

# FocusOPEN Deployment & Configuration Guide

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## Revisions

This documentation relates to FocusOPEN 3.4.5.1

	Description	Version
1-6	Initial edition of notes, up to and including the first release.	3.3.1
7	Added note about using the 64-bit version of SQLite. Included post-deployment follow up activities section. Added Appendices with details about configuration	3.3.2
8	Added installation notes about Category Count updater. Added further notes about SQLite for 64-bit environments with specific reference to Elmah and APS. Added new configuration options descriptions to appsettings.config in appendix.	3.3.5.1
9	References to Elmah removed as this is no longer included. Added sections to enable ASP.NET in IIS if required. Added new AssetSourcePaths.config notes	3.3.6
9b	Corrected error about CommandLineApps folder in Category Count Updater installation notes.	3.3.6b
10	LightboxManager.MaxNumberCCEmails config key added to web.config settings explanations.	3.3.7
11	Added new sections to appsettings.config file relating to scripts and API. Added new web.config sections relating to new features and settings, including scripting, API, usability enhancements and other new configuration features. Added new AssetBitmapGroups.config section for new multi-size bitmaps.	3.3.9.5
12	Added screenshots to install process Added wkhtmlpdf dependency to third party installation Added warnings about changing paths for 64-bit installations Added warnings about session state server Added installation information for new command line applications Added new PdfEnginePath config setting to appsettings.config Added AuthPlugin setting to web.config Added AuthPluginConfig setting to web.config Added AuthEnableStatus setting to web.config Added AlwaysAuthenticateUser setting to web.config Added DisableShorthandSearchGrammar setting to web.config Added LargeOrderItemsThreshold setting to web.config Added LargeOrderMaxSizeMB setting to web.config Added NoPhysicalAssetDownloads setting to web.config Added DisableCartForNonPhysicalAssets setting to web.config Added AssetImageDownloadFormat setting to web.config Added EmbeddedMetadataMapping setting to web.config Added AssetTypesToExcludeFromDefaultCatalogueSearch setting to web.config Added EmbeddedMetadataMapping.config description Added AssetListViews.config description	3.4.1
13		3.4.2

	<p>Added notes about permission on APS folders and instructions for testing uploading.</p> <p>Added information about offline asset versioning application</p> <p>Added OfflineAssetVersioning setting to web.config</p> <p>Added DisableAssetVersioning setting to web.config</p> <p>Added StampThumbnails setting to web.config</p>	
14	<p>Added notes about new Application Data path</p> <p>Number of database set up files changed</p> <p>Added notes about storing ImageMagick Path</p> <p>Added notes about APS temporary path</p>	3.4.3
15	<p>Added watched folder command line application configuration</p> <p>Added workflow approval checker command line configuration</p> <p>Added other command line applications section</p> <p>Added AssetCommentFilesFolder setting to web.config</p> <p>Added CachedAssetFilesFolder setting to web.config</p> <p>Added ImportsFolder setting to web.config</p> <p>Added ImportJobSettingsFolder setting to web.config</p> <p>Added ImportAttachments setting to web.config</p> <p>Added TempFolder setting to web.config</p> <p>Added HomepagelImagesFolder setting to web.config</p> <p>Added DisableExtendedErrorHandler setting to web.config</p> <p>Added GuestAccount.Username setting to web.config</p> <p>Added GuestAccount.Password setting to web.config</p> <p>Added EnableGuestAccountLogin setting to web.config</p> <p>Added NotifyGroupManagerOnDownloadRequests setting to web.config</p> <p>Added AutoDelegateAssetsToGroupAdmin setting to web.config</p> <p>Added SuppressAutoDelegateEmailNotification setting to web.config</p> <p>Added DefaultWorkflowEnabled setting to web.config</p> <p>Added SuppressSubmitToWorkflow setting to web.config</p> <p>Added DefaultAssetDeletionUserLevel setting to web.config</p> <p>Added AccountNeverExpiresEnabled setting to web.config</p> <p>Added PasswordNeverExpiresEnabled setting to web.config</p> <p>Added EnableGuestAccountLoginAnyIPAddress setting to web.config</p> <p>Added EnableNoLoginGuestAccount setting to web.config</p> <p>Added ContactSheetImageSource setting to web.config</p> <p>Added AuthPluginOverritesNativeUserRoleAndStatus setting to web.config</p> <p>Added EnableCustomButton setting to web.config</p> <p>Added CustomButtonMinimumRole setting to web.config</p> <p>Added TemplateCataloguingFieldsToExclude setting to web.config</p> <p>Added AssetHoverCaption setting to web.config</p> <p>Added AssetHoverWidth setting to web.config</p> <p>Added AssetHoverShowPreview setting to web.config</p> <p>Added AssetHoverPreviewType setting to web.config</p> <p>Added AssetHoverPreviewBitmapGroupIndex setting to web.config</p> <p>Added SwapCommasForNewlinesInKeywordsEmbeddedMetadata setting to web.config</p> <p>Updated appsettings.config with revised descriptions of settings.</p>	3.4.3.1

	lightbox_fields.config, cart_fields.config and order_fields.config settings notes added	
16	<p>Added information about command line applications: asset expiry notifier and text extractor.</p> <p>LoosePermissionModeEnabled config setting removed.</p> <p>Added ResultThumbnailHyperlinkIdentifier to web.config  Added ResultThumbnailAdditionalInfoIdentifier to web.config  Added SlideShowVisible to web.config  Added MetadataSearchLinks to web.config  Added WatermarkByDefault to web.config  Added ShowExcludeShortDescriptionFilter to web.config  Added ShowExcludeGroupNameFilter to web.config  Added ShowCropOptions to web.config  Added DefaultPrimaryGroup to web.config  Added GroupPluralSuffix to web.config  Added ChooseCompanyFromDropDown to web.config  Added EnableCompanyNameTextBox to web.config  Added HideCompanyNameTextBoxIfDisabled to web.config  Added PublishToWorkspaceCopy to web.config  Added KeepForPersonalUseCopy to web.config  Added AdminPersonalLinkCopy to web.config  Added SSOLinksOnUserProfile to web.config  Added DisablePDFContactSheets to web.config  Added ContactLink to web.config  Added NumericSearchTermsMatchAssetIDsOnly to web.config  Added UseFreetext to web.config  Added FilterSearchPunctuation to web.config  Added ApprovedSearchCharacters to web.config  Added FilterAdminSearchForAssetUploaders to web.config  Added AllowPreviewsForContactSheets to web.config  Added LinkLightboxTerm to web.config  Added ShowGeoLocLink to web.config</p>	3.4.4.0
16c	<p>Added information on inclusion of pdftotext</p> <p>Added AlphanumericallySortCategoriesByDefault to web.config  Added EditableDuration to web.config  Added ContactSheetSendingMinimumRole to web.config</p> <p>Added note about permitted enumerations for ChooseCompanyFromDropDown and EnableCompanyNameTextBox</p>	3.4.4.4
17	<p>Added EnableRoleIDToViewEditAssetsOutsidePrimaryGroup to web.config  Added GenericAssetTypeName to web.config  Added AutoSelectedPrimaryGroup to web.config</p>	3.4.5.1
18	Added notes to remind users that .NET 3.5 is required	3.4.6.0

	<p>Note about use of ASP.NET session state server added Reminder about FocusOPEN not being usable with the .NET 4.0 framework added.</p> <p>Added AddToCartReminderMessage to web.config Added AutoUpdateExpiryOnAssetFileReplacement to web.config Added NewlineReplacementChar to web.config Added UsePDFToTextForPDFTextExtraction to web.config Added HideGroupMetadataDropDownViewSelector to web.config Added ShowIncludeUnpublishedExpiredAssetsFilter to web.config</p>	
19	<p>Added details of two new command line applications:</p> <p>BatchCSVImporter AssetFileMigrator</p> <p>Added notes recommending which command line applications should be installed and set up with Windows scheduler:</p> <p>Category Count Updater Offline Zip Processor Broadcast Sender Asset Expiry Notifier</p> <p>Added EnableMetadataObjects to web.config Added MaximumAssetFormSearchObjectsToDisplay to web.config Added DisableAddingOfNewMetadataObjects to web.config Added DisableEditingOfMetadataObjects to web.config Added HideGroupMetadataDropDownViewSelector to web.config Added MaximumImportAutoGenerateMetadataThreshold to web.config Added ImportCarriageReturnCharacter to web.config Added ImportParserHasFieldsEnclosedInQuotes to web.config Added VerboseImportLogging to web.config Added AutoSwapUnderscoresForSpacesInTitle to web.config Added UseAPSPForImageTransformations to web.config Added UseAdvancedMetadataManager to web.config Added SkipRecordsWithInconsistentNumOfFields to web.config Added AppUnavailableIPAddressExclusionList to web.config Added DoNotProcessUploadsOrImports to web.config Added CopyFailedImportsToFailedFolder to web.config Added EnableRoleIDToDownloadUnpublishedAssetsAssetsOutsidePrimaryGroup to web.config Added EnforceNativeBlankPasswords to web.config Added DefaultShortDescription to web.config Added AllowDuplicateAssetsAcrossBrands to web.config</p>	3.4.7.1
20	<p>Added new section about requesting an APS registration key to remove watermark (appendix D)</p>	3.4.8

<p> Added APIFileFolder to web.config  Added APIPersistentDataFolder to web.config  Added APSInstanceToUse to web.config  Added APSLoadBalanceType to web.config  Added TemplateCataloguingSupportsPublishing to web.config  Added LMAPLStatus to web.config  Added MaximumFileVersions to web.config  Added ImageExtensions to web.config  Added ThumbnailCustomIdentifierData to web.config  Added EnableAPIPersistentDataFileSystemCopies to web.config  Added SuppressCategoryCounts to web.config  Added CollectionsGuestAccount to web.config  Added ArbitraryFileDataEnabled to web.config  Added ArbitraryFileDataAllowedExtensions to web.config  Added SavedSearchesStatus to web.config  Added EnhancedLightboxStatus to web.config  Added BatchImportSimpleMode to web.config  Added OptionalNavURL to web.config  Added OptionalNavURLAnchorText to web.config  Added OverrideCartBrandLink to web.config  Added NoDedicatedUploadURLForUploadUsers to web.config  Added HideSearchDDLSearchMetadataInput1 Filter to web.config  Added NoUploadingDigitalAssets to web.config  Added AvailableCatalogueSortHyperlinks to web.config  Added ShowAscDescSorting to web.config  Added ShowDisableFOBadgeOnBrandForm to web.config  Added DisableCustomSortOnListView to web.config  Added DocumentTextFilterDisabledByDefault to web.config  Added DocumentTextFilterDisableFeatureEnabled to web.config  Added HideFileColumnInListViewSearchResults to web.config  Added HideNonCoreSystemMetadataOnAssetForm to web.config  Added ShowZoomControl to web.config  Added IncludeTotalCountOnAssetExport to web.config    Added new APIFilePaths.config config file  Added new APSControlStrings.config config file  Added new StringSettings.config config file </p>	
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## A. Overview

The deployment package contains everything required to install and start using FocusOPEN. The steps below assume that the application will be installed to C:\FocusOPEN. If a different folder path is to be used, please modify the settings accordingly. See Appendix B: FocusOPEN Application Configuration Reference Guide for more information.

