

Single Sign On & Active Directory Integration

Use the following procedures to integrate Active Directory Sites, Users, and User Groups into FuelsManager.

Prerequisites: Users should have already been created and managed in AD. This document does not include information on how to create Users in AD.



Single Sign On (SSO) and Active Directory (AD) integration allow customers with an existing IT infrastructure to integrate Sites, User Groups, and Users managed by AD into FuelsManager. This simplifies and reduces the effort involved in adding or managing Users in FuelsManager.

When integrating SSO and AD at the Enterprise, sections 1 & 2 (below) need to be performed at the Enterprise and at the Terminal(s). A sync then needs to be performed on the Terminal once the Enterprise server is fully configured so that Configuration Settings, Users, and User Groups are pulled from the Enterprise to the Terminal(s). Refer to the Synchronization help file in FuelsManager for more information on synchronizing data.

When integrating SSO and AD at a Terminal(s) only, you must perform step 4 (below) to ensure that the *FM Active Directory Manage Service* is running.

1 Configure IIS

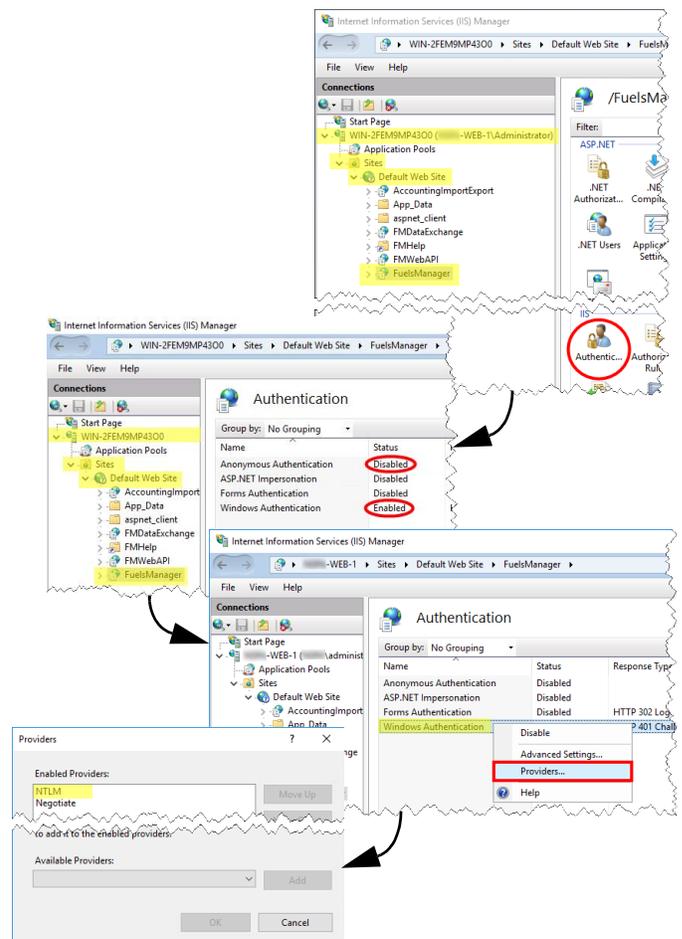
On the Web Server that hosts FuelsManager, do the following:

- Enable Windows Authentication
- Disable Anonymous Authentication

- 1) Open the **Internet Information Services (IIS) Manager**.
- 2) Expand the **[Server Name] > Sites > Default Web Site**.
- 3) Select **FuelsManager**.
- 4) On the right panel, in the IIS section double-click **Authentication**.
- 5) Right-click on **Anonymous Authentication** and select **Disable**.
- 6) Right-click on **Windows Authentication** and select **Enable**.
- 7) Right-click on **Windows Authentication** again and select **Providers**.
- 8) Ensure that **NTLM** is listed as an Enabled Provider.

If **NTLM** is not listed, select **NTLM** from the Available Providers drop down list. Click **Add** to add it to the list, and then click **OK** to save changes.

Once **Windows Authentication** is turned ON, the only way to get to the FuelsManager web site will be through **Windows Credentials**, such that the user will need to have a **Windows account** on the target domain (where the FuelsManager Web application resides).



