

Dell™ Change Auditor for SharePoint® 6.6

User Guide



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Dell Inc.
Attn: LEGAL Dept
5 Polaris Way
Aliso Viejo, CA 92656

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Legend

 **CAUTION:** A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.

 **WARNING:** A WARNING icon indicates a potential for property damage, personal injury, or death.

 **IMPORTANT NOTE, NOTE, TIP, MOBILE, or VIDEO:** An information icon indicates supporting information.

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Contents

Dell Change Auditor for SharePoint Overview	5
Introduction	5
System overview	6
Deployment requirements	7
Client components/features	8
Installation and Configuration	11
Before you begin	11
Step 1: Ensure SharePoint is properly configured	12
Enable SharePoint settings	12
Verify MySite permissions	14
Step 2: Install Change Auditor	15
Step 3: Add and deploy Change Auditor SharePoint Solution	16
Step 4: Create SharePoint Auditing template	17
Getting Started	20
Introduction	20
Verify license is applied	20
Verify deployment status of Change Auditor SharePoint Solution	20
Verify auditing template is applied	21
Make changes and run a report	22
Troubleshooting steps	23
SharePoint Auditing	24
Introduction	24
SharePoint Auditing page	24
SharePoint Auditing templates	26
SharePoint Auditing wizard	28
SharePoint event logging	34
SharePoint Searches/Reports	35
Introduction	35
Create custom SharePoint searches	35
Manually Add/Deploy Change Auditor SharePoint Solution	39
SharePoint Event Requirements	41
Upgrade Change Auditor for SharePoint	42
Step 1: Upgrade Change Auditor components	42
Step 2: Run SharePoint Solution Manager	43
Step 3: Edit existing SharePoint Auditing template(s)	44
About Dell	46
Contacting Dell	46

Technical Support Resources46

Dell Change Auditor for SharePoint Overview

- [Introduction](#)
- [System overview](#)
- [Deployment requirements](#)
- [Client components/features](#)

Introduction

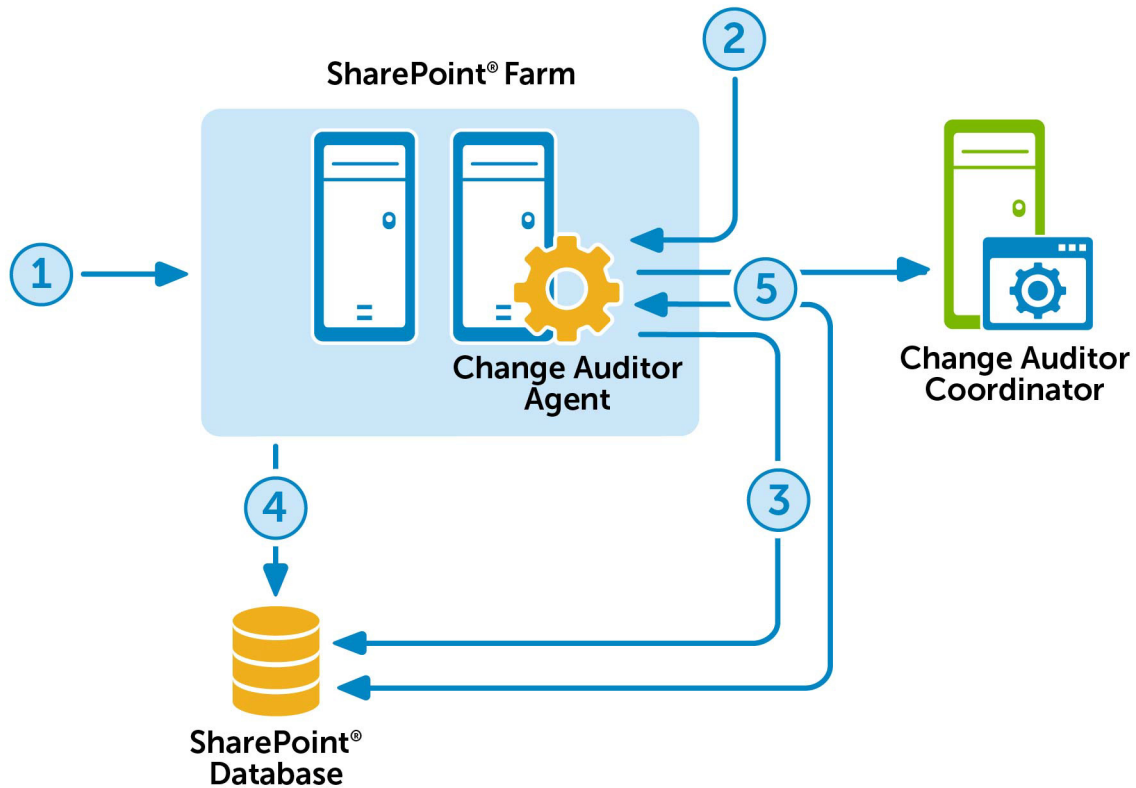
Auditing your SharePoint® platform is critical to maintaining internal security controls and meeting external auditing regulation requirements. Dell™ Change Auditor for SharePoint® tracks operations across your SharePoint environment, providing comprehensive auditing and reporting that tells you ‘who, what, when and where’ changes are being made to SharePoint configuration, documents, lists and sites.

To enable SharePoint auditing, you must deploy the Change Auditor SharePoint component to the SharePoint farms to be audited by Change Auditor. Using Change Auditor you must then create a SharePoint Auditing template for each SharePoint farm to be audited. The SharePoint Auditing template also defines the path(s) within the farm that are to be audited and specifies the Change Auditor agent to be used to capture the SharePoint events for the selected SharePoint farm.

- ① **NOTE:** SharePoint auditing is only available if you have licensed the Change Auditor for SharePoint auditing module. Change Auditor will not prevent you from using these features; however, associated events will not be captured unless the proper license is applied.

System overview

The following diagram illustrates how SharePoint® integrates with Change Auditor to provide this auditing capability.



- 1 The SharePoint Farm Administrator deploys the `dell.sharepoint.auditing.monitor.wsp` solution, which writes raw event information from each server to the SharePoint database. This is done globally on all servers in the SharePoint farm by running the SharePoint Solution Manager utility. See [Step 3: Add and deploy Change Auditor SharePoint Solution](#) in the [Installation and Configuration](#) chapter for more information on deploying the Change Auditor SharePoint Solution.
- 2 The administrator installs a Change Auditor agent on ONE of the SharePoint servers in the farm.
- 3 The Change Auditor agent connects to the SharePoint database and registers for events to be stored in the SharePoint database AuditData table.
- 4 SharePoint events are stored by SharePoint clients in the AuditData table shortly after they occur.
- 5 The Change Auditor agent periodically queries the SharePoint AuditData table to collect the events and forwards them to the Change Auditor coordinator.

Deployment requirements

For a successful deployment of Change Auditor for SharePoint, ensure that you have the following components and your environment meets the minimum system requirements. For information on Change Auditor system requirements, see the *Dell™ Change Auditor Installation Guide*.

SharePoint auditing requirements

Change Auditor license requirement:

- Change Auditor for SharePoint 5.7 (or higher)

Supported SharePoint® platforms:

- SharePoint Server 2010
- SharePoint Foundation 2010
- SharePoint Server 2013
- SharePoint Foundation 2013

The SharePoint requirements as defined by Microsoft® must be met (**Change Auditor for SharePoint does not have any additional requirements**). The following table lists the minimum requirements as defined by Microsoft:

Table 1. Microsoft's requirements for SharePoint

Processor:	<ul style="list-style-type: none">• 64-bit, four cores for small deployments• 64-bit, eight cores for medium deployments
RAM:	<ul style="list-style-type: none">• 8 GB for small deployments• 16 GB for medium deployments
Hard Disk:	80 GB for system drive NOTE: Hard disk space is dependent on the size of your SharePoint content.
Single server and multiple server farm:	SharePoint 2010: <ul style="list-style-type: none">• The 64-bit edition of Windows Server® 2008 Standard, Enterprise, Datacenter, or Web Server with Service Pack 2 (SP2).• The 64-bit edition of Windows Server 2008 R2 Standard, Enterprise, Datacenter, or Web Server.• The 64-bit edition of Windows Server 2008 R2 Service Pack 1 (SP1) Standard, Enterprise, Data Center, or Web Server. SharePoint 2013: <ul style="list-style-type: none">• The 64-bit edition of Windows Server 2008 R2 Service Pack 1 (SP1) Standard, Enterprise or Datacenter• The 64-bit edition of Windows Server 2012 Standard or Datacenter

Required rights and permissions

When selecting the Change Auditor agent that is to be used to capture SharePoint events, you must enter the credentials to be used to access the selected SharePoint farm. This account must have the following permissions:

- At a minimum, the account must have full access to all SharePoint sites. It must also have read permissions on all SharePoint SQL databases.
 - **Recommended:** Use the SharePoint farm administrator account that was supplied when SharePoint was installed.
- NOTE:** In order to capture SharePoint events, the account Change Auditor uses to access a SharePoint database must be added as a MySite Site Collection Administrator (primary or secondary) or to the User Web Policy for the MySite Web Application. See [Verify MySite permissions](#) for more information.

Client components/features

The following table lists the client components and features that require a valid Change Auditor for SharePoint license. The product will not prevent you from using these features; however, associated events will not be captured unless the proper license is applied.

- NOTE:** To hide unlicensed Change Auditor features from the Administration Tasks tab (including unavailable audit events throughout the client), use the **Action | Hide Unlicensed Components** menu command. Note this command is only available when the Administration Tasks tab is the active page.

Table 2. Change Auditor for SharePoint client components/features

Client page	Feature
Administration Tasks tab	Agent Configuration page <ul style="list-style-type: none">• Event Logging - enable/disable SharePoint® event logging Audit Task list: <ul style="list-style-type: none">• SharePoint NOTE: See SharePoint Auditing for information on enabling event logging and creating templates to define SharePoint auditing.
Event Details pane	What details: <ul style="list-style-type: none">• Farm• Site• Item URL
Events	Facilities: <ul style="list-style-type: none">• SharePoint Document• SharePoint Document Library• SharePoint Farm• SharePoint Folder• SharePoint List• SharePoint List Item• SharePoint Permission• SharePoint Security Group• SharePoint Site• SharePoint Site Collection

Table 2. Change Auditor for SharePoint client components/features

Client page	Feature
Search Properties	What tab: <ul style="list-style-type: none"> Subsystem SharePoint NOTE: See SharePoint Searches/Reports for information on using the What tab to create custom SharePoint search queries.
Searches page	Built-in reports: <ul style="list-style-type: none"> All SharePoint Events in the last 7 days Document Content changes in the last 7 days Document Story changes in the last 7 days Document Version changes in the last 7 days List Item changes in the last 7 days Permission changes in the last 7 days Permission Inheritance changes in the last 7 days Site Collection Groups created and deleted in the last 7 days Site Collection Groups Membership changes in the last 7 days Site Collection Ownership changes in the last 7 days Site Collections created and deleted in the last 7 days Sites created and deleted in the last 7 days Sites moved in the last 7 days
Advanced tab/Search Results page	Columns: <ul style="list-style-type: none"> SharePoint FarmName SharePoint ItemName SharePoint ItemURL SharePoint ListName SharePoint ListPath SharePoint WebName SharePoint WebURL
Alert Body Configuration dialog - Event Details tab	Variables (email tags): <ul style="list-style-type: none"> SHAREPOINT_FARMNAME SHAREPOINT_ITEMNAME SHAREPOINT_ITEMURL SHAREPOINT_LISTNAME SHAREPOINT_LISTPATH SHAREPOINT_WEBNAME SHAREPOINT_WEBURL NOTE: See the <i>Dell™ Change Auditor User Guide</i> for a description of these email tags and how to configure alert email notifications.