If you are upgrading from a previous version of FocusOPEN, consult the Developer's Wiki for up to date upgrade instructions:

<http://www.focusopen.com/wiki/>

## B. Target Readership

This guide should be read by developers and engineers who wish to deploy FocusOPEN Digital Asset Manager within their organisation. The document contains detailed technical instructions that assume a reasonable degree of familiarity with Windows, Internet Information Server (IIS), SQL Server and the deployment of ASP.NET web applications.

## C. Prerequisites

1. Microsoft Windows Operating System running IIS6-8 or above.
2. SQL Server 2005/2008/2012
3. .NET Framework 3.5\*

\* <http://msdn.microsoft.com/en-us/netframework/cc378097.aspx>

Note: FocusOPEN uses the .NET 3.5 framework (ASP.NET Classic). Using the application with .NET 4.0 or above is not currently supported.

Session State Server  
FocusOPEN uses the ASP.NET session state server.

## D. Test Installation Instructions

1. *Download the FocusOPEN release package.*

Unzip this to C:\FocusOPEN, which will create the following folder structure:

Installers	Contains:
	FocusOPEN_APS - the setup package for installing the asset processing service
	ImageMagick – the setup package for ImageMagick
	GhostScript – the setup package for GhostScript
	wkhtmltopdf - the setup package for the wkhtmltopdf HTML to PDF conversion tool



ColorProfiles: The colour profiles used for image processing.  
Data: This is where data is stored on disk. The folder contains a script that can be executed to create the subfolder structure required by the application and setup the required permissions.  
DatabaseSetup: Database installation scripts.  
WebRoot: The web application. IIS should be pointed to this folder.

## 2. Edit configuration settings

Application configuration settings are stored in WebRoot/Config/AppSettings.config. The following settings must be updated before the web application can be used:

ConnectionString  
Error.ToEmail

You may also need to change the value of the Email.MailServer if not running default IIS SMTP services on your deployment server.

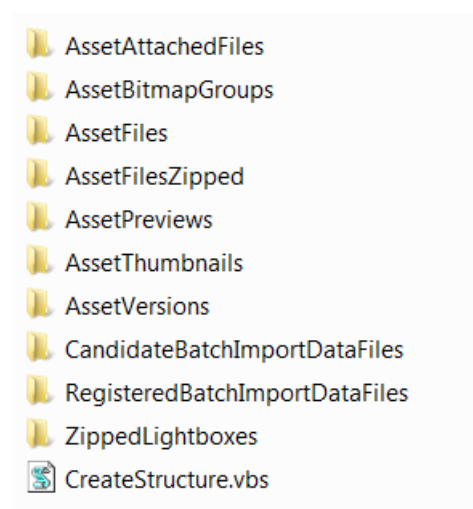
There are many other settings also described in the Appendix which can be used to modify the behaviour of the FocusOPEN application. We recommend leaving most settings unchanged for an initial install as this will simplify the resolution of any deployment problems you might encounter.

## 3. Setup the data and application data folders

Asset files are stored in Data subfolder. In a default install of FocusOPEN, these paths should be included in the deployment package, however, they might not have the correct permissions. To create the subfolders, double-click:

Data\CreateStructure.vbs.

This will create folders for asset files, previews, thumbnails and the homepage. It will also give *Everyone* full access to this folder as the web application must have the ability to read, write and delete in this folder.



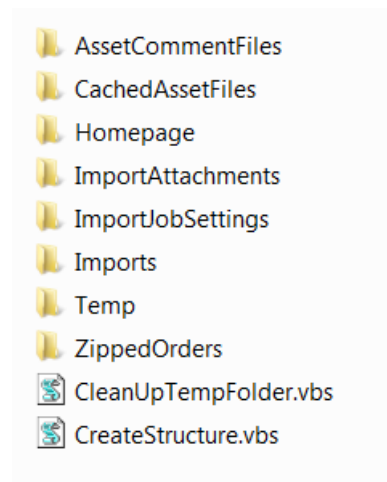
The DeleteFile.vbs script will reset all asset files stored in these folders and should be used with extreme care (it is not required for installation).

### 3.b Set up the Application Data Folder

This was introduced in version 3.4.3 and separates asset data which is usually referenced from the database with application data such as home pages, imports (loading assets) temporary files. Again, the defaults should be included in the package, double click:

```
ApplicationData\CreateStructure.vbs
```

This will create the Application Data folders with *Everyone/Full Control* permissions:



It is very important that you assign full permissions to the Imports folders as this is where upload files are copied to before being loaded.

The CleanUpTempFolder.vbs script can be set up as a scheduled job and run daily to delete and temporary files.

## 4. Install the database

The DatabaseSetup folder contains at four SQL script files which are used to create the empty database, setup the schema, insert default data and add feature upgrades. From version 3.4.3 onwards, version 3.4.2 is used as the baseline and feature extensions are included in the 4th script to simplify the upgrade process. The install.cmd will set all of this up for you.

Edit install.cmd and change the value of the target SQL Server instance you wish to install FocusOPEN to. Below is the line you need to amend:

```
set FocusOPENDB_SQLSERVER= (LOCAL)
```

Then execute install.cmd.

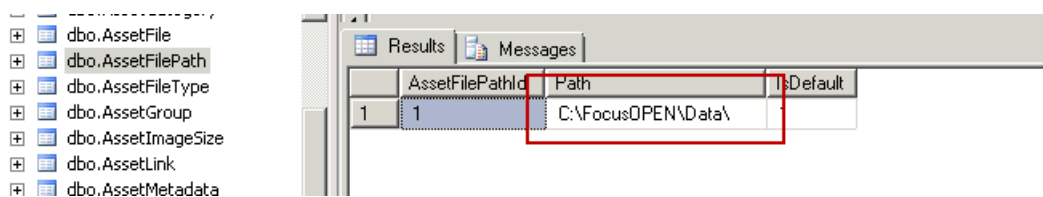
This will try and connect to the local SQL server using the logged in user's Windows credentials.

Note: the default database will install to 'FocusOPEN'. If you wish to change this, you must edit the name of the database. It is recommended to create a master database, make a backup and restore that if you wish to use a different name.

### 5. Change the Data storage path in the database

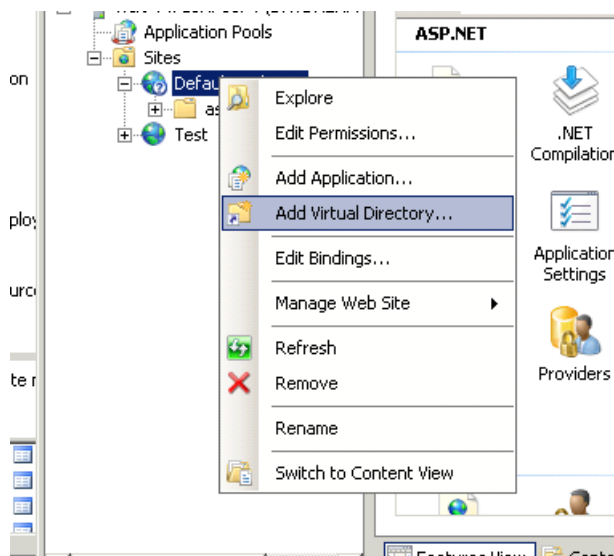
If you are not using the default location of c:\FocusOPEN\data\ then you need to change the folder in the database. The data storage path determines where assets are stored in the Windows file system.

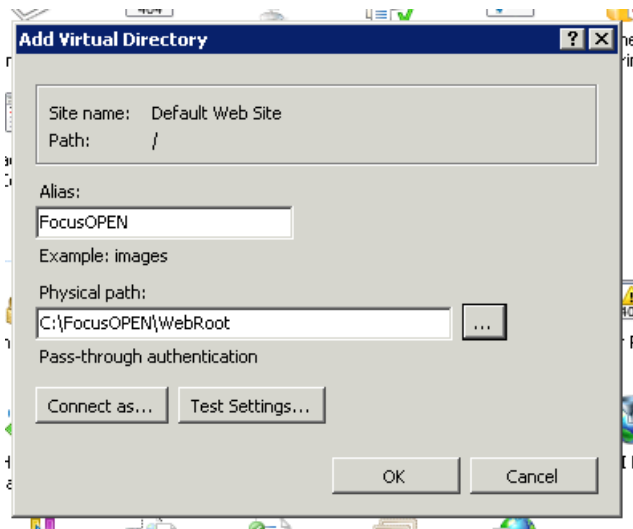
Open SQL Server Management Studio, locate the FocusOPEN database and open the AssetFilePath table. Amend the path to your required location.



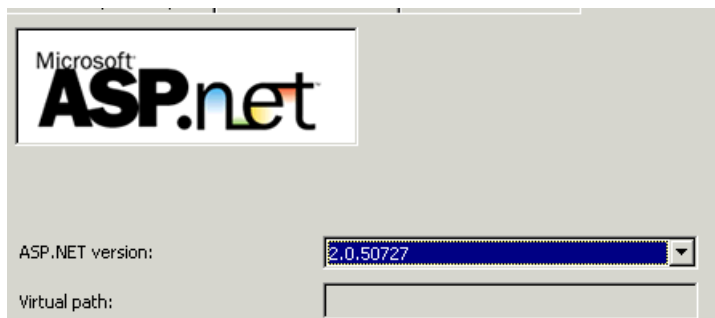
### 6. Setup IIS

Create a new virtual directory named FocusOPEN and point it to c:\FocusOPEN\WebRoot.

