Configuring Adobe PDF iFilter 9 for 64-bit platforms for MS SQL Server 2005

- 1. Install Microsoft SQL Server 2005 first and apply any required service packs to it (and the OS). For the information on SQL Server 2005 system requirements, please follow the link here: <u>http://www.microsoft.com/sql/prodinfo/sysreqs/default.mspx</u>
- 2. Install Adobe PDF iFilter 9 for 64-bit platforms.
- 3. Set the PATH environment variable to 'bin' folder of 'Ifilter' installation. For e.g in the PATH variable, add the path 'C:\Program Files\Adobe\Adobe PDF iFilter 9 64-bit\bin\' and then **restart** the machine.
- 4. Launch the SQLServer Management Studio (SSMS). Log in to a database server giving correct username/password.
- 5. Once you login, you will see tree view in SSMS. Expand a database which you would like to index for e.g. in this case: Ifilter or Create a new functioning database to **store PDF files**.



6. Click on the 'New Query' toolbar button and change the drop-down combo box from 'master' to 'Ifilter' (Name of the database which you are trying to index). In the right-hand side view, you can now enter T-SQL commands and execute them. 7. Create a new table in the database executing the following query:

```
CREATE TABLE BlobTable (
     ID int IDENTITY (1, 1) NOT NULL,
     Filename sysname NULL,
     Extension sysname NULL,
     Document image NULL,
     CONSTRAINT PK_BlobTable1 PRIMARY KEY NONCLUSTERED
     (ID)
       )
```

You can change the name of the table as per your requirement. In the given example, the name is selected to be BlobTable. Adobe PDF IFilter indexes PDF files in SQL Server based on your specified column names.

8. Create a stored procedure by executing the following query.

GO

```
CREATE PROCEDURE sp_textcopy (
 @srvname varchar (30),
 @login
           varchar (30),
 @password varchar (30),
 @dbname varchar (30),
 @tbname varchar (30),
 @colname varchar (30),
 @filename varchar (30),
 @whereclause varchar (40),
 @direction char(1))
AS
DECLARE @exec_str varchar (255)
SELECT @exec str =
    'textcopy /S ' + @srvname +
    '/U ' + @login +
    '/P ' + @password +
    '/D ' + @dbname +
    '/T ' + @tbname +
    '/C ' + @colname +
    '/W "' + @whereclause +
    '" /F ' + @filename +
    '/' + @direction
EXEC master..xp_cmdshell @exec_str
GO
```

9. Now to allow advanced options to be changed, execute the following query:

```
-- To allow advanced options to be changed.
EXEC sp_configure 'show advanced options', 1
GO
-- To update the currently configured value for advanced options.
RECONFIGURE
GO
-- To enable the feature.
```

EXEC sp_configure 'xp_cmdshell', 1 GO -- To update the currently configured value for this feature. RECONFIGURE GO Refresh the explorer tree view in SSMS and verify the table is created.

- Next we need to copy some files into the table. Create a folder on your local drive for eg: 'C:\pdfs'. Copy the PDF files which you need to index into this folder. You can select some other folder too which has PDF's in it.
- 11. Create a new query view and enter the following commands. This query is to enter the PDF files information into Database. In the given example, we have inserted 5 pdf's into the table.

USE ifilter

/*

delete any previous data

```
*/
```

DELETE BlobTable

/*now create ten rows (minus the actual blob data) for the five pdf's 1.pdf -> 5.pdf */

```
INSERT INTO BlobTable(FileName, Extension, Document) VALUES ('1.pdf', '.pdf', 0x0)
INSERT INTO BlobTable(FileName, Extension, Document) VALUES ('2.pdf', '.pdf', 0x0)
INSERT INTO BlobTable(FileName, Extension, Document) VALUES ('3.pdf', '.pdf', 0x0)
INSERT INTO BlobTable(FileName, Extension, Document) VALUES ('4.pdf', '.pdf', 0x0)
INSERT INTO BlobTable(FileName, Extension, Document) VALUES ('5.pdf', '.pdf', 0x0)
INSERT INTO BlobTable(FileName, Extension, Document) VALUES ('textfile.txt', '.txt',
0x0)
```

- GO
- 12. Now using the stored procedure *sp_textcopy*, which was created earlier, insert data into the table for each PDF file, as shown in the example below. Note that you need to change the servname (svrname), login, password as per the configuration in your database.

```
/* insert pdf's into table*/
sp_textcopy @srvname = 'ACODY-WSRV03-1',
    @login = 'sa',
    @password = 'sa',
    @dbname = 'ifilter',
    @dbname = 'BlobTable',
    @colname = 'Document',
    @filename = 'c:\pdfs\1.pdf',
    @whereclause = "WHERE FileName='1.pdf' ",
    @direction = 'l'
GO
sp_textcopy @srvname = 'ACODY-WSRV03-1',
    @login = 'sa',
```

```
@password = 'sa',
      @dbname = 'ifilter',
      @tbname = 'BlobTable',
      @colname = 'Document',
      @filename = 'c: \pdfs \2.pdf',
      @whereclause = " WHERE FileName='2.pdf' ",
      @direction = 'I'
GO
sp_textcopy @srvname = 'ACODY-WSRV03-1',
      @login = 'sa',
      @password = 'sa',
      @dbname = 'ifilter',
      @tbname = 'BlobTable',
      @colname = 'Document',
      @filename = 'c: \pdfs \3.pdf',
      @whereclause = " WHERE FileName='3.pdf' ",
      @direction = 'I'
GO
sp_textcopy @srvname = 'ACODY-WSRV03-1',
      @login = 'sa',
      @password = 'sa',
      @dbname = 'ifilter',
      @tbname = 'BlobTable',
      @colname = 'Document',
      @filename = 'c:\pdfs\4.pdf',
      @whereclause = " WHERE FileName='4.pdf' ",
      @direction = 'I'
GO
sp_textcopy @srvname = 'ACODY-WSRV03-1',
      @login = 'sa',
      @password = 'sa',
      @dbname = 'ifilter',
      @tbname = 'BlobTable',
      @colname = 'Document',
      @filename = 'c: \pdfs \5.pdf',
      @whereclause = " WHERE FileName='5.pdf' ",
      @direction = 'I'
GO
```

Note: Before you run it, make sure that the tool '*textcopy.exe*' is added to your system PATH variable and machine is rebooted once.

Once you run the above query, you will get success *results* as shown below:



13. Check whether Adobe IFilter is registered with the server. In a new query window type and execute the following:

SELECT * from sys.fulltext_document_types

You should see a list of installed filters in the output window. Verify if you see entry for PDF (.pdf) with correct path set. If you do not see an entry for '.pdf' then you need to execute the following two lines:

EXEC sp_fulltext_service 'load_os_resources', 1 EXEC sp_fulltext_service 'verify_signature', 0 GO

Restart the SQLServer . Re-run above query and verify that you see an entry for '.pdf'.

14. Now enable Full Text search on your database if it's not enable.

EXEC sp_fulltext_database 'enable'

Now you are ready to create the full-text index on your table.

15. Run the following query:

USE ifilter EXEC sp_fulltext_catalog 'ifilter_cat', 'create' GO USE ifilter

EXEC sp_fulltext_table 'BlobTable', 'create', 'ifilter_cat', 'PK_BlobTable1' GO

USE ifilter EXEC sp_fulltext_column 'BlobTable', 'Document', 'add '<language code>, 'Externsion' GO

USE ifilter EXEC sp_fulltext_table 'BlobTable', 'activate' Go

16. Now run the following query to build the catalog:

USE ifilter Exec sp_fulltext_catalog 'ifilter_cat', 'start_full' GO

17. Now you are ready to query the index. In a new query window try the following:

> SELECT * FROM BlobTable WHERE CONTAINS(*, '<search word>') SELECT * FROM BlobTable WHERE FREETEXT(*, '<search word>')

You should see results in the Results pane of SQL Server Management Studio.

Further information about IFilter specification can be found on the Microsoft Web site:

- http://msdn.microsoft.com/en-us/library/ms691105.aspx
- <u>http://technet.microsoft.com/en-us/library/ms142499.aspx</u>

Other references:

- <u>http://www.adobe.com/cfusion/webforums/forum/messageview.cfm?forumid=72&cati</u> <u>d=654&threadid=1362988&enterthread=y#4959249</u>
- <u>http://labs.adobe.com/wiki/index.php/PDF_iFilter_8_-_64-bit_Support</u>
- <u>http://kb.instantasp.co.uk/Documentation/Setting-up-full-text-search-within-InstantKB.NET</u>