BoostSolutions
We make your SharePoint life easier.

AD Information Sync 2.0

User Guide

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Our web site: http://www.boostsolutions.com

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1. Introduction

SharePoint AD Information Sync (AD Information Sync) 2.0 provides a fast and convenient way to synchronize AD information to SharePoint lists based on profile either manually or automatically by schedule. AD Information Sync 2.0 supports a two-way synchronization. The changes of lists can also be synced to AD.

The user guide is used to instruct the users to configure and use the product.

For the latest copy of this and other guides, please visit the link provided:

http://www.boostsolutions.com/download-documentation.html

2. Installation

2.1 Product Files

After you download and unzip the AD Information Sync zip file from www.boostsolutions.com, you will find the following files:

Path	Descriptions
Setup.exe	A program that installs and deploys the WSP solution packages to the SharePoint farm.
EULA.rtf	The product End-User-License-Agreement.
AD Information Sync_V2_User Guide.pdf	User guide for AD Information Sync in PDF format.
Library\2.0\Setup.exe	The product installer for .Net Framework 2.0.
Library\2.0\Setup.exe.config	A file containing the configuration information for the installer.
Library\4.0\Setup.exe	The product installer for .Net Framework 4.0.
Library\4.0\Setup.exe.config	A file containing the configuration information for the installer.
Solutions\Foundtion\ BoostSolutions.FoundationSetup12.1.wsp	A SharePoint solution package containing Foundation files and resources for SharePoint 2007 or WSS 3.0.
Solutions\Foundtion\ BoostSolutions.FoundationSetup14.1.wsp	A SharePoint solution package containing Foundation files and resources for SharePoint 2010 or SharePoint Foundation 2010.
Solutions\Foundtion\ BoostSolutions.FoundationSetup15.1.wsp	A SharePoint solution package containing Foundation files and resources for SharePoint 2013 or SharePoint Foundation 2013.
Solutions\Foundtion\Install.config	A file containing the configuration information for the installer.
Solutions\ADSync\ BoostSolutions.ADSyncSetup12.2.wsp	A SharePoint solution package containing AD Information Sync files and resources for SharePoint 2007 or WSS 3.0.
Solutions\ ADSync\ BoostSolutions.ADSyncSetup14.2.wsp	A SharePoint solution package containing AD Information Sync files and resources for SharePoint 2010 or SharePoint Foundation 2010.
Solutions\ ADSync\ BoostSolutions.ADSyncSetup15.2.wsp	A SharePoint solution package containing AD Information Sync files and resources for SharePoint 2013 or SharePoint Foundation 2013.

Solutions\ADSync\Install.config	A file containing the configuration information for the installer.

2.2 Software Requirements

Before you install AD Information Sync, ensure your system meets the following requirements:

SharePoint 2013

Operating System	Microsoft Windows Server 2012 Standard or Datacenter X64 Microsoft Windows Server 2008 R2 SP1
Server	Microsoft SharePoint Foundation 2013 or Microsoft SharePoint Server 2013 Microsoft .NET Framework 4.5
Browser	Microsoft Internet Explorer 8 or greater Mozilla Firefox Google Chrome

SharePoint 2010

Operating System	Microsoft Windows Server 2008 x64 Microsoft Windows Server 2008 R2
Server	Microsoft SharePoint Foundation 2010 or Microsoft SharePoint Server 2010 Microsoft .NET Framework 3.5
Browser	Microsoft Internet Explorer 7 or greater Mozilla Firefox Google Chrome

SharePoint 2007

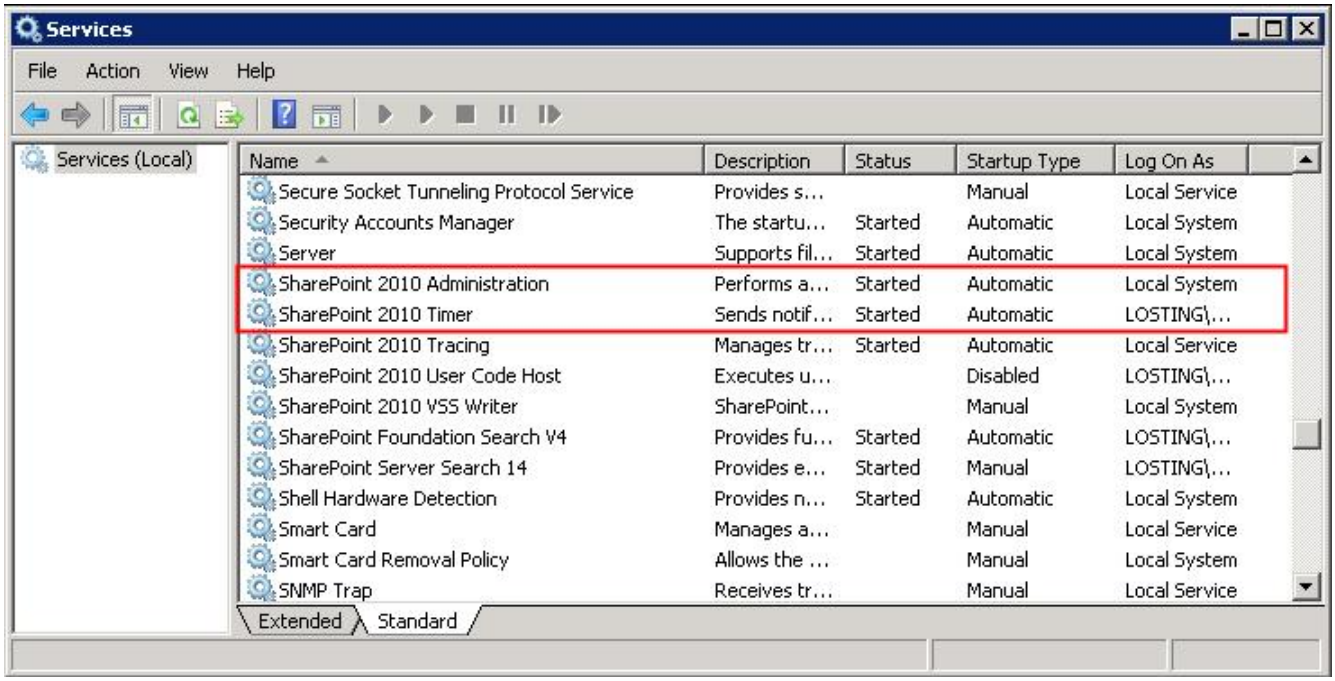
Operating System	Microsoft Windows Server 2003 x86/x64 Microsoft Windows Server 2008 x86/x64 Microsoft Windows Server 2008 R2
Server	Microsoft Windows SharePoint Services v3 or Microsoft Office SharePoint Server 2007 Microsoft .NET Framework 2.0 or 3.0 **Note**: This product is not compatible with SPS 2003 and WSS v2
Browser	Microsoft Internet Explorer 6 or greater

2.3 Installation

Follow these steps to install AD Information Sync on your SharePoint servers.

Installation Preconditions

Before you start installing the product, please make sure these services are started on your SharePoint servers: **SharePoint Administration** and **SharePoint Timer**.



AD Information Sync must be run on one front-end Web server in the SharePoint farm where **Microsoft SharePoint Foundation Web Application services** are running. Check **Central Administration → System Settings** for a list of servers running this service.

Required Permissions

To perform this procedure, you must have specific permissions and rights.

- Member of the local server's **Administrators** group.
- Member of the **Farm Administrators** group.

To install AD Information Sync on SharePoint server.

1. Download the zip file (*.zip) of the product of your choice from the BoostSolutions website, then extract the file.

2. Open the created folder and run the **Setup.exe** file.

> ***Note*** If you cannot run the setup file, please right click the **Setup.exe** file and choose **Run as administrator**.

3. A system check is performed to verify if your machine meets all the requirements for installing the product. After the system check is finished, click **Next**.
4. Review and accept the End-User License Agreement and click **Next**.
5. In the **Web Application Deployment Targets**, select the web applications you are going to install and click **Next**.

> ***Note*** If you select **Automatically activate features**, the product features will be activated in the target site collection during the installation process. If you want to manually activate the product feature later, uncheck this box.

6. Upon completion of the installation, details are displayed showing which web applications you product has been installed to. Click **Close**.

2.4 Upgrade

Download the latest version of our product and run the **Setup.exe** file.

In the **Program Maintenance** window, select **Upgrade** and click **Next**.

2.5 Uninstallation

If you want to uninstall the product, double-click the **Setup.exe** file.

In the **Repair or Remove** window, select **Remove** and click **Next**. Then the application will be removed.

2.6 Command_Line Installation

The following instructions are for installing the solution files for AD Information Sync in **SharePoint 2010** by using the SharePoint STSADM command line tool.

Required permissions

To use STSADM, you must be a member of the local Administrators group on the server.

To install AD Information Sync on SharePoint server.

1. Extract the files from the product zip pack to a folder on one SharePoint server.

2. Open a command prompt and make sure your path is set with the SharePoint bin directory.

   - **SharePoint 2010**

   C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\14\BIN

   - **SharePoint 2013**

   C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\15\BIN

   - **SharePoint 2007**

   C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\12\BIN\stsadm.exe

3. Add the solution files to SharePoint in the STSADM command line tool.

   stsadm -o addsolution -filename BoostSolutions.ADSyncSetup14.2.wsp

   stsadm -o addsolution -filename BoostSolutions.FoundationSetup14.1.wsp

4. Deploy the added solution with the following command:

   stsadm -o deploysolution -name BoostSolutions.ADSyncSetup14.2.wsp -allowgacdeployment –url [virtual server url] –immediate

   stsadm -o deploysolution -name BoostSolutions.FoundationSetup14.1.wsp -allowgacdeployment –url [virtual server url] –immediate

5. Wait for the deployment to complete. Check the final status of the deployment with this command:

   stsadm -o displaysolution -name BoostSolutions.ADSyncSetup14.2.wsp

   stsadm -o displaysolution -name BoostSolutions.FoundationSetup14.1.wsp

   The result should contain a <Deployed> parameter for which the value is TRUE.

6. In the STSADM tool, activate the features.

   stsadm -o activatefeature -name SharePointBoost.ADSync –url [site collection url] –force

   stsadm -o activatefeature -name SharePointBoost.ADSync.TimerJob –url [virtual server url] –force

To remove AD Information Sync from SharePoint servers.

1. Removal is initiated with the following command:

   stsadm -o retractsolution -name BoostSolutions.ADSyncSetup14.2.wsp -immediate -url [virtual

server url]

stsadm -o retractsolution -name BoostSolutions.FoundationSetup14.1.wsp –immediate –url [virtual server url]

2. Wait for the removal to finish. To check the final status of the removal you can use the following command:

stsadm -o displaysolution -name BoostSolutions.ADSyncSetup14.2.wsp

stsadm -o displaysolution -name BoostSolutions.FoundationSetup14.1.wsp

The result should contain the <Deployed> parameter for which the value is FALSE and the <LastOperationResult> parameter with the RetractionSucceeded value.

3. Remove the solution from the SharePoint solutions storage:

stsadm -o deletesolution -name BoostSolutions.ADSyncSetup14.2.wsp

stsadm -o deletesolution -name BoostSolutions.FoundationSetup14.1.wsp

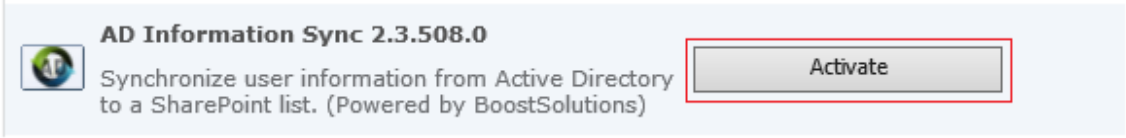
2.7 Feature Activation

Activate feature in site collection

By default, the application's features are automatically activated once the product is installed. You can also activate the product feature manually.

