## boldonjames by HelpSystems



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## About this product

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 supported label values are defined by a Classifier Configuration created using Classifier Administration. See the Classifier Administration Server User Guide for more information.

See <u>Classifying Items in SharePoint on page 33</u> for a description of the functionality that SharePoint Classifier provides.

## About this guide

This guide is intended for Administrators deploying and managing SharePoint Classifier software.

## Planning

## **Identifying Assets**

Not all documents within your SharePoint estate need classification. You should identify the SharePoint document libraries, SharePoint sites, and site collections that do require integration with Classifier.

SharePoint Classifier can apply default settings to a Site Collection as soon as it is identified as an asset to be monitored. SharePoint Classifier can be enabled hierarchically with settings for a document library inherited from a site's settings, which in turn can be inherited from a site collection's settings. At both the document library and site level, the inherited value can be overridden. The inheritance of settings also applies to newly created sites and document libraries.

This hierarchy of settings allows you to exclude certain document libraries and/or sites from integration with Classifier in a site collection where most sites and document libraries should be integrated.

#### **PowerShell scripts**

We have provided two utility PowerShell scripts to help discover the site collections in a farm or tenant administration site:

- For SharePoint Online, use the script Get\_Online\_Site\_Collections.ps1
- For SharePoint 2016 and 2019 servers, use the script Get\_OnPremises\_Site\_ Collections.ps1

The scripts are delivered with the installation package for SharePoint Classifier Configuration PowerShell. Both scripts are located in the SupportingScripts sub-folder of the installation folder.

In addition, the utility script Manage\_SP\_Classifier\_Lists.ps1 is provided to identify and manage Document Libraries within a SharePoint Collection. You may find this script useful if you are upgrading from an earlier version of SharePoint Classifier.

Use the get-help cmdlet for detailed instructions on running these scripts.

## **Identifying Usage**

SharePoint can provide reports on the activity of users. These reports will help you determine how many documents are uploaded and accessed within a site collection. This usage information informs how to deploy SharePoint Classifier with respect to the sizing of servers.

SharePoint Classifier monitors site collections. As a general rule, a single instance of SharePoint Classifier Item Sweeper Service can handle 25 000 file uploads per day. If you determine your organization's usage is 50 000 file uploads a day spread evenly across four site collections, then

consider deploying two instances of the SharePoint Classifier Item Sweeper Service with each monitoring two site collections.

If a single instance of SharePoint Classifier is deployed to handle more than 25 000 file uploads, the user experience within SharePoint could be negatively affected. For example, the Classifier Labels shown within a Document Library's view not being updated in a timely manner.

**NOTE**: When determining the number of instances of the SharePoint Classifier Item Sweeper service for your organization, consider future increases to usage and peak usage of SharePoint along with the typical size of documents.

#### Benchmarking

Use the following benchmark figures to indicate the work load a single instance of SharePoint Classifier can handle:

Benchmark items	Description
Specifications	SharePoint Classifier Item Sweeper Service running on a Windows Server 2016 virtual machine with 1 virtual processor and 10 GB allocated memory. The host machine has a 3.5 GHz clock speed CPU and solid-state drive storage.
Test Details	The Item Sweeper service was tested using a custom test harness. This test harness uploads files from a seed set continuously to a SharePoint 2016 Document Library. The following seed files were used:
	3 copies of a 7.1 MB PowerPoint file
	<ul> <li>2 copies of a 4.4MB Word Docx file</li> </ul>
	• 1 copy of a 5.9MB Word Doc file
	<ul> <li>1 copy of a 1.8MB PDF file</li> </ul>
	The seed set reflects the distribution of file sizes and types uploaded.

Benchmark items	Description
Results	Duration of sample collection = 0.01:04:33
	File contents downloaded = 20,961,342,330 bytes
	Number of files handled = 1490
	Number of events handled = 2980
	Speed of events handled = 46.189 events/min
	Processing rate = 43.290 Mbps
	Extrapolates to 33234 user uploads per day of a 7.034 MB file to SharePoint

## **Determining Non-Compliance Operations**

Your organization's Classifier label configuration will specify permissible label combinations. It will not specify how to handle documents uploaded into SharePoint that do not have a Classifier Label or how to handle documents that have been classified inappropriately or using a different label configuration.

With SharePoint Classifier, you can apply a default classification to unclassified items in a SharePoint Classifier-enabled document library when the item is added or updated. The item 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.

## Preparing

## **Determining Number of Servers**

SharePoint Classifier is comprised of three different components: two Windows services that monitor SharePoint for changes, and a website that end-users connect to in order to access the SharePoint Classifier UI. An additional optional component allows PowerShell adjustment of SharePoint Classifier configuration.

The two SharePoint Classifier sweeper services should be collocated on a single server. Windows clustering services (or other Virtualization-based clustering) can be used to provide high availability in an Active/Passive configuration.

The anticipated load, discovered during the planning stage, will determine if more than one SharePoint Classifier Item Sweeper service is required. Install the SharePoint Classifier Configuration Sweeper Service alongside the Item sweeper service to monitor the same site collections. There are usually very few configuration events generated; the majority of events generated in a SharePoint site collection relate to items.

If more than one SharePoint Classifier Item Sweeper service is required, then the SharePoint server will need to service a considerable number of SharePoint client-side object model (CSOM) requests and may introduce throttling to manage its own resources. To help reduce the chance of this happening, we recommend using different authentication credentials for each Item Sweeper service.

Depending on the anticipated load, install SharePoint Classifier Website for Clients on one or more Classifier Client Website Servers with, if necessary, a load balancer managing the traffic between them.

