



Power PDF

SharePoint Extensions Installation Guide

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TUNGSTEN
AUTOMATION
FORMERLY KOFAX

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Preface

This guide is intended for network administrators who use the Microsoft SharePoint repository for file storage and sharing with Power PDF Advanced. It provides assistance for the installation and configuration of the following SharePoint extensions:

- PDF Rights Management Services (RMS): Information protection solution for specifying user access rights to documents, including PDF files.
- PDF iFilter: Application for indexing PDF files and making their text components searchable.

System requirements

The primary source of information about Power PDF 5.1.1 system requirements and dependencies on other products is the *Technical Specifications* document, which is available on the [Product Documentation](#) page. The document is updated regularly, and we recommend that you review it carefully to ensure success with your Power PDF product.


Training

Tungsten Automation offers both on-demand and instructor-led training to help you make the most of your product. To learn more about training courses and schedules, visit the [Tungsten Automation Learning Cloud](#).

Getting help with Tungsten Automation products

The [Tungsten Automation Knowledge Portal](#) repository contains articles that are updated on a regular basis to keep you informed about Tungsten Automation products. We encourage you to use the Knowledge Portal to obtain answers to your product questions.

To access the Tungsten Automation Knowledge Portal, go to <https://knowledge.tungstenautomation.com/>.

 The Tungsten Automation Knowledge Portal is optimized for use with Google Chrome, Mozilla Firefox, or Microsoft Edge.

The Tungsten Automation Knowledge Portal provides:

- Powerful search capabilities to help you quickly locate the information you need.
Type your search terms or phrase into the **Search** box, and then click the search icon.
- Product information, configuration details and documentation, including release news.

To locate articles, go to the Knowledge Portal home page and select the applicable Solution Family for your product, or click the View All Products button.

From the Knowledge Portal home page, you can:

- Access the Tungsten Automation Community (for all customers).
On the Resources menu, click the **Community** link.
- Access the Tungsten Automation Customer Portal (for eligible customers).
Go to the [Support Portal Information](#) page and click **Log in to the Customer Portal**.
- Access the Tungsten Automation Partner Portal (for eligible partners).
Go to the [Support Portal Information](#) page and click **Log in to the Partner Portal**.
- Access Tungsten Automation support commitments, lifecycle policies, electronic fulfillment details, and self-service tools.
Go to the [Support Details](#) page and select the appropriate article.

Chapter 1

PDF RMS Protector for SharePoint

This chapter explains how to install and configure the Rights Management Services (RMS) Protector for SharePoint servers.

Rights Management Services

A common practice with document protection is to limit access to the networks and computers where the files are stored. Further restrictions may be required to manage the file permission rights of users who access a network.

Microsoft Information Rights Management (IRM) and the related Rights Management Services (RMS) ensure that sensitive documents are accessible only by authorized persons. Access is managed by defining different levels of access (such as read-only, modify, print, and content copy) and time limits on the document access rights.

In Power PDF Advanced, RMS protection is applied through the RMS Security tool under **Security > DRM** (or Digital Rights Management). This tool is only available if "Use Purview Information Protection Instead of AD RMS" is cleared under **File > Options > Security**.

Install the PDF RMS Protector

Use the procedure below to install the PDF RMS Protector.

1. Launch a Command Prompt (cmd.exe) with administrator rights.
2. Launch TungstenPowerPDFRMSProtector64-5.0.0.exe to open the installation wizard, which guides you through the installation steps.
3. Download the small PDF icon image from the RMS Protector for SharePoint .zip package. By default, it is named PowerPDF.gif.
4. Copy the icon from your Downloads folder to:
`C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\16\Template\Images`
5. Open the DOCICON.XML file located in the following folder:
`C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\16\Template\XML`
6. Under the `<By Extension>` section, verify that a line for the PDF file extension exists.
 - If yes, replace it with the following line.
 - If not, add the following line anywhere within that section.

```
<Mapping Key="pdf" Value="PowerPDF.gif" EditText="Power PDF"  
OpenControl="NPDFSPControl.OpenPdf.3" OpenApp="pdf"/>
```

The icon file name must be identical to the one you downloaded in step 3.

7. Type `iisreset` in the Command Prompt window to perform an `iisreset` operation.

i SharePoint servers have a built-in RMS protector for PDF files. When launched from a Command Prompt with administrator rights, the RMS Protector installer replaces the built-in PDF protector. When uninstalled, it restores the built-in protector.

8. Verify that the built-in protector was successfully replaced. Check all the subkeys of the following key:

```
KEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Shared Tools\Web Server  
Extensions\16.0\IrmProtectors
```

No other subkeys other than `PowerPdfProtector` can contain PDF as their `Extensions` value. If any other key contains `Extensions="PDF"`, remove it.

Configure the SharePoint server

You can skip the following steps if SharePoint is already configured to work with Active Directory Rights Management Services (AD RMS).

Set up Information Rights Management (IRM) on the SharePoint server

1. Launch **SharePoint Central Administration**.
2. Go to **Security > Information policy > Configure information rights management**.
3. Select **Use the default RMS server specified in Active Directory** and click **OK**.

Set up permissions

You must configure the permissions for each library individually. To set up IRM in a library:

1. Log on with administrator rights to the SharePoint site where the configurable library resides.
2. Select **Site Settings**.
3. Under **Site Administration**, select **Site libraries and lists**.
4. Select the library to configure.
5. Under **Permissions and Management**, select **Information Rights Management**.
6. Select the **Restrict permissions on this library on download** check box.
7. Add **Title** and **Description** to the permission policy.
8. To permit users to print downloaded documents, select the **Allow users to print documents** check box.
9. When you finished configuring the Information Rights Management settings, click **OK**.

To set up user permissions in a library:

1. Log on with administrator rights to the SharePoint site where the configurable library resides.

2. Select **Site Settings**.
3. Under **Site Administration**, select **Site libraries and lists**.
4. Select the library to configure.
5. Set up groups and users with the preferred **Read**, **Contribute**, or **Full Control** settings for the library.

Verify the RMS configuration of the SharePoint server

To verify that the configuration was completed successfully:

1. On the client machine, log on to the library where RMS was configured with a user that has access to that library.
2. Download a document from the library and open it in Power PDF.
3. Select **File > Info**, click the arrow next to **Properties**, and then select **Advanced Properties**.
4. In the **Document Properties** dialog box, ensure that **Security Method** is set to **RMS Security**.
5. Click **Details** to check user access rights.

Uninstall the PDF RMS Protector

To uninstall PDF RMS Protector, do one of the following:

- From the Windows Control Panel, select **Programs and Features**. In the **Uninstall or change a program** list, select **Kofax RMS Protector for SharePoint**.
- Launch the installer setup executable file again. When prompted to **Repair** or **Remove** the program, select **Remove**.

Chapter 2

PDF iFilter for SharePoint


PDF iFilter is an application used to dynamically index PDF files in SharePoint, so that its search facility finds text strings inside PDF files. This chapter explains how to install and configure the PDF iFilter for Microsoft SharePoint 2016 and 2019.

Levels of access in PDF files

Two access levels are available for text within PDF files:

- PDF files, pages, or areas that already have a searchable text layer.
- Image-only PDF files, pages, or areas may also contain text that is not searchable by default.

SharePoint 2016 and 2019 include a built-in indexing application for PDF files, but it can handle only files with an accessible text layer. You can replace the built-in filter with iFilter that gives you the ability to also index and search text in image-only PDF files, pages, or areas.

 iFilter respects PDF security and does not extract text if the document security settings prohibit it.

PDF iFilter components

PDF iFilter provides the following functionality:

- Access text layer
Provides access to the existing text layers within PDF files.
- Use OCR
Provides access to text within image-only PDF page areas. iFilter can automatically detect image-only page areas deemed to contain text, and perform OCR (Optical Character Recognition) to generate the text layer. By enabling this component, you can also replace the built-in PDF indexing application.
- Test the indexing service
Stops the running indexing application, starts indexing with iFilter, then searches the results to verify successful installation.

See the sections below to install or enable each component individually.

Access text layer

Because the installation is done on the SharePoint server, one instance is sufficient for multiple users.

1. Launch setup-iFilter-64-5.00.22223.0100.exe to begin the installation process using the installation wizard, which guides you through the installation steps.
 - After confirming the installation folder, verify that the check box SharePoint is displayed and selected, which confirms that SharePoint is correctly installed and detected.
2. Download the small PDF icon image from the iFilter for SharePoint .zip package. By default, it is named PowerPDF.gif.

3. Copy the icon from your Downloads folder to:

```
C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions  
\16\Template\Images
```

4. Edit the DOCICON.XML file located in the following folder:

```
C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions  
\16\Template\XML
```

5. Under the <By Extension> section, verify that a line for the PDF file extension exists.
 - If yes, replace it with the following line.
 - If not, add the following line anywhere within that section.

```
<Mapping Key="pdf" Value="PowerPDF.gif" EditText="Power PDF"  
OpenControl="NPDFSPControl.OpenPdf.3" OpenApp="pdf"/>
```

The icon file name must be identical to the one you downloaded in step 2.

6. In SharePoint, select **Central Administration > Application Management > Manage service applications > Search Service Application > File Types**. Click **New File Type**, enter **pdf** in the edit box and click **OK**.

Use OCR

By default, iFilter does not perform OCR on image-only PDF documents. By enabling this feature, you can run OCR to generate searchable results even on PDF page areas with image-only text; provided the file is not security-protected.

i Note that OCR-generated text tends to be less accurate than text extracted directly. The results are highly dependent on image quality: we recommend a pixel density of at least 300 dpi. Still, OCR in most cases can generate output adequate for indexing and searching.

1. In Power PDF, select **File > Options > General > Integrations**. Configure the Windows Desktop Search Integration to the preferred behavior, then click **OK** in the **Options** window for the changes to take effect.
2. Copy the wsdi.ini file from the %programdata%\Kofax\PDF\V1 folder to the SharePoint server.

As an alternative, the wsdi.ini file can be manually created on the server. See [Create the wsdi.ini file manually](#) for details.

3. Navigate from the Windows Start menu and select **SharePoint Management Shell**. Ensure that you run it with administrator rights. Otherwise, you might fail to perform the commands in the following two steps.
4. To replace the built-in PDF iFilter with a third-party one, perform the following two commands:

```
$ssa = Get-SPEnterpriseSearchServiceApplication  
Set-SPEnterpriseSearchFileFormatState -SearchApplication $ssa PDF $TRUE $TRUE
```
5. Run the following command to retrieve information about "pdf" in the Search service application.

```
Get-SPEnterpriseSearchFileFormat -SearchApplication $ssa pdf
```

The returned value `UseIFilter: True` means that you have successfully used a third-party PDF iFilter.
6. For the changes to take effect, you must perform an `iisreset` operation. Launch a Command Prompt (`cmd.exe`) with administrator rights. Type `iisreset` in the Command Prompt window.
7. Exit the Command Prompt window when IIS stops and restarts successfully.

Create the `wsgi.ini` file manually

To manually create the `wsgi.ini` file on the server:

1. Open the file in a plain text editor and locate the following section:

```
[Main]  
OCRPages=  
OCRFirst=  
OCRPageNum=  
OCReDiscovery=
```

2. Set the values according to your preference:
 - `OCRPages`: Set to 1 to run OCR on pages that do not contain a text layer. Otherwise, set it to 0.
 - `OCReDiscovery`: Set to 1 to find additional text on pages that already contain a text layer. `OCReDiscovery` is effective only if `OCRPages=1`. When this is selected, the existing text layer is always retained, and OCR is applied only to the remainder of the page.
 - `OCRFirst`: Set to 1 to set a limit on the number of pages on which OCR is run in a document. Otherwise, set it to 0. `OCRFirst` is effective only if `OCRPages=1`.
 - `OCRPageNum`: Use this to set the OCR page limit. For example, `OCRPageNum=3` means that OCR is run only on the first three pages of the document. `OCRPageNum` is effective only if `OCRFirst=1`. This is useful in the case of long documents or documents that have image-only cover pages with the other pages having a text layer.

Test the indexing service

To restart the SharePoint Search Service, use the following command lines:

- `net stop spsearchhostcontroller`
- `net start spsearchhostcontroller`
- `net stop osearch16`
- `net start osearch16`