1. On the Site Actions menu

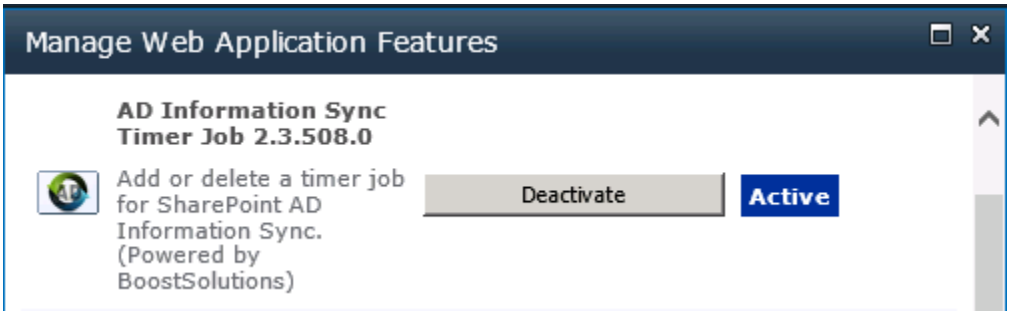
, click **Site Settings**.
2. Under **Site Collection Administration,** click **Site collection features**.
3. Find the application feature and click **Activate**. After the feature is activated, the Status column lists the feature as **Active**.



Activate AD Information Sync's feature in Central Administration

1. On the Quick Launch, click **Application Management**.
2. On the **Application Management** page, under **Manage Applications**, click **Manage Web applications**.
3. Select a web application you want to configure and click **Manage Features** on the ribbon.

4. Find AD Information Sync's features and click **Activate**. After a feature is activated, the Status column lists the feature as **Active**.

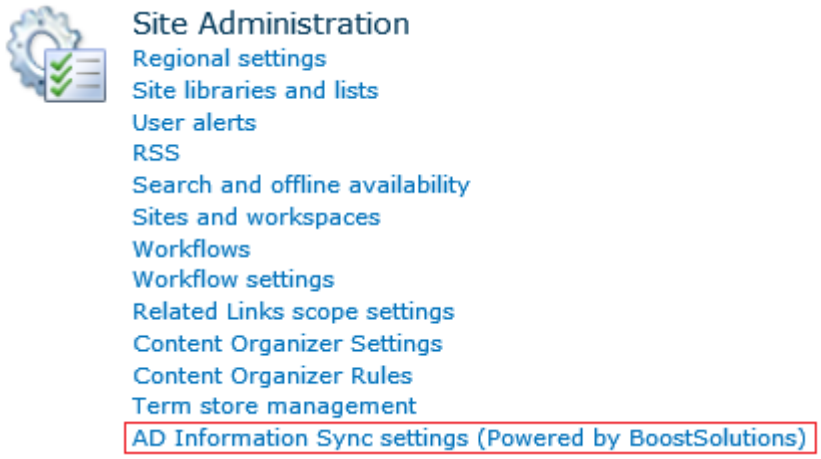


3. Configure AD Information Sync Settings

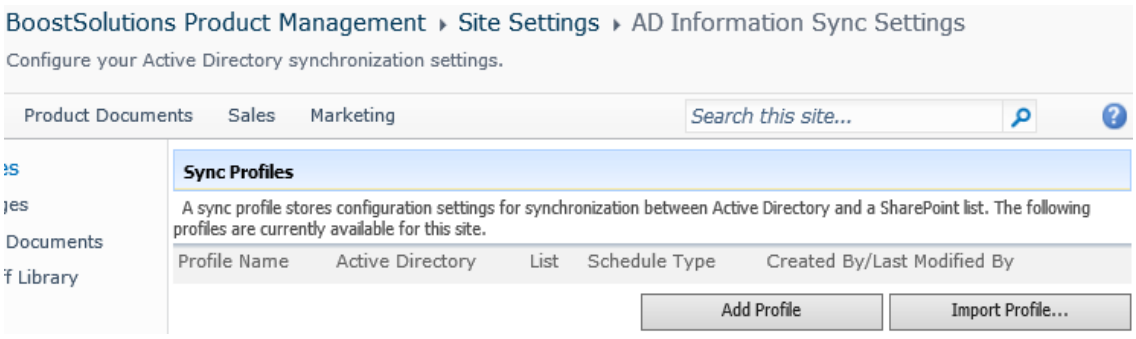
Note: To configure the settings of AD Information Sync, make sure you can: manage web site, manage lists, add items, edit items, delete items, and view items.

3.1 Enter AD Information Sync Settings Page

1. In the **Site Actions** menu, click **Site Settings**.
2. On the **Site Settings** page, find the entry of AD Information Sync settings under **Site Administration**.

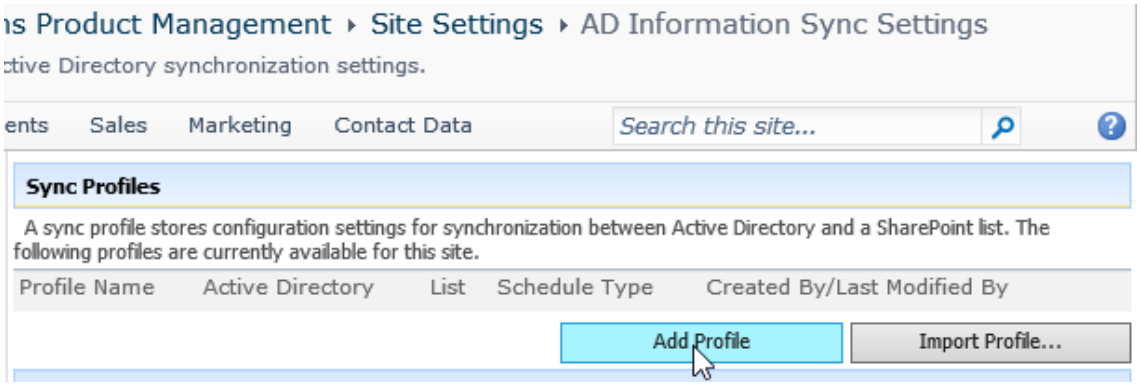


3. Click **AD Information Sync settings** to access the settings page of the product.



3.2 Add a Sync Profile

On the **AD Information Sync Settings** page, click **Add Profile**.

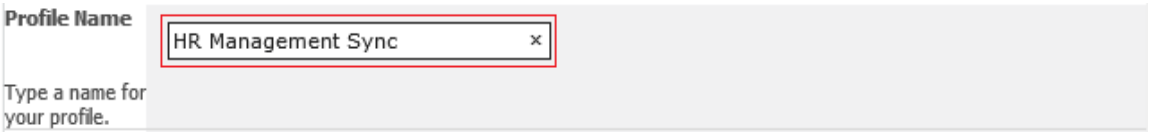


Note: If there are no lists in the site, you need to create one. Otherwise, when you click **Add Profile**, an error will occur.

On the **Profile Settings** page, you can configure the settings of the Sync Profile you add.

3.2.1 Specify Profile Name

In the **Profile Name** section, type a name for your profile.



3.2.2 Select a SharePoint List

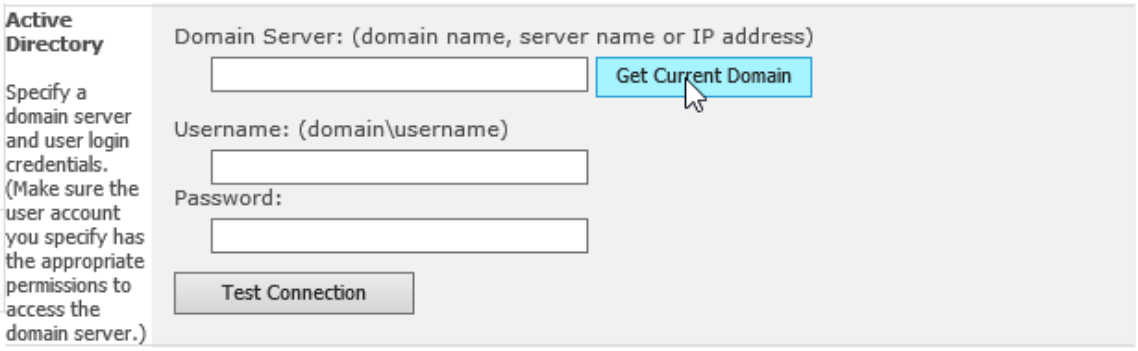
In the **List** section, select a SharePoint list to which you want to store AD information.

Note: The **List** contains all lists in the current site. List types supported include: Custom List, Task,

Calendar, Announcement, Custom List in Datasheet View, Issue Tracking, Project Tasks and Discussion Board, User Information List and Contact.

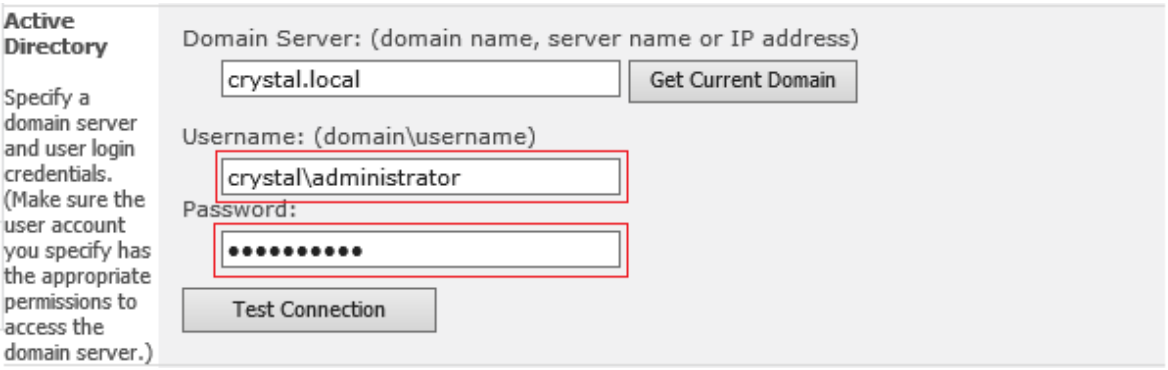
3.2.3 Connect to AD

1. In the **Active Directory** section, click **Get Current Domain.**



Also, you can type the domain name, **server name** or **IP address** of the Domain server in the **Domain Server** text box.

2. Enter the username and password.



Note: The specified user has to have access rights to the domain server.

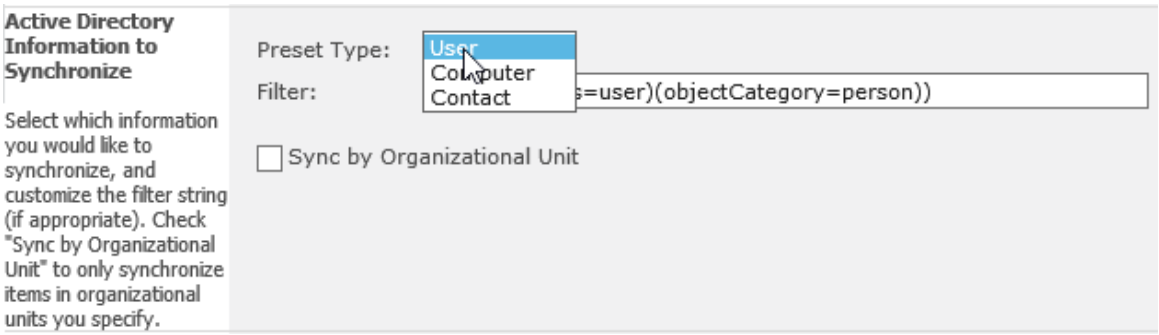
If you want to sync information from list to AD, the specified user must belong to the **Domain Admin** group.

