Foxit PDF Web Reader for SharePoint
Advanced Configuration Guide

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Overview

Foxit PDF Web Reader provides four advanced configuration types to help the administrator control the reader's functions. The configurations are frontend web server configuration, PDF's conversion configuration, cache's configuration and log configuration. In this guide, this document will provide a description of how to use them in detail.

Frontend Web Server Configuration

The fronted Web Server configuration provides configuration to PDF viewing functions. The configuration is valid for different web applications.

Feature list

- View
- Zoom
- Go to page
- Bookmark view
- Thumbnail view
- File Properties
- View annotation and pop-up note
- Link action
- Shortcut key support
- File with password
- Text search
- Select and copy text
- Highlight form field
- Form filling
- Export form data
- Add watermark (static and dynamic)

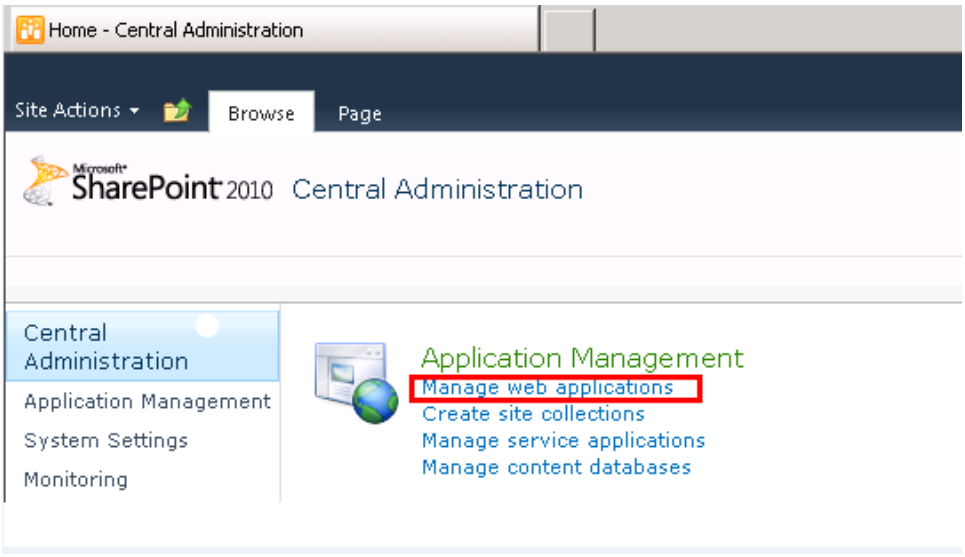
Administrator can enable/disable the functions accessible to end users For example, if Administrator does not want to allow the end user to select and copy the text, he/she can just disable the text selection and copy function.

Besides, PDF Web Reader also supports adding watermarks, including static text watermark (i.e. fixed text content) and dynamic watermark (including current device IP, name of current active account and current time). The watermarks will be added to the converted image of PDF file before be sent to the user.

Step by step introduction

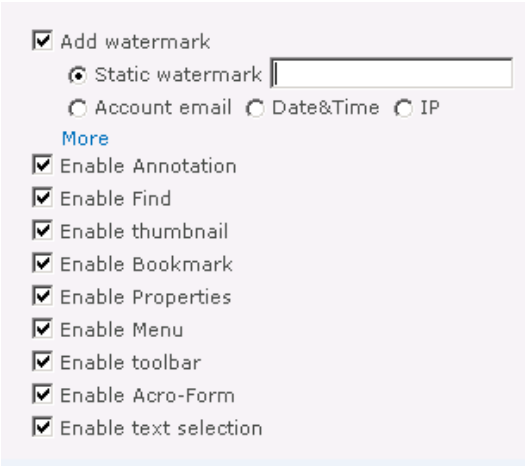
How to configure the frontend web server?

- Visit Central Administration of SharePoint, click "Manage Web Application" under “Application Management”.