This document has been prepared to assist you in becoming familiar with Change Auditor for SharePoint. This User Guide contains information about the additional features that are available when a valid Change Auditor for SharePoint license has been applied. It is intended for network administrators, consultants, analysts, and any other IT professionals using the product.

The screen shots displayed throughout this document are for SharePoint 2013. Even though SharePoint 2010 may look different, the basic steps outlined in this document also apply to SharePoint 2010.

NOTE: The *Dell™ Change Auditor User Guide* explains the core functionality available in Change Auditor regardless of the product license that has been applied. In addition, there are separate user guides available that describe the additional functionality added to Change Auditor when the different auditing modules are licensed. The supplemental user guides include:

- Dell™ Change Auditor for Active Directory® User Guide
- Dell™ Change Auditor for Active Directory® Queries User Guide
- Dell™ Change Auditor for EMC® User Guide
- Dell™ Change Auditor for Exchange User Guide
- Dell™ Change Auditor for Logon Activity User Guide
- Dell™ Change Auditor for NetApp® User Guide
- Dell™ Change Auditor for SharePoint® User Guide
- Dell™ Change Auditor for SonicWALL™ User Guide
- Dell™ Change Auditor for SQL Server® User Guide
- Dell™ Change Auditor for Windows® File Servers User Guide

Installation and Configuration

- Before you begin
- Step 1: Ensure SharePoint is properly configured
- Step 2: Install Change Auditor
- Step 3: Add and deploy Change Auditor SharePoint Solution
- Step 4: Create SharePoint Auditing template

Before you begin

It is recommended that you perform the following steps before you begin the installation procedure:

- Review the Deployment Requirements
- Review the complete installation process
- Read the Change Auditor Release Notes for updated information
- Ensure you have the appropriate license file to enable Change Auditor for SharePoint

NOTE: You should have received separate license files from Dell™ to enable the Change Auditor auditing modules you purchased:

- Dell™ Change Auditor for Active Directory®
- Dell™ Change Auditor for Exchange
- Dell™ Change Auditor for Windows® File Servers
- Dell™ Change Auditor for SQL Server®
- Dell™ Change Auditor for Active Directory® Queries
- Dell™ Change Auditor for Authentication Services
- Dell™ Change Auditor for Defender
- Dell™ Change Auditor for NetApp®
- Dell™ Change Auditor for EMC®
- Dell™ Change Auditor for SharePoint®
- Dell™ Change Auditor for Logon Activity User
- Dell™ Change Auditor for Logon Activity Workstation
- Dell™ Change Auditor for Lync®
- Dell™ Change Auditor for SonicWALL™
- Dell™ Change Auditor for Cloud Storage

Copy the .asc license files to the local hard drive where you are installing Change Auditor.

Step 1: Ensure SharePoint is properly configured

NOTE: This guide assumes SharePoint® 2010/2013 is properly installed and configured. For detailed installation steps, see the appropriate guide from Microsoft®.

Enable SharePoint settings

In order for Change Auditor to capture some of the SharePoint events, there are some SharePoint® settings that must first be enabled. See [SharePoint Event Requirements](#) for a list of the events that need these additional settings enabled in order for Change Auditor to capture them.

NOTE: Since SharePoint Foundation Server 2010/2013 does not provide a graphical user interface, these auditing flags (native auditing and versioning) must be enabled using PowerShell® commands.

Native auditing

For all SharePoint web applications (including each user site under MySite) to be audited, native auditing must be enabled.

To enable native auditing:

- 1 From a top-level site, or web application, select **Site Actions | Site Settings**.
- 2 Under the **Site Collection Administration** heading, click **Site collection audit settings**.
- 3 Under the **Documents and Items** section, select all the check boxes.
- 4 Under the **Lists, Libraries, and Sites** section, select the **Editing users and permissions** check box.

SharePoint13 Test Site EDIT LINKS Search this site

Configure Audit Settings

Audit Log Trimming
Specify whether the audit log for this site should be automatically trimmed and optionally store all of the current audit data in a document library. The schedule for audit log trimming is configured by your server administrator. [Learn more about audit log trimming.](#)

Automatically trim the audit log for this site?
 Yes No

Optional, specify the number of days of audit log data to retain:

Optional, specify a location to store audit reports before trimming the audit log:

Documents and Items
Specify the events that should be audited for documents and items within this site collection.

Specify the events to audit:

- Opening or downloading documents, viewing items in lists, or viewing item properties
- Editing items
- Checking out or checking in items
- Moving or copying items to another location in the site
- Deleting or restoring items

Lists, Libraries, and Sites
Specify the events that should be audited for lists, libraries, and sites within this site collection.

Specify the events to audit:

- Editing content types and columns
- Searching site content
- Editing users and permissions

NOTE: Log trimming is off by default. Enable log trimming to meet your policies, but note that if the Change Auditor agent is offline or is otherwise unable to retrieve event information from the SharePoint database for a period longer than the trim period, events could be lost.

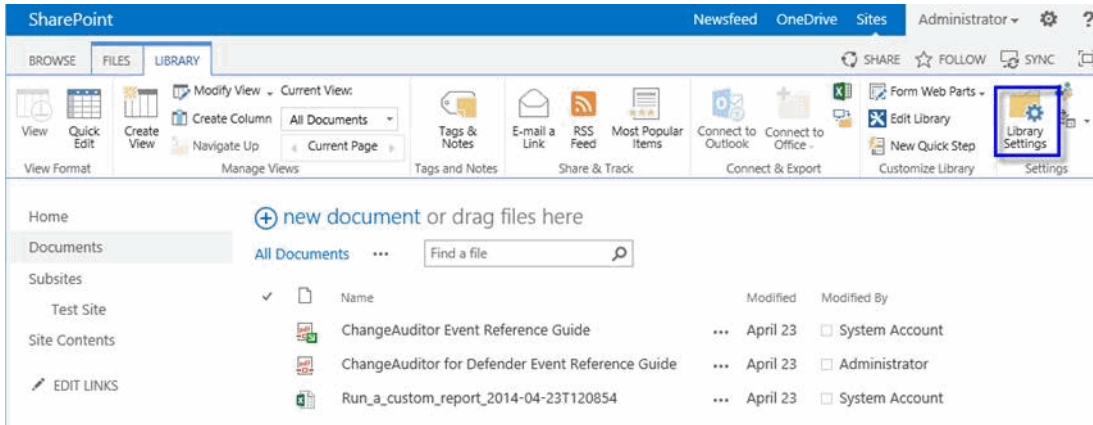
Versioning

If you want Change Auditor to audit versioning within SharePoint, be sure to enable it for each individual Library and List Item pertaining to the Site(s) being audited.

- NOTE: The procedure described below also applies to announcements, calendars and tasks. The only difference is that you will see the 'Tools' section and tabs specific to the List Settings item.

To enable document versioning for shared documents for a top-level site:

- 1 Navigate to a Document Library.
- 2 Under **Library Tools**, select the **Library** tab.
- 3 Click the **Library Settings** icon, located to the right of the ribbon.



- 4 Click **Versions settings** under **General Settings**.
- 5 In the **Document Version History** section, change the selection of **No Versioning** to the desired level of versioning: **Create major versions** or **Create major and minor (draft) version**.

Settings · Versioning Settings

Content Approval
Specify whether new items or changes to existing items should remain in a draft state until they have been approved. [Learn about requiring approval.](#)

Require content approval for submitted items?
 Yes No

Document Version History
Specify whether a version is created each time you edit a file in this document library. [Learn about versions.](#)

Create a version each time you edit a file in this document library?

No versioning
 Create major versions
Example: 1, 2, 3, 4
 Create major and minor (draft) versions
Example: 1.0, 1.1, 1.2, 2.0

Optionally limit the number of versions to retain:

Keep the following number of major versions:

Keep drafts for the following number of major versions:

Draft Item Security
Drafts are minor versions or items which have not been approved. Specify which users should be able to view drafts in this document library. [Learn about specifying who can view and edit drafts.](#)

Who should see draft items in this document library?
 Any user who can read items
 Only users who can edit items
 Only users who can approve items (and the author of the item)

Require Check Out
Specify whether users must check out documents before making changes in this document library. [Learn about requiring check out.](#)

Require documents to be checked out before they can be edited?

Verify MySite permissions

For proper auditing of sites within the MySite Site Collection or Web Application, the account Change Auditor uses to access the SharePoint® database must be added as a Site Collection Administrator (primary or secondary) or to the User Web Policy for the MySite host.

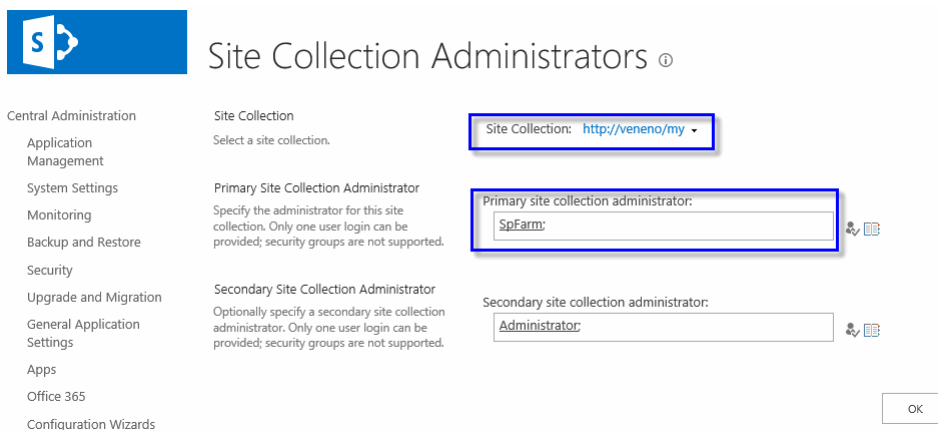
Depending on how your MySite host is initially set up, use the Central Administration Web Site to verify, and if necessary add, this account.

NOTE: This account must be added BEFORE you add a personal site to a SharePoint Auditing template or you will encounter an 'access denied' error when you select a personal site in the SharePoint Auditing wizard. See [Step 4: Create SharePoint Auditing template](#) for more information on creating a SharePoint Auditing template.

MySite Site Collection

This refers to the default 'MySite' Site Collection that is automatically created during a SharePoint Single Server installation. Its location is under the default SharePoint-80 Web Application (//veneno in the following screen shot). By default, the SharePoint farm account is assigned as the Primary Site Collection Administrator. However, if this site collection is manually created, then the primary and secondary administrator can be specified.

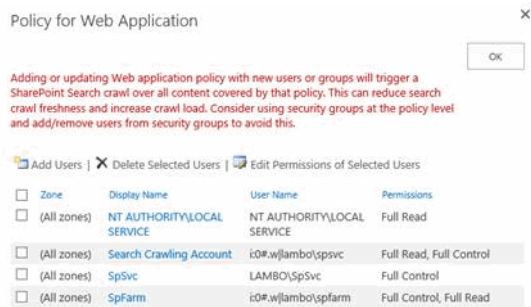
In this scenario, verify that the account Change Auditor is using is listed as either the Primary Site Collection Administrator or Secondary Site Collection Administrator for the MySite Site Collection.



MySite Web Application

This refers to the 'MySite' Web Application that is created manually after a SharePoint Multi-Server Farm installation. In this case, MySite is not tied to any other web application (i.e., is not underneath the default SharePoint Web Application) and therefore uses the User Policy permissions.

In this scenario, verify that the account Change Auditor is using is included in the User Web Policy for the MySite Web Application.



Step 2: Install Change Auditor

NOTE: For detailed instructions and required permissions for installing Change Auditor, see the *Dell™ Change Auditor Installation Guide*.