3. Click **Test Connection** to test whether you can connect to the specified active directory.

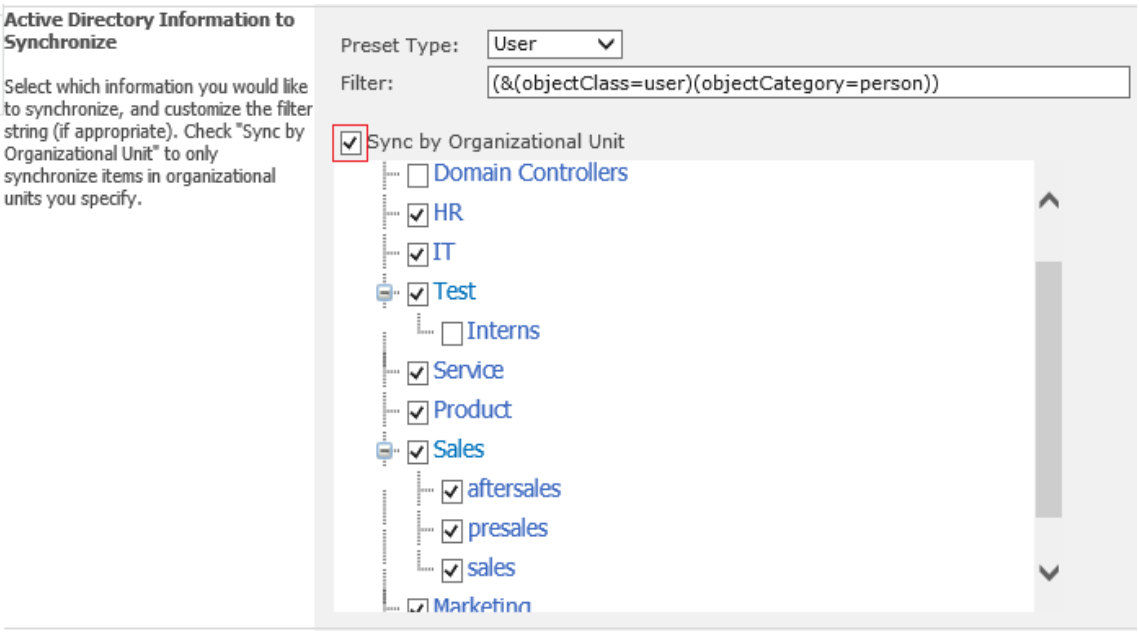
3.2.4 Filter AD Information to Sync

In the **Active Directory Information to Synchronize** section, you can select which information you want to sync.

- **Present Type**: select one object to synchronize, user, computer or contact.



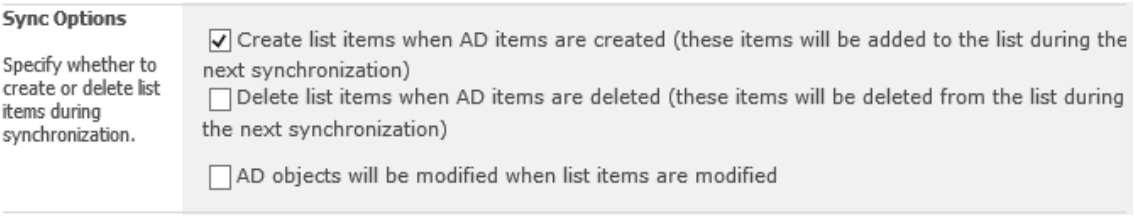
- **Filter**: AD objects can be filtered by LDAP queries. You can enter customized LDAP queries in the **Filter** field manually.
- **Sync by Organization Unit**: to sync the contained information in the OU, select the checkbox next to the OU name.



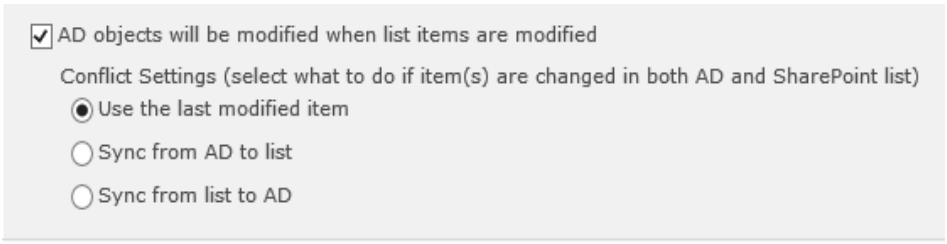
3.2.5 Select Sync Options

In the **Sync Options** section, specify whether to create or delete list items when AD items are created or deleted, or modify AD objects when list items are modified.

- **Create list items when AD items are created:** when an AD item is created, it will be created automatically in the list. For first time you add a profile, you need to select this checkbox. Otherwise, the list will not be populated with items from AD.
- **Delete list items when AD items are deleted**: when an AD item is deleted, the corresponding item in the list will be deleted.
- **AD objects will be modified when list items are modified:** to sync any modifications made in SharePoint list to AD.



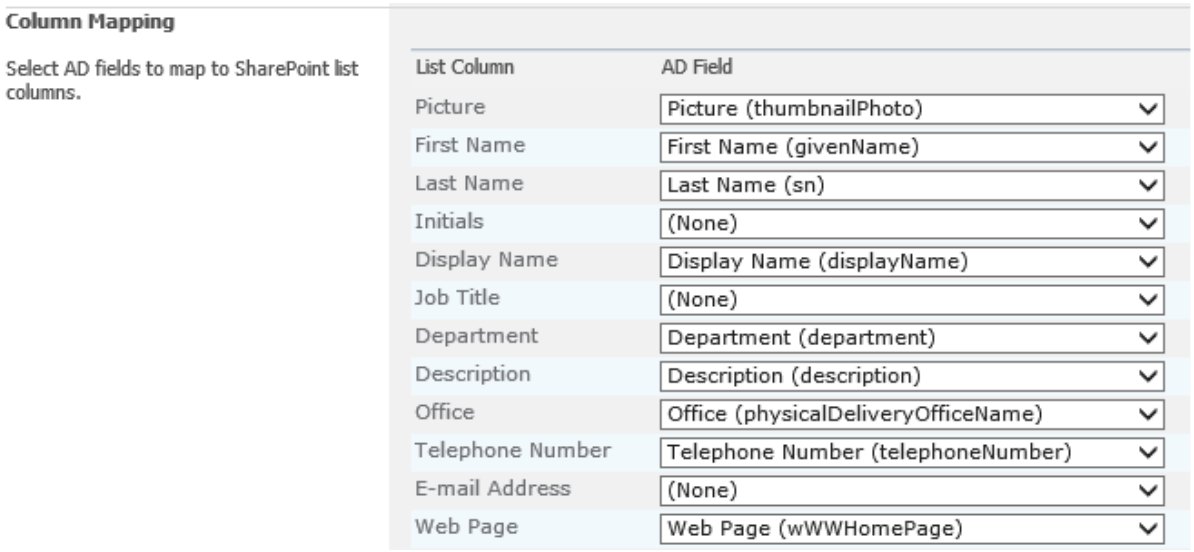
When you select the checkbox **AD objects will be modified when list items are modified**, more options will be displayed. You can select what to do if items(s) are changed in both AD and a SharePoint list.



- **Use the last modified item**: compare the modifications between SharePoint list and AD, and sync the last modifications to list or AD.
- **Sync from AD to list**: always update list items with AD modifications.
- **Sync from list to AD**: always update AD items with list modifications.

3.2.6 Select AD Fields for Column Mapping

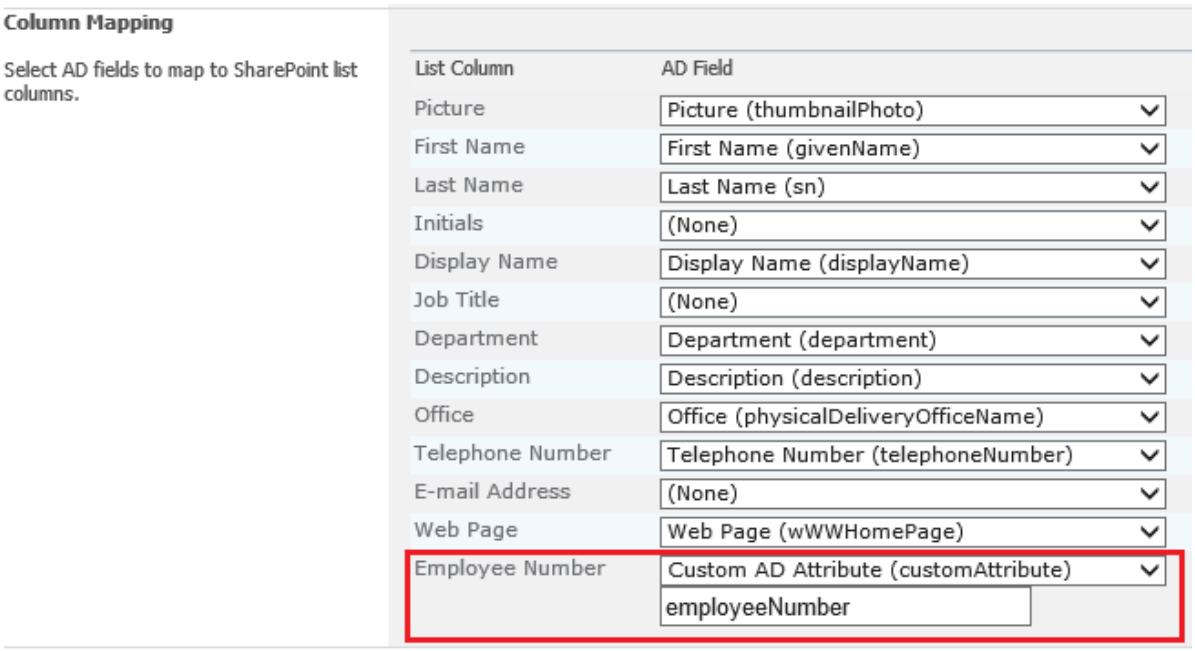
1. In the **Column Mapping** section, select the AD fields to map to the SharePoint list columns.



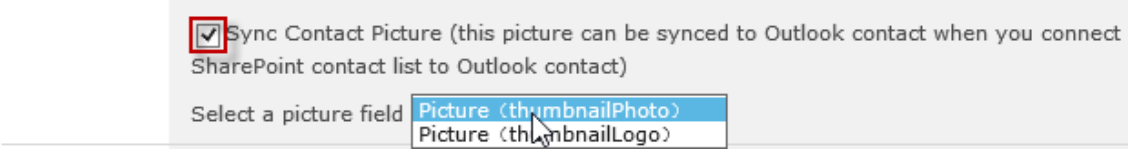
AD Information Sync stores the AD thumbnail as item's attachment, so to sync the thumbnails, you need to enable Attachment feature in the list (go to List Settings>Advanced Setting, find **Attachments**).

Currently, AD Information Sync supports all standard column types, excluding Date and Time, Lookup, Yes/No, KPI, Calculated, Business Data and Managed Meta Data columns. Unsupported columns will not show up in the Column Mapping section.

2. To sync an AD field that is unavailable in the drop-down list, select **Custom AD Attribute** from the drop-down list, and then enter the attribute name (such as *employeeNumber*).



4. Specify if the thumbnail is synced to the contact list.



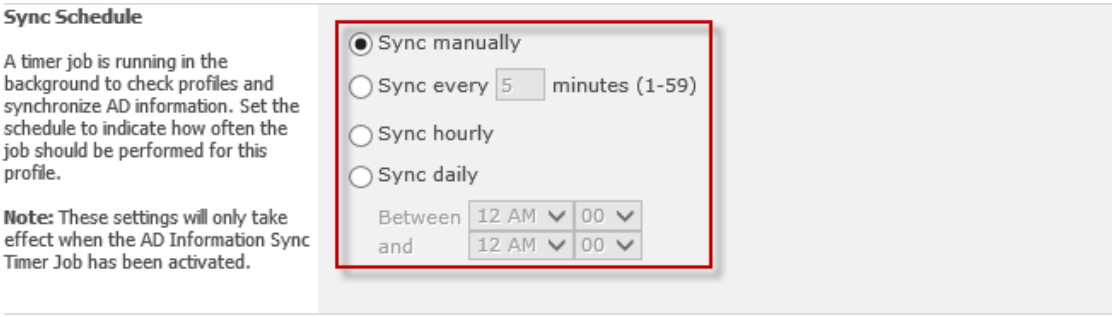
3.2.7 Specify Sync Schedule

Specify if the information is synced automatically in the background based on the interval settings.

