **Active Directory** item at the top of the list, click **Add**, then click **OK**.
12. On the **Enforce Policy** page, click **Next**.
13. Click **Finish** to create the new policy object.
14. To return to the ActiveRoles Server Console, in the **ActiveRoles Server** dialog, click **OK**.

When you provision a new user account, the Integration Pack automatically UNIX-enables that account. That is, it populates the user's UNIX attributes.

## Deleting Policy Objects

This section describes how to delete Policy Objects.

### *To delete Policy Objects*

1. In the ActiveRoles Server Console, navigate to **Configuration > Policies > Administration**.
2. Right-click a Policy Object and choose **Policy Scope**.  
This displays the links in which the Policy Object occurs.
3. Select the link, click **Remove, Yes, OK**, then **OK** again.  
This deletes the links to the policy object.
4. Right-click the policy object and click **Delete**.
5. To confirm your decision, click **Yes**.

## Deprovisioning UNIX users

You can automatically block UNIX accounts when users are deprovisioned in ActiveRoles Server.

### *To deprovision UNIX users*

1. In the ActiveRoles Server Console, navigate to **Configuration > Policies > Administration**.
2. From the **Action** menu, select **New > Deprovisioning Policy**.
3. When the New Deprovisioning Policy Object Wizard starts, click **Next**.

4. On the **Name and Description** page, in the **Name** box, enter **Disable UNIX accounts for deprovisioned users**, then click **Next**.
5. On the **Policy to Configure** page, locate the Safeguard Authentication Services Active Roles Integration Pack Integration Pack, select the **Deprovision UNIX User** policy type, then click **Next**.
6. On the **Policy Parameters** page, select the **UnixDisable** parameter, then click **Edit**.
7. On the **Edit Parameter** page, from the **Value:** drop-down, select **True**, then click **OK**.
8. On the **Policy Parameters** page, select the **PrimaryGidNumber** parameter, then click **Edit**.
9. On the **Edit Parameter** page, specify an integer value for the Primary GID number, then click **OK**.
10. On the **Policy Parameters** page, click **Next**.
11. On the **Enforce Policy** page, click **Add**.
12. On the **Select Objects** page, click **Browse**, select **Active Directory** (to apply this policy to all new users), then click **OK**.
13. On the **Select Objects** page, select the **Active Directory** item at the top of the list, click **Add**, then click **OK**.
14. On the **Enforce Policy** page, click **Next**.
15. To create the new policy object and close the wizard, click **Finish**.

When you deprovision a user account, the Integration Pack automatically clears the user's UNIX attributes.

## Provisioning UNIX Groups

This section describes how to automatically UNIX-enable groups.

### *To automatically UNIX-enable groups*

1. From the ActiveRoles Server Console, navigate to **Configuration > Policies > Administration**.
2. From the **Action** menu, select **New > Provisioning Policy**.
3. When the New Provisioning Policy Object Wizard starts, click **Next**.
4. On the **Name and Description** page, enter **UNIX-enable new groups** in the **Name** box and click **Next**.
5. On the **Policy to Configure** page, locate the Safeguard Authentication Services Active Roles Integration Pack Integration Pack and select the **Provision UNIX Group** policy type and click **Next**.

6. On the **Policy Parameters** page, select the **AutoUnixEnable** parameter and click **Edit**.
7. On the **Edit Parameter** page, open the **Value:** drop-down menu, select **True** and click **OK**.
8. On the **Policy Parameters** page, click **Next**.
9. On the **Enforce Policy** page, click the **Add** button.
10. On the **Select Objects** page, click **Browse**, select **Active Directory** (to apply this policy to all new Active Directory groups), and click **OK**.
11. On the **Select Objects** page, select the **Active Directory** item at the top of the list, click **Add**, then click **OK**.
12. On the **Enforce Policy** page, click **Next**.
13. Click **Finish** to create the new policy object.
14. On the ActiveRoles Server dialog, click **OK** to return to the ActiveRoles Server Console.

When you provision a new group account, the Integration Pack automatically UNIX-enables the users associated with that account. That is, it populates the user's UNIX attributes.

## Deprovisioning groups

You can automatically block UNIX accounts when groups are deprovisioned in ActiveRoles Server.

### *To deprovision UNIX groups*

1. In the ActiveRoles Server Console, navigate to **Configuration > Policies > Administration**.
2. From the **Action** menu, select **New > Deprovisioning Policy**.
3. When the New Deprovisioning Policy Object Wizard starts, click **Next**.
4. On the **Name and Description** page, in the **Name** box, enter **Disable UNIX accounts for deprovisioned groups**, then click **Next**.
5. On the **Policy to Configure** page, locate the Safeguard Authentication Services Active Roles Integration Pack Integration Pack, select the **Deprovision UNIX Group** policy type, then click **Next**.
6. On the **Policy Parameters** page, select the **UnixDisable** parameter, then click **Edit**.
7. On the **Edit Parameter** page, from the **Value:** drop-down, select **True**, then click **OK**.
8. On the **Policy Parameters** page, click **Next**.