If you do not have a previous version of Change Auditor already installed, we recommend installing the Change Auditor components in the following order:

1 Database (SQL Server®)

Choose the SQL database you are going to use. If you wish to install the Change Auditor database to a SQL instance other than the default instance of the selected SQL server, create the new instance BEFORE running the installer.

2 Change Auditor coordinator

Once you have confirmed that the database instance you are going to use is installed and functioning correctly, install the Change Auditor coordinator.

NOTE: Change Auditor will prompt you for a valid license during the coordinator installation. If you are installing multiple Change Auditor auditing modules, select each of the licenses to be applied. You must apply the Change Auditor for SharePoint license to enable the SharePoint® auditing in Change Auditor.

3 Change Auditor client

Once you have confirmed that the coordinator is functioning correctly, install the Change Auditor client.

4 Change Auditor agents

Finally, launch the Change Auditor client to deploy agents to your domain controllers and member servers.

NOTE: Be sure to deploy a Change Auditor agent on ONE of the Central Administration SharePoint servers in the SharePoint® farm to be monitored.

5 Web-based client

Optionally, install the web-based client on the IIS web server to allow users access to Change Auditor data through a standard or mobile browser.

Step 3: Add and deploy Change Auditor SharePoint Solution

In order to capture SharePoint® events, the Change Auditor SharePoint Solution (Dell.SharePoint.Auditing.Monitor.wsp) must first be added to the SharePoint Solution Store (which can be found on the Solution Manager page in the Central Administration site) and deployed to all SharePoint web applications of the SharePoint farm(s) to be audited by Change Auditor.

Change Auditor for SharePoint provides a utility, SharePoint Solution Manager, which allows you to add the solution to the SharePoint Solution Store and deploy it globally to all SharePoint web applications. You can also do this manually using a Windows PowerShell® cmdlet to add it to the store and then using the SharePoint Central Administration web site to deploy it. See [Manually Add/Deploy Change Auditor SharePoint Solution](#).

NOTE: The Change Auditor SharePoint Solution must be deployed to all SharePoint web applications on all SharePoint farms that are to be audited by Change Auditor. The following procedure describes how to use the SharePoint Solution Manager utility to automatically add and deploy the solution globally through out a SharePoint farm. If you have multiple SharePoint farms in your environment, you must run this utility locally on the Central Administration server in each SharePoint farm.

1 On the local SharePoint farm server, run the SharePoint Solution Manager utility:

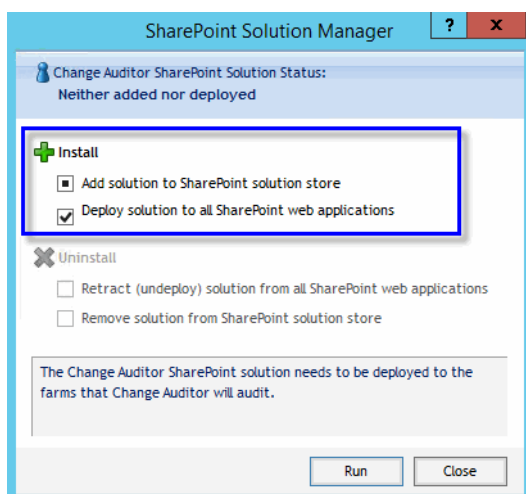
- SharePoint 2010: **SharePointSolutionManagerCA.exe**.
- SharePoint 2013: **SharePointSolutionManagerCALauncher2013.exe**

These utilities can be found in the Plug-in for SharePoint folder under the Change Auditor agent installation folder. For example, the default location is:

%ProgramFiles%\Dell\ChangeAuditor\Agent\Plug-in for SharePoint

2 On the SharePoint Solution Manager dialog, select both check boxes under the **Install** heading:

- Add solution to SharePoint solution store
- Deploy solution to all SharePoint web applications (requires IIS restart)



NOTE: Since the deployment step requires an IIS restart, this is a separate step that can be run at a more convenient time when an IIS restart is less disruptive. Note that if you do not select this step, you must deploy the solution using the SharePoint Solution Manager utility or SharePoint's Central Administration web site BEFORE Change Auditor can start capturing events.

Click **Run**.

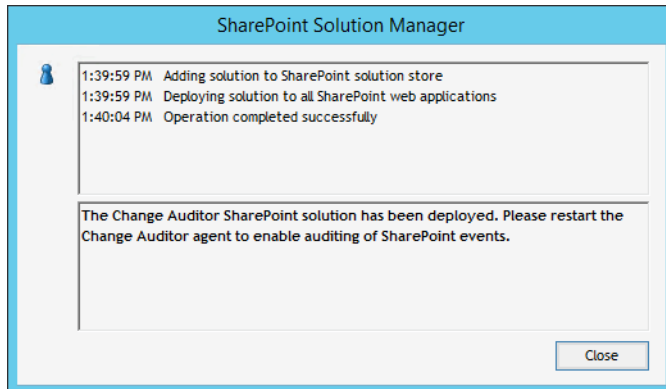
- 3 A progress dialog appears. When completed, the Change Auditor SharePoint Solution status is updated at the top of the SharePoint Solution Manager dialog.

NOTE: If the add/deploy solution process cannot be completed, an error message is displayed explaining why the process did not complete successfully. Click **Close** to exit the SharePoint Solution Manager utility.

Once the issue is resolved, rerun the SharePoint Solution Manager utility to deploy the Change Auditor SharePoint Solution.

Click **Close** to close the SharePoint Solution Manager dialog.

- 4 A message appears explaining that the deployment status has changed and that the Change Auditor agent needs to be restarted.



Click **Close** to close the message box.

- 5 Restart the Change Auditor agent to enable auditing of SharePoint events.

Step 4: Create SharePoint Auditing template

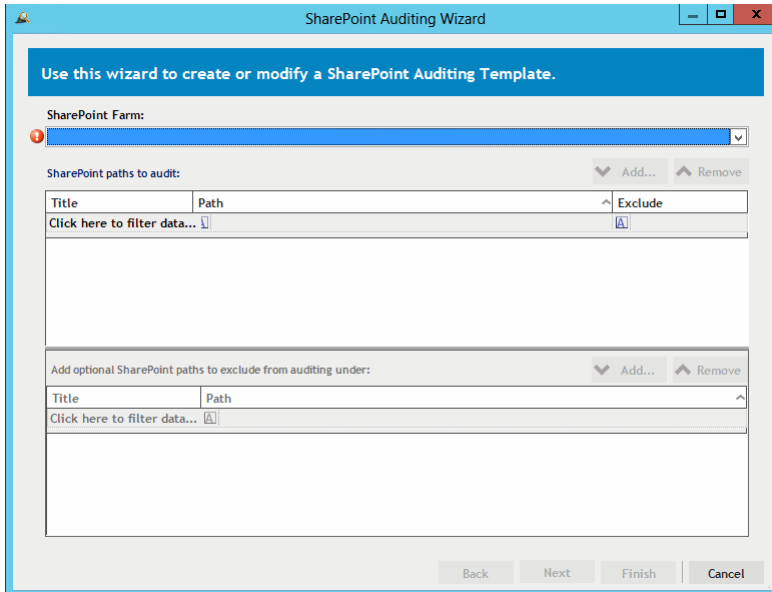
In order to capture SharePoint® events in Change Auditor, you must also create a SharePoint Auditing template which specifies the SharePoint farm and the path(s) within the SharePoint farm to be audited as well as the Change Auditor agent that is to receive events from the selected SharePoint farm.

NOTE: If you have multiple SharePoint farms to be audited, you will create a separate SharePoint Auditing template for each farm.

To create a new SharePoint Auditing template:

- 1 Open the Administration Tasks tab.
- 2 Click the **Auditing** task button at the bottom of the navigation pane (left pane).
- 3 Select **SharePoint** (under the Applications heading in the Auditing task list) to open the SharePoint Auditing page.
- 4 Click the **Add** tool bar button.

This will launch the SharePoint Auditing wizard, which steps you through the process of defining the SharePoint farm and path(s) to be audited and the Change Auditor agent that is to receive the SharePoint events.



- 5 On the first page of the wizard, specify the SharePoint farm and path(s) to be audited:
 - **SharePoint Farm** - use the drop-down arrow and select **Find a SharePoint farm**.
 - On the **Eligible Change Auditor Agents** dialog, select an agented server to be used to capture SharePoint events.
 - The first time an agent is selected, the **SharePoint Credentials** dialog appears prompting you to enter the credentials to be used to connect to the SharePoint farm to be audited.
 - Once the credentials are entered, **Change Auditor** performs a SharePoint topology search to locate the SharePoint farm residing on the previously selected agent (which may take several minutes).
 - Once the topology is completed, the name of the farm (and GUID) appears in the **SharePoint Farm** field in the wizard.
 - Click the **Add** button to display the **Browse SharePoint** dialog and select the SharePoint path(s) to be audited. Once you have selected the path(s) to be audited, these paths appear in the **SharePoint Paths to audit** list in the wizard.
 - **Add optional SharePoint paths to exclude from auditing under** - skip this optional step. (In this scenario we will not be excluding any paths from auditing. See [SharePoint Auditing templates](#) for information on excluding paths from SharePoint auditing.)
- 6 On the second page of the wizard, select the operations (facilities or event classes) that are to be audited. Select an entry from the list box at the top of the page, expand the **Add** button and click one of the following commands:
 - Use the **Add | Add This Event** button to add individual events.
 - Use the **Add | Add All Events in Facility** option to add all events in the selected facility.

Repeat this step to include additional events or facilities. At least one event/facility must be specified.

NOTE: If you want to audit ALL SharePoint events, they must all be added to this page of the wizard. In addition, the events that are disabled by default must be enabled using the **Audit Events** page on the **Administration Tasks** tab in the **Change Auditor** client.

NOTE: The following operations are audited by default when you create a SharePoint Auditing template. Therefore, they are NOT included in the event class list on this page.

- Site Created
- Site Deleted
- Site Moved
- Site Collection Created
- Site Collection Deleted
-

7 The third page of the wizard displays the information about the Change Auditor agent previously selected to capture SharePoint events.

Click **OK** to use the specified agent. (See [SharePoint Auditing templates](#) for information on selecting a different agent.)

8 On the last page of the wizard, verify that the Change Auditor SharePoint Solution has been successfully added and deployed to the SharePoint farm selected for auditing.

NOTE: The Change Auditor SharePoint Solution status is checked/refreshed once every hour; therefore, the status displayed may not reflect the most current status. Click the **Refresh Change Auditor Solution Status** button to force a refresh of the solution's status.

9 To create the template, click **Finish**.

Clicking the **Finish** button will create the template, close the wizard, and return to the SharePoint Auditing page, where the newly created template will now be listed.

10 On the Administration Tasks tab, click the **Configuration** task button at the bottom of the navigation pane. Select **Agent** in the Configuration task list to open the Agent Configuration page.

11 Select the Change Auditor agent assigned to the SharePoint Auditing template and click the **Refresh Configuration** tool bar button or right-click command.

12 Verify that **Auditing** is displayed in the **SharePoint** column.

NOTE: If you do not refresh the agent's configuration, the agent will automatically check for a new agent configuration based on the polling interval setting (located on the System Settings tab of the Configuration Setup dialog). The default is every 15 minutes.

Getting Started

- [Introduction](#)
- [Verify license is applied](#)
- [Verify deployment status of Change Auditor SharePoint Solution](#)
- [Verify auditing template is applied](#)
- [Make changes and run a report](#)
- [Troubleshooting steps](#)

Introduction

Change Auditor for SharePoint provides you with the ability to search, report and alert on changes to SharePoint® Server configuration, permissions, document stores and lists. Using Change Auditor for SharePoint you can receive real-time alerts whenever someone makes a critical change in your SharePoint environment.