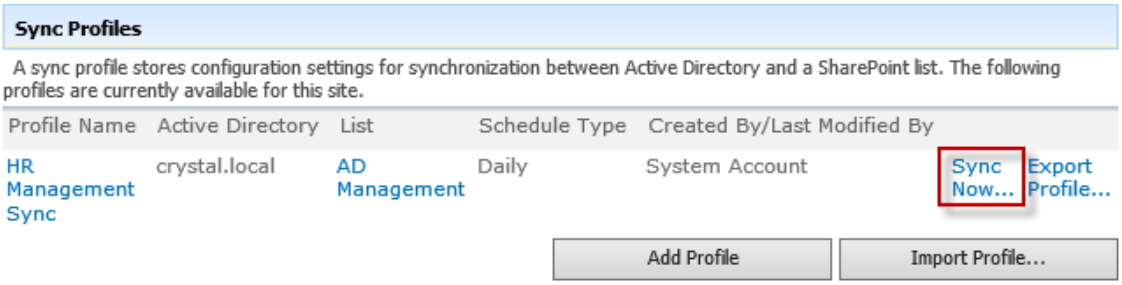
The settings of the Sync Schedule take effects only when the **AD Information Sync Timer Job** is activated in the Central Administration.

To activate the AD Information Sync Timer Job, see chapter 2.7 Feature Activation.

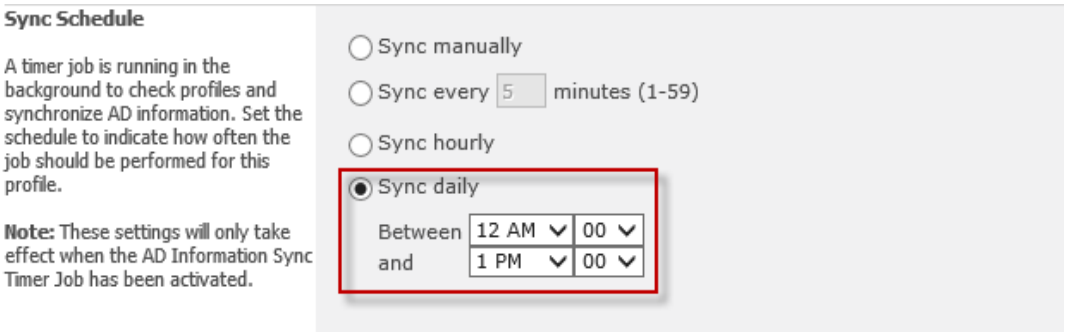
In the **Sync Schedule** section, specify the AD sync schedule type.



- **Sync manually**: sync information only when the **Sync Now** button is clicked on the **AD Information Sync Settings** page.



- **Sync every *n* minutes (1-59)**: sync information every some specified minutes. If there is too much AD information to sync, the interval should be set longer.
- **Sync hourly**: sync information every hour.
- **Sync daily**: sync information every day. You can set the time range, for example, between 12AM and 1PM.

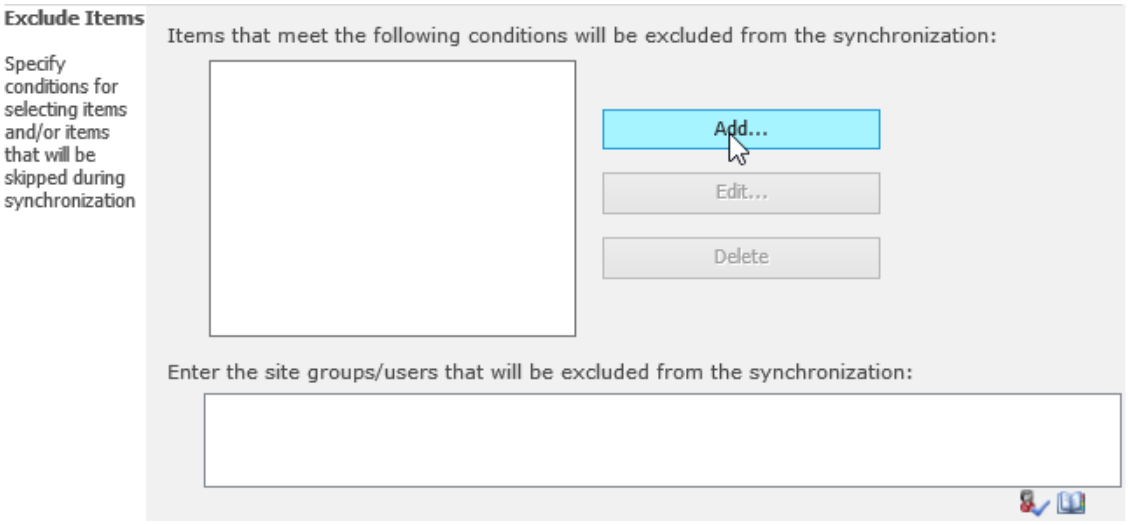


3.2.8 Exclude Items and Groups/Users

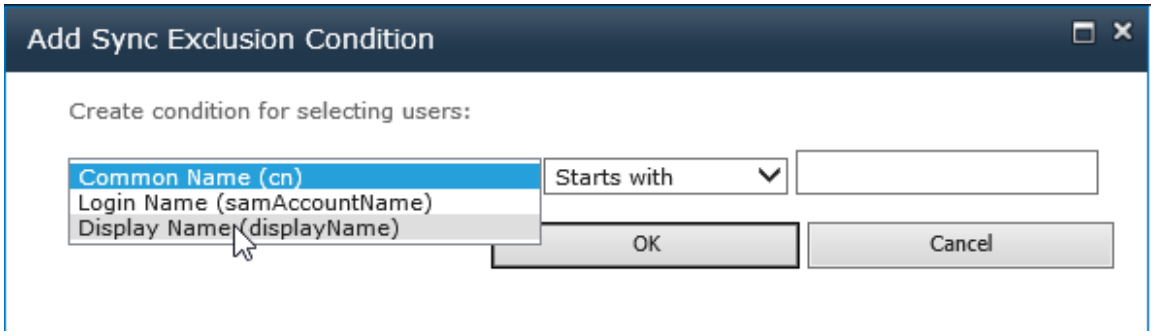
This feature allows you to specify which items are excluded during synchronization.

To create an exclusion condition

1. Click **Add** button.



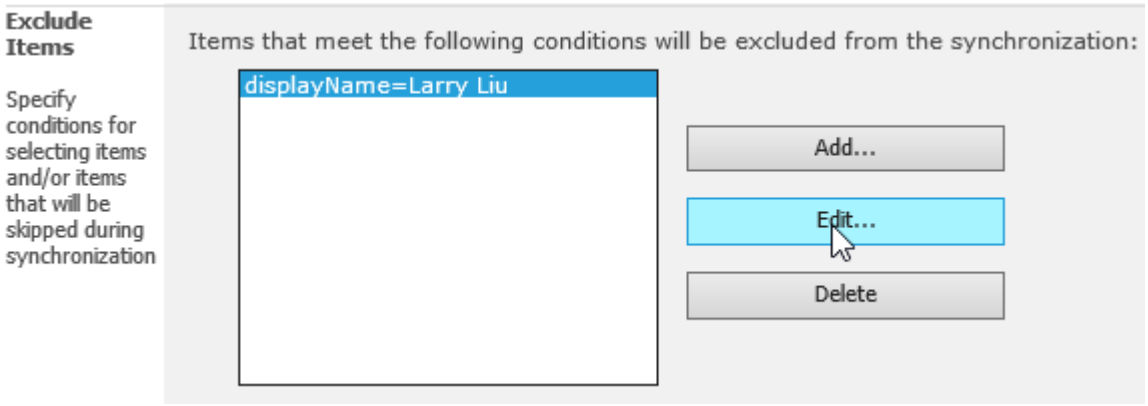
2. In the **Add Sync Exclusion Condition** window, specify a condition for selecting items.



3. Click **OK** to save your operations.

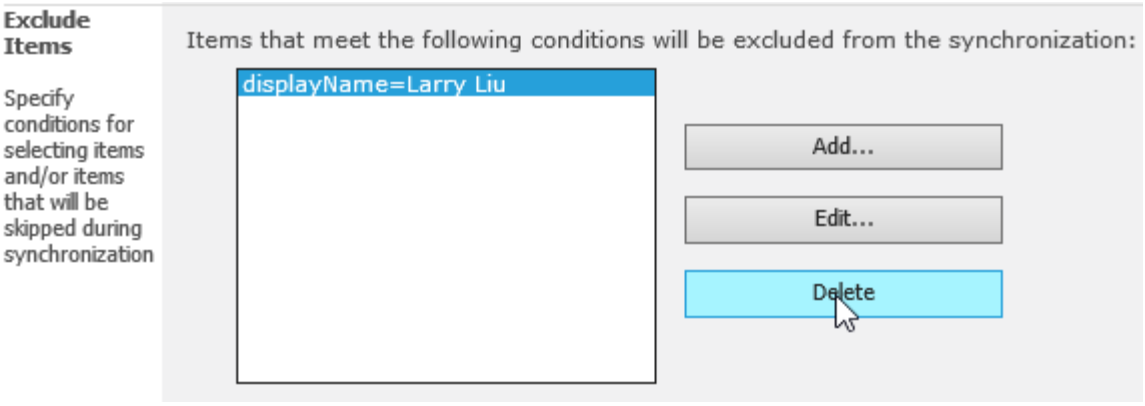
To edit an exclusion condition

Select one condition in the box, and then click **Edit**.



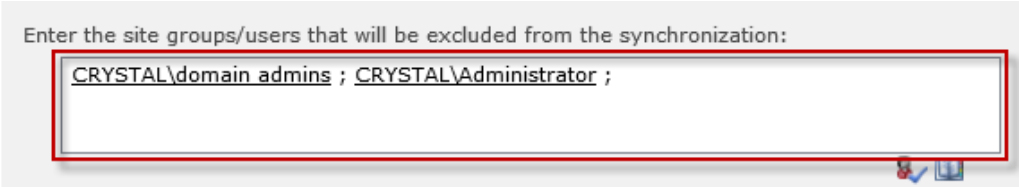
To delete an exclusion condition

Select one condition in the box, and then click **Delete**.



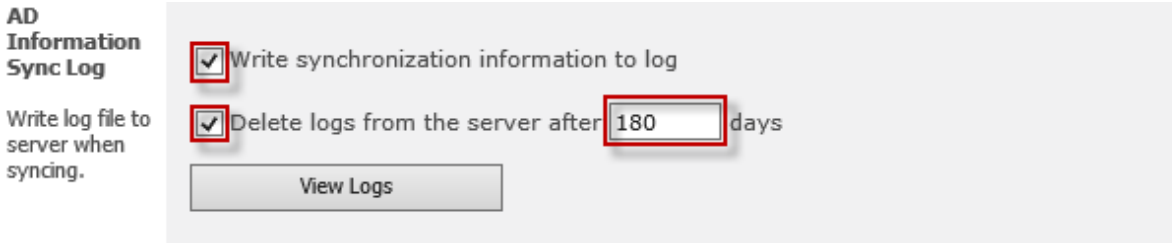
To exclude the site users/ groups from synchronization

In the people picker, type the user or group name.