9. On the **Enforce Policy** page, click **Add**.
10. On the **Select Objects** page, click **Browse**, select **Active Directory** (to apply this policy to all new groups), then click **OK**.
11. On the **Select Objects** page, select the **Active Directory** item at the top of the list, click **Add**, then click **OK**.
12. On the **Enforce Policy** page, click **Next**.
13. To create the new policy object and close the wizard, click **Finish**.

When you deprovision a group account, the Integration Pack automatically clears the group's UNIX attributes rendering it UNIX-disabled.

## Delegating rights to manage UNIX objects

Use Access Templates to grant permissions to users and groups. When you add a user to an Access Template, you add all the attributes and permissions of that template to that user. When you apply Access Templates to a folder, you configure the permission settings to propagate from the folder to its child objects, down the directory structure.

You can implement a delegation scheme by applying Access Templates (ATs) included with the Integration Pack. For example, to delegate all UNIX-related management tasks on Windows user accounts, link the **Users - Modify All UNIX Properties** AT to a certain Organizational Unit and select the appropriate group as **Trustee**. As a result, any member of that group is authorized to perform the tasks on any user account held in that Organizational Unit.

### *To delegate rights to manage UNIX objects*

1. In the ActiveRoles Server Console, navigate to **Active Directory**.
2. From the **Action** menu, choose **Delegate Control**.
3. On the **Access Template links** page, click **Add**.
4. When the Delegation of Control Wizard starts, click **Next**.

The Delegation of Control Wizard helps you delegate control of directory objects. Give permission to manage users, groups, computers, organizational units, and other objects administered with ActiveRoles Server.

5. On the **Users or Groups** page, click **Add**.
6. On the **Select Objects** page, click the link to display the objects.
7. Select objects you want to add, click **Add**, then **OK**.
8. On the **Users or Groups** page, click **Next**.
9. On the **Access Templates** page, expand **Safeguard Authentication Services Active Roles Integration Pack Integration v2.x**, and select **Group** or **User** or

both and click **Next**.

10. On the **Inheritance Options** page, specify whether you want child objects to inherit the permission settings from the selected Access Templates and click **Next**.
11. On the **Permissions Propagation** page, leave the **Propagate permissions to Active Directory** option clear and click **Next**.
12. On the **Complete** page, click **Finish**.
13. To return to the Console, on the **Access Template links** page, click **OK**.

Users or groups with delegated rights to manage UNIX objects can block, unblock, or change UNIX attributes on users and groups in either the ActiveRoles Server Console or the Web Interface.

**NOTE:** Each delegated user must have read access to the application configuration.

## Locating UNIX objects

Managed Units allow you to locate the UNIX users and groups in your ActiveRoles Server managed environment.

### *To locate UNIX objects*

1. From the ActiveRoles Server Console, navigate to **Configuration > Managed Units > Safeguard Authentication Services Active Roles Integration Pack Integration v2.x**.
2. Right-click either **UNIX-enabled Groups** or **UNIX-enabled Users** and choose **Find...**
3. You use standard ActiveRoles Server functionality to search for objects of different types. For details on using the Find Users, Contacts, and Group dialog, open the **Help** menu, choose **Help Topics**, and open the **Finding Objects** topic.

## Using the Web Interface extensions

Safeguard Authentication Services Active Roles Integration Pack provides Microsoft Management Console (MMC) extensions that support the ActiveRoles Server Web Interface allowing you to:

- Block, unblock, or clear the UNIX properties for a Windows user account.
- View or modify UNIX-related properties of a Windows user account.
- Enable or clear the UNIX group properties for a Windows group.
- View or modify UNIX-related properties of a Windows group.

After you install the Integration Pack, you must publish the Web Interface extensions.

## Configuring new websites for the Web Interface

Every time you create and configure a new website for the ActiveRoles Server Web Interface, you must run the ActiveRoles Integration Configuration Wizard.

### *To configure new websites for the Web Interface*

1. To start a wizard that will help you configure newly created websites for the ActiveRoles Server Web Interface, from the **Start** menu, navigate to **All Programs > Quest Software > Authentication Service ActiveRoles Integration > ActiveRoles Integration Configuration Wizard**
2. When the configuration setup wizard completes, click **Restart ActiveRoles Now**.
3. Click **Close** when the button becomes available, and wait for a minute while ActiveRoles Server loads the startup information.

