

# Developers Guide Foxit® RMS PDF Protection Tool



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## **Prerequisites**

### Step 1: Install the AD RMS Services Client

To run this SDK, 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 RM), please refer to the <u>Quick Start</u> for Using Windows Azure AD Right Management.

### Step 2: Install and configure RMS Server

About how to install and configure an RMS Server, please see AD RMS Step-by-Step Guide .

#### How to Use the SDK

- i. Unzip the installation package to a directory, for example, D:\ Foxit RMS PDF Protection Tool(SDK).
- ii. Add the file frms.h under the directory "Foxit RMS PDF Protection Tool(SDK)\include" to your project, so that you can check each interface conveniently.
- iii. Add the file FPDFRMS.lib to the project, for example, add #pragma comment(lib,"D:\\ Foxit RMS PDF Protection Tool(SDK)\\library\\FPDFRMS.lib") to the file stdafx.cpp (pre-compiled file).
- iv. Include the header file frms.h in the file which needs to use SDK interfaces, for example, add include "D:\\ Foxit RMS PDF Protection Tool(SDK)\\library\\frms.h" to the file stdafx.h (pre-compiled file).
- v. Copy the file FPDFRMS.dll under "Foxit RMS PDF Protection Tool(SDK)\library" to the same directory where your application program locates.

#### **Running Your Application**

In order to run your RMS application you need to generate a signed application manifest. This guide shows how to generate a manifest

#### On your development machine:

- 1. Copy the following files to a single directory:
  - "Foxit RMS PDF Protection Tool(SDK)\tools\Genmanifest.exe"
  - "Foxit RMS PDF Protection Tool(SDK)\tools\ isvtier5appsigningprivkey.dat"
  - "Foxit RMS PDF Protection Tool(SDK)\tools\ isvtier5appsigningpubkey.dat"
  - "Foxit RMS PDF Protection Tool(SDK)\tools\ isvtier5appsignsdk\_client.xml"
  - "Foxit RMS PDF Protection Tool(SDK)\tools\< YourAppName >.bat"
  - "Foxit RMS PDF Protection Tool(SDK)\tools\< YourAppName >.mcf"
  - < YourAppName >.exe

Note: If it's the pre-production environment, please copy the files "isvtier5appsigningprivkey.dat", "isvtier5appsigningpubkey.dat" and "isvtier5appsignsdk\_client.xml" under the directory of "FoxitPDF\_ADRMS\_SDK\_10\tools\pre-production".

 In this same directory, use notepad.exe to open the file < YourAppName >.mcf. Modify the option REQ HASH "YourAppName.exe", and fill in the name of your application program. The file should have the following contents:

AUTO-GUID

"isvtier5appsigningprivkey.dat"

MODULELIST

REQ HASH "YourAppName.exe"

POLICYLIST INCLUSION PUBLICKEY "isvtier5appsigningpubkey.dat" EXCLUSION

**NOTE:** Ensure that "YourAppName.exe" is consistent with the actual < YourAppName >.exe.

3. In this same directory, use notepad.exe to open the file < YourAppName >.bat. Modify the option YourAppName.exe.man, and fill in the name of your application program. The file should have the following contents:

cd %~dp0 genmanifest.exe -chain isvtier5appsignsdk\_client.xml YourAppName.mcf YourAppName.exe.man

**NOTE:** Ensure that the file YourAppName.mcf and the file "YourAppName" under YourAppName.exe.man are consistent with the actual ones.

4. You will get a file "YourAppName.exe.man" by double-clicking the file YourAppName.bat.

**Note:** If the program YourAppName.exe has been modified, you should regenerate the file < YourAppName >.exe.man.

- 5. Copy the following files to your RMS server:
  - < YourAppName >.exe
  - < YourAppName >.exe.man
  - FPDFRMS.dll
- Run your application. You can run the application from any directory, but your generated manifest (<YourAppName >.exe.man and FPDFRMS.dll) must be in the same directory as < YourAppName >.exe

#### **How to Build Your Application**

 Before you can call any functions, you need to first call FRMS\_UnlockLibrary function to unlock the library. If you are in free 30-day trial, don't pass any parameter to the function FRMS\_UnlockLibrary, for example, FRMSAPI FRMS\_HRESULT FRMS\_UnlockLibrary().

