Foxit®

User Manual

Foxit® RMS
PDF Protection Tool

Microsoft® Partner

Gold Independent Software Vendor (ISV)

Content

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]]
                [/showtemplates [/sync]] [/preserveattributes]
                [/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.
/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
```

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**

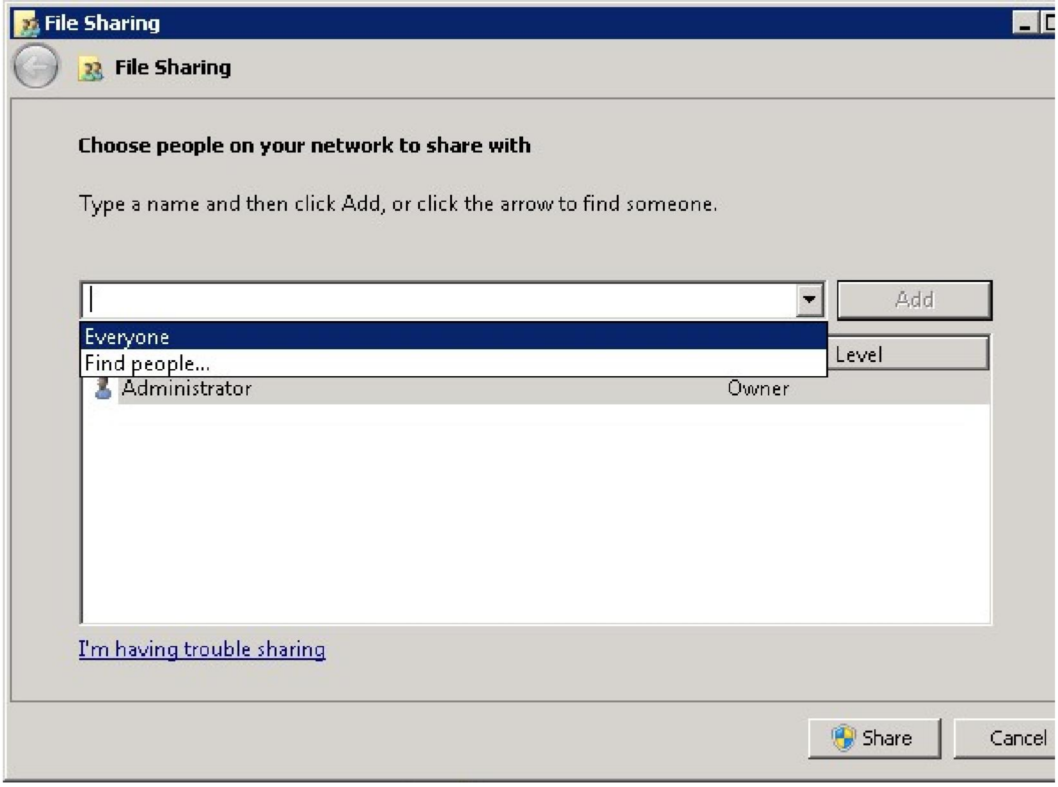
b. Click **Start**, click **Computer**, and then double-click **Local Disk (C:)**.

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**.



Choose people on your network to share with

Type a name and then click Add, or click the arrow to find someone.

Administrator Owner

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**.