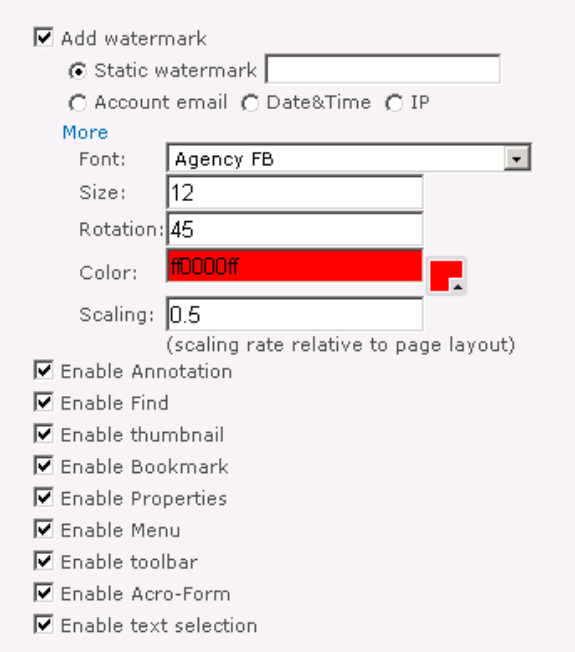
- Click the website to be configured, and choose SharePoint-80 (as shown below). Then the “Web Reader Plugin Setting” option in the toolbar will be activated, click it. (Note: Configuration to the administrator’s website is not supported. Therefore, the “Web Reader Plugin Setting” option will not be activated if you choose “SharePoint Central Administration v4”)

You will enter the configuration page as shown below:



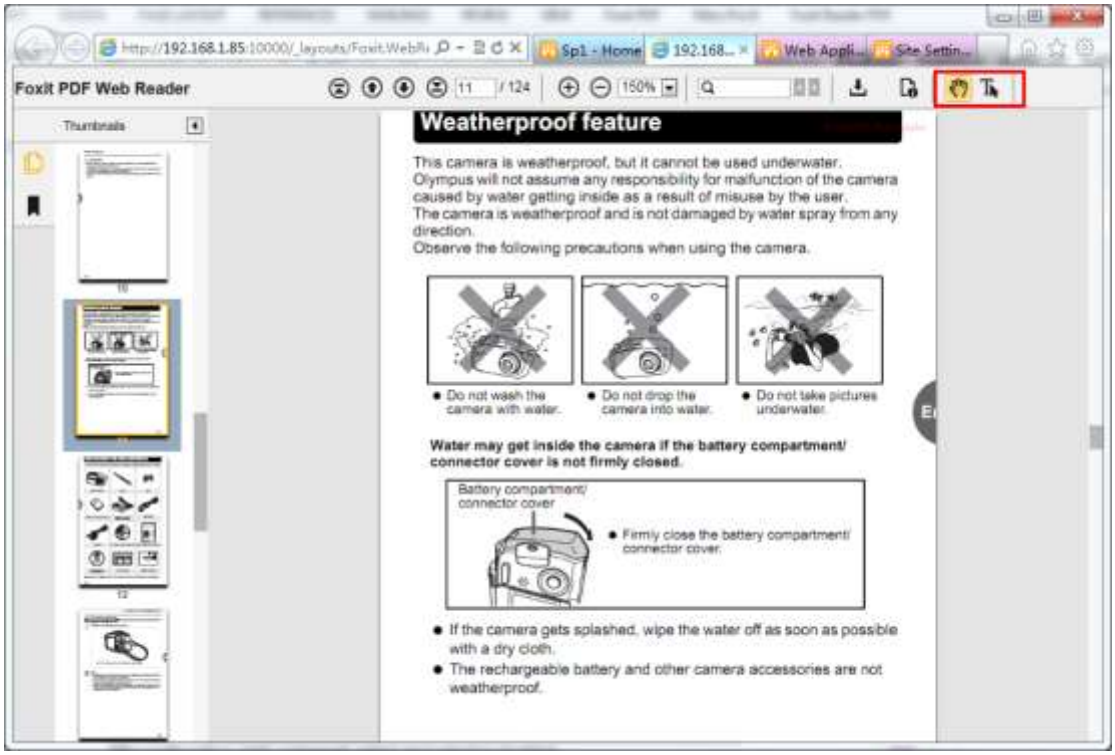
By default, all the functions of Web Reader, except the “Add watermark”, are enabled. If you

want to enable the watermark, just check the “Add watermark” option. Select one kind of watermark you like. Click more to set parameters of font size, font and color of watermark, etc. (Note: The listed fonts are those that are applied in the Web frontend server. Please make sure that the selected font has been installed in the SharePoint Server to ensure normal display of the watermark.)