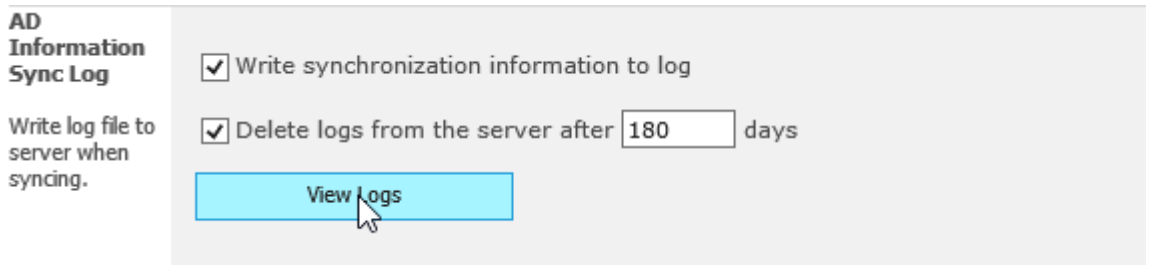


3.2.9 Configure Sync Log

1. In the **AD Information Sync Log** section, select checkbox next to **Write synchronization information to log**.
2. Specify whether and when the log should be deleted after a specified number of days.



3. To view logs, click **View Logs**.

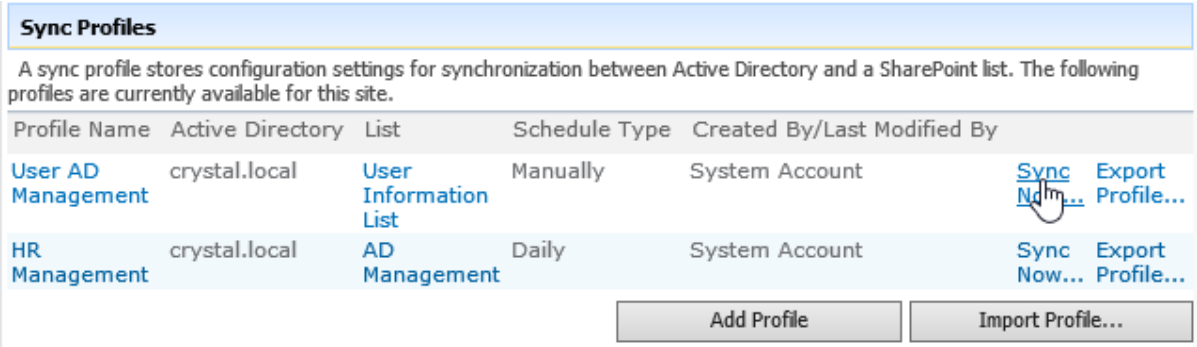


For log files management, see *3.7 Manage Log Files*.

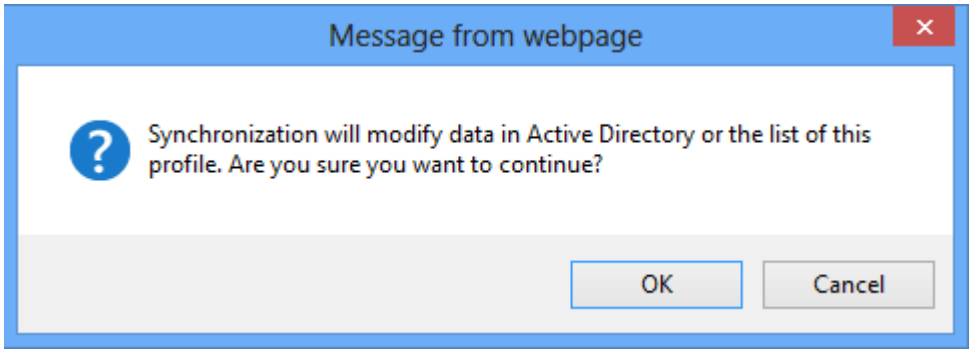
3.3 Run a Sync Profile

Once a profile is created, you can sync the information manually. To run a sync profile, go to **AD Information Sync Settings** page.

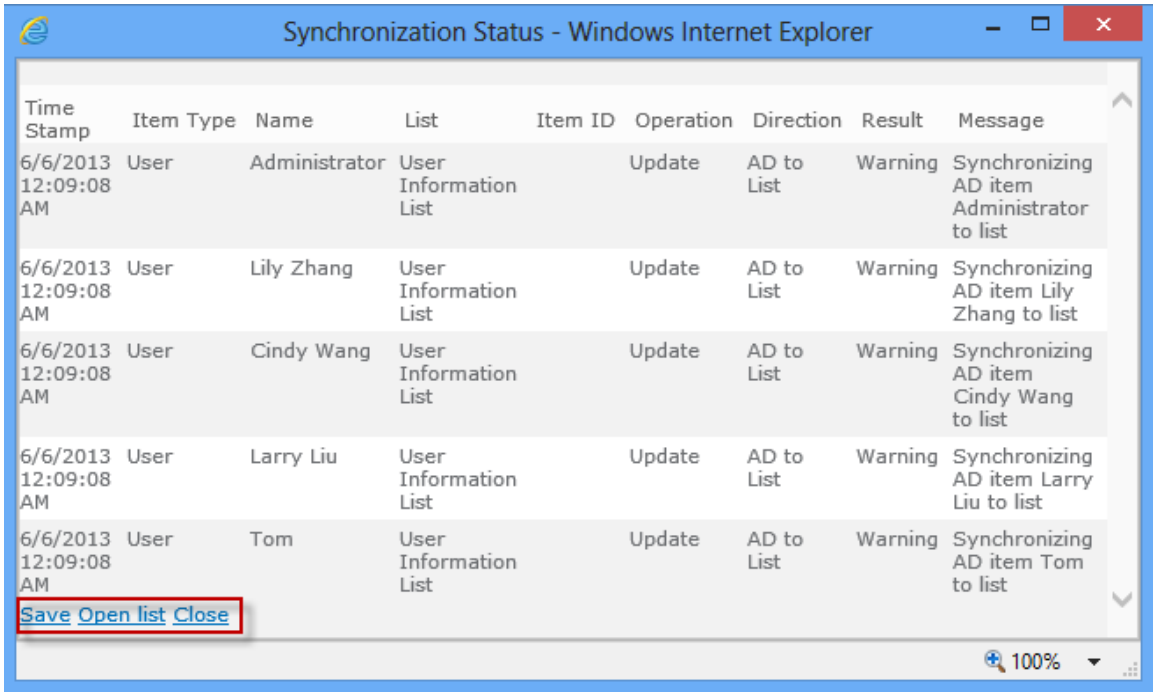
1. Click **Sync Now**.



2. A confirmation message will show up. Click **OK** if you want to continue.



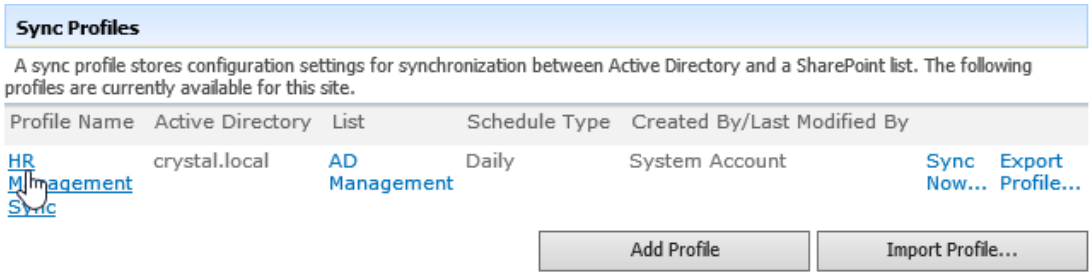
After synchronization complete, a window appears to show the Synchronization Status.



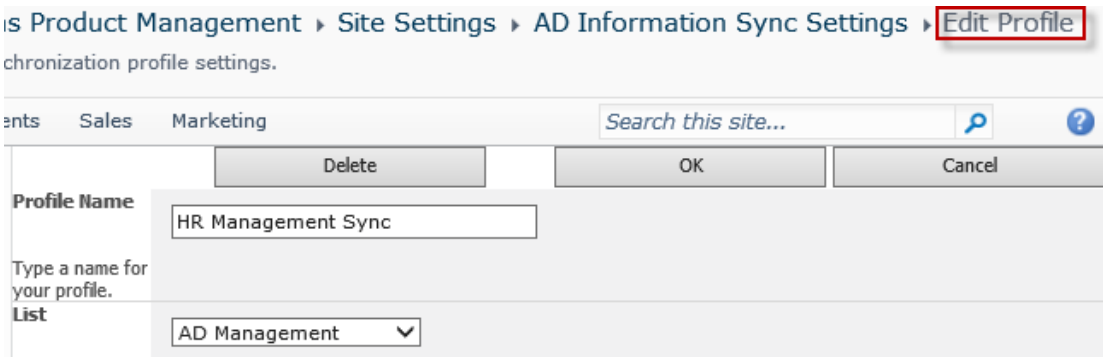
3.4 Edit or Delete a Sync Profile

You can edit or delete a Sync Profile after it is added to the AD Information Sync settings page.

1. On the **AD Information Settings** page, click the profile name to enter the **Edit Profile** page.



2. On the **Edit Profile** page, modify or delete the sync profile.

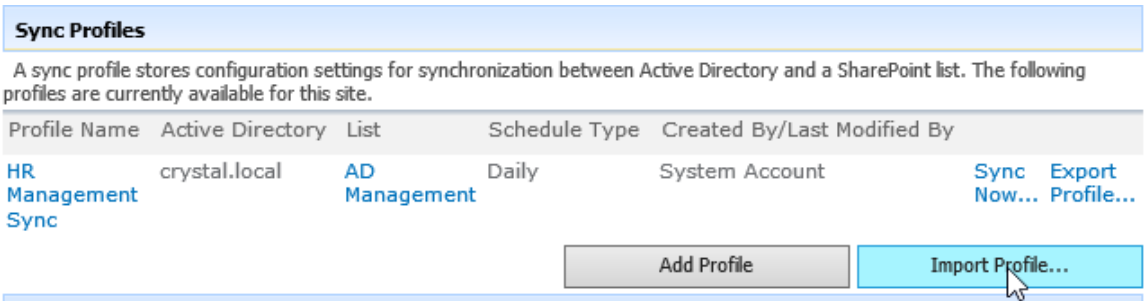


Note: If the current user is not the user who last modified the profile then he/she needs to enter the password required to connect the domain server to AD.

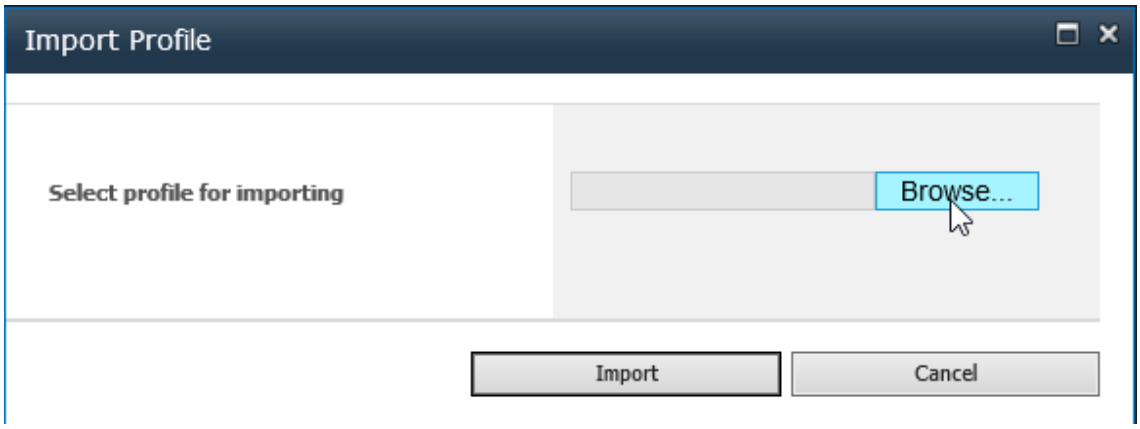
3.5 Import a Profile

AD Information Sync provides a quick and easy method to create a profile and sync information by importing an existing profile.