This chapter provides a high-level view of the tasks to get you started using Change Auditor for SharePoint. It assumes you have successfully installed/licensed Change Auditor for SharePoint.

Verify license is applied

SharePoint® auditing is only available if you have licensed the Change Auditor for SharePoint® product. Change Auditor will not prevent you from using these features; however, associated events will not be captured unless the proper license is applied

To verify that Change Auditor for SharePoint is licensed:

- 1 From the member server where Change Auditor is installed, launch the License Manager (**Start | All Programs | Dell | Change Auditor | License Manager**).
- 2 On the About Change Auditor dialog, verify that the **License Status** field is set to 'Installed' for Change Auditor for SharePoint.
- 3 If the **License Status** field indicates that Change Auditor for SharePoint is 'Uninstalled', click the **Update License** button to locate and apply the appropriate license.

Verify deployment status of Change Auditor SharePoint Solution

You can verify the deployment status of the Change Auditor SharePoint Solution using either the SharePoint Central Administration web site or through the SharePoint Auditing template defined in the Change Auditor client.

To verify status using SharePoint Central Administration web site:

- 1 Launch the SharePoint Central Administration web site (**Start | All Programs | Microsoft SharePoint 2013 Products | SharePoint 2013 Central Administration**).
- 2 On the Central Administration Home page, select **System Settings**.
- 3 On the System Settings page, under Farm Management, click **Manage farm solutions**.
- 4 Verify that the status associated with the Change Auditor SharePoint Solution (dell.sharepoint.auditing.monitor.wsp) is set to 'Deployed'.
- 5 If the solution's status is 'Not Deployed', deploy the solution:
 - Click the **dell.sharepoint.auditing.monitor.wsp** entry.
 - On the Solution Properties page, click **Deploy Solution**.
 - On the Deploy Solution page, select the appropriate options as described below:
 - **Deploy When** - select one of the following options: **Now** or **At a specified time**
 - **Deploy To** - select to deploy globally to all web applications
 - Click **OK** to save your selections and close the Deploy Solution page.
- 6 Once the solution is deployed, restart the Change Auditor agent to enable auditing of SharePoint events.

To verify status using the SharePoint Auditing template in Change Auditor:

- 1 Launch the Change Auditor client (**Start | All Programs | Dell | Change Auditor | Change Auditor Client**).
- 2 Open the Administration Tasks tab (**View | Administration** menu command).
- 3 Click the **Auditing** task button at the bottom of the navigation pane (left pane).
- 4 Select **SharePoint** (under the Applications heading in the Auditing task list) to open the SharePoint Auditing page.
- 5 Select the template from the list and click the **Edit** tool bar button.
- 6 Page through the screens of the SharePoint Auditing wizard using the **Next** button.
- 7 On the last page of the wizard, verify that the Change Auditor SharePoint Solution has been successfully added and deployed to the SharePoint farm selected for auditing.
 - ① **NOTE:** The Change Auditor SharePoint Solution status is checked/refreshed once every hour; therefore, the status displayed may not reflect the most current status. Click the **Refresh Change Auditor Solution Status** button to force a refresh of the solution's status.
- 8 Click **Finish** to close the SharePoint Auditing wizard.

If the status indicates that the solution is not yet added and/or deployed, run the SharePoint Solution Manager utility to add and deploy it. For more information on running this utility, see [Step 3: Add and deploy Change Auditor SharePoint Solution](#) in the Installation and Configuration chapter.

Verify auditing template is applied

To ensure SharePoint® events are being captured, check to see if the Change Auditor agent assigned to the SharePoint Auditing template is using the latest agent configuration.

To verify that the latest agent configuration is being used:

- 1 Launch the Change Auditor client (**Start | All Programs | Dell | Change Auditor | Change Auditor Client**).
- 2 Open the Administration Tasks tab (**View | Administration**) menu command.

- 3 Click the **Configuration** task button at the bottom of the navigation pane (left pane).
- 4 Select **Agent** in the Configuration task list to open the Agent Configuration page.
- 5 Select the Change Auditor agent(s) assigned to the SharePoint Auditing template (**Auditing** appears in the **SharePoint** column) and click the **Refresh Configuration** tool bar button or right-click command.

NOTE: If you do not refresh the agent's configuration, the agent will automatically check for a new agent configuration based on the polling interval setting (located on the System Settings tab of the Configuration Setup dialog). The default is every 15 minutes.

Make changes and run a report

- 1 To test SharePoint® auditing, make some changes to the SharePoint farm specified in the template.

For example:

- add a document
 - add a folder
 - add an announcement
 - add a task
 - delete the document added above
 - delete the task added above
- 2 Launch the Change Auditor client (**Start | All Programs | Dell | Change Auditor | Change Auditor Client**) to review the events generated.
 - 3 Open the Searches tab.
 - 4 Expand the **Shared | Built-in | SharePoint** folder in the left pane.
 - 5 Locate and double-click **All SharePoint Events in the last 7 days** in the right-hand pane.

A new Search Results tab is added to the client displaying the SharePoint events that were captured.

Severity	Time Detected	Subsystem	User	Event	SharePoint Item Name	SharePoint List Name	SharePoint Web Name
Medium	5/14/2014 2:13 PM	SharePoint	lamboladministrator	Permission level granted	SharePoint13 Owners		QA Test Site
Medium	5/14/2014 2:13 PM	SharePoint	lamboladministrator	Permission level granted	SharePoint13 Visitors		QA Test Site
Medium	5/14/2014 2:13 PM	SharePoint	lamboladministrator	Permission level granted	SharePoint13 Members		QA Test Site
Medium	5/14/2014 2:13 PM	SharePoint	lamboladministrator	Permission level granted	SharePoint13 Owners		QA Test Site
Medium	5/14/2014 2:13 PM	SharePoint	lamboladministrator	Permission level granted	SharePoint13 Visitors		QA Test Site
Medium	5/14/2014 2:13 PM	SharePoint	lamboladministrator	Permission level granted	SharePoint13 Members		QA Test Site
Medium	5/14/2014 2:13 PM	SharePoint	lamboladministrator	Permission inheritance broken	/qatest		QA Test Site
Medium	5/14/2014 2:13 PM	SharePoint	lamboladministrator	Permission inheritance broken	/qatest		QA Test Site
Medium	5/14/2014 2:12 PM	SharePoint	lamboladministrator	Document viewed	Home	Site Pages	QA Test Site
Medium	5/14/2014 2:12 PM	SharePoint	lamboladministrator	Document viewed	Home	Site Pages	QA Test Site
Medium	5/14/2014 2:12 PM	SharePoint	lamboladministrator	Document viewed	Home	Site Pages	QA Test Site
Medium	5/14/2014 2:12 PM	SharePoint	lamboladministrator	Document viewed	Home	Site Pages	QA Test Site
Medium	5/14/2014 2:12 PM	SharePoint	lamboladministrator	Document viewed	Home	Site Pages	QA Test Site
Medium	5/14/2014 2:12 PM	SharePoint	lamboladministrator	Document viewed	Home	Site Pages	QA Test Site
Medium	5/14/2014 2:12 PM	SharePoint	lamboladministrator	Site created			QA Test Site

- 6 Double-click an event from the Search Results grid to display the event details for the selected event.

Troubleshooting steps

If the SharePoint® events do not appear in the Change Auditor client as expected, check the following:

- Review the SharePointPluginCA.exe.nptlog for any errors and to verify that the SharePoint plug-in process is running.
- If you are not getting some events (e.g., restore events, permission events, etc.) from a specific site, verify that native auditing is enabled for that SharePoint site. See *Native Auditing* under [Step 1: Ensure SharePoint is properly configured](#).
- If you are not getting versioning events, verify that versioning is enabled for that type of object in SharePoint. See *Versioning* under [Step 1: Ensure SharePoint is properly configured](#).
- Verify that the user account being used to access the SharePoint farm has full access to all SharePoint sites and read permissions on all SharePoint SQL databases. (Change Auditor agent credentials entered in the SharePoint Auditing wizard.)
- If you get an access denied error when attempting to add a personal site to the SharePoint Auditing wizard, verify that the account being used by the selected Change Auditor agent has been added to the User Web Policy for the site. See *MySite Permissions* under [Step 1: Ensure SharePoint is properly configured](#).
- Verify that you have included the correct SharePoint paths for auditing. (Paths listed across the middle of the first page of the SharePoint Auditing wizard.)
- Verify that you have not excluded the specified paths from auditing. (Paths listed at the bottom of the first page of the SharePoint Auditing wizard.)
- Verify that you have selected those types of events in the SharePoint Auditing template. (Facilities and/or event classes specified in the SharePoint Auditing wizard.)
- Verify that the events selected for auditing are enabled. (Use the Audit Events page on the Administration Tasks tab.)
- Verify that the Change Auditor SharePoint Solution has been successfully deployed. See [Verify deployment status of Change Auditor SharePoint Solution](#).
- Refresh the specified Change Auditor agent configuration on the Agent Configuration page to ensure the latest SharePoint Auditing template is being used. See [Verify auditing template is applied](#).

SharePoint Auditing

- [Introduction](#)
- [SharePoint Auditing page](#)
- [SharePoint Auditing templates](#)
- [SharePoint Auditing wizard](#)
- [SharePoint event logging](#)

Introduction

The SharePoint Auditing page on the Administration Tasks tab displays details about each SharePoint® Auditing template created and allows you to add new auditing templates or modify and delete templates.

NOTE: Each SharePoint farm to be audited requires its own SharePoint Auditing template.

This chapter provides instructions for creating SharePoint Auditing templates, as well as a description of the SharePoint Auditing page and SharePoint Auditing wizard. For a description of the dialogs mentioned in this chapter, refer to the online help.

SharePoint Auditing page

The SharePoint Auditing page is displayed when **SharePoint** is selected from the Auditing task list in the navigation pane of the Administration Tasks tab. From this page you can launch the SharePoint Auditing wizard to specify the SharePoint® farm and path(s) to be audited. You can also edit existing templates and remove templates that are no longer being used.

NOTE: Authorization to use the administration tasks on the Administrations Tasks tab is defined using the Application User Interface page under the Configuration task list. If you are denied access to the tasks on this page, refer to the *Dell™ Change Auditor User Guide* for more information on how to gain access.

Farm	Status	Operations	Agent	Paths
Click here to filter data...	[A]	[A]	[A]	[A]
SharePoint_2013_Config (c05592e2-48ad-46db-b888-34c5cb4b8318)	Enabled	SharePoint Document (13) ...	VENENO.lambo.local	

Title	Status	Path	Exclude
Click here to filter data...	[A]	[A]	[A]
SharePoint13	Enabled	http://veneno	
My Site	Enabled	http://veneno/my	
SpFarm	Enabled	http://veneno/my/personal/spfarm	

The SharePoint Auditing page contains an expandable view of all the SharePoint Auditing templates that have been defined. To add a new template to this list, use the **Add** tool bar button. Once added, the following information is provided for each template:

Farm

Displays the name and GUID of the SharePoint farm specified in the wizard.

Status

Indicates whether the auditing template is enabled or disabled.

Operations

Displays the events selected for auditing on the second page of the wizard. Hover your mouse over this cell to view all of the events included in the template.


Agent

Displays the name of the agent assigned to audit the SharePoint farm.

Paths

This field is used for filtering data.

Click the expansion box to the left of the Farm name to expand this view and display the following details for each template:

 **NOTE:** The cells directly under the main heading rows are used for filtering data. That is, as you enter characters into these cells, the client will redisplay the templates that meet the search criteria (i.e., comparison operator and characters entered). For more details about using the data filtering function provided throughout the Change Auditor client, see the *Dell™ Change Auditor User Guide*.

Title

Displays the name assigned to the SharePoint component being audited.

Status

Indicates whether auditing for the selected audit path is enabled or disabled.

