

DocusnapScript.exe

Script-Based Inventory Process

TITLE	DocusnapScript.exe			
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1. INTRODUCTION

This document describes an additional method of how to perform a network-based inventory scan of IT systems that are not or only temporarily connected to the network, such as the notebooks of field service staff. If the systems to be scanned are Window systems, we recommend to use the DocusnapScript.exe script for this purpose.

Corresponding scripts are also available for Linux or Exchange Server systems. They are covered in separate support documents.

This document describes how to integrate DocusnapScript.exe by providing it centrally using group policies or by running it manually.

Then, we will demonstrate how to import the resulting information into the Docusnap database.

2. BASICS

2.1 FILING LOCATION

When you install Docusnap, DocusnapScript.exe is stored in the *Tools* folder below the Docusnap application directory. This folder can be opened from the Docusnap user interface.

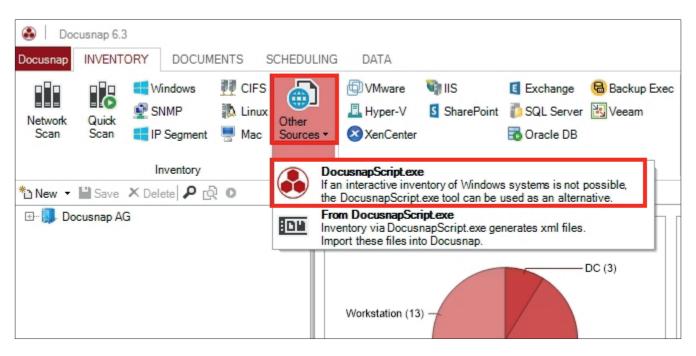
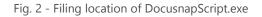


Fig. 1 - Opening the directory from within Docusnap

🐌 l 💽 🕕 = l	Tools	S		_ 🗆 🗙
File Home	Share View			~ (?
🔄 🏵 🗉 🕇 🌗	≪ Program Files → Docusnap 6 → Tools	× د	Search Tools	Q
^	Name	Date modified	Туре	Size
This PC	🚯 DocusnapEX13	4/14/2015 2:16 AM	Application	472 KB
A on VKN	🚳 DocusnapExchange	4/14/2015 2:16 AM	Application	471 KB
C on VKN	🚳 DocusnapLink	4/14/2015 2:16 AM	Application	252 KB
🖵 D on VKN	DocusnapScript	4/14/2015 2:16 AM	Application	1,641 KB
Documei				
〕 Downloa 🗸				
4 items				===



2.2 FUNCTIONALITY

When you run the DocusnapScript.exe script, it creates an XML file containing all inventory data of the local system. You can later import this XML file into Docusnap.

For further details, please refer to the IMPORTING THE INVENTORY DATA section.

2.3 AUTOMATION

It is also possible to run the DocusnapScript.exe script in an automated way. By specifying corresponding parameters, you can store the XML file created by the script in a central network share and then import it automatically at the time specified in the schedule.

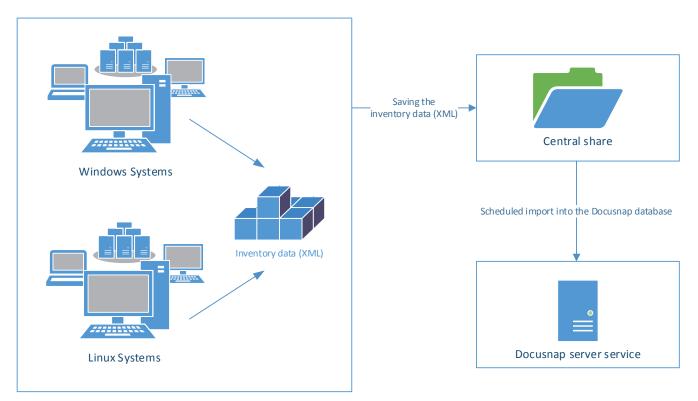


Fig. 3 – Workflow of the automatic import

When you start DocusnapScript.exe while being logged on as a particular user, the script will be run with the permissions of that user account. This means that this user must have a write permission to the central network location.

