

Boldon James

A QINETIQ company

SharePoint Classifier Guide

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Gold
Microsoft Partner



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Customer Documentation

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1 INTRODUCTION

This document summarises the features supported by Boldon James SharePoint Classifier.

SharePoint Classifier extends SharePoint to present Classifier applied Label values in document library columns. Uploading a labelled file will propagate the label into the document library columns. Items already in a document library can have Label values applied and changed using SharePoint Classifier.

The Label values supported are as defined by a Classifier Configuration as established using Classifier Administration. See the Classifier Administration Guide for details on running Classifier Administration.

Note: Throughout this document, [Administration Guide](#) means [Administration Guide](#) or [Administration Server Guide](#) depending upon whether you are using the [Administration Console](#) or [Administration Server](#) environment.

See [SharePoint Classifier Functionality](#) for a description of the functionality that SharePoint Classifier provides.

1.1 Architecture Overview

SharePoint Classifier is not a tightly coupled full trust SharePoint solution but uses a loosely coupled model using public APIs and extensibility frameworks. This allows consistent functionality across all of the SharePoint platforms supported by SharePoint Classifier and includes platforms such as SharePoint Online in Office 365 where full trust solutions are not supported.

The product is supplied as the SharePoint Classifier Bundle which contains:

- [Boldon James SharePoint Classifier Website for Clients.](#)
- [Boldon James SharePoint Classifier Configuration Sweeper Service.](#)
- [Boldon James SharePoint Classifier Item Sweeper Service.](#)
- [Boldon James SharePoint Classifier PowerShell Configuration.](#)

The [SharePoint Classifier Website for Clients](#) provides the Classifier configuration for the SharePoint Client label dialog. This website installs into an IIS website on a Windows Server. This IIS website must be accessible from all client machines where users will be accessing the SharePoint Classifier functionality.

The [SharePoint Classifier Configuration Sweeper Service](#) is a Windows Service that monitors the SharePoint environment for changes to the SharePoint configuration using the SharePoint client-side object model (CSOM) API. This service monitors the SharePoint environment for changes using the SharePoint Change Log and enables/disables the SharePoint Classifier functionality on document libraries based on settings on the SharePoint property bags at the site collection, site and document library level.

The [SharePoint Classifier Item Sweeper Service](#) is a Windows Service which monitors the SharePoint environment for changes to the items in document libraries using the SharePoint client-side object model (CSOM) API. This service monitors the SharePoint environment for changes using the SharePoint Change Log and applies SharePoint Classifier functionality to items in document libraries when the items are changed. The SharePoint Classifier functionality is derived from settings on the SharePoint property bags at the site collection, site and document library level.

The [SharePoint Classifier PowerShell Configuration](#) allows the SharePoint Classifier settings to be read, written and removed from the SharePoint property bags at the site collection, site and document library level using the SharePoint client-side object model (CSOM) API.

These four separate components work together to allow SharePoint Classifier to be configured and provide the [SharePoint Classifier Functionality](#).

Figure 1 shows an overview of the SharePoint Classifier architecture.

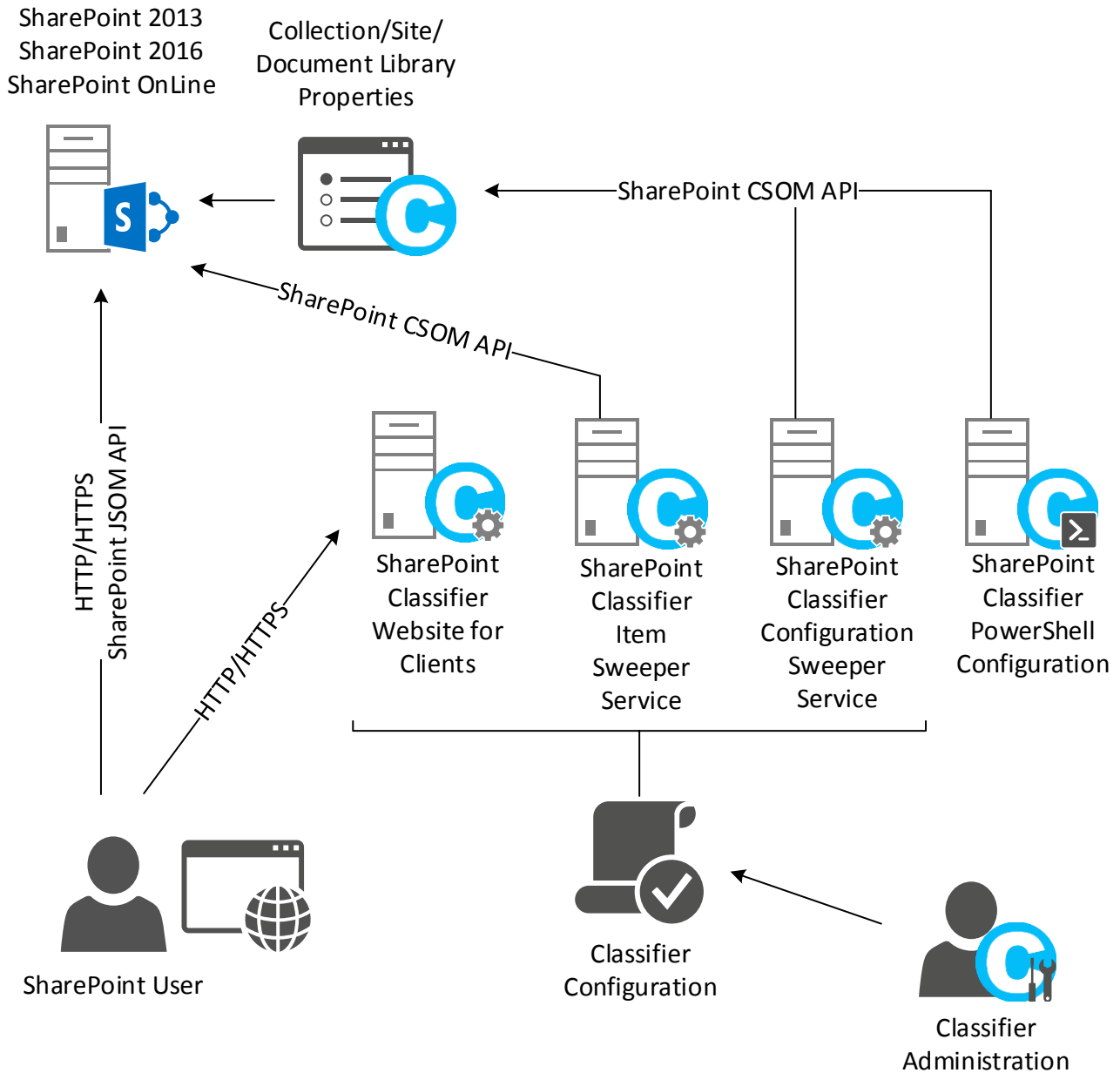


Figure 1: Overview of the SharePoint Classifier architecture

1.2 Migration from SharePoint Classifier Full Trust (SharePoint Classifier version 3.6 or earlier)

Do not uninstall SharePoint Classifier Full Trust until all document libraries where SharePoint Classifier is used have either been migrated to the new SharePoint Classifier or has SharePoint Classifier Full Trust disabled.

Process for migrating from the existing SharePoint Classifier Full Trust to the new SharePoint Classifier.

1. Install and configure the new SharePoint Classifier.
2. If using Classifier Clearance security trimming in SharePoint Classifier Full Trust ensure this is disabled on all document libraries and these libraries have **Propagate Labels** set.
3. When the new SharePoint Classifier is enabled on a document library with SharePoint Classifier Full Trust then the new SharePoint Classifier disables the SharePoint Classifier Full Trust functionality and then enabled the new SharePoint Classifier functionality.
4. When all document libraries where SharePoint Classifier Full Trust is enabled have either been migrated to the new SharePoint Classifier or had SharePoint Classifier Full Trust disabled then the SharePoint Classifier Full Trust solution `boldon james sharepoint classifier.wsp` can be retracted then uninstalled from the SharePoint environment.

Please note the SharePoint Classifier Full Trust supported SharePoint Server 2010 and SharePoint Server 2013. The new SharePoint Classifier supports SharePoint Server 2013, SharePoint Server 2016 and SharePoint Online in Office 365. Therefore, these migration instructions only apply to SharePoint Classifier Full Trust installation in SharePoint Server 2013.

2 INSTALLATION AND DEPLOYMENT

The SharePoint Classifier Bundle contains:

- Boldon James SharePoint Classifier Website for Clients.
- Boldon James SharePoint Classifier Configuration Sweeper Service.
- Boldon James SharePoint Classifier Item Sweeper Service.
- Boldon James SharePoint Classifier PowerShell Configuration.

Note: Environment information, including supported platforms, for each of the above is provided in the Release Notes found under SharePoint Classifier Bundle \ <Product>

2.1 Pre-deployment Configuration

Before installing SharePoint Classifier, certain pre-deployment configuration is required.

2.1.1 SharePoint Configuration

2.1.1.1 Service Accounts

Accounts are required for the SharePoint Classifier Configuration Sweeper Service and Item Sweeper Service to access the SharePoint environment. Both services require the same SharePoint permission levels and can use the same account, but due to throttling in SharePoint we would advise using different accounts for the services.

These accounts only require SharePoint permissions. They do not require **logon** or **logon as a service** permissions on the servers where the SharePoint Classifier Configuration Sweeper Service and Item Sweeper Service are installed.

The SharePoint permission levels required for the accounts are:

List Permissions	Site Permissions
✓ <i>Manage Lists</i>	✓ <i>Manage Permissions</i>
✓ <i>Add Items</i>	✓ <i>Manage Web Site</i>
✓ <i>Edit Items</i>	✓ <i>Add and Customize Pages</i>
✓ <i>Delete Items</i>	✓ <i>Browse Directories</i>
✓ <i>View Items</i>	✓ <i>View Pages</i>
✓ <i>Open Items</i>	✓ <i>Enumerate Permissions</i>
✓ <i>View Versions</i>	✓ <i>Browse User Information</i>
✓ <i>Create Alerts</i>	✓ <i>Manage Alerts</i>
	✓ <i>Use Remote Interfaces</i>
	✓ <i>Open</i>

The service accounts must be assigned these permissions to the site collections SharePoint Classifier Configuration Sweeper Service or Item Sweeper Service are monitoring. If these permissions are not inherited to the sites and/or the document libraries within these sites then they must have these permissions assigned to them at the appropriate level.