Path

Displays the audit path of each SharePoint component to be audited.

Exclude

Displays the SharePoint paths that have been excluded from auditing as specified at the bottom of the first page of the wizard.

SharePoint Auditing templates

In order to enable SharePoint® auditing in Change Auditor, you must create a SharePoint Auditing template for each SharePoint farm to be audited. Each auditing template defines the SharePoint path within the farm to be audited and the Change Auditor agent to be used to capture events from the selected SharePoint farm.

- ① **NOTE:** There can only be one SharePoint Auditing template per SharePoint farm. The SharePoint Auditing wizard will not allow you to proceed if you select a SharePoint farm that already has a template defined. Be sure that all of the SharePoint Auditing templates contain a GUID in their Farm name (**Farm** field on SharePoint Auditing page) BEFORE you attempt to add any new templates.

See [Step 4: Create SharePoint Auditing template](#) for the procedure on how to create a new SharePoint Auditing template for a SharePoint farm that has not been previously selected for auditing.

To create a new SharePoint auditing template (for a SharePoint farm that was previously selected for auditing, but the template has been deleted):

- 1 Open the Administration Tasks tab.
- 2 Click the **Auditing** task button at the bottom of the navigation pane (left pane).
- 3 Select **SharePoint** (under the Applications heading in the Auditing task list) to open the SharePoint Auditing page.
- 4 Click the **Add** tool bar button to launch the SharePoint Auditing wizard which will step you through the process of creating a SharePoint Auditing template.
- 5 From the first page of the wizard, specify the SharePoint farm and path(s) to be audited.
 - **SharePoint Farm** - Use the drop-down arrow to the far right of this field and select a <SharePoint Farm (and GUID)> from the list displayed.
 - ① **NOTE:** The **Next** button on this page is disabled if you select a SharePoint farm from the drop-down list that is currently assigned to a SharePoint Auditing template. You can only select a SharePoint farm whose auditing template has been deleted.
 - **SharePoint paths to audit** - click the **Add** button to locate and add paths within the selected SharePoint farm to be audited.
 - **Add optional SharePoint paths to exclude from auditing under** - select a path that has been added to the SharePoint paths to audit list and then click the **Add** button to locate and add any subsequent paths within the selected path that are to be excluded from auditing.
- 6 On the second page of the wizard, select the operations (facilities or event classes) that are to be audited. Select an entry from the list box at the top of the page, expand the **Add** button and click one of the following commands:
 - Use the **Add | Add This Event** button to add individual events.
 - Use the **Add | Add All Events in Facility** option to add all events in the selected facility.

Repeat this step to include additional events or facilities. At least one event/facility must be specified.

- ① **NOTE:** If you want to audit ALL SharePoint events, they must all be added to this page of the wizard. In addition, the events that are disabled by default must first be enabled using the Audit Events page on the Administration Tasks tab in the Change Auditor client.

- ① **NOTE:** The following operations are audited by default when you create a SharePoint Auditing template. Therefore, they are NOT included in the event class list on this page.
 - Site Created
 - Site Deleted
 - Site Moved
 - Site Collection Created
 - Site Collection Deleted
 -

- 7 On the third page of the wizard, select the Change Auditor agent to be used to monitor the specified SharePoint farm.
 - Click the **Browse** button to display the Eligible Change Auditor Agents dialog, which displays a list of the Change Auditor agents that are in the selected SharePoint farm. Select an agent from this list and click **OK**.
 - Click the **Set Credentials** button and enter the credentials to be used to access the SharePoint farm. Click **OK**. A notification message appears indicating whether you have entered valid credentials. If you get an 'Invalid credentials' notification, click the **Set Credentials** button and enter the proper credentials.
- 8 Use the last page of the wizard to optionally verify that the Change Auditor SharePoint Solution has been successfully added and deployed to the SharePoint farm selected for auditing.
 - ① **NOTE:** The Change Auditor SharePoint Solution status is checked/refreshed once every hour; therefore, the status displayed may not reflect the most current status. Click the **Refresh Change Auditor Solution Status** button to force a refresh of the solution's status.
- 9 To create the template, click the **Finish** button.

Clicking the **Finish** button will create the template, close the wizard, and return to the SharePoint Auditing page, where the newly created template will now be listed.
- 10 On the Administration Tasks tab, click the **Configuration** task button at the bottom of the navigation pane. Select **Agent** in the Configuration task list to open the Agent Configuration page.
- 11 Select the Change Auditor agent assigned to the SharePoint Auditing template (**Auditing** appears in the **SharePoint** column) and click the **Refresh Configuration** tool bar button or right-click command.
 - ① **NOTE:** If you do not refresh the agent's configuration, the agent will automatically check for a new agent configuration based on the polling interval setting (located on the System Settings tab of the Configuration Setup dialog). The default is every 15 minutes.

To modify a template:

- 1 On the SharePoint Auditing page, select the template to be modified and click the **Edit** tool bar button or right-click command.
- 2 This will display the SharePoint Auditing wizard, where you can modify the path(s) included/excluded in the template. For example:
 - On the first page of wizard, you can add a new path to the auditing template. You can also add a SharePoint path that is to be excluded from auditing.
 - On the second page of the wizard, you can add or remove SharePoint events/facilities from the auditing template.
 - On the third page of the wizard, you can select a different Change Auditor agent to be used to audit the SharePoint farm or change the user account used to access the SharePoint farm.
- 3 You can also use the last page of the wizard to verify the deployment status of the Change Auditor SharePoint Solution.
- 4 Once you have made the necessary modifications, click the **Finish** button to save your changes and close the wizard.
- 5 On the Administration Tasks tab, click the **Configuration** task button at the bottom of the navigation pane. Select **Agent** in the Configuration task list to open the Agent Configuration page.
- 6 Select the Change Auditor agent assigned to the SharePoint Auditing template and click the **Refresh Configuration** tool bar button or right-click command.
 - ① **NOTE:** If you do not refresh the agent's configuration, the agent will automatically check for a new agent configuration based on the polling interval setting (located on the System Settings tab of the Configuration Setup dialog). The default is every 15 minutes.

To disable an auditing template:

The disable feature allows you to temporarily stop auditing the specified SharePoint farm or path without having to remove the auditing template or individual path from a template.

- 1 On the SharePoint Auditing page, use one of the following methods to disable an auditing template:
 - Place your cursor in the **Status** cell for the template to be disabled, click the arrow control and select **Disabled**.
 - Right-click the template to be disabled and select **Disable**.

The entry in the **Status** column for the template will change to 'Disabled'.

- 2 To re-enable the auditing template, use the **Enable** option in either the **Status** cell or right-click menu.

To disable the auditing of a path in a template:

- 1 On the SharePoint Auditing page, use one of the following methods to disable the auditing of a path in an auditing template:
 - Click in the **Status** cell for the path and select **Disabled**.
 - Right-click the path and select **Disable**.

The entry in the **Status** column for the selected path will change to 'Disabled'.


- 2 To re-enable the auditing of a path, use the **Enable** option in either the **Status** cell or right-click menu.

To delete an auditing template:

- 1 On the SharePoint Auditing page, use one of the following methods to delete a template:
 - Select the template to be deleted and click the **Delete | Delete Template** tool bar button.
 - Right-click the template to be deleted and select **Delete**.
- 2 A dialog will be displayed confirming that you want to delete the selected template. Click **Yes**.

To delete a path from a template:

- 1 On the SharePoint Auditing page, use one of the following methods to delete a SharePoint path from an auditing template:
 - Select the path to be deleted and use the **Delete | Delete Path** tool bar button.
 - Right-click the SharePoint path to be deleted and select **Delete**.
- 2 A dialog will be displayed confirming that you want to delete the selected path from the template. Select **Yes**.

 **NOTE:** If the selected path is the last one in the template, deleting it will also delete the template.

SharePoint Auditing wizard

The SharePoint Auditing wizard is displayed when you click the **Add** or **Edit** tool bar button on the SharePoint Auditing page. This wizard steps you through the process of creating a new template, identifying the SharePoint® farm and path(s) to be audited. You will also select a Change Auditor agent that has SharePoint installed to capture events from the selected SharePoint farm.

You can also use this wizard to modify a previously defined template.

The following table provides a description of the fields and controls in the SharePoint Auditing wizard.



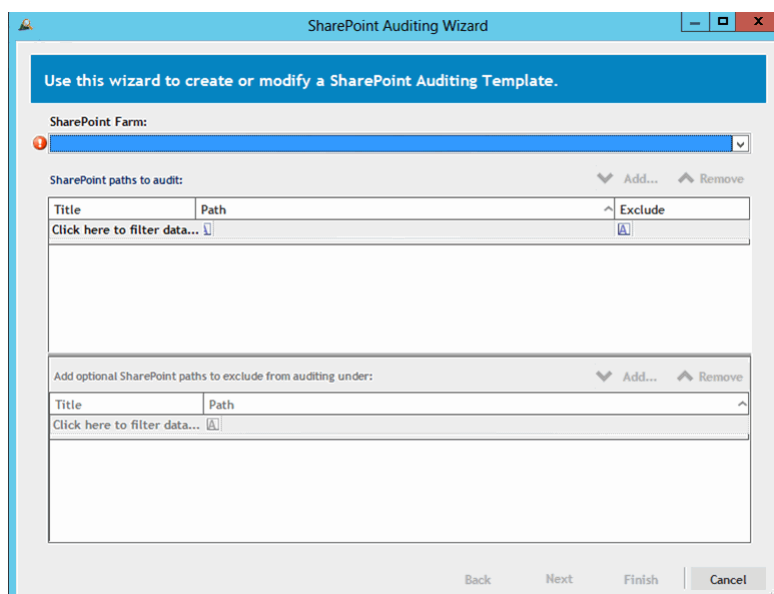
 **NOTE:** A red flashing icon () indicates that you have not yet entered the required information or you have selected a SharePoint Farm that is already being audited by another auditing template. Hovering your cursor over this icon displays a tool tip explaining what needs to be entered.

Table 3. SharePoint Auditing wizard

Create or modify a SharePoint Auditing Template page

On the first page of the wizard, specify the SharePoint farm and path(s) to be audited.



SharePoint Farm

This field displays that name (and GUID) of the SharePoint farm being audited. Use the drop-down control to select or find a SharePoint farm.

- **Find a SharePoint farm** - select this option to select a SharePoint farm for auditing. Selecting this option displays the Eligible Change Auditor Agents dialog allowing you to select from a list of agents that host a SharePoint farm.

NOTE: The topology will scan for the SharePoint farm and add it to the **SharePoint Farm** field. A red flashing icon (⚠) indicates that the SharePoint Farm is already being monitored by another SharePoint Auditing template. See the [Upgrade Change Auditor for SharePoint](#) appendix for more information on editing existing templates BEFORE adding new SharePoint Auditing templates.

- **<SharePoint Farm Name (GUID)>** - select from a list of cached SharePoint farms that have been previously selected for auditing.

NOTE: The only time you can select a SharePoint farm from the drop-down list is when a SharePoint farm was previously selected for auditing and that auditing template has been deleted. The wizard will not allow you to select a SharePoint farm from the drop-down list if it has a template currently assigned to it.

SharePoint paths to audit list

This box lists the SharePoint components within the selected SharePoint farm to be audited. Use the **Add** and **Remove** buttons at the top of this list box to specify the SharePoint components to be audited.

- **Add** - Use the **Add** button to locate and add a component within the selected SharePoint farm to the SharePoint Paths to Audit list. Clicking the **Add** button displays the Browse SharePoint dialog allowing you to select a SharePoint component for auditing.
- **Remove** - Select an entry in the SharePoint Paths to Audit list and click the **Remove** button to remove it from the template.