2.4 REQUIRED PERMISSIONS

In order to perform the inventory scan of a local system with DocusnapScript.exe, normal user permissions are sufficient.

2.5 PARAMETERS

Available parameters can be viewed by calling DocusnapScript.exe -?

	DocusnapScript
Docusr	apScript:
Creates	an XML file containing all information relevant to Docusnap 6.
Call: Docusr	napScript.exe [-H][-C <workstationname>][-D <domainname>] [-U <username>][-P <password>][-O <outputpath>] [-L <debuglevel>][-A <archiveversions>] [-S <softwaresearchfile>]</softwaresearchfile></archiveversions></debuglevel></outputpath></password></username></domainname></workstationname>
	eters: ssible to call DocusnapScript without parameters. In this case, all eters are set to their default values.
-H	View this help. If this parameter is set, help information will be displayed by default.
-C	Computer name (only for remote inventories; default is the local computer).
-D	Domain (only for remote inventories; default is the local domain).
-U -P	User name (only for remote inventories; default is ""). Password (only for remote inventories; default is "").
-0	Path where the result file and the log file will be stored (default is the DocusnapScript program directory).
-S -L	Software search example file: <softwarename> Product1</softwarename> <softwarepublisher> Publisher1</softwarepublisher> <filename> Application1.exe</filename> <modifydate></modifydate> <searchpath> C:\Application1\InstallPath</searchpath> <filesize></filesize> <softwareitem> Log level (default is 0). Valid values are {0, 1, 2}: 0 No logging 1 Error logging</softwareitem>
-A	2 Maximum logging Number of archived versions (default is 4).
(c) iteli	o GmbH - DocusnapScript, version 6.
	ОК

Fig. 4 – DocusnapScript parameters

The following example scans the system and creates the .XML file in the central network share named \\SMDC0001\DC-Share:

DocusnapScript.exe -O \\SMDC0001\DC-Share\

3. CENTRALIZED EXECUTION

3.1 PREPARATIONS

A particularly efficient variant for the distribution of logon scripts is to use a group policy object (GPO). Depending on the inventory requirements, this can either be done via a user configuration or a computer configuration.

The DocusnapScript.exe script can be made available under \\%userdomain%\netlogon. DocusnapScript.exe will then be distributed to other domain controllers in the infrastructure by the Active Directory replication feature.

Depending on the Active Directory infrastructure, the distribution of group policies and logon scripts can take some time (in most cases, it is done within 15 minutes).

For information on how to check the status of the group policies infrastructure and on Active Directory replication issues, please refer to: https://technet.microsoft.com/de-de/library/jj134176.aspx

A central storage path must be provided for storing the XML files. All users or computers who are supposed to save files must have access to this path.

3.2 MANAGEMENT CONSOLE (GPMC)

For the following examples, the Microsoft Group Policy Management Console (GPMC) tool is used.

If the Microsoft Group Policy Management Console has not been installed on your system, you can download it for free from Microsoft. It is strongly recommended to previously test this in a test environment or to implement the settings only in a dedicated test OU (*organisational unit*) in the Active Directory.

The remote server management tools that include the GPMC can be downloaded from the Microsoft website for the Windows client operating systems.

For Windows 7: http://www.microsoft.com/de-de/download/details.aspx?id=7887

For Windows 8: http://www.microsoft.com/de-DE/download/details.aspx?id=28972

For Windows 8.1: http://www.microsoft.com/de-DE/download/details.aspx?id=39296

Windows Server operating systems (2008 and higher) already include the GPMC, but it might be necessary to install it subsequently via the Server Manager.