If these SharePoint permission levels are not assigned to the service accounts then SharePoint Classifier will not operate correctly.

If the service accounts do not have these permissions assigned at the site collection, site or document library level where SharePoint Classifier is required then SharePoint Classifier will not operate correctly.

If the service accounts have no permissions for one or more sites in a site collection then SharePoint Classifier functionality will not be available for that site collection. [Test SharePoint Permissions](#) in the Configuration Tools allows the identification of sites and lists that have no access or incorrect permissions for the service accounts.

The [SharePoint Classifier Configuration Sweeper Service](#) and the [SharePoint Classifier Item Sweeper Service](#) generate Windows event log entries when a site, document library or document library item has no access or incorrect permissions for the service accounts. These Classifier Windows event log entries can be used to determine if there are access or permission issues within SharePoint for the service accounts.

It is recommended that a SharePoint Permission Level is created with these permissions and this assigned to the SharePoint Group. The service accounts can then be added into the SharePoint group and will have the correct permissions applied to them. Refer to [Understanding permission levels in SharePoint](#) in the Microsoft SharePoint documentation more information on SharePoint Permission Levels and SharePoint Groups.

2.1.1.2 Document Library for the Service Data

The SharePoint Classifier Configuration Sweeper Service and Item Sweeper Services store their current state in a SharePoint Document Library. This Document Library should be configured in SharePoint before installing and configuring SharePoint Classifier. The Service Accounts created in [Service Accounts](#) require access to this Document Library using the permissions specified in [Service Accounts](#). Users do not require access to this Document Library and we do not advise enabling SharePoint Classifier on this Document Library.

The URL of the SharePoint site containing this Document Library and the Document Library Name are required when configuring the Configuration Sweeper Service and the Item Sweeper Service.

Note: This document library can be shared between multiple instances of the SharePoint Classifier Configuration Sweeper Service and Item Sweeper Services. The state data from the SharePoint Classifier Configuration Sweeper Service and Item Sweeper Services are stored in the document library when these services shutdown. The data they store should not be modified unless instructed by Boldon James support.

2.1.1.3 Document Library for Client Files

The client files (primarily HTML, CSS and JavaScript files) used for the Classifier user interface in SharePoint are stored in a SharePoint Document Library. The Service Accounts created in [Service Accounts](#) require access to this Document Library using the permissions specified in [Service Accounts](#). Users only require read access to this Document Library and we do not advise enabling SharePoint Classifier on this Document Library.

The URL of the SharePoint site containing this Document Library and the Document Library Name are required when configuring the SharePoint Classifier Configuration Sweeper Service.

When they are loaded into a SharePoint user's client web browser they communicate with:

- The [SharePoint Classifier Website for Clients](#) over HTTP/HTTPS to perform Classifier functionality in the SharePoint Classifier user interfaces in SharePoint.
- The SharePoint environment using the SharePoint JavaScript object model (JSOM) API to access SharePoint data.

Note: A separate document library for client files is required for each instance of the SharePoint Classifier Configuration Sweeper Service. The contents of a document library for client files is populated when the SharePoint Classifier Configuration Sweeper Service instance using that document library starts.

2.1.2 Windows Servers for Services and Website

At least one Windows Server is required to install the SharePoint Classifier Configuration Sweeper Service, Item Sweeper Service and Website for Clients. All three of these products can be installed on the same or separate Windows Servers.

Note: There can only be one installed copy of the SharePoint Classifier Configuration Sweeper Service, Item Sweeper Service and Website for Clients on each server, but the SharePoint Classifier Configuration Sweeper Service, Item Sweeper Service and Website for Clients products can all be installed on the same server.

Multiple installations of the SharePoint Classifier Configuration Sweeper Service, Item Sweeper Service and Website for Clients on multiple Windows Servers is supported.

Note: If you intend to use multiple installations of the SharePoint Classifier Configuration Sweeper Service or Item Sweeper Service then it is recommended that each service installation have its own [Service Account](#). Using the same [Service Account](#) for multiple service installations increases the possibility that SharePoint will throttle the [Service Account](#) and result in degraded performance of the services.

Installations of the SharePoint Classifier Configuration Sweeper Service on different Windows Servers must be configured to monitor different site collections. It is not recommended that multiple SharePoint Classifier Configuration Sweeper Services monitor the same site collections. By using different SharePoint Classifier Configuration Sweeper Services to monitor different site collections it is possible to apply different Classifier Configuration Policies to site collections.

Installations of the SharePoint Classifier Item Sweeper Service on different Windows Servers must be configured to monitor different site collections. It is not recommended that multiple SharePoint Classifier Item Sweeper Services monitor the same site collections. By using different SharePoint Classifier Item Sweeper Services to monitor different site collections it is possible to apply different Classifier Configuration Policies to site collections.

Multiple installations of the SharePoint Classifier Website for Clients can be configured to use different Classifier Configuration Policies so site collections, sites or document libraries can be configured to use different Classifier Configuration Policies.

Multiple installations of the SharePoint Classifier Website for Clients can be placed behind a load balancing solution. In this scenario, all of the installations of the SharePoint Classifier Website for Clients behind load balancing solution must be using the same Classifier Configuration Policy.

Note: It is recommended that the SharePoint Classifier Configuration Sweeper Service, Item Sweeper Service and Website for Clients configured for a site collection use the same Classifier Configuration Policy. If they do not use the same Classifier Configuration Policy then the Classifier functionality may not be consistent due to differences between the Classifier Configuration Policies in use.

The release notes for the SharePoint Classifier Configuration Sweeper Service, Item Sweeper Service and Website for Clients specify the versions of Windows Server they support and the prerequisites they require. Reference these release notes so ensure that the Windows Servers are valid for the products you are installing on them.

2.1.3 Classifier Label Configuration

The following steps are required to establish a working SharePoint Classifier installation for the SharePoint Classifier Website for Clients, Configuration Sweeper Service and Item Sweeper Service:

1. Apply your SharePoint Classifier licence to your Classifier Configuration using Classifier Administration **Global Settings / Licence** mechanisms.
2. Ensure that the updated configuration is **Published** (using Classifier Administration / Publish) to a location accessible to your intended SharePoint server.
3. Ensure that registry keys are set on the server that is to run the SharePoint Classifier Website for Clients, Configuration Sweeper Service and/or Item Sweeper Service. These registry keys indicate the **Location of the Configuration** (File Store or Active Directory), the **Name of the Configuration** and the **Classifier Policy** to use. For example, if the Classifier Configuration is published via File Store, then set the following registry entries with the relevant site values:

HKEY_LOCAL_MACHINE\SOFTWARE\Boldon James\ConfigManager

Name	Type	Value
ServerRootType	REG_DWORD	0
ServerFileSystemRoot	REG_SZ	\\ICS-SVR-1\Classifier Configuration
LabelConfiguration	REG_SZ	Classifier Test
Policy	REG_SZ	All users

Refer to the Classifier Administration Guide's Configuration Deployment section for further details.

Note: SharePoint Classifier Website for Clients, Configuration Sweeper Service and Item Sweeper Service use a single Classifier Policy. All users of those services will see the same label selectors and selector values.

2.2 SharePoint Classifier Website for Clients

The SharePoint Classifier Website for Clients provides the Classifier configuration for the SharePoint Client label dialog. This website installs into an IIS website on a Windows Server. This IIS website must be accessible from all client machines where users will be accessing the SharePoint Classifier functionality.

The client files in the [Document Library for Client Files](#) communicate with the SharePoint Classifier Website for Clients when they are loaded into a SharePoint user's client web browser. They communicate over HTTP/HTTPS to perform Classifier functionality in the SharePoint Classifier user interfaces in SharePoint.

2.2.1 Installation

The installation instructions for SharePoint Classifier Website for Clients are included on the product's Release Note.

2.2.2 Configuration

The SharePoint Classifier Website for Clients requires a correctly configured [Classifier Label Configuration](#).

You will need the URL that client machines will use to access this website when configuring the SharePoint Classifier Configuration Sweeper Service. This URL will be determined by the method you will be using to provide access to the SharePoint Classifier Website for Clients from your client machines.

Depending on the environment, the URL may be based on a server name, a fully qualified domain name or an IP address. Which you use is dependent on how your client machines will locate the server or network device that provides access to the server or servers running the SharePoint Classifier Website for Clients.

Depending on whether you are using HTTP or HTTPS bindings and if a custom port number is used then the URL will need to include this information.

Some SharePoint Classifier Website for Clients URL examples are shown below:

Using the server name `TheServer` over HTTP with the standard port number 80:

```
http://TheServer/
```

Using the fully qualified domain name `TheServer.my.domain` over HTTPS with the standard port number 443: `https://TheServer.my.domain/`

Using the IP address `10.0.0.1` over HTTP with a custom port number of 8080:

```
http://10.0.0.1:8080/
```

Note: The website must be configured to use HTTP or HTTPS bindings and can use standard or custom ports. If you are using Office 365's SharePoint Online or another SharePoint environment that uses HTTPS then the website for the SharePoint Classifier Website for Clients must be configured to use a HTTPS binding and the SSL certificate for the HTTPS binding must be fully trusted by all client browsers used to access SharePoint.

This website must be accessible from all client computers and devices where users will be accessing the SharePoint Classifier functionality. The website does not need to be accessible from the SharePoint environment. It only needs to be accessible from the client computers and devices where users will be accessing the SharePoint environment.

2.3 SharePoint Classifier Configuration Sweeper Service

The SharePoint Classifier Configuration Sweeper Service is a Windows Service that monitors the SharePoint environment for changes to the SharePoint configuration using the SharePoint client-side object model (CSOM) API.

This service monitors the SharePoint environment for changes using the SharePoint Change Log and enables/disables the SharePoint Classifier functionality on document libraries based on settings on SharePoint property bags at the site collection, site and document library level. It installs the client files into the [Clients Files List](#) specified in the services configuration.

2.3.1 Installation

Refer to the product's Release Note for installation instructions.

2.3.2 Configuration

The SharePoint Classifier Configuration Sweeper Service requires a correctly configured [Classifier Label Configuration](#).

The [SharePoint Classifier Configuration Sweeper Service Configuration Tool](#) is installed with the SharePoint Classifier Configuration Sweeper Service. This tool configures the SharePoint Classifier Configuration Sweeper Service installation on an individual server.

