DNS Inventory

Inventory Domain Name Services

TITLE	DNS Inventory
AUTHOR	Docusnap Consulting
DATE	10/18/2022
VERSION	1.0 | valid from 9/30/2022

CONTENTS

1. Introduction

Docusnap can inventory your DNS servers and the DNS information they contain. This way you have your DNS zones available in Docusnap as well as the corresponding records.

The DNS inventory requires a WMI connection. The actual information is then queried via PowerShell. In detail used ports and necessary permissions are listed in the whitepaper for the inventories.

In addition to the actual inventory of the DNS service (Chapter 2), this HowTo also describes the possibility of a script-based inventory (Chapter 3).

In Chapter 4 you will find reporting options on topics related to DNS inventory.

2. DNS Inventory

For the network inventory of DNS service start the corresponding wizard:

- Discovery - All Wizards – DNS Server
- Inventory - All Wizards - DNS Server
- All Jobs - All Wizards - DNS Server

In **step 1**, select your company or your customer's company.

In step 2, select the Discovery Service through which you want to perform the inventory.

For a scheduled inventory, select Docusnap Server Discovery or a Discovery Service you have configured here.

Furthermore, select or enter the domain and an appropriately authorized user with their password. Use the NetBios notation for the user (domain\user).

In **step 3** you can now search for available DNS servers or enter them manually.

In the automatic search, all DNS servers of the selected domain are found, including DNS servers that are located in a subdomain. The option Consider **only DNS servers of the current domain** limits the search to the selected domain in step two.

3. Script-based DNS inventory

3.1 Performing a Script-based Inventory

Docusnap offers the possibility to capture the DNS information also locally, the DNS server, using a script-based inventory.

The script file can be found in the Docusnap installation directory - by default:

- C:\Program Files\Docusnap 11\Tools\Scan-DNS.exe.

You can copy the Scan-DNS.exe to the DNS servers and run it.

3.2 Import inventory

After the inventory is finished, you will find two files:

- dns-DNS-Server.domain.local-TimestampExecution.finished
- dns-DNS-Server.domain.local-TimestampExecution.json

You can import this data to Docusnap using the Script Import wizard:

- Discovery - All Wizards - Script Import
- Inventory - All Wizards - Script Import
- All Orders - All Wizards - Script Import

In step 1, select your company or your client's company.

In step 2, select the discovery service through which you want to perform the inventory.

For a scheduled inventory, select Docusnap Server Discovery or a discovery service you have configured here.

Note here that the user running one of the services must have read and write access to the path selected in the next step.

Local system = storage directory can only be local

In step 3, select the directory where you have stored the generated JSON files.

This directory can also be a network drive. Note the share permissions.

In step 4, you can now search for valid script files.

If there are files from other script inventories (Active Directory, DHCP, Windows, etc.) in the folder you selected, these will also be considered.

3.3 Automate script execution

The big advantage of Docusnap is that data is regularly and automatically inventoried and therefore up to date. This can also be achieved with script inventories.

The first step is to automate the execution of the script. Among other things, this can be done with a software distribution, as well as with Windows on-board means - task scheduling.

Switch to the Task Scheduler of your DNS server and create a new task.

In the **General** tab, enter a name and select the security options:

Use the following user account: User with DNS permission / local system

Run regardless of user logon

Run with highest privileges

Configure for: Select the appropriate operating system

In the **Trigger** tab, you can configure the script execution schedule - for example:

Start Task: On a schedule

Weekly, repeat every 1 week on: Sunday

In the **Actions** tab you define the execution of the Scan-DNS.exe

We recommend creating a hidden share on the Docusnap server / system that runs the Docusnap Discovery Service.

On this share place the Scan-DNS.exe and the JSON files

z. B. \\SRV-Docu\DocusnapScript$\Scripts\DNS

\\SRV-Docu\DocusnapScript$\Account Name#Domain.FQDN[1]

Within this share / subfolder the executing user can read and write

Action: Start program

Program / script: \\SRV-Docu\DocusnapScript$\Scripts\DNS\Scan-DNS.exe

Arguments: -O "\\SRV-Docu\DocusnapScript$\Your Account#intern.local"

The -O parameter redirects the result files to the specified path. The user performing the inventory must have write permissions on this path.

The newly created task ensures that the inventory is run regularly and automatically.

It should always be ensured that the current version of the script file is used! This means that after an update of Docusnap you also exchange the script files!

[1] The specification of the folder structure corresponds to the standard of the global script import and causes that you are also prepared for possibly future scenarios.

The next step is to set up the import of the inventory as a job. Note that during an import job, you can also automatically import the results of the other script-based inventories.

Open the Script Import Wizard:

- Discovery - All Wizards - Script Import.
- Inventory - All Wizards - Script Import
- All Orders - All Wizards - Script Import

In **step 1**, select your company or your customer's company.

In **step 2**, select the Docusnap Server service or a discovery service you created.

In **step 3**, select the directory where the generated JSON files will be stored:

In the recommended configuration, this folder is located locally on the Docusnap Server or on the system that provides the discovery service

Additional directories can also be added for the remaining script executions

In **step 6**, you configure the scheduling.

Besides the simple script import, you can also use the global script import. This allows you to import scripts for multiple companies and/or domains at the same time.

4. Analysis options

4.1 Information in the tree structure

DNS inventory information can be found in the tree structure as follows:

- Your Company - Infrastructure - Your Domain – Network Services – DNS Server

Here you can now navigate through the inventoried information.

In addition to general information, you also get an overview of your configured DNS zones including their entries.

Furthermore, you will find a query that lists all IP addresses that exist more than one DNS entry.

You will also find this query as a report:

- Your Company - Infrastructure - Your Domain - Network Services - DNS Servers - DNS Server - Reports

You could, for example, send this report by mail at regular intervals, on a scheduled basis and automatically. This way, the DNS officers could clean up the entries accordingly.

VERSION HISTORY

Date	Description
09/29/2022	HowTo created