For more information on the group policy management console and its options, please refer to: https://technet.microsoft.com/de-de/library/cc753298.aspx

3.3 STARTING GPMC

To start the Group Policies Management Console, open the Windows Run dialog (Windows key+R) and enter *gpmc.msc.*

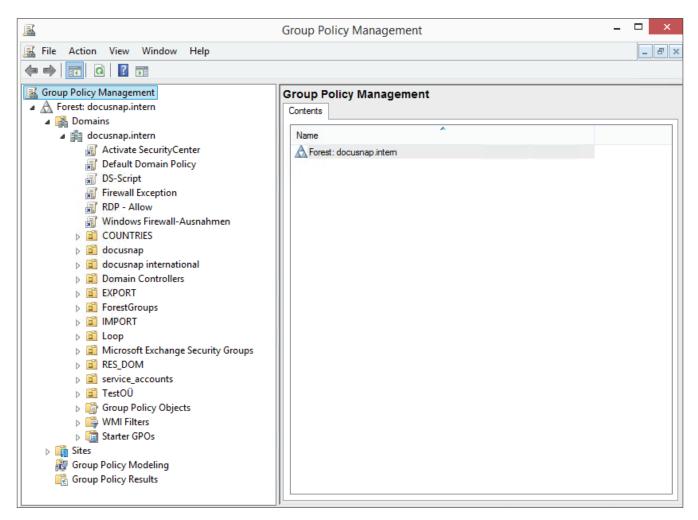


Fig. 5 – Group Policy Management

3.4 INTEGRATING THE SCRIPT VIA A PARAMETERISED GPO

Step 1: Right-click the desired group policy object and click Edit.

Step 2: User Configuration / Computer Configuration => Windows Settings => Scripts

Step 3: Double-click Logon / Logoff (or Startup / Shutdown)

Step 4: Add a new script and enter the required data

Script Name: \\%userdomain%\netlogon\DocusnapScript.exe Script Parameters: -o \\UNC_path

Group Policy Management	- 🗆 🗙
File Action View Window Help	_ 8 ×
Group Policy Management	itor – 🗆 🗙
▲ ▲ Forest: docusnap.intern ▲ ▲ Domains File Action View Help	
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Activate Secur DS-Script [SMDC0001.DOCUSN] Name	
1. Default Domai	
Firewall Except Foreferences RDP - Allow	
Windows Firev Moderation Logon Properties	? ×
COUNTRIES Software Settings Scripts PowerShell Scripts	
docusnap inte docusna	
Security Settings	
ForestGroups Folder Redirectio Definition Particular Conference Conference	
Deployed Printer:	Up
Microsoft Exct Preferences	Down
▷ Indicates	
⊳ 🛱 TestOÜ	4. Add
Group Policy (Script Name:	Edit
Starter GPOs	Remove
Group Policy Modelir Script Parameters:	
	ect, press
OK Cancel	
ОК Са	cel Apply

Fig. 6 – Integrating DocusnapScript.exe via a GPO

Step 5:

<u>s</u>	Group Policy Mar	nagement		_ 🗆 🗙
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🗢 🔿 📶 🖸 🖬				
Group Policy Management Group Policy Management Domains Activate SecurityCenter Default Domain Policy Default Domain Policy Default Domain Policy Firewall Exception Firewall Exception Firewall Exception Firewall Exception Firewall Exception OUNTRIES Gocusnap Gocusnap international Gocusnap international Gocusnap ForestGroups ForestGroups Microsoft Exchange Security Grout File Starter GPOs WMI Filters Sites Group Policy Modeling	The following sites, domains, and OUs a Location Cocation Cocatii Cocation Cocatii Cocation Cocatii Cocation Cocation Cocation Co	docusnap intem are linked to this GPO: Enforced No No to the following groups, u		Path docusnap.intem docusnap.intem/docusnap/finanzen/f
Group Policy Results	This GPO is linked to the following WM	l filter:	Open	
< >>				



Make sure to select the desired users or groups in the Security Filtering group. In addition, open the *Delegation* tab to check which users and groups have the right to access this GPO.

