

SLIM Companion Explorer 1.8 Administrator Guide

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1. Introduction

SLIM Companion Explorer is a browser-based tool that mimics File Explorer and allows users to access SharePoint using an intuitive and efficient interface.

Throughout this document SharePoint is used to refer to SharePoint Online, OneDrive for Business, SharePoint 2013, SharePoint 2016, and SharePoint 2019.

The details of the supported browsers, client operating systems and SharePoint versions are provided in the SLIM Companion Explorer release notes (see <https://www.slimapplications.com/product/explorer/>).

2. Installation

2.1 Basic installation SharePoint

This section describes the basic installation of the tool. The steps to install the optional App are provided in the section 2.2.

The SLIM Companion Explorer tool consists of 5 files:

- SLIM_Companion_Explorer.aspx
- SLIM_Companion_Explorer_properties.txt
- SLIM_Companion_Explorer.js
- zipInflate.js
- properties.txt

The following prerequisites need to be met:

1. The files listed above are available
2. Account with “Add and Customize Pages” permission to install the tool.
3. End-users need to have read permissions (i.e. “Can view”) for the 5 files listed above.

The following installation steps need to be executed:

1. Upload the 5 files to a library (e.g. SiteAssets) in the SharePoint site
2. Grant read access to the files by configuring the permissions to “Can view” for the target audience.

2.2 Starting the tool via a link

In typical deployments a link is created by the Office 365 Administrator to provide easy access to the tool for users .

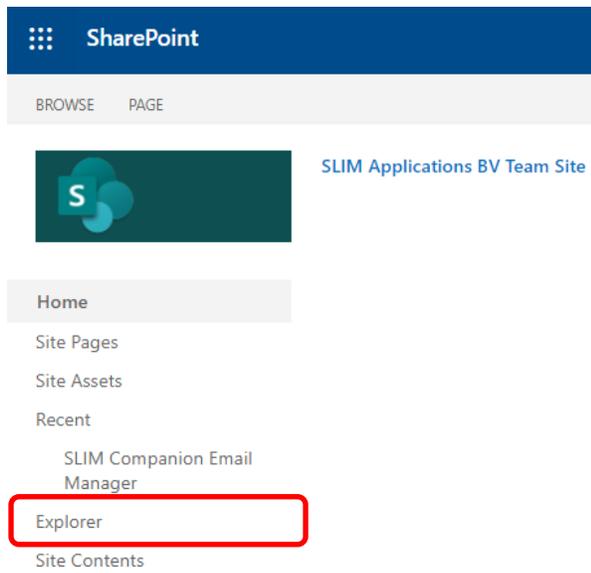


Figure 1. Screenshot of SharePoint system after adding a link to the Explorer tool.

The recommended way of using links is to upload to the tool to a single location in your SharePoint system and then use links from the various sites that refer to this central location.

The syntax is as follows:

https://<yourservername>/<sitename>/<libraryname>/SLIM_Companion_Explorer.aspx?startsite=<site url>

For example, if the Explorer tool is installed in the SiteAssets library of the support site and the tool should open in the site named “ProjectX” use the following link

https://slimapplications.sharepoint.com/support/SiteAssets/SLIM_Companion_Explorer.aspx?startsite=https://slimapplications.sharepoint.com/sites/ProjectX

Note #1: use the full URL including the protocol and domain name like slimapplications.sharepoint.com for the startsite parameter

Make sure that the URL of the start site provided is valid by simply opening the link in a separate tab or window.

2.3 Installation of the optional SLIM Companion Explorer App (SharePoint)

Organizations with Office 365 Business and Enterprise plans using SharePoint Online can install the optional SLIM Companion Explorer App. This App needs to be installed via the SharePoint Admin Center and allows deployment of the tool to all libraries in a site or all sites in a tenant. The App simplifies access to the tool for users by adding a button to the SharePoint ribbon. See figures 2 and 3 below.

Download the App from <https://www.slimapplications.com/wp-content/uploads/2020/03/SLIM-Companion-Explorer-App-1.1.0.0.zip>

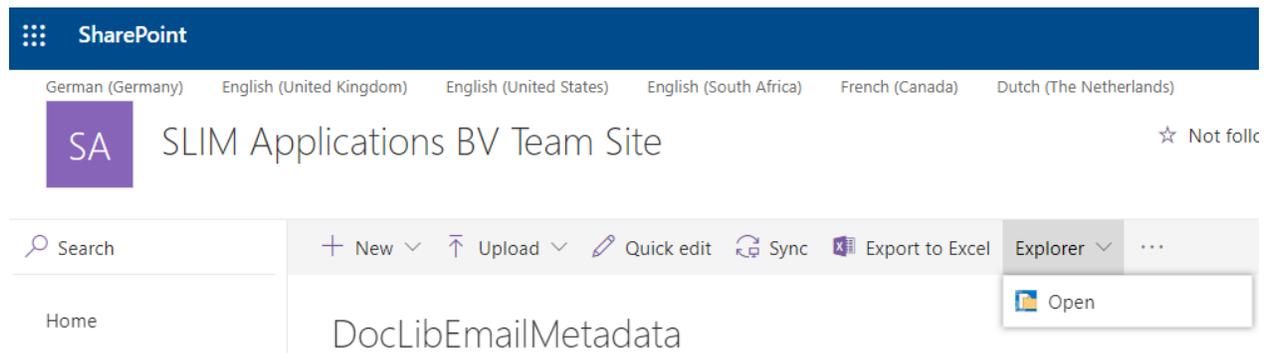


Figure 2. SharePoint modern view with the additional “Explorer” button.

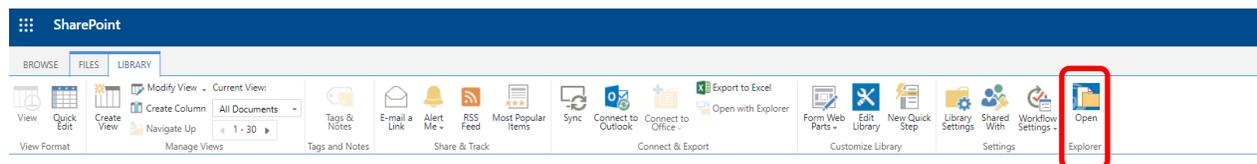


Figure 3. SharePoint classic view with the additional “Explorer” button.