## Document Library Template Types

SharePoint Classifier integrates with Document Libraries based on the Document Library base type and uses the Document Library template type of 101. This behaviour can be adjusted to include Document Libraries based on other template types.

Template codes are integers. For example, if you wanted to add support for each of the standard out-of-the-box template types then the associated template codes are Asset Library [851], Wiki Page [119], Form [115] and Picture [109].

## Classifying Existing SharePoint Documents

Documents likely exist in your SharePoint libraries that do not have a Classifier label. Use Boldon James Knowledge Classifier to classify these existing SharePoint files before introducing SharePoint Classifier. To use the Knowledge Classifier with SharePoint, contact Support for further information. Alternatively, if your organization currently uses another discovery product, you can employ Power Classifier for SharePoint in conjunction with that product's output to bulk classify existing files. For further information, contact Support.

## **Firewall and Proxy Considerations**

The two sweeper services that monitor changes within SharePoint provide configuration and authentication settings to allow communication with SharePoint via a proxy. To use the label dialog within SharePoint, access the SharePoint Classifier Website for Clients. This website installs into an IIS website on a Windows Server. This IIS website must be accessible from all client machines where you will be accessing the SharePoint Classifier functionality.

You can communicate with the SharePoint Classifier Website for Clients via a URL specified during configuration of the SharePoint Classifier Configuration Sweeper Service. This URL will be determined by the method you will be using to access 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.

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 only needs to be accessible from the client computers and devices where users will be accessible from the client computers and devices where users will be accessible from the client computers and devices where users will be accessible from the client computers and devices where users will be accessible from the client computers and devices where users will be accessible from the client computers and devices where users will be accessible from the client computers and devices where users will be accessible from the client computers and devices where users will be accessible from the client computers and devices where users will be accessible from the client computers and devices where users will be accessible from the client computers and devices where users will be accessible from the client computers and devices where users will be accessible from the client computers and devices where users will be accessible from the client computers and devices where users will be accessible from the client computers and devices where users will be accessible from the client computers and devices where users will be accessible from the client computers and devices where users will be accessing the SharePoint environment.

## **Testing Additional Library Templates**

If you decide to include additional template types, we highly recommend that you thoroughly test that behaviour within a test environment before deploying to a live production environment. If you do not include additional template types, then SharePoint Classifier will only be integrated with Document Libraries based on the Document Library base type that use the Document Library template type of 101.

# Synchronising Existing Documents in SharePoint

When SharePoint Classifier is introduced into a SharePoint environment, additional columns are added to the library view. These columns show the Classification of documents. Initially, any documents within the library will need to be scanned to populate the columns. This process is known as propagation of labels and is performed by the SharePoint Classifier Configuration

Sweeper service. You can trigger the propagation of labels at any time once SharePoint Classifier is enabled.

**NOTE**: This process may take some time depending on the number of existing documents. Benchmark testing of this process indicates processing times similar to processing by the SharePoint Classifier Item Sweeper service, as shown in <u>Benchmarking</u>.

## Enabling for a Pilot Group and Gathering Feedback

For the initial introduction of SharePoint Classifier to your organisation, consider establishing a pilot user community and gathering feedback before expanding the deployment to your full target community. You could enable SharePoint Classifier on a subset of SharePoint Site Collections, Sites, or Document Libraries for the pilot user community.

# Monitoring Event Viewer Records and Performance Counters

SharePoint Classifier records warnings and errors to the Windows Event Viewer. Regularly review these records to ascertain the health of the SharePoint Classifier system. If more comprehensive trace is required, then use the BJTrace utility installed with each SharePoint Classifier component. For further information on configuration and use of this logging facility, contact Support.

In addition, a wide variety of Performance Counters can be enabled to understand the resource impact and performance of SharePoint Classifier. The SharePoint performance counters have a category name of SharePoint Classifier Config Events for the SharePoint Classifier Configuration Sweeper service and SharePoint Classifier Item Events for the SharePoint Classifier Item Sweeper service.

# Deploying to a Larger Community with Auto-Provisioning

Auto-provisioning of SharePoint Classifier to new sites and document libraries is provided through the Configuration console for the SharePoint Classifier Configuration Sweeper Service component. Default settings can be automatically applied to new sites and new document libraries. The default settings can be overridden at a site level and changed at both the site and document library levels.

## Installing SharePoint Classifier

## **Before You Start**

Before installing SharePoint Classifier, certain pre-deployment configurations are required.

#### **SharePoint 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
Manage Lists	Manage Permissions
Add Items	Manage Web Site
Edit Items	<ul> <li>Add and Customize Pages</li> </ul>
Delete Items	Browse Directories
View Items	View Pages
Open Items	Enumerate Permissions
View Versions	Browse User Information
Create Alerts	Manage Alerts
	Use Remote Interfaces
	• Open

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

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. You can test SharePoint Permissions in the Configuration Tools to identify 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.

HelpSystems recommend that a SharePoint Permission Level is created with these permissions and is assigned to the SharePoint group. Refer to the Microsoft SharePoint documentation more information on SharePoint Permission Levels and SharePoint Groups.

#### 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.

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.

#### **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.

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.

#### 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. These products can be installed on the same or separate Windows Servers.

**NOTE**: There can only one instance of the SharePoint Classifier Configuration Sweeper Service, Item Sweeper Service, and Website for Clients installed 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**

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

**NOTE:** If you intend to use multiple installations of the SharePoint Classifier Configuration Sweeper Service or Item Sweeper Service, then we recommend that each service installation have its own Service Account. Using the same Service Account for multiple service installations may cause SharePoint to throttle the Service Account and degrade performance of the services.