2.4 SharePoint Classifier Item Sweeper Service

The SharePoint Classifier Item Sweeper Service is a Windows Service that monitors the SharePoint environment for changes to the items in document libraries using the SharePoint client-side object model (CSOM) API.

This service monitors the SharePoint environment for changes using the SharePoint Change Log and applies SharePoint Classifier functionality to items in document libraries when the items are changed. The SharePoint Classifier functionality is derived from settings on the SharePoint property bags at the site collection, site and document library level.

2.4.1 Installation

Refer to the product's Release Note for installation instructions.

2.4.2 Configuration

The SharePoint Classifier Item Sweeper Service requires a correctly configured [Classifier Label Configuration](#).

The [SharePoint Classifier Item Sweeper Service Configuration Tool](#) is installed with SharePoint Classifier Item Sweeper Service. This tool configures the SharePoint Classifier Item Sweeper Service installation on an individual server.

2.5 SharePoint Classifier PowerShell Configuration

The SharePoint Classifier PowerShell Configuration allows the SharePoint Classifier settings to be read, written and removed from the SharePoint property bags at the site collection, site and document library level using the SharePoint client-side object model (CSOM) API.

2.5.1 Installation

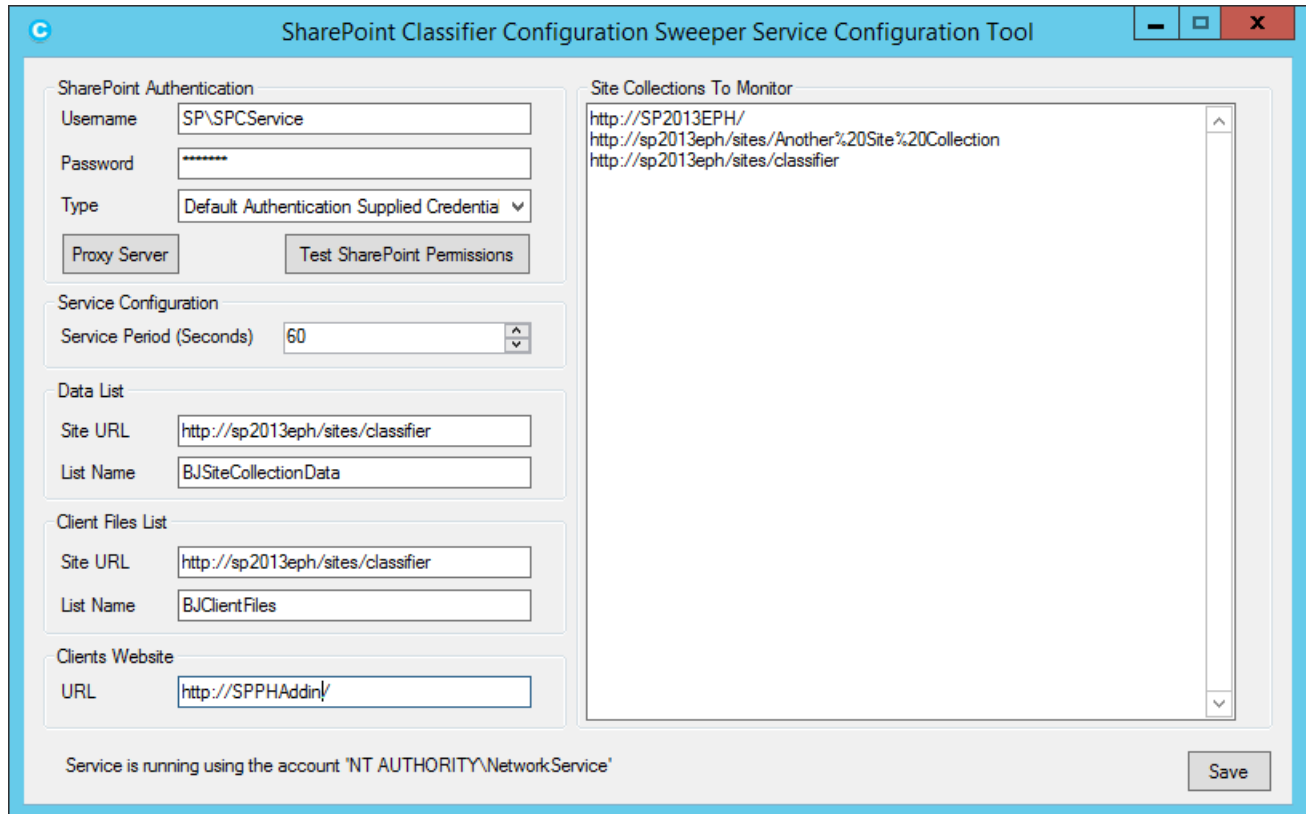
Refer to the product's Release Note for installation instructions.

2.5.2 Configuration

The SharePoint Classifier PowerShell Configuration does not require a [Classifier Label Configuration](#).

3 SHAREPOINT CLASSIFIER SERVICE CONFIGURATION

3.1 SharePoint Classifier Configuration Sweeper Service Tool



SharePoint Classifier Configuration Sweeper Service Configuration Tool

The SharePoint Classifier Configuration Sweeper Service Configuration Tool is used to set the configuration for a SharePoint Classifier Configuration Sweeper Service installation on an individual server. The SharePoint Classifier Configuration Sweeper Service monitors SharePoint site collections and configures SharePoint Classifier functionality in those site collections and the document libraries contained within the sites in those site collections.

The SharePoint Classifier Item Sweeper Service Configuration Tool and the SharePoint Classifier Configuration Sweeper Service Configuration Tool contain similar configuration options but they have separate configurations and both must be configured correctly.

3.1.1 SharePoint Authentication

This specifies the credentials for the [Service Account](#) that will be used to access the SharePoint environments.

3.1.1.1 Username

This is the user name for the Service Account. This account can be entered as the DOMAIN/USERNAME format for SharePoint environments using AD authentication or USERNAME@TENANT.EMAIL.ADDRESS format for SharePoint Online.

3.1.1.2 Password

This is the password for the user name. It is encrypted before being stored.

3.1.1.3 Type

This is the type of authentication the SharePoint environment is using. The authentication types supported are:

- Default Authentication Current Credentials
- Default Authentication Supplied Credentials
- Anonymous Authentication
- Forms Based Authentication Supplied Credentials
- SharePoint Online Authentication Supplied Credentials

On-premises SharePoint environments support Default Authentication, Anonymous Authentication and Forms Based Authentication. Default Authentication is the standard authentication type for on-premises SharePoint environments.

SharePoint Online in Office 365 only supports SharePoint Online Authentication.

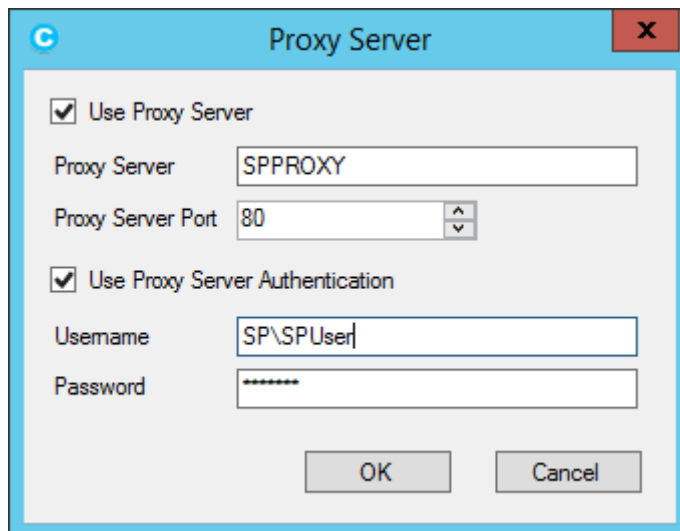
The difference between Default Authentication Current Credentials and Default Authentication Supplied Credentials is that for Supplied Credentials the user name and password entered into the configuration tool are used to authenticate to the SharePoint environment. For Current Credentials, the credentials of the user running the Boldon James SharePoint Classifier Configuration Sweeper Service Windows Service are used.

When initially installed, the Boldon James SharePoint Classifier Configuration Sweeper Service Windows Service runs as the **Network Service** account. This can be changed to the [Service Account](#) used to access SharePoint in the Windows Server "Services" tool. When using Current Credentials user name and password are not required.

The choice between Current Credentials or Supplied Credentials is only available with Default Authentication.

3.1.1.4 Proxy Server

The **Proxy Server** button opens the Proxy Server Dialog.

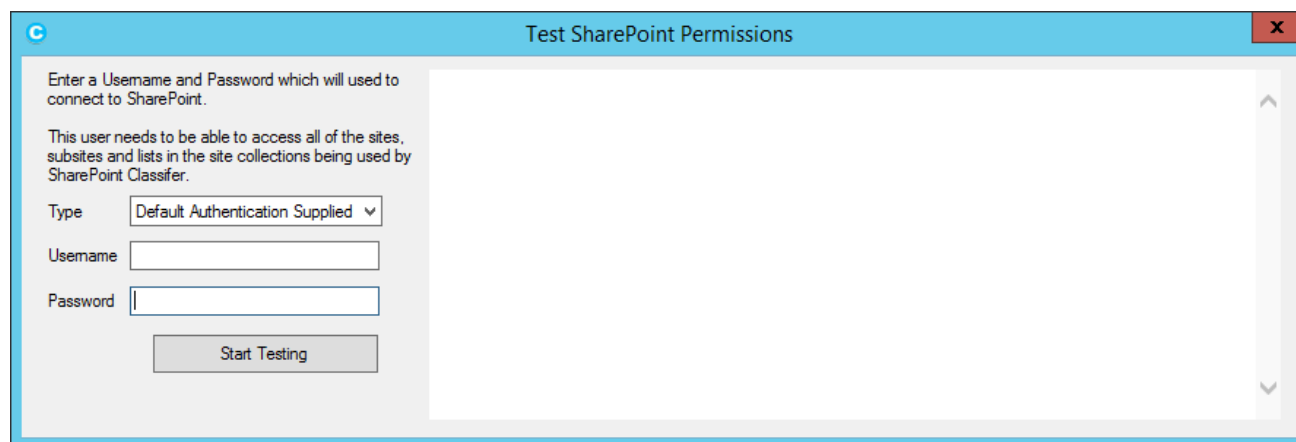


Proxy Server

The Proxy Server dialog gives the option of using a Web Proxy server for the communication between the Service and the SharePoint environment. The use of a Web Proxy server is optional and its configuration will depend on the end user’s environment.