**NOTE:** Once the service restarts, wait a few minutes before you open the ActiveRoles Server Console.

# Publishing Web Interface extensions

Installing and publishing the Web Interface extensions adds a number of pages and commands to the Active Roles Web Interface, enabling the management of UNIX-specific information in Active Directory.

These pages and commands include:

- **UNIX Properties on User Account:** View or modify UNIX-related properties of a Windows user account.
- **UNIX Properties on Group:** View or modify UNIX-related properties of a Windows group.

## To publish Web Interface extensions

1. Start the ActiveRoles Server Web Interface.
  - a. Start Google Chrome or Mozilla Firefox.
  - b. Navigate to the following URL:  
`http://<IP Address>/ARWebAdmin`
  - c. At the login screen, enter your user name and password.
2. From the **Customization** menu on the main page of the ActiveRoles Server Web Interface, choose the **Reload** option.

**NOTE:** If you do not see the **Customization** link on the ActiveRoles Server Web Interface on Windows 2008 R2, run the browser with elevated privileges.

## UNIX-Enable a user

You can manage the UNIX-specific information for a Windows user account in the Active Roles Web Interface.

### To UNIX-enable a user

1. On the home page of the ActiveRoles Server, click the **Directory Management** link.
2. In the Active Roles directory tree, navigate to **Active Directory** and select the **Users** folder under your managed domain.
3. In the details pane, click a user name link.
4. From the drop-down, select **UNIX Properties**.
5. On the **UNIX Account** tab, select the **UNIX Enabled** option.
6. Modify any of the UNIX-related properties.

The UID Number is the unique identifier for a UNIX user. Ideally, each Windows user is assigned a unique UID number. By default the Integration Pack generates a unique ID automatically. If you change the User ID, the Integration Pack checks to ensure the specified value is unique among UNIX-enabled users.

**NOTE:** The **Primary Group** box displays the Domain Name of the group corresponding to the Primary Group ID. You can click **Change** to browse UNIX-enabled groups to find the Primary Group by name.

7. To commit your changes, click **Save**.

## UNIX-Disable a user

You can use ActiveRoles Server to UNIX-disable users.

### *To UNIX-disable a user*

1. On the home page of ActiveRoles Server, click the **Directory Management** link.
2. In the Active Roles directory tree, navigate to **Active Directory** and select the **Users** folder under your managed domain.
3. In the details pane, click a user name link.
4. From the drop-down, select **UNIX Properties**.
5. On the **UNIX Account** tab, clear the **UNIX Enabled** option.
6. To commit your changes, click **Save**.

UNIX-disabling a user changes their login shell to `bin/false`.

## Clearing UNIX attributes

After you UNIX-disable a user, you may want to clear that user's UNIX attributes.

### *To clear UNIX attributes*

1. Click the **Directory Management** link on the home page of ActiveRoles Server.
2. From the ActiveRoles Server directory tree, navigate to **Active Directory** and select the **Users** folder under your managed domain.
3. In the details pane, click a user name link.
4. From the drop-down menu, select **UNIX Properties**.
5. Clear the text of each UNIX-related property and click **Save**.

**NOTE:** When you click **Save**, if there is a UNIX property in any of the fields, the Integration Pack makes no changes to the user's UNIX properties.

# UNIX-Enable a group

You can manage the UNIX-specific information for a Active Roles Web Interface.

## *To UNIX-enable a group*

1. On the home page of ActiveRoles Server, click the **Directory Management** link.
2. In the Active Roles directory tree, navigate to **Active Directory** and select the **Users** folder under your managed domain.
3. In the details pane, click a group name link.
4. From the drop-down, select **UNIX Properties**.
5. On the **UNIX Account** tab, select the **UNIX Enabled** option.
6. >Modify any of the UNIX-related properties.

The GID Number is the unique identifier for a UNIX group. Ideally, each Windows group is assigned a unique Group ID number. By default the Integration Pack generates a unique ID automatically. If you change the GID Number, the Integration Pack checks to ensure the specified value is unique among UNIX-enabled groups.

7. To commit your changes, click **Save**.

# UNIX-Disable a group

You can use ActiveRoles Server to UNIX-disable groups.

## *To UNIX-disable a group*

1. On the home page of ActiveRoles Server, click the **Directory Management** link.
2. From the Active Roles directory tree, navigate to **Active Directory** and select the **Users** folder under your managed domain.
3. In the details pane, click a group name link.
4. From the drop-down, select **UNIX Properties**.
5. On the **UNIX Account** tab, clear the **UNIX Enabled** option.
6. To commit your changes, click **Save**.

UNIX-disabling a group clears the GID.

## Troubleshooting

To help you troubleshoot, One Identity recommends the following resolutions to some of the common problems you might encounter as you deploy and use the Safeguard Authentication Services ActiveRoles Integration Pack.

### No Application Configuration Found for Safeguard Authentication Services

The Integration Pack must have an Safeguard Authentication Services Active Roles Integration Pack Application Configuration available for each managed forest. During the Safeguard Authentication Services Active Roles Integration Pack Integration Setup for ActiveRoles Server, if you do not have an application configuration in list of domains, the ActiveRoles Integration Configuration Wizard displays an error message that says, "No Application Configuration Found for Safeguard Authentication Services Active Roles Integration Pack".

#### ***To make the Safeguard Authentication Services Active Roles Integration Pack Application Configuration available to the Integration Pack***

1. Using standard ActiveRoles Server functionality, add the Active Directory domain in which the Safeguard Authentication Services Active Roles Integration Pack Application Configuration resides to the list of domains managed by ActiveRoles Server.
- OR-
2. Delete the Safeguard Authentication Services Active Roles Integration Pack Application Configuration from its current location and re-create it in the domain where ActiveRoles Server resides.

## UNIX Properties Menu Not Visible in Web Interface

After installing the Integration Pack, whenever you select a user or group in the ActiveRoles Server Web interface, a new menu entry appears called **UNIX Properties**. If you do not see this menu entry, ensure that you configured the web site for Safeguard Authentication Services Active Roles Integration Pack ActiveRoles Integration.

### ***To configured the web site for Safeguard Authentication Services Active Roles Integration Pack ActiveRoles Integration***

- From the **Start** menu on the machine where the Integration Pack is installed, navigate to **All Programs > Quest Software > Safeguard Authentication Services Active Roles Integration Pack ActiveRoles Integration > ActiveRoles Integration Configuration Wizard** to start the wizard.

## The Customization Link is Not Available in Web Interface

To see the **Customization** link on the ActiveRoles Server web interface on Windows 2008 R2, run the browser with elevated privileges.

## Web Interface extension changes are not saved

The Web Interface extensions for the Integration Pack are based on Active Roles virtual attributes. This allows the UNIX attributes to map to the correct LDAP attributes in Active Directory based on the Safeguard Authentication Services Active Roles Integration Pack configuration. However, if the virtual attribute maps to a read-only LDAP attribute, then any changes to the virtual attribute will not be propagated to the directory. User and group objects from unmanaged domains are read-only.

# Restoring Integration Pack Web Interface configuration

To restore the Safeguard Authentication Services Active Roles Integration Pack ActiveRoles Integration extensions to the Web Interface, run ActiveRoles Integration Configuration Wizard from the **Start** menu on the ActiveRoles Server. This tool allows you to reconfigure the Web Interface extensions.

**CAUTION:** Do not select Customization > Restore Default in the ActiveRoles Server web interface unless you want to uninstall the Integration Pack. If you select Customization > Restore Defaults, all extensions are removed and the web interface is reset to the defaults.

## Repairing Integration scripts

If you modify an Safeguard Authentication Services Active Roles Integration Pack ActiveRoles Integration script and it becomes corrupt, causing errors when it is run, you can repair it.

### *To repair integration scripts*

1. Open the command line.
2. Run the following command:

```
"C:\Program Files\Quest Software \Safeguard Authentication Services Integration 2.6.x\SetupUi.exe" -force
```

## Delegated user is unable to modify UNIX attributes

To be able to manage UNIX users within his delegated domain, you must assign a delegated user read permissions to the Application Configuration.

**Problem:** Even though a user or group has a **UNIX Account** tab, when you select the tab, the UNIX attributes do not display. Instead you see a message that says, "The Configuration Setting for Safeguard Authentication Services Active Roles Integration Pack could not be found in Active Directory" even though there is a configuration in the forest. At times, a user is delegated permission to manage UNIX attributes for users and/or groups within an Organizational Unit but that user does not have read access to other containers in the domain.

**Solution:** You must delegate permission to the user by means of ActiveRoles Server so they can list and read the Safeguard Authentication Services Active Roles Integration Pack Application Configuration. For more information about the Safeguard Authentication Services Active Roles Integration Pack Application Configuration, see *Configure Active Directory for Safeguard Authentication Services Active Roles Integration Pack* in the *Safeguard Authentication Services Active Roles Integration Pack Installation Guide*.

One Identity solutions eliminate the complexities and time-consuming processes often required to govern identities, manage privileged accounts and control access. Our solutions enhance business agility while addressing your IAM challenges with on-premises, cloud and hybrid environments.

## Contacting us

For sales and other inquiries, such as licensing, support, and renewals, visit <https://www.oneidentity.com/company/contact-us.aspx>.

## Technical support resources

Technical support is available to One Identity customers with a valid maintenance contract and customers who have trial versions. You can access the Support Portal at <https://support.oneidentity.com/>.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
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- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product

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