You can have multiple installations of SharePoint Classifier Configuration Sweeper Service and SharePoint Classifier Item Sweeper Service on different Windows Servers so they can monitor different site collections. In this way, you can apply different Classifier Configuration Policies to site collections. We do not recommend that they monitor the same 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. Therefore, it must use the same Classifier Configuration Policy.

**NOTE**: We recommend 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 not, then the Classifier functionality may not be consistent due to differences between the Classifier Configuration Policies in use.

### **Configuring Classifier Label**

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 to a location accessible to the Windows Servers hosting the Item Sweeper Service, Configuration Sweeper Service, and Client Website.
- 3. Ensure that registry keys are set on the server that is to run the SharePoint Classifier Website for Clients, Configuration Sweeper Service, and 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	Туре	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 Server User Guide for more 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.

# Installing 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.

#### Prerequisite

- Windows Server 2016 or Windows Server 2019
- .NET 4.72 framework
- Web Server (IIS) configured with the following roles and features

- .NET Framework 4.5 feature
- .NET Framework 4.5 feature ASP.NET
- Web Server (IIS) role configured with the following additional features:
  - Static Content
  - HTTP Errors
  - Static Compression
  - Dynamic Compression
  - IIS Management Console

**NOTE**: SharePoint Classifier Website for Clients is installed into an existing IIS Website. We recommend that the SharePoint Classifier Website for Clients does not share a website with any other product and that a dedicated 64-bit IIS website is created for this product prior to installation.

#### Installing

Ensure you are logged on with Administrator privileges. You cannot install SharePoint Classifier Website for Client using the command line.

- 1. Run Setup.exe.
- 2. Follow the instructions and select the IIS Website that has been created.

An Application Pool called "SharePoint Classifier Clients Application Pool" is created when the product is installed. This Application Pool runs under the "Network Service" identity. This App Pool identity must allow:

- Reading from the location where the Classifier label configuration is published.
- Writing to the Event Log to allow the creation of audit and diagnostic information.

### **Configuration Considerations**

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 customer 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 accessible from the client computers and devices where users will be accessing the SharePoint environment.

## Installing 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.

#### Prerequisites

- Windows Server 2016 or Windows Server 2019
- PowerShell 4.0 or later
- .NET 4.72 framework

### Installing

User must be logged in with Administrator privileges. You cannot install SharePoint Classifier Configuration Sweeper Service using the command line.

- 1. Run the Setup.exe file.
- 2. Follow the instructions.

#### **Configuration Considerations**

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. Any changes to the configuration will require a restart of the SharePoint Classifier Configuration Sweeper Service.

## Installing 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.

#### Prerequisites

- Windows Server 2016 or Windows Server 2019
- .NET 4.72 framework

### Installing

User must be logged in with Administrator privileges. You cannot install SharePoint Classifier Item Sweeper Service using the command line.

- 1. Run the Setup.exe file.
- 2. Follow the instructions.

#### **Configuration Considerations**

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. Any changes to the configuration will require a restart of the SharePoint Classifier Item Sweeper Service.

## Installing SharePoint Classifier PowerShell Configuration Module

The SharePoint Classifier PowerShell Configuration module 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.

#### Prerequisites

- Microsoft Windows 10 (64-bit only) or Windows Server 2016 or Windows Server 2019
- PowerShell 4.0 or later
- .NET 4.72 framework

#### Installing

User must be logged in with Administrator privileges. You cannot install SharePoint Classifier PowerShell Configuation Module using the command line.

- 1. Run the Setup.exe file.
- 2. Follow the instructions.

#### **Configuration Considerations**

The SharePoint Classifier PowerShell Configuration does not require a Classifier Label Configuration.

# Configuring the SharePoint Classifier Service

## Using the SharePoint Classifier Configuration Sweeper Service Tool

The SharePoint Classifier Configuration Sweeper Service Configuration Tool 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.

The SharePoint Classifier Configuration Sweeper Service requires a configured Classifier Label Configuration. Any changes to the configuration will require a restart of the SharePoint Classifier Configuration Sweeper Service.

To configure a SharePoint Classifier Configuration Sweeper Service installation on a server

- 1. Click **Import Configuration** to import the configuration file created in the Classifier Administration Server.
- 2. Authenticate your SharePoint credentials. You can select one of the following supported authentication types:
  - 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. See *Configuring the SharePoint Classifier Service* on page 21

- 3. Click **Proxy Server** if you want to use a Web Proxy server to communicate between the Service and the SharePoint environment.
- 4. Click **Test SharePoint Permissions** if you want to test your permissions. See <u>Testing</u> <u>SharePoint Permissions on page 22</u>.
- 5. Enter the number of seconds in the Polling Period to specify how often the service checks for changes to the SharePoint and SharePoint Classifier configuration.
- 6. Enter the site URL and Library name of the Document Library for the Service Data 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.

- 7. Specify the site URL and Libray name of the SharePoint Classifier Clients Files used for the Classifier user interface in SharePoint. 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.
- 8. In the Site Collections to Monitor section, add the SharePoint site collections that the service will monitor. Multiple site collections can be monitored by entering the site collection URLs on separate lines. The Import and Export buttons allow you to backup and restore a collection of these site collection URLs using a CSV file. The file should have each URL on separate lines and use .csv as a filename extension.