The following steps need to be executed to install the optional SLIM Companion Explorer App:

1. Browse to the library named “SiteAssets” in your site.

If this library does not exist create it by browsing to “Site contents” in your SharePoint site and then use “New” | “App” and select an “Asset Library” to create the library named “SiteAssets” (use this exact name without additional spaces).

2. Upload the 5 files from the zip file to the “SiteAssets” library.

SiteAssets

Name	Modified	Modified By
properties.txt	April 1	Paul de Jong (Administrat
SLIM_Companion_Explorer.aspx	Monday at 3:26 PM	Paul de Jong (Administrat
SLIM_Companion_Explorer.js	Monday at 3:26 PM	Paul de Jong (Administrat
SLIM_Companion_Explorer_properties.txt	Monday at 3:26 PM	Paul de Jong (Administrat
zipinflate.js	April 1	Paul de Jong (Administrat

Figure 4. Contents of SiteAssets list after uploading the 5 files.

3. Browse to <https://admin.microsoft.com/> and in the “Admin centers” section select the “SharePoint Admin Center” link

4. Select “apps” in the left-hand side navigation and click on “App Catalog”

5. Click on the link “Apps for SharePoint”

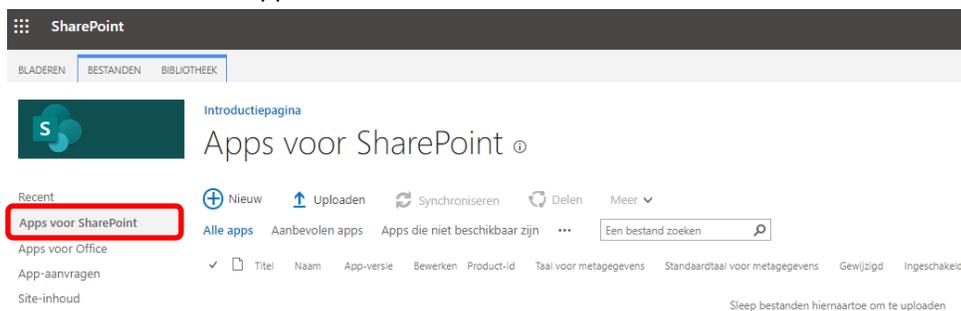


Figure 5. Apps for SharePoint.

6. Upload the SLIMCompanionExplorerApp.app file using the “Upload” button

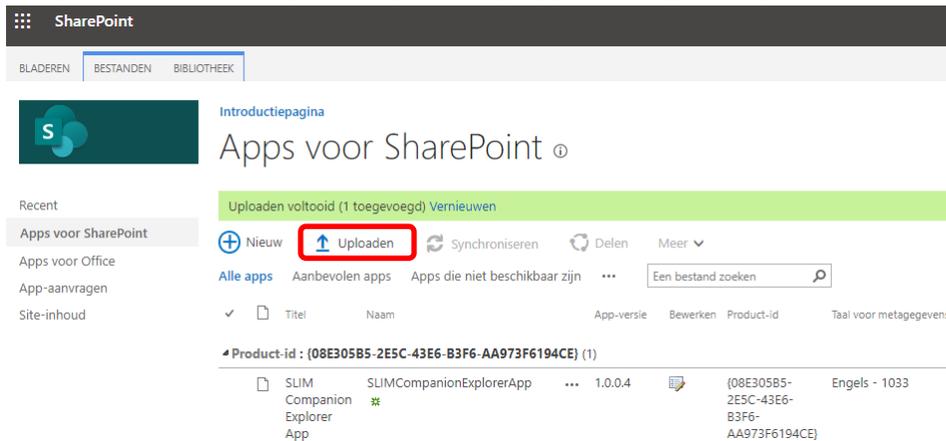


Figure 6. Apps for SharePoint after uploading the “SLIM Companion Explorer App”.

7. Browse to your SharePoint site

8. Select “Settings” | “Add an app”

9. In the left-hand menu select the link “From Your Organization”

This show a list with available apps.

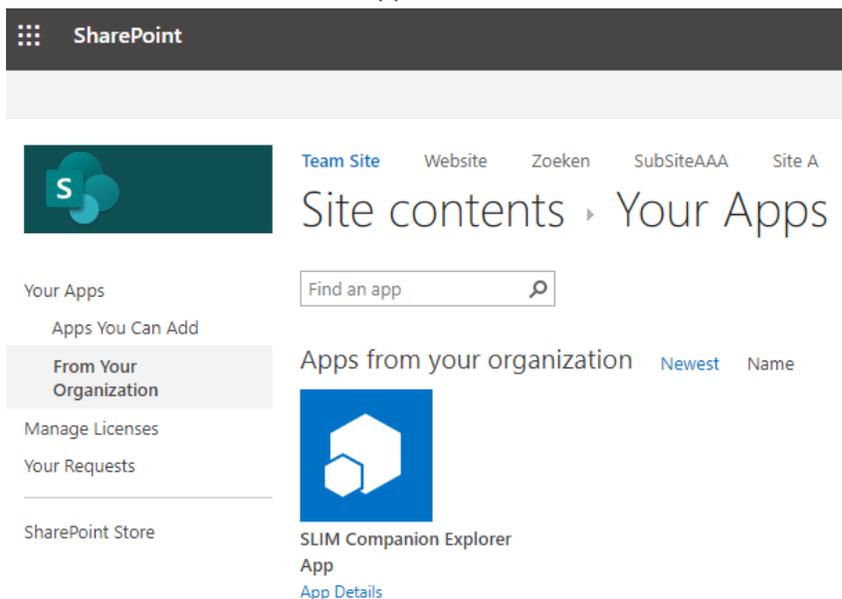


Figure 7. “From Your Organization” page with the added “SLIM Companion Explorer App”.