Table 3. SharePoint Auditing wizard

SharePoint paths to exclude list (Optional)

The list box located across the bottom of this page displays the SharePoint components to be excluded from auditing. Use the button above this list box to specify the paths to be excluded.

- **Add** - To exclude a component, select a path in the SharePoint Paths to Audit list and then click the **Add** button to select the component(s) under the selected audit path that are to be excluded from auditing.

Clicking the **Add** button displays the Browse SharePoint dialog allowing you to locate and select a SharePoint component under the selected audit path for exclusion.

- **Remove** - Select an entry in the Exclusion list and click the **Remove** button to remove it.

Select the changes to audit page

From this page, select the SharePoint operations (event classes or facilities) that are to be audited on the selected SharePoint farm. You must select at least one event class.

NOTE: If you want to audit ALL SharePoint events, they must all be added to this page of the wizard. In addition, the events that are disabled by default must be enabled using the Audit Events page on the Administration Tasks tab in the Change Auditor client.

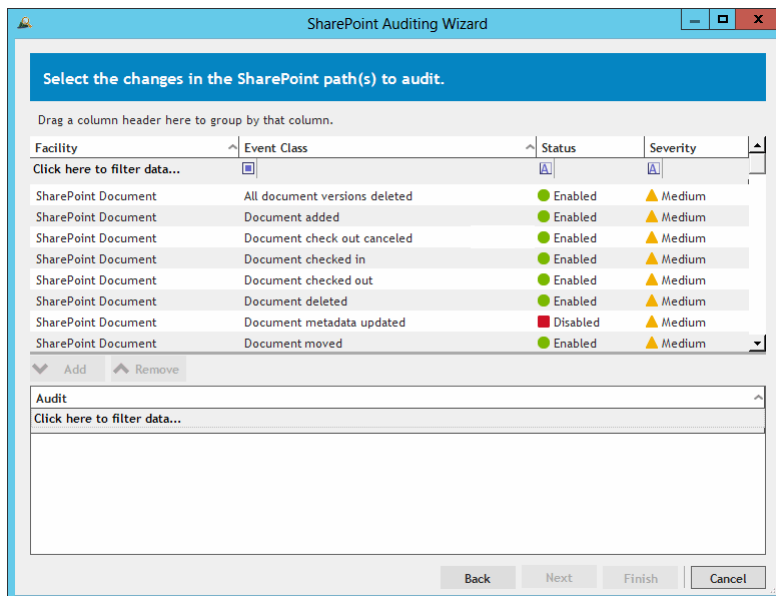


Table 3. SharePoint Auditing wizard

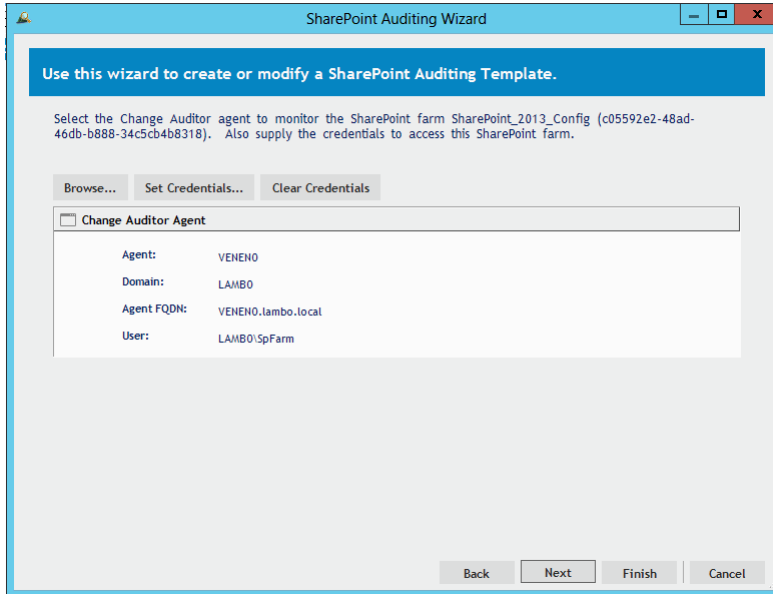
Event Classes	<p>The data grid across the top of the page displays all of the SharePoint event classes available for auditing. Select/highlight an event class and use the appropriate add option to add either the individual event class or all events in the selected facility.</p> <p>This grid displays the following information for each event class:</p> <ul style="list-style-type: none"> • Facility - displays the facility to which each event class belongs • Event Class - displays the events available for auditing • Status - indicates whether the event is currently enabled or disabled • Severity - displays the current severity level assigned to each event <p>NOTE: The following operations are audited by default when you create a SharePoint Auditing template. Therefore, they are NOT included in the event class list on this page.</p> <ul style="list-style-type: none"> • Site Created • Site Deleted • Site Moved • Site Collection Created • Site Collection Deleted •
Add	<p>Select an event class in the data grid, click the Add button and select one of the following options:</p> <ul style="list-style-type: none"> • Add This Event - use to add the selected event class(es) to the Audit list box at the bottom of the page. • Add All Events in Facility - use to add all event classes in the selected facility to the Audit list box at the bottom of the page. This option is only available when you have selected only one event class in the data grid.
Remove	<p>Click the Remove button to remove the selected entry from the Audit list box.</p>
Audit list	<p>This list box displays the facilities and/or event classes to be included in the selected auditing template.</p>

Table 3. SharePoint Auditing wizard

Select Change Auditor agent page

From this page, select the Change Auditor agent to be used to capture events from the selected SharePoint farm.

NOTE: If you used the **Find SharePoint Farm** option on the first page of the wizard to specify the SharePoint farm to be audited, this page is pre-populated based on the agent selected.

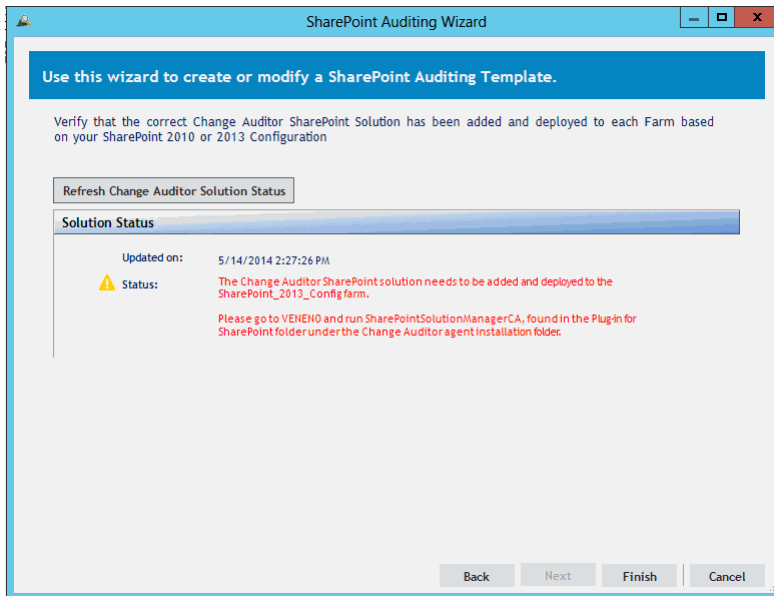


Browse	Click the Browse button to display the Eligible Change Auditor Agents dialog, which displays a list of the agented servers available in the selected SharePoint farm. From this dialog, select the Change Auditor agent to be used to capture the events from the specified farm.
Set Credentials	Once you have selected the Change Auditor agent to be used, click the Set Credentials button to enter the credentials to be used to access the selected SharePoint farm. Clicking this button displays the SharePoint Credentials Required dialog which prompts you to enter the following: <ul style="list-style-type: none"> • User • Password • Domain <p>NOTE: The user account specified must have full access to all SharePoint sites and read permissions on all SharePoint SQL databases.</p> <p>NOTE: A notification message appears indicating whether you have entered valid credentials. If you get an 'Invalid credentials' notification, click the Set Credentials button and enter the proper credentials.</p>
Clear Credentials	Click the Clear Credentials button to clear the credentials previously entered for the selected Change Auditor agent.
Change Auditor Agent	Once a Change Auditor agent is selected, the following information is displayed: <ul style="list-style-type: none"> • Agent • Domain • Agent FQDN • User (this field is populated once valid credentials have been entered/verified using the Set Credentials button)

Table 3. SharePoint Auditing wizard

Verify Change Auditor SharePoint Solution deployment status page

Use the last page of the wizard to verify the deployment status of the Change Auditor SharePoint Solution.




Refresh Change Auditor Solution Status

The Change Auditor SharePoint Solution status is checked/refreshed once every hour; therefore, the status displayed may not reflect the most current status. Click the **Refresh Change Auditor Solution Status** button to force a refresh of the solution's status.

Solution Status

The Solution Status pane displays the current status of the Change Auditor SharePoint Solution.

If it contains a warning status ( symbol and red text), select the **Refresh Change Auditor Solution Status** button to refresh the status. If the warning state remains, click the **Finish** button to close the wizard. On the local SharePoint farm server, run the SharePoint Solution Manager utility provided with Change Auditor for SharePoint to add/deploy the solution. See [Step 3: Add and deploy Change Auditor SharePoint Solution](#) for more information on using the SharePoint Solution Manager utility.

SharePoint event logging

In addition to real-time event auditing, you can enable event logging to capture SharePoint® events locally in a Windows® event log. This event log can then be collected using Dell™ InTrust™ to satisfy long-term storage requirements.

For SharePoint events, event logging is disabled by default. When enabled, only configured activities are sent to the ChangeAuditor for SharePoint event log. See the *Dell™ Change Auditor for SharePoint® Event Reference Guide* for a list of the SharePoint events that can be sent to the event log.

To enable SharePoint event logging:

- 1 Open the Administration Tasks tab.
- 2 Click the **Configuration** task button at the bottom of the navigation pane.
- 3 Select **Agent** in the Configuration task list to display the Agent Configuration page.
- 4 Click the **Event Logging** tool bar button.
- 5 On the Event Logging dialog, select **SharePoint**.
- 6 Click **OK** to save your selection and close the dialog.

The SharePoint events configured in the SharePoint Auditing template will then be sent to the ChangeAuditor for SharePoint event log.

SharePoint Searches/Reports

- [Introduction](#)
- [Create custom SharePoint searches](#)

Introduction

Change Auditor for SharePoint provides you with the ability to search, report and alert on SharePoint® activity, such as changes to SharePoint configurations, security, and documents. Using the search capabilities of Change Auditor, you can retrieve SharePoint events for multiple site collections and farms or for an individual SharePoint farm, site, path or object.

This chapter explains how to create a custom SharePoint search using the What tab. For a description of the dialogs mentioned in this chapter, please refer to the online help.

Create custom SharePoint searches

The following scenarios explain how to use the What tab to create custom SharePoint® searches.

- NOTE:** If you wanted to, you can use the other Search Properties tabs to define additional criteria:
- **Who** - allows you to search for events generated by a specific user, computer or group
 - **Where** - allows you to search for events captured by a specific agent or within a specific domain or site
 - **When** - allows you to search for events that occurred within a specific date/time range
- The Origin is not available for SharePoint events.

To search all SharePoint paths:

- 1 Open the Searches page.
- 2 In the explorer view (left pane), expand and select the folder where you want to save your search.
Selecting the **Private** folder will create a search that only you can run and view, whereas selecting the **Shared** folder will create a search which can be run and viewed by all Change Auditor users.
- 3 Click the **New** tool bar button at the top of the Searches page (or right-click a folder and select the **New | New Search** menu command).
This will activate the Search Properties tabs across the bottom of the Searches page.
- 4 On the Info tab, enter a name and description for the search.
- 5 Open the What tab, expand the **Add** tool bar button and select **Subsystem | SharePoint**.
- 6 On the Add SharePoint Path dialog, select **All SharePoint Paths**.
- 7 Click the **OK** button to save your selection and close the dialog.
- 8 Once you have defined the search criteria to be used, you can either save the search definition or run the search.
 - To save the search definition without running it, click **Save**.

