User Manual

Foxit® RMS

PDF Protection Tool

Microsoft Partner
Gold Independent Software Vendor (ISV)

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User Manual

Foxit RMS PDF Protection Tool provides a command-line interface that can decrypt multiple AD RMS protected PDF files or encrypt multiple PDF files by a predefined official rights-policy template. This tool can be used to safeguard existing sensitive data on company shares. It also works in conjunction with the File Classification Infrastructure (FCI) feature in Windows Server 2008/2012 to classify and protect sensitive company data.

Pre-installation Information

To run this tool, you must have the latest version of the AD RMS client installed. If you have an existing older version of the AD RMS client installed, you will need to uninstall the old version first and then download and install the latest version of the AD RMS client from below:

For X86：
http://us-request.foxitservice.com/products/redirect.php?title=ad_rms_sdk_x86&language=en_us

For X64：
http://us-request.foxitservice.com/products/redirect.php?title=ad_rms_sdk_x64&language=en_us

As for using Windows Azure AD Right Management (AAD RMS), please refer to the Quick Start for Using Windows Azure AD Right Management.

System requirements

Supported operating systems: Windows 7, Windows 8 Release Preview, Windows Server 2008, and Windows Server 2008 R2, Windows Vista, Windows Server 2012
The following list identifies client and server platforms that can install Active Directory Rights Management Services SDK 2.0: • Windows Server 2008 R2 • Windows 7 • Windows Server 2008 with Service Pack 2 (SP2) • Windows Vista with Service Pack 2 (SP2) • Windows Server 2012

RMS Command Line Tool Commands

The following syntax, parameter description, and example sections describe the Foxit RMS Command Line Tool commands.

Format	Meaning
Monospace	Elements that the user must type exactly as shown.
Between angle brackets < >	Placeholders for values that the user must supply.
Between square brackets [ ]	Optional items.

Syntax

RMSProtector [/decrypt <location>]
[/encrypt <location> </template <name> [issuer]> [/highstrength]] [/revoke]]
[/encrypt <location> </user <name> /rights <rights>> [/revoke]]
[/showtemplates [/sync]] [/preserveattributes]
[/showencryption <location>]
[/log <log_file> [/append] [/simple]] [/silent]

Parameters

Parameter	Description
/decrypt *<location>*	Performs a batch decryption. This will decrypt all of the PDF files that reside in the location that is specified with this parameter.
/encrypt *<location>* </template *<name>* [*issuer*] > [/highstrength]	Performs a batch encryption. This will encrypt all of the PDF files that reside in the location based on the rights policy template that is specified along with this parameter. The ***<issuer>*** argument lets you specify an issuer of rights policy template. The **/highstrength** is an updated and enhanced AD RMS cryptographic implementation.
/revoke	This parameter is used to revoke a document that has been issued, or revoke a user that has been authorized with access rights. If you want to use this command, you need to configure the web service first. For detailed configuration steps, please refer to Web Service Configuration.
/showencyrption location	This parameter will show user permission information for the encrypted files.
/showtemplates [/sync]	The **/showtemplates** parameter can show the available templates. The **/sync** parameter will download the rights policy template from the server synchronously.
/preserveattributes	This parameter preserves all the original file attributes. These attributes includes the following: Owner, Creation Time, Modified Time, and Accessed Time. For example, when this parameter is used with the File Classification Infrastructure in Windows Server 2008 R2, there can be a rule in place to delete all files that were not modified or accessed in the last 10 years. This option preserves all these

	original attributes.
/log <*log_file*> [/append] [/simple]	Performs an output to a log file. The log file contains a header that will show the status during the prerequisite stage and a footer that will shows the summary of the run. The log file will also show the file count information. The **/simple** flag allows the header, footer, and file numbering information to be left out of the log file. This is useful when the tool is used together with File Classification Infrastructure, because it will let you append the log file without the header, footer, and file numbering information. The **/append** flag will add the new information to a pre-existing log file. By default, if the **/simple** or **/append** flag is not specified when you are using a pre-existing log file, the log file will be overwritten.
/silent	This parameter disables console logging.

Examples

The following shows an example of decrypting files on a network share:
RMSProtector.exe /decrypt \\Share\Folder /log RMSProtector.log
The following shows an example of encrypting local files:
RMSProtector.exe /encrypt C:\Documents\Folder /template TemplateName /log C:\Logs\RMSProtector.log
The following shows an example of encrypting an individual file on a network share.
RMSProtector.exe /encrypt \\Share\file.pdf /template TemplateName IssuerName /preserveattributes /log C:\Logs\RMSProtector.log /append /simple
The following shows an example of directly encrypting files:
RMSProtector.exe /encrypt C:\Documents\Folder /user user01@frms.com,user02@frms.com /rights VIEW,ANNOTATE /revoke

User Rights include the following:

ALL: Full control
VIEW: View document
PRINTLOW: Print with low resolution
PRINTHIGH: Print with high resolution
FILLFORM: Fill in a form
ANNOTATE: Comment in the document
ASSEMBLE: Manage pages and bookmarks
MODIFY: Modify document
EXTRACTACCESS: Content copying for accessibility
EXTRACT: Extract the contents of the document
RUNJAVASCRIPT: Run JavaScript

Using the RMS Protection Tool in Conjunction with the Windows Server File Classification Infrastructure

The following steps will guide you through setting up the RMS Command Line Tool and FCI.

1. Unzip installation package to the specified directory.
   a. Log on to the FCI Server as **Administrator**.
   b. Unzip command line tool to: C:\Windows\SysWOW64
   c. If you have purchased the product, please place the key file in this directory.

2. Grant FCI Machine Account Read and Execute Permissions.

a. Log on to the AD RMS Server as an Administrator.
b. Navigate to **C:\Inetpub\wwwroot_wmcs\Certification**, right-click on **ServerCertification.asmx** and select **Properties**.
c. On the **ServerCertification.asmx** properties, select the **Security** tab, and then click **Edit**.
d. On the **Permissions for ServerCertification.asmx** screen, click **Add**.
e. On the **Select Users, Computers, or Groups** screen, to the right, click the **Object Types…** button.
f. On the **Object Types** screen, place a check in **Computers** and click **Ok**.
g. On the **Select Users, Computers, or Groups** screen, under **Enter the object names to select**, type *<domain>\<machinename>* and then click **Check Names**. This should validate the machine with an underline. Click **Ok**.
h. On the **Permissions for ServerCertification.asmx** screen, select the newly added *machinename* and verify it has a check in **Read & execute**. Click **Apply** and then **OK**.
i. On the **ServerCertification.asmx** properties, click **Ok**.

