#### Terms

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#### 11.1 Scope

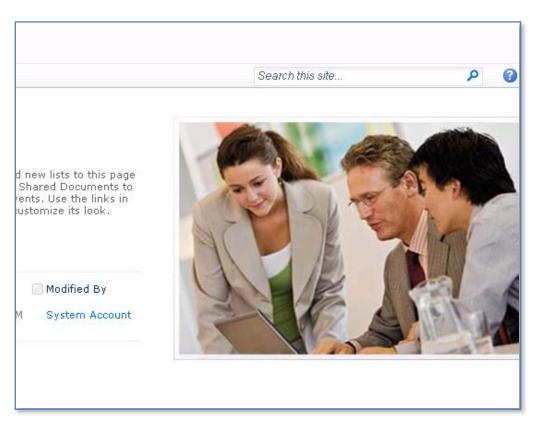
This chapter will cover the specifics of enabling and enhancing the searching of Windows SharePoint Foundation 2010 (WSF). Although WSF can search much of what appears in WSF it is possible to extend this to items such as Adobe PDF documents. The major restriction that searching has in WSF is that it is limited to the WSF site. However, with the installation of Microsoft Search Server Express 2010 it is possible to not only search WSF content but also information from elsewhere including network file shares, Exchange public folder and even Internet web sites.

### 11.2 Prerequisites

WSF search requires WSF to be installed. See **Chapters 3 and 4** for more information about installing WSF.

#### 11.3 Basics

Like its predecessor, Windows SharePoint Services v3 (WSS v3), WSF includes the ability to index and search its content automatically.



Once WSF has been installed you will see a search box in the top right of the window. Simply enter the desired search information and click the magnifying glass to the right to commence the search.



When the search has completed you will a list of entries matching your search display like shown above. You can click on these results to display the entry. If you enter more than one word WSF will match any item with either or both of the strings (a Boolean OR operation). WSF search uses a feature called stemming. The basics of search stemming are<sup>1</sup>:

- When you submit a query in SharePoint, the query is broken into individual words. For example, the query "securing the database" would be broken down into "securing", "the", and "database"
- Noise words can be eliminated, i.e. common words such as "and", "the", "or", that are unlikely to influence results. In this example, "the" would be dropped from the query. It also ignores single digit numbers.
- The query words can then be stemmed for variations. For example, a query for "security" could be expanded to include documents that refer to "securing", "securely" and so on
- The query words will also be compared against the thesaurus. The thesaurus is customizable and very useful for words with domain-specific alternatives or abbreviations. You can choose to expand queries (e.g. expand "PMB" to also search for "Purple Medium Board") or replace queries (e.g. replace "ie" with "Instant Everywhere" "ie" will return just about every document in an English-language index).
- Does not support Boolean functions such as AND and OR. You can however include key words by using the + (plus) or (minus) sign in front of the keyword. The plus (+) tells the search that the word must be included in the results, and the minus (-) indicates that the term should not be included in the results.

<sup>&</sup>lt;sup>1</sup> <u>http://www.joiningdots.net/blog/2007/01/sharepoint-and-stemming.html</u>

• It is not case sensitive.

There are however a number of components of WSF that are not searchable. These include:

- Non-text columns in lists i.e. lookup, current and Yes/No fields.
- Attachments to list items.
- Survey lists.
- Hidden lists.

By default WSF will run an incremental indexing process every 5 minutes.

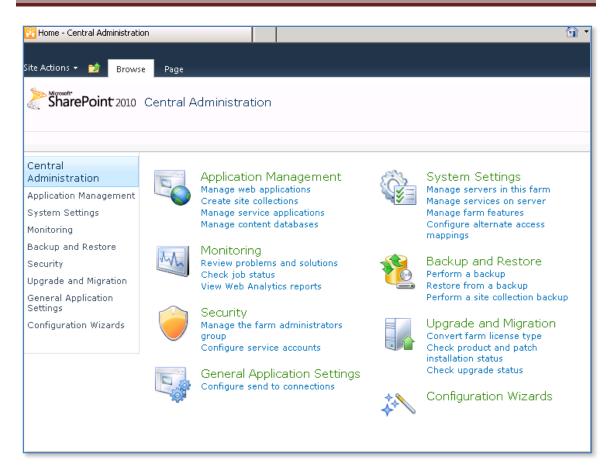
#### 11.4 Ensuring the search is enabled

Depending on how you chose to install WSF the search functionality may not yet be enabled.

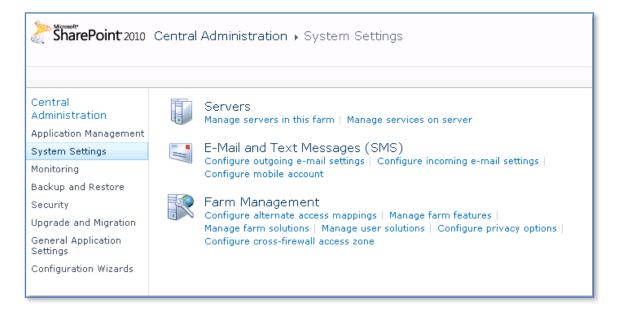


Open the *SharePoint 2010 Central Administration* via **Start | Microsoft Sharepoint 2010 Products | SharePoint 2010 Central Administration** and accept any UAC that appears.

# Chapter 11 – Search



#### Select the System Settings from the menu on the left hand side.



Then select Manage services on server from the Servers section.

### Chapter 11 – Search

Search Query and Site Settings Service	Started	Stop
Secure Store Service	Stopped	Start
SharePoint Foundation Help Search	Started	Stop
SharePoint Server Search	Started	Stop
Web Analytics Data Processing Service	Stopped	Start
Web Analytics Web Service	Stopped	Start

In the list that appears ensure that SharePoint Server Search is started. If it isn't click on the hyperlink **Start**.

Warning: this page is not encrypted for secure comm more information, contact your administrator. <b>Service Account</b>	nunication. User names, passwords, and any other information will be so
The search service will run using this account. The search service account must not be a built-in account in order to access the database. Examples of built-in accounts are Local Service and Network Service.	Service Account SBS2008\robert - Register new managed account
<ul> <li>Content Access Account</li> <li>The search service will access all content using this account.</li> <li>The account will be added to the Full Read policy, giving it read-only access to all content.</li> <li>For proper search functionality and information security, do not use an administrator account, and do not use accounts that can modify content.</li> </ul>	User name sbs2008\robert Password
<ul> <li>Search Database</li> <li>Use of the default database server and database name is recommended for most cases. Refer to the administrator's guide for advanced scenarios where specifying database information is required.</li> <li>Use of Windows authentication is strongly recommended. To use SQL authentication, specify the credentials which will be used to connect to the database.</li> </ul>	Database Server CIASVR01\SQLEXPRESS Database Name WSS_Search_CIASVR01 Database authentication

Select a *Service account* from the drop down list or select the hyperlink below to *Register new managed account*.

Enter the details for an account to access the WSF content. This account will be given full read access to WSF.

In the *Search Database* section there is no need to change either the *Database Server* or the *Database Name*.

Scroll down for more options.

🖃 Search Database	
Use of the default database server and database name is recommended for most cases. Refer to the administrator's guide for advanced scenarios where specifying database information is required. Use of Windows authentication is strongly recommended. To use SQL authentication, specify the credentials which will be used to connect to the database.	Database Server CIASVR01\SQLEXPRESS Database Name WSS_Search_CIASVR01 Database authentication Windows authentication (recommended) SQL authentication Account Password Password
Failover Server You can choose to associate a database with a specific failover server that is used in conjuction with SQL Server database mirroring.	Failover Database Server
Indexing Schedule Configure the indexing Schedule.	Indexing schedule: C Minutes Starting every hour between G Hourly 35 minutes past the hour and no later than 35 minutes past the hour
	Start Cancel

Leave the other settings as default, however you may choose to alter the *Indexed Schedule* to suit your requirements.

Press the **OK** button to save the configuration.

• Processing	
Please wait while your changes are processed.	

You should now see a message in the screen indicating that your settings are being enabled.

	Server: CIASVR01 -	View: Configurable -
Service	Status	Action
Business Data Connectivity Service	Stopped	Start
Central Administration	Started	Stop
Claims to Windows Token Service	Stopped	Start
Microsoft SharePoint Foundation Incoming E-Mail	Started	Stop
Microsoft SharePoint Foundation Sandboxed Code Service	Stopped	Start
Microsoft SharePoint Foundation Subscription Settings Service	Stopped	Start
Microsoft SharePoint Foundation Web Application	Started	Stop
Microsoft SharePoint Foundation Workflow Timer Service	Started	Stop
SharePoint Foundation Help Search	Started	Stop

Once complete you should now see that the SharePoint Foundation is *Started*.

Return to the SharePoint *Central Administration* screen.

SharePoint 2010 Central Administration + Application Management			
Central Administration		Web Applications Manage web applications   Configure alternate access mappings	
Application Management System Settings Monitoring Backup and Restore Security	P-00	Site Collections Create site collections   Delete a site collection   Confirm site use and deletion   Specify quota templates   Configure quotas and locks   Change site collection administrators   View all site collections   Configure self-service site creation	
Upgrade and Migration General Application Settings Configuration Wizards	<u>.</u>	Service Applications Manage service applications   Configure service application associations   Manage services on server Databases Manage content databases   Specify the default database server   Configure the data retrieval service	

Select the **Application Management** option from the menu on the left, then select **Manage content databases** from the *Databases* section.

## Chapter 11 – Search

SharePoint 2010			nage Content Da tabases for this web a	tabases pplication. Click a content database n	name to change its properties.	(
Central Administration	🚔 Add a conten	t database			Web Application:	ttp://ciasvr01/ →
Application Management System Settings	Database Name	Database Status	Database Read-Only	Current Number of Site Collections	Site Collection Level Warning	Maximum Number
Monitoring	WSS_Content	Started	No	1	9000	15000
Backup and Restore						
Security						
Upgrade and Migration						
General Application Settings						
Configuration Wizards						

#### Click on the content database (in this case WSS\_CONTENT).

Failover Server You can choose to associate a database with a specific failover server that is used in conjuction with SQL Server database mirroring.	Failover Database Server
Database Capacity Settings Specify capacity settings for this database.	Number of sites before a warning event is generated 9000 Maximum number of sites that can be created in this database 15000
Search Server You can choose to associate a content database with a specific server that is running the Microsoft SharePoint Foundation search service.	Select Microsoft SharePoint Foundation search server CIASVR01
Remove Content Database Use this section to remove a content database from the server farm. When you select the Remove content database check box and dick OK, the database is no longer associated with this Web application. Caution: When you remove the content database, any sites listed in that content database are removed from the server farm, but the site data remains in the database.	□ <sub>Remove</sub> content database
Preferred Server for Timer Jobs	Preferred Server for Timer Jobs CIASVR01
	OK Cancel

Scroll down the screen until you locate the *Search Server* section. From the drop down menu select the name of your WSF server. Also ensure that the WSF server name also appears in the *Preferred Server for Timer Jobs* section.

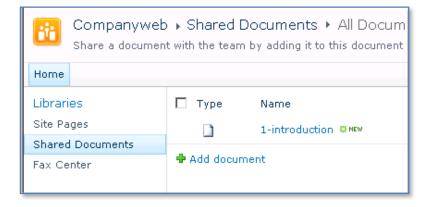
Press **OK** to save the new configuration.



If you now return to your WSF site and enter in a search request you should see the results displayed. Remember that search results will not display until an index crawl has completed.

#### 11.5 Indexing Acrobat PDF's

SharePoint Foundation 2010 does not come with the native ability to index Acrobat PDF documents, however it can easily be configured to do this. By default, if you upload a PDF document to SharePoint Foundation 2010 you should see something like this:



When you attempt to run a search for a term in the document (in this case CIAOPS) you will find that the search returns no result like shown here:

::	Companyweb ► Search Results			
Home	This Site 🗾 ciaops			
	We did not find any results for <b>ciaops</b> . <b>Suggestions:</b>			
<ul> <li>Ensure words are spelled correctly.</li> <li>Try using synonyms or related searches.</li> <li>Try broadening your search by searching from a different site.</li> </ul>				
Additional resources:				
	<ul> <li>Get additional search tips by visiting Search Help</li> <li>If you cannot find a page that you know exists, contact your administrator.</li> </ul>			

The reason is that SharePoint Foundation 2010 relies on something called an iFilter to provide the ability to index documents. You require an iFilter for each different document you wish indexed in SharePoint Foundation 2010. By default, the iFilters for most Microsoft Office documents now get installed as part of the SharePoint Foundation 2010 pre-install. Ones for other common file types, like Acrobat PDF documents don't, however they can be manually configured.

The following process will work on both a SharePoint Foundation 2010 standalone member server and a Small Business Server 2011 Standard server.

The first step in the process is to download and install the PDF iFilter program from Adobe. To do this visit:

http://www.adobe.com/support/downloads/detail.jsp?ftpID=4025

It is important to remember that SharePoint Foundation runs on a 64 bit operating system so you are going to need a 64 bit version of the PDF iFilter.

FILE INFORMATION	
Product	Acrobat
Version	9.0
Platform	Windows
File Name	PDFiFilter64installer.zip
File Size	17.2MB
	Proceed to Download

Login to your SharePoint Foundation 2010 server as an administrator and download the file to your SharePoint Foundation Server 2010 and expand the file. You should find a single installation file like shown below.

Organize 🔻 Include in libra	ry 🔻 Share with 💌 New folder			-	(?
☆ Favorites	Name ^	Date modified	Туре	Size	
E Desktop Downloads	PDFFilter64installer	26/11/2008 5:46 PM	Windows Installer P	18,095 KB	

Double click the installer file to run. Accept any User Access Control (UAC) that is presented.



The iFilter installation process should now commence.

Press the Next button to continue.

🙀 Adobe PDF iFilter 9 for 64-bit pla	atforms	
License Agreement		Adobe
Please take a moment to read the licen: Agree", then "Next". Otherwise click "C		ne terms below, click ''I
ADOBE Adobe® PDF iFilter Software Lie	cense Agreement	<b></b>
NOTICE TO USER: PLEASE RE COPYING, INSTALLING OR US SOFTWARE YOU ACCEPT ALL AGREEMENT, INCLUDING, IN CONTAINED IN SECTION 2; TH IN SECTION 6; AND LIABILITY	ING ALL OR ANY PORTION O L THE TERMS AND CONDITI PARTICULAR THE LIMITAT RANSFERABILITY IN SECTIO	OF THE ONS OF THIS IONS ON: USE IN 4; WARRANTY
C I Do Not Agree	<ul> <li>I Agree</li> </ul>	
	Cancel < Bac	k Next>

Accept the *License Agreement* and press **Next** to continue.

# Chapter 11 – Search

🙀 Adobe PDF iFilter 9 for 64-bit platforms	
Select Installation Folder	Adobe
The installer will install Adobe PDF iFilter 9 for 64-bit platforms to the followin To install in this folder, click "Next". To install to a different folder, enter it be <u>F</u> older:	-
C:\Program Files\Adobe\Adobe PDF iFilter 9 for 64-bit platforms\	Browse Disk Cost
Cancel < Back	Next >

Select a location to install the iFilter files, by default this will be your C: Drive.

Press **Next** to continue.

🕞 Adobe PDF iFilter 9 for 64-bit platforms	
Confirm Installation	Adobe
The installer is ready to install Adobe PDF iFilter 9 for 64-bit platforms on your computer. Click "Next" to start the installation.	
Cancel < Back	Next >

Press Next to continue.

🙀 Adobe PDF iFilter 9 for 64-bit platfor	ms			
Installation Complete				Adobe
Adobe PDF iFilter 9 for 64-bit platforms has b	een successfully	y installed.		
Click "Close" to exit.				
	Cancel	< Bac	k.	Close

Press **Close** to complete the installation.

To add the PDF Icon to SharePoint download the PDF icon from:

http://www.adobe.com/images/pdficon\_small.gif

and save it to:

C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\14\TEMPLATE\IMAGES\

🖉 Save Picture		×
GOV 🎉 🔹 14 🔹 TEMPLATE 👻 IMAGES 🔹	👻 🔽 Search IMAGES	<u> </u>
Organize 🔻 New folder		II - 📀
🕌 ISAPI 🔄	Name *	Date modifie
Policy Resources	keportServer	3/09/2010 4 1/10/2003 7
	ACA16	1/10/2003 7
40 1033 ADMIN	ACF16	1/10/2003 7 1/10/2003 7
CONTROLTEMPLATES DocumentTemplates	ACL16	1/10/2003 7 1/10/2003 7
DEATURES	ACTIONHD	8/04/2005 1
IDENTITYMODEL	stionlhd	8/04/2005 1 8/04/2005 11
	▼ 4	•
File name: pdficon_small Save as type: GIF (*.gif)		<b>_</b>
	Save	Cancel

You will generally need administrator privileges to do this.

📕 ISAPI	ReportServer 3/09/2010 4:12 AM File fold	er
📙 LOGS	<u> </u>	
📗 Policy	32316 1/10/2003 7:54 AM GIF imag	ge
📔 Resou	Destination Folder Access Denied	×
📔 TEMPL		
퉬 103(	You'll need to provide administrator permission to copy to this folder	
📔 ADM		
NOD 🏭	Date created: 3/09/2010 4:12 AM	
鷆 Doci		
📔 FEA'		
🐌 GLO		
🚺 IDEM		
🚺 IMA(		
🌗 LAY¢	🚱 Continue 🛛 Skip 🛛 Cancel	
📔 Page		
]) Scer	sectionseditpage16 13/09/2008 6:27 AM GIF image	ge
脂 Site	s actionssettings 2/06/2006 9:35 AM GIF image	ge
<u>n</u> sol	1/10/2002 7/54 AM CTE image	

This may mean you have to save it another location and then copy and paste to the destination.

Locate the file *c*:\*program files*\*common files*\*Microsoft shared*\*web server extensions*\14\*template*\*xml*\*docicon.xml*. **Right mouse click** on the file to edit.

DCCCON - Notepad	B D
File Edit Format View Help	
<mapping key="stp" opencontrol="" value="icstp.gif"></mapping>	-
<mapping kev="stt" opencontrol="" value="icstt.gif"></mapping>	-
<mapping key="thmx" value="icthmx.gif"></mapping>	
<mapping keý="tif" value="ictif.gif"></mapping> <mapping key="tiff" value="ictiff.gif"></mapping>	
<pre><mapping key="tht" txt"="" value="ictxt.gif"></mapping> <mapping key="vbe" opencontrol="" value="icvbe.gif"></mapping></pre>	
<mapping key="vbs" opencontrol="" value="icvbs.gif"></mapping>	
<pre><mapping edittext="Microsoft visio" key="vdw" opencontrol="SharePoint.openDocuments" value="icvdw.gif"></mapping></pre>	
<mapping edittext="Microsoft Visio" keý="vdx" opencontrol="SharePoint.openDocuments" value="icvdx.gif"></mapping> <mapping edittext="Microsoft Visio" key="vsd" opencontrol="SharePoint.openDocuments" value="icvsd.gif"></mapping>	
<pre>dmapping Key="vsl" value="icvsl.gif" opencontrol=""/&gt;</pre>	
<mapping edittext="Microsoft Visio" kev="vss" opencontrol="SharePoint.OpenDocuments" value="icvss.gif"></mapping>	
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<mapping key="vsu" opencontrol="" value="icvsu.gif"></mapping> <mapping key="vsw" opencontrol="" value="icvsw.gif"></mapping>	
<pre><mapping crosoft="" key="vsw" opencontrol="SharePoint.OpenDocuments" value="(cvsw.gffgencuntroi=vsaft," visio"=""></mapping></pre>	
<mapping edittext="Microsoft Visio" key="vtx" opencontrol="SharePoint.OpenDocuments" value="icvtx.gif"></mapping>	
<mapping key="wdp" value="ichdp.gif"></mapping>	
<mapping key="webpart" opencontrol="" value="icdwp.gif"></mapping>	
<mapping 'opencontrol="" 'value="icwm.gif" key="wm"></mapping> <mapping key="wma" opencontrol="" value="icwma.gif"></mapping>	
<mapping kev="wmd" opencontrol="" value="icwmd.gif"></mapping>	
<mapping kev="wmp" opencontrol="" value="icwmp.gif"></mapping>	
<mapping key="wms" opencontrol="" value="icwms.gif"></mapping>	
Mapping Key="wmv" value="icwmv.gif" openControl=""/>	
<pre><mapping _opencontrol="SharePoint.openDocuments" comin.gif"="" edittext="Microsoft_Excel" key="minv value=" minv="" minv"="" opencontrol="'/&gt; &lt;/pre&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;Mapping Key=" value="comiz.gif" xla"_value="icxla.png"></mapping>_</pre>	
<pre><mapping edittext="Microsoft Excel" key="xlam" opencontrol="sharePoint.openDocuments" value="icxlam.png"></mapping> <mapping edittext="Microsoft Excel" key="xls" opencontrol="sharePoint.openDocuments" value="icxls.png"></mapping></pre>	
<pre> cmapping key= xis value= rcxis.pig = utriext= microsoft excel operiodic or= snarepoint.openbocuments /&gt;</pre>	
<pre>Mapping Key="xlsm" Value="icxlsm.png" EditText="Microsoft Excel" OpenControl="SharePoint.openDocuments"/&gt;</pre>	
<pre><mapping edittext="Microsoft Excel" key="xlsm" opencontrol="SharePoint.OpenDocuments" value="icxlsm.png"></mapping> <mapping edittext="Microsoft Excel" key="xlsx" opencontrol="SharePoint.OpenDocuments" value="icxlsx.png"></mapping></pre>	
<pre><mapping edittext="Microsoft Excel" key="xlt" opencontrol="SharePoint.OpenDocuments" value="icxlt.png"></mapping> <mapping edittext="Microsoft Excel" key="xltb" opencontrol="SharePoint.OpenDocuments" value="icxltx.gif"></mapping></pre>	
<pre><mapping editext="microsoft" excel="" key="xitb" opercontrol="SharePoint.openDocuments" value="icxitx.git"></mapping> </pre>	
<pre></pre> Amapping Key="xltm" value="icxltm.png" EditText="Microsoft Excel" OpenControl="sharePoint.OpenDocuments"/> Amapping Key="xltx" value="icxltx.png" EditText="Microsoft Excel" OpenControl="sharePoint.OpenDocuments"/>	
<mapping key="xml" value="icxml.gif"></mapping> <mapping key="xps" opencontrol="" value="icxps.gif"></mapping>	
<mapping key="xps" opencontrol="" value="icxps.gif"></mapping>	
<mapping key="xsd" value="icxsd.gif"></mapping> ⊲Mapping Key="xsl" value="icxsl.gif"/>	
<pre><mapping edittext="Microsoft InfoPath" key="xsn" opencontrol="SharePoint.OpenXMLDocuments" value="icxsn.gif"></mapping></pre>	
<mapping kev="xslt" value="icxslt.gif"></mapping>	
<mapping keý="zip" opencontrol="" value="iczip.gif"></mapping>	
<mapping key="pdf" opencontrol="" value="pdficon_small.gif"></mapping> 	
<pre>dmapping Value="icgen.gif"/&gt;</pre>	
▲	١
	_

Locate the <ByExtension> element where you will see entries for each icon starting with <Mapping key=. Enter the following on a new line:

### <Mapping key="pdf" Value="pdficon\_small.gif" OpenControl=""/>

Note, that the extension names do not have to be in alphabetical order so it is best to place the entry at the end of the existing list. Also ensure that the correct filename for the icon is used in the entry line.

When complete, save the file and exit notepad.

To see the icon immediately in WSF start a command prompt on the server via **Start** and **Right mouse clicking** on *Command prompt* and selecting **Run as Administrator** from menu that appears.



At the prompt enter **iisreset** to restart Internet Information server. Don't forget that resetting IIS will also affect other applications on the server. When the process is complete, exit the DOS prompt and examine any SharePoint Foundation 2010 libraries that contain PDF documents.

Companyweb ▶ Shared Documents ▶ All Documents ➡ Share a document with the team by adding it to this document library.			
Home			
Libraries	🔲 Туре	Name	
Site Pages	1	1-introduction 🔛 NEW	
Shared Documents	-		
	🕈 Add document		
Lists			
Calendar			
Tasks			

Next, copy the following script to a file called Addextension.vbs on your system

Sub Usage

WScript.Echo "Usage: AddExtension.vbs extension" WScript.Echo

end Sub

Sub Main

```
if WScript.Arguments.Count < 1 then
    Usage
    wscript.Quit(1)
end if
dim extension
extension = wscript.arguments(0)
Set gadmin = WScript.CreateObject("SPSearch4.GatherMgr.1", "")
For Each application in gadmin.GatherApplications
For Each project in application.GatherProjects
    project.Gather.Extensions.Add(extension)
    Next
Next
End Sub</pre>
```

call Main

🗾 Untitled - Notepad			
File Edit Format View Help			
Sub Usage	Save As		×
WScript.Echo "Usage: AddExtension WScript.Echo	G → 📕 🔹 Computer 👻 Local Disk (C:) 👻	download 🔹 🛛 🛛 🗸 Search download	2
end Sub	Organize 🔻 New folder		= - 🕐
Sub Main	E Desktop	Name *	Date modified
if WScript.Arguments.Count < 1 then Usage wscript.Quit(1)	🍺 Downloads 🔄 Recent Places	PDFiFilter64installer	31/05/2011 2:4
end if	🥽 Libraries		
dim extension extension = wscript.arguments(0)	Documents	1	
Set gadmin = WScript.CreateObject("s			
For Each application in gadmin.Gathe For Each project in application. project.Gather.Exten	Videos		
project.Gather.Exten Next	r Computer		
Next	Local Disk (C:)		
End Sub	download		
call Main	PDFiFilter64installer	•	•
	File name: addextension.vbs		•
	Save as type: Text Documents (*.txt)		•
र	Encoding:	ANSI Save	Cancel
<u>بال</u>			11.

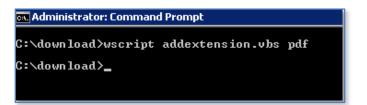
Now run a *Command Prompt* as an administrator by **right mouse clicking** on the *Command Prompt* icon like and selecting **Run as administrator**.

internet Explorer	•
Command Prompt	Open
Notepad	😚 Run as administrator
	Pin to Taskbar Pin to Start Menu
	Remove from this list
	Properties

Accept any UAC that appears.

Change to the directory where you saved the VBS script and type:

#### Wscript addextension.vbs pdf



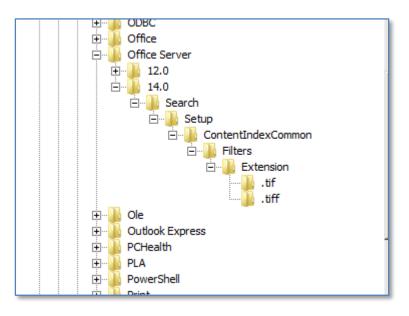
You should see no result if the script executes correctly.



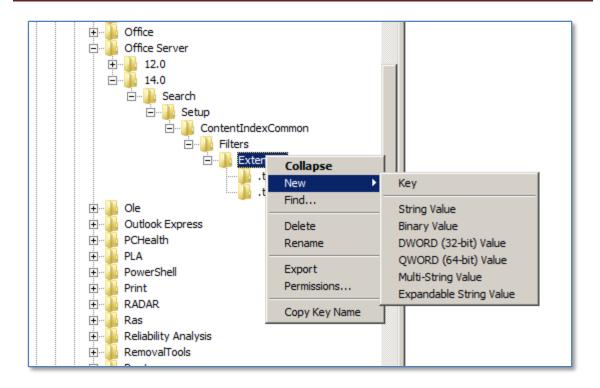
If you receive an error like shown above, check that your *Search Service* is enabled in SharePoint.

Programs (1)
🚮 regedit
₽ See more results
regedit Nog off

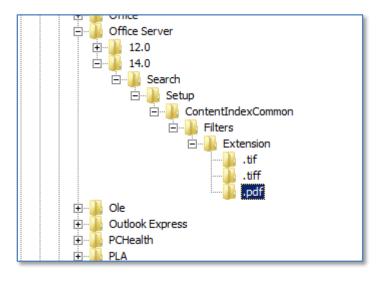
Run Regedit and accept any UAC.



Locate the registry *HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Shared Tools\Web* Server Extensions\14.0\Search\Setup\ContentIndexCommon\Filters\Extension\



Right mouse click on *Extensions* and select New and Key.



Add the key .pdf

🔐 Registry Editor			
File Edit View Favorites Help			
	▲ Name	Туре	Data
E MSF	ab (Default)	REG_SZ	(value not set)
Edit String	×		
Value name:			
(Default)			
Value data:			
{E8978DA6-047F-4E3D-9C78-CDBE46041603}			
ОК	Cancel		

**Right mouse click** on **(Default)** in the right hand window and select **Modify** from the menu that appears.

Enter the following into the Value Data field:

### {E8978DA6-047F-4E3D-9C78-CDBE46041603}

🙀 Registry Editor			
File Edit View Favorites Help			
😟 🕕 ODBC 🔼	Name	Туре	Data
🕀 🌗 Office	ab (Default)	REG_SZ	{E8978DA6-047F-4E3D-9C78-CDBE46041603}
🚊 🔒 Office Server			
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in in iteration in the interval interval in the interval			
🖻 📲 Search			
🖻 📲 Setup			
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🗄 📲 Ole			

Close regedit.

## Chapter 11 – Search

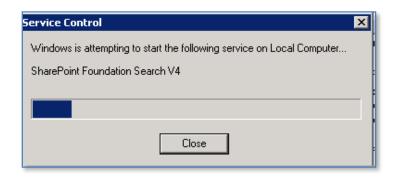
<ul> <li>Internet Explorer (64-bit)</li> <li>Internet Explorer</li> <li>Windows SBS Console</li> <li>Windows Update</li> <li>Accessories</li> <li>Administrative Tools</li> <li>Maintenance</li> <li>Microsoft Exchange Server 2010</li> <li>Microsoft SAL Server 2008</li> <li>Microsoft SQL Server 2008 R2</li> <li>Startup</li> <li>Windows Small Business Server</li> </ul>	Robert Crane Documents Computer Network Control Panel Devices and Printers Administrative Tools Help and Support Run		Computer Managemen Data Sources (ODBC) DHCP DNS Event Viewer File Server Resource M Group Policy Managem Internet Information S INternet Information S ISCSI Initiator Local Security Policy Network Policy Server Performance Monitor Routing and Remote A Security Configuration Server Manager Share and Storage Ma Storage Explorer System Configuration Task Scheduler Windows Firewall with	Open file location Author Pin Lo as administrator Open with Pin to Taskbar Pin to Start Menu Restore previous versions Send to Cut Copy Create shortcut Pin Delete Pin Delete Properties Name Properties
A Back	Windows Security		Windows Memory Diag Windows PowerShell M	Iodules
Search programs and files	Log off	「「」の「」	Windows SBS Console Windows SBS Console Windows Server Back, Windows Server Updat	ip

Click **Start | Administrative Tools | Services** and **right mouse click** on **Services** and select **Run as Administrator** from menu that appears.

Scroll down the list of services and locate the service SharePoint Foundation Search V4.

Sharer one 2010 miller	Jondy Hodina		Hacomade	
🔍 SharePoint 2010 Tracing	Manages tr	Started	Automatic	Lc
🔍 SharePoint 2010 User Code Host	Executes u		Disabled	SE
🔍 SharePoint 2010 VSS Writer	SharePoint		Automatic	SE
SharePoint Foundation Search V4	Provides fu	Started	Manual 👘	C.
🕵 Shell Hardware Detection	Provides n	Started	Automatic	Start
💁 Smart Card	Manages a		Manual	Stop
Smart Card Removal Policy	Allows the		Manual	Pause
SNMP Trap	Receives tr		Manual	Resume
Software Protection	Enables th	Started	Automatic (D	Restart
Special Administration Console Helper	Allows adm		Manual	All Tasks 🔹 🕨
SPP Notification Service	Provides S	Started	Manual -	
SQL Active Directory Helper Service	Enables int		Disabled	Refresh
SQL Full-text Filter Daemon Launche	Service to I	Started	Manual	Properties
SQL Full-text Filter Daemon Launche	Service to I	Started	Manual -	
ពិ				Help

*Right mouse click* on the service and select **Restart** from the menu that appears.



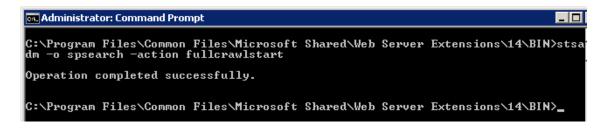
You should see the service restart.

Close the Services window.



Run a *Command Prompt* as an administrator again by **right mouse clicking** on the icon and selecting **Run as Administrator** from the menu that appears.

Any PDF documents you now add to SharePoint will be indexed, however those already there will not be indexed until a full crawl is run.



To launch a full manual crawl change to the directory:

C:\program files\common files\microsoft shared\web server extensions\14\bin

And run the following command:

#### Stsadm –o spsearch –action fullcrawlstart

This will commence a full reindex of all SharePoint information. This reindex may take a while to complete and may impact the performance of your SharePoint Server.

::	Companyweb → Search Results	
Home		This Site 🔽 ciaops
	of 1 results <u>Chapter 3 – Installing Windows Sharepoint Services 3.0</u> means please contact www.ciaops.com immediately to arrange for a within our client sites. <b>CIAOPS</b> regular testing of new software direct support and advice from <b>CIAOPS</b> on a particular situation has timeframe. We can even engage <b>CIAOPS</b> at a reasonable hourly rate to Authors: Robert Crane Date: 5/31/2011 Size: 1MB http://companyweb/Shared Documents/1-introduction.pdf	

If a search is now run using the same term (here ciaops) you can see that now returns a hit from the PDF and from text inside that document (rather than just the title). This indicates that the PDF search is operating correctly.

Reference - http://support.microsoft.com/kb/2293357

#### 11.6 Microsoft Search Sever Express 2010

The ability to search WSF content is provided by default, however it is limited to only the content contained within WSF sites. With the installation of Windows Search Server Express 2010 it is possible to not only search WSF content but also network file shares, web sites and Exchange Public folders.

One down side with Search Server Express 2010 is that it doesn't integrate into the existing search functionality in WSF. This means that if you use WSF search you will only be able to search WSF content, however if you use Search Server Express 2010 you will be able to search WSF content and network files shares, web sites and Exchange Public Folders but it will be via the Search Server Express 2010 web site not the WSF web site.

Microsoft Search Server 2010 Express is a freely available from Microsoft and can be downloaded from:

http://www.microsoft.com/downloads/details.aspx?displaylang=en&FamilyID=cea31a4f -a8b4-4864-b520-be612becdcfa The specifications for Search Server Express 2010 are as follows:

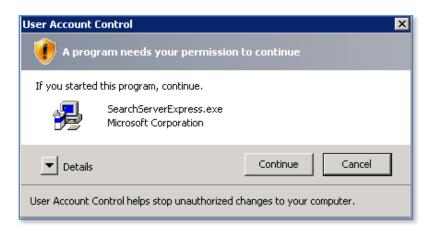
- Processor: 2.5 gigahertz (GHz) (minimum)
- Memory: 4 gigabytes (GB) RAM (minimum)
- Operating System: Any of the following editions of the Windows Server 2008 or newer operating system with the most recent service packs (minimum Service Pack 2): Standard Edition, Enterprise Edition, Datacenter Edition, and Web Edition.
- Hard disk: NTFS-formatted partition with 3 GB of free space (minimum)
- SharePoint Foundation 2010 software prerequisites

In theory it is possible to install Search Server Express 2010 onto Windows Small Business Server 2008 (SBS) but considering all the other applications that need to reside on an SBS server (including WSS v3 or SharePoint Foundation) there is little doubt that performance of Search Server Express 2010 and SBS will be impacted if they co-exist without enough system resources. Search Server Express should not be installed on SBS 2008 is Windows SharePoint v3 (WSS v3) is still installed.

The general recommendation then is to install Search Server Express 2010 and SharePoint Foundation 2010 on a dedicated member server in a network. For more information about installing WSS v3 see Chapter 3 – Installing on Windows Server 2010 and Chapter 4 – Installing on Windows Small Business Server.

	,				1 Dogram	
Tools H	łelp					
Views	🔻 📄 Open					
	Name 🔺 💌	Date modified 🚽	Туре	- Size	▼ Tags	-
	Program Files (x86)	6/11/2008 2:57 PM 31/05/2010 12:4	File Folder			
	SearchServerExpress	13/08/2010 4:03		377.	229 KB	
					Open	
					🗑 Run as admin	
					Pin to Start M	
~					Add to Quick	
					Restore previ	ous versions
					Send To	•
					Cut	
					Сору	
rive (🛄					Curata Chauta	
:)					Create Shorto Delete	cuc
:) :)					Rename	
3)					Rename	
8.0.6)					Properties	
Data						

Log onto the WSF server as an administrator and right mouse click the file to commence the installation. The required files will firstly be extracted to the server.



Accept the User Account Control window by clicking the Continue button.

Microsoft Search Server Express 2010	×
Extracting files, please wait	
	_
Cancel	

The files will then be extracted and the installation commence.



You should now see a *Start* screen displayed. From here select the option Install the prerequisites.

Microsoft® SharePoint® 201	Microsoft® SharePoint® 2010 Products Preparation Tool				
	Welcome to the Microsoft® SharePoint® 2010 Products Preparation Tool				
	The Microsoft® SharePoint® 2010 Products Preparation Tool checks your computer for required products and updates. It may connect to the internet to download products from the Microsoft Download Center. The tool installs and configures the following products:				
	Application Server Role, Web Server (IIS) Role     Microsoft SQL Server 2008 Native Client     Hotirs for Microsoft Windows (KB976452)     Windows Identity Foundation (KB974405)     Microsoft Sync Framework Runtime v1.0 (x64)     Microsoft Chart Controls for Microsoft .NET Framework 3.5     Microsoft Filter Pack 2.0     Microsoft SQL Server 2008 Analysis Services ADDMD.NET     Microsoft Server Speech Platform Runtime (x64)     Microsoft Server Speech Recognition Language - TELE(en-US)     SQL 2008 R2 Reporting Services SharePoint 2010 Add-in				
	, Learn more about these prerequisites				
	< Back. Next > Ca	ancel			

You should now see the welcome screen. Press **Next** to continue.

Microsoft® SharePoint® 2010 Products Preparation Tool	×
Microsoft® SharePoint® 2010 Products Preparation Tool Now Installing Prerequisites	
Configuring Application Server Role, Web Server (IIS) Role	
Started 4:43:15 PM, running for 0:00:05	
<back. next=""> Car</back.>	ncel

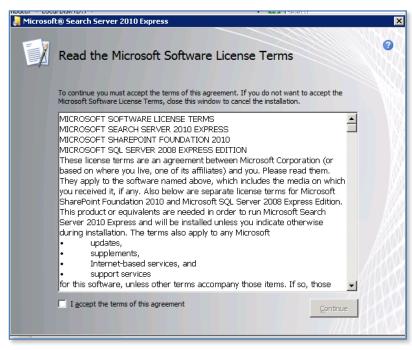
The server will now be checked to ensure that it meets all the minimum requirements and is configured correctly.

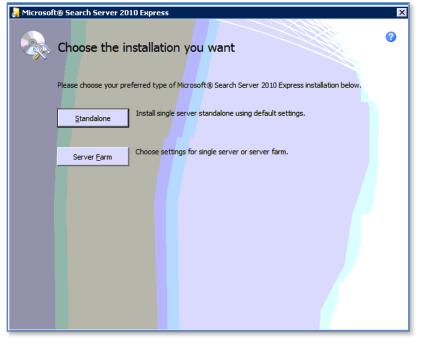
Microsoft® SharePoint® 201	Microsoft® SharePoint® 2010 Products Preparation Tool			
	Installation Complete			
	All required prerequisites have been installed or enabled.			
<ul> <li>And Antonio and Anton Antonio antonio ant</li></ul>	<ul> <li>Application Server Role, Web Server (IIS) Role: configured successfully</li> <li>Microsoft SQL Server 2008 Native Client: installed successfully</li> <li>Hotrix for Microsoft Windows (KB976462); was already installed (no action taken)</li> <li>Windows Identity Foundation (KB974405); was already installed (no action taken)</li> <li>Microsoft Sync Framework Runtime v1.0 (k64) was already installed (no action taken)</li> <li>Microsoft Chart Controls for Microsoft .NET Framework 3.5: was already installed (no action taken)</li> <li>Microsoft Filter Pack 2.0: equivalent products already installed (no action taken)</li> <li>Microsoft Server 2008 Analysis Services ADOMD.NET: installed successfully</li> <li>Microsoft Server Speech Platform Runtime (k64) was already installed (no action taken)</li> <li>Microsoft Server Speech Recognition Language - TELE(en-US); was already installed (no action taken)</li> <li>SQL 2008 R2 Reporting Services SharePoint 2010 Add-in: installed successfully</li> </ul>			
	It is recommended that you keep your Windows operating system up to date on <a href="http://windowsupdate.microsoft.com">http://windowsupdate.microsoft.com</a> .			
	K Back Finish Cancel			

When the process is complete you may need to take further action as recommended by the tool. Press **Finish** to complete the process.

You will now be returned to the *Start* window. From here now select the option **Install Search Server**.







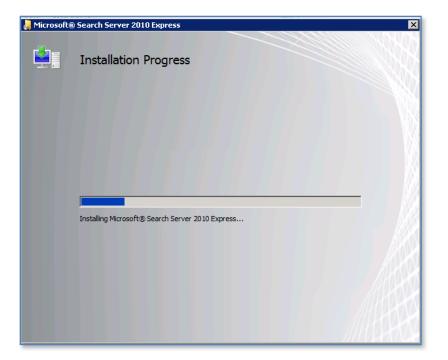
Check the option *I accept the terms of this agreement* and press **Continue**.

Unless Search Server Express 2010 detects a compatible version of SQL server already installed, the only option that will be available on the *Server Type* tab will be *Stand-alone*. Note in that case Search Server Express 2010 will automatically also install SQL 2008 Express onto the server in the system partition. For more information about this version of SQL see **Chapter 8 – Database Operations**.

If Search Server Express 2010 does detect a compatible SQL version it will automatically use that. In that case you will have the option to do a *Server Farm*.

If you select the *File Location* tab you can nominate into which directory the application files and index files will be stored. It is good practice to store these on a non system partition.

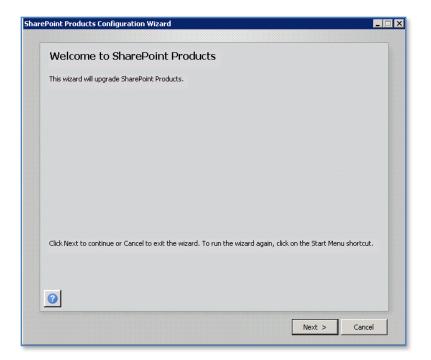
When your configuration is complete press the **Install Now** button to continue.



The installation process will commence and no further input will be required.



When the installation process is complete you will be given the option by default to **Run the SharePoint Products Configuration Wizard now**. To do so simply leave the option checked and press the **Close** button.



Press the **Next** button to continue.

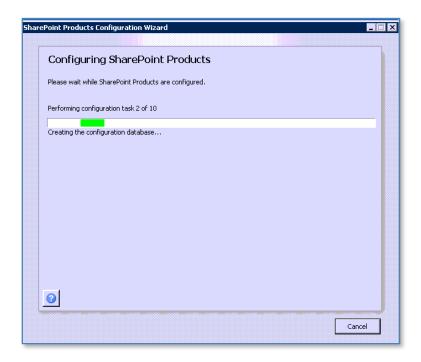


You will then be prompted that the following services will be started or reset during the configuration:

- Internet Information Services
- SharePoint Administration Service

- SharePoint Timer Service

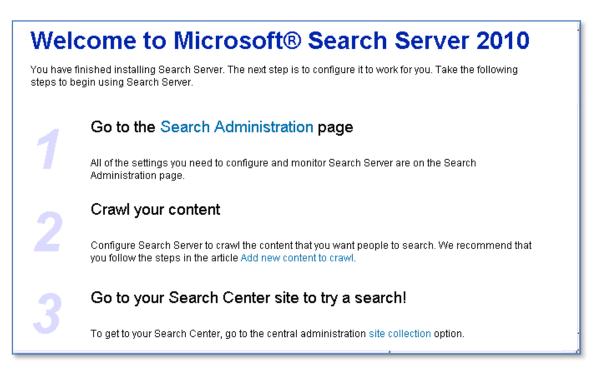
This may affect other users on the network and if so you should prepare them for interruption to their normal programs. Click the **Yes** button to accept this warning and continue. Then press the **Next** button to proceed.



The configuration process will now continue. The only option available is to stop the process via the **Cancel** button.



When the process is complete you will see the Window above. Press the **Finish** button.

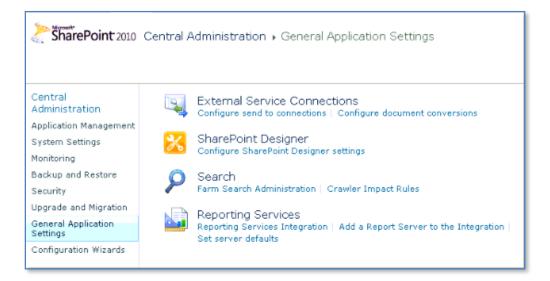


The Search Server Express windows will now automatically be displayed. Click the link **Search Administration** to continue.

Site Actions • 📦 Brows		ervice Application: Search Administratio
Administration	System Status	
Search Administration	Crawl status	Online for crawling
Farm Search Administration	Background activity	None
Administration	Recent crawl rate	0.02 items per second
Crawling	Searchable items	0
Content Sources	Recent query rate	0.00 queries per minute
Content Sources Crawl Rules	Propagation status	Propagation not required
Crawl Log	Default content access account	NT AUTHORITY\NETWORK SERVICE
Server Name Mappings	Contact e-mail address	someone@example.com
Host Distribution Rules	Proxy server	None
File Types	Scopes update status	Idle
Index Reset	Scopes update schedule	Automatically scheduled
Crawler Impact Rules	Scopes needing update	0

The Search Administration site will now be displayed. As you can see it is a SharePoint site.

If you installed Search Server Express 2010 over an existing SharePoint Foundation 2010 Server then you can access the Search Service Application via the Central Administration console.

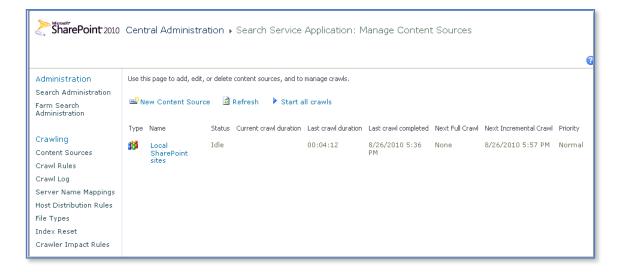


You do so by selecting *General Application Settings* on the left hand side *Quick Start menu* and then *Farm Search Administration* from under the *Search* heading.

SharePoint 2010	Central Administration + Farm Search Administration	n
Central Administration Application Management System Settings Monitoring Backup and Restore Security	Farm-Level Search Settings Proxy server Time-out (seconds) Ignore SSL warnings	None 60,60 No
Upgrade and Migration General Application Settings Configuration Wizards	Search Service Applications Name Search Service Application	
🛆 Recycle Bin 🎒 All Site Content		

From the page that appears select **Search Service Application** in the lower part of the screen.

By default, Search Server Express 2010 will automatically crawl (or index) information in the WSF site, however it is possible to add additional sources for Search Server 2010 to index. To have additional sources index by Search Server 2010 click on the link **Content Sources** under the *Crawling* item from the left Quick link bar.



You should already see the *Local Office SharePoint Server sites* configured as content sources. Click the **New Content Source** from the menu bar.

* Indicates a required field	
Name	Name: *
Type a name to describe this content source.	File Shares
Content Source Type	Select the type of content to be crawled:
Select what type of content will be crawled. Note: This cannot be changed after this content source is created because	C SharePoint Sites C Web Sites
other settings depend on it.	In the second secon
	C Line of Business Data C Custom Repository
Start Addresses	Type start addresses below (one per line): *
Type the URLs from which the search system should start crawling.	\\ciasvr02\data
This includes contents of a file share, such as documents and other files.	
	▼ ∢

Give the new content source a meaningful name, select what sort of your content you wish added. You can choose from:

- SharePoint sites
- Web Sites
- File Shares
- Exchange Public folders

Enter the starting address for the content next. It from this point down that Search Server Express 2010 will index. In this case we have selected a network shared folder.

Crawl Settings	Select crawling behavior for all start addresses in this content
Specify the behavior for crawling this type of content.	source:
Choose which folders to include in the crawl.	ullet Crawl the folder and all subfolders of each start address $ullet$ Only crawl the folder of each start address
Crawl Schedules	Select the schedule that this should be a part of:
Select the crawl schedules for this content source.	Full Crawl Every 20 minute(s) from 5:37 PM for 24 hour(s) every day, sta Edit schedule Incremental Crawl Every 20 minute(s) from 5:37 PM for 24 hour(s) every day, sta Edit schedule
<b>Content Source Priority</b> Select what the priority of this content source should be. The Crawl system will prioritize the processing of 'High' priority content sources over 'Normal' priority content sources	Select the priority for this content source: Priority Normal •
Start Full Crawl	☑ Start full crawl of this content source
Select "Start full crawl of this content source" and click "OK" to start a full crawl of this content source.	

Scroll down and select the crawl settings, schedules and whether you wish a full crawl to commence immediately. When complete press the **OK** button to continue.

Use th	Use this page to add, edit, or delete content sources, and to manage crawls.							
⊫ <sup>∰</sup> N	ew Content Sourc	e 🖪 Re	efresh 🔹 🕨 Start all	crawls 🛛 🗎 Stop	all crawls 🛛 🗎 Pau	se all crawls		
Туре	Name	Status	Current crawl duration	Last crawl duration	Last crawl completed	Next Full Crawl	Next Incremental Crawl	Priority
<b>55</b>	Local SharePoint sites	Idle		00:04:12	8/26/2010 5:36 PM	None	8/26/2010 5:57 PM	Normal
i 🦢	File Shares	Starting				None	None	Normal

You should now see the content source you just configured displayed in the list. Continue to add content sources as required following the above method. When complete select the option **Search Administration** from the Quick link bar on the left of the screen under the *Administration* heading.

Crawl History							
Content Source	Туре	Start Time	End Time	Duration	Success	All Error	s
File Shares	Full	8/26/2010 5:45 PM		00:00:43	0	1	
Local SharePoint sites	Full	8/26/2010 5:32 PM	8/26/2010 5:36 PM	00:04:12	0	1	
							¢
Search Application To	pology						
Current 🔽							
Category					Server Na	ime Statu	s
🗆 Admin							
Administration Co	mponen	t			CIASVR02	Online	э
🖃 Databases							
Administration Da Search_Service_,			bcb9a10987f414e6606		CIASVR02 \SHAREPO	INT	
Crawl Database :					CIASVR02		

At the *Search Administration* page you will now see a summary of all the content sources you have configures and their crawl progress and status.

Site Actions • Browse Page		
🟦 Home 🛛 Search		👔 CIASVR02\administrator 🗸
	٩	Preferences Advanced
<u>II .</u>		

To commence a search of your configured content simply enter the address of your Search Server site into a browser. Enter a query into the box and click on the magnifying glass or press **Enter**.

Search Center : data introduction - Windows Internet Explorer      O      P      http://diasvr02/results.aspx?k=data%20introduction     S      S      Bing	_
🔆 Favorites 👍 🔊 Suggested Sites - 🖉 Web Site Galery -	
😬 🔻 🔀 Search Service Application: 🔽 Search Center : data intr 🗙 🍈 🕷 🛪 🗔 👻 🖷 🗰 🔻 Page 🔹 Safe	ty + Tools + 💓 +
Site Actions • Browse Page           Browse         Page           Image: Page         Image: Page           Image: Page         Image: Page	ministrator -
data introduction Preferences Advanced	
1-1 of 1 results No refinements available	2 🗟 🖄
1-introduction.pdf     Date: 8/26/2010 Size: 1MB     file://ciasyr02/data/1-introduction.pdf	
Done Trusted sites   Protected Mode: Off	• • 100% • <u>/</u>

The results from your content will be returned. You will also notice that you can perform a more advanced search if you press the *Advanced* hyperlink near the input box at the top.

Find documents	that have
All of these words:	
The exact phrase:	
Any of these words:	
None of these words:	
Only the language (s):	🗖 English
	French
	🗖 German
	🗖 Japanese
	Simplified Chinese
	🗖 Spanish
	Traditional Chinese
Result type:	All Results •
Add property re	strictions
Where the Property	(Pick Property) 🔽 Contains 💌

#### 11.10 Conclusion

This guide continues to be a work in progress and I encourage comments and feedback of any type. The only way that the Guide will improve if these is continued feedback.

Please send your comments and feedback to <u>director@ciaops.com</u>.