3.1.1.5 Test SharePoint Permissions

The **Test SharePoint Permissions** button opens the Test SharePoint Permissions dialog.



Test SharePoint Permissions

The Test SharePoint Permissions dialog allows the settings in the configuration tool to be tested.

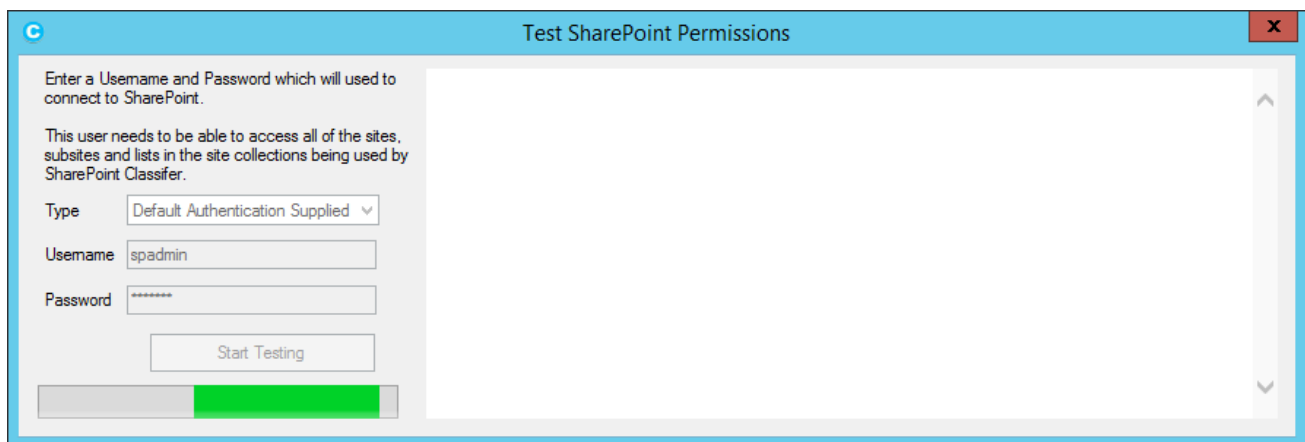
A username and password for a user with access to the [Site Collections To Monitor](#) in SharePoint is required. This user is used to determine if the [Service Account](#) specified in the configuration tool has the required access and permissions to these sites and lists within the [Site Collections To Monitor](#). This user must be able to access all of the sites and lists within the [Site Collections To Monitor](#) to allow the [Service Account](#)’s access and permissions to be checked.

Note: The user used for the Test SharePoint Permissions should not be the [Service Account](#). If the [Service Account](#) user is used it will not be possible to determine the sites and lists which have no access or incorrect permissions for the [Service Account](#).

Clicking the **Start Testing** button tests the settings in the configuration tool. The tests are as follows:

- Check that the [Service Account](#) has the required access and permissions to the [Site Collections To Monitor](#).
- Check that the [Service Account](#) has the required access and permissions to the [Data List](#).
- Check that the [Service Account](#) has the required access and permissions to the [Client Files List](#).
- Check that the [Clients Website](#) can be accessed. If it can be accessed basic information about the [Clients Website](#) configuration is displayed.

This testing can take a significant amount of time depending on the complexity of the [Site Collections to Monitor](#). When the testing is taking place a progress bar is shown.

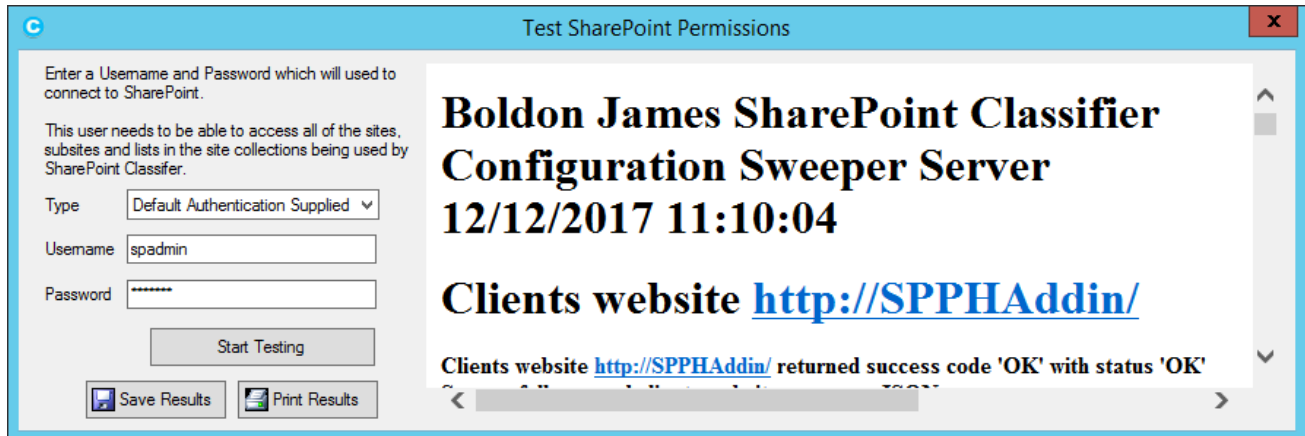


Test SharePoint Permissions - Progress

When the testing is complete, the results appear in the right hand pane. These results detail problems with the four areas that are tested. The results can be saved or printed using the buttons on the dialog.

Note: For the [Site Collections To Monitor](#) only the sites and lists with access or permission problems are included in the results. Sites and lists where the access and permissions are correct are not shown.

SharePoint Classifier cannot set the required access or permissions on the sites and lists in the [Site Collections To Monitor](#). Please refer to the [Service Accounts](#) section on the permissions that are required for SharePoint Classifier to operate.



Test SharePoint Permissions - Results

3.1.2 Service Configuration

3.1.2.1 Service Period (Seconds)

This specifies how often the service checks for changes to the SharePoint and SharePoint Classifier configuration.

3.1.3 Data List

This [Document Library for the Service Data](#) is where the service stores its state data. This document library should have been created as part of the [pre-deployment configuration](#). These settings specify the location for that document library.

3.1.3.1 Site URL

The URL of the SharePoint site containing the [Document Library for the Service Data](#) which will store the service data.

3.1.3.2 List Name

The name of the [Document Library for the Service Data](#) in that site which will store the service data.

3.1.4 Client Files List

The client files used for the Classifier user interface in SharePoint are stored in a [Document Library for Client Files](#). This should have been created as part of the [pre-deployment configuration](#). These settings specify the location for that document library.

The SharePoint Classifier Configuration Sweeper Service installs the files into this document library when the service starts up.

3.1.4.1 Site URL

The URL of the SharePoint site containing the [Document Library for Client Files](#) which will contain the client files used for the Classifier user interface.

3.1.4.2 List Name

The name of the [Document Library for Client Files](#) in that site which will contain the client files used for the Classifier user interface.

3.1.5 Clients Website

This specifies the URL of the [Boldon James SharePoint Classifier Website for Clients](#).

3.1.5.1 URL

The URL for the [Boldon James SharePoint Classifier Website for Clients](#).

3.1.6 Site Collections to Monitor

This specifies the SharePoint site collections that this service will monitor. Multiple site collections can be monitored by entering the site collection URLs on separate lines.

3.2 SharePoint Classifier Item Sweeper Service Configuration Tool

The screenshot shows the 'SharePoint Classifier Item Sweeper Service Configuration Tool' window. It contains several sections for configuration:

- SharePoint Authentication:** Includes fields for Username (SP\SPService), Password (masked), and Type (Default Authentication Supplied Credential). There are buttons for Proxy Server and Test SharePoint Permissions.
- Service Configuration:** Includes a Service Period (Seconds) dropdown set to 1.
- Data List:** Includes fields for Site URL (http://sp2013eph/sites/classifier) and List Name (BJSiteCollectionData).
- Site Collections To Monitor:** A text area containing three URLs: http://SP2013EPH/, http://sp2013eph/sites/Another%20Site%20Collection, and http://sp2013eph/sites/classifier.
- Status:** A message at the bottom left states 'Service is running using the account 'NT AUTHORITY\NetworkService''. A Save button is located at the bottom right.

Boldon James SharePoint Classifier Item Sweeper Service

The SharePoint Classifier Item Sweeper Service Configuration Tool sets the configuration for the SharePoint Classifier Item Sweeper Service. The SharePoint Classifier Item Sweeper Service monitors SharePoint site collections for changes to document library items and when required performs SharePoint Classifier processing on those items when changes occur.

The SharePoint Classifier Item Sweeper Service Configuration Tool and the SharePoint Classifier Configuration Sweeper Service Configuration Tool contain similar configuration options but they have separate configurations and both must be configured correctly.

3.2.1 SharePoint Authentication

See [SharePoint Authentication](#) for the options supported.

Note: The [Test SharePoint Permissions](#) results for the Item Sweeper Configuration Tool do not contain results for the [Clients Files List](#) or [Clients Website](#) as these settings are only available on the Configuration Sweeper Configuration Tool.

3.2.2 Service Configuration

See [Service Configuration](#) for the options supported.

3.2.3 Data List

See [Data List](#) for the options supported.

3.2.4 Site Collections to Monitor

See [Site Collections To Monitor](#) for the options supported.

4 SHAREPOINT CLASSIFIER CONFIGURATION

SharePoint Classifier functionality can be configured in three ways, using:

1. [Boldon James Classifier Settings](#)
2. [SharePoint Classifier PowerShell Configuration](#)
3. [Setting SharePoint property bag setting's directly](#)

[Boldon James Classifier Settings](#) web page allows the settings to set easily accessed using the SharePoint web interface.

The [SharePoint Classifier PowerShell Configuration](#) allows the settings to be set using Microsoft PowerShell commands. This is primarily for, but not limited to, SharePoint provisioning systems which cannot set SharePoint property bag settings directly.

[Setting SharePoint property bag settings directly](#) is primarily for, but not limited to, SharePoint provisioning systems which can set property bag settings directly.

When SharePoint Classifier settings are modified they are applied to the SharePoint environment by the [SharePoint Classifier Configuration Sweeper Service](#) and the [SharePoint Classifier Configuration Item Service](#). These services monitor the SharePoint environment for changes to the SharePoint Classifier settings and apply them to the SharePoint environment.

Note: The [SharePoint Classifier Configuration Sweeper Service](#) and the [SharePoint Classifier Configuration Item Service](#) monitoring the SharePoint site collection where the SharePoint Classifier settings have been applied must both be running for that the SharePoint Classifier settings to be applied correctly.

The [SharePoint Classifier Configuration Sweeper Service](#) and the [SharePoint Classifier Configuration Item Service](#) only check for changes to the SharePoint environment periodically. The SharePoint Classifier settings will only be applied once a [SharePoint Classifier Configuration Sweeper Service](#) and a [SharePoint Classifier Configuration Item Service](#) have successfully processed those changes.

4.1 Supported Settings

SharePoint Classifier settings can be set at the site collection, site and document library level. The individual settings at these levels are hierarchical.

- If a setting is present at the document library level it will be used for that document library.
 - If the document library level setting is not present then a site level setting will be used for that document library.
 - If a document library or site level setting is not present then a site collection level setting is used.
 - If no setting is present at the document library, site or site collection level then that setting is disabled.

The SharePoint Classifier settings and the level they are supported at are shown below:

Setting Name	Supported at Site Collection Level	Supported at Site Level	Supported at Document Library Level
Enabled			✓
Propagate Labels			✓
Is This a Quarantine List?			✓
ServiceURL	✓	✓	✓
Use Permissions Modification for Quarantining	✓	✓	✓
Quarantine Site URL	✓	✓	✓
Quarantine List Name	✓	✓	✓
Apply Default Label	✓	✓	✓
Default Label Name	✓	✓	✓
Apply Clearance	✓	✓	✓
Clearance Name	✓	✓	✓
Stop Unlabelled	✓	✓	✓

The SharePoint property bags names of the SharePoint Classifier settings for the three levels are shown below:

Setting Name	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
Enabled			bjSPAEnable
Propagate Labels			bjSPAPropagateLabels
Is This a Quarantine List?			bjSPAQuarantine
ServiceURL	bjSPASCIInternalServiceURL	bjSPAInternalServiceURL	bjSPAInternalServiceURL
Use Permissions Modification for Quarantining	bjSPASCQuarantinePermissions	bjSPAQuarantinePermissions	bjSPAQuarantinePermissions
Quarantine Site URL	bjSPASCQuarantineSiteUrl	bjSPAQuarantineSiteUrl	bjSPAQuarantineSiteUrl
Quarantine List Name	bjSPASCQuarantineListName	bjSPAQuarantineListName	bjSPAQuarantineListName
Apply Default Label	bjSPASCAApplyDefaultLabel	bjSPAApplyDefaultLabel	bjSPAApplyDefaultLabel
Default Label Name	bjSPASCDDefaultLabel	bjSPADefaultLabel	bjSPADefaultLabel
Apply Clearance	bjSPASCAApplyClearance	bjSPAApplyClearance	bjSPAApplyClearance
Clearance Name	bjSPASCClearance	bjSPAClearance	bjSPAClearance
Stop Unlabelled	bjSPASCStopUnlabelled	bjSPAStopUnlabelled	bjSPAStopUnlabelled

Note: Site collection level settings are stored on the property bag in the root site of the site collection.

Site level settings are stored on the property bag of that site.

Document library level settings are stored on the root folder's property bag in that document library.

All property bag settings' names are case sensitive and must be used exactly as shown.

4.1.1.1 Enabled

The **Enabled** setting is only supported at the document library level.

This setting sets whether SharePoint Classifier functionality is enabled or disabled on a document library.

The supported values are:

- 1 – When this setting has the value 1 then SharePoint Classifier functionality is enabled on that document library.
- All other values or the setting not being present means that all SharePoint Classifier functionality is disabled on the document library.

4.1.1.2 Propagate Labels

The **Propagate Labels** setting is only supported at the document library level and requires the [Enabled](#) setting to be configured correctly.

This setting propagates any existing classifications from the items in a document library into the SharePoint Classifier fields and applies SharePoint Classifier functionality based on those classifications.

The supported values are:

- 1 – When this setting has the value 1 then existing Classifications are propagated.
- All other values or the setting not being present means this functionality is disabled.

4.1.1.3 Is this a Quarantine List?

The **Is this a Quarantine List?** setting is only supported at the document library level and requires the [Enabled](#) setting to be configured correctly.

This setting defines a list as a [quarantine list](#).

The supported values are:

- 1 – When this setting has the value 1 then the list is a [quarantine list](#).
- All other values or the setting not being present means this functionality is disabled.

4.1.1.4 ServiceURL

The **ServiceURL** setting is supported at the site collection, site and document library level.

This setting defines the complete URL for the Boldon James SharePoint Classifier Website for Clients.

The value of the **ServiceURL** setting is the URL for the [Boldon James Website for Clients](#) with the path `/SCClients` added. For example, the URL for the IIS website hosting the Boldon James Website for Clients is `https://this.is.a.url` so the value would be `https://this.is.a.url/SCClients`

Note: A site collection level **ServiceURL** setting is automatically created by the Boldon James Configuration Sweeper Service when it is set to monitor a site collection. This can be overwritten at the site or document library level by setting appropriate values for the setting at the site or document library level.

4.1.1.5 Use Permissions Modification for Quarantining

The **Use Permissions Modification for Quarantining** setting is supported at the site collection, site and document library level.

This setting defines the type of quarantining that occurs when items with [Inappropriate Classifications](#) are added or updated in a document library.

- 1 – When this setting has the value 1 then items with [Inappropriate Classifications](#) will be quarantined using [Permissions Modification](#).
- All other values or the setting not being present then items with [Inappropriate Classifications](#) will be quarantined using a [Quarantine List](#). The [Quarantine Site URL](#) and [Quarantine List Name](#) must be configured to use quarantining to a [Quarantine List](#).

4.1.1.6 Quarantine Site URL

The **Quarantine Site URL** setting is supported at the site collection, site and document library level.

This setting is only used when the [Use Permissions Modification for Quarantining](#) setting is disabled or not present.

This setting defines the URL for the SharePoint site that contains the [quarantine list](#) defined in the [Quarantine List Name](#) setting.

Note: The [Quarantine List Name](#) setting defines the name of the document library configured as a [quarantine list](#).

4.1.1.7 Quarantine List Name

The [Quarantine List Name](#) setting is supported at the site collection, site and document library level.

This setting is only used when the [Use Permissions Modification for Quarantining](#) setting is disabled or not present.

This setting defines the name of a document library configured as a [quarantine list](#). The SharePoint site that contains this document library is defined in the [Quarantine Site URL](#) setting.

Note: The [Quarantine Site URL](#) setting defines the URL for the SharePoint site which contains this document library configured as a [quarantine list](#).

4.1.1.8 Apply Default Label

The **Apply Default Label** setting is supported at the site collection, site and document library level.

This setting defines whether a [default classification is applied](#) to unclassified items when they are added or updated in a document library with SharePoint Classifier enabled.

The supported values are:

- 1 – When this setting has the value 1 then a default classification will be applied.
- All other values or the setting not being present means this functionality is disabled.

Note: The [Default Label Name](#) setting specifies the default label that will be applied to unclassified items when this setting is enabled.

4.1.1.9 Default Label Name

The **Default Label Name** setting is supported at the site collection, site and document library level.

This setting contains the Name of a Default Label entry from a Classifier Configuration Policy. The Policy can be configured using Classifier Administration → Label Configurations → <label configuration name> → Policies → <policy name> → Default Label tab.

Note: The [Apply Default Label](#) setting determines if this setting is used.

Default Label names are defined within a Classifier Configuration Policy. The Name specified here must be a name of a Default Label library entry contained within the Classifier Configuration Policy being used by the Boldon James SharePoint Classifier Item Sweeper Service monitoring this site collection.

If the **Default Label Name** setting does not exist, does not contain a value or the value contains the name of the “Default Label” library entry which does not exist then a default classification will not be set.

4.1.1.10 Apply Clearance

The **Apply Clearance** setting is supported at the site collection, site and document library level.

This setting defines whether a Classifier Clearance is applied to items when they are added or updated in the document library with SharePoint Classifier enabled.

The Clearance Name specifies the Classifier Clearance that will be applied to items.

The supported values are:

- 1 – When this setting has the value 1 then a Classifier Clearance will be applied.
- All other values or the setting not being present means this functionality is disabled.

Note: The [Clearance Name](#) setting specifies the Classifier Clearance that will be applied to items.

4.1.1.11 Clearance Name

The **Clearance Name** setting is supported at the site collection, site and document library level.

This setting contains the Name of a Clearance Library entry from a Classifier Label Configuration. The Clearance Library can be configured using Classifier Administration → Label Configurations → <label configuration name> → Clearance Settings → Clearance Library.

Note: The “Apply Clearance” setting determines if this setting is used.

Note: Clearance Library names are defined within a Classifier Configuration Policy. The Name specified here must be a name of a Clearance Library entry contained within the Classifier Configuration Policy being used by the Boldon James SharePoint Classifier Item Sweeper Service monitoring this site collection.

If the **Clearance Name** setting does not exist, does not contain a value or the value contains the name of the entry which does not exist then a Classifier Clearance will not be applied.

The SharePoint Classifier label dialog will be masked using the entry's Classifier Clearance to stop users selecting an inappropriate classification for an item in SharePoint. This masking of the label dialog is only present when using the SharePoint Classifier label dialog. Any other Classifier applications used to classify an item in this document library will be not have masking applied using this Classifier Clearance.

If the clearance value of the entry is changed then the updated clearance value will be applied to items in the document libraries where it applies when the SharePoint Classifier Configuration Sweeper Service is restarted.

4.1.1.12 Stop Unlabelled

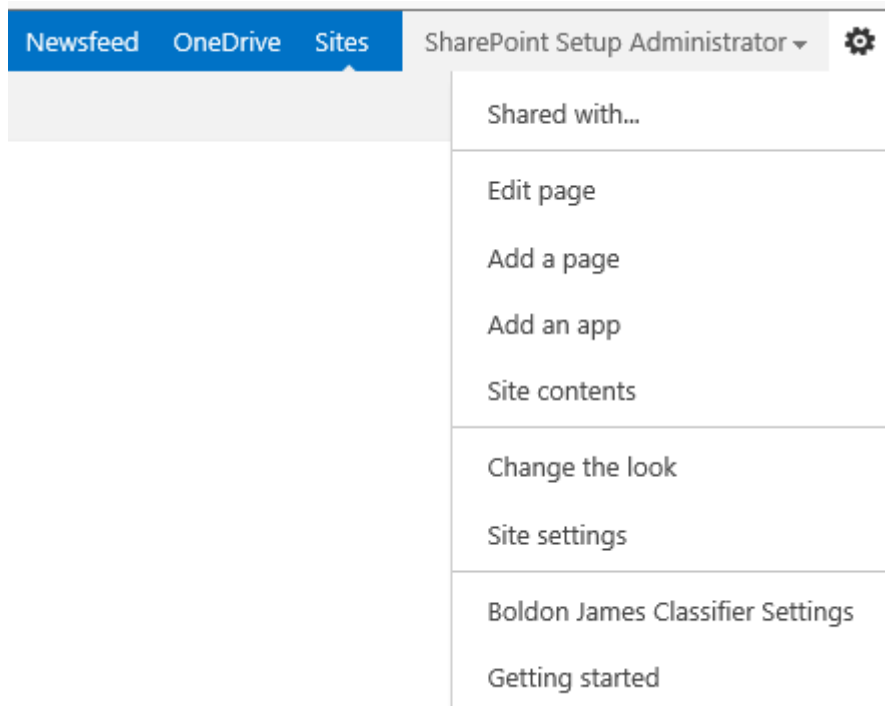
The **Stop Unlabelled** setting is supported at the site collection, site and document library level.

This setting defines whether unclassified items can be added or updated in a document library with SharePoint Classifier enabled.

The supported values are:

- 1 – When this setting has the value 1 then unclassified items cannot be added or updated.
- All other values or the setting not being present means this functionality is disabled. When this setting is disabled both classified and unclassified items can be added or updated.

4.2 Boldon James Classifier Settings



Boldon James Classifier Settings


Access the **Boldon James Classifier Settings** from the context menu in the SharePoint web interface.

This option opens the Classifier Settings page for the current site collection. From this page, settings can be set at:

- This site collection level
- The site level for the sites contained within this site collection
- The document library level for document libraries contained with the sites in this site collection

Clicking on the values to the left of a setting's name allows its value to be set.

When a setting has a value, its value can be deleted by clicking on the  icon.


The settings at the site collection, site or document library level can be updated by clicking in the  icon.

Click on **About SharePoint Classifier Client Website** to display information about the version of the product and the Classifier Configuration it is using.

Classifier Settings

Hello SharePoint Setup Administrator

[About SharePoint Classifier Client Website](#)

Site Collection - <http://sp2013eph/sites/classifier> 

ServiceUrl : <http://sp2013eph/sites/classifier> 

Client Name : -Not Set-

Quarantine Site Url : -Not Set-

Quarantine List Name : -Not Set-

Apply Default Label : -Not Set-

Default Label Name : -Not Set-

Apply Clearance : -Not Set--

Clearance Name : -Not Set-

Stop Unlabelled : -Not Set-

Sites

Classifier : <http://sp2013eph/sites/classifier>  

ServiceUrl : <http://sp2013eph/sites/classifier> 

Quarantine Site Url : -Inherit-

Quarantine List Name : -Inherit-

Apply Default Label : -Inherit-

Default Label Name : -Inherit-

Apply Clearance : -Inherit-

Clearance Name : -Inherit-

Stop Unlabelled : -Inherit-

Document Libraries in Site

Documents  

Enabled : false

Propagate Labels: false

Is This a Quarantine List?: false

ServiceUrl : -Inherit-

Quarantine Site Url : -Inherit-

Quarantine List Name : -Inherit-

Apply Default Label : -Inherit-

Default Label Name : -Inherit-

Apply Clearance : -Inherit-

Clearance Name : -Inherit-

Stop Unlabelled : -Inherit-

Classifier Settings

4.3 Boldon James SharePoint Classifier PowerShell Configuration

The [Boldon James SharePoint Classifier PowerShell Configuration](#) allows the SharePoint Classifier settings to be set using PowerShell commands. The PowerShell commands support getting and setting the SharePoint Classifier settings at the site collection, site and document library levels.

The [Boldon James SharePoint Classifier PowerShell Configuration](#) is a PowerShell module. The module is automatically imported into PowerShell sessions.

4.3.1.1 Common Shared Parameters

The PowerShell commands contain the following common shared parameters:

-SiteURL

- The URL of a SharePoint site.
- The parameter is mandatory.
- For site collection commands, this is the URL of any site within the site collection.
- For site commands, this is the URL of the site.
- For document library commands this the URL of the site containing the document library.

-AuthenticationMode

- This must match the [authentication type](#) used by the SharePoint environment specified in the [SiteURL](#) parameter. This parameter is mandatory.
- The possible values for this parameter are {[DefaultCurrentUser](#) | [DefaultSuppliedCredentials](#) | [Anonymous](#) | [FormsBased](#) | [SharepointOnline](#)}

-UserName

- This is the [user name](#) used to authenticate to the SharePoint environment specified in the [SiteURL](#) parameter.
- This is mandatory for the AuthenticationMode values {[DefaultSuppliedCredentials](#) | [FormsBased](#) | [SharepointOnline](#)}

-SecurePassword

- This is the password for the [UserName](#) parameter. It is entered as a secure string. The [ConvertTo-SecureString](#) PowerShell command allows a plain text string to be converted to a secure string.
- This is mandatory for the AuthenticationMode values {[DefaultSuppliedCredentials](#) | [FormsBased](#) | [SharepointOnline](#)}

-UseProxyServer

- Use a Web Proxy server for communication with the SharePoint environment. The parameter is optional, and the default value is [\\$false](#).
- The parameter is optional, and the default value is [\\$false](#).
- The possible values for this parameter are {[\\$true](#) | [\\$false](#)}

-ProxyServer

- The name or IP Address for the Web Proxy server used for communication with the SharePoint environment.
- This is mandatory when the *UseProxyServer* parameter is set to *\$true*.
- It is not required when *UseProxyServer* parameter is set to *\$false* or not specified.

-ProxyServerPort

- The port number for the Web Proxy server used for communication with the SharePoint environment.
- This is mandatory when the *UseProxyServer* parameter is set to *\$true*.
- It is not required when *UseProxyServer* parameter is set to *\$false* or not specified.

-UseProxyServerAuthentication

- The Web Proxy server used for communication with the SharePoint environment requires authentication.
- The parameter is optional, and the default value is *\$false*.
- The possible values for this parameter are *{ \$true | \$false }*
- It is not required when *UseProxyServer* parameter is set to *\$false* or not specified.

-ProxyServerUserName

- The user name used to authenticate to the Web Proxy server used for communication with the SharePoint environment.
- This is mandatory when the *UseProxyServer* and *UseProxyServerAuthentication* parameters are set to *\$true*.
- It is not required when *UseProxyServer* parameter is set to *\$false* or not specified, or *UseProxyServerAuthentication* is set to *\$false* or not specified

-ProxyServerPassword

- This is the password for the *ProxyServerUserName* parameter. It is entered as a secure string. The [ConvertTo-SecureString](#) PowerShell command allows a plain text string to be converted to a secure string.
- This is mandatory when the *UseProxyServer* and *UseProxyServerAuthentication* parameters are set to *\$true*.
- It is not required when *UseProxyServer* parameter is set to *\$false* or not specified, or *UseProxyServerAuthentication* is set to *\$false* or not specified

4.3.1.2 Get-BJSCSiteCollectionSettings

```
Get-BJSCSiteCollectionSettings [-SiteUrl] <string> [-AuthenticationMode]
  <BJSCAuthenticationType> {DefaultCurrentUser | DefaultSuppliedCredentials | Anonymous |
  FormsBased | SharepointOnline} [[-UserName] <string>] [[-SecurePassword] <securestring>]
  [<CommonParameters>]
```

The command gets the site collection settings for a given SharePoint site collection. It returns a dictionary object containing entries with Name set to the SharePoint property bag setting's name and Value set to the SharePoint property bag setting's value.

This command only contains the [common shared parameters](#).

4.3.1.3 Set-BJSCSiteCollectionSetting

```
Set-BJSCSiteCollectionSetting [-SiteUrl] <string> [-AuthenticationMode] <BJSCAuthenticationType>
  {DefaultCurrentUser | DefaultSuppliedCredentials | Anonymous | FormsBased |
  SharepointOnline} [[-UserName] <string>] [[-SecurePassword] <securestring>] -PropertyName
  <string> {bjSPASCInternalServiceURL | bjSPASCApplYClearance | bjSPASCClearance |
  bjSPASCApplYDefaultLabel | bjSPASCDefaultLabel | bjSPASCQuarantinePermissions |
  bjSPASCQuarantineListName | bjSPASCQuarantineSiteUrl | bjSPASCStopUnlabelled}
  [-PropertyValue <string>] [<CommonParameters>]
```

The command sets a site collection setting for a given SharePoint site collection.

This command contains the [common shared parameters](#) and the following additional parameters:

-PropertyName

- This the SharePoint property bag setting's name for the site collection setting being set. This parameter is mandatory.
- The possible values for this parameter are {bjSPASCInternalServiceURL | bjSPASCApplYClearance | bjSPASCClearance | bjSPASCApplYDefaultLabel | bjSPASCDefaultLabel | bjSPASCQuarantinePermissions | bjSPASCQuarantineListName | bjSPASCQuarantineSiteUrl | bjSPASCStopUnlabelled}

-PropertyValue

- This is the property value being set.

Note: The supported values for settings can be found in [Supported Settings](#). To remove a property from the property bag set the *PropertyValue* to an empty string

4.3.1.4 Get-BJSCSiteSettings

```
Get-BJSCSiteSettings [-SiteUrl] <string> [-AuthenticationMode] <BJSCAuthenticationType>
  {DefaultCurrentUser | DefaultSuppliedCredentials | Anonymous | FormsBased |
  SharepointOnline} [[-UserName] <string>] [[-SecurePassword] <securestring>]
  [<CommonParameters>]
```

The command gets the site settings for a given SharePoint site. It returns a dictionary object containing entries with Name set to the property bag setting's name and Value set to the property bag setting's value.

This command only contains the [common shared parameters](#).

4.3.1.5 Set-BJSCSiteSetting

```
Set-BJSCSiteSetting [-SiteUrl] <string> [-AuthenticationMode] <BJSCAuthenticationType>
  {DefaultCurrentUser | DefaultSuppliedCredentials | Anonymous | FormsBased |
  SharepointOnline} [[-UserName] <string>] [[-SecurePassword] <securestring>] -PropertyName
```

```
<string> {bjSPAInternalServiceURL | bjSPAApplyClearance | bjSPAClearance |
bjSPAApplyDefaultLabel | bjSPADefaultLabel | bjSPAQuarantinePermissions |
bjSPAQuarantineListName | bjSPAQuarantineSiteUrl | bjSPAStopUnlabelled} [-PropertyValue
<string>] [<CommonParameters>]
```

The command configures a SharePoint site setting.

This script contains the [common shared parameters](#) and the following additional parameters:

-PropertyName

- This the property bag setting's name for the site setting being set. This parameter is mandatory.
- The possible values for this parameter are {bjSPAInternalServiceURL | bjSPAApplyClearance | bjSPAClearance | bjSPAApplyDefaultLabel | bjSPADefaultLabel | bjSPAQuarantinePermissions | bjSPAQuarantineListName | bjSPAQuarantineSiteUrl | bjSPAStopUnlabelled}

-PropertyValue

- This is the property value being set.

Note: The supported values for settings can be found in [Supported Settings](#). To remove a property from the property bag set the -PropertyValue to an empty string

4.3.1.6 Get-BJSCLibrarySettings

```
Get-BJSCLibrarySettings [-SiteUrl] <string> [-LibraryName] <string> [-AuthenticationMode]
<BJSCAuthenticationType> {DefaultCurrentUser | DefaultSuppliedCredentials | Anonymous |
FormsBased | SharepointOnline} [[-UserName] <string>] [[-SecurePassword] <securestring>]
[<CommonParameters>]
```

The command gets the document library settings for a for a given SharePoint document library in a given SharePoint site. It returns a dictionary object containing entries with Name set to the property bag setting's name and Value set to the property bag setting's value.

This command contains the [common shared parameters](#) and the following additional parameter:

-LibraryName

- The name of a document library where settings are being read. This parameter is mandatory.

4.3.1.7 Set-BJSCLibrarySetting

```
Set-BJSCLibrarySetting [-SiteUrl] <string> [-AuthenticationMode] <BJSCAuthenticationType>
{DefaultCurrentUser | DefaultSuppliedCredentials | Anonymous | FormsBased |
SharepointOnline} [[-UserName] <string>] [[-SecurePassword] <securestring>] -PropertyName
<string> {bjSPAEnable | bjSPAPropagateLabels | bjSPAInternalServiceURL |
bjSPAApplyClearance | bjSPAClearance | bjSPAApplyDefaultLabel | bjSPADefaultLabel |
bjSPAQuarantine | bjSPAQuarantinePermissions | bjSPAQuarantineListName |
bjSPAQuarantineSiteUrl | bjSPAStopUnlabelled} [-PropertyValue <string>]
[<CommonParameters>]
```

The command sets a document library setting for a given SharePoint document library in a given SharePoint site.

This command contains the [common shared parameters](#) and the following additional parameters:

-LibraryName

boldonjames.com

-
- The name of a document library where settings are being set. This parameter is mandatory.

-PropertyName

- This is the property bag setting's name for the site setting being set. This parameter is mandatory.
- The possible values for this parameter are {bjSPAEnable | bjSPAPropagateLabels | bjSPAInternalServiceURL | bjSPAApplyClearance | bjSPAClearance | bjSPAApplyDefaultLabel | bjSPADefaultLabel | bjSPAQuarantine / bjSPAQuarantinePermissions | bjSPAQuarantineListName | bjSPAQuarantineSiteUrl | bjSPAStopUnlabelled}

-PropertyValue

- This is the property value being set.

Note: The supported values for settings can be found in [Supported Settings](#). To remove a property from the property bag set the -PropertyValue to an empty string

4.4 Setting SharePoint Classifier Settings directly on Property Bags

Please refer to the [Supported Settings](#) to get the property bag setting's information. This includes the names of the SharePoint property bag settings at site collection, site and document library levels and details the supported values for each setting. It also defines the location of the SharePoint property bags where the settings are stored at each level.

Note: When setting property bag setting's information directly please note the property names are case sensitive and the property values must be stored as string values.

5 SHAREPOINT CLASSIFIER FUNCTIONALITY

SharePoint Classifier allows Classifier classifications to be shown on fields in a SharePoint document library. Fields are created to hold the Classifier selector values and a summary marking value showing the complete classification. The fields shown are dependent on the Classifier selectors in the Classifier Configuration Policy that is in use by the Boldon James SharePoint Classifier Configuration Sweeper Service monitoring the site collection that contains the document library.

Classifications on SharePoint document library items can be set within SharePoint using the SharePoint Classifier label dialog. The SharePoint Classifier label dialog applies SharePoint Classifier rules to ensure any classification selected by the user is valid.

Note: The SharePoint Classifier label dialog can classify more than one file simultaneously. It is not recommended that more than 10 files be classified simultaneously. For classifying more than 10 files, it is recommended that Boldon James Power Classifier for SharePoint is used.

SharePoint Classifier supports SharePoint item file types which are and are not natively classified by Classifier.

Files types which are [natively classified](#) by Classifier use the classification contained within the file as the primary Classification.

- When a [natively classified](#) file type has its classification updated using the SharePoint Classifier label dialog then the classification contained within the file is updated with the new Classification. This updated classification is then used by any Classifier application which subsequently accesses this file. This is correct for whether the file is accessed from within SharePoint or if the file is moved outside of the SharePoint environment.
- When a [natively classified](#) file type has its classification updated by an application outside of SharePoint then this updated classification is reflected on the item in SharePoint by SharePoint Classifier.

File types which are [not natively classified](#) by Classifier have a Classification that only resides in the SharePoint environment. When the file is accessed by any other Classifier application or moved from the SharePoint environment then the classification defined by SharePoint Classifier is lost.

The Classifier classification on document library items can have certain SharePoint Classifier specific functionality applied to them.

5.1 Apply Default Classification

It is possible to apply a default classification to unclassified items in a SharePoint Classifier enabled document library when the item is added or updated.

See the [SharePoint Classifier Configuration](#) section on how to configure this functionality.

5.2 Quarantine Items with Inappropriate Classification

When an item is added or updated in a SharePoint Classifier enabled document library with an inappropriate classification it can be quarantined until an appropriate Classification is set on the item.

When an inappropriate classification is detected, the item can be either moved to a [quarantine list](#) or have its [permissions modified](#) to stop other users seeing and accessing the item.

5.2.1 Inappropriate Classification Reasons

5.2.1.1 Classifier Clearance Failure

Classifier Clearances can be applied to SharePoint Classifier enabled document libraries. These Classifier Clearances define which Classifier classification elements are valid for these document libraries.

When an item is added or updated with a classification containing one of more Classifier classification elements that are not in the Classifier Clearance then the item is quarantined until a classification appropriate for this document library's Classifier Clearance is selected.

See the [SharePoint Classifier Configuration](#) section on how to configure this functionality.

5.2.1.2 Unclassified Failure

When an item in a SharePoint Classifier enabled document library is added or updated it can be quarantined if it does not have a classification set. This stops items with no classification being added or updated in a SharePoint Classifier enabled document library. The item is quarantined until a classification appropriate for this document library is selected.

See the [SharePoint Classifier Configuration](#) section on how to configure this functionality.

5.2.2 Quarantine Options

There are two options for quarantining items in SharePoint Classifier; moving to a [quarantine list](#) or have its [permissions modified](#) to stop other users seeing and accessing the item.

5.2.2.1 Quarantine List

This is special type of SharePoint Classifier enabled document library with the [Is this a Quarantine List?](#) setting enabled. This special type of SharePoint Classifier enabled document library has extra options added to the document library ribbon buttons and context menu. These options allow items to be restored to their original document library locations after an appropriate classification has been applied.

This type of quarantining occurs when the [Use Permissions Modification for Quarantining](#) setting is disabled or not present on a SharePoint Classifier enabled document library and the [Quarantine Site URL](#) and [Quarantine List Name](#) settings are configured correctly.

Note: The quarantine list the [Quarantine Site URL](#) and [Quarantine List Name](#) settings point to must exist and this quarantine list must have the [Is this a Quarantine List?](#) setting enabled before this type of quarantining can occur. If these settings are incorrect then quarantining will not occur.

When an inappropriate item is moved to a Quarantine List:

- The item is moved to the Quarantine List.
- The inappropriate label on this item is shown in the Quarantine List.

To restore an item from a Quarantine List:

- Select a classification which is appropriate for the original document library which contained this item. This can be achieved using the SharePoint Classifier label dialog or using other Classifier applications which can natively label this item's file type.
- Select the **Restore Item** option from the ribbon bar or item context menu in the quarantine list.
- In the Restore Item dialog choose to restore the item.
- The item will be moved back to the original document library and the appropriate classification which has been selected will be shown on the item in the original document library.

Note: If an inappropriate classification is present on the item when it is restored it will be returned to the quarantine list.

The quarantine list must be in the same site collection as the document libraries which are using it. Document libraries cannot use a quarantine list outside of their site collection. If a quarantine list outside of the site collection is used then quarantining will fail because the item cannot be moved to the quarantine list.

Multiple quarantine lists can be configured within the sites in a site collection.

Quarantine lists can be shared between multiple document libraries in a site collection.

5.2.2.2 Permissions Modification

This type of quarantining occurs when the [Use Permissions Modification for Quarantining](#) settings is enabled for a SharePoint Classifier enabled document library.

This type of quarantining modifies the permissions on the item in the document library to stop other users seeing and accessing the item until an appropriate classification for the document library has been selected.

When an item is quarantined, the item in the document library has:

- Permission inheritance removed from the item.
- The user making the inappropriate change has edit permissions assigned to the item so they can set an appropriate classification or remove the item from the document library.
- Users with **Manage List** permissions for that document library have their permissions left on the item. This allows users who have the relatively high level permissions to manage the list can set an appropriate classification or remove the item from the document library.
- All other users have permissions removed from the item so they cannot see or access the item.

When an appropriate classification is applied to the item, it has:

- Permission inheritance restored on the item.
- All of the modified permissions assigned to the item by SharePoint Classifier are removed when permission inheritance is restored. This allows all users to see and access the item with the same inherited permissions they had before the item was quarantined.