1. On the AD Information Sync Settings page, click **Import Profile**.



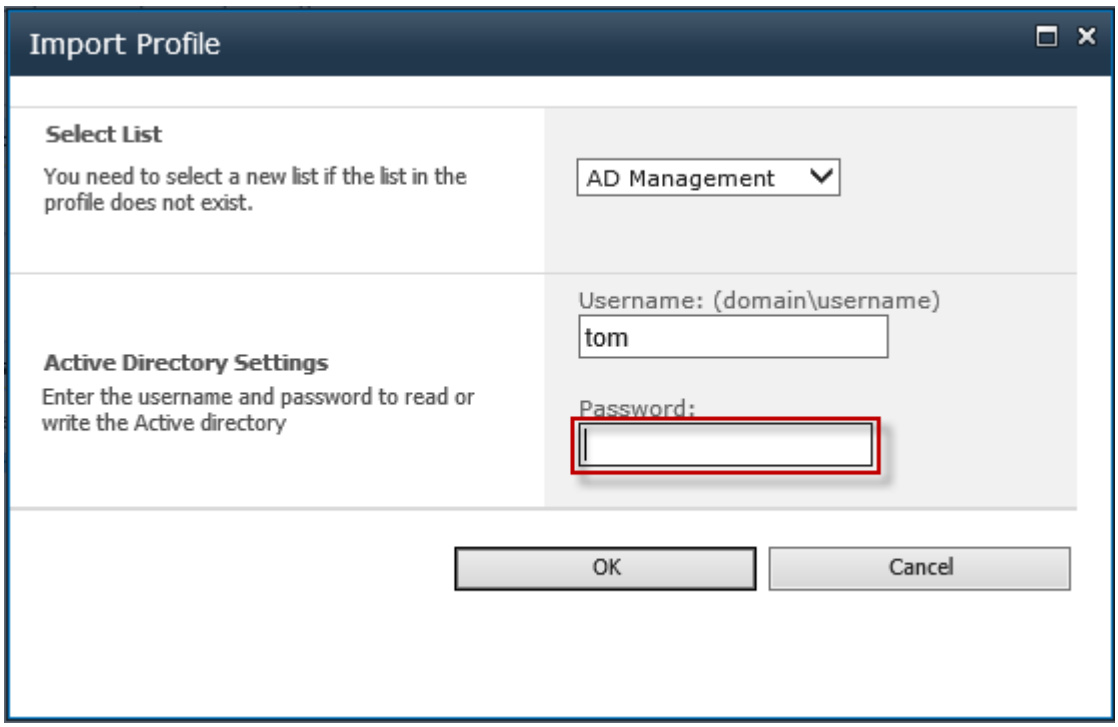
2. In **Import Profile** window, click **Browse** to select the profile you want to import.



3. And then click **Import**.

4. In Select List section, select one list to store the AD information.

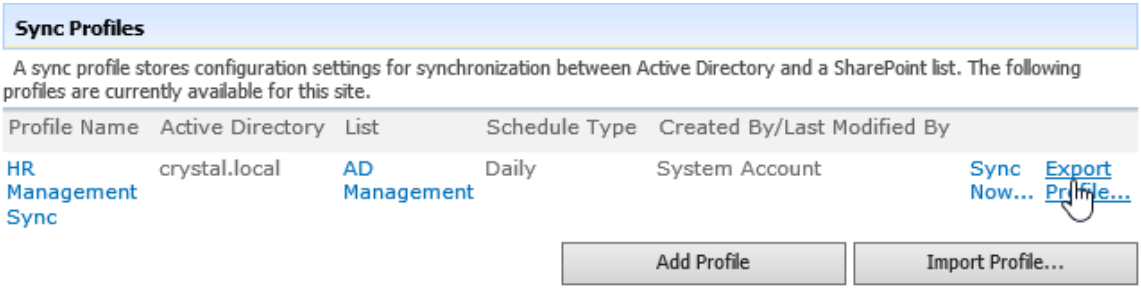
5. In Active Directory Settings section, specify the username and password to connect the domain server.



6. Click **OK** to import the profile. Then you will be directed to the **Add Profile** page.

3.6 Export a Profile

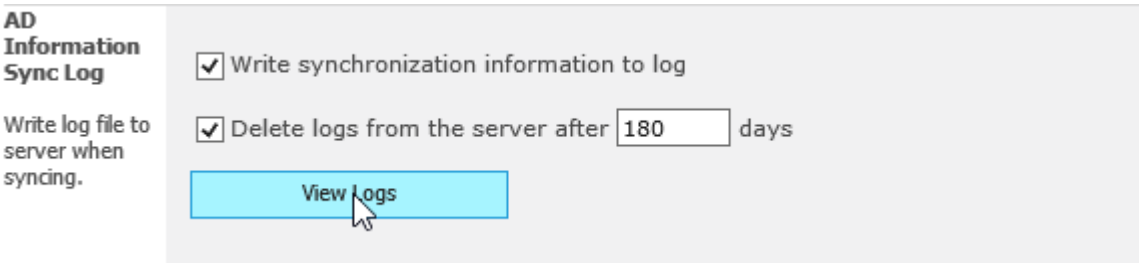
On the **AD Information Sync Settings** page, click **Export Profile**.



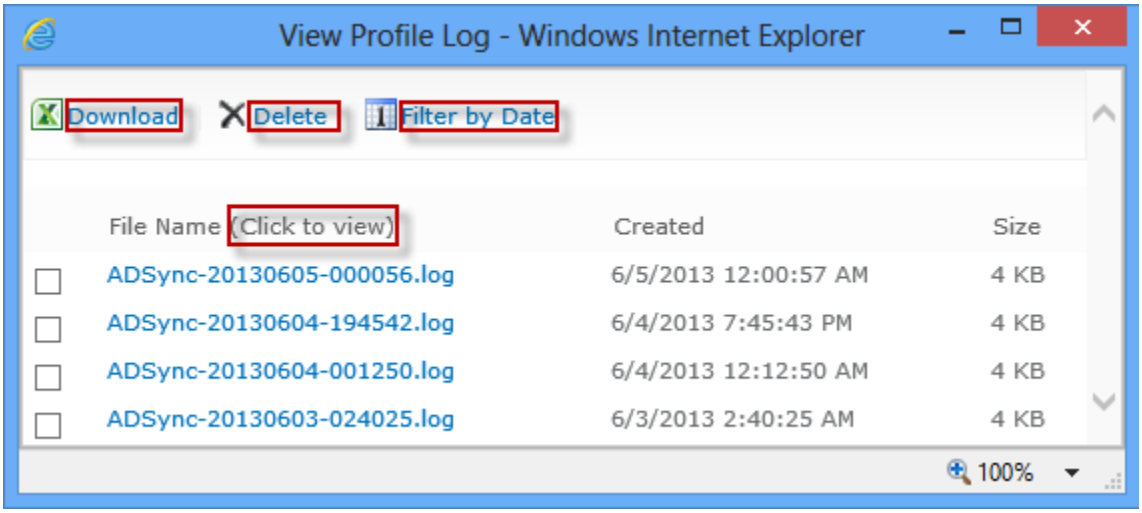
Note: For security's sake, the exported profiles will not contain any login credential information.

3.7 Manage Log Files

To manage sync logs, go to the **Edit Profile** page. In the **AD Information Sync Log** section, click **View Logs**.



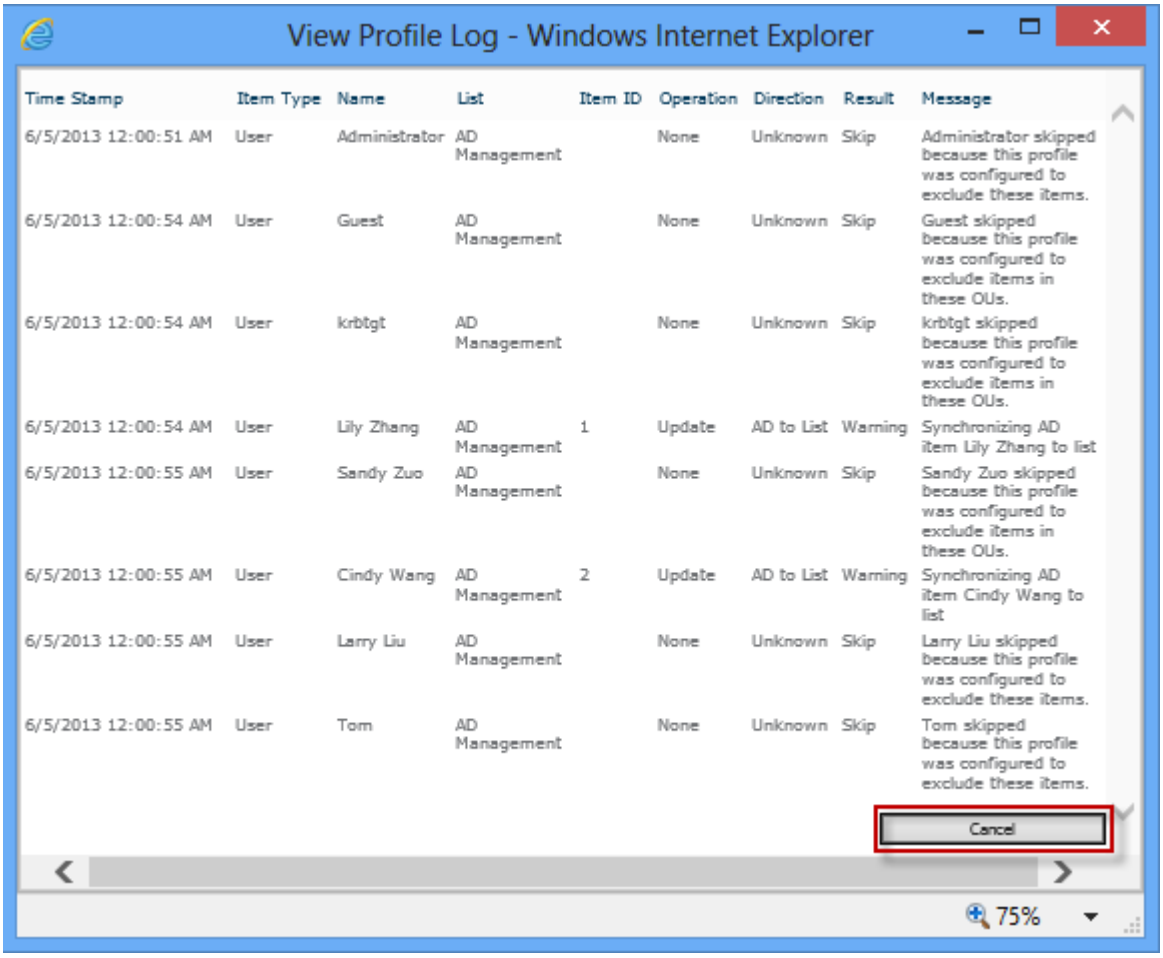
In the window that opens, you can view, download, delete a log, and filter the logs by date.



3.7.1 View a Log File

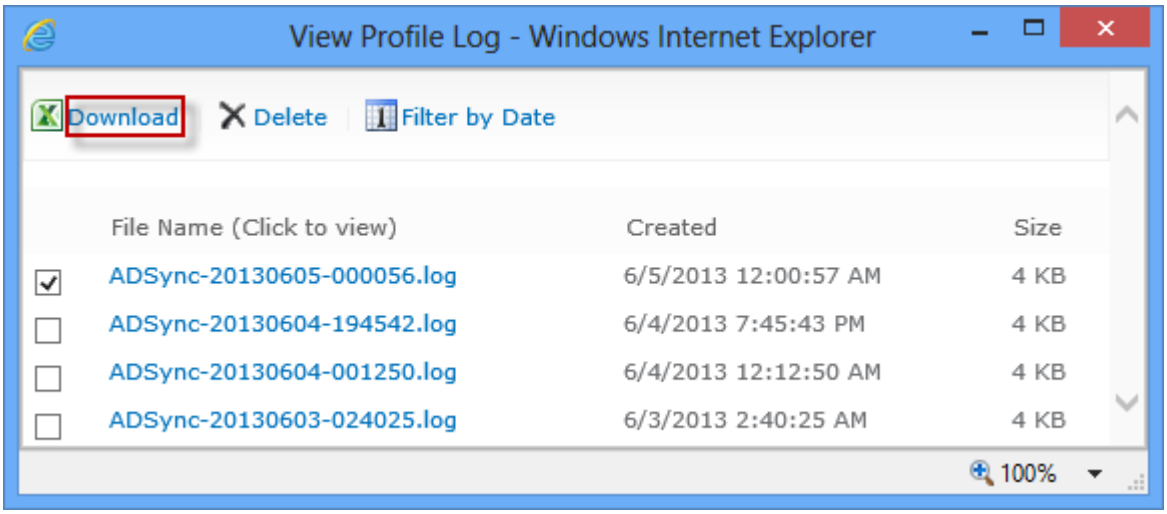
To view a log file, click the file name.