3.5 INTEGRATING THE SCRIPT VIA VB SCRIPT

Step 1: Right-click the desired group policy object and click Edit.

Step 2: User Configuration / Computer Configuration => Windows Settings => Scripts

Step 3: Double-click Logon / Logoff (or Startup / Shutdown)

Step 4: Add a new script and enter the required data

Script Name: \\%userdomain%\netlogon\DS-Script.vbs

L	Group Policy Management –	
File Action View Win		_ <i>B</i> ×
Group Policy Management ▲ ▲ Forest: docusnap.intern ▲ ऄ Domains ▲ ऄ docusnap.intern		×
	Computer Configuration 3. Delicies Deferences Software Settings Windows Settings Windows Settings Software Settings Delicies Delicies	
 ▷ IMPORT ▷ Ioop ▷ Iocop ▷ Microsoft Exc ▷ I RES_DOM 	▷ J]] Policy-based Qo: Name Parameters ▷ IIII Deployed Printer: Up ▷ IIII Administrative Temp: Down	
▷ 😭 service_accol ▷ 😭 TestOÜ ▷ 😭 Group Policy ▷ 🚱 WMI Filters ▷ 🚳 Starter GPOs ▷ 🙀 Sites ఔ Group Policy Modeli ֎ Group Policy Results	Script Name: Edit \\SMDC0001\DC-Share\DS-Script.vbs Browse Script Parameters: Edit	
<	OK Cancel OK Cancel	

Fig. 8 – Integration via VB script

Sample DS-Script.vbs file:

```
on error resume next
Set WshShell = WScript.CreateObject("WScript.Shell")
WshShell.Run "\\DOCUSNAP\Netlogon\DocusnapScript.exe -o \\SMDC0001\Public\DS-Script"
```

For information on how to correctly use quotes in VB, please refer to: https://msdn.microsoft.com/de-de/library/267k4fw5(v=vs.110).aspx?cs-save-lang=1&cs-lang=vb#codesnippet-1 Step 5:

<u>s</u>	Group Policy Management	_ 🗆 🗙				
📓 File Action View Window Help						
🗢 🔿 📶 🖸 🔢 🖬						
Group Policy Management A A Forest: docusnap.intern B M Domains	DS-Script Scope Details Settings Delegation					
✓ initial docusnap.intern i Activate SecurityCenter i Default Domain Policy	Links Display links in this location: docusnap intem The following sites, domains, and OUs are linked to this GPO:	~				
DS-Script Firewall Exception RDP - Allow		ath ocusnap.intem				
	🖬 finanzen_users No Yes do	ocusnap.intem/docusnap/finanzen/f				
 Domain Controllers EXPORT Sector for the sector of the sector	Security Filtering The settings in this GPO can only apply to the following groups, users, and computers:					
 IMPORT Import Loop Import Microsoft Exchange Security Grout Import RES_DOM Import Service_accounts Import TestOU Import Group Policy Objects 	Name					
Given WMI Filters Given	Add Remove Properties					
Group Policy Modeling Group Policy Results	WMI Filtering This GPO is linked to the following WMI filter: <none> ✓none></none>					



Make sure to select the desired users or groups in the Security Filtering group. In addition, open the *Delegation* tab to check which users and groups have the right to access this GPO.

3.6 USING A WMI FILTER

3.6.1 HOW TO CREATE THE FILTER

In some cases, it might be necessary to restrict the validity of a GPO, independent of the OU it is linked to. This may be useful if the computer accounts in the Active Directory are dispersed over many OUs and you want to restrict the inventory to be performed via a Docusnap script to some devices.

Below, we explain how you can do this using a WMI filter.

Step 1: Right-click the WMI Filters node in the Group Policies Management Editor to create a new filter.

Step 2: Enter a descriptive name for the filter.