Note: SharePoint Classifier quarantine permissions modification relies on inherited permissions. If an item within a document library has permissions inheritance disabled then it will have permissions inheritance enabled after it has had SharePoint Classifier quarantine permissions modifications applied.

5.2.2.3 Quarantine Notification Email

When an item is quarantined using either a [quarantine list](#) or [permissions modification](#) a notification email is sent to the user who added or update the item with the inappropriate classification. The email is sent through the SharePoint environments email functionality.

This email can only be sent when:

- The user's profile in SharePoint contains their correct email address.
- The SharePoint environment is configured to allow outgoing email.

5.3 Adding SharePoint Classifier functionality to a Document Library

SharePoint Classifier functionality is added onto a document library by setting the [Enabled](#) setting to the correct value. This will enable the basic SharePoint Classifier functionality on the document library. Other functionality can be enabled by setting the [Supported Settings](#) with values appropriate to your environment.

Enabling and configuring SharePoint Classifier can be achieved using the [Boldon James SharePoint Classifier Settings](#), [PowerShell Configuration](#) or [setting SharePoint property bag setting directly](#).

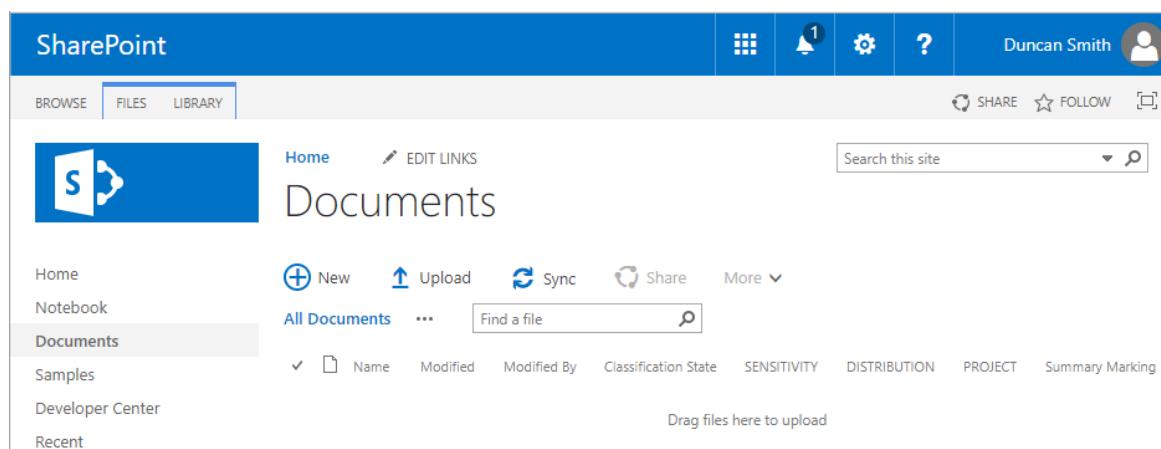
Note: SharePoint Classifier cannot be automatically enabled on all document libraries in a SharePoint environment. There are numerous document libraries hidden from the user which are used by SharePoint. SharePoint Classifier should not be enabled on these document libraries and automatically enabling SharePoint Classifier on all document libraries would result in SharePoint not working correctly when these internal use document libraries are modified. Contact Boldon James support for more details concerning this.

6 USER VIEW OF SHAREPOINT CLASSIFIER

[Adding SharePoint Classifier functionality to a Document Library](#) enhances the [Library View](#) to display Label value information.

6.1 Library View

New columns are added (one for each configured Label Selector, plus one showing the Summary Marking value), as in the example below. The columns shown and their order is managed on a per library basis using the standard SharePoint features found under **Library Tools / Library / Library Settings / All documents**.



Library Columns

6.2 Uploading a File

When you upload a file into a SharePoint Classifier enabled library, SharePoint Classifier will check the file and one of the following conditions will apply:

1. The file is a Classifier supported document and contains a label recognised by Classifier. In this case, the label is propagated into the SharePoint columns.
2. This file is a Classifier supported document but does not include a label recognised by Classifier, or it is a Classifier unsupported document. In either case, the file is uploaded to SharePoint and the SharePoint columns show the item as unlabelled or a [default classification](#) can be applied.

The label value can be viewed and where appropriate modified as described in the next section.

6.3 Viewing and Changing Label Value after upload

Any file in SharePoint Classifier can have a label applied. However, the ability to change an existing label value can be controlled by **Check for label change** rules, details of which can be found in **Classifier Administration Guide / Policies / Rules supported / Check Rules**.

- Select the file
- Choose the Classify option from the Document ribbon bar or Classify from the item context menu.

Edit Properties

Classifier will enforce any **Check these mandatory selectors** or **Check for label change** rules defined for SharePoint.

All unlabelled items within SharePoint may be labelled by this mechanism. However, items fall into three categories:

- a) Items that Office Classifier can label (Word, Excel, PowerPoint, Project, Visio). Labelling these items will update the Classifier label property of the item, but will not change the item in any other way (e.g. Markings will not be updated).
- b) Items that can be labelled by File Classifier or Power Classifier (e.g. ZIP, JPEG, PDF, HTML, Open Office Documents – see **Classifier Administration Guide – Appendix Label Propagation Mechanisms** for full details). Labelling these items will set the appropriate item property.
- c) All other items (e.g. TXT, Database). Labelling such items only sets the label as a SharePoint property. Such labels are never available outside SharePoint.

Note: When [Apply Clearance](#) and [Clearance Name](#) are correctly configured then the SharePoint Classifier label dialog will be masked using this Classifier Clearance to stop users selecting an inappropriate classification for an item in the document library. This masking of the label dialog is only present when using the SharePoint Classifier label dialog. Any other Classifier applications used to classify an item in this document library will be not have masking applied using this Classifier Clearance.

When a classification is applied to an item using the **Classify** option in SharePoint then the Classifier columns on that item will show **Update Pending** until a [SharePoint Classifier Configuration Item Service](#) has successfully processed the changes. Upon completion, the columns will be updated to show the correct values for the selected classification and the selected classification will be applied to **natively classified** file types.

6.4 Inappropriate Classification

Items with a classification that is [inappropriate](#) for the document library can be [quarantined](#). When a user adds or updates an item with an [inappropriate classification](#) the item will be [quarantined](#) and the user will receive an [email](#) stating the item has been [quarantined](#).

The user can then apply an appropriate classification to the item for that document library and restore the item from the [quarantined](#) state.

If the user cannot apply an appropriate classification to the item then the item must be deleted and cannot be restored from the [quarantined](#) state.

7 INTERWORKING WITH CLASSIFIER APPLICATIONS

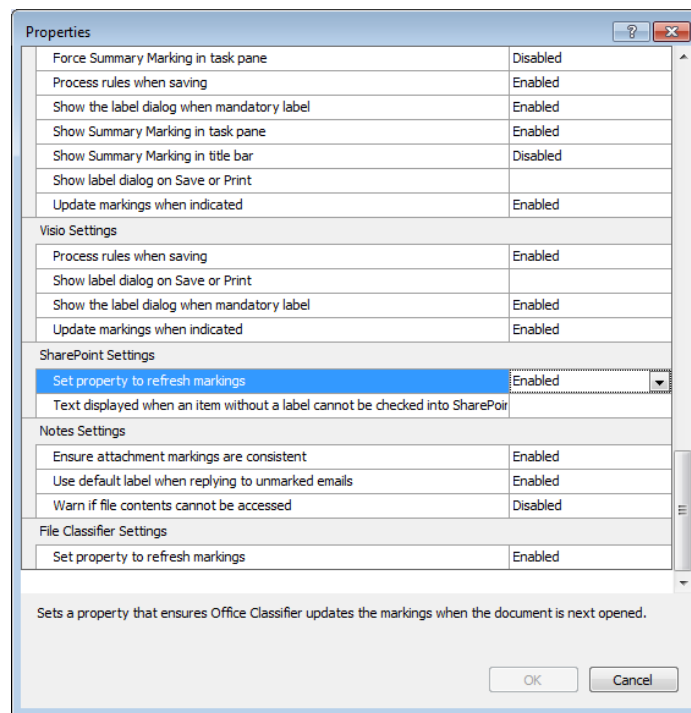
Note: Detailed information on the use and propagation of labels by Classifier applications can be found in the [Classifier Administration Guide/ Appendix – Label Propagation Mechanisms](#).

- SharePoint Classifier uses the same Label information as Office Classifier and CAD Classifier (Classifier 'private' label property and Label Locations) when reading labels from file types supported (e.g. Microsoft Word, Excel, PowerPoint and Project but not **VISIO**).
- Using SharePoint Classifier to apply a label value to an unlabelled Word document will update the Classifier 'private' label property. Consequential effects on Markings are applied the next time the document is opened using Office Classifier.

In this circumstance, SharePoint Classifier will set a custom property indicating to Office Classifier that the current Markings may not match the label value. Office Classifier will then automatically update the Markings the next time the document is opened. This mechanism can be inhibited via a **Classifier Administration** option:

Label Configurations / Configuration Settings / Classifier Application Settings / SharePoint Classifier / Set property to refresh markings (default **Enabled**).

Note: Markings may be refreshed using the label applied by SharePoint Classifier if the document is printed or saved.



Set property to refresh markings

- For Outlook messages and EML and MSG format messages, SharePoint Classifier uses the same Label location information markings stored within the message as is used by Email Classifier.
- For PDF SharePoint Classifier uses the *BJ label* property (as supported by File Classifier and Power Classifier for Files), otherwise check configured locations (document label locations configured in the Classifier configuration) for a label value.

- For ZIP files check the Comment field to see if it contains a *BJ label* (as supported by File Classifier and Power Classifier for Files).
- For the following use the *BJ label* value if it exists, otherwise check configured locations (email label locations configured in the Classifier configuration) to determine the current label value:
 - JPG files (JPG, JPEG, JPE)
 - html, htm
 - odf, odt, odp

Note: Support for these file types requires additional configuration of Classifier plug-ins under guidance from Classifier support. Be aware that the plug in for DXF/DWG files only supports reading of BJ Label values.

- All other attachment types are treated as unlabelled.
- For all other file types (e.g. .TXT) SharePoint Classifier allows you to apply a label to the file within SharePoint. This label value is not propagated beyond SharePoint.

Note: Any Classifier label assigned to an RMS protected document, S/MIME protected document or MSG file will not be available when an upload takes place.