=

#### Example:

}

2. Initialize the SDK with FRMS\_Initialize. Before the application exits, destroy the library to release resources.

#### Example:

//Initalize the SDK with library

```
hr = FRMS_Initialize(FRMS_API_MODE_CLIENT);
if (FRMS_HRESULT_OK != hr)
{
    DisplayFRMSError(hr);
    goto Exit;
}
//Release all resources allocated by the SDK library
if(Null != hProtector)
{
    FRMSProtector_Release(hProtector);
}
```

NOTE: If failing to call the function, 1. ensure you have called the function FRMS\_UnlockLibrary successfully. 2. check whether the AD RMS environment has been set up correctly if the function FRMS\_UnlockLibrary is returned successfully.

3. Sets the source to be protected. It can be a folder containing PDF files or can be a PDF file path.

```
//Set the PDF file path
wchar_t wsSource[20] = L"C:\\test.pdf";
FRMS HPROTECTOR hProtector = NULL;
Hr = FRMSProtector_Create(&hProtector);
if (NULL != hProtector)
{
    hr = FRMSProtector_SetSource(hProtector,wsSource);
    if(hr != FRMS_HRESULT_OK)
    {
         DisplayFRMSError(hr);
         goto Exit;
    }
}
4. Get all Issuers.
Example:
```

```
int nCount = 0;
// Gets the count of issuers
hr = FRMSProtector_GetIssuerCount(hProtector, this->GetSafeHwnd(), &nCount);
if(hr != FRMS_HRESULT_OK)
{
    DisplayFRMSError(hr);
```

```
goto Exit;
}
for(int i=0; i<nCount; i++)</pre>
{
     LPWSTR lpwslssuer = NULL;
    int nLen = 0;
    // Gets the length of the issuer name
     hr = FRMSProtector_GetIssuer(hProtector, i, this->GetSafeHwnd(), lpwsIssuer, &nLen);
     if(hr != FRMS HRESULT OK)
     {
         DisplayFRMSError(hr);
         goto Exit;
    }
     lpwslssuer = new wchar_t[nLen];
     memset(lpwslssuer, 0, sizeof(wchar_t)*nLen);
    //Gets the issuer name by index
     hr = FRMSProtector_GetIssuer(hProtector, i, this->GetSafeHwnd(), lpwsIssuer, &nLen);
     if(hr != FRMS_HRESULT_OK)
     {
         DisplayFRMSError(hr);
         delete [] lpwslssuer;
         goto Exit;
    }
}
```

5. Get the number of Rights Poilcy Template.

#### Example:

```
int nTemplateCount = 0;
//Gets the count of RMS rights policy templates of the specified issuer.
hr = FRMSProtector_GetTemplateCount(hProtector, lpwsIssuer, TRUE, this->GetSafeHwnd(),
&nTemplateCount);
if (hr != FRMS_HRESULT_OK)
{
    DisplayFRMSError(hr);
    delete [] lpwsIssuer;
    goto Exit;
}
```

```
}
```

6. Get the names of all templates.

```
for(int j=0; j<nTemplateCount; j++)
{</pre>
```

```
LPWSTR lpwsName = NULL;
    int nLen = 0;
    // Gets the length of the template name
    hr = FRMSProtector_GetTemplateName(hProtector, j, lpwsIssuer, this->GetSafeHwnd(),
lpwsName, &nLen);
    if(hr != FRMS_HRESULT_OK)
    {
         DisplayFRMSError(hr);
         delete [] lpwslssuer;
         goto Exit;
    }
    lpwsName = new wchar_t[nLen];
    memset(lpwsName, 0, sizeof(wchar_t)*nLen);
    // Gets the name of RMS rights policy template by specified index.
    hr = FRMSProtector_GetTemplateName(hProtector, j, lpwsIssuer, this->GetSafeHwnd(),
lpwsName, &nLen);
    if(hr != FRMS_HRESULT_OK)
    {
         DisplayFRMSError(hr);
         delete [] lpwsName;
         delete [] lpwslssuer;
         goto Exit;
```

```
}
}
```