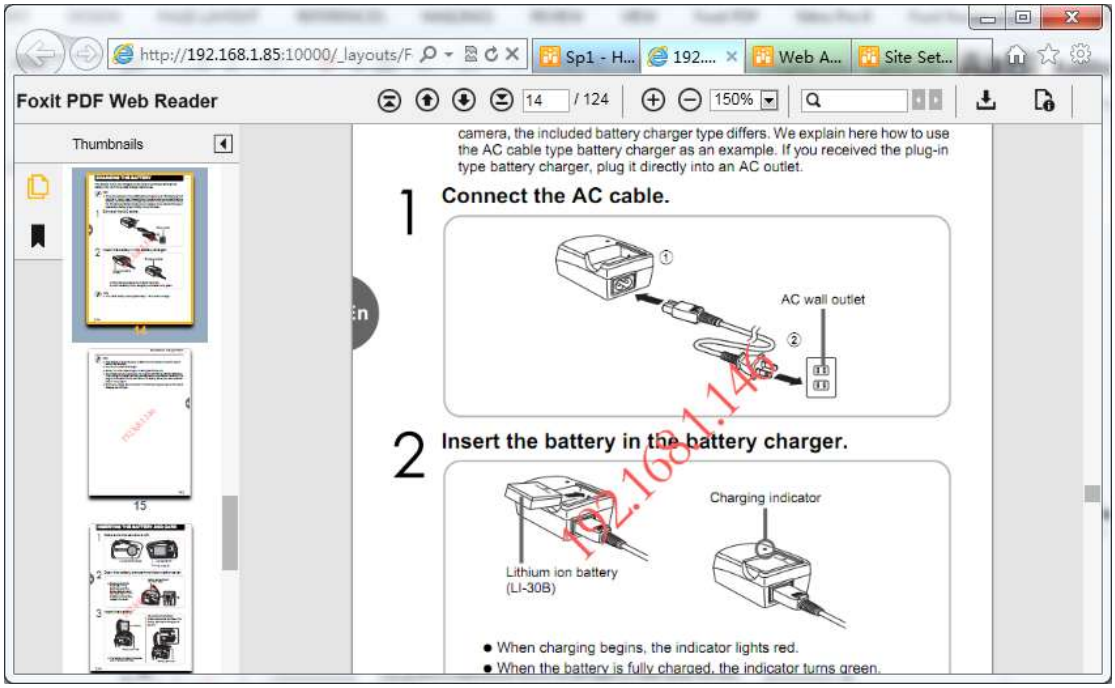


Below are the comparisons between PDF Web Reader before and after configuration:

Before configuration: no watermark added, text selection enabled:



After configuration: static watermark added, text selection disabled:



PDF Conversion Service Configuration

The PDF conversion service is the core function of PDF Web Reader, including functions such as converting a PDF to an image, extracting text information from a PDF, extracting PDF form data, and more. The conversion service configuration is used to set the parameters of conversion service Administrators can configure the parameters according to the performance of servers to optimize the performance and maximize the usability of the conversion service.

Configuration Options

Maximum number of conversion tasks	Maximum quantity of conversion tasks (must be greater than 0). You must reset IIS for this setting to take effect.
Conversion service request timeout	Set the conversion server timeout for requests from the Web server. This can prevent the Web server from waiting for extended periods. IIS must be reset for changes in this setting to take effect. The default value is 120,000ms.
Maximum thread quantity of thread pool 1	Maximum thread quantity of thread pool is 1. You must reset IIS before the configuration changes will take effect. Generally, this number should not be greater than the quantity of the total processor cores on the server.
Minimum thread quantity of thread pool1	Minimum thread quantity of thread pool is 1. You must rest IIS before the configuration changes will take effect. The default value is 2.
Maximum thread quantity of thread pool	Maximum thread quantity of thread pool is 2. You must reset IIS before the configuration changes will take effect.