A window opens, you can view the log. To return to the previous window, click **Cancel**.

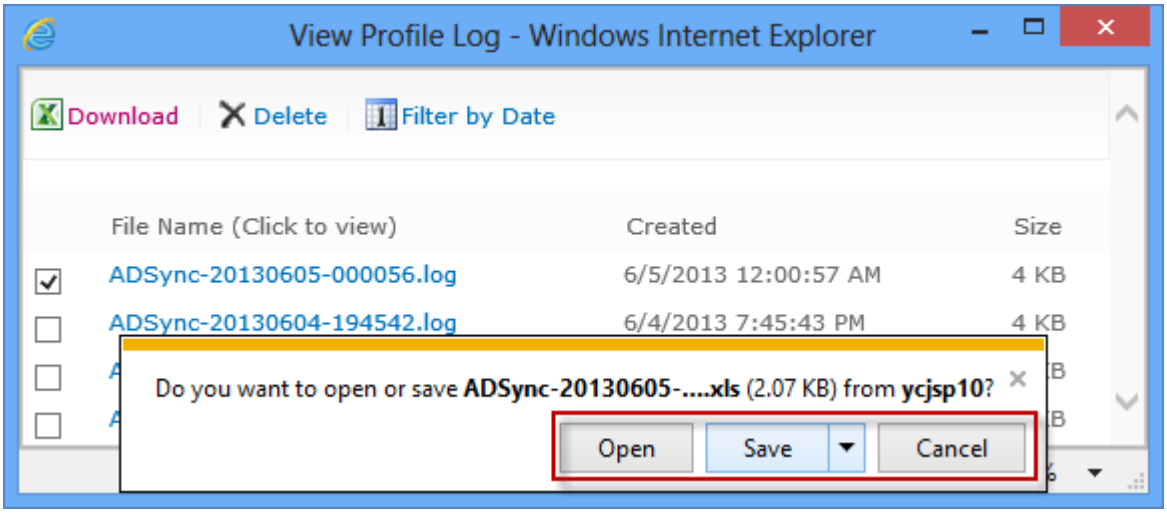


3.7.2 Download a Log File

Select the log file you want to download and then click **Download**.

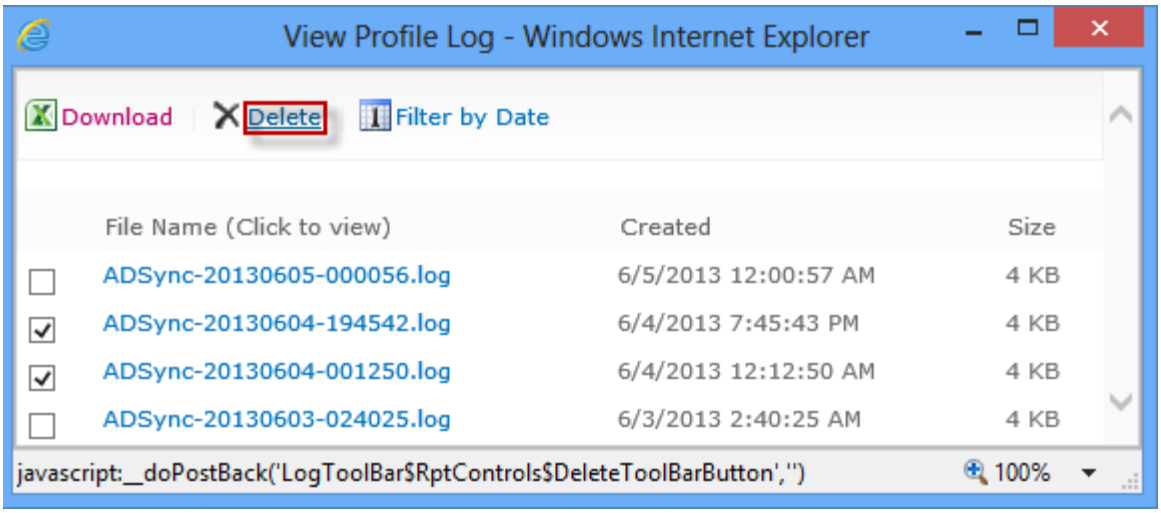


You can open to view or save the log file to your computer.

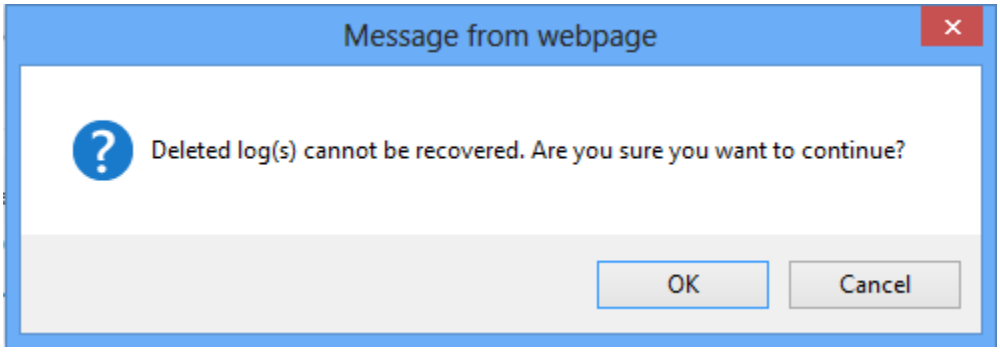


3.7.3 Delete Log Files

Select the log files you want to delete and then click **Delete**.

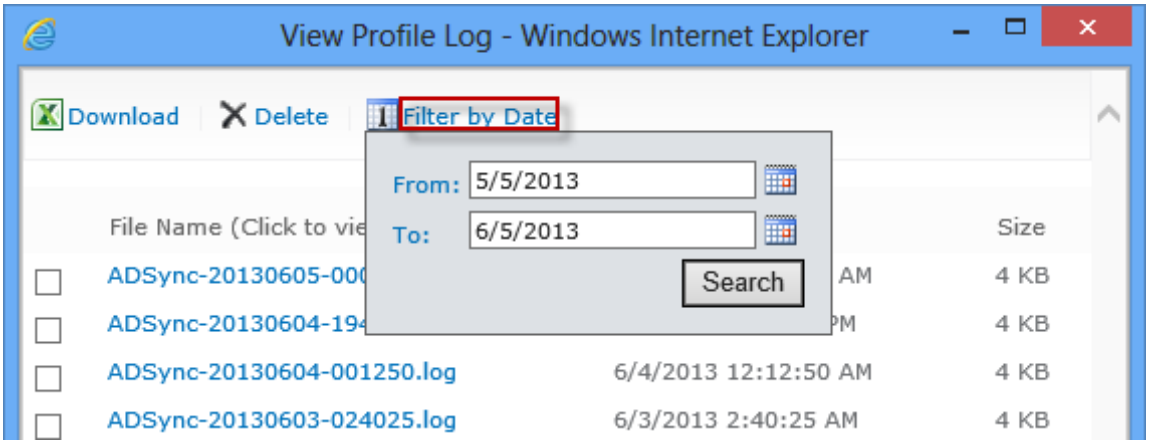


A confirmation message will show up. Click **OK** if you are confirmed with the deletion.

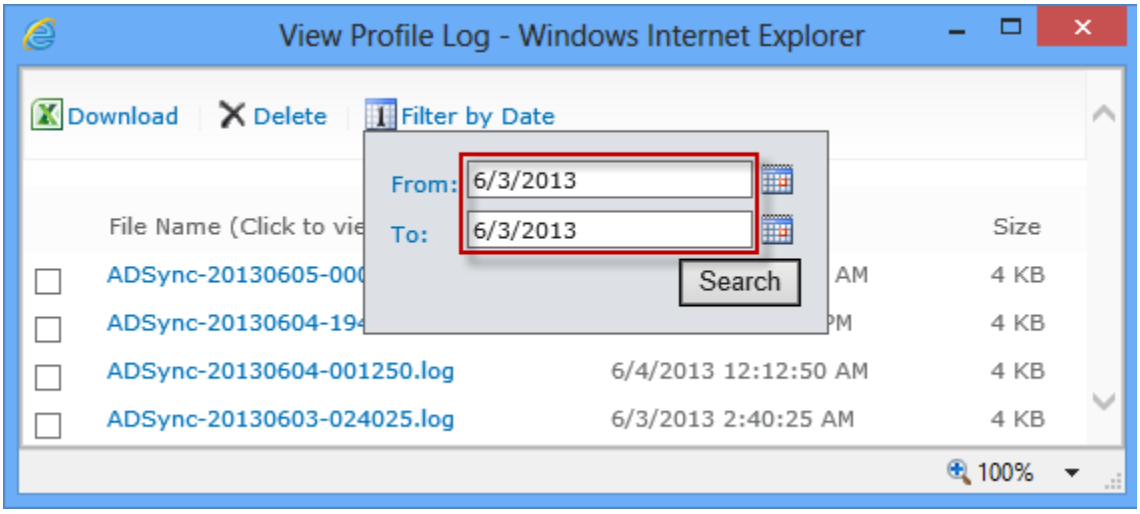


3.7.4 Filter Log Files

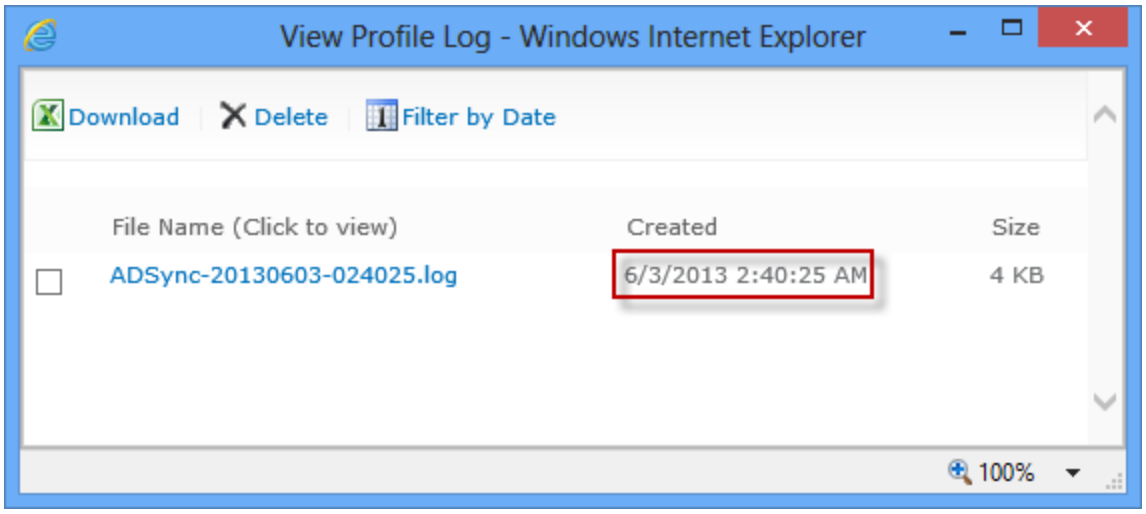
To filter the log files by date, click **Filter by Date**.



Specify the time range for filtering and then click **Search**.