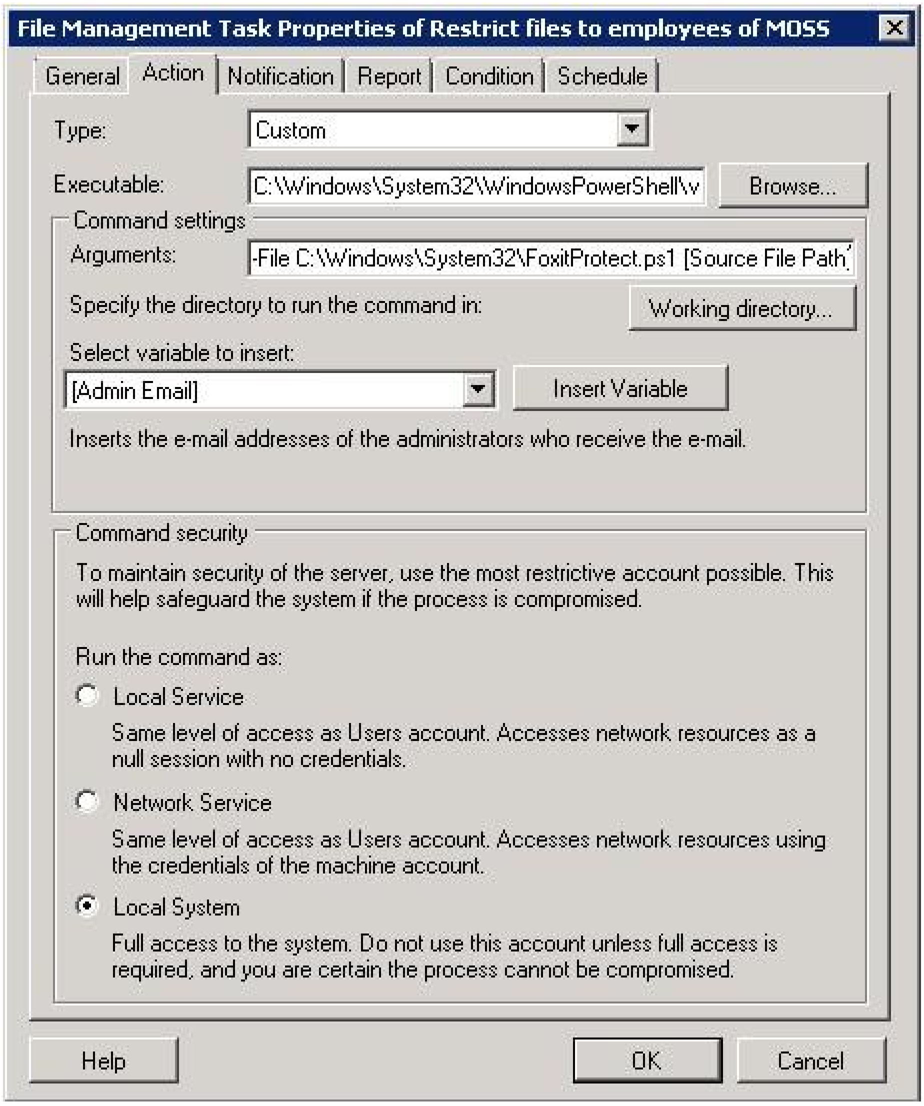
g. Under **Scope**, click **Add** and then browse to **SharedFolder**. Click **OK** when done.

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]**.



Type: Custom

Executable: C:\Windows\System32\WindowsPowerShell\v

Command settings

Arguments: -File C:\Windows\System32\FoxitProtect.ps1 [Source File Path'

Specify the directory to run the command in:

Select variable to insert: [Admin Email]

Inserts the e-mail addresses of the administrators who receive the e-mail.

Command security

To maintain security of the server, use the most restrictive account possible. This will help safeguard the system if the process is compromised.

Run the command as:

○ Local Service

Same level of access as Users account. Accesses network resources as a null session with no credentials.

○ Network Service

Same level of access as Users account. Accesses network resources using the credentials of the machine account.

● Local System

Full access to the system. Do not use this account unless full access is required, and you are certain the process cannot be compromised.

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

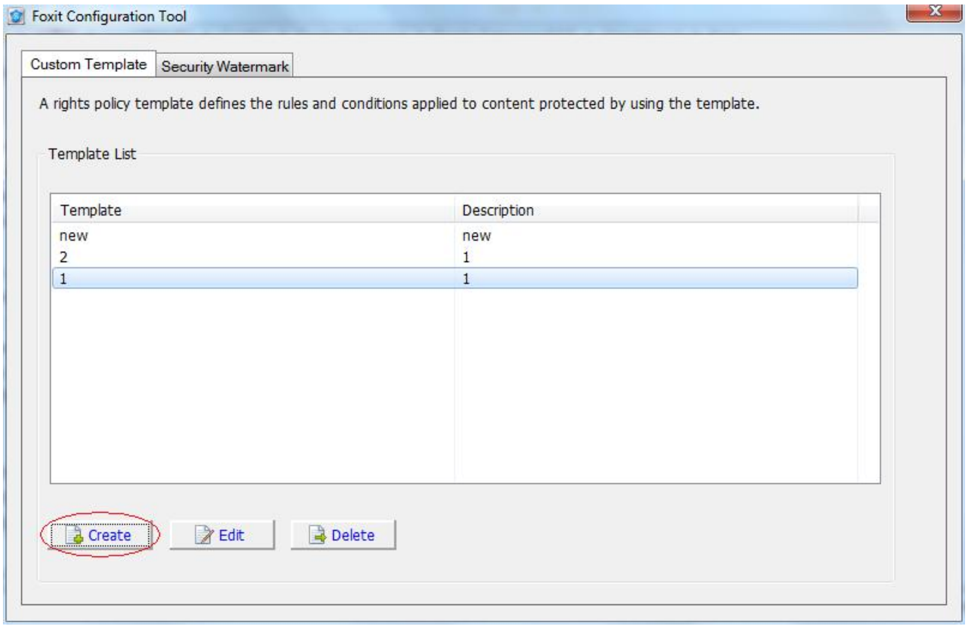
Foxit RMS PDF Protection Tool allows users to encrypt documents by custom templates. You can create custom templates by Configuration Tool, call “showtemplates” command to display the custom templates and then encrypt documents by the created template via “encrypt” command. Also, you can manage the custom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

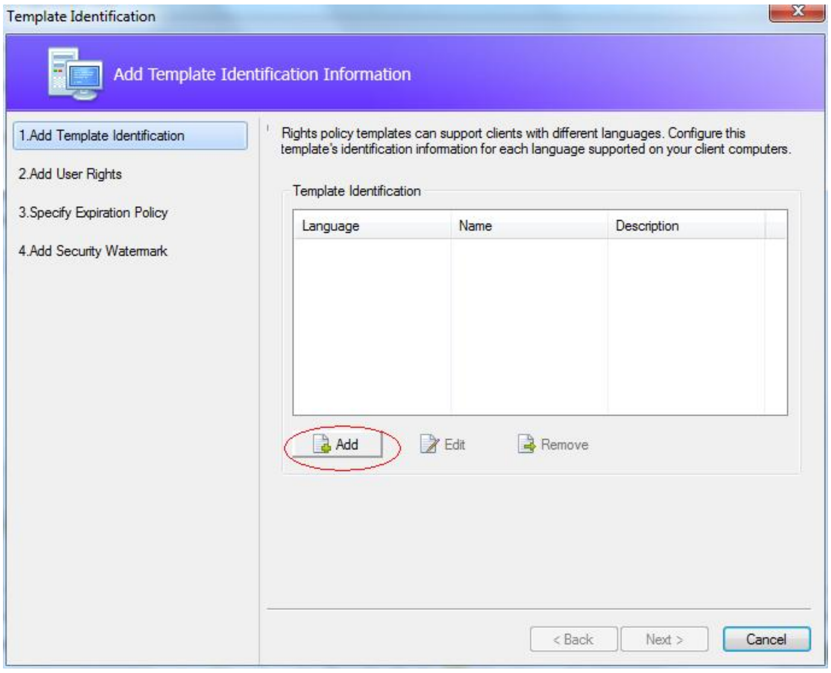


A rights policy template defines the rules and conditions applied to content protected by using the template.

Template List

Template	Description
new	new
2	1
1	1

3. Click Add in the Template Identification dialog box.


Template Identification
Add Template Identification Information
1.Add Template Identification
2.Add User Rights
3.Specify Expiration Policy
4.Add Security Watermark
Add
Edit
Remove
< Back
Next >
Cancel

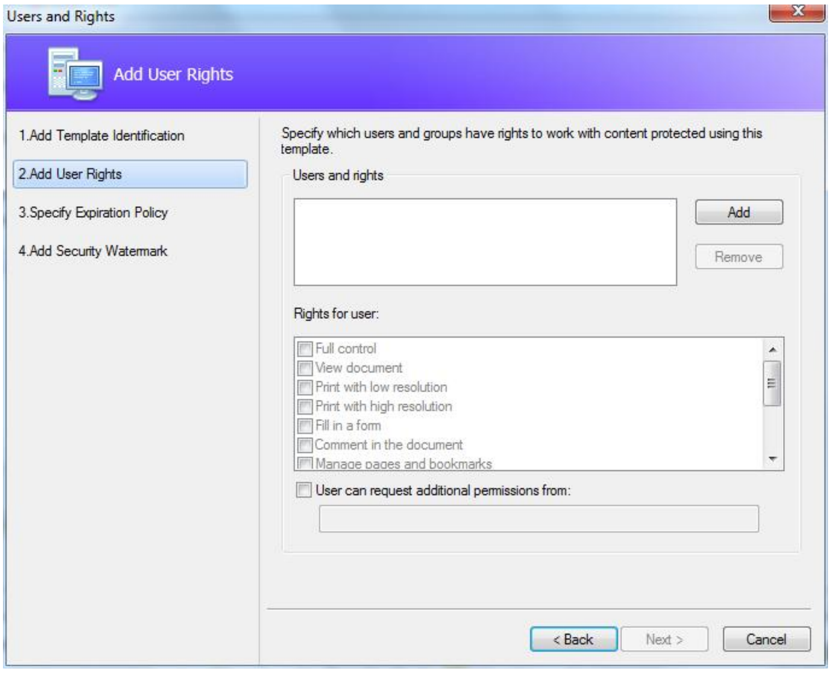
Rights policy templates can support clients with different languages. Configure this template's identification information for each language supported on your client computers.

Template Identification

Language	Name	Description

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.



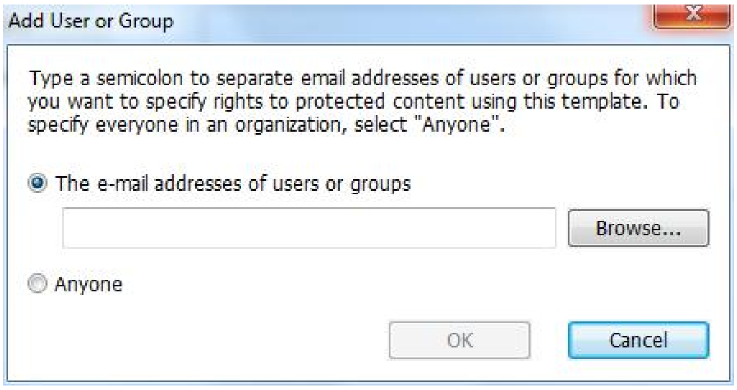
Specify which users and groups have rights to work with content protected using this template.

□ Full control
□ View document
□ Print with low resolution
□ Print with high resolution
□ Fill in a form
□ Comment in the document
□ Manage pages and bookmarks

□ User can request additional permissions from:

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.



Type a semicolon to separate email addresses of users or groups for which you want to specify rights to protected content using this template. To specify everyone in an organization, select "Anyone".

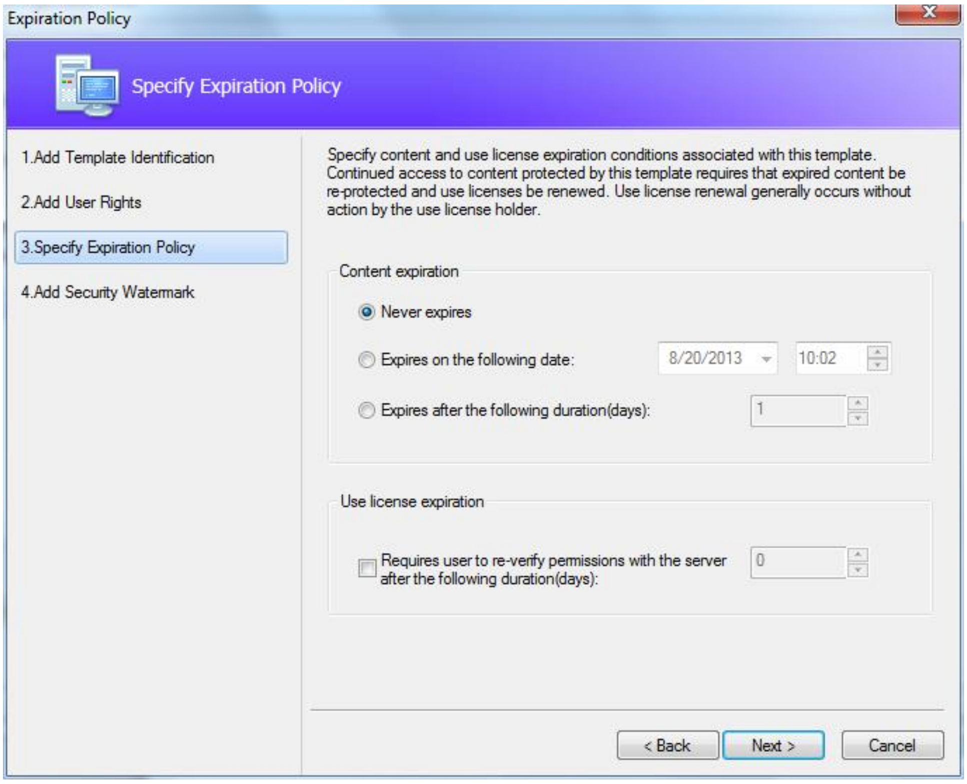
● The e-mail addresses of users or groups

○ Anyone

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.



Expiration Policy

Specify Expiration Policy

1.Add Template Identification
2.Add User Rights
3.Specify Expiration Policy
4.Add Security Watermark

Specify content and use license expiration conditions associated with this template. Continued access to content protected by this template requires that expired content be re-protected and use licenses be renewed. Use license renewal generally occurs without action by the use license holder.

Content expiration

● Never expires
○ Expires on the following date: 8/20/2013 10:02
○ Expires after the following duration(days): 1

Use license expiration

□ Requires user to re-verify permissions with the server after the following duration(days): 0

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 add security watermark. You can refer to Add Security Dynamic Watermark to the File Encrypted by RMS.
11. Click Finish to complete creating the template.

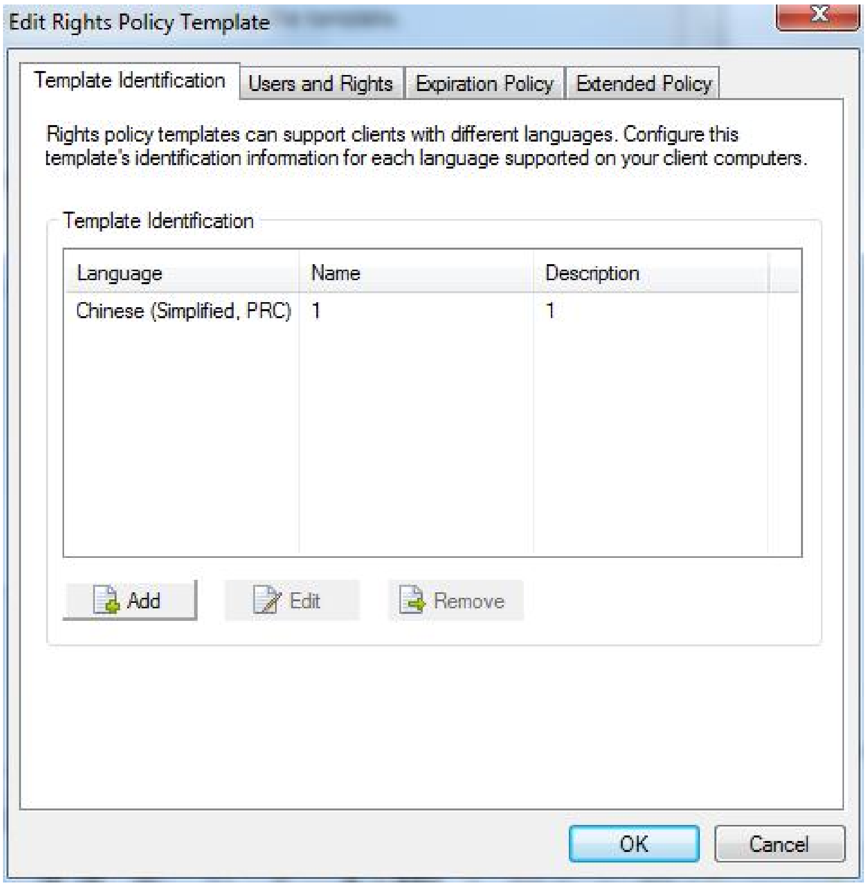
Manage Custom Template

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 Rights Policy Template.



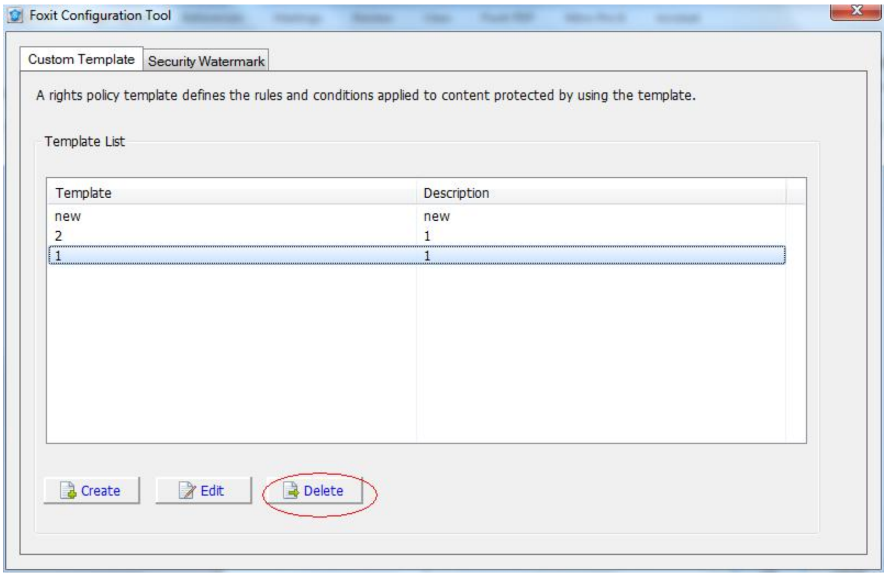
Rights policy templates can support clients with different languages. Configure this template's identification information for each language supported on your client computers.

Template Identification

Language	Name	Description
Chinese (Simplified, PRC)	1	1

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

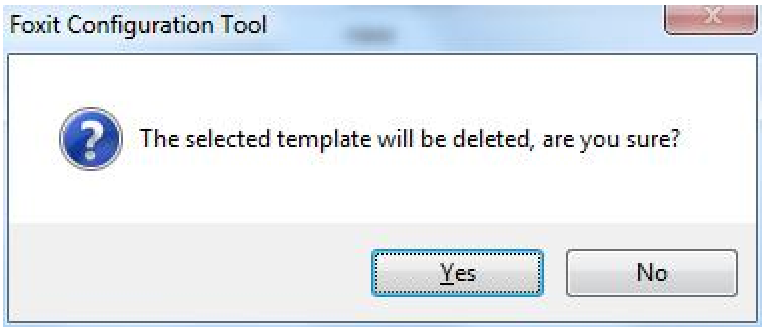
To delete a template, select the template you want to delete, and click Delete and Yes.



A rights policy template defines the rules and conditions applied to content protected by using the template.

Template List

Template	Description
new	new
2	1
1	1



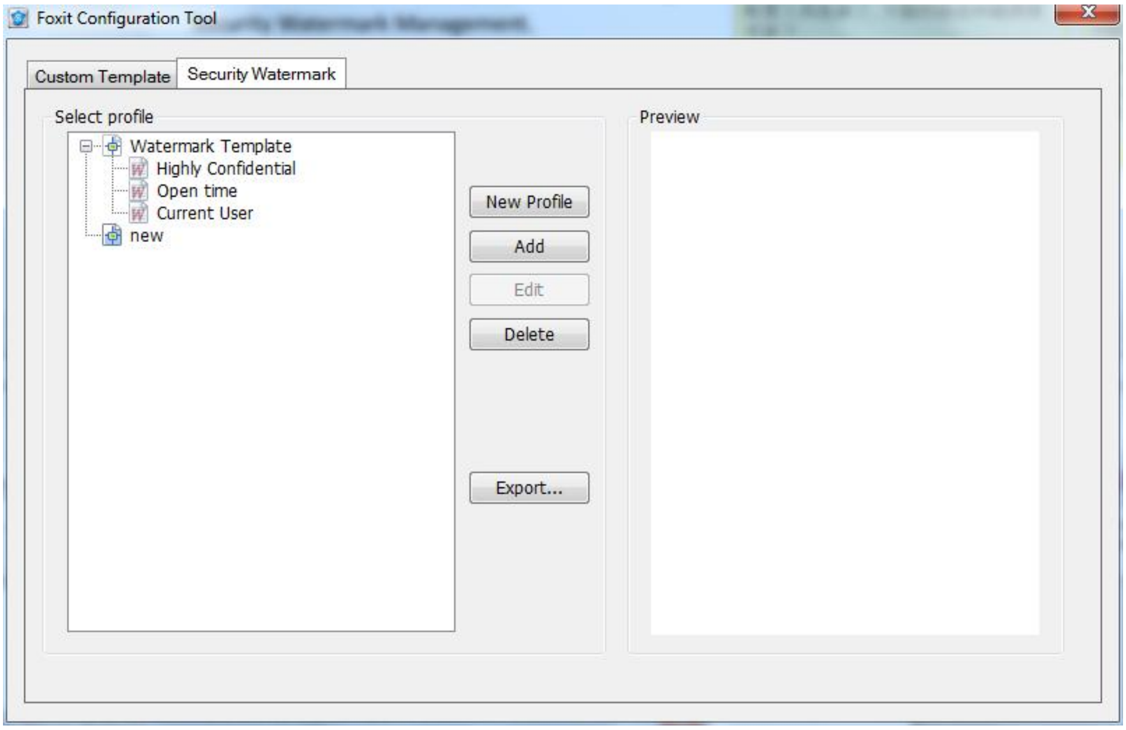
Foxit Configuration Tool

The selected template will be deleted, are you sure?

Add Security Dynamic Watermark to Templates

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

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. Create a required watermark.



a. Add a 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.

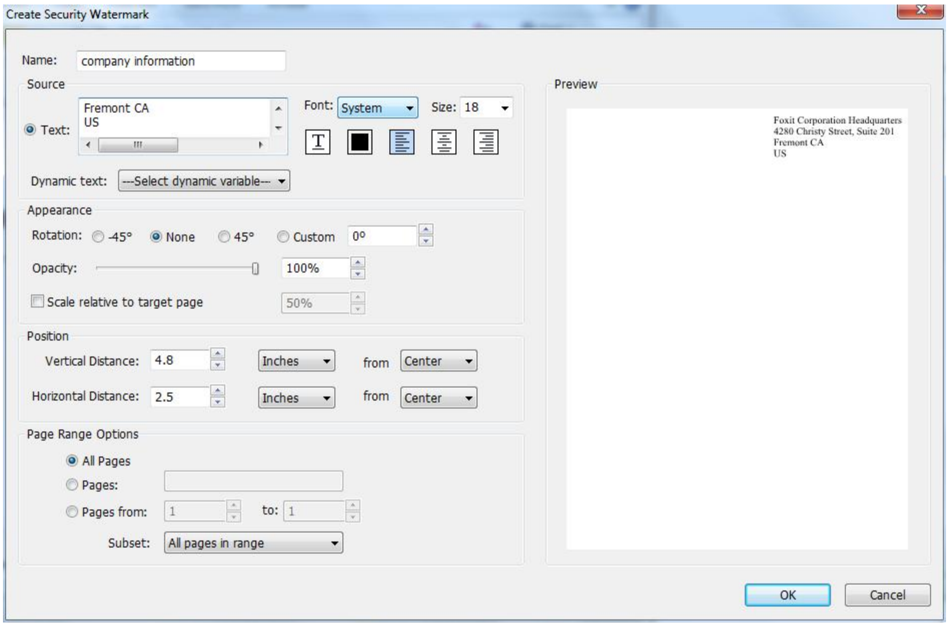
vi. Set the appearance by choosing the rotation degree and the opacity. You also have the option to make the scale relative to target page.

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.



Create Security Watermark

Name: company information

Source
● Text: Fremont CA
US
Font: System Size: 18
Dynamic text: ---Select dynamic variable---

Appearance
Rotation: ○ -45° ● None ○ 45° ○ Custom 0°
Opacity: 100%
□ Scale relative to target page 50%

Position
Vertical Distance: 4.8 Inches from Center
Horizontal Distance: 2.5 Inches from Center

Page Range Options
● All Pages
○ Pages:
○ Pages from: 1 to: 1
Subset: All pages in range

Preview
Foxit Corporation Headquarters
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b. Editing or Deleting Watermark

Editing 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 “Adding Watermark”.

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

Deleting a Watermark

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

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

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

   To add dynamic security watermarks to official template, please follow the steps below:

1) Export the Watermark

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

ii. Click Export and choose a file type and location to save.

iii. The watermark will be exported as an encoded file (.txt format).

2) Open the file “Add Security Watermark.vbs” in the unzipped folder with Notepad.exe.

3) Find the text (templateName = “”) and type in the name of the template which needs to be added to the exported watermark.

4) Fill in the following content according to the exported watermark:
appDataName = “”
appDataValue = “”

5) Run “Add Security Watermark.vbs” and the watermark will be added to the target template.

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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