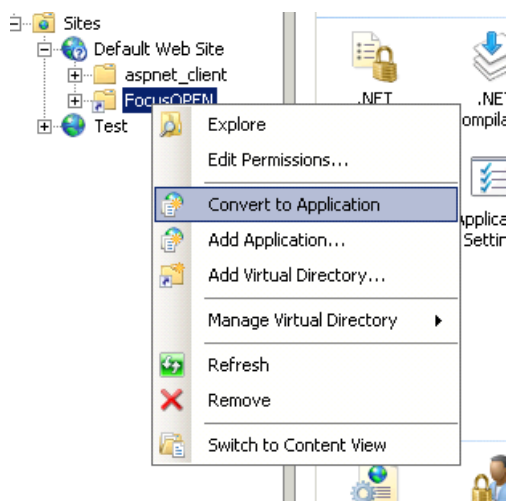


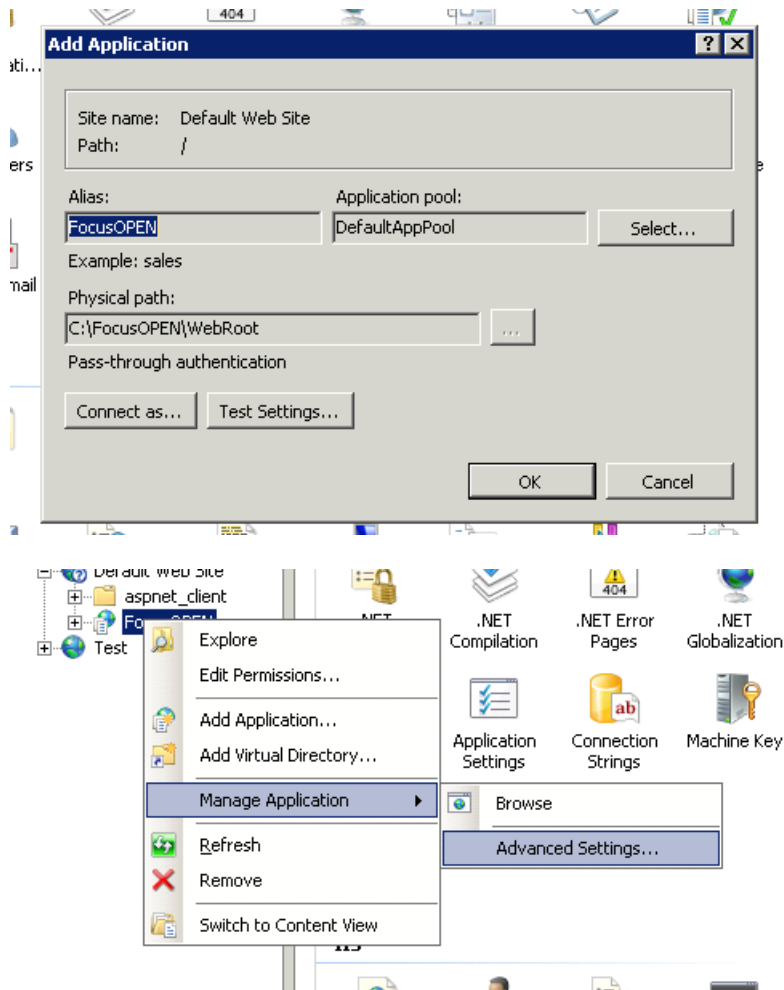


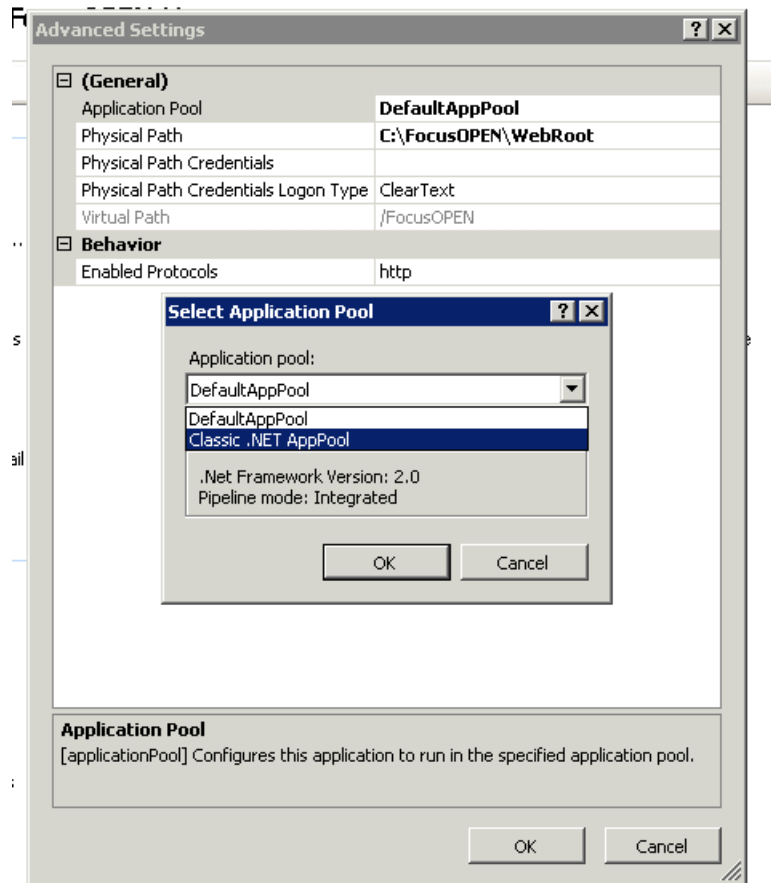
If using IIS6 where an older version of the .net framework such as 1.x has been installed before (e.g. as a default) then you will need to change the ASP.NET version to 2.x



If you are using IIS7, you will need to create an application by clicking on 'Convert to application', then ensure that the application is set up to use the *Classic .NET AppPool*. This can be done by right-clicking on the application, and selecting *Manage Application - Advanced Settings*.







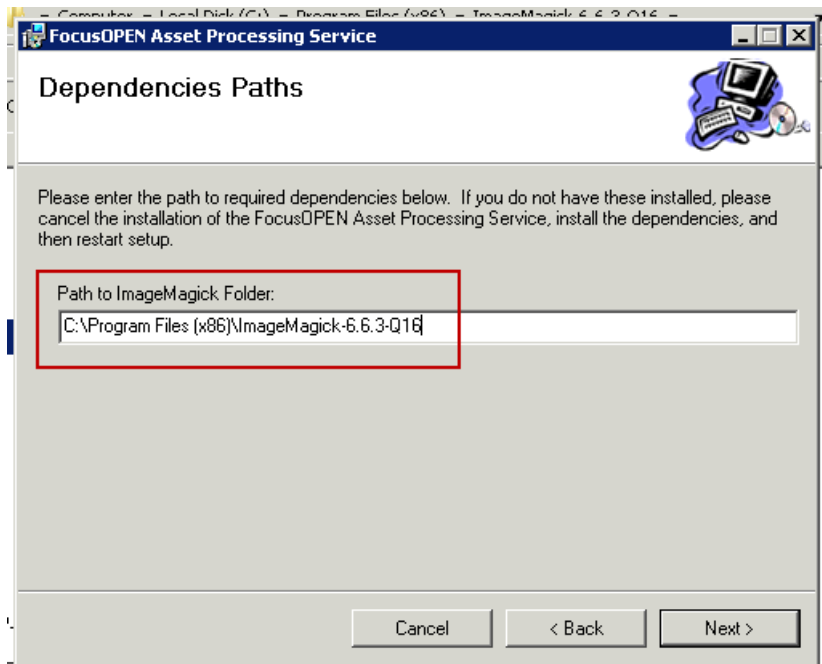
**NOTE: FocusOPEN requires .NET 3.5 framework, you cannot use FocusOPEN with .NET 4.0 at this time.**

## 7. Install Dependent Applications

From within the folder C:\FocusOPEN\Installers

- Run the setup program in the ImageMagick folder. ImageMagick will offer a default path for installation - **important, copy the full path of this folder as you will need it later\***
- Run the setup program in the GhostScript folder.
- Run the setup program in the wkhtml2pdf folder.
- Run the setup program in the FocusOPEN\_APS folder. This will install the asset processing Windows service and start it, ready to receive asset processing requests from the web application.

\*Note: the APS installer will prompt you to specify the location of ImageMagick (usually in the program files folder on the system drive). Check the path is correct for your version of ImageMagick. If installing to a 64-bit edition of Windows, the default program files folder will often be incorrect (e.g. " C:\Program Files\ImageMagick-6.6.3-Q16\" where "Program Files (x86)" would be the required path).



## 7.1 Check Dependent Application Paths

If you do need to modify the ImageMagick location you will also need to change the value of key="ImageMagickFolder" in config/appsettings.config

```

<add key="ConnectionString" value="Data Source=(LOCAL);Initial Catalog=FocusOPEN;User ID=
<add key="ImageMagickFolder" value="C:\Program Files (x86)\ImageMagick-6.6.3-Q16" />
<add key="PdfEnginePath" value="C:\Program Files (x86)\wkhtmltopdf.exe" />
<add key="BaseFolder" value="C:\FocusOPEN" />
<add key="DataFolder" value="##BaseFolder##\Data" />
<add key="ColorProfilesFolder" value="##BaseFolder##\ColorProfiles" />
<add key="APILogFolder" value="##BaseFolder##\Logs\API"/>

```

The same is also true of the PdfEnginePath for wkhtmltopdf. If you do not specify either of these correctly, you may get an error like the following:

### Server Error in '/FocusOPEN' Application.

**File 'C:\Program Files\wkhtmltopdf\wkhtmltopdf.exe' does not exist**

**Description:** An unhandled exception occurred during the execution of the current web request. Please review the stack trace for more information about the error and where it originated in the code.

**Exception Details:** System.SystemException: File 'C:\Program Files\wkhtmltopdf\wkhtmltopdf.exe' does not exist

#### Source Error:

An unhandled exception was generated during the execution of the current web request. Information regarding the origin and location of the exception can be identified using the exception stack trace below.

#### Stack Trace:

```

[SystemException: File 'C:\Program Files\wkhtmltopdf\wkhtmltopdf.exe' does not exist]
FocusOPEN.Website.Global1.CheckFileExists(String path) +203

```

**Version Information:** Microsoft .NET Framework Version:2.0.50727.4927; ASP.NET Version:2.0.50727.4927

## 64-bit Windows Editions

There are some known issues and workarounds for users of 64-bit Windows and the APS, see the troubleshooting notes at the end if you intend to deploy to 64-bit Windows.

## 7.2 APS Temporary Files Folder

The APS creates a temporary folder where proxy files like previews and thumbnails are created before being returned back to the client application (i.e. FocusOPEN). This is usually in the Windows\temp folder, e.g

```
C:\Windows\Temp\FocusOPEN-APS\
```

### Important Note

You must ensure you give either *Everyone/Full Control* permissions to this folder, or at least the ability for the IIS WPG user to read/write to it. If the permissions are not set appropriately for this folder, the FocusOPEN web application will not be able to access it to copy previews, thumbnails and bitmap groups back to the asset data folder defined in the database.

### 7.2.1 Changing the APS Temp Files Folder

Sometimes it can be necessary to change the location of the temp folder, you can specify this by modifying the FocusOPEN.APS.WinService.exe.config this is usually in the default installation folder, e.g.

```
C:\Program Files (x86)\FocusOPEN Software\FocusOPEN Asset Processing Service\
```

The key to edit is:

```
<add key="TempPath" value="" />
```

If blank, this will use the system default (described in the previous section).

## 7.3 Setting up PDF Text Indexing

From FocusOPEN 3.4.4.0, text content like Office or PDF documents are converted to raw text before being stored in the database rather than as BLOBs. The Adobe PDF iFilter is normally used to extract text content but on 64-bit platforms this can be unreliable and prone to failure.

In FocusOPEN 3.4.4.4 and above, if the iFilter method fails to extract text, the open source command line pdftotext application will be used instead. This process is transparent and apart from configuring the location properly, the user does not need to do anything. More details on this application are here: <http://www.foolabs.com/xpdf/download.html>

pdftotext does not require installation, the application needs to be copied somewhere where it can be run and is launched by the FocusOPEN web application. Two settings needs to be changed in appsettings.config:

- PDFToTextPath
- ExtractedPDFTextFolder

A copy of pdftotext is included in the Extras folder in the deployment package and the default references that, however, you may wish to copy this to an alternative location.