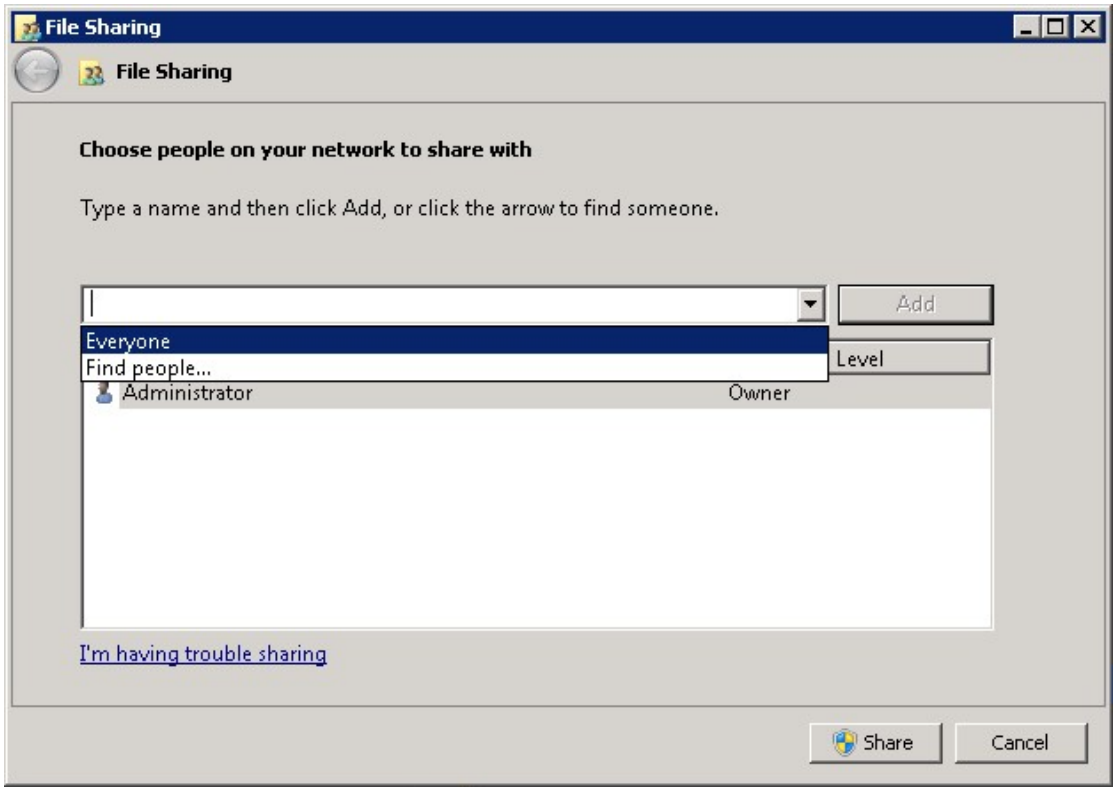
3. Grant AD RMS Service Group Read and Execute Permissions

a. On the **Select Users, Computers, or Groups** screen, under **Enter the object names to select**, enter ADRMS\AD RMS Service Group and click **Check Names**. This should resolve with an underline. Click **Ok**.
b. On the **Permissions for ServerCertification.asmx** screen, select the newly added AD RMS Service Group and verify it has a check in **Read & execute**. Click **Apply** and then Click **Ok**.
c. On the **ServerCertification.asmx** properties, click **Ok**.
d. Restart the AD RMS server.

4. To create the Shared Folder

a. Log on to FCI Server as **Administrator**
b. Click **Start**, click **Computer**, and then double-click **Local Disk (C:)**.
c. Click **File**, point to **New**, and then select **Folder**.
d. Type **SharedFolder** for the new folder's name, and then press ENTER.
e. Right-click **SharedFolder**, click **Share with**, and then click **Specific people**.

f. On the **File Sharing** window, in the box under **Type a name and then click Add, or click the arrow to find someone** select **Everyone**, then and click **Add**.



The Everyone group should now appear in the box below. Under **Permission Level**, select **Read/Write**.

g. Click **Share**. The window should change and you should now see **Your folder is shared**.

h. Click **Done**.

5. Restrict Files

a. Log on to FCI server as **Administrator**

b. Copy the script from Appendix 1 into notepad and save it as c:\windows\system32\FoxitProtect.ps1.

c. Click **Start**, click **Administrative Tools**, and click **File Server Resource Manager**.

d. In the File Server Resource Manager, on the left, right-click **File Management Tasks**, and select **Create File Management Task**. This will bring up the Create File Management Task window.

e. Under **Task name:** enter **Restrict files**.

f. Under **Description**, enter **Apply Confidential rights policy**.

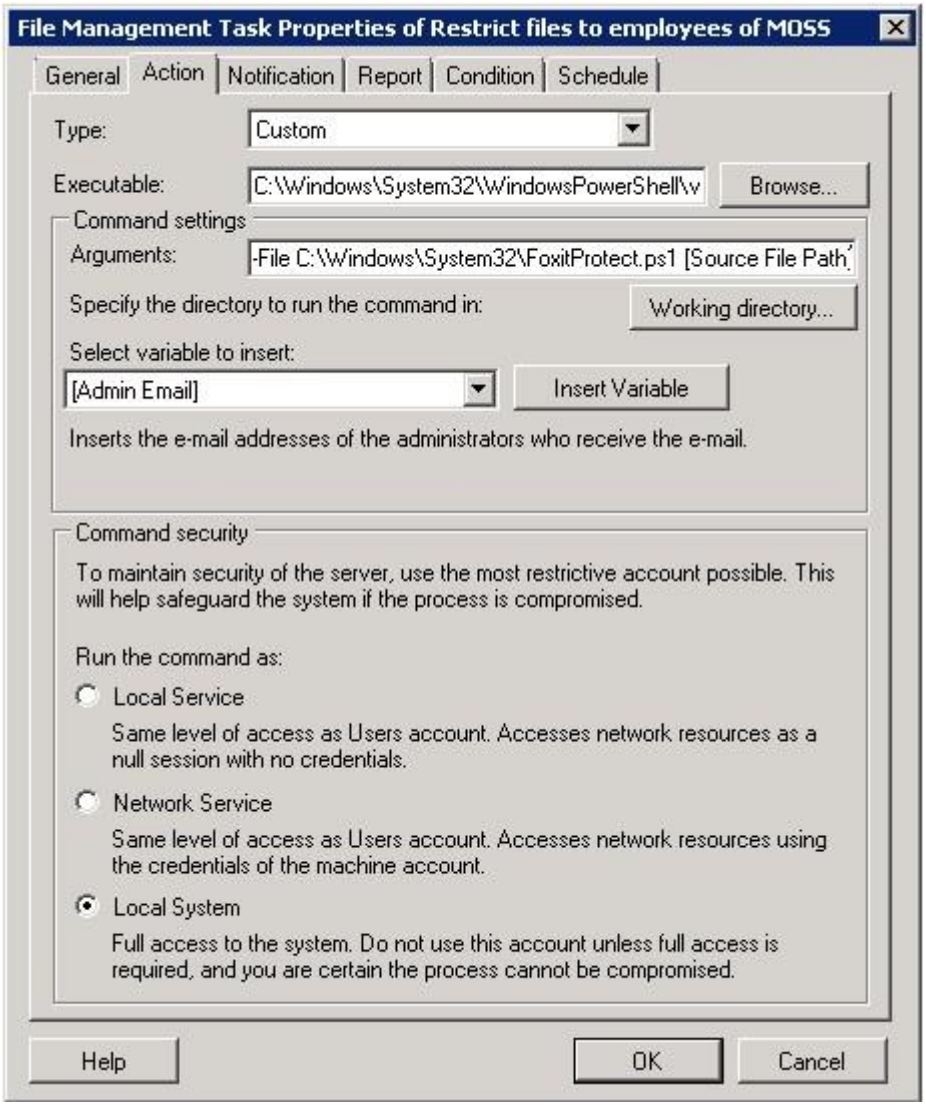
g. Under **Scope**, click **Add** and then browse to **SharedFolder**. Click **OK** when done.

h. At the top, click the **Action** tab.

i. Under **Type**, select **Custom** from the drop-down.

j. Under **Executable**, select **Browse** and navigate to **c:\windows\system32\WindowsPowerShell\v1.0\powershell.exe**.

k. Under **Arguments**, enter **-File c:\windows\system32\FoxitProtect.ps1 [Source File Path]**.



l. Under **Run the command as:**, select **Local System**.
m. At the top, click the **Condition** tab.
n. Click **Add**. This will bring up the **Property Condition** window.
o. On the **Property Condition** window, make sure **Property:** is set to **Business Impact**, set the **Operator:** to **Equals**, and for the **Value:** select **Low** from the drop-down. Click **Ok**.
p. Click **Add**. This will bring up the **Property Condition** window.
q. On the **Property Condition** window, make sure **Property:** is set to **dateEncrypted**, and select **not exist** for the condition. Click **OK**.
r. At the top, click the **Notification** tab.
s. Click **Add**. This will bring up the **Add Notification** window.
t. Set the **Number of days before the task is executed to send notification** to **0**.
u. At the top, click the **Schedule** tab.
v. On the Schedule tab, click **Create**. This will bring up the **Schedule** window.
w. On the Schedule window, click **New**.
x. Accept the defaults and click **OK**. This will close the Schedule window.
y. Click **OK**. This will close the Create File Management Task window.

