Command line administration of your Exchange Full-Text index with the help of MSSEARCH_ADMIN.VBS

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Abstract

In my first article about Exchange Server Full-Text Indexing i explained how to administer the index with the GUI.

In this article, i will show you how to administer the Full-Text index with a new command line tool – called MSSEARCH_ADMIN.VBS. This tool greatly expands the administration capabilities with a lot of missing features in the GUI administration (Exchange System Manager). You can use MSSEARCH_ADMIN.VBS with Exchange 2000 and Exchange 2003.

Let's begin

First, we have to download the MSSEARCH_ADMIN.VBS from the following website. The tool is really small because the package contains only one VBS script, some XSL files and a small documentation.

MSSEARCH_ADMIN.VBS features:

MSSEARCH_ADMIN.VBS provide a way for an administrator to perform several tasks against an existing Full-Text Index via the command line. The main functions are:

- ? Determine which Exchange Stores in the domain have Full-Text indexes
- ? Get the status of the existing Full-Text Indexes on Exchange Servers
- ? Enable the Index for searching
- ? Disable the Index for searching
- ? Start a Full Population
- ? Start an Incremental Population
- ? Pause the current population
- ? Resume the current population
- ? Stop the current population
- ? Reset the Index

Features included in the command line tool but not in the GUI:

Provide a way to repair any existing Exchange Full-Text Indexes after any of the following has occurred:

- ? Domain Rename (for more information about Domain Rename read this)
- ? Change the primary SMTP Address for the Default Recipient Policy

Figure 1: MSSEARCH_ADMIN.VBS features

Installation

To uses the MSSEARCH_ADMIN.VBS tool, copy it and it's XSL files to a directory where the Exchange System Manager binaries are installed.
Next, you must obtain a file called ADS.DLL from the following website and copy it to the same location as the MSSEARCH_ADMIN.VBS tool.
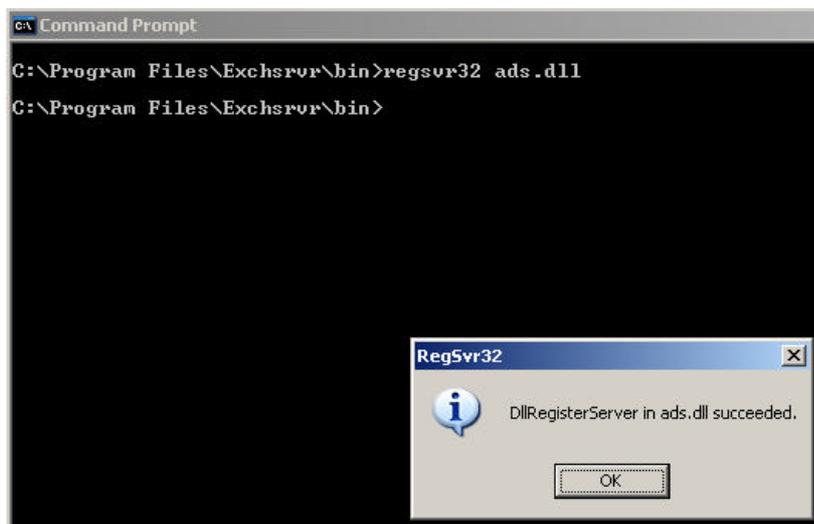We must register the ADS.DLL with REGSVR32

Figure 2: REGSVR32 ADS.DLL

This binary is used to convert a variant array of bytes to a variant that contains an ASCII encoded hexadecimal string. This enables VBSCRIPT to translate an ADSTYPE_OCTECTSTRING variant to a string of ASCII characters 0-0 and A-F. Wow – that's hard for me to understand but the main thing ist that it works ✍

The XSL files are used to transform the XML data from VBSCRIPT to a user friendly format.

How it works

For all commands, you must use CSCRIPT, the command line interpreter for the Windows Script Host.

The syntax is:

```
MSSearch_Admin.vbs /Action:<ACTION> [/ExServer:<EXSERVER>]
[/Application:<APPLICATION>]
[/Index:<INDEX>] [/OutputFile:<OUTPUTFILE>]
```

For the complete Syntax of MSSEARCH_ADMIN you can read the documentation (MSSEARCH Admin Tool.doc) included in the download package.

I have modified and copied the important parts of the syntax and paste it into this article to help you for better understanding.

LIST	Lists all Exchange stores, in the specified "scope", that have a full-text index. If the parameter **ExServer** is specified, only the Exchange stores on that specified Exchange server will be listed. If the Parameter **ExServer** is not specified, all the Exchange stores in the current domain will be listed. The Application and Index parameters do not affect the execution of this action
STATUS	Obtains the status and file locations of the specified full-text indexes on the specified Exchange server and also indicates if any of the indexes have incorrect configurations
FIXUP	Fixes any known incorrect configurations for the specified full-text indexes on the specified Exchange server. The current known incorrect configurations are as follows: Index Location in Active Directory is not updated when the index is moved Index Start Addresses may need to be modified if the Primary SMTP Address for the Default Recipient Policy has been changed, or if the domain has been renamed
ENABLE	Enables the specified full-text indexes on the specified Exchange Server for searching
DISABLE	Disables the specified full-text indexes on the specified Exchange server for searching
FULL	Starts a Full Population on the specified full-text indexes on the specified Exchange server. This action will apply only to those indexes with a status of **Idle**

INCREMENTAL	Starts an Incremental Population on the specified full-text indexes on the specified Exchange server. This action will apply only to those indexes with a status of **Idle**
PAUSE	Pauses the current Population on the specified full-text indexes on the specified Exchange server. This action will apply only to those indexes with a status of Crawling or Crawling Incrementally
RESUME	Resumes the paused Population on the specified full-text indexes on the specified Exchange server. This action will only apply to those indexes with a status of **Paused**
STOP	Stops the current Population on the specified full-text indexes on the specified Exchange server. **Note:** This action will apply only to those indexes with a status of Crawling or Crawling Incrementally
RESET	Resets the specified full-text indexes on the specified Exchange Server and disables the full-text index for searching. This action will apply to any index status. **Attention:** This action will erase all full-text indexes on the specified Exchange Server

Other parameters

The parameters …

- ? Index
- ? Application
- ? ExServer

Apply to a specific full-text index for a specific MSSearch application on a specific Exchange server.

Examples

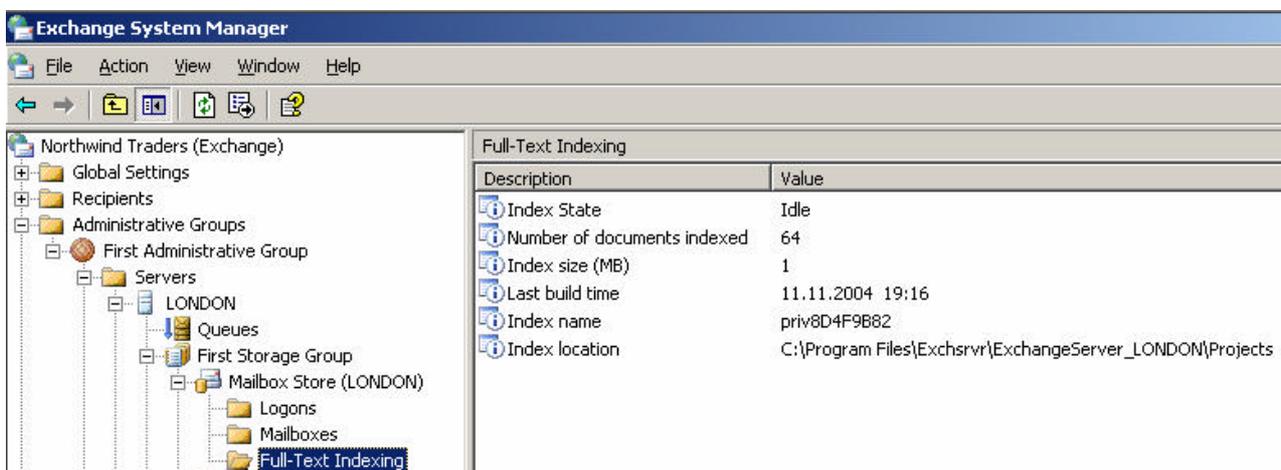Base of all MSSEARCH_ADMIN.VBS is an activated Full-Text Index on the Exchange Server/s

Figure 3: Activated Full-Text Index on the Exchange Server

List all Exchange Servers in the Domain with enabled Full-Text Indexes:


```
Command Prompt
C:\Program Files\Exchsrvr\bin>cscript /nologo mssearch_admin.vbs /action:list >output.xml
```

Figure 4: MSSEARCH_ADMIN.VBS /LIST

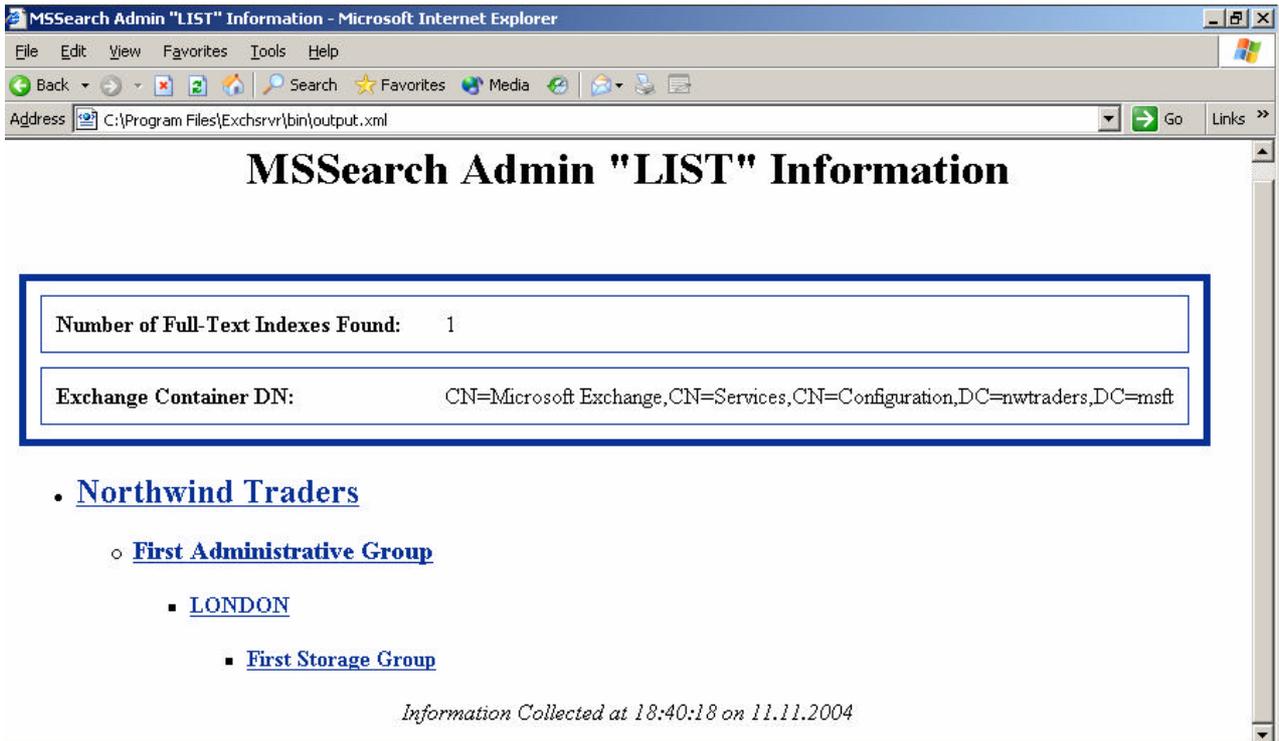Open the OUTPUT.XML file with the Internet Explorer

MSSearch Admin "LIST" Information - Microsoft Internet Explorer

File   Edit   View   Favorites   Tools   Help

Back   •   •   •   •   •   Search   Favorites   Media   •   •   •   •

Address   C:\Program Files\Exchsrvr\bin\output.xml   ▼   Go   Links   »

MSSearch Admin "LIST" Information

| Number of Full-Text Indexes Found: | 1 |
| Exchange Container DN: | CN=Microsoft Exchange,CN=Services,CN=Configuration,DC=nwtraders,DC=msft |

- **Northwind Traders**
  - o **First Administrative Group**
    - ■ **LONDON**
      - ■ **First Storage Group**

Information Collected at 18:40:18 on 11.11.2004

Figure 5: MSSEARCH_ADMIN.VBS /LIST – HTML Output

Show the status of the Exchange Server Full-Text Index


```
Command Prompt
C:\Program Files\Internet Explorer>cscript /nologo mssearch_admin.vbs /action:status >output.xml
```
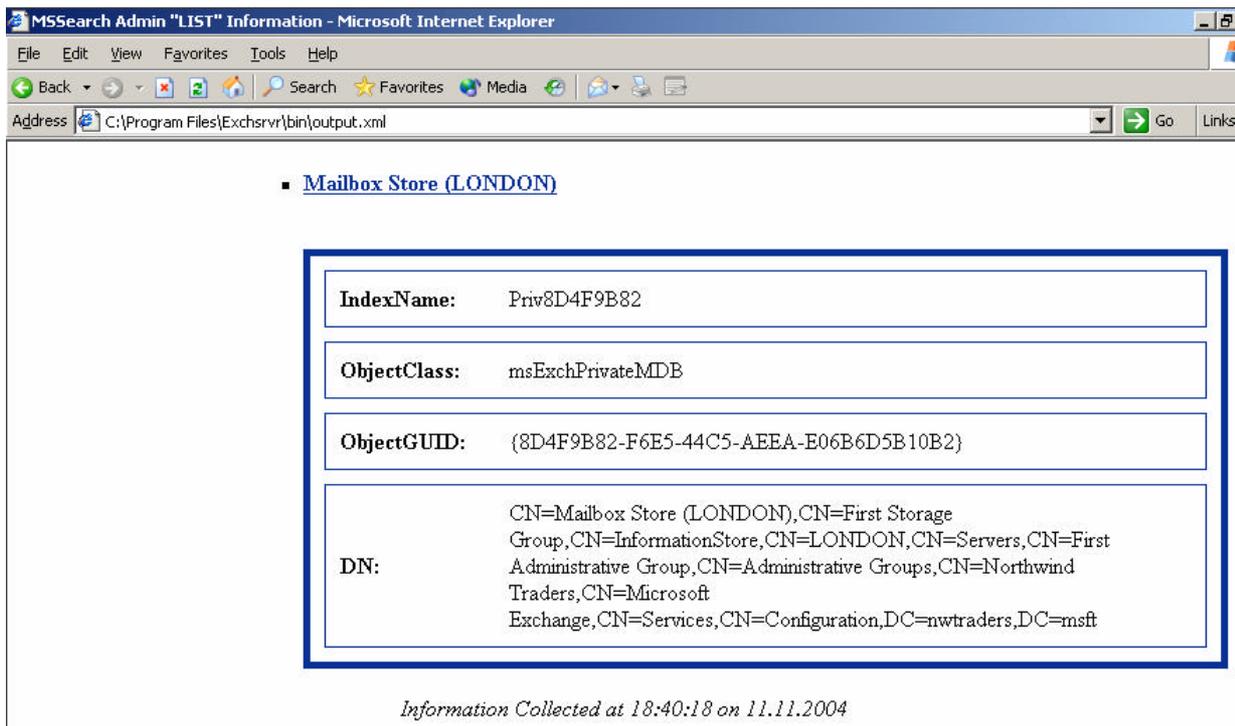
Figure 6: MSSEARCH_ADMIN.VBS /STATUS

Figure 7: MSSEARCH_ADMIN.VBS /STATUS – HTML Output

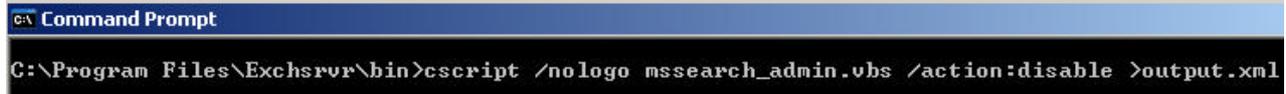Disables the specified full-text indexes on the specified Exchange server for searching

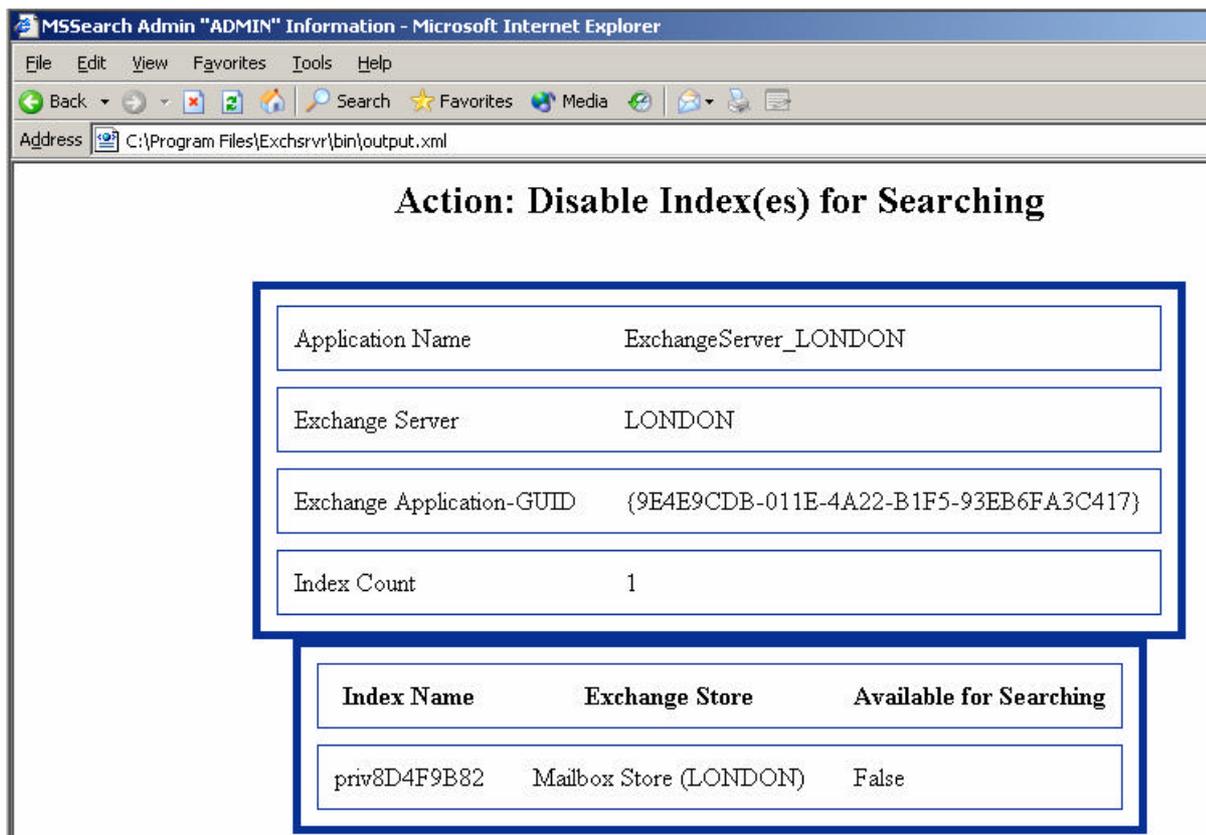Figure 8: MSSEARCH_ADMIN.VBS /DISABLE

Figure 9: MSSEARCH_ADMIN.VBS /DISABLE – HTML Output

Conclusion

I like the command line administration tool MSSEARCH_ADMIN.VBS because it is more powerful as the GUI tool and offers many options which are missing in the Exchange System Manager.

Related Links

MSSearch Admin Tool
http://www.microsoft.com/downloads/details.aspx?familyid=46fd5644-bd0d-4cfa-95f8-64ba34bde6a7&displaylang=en
Variant Conversion Functions (ArrayConvert.Exe)
http://support.microsoft.com/default.aspx?scid=kb;en-us;250344
Exchange 2003 Download Tools website
http://www.microsoft.com/exchange/downloads/2003/default.mspx
Implementing a Full-Text Index for your Information Store
http://www.msexchange.org/tutorials/Full-Text-Index-Information-Store.html
Full-Text Indexing with Multiple Languages
http://support.microsoft.com/default.aspx?scid=kb;en-us;325624
Configure Full-Text Indexing on Mailbox Stores in Exchange 2003
http://support.microsoft.com/default.aspx?scid=kb;en-us;822932
White Paper - The Best Practices for Deploying Full-Text Indexing
http://support.microsoft.com/default.aspx?scid=kb;en-us;326186