The ExtractedPDFTextFolder is normally stored in the Application Data folder and will be created if it does not exist. If you have permissions problems, try creating the folder



manually. When PDF files are uploaded, you should see copies of the text content stored in this folder using the same zero padded asset ID as used for asset files, previews, thumbnails etc.

8. Check everything is working.  
Browse to <http://localhost/FocusOPEN/>

**FocusOPEN** DIGITAL ASSET MANAGER

Enter your email and password below. If you have forgotten your password, enter your email address below and press "forgot password?" to have it emailed to you.

You have been logged out

<b>Username or Email</b>	<input type="text"/>
<b>Password</b>	<input type="password"/>

remember my login name next time

**Not registered?** Daydream employees and suppliers can apply for access by [registering here](#).

---

This facility is not available to the general public. It is for the sole use of employees and approved suppliers. Attempting unauthorised access to this facility is forbidden and may result in action being taken against you.

Login using the default credentials – email: [admin@example.com](mailto:admin@example.com), password: password.  
You will be required to change your password the first time you login.

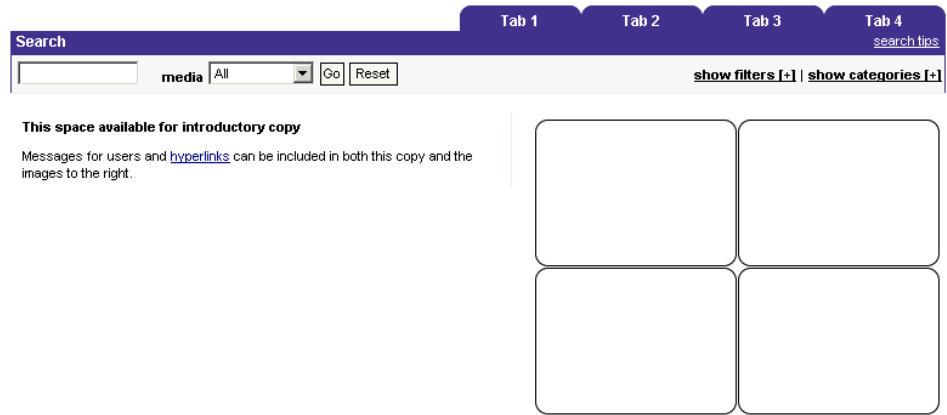
**FocusOPEN** DIGITAL ASSET MANAGER

Enter your old password, a new password and confirm.

<b>Old Password</b>	<input type="password"/>
<b>New Password</b>	<input type="password"/>
<b>Confirm</b>	<input type="password"/>

---

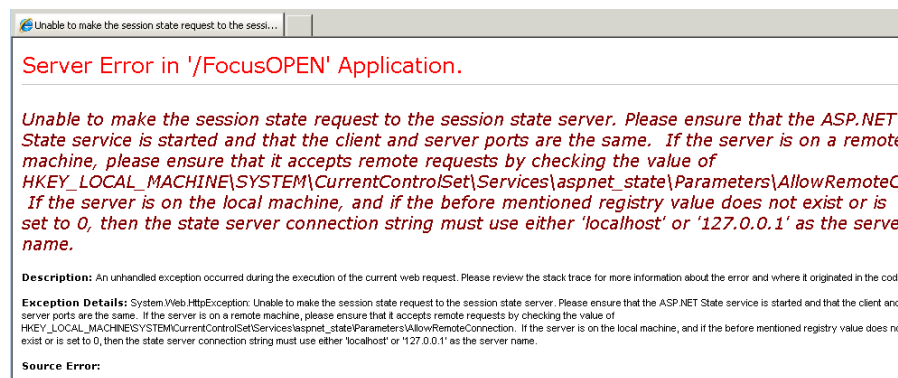
This facility is not available to the general public. It is for the sole use of Daydream employees and approved suppliers. Attempting unauthorised access to this facility is forbidden and may result in action being taken against you.



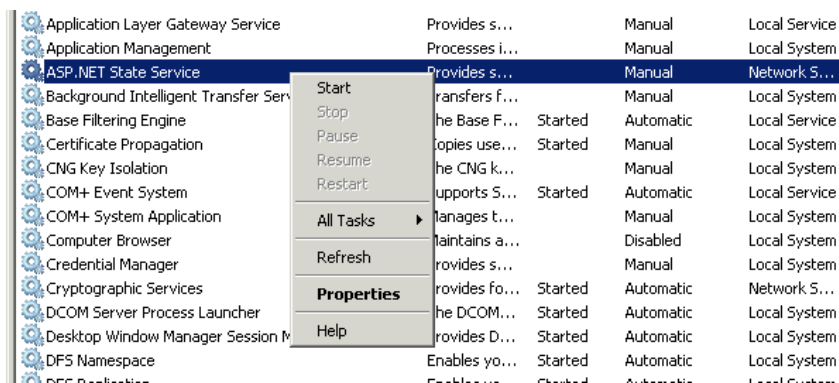
### 8.1 Session State Server

If you receive an error message like:

"Unable to make the session state request to the session state server. Please ensure that the ASP.NET State service is started and that the client and server ports are the same."



You need to start the ASP.NET session state service in the Services control panel:



## 8.2 Testing the FocusOPEN APS

The FocusOPEN APS (Asset Processing Server) generates proxy files (previews) such as preview images for static media or web viewable media for dynamic assets such as video or audio. Once you have got the FocusOPEN web application working, the next task is to check uploading is working correctly and that previews are generated for common types of media.

Before proceeding with an upload, check the permissions on the FocusOPEN system temp folder (created when the service starts). Normally this will be something like:  
C:\Windows\Temp\FocusOPEN-APS

To test the upload and APS functionality, use the following instructions. You need a test file, a relatively small image (e.g. JPEG) is a good choice.

- Go to the Admin area and select Assets > Upload New Asset:



Admin Area allows users to manage the system and contact your system administrator.

- Choose a file by clicking browse:

**Upload assets.**  
Many files of the same type can be uploaded at once if zipped. | [Uploading zip files](#)  
Note: fields marked \* are required | [view assets to be catalogued](#) | [view all assets](#) | [help](#)

Select File \*  Browse...

**[+] show extended upload options**

email me when video previews have been processed  
 map embedded metadata

**! Copyright Warning:** Please ensure that the copyright and usage rights are available before uploading your assets. All copyright, usage and download rights must be specified before assets can be published to the system.

upload

- The upload progress bar will be displayed:

email me when video previews have been processed  
 map embedded metadata

---

**Upload Status:** 2.16/7.35 MB (29%) at 995.7 KB/s - 00:05 left cancel

---

! **Copyright Warning:** Please ensure that the copyright and usage rights are available before uploading your assets. All copyright issues and download rights must be specified before assets can

- Once the upload has been completed, you will see a screen like this:

#### UPLOAD ASSETS

✔ **Successfully uploaded 1 asset**  
 - IMG\_1073.jpg

#### What do you want to do now?


- [View assets to be catalogued](#)
- [View all assets](#)
- [Upload asset\(s\)](#)

- The APS usually takes about a minute or two to process each asset. Wait for a while and then click 'View all assets to be catalogued'. You should then see Catalogue Step 1:

#### Select uploaded assets to catalogue.

Note: fields marked \* are required | [upload more assets](#) | [view all assets](#) | [help](#)

**Type \*** All

Reference Number *	Thumbnail
All assets uploaded by you which have yet to be catalogued. (CTRL + click to select more than one.)  <div style="border: 1px solid #ccc; padding: 5px; min-height: 100px;">             2 (IMG_1040.jpg)           </div>	 IMG_1040.jpg <a href="#">Delete Asset</a>

[select all assets](#)

- This means the upload is working correctly. If where the thumbnail is displayed, you see 'Processing' it usually means the APS is still processing your asset into a thumbnail.
- If you see a 'Not Available' icon like this:



this means the asset has failed to process.

The most common issue is your temporary folder which will usually be in a location like: C:\Windows\Temp not having sufficient permissions to allow the APS to write the proxy files like preview, thumbnail etc.

If you just need to get this working, it's simplest to assign the 'everyone' group full control to this folder and then tighten the permissions later if you need to.

This wiki article has more information on various diagnostic techniques for finding out why the APS is not working if the above is ineffective:

<http://www.focusopen.com/wiki/troubleshooting/aps-issues/>

### 9. *Installing the Dependent Command Line Applications (versions 3.3.5.1 +)*

FocusOPEN includes a number of dependent command line applications that are required to enable non-interactive tasks to be processed outside the web process. These are not mandatory but may restrict the functionality of the application if not set up.

The following command line applications are recommended for conventional use:

- Category Count Updater
- Offline Zip Processor
- Broadcast Sender
- Asset Expiry Notifier

#### 9.2 Category Count Updater (versions 3.3.5.1 and above)

The Category Count updater keeps the asset totals for each metadata category up to date. The update is scheduled and run outside the web application to avoid performance issues as the number of assets increases.

- Copy the contents of the CommandLineApps folder from the deployment package to the FocusOPEN install folder, e.g. C:\FocusOPEN
- Open FocusOPEN.CategoryCountUpdater.exe.config file and change the database connection string to the same as value as used for the FocusOPEN SQL Server database instance.
- The Category Count Updater must be scheduled to run at regular intervals. Use the Windows Task Scheduler to create a task for the Category Count Updater application (FocusOPEN.CategoryCountUpdater.exe) that will run as frequently as you require the categories to be updated, e.g. once per hour.

It is also recommended to run the Category Count Updater manually once via the command line to check it is working properly.

#### 9.3 *Offline Zip Processor (3.4.1 and above)*

If the user chooses to zip many files together when ordering, this can take a significant amount of time and slow down the system for other users. This application will prepare

large zips into user zip files outside the web root and then send users a message when they are ready to download.

- Copy the contents of the CommandLineApps folder from the deployment package to the FocusOPEN install folder, e.g. C:\FocusOPEN
- Open the FocusOPEN.OfflineZipProcessor.exe.config file and change the database connection string to the same as value as used for the FocusOPEN SQL Server database instance.
- The Zip Offline Order Processor must be also scheduled to run at regular intervals. Use the Windows Task Scheduler to create a task for it. It is recommended this is run every 15 minutes or less to avoid users needing to wait an extended period for orders.

The threshold for what is deemed a large order is set in the web.config file with these two keys:

"LargeOrderItemsThreshold"

"LargeOrderMaxSizeMB"

These are both set to 50 by default. If a zip order has more than 50 items, it is assigned for offline processing. If the size of the assets amounts to more than 50MB, it is also assigned for offline order processing. Either of these conditions can be met to trigger an offline zip processing job.