7. Set the template which is used to encrypt documents, and ensure this template can be retrieved on the AD RMS server.

#### Example:

```
LPCWSTR lpwsIssuerName = L"IssuerName";

LPCWSTR lpwsTemplateName = L"TemplateName";

//Sets the current RMS rights policy template name used to protect the source.

hr = FRMSProtector_SetTemplate(hProtector, lpwsIssuerName, lpwsTemplateName,NULL);

if (hr != FRMS_HRESULT_OK)

{

DisplayFRMSError(hr);
```

```
goto Exit;
```

}

8. Finally, you can do the actual encryption.

```
hr = FRMSProtector_Protect(hProtector, 0 , NULL);
if (hr != FRMS_HRESULT_OK)
```

```
DisplayFRMSError(hr);
goto Exit;
```

}

{

{

9. Throughout this example application the DisplayFRMSError function is being used to handle errors.

#### Example:

```
void DisplayFRMSError(HRESULT hr)
    LPWSTR lpwsText = NULL;
    int nLen = 0;
    FRMS_HRESULT hrGet = FRMS_GetErrorMessage(hr, 1033, lpwsText, &nLen);
    if(hrGet == FRMS HRESULT OK)
    {
         lpwsText = new wchar t[nLen];
         memset(lpwsText, 0, sizeof(wchar_t)*nLen);
         hrGet = FRMS_GetErrorMessage(hr, 1033, lpwsText, &nLen);
         wprintf(L"%s\r\n", lpwsText);
         delete [] lpwsText;
    }
```

10. How to create a watermark node

#### Example:

}

FRMS\_HWATERMARKNODE hWatermarkNode = NULL;

FRMS\_HRESULT hr = FRMSWatermarkNode\_Create(&hWatermarkNode);

hr = FRMSWatermarkNode\_SetName(hWatermarkNode, L"watermarkNode name");//Sets node's name

hr = FRMSWatermarkNode\_SetContent(hWatermarkNode, L"watermark content");//Sets content of watermark node.

hr = FRMSWatermarkNode\_SetContentUnderLine(hWatermarkNode, TRUE);

hr = FRMSWatermarkNode\_SetContentAlignType(hWatermarkNode);

hr = FRMSWatermarkNode\_SetContentFontName(hWatermarkNode);//Sets the default font

hr = FRMSWatermarkNode\_SetContentFontSize(hWatermarkNode);//Sets the default font size to 24.

hr = FRMSWatermarkNode\_SetContentColor(hWatermarkNode);//Sets the default content color to black.

hr = FRMSWatermarkNode\_SetContentRotation(hWatermarkNode, 45)// Sets the content to 45° counterclockwise.

hr = FRMSWatermarkNode\_SetContentScale(hWatermarkNode, 0)// Set 0 to use default font size

FRMSWatermarkNode\_SetContentVerticalPosition(hWatermarkNode, 0, hr =

FRMS\_DISTANCE\_TYPE\_PERCENT, FRMS\_CONTENT\_V\_POSITION\_CENTER);//Sets the content's vertical position.

hr = FRMSWatermarkNode\_SetContentHorizontalPosition(hWatermarkNode, 0, FRMS\_DISTANCE\_TYPE\_PERCENT, FRMS\_CONTENT\_H\_POSITION\_CENTER);//Sets content's horizontal position.

hr = FRMSWatermarkNode\_SetImpactPageI(hWatermarkNode, TRUE, 0, 0, FRMS\_IMPACT\_TYPE\_ALL\_PAGE);//Sets page(s) that the watermark will be applied to. Once the properties of the watermark is set, it now can be used.

FRMSWatermarkNode\_Release(hWatermarkNode);//Releases the watermark node. User must release the node after they are done using it.