**NOTE:** If you want to remove SharePoint Classier from Site Collections, click Remove Tool.

9. Click **Configure** to process additional library templates.

SharePoint Classifier integrates with Document Libraries based on the Document Library base type and uses the Document Library template type of 101. This can be adjusted to include Document Libraries based on other template types. If you decide to include additional template types, ensure the behaviour is as expected within a test environment before deploying to a live production environment. Click the User Additional Base Template Codes checkbox enter the codes. For example, if you wanted to add support for each of the standard out-of-the-box template types (Asset Library [851], Wiki Page [119], Form [115] and Picture [109]), populate the key as 851, 119, 115, 109.

10. Click **Configure** to apply default SharePoint Classifier settings for unclassified items when the item is added or updated.

Default settings apply to all Site Collections that have been identified in the Site Collections to Monitor. The default settings are only applied if those settings are not currently present at the Site Collection level. If the settings are not overridden at the Site level, then they are also used when new document libraries are created. This hierarchical system of settings provides automatic provisioning for SharePoint Classifier. For example, if every new document library should be enabled for SharePoint Classifier Processing, then the Enable SharePoint Classifier Processing default setting should be checked. If SharePoint Classifier does not process all document libraries in a specific SharePoint Site, then disable the Enabled setting for that Site. In addition, if SharePoint Classifier does not process a specific document library, then the Enabled setting for that library can be overridden.

11. Click OK.

#### **Testing SharePoint Permissions**

When testing SharePoint permissions, ensure the user has access to the **Site Collections To Monitor** in SharePoint. The user for the Test SharePoint Permissions should not be the Service Account user. 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. This user The user should not be the Service Account user because it will not be possible to determine the sites and lists which have no access or incorrect permissions for the Service Account.

Before you test, check that:

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

To test SharePoint permissions:

1. From the Test SharePoint Permissions dialog, click Start Testing

This testing can take a long time depending on the complexity of the Site Collections to Monitor. When the testing is taking place, a progress bar is shown. When the testing is complete, the results appear in the right hand pane. These results detail problems with the four areas that are tested. 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.

2. Click Close.

#### **Current Credentials vs Supplied Credentials**

The difference between Default Authentication Current Credentials and Default Authentication Supplied Credentials is that for supplied credentials, the user name and password entered 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 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 and anonymous authentication, user name and password are not required. The choice between current credentials or supplied credentials is only available with default authentication.

## Removing SharePoint Classifier from Site Collections

When SharePoint Classifier is enabled within a site collection, changes are made to the SharePoint site collection that are not removed by simply uninstalling SharePoint Classifier. Instead, each site collection that is enabled for SharePoint Classifier must be directly contacted to remove additional buttons, properties, and fields. Ensure that you are not currently monitoring the specified SharePoint Site Collections that you wish to remove.

To remove SharePoint Classifier from site collections:

- From the SharePoint Classifier Configuration Sweeper Service, click Remove Tool.
   A URL in the main list of the dialog identifies each site collection from which the SharePoint Classifier should be removed. This list shows the URL for the site collection and the current status of removing SharePoint Classifier. The following status values are shown:
  - Pending SharePoint Classifier will be removed when the Start button is clicked.
  - Removed SharePoint Classifier has been removed.
  - Failed SharePoint Classifier failed to be removed. Click the View Status button for further details.
- Click Start to stop the SharePoint Classifier Configuration service and remove all SharePoint Classifier Properties, columns, and buttons from the Site Collections specified. A progress bar appears and the status of removal will be reflected in the list. Use the Abort button to stop the removal.

## Using the SharePoint Classifier Item Sweeper Service Configuration Tool

The SharePoint Classifier Item Sweeper Service Configuration Tool 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 requires a configured Classifier Label Configuration. Any changes to the configuration will require a restart of the SharePoint Classifier Item Sweeper Service.

To configure a SharePoint Classifier Item Sweeper Service installation on a server:

- 1. Click **Import Configuration** to import the configuration file created in the Classifier Administration Server.
- 2. Authenticate your SharePoint credentials. You can select one of the following supported authentication types:
  - 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.

See Configuring the SharePoint Classifier Service on page 21

- 3. Click **Proxy Server** if you want to use a Web Proxy server to communicate between the service and the SharePoint environment.
- 4. Click **Test SharePoint Permissions** if you want to test your permissions. See <u>Testing</u> <u>SharePoint Permissions on page 22</u>.

- 5. Enter the number of seconds in the **Polling Period** to specify how often the service checks for changes to the SharePoint and SharePoint Classifier configuration.
- 6. Enter the site URL and Library name where the SharePoint Classifier Data are located.
- 7. In the Site Collections to Monitor section, add the SharePoint site collections that the service will monitor. Multiple site collections can be monitored by entering the site collection URLs on separate lines. The Import and Export buttons allow you to backup and restore a collection of these site collection URLs using a CSV file. The file should have each URL on separate lines and use .csv as a filename extension.

**NOTE:** If you want to remove SharePoint Classier from Site Collections, click Remove Tool.

8. Click **Configure** to process additional library templates.

SharePoint Classifier integrates with Document Libraries based on the Document Library base type and uses the Document Library template type of 101. This can be adjusted to include Document Libraries based on other template types. If you decide to include additional template types, ensure the behaviour is as expected within a test environment before deploying to a live production environment. Click the User Additional Base Template Codes checkbox enter the codes. For example, if you wanted to add support for each of the standard out-of-the-box template types (Asset Library [851], Wiki Page [119], Form [115] and Picture [109]), populate the key as 851, 119, 115, 109. Click **OK**.

9. Click OK.

# Using the SharePoint Classifier Website for Clients

The SharePoint Classifier Website for Clients requires a configured Classifier Label Configuration.

You 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: <u>http://TheServer/</u>
- 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 customer 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 accessible from the client computers and devices where users will be accessing the SharePoint environment.

The Classifier Settings allows you to configure the SharePoint Classifier using the SharePoint web interface. When SharePoint Classifier settings are modified, they are applied to the SharePoint environment by the SharePoint Classifier Configuration Sweeper Service. See <u>SharePoint Classifier Settings on page 39</u>.

## Using the SharePoint Classifier PowerShell

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 SharePoint Classifier PowerShell Configuration does not require a Classifier Label Configuration.

#### **Common Shared Parameters**

CommandDescription-SiteURL• The URL of a SharePoint site.<br/>• The parameter is mandatory.<br/>• For site collection commands, this is the URL<br/>of any site within the site collection.<br/>• For site commands, this is the URL of the<br/>site.<br/>• For document library commands this the URL<br/>of the site containing the document library.

The PowerShell commands contain the following common shared parameters:

Command	Description
-AuthenticationMode	<ul> <li>This must match the authentication type used by the SharePoint environment specified in the SiteURL parameter. This parameter is mandatory.</li> <li>The possible values for this parameter are {DefaultCurrentUser   DefaultSuppliedCredentials  Anonymous   FormsBased   SharepointOnline}</li> </ul>
-UserName	<ul> <li>This is the user name used to authenticate to the SharePoint environment specified in the SiteURL parameter.</li> <li>This is mandatory for the AuthenticationMode values {DefaultSuppliedCredentials   FormsBased   SharepointOnline}</li> </ul>
-SecurePassword	<ul> <li>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.</li> <li>This is mandatory for the AuthenticationMode values {DefaultSuppliedCredentials   FormsBased   SharepointOnline}.</li> </ul>
-UseProxyServer	<ul> <li>Use a Web Proxy server for communication with the SharePoint environment. The parameter is optional, and the default value is \$false.</li> <li>The parameter is optional, and the default value is \$false.</li> <li>The possible values for this parameter are {\$true   \$false}</li> </ul>

Command	Description
-ProxyServer	<ul> <li>The name or IP Address for the Web Proxy server used for communication with the SharePoint environment.</li> </ul>
	<ul> <li>This is mandatory when the UseProxyServer parameter is set to \$true.</li> </ul>
	<ul> <li>It is not required when UseProxyServer parameter is set to \$false or not specified.</li> </ul>
-ProxyServerPort	• The port number for the Web Proxy server used for communication with the SharePoint environment.
	<ul> <li>This is mandatory when the UseProxyServer parameter is set to \$true.</li> </ul>
	<ul> <li>It is not required when UseProxyServer parameter is set to \$false or not specified.</li> </ul>
-UseProxyServerAuthentication	<ul> <li>The Web Proxy server used for communication with the SharePoint environment requires authentication.</li> </ul>
	<ul> <li>The parameter is optional, and the default value is \$false.</li> </ul>
	<ul> <li>The possible values for this parameter are {\$true   \$false}</li> </ul>
	<ul> <li>It is not required when UseProxyServer parameter is set to \$false or not specified.</li> </ul>
-ProxyServerUserName	• The user name used to authenticate to the Web Proxy server used for communication with the SharePoint environment.
	<ul> <li>This is mandatory when the UseProxyServer and UseProxyServerAuthentication parameters are set to \$true.</li> </ul>
	<ul> <li>It is not required when UseProxyServer parameter is set to \$false or not specified, or</li> </ul>
	UseProxyServerAuthentication is set to \$false or not specified

Command	Description
-ProxyServerPassword	<ul> <li>This is the password for the ProxyServerUserName parameter. It is entered as a secure string. The <u>ConvertTo-SecureString</u> PowerShell command allows a plain text string to be converted to a secure string.</li> </ul>
	<ul> <li>This is mandatory when the UseProxyServer and UseProxyServerAuthentication parameters are set to \$true.</li> </ul>
	<ul> <li>It is not required when UseProxyServer parameter is set to \$false or not specified, or UseProxyServerAuthentication is set to \$false or not specified</li> </ul>

#### 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.

#### Set-BJSCSiteCollectionSetting

Set-BJSCSiteCollectionSetting [-SiteUrl] <string> [-AuthenticationMode] <BJSCAuthenticationType> {DefaultCurrentUser | DefaultSuppliedCredentials | Anonymous | FormsBased | SharepointOnline} [[- UserName] <string>] [[-SecurePassword] <securestring>] -PropertyName <string> { bjSPASCEnable | bjSPASCInternalServiceURL | bjSPASCApplyClearance | bjSPASCClearance | bjSPASCApplyDefaultLabel | bjSPASCDefaultLabel | bjSPASCQuarantinePermissions | bjSPASCQuarantineListName | bjSPASCQuarantineSiteUrl | bjSPASCStopUnlabelled | bjSPASCStopItemsWithMissingMandatory } [-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:

Parameter	Description
-PropertyName	<ul> <li>This the SharePoint property bag setting's name for the site collection setting being set. This parameter is mandatory.</li> <li>The possible values for this parameter are { bjSPASCEnable   bjSPASCPropagateLabels   bjSPASCInternalServiceURL   bjSPASCApplyClearance   bjSPASCClearance   bjSPASCApplyDefaultLabel   bjSPASCDefaultLabel   bjSPASCQuarantinePermissions   bjSPASCQuarantineListName   bjSPASCQuarantineSiteUrl   bjSPASCStopUnlabelled   bjSPASCStopItemsWithMissingMandatory }</li> </ul>
-PropertyValue	<ul> <li>This is the property value being set.</li> <li>The supported values for settings can be found in <u>SharePoint</u> <u>Classifier Settings on page 39</u>. To remove a property from the property bag set the PropertyValue to an empty string.</li> </ul>

### 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.

### Set-BJSCSiteSetting

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

The command configures a SharePoint site setting.

This script contains the common shared parameters and the following additional parameters:

Parameter	Description
-PropertyName	<ul> <li>This the SharePoint property bag setting's name for the site collection setting being set. This parameter is mandatory.</li> </ul>
	<ul> <li>The possible values for this parameter are { bjSPAEnable   bjSPAPropagateLabels   bjSPAInternalServiceURL   bjSPAApplyClearance   bjSPAClearance   bjSPAApplyDefaultLabel   bjSPADefaultLabel   bjSPAQuarantinePermissions   bjSPAQuarantineListName   bjSPAQuarantineSiteUrl   bjSPAStopUnlabelled   bjSPAStopItemsWithMissingMandatory }</li> </ul>
-PropertyValue	<ul> <li>This is the property value being set.</li> <li>The supported values for settings can be found in <u>Setting on page 41</u>. To remove a property from the property bag set the PropertyValue to an empty string.</li> </ul>

#### 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:

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

#### 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 | bjSPAStopItemsWithMissingMandatory } [-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	e following	additional
parameters:							

Parameter	Description
-LibraryName	• The name of a document library where settings are being set. This parameter is mandatory.
-PropertyName	<ul> <li>This is the property bag setting's name for the site setting being set. This parameter is mandatory.</li> </ul>
	<ul> <li>The possible values for this parameter are {bjSPAEnable   bjSPAPropagateLabels   bjSPAInternalServiceURL   bjSPAApplyClearance   bjSPAClearance   bjSPAApplyDefaultLabel   bjSPADefaultLabel   bjSPAQuarantine   bjSPAQuarantinePermissions   bjSPAQuarantineListName   bjSPAQuarantineSiteUrl   bjSPAStopUnlabelled   bjSPAStopItemsWithMissingMandatory }</li> </ul>
-PropertyValue	<ul> <li>This is the property value being set.</li> </ul>
	<ul> <li>The supported values for settings can be found in <u>Setting on</u> page 41. To remove a property from the property bag set the PropertyValue to an empty string.</li> </ul>

## **Classifying Items in SharePoint**

SharePoint Classifier allows 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. These fields shown depend on the Classifier selectors in the Classifier Configuration Policy used 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, and can only classify one file at a time. If several files need to be classified simultaneously, it is recommended that Boldon James Power Classifier for SharePoint be used.

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

## **File Types**

Files types which are 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 is updated with the new Classification. This is then used by any Classifier application which can access this file from within SharePoint or if the file is moved outside of the SharePoint environment.
- When a 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 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.

## Labels and Marking for Supported File Types

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 (for example, 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.

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

For Outlook, EML and MSG format messages, SharePoint Classifier uses the same Label location information stored within the message as is used by Email Classifier.

For PDF files, SharePoint Classifier uses the Boldon James 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 Boldon James label (as supported by File Classifier and Power Classifier for Files).

For the following, use the Boldon James label value if it exists, otherwise check configured locations (email label locations configured in the Classifier configuration) to determine the current label value:

- JPG, JPEG, JPE
- html, htm
- odf, odt, odp

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.

For all other file types (for example, .TXT) SharePoint Classifier allows you to apply a label to the file within SharePoint. This label value is not propagated beyond SharePoint.

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.

You can label the following items in SharePoint:

- 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 (for example, Markings will not be updated).
- Items that can be labelled by File Classifier or Power Classifier (for example, ZIP, JPEG, PDF, HTML, Open Office Documents) see Appendix Label Propagation Mechanisms in the Classifier Administration Server User Guide. Labelling these items will set the appropriate item property.
- All other items (for example, TXT, Database). Labelling such items only sets the label as a SharePoint property. Such labels are not available outside SharePoint.

When Apply Clearance and Clearance Name are correctly configured, the SharePoint Classifier label dialog will be masked 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.

For more information on inappropriate classifications, see <u>Quarantining Items on page 36</u>

# Configuring a Document Library to talk to SharePoint Classifier

You can enable SharePoint Classifier functionality to a document library by setting values appropriate to your environment. For more information, see <u>SharePoint Classifier Settings on page</u> <u>39</u> and <u>Configuring the SharePoint Classifier Service on page 21</u>. You can enhance the Library View to display Label value information. SharePoint Classifier is supported in both the Classic View and Modern Experience.

### Library View

In SharePoint, new columns are added (one for each configured Label Selector, plus one showing the Summary Marking value). The columns and their order is managed on a per library basis using the standard SharePoint features found under Library Tools > Library > Library Settings > All documents.

## **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:

- 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.
- 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.

#### Viewing and Changing Label Value after Uploading

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. For more information, see the Classifier Administration Server User Guide. To view or change a Classification:

- 1. From SharePoint, right-click a file.
- 2. Select Classification Information.

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

When a classification is applied to an item using the Classify option in SharePoint, 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.

## **Quarantining Items**

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 from seeing and accessing the item.

When an item is quarantined, a notification is sent to the user who added or updated the item with the inappropriate classification. The notification is sent though the SharePoint environment's 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.

## Why Items are Quarantined

Reason	Description						
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 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.						
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.						
Missing Mandatory Element Failure	When an item in a SharePoint Classifier-enabled document library is added or updated, it can be quarantined if it does not pass a Check these mandatory selectors rule configured with a prevent action. This stops items with an incomplete 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.						

### How Items are Quarantined

You can move items to a Quarantine List by:

- enabling the Is this a QuarantineList? setting. The Quarantine Site URL and Quarantine
  List Name settings must be configured correctly. The quarantine list, that the Quarantine
  Site URL and Quarantine List Name settings point to, must exist. If these settings are
  incorrect, then quarantining will not occur. The Use Permissions Modification for
  Quarantining setting must be disabled or not present on a SharePoint Classifier-enabled
  document library. To enable this setting, see <u>SharePoint Classifier Settings on page 39</u>
- enabling the **Use Permissions Modification for Quarantining** setting for a SharePoint Classifier enabled document library. This stops other users seeing and accessing the item until an appropriate classification for the document library has been selected. To enable this setting, see <u>SharePoint Classifier Settings on page 39</u>. When an item is quarantined:
  - 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.

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.
- 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.

## **Restoring Items**

You can restore the items to their original document library locations after an appropriate classification has been applied. To restore an item from a Quarantine List in one of the following ways:

- Select a classification which is appropriate for the original document library which contained this item by 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 a site collection.

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

## **SharePoint Classifier Settings**

SharePoint Classifier functionality can be configured in one of the following ways:

- Default SharePoint Classifier Settings automatic provisioning of new sites and libraries using the SharePoint Classifier Configuration Sweeper Service Tool. When Default SharePoint Classifier settings are modified they are applied to the SharePoint environment by the SharePoint Classifier Configuration Sweeper Service.
- Boldon James Classifier Settings a web page allows configuration using the SharePoint web interface. When SharePoint Classifier settings are modified they are applied to the SharePoint environment by the SharePoint Classifier Configuration Sweeper Service.
- SharePoint Classifier PowerShell Configuration allows configuration using Microsoft PowerShell commands.
- Configuring SharePoint property bag settings directly this is primarily for, but not limited to, SharePoint provisioning systems which can set property bag settings.

**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 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 the SharePoint Classifier Configuration Sweeper Service and SharePoint Classifier Configuration Item Service have successfully processed those changes.

SharePoint Classifier settings can be set at the site collection, site, and document library level.

- 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 the default settings configured in SharePoint Classifier Configuration Sweeper Service Tool will be used. In addition, the site collection level setting will be populated with that default configuration setting.

The SharePoint Classifier settings, the level they are supported at, and their property bag settings are shown in the following table.

**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.

## Accessing the Classifier Settings

To open the Classifier Settings:

- Right-click the SharePoint web interface and select Boldon James Classifier Settings. The Settings dialog opens for the current site collection. You can configure settings at the site collection level, sit elevel for the sites contained within the site collection, or the document library level for document libraries contained within the sites in the site collection.
- 2. Click a value to the right of a settings to set a value.

To delete a value in Classifier Settings:

1. Click 🖳 to delete the value.

To update values in Classifier Settings:

1. Click C next to "Settings for.....".

To display information about the product's version and Classifier Configuration being used:

1. Click About SharePoint Classifier Client Website.

Setting	Description	Default ShareP oint Classifi er Level Suppor t	Site Collect ion Level Suppor t	Site Level Supp ort	Docum ent Library Level Suppor t	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
Enabled	Controls whether SharePoint Classifier functionality is available or not. When value is set to 1, the functionality is enabled. All other values or the setting not being present means that functionality is disabled.	~	~	~	~	bjSPASCEnable	bjSPAEnable	bjSPAEnable

Setting	Description	Default ShareP oint Classifi er Level Suppor t	Site Collect ion Level Suppor t	Site Level Supp ort	Docum ent Library Level Suppor t	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
Propagat e Labels	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.		~	~	~	bjSPASCPropogateLabels	bjSPAPropogateLabels	bjSPAPropogateLabels
	been propagated, this setting will be automatically cleared. When the value is							
	set to 1, existing Classifications are propagated. All other values or the setting not being present means this functionality is disabled.							

Setting	Description	Default ShareP oint Classifi er Level Suppor t	Site Collect ion Level Suppor t	Site Level Supp ort	Docum ent Library Level Suppor t	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
Is this a Quaranti ne List	Defines a list as a quarantine list. 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. The Enabled setting must be configured				~			bjSPAQuarantine
	correctly for this setting.							

Sett	ing	Description	Default ShareP oint Classifi er Level Suppor t	Site Collect ion Level Suppor t	Site Level Supp ort	Docum ent Library Level Suppor t	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
Serv	ice	Defines the complete URL for the SharePoint Classifier 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. A site collection level ServiceURL setting is automatically created by the Configuration Sweeper Service when it is set to monitor a site collection. This can be overwritten at the site or				~	bjSPASCInternalServiceURL	bjSPAInternalServiceURL	bjSPAInternalServiceURL

Setting	Description	Default ShareP oint Classifi er Level Suppor t	Site Collect ion Level Suppor t	Site Level Supp ort	Docum ent Library Level Suppor t	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
	document library level by setting appropriate values for the setting at the site or document library level.							

Setting	Description	Default ShareP oint Classifi er Level Suppor t	Site Collect ion Level Suppor t	Site Level Supp ort	Docum ent Library Level Suppor t	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
Use Permissi ons Modifica tion for Quaranti ning	Defines the type of quarantining that occurs when items with Inappropriate Classifications are added or updated in a document library.	v	•	Ŷ	v	bjSPASCQuarantinePermiss ions	bjSPAQuarantinePermissi ons	bjSPAQuarantinePermissi ons
	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 means that items with Inappropriate Classifications will be quarantined using a Quarantine List. The Quarantine Site URL and Quarantine List Name must be							

Setting	Description	Default ShareP oint Classifi er Level Suppor t	Site Collect ion Level Suppor t	Site Level Supp ort	Docum ent Library Level Suppor t	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
	configured to use quarantining to a Quarantine List.							
Quaranti ne Site URL	Defines the URL for the SharePoint site that contains the quarantine list defined in the Quarantine List Name setting.	~	V	~	~	bjSPASCQuarantineSiteUrl	bjSPAQuarantineSiteUrl	bjSPAQuarantineSiteUrl
	The Quarantine List Name setting defines the name of the document library configured as a quarantine list.							
	This setting is only used when the Use Permissions Modification for Quarantining setting is disabled or not present.							