#### 9.4 Broadcast Sender (3.4.1 and above)

The Broadcast Sender is used for the batch email facility accessible from the Utilities menu:

The screenshot shows the FocusOPEN web application interface. At the top, there is a navigation menu with items: « Catalogue | Admin Home | Users | Orders | Assets | Content | Utilities | Reports ». Below this, a breadcrumb trail reads "Admin > Utilities > Broadcast". The main content area is titled "BROADCAST" and contains a section "Specify a group of users to broadcast to". This section includes three dropdown menus for "Brand", "Company", and "Role", all currently set to "All". Below these is a "Last Login" section with radio buttons for "Before", "After", and "Ignore last login date" (which is selected). There is an empty text input field below the radio buttons. A checkbox labeled "include suspended users" is also present. At the bottom of this section are two buttons: "reset" and "compose message". To the right of the main content area, there is a vertical menu with three items: "Configure Metadata »", "Manage File Paths", and "Diagnostic Tools »".

POWERED BY  
**FocusOPEN**  
FocusOPEN Digital Asset Manager  
[Download source code \(AGPL\)](#)

If this application is not installed, messages not get sent out.

- Copy the contents of the CommandLineApps folder from the deployment package to the FocusOPEN install folder, e.g. C:\FocusOPEN
- Open the FocusOPEN.BroadcastSender.exe.config file and change the database connection string to the same as value as used for the FocusOPEN SQL Server database instance.
- The Broadcast Sender application must be scheduled to run at regular intervals as with the other command line applications. Use the Windows Task Scheduler to create a task for it. The frequency should be set to the longest time you want to wait for the messages to be sent out (e.g. 15 minutes).

Note: to reduce the risk of conflicts, it can be advisable to stagger the scheduled jobs rather than having them all execute at the same time.

#### 9.4 Offline Asset Versioning (3.4.2 and above)

This command line tool will transfer control of the versioning process away from the web application to an offline process. This can be useful if you are versioning very large files since backup copies are made of each version and this can slow the application down significantly if left to the web app. See the configuration settings section later for details on how to enable this.

- Copy the contents of the CommandLineApps folder from the deployment package to the FocusOPEN install folder, e.g. C:\FocusOPEN
- Open the FocusOPEN.OfflineZipProcessor.exe.config file and change the database connection string to the same as value as used for the FocusOPEN SQL Server database instance.
- Change the email settings also to reflect your local version.
- The Offline Asset Versioning application must be scheduled to run at regular intervals as with the other command line applications. Use the Windows Task Scheduler to create a task for it. The frequency should be set to the longest time you want to wait for the messages to be sent out (e.g. 15 minutes).

Note

The DataFolder and TempFolder are unused and can be ignored.

#### 9.5 Watched Folder Processor (3.4.3 and above, Commercial Only)

The Watched Folder Processor will automatically ingest files into FocusOPEN and generate previews and thumbnails for them, it must be installed on the same server as the FocusOPEN web application and have access to the data folder where your files are placed.

- Copy the contents of the CommandLineApps folder from the deployment package to the FocusOPEN install folder, e.g. C:\FocusOPEN
- Open the FocusOPEN.WatchedFolderProcessor.exe.config file and change the database connection string to the same as value as used for the FocusOPEN SQL Server database instance.
- Change the email settings also to reflect your local version.
- Check the WebRoot, BrandsFolder and AssetBitmapGroupsConfig settings - especially the WebRoot to ensure this is the actual location of the FocusOPEN web application root.



- You will need to ensure the APS settings are the same as the ones in your web.config file. These can be changed in the system.serviceModel stanza.
- Check the OverrideCallbackUrl will respond on the server where the watched folder processor is installed. The default will probably require amendment.
- The Watched Folder application must be scheduled to run at regular intervals as with the other command line applications. Use the Windows Task Scheduler to create a task for it. The frequency should be set to the longest time you want to wait for the messages to be sent out (e.g. 15 minutes).

#### 9.6 Workflow Approval Checker (3.4.3 and above)

The workflow approval checker is used to alert warnings to approver users if any orders are due to exceed the deadline assigned to them by the applicant.

- Copy the contents of the CommandLineApps folder from the deployment package to the FocusOPEN install folder, e.g. C:\FocusOPEN
- Open the FocusOPEN.WorkflowApprovalChecker.exe.config file and change the database connection string to the same as value as used for the FocusOPEN SQL Server database instance.
- Change the other email templates, application data and temporary files folders.
- The HoursBeforeWarning setting determines how long before the deadline to send the alert message to the approvers.

#### 9.7 Asset Expiry Notifier (3.4.3 and above)

The Asset Expiry Notifier will send users a consolidated email when assets are approaching expiry.

- Copy the contents of the CommandLineApps folder from the deployment package to the FocusOPEN install folder, e.g. C:\FocusOPEN
- Open the FocusOPEN.AssetExpiryNotifier.exe.config file and change the database connection string to the same as value as used for the FocusOPEN SQL Server database instance.
- Change the other email templates, application data and temporary files folders.

#### 9.8 TextExtractorConsole (3.4.4 - upgrading users only)

The TextExtractorConsole is used by those upgrading from FocusOPEN 3.4.3. From FocusOPEN 3.4.4 onwards, document assets such as PDF or Word files are converted to raw text and then stored in the database rather than as BLOBs. This application is used to convert existing assets already stored as either asset files or attachments into raw text and store the attachments in the file system.

The application will locate the asset storage locations from the default FocusOPEN instance and only required configuration of the database location and a temporary file path which it uses while binary data is stored as files.

#### 9.9 Other Command Line Applications

The AssetFileBlobExporter is used to extract document assets such as PDF or Word files attachments that are stored inside the database to allow them to be used with text searches. Unless you need retrieve attachments from the database, this does not need to be run.

The UserImporter command line application can be used to batch import many users from a CSV file.

The AssetSaver application can be used to re-save assets. This can be useful if you have carried out a number of manual database modifications and want to transfer any searchable data added outside the FocusOPEN application to it. The Asset Saver will batch save many assets without the need to do this manually.

The BatchCSVImporter command line application can be used to automatically initiate batch CSV import jobs using a job settings file that was previously created with an administrator account in the FocusOPEN GUI. This is useful for automated scheduled data loads such as receiving metadata files from an external system every 24 hours.

The AssetFileMigrator allows previews from one instance of FocusOPEN to be copied to another. The command line application must be able to access both databases from wherever it is executed.

### *10. Follow-Up Activities*

If you have problems installing FocusOPEN, check the Deployment Troubleshooting section later in this guide.

After testing FocusOPEN, you may wish to install to a dedicated site rather than a sub-folder. If using FocusOPEN for a production environment, you are strongly recommended to change the database passwords for more secure alternatives and to carry out further hardening of the installation by restricting folder permissions.

In addition, you may wish to change some configuration settings to suit your own server environment. Consult the following for more information on how to proceed beyond a test install:

- [Deploying To Production Servers Deploying FocusOPEN to a Production Environment](#) . See later in this document, this describes the main points to be considered for using FocusOPEN in production environments.
- [Appendix A - Deployment Troubleshooting](#). A list of known deployment issues and other troubleshooting procedures for FocusOPEN.
- [Appendix B - FocusOPEN Application Configuration Reference Guide](#). Explains the configuration settings for the web application and how each affects the behaviour of FocusOPEN.

## E. Deploying FocusOPEN to a Production Environment

Once you have deployed FocusOPEN to a test server and made the decision to use it as your chosen Digital Asset Management solution, you need to establish a production environment. Below a number of the key areas to consider are highlighted to enable you to devise a plan for a successful implementation if you wish to self-host FocusOPEN rather than have FocusOPEN Software provide a hosted solution for you.

### *Removing the Powered By FocusOPEN Logo*

If you use the AGPL edition of FocusOPEN (this is the standard free to download version) you cannot remove the logo or attribution marks, nor may you change the source code without providing a link to your modified edition using the hyperlink fields in the brand management area. If you do not wish to show the logo or links to modified editions, you must purchase a Commercial Licence. Please login to the 'My Account' area of the focusopen.com website and request a Commercial Licence and a representative will contact you.

### *Server Architecture Considerations*

You will need to ensure a suitable equipped server environment that covers the following four key areas:

- Web Server (IIS instance)
- Database (SQL Server instance)
- Asset Processing Server (APS instance)
- Asset storage

Depending on the scale of assets and users plus also the type of assets you intend to provide, it is possible to combine any or all of the above on a single host (whether virtual or physical). Discussing scaling and provisioning requirements is outside the scope of this document, however, if you plan to use FocusOPEN in an environment where thousands of assets will be ingested and accessed by larger numbers of users, it will be simpler to scale if you can separate the architectural components on to different hosts.

### *Virtualised Servers*

FocusOPEN can be installed on most virtualised server technologies such as VMWare, Xen, Windows 2008 or VBox.

### *DNS and Domain Names*

FocusOPEN uses URLs to differentiate between brands – these are fully segregated repositories of assets and users that can have a unique visual identity and separate metadata configurations. Even if you only plan to use a single brand, determining a domain name (or DNS entry if hosting on a private network) is an important step for using FocusOPEN within your environment.

### *Mail Server*

FocusOPEN sends a number of messages either to users or administrators (including error alerts and warnings for engineers or developers). Some of these features such as issuing passwords are essential for normal operation. By default, FocusOPEN will use the built-in

IIS SMTP server to send messages. In many companies, outgoing mail is only permitted to be sent by designated mail server (e.g. an Exchange instance). If this is the case, you may need to make the required firewall modifications to allow the web server to access your mail server to issue these.

### *Backups*

The main elements that will require integration with your backup procedures are:

- Asset Files
- Database
- Application scripts, logs and DLLs
- Web server settings
- Asset Processing Server logs

Most of the above should be realisable via an existing backup strategy for your other web applications (or regular file backup in the case of the assets themselves).

If your instance of the FocusOPEN SQL Server database uses the conventional full recovery model then you are recommended to have at least a maintenance plan to ensure that SQL Server log files are backed up and that you have other plans in place to prevent your main LDF log files from growing to an unmanageable size (e.g. shrinking or truncating your log files according to the policy of your DBA).

## Appendix A - Deployment Troubleshooting

The following is a list of current known issues with deployments and some suggested workarounds.

### *Getting Support & Assistance*

If you have problems deploying FocusOPEN that are not addressed by the available documentation, you can post a message on the Community Support forum:

<http://www.focusopen.com/forum/>

The Wiki includes some troubleshooting articles:

<http://www.focusopen.com/wiki>

If you have a priority support agreement, use the My Account Dashboard on the FocusOPEN site to issue a ticket: <http://www.focusopen.com/myaccount/> or send an email with your service tag to the designated account provided to you. Please contact FocusOPEN Software if you wish to take out a support agreement.

### *SQLite Issues*

FocusOPEN uses SQLite in the APS (Asset Processing Server). This can cause problems if you wish to install to a 64-bit operating system. Below are some tips for avoiding them or working around the issues. The SQLite DLL is: System.Data.SQLite.dll

Consult this troubleshooting article for more details on SQLite issues:

<http://www.focusopen.com/wiki/troubleshooting/sqlite-32bit-64bit/>

Note: the Elmah logging tool which depends on SQLite has been removed from the web application as of version 3.3.6.

### *APS fails to start on 64-Bit edition of Windows*

The APS relies on SQLite to store state information about processing assets (generating previews and thumbnails). From version 3.3.5.1 onwards, the APS installer should install either the 64-bit or 32-bit version of the SQLite DLL automatically.

A 32-bit instance of the SQLite DLL cannot be used on a 64-bit edition of Windows and both DLLs cannot be in the same folder simultaneously. If the automated installer does not pick up that you are using a 64-bit systems or you are attempting a manual upgrade you must replace the 32-bit edition of the SQLite DLL manually or use the 64-bit DLL included in the extras folder in the deployment package.

A 64-bit version of SQLite can also be downloaded from here:

<http://sourceforge.net/projects/sqlite-dotnet2/files/>

### *APS Troubleshooting*

If you are having problems getting the APS to correctly generate thumbnails and previews, consult this Wiki article which has more detailed information:

<http://www.focusopen.com/wiki/troubleshooting/aps-issues/>

*Website does not appear – Page not found error*

If you have not run any ASP.NET websites previously on your server you may need to enable ASP.NET in the Web Service Extension List.

To do this in IIS6 click on Web Service Extensions within the Internet Information Services (IIS) Manager console and select ASP.NET v2.0.50727 then click Allow.

If you are using IIS7 click on the Computer name in the left pane (root node in the tree) then in Features view select “ISAPI and CGI Restrictions” and ensure the ASP.NET v2.0.50727 and set to Allowed,

## Appendix B – FocusOPEN Application Configuration Reference Guide

### Major Configuration Files

There are two major configuration files:

- AppSettings.config
- web.config

### Other Configuration Files

The following Config folders files also affect application behaviour but typically do not need to be changed

- Log4Net.config
- SecurePages.config
- AdminNavigation.config
- AssetPropertyGroups.config
- NoiseWords.config
- AssetSourcePaths.config
- AssetBitmapGroups.config

### AppSettings.config

This controls the main FocusOPEN-specific application keys:

Key Name	Description
ConnectionString	The database connection string
ImageMagickFolder	The location of ImageMagick – used for some asset operations that are not managed by the Asset Processing Server.
BaseFolder	Used as a default for some other paths to simplify management. This should be the root of the application and is generally above the webroot.
ApplicationDataFolder	Application data is defined as any non-asset data that the system must store outside the database. This will include: the location for any imported files, attachments, home page files, import job settings and temporary files. This should usually be outside the webroot but IIS will need to be able to access them.  In versions prior to 3.4.3 this was referred to as the data folder but the name has been changed to avoid confusion with the asset data path stored in the database.
Email.BccEmail	Email addresses who will get copies of any email notifications. This is useful for support monitoring purposes.
Email.DebugEmail	If this value is entered, any messages will be sent to

	these addresses instead. This can be used during fault finding and when testing new deployments to avoid the actual recipient receiving any test messages.
PdfEnginePath	The location of the PDF engine path used to create PDF contact sheets. This is usually wkhtml2pdf.
ColorProfilesFolder	The location of colour profiles used when generating previews for images.
Error.AssetProcessingErrorRecipients	A list of users who should be notified if there is a problem processing an asset (separated by semi-colons).
Error.ToEmail	A list of users who should be notified if a system error occurs.
Error.ShowRawErrors	Controls whether end users see raw ASP.NET errors or if they are redirected to a static error page inside the errors folder.
WatchedDrives	A semi-colon separated list of drives to monitor disk utilisation via the 'Disk Info' option on the Utilities menu.
RTMPStreamingServer	The location of an RTMP Streaming Server such as Wowza Media Server Pro. If this is specified, video will be played back via the RTMP server instead of the web server. You must have configured your streaming server so that it has access to the previews folder where any video previews are held. This is blank by default.
OrderHistoryAccess	Determines what user level can view order histories about each asset from the asset catalogue. The default is to allow all users to view order history for any asset. This can be one of: None, Upload User, Brand Administrator or Super Administrator.
ScriptsPath	Location of folder for any custom JavaScript scripts authored by end users. Part of the FocusOPEN scripting engine.
APILogFolder	Used by the API feature to store API calls and responses so they can be inspected later this option does not normally need to be enabled.
PhysicalOrderEmailNotification	The address to send notifications about orders for any physical assets to.
MaximumStorageCapacityMB	Allows a usage quota to be defined for the FocusOPEN instance. This is based on the size of assets stored in all data file paths in the database.
PDFToTextPath	The location of the pdftotext command line application used if the PDF iFilter is unsuccessful at extracting text.
ExtractedPDFTextFolder	The location where extracted PDF text is stored prior to insertion into the database.
<i>web.config</i> Key Name	Description



AssetFinder.FullTextSearchedEnabled	Allows full text search to be enabled/disabled.
AssetFinder.FileIndexingEnabled	Allows the content of document assets like Word files to be enabled/disabled.
FileContentSearchingEnabled	This determines whether the contents of text files is searched operations and is true by default.
ImageUtils.ImageMagickConvert	The location of the ImageMagick convert executable.
ImageUtils.ImageMagickComposite	The location of the ImageMagick composite executable.
ImageUtils.ImageMagickIdentify	The location of the ImageMagick identify executable.
ImageUtils.ColorspaceProfileCMYK	The location of the CMYK colour profile.
ImageUtils.ColorspaceProfileRGB	The location of the RGB colour profile.
Email.MailServer	The mail server to use when sending messages.
Email.MailServerUsername	The username if the SMTP host requires a login.
Email.MailServerPassword	The password for the user if the SMTP host requires a login.
Email.MailServerPort	The port the SMTP host uses, 25 is assumed if this is empty.
Email.MailServerSsl	Whether the SMTP host requires SSL (false by default).
Error.FromEmail	The from address to use when sending error report emails to those in the notification list (see appsettings.config).
Error.Subject	The subject to use for an email error reports.
SearchResults.ShowFiltersCount	If the number of results is greater than the value specified then the filter options will automatically be shown to the user.
LoginManager.BadLoginCountThreshold	Determines how many failed login attempts are permitted before the user must wait to login again.
LoginManager.BadLoginLockoutMinutes	The duration that the login blocking will last.
UserManager.AccountExpiryDays	The length of time a user's account may remain inactive (not logged in) before they must re-activate.
UserManager.PasswordExpiryDays	The length of time before the user's password has to be changed.
ZipAssetFiles	Controls whether asset downloads are zipped by default to reduce bandwidth utilisation.
UseSSL	Should be set to true if FocusOPEN is used on over SSL encrypted connections.
AllowPublicRegistration	Determines if an option to register is provided on the login. If this is set to false, users must be added by administrators.
IpAddressRestrictionEnabled	Allows access for staff to be restricted to given ranges of IP addresses.

Licensing_SourceUrl	If the source code is modified and the instance of FocusOPEN is licensed under the AGPL then the URL of the modified source must be shown here.
Licensing_AnchorText	The anchor text to link to the source code.
LightboxManager.MaxNumberCCEmails	The maximum number of users who can be CC'd to a sent lightbox. The default is 20.
NumberOfMetadataFields	Defines an arbitrary limit to the number of custom metadata fields that can be added. The default is 50 but this can be increased to the administrator's required maximum.
MaxBulkDeleteAllowed	Specifies the maximum number of assets the user may ask to delete in a bulk delete operation. This is a failsafe to prevent administrators accidentally removing the entire catalogue. It can be set to a higher number than 100 but care must be taken with this setting.
PasswordResetEnabled	Shows or hides the forgot password button.
MaxSelectableMetadataDepth	The most number of rows permitted in custom combo box metadata fields.
PluginsPath	The location of Preview Plugins.
RegisterUserRequiresKnownEmailFormat	Can be Empty "", InternalUsers or "AllUsers". Specifies which group of users must register with a known email address format (i.e. a company).
APIRestrictAccounts	Prevents API scripts from being executed by anyone other than the accounts specified in this fields. Blank by default (any user may issue API calls).
APIObeyIPAddressRestrictions	If IP address access restrictions are enabled then API calls must originate from designated IP addressees.
OverrideCallbackUrl	Allows a different APS callback to be specified when an asset is processed to the standard callback.ashx. This would normally only be used when FocusOPEN is not being used to actively manage digital asset but to act as an upload and processing conduit for another third party application.
AuthPlugin	This specifies an authentication plug-in that will be used instead of FocusOPEN. The Commercial edition includes an Active Directory integration module that is implemented as an AuthPlugin.
AuthPluginConfig	The location of authentication plug-in configuration files.
AuthEnableStatus	Enables or disables the Authentication Plug-in.
AlwaysAuthenticateUser	Specifies a user to always authenticate (for

DisableShorthandSearchGrammar	testing purposes) when used with the Authentication Plug-in only. The search facility uses a dash or '-' symbol by default for NOT searches. If this setting is enabled, this feature is disabled and the user must enter 'NOT' for negative searches. This setting can be useful if many of your search terms use the minus/dash symbol (e.g. model numbers)
LargeOrderItemsThreshold	If the number of items in an order is higher than the amount specified in this setting, a zip order is flagged for offline processing by the command line zip order processing application. This can be used to prevent a large order slowing down the rest of a FocusOPEN instance for other users.
LargeOrderMaxSizeMB	Similar to LargeOrderItemsThreshold, this specifies an order size instead. If both settings are enabled then if either matches, the order is prepared offline and the user is emailed with a link when it is ready.
NoPhysicalAssetDownloads	If an asset is specified as being 'physical' rather than digital then this setting will stop users downloading a file associated with the asset that may have been used to create a preview of it (e.g. a PDF or image file).
DisableCartForNonPhysicalAssets	This will prevent users from adding digital assets to their cart.
AssetImageDownloadFormat	Specifies the types of download format offered to users in the Image Studio.
EmbeddedMetadataMapping	If enabled, will attempt to map embedded metadata when the asset is loaded.
AssetTypesToExcludeFromDefaultCatalogueSearch	If the number of asset type(s) are specified in this settings, they will not normally be shown in searches.
OfflineAssetVersioning	If true, the web application will not attempt to create versions of each asset (file and metadata) but instead leave this for the offline asset versioning command line application to process. Set this up if you deal with a lot of large files.
DisableAssetVersioning	If this is set to true, versioning can be disabled and FocusOPEN will keep just a single edition of each asset file and metadata.
StampThumbnails	If false, FocusOPEN will not attempt to place the asset type icons in the bottom right corner of each asset.
AssetCommentFilesFolder	If an applicant user supplies a file with their workflow request to publish or use assets, they will be stored in this location.

CachedAssetFilesFolder	Location of cached asset files
ImportsFolder	The folder where user uploads or watched folder ingestions are stored.
ImportJobSettingsFolder	Used for batch CSV import functions to hold XML files that describe each import job.
ImportAttachments	A location where imported attachments can be stored
TempFolder	Temporary folder used for various intermediate operations.
HomepagelImagesFolder	Used to determine where to store custom images for home pages.
DisableExtendedErrorHandler	System error reporting setting to determine error detail.
GuestAccount.Username	Used for the Guest account feature to specify a user who will be the Guest account. This user must exist and be registered with the email address specified here.
GuestAccount.Password	Password for the Guest
EnableGuestAccountLogin	Whether or not Guest access is permitted.
NotifyGroupManagerOnDownloadRequests	Sends the Group Manager an email if a restricted asset in their Group is requested
AutoDelegateAssetsToGroupAdmin	If enabled will automatically transfer an asset from the Upload User to their Group Manager.
SuppressAutoDelegateEmailNotification	If this is enabled, the Group Manager will not be notified by email each time an asset is automatically delegated to them.
DefaultWorkflowEnabled	If false will stop all new users automatically having the 'workflow' option checked on their profile.
SuppressSubmitToWorkflow	If this is enabled, the submit to workflow option is disabled. This is used for instances where workflow is never required.
DefaultAssetDeletionUserLevel	Determines what level of user is able to delete assets. This can be used to restrict access to the delete function.
AccountNeverExpiresEnabled	Used to determine the default account expiry setting for new users.
PasswordNeverExpiresEnabled	Used to determine the default password expiry setting for new users.
EnableGuestAccountLoginAnyIPAddress	This option allow Guest users to login from any IP address.
EnableNoLoginGuestAccount	If this is true and the Guest is enabled then the login page is bypassed and the Guest logged in directly.
ContactSheetImageSource	Preview or BitmapGroup. This determines what source to use for contact sheets.
AuthPluginOverritesNativeUserRoleAndStatus	If this is enabled, the authentication plug-in (and associated provider) will overwrite the user profile settings. This can be used to

EnableCustomButton	allow AD to control user permissions. The custom button is a user definable client-side control which allows users to assign an arbitrary action to a button accompanying each asset thumbnails.
CustomButtonMinimumRole	The minimum level of user who will see the custom button.
TemplateCataloguingFieldsToExclude	Allows the user to prevent certain fields from being used in template cataloguing operations.
AssetHoverCaption	The field to use for the hover caption (usually title or description)
AssetHoverWidth	The width of the rollover display
AssetHoverShowPreview	If enabled will show a preview of the asset when rolled over.
AssetHoverPreviewType	Either "preview" or "bitmap" this determines whether a preview or bitmap from the bitmap groups is used.
AssetHoverPreviewBitmapGroupIndex	The index number of the bitmap group to use for the preview
SwapCommasForNewlinesInKeywordsEmbeddedMetadata	Exchanges commas for newlines when mapping metadata to FocusOPEN fields
ResultThumbnailHyperlinkIdentifier	A template string to show under each thumbnail result. Square brackets can be used to denote default FocusOPEN fields
ResultThumbnailAdditionalInfoIdentifier	As above, basic information to display about assets
SlideShowVisible	Enables the slideshow for the lightbox. This relies on bitmap groups being generated for all assets and is disabled by default
MetadataSearchLinks	This will add search hyperlinks to any fields shown in this list. The custom identifiers for each field are used.
WatermarkByDefault	Allows watermarking to be switched on by default. Usually false.
ShowExcludeShortDescriptionFilter	Shows or hides the checkbox filter option to not search the short description field.
ShowExcludeGroupNameFilter	Shows or hides the checkbox filter option to not search the Primary Group name for each asset.
ShowCropOptions	Disables the 'show crop tool' link. This is for custom installations of FocusOPEN where a cropping tool is used to generate cropping marks
DefaultPrimaryGroup	The default primary group to assign users to
GroupPluralSuffix	Used to allow the 's' plural to be changed to something else where it might not make grammatical sense.
ChooseCompanyFromDropDown	Specify which users can choose a company from a drop-down list of all companies in

registration and admin forms

The range of permitted enumerations is:

- InternalUsers
- ExternalUsers
- AllUsers
- NoUsers

EnableCompanyNameTextBox

Allows a free text company name to be displayed as well or instead of a drop-down list.

The range of permitted enumerations is:

- InternalUsers
- ExternalUsers
- AllUsers
- NoUsers

HideCompanyNameTextBoxIfDisabled

Removes the company name field if it cannot be entered

PublishToWorkspaceCopy

The copy to display for published assets in the asset metadata editing form.

KeepForPersonalUseCopy

Allows the copy for the unpublished status to be changed.

AdminPersonalLinkCopy

What to show on hyperlinks when assets are unpublished.

SSOLinksOnUserProfile

For Commercial editions only. If the Commercial SSO feature is enabled, this will show an SSO link on the user's profile to engineer users only. This can be used for testing SSO.

DisablePDFContactSheets

Turns off the PDF contact sheets.

ContactLink

Allows a link (e.g. for support) to be added to FocusOPEN instances.

NumericSearchTermsMatchAssetIDsOnly  
UseFreetext

Restricts numeric searches to assets IDs only  
Uses SQL Server free text search. Can be used to adjust/optimize free text search.  
Normally disabled.

FilterSearchPunctuation

Will filter out non-specified punctuation items from the text search

ApprovedSearchCharacters

Any characters specified here are ignored by the above setting.

FilterAdminSearchForAssetUploaders

Causes the upload user filter on view asset list to be limited to only those upload users who have uploaded assets.

AllowPreviewsForContactSheets

Enables previews to be shown on contact sheets sent from lightboxes

LinkLightboxTerm

Allows linked lightboxes to be referred to as

ShowGeoLocLink	something else. If enabled and the image asset contains GPRS coordinates in the EXIF data then links to Google Maps showing the location will be displayed on the asset detail pop-up and asset metadata editing page.
AlphanumericallySortCategoriesByDefault	True by default, if false then categories will be sorted in the order they are shown in the category hierarchy editor.
EditableDuration	If FFMPEG generates a duration for video or audio assets which is wrong and this setting is true then upload users can manually change the duration to an alternative value.
ContactSheetSendingMinimumRole	Contact sheets with download links can normally only be sent by Super Administrators. This setting allows other lower roles to access this feature also. The roles IDs run downwards from 4 = brand administrator, 3 = group administrator, 2 = upload user and 1 = normal user.
EnableRoleIDToViewEditAssetsOutsidePrimaryGroup	This allows users from who are at a designated role to amend assets that are not from their own primary group. It might be enabled to allow upload users to modify the metadata for other users.
GenericAssetTypeName	If the generic asset type has been renamed to something else, it can be specified here. This enables assets that might be generated automatically (e.g. stub asset records from imports or analogue assets) to be assigned. This usually does not require changing unless the generic asset type has been renamed.
AutoSelectedPrimaryGroup	All assets must be assigned to a primary group. This setting allows the default auto-selection to be specified in advance.
AddToCartReminderMessage	This message will be shown on the overlib rollover for those assets that have to be added to the user's cart and ordered (as opposed to direct downloads)
AutoUpdateExpiryOnAssetFileReplacement	This resets the expiry date if the asset is replaced. False by default.
NewlineReplacementChar	Used for metadata exports. This causes the default newline record delimiter to get swapped for another character. This can be useful for exporting asset metadata that contains narrative text with carriage returns and enables a different character to be substituted which can be swapped post-export.
UsePDFToTextForPDFTextExtraction	Forces FocusOPEN to use the pdftotext

HideGroupMetadataDropDownViewSelector	command line application rather than trying to use the less reliable PDF iFilter which has issues on 64-bit servers. The Group selector is displayed to all super admin users to allow them to see metadata schema for groups that are not their own Primary Group. This can be disabled if not required (e.g. if all Groups have an identical metadata schema).
ShowIncludeUnpublishedExpiredAssetsFilter	Causes the checkbox to show unpublished or expired assets to appear in the filter interface of the catalogue. This allows upload users and above to see unpublished assets in the catalogue. Assets have a grey border around them.
EnableMetadataObjects	Provides access to the Metadata Object features. These are not required by most users.
MaximumAssetFormSearchObjectsToDisplay	The number of Metadata Objects to display in search results when selecting objects to associate to assets.
DisableAddingOfNewMetadataObjects	Prevents users from adding their own metadata objects
DisableEditingOfMetadataObjects	Prevents users from editing metadata objects
HideGroupMetadataDropDownViewSelector	Suppresses the option to change the metadata view (visible to Super Administrators only)
MaximumImportAutoGenerateMetadataThreshold	This allows Select metadata entries to be automatically generated during batch CSV imports. The threshold prevents accidental large-scale insertions e.g. an incorrect field being specified for import where all values are unique
ImportCarriageReturnCharacter	The character which would denote a record delimiter instead of a Carriage Return.
ImportParserHasFieldsEnclosedInQuotes	Whether the batch import source has all fields enclosed in quotation marks
VerboseImportLogging	Outputs detailed batch import logs.
AutoSwapUnderscoresForSpacesInTitle	Swap underscores for spaces when found in filenames (where the filename auto-populates the title field)
UseAPSFForImageTransformations	Switches between the APS or the web application to carry out image manipulation transformations
UseAdvancedMetadataManager	Switches between the simple and advanced metadata manager by default
SkipRecordsWithInconsistentNumOfFields	Prevents batch imports failing if one or more records has a different number of fields to the rest of the source file.
AppUnavailableIPAddressExclusionList	A list of IP addresses that are allowed to



DoNotProcessUploadsOrImports	access FocusOPEN while the application has been taken offline Blocks APS processing of uploaded or imported files. Usually required if the import should not process a batch of files (e.g. because of the volume or slow speed of processing).
CopyFailedImportsToFailedFolder	If the import raises a fail condition, the file is copied to the failed folder. This prevents that behaviour.
EnableRoleIDToDownloadUnpublishedAssetsAssetsOutsidePrimaryGroup	Allows users of a given role to download unpublished assets even if not within their primary group.
EnforceNativeBlankPasswords	If an external authentication plug-in (e.g. AD) is used, this can be enabled to stop placeholder hashed random default passwords being created so there are no native password details at all.
DefaultShortDescription	The default value to use for the short description field.
AllowDuplicateAssetsAcrossBrands	Prevents blocking of duplicate asset uploads if it is contained within a different brand.
APIFileFolder	Storage location for files uploaded using the API
APIPersistentDataFolder	Storage location for persistent API data
APSInstanceToUse	Allows a specific APS instance to be used for processing tasks
APSLoadBalanceType	Can be empty, RoundRobin or LowestNumberOfJobs. If empty, defaults to RoundRobin. LowestNumberOfJobs will dynamically select the APS instance with the lowest load (as measured by job count).
TemplateCataloguingSupportsPublishing	If enabled, template cataloguing operations will apply to the publish option also and users will not need to manually publish each asset.
LMAPLStatus	If set to false, any attempts to login via external authentication plug-ins (e.g. Active Directory) will not be logged to the log4net application logs.
MaximumFileVersions	Enables a maximum number of asset versions to be specified. When this is exceeded, older versions will be deleted. The default is -1 which is unlimited.
ImageExtensions	A list of image extensions which the order manager can carry out transformations on.
ThumbnailCustomIdentifierData	Allows metadata custom identifiers to be included as attributes on thumbnails. This is usually to allow custom JQuery client-side code to target thumbnails.
EnableAPIPersistentDataFileSystemCopies	Allows any arbitrary API persistent data stored

SuppressCategoryCounts	in the database to also be stored in the file system. This is usually for debugging and/or monitoring purposes. Hides the category counts when the categories are shown.
CollectionsGuestAccount	An account which can be used to allow guest access to external collections
ArbitraryFileDataEnabled	Allows API clients to upload arbitrary files via API calls.
ArbitraryFileDataAllowedExtensions	A list of the permitted file extensions for arbitrary file data uploaded using the API.
SavedSearchesStatus	Enables or disables the saved search facility
EnhancedLightboxStatus	Enables or disables the enhanced DHTML lightbox
BatchImportSimpleMode	If enabled, skips the advanced options for batch importing of CSV data
OptionalNavURL	An optional link on the navigation bar to an arbitrary URL.
OptionalNavURLAnchorText	The anchor text for the optional navigation link.
OverrideCartBrandLink	Allows the cart link to be renamed and changed to an alternative URL.
NoDedicatedUploadURLForUploadUsers	Suppresses the upload link on the navigation area.
HideSearchDDLSearchMetadataInput1Filter	Hides the first search drop-down in the basic search area (usually asset type filter).
NoUploadingDigitalAssets	For systems which are metadata only (e.g preservation-based) where no digital file is required to create an asset record. This avoids the need to upload a file to create an asset.
AvailableCatalogueSortHyperlinks	A list of hyperlinks which the user can sort by on the catalogue search (as an alternative or in addition to clicking the headers).
ShowAscDescSorting	An optional button to sort ascending/descending (in addition to clicking the headers).
DisableCustomSortOnListView	Hides the option to sort search results by a custom criteria.
DocumentTextFilterDisabledByDefault	Sets the UI option to not search the text content of assets as enabled or disabled by default.
DocumentTextFilterDisableFeatureEnabled	Enables or disables text content searching for document assets (this is at a lower level than the UI).
HideFileColumnInListViewSearchResults	Suppress the file type icon column in list views. This is primarily for non-digital archives.
HideNonCoreSystemMetadataOnAssetForm	Rolls up non-core system metadata in the asset catalogue step 2 (assetform) area into a

ShowZoomControl	show/hide control. Enables the zoom feature in asset detail and cataloguing views
IncludeTotalCountOnAssetExport	Includes the total results when exporting assets via JSON or XML link to search links.

#### *Log4Net.config*

This controls the application logging configuration options. See the Apache Log4Net documentation for more information:

<http://logging.apache.org/log4net/release/config-examples.html>

#### *SecurePages.config*

This file controls those pages which must be accessed over SSL.

#### *AdminNavigation.config*

This file controls what is accessible to the different user roles in the FocusOPEN administrator area and the menu option titles used.

#### *NoiseWords.config*

A list of common words that are ignored in searches.

#### *AssetSourcePaths.config*

If ingesting assets direct from the file system (rather than uploading from a browser), this file determines which designated paths the user can choose to load from.

#### *AssetBitmapGroups.config*

In FocusOPEN 3.3.9.5 and above, the APS will generate bitmaps in different sizes. These can be used to create customisable viewers or larger thumbnails. An unlimited number of groups can be created, but the more that are added, the longer assets may take to process.

#### *EmbeddedMetadataMapping.config*

In FocusOPEN 3.4.1 and above, it is possible to use this file to choose whether any embedded metadata found by EXIFTool is mapped to metadata fields you have specified in FocusOPEN. The mappings are specified as follows:

Brands	Each brand can have dedicated embedded mappings rules.
Brand	Specify the brand ID and optional brand name (this is only required to make the file more readable by humans)
Extension type	Allows the mapping rules to be specialised
Match identifier	The metadata identifier you wish to match. Use the metadata configuration facility to specify an identifier for a given type of metadata.
filemetadata	The embedded metadata tag (in the asset file itself) that you wish to map to. For example: "Copyright Owner"
truncate	"truncate" or "reject". If "truncate" is specified, FocusOPEN will truncate the metadata so it fits the required field. If "reject" is used, it will reject the mapping for that field.
filemetadataMatchType	"StartsWith" or "Exact". This allows partial matching of the target embedded metadata to map from.
selectMatchType	"StartsWith" or "Exact". If the specified value is supposed to map

to a Select asset type (e.g. a drop down menu) then this allows partial matching of the field to map to.  
 overwrite If set to true, this will overwrite any existing data entered by the user.

*AssetListViews.config*

In FocusOPEN 3.4.1 this allows the user to specify what fields are shown in list view in the catalogue (this does not affect the thumbnail view).

Each of the view configurations are organised into view sections. Each of these has the following sub-settings:

Brands Each brand can have dedicated embedded mappings rules.  
 Brandid The ID number of the brand  
 media\_type\_id Media types can also have their own list view settings that are different from other types within the same brand.

Each view is further sub-divided into column settings for each column to be shown:

Identifier The metadata identifier for the column\*  
 Title The Title of the column  
 Header Class The CSS class to apply to the header  
 Field Class The CSS class to apply to the field data itself

\* Not all metadata can be used: only single text fields or select fields that permit a single option such as radio buttons and drop-down menus. Text area, preset or checkbox fields cannot be used as sources for list view configurations.

*lightbox\_fields.config, cart\_fields.config, order\_fields.config*

These files control what fields get shown to users in the lightbox, cart and ordering fields respectively. An arbitrary number of fields can be added, each requires the following:

Field label	The label to display to end users
Identifier	The identifier that is the source of the data

Each unique brand can have their own settings defined also and a 'choice' delimiter specifies what to separate multi-selection fields like checkboxes.

*lightbox\_fields.config*

The notes node allows notes to be suppressed for lightboxes.

*order\_fields.config*

The Download\_Options and file\_size node setting allows the download options and file\_size display to be disabled.

*APIFilePaths.config*

The APIFilePath config key accepts these attributes:

- name - a name for the path to refer to in API calls

- path - the path where API files can be created by API calls. The shorthand: `##brand##\Brand_*\ "` can be used to allow writing to any brand folder
- read - a boolean to determine whether the path can be read from by API calls
- write - a boolean to determine whether the path can be written to by API calls
- minimumreadrole - the minimum role permitted to read files. Possible values are Normal,UploadUser,GroupAdministrator,SuperAdministrator
- minimumwriterole - the minimum role permitted to write files. Possible values are Normal,UploadUser,GroupAdministrator,SuperAdministrator

### *APSControlStrings.config*

These are optional settings that allow the APS default command line preview, thumbnail and bitmap group conversion screens to be overridden for specific extensions.

#### Example

```
<APSControlGroup name="test" extensions="jpg,gif">
    <PreviewCommandLine>[CONVERT] -flip [INPUT][0] [OUTPUT]</PreviewCommandLine>
    <ThumbnailCommandLine>[CONVERT] -colorspace RGB -quality 90 -resize 20x20!
    [INPUT][0] [OUTPUT]</ThumbnailCommandLine>
    <BMGCommandLine></BMGCommandLine>
</APSControlGroup>
```

### *StringSettings.config*

Some of user interface elements can have their text descriptions changed by modifying this file. Some strings are URLs and CSS classes instead of displayed text. Below is a list of supported string settings:

- ShowFiltersLink
- HideFiltersLink
- FieldValueNotAvailableString
- AssetListHeaderText
- DefaultAnalogueAssetTitle
- SingleBrandSearchButtonText
- SingleBrandKeywordsTextBoxCssClass
- MyAccountURL
- MyAccountAnchorText
- LightboxLinkURL
- LightboxLinkAnchorText
- CartLinkURL
- CartLinkAnchorText
- OrdersLinkURL
- OrdersLinkAnchorText

## Appendix C – Putting FocusOPEN Into Maintenance Mode

In the event you need to take FocusOPEN offline to carry out essential maintenance, it is possible to deny access without stopping the website and showing users a web server error message.

Rename the file "!App\_Offline.htm" to "App\_Offline.htm" by removing the exclamation mark (!) from the front of the file. This will cause this page to be shown rather than the file requested by users. You can modify the contents of the App\_Offline.htm to include branding options etc, however, it is recommended you avoid any complex interactivity on this page to ensure it does not fail when requested.

Enabling Selective Access While Application Is Offline (FocusOPEN 3.4.7.1 and above)  
The web.config key AppUnavailableIPAddressExclusionList is a comma delimited list of IP addresses that can still access FocusOPEN even when it is offline. This can be used by engineers to test updates or settings changes.

## Appendix D - Removing The FocusOPEN Watermark

From version 3.4.8 and above, the FocusOPEN watermark is applied unless a valid license key is included in the APS configuration. To obtain a key, do the following:

1. Find the APS configuration file: FocusOPEN.APS.WinService.exe.config, on a 64-bit edition, this will usually be in a location like this:

C:\Program Files\FocusOPEN Software\FocusOPEN Asset Processing Service\

2. Open the file with a text editor like Notepad and look for the RequestKey config key:

```
<add key="MaximumNumberOfConcurrentJobs" value="4" />
<add key="EXIFToolPath" value="C:\Program Files\FocusOPEN Software\FocusOPEN
<add key="DeleteGeneratedFilesAfterCallback" value="true" />
<add key="TempPath" value="" />
<add key="CommandLogDelimiter" value="," />
<add key="RequestKey" value="75E02B5A-E4E4-43FD-8BDF-3FA06269D21A" />
<add key="License" value="" />
<add key="ClientSettingsProvider.ServiceUri" value="" />
</appSettings>
<system.web>
  <compilation debug="true" />
```

3. Copy this value then go to the FocusOPEN website:

[http://focusopen.com/myaccount/commercial\\_upgrade.php](http://focusopen.com/myaccount/commercial_upgrade.php)

Enter the request key in the text area and submit

### APS Request Key

Please enter your APS configuration request key to allow us to generate a commercial licence key which will remove the FocusOPEN watermarks from previews. [See this page on the wiki to find this](#). You must have installed the APS first and be generating previews and thumbnails with FocusOPEN. If you have not been able to get this working yet, do not order a commercial edition.

Once you have provided your request key, you will be emailed a link to purchase FocusOPEN from our e-commerce service provider, MyCommerce. On confirmation of purchase from them, we will send you a licence key and instructions on how to disable the 'Powered By FocusOPEN Badge' as well as commercial licence documentation and access to the APS source code. Upon confirmation of payment, orders are usually processed within less than two business days and we will endeavour to expedite fulfilment before, where possible.

4. You will then be redirected to the e-commerce purchasing facility where you can order FocusOPEN.

5. Once payment is confirmed as received, a member of our support team will generate a licence key for you and send it via email. Copy the code into the License config key:

```
<add key="MaximumNumberOfConcurrentJobs" value="4" />
<add key="TempPath" value="" />
<add key="CommandLogDelimiter" value="," />
<add key="RequestKey" value="75E02B5A-E4E4-43FD-8BDF-3FA06269D21A" />
<add key="License" value="" />
<add key="ClientSettingsProvider.ServiceUri" value="" />
</appSettings>
```

6. Restart the FocusOPEN APS service. Uploaded images and videos should no longer have the FocusOPEN watermark on previews and thumbnails.