11. How to Create a watermark

#### Example:

```
FRMS_HWATERMARK hWatermark = NULL;
FRMS_HRESULT hr = FRMSWatermark_Create(&hWatermark);
hr = FRMSWatermark_SetName(hWatermark, L"watermark name");
if (hr != FRMS_HRESULT_OK)
{
DisplayFRMSError(hr);
return;
}
```

```
hr = FRMSWatermark_AddNode(hWatermark, hWatermarkNode);
if (hr != FRMS_HRESULT_OK)
{
DisplayFRMSError(hr);
return;
```

}

hr = FRMSWatermark\_Save(hWatermark, NULL);//Passing null for the file path field means to save it to the defeault path.

FRMSWatermark\_Release(hWatermark);// After using the watermark, call this function to release

12. Get watermark node from a watermark

```
Example:
int nCount = 0;
FRMS_HRESULT hr = FRMSWatermark_GetNodeCount(hWatermark, &nCount);
for(int i = 0; i < nCount; i++)
{
```

FRMS\_HWATERMARKNODE hWatermarkNode = NULL;

Hr = FRMSWatermark\_GetNodeI(hWatermark, i, &hWatermarkNode);

•••

FRMSWatermarkNode\_Release(hWatermarkNode);// After using the watermark node, call this function to release.

}

If the node's name is known users can use FRMSWatermark\_GetNodeII to get the node. FRMS\_HWATERMARKNODE hWatermarkNode = NULL;

FRMS\_HRESULT hr = FRMSWatermark\_GetNodeII (hWatermark, L" watermarkNode name", & hWatermarkNode);

```
if (hr != FRMS_HRESULT_OK)
```

```
{
```

DisplayFRMSError(hr);

return;

}

hr = FRMSWatermarkNode\_SetContent(hWatermarkNode, L"new content");

hr = FRMSWatermarkNode\_UpdateNode(hWatermarkNode);//Updatethe new changes to the node.

hr = FRMSWatermark\_Save(hWatermark, NULL);//Save the changes made to the node.

FRMSWatermarkNode\_Release(hWatermarkNode);// After using the watermark node, call this function to release

13. Check the watermark or effect of watermark node

#### Example:

```
FRMS_HWATERMARKRENDER hRender = NULL;
```

FRMS\_HRESULT hr = FRMSWatermarkRender\_Create(hWnd, &hRender);// This 'hWnd' is the handle to a static text box, for displaying a watermark or watermark effect node. hr = FRMSWatermarkRender\_Rendering(hRender, hWatermark, hWatermarkNode); HDC hDC = NULL; FRMSWatermarkRender\_GetDC(hRender, &hDC); //Draws ont he DC called showDC. ::BitBlt(showDC, 0, 0, nWidth, nHeight, hDC, 0, 0, SRCCOPY);

FRMSWatermarkRender\_Release(hRender);

14. Create customized template, and add the watermark into the customized template.

```
FRMS_HCUSTEMPLATE hCusTemplate = NULL;
FRMS_HRESULT hr = FRMSCusTemplate_Create(&hCusTemplate);
if (hr != FRMS_HRESULT_OK)
{
DisplayFRMSError(hr);
return;
```

}

hr = FRMSCusTemplate\_SetIdentification(hCusTemplate, 0, 1033, L"template name", L"template
description");

hr = FRMSCusTemplate\_SetUserAndRights(hCusTemplate, FRMS\_USER\_TYPE\_EVERYYONE, FRMS\_RIGHT\_VIEW);//Sets read permission for all user.

hr = FRMSCusTemplate\_SetRequestAdditionalPermission(hCusTemplate,
FRMS\_DESTINATION\_TYPE\_URL, NULL);//

Pass NULL means user will request additional permission from document owner who encrypts the document, and the destination is an owner's email.

hr = FRMSCusTemplate\_SetContentExpiration(hCusTemplate, TRUE, 0);//Sets when the contentexpires. Setting TRUE for bNeverExpires means it will never expire.

hr = FRMSCusTemplate\_SetUseLicenseExpirationDays(hCusTemplate, -1);//Sets when the licenseexpiresby days. This is the numbers of days which the viewer must varify their credentials again.

hr = FRMSCusTemplate\_SetWatermarkIII(hCusTemplate, hWatermark);

hr = FRMSCusTemplate\_Save(hCusTemplate, NULL);//Saves template in the default path. FRMSCusTemplate\_Release(hCusTemplate);