Setting	Description	Default ShareP oint Classifi er Level Suppor t	Site Collect ion Level Suppor t	Site Level Supp ort	Docum ent Library Level Suppor t	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
Quaranti ne List Name	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.	~	~	~	~	bjSPASCQuarantineListNa me	bjSPAQuarantineListNam e	bjSPAQuarantineListNam e
	The Quarantine Site URL setting defines the URL for the SharePoint site which contains this document library configured as a quarantine list.							
	This setting is only used when the Use Permissions Modification for Quarantining setting is disabled or not present.							

Setting	Description	Default ShareP oint Classifi er Level Suppor t	Site Collect ion Level Suppor t	Site Level Supp ort	Docum ent Library Level Suppor t	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
Apply Default Label	Defines whether a default classification is applied to unclassified items when they are added or updated in a document library with SharePoint Classifier enabled.	~	~	~	~	bjSPASCApplyDefaultLabel	bjSPAApplyDefaultLabel	bjSPAApplyDefaultLabel
	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.							
	The Default Label Name setting specifies the default label that will be applied to unclassified items							

Setting	Description	Default ShareP oint Classifi er Level Suppor t	Site Collect ion Level Suppor t	Site Level Supp ort	Docum ent Library Level Suppor t	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
	when this setting is enabled.							

Sett	ting	Description	Default ShareP oint Classifi er Level Suppor t	Site Collect ion Level Suppor t	Site Level Supp ort	Docum ent Library Level Suppor t	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
Def Lab Nan	ault el ne	Contains the name of a Default Label entry from a Classifier Configuration Policy.	~	~	~	~	bjSPASCDefaultLabel	bjSPADefaultLabel	bjSPADefaultLabel
		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 SharePoint Classifier Item Sweeper Service monitoring this site collection.							

Setting	Description	Default ShareP oint Classifi er Level Suppor t	Site Collect ion Level Suppor t	Site Level Supp ort	Docum ent Library Level Suppor t	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
	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.							

Setting	Description	Default ShareP oint Classifi er Level Suppor t	Site Collect ion Level Suppor t	Site Level Supp ort	Docum ent Library Level Suppor t	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
Apply Clearanc e	Defines whether a Classifier Clearance is applied to items when they are added or updated in the document library with SharePoint Classifier enabled.	~	~	~	~	bjSPASCApplyClearance	bjSPAApplyClearance	bjSPAApplyClearance
	The Clearance Name specifies the Classifier Clearance that will be applied to items.							
	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.							
	The Clearance Name setting specifies the							

Setting	Description	Default ShareP oint Classifi er Level Suppor t	Site Collect ion Level Suppor t	Site Level Supp ort	Docum ent Library Level Suppor t	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
	Classifier Clearance that will be applied to items.							

Setting	Description	Default ShareP oint Classifi er Level Suppor t	Site Collect ion Level Suppor t	Site Level Supp ort	Docum ent Library Level Suppor t	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
Clearanc e Name	Contains the name of a Clearance Library entry from a Classifier Label Configuration.	•	*	<b>v</b>	~	bjSPASCClearance	bjSPAClearance	bjSPAClearance
	The "Apply Clearance" setting determines if this setting is used.							
	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.							

Se	tting	Description	Default ShareP oint Classifi er Level Suppor t	Site Collect ion Level Suppor t	Site Level Supp ort	Docum ent Library Level Suppor t	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
		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.							
		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.							

Setting	Description	Default ShareP oint Classifi er Level Suppor t	Site Collect ion Level Suppor t	Site Level Supp ort	Docum ent Library Level Suppor t	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
Stop Unlabell ed	Defines whether unclassified items can be added or updated in a document library with SharePoint Classifier enabled.	~	~	~	~	bjSPASCStopUnlabelled	bjSPAStopUnlabelled	bjSPAStopUnlabelled
	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.							

Setti	ng	Description	Default ShareP oint Classifi er Level Suppor t	Site Collect ion Level Suppor t	Site Level Supp ort	Docum ent Library Level Suppor t	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
Stop Items with Miss Mano ry Va	s ing dato alue	Defines whether items with missing mandatory label elements can be added or updated in a document library with SharePoint Classifier enabled.	v	~	ý	~	bjSPASCStopItemWithMiss ingMandatory	bjSPAStopItemWithMissi ngMandatory	bjSPAStopItemWithMissi ngMandatory
		When this setting has the value 1, then items which fail a Check these mandatory selectors rule cannot be added or updated.							
		All other values or the setting not being present means this functionality is disabled.							
		The active Classifier policy must be configured with a Check these mandatory							

Setting	Description	Default ShareP oint Classifi er Level Suppor t	Site Collect ion Level Suppor t	Site Level Supp ort	Docum ent Library Level Suppor t	Property Bag Setting Name at Site Collection Level	Property Bag Setting Name at Site Level	Property Bag Setting Name at Document Library Level
	selectors rule for SharePoint Classifier with a prevent action for this to take effect. More information on configuring this rule can be found in the Classifier Administration Server User Guide.							