- To save and run the search, click **Run**.
- 9 When this search is run, Change Auditor will search for the SharePoint events based on the search criteria specified on the What tab and display the results in a new search results page.

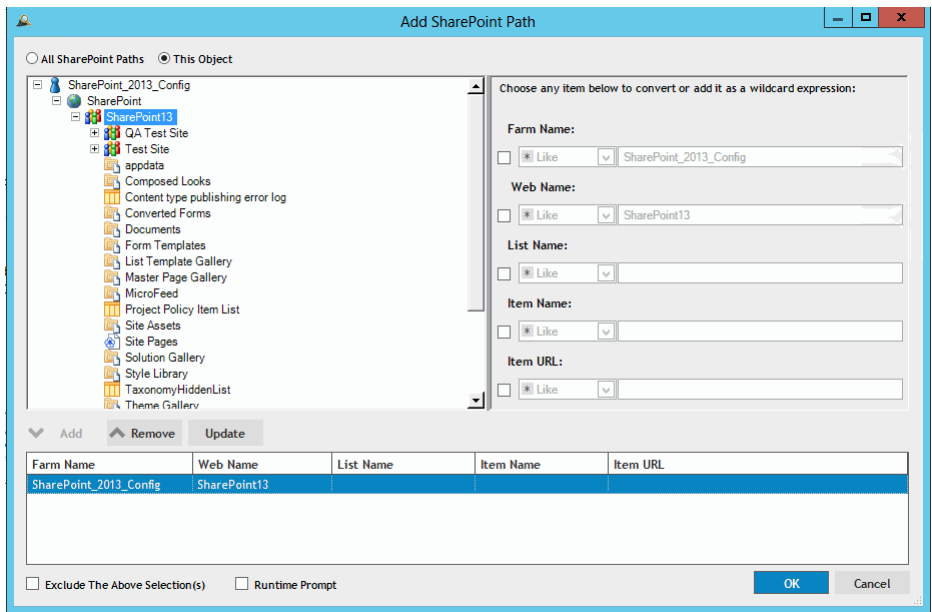
To search for changes to a SharePoint farm:

NOTE: This procedure also applies to searching for changes to the other SharePoint objects (e.g., web applications, sites, lists, etc.).

- 1 Open the Searches page.
- 2 In the explorer view (left pane), expand and select the folder where you want to save your search.
Selecting the **Private** folder will create a search that only you can run and view, whereas selecting the **Shared** folder will create a search which can be run and viewed by all Change Auditor users.
- 3 Click the **New** tool bar button at the top of the Searches page (or right-click a folder and select the **New | New Search** menu command).
This will activate the Search Properties tabs across the bottom of the Searches page.
- 4 On the Info tab, enter a name and description for the search.
- 5 Open the What tab, expand the **Add** tool bar button and select **Subsystem | SharePoint**.
- 6 On the Add SharePoint Path dialog, select **This Object**.
- 7 Selecting **This Object** enables the selection controls on this dialog, which includes a hierarchical display (left pane) and a wildcard expression pane (right pane).

The hierarchical pane displays your SharePoint farms, including the web applications, sites and lists discovered on each farm. Using this pane, you can search for events against an individual object.



The wildcard expression pane is populated as you select objects in the hierarchical pane. Using this pane, you can expand your search for events against all objects that match a specific wildcard expression.



Using this pane, select the SharePoint farm to be included in the search.

- To search an individual SharePoint farm, select the farm to be searched in the hierarchical pane on the left.
- To search SharePoint farms using a wildcard expression, select the check box next to the **Farm Name** in the right pane. Select the operator (**Like** or **Not Like**) and enter the string of characters


to be used to find SharePoint farms. See the following procedure for more details on using the wildcard expression pane.

- 8 Once you have selected the SharePoint farm to be included in the search definition, click **Add** to add it to the Selection list at the bottom of the dialog.
 -  **NOTE:** Select the **Exclude the Above Selection(s)** check box if you want to search for changes to all SharePoint farms EXCEPT those listed in the 'what' list.
 -  **NOTE:** Select the **Runtime Prompt** check box on this dialog to prompt for a SharePoint object every time the search is run.
- 9 Click the **OK** button to save your selection and close the dialog.
- 10 Once you have defined the search criteria to be used, you can either save the search definition or run the search.
 - To save the search definition without running it, click **Save**.
 - To save and run the search, click **Run**.
- 11 When this search is run, Change Auditor will search for the SharePoint events based on the search criteria specified on the What tab and display the results in a new search results page.

To locate SharePoint events based on a wildcard expression:

- 1 Open the Searches page.
- 2 In the explorer view (left pane), expand and select the folder where you want to save your search.

Selecting the **Private** folder will create a search that only you can run and view, whereas selecting the **Shared** folder will create a search which can be run and viewed by all Change Auditor users.
- 3 Click the **New** tool bar button at the top of the Searches page (or right-click a folder and select the **New | New Search** menu command).

This will activate the Search Properties tabs across the bottom of the Searches page.
- 4 On the Info tab, enter a name and description for the search.
- 5 Open the What tab, expand the **Add** tool bar button and select **Subsystem | SharePoint**.
- 6 On the Add SharePoint Path dialog, select **This Object**.
- 7 Use the right pane to specify the wildcard expression to be used to search for SharePoint events.
 - Select the SharePoint component(s) to be included in your search: **Farm Name, Web Name, List Name, Item Name** and/or **Item URL**.
 - For each SharePoint component selected, select the comparison operator to be used: **Like** or **Not Like**
 - For each SharePoint component selected, enter the pattern (character string and * wildcard character) to be used to search for a match.
 -  **NOTE:** When multiple wildcard expressions are specified (i.e., multiple check boxes are selected), they are 'ANDed' together and all of the expressions must be met to be considered a match.

For example, to search all web application sites that begin with 'Admin' for documents that contain 'procedure' in their name:

 - Select (check) **Web Name** and specify: **Like Admin***
 - Select (check) **Item Name** and specify: **Like *procedure***

NOTE: You can also select objects in the hierarchical pane to pre-populate the fields in the wildcard expression pane. When you use this approach to pre-populate the fields, the check boxes associated with the object(s) do not need to be checked in order to include them in your wildcard expression. However, in order to convert or add a specific expression, you must select the corresponding check box in order to select the comparison operator and pattern to be matched.

For example, to search for all documents that begin with 'Sales' in a SharePoint farm:

- From the hierarchical pane, select/highlight the SharePoint farm to be searched (this will pre-populate the Farm Name field in the wildcard expression pane)
- From the wildcard expression pane, select **Item Name** check box and specify: **Like Sales***

8 After entering the wildcard expression(s) to be used, click **Add** to add it to the Selection list at the bottom of the dialog.

NOTE: Select the **Exclude the Above Selection(s)** check box if you want to search for changes to all SharePoint sites EXCEPT those listed in the 'what' list.

NOTE: Select the **Runtime Prompt** check box on this dialog to prompt for a SharePoint path every time the search is run.

9 Click the **OK** button to save your selection and close the dialog.

10 Once you have defined the search criteria to be used, you can either save the search definition or run the search.

- To save the search definition without running it, click **Save**.
- To save and run the search, click **Run**.

11 When this search is run, Change Auditor will search for the SharePoint events based on the search criteria specified on the What tab and display the results in a new search results page.

To search for SharePoint paths that already have an event in the database:

1 Open the Searches page.

2 In the explorer view (left pane), expand and select the folder where you want to save your search.

Selecting the **Private** folder will create a search that only you can run and view, whereas selecting the **Shared** folder will create a search which can be run and viewed by all Change Auditor users.

3 Click the **New** tool bar button at the top of the Searches page (or right-click a folder and select the **New | New Search** menu command).

This will activate the Search Properties tabs across the bottom of the Searches page.

4 On the Info tab, enter a name and description for the search.

5 Open the What tab, expand the **Add with Events** tool bar button and select **Subsystem | SharePoint**.

6 On the Add SharePoint Paths dialog, select a path from the list and click the **Add** button to add it to the selection list at the bottom of the page.

7 Click **OK** to save your selection and close the dialog.

8 Once you have defined the search criteria to be used, you can either save the search definition or run the search.

- To save the search definition without running it, click **Save**.
- To save and run the search, click **Run**.

9 When this search is run, Change Auditor will search for the SharePoint events based on the search criteria specified on the What tab and display the results in a new search results page.

Manually Add/Deploy Change Auditor SharePoint Solution

The procedure provided in this appendix explains how to manually add the Change Auditor SharePoint Solution to the SharePoint® Solution Store and deploy the solution to web applications.

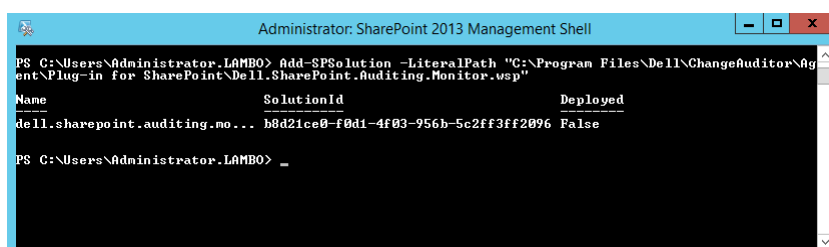
- ① **NOTE:** If you have already run the SharePoint Solution Manager utility as described in the Installation and Configuration chapter, there is no need to manually add/deploy the solution. However, if you desire more control in adding and deploying the Change Auditor SharePoint Solution, you can use this procedure instead.

To add the Change Auditor SharePoint Solution via PowerShell®:

- 1 On the server that is running Microsoft® SharePoint 2013 Products, open a SharePoint PowerShell management shell (**Start | All Programs | Microsoft SharePoint 2013 Products | SharePoint 2013 Management Shell**).
- 2 At the command prompt, enter the following command:

```
Add-SPSolution -LiteralPath "C:\Program Files\Dell\ChangeAuditor\Agent\Plug-in for SharePoint\Dell.SharePoint.Auditing.Monitor.wsp"
```

Executing this command adds the Change Auditor SharePoint Solution to the farm's solution store. You will get something that looks like this:

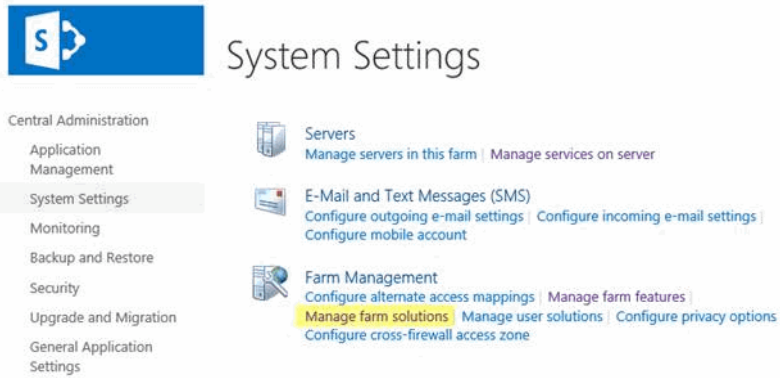


```
Administrator: SharePoint 2013 Management Shell
PS C:\Users\Administrator.LAMBO> Add-SPSolution -LiteralPath "C:\Program Files\Dell\ChangeAuditor\Agent\Plug-in for SharePoint\Dell.SharePoint.Auditing.Monitor.wsp"
Name                SolutionId           Deployed
-----                -
dell.sharepoint.auditing.mo... b8d21ce0-f0d1-4f03-956b-5c2ff3ff2096 False
PS C:\Users\Administrator.LAMBO> _
```

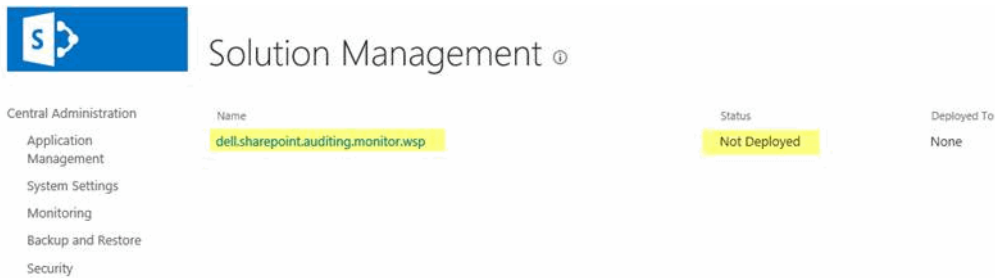
- 3 In order to use the solution, you must deploy the solution package as described below.