Group Policy Management -	
📓 File Action View Window Help	_ 8 ×
Group Policy Management Contents in docusnap.intern MMI Filters in docusnap.intern Contents Delegation	
A ctivate SecurityCenter Default Domain Policy Default Domain Policy Default Domain Policy Default Domain Policy Description RDP - Allow Windows Firewall-Exception Rep - Allow Windows Firewall-Except Description: Windows Firewall-Except Description: Windows Firewall-Except Description: WMI Query COUNTRIES Domain Controlle Default Domain Policy Mamespace Courspap Description: WMI Query Remove Edit Concel Select * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 and not Salect * from Win32_OperatingSystem where ProductType = 1 an	İ
Group Policy Modeling OK Cancel	
	>

Fig. 10 – Group Policy Management

Sample WMI query:

Select * from Win32_OperatingSystem where ProductType = 1 and not CSName like "WMWS%"

- \Rightarrow This query selects all clients whose name starts with WMWS.
- ⇒ The "ProductType" variable returns the following values:
 - 1 = Microsoft Windows client operating systems (e.g. Windows XP, Windows 7, Windows 8)
 - 2 = Microsoft Windows Server operating systems configured as domain controllers
 - 3 = Microsoft Windows Server operating systems not configured as domain controllers

3.6.2 HOW TO LINK THE FILTER

Link the newly created WMI filter to the group policies object that calls the DocusnapScript.exe script.

æ	Group Policy Manageme	nt		- 🗆 🗙
📓 File Action View Window Help				_ 8 ×
🗢 🔿 🙍 🖬 🍳 🖬				
📓 Group Policy Management 🔺	DS-Script			
 A Forest: docusnap.intern 	Scope Details Settings Delegation]		
Domains	Links			
▲ iii docusnap.intern	Display links in this location:	locusnap.intem		~
Activate SecurityCenter				¥
DS-Script	The following sites, domains, and OUs a	re linked to this GPU:		
Firewall Exception	Location	Enforced	Link Enabled	Path
RDP - Allow	docusnap.intem	No	Yes	docusnap.intem
Windows Firewall-Exceptions	finanzen_users	No	Yes	docusnap.intem/do
COUNTRIES				
docusnap				
docusnap international	<			>
Domain Controllers	Security Filtering			
 EXPORT ForestGroups 	The settings in this GPO can only apply t	to the following groups, use	ers, and computers:	
> The store of the	Name	*		
Microsoft Exchange Security G	Authentifizierte Benutzer			
▶ 🛱 RES_DOM				
iservice_accounts				
⊳ 🖬 TestOÜ				
Group Policy Objects	Add Remove	Descrites		
WMI Filters	Add Remove	Properties		
b iii Starter GPOs	WMI Filtering			
D ites Group Policy Modeling	This GPO is linked to the following WMI	filter:		
Group Policy Results	<none></none>	¥	Open	
<	(10000)			
	Docusnap WMI-Filter			



This link is also visible from the WMI filter properties.

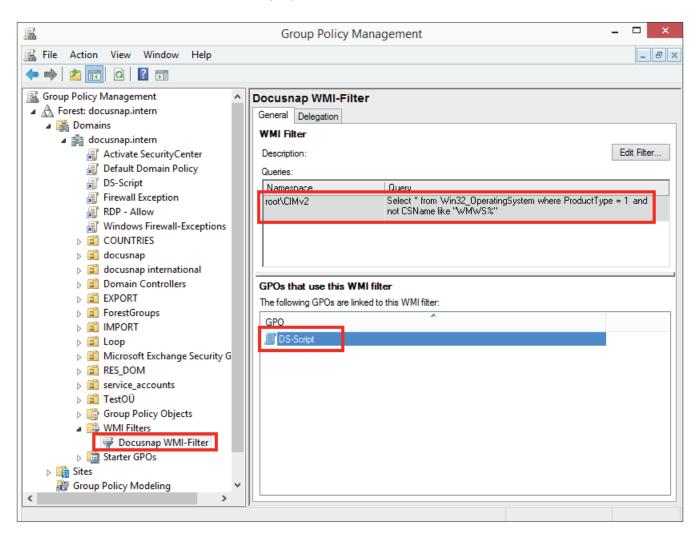


Fig. 12 – WMI filter

For more details on how to work with WMI filters, go to the Microsoft website: https://technet.microsoft.com/de-de/library/cc732796.aspx