10. Click “SLIM Companion Explorer App” and in the popup window about click “Trust It”

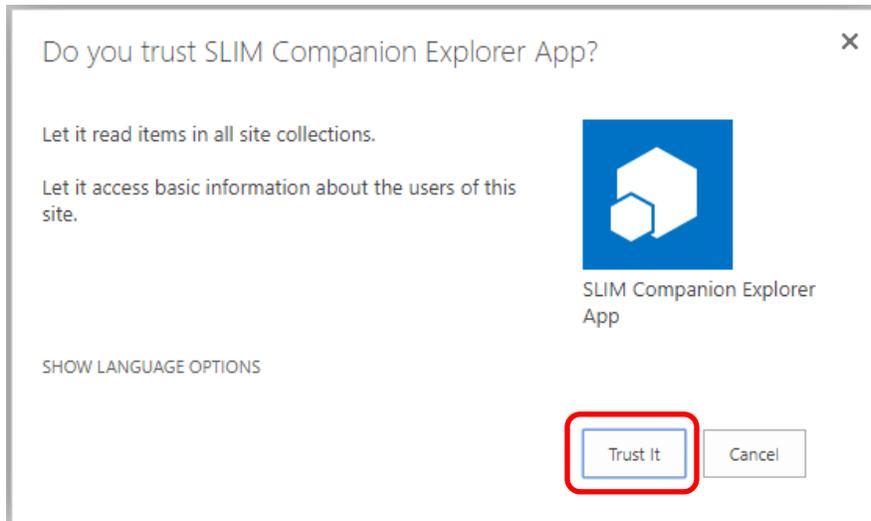


Figure 8. Popup window after adding the SLIM Companion Explorer App.

11. Wait a while (this may take minutes) until the App is installed and available

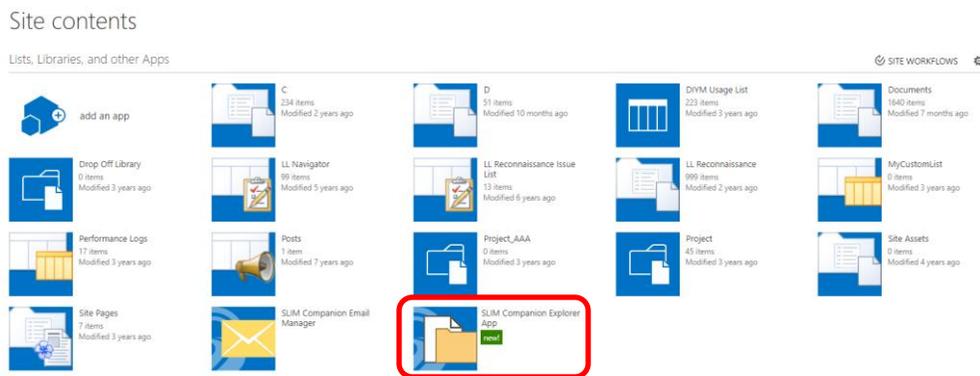


Figure 9. Site Contents with the available "SLIM Companion Explorer App"

Testing:

1. Browse to a Document, Picture or Asset library in your SharePoint site
2. Check if the button “Explorer” is shown in the ribbon (for modern view).

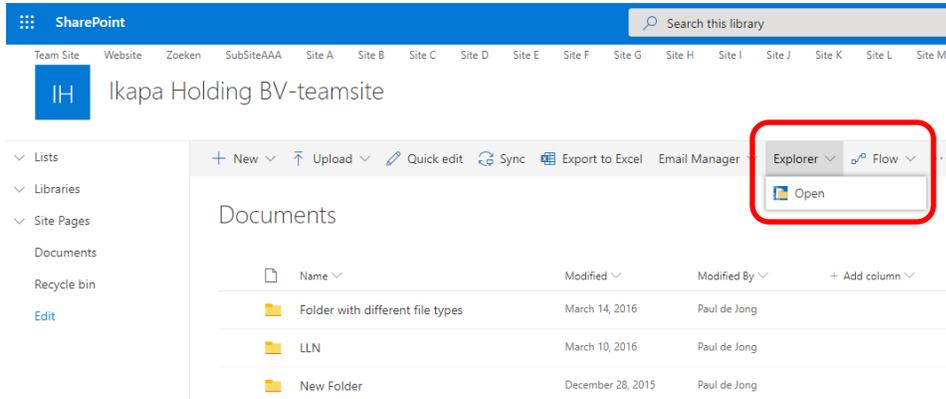


Figure 10. Document library (modern view) with the Explorer button.

For libraries using the classic view click on the tab “Library”.

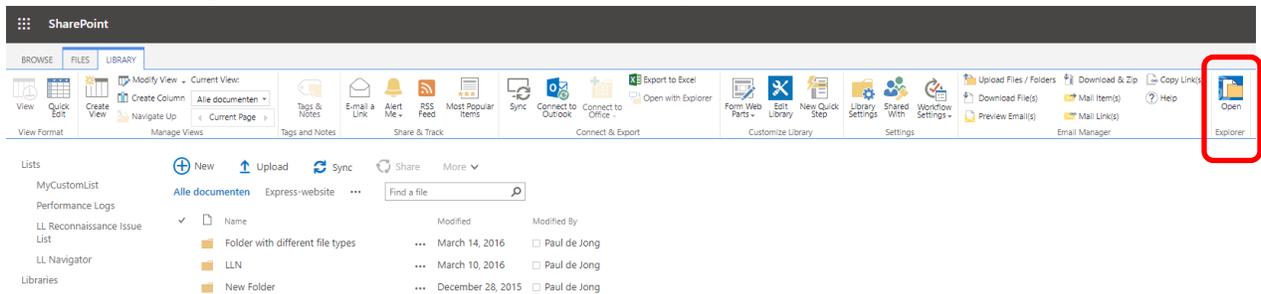


Figure 11. Document library (classic view) with the Explorer button.

3. Open the tool by clicking the “Explorer” button and verify that the SLIM Companion Explorer tree is shown in the browser.

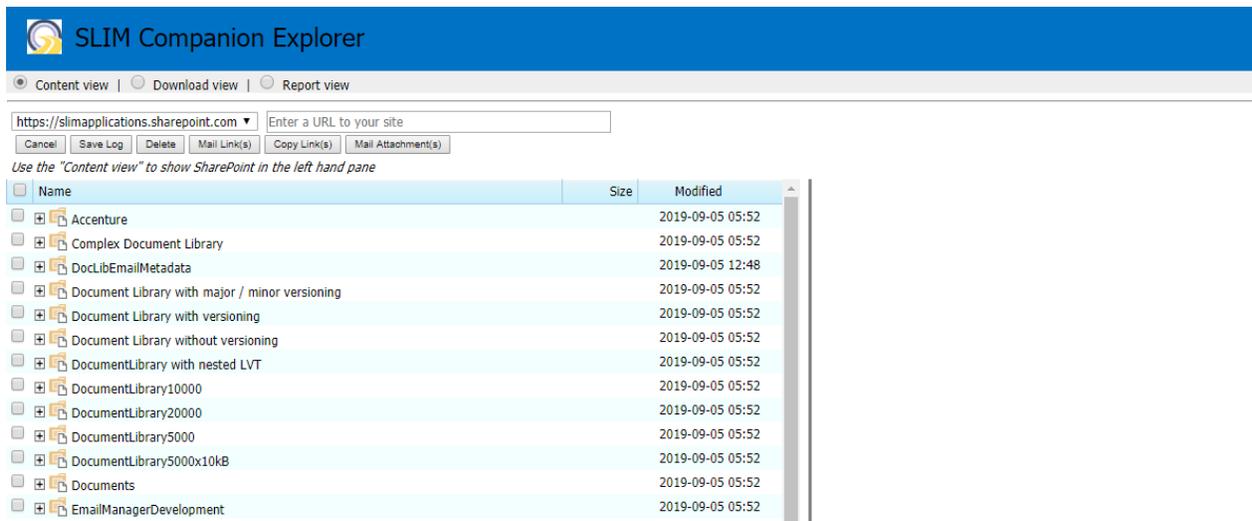


Figure 12. SLIM Companion Explorer tree

2.4 Installation OneDrive for Business

SLIM Companion Explorer can also be used to work with OneDrive for Business. The files need to be uploaded to a central location to avoid installing the files for each user separately. The use of the app is highly recommended to simplify deployment across the user's OneDrive sites.

The installation needs to be done by a user with administrative permissions.

Installation:

1. Unpack the zip file with the OneDrive files on your local computer
2. Browse to the root of the OneDrive site
https://yourcompany-my.sharepoint.com/_layouts/15/viewlsts.aspx?view=14
3. Create a new library named "SiteAssets" (use exact spelling without the enclosing " characters).
4. Upload the 5 files
5. Grant read permissions to the planned users

The following steps need to be made by the individual users to enable the tool in OneDrive:

1. Browse to your OneDrive site
https://ikapa-my.sharepoint.com/personal/paul_de_jong_ikapa_onmicrosoft_com/_layouts/15/viewlsts.aspx?view=14
2. Use New App to add an app

3. In the left-hand menu select the link “From Your Organization”
This show a list with available apps.
4. Click “SLIM Companion Explorer App” and in the popup window about click “Trust It”

Testing:

1. Browse to a document library in OneDrive for Business (browser).
2. Verify that the button “Explorer” is visible in the ribbon.
3. Click on the “Explorer” button to open the tool.

2.5 Deploying a new release

Deploying a new release is as simple as adding a version to the existing documents. The users will automatically start using the latest version the next time they open the SLIM Companion Explorer file. A message will be shown to the users if they need to refresh the page.

2.6 Retracting a release

A release can be retracted by restoring a previous version. Open the document’s Version History and restore the version of choice.

2.7 Browser Settings

SLIM Companion Explorer requires the following browser settings:
approve “downloading multiple files” on Chrome, Edge, and Opera

Chrome, Edge, and Opera may show a warning message when downloading multiple files. The user needs to “Approve” this one time by clicking the “Apply button”. Users can also pro-actively modify their browser settings (see Appendices A, B and C for instructions).

Note: the approval for downloading multiple files is not necessary when using the “Download & Zip” functionality since that generates a single zip file.

2.8 Dependency on SharePoint search

SLIM Companion Explorer tree lists the various subsites and libraries in the specified SharePoint site. The subsites are determined by using SharePoint search. Hence if the search is not available the subsites will not be shown and only the libraries will be shown. The search results only include subsites the user has access to because the search results are security trimmed.

The search bar (Explorer 1.6 and later) for SharePoint Online users also depends on search. The search result list will only contain items that have been indexed and that are accessible for the current user.

2.9 Removing the tool

Browse to the document library where the 5 files have been uploaded. Delete all 5 files. No further action required.

In case the optional App is installed execute the following steps:

- browse to site content and select the ... to remove the App
- wait for the request to complete
- delete the App from the recycle bin
- browse to the App catalog and under apps open the “Apps for SharePoint”
- click ... and choose “remove” to remove the App

2.10 Starting the tool in a specific site and library

SLIM Companion Explorer 1.6 and later support opening the tool in a specific site and library. This might be useful to automatically direct users to the proper location in SharePoint. For instance, it can be used in Microsoft Teams as a separate tab to open the Teams files in a File Explorer like way.

The syntax is as follows:

`https://<yourservername>/<libraryname>/SLIM_Companion_Explorer.aspx?starturl=<yourstartlocation>`

For example, if the tool is installed in the SiteAssets library and the tree should open in the site named “MyTeamSite” with the library named “Shared Documents” use the following link

https://slimapplications.sharepoint.com/SiteAssets/SLIM_Companion_Explorer.aspx?starturl=https://slimapplications.sharepoint.com/sites/MyTeamSite/Shared Documents

Note #1: the starturl parameter is in lowercase.

Note #2: the URL for the site+library does not contain parts like /Forms/AllItems.aspx

Note #3: use the full URL including the protocol and domain name like slimapplications.sharepoint.com

Make sure that the start location provided is valid by simply opening the link in a separate tab or window.

2.11 Configuring Google Maps

SLIM Companion Explorer 1.8 and later provide integration with Google Maps. Users can view selected document(s) or all documents on a map. The tool can also be used for geotagging documents by using Google Maps.

Administrators do not have to add and configure web parts or add custom scripts for individual libraries.

Explorer will detect if the library contains a column of type location and then adds the option “View in Google Maps” to the libraries’ context menu.

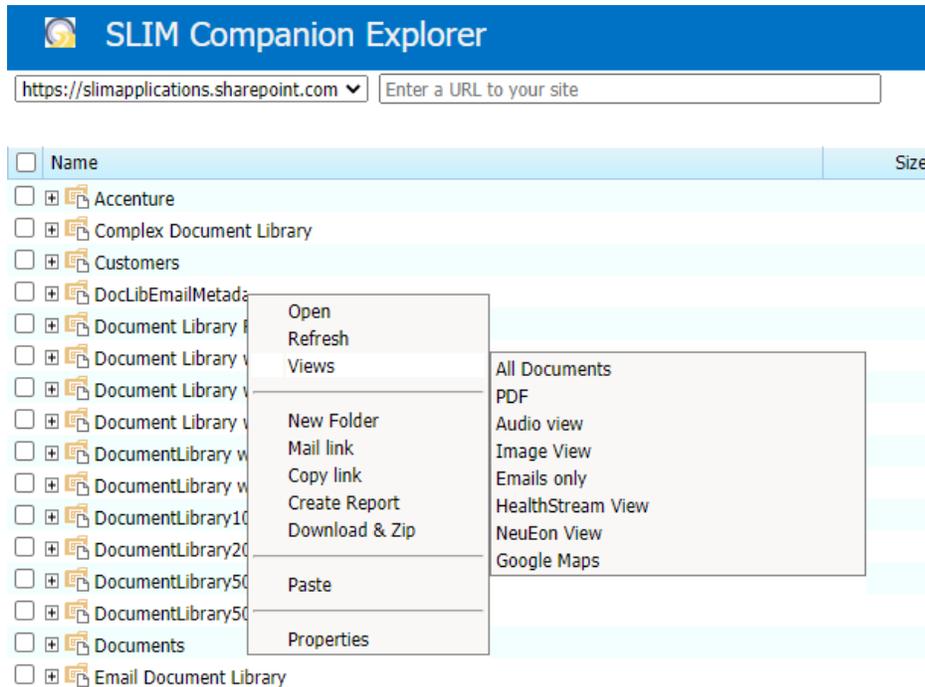


Figure 13. Library with the option “View in Google Maps”

The use of Google Maps requires the specification of the key through the properties.txt file.

```
# type, property name in original file (case sensitive), SharePoint internal column name
# Configuration
GOOGLE,key,AIzaSyBwBc3VgBpH17Mi54nXHW8rSfzpAmgxxxx
#LISTS,key,101:109:700:851
#HEADERTITLE,key,SLIM Applications
#HEADERMENU,key,hide
#HEADERCOLOR,key,#FF4337
#HEADERLOGO,key,img-jpg-wsp-red.jpg
#HEADERSITES,key,hide
# type, property name in original file (case sensitive), SharePoint internal column name
# Maps
GOOGLE,key,AIzaSyBwBc3VgBpH17Mi54nXHW8rSfzpAmgxxxx
```

Figure 14. Google Maps key in the properties.txt file

NB: only change the value part and do not change the “GOOGLE,key,” part.

The instruction to configure a Google Maps key are described in <https://www.slimapplications.com/wp-content/uploads/2020/11/Instructions-to-use-SLIM-Companion-Explorer-with-Google-Maps.pdf>

3. Configuration options

The JavaScript code of the tool is obfuscated and minimized. A typical fragment will look like

```
for(var a=0;a<l;a++){v704.push({name:v1005[k].name,Created:m[a].Created,Size:m[a].Size,UniqueId:v1005[k].UniqueId,
```

The “Settings” menu option in the tool allows users to modify selected settings for SLIM Companion Explorer. The changed values are only valid throughout the user’s session and the original values (centrally managed) will be used when re-opening the tool. The changed values from one user does not affect the behavior of the tool for other users.

An administrator can make persistent changes that affect all users. The values listed below can be changed. Please note that some changes may result in browser instability. The mapping between the above fields and the variable names in the obfuscated file is listed in the properties file. See Appendix C for details about modifying the SLIM Companion Explorer JavaScript file.

Field	Default value
Maximum number of child items to show	100000
SharePoint version	SharePoint Online
System libraries / lists	Form Templates,Site Assets,Style Library,Stijlbibliotheek,Siteactiva
System folders	Forms
Truncate document names but keep original extension	Checked
Truncate URLs	Checked
Overwrite existing file	Checked
Extract email metadata	Checked
Supported email extensions	msg, eml
Email address separator	;
Extract PDF metadata	Checked
Supported PDF extensions	pdf
Extract HTML metadata	Checked
Supported HTML extensions	html, htm
Extract image metadata	Checked
Supported Image extensions	png, gif, jpg, jpeg, bmp, tif, tiff, svg, jpe, jif, jfif, jfi, psd
Extract Office metadata	Checked
Supported Office extensions	docx,xlsx,pptx,vsd
Maximum number of parallel processes	6
Set Custom Metadata	true
Method to retrieve sites [Search REST API]	Search

3.1 Customize appearance

The properties.txt file allows for customization of the tool's appearance.

```
# type, property name in original file (case sensitive), SharePoint internal column name
# Configuration
GOOGLE, key, AIzaSyBwBc3VgBpH17Mi54nXHW8rSfzpzAmgxxxx
#LISTS, key, 101:109:700:851
#HEADERTITLE, key, SLIM Applications
#HEADERMENU, key, hide
#HEADERCOLOR, key, #FF4337
#HEADERLOGO, key, img-jpg-wsp-red.jpg
#HEADERSITES, key, hide
```

Figure 15. Customization options in the properties.txt file

A # character at the start of the line indicates that the line is commented out. The LISTS field controls which library types are displayed in the Explorer tree. The default behavior is to show lists of types 101 (Document Library), 109 (Picture Library), 700 (MySite Document Library) and 851 (Asset Library). The colon character “:” is used to separate multiple values.

For example, to only show Picture enter the following line

```
LISTS,key,109
```

The HEADERTITLE field is the text shown in the header of the page. See figure below.



Figure 16. SLIM Companion Explorer header with the HEADERTITLE (marked in green), the HEADERLOGO (marked in amber), the HEADERMENU (marked in grey) and the HEADERSITES (marked in red).

The HEADERLOGO refers to an image in the same location of Explorer tool. The HEADERCOLOR denotes the color of the header background.

Appendix A Instructions to allow multiple downloads in Chrome

Users can change the setting in the top bar.

Alternatively, they can open

`chrome://settings/contentExceptions#multiple-automatic-downloads`

and under “Automatic Downloads” | Manage Exceptions add the hostname for SharePoint (e.g. *.sharepoint.com) and for behavior click “Allow”

Click “Done” 2x and then close the settings tab

Appendix B Instructions to allow multiple downloads in Opera

Users can change the setting in the popup window the first time they download multiple files.

Alternatively, they can open

`opera://settings/contentExceptions#multiple-automatic-downloads`

and under “Automatic Downloads” | Manage Exceptions add the hostname for SharePoint (e.g. *.sharepoint.com) and for behavior click “Allow”

Click “Done” and close the settings tab

Appendix C Instructions to allow multiple downloads in Edge

Users can change the setting in Edge

Open <edge://settings/content/automaticDownloads>

Disable “Ask when a site tries to download multiple files automatically (recommended)”

Or use the “Add” button to add your SharePoint URL

Appendix D Instructions to modify generic settings for SLIM Companion Explorer

In the following section the steps are described to modify one of the values.

Open the SLIM_Companion_Explorer_properties.txt file to view the mapped variable names for your SharePoint environment is. For example, in the example below the field “Maximum number of child items to show” is mapped to variable v747. The value needs to be changed from 100000 to 10000.

```
Maximum number of child items to show=v747
SharePoint version=v1136
Invalid characters SharePoint 2013=v798
Invalid characters SharePoint Online=v622
Blocked file types SharePoint 2013=v870
Blocked file types SharePoint Online=v1084
System libraries / lists=v602
System folders=v912
Truncate document names but keep original extension=v1126
Truncate URLs=v648
Overwrite existing file=v826
Skip .DS_Store files=v1208
Extract email metadata=v1216
Supported email extensions=v1210
Email address separator=v1220
Extract PDF metadata=v995
Supported PDF extensions=v682
Extract HTML metadata=v1131
Supported HTML extensions=v690
Extract image metadata=v1081
Supported Image extensions=v1100
Extract Office metadata=v769
Supported Office extensions=v921
Maximum number of parallel processes=v942
Set Custom Metadata=v1067
```

Execute the following steps:

1. Create a backup of the existing JavaScript file (SLIM_Companion_Explorer.js)
2. Open the JavaScript file in a text editor, e.g. notepad
3. Search for the first occurrence of v747
4. Change the value from 100000 to 10000
5. Save the file (keep the name the same)
6. Upload the modified JavaScript file (i.e. add as a version)
7. Open SLIM Companion Explorer in your browser, use shift reload in your browser to reload the latest JavaScript file and then check under “Settings” that the value has been changed.

Repeat the above steps 3 and 4 for all other fields that need to be changed.

Appendix E Metadata mapping

The SLIM Companion Explorer tool allows mapping of metadata from several file types to SharePoint columns available on your system. This mapping is established through the properties.txt file.

An example of a properties file is listed below. For example, the metadata field “Subject” from PDF files is mapped to a SharePoint column with the internal name “Subject”.

```
# type, property name in original file (case sensitive), SharePoint internal column name
# PDF metadata
PDF,Title,Title
PDF,Author,_Author
PDF,Subject,Subject
PDF,Keywords,Keywords
PDF,Create Date,Creation_x0020_Date
PDF,Modify Date,Modification_x0020_Date
PDF,Creator,Application
PDF,Producer,Producer
PDF,Source Modified,Compression
PDF,Company,Conversation
# JPG metadata
JPG,GPSLatitudeRef,JPG_x003A_GPS_x0020_Latitude_x0020_Ref
JPG,GPSLatitude,JPG_x003A_GPS_x0020_Latitude
JPG,GPSLongitudeRef,JPG_x003A_GPS_x0020_Longitude_x0020_Ref
JPG,GPSLongitude,JPG_x003A_GPS_x0020_Longitude
JPG,GPSAltitudeRef,JPG_x003A_GPS_x0020_Altitude_x0020_Ref
JPG,GPSAltitude,JPG_x003A_GPS_x0020_Altitude
JPG,GPSImgDirectionRef,JPG_x003A_GPS_x0020_Img_x0020_Direction_x0020_Ref
JPG,GPSImgDirection,JPG_x003A_GPS_x0020_Img_x0020_Direction
...
```

Instructions:

1. A # character at the beginning of a line denotes the line is a comment

2. Enter mapping details using the following syntax:

<type>,<source property name>,<SharePoint column name (internal name)>

NB: there are no additional spaces

3. The supported values for <type> are:

PDF, JPG, GIF, PNG, TIF, BMP, SVG, OFFICE, HTML, EMAIL, AUDIO and VIDEO

NB: the values are capitalized.

4. The <source property name> values are extracted from the source files for PDF, OFFICE, HTML, EMAIL, AUDIO and VIDEO.

For images the property names are best determined using SLIM Companion Explorer. Upload a document to SharePoint, right-click on the document and select Properties to list the available properties. See figure 13.