Note:
After the installation of PowerShell, the execution of scripts is disabled by default. You must enable your system to run the scripts. This can be done by using the following command: **Set-Executionpolicy Unrestricted**.

Appendix 1
The following Windows Powershell script is used to create the file management task to restrict files

```
# execute bulk tool

$encryptfile = '"' + $args[0] + '"'
$r = start-process –Wait –PassThru –FilePath C:\Windows\SysWOW64\RMSProtector.exe –ArgumentList “/encrypt”, $encryptfile, “/template”, “[TemplateName]”, “/log”, “C:\ShareFolder\RmsLog.log”, “/append”, “/preserveattributes”
if ($r.ExitCode –eq 0)
{
    $c = new-object –com Fsrm.FsrmClassificationManager
    $d = (get-date).toFileTimeUTC()
    $d = $d - ($d % 10000000)
    $c.SetFileProperty($args[0], “dateEncrypted”, $d.ToString())
}
```

Note:
1. [TemplateName] in the script should be filled out with real information. If [TemplateName] includes spaces, for example, the template name is “security audit mechanism”, the script should be written as “/template”, ‘“security audit mechanism”’.
2. To encrypt a document by custom templates, please create custom template first (for how to create a custom template, please refer to Create Template), and then copy “Foxit Software” folder under C:\Users\User name (the current user of the operation system)\AppData\Roaming to C:\Users\Default\AppData\Roaming.

Custom Template

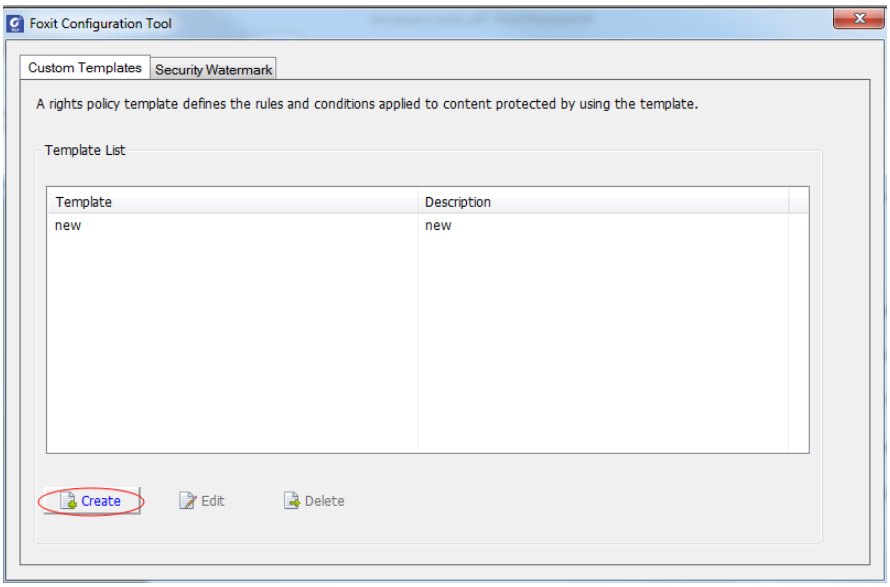
Foxit RMS PDF Protection Tool allows users to encrypt documents by custom templates. You can create custom templates by Configuration Tool, call “showtemplates” command to display the custom templates and then encrypt documents by the created template via “encrypt” command. Also, you can manage the custom templates with the Protection Tool. Please refer to the instructions below for details.

Create Template

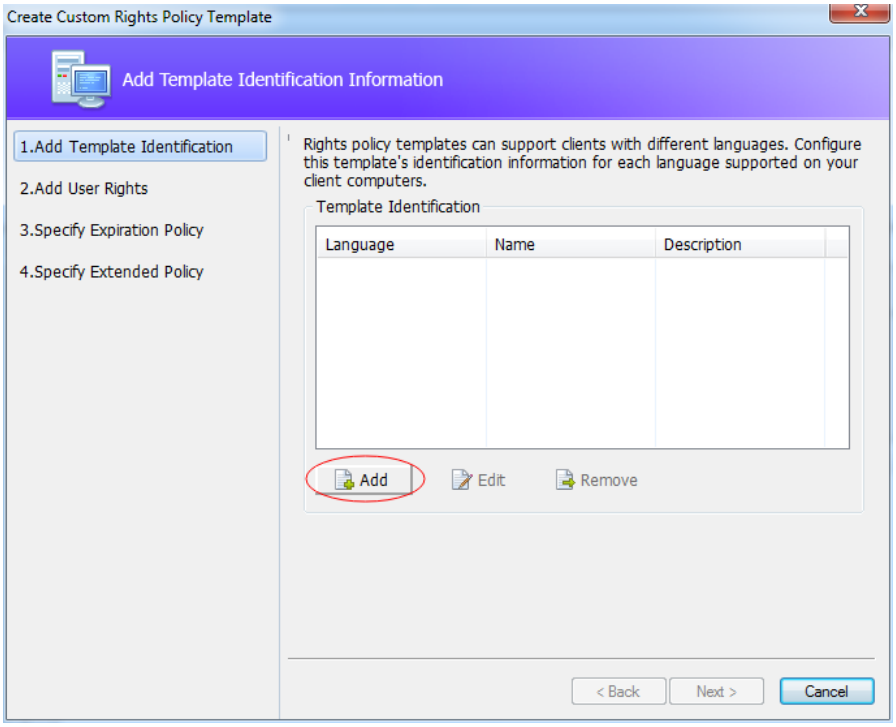
To create a custom template, please see the following steps:

1. Run the file “Foxit Configuration Tool.exe” in the unzipped folder and choose Custom Template tab.

2. Click Create.

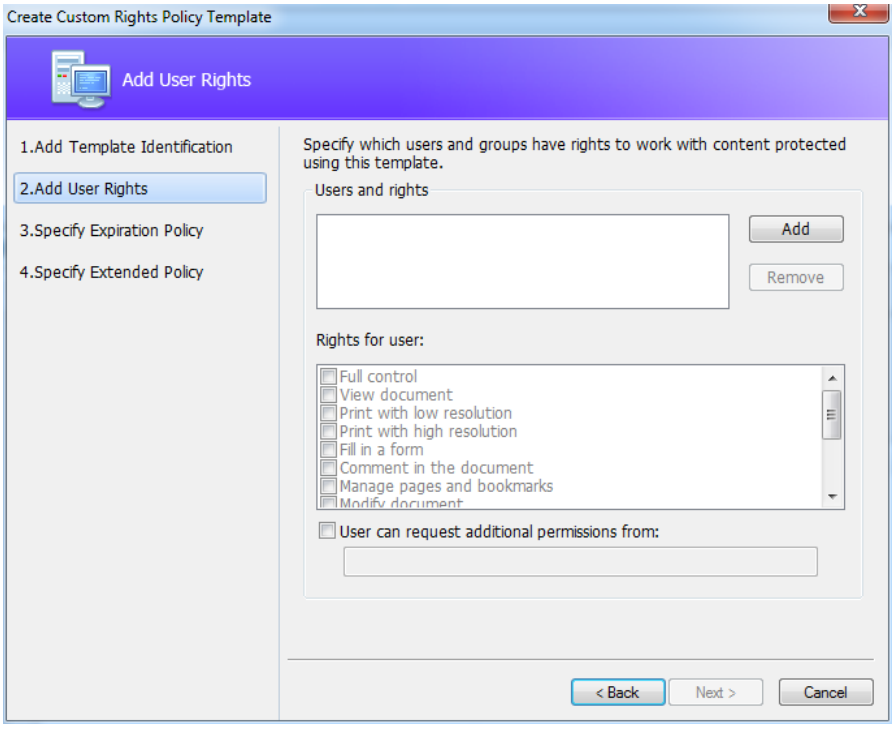


3. Click Add in the Create Custom Rights Policy Template dialog box.



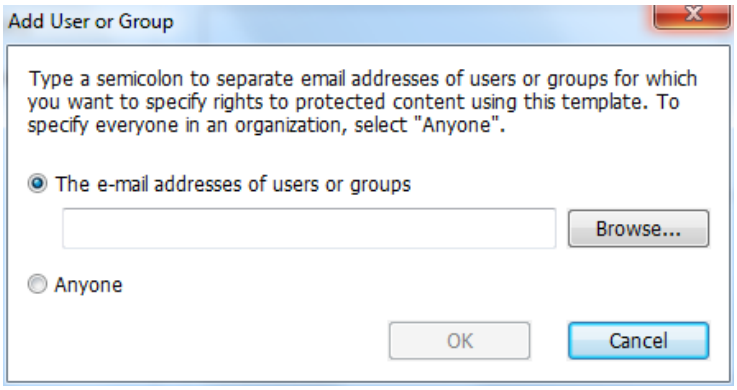
4. Choose the language and edit template name and description. Click OK. The template name and description will be shown in the Template Identification list. You can type the name and description with different languages for the template you want to create via clicking Add.

5. Click Next to turn to Add User Rights.



6. Click **Add** button to simply add users you would like to assign the rights.

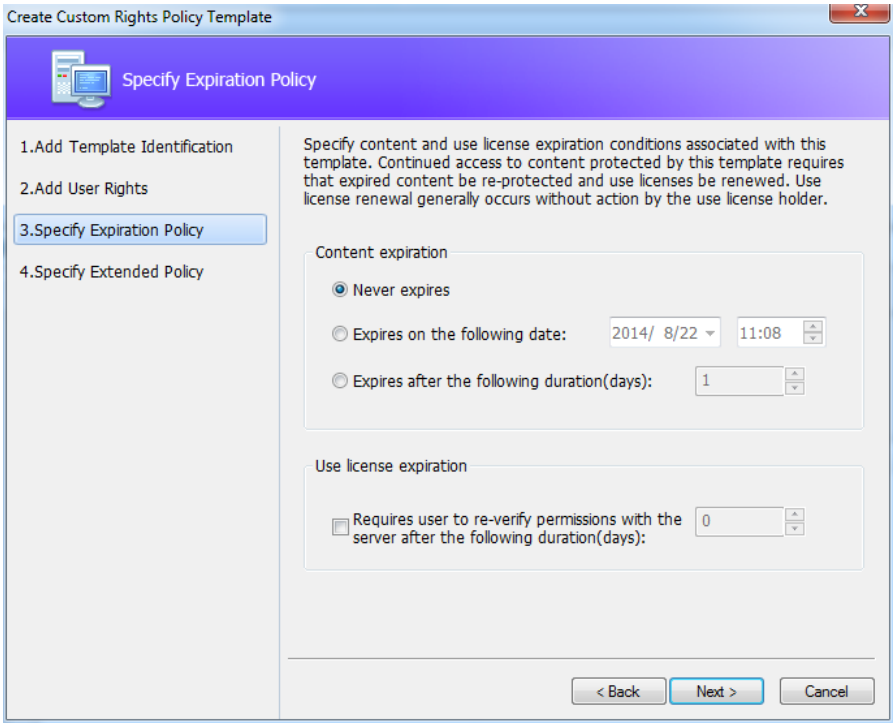
- Input e-mail addresses in the field under "The e-mail addresses of users or groups" option or click Browser button to select email addresses from Outlook.
- Select Anyone to allow all the users to work with the encrypted PDF files.
- Click OK to finish adding.



7. Check PDF permissions for the above users. You can set the permissions for all of the users or set different permissions for different users.

8. User can request additional permissions from: if users want to apply for any permission, the application will launch the email client and list the email addresses you typed into the text in the Recipient's Address automatically. You can type a URL as well.

9. Click Next to set the expiration policy.



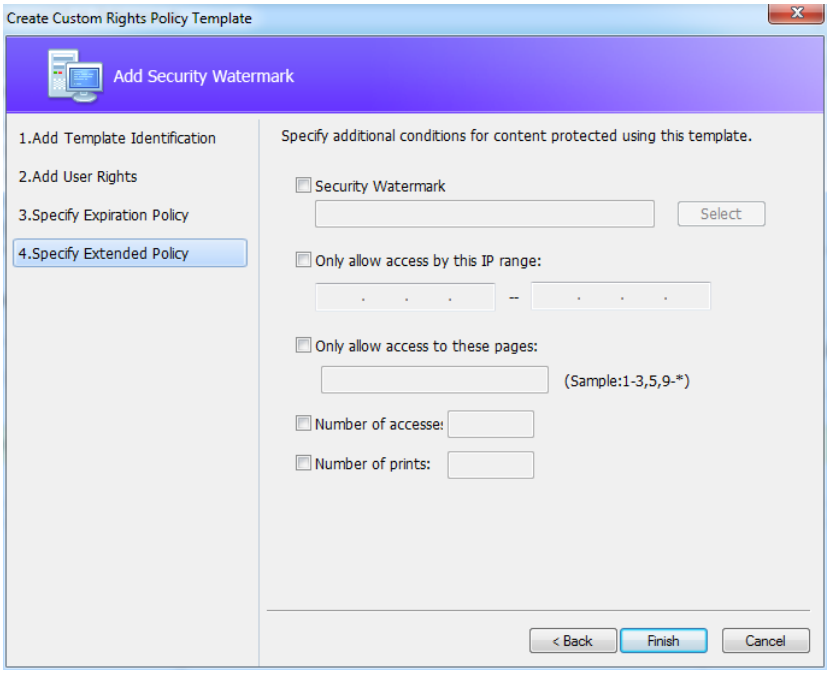
Content expiration

Never expires: the PDF content can be viewed indefinitely.
Expires on the following date: the PDF content will expire on a given date.
Expires after the following duration (days): the PDF content will expire after the desired days selected.

Use license expiration

Requires user to re-verify permissions with the server after the following duration (days): users need to apply for a new license to open the encrypted PDFs several days (the number you type into) later.

10. Click Next to specify extended policy.



Security Watermark

To add security watermark, please check Security Watermark first, and then follow the steps specified in Add a required watermark.

Only allow access by this IP range:
Check the option and specify an IP range that is allowed to access a document.

Only allow access to these pages:
Check the option and specify the page number(s) that a user is allowed to access.

Number of accesses:
Check the option and specify the number of times that a user is allowed to access a document.

Number of prints:
Check the option and specify the number of times that a user is allowed to print a document.

11. Click Finish to complete creating the template.

Note: If you want to control “Number of accesses” or “Number of prints” in an on-premise environment, you need to configure the web service first. For detailed configuration steps, please refer to the attached Web Service Configuration.

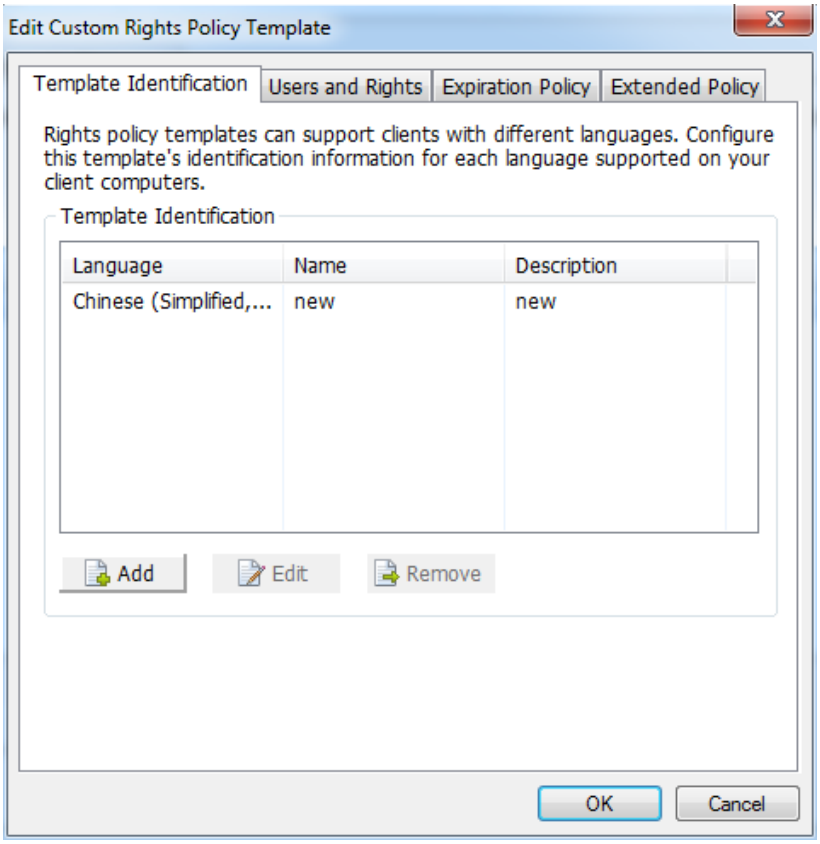
Manage Custom Template

You can edit and delete the custom templates you created by Foxit Configuration Tool.

To edit a template, please follow the steps below:

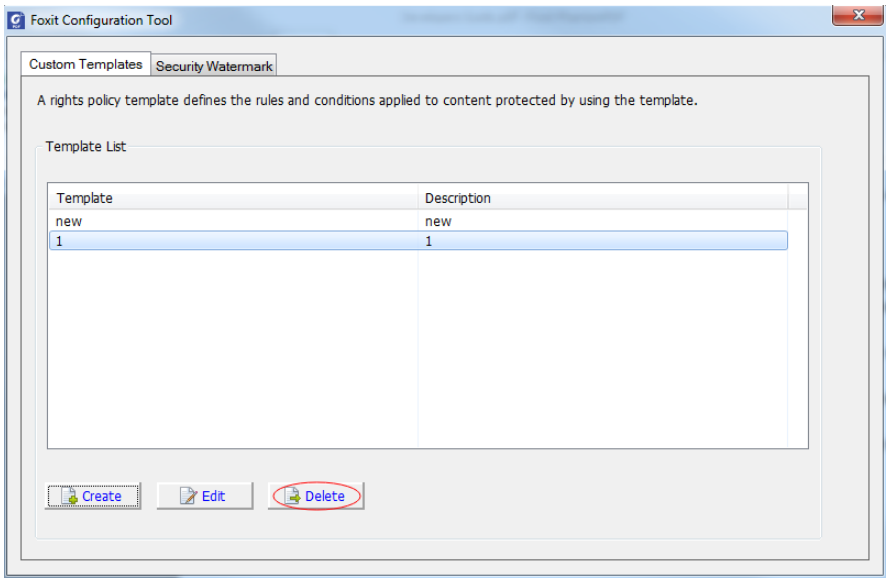
1. Run the file “Foxit Configuration Tool.exe” in the unzipped folder and choose Custom Template tab.

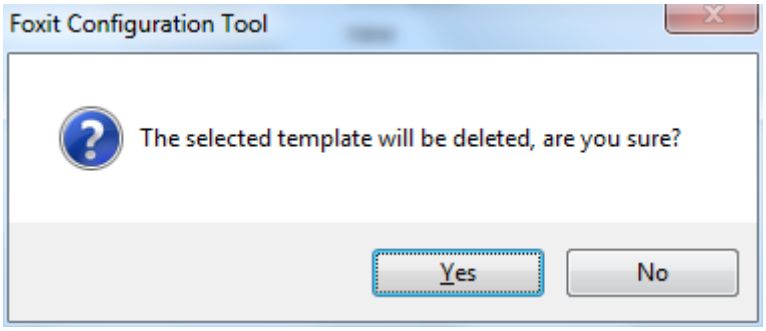
2. Choose the template you want to edit and click Edit to open Edit Custom Rights Policy Template.



3. Edit the template as required. For the instructions on how to edit the template, please refer to Create Template for details.

To delete a template, select the template you want to delete, and click Delete and Yes.





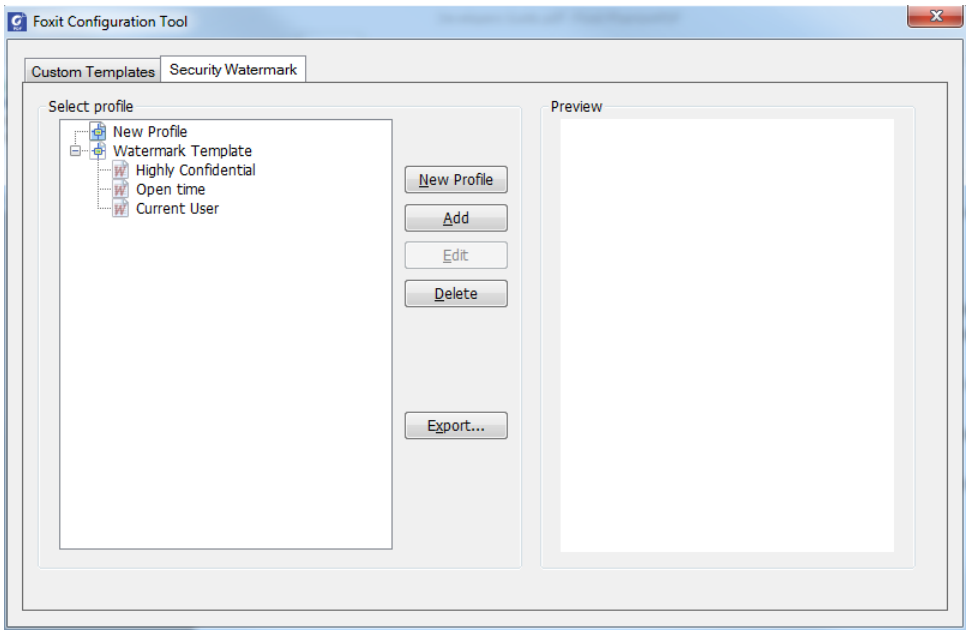
Security Dynamic Watermark

Create and manage dynamic watermarks

Dynamic security watermarks automatically display viewer identity information on protected PDF files to protect against compromise from screen shots and cameras.

Create dynamic watermarks

1. Unzip the installation package on RMS server.
2. Run the file “Foxit Configuration Tool.exe” in the unzipped folder and choose Security Watermark tab to open Security Watermark Management.
3. Add a required watermark.



i. Click New Profile to create a profile and name it.

ii. Select a profile you created and click Add to add watermarks in the profile.

iii. Type the watermark's name.

iv. Type the watermark's content in the text box and set the font, size, color, underline, and alignment.

Note: you can only set text as watermark.

v. Choose the Dynamic Text. When any PDF reader opens the file, the watermark will show the current document information dynamically and you can use multiple texts at the same time.

Content ID: shows the content ID of the current document.
Document Title: shows the current document title.
Author: shows the author of the current document.
Current User: shows the current user who is reading the document.
Date: shows the current system date when opening the document.
Day: shows the current system day when opening the document.
Month: shows the current system month when opening the document.
Year: shows the current system year when opening the document.
Time: shows the current system time when opening the document.
Hour: shows the current system hours when opening the document.
Minute: shows the current system minutes when opening the document.
Second: shows the current system seconds when opening the document.

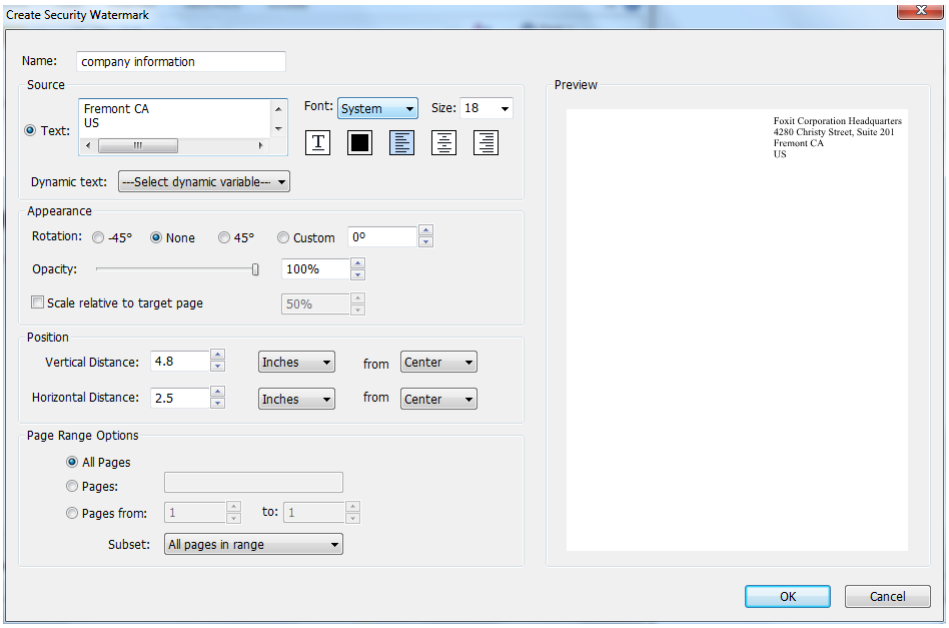
vi. Set the appearance by choosing the rotation degree and the opacity. You also have the option to make the scale relative to target page.

vii. Set the vertical and horizontal distance between the target page and the watermark.

viii. Choose the page range to play the watermark. You can select the different page range options via clicking the right items in the subset list.

ix. Preview the watermark in the right pane.

x. Click OK to finish it.



Manage dynamic watermarks

Edit a Watermark

i. Open the Security Watermark Management and select a watermark you want to edit.

ii. Click **Edit** to open the Create Security Watermark dialog box.

iii. Begin editing the watermark, please refer to "Add a required watermark".

iv. Click **OK** to finish the operation.

Delete a Watermark

i. Open the Security Watermark Management and select a watermark you want to delete.

ii. Click **Delete** to remove the selected watermark.

Add dynamic security watermarks to a custom template

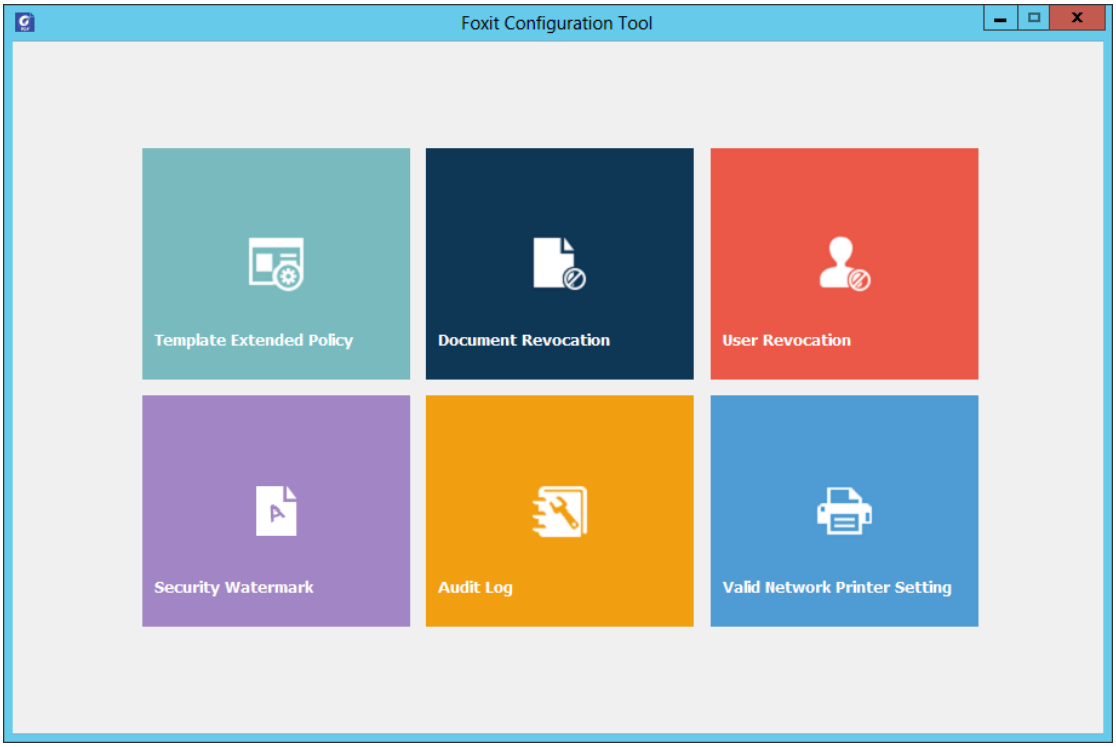
To add dynamic security watermarks to a custom template, select the dynamic security watermarks as needed while creating the custom template.

Add dynamic security watermarks to an official template

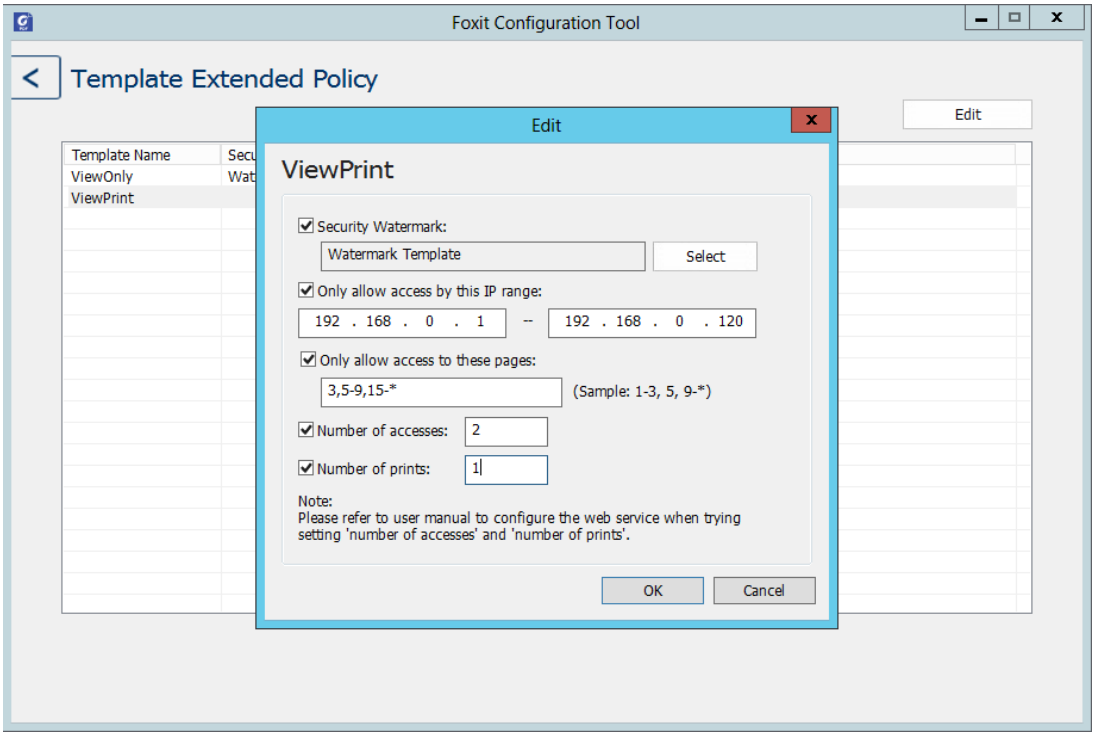
To add dynamic security watermarks to an official template, you need to use Foxit Configuration Tool (for RMS server). Steps are as follows:

1. Log on to the RMS server.
2. Download the Foxit Configuration Tool from:
   For X86:
   http://cdn01.foxitsoftware.com/pub/foxit/rms/configtool/FoxitConfigurationTool_32.zip

   For X64:
   http://cdn01.foxitsoftware.com/pub/foxit/rms/configtool/FoxitConfigurationTool_64.zip
3. Unzip and run the Foxit Configuration Tool.



4. Click Template Extended Policy. Select a template to edit.



5. Click Select, and then follow the steps specified in Add a required watermark to add watermarks to official templates.

Dynamic Revocation

Revocation is a mechanism that revokes a PDF document that has been issued, or revoke a user that has been authorized with access rights. For example, you can remove access to a document when it becomes out of date, or remove rights for an individual when he is no longer authorized.

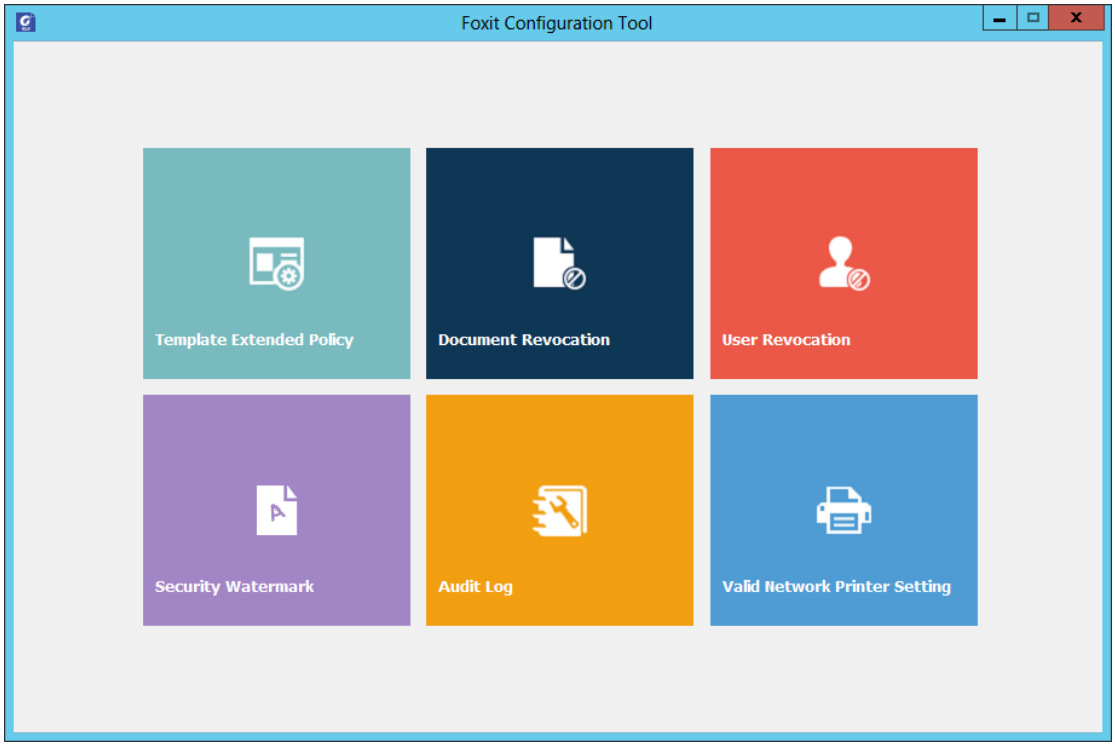
To revoke a PDF document or user in an on-premises environment, please refer to the attached Web Service Configuration to configure the web service first.

Revoke a PDF Document

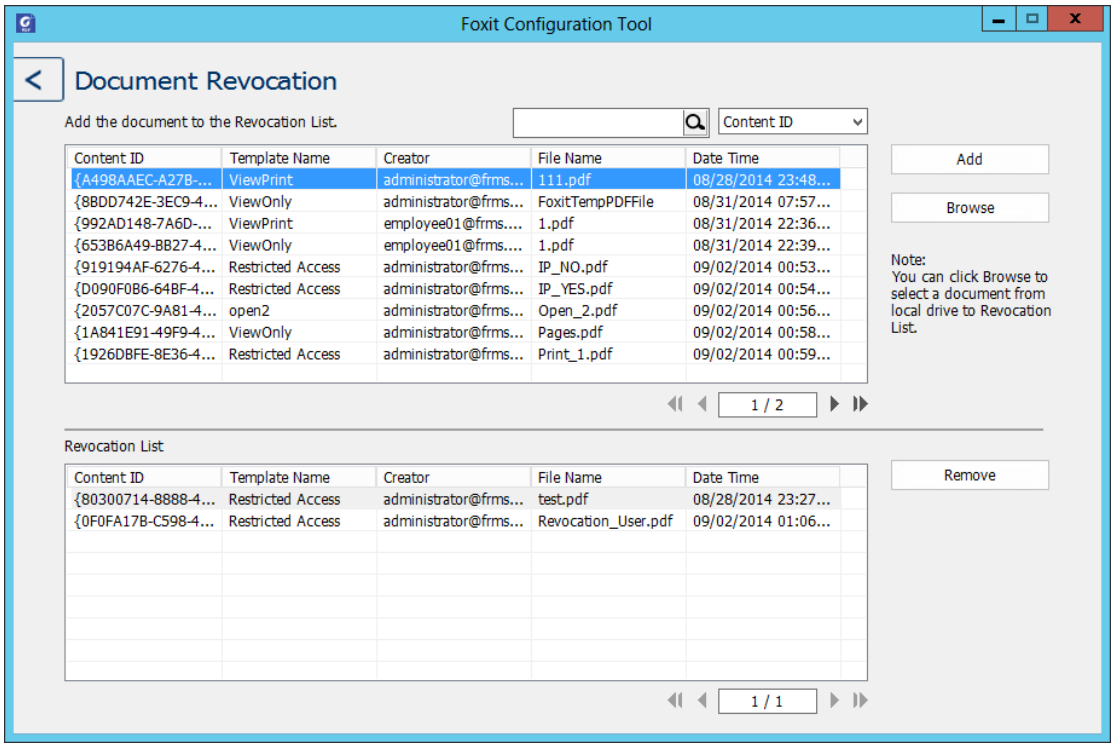
1. Log on to the RMS server.
2. Download the Foxit Configuration Tool from:
   For X86:
   http://cdn01.foxitsoftware.com/pub/foxit/rms/configtool/FoxitConfigurationTool_32.zip