4. RUNNING THE SCRIPT MANUALLY

In cases where the system to be scanned is not connected to the network, it makes sense to run DocusnapScript.exe manually. This is also advisable in cases of network access problems (e.g. due to Firewall settings, WMI access problems, etc.) that cannot be solved at all or not immediately. In these cases, create the XML files locally and use a USB stick to transfer them to the network. From there, you can import them either manually or automatically into Docusnap (provided the files have been copied to the central import share).

Then, just run the DocusnapScript.exe file on the system to be scanned. By default, the XML file will be stored in the folder where the DocusnapScript.exe file resides.

For an overview of the inventory parameters for manual execution, please refer to section 2.5 – PARAMETERS.

5. IMPORTING THE INVENTORY DATA

Using the Docusnap script import feature, you can import the xml files generated by the script into Docusnap.

To open the Import wizard, select *Inventory* > *Other Sources* > *From DocusnapScript.exe* from the user interface.

🔒 Doc	usnap 6.3	6							
Docusnap	INVENT	DRY DOCUM	ENTS S	CHEDUL	ING DATA				
Network Scan	Quick Scan	Windows SNMP IP Segment	👖 CIFS 🐘 Linux 💻 Mac	Other Sources	Hyper-V	🖏 IIS 💈 SharePoint	E Exchange SQL Server	🔒 Backup E 法 Veeam	Exec
* New -	L' Save	Inventory	0		DocusnapScript.exe If an interactive inver the DocusnapScript.e	ntory of Windows			
⊞- 🛄 Docusnap AG			<u>101</u>	From DocusnapScri Inventory via Docusn Import these files into	apScript.exe ger	nerates xml files.		r of	
								300	

Fig. 13 – Opening the Import wizard

In the first step, select the desired company and domain for the import. Then, specify the path for the XML files.

٨	Import Data		×
	Company Selection	Select Directory	
	Domain Selection		
6	Directory Selection	Add Directory	
	File Selection	Search Path: C:\DSScript Add	
	Summary		
G	Scheduling		
		Directory Selection	
		Path	
		C:\DSScript	

Fig. 14 – XML import

Specify the directory or UNC path of the central share from which to import the XML files. If you want to schedule automated imports, make sure that the user who configured the Docusnap Server service has read and write access to that directory.

	Import Data		□ ×
	Company Selection	✓ schedule File Import	
	Domain Selection		
-	Directory Selection	General Settings	
	File Selection	Name: Docusnap Script Import Every Week on Wednesday, Saturday at 3:07:30 AM. Schedule will be used on	'n
5	Summary	Schedule Type: Recurring 4/27/2015.	
G) Scheduling		
		Frequency	
		Interval: Weekly 🔹 Monday 🖉 Wednesday 🗍 Friday 🖉 Saturday	
		Recurring every: 1 Week(s) on: Tuesday Thursday Sunday	
		Frequency per day	
		One-time at: 3:07:30 AM	
		O Every: 1 - Hour(s) → Start: 12:00:00 A → End: 11:59:59	PI ÷
		Duration	
		Start Date: 4/27/2015 Image: Control Date: End Date: 4/27/2015	V A

Fig. 15 – Scheduling the automated import

Under Scheduling, you can create a job for this import, i.e. the XML files created by the script will be imported at the times specified there.

However, this is only possible if Docusnap Server has been configured before (please refer to the User Manual under http://www.docusnap.com/handbuch/anwender/index.html?docusnap-server.htm

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