2 Verify Automatic Logon in Intranet Zone

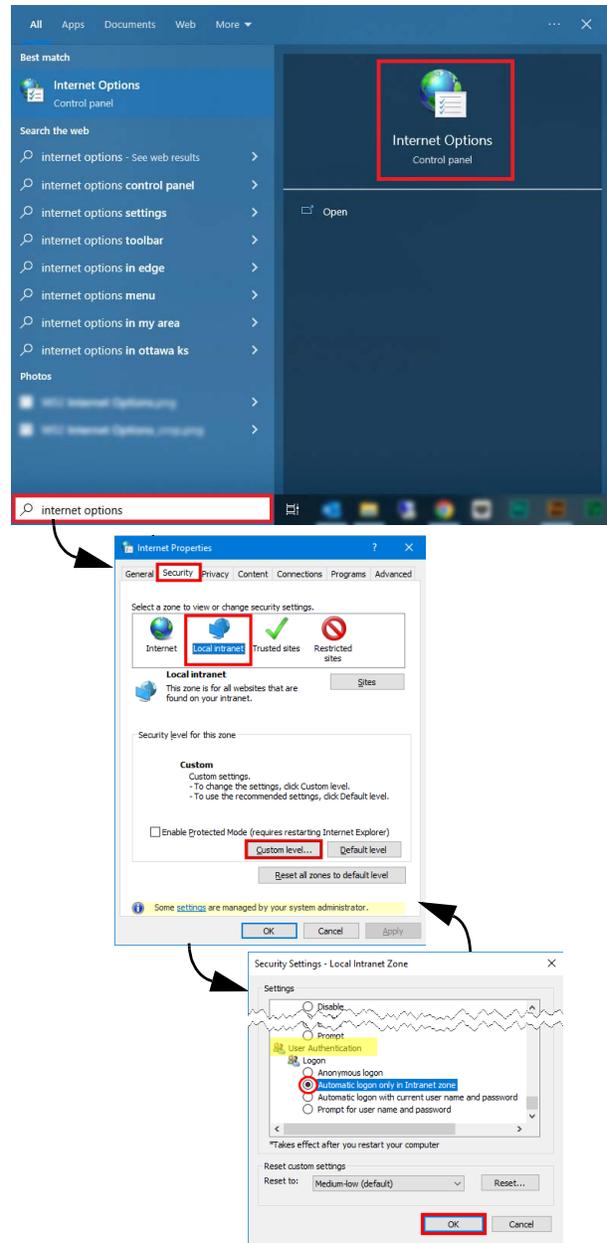
- 1) In the Windows search bar, enter **Internet options**.
- 2) Click **Internet Options** on the right panel.
- 3) In the Internet Properties dialog, select the **Security** tab.
- 4) Select the **Local intranet** zone, and then click **Custom level**.
- 5) In the Security Settings - Local Intranet Zone dialog, scroll down to the User Authentication section and ensure that **Automatic logon only in Intranet zone** is selected.

This is the default setting for Internet, Local intranet, and Trusted sites zones.

- 6) Click **OK** to confirm your selection.
- 7) In the Internet Properties window, click **OK** to save your changes.

Add the FuelsManager URL as a Trusted Site only if the browser does not pass the user credentials through, and ensure that **Automatic logon only in Intranet zone** is also selected for Trusted Sites.

You must perform a reboot for the changes to take effect.



3 Configure Active Directory

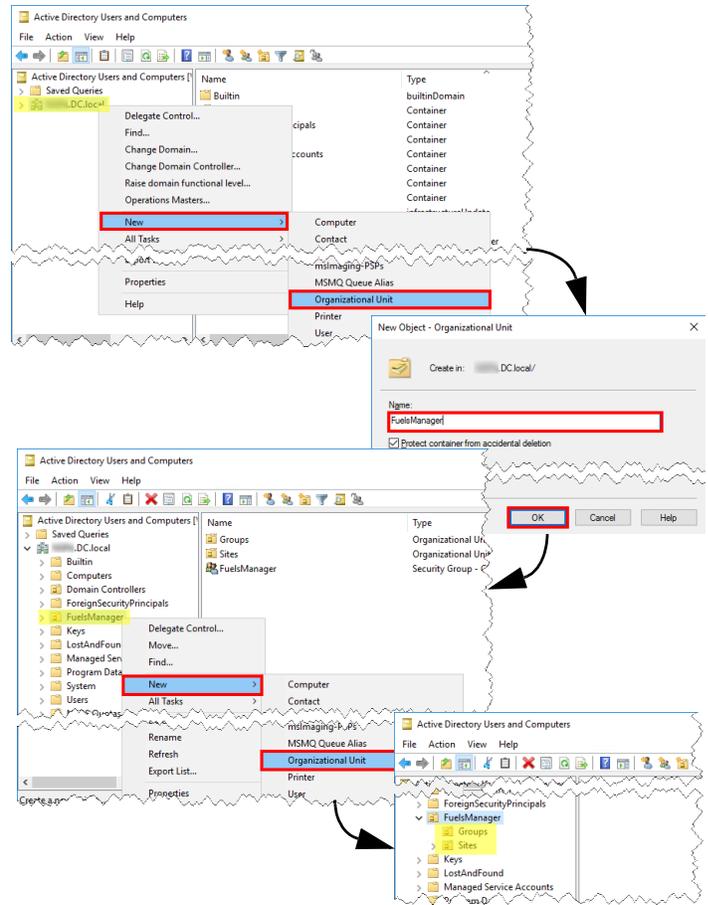
Active Directory must be properly configured to integrate with FuelsManager. The AD Users, Groups, and Sites are imported to FuelsManager through the *FM Manage Active Directory Windows Service* that runs in the background.

Create Organizational Units (OU)

Create a FuelsManager OU with two OUs under it:

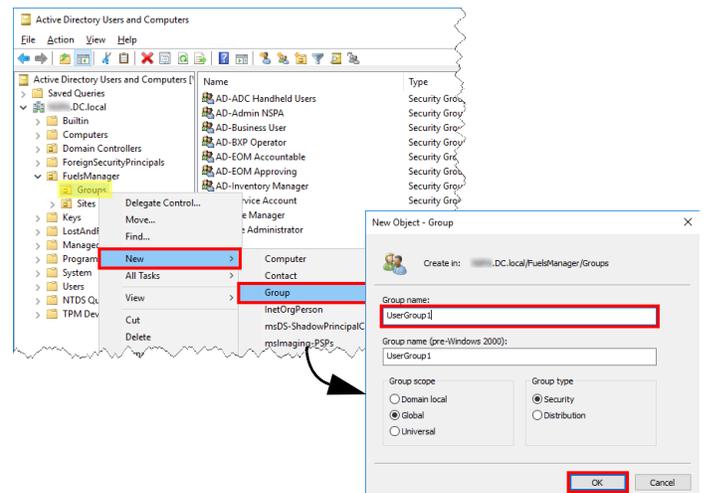
- Groups - used to map with FuelsManager User Groups.
- Sites - used to map with FuelsManager Site Groups.

- 1) Log into the Active Directory Server.
- 2) Open **Control Panel > Administrative Tools > Active Directory Users and Computers**.
- 3) From the Active Directory Users and Computers window, add a *FuelsManager* Organizational Unit (OU). Right-click the AD server name, select **New**, and then select **Organizational Unit**.
- 4) In the New Object - Organizational Unit dialog, type **FuelsManager**, and then click **OK** to save changes.
- 5) Expand the AD server name and right-click on **FuelsManager**. Create new sub OUs for **Groups** and **Sites** under the FuelsManager OU.



