



Access Rights Management. **Only much Smarter.**



Access Rights Management

Install & Config Manual

Version 9

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1 Contact 8MAN Support

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Monday through Friday from 9 am until 5 pm (CET).

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support@8man.com

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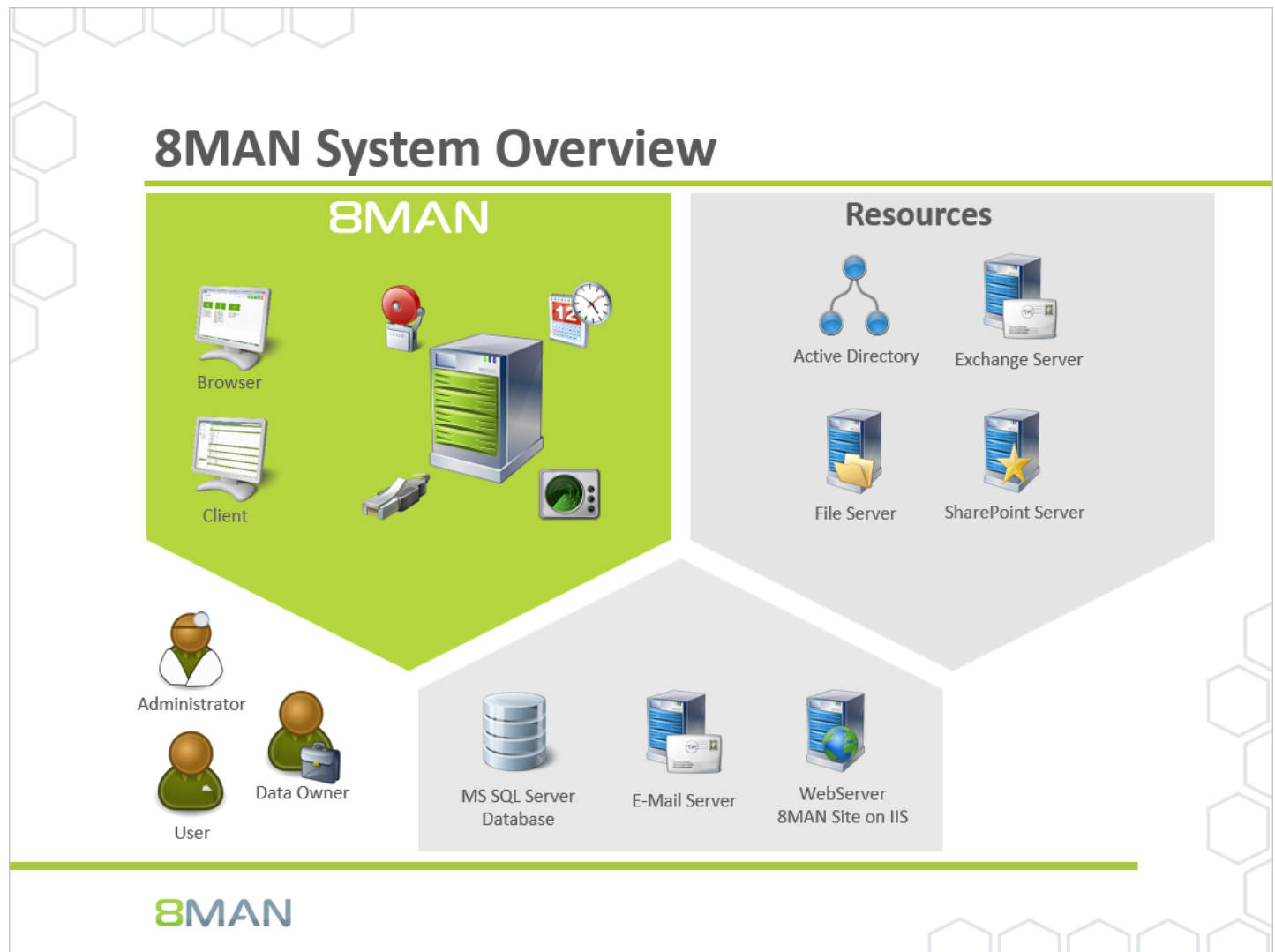
You start on the website with a self-registration. After completion, you can see the publicly accessible content.

After registration, you will be assigned to an authorization level by our support team. Only then you can see non-public content and use the ticket system.

This process may take some time.

2 System requirements

2.1 8MAN architecture



The 8MAN Suite is comprised of three components:

- 8MAN server to process new data and requests from the 8MAN GUI
- Collectors to connect your resource and data systems
- 8MAN graphical user interface (application and configuration module, web interface)

The 8MAN component architecture allows you to run installations across a variety of remote resources in an extremely efficient manner. All individual components are connected with each other via network interfaces. You can even run several components on the same computer.

2.2 8MAN base versions

2.2.1 8MAN server requirements

Hardware

Hardware requirements vary and are dependent on several factors. These include:

- the number of users in Active Directory (AD)
- the number of file servers and directories monitored by 8MAN
- the 8MATES used, especially the Logga
- data storage settings

Users	up to 1,000	up to 4,000	4,000+
RAM	4 GB	8 GB	16 GB
Processors	2	4	4
Disk space	30 GB	40 GB	40 GB

Intel Itanium platforms are not supported.

Software

The 8MAN server can run on the following operating systems:

Microsoft Windows Server 2008 SP1 (32-bit and 64-bit), 2008 R2, 2012, 2012 R2 and 2016.

The 8MAN server must be a member of an Active Directory domain.

.NET 3.5 SP1 **and** .NET 4.5.2 (or higher) is required.

Clusters are not supported.

Server Core is not supported.

2.2.2 Collector requirements

Hardware

A collector server must fulfill the following requirements:

- 5 GB disk space
- 2 processor cores
- 4 GB RAM

Intel Itanium platforms are not supported.

Software

The 8MAN collector can be installed on the following operating systems:

Microsoft Windows Server 2008 SP1 (64-bit only), 2008 R2, 2012, 2012 R2 and 2016.

The 8MAN collectors can be installed on a member server (node) of a cluster.

The 8MAN collector can not be used as a cluster resource (failover cluster manager)

Server core versions are only supported if the graphical 8MAN setup can be executed. In case of doubt, please contact our [support](#).

.NET 3.5 SP1 **and** .NET 4.5.2 (or higher) is required.

2.2.3 User interface requirements

Hardware

The computer executing the 8MAN graphical user interface (GUI) must fulfill the following requirements.

- 500 MB free disk space
- 2 processor cores
- 2 GB RAM
- Screen resolution: 1280x1024, recommended 1920x1080 (FullHD)
- optional: Graphic card with DirectX 10

Software

The 8MAN GUI can be run on the following operating systems:

Microsoft Windows Server 2008 SP1 (32-bit and 64-bit), 2008 R2, 2012, 2012 R2 and 2016

Microsoft Windows Vista, 7, 8, 10

.NET 3.5 SP1 **and** .NET 4.5.2 (or higher) is required.

2.2.4 SQL server requirements

8MAN supports Microsoft SQL Server 2008 SP1, 2012, 2014, 2016 (32-bit und 64-bit).

Your storage requirements may vary depending on several factors. These include:

- The number of users in Active Directory (AD)
- The number of file servers and directories
- The presence of 8MATES, especially FS Logga und AD Logga
- Data storage settings

Users	up to 500	500 to 1.000	1.000 to 4.000	over 4.000
Data base storage	10 GB	30 GB	50 GB	50 GB

2.2.4.1 SQL Express and 8MAN

Microsoft SQL-Server Express Edition has the following limitations:

- 10 GB maximum data base size -> only a limited number of scans can be stored
- 1 GB maximum RAM use -> poor performance in large environments
- 4 cores maximum -> poor performance in large environments

8MAN allows you to configure your settings in order to optimize data storage:

Information on actual data base size can be found in the [Server Health-Check](#).

Details on reducing data base size can be found in the following chapters: [data storage](#) and [SQL-Server data base maintenance](#).

Information on SQL server editions are available from [Microsoft](#).

2.2.5 File server requirements

Windows

8MAN supports the following Windows Server Versions:

- Microsoft Windows Server 2008 (32-bit and 64-bit), 2008 R2, 2012, 2012 R2 and 2016

A collector can only be installed on the server core versions on which the graphical 8MAN setup can be executed. In case of doubt, please contact our [Support](#).

Failover-Clusters are supported.

DFS (Domain integrated and stand-alone Computer) are supported.

Intel Itanium Platforms are not supported.

NetApp

8MAN supports CIFS-based shares on NetApp file servers.

EMC

8MAN supports CIFS-based shares of EMC file servers.

2.3 8MATES

2.3.1 AD Logga requirements

The 8MATE AD Logga supports domain controllers (DCs) that run on the following server versions:

- Microsoft Windows Server 2008 (32-bit and 64-bit), 2008 R2, 2012, 2012 R2 and 2016

The 8MATE Logga does not require a dedicated collector. Even the 8MAN server itself can be used as a collector.

2.3.2 FS Logga requirements

Windows file server

8MATE FS Logga supports the following Windows Server Versions:

- Microsoft Windows Server 2008 R2, 2012, 2012 R2 and 2016

Server Core Versions are only supported which support the execution of an interactive graphical setup. For compatibility with Windows Server 2008 (not R2) and in case of doubt please contact our [support](#).

Failover-Clusters are supported.

Intel Itanium Platforms are not supported.

DFS is not supported.

Windows file servers that have been virtualized through XenServer are supported from version 6.5 onwards. A XenServer Tools/Windows Management agent must be installed.

8MATE FS Logga requires a [filter driver installation](#) on the Windows server as well as a dedicated collector.

NetApp file server

8MATE FS Logga supports NetApp file servers in the following versions:

- NetApp Data ONTAP Release 7.x, Minimum 7.3.1.
- NetApp Clustered Data ONTAP Version 8.x and 9.0 are supported. SSL is supported.

The 8MATE FS Logga utilizes a NetApp integrated monitoring policy (FPolicy). This requires a dedicated collector.

Please refer to the 8MAN FS Logga Manual for more information.

EMC file server

8MATE FS Logga supports the following EMC file server versions:

- NAS 5.5 or higher in Celerra and VNX product series.
- Product Line Isilon

The 8MATE FS Logga utilizes the components and services provided by EMC. This requires a dedicated collector. We recommend installing the collector on the same server as the Common Event Enabler (CEE). The CEE is supported up to version 6.6.

Please refer to the 8MAN FS Logga Manual for more information.

2.3.3 SharePoint requirements

8MAN supports the following SharePoint versions:

- Microsoft SharePoint Server 2010, 2013 (Cumulative Update December 2014 required), 2016 and SharePoint Online via SharePoint Remote Connector (Client Side Object Model)

Installing a collector on the SharePoint server is not required.

- Microsoft SharePoint Server 2010, 2013

Installing a collector on the SharePoint server is required. The Server Side Object Model will no longer be supported by 8MAN Version 8.5 (fall 2017).

2.3.4 Exchange requirements

Das 8MATE for Exchange supports the following Exchange versions:

- Exchange Server 2010, 2013, 2016
- Exchange Online

Exchange 2016 Cumulative Update 2 is needed to modify out of office notices.

If you are using a hybrid variation, please contact [support](#).

2.3.5 Exchange Logga requirements

The 8MATE Exchange Logga supports the following Exchange versions:

- Exchange Server (on-premise) 2013, 2016
- Exchange Online

For the on-premise variants, the servers holding the mailbox databases must primarily use the en-US language. Installing language packs may require a reboot. For more information, visit [Microsoft](#).

8MATE for Exchange is not mandatory - the Exchange Logga can be used independently.

2.4 Web components and web interface requirements

Web components supports the following operating systems:

Microsoft Windows Server 2008 R2, 2012, 2012 R2 and 2016.

.NET 3.5 SP1 **and** .NET 4.5.2 (or higher) is required.

Internet Information Services (IIS) Version 7.5 or higher. [Required components](#) may be complemented by 8MAN setup.

Cluster is not supported.

Server Core is not supported.

The following browsers are supported:

- Internet Explorer 11.0.22 or higher
- Mozilla Firefox 49 or higher
- Google Chrome 54 or higher
- Edge 38.14393 or higher

Cookies and Javascript must be enabled.

Using a big amount of data in Analyze & Act grids the web browsers perform very different. We recommend using a web browser by the following priority:

1. Chrome
2. Firefox
3. Edge
4. Internet Explorer

2.5 Network requirements & firewall settings

2.5.1 Used ports overview

8MAN uses the following ports:

AD Scan

- LDAP (389)

FS Scan

- NetBIOS (139)
- Microsoft DS (CIFS) (445)
- Lokal users/groups = WMI/DCOM/RPC (135 + dynamic)

Alerts FS Logga

- 5671 TCP

MS SQL Server

- 1433

Authentication

- Kerberos (88)

8MAN components standard port

- (55555 + dynamic)

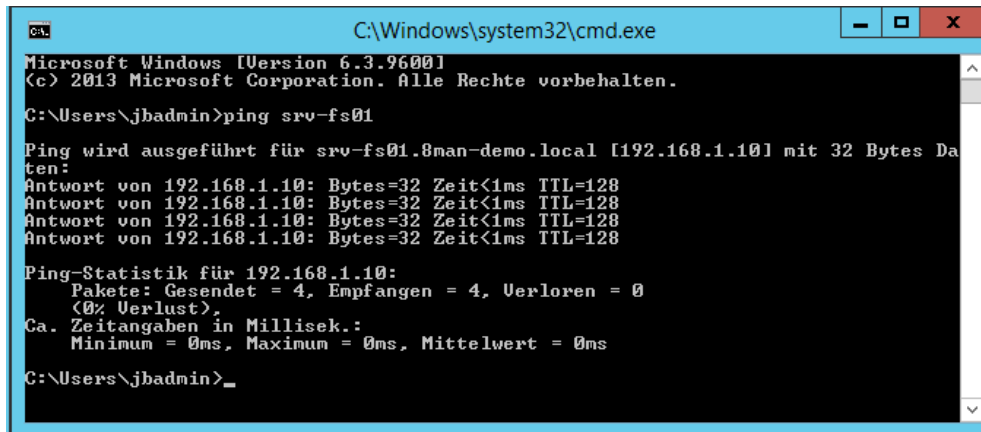
If possible define an application rule, because of the usage of dynamic ports (random high ports).

2.5.2 Ensuring a connection between 8MAN server and collector

By default 8MAN uses port "55555" for all communication between collectors and the 8MAN server. The port must be available bi-directionally.

If you would like to use a different port, please contact [support](#).

2.5.2.1 Simple connection check

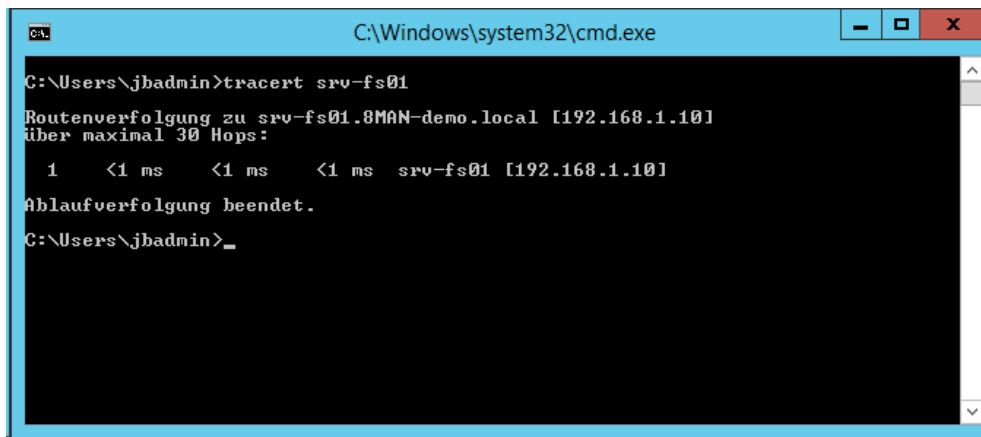


```
CA. C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. Alle Rechte vorbehalten.
C:\Users\jbadmin>ping srv-fs01

Ping wird ausgeführt für srv-fs01.8man-demo.local [192.168.1.10] mit 32 Bytes Daten:
Antwort von 192.168.1.10: Bytes=32 Zeit<1ms TTL=128
Antwort von 192.168.1.10: Bytes=32 Zeit<1ms TTL=128
Antwort von 192.168.1.10: Bytes=32 Zeit<1ms TTL=128
Antwort von 192.168.1.10: Bytes=32 Zeit<1ms TTL=128

Ping-Statistik für 192.168.1.10:
    Pakete: Gesendet = 4, Empfangen = 4, Verloren = 0
    (0% Verlust),
    Ca. Zeitangaben in Millisek.:
    Minimum = 0ms, Maximum = 0ms, Mittelwert = 0ms
C:\Users\jbadmin>_
```

A simple connection check can be performed with a **ping**.
If a ping is successful the firewall may still block port "55555".
Run a "[browser test](#)".



```
CA. C:\Windows\system32\cmd.exe
C:\Users\jbadmin>tracert srv-fs01

Routenverfolgung zu srv-fs01.8MAN-demo.local [192.168.1.10]
über maximal 30 Hops:

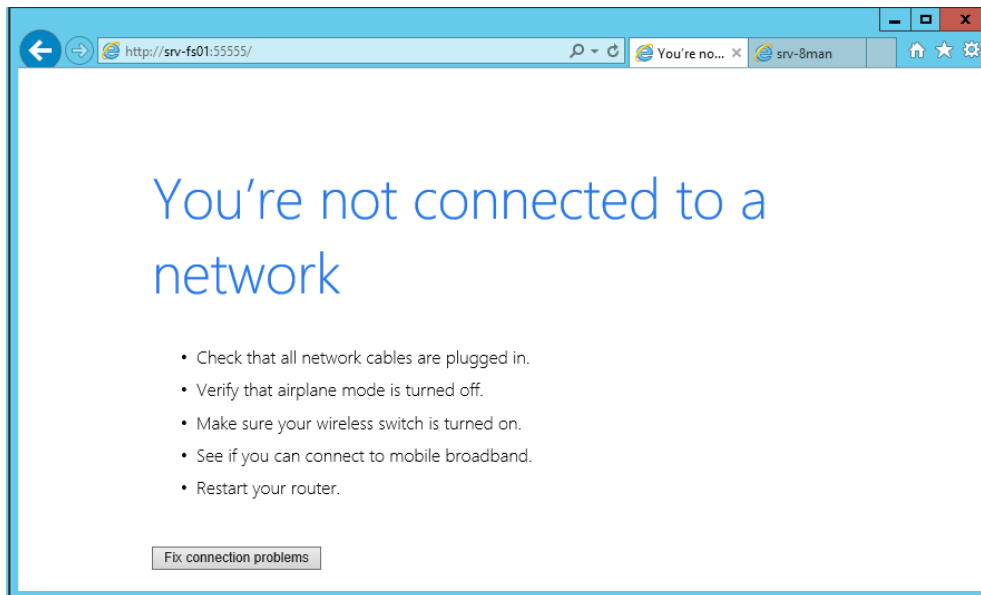
 1  <1 ms    <1 ms    <1 ms    srv-fs01 [192.168.1.10]

Ablaufverfolgung beendet.
C:\Users\jbadmin>_
```

By using the command **tracert** you can trace any blocks of packages and identify "external" firewalls.

2.5.2.2 Using a browser to test the connection to a collector

By using a "browser test" you can investigate whether a connection between a collector and the 8MAN server is possible.

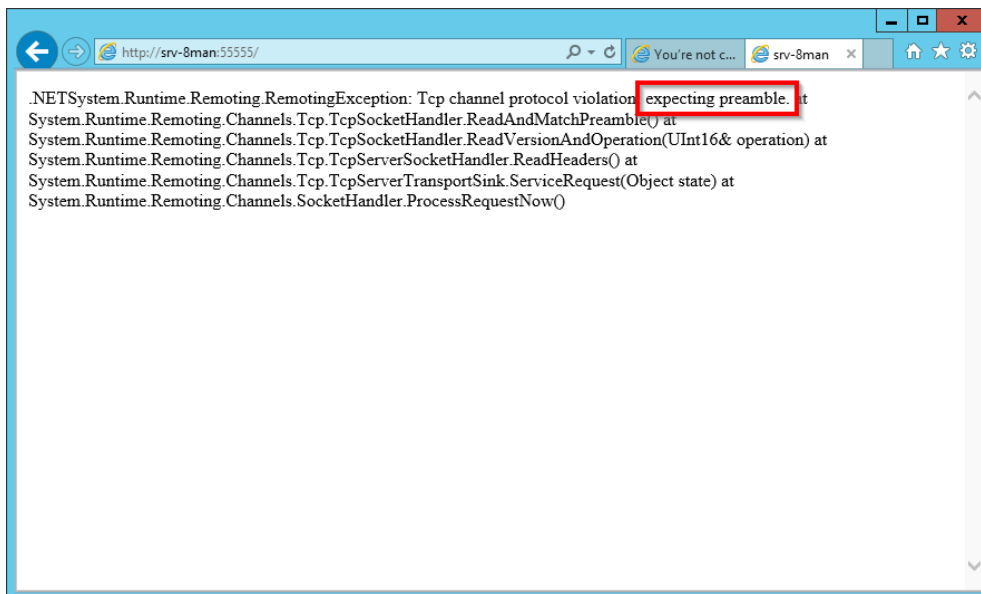


Open a browser on the 8MAN server and enter the address of the collector including port "55555".

For example:

http://srv-fs01:55555

If you receive an error message after a time out, then the connection is blocked.



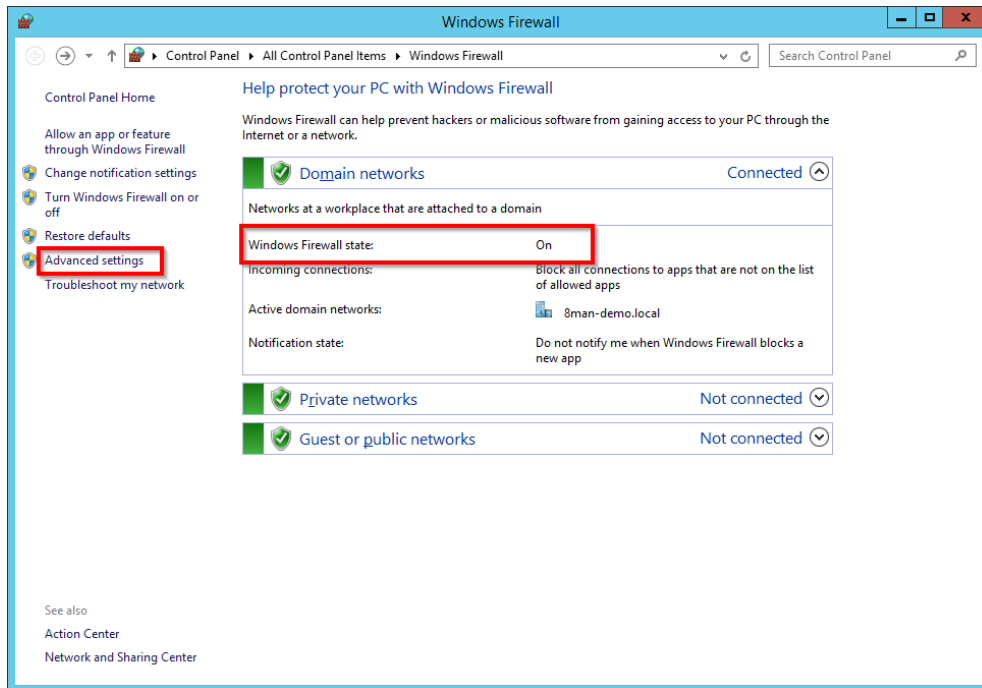
If you receive the following message, then a connection is possible.

The message "...expecting preamble..." is generated by the 8MAN service.



Run the browser test in both directions. Accessing the 8MAN server from the collector and vice versa. Bi-directional communication is required.

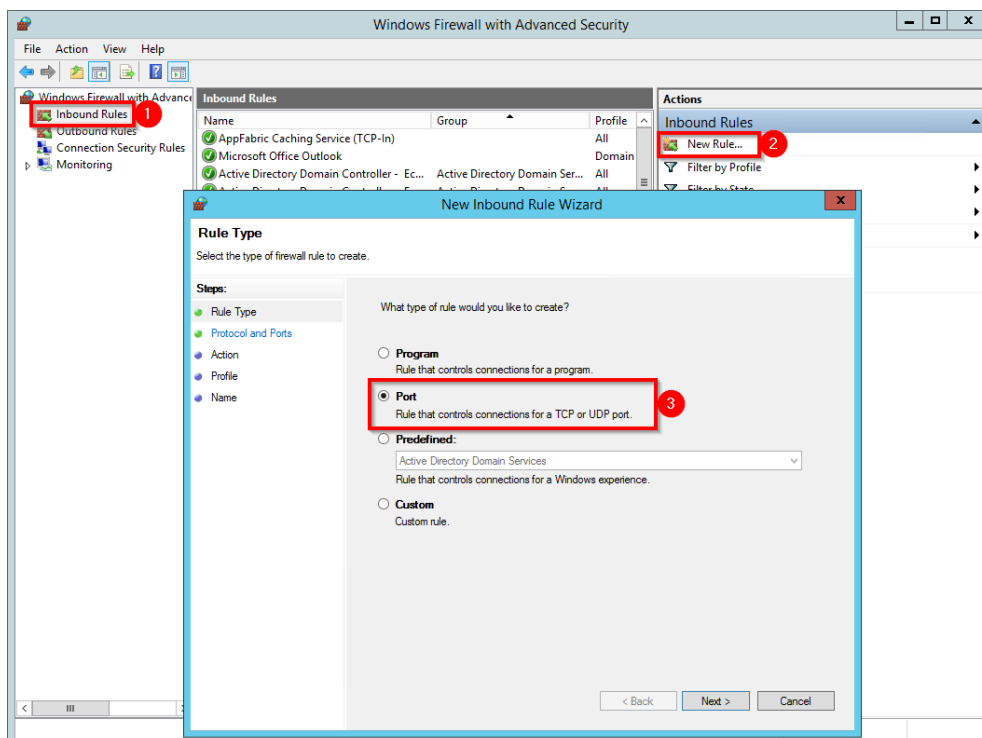
2.5.2.3 Opening a windows firewall port for 8MAN



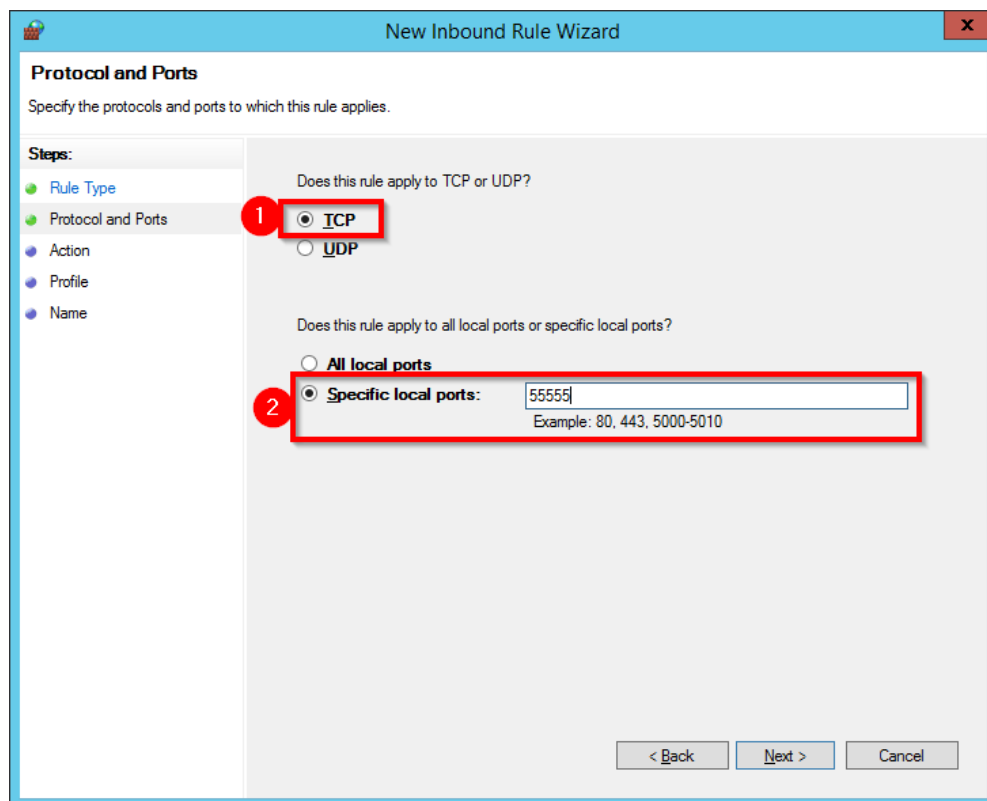
If the Windows firewall is turned on, then a rule must be created for successful communication.

This applies to the 8MAN server as well as all collector servers.

Select "Advanced settings".

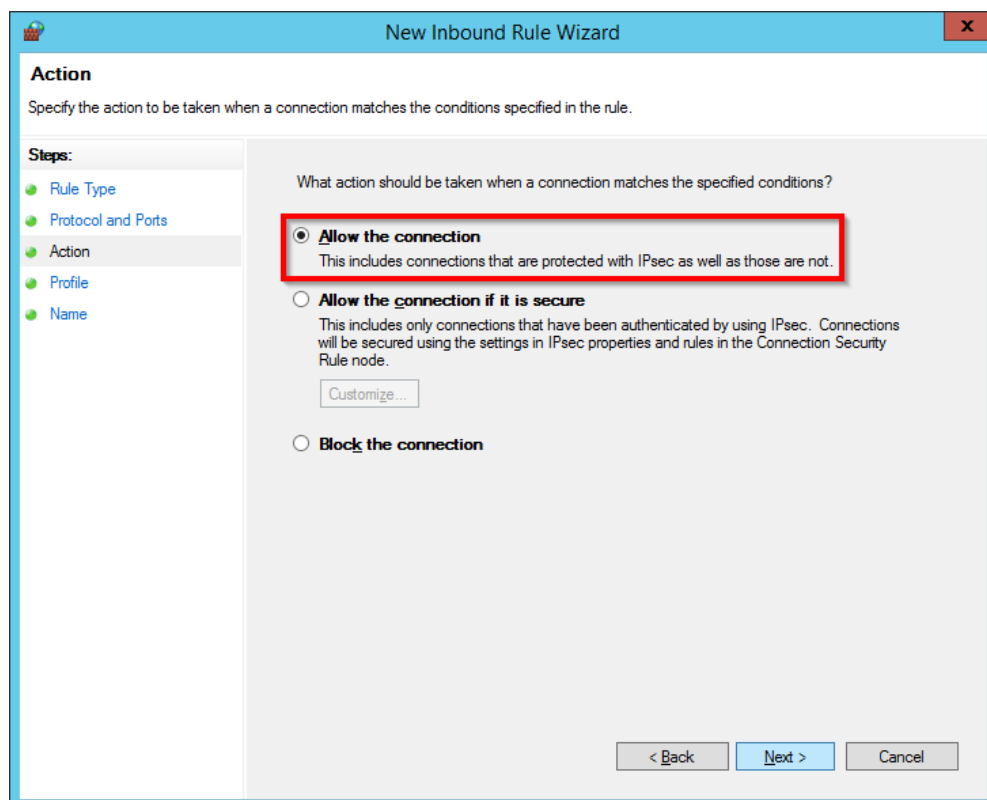


Create a new rule and select the type "port".



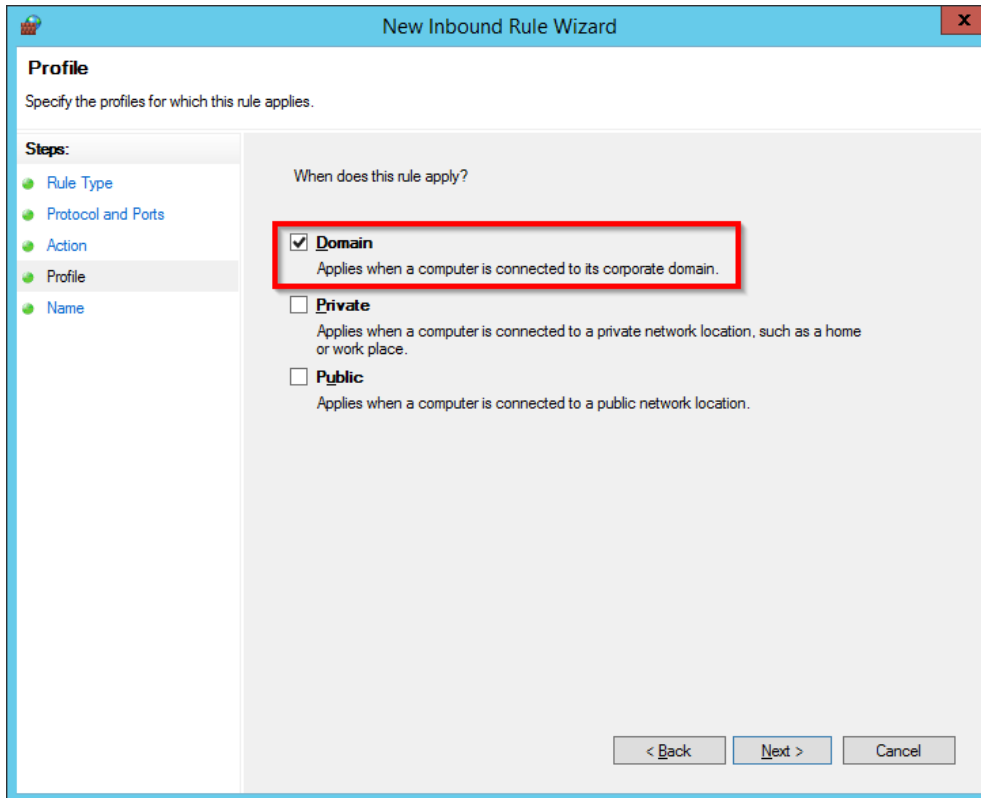
The screenshot shows the 'New Inbound Rule Wizard' window, specifically the 'Protocol and Ports' step. The left sidebar lists the steps: Rule Type, Protocol and Ports (highlighted), Action, Profile, and Name. The main area contains two questions. The first question, 'Does this rule apply to TCP or UDP?', has two radio buttons: 'TCP' (selected and circled with a red '1') and 'UDP'. The second question, 'Does this rule apply to all local ports or specific local ports?', has two radio buttons: 'All local ports' and 'Specific local ports' (selected and circled with a red '2'). The 'Specific local ports' option is followed by a text box containing '55555' and an example 'Example: 80, 443, 5000-5010'. At the bottom are buttons for '< Back', 'Next >', and 'Cancel'.

Select "TCP" and enter port number "55555".



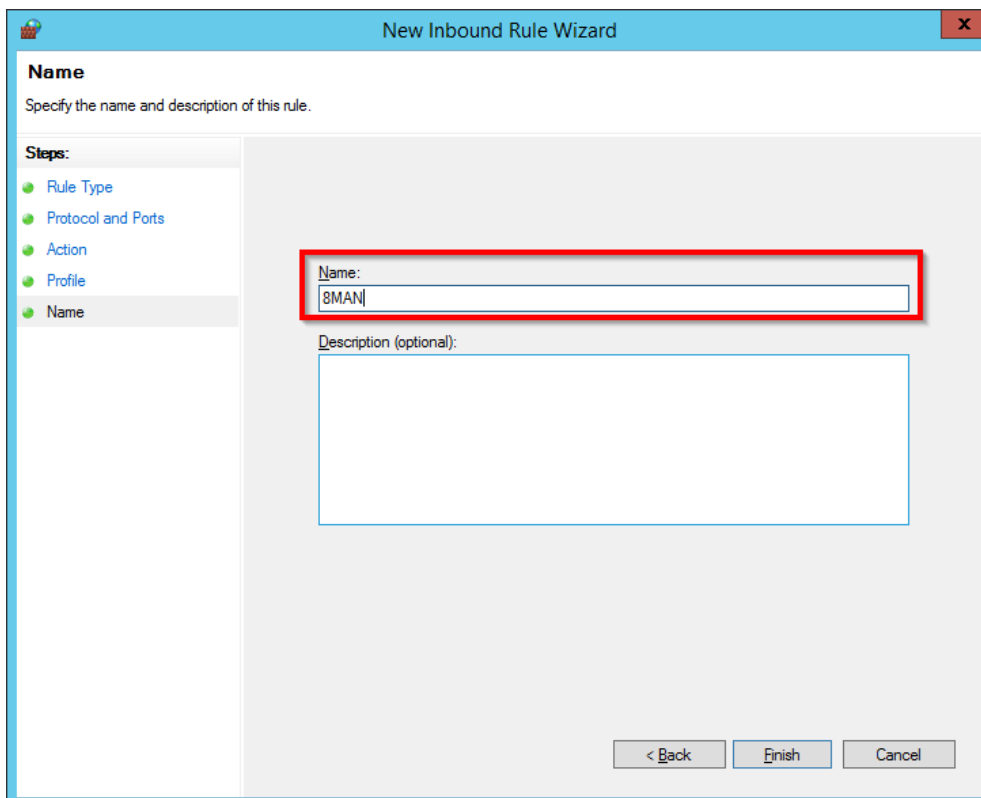
The screenshot shows the 'New Inbound Rule Wizard' window, specifically the 'Action' step. The left sidebar lists the steps: Rule Type, Protocol and Ports, Action (highlighted), Profile, and Name. The main area contains the question 'What action should be taken when a connection matches the specified conditions?'. There are three radio button options: 'Allow the connection' (selected and circled with a red box), 'Allow the connection if it is secure', and 'Block the connection'. The 'Allow the connection' option has a description: 'This includes connections that are protected with IPsec as well as those are not.' The 'Allow the connection if it is secure' option has a description: 'This includes only connections that have been authenticated by using IPsec. Connections will be secured using the settings in IPsec properties and rules in the Connection Security Rule node.' and a 'Customize...' button. At the bottom are buttons for '< Back', 'Next >', and 'Cancel'.

Select "Allow the connection".



The screenshot shows the 'New Inbound Rule Wizard' window, specifically the 'Profile' step. The title bar reads 'New Inbound Rule Wizard'. The main heading is 'Profile', with the instruction 'Specify the profiles for which this rule applies.' Below this, a 'Steps:' list on the left includes 'Rule Type', 'Protocol and Ports', 'Action', 'Profile' (which is highlighted), and 'Name'. The main area is titled 'When does this rule apply?' and contains three options: 'Domain' (checked), 'Private', and 'Public'. The 'Domain' option is highlighted with a red rectangle and includes the text 'Applies when a computer is connected to its corporate domain.' The 'Private' option includes 'Applies when a computer is connected to a private network location, such as a home or work place.' The 'Public' option includes 'Applies when a computer is connected to a public network location.' At the bottom right are buttons for '< Back', 'Next >', and 'Cancel'.

Select only the option "domain".



The screenshot shows the 'New Inbound Rule Wizard' window, specifically the 'Name' step. The title bar reads 'New Inbound Rule Wizard'. The main heading is 'Name', with the instruction 'Specify the name and description of this rule.' Below this, a 'Steps:' list on the left includes 'Rule Type', 'Protocol and Ports', 'Action', 'Profile', and 'Name' (which is highlighted). The main area contains a 'Name:' text box with '8MAN' entered, which is highlighted with a red rectangle. Below it is a 'Description (optional):' text box. At the bottom right are buttons for '< Back', 'Finish', and 'Cancel'.

Enter a name for the rule.

Repeat as necessary. Create a rule for the 8MAN server and all collectors where Windows firewalls are active.

2.5.3 Communication between the 8MAN Server and the Graphical User Interface (GUI)

By default 8MAN uses port "55555" for all communication between server and client (GUIs).

If you would like to use a different port, please contact [support](#).

Once you have initiated the connection a random high port is used for any response communication.