To deploy the Change Auditor SharePoint Solution via Central Administration:

- 1 Launch the SharePoint Central Administration web site (**Start | All Programs | Microsoft SharePoint 2013 Products | SharePoint 2013 Administration**).
- 2 On the Central Administration Home page, select **System Settings**.
- 3 On the System Settings page, under Farm Management, click **Manage farm solutions**.



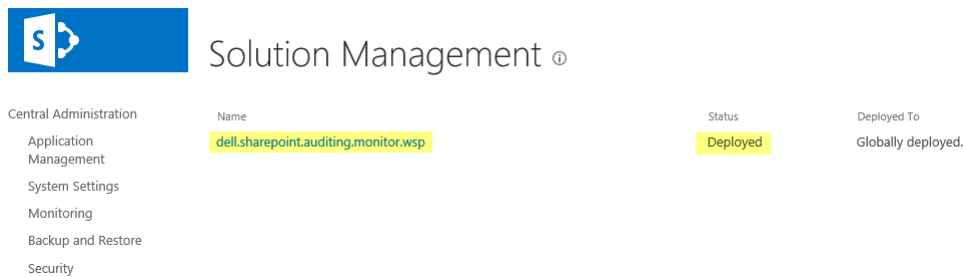
- 4 On the Solution Management page, locate and click **dell.sharepoint.auditing.monitor.wsp**.



- 5 On the Solution Properties page, click **Deploy Solution**.
- 6 On the Deploy Solution page, select the appropriate options as described below:
 - **Deploy When** - select one of the following options: **Now** or **At a specified time**
 - **Deploy To** - select to deploy globally to all web applications or to an individual web application if you have specified a web application in the PowerShell cmdlet when you added the solution to the solution store

Click **OK** to save your selections and close the Deploy Solution page.

- 7 Once successfully deployed, the **Status** column for the Change Auditor SharePoint Solution displays **Deployed** as shown below.



- 8 Once the solution is deployed, restart the Change Auditor agent to enable auditing of SharePoint events.

SharePoint Event Requirements

The following table lists the SharePoint® events that require additional SharePoint settings to be enabled in order for Change Auditor for SharePoint to capture the event.

See [Step 1: Ensure SharePoint is properly configured](#) for instructions on how to enable native auditing and versioning within SharePoint.

Table 4. SharePoint event requirements


Event	Native Auditing	Versioning
All document versions deleted	X	X
All list item versions deleted	X	X
All permission levels revoked	X	
Document library restored from recycle bin	X	
Document restored from recycle bin	X	
Document version deleted	X	X
Document viewed	X	
Folder restored from recycle bin	X	
List item restored from recycle bin	X	
List item version deleted	X	X
List restored from recycle bin	X	
Member added to security group	X	
Member removed from security group	X	
Permission inheritance broken	X	
Permission inheritance restored	X	
Permission level created	X	
Permission level deleted	X	
Permission level granted	X	
Permission level inheritance broken	X	
Permission level permissions modified	X	
Permission level revoked	X	
Security group created	X	
Security group deleted	X	
Site collection ownership granted	X	
Site collection ownership revoked	X	

Upgrade Change Auditor for SharePoint

Use this upgrade procedure if you have a previous version of Change Auditor for SharePoint already installed and have existing SharePoint® Auditing templates defined.


- [Step 1: Upgrade Change Auditor components](#)
- [Step 2: Run SharePoint Solution Manager](#)
- [Step 3: Edit existing SharePoint Auditing template\(s\)](#)

Step 1: Upgrade Change Auditor components


 **NOTE:** For detailed instructions on upgrading Change Auditor, see the *Dell™ Change Auditor Installation Guide*.

If you have a previous version of Change Auditor already installed, upgrade the Change Auditor components in the following order:

- 1 Change Auditor coordinator (and database schema)

 **NOTE:** If you are upgrading from Change Auditor for SharePoint 6.0, you will NOT require a new license for this product (or any of the other Change Auditor products).

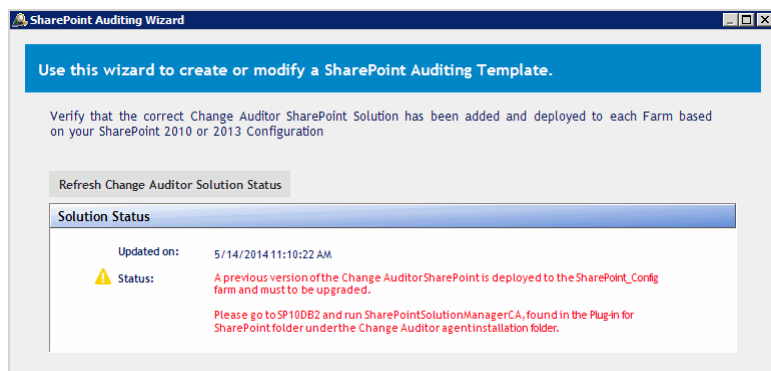
- 2 Change Auditor client
- 3 Change Auditor agents

 **NOTE:** Be sure to deploy a Change Auditor agent on ONE of the Central Administration SharePoint servers in the SharePoint® farm to be monitored.

Step 2: Run SharePoint Solution Manager

Users with existing SharePoint® auditing in place must run the SharePoint Solution Manager on all SharePoint Central Administration servers.

- ① **NOTE:** If any existing SharePoint Auditing templates are edited after a 6.5 upgrade, the wizard checks the Solution Deployment .wsp file and displays the following message if the SharePoint Solution Manager has not been run:



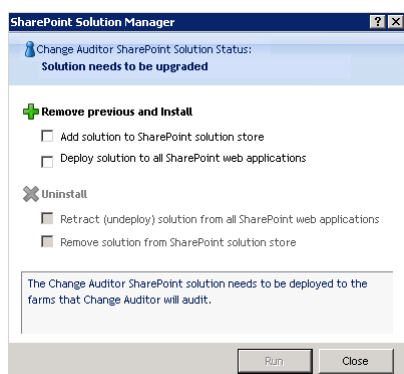
- 1 On the local SharePoint farm server, run the SharePoint Solution Manager utility:

- SharePoint 2010: SharePointSolutionManagerCA.exe
- SharePoint 2013: SharePointSolutionManagerCALauncher2013.exe

These utilities can be found in the Plug-in for SharePoint folder under the Change Auditor agent installation folder. For example, the default location is:

%ProgramFiles%\Dell\ChangeAuditor\Agent\Plug-in for SharePoint

Launching the SharePoint Solution Manager scans the topology and displays the message 'Solution needs to be upgraded'.

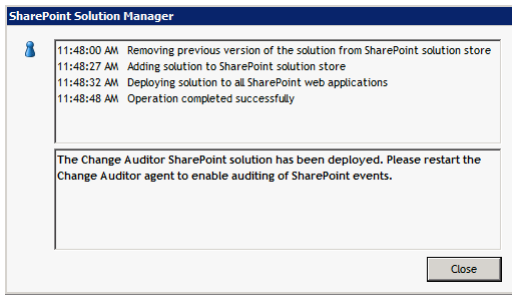


- 2 Select both check boxes under the **Remove previous and Install** heading:

- Add solution to SharePoint solution store
- Deploy solution to all SharePoint web applications

Click **Run**.

- 3 A progress dialog appears. When completed, the Change Auditor SharePoint Solution status is updated at the top of the dialog. Click **Close**.
- 4 A message appears explaining that the old solution was removed and that the new solution was added and deployed.



- 5 Click **Close** to close the message box.
- 6 Restart the Change Auditor agent to enable auditing of SharePoint events.

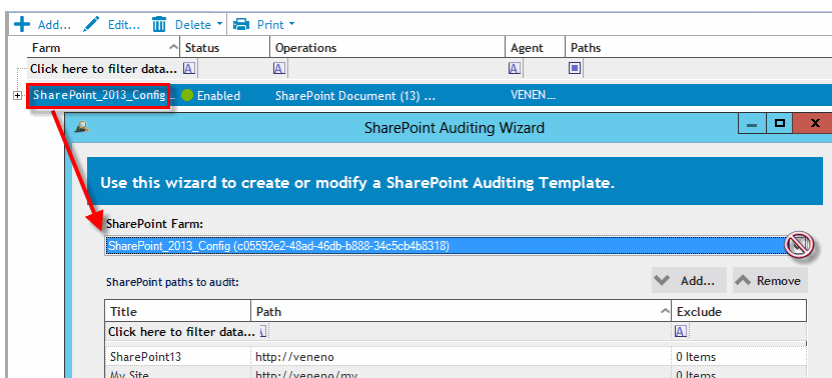
Step 3: Edit existing SharePoint Auditing template(s)

Beginning with ChangeAuditor 5.9, Change Auditor for SharePoint includes the GUID of the SharePoint® farm server in the template name. Therefore if you are upgrading from a pre-5.9 version of Change Auditor, you must open and edit each of your existing SharePoint Auditing templates in order to capture this additional information.

- ① **NOTE:** You must edit ALL existing SharePoint Auditing templates BEFORE you can add any new SharePoint Auditing templates. Be sure that all of the SharePoint Auditing templates contain a GUID in their Farm name (Farm field on SharePoint Auditing page) BEFORE you attempt to add any new templates.

To edit an existing SharePoint Auditing template:

- 1 Open the Administration Tasks tab.
- 2 Click the **Auditing** task button at the bottom of the navigation pane (left pane).
- 3 Select **SharePoint** (under the Applications heading in the Auditing task list) to open the SharePoint Auditing page.
- 4 Select the template to be edited and click the **Edit** tool bar button to launch the SharePoint Auditing wizard.



The wizard automatically appends the GUID associated with the selected SharePoint Farm to the name displayed in the **SharePoint Farm** field. In addition, the drop-down option to 'Find a new SharePoint Farm' is not available.

- 5 Click through the wizard pages. No changes are required.

- 6 On the last page of the wizard, click the **Refresh Change Auditor Solution Status** button and verify that the Change Auditor SharePoint Solution has been successfully added and deployed to the SharePoint farm.
- 7 Click **Finish** to save the updated template.

Once the existing SharePoint Auditing templates are updated as described above, you can add new SharePoint Auditing templates to monitor other SharePoint Farms. See [Step 4: Create SharePoint Auditing template](#) in the [Installation and Configuration](#) chapter for more details on adding a new SharePoint Auditing template.

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Technical support is available to customers who have purchased Dell software with a valid maintenance contract and to customers who have trial versions. To access the Support Portal, go to <http://software.dell.com/support/>.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. In addition, the portal provides direct access to product support engineers through an online Service Request system.

The site enables you to:

- Create, update, and manage Service Requests (cases)
- View Knowledge Base articles
- Obtain product notifications
- Download software. For trial software, go to [Trial Downloads](#).
- View how-to videos
- Engage in community discussions
- Chat with a support engineer