   For X64:
   http://cdn01.foxitsoftware.com/pub/foxit/rms/configtool/FoxitConfigurationTool_64.zip

3. Unzip and run the Foxit Configuration Tool.



4. Click Document Revocation.

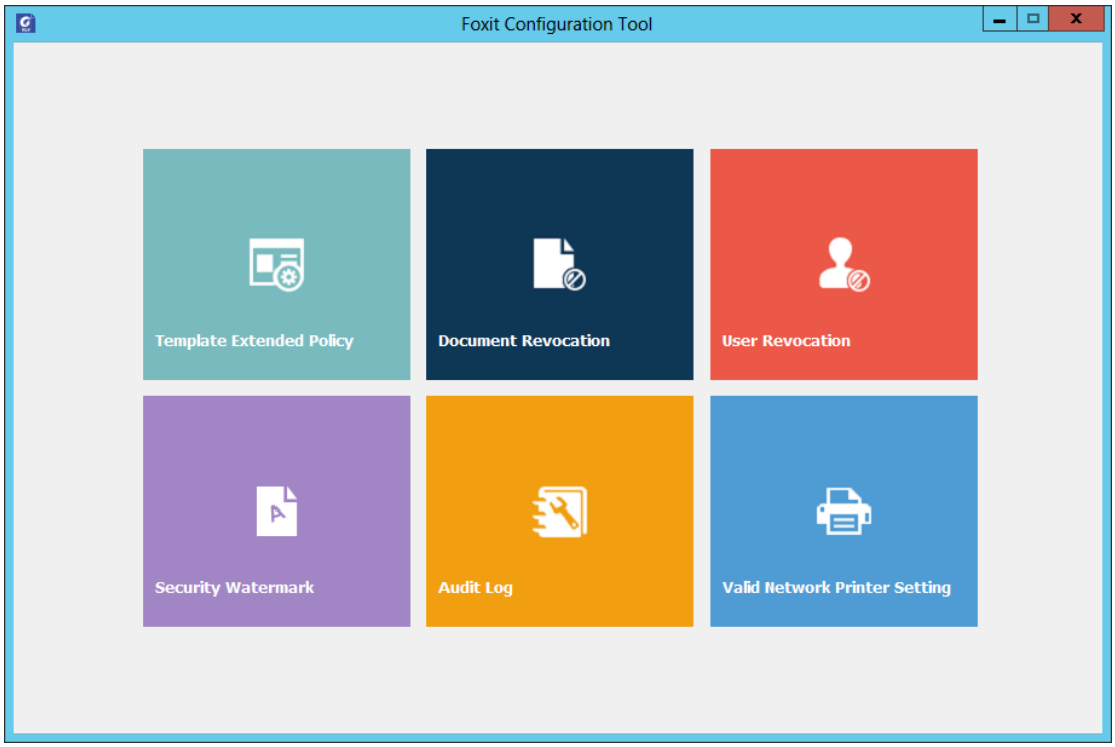


5. Select the PDF document you want to revoke, click Add button to add the document to the Revocation List. Or you can click Browse to select a document from a lcoal drive to add to the

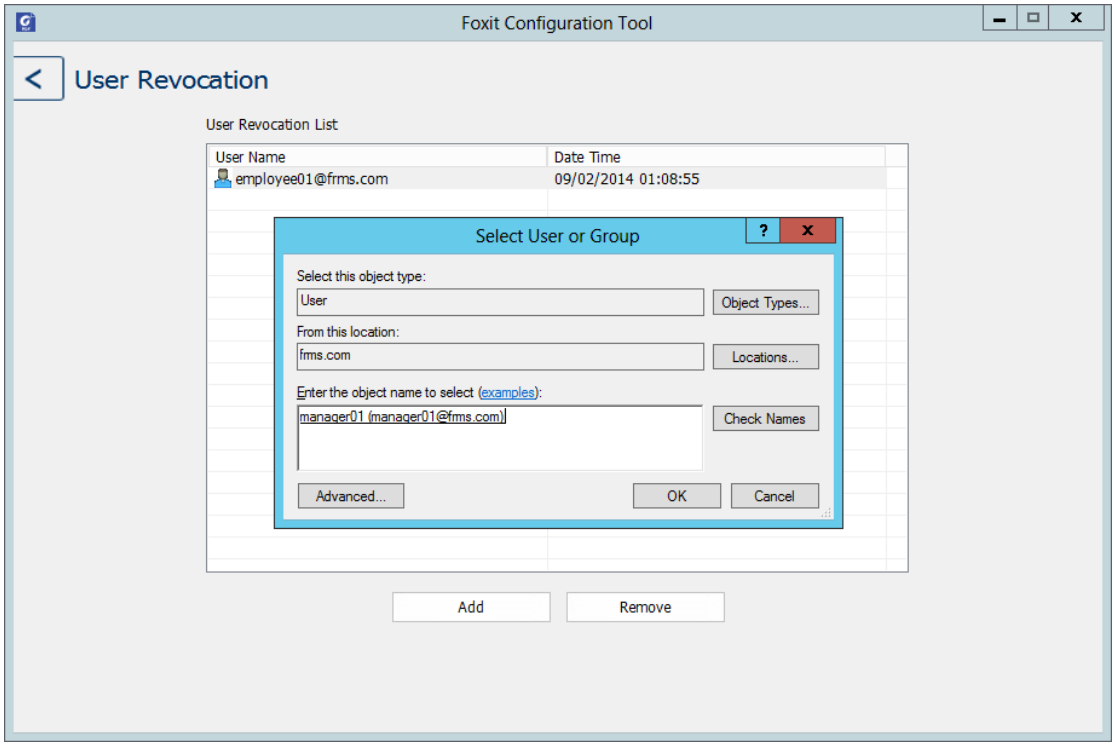
Revocation List.

Revoke a User

1. Log on to the RMS server.
2. Run the Foxit Configuration Tool.



3. Click User Revocation.



6. Click Add button to add a user to the User Revocaton List.

Quick Start for Using Windows Azure AD Right Management

Enable Windows Azure AD Rights Management for your organization:

- Download the Windows Azure AD Rights Management administration module (WindowsAzureADRightsManagementAdministration.exe) for Windows PowerShell from here.
- In the local folder where you downloaded and saved the Rights Management installer file, double-click the file WindowsAzureADRightsManagementAdministration.exe to launch installation of the Rights Management administration module.
- Open Windows PowerShell.
- Type the following commands:

  ✓ Import-Module AADRM
  ✓ Connect-AadrmService -Verbose

- Enter your Office 365 credentials when prompted, for example“user@company.onmicrosoft.com”.
- Type the following commands:

  ✓ Enable-Aadrm
  ✓ Disconnect-AadrmService

Contact Us

Feel free to contact Foxit should you need any information or have any problems with our products. We are always here, ready to serve you better.

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