

3.9 Hyper-V / IIS Server

3.9.1 Protocols and Authorizations

Protocols used:

| DESIGNATION | PORT | TRANSPORT |
|--|---------------|-----------|
| NETBIOS NAME SERVICE, NETBIOS DATAGRAM SERVICE | 137, 138 | UDP |
| DCE ENDPOINT-SOLUTION, NETBIOS SESSION SERVICE, MICROSOFT-DS ACTIVE DIRECTORY, WINDOWS SHARES (CIFS) | 135, 139, 445 | TCP |
| DYNAMIC HIGH RANGE PORT | 1024 - 65535 | TCP/UDP |

Required rights:

- Local administrator or domain administrator
 - NetBIOS notation
 - UPN notation
- Administration rights Hyper-V manager
- SharePoint Farmadmin permissions on a SharePoint IIS
 - Enter the authentication with NetBIOS name

3.9.2 Network requirements

- Transparent firewall configuration
- Unique name resolution must be given (forward lookup & reverse lookup).

3.9.3 FAQs

Q1 I own a Hyper-V environment / IIS server, but no domain. Nevertheless, an authentication against the domain is assumed in the inventory dialog.

A1 *In the Docusnap menu - Inventory - Inventory tab – section Other a domain authentication for the Hyper-V and IIS wizard can be deactivated. Authentication with a local user is then possible.*

3.10 XenCenter

3.10.1 Protocols and Authorizations

Protocols used:

| DESIGNATION | PORT | TRANSPORT |
|--|------------------------|-----------|
| HTTPS - HYPERTEXT TRANSFER PROTOCOL SECURE | Port can be customized | TCP |

Required rights:

- Administrator rights on Xen Server

3.10.2 Network requirements

- Transparent firewall configuration
- Set proxy exceptions if necessary

3.11 Igel Systems

3.11.1 Protocols and Authorizations

Protocols used:

| DESIGNATION | PORT | TRANSPORT |
|---|--------------|-----------|
| SQL DATABASE - MSSQL (MICROSOFT SQL SERVER) | 1433 | TCP |
| SQL DATABASE - MSSQL (MICROSOFT SQL SERVER) MONITOR | 1434 | TCP/UDP |
| DYNAMIC HIGH RANGE PORT | 1024 - 65535 | TCP/UDP |

Required rights:

- Users with at least read permissions on the Igel database (**db_reader**).

3.11.2 Network requirements

- Transparent firewall configuration
- Database and server must allow remote connections

3.11.3 FAQs

Q1 There is only an Igel embedded Database available. How can Docusnap connect to it?

A1 Docusnap only supports Microsoft SQL databases when inventorying Linux systems using the Igel wizard. An Igel embedded database is not supported. However, this can be migrated to a Microsoft SQL environment. The exact procedure is described in the Igel manual.

Q2 Is it possible to inventory the Igel thin clients using a script?

A2 Yes, you can inventory Igel thin clients with a Linux operating system using the Linux script. The corresponding script file can be found in the installation directory of Docusnap, in the subfolder "Bin". A possible method of automated execution of the script is to use the Igel UMS.

Note: The thin client is stored in the database as a Linux system and not as a thin client.

3.12 SharePoint

3.12.1 Protocols and Authorizations

Protocols used:

| DESIGNATION | PORT | TRANSPORT |
|--|----------|-----------|
| DCE ENDPOINT-SOLUTION, WINDOWS SHARES (CIFS) | 135, 445 | TCP |

Required rights:

- Full access to the SharePoint system. Corresponds to the FarmAdmin used during the installation. It is necessary to add the domain suffix to the username.
 - NetBIOS notation
 - UPN notation
- Db_owner rights in every SharePoint database
- Administration rights for all website collections
- Starting with Windows Server 2008 R2 and the separation of SharePoint and SQL Server, authentication problems may occur due to "multi-hop".
 - In this case, the inventory user must be included in the group of local administrators on the SharePoint server.
 - FarmAdmin must be stored in the authentication dialog. No user may be stored for server authentication.

3.12.2 Network requirements

- Transparent firewall configuration
- Execution of PsExec.exe (Microsoft Sysinternals Tool) possible
- PsExec can be blocked by virus scanner

3.12.3 FAQs

Q1 Despite the use of the specified FarmAdmin, the inventory is erroneous or incomplete.

A1 *If, for example, a domain administrator is used during the SharePoint installation, this is the "real" FarmAdmin. Check an inventory with this user.*

Q2 Is it possible to inventory via script?

A2 *Yes. In the Docusnap installation directory, subfolder "Bin" you will find a DocusnapSP** script. Select the appropriate script for your SharePoint version. You can start the script on the SharePoint Server via CMD or Power Shell. The results are packed into a Zip archive. You can then import this into Docusnap using the Script Import.*

3.13 Exchange

3.13.1 Protocols and Authorizations

Protocols used:

| DESIGNATION | PORT | TRANSPORT |
|--|---------------|-----------|
| NETBIOS NAME SERVICE, NETBIOS DATAGRAM SERVICE | 137, 138 | UDP |
| DCE ENDPOINT-SOLUTION, NETBIOS SESSION SERVICE, MICROSOFT-DS ACTIVE DIRECTORY, WINDOWS SHARES (CIFS) | 135, 139, 445 | TCP |
| DYNAMIC HIGH RANGE PORT - WMI CONNECTION | 1024 - 65535 | TCP/UDP |

Required rights:

- Domain administrator and membership in the Exchange Organization Administrators (Organization Management) group. It is necessary to add the domain suffix to the username.
 - NetBIOS notation
 - UPN notation

3.13.2 Network requirements

- Transparent firewall configuration
- Execution of PsExec.exe (Microsoft Sysinternals Tool) possible
- PsExec can be blocked by virus scanner

3.13.3 FAQs

Q1 An inventory was successful, but no mailboxes were evaluated.

A1 Please check if the inventory user is a member of the Exchange Organization Administrators.

Q2 Is it possible to inventory via script?

A2 Yes, you can inventory Exchange data via script.

3.14 SQL-Server / Veeam / BackupExec

3.14.1 Protocols and Authorizations

Protocols used:

| DESIGNATION | PORT | TRANSPORT |
|---|--------------|-----------|
| SQL DATABASE - MSSQL (MICROSOFT SQL SERVER) | 1433 | TCP |
| SQL DATABASE - MSSQL (MICROSOFT SQL SERVER) MONITOR | 1434 | TCP/UDP |
| DYNAMIC HIGH RANGE PORT | 1024 - 65535 | TCP/UDP |

Required rights:

- SysAdmin authorization for SQL Server inventory
- If a user without SysAdmin role is used, a "limited inventory" is possible. Only parts of the SQL Server or the instance are inventoried.
- For Veeam and BackupExec inventory a user with read permissions on the Veeam or BackupExec database is required (`db_reader`).
- SQL user or Domain user
 - Domain user is integrated in the inventory dialog. This cannot be changed. The session user or the deposited user account of the Docusnap Server service is used.
 - SQL user can be stored separately for each instance found

3.14.2 Network requirements

- Transparent firewall configuration
- Database and server must allow remote connections
- TCP/IP protocol activated for SQL server or instance.

3.14.3 FAQs

Q1 In an automatic SQL server search, not all SQL servers are found.

A1 Please check whether the SQL server browser is active on the SQL server to be inventoried. This is necessary for automatic determination. SQL server instances are determined using broadcast. No systems are found across a router (broadcast domain).

3.15 Oracle Database

3.15.1 Protocols and Authorizations

Protocols used in the standard system:

| DESIGNATION | PORT | TRANSPORT |
|--|------|-----------|
| ORACLE SQL NET LISTENER AND DATA GUARD | 1521 | TCP |

Required rights:

- Correspondingly authorized user (DBA). Inventory user can be created with the help of a script.
 - This can be found in the Docusnap manual in the chapter "Oracle" Inventory.
- Specify host name, service name, and port.
 - Data can be read out in the configuration
- Authorized user
 - Create session
 - Select any dictionary

3.15.2 Network requirements

- Transparent firewall configuration

3.16 Dell EMC² Isilon

3.16.1 Protocols and Authorizations

Protocols used in the standard system:

| DESIGNATION | PORT | TRANSPORT |
|-----------------------------------|------|-----------|
| HTTP, HYPERTEXT TRANSFER PROTOCOL | 8080 | TCP |

Required rights:

- Read access via membership of the AuditAdmin role
- New user must be activated

3.16.2 Network requirements

- Transparent firewall configuration
- If necessary, proxy exceptions must be set.
- Standard port may differ

3.17 Active Directory / ADS Synchronization

3.17.1 Protocols and Authorizations

Protocols used:

| DESIGNATION | PORT | TRANSPORT |
|---|------------|-----------|
| LDAP - LIGHTWEIGHT DIRECTORY ACCESS PROTOCOL UNSECURED (LDAP) TLS-SECURED (LDAPS) | 389 636 | TCP/UDP |
| DCE ENDPOINT-SOLUTION, MICROSOFT-DS ACTIVE DIRECTORY, WINDOWS SHARES (CIFS) - GROUP POLICY ONLY | 135, 445 | TCP |

Required rights:

- A full ADS scan requires a domain administrator login.
 - Specification in NetBIOS or UPN notation
- As a domain user, a query is also possible - if the default configuration has not been changed.
 - It is not possible to read the configuration partition here.
- Optional GPO inventory requires access to the domain controller via PsExec.exe.

3.17.2 Network requirements

- Transparent firewall configuration
- PsExec can be blocked by virus scanner

3.17.3 FAQs

Q1 The Active Directory was successfully inventoried. However, no users and groups were read out.

A1 *Please check whether your domain is stored in Docusnap with the FQDN; e.g. "docusnap.internal".*

Q2 How can it be avoided that the ADS reconciliation deletes inventoried systems that are not members of the domain?

A2 *Set the OU filter to the uppermost level during ADS adjustment. Subsequently, the wizard compares the workgroup domains to membership domains. Only systems that no longer exist and were part of the domain are now removed.*

3.18 DFS

3.18.1 Protocols and Authorizations

Protocols used:

| DESIGNATION | PORT | TRANSPORT |
|--|--------------|-----------|
| NETBIOS NAME SERVICE, NETBIOS DATAGRAM SERVICE | 137, 138 | UDP |
| NETBIOS SESSION SERVICE, MICROSOFT DS ACTIVE DIRECTORY - WINDOWS SHARES (CIFS) | 139, 445 | TCP |
| DYNAMIC HIGH RANGE PORT | 1024 - 65535 | TCP/UDP |
| LDAP - LIGHTWEIGHT DIRECTORY ACCESS PROTOCOL | 389 | TCP/UDP |

Required rights:

- Domain administrator
 - NetBIOS notation
 - UPN notation

3.18.2 Network requirements

- Transparent firewall configuration
- DNS (resolution and recursive resolution)

3.19 DNS / DHCP

3.19.1 Protocols and Authorizations

Protocols used:

| DESIGNATION | PORT | TRANSPORT |
|--|---------------|-----------|
| DCE ENDPOINT-SOLUTION, NETBIOS SESSION SERVICE, MICROSOFT-DS ACTIVE DIRECTORY, WINDOWS SHARES (CIFS) | 135, 139, 445 | TCP |

Required rights:

- Domain administrator
 - NetBIOS notation
 - UPN notation

3.19.2 Network requirements

- Transparent firewall configuration
- Execution of PsExec.exe (Microsoft Sysinternals Tool) possible
- PsExec can be blocked by virus scanner

3.20 Azure / Office365

3.20.1 Protocols and Authorizations

Protocols used:

| DESIGNATION | PORT | TRANSPORT |
|--|------|-----------|
| HTTPS - HYPERTEXT TRANSFER PROTOCOL SECURE | 443 | TCP |

Required rights:

- A global administrator is required to create the necessary applications.
 - Azure: registered application with read access to Azure information
 - Office365: Registered application with read access to Office365 information

A detailed description of the inventory can be found in the HowTos of the Docusnap Knowledge Base.

- Inventorying Microsoft Azure
- Inventorying Microsoft Office 365

3.20.2 Network requirements

- Transparent firewall configuration
- Discovery service must reach the Internet
- If necessary, set proxy exceptions.

3.21 Amazon Web Services - AWS 3.21.1

Protocols and Authorizations

Protocols used:

| DESIGNATION | PORT | TRANSPORT |
|--|------|-----------|
| HTTPS - HYPERTEXT TRANSFER PROTOCOL SECURE | 443 | TCP |

Required rights:

- User needs at least the following permissions
 - Creating policies
 - Create a user and assign the created policies
- By policy, the permissions list and read are required for the areas service, actions and resources

A detailed description of the inventory can be found in the HowTos of the Docusnap Knowledge Base.

- Inventory of Amazon Web Services (AWS)

3.21.2 Network requirements

- Transparent firewall configuration
- Discovery service must reach the Internet
- If necessary, set proxy exceptions.

3.22 Exchange Online

3.22.1 Protocols and Authorizations

Protocols used:

| DESIGNATION | PORT | TRANSPORT |
|--|------|-----------|
| HTTPS - HYPERTEXT TRANSFER PROTOCOL SECURE | 443 | TCP |

Required rights:

- PowerShell Execution Policy: Remote Signed
 - Starting PowerShell: Set-ExecutionPolicy RemoteSigned
- Global Exchange Online Admin

A detailed description of the inventory can be found in the HowTos of the Docusnap Knowledge Base.

- [Inventorying Microsoft Exchange](#)

3.22.2 Network requirements

- Transparent firewall configuration
- Discovery service must reach the Internet
- If necessary, set proxy exceptions.

VERSION HISTORY

| Date | Description |
|-------------|---|
| 03/20/2019 | Version 1.0 - Documentation created |
| 07/01/2019 | Version 1.1 - IP Scan module was added |
| 03/02/2020 | Version 1.2 - Linux inventory using SUDO user was added; AWS added; Added encrypted LDAP connection |
| 06/20/2020 | Version 2.0 - Revision of the HowTos for Docusnap 11 |