The filter result will show:


View Profile Log - Windows Internet Explorer
Download
Delete
Filter by Date
File Name (Click to view)
Created
Size
ADSync-20130603-024025.log
6/3/2013 2:40:25 AM
4 KB
100%

4. Troubleshooting & Support

Frequently Asked Questions

1. Is the AD Information Sync one-way only? If we make any changes to the List, will they be applied to AD?

   AD information sync 2.0 is two-way synchronization. The changes of list can be applied to AD.

2. What access rights are needed for installing AD Information Sync?

   You need at least Administration right for the SharePoint Server. If possible, better be in the Domain Admins group.

3. What are the minimum permissions required for an account to configure the settings of AD Information Sync?

   You need to have the following permissions: manage web site, manage lists, add items, edit items, delete items, and view items.

4. I set the Sync Schedule to indicate how often the job should be performed for this profile, but why doesn't it work?

   Check whether you have activated the SharePoint AD Information Sync Timer Job in the web application feature list. When you install the software, this feature may not be activated. To activate the AD Information Sync Timer Job, go to **Central Administration>Manage web applications**, select the desired web application and click **Manage Features**, find **AD Information Sync Timer Job** from the feature list and activate it.

5. How do I check if the sync schedule is working? Are there log files to record the schedule details?

   You can check the schedule through the timer job in central administration. Go to **Central Administration**, click **Monitoring** on the left navigation bar, and click **Check job status** under **Timer Jobs**. Normally, the AD Information Sync Timer Job starts every one or more minutes. If the timer job does not start for a long time, it may be caused by:

   - There are too many profiles in synchronization;
   - There is too much AD information to sync;
   - The AD Information Sync Timer Job does not work properly.

The reasons why the AD Information Sync Timer Job does not work properly are listed as below:

- Windows SharePoint Services Timer stops;
- AD Information Sync Timer Job is disabled;
- There are some other problems with the timer job or profiles.

There is no log file to record the schedule details.

6. When I click **Add Profile** after installation of AD Information Sync, an error occurs "System .Null Reference Exception: Object reference not set to an instance of an object." Why?

   This might due to there is no list in the site. Create a list which you want to sync AD information.

7. How can I filter out all disabled user objects?

   In the **Filter** filed, enter the LDAP queries:

   (&(objectClass=user)(objectCategory=person)(!(userAccountControl:1.2.840.113556.1.4.803:=2)))

   Note: Before run sync profile for another time, please clear up the related List in advance, because the disabled user items which have ever been existed in the List cannot be deleted automatically.

8. Can AD Information Sync sync information from Contact objects?

   It can sync information from Contact objects, select **Contact** in **Preset Type** section.

9. I have a **Picture or Hyperlink** column in the list, but the picture does not show up after synchronization. Why?

   You need to map the column to the **Picture (thumbnailPhoto)** field and enable **Attachments** in **List Settings** (go to **List Settings>Advanced Setting**, find **Attachments**).

10. Can it sync to Lotus or Oracle?

    Currently, it cannot be synced to Lotus or Oracle.

11. Can it sync **Member of** Tab of AD?

    Currently, it cannot sync **Member of** tab of AD.

12. Does AD Information Sync support Date fields?

    Currently, it does not support date fields.

13. How this product relates to SSP? What's the difference?

    The product is different from SSP. SSP provides the service to sync user information from AD to user profile in Central Administration. But AD Information Sync provides the solution to sync the

user information to a SharePoint list, such as Contact list. After being installed, it will not affect the SSP.

14. How to sync Manager field to list?

    In the profile page, map the **Manager** field to a user or group column.

Contact Us

Product & Licensing Inquires: sales@boostsolutions.com

Technical Support (Basic): support@boostsolutions.com

Request a New Product or Feature: feature_request@boostsolutions.com

Live chat:

http://www.boostsolutions.com/support/chat/livezilla.php?intgroup=U3VwcG9ydA==&reset=true

Appendix: License Management

You can use AD Information Sync without entering any license code for a period of 30 days from when you first use it.

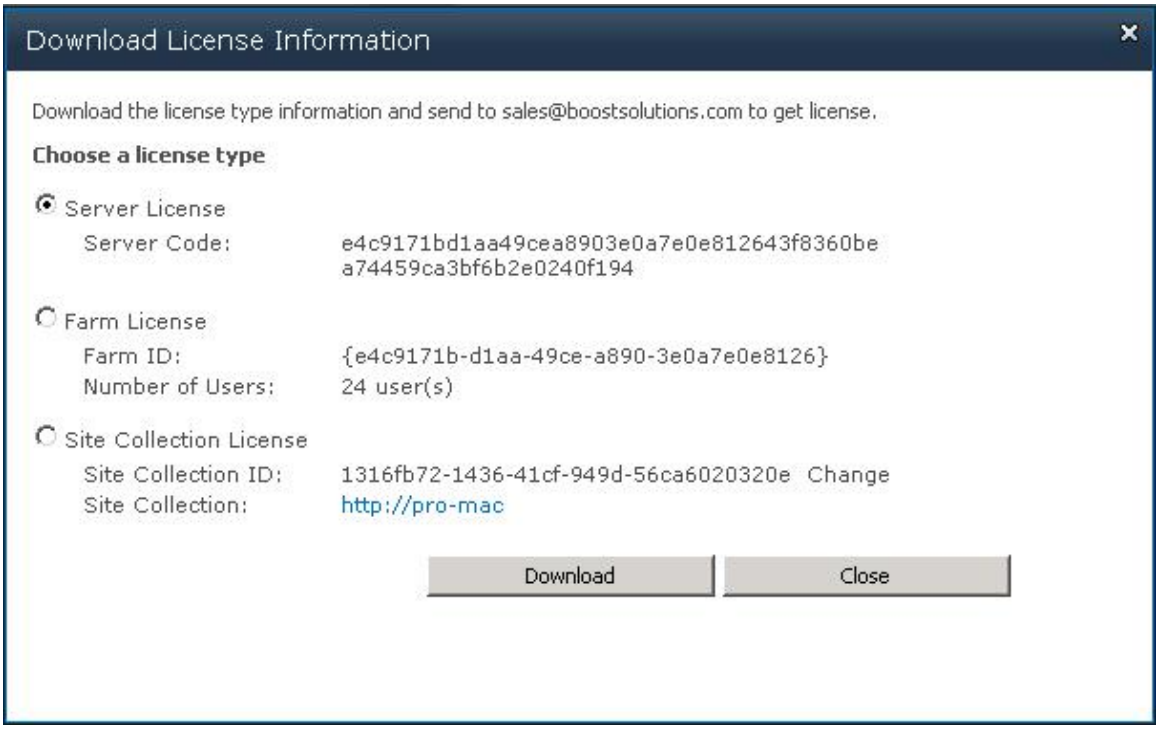
Note: the trial version ONLY supports up to 20 records/items.

To use the product without limitation, you will need to purchase a license and register the product.

Finding License Information

1. In the products main page, click the trial link and enter the **License Management Center**.

2. Click Download License Information, choose a license type and download the information (Server Code, Farm ID or Site Collection ID).

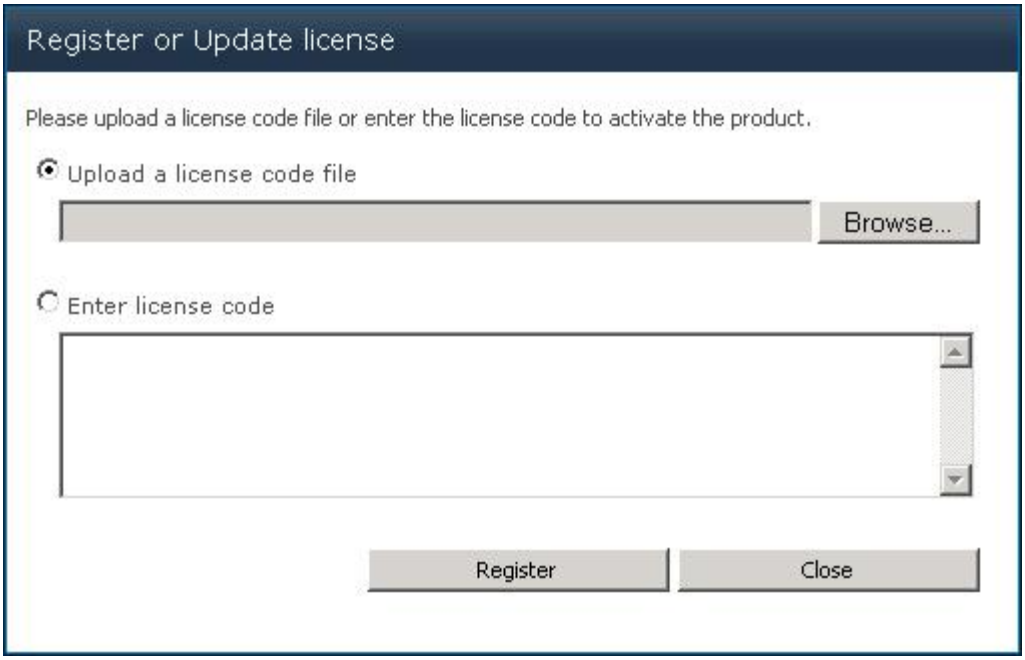


In order for BoostSolutions to create a license for you, you need to send us your SharePoint environment identifier (Note: different license types need different information). A server license needs a server code; a Farm license needs a farm ID; and a site collection license needs a site collection ID.

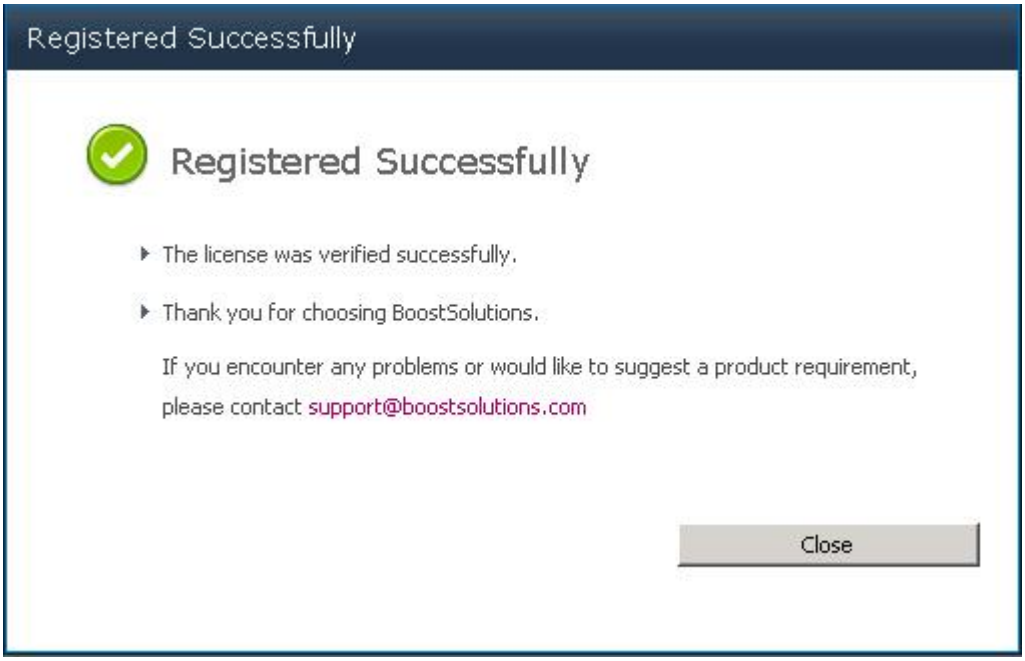
3. Send the above information to us (sales@boostsolutions.com) to generate a license code.

License Registration

1. When you receive a product license code, enter the **License Management Center** page.
2. Click **Register** on the license page and a **Register or Update license** window will open.



3. Upload the license file or enter the license code and click **Register**. You will get confirmation that your license has been validated.



For more details on license management, see BoostSolutions Foundation.