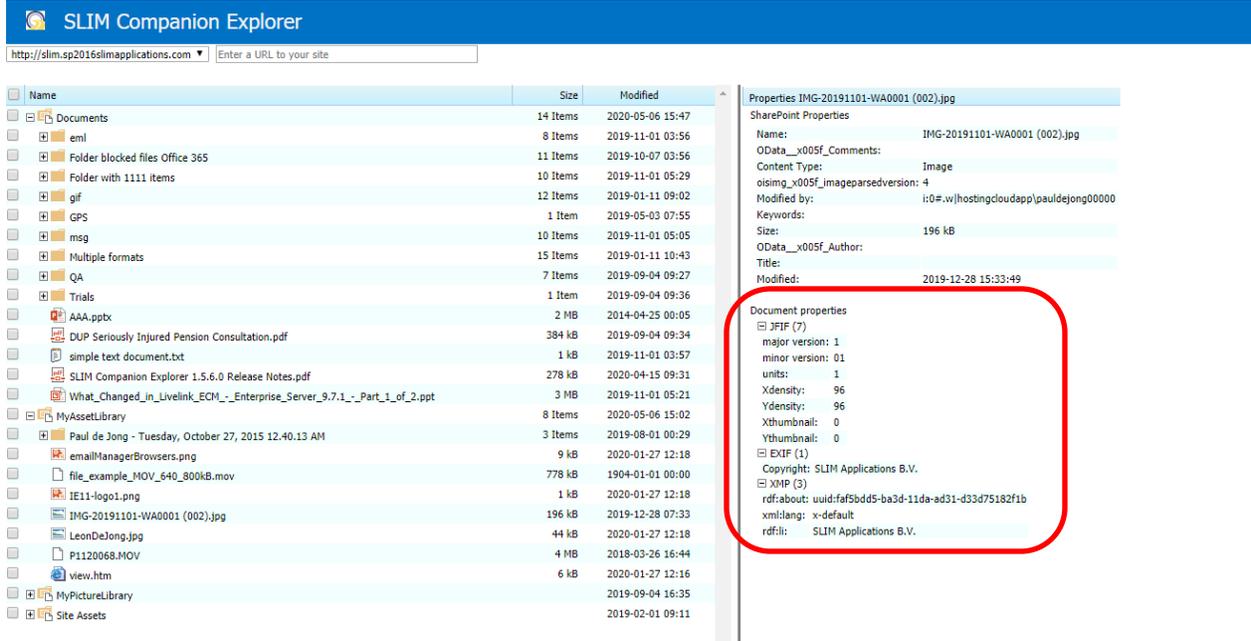


Figure 14. List with properties available in the selected file.

For example, the name for the copyright property is “Copyright”.

5. The <SharePoint column name (internal name)> are best determined using the tool’s Settings. In the last part under “List details” the details for each list are show.

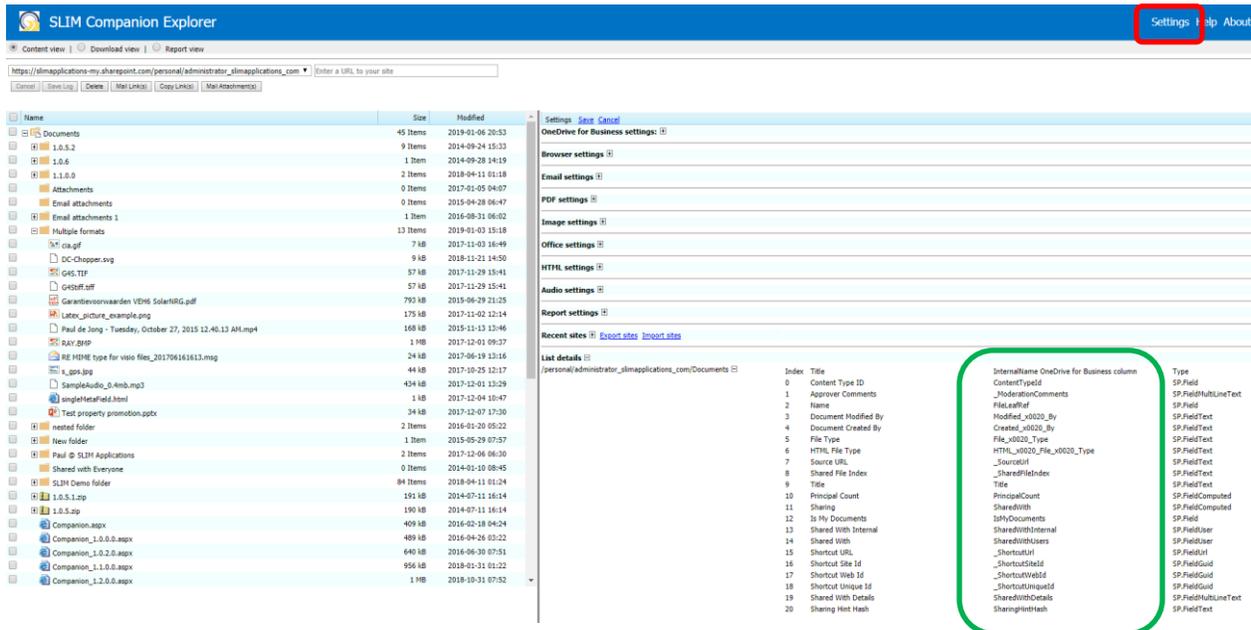
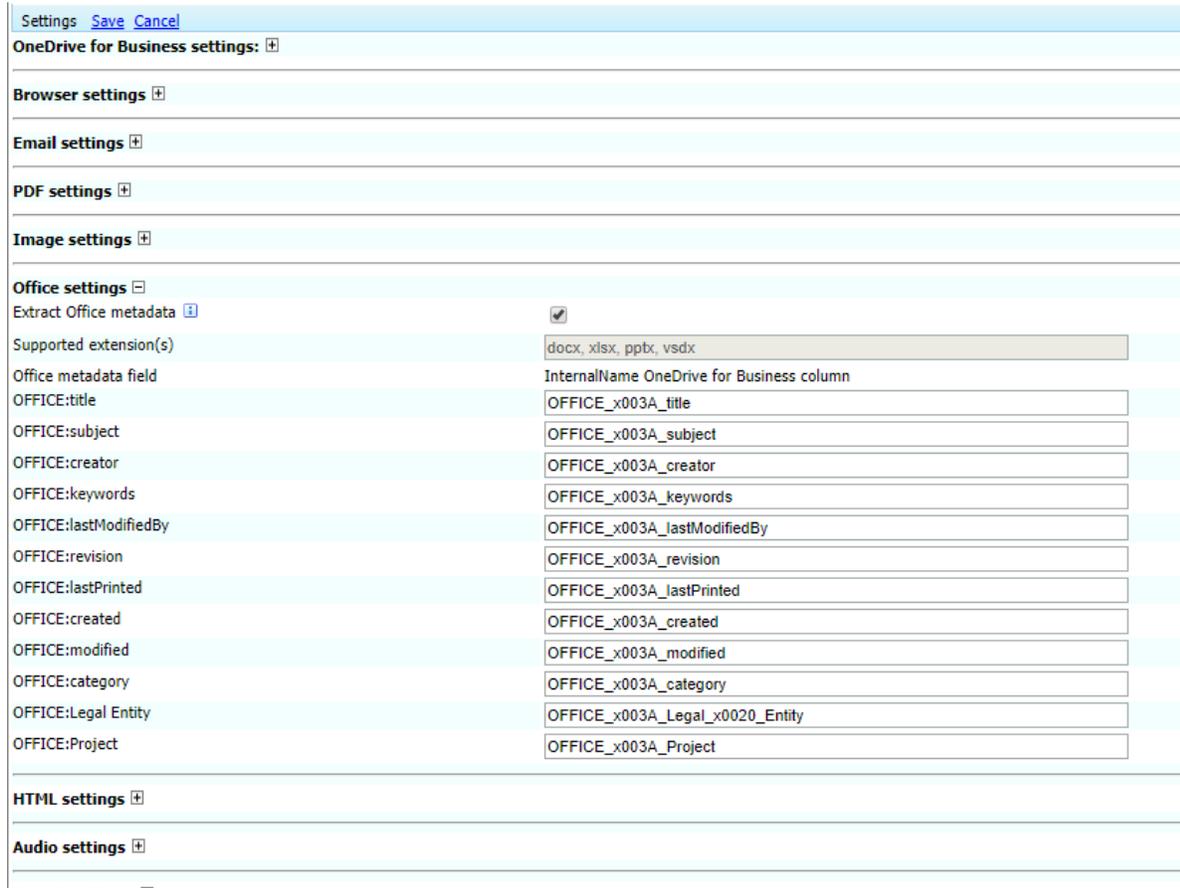


Figure 15. Screenshot SLIM Companion Explorer with the internal column names (marked in green) for a selected list.

Update the properties file on your local computer and upload the file to the same location as the Explorer tool.

The mapped properties are listed under Settings.



The screenshot shows a settings interface with several sections. The 'Office settings' section is expanded, showing a table of mapped properties. The 'Extract Office metadata' checkbox is checked. The 'Supported extension(s)' field contains 'docx, xlsx, pptx, vsdx'. The 'Office metadata field' is set to 'InternalName OneDrive for Business column'. Below this, various Office metadata fields are mapped to specific column names.

Office metadata field	InternalName OneDrive for Business column
OFFICE:title	OFFICE_x003A_title
OFFICE:subject	OFFICE_x003A_subject
OFFICE:creator	OFFICE_x003A_creator
OFFICE:keywords	OFFICE_x003A_keywords
OFFICE:lastModifiedBy	OFFICE_x003A_lastModifiedBy
OFFICE:revision	OFFICE_x003A_revision
OFFICE:lastPrinted	OFFICE_x003A_lastPrinted
OFFICE:created	OFFICE_x003A_created
OFFICE:modified	OFFICE_x003A_modified
OFFICE:category	OFFICE_x003A_category
OFFICE:Legal Entity	OFFICE_x003A_Legal_x0020_Entity
OFFICE:Project	OFFICE_x003A_Project

Figure 16. Screenshot of the “Settings” page showing the mapped properties for Office files.

There are separate sections for Email, PDF files, Images, Office files, HTML files and audio files.

Appendix F Excluding sites, libraries or folders

The tool supports excluding sites, libraries, or folders from the tree. Classic examples are the “_w” folders in Picture libraries, the “Form Templates” libraries or an app catalog site.

Execute the following steps to excluded items from the Explorer tree.

1. Download the properties.txt file from your SharePoint system.
2. Open the file in an editor.

Add the following lines if they are not present.

```
# Configuration
EXCLUDEDSITES,key,SLIM Companion Explorer App:App Catalog Site:App Catalog
EXCLUDEDLIBRARIES,key,Form Templates:Style Library:_catalogs/hubsite
EXCLUDEDFOLDERS,key,Forms:_w:_t:_vti
```

3. Specify the sites to be excluded in the row containing “EXCLUDEDSITES”. Separate the sites using a semi-colon character.
 4. Change the EXCLUDEDLIBRARIES and EXCLUDEDFOLDERS if necessary.
 5. Save the properties.txt file and upload the file to your SharePoint library. Overwrite the existing properties.txt file. Refresh the Explorer tool to ensure the modified properties.txt file is loaded.
-

Appendix G Excluding context menu options

The tool supports excluding context menu options for sites, libraries, folders, and documents. For example, using the properties.txt it is possible to hide the option “Mail as Attachment” for end-users.

Execute the following steps to excluded context menu options.

1. Download the properties.txt file from your SharePoint system.
2. Open the file in an editor.

Add the following lines if they are not present. The location in the properties.txt file is not relevant.

```
# Site context options: remove options that need to be skipped. HR denotes a horizontal line
SITE,key,OpenInSharePoint:HR:MailLink:CopyLink
# Library context options: remove options that need to be skipped e.g., CreateReport
LIBRARY,key,OpenInSharePoint:HR:Refresh:Views:NewFolder:MailLink:CopyLink:Download&Zip:HR:Pa
ste:HR:Properties
# Folder context options: remove options that need to be skipped e.g., MailAsAttachment:
FOLDER,key,OpenInSharePoint:Refresh:HR:NewFolder:MailLink:CopyLink:CreateReport:Download&Zip
:Export:HR:Paste:HR:Rename>Delete:HR:Properties
# Document context options: remove options that need to be skipped e.g., MailAsAttachment:
DOCUMENT,key,Preview:PreviewInSharePoint:Attachments:ViewInGoogleMaps:ViewInApp>EditInApp:
HR:MailLink:CopyLink:Download:Download&Zip:Export:Versions:HR:Copy:Move:HR:Rename>Delete:H
R:Properties
```

3. Specify the options to be included in the row containing “SITE”. Separate the options using a semi-colon character.
4. Change the LIBRARIES, FOLDERS and DOCUMENTS rows if necessary.
5. Save the properties.txt file and upload the file to your SharePoint library. Overwrite the existing properties.txt file. Refresh the Explorer tool to ensure the modified properties.txt file is loaded.

Comments

- HR is used to add a separator between the options
- the order is relevant
- the names for the options are case sensitive

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