15. Load and edit template

#### Example:

```
int nCount = 0;
```

```
FRMS_HRESULT hr = FRMSCusTemplate_Load(NULL, &nCount);//Gets the number of templates in the default path.
```

```
for(int i = 0; i < nCount; i++)</pre>
```

{

```
FRMS_HCUSTEMPLATE hCusTemplate = NULL;
```

```
hr = FRMSCusTemplate_Load(i, &hCusTemplate);
```

int nldenCount = 0;

hr = FRMSCusTemplate\_GetIdentificationCount(hCusTemplate, &nIdenCount);

for(int i = 0; i < nIdenCount; i++)//Gets each identification information.

{

DWORD languageID = 0;

LPWSTR lpwsName = NULL, LPWSTR lpwsDescription = NULL;

hr = FRMSCusTemplate\_GetIdentification(hCusTemplate, i, &languageID, &lpwsName, &lpwsDescription);

```
FRMS_ReleaseBuffer(IpwsName);//Releases the buffer.
```

FRMS\_ReleaseBuffer(lpwsDescription); //Releasethe buffer.

}

hr = FRMSCusTemplate\_SetIdentification(hCusTemplate, 0, 1033, L"template name new", L"template description new");

hr = FRMSCusTemplate\_SetContentExpiration(hCusTemplate, FALSE, 1);//Sets the content expiration day to 1 day.

```
hr = FRMSCusTemplate_Save(hCusTemplate, NULL);//Update the template's information.
FRMSCusTemplate_Release(hCusTemplate);
}
16. Set dynamic revocation before calling FRMSProtector_Protect function.
Hr = FRMSProtector_SetDynamicRevoked(hProtector, TRUE);//TRUE means enabling dynamic
revocation.
if (hr != FRMS_HRESULT_OK)
{
    DisplayFRMSError(hr);
    return;
}
```

17. Set extended policies before calling FRMSCusTemplate\_Save function.

#### Example:

//Set which pages users are allowed to access
LPCWSTR pPages = L" 1-3,4,6-8";
Hr = FRMSCusTemplate\_ SetViewablePages(hCusTemplate, pPages);

```
//Restrict access by IP range
LPCWSTR pIPFrom = L"192.168.0.1";
LPCWSTR pIPTo = L"192.168.0.5";
Hr = FRMSCusTemplate_SetIPRestrict(hProtector, pIPFrom, pIPTo);
```

```
//Set the number of accesses to 10
Hr = FRMSCusTemplate_SetAccessCount(hCusTemplate, 10);
```

```
//Set the number of prints to 10
Hr = FRMSCusTemplate_SetPrintCount(hCusTemplate, 10)
```

Note: If you set the number of prints or the number of accesses, the encryption information of the document will be saved in the database of RMS server. To encrypt the document successfully, you need to configure the server. You can call FRMSProtector\_IfTemplateNeedWebService function to check whether you have set the option.

 Show the encryption information for the encrypted document. FRMS\_HENCRYPTINFO hEncryptInfo = NULL; FRMS\_HRESULT hr = FRMSEncryptInfo\_Create(&hEncryptInfo);

LPCWSTR pFilePath = L"C:\\test.pdf"; hr = FRMSEncryptInfo\_SetSource(hEncryptInfo, pFilePath); if (hr == FRMS\_HRESULT\_OK) {

```
LCID languageID = 0;
          LPWSTR pTemplateName = NULL;
          LPWSTR pTemplateDescription = NULL;
          int nUserCount = 0;
//Get encryption template information
          hr = FRMSEncryptInfo GetIdentification(hEncryptInfo, &languageID, &pTemplateName, &
pTemplateDescription);
     if (hr == FRMS HRESULT OK)
      {
          hr = FRMSEncryptInfo_GetUserCount(hEncryptInfo, &nUserCount);
          for (int i = 0; i < nUserCount; i++)</pre>
          {
               LPWSTR pUser = NULL;
               DWORD dwRight = 0;
               hr = FRMSEncryptInfo_GetUser(hEncryptInfo, i, &pUser);//get user
               hr = FRMSEncryptInfo_GetRight(hEncryptInfo, pUser, &dwRight);//get user rights
               FRMS_ReleaseBuffer(pUser);//release memory
               pUser = NULL;
          }
          FRMS ReleaseBuffer(pTemplateDescription);
          FRMS_ReleaseBuffer(pTemplateName);
     }
```

```
}
```

Note: If you want to apply extended policy or dynamic revocation, you need to configure web service first. For detailed configuration steps, please refer to Web Service Configuration.

## Add Security Dynamic Watermark to the File Encrypted by RMS

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

If you want to add dynamic security watermarks to a custom template with SDK interface, please refer to <u>How to Build Your Application</u>.

If you want to add dynamic security watermarks to an official template, please follow the steps below:

1. Log on to the RMS server.

 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.

g			Foxit Configuration Tool	_ 🗆 🗙
<	Template E	xten	ded Policy	
			Edit	Edit
	Template Name ViewOnly ViewPrint	Secu	ViewPrint Security Watermark: Watermark Template Select Only allow access by this IP range: 192 . 168 . 0 . 1 - 192 . 168 . 0 . 120 Only allow access to these pages: 3.5-9.15-* (Sample: 1-3, 5, 9-*) Number of accesses: 2 Note: Please refer to user manual to configure the web service when trying setting 'number of accesses' and 'number of prints'. OK Cancel	

- 5. Click Select.
- 6. 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.

Create Security Watermark	×
Name:       company information         Source       Fremont CA         Image: Size 18       Image: Size 18         Image: Size 18       Image: Size 18 </td <td>Foxii Corporation Headquarters 4280 Christy Street, Suite 201 Fremont CA US</td>	Foxii Corporation Headquarters 4280 Christy Street, Suite 201 Fremont CA US
Appearance Rotation:	
Horizontal Distance: 2.5 • Inches • from Center • Page Range Options  O All Pages  Pages: Pages: Pages from: I v to: I v Subset: All pages in range •	
	OK Cancel

#### How to Debug Applications that Use RMS PDF Protection Tool

If the parameter you passed is FRMS\_API\_MODE\_SERVER when calling the function "FRMS\_Initialize", you can toggle breakpoint and debug the program directly.

If the parameter you passed is FRMS\_API\_MODE\_CLIENT when calling the function FRMS\_Initialize, the anti-debugging checks in the developer version of our runtime are disabled.

#### For Visual Studio 2005 or later:

You can turn on debug tracing by using the following steps:

1. Call the function afxmessageBox when you need to debug.

2. Run your program.

3. When the dialog box afxmessageBox pops up, choose the option *Attach to Process...* under the menu Debug of the Visual Studio. In the dialog box, choose your application program and click *Attach.* 

Demo - Microsoft Visual Studio						
File Edit View VAssistX Project Build	Debug Data Tools	Test Ana	lyze Window Help			
🛐 • 📴 • 💕 🗶 🌒 🕺 🖬 🛍 🖉 • 🤒	• 🗐 • 🖾 🛛 🕨 Debug	▼ Win3	2 - Market Presentation - Get	File 🔻 🗟	· 🖸 🛃 🛠 🖻 🖸	. 📮
		، 🐼 🔁 🕅	▫₽₽▫๛๛๛๛ๅ !๛ਗ਼๛ฃๅ	🖽 📇 🛛	ž į	
olution Explorer - Solution 'Demo' (1 project)	- " ×		N. Yuu	- 2		
🚡 🚯 🗉 🍇	Attach to Process			_	-	R X
all Solution 'Demo' (1 project)	Transport					
- 🚰 Demo	Transport	Default				•
🖻 🣴 Header Files	Qualifier:	CHENGZHA	ANGLIN	otector_GetFile		
Permo - Microsoft Visual Studio         File Edit View VAssistX Project Build Debug Data Tools Test Analyze Window Help         Image: Solution Permo         Image: Solution Demo(1 project)         Image: Solution Demo         Image: S						
b fileaccess.h	The default transpo	ort lets you s	elect processes on this computer or a remote	computer runnir	ng the Microsoft Visua	Image: select         Select         Select         Select         Image: select         Image: select         Select         Image: select         Ima
- h frms.h	Remote Debugging	Monitor (N	ISVSMON.EXE).		-	
- h frmsbase.h						
— 🖻 frmserror.h						
- 🖻 ModuleMgr.h	Attach to:	Automatic:	Native code			Select
Resource.h	Available Processes					
h statx.n	Process	ID	Title	Type	User Name	Session
Resource Files	Demo exe	2668	Demo	v86	WINOS\chenozha	1
🗐 🗁 🗁 Source Files	devenv.exe	2528	FRMSHelloWorld8 - Microsoft Visual Studio	Managed, x	WINOS\chengzha	1
— 🚰 Demo.cpp	dwm.exe	704		x86	WINOS\chengzha	1
- 🚰 DemoDlg.cpp	explorer.exe	2068	开始	x86	WINOS\chengzha	1
- 😋 fileaccess.cpp	mspdbsrv.exe	1036		x86	WINOS\chengzha	1
- C ModuleMgr.cpp	taskhost.exe	1844		x86	WINOS\chengzha	1
BeadMatyt	TSVNCache.exe	2372		x86	WINOS\chengzha	1
Readmenter	VMwareTray.exe	2244		x86	WINOS\chengzha	1
	VMwareUser.exe	2252		x86	WINOS\chengzha	1
	Show processes	from all use	rs Show processes in all	sessions		Refresh
					Attach	Cancel
		_				

4. Set the debugging breakpoint behind AfxMessageBox. When you close the dialog box AfxMessageBox, the breakpoint will be activated.

#### For VC6.0:

 Open regedit.exe and navigate to HKEY\_LOCAL\_MACHINE/SOFTWARE/Microsoft/WindowsNT/CurrentVersion/AeDebug
 Change the following key values:

Key :Auto Value: 0

Key: Debugger

Value: C:\Program Files\Microsoft Visual Studio\Common\MSDev98\Bin\msdev.exe" -p %ld -e %ld

NOTE: Ensure that "YourAppName.exe" is consistent with the actual msdev.exe.

Key: UserDebuggerHotKey Value: 0

- 3. Restart your computer.
- 4. Call the function afxmessageBox when you need to debug.
- 5. Run your program. Then the dialog box afxmessageBox pops up.

- 6. Open Windows Task Manager.
- 7. Right-click on your application and choose Debug. VC6.0 will be started automatically.

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Demo.exe	exe		00	2 0 1	εĶ	Foxit RMS.	
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Show proc	esses fr	om all use	ers		[	End Proce	ess

i. Open the debug file and set the debugging breakpoint behind AfxMessageBox. When you close the dialog box AfxMessageBox, the breakpoint will be activated.

#### How to Understand Common Error Conditions and Solutions

#### 1. When running your application, the error prompt may appear as below:

This application is not trusted to consume rights managed content. The application's rights management manifest is missing or is not valid. Contact your application support for further investigation.

#### Action required to fix the error:

Make sure you regenerate your application manifest every time you rebuild your application.

#### 2. When running your application, the error prompt may appear as below:

This operation could not be completed because a debugger was detected.

#### Action required to fix the error:

Please choose the option **Start without debugging** under the menu Debug of the Visual Studio to debug and run your program.

#### **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 <u>here</u>.
- 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.

- Office Address: Foxit Software Incorporated 42840 Christy Street. Suite 201 Fremont CA 94538 USA
- Mailing Address: Foxit Software Incorporated 42840 Christy Street. Suite 201 Fremont CA 94538 USA
- Sales: 1-866-680-3668 (24/7)
- Support: 1-866-MYFOXIT or 1-866-693-6948 (24/7)
- Fax: 530-535-9288
- Website: www.foxitsoftware.com
- E-mail:

Sales and Information - <u>sales@foxitsoftware.com</u> Technical Support - Input <u>a trouble ticket online</u> Marketing Service - <u>marketing@foxitsoftware.com</u>