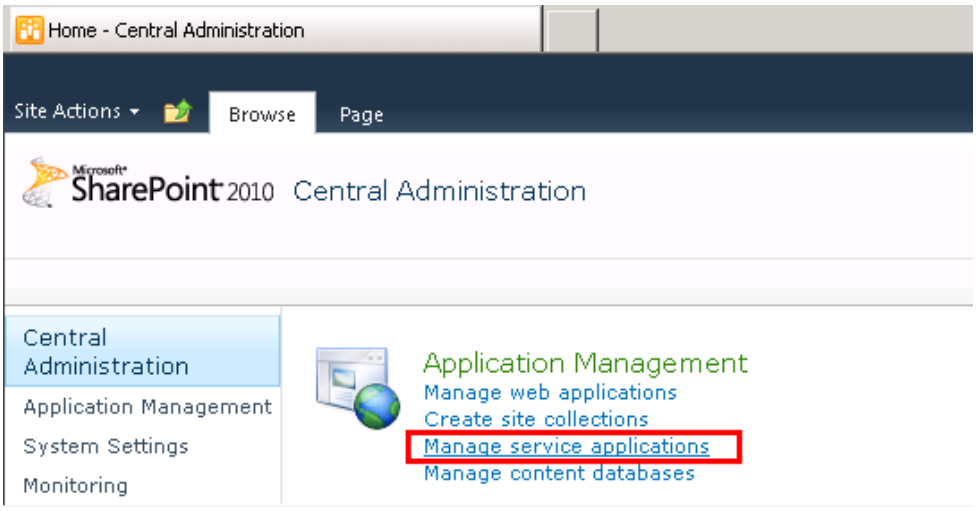
2	Generally, this number should not be greater than the quantity of total processor cores on the server.
Minimum thread quantity of thread pool 2	Minimum thread quantity of thread pool is 1. You must rest IIS before the configuration changes will take effect. The default value is 2.
Maximum image width	Set the maximum width of converted images. Setting this too high may cause excessively large images The default value is 4,096.
Maximum image height	Set the maximum height of converted images. Setting this too high may cause excessively large images. The default value is 4,096. Note: IOS enforces a maximum image size in Safari Mobile.
Vertical pixels per inch	When converting a PDF page to an image, the converted image width will equal (width of PDF*magnification*horizontal PPI)/72.
Horizontal pixels per inch	When converting a PDF page to an image, the converted image height will equal (height of PDF*magnification*vertical PPI)/72.

Note: Above configurations will take effect in all the application servers running with PDF conversion service.

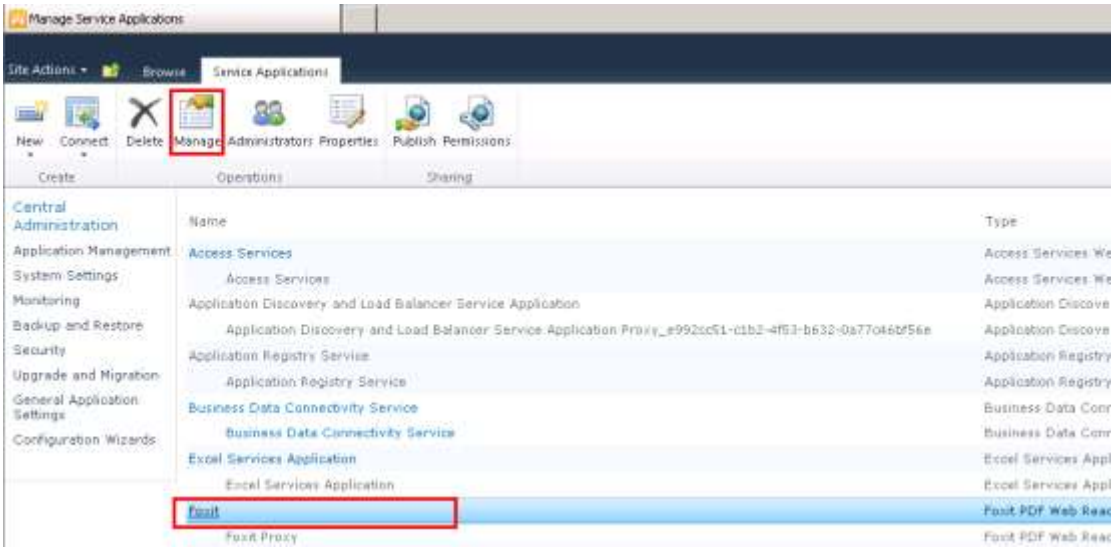
Note: There are two thread pools. Thread pool 1 serves for the conversion tasks which take shorter amounts of time. For example, converting just one page of a PDF to an image. Thread pool 2 serves for the conversion tasks that take longer. For example, converting a whole PDF document at a time.