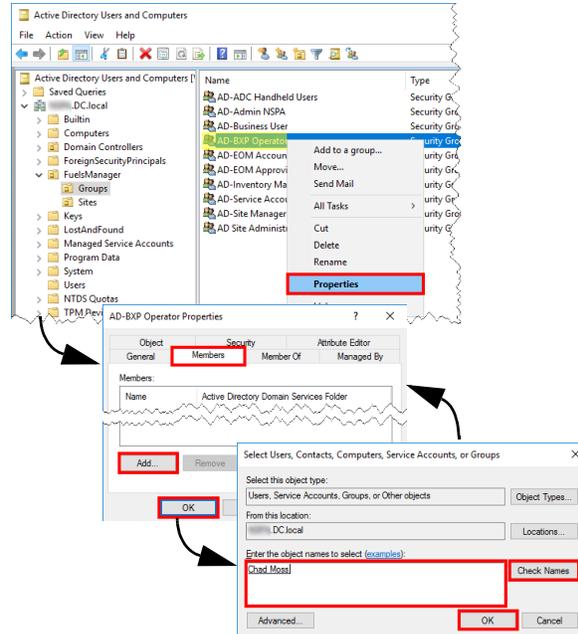
Configure AD User Groups

- 1) Right-click on the **Groups** OU and select **New > Group** to add AD User groups.
- 2) In the New Object - Group dialog, enter the user **Group name**, accept the default selections, and click **OK**.
Varec recommends that the AD User Groups be named as close as possible to the FuelsManager User Groups to avoid confusion when mapping AD to FuelsManager.
- 3) Repeat the above steps to add more AD User Groups.



Add AD Users to the Appropriate AD User Groups

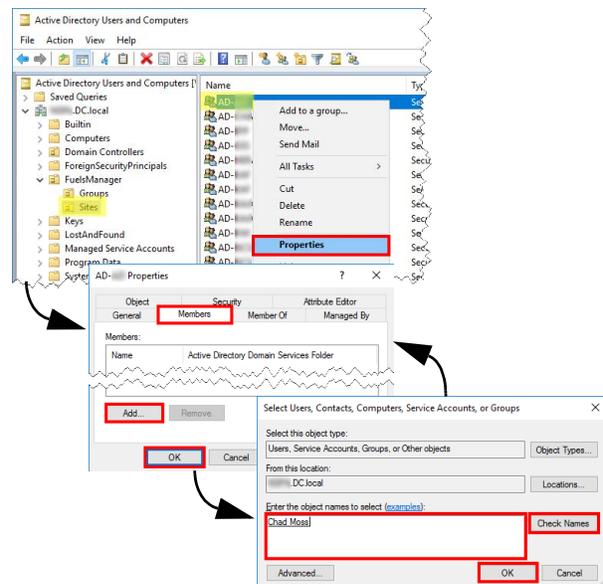
- 1) With the **Groups** OU selected on the left panel, right-click an [AD User Group] on the right panel, and select **Properties**.
- 2) In the [AD User Group name] Properties window, select the **Members** tab.
- 3) Click **Add** to add an AD User to the group.
- 4) Enter the **User name** or **ID** and then click **Check Names** to verify the User exists.
You may enter multiple User Names/IDs and separate them with a semi-colon (;).
- 5) Click **OK** to add the User.
- 6) Repeat the above steps to add Users to other User Groups.
- 7) When finished adding Users, click **OK** in the [AD User Security Group name] Properties window.



Add AD Users to the Appropriate AD Sites

- 1) On the left panel, click on the **Sites** OU.
- 2) On the right panel, right-click an [AD Site] and select **Properties**.
- 3) In the [AD Site name] Properties window, select the **Members** tab.
- 4) Click **Add** to add an AD User to the Site.
- 5) Enter the **User name** or **ID** and then click **Check Names** to verify the User exists.
You may enter multiple User Names/IDs and separate them with a semi-colon (;).
- 6) Click **OK** to add the User.
- 7) Repeat the above steps to add Users to other Sites.
- 8) When finished adding Users, click **OK** in the [AD Site name] Properties window.

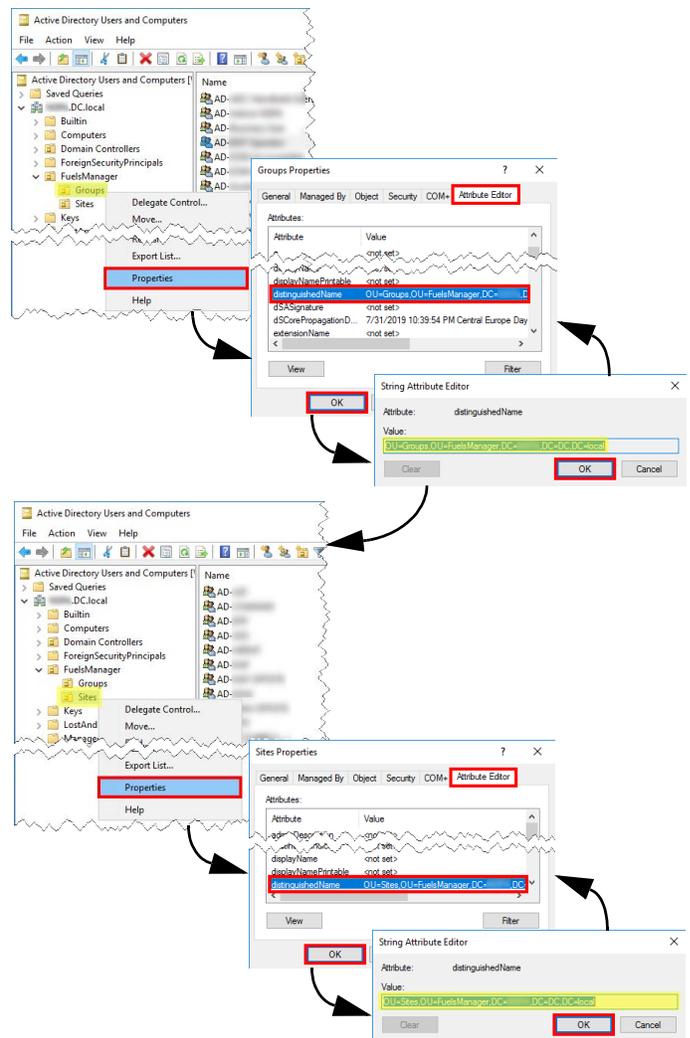
An AD user must be part of at least one Site; otherwise, the user will not be created or assigned to a Site automatically in FuelsManager.



Take Note of the Groups and Sites Organizational Unit Paths

The OU paths instructs FuelsManager where to look for the AD User Groups and Sites that need to be managed. You may copy-paste the values to Notepad temporarily, if desired. These will be copied over to FuelsManager later.

- 1) To enable the Attribute Editor, click **View** from the menu and set to **Advanced Features**.
- 2) Right-click on the **Groups** OU and select **Properties**.
- 3) On the Groups Properties window, select the **Attribute Editor** tab.
- 4) Double-click the **distinguishedName** attribute.
- 5) Highlight the **Value**, copy-paste it to Notepad, and then click **OK**.
- 6) Click **OK** on the Properties window to close it.
- 7) Right-click on the **Sites** OU and select **Properties**.
- 8) On the Sites Properties window, select the **Attribute Editor** tab.
- 9) Double-click the **distinguishedName** attribute.
- 10) Highlight the **Value**, copy-paste it to Notepad, and then click **OK**.
- 11) Click **OK** on the Properties window to close it.

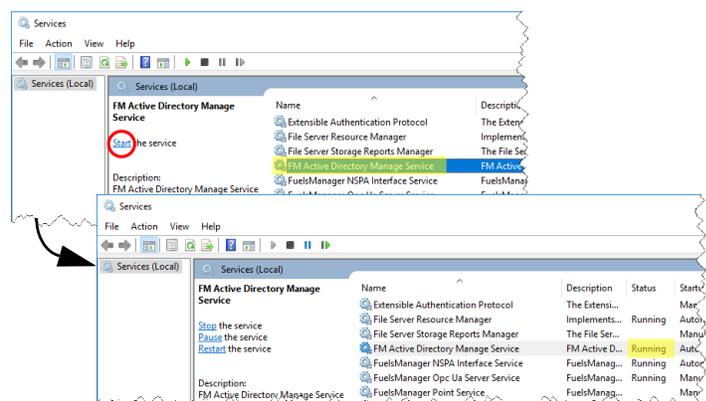


4 Verify the FM Active Directory Manage Service is Running

Prior to performing the Active Directory mappings in FuelsManager (steps 5d and 5e below), ensure that the *FM Active Directory Manage Service* is running on the App server. This updates the AD User Groups and Site Groups tables and ensures that the two tables contain data, or if there is data already, it is refreshed.

- 1) Log in to the App server.
- 2) Open Services from the **Control Panel > Administrative Tools > Services**.
- 3) In the Services window, ensure that *FM Active Directory Manage Service* is running. If not, **Start the service**.

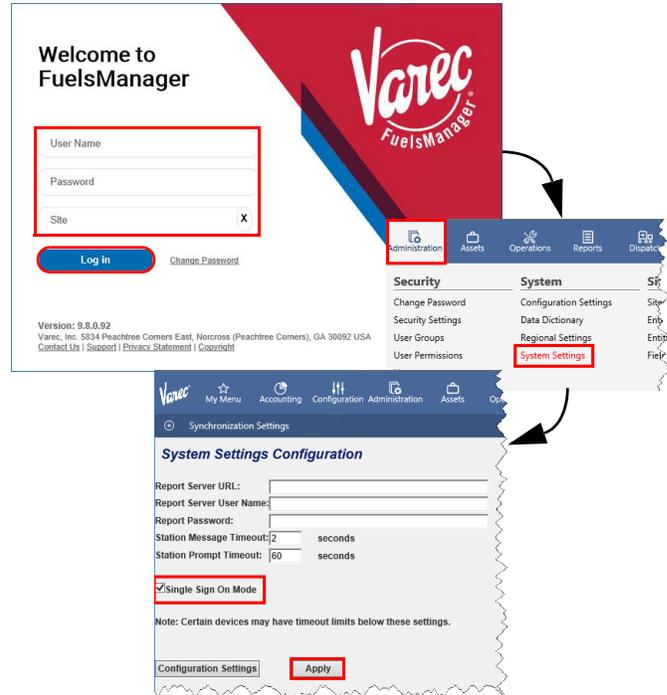
The Status next to the *FM Active Directory Manage Service* should display **Running**.



5 Configure FuelsManager

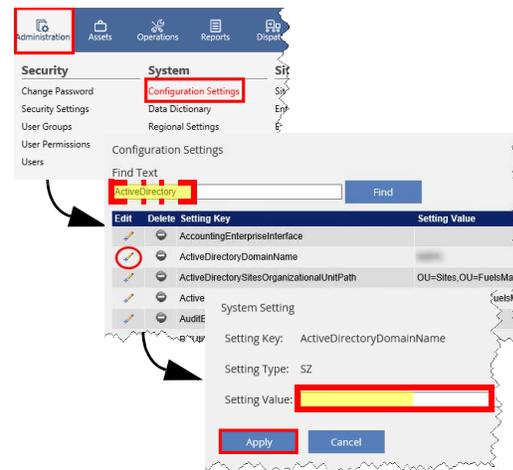
Enable Single Sign On (SSO) Mode

- 1) Log in to **FuelsManager**.
You may log in as an administrator or any other FuelsManager User.
- 2) From the menu, select **Administration > System > System Settings**.
- 3) On the System Settings Configuration page, check the **Single Sign On Mode** box.
When checked, this sets the *SingleSignOnMode* setting key in Configuration Settings to 1, and enables the *Active Directory Site* field on the General tab of Site Configuration as well as the *Active Directory User Group* field on the General tab of the User Group Configuration page. Refer to the *Single Sign On and Active Directory Integration* help page for more information.
- 4) Click **Apply** to save changes.



Set the AD Domain Name Key

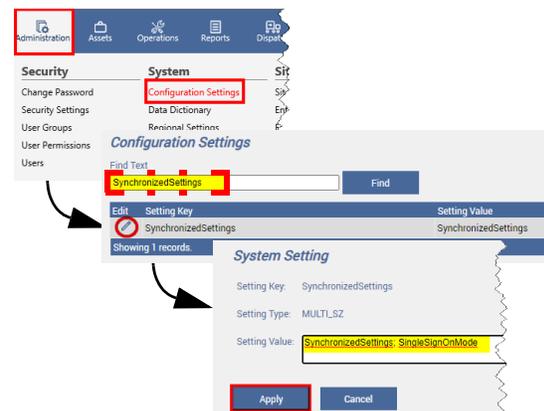
- 1) From the menu, select **Administration > System > Configuration Settings**.
- 2) On the Configuration Settings page, locate the *ActiveDirectoryDomainName* setting or enter *ActiveDirectory* in the Find Text field and then click **Find**.
- 3) Click the **Edit** icon next to *ActiveDirectoryDomainName*.
- 4) On the System Setting page, enter the **Active Directory Domain Name** you want to integrate with FuelsManager.
- 5) Click **Apply** to save your changes.



Set the Synchronized Settings Key (Optional)

This allows sync support for Single Sign On and Active Directory. Perform these steps if you will be running synchronization.

- 1) From the menu, select **Administration > System > Configuration Settings**.
- 2) On the Configuration Settings page, locate the *SynchronizedSettings* key or enter *SynchronizedSettings* in the Find Text field and then click **Find**.
- 3) Click the **Edit** icon next to *SynchronizedSettings*.
- 4) On the System Setting page, enter **SynchronizedSettings; SingleSignOnMode**.
- 5) Click **Apply** to save your changes.



Set the AD Organizational Unit Paths Keys

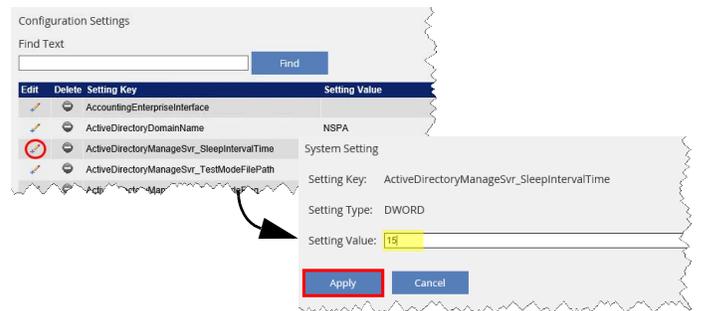
- 1) Click the **Edit** icon next to *ActiveDirectorySitesOrganizationalUnitPath*.
- 2) On the System Setting page, copy-paste the Site OU path from Notepad (step 3e above), and then click **Apply** to save changes.
- 3) Click the **Edit** icon next to *ActiveDirectoryUserGroupsOrganizationalUnitPath*.
- 4) On the System Setting page, copy-paste the Groups OU path from Notepad (step 3e above), and then click **Apply** to save changes.



Set the AD Sleep Interval Time Key

This is the sleep interval for the FuelsManager Active Directory Manage Service to check AD for new or updated User Groups, Users, and Sites. Varec recommends an interval of at least 15 minutes. Reading and updating FuelsManager may take a while depending on the number of AD User Groups, Users, and Sites configured.

- 1) Click the **Edit** icon next to *ActiveDirectoryManageSvr_SleepIntervalTime*.
- 2) On the System Setting page, enter the **sleep interval number** (in minutes).
- 3) Click **Apply** to save your changes.

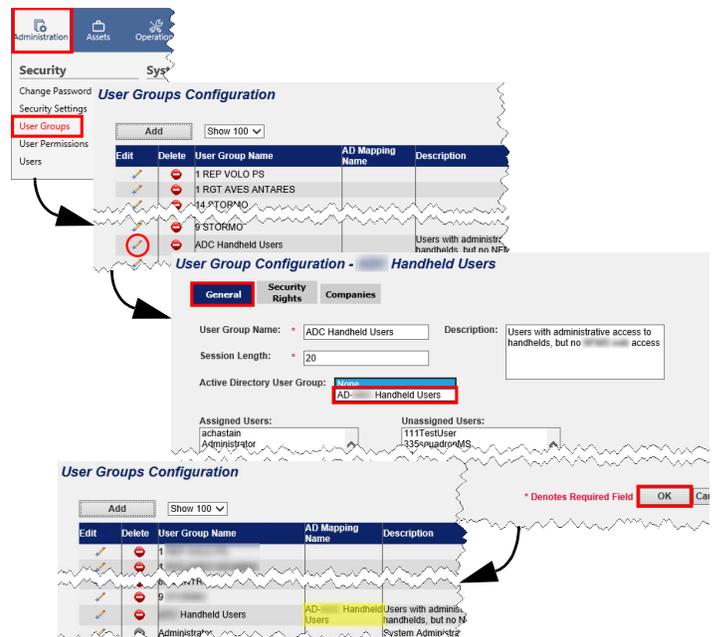


Map the AD User Group

This allows FuelsManager to automatically assign AD Users that belong to the mapped AD User Group to appropriate FuelsManager User Groups.

- 1) From the menu, select **Administration > Security > User Groups**.
- 2) On the User Groups Configuration list page, click the **Edit** icon next to the User Group you want to map.
- 3) On the General tab of the User Group Configuration page, expand the **Active Directory User Group** list, and select the **AD User Group** you want to map.
If the AD User Group you want to map is not listed, that User Group may have already been mapped to a different FuelsManager User Group. Previously mapped AD User Groups are precluded from the list.
- 4) Click **OK** to save your changes.
- 5) Repeat steps 2 to 4 to map other AD User Groups.

Once mapped, the AD User Group name displays in the AD Mapping Name column.

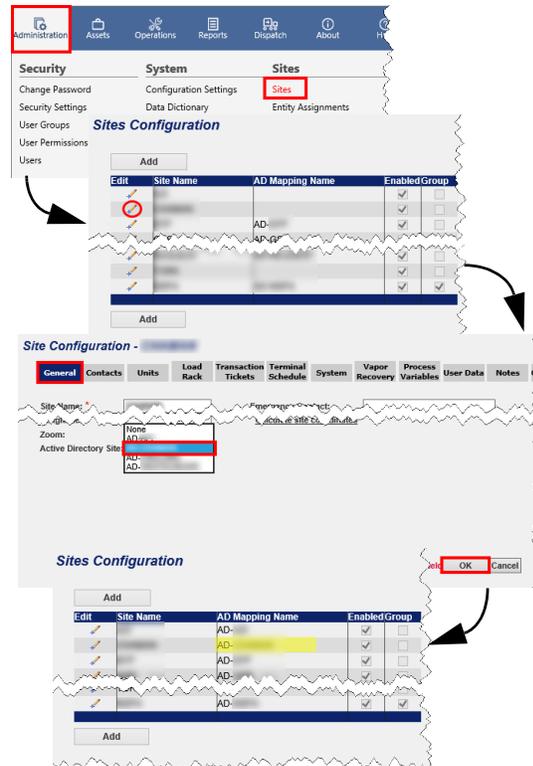


Map the AD Site/Site Group

This allows FuelsManager to automatically assign AD Users that belong to the mapped AD Site/Site Group to the appropriate FuelsManager Site/Site Group.

- 1) From the menu, select **Administration > Sites > Sites**.
- 2) On the Sites Configuration list page, click the **Edit** icon next to the Site you want to map.
- 3) On the General tab of the Site Configuration page, expand the **Active Directory Site** list, and select the **AD Site/Site Group** you want to map. If the AD Site/Site Group you want to map is not listed, that Site/Site Group may have already been mapped to a different FuelsManager Site/Site Group. Previously mapped AD Sites/Site Groups are precluded from the list.
- 4) Click **OK** to save your changes.
- 5) Repeat steps 2 to 4 to map other AD Site/Site Groups.

Once mapped, the AD Site/Site Group name displays in the AD Mapping Name column.



Mapping Scenarios

- If an AD User is not a member of a mapped AD Site/SiteGroup or AD User Group, that AD User will not be imported into FuelsManager.
- If an AD User is mapped to multiple AD Sites without being mapped to the common parent Site Group of those Sites, that AD user will not be imported to FuelsManager.
- If an AD User is a member of multiple AD Sites/Site Groups, that AD user will be owned by the FuelsManager Site Group with the highest hierarchy in the AD Site mappings, and automatically assigned down to the matching FuelsManager Sites for the remaining AD Site mappings.