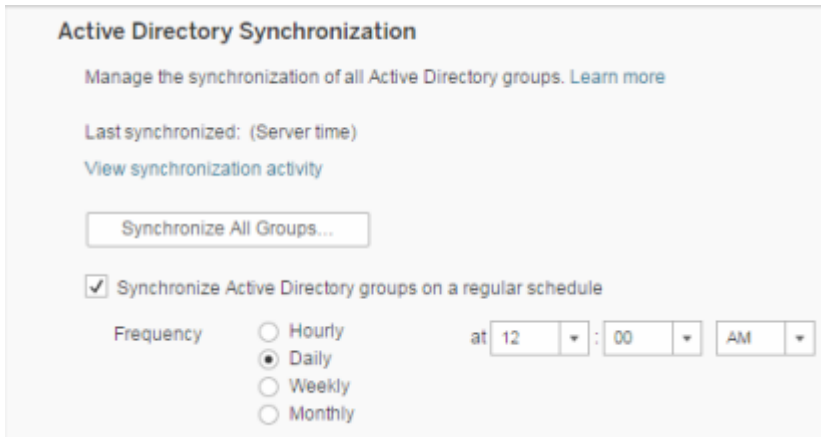# Synchronize External Directory Groups on the Server

As a server administrator, you can synchronize all external directory (such as Active Directory) groups (that have been configured on Tableau Server) on a regular schedule or on-demand on the [General] tab of the [Settings] page for the server.

Note: In the context of user and group synchronization, Tableau Server configured with LDAP identity store is equivalent to Active Directory. Active Directory synchronization features in Tableau Server function seamlessly with properly configured LDAP directory solutions.

Before you begin

Before synchronizing groups as described in this topic, you must first import the external directory group into Tableau Server. See Create Groups via Active Directory.

Synchronize external directory groups on a schedule

1. **Single-site**: Click [Settings]> [General].

   Multisite: In the site menu, click **Manage All Sites** and then click [Settings]> [General].

2. Scroll down the page to [Active Directory Synchronization], and then select [Synchronize Active Directory groups on a regular schedule].

3. Select the frequency and time of synchronization.

4. Click [Save].

Synchronize all external directory groups on demand

At any time, you can synchronize external directory (such as Active Directory) groups with [Tableau Server] to ensure that new users and changes in the external directory are reflected in all external directory groups on [Tableau Server].

1. **Single-site**: Click [Settings] > [General].

   Multisite: In the site menu, click **Manage All Sites**, and then click [Settings] > [General].

2. Under [Active Directory Synchronization], click [Synchronize All Groups].

View synchronization activity

You can view the results of synchronization jobs in the **Background Tasks for Non Extracts** administrative view. **Queue Active Directory Groups Sync** is the task that queues and indicates the number of **Sync Active Directory Group** tasks to be run.

1. **Single-site**: Click [Status].

   Multisite: In the site menu, click **Manage All Sites** and then click [Status].

2. Click the [Background Tasks for Non Extracts] link.

3. Set the [Task] filter to include **Queue Active Directory Groups Sync** and **Sync Active Directory Group**.

You can quickly navigate to this administrative view by clicking the [View synchronization activity] link in the [Settings] page for the server.

Set the minimum site role for users in an external directory group

In the[Groups - Details] page, you can set the minimum site role for group users to be applied during Active Directory synchronization.

This setting does not run synchronization; instead, it sets the minimum site role to applied to the group every time synchronization runs. The result is that when you synchronize external directory groups, new users are added to the site with the minimum site role. If a user already exists, the minimum site role is applied if it gives the user more access in a site. If you don't set a minimum site role, new users are added as [Unlicensed] by default.

Note: A user's site role can be promoted but never demoted based on the minimum site role setting. If a user already has the ability to publish, that ability will always be maintained. For more information on minimum site role, see Site roles and Active Directory import and synchronization.

1. In a site, click [Groups].

2. On the Groups page, select a group.

   Click [Actions] > [Minimum Site Role].

3. Select the minimum site role, and then click **Change Site Role**.
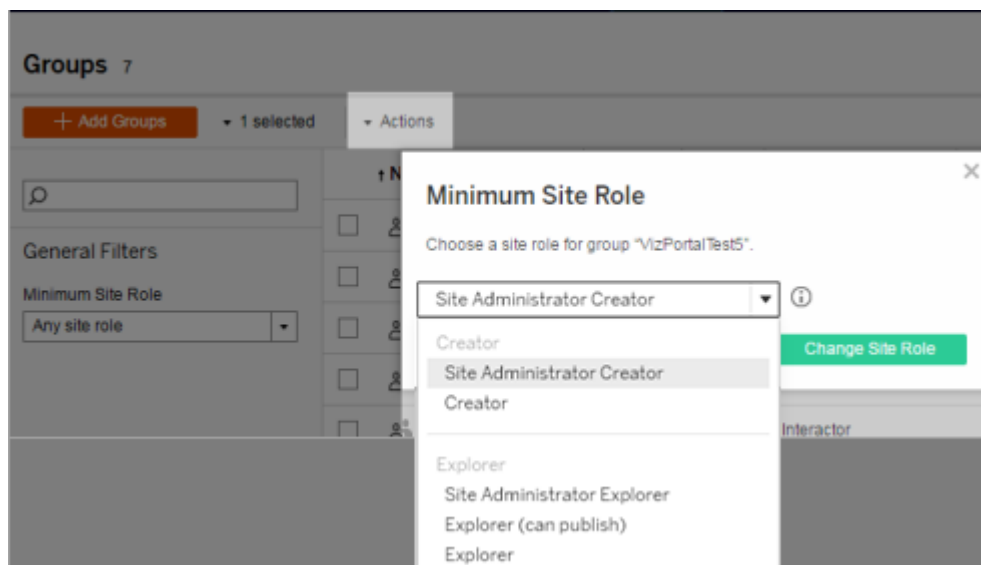
What happens when users are removed in the source external directory?

Users cannot be automatically removed from the Tableau Server through an external directory sync operation. Users that are disabled, deleted, or removed from groups in the external directory remain on Tableau Server so that administrators can audit and reassign the user's content before removing the user's account completely. For more information, see [Sync behavior when removing users from Active Directory](#).

Improving group synchronization performance

External directory synchronization is performed by the backgrounder process. The Backgrounder process is the same process that is used for managing and creating extracts, and is also used to generate subscription content. In large organizations with dynamic group membership and heavy extract usage, the external directory group synchronization process may be disruptive. We recommend running group synchronization during non-business hours.

By default, the Backgrounder process performs synchronization in a serial operation. This means that each group is synchronized, one after the other, in a single Backgrounder process. If you are running multiple instances of Backgrounder processes either on a single Tableau Server or across a distributed deployment, consider enabling parallel processing for external directory synchronization. When parallel Backgrounder processing is enabled, the group synchronization is distributed across multiple Backgrounder processes for better performance.

To enable parallel backgrounder processing for group synchronization, open TSM CLI and enter the following commands:

```
tsm configuration set -k backgrounder.enable_parallel_adsync -v true
```

```
tsm pending-changes apply
```