Step by step instruction

- Visit Central Administrator of SharePoint, click “Manage service application” under “Application Management”.



- Find “Foxit” and select it, and then click the “Manage” button on the toolbar.



➢ Input the value you want to set and then click “OK” to save the configuration.

Cache Management Configuration

Some data files (such as images, PDF text, etc.) will be created when you view PDF files through PDF Web Reader on the server. It will consume some computer memory during data conversion. To reasonably reuse the data files as well as reduce memory consumption, PDF Web Reader will save the images and other converted data files to the content database of SharePoint as cache. PDF Web Reader will extract the data files in the cache directly if the requested file information has been stored in the content database.

There are two cache types for Web Reader, one is the temporary cache in the file system, another is the content database cache.
Temporary cache is stored in a specific directory of each server where “Foxit PDF Web Reader Conversion Service” is located. Foxit PDF Web Reader will synchronize the temporary cache to the content database cache folder regularly. The default path of the temporary cache directory is “C:\\FoxitWebReaderCache”. Check for more details in the last chapter “PDF Conversion Service Configuration”.

In a file library, if the file is not frequently updated, you can choose to set the Cache storage as large as possible and make the valid period set as long as possible as well. These settings help reduce the computer resource consumption. In a file library, if the file is frequently updated, you can reduce the storage size and valid period of cache as well for optimized performance.

Configuration Options

The cache storage size	The cache storage size. (byte) The default size is 100GB (1073741824 bytes) in an individual server or server farm.
Cache effective time	How long the cache will be stored. Cache data will be deleted automatically after the effective time. The default value is 30 days. The min value is 1.
Cache storage path	The path of cache. (Content database of SharePoint). To manage the cache of PDF Web Reader more easily, it is better to make the cache of PDF Web Reader independent to other content in the database. So you have to create an individual content database, and make sure it just includes one website collection. And then configure PDF Web Reader to use this database.
Job timer	Foxit PDF Web Reader includes 2 job timers. You can configure the timers in Central Administration.

Job timer

Timer name	Note
FoxitWebReaderCache CreateJob	Make sure each SharePoint Web application activated with Foxit PDF Web Reader for SharePoint is connected to Foxit PDF Web Reader for SharePoint cache to be stored. The timer will start every 5 minutes in default setting.
FoxitWebReaderCache ExpirationJob	Set the older files to be expired. Make sure there is some free space in Foxit PDF Web Reader for SharePoint cache. The timer will start daily in default setting.

You can also use PowerShell to set and get the configuration of Foxit PDF Web Reader for SharePoint Cache.

Set the storage size and effective time of Cache.

In this case, the storage size is 200GB, and effective time is 30 days.
Create a txt file and then copy and paste below the script to the txt:

```
$200gbInBytes = 1024 * 1024 * 1024 * 200
Get-SPWebApplication | Set-SPFoxitWebReaderCacheExpiration –CacheExpirationPeriodInDays 30
Get-SPWebApplication | Set-SPFoxitWebReaderCacheMaxSize –MaxCacheSizeInBytes $200gbInBytes
```

Note: CacheExpirationPeriodInDays is the effective time of the Cache (day);
MaxCacheSizeInBytes is the storage size of the Cache (byte).

Use .ps1 as the extension name and save this file in the folder the script is running from (C:\scripts by default).
Input below command to the Windows PowerShell, and then press Enter:

```
C:\<path>\<filename>.ps1
```

Get webapp first and then set the cache storage size and effective time by the following commands.

```
$webapp = Get-SPWebApplication
Set-SPFoxitWebReaderCacheExpiration –WebApplication $webapp –CacheExpirationPeriodInDays 30
Set-SPFoxitWebReaderCacheMaxSize –WebApplication $webapp –MaxCacheSizeInBytes $200gbInBytes
```

Get the value of cache storage size and effective time:

Use below script to get the cache effective time in PowerShell window

```
Get-SPWebApplication | Get-SPFoxitWebReaderCacheExpiration
```

Use below script to get the cache storage size in PowerShell window

```
Get-SPWebApplication | Get-SPFoxitWebReaderCacheMaxSize
```

Move the cache database with PowerShell **(highly recommend)**:

In this case, we will try to move the Web Application cache of *http://TestWebApp* to TestWebAppCacheDB.
Create a new txt file, and then copy and paste the script below to the txt:

```
$webapp = "http://TestWebApp"
$newDB = New-SPContentDatabase -Name TestWebAppCacheDB -WebApplication $webapp –DatabaseServer TestDataServer
Get-SPFoxitWebReaderCacheSite -WebApplicationURL  $webapp | Move-SPSite -DestinationDatabase $newDB
```

Notes:
-WebApplication and WebApplicationURL: the appointed URL of Web Application:
-Name: the appointed database name
DatabaseServer: the appointed database server instance.
Note:
Use .ps1 as extension name and save this file in the folder the script is running from (C:\scripts by default).
Input below command to the Windows PowerShell, and then press Enter:
C:\<path>\<filename>.ps1

Log Management Configuration

Foxit PDF Web Reader Plugin for SharePoint supports basic log management. With the log information, administrator can find out the error and try to solve them.

Type of Log

The log information is divided into three parts.

- Frontend log: The web server requests log information, the default path: C:\FoxitWebReaderLog\FrontEnd\, named by date;
- Conversion log: The PDF file conversion task log information, the default path: C:\FoxitWebReaderLog\Service\, named by date;
- Timer job log: Take record of the timer job log information. This log information is written into the log of SharePoint directly, so there is no need to configure individual log information.

Modify log storage path

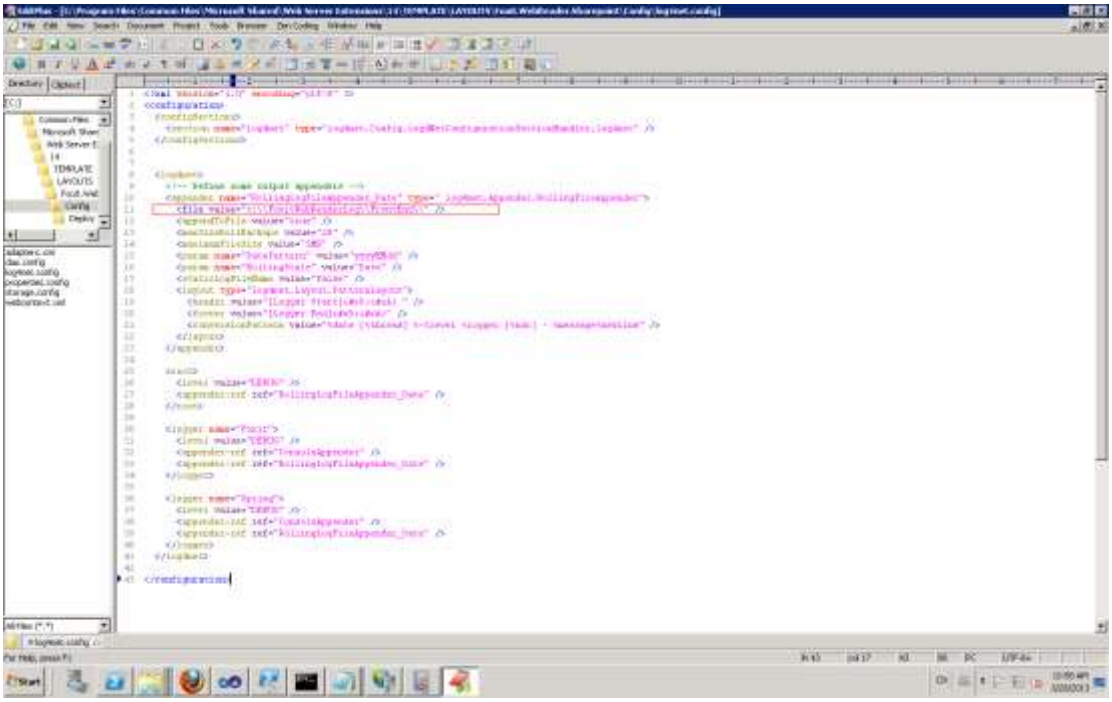
If you want to modify the storage path of the log, please follow the steps below:

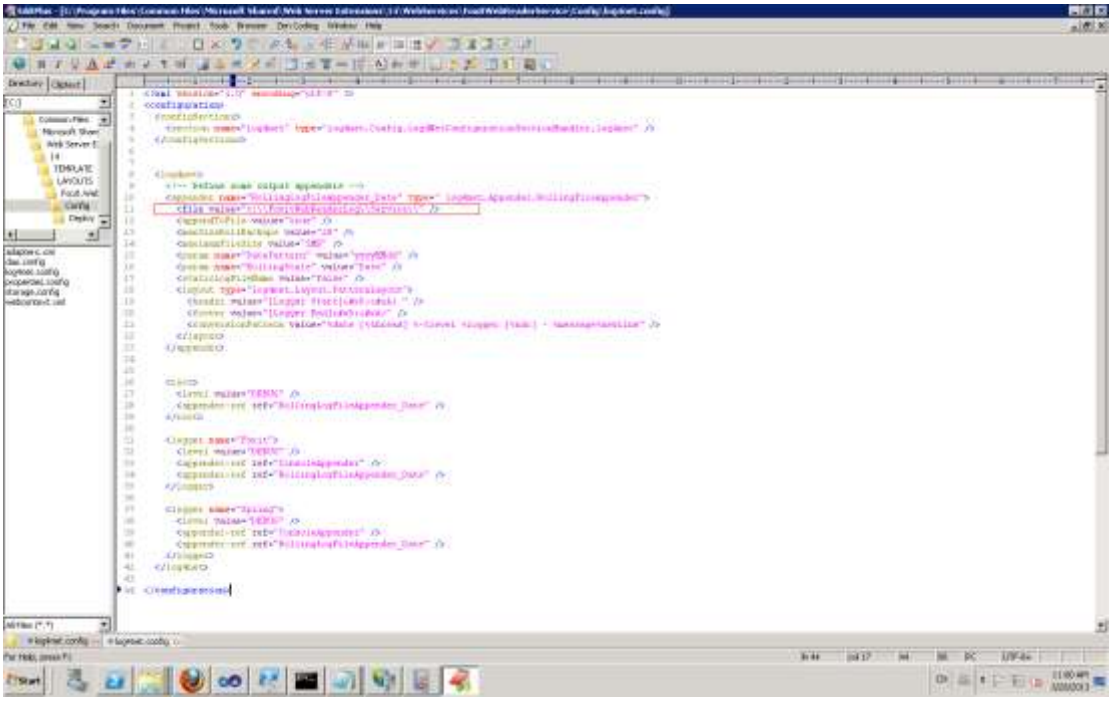
Modify the path of the frontend log

Open $SharepointRootPath\TEMPLATE\LAYOUTS\Foxit.WebReader.Sharepoint\Config

folder ($SharepointRootPath is the designated root folder of SharePoint installation)

- Open “log4net.config” file with Notepad, modify `<file value="c:\\FoxitWebReaderLog\\FontEnd\\" />` to a new path as below:



Modify the path of conversion log

- Open $SharepointRootPath\WebServices\FoxitWebReaderService\Config folder.
- Open “log4net.config” file within Notepad, modify `<file value="c:\\FoxitWebReaderLog\\Service\\" />` to a new path as below: