# Exchange 2003 – Exinfo

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## Abstract

In this article I will show you how use the Exinfo tool to collect and display Exchange Server 2000 and Exchange Server 2003 information Exinfo was primary designed for Exchange 2000 Server use but you can also use it for Exchange Server 2003.

### Let's begin

ExInfo is a very small Visual Basic application that you must run locally on your Exchange 2000 server or Exchange Server 2003. Exinfo provides diagnostic and systemstate data about the Exchange Server and a lot of associated Active Directory information.

ExInfo uses WMI (Windows Management Instrumentarium) which is an implementation from the WBEM (Web Based Enterprise Management) imitative from Microsoft. WMI is supported in Windows 2000, Windows XP and Windows Server 2003, and for some older operating systems as an Addon.

ExInfo uses WMI queries on the local Exchange 2003 server and queries Active Directory to provide a huge amount of useful information.

ExInfo is a query and reporting tool, it doesn't make any configuration unless you execute some scripts which change or add some information to your Exchange organization.

### Installation

To run Exinfo you must have a minimum of Microsoft Windows 2000 Server Service Pack 1 and Exchange 2000 Server Service Pack 1 or Exchange Server 2003. Exinfo best runs locally on the computer that runs Exchange Server. You must be logged on as an Administrator to access Windows Management Instrumentation, Active Directory and Exchange information.

After <u>downloading</u> and extracting the Exinfo files, you can start the installation by clicking Setup.exe.



Figure 1: Installation of ExInfo

You must specify the installation path. The default installation path is C:\Program Files\ExInfo.

ExInfo Setup creates a Program Group called "Exchange Information Collection Tool"

Because ExInfo is a relative old tool it is possible that it would like to overwrite an OCX file. If you get the message with the version conflict click Yes to let the newer file on the system.

Version Conflict	×
A file being copied is not newer than the file currently system. It is recommended that you keep your existing	
File name: 'C:\WINDOWS\system32\Mscomctl.ocx'	
Description: "Windows Common Controls ActiveX Cor	trol DLL
Your version: '6.1.95.45'	
Do you want to keep this file?	
<u>Y</u> es <u>N</u> o	No to <u>A</u> ll

Figure 2: ExInfo version conflict

#### Exinfo has three primary functions:

- <u>Information Collection</u>: Information Collection collects information from Windows Management Instrumentation Providers and Active Directory. You can also specify Exinfo.exe to generate an file dump of the Configuration container as well as generate an HTML-based report of the Active Directory and Windows Management Instrumentation queries.
- <u>Custom Script</u>: Custom Script provides a user interface to host custom scripts and display human readable text generated by the script; it saves this information to a log file. In addition, this tab enables the log file to be appended or overwritten by subsequent executions of the same script to the same file depending on the user's preference.
- <u>File Collection</u>: File Collection enables the user to package any of the files created by Exinfo.exe or any file on the system into a .cab file. This cab file can be archived after analyzing or it could be send to Microsoft or to other professionals for further analysis.

As a	first step	vou must s	pecify the	Exchange	Server to use.
/ 10 U	mot stop	you must s	peeny the	Exchange	001101 10 030.

Exchange Information		×
	Welcome! Exchange Information utility can be used to collect information about an exchange server.	
	Please specify the Exchange server name:	
	OK Cancel	

Figure 3: Select the Server to get the information from

On the first tab called "Information Collection" click on Local Server information and you will find some helpful information about the Exchange and AD configuration. You will see your Active Directory and Exchange Topology and many other configuration settings of your Exchange Organization.

Exchange Server Data and Configu	uration Collectior	1 Tool			×
🚮 Information Collection 🔤 Cust	om Scripts   🖄 Fil	e Collection			
	Exchange Server M cn=LONDON Exchange Server I dn=CN=LONDO Exchange Server V	Vame: Distinguished Name: DN,CN=Servers,CN=First Admini /ersion: ersion 6.5 (Build 7638.2: Servic id configuration:		Administrative Groups,CN=NorL	
Processes and Services list     Logical Disks list     Exchange WMI Classes    Absolute TimerInstruction    AggregateEvent    ClassCreationEvent    ClassDeletionEvent    ClassOperationEvent    ClassOperationEvent    ClassProviderRegistration    ConsumerFailureEvent		Property Name	Propert	y Value IFDE dump <u>G</u> enerate Repo	rt
				OK <u>H</u> elt	>

Figure 4: Information Collection

### E2KDSINTEG

The E2kdsinteg utility was first included in Exchange 2000 SP2. This tool reports the health of Active Directory after Exchange 2000 Server or Exchange Server 2003 is installed and running.

E2kdsinteg generates a simple report in text file format that documents anomalies or suspect objects in Active Directory.

E2kdsinteg does not make changes to any objects in Active Directory. Depending on the number of mail-enabled objects and configuration objects in Active Directory, it may take a substantial amount of time to process the mail-enabled objects. In this example the collection of about 3.500 objects takes a few seconds in a Virtual Machine.

In Exchange Server 2003, the ConfigDSInteg tool runs the E2kDSInteg configuration object to examine Active Directory configuration objects but it is also possible to run the tool alone.

You can find more information about this tool and when to use it in the following KB article: <u>http://support.microsoft.com/kb/313184/en-us</u>.

Click E2KDSINTEG Script to start the script as you can see in the following Figure.

Exchange Server Data and Configuration Co	ollection Tool
🔄 Information Collection 🔤 Custom Scripts	Eile Collection
	ilnickname=*)
	ayProxy: TP:@nwtraders.msft
First Administrative disable	00:c=US;a= ;p=Northwind Trader;o=Exchange; adGatewayProxy;
Servers msExc	hPolicyOrder:
H Zweite Administrativ Internet Message Form	17483647 hNonAuthoritativeDomains:
Recipient Policies	TP:@nwtraders.msft
E2KDSINTEG Script	The selected request may take a significant amount of time to complete.
Exchange WMI Classes	Do you want to continue?
AbsoluteTimerInstruction	Yes No
AggregateEvent	
ClassDeletionEvent	
ClassOperationEvent	
ClassProviderRegistration	
Event EventConsumer	-1
	Generate LDIFDE dump Generate Report
	OK <u>H</u> elp

Figure 5: Executing E2KDSINTEG

E2KDSINTEG is now executing the Exchange DS Integrity Checker.

Exchange Server Data and Configuration Collection Tool	×
📾 Information Collection 🔤 Custom Scripts 🔄 🏐 File Collection	
NT Site Names     (mailnickname=")     gatewayProxy:     SMTP:@nwtraders.msft     X400:c=US;a=;p=Northwind Trader;o=Exchange;     disabledGatewayProxy:	
Exchange W Exchange 2000 DS Integrity Checker	
Absolu CN=DL56-B36kcw4,0U=Loadsim Users,DC=nwtraders,DC=msft Objects = 553	
AggregiateLiverit    ClassCreationEvent    ClassDeletionEvent    ClassOperationEvent    ClassOperationEvent    ClassOperationEvent    ClassProviderRegistration    ConsumerFailureEvent    Event    Event    Event	
Generate LDIFDE dump	
ОК <u>Н</u> ер	

Figure 6: E2KDSINTEG is running

After E2KDSINTEG has run you can see the result in EXInfo.

Exchange Server Data and Configu	ration Collection	1 Tool			×	
💼 Information Collection 🔤 Custom Scripts 🔄 😋 File Collection						
I IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Exchange Inform		10:04:52 (ap - Landen v	united and mails marries = 1.0.1	▲	
Administrative Groups		********* e2k ds integ began on 09/17/2006 at 16:04:53 (gc = London.nwtraders.msft, version = 1.0.3				
Routing Groups Servers Zweite Administrativ	object-class = to	DN = CN=dc1,0U=domaene-internal,DC=nwtraders,DC=msft object-class = top\$person\$organizationalperson\$contact				
Internet Message Forma     Recipient Policies     E2KDSINTEG Script		The contact contains no primary X400 address (textENcodedOrAddress)e				
	<pre></pre>					
Exchange WMI Classes    AbsoluteTimerInstruction    AggregateEvent    ClassCreationEvent    ClassDeletionEvent    ClassOperationEvent    ClassOperationEvent    ClassProviderRegistration    ConsumerFailureEvent    Event    Event	<b>T</b>	Property Name	Property \	Value		
			Generate <u>L</u> DIF	DE dump <u>G</u> enerate Repor		
				<u>ОК <u>Н</u>еір</u>		

Figure 7 E2KDSINTEG results

#### **Custom Script**

EXInfo allows you to execute scripts to collect or find information about your Exchange environment that are not part of EXInfo. With the help of EXInfo you can redirect the Output generated by the Script to a file as you can see in the following Figure. If you want to see the Output of the Script in EXInfo you must active the function "Show Output".

Exchange Server Data and Configuration Collection Tool			×
💼 Information Collection 🔤 Custom Scripts 🏻 😋 File Collection			
Redirect to a file □ Show output Redirect			
Append to file     O <u>O</u> verwrite the file			
C:\exinfo\redirect.txt	]		
Script File:			
C:\exinfo\script.cmd			
Script File Output:			
	ОК	1	Help
			Tielb

Figure 8: Executing custom scripts

CAB file creation

For archiving purposes or if you want to send the EXInfo output to Microsoft or another IT professional you can create a CAB file of the EXInfo output.

Information Collection       Image: Custom Scripts       Image: File Collection         Cab File Path:	Exchange Server Data and Configuration Collection Tool		×
C:\temp\exinfo.cab  File Path: C:\Program Files\ExinfoReports\Exinfo10_07_06_17_35_12.htm Add >> Add >> C:\Program Files\Exinfo\ExinfoReport Succeeded. C:\Program Files\Exinfo\ExinfoReport Succeeded.  C:tgate Cab	💼 Information Collection 🔤 Custom Scripts 🔄 File Collection		
File Path:         C:\Program Files\ExInfoReports\ExInfoReports\ExInfoReport Succeeded.         Add >>         Add >>         C:\Program Files\ExInfo\ExInfoReport Succeeded.         C:\Program Files\ExInfoReport Succeeded.         C:\Program Files\ExInfo\ExInfoReport Succeeded.         C:\Program Files\ExInfo\ExInfoReport Succeeded.	<u>C</u> ab File Path:		
C:\Program Files\ExInfoTeports\ExInfoT0_07_06_17_35_12.htm         Add >>       Add Files       Status         C:\Program Files\ExInfo\ExInfoReport       Succeeded.         C:\Program Files\ExInfo\ExInfoReport       Succeeded.	C:\temp\exinfo.cab		
Add Files       Status         C:\Program Files\ExInfo\ExInfoReport       Succeeded.         Create Cab       Create Cab	<u>F</u> ile Path:		
C:\Program Files\Exinfo\ExinfoReport       Succeeded.         C:\Program Files\Exinfo\ExinfoReport       Succeeded.         C:reate Cab       Create Cab	C:\Program Files\ExInfo\ExInfoReports\ExInfo10_07_06_17_35_12.htm		
C:\Program Files\Exinfo\ExinfoReport       Succeeded.         C:\Program Files\Exinfo\ExinfoReport       Succeeded.         C:reate Cab       Create Cab	Add >> Add Files Status		
Create Cab	C:\Program Files\ExInfoReport Succeeded.		
ОК <u>Н</u> еір	Cr <u>e</u> ate Cab		
OK Help			
OK Help			
 ОК <u>Н</u> еір			
		ок	Help

Figure 9: Creating the CAB file

The CAB file contains a HTM report from EXInfo, a Perfmon Log file which you can use with Perfmon or for example the Exchange Server Performance Troubleshooting Analyzer and a text file with the Performance Counters of the machine where you run EXInfo.

Name 🔺	Size	Туре	Date Modified
<pre>@exinfo10_07_06_17_33_11.htm</pre>	277 KB	HTML Document	7/10/2006 5:34 PM
ExPTA.LONDON.20060916100112.PerfMon.blg	576 KB	Performance Monito	9/16/2006 10:09 AM
PerfCounters_LONDON.txt	4 KB	Text Document	9/16/2006 10:04 AM

Figure 10: Content of the CAB file

### Command line syntax

EXInfo has a command line option from where you can execute commands. The Command line option from EXInfo is a good idea if you want to use EXInfo in scripts or batch files or if you want to collect information from several servers.

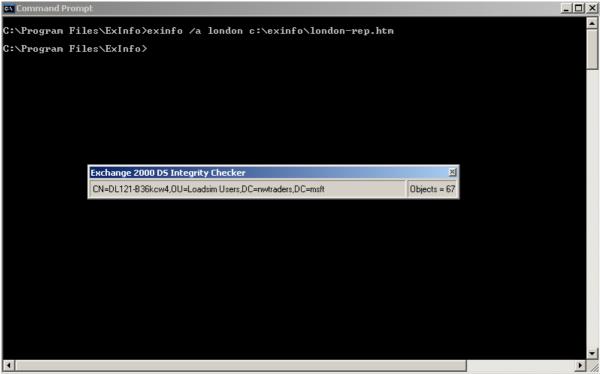


Figure 11: EXInfo command line option

This example creates HTML report called LONDON-REP.HTM. This is the same HTML Report Format and content that EXInfo creates and you see when you create a CAB file from the ExInfo results.

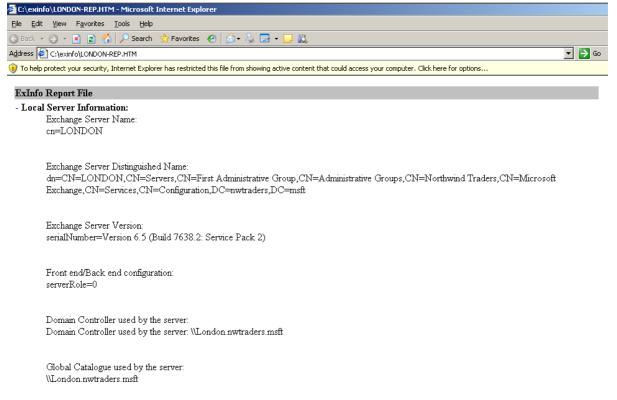


Figure 12: EXInfo report

## Conclusion

ExInfo is a great tool for collecting several information about your Exchange Server and your Exchange environment. The tool was primary designed for Exchange Server 2000 but also woks in Exchange Server 2003 environments. With Exchange Server 2003 there are several more tools to collect Exchange and Active Directory information but you should know that Exinfo is one of these tools.

## **Related Links**

General Information on Exinfo.exe <u>http://support.microsoft.com/kb/305816/en-us</u> Download site for Exinfo <u>http://download.microsoft.com/download/exchplatinumbeta/Utility/1/NT5XP/EN-US/E</u> <u>xinfo.exe</u> Using the Exchange Dump Utility (ExchDump) <u>http://www.msexchange.org/tutorials/Using-Exchange-Dump-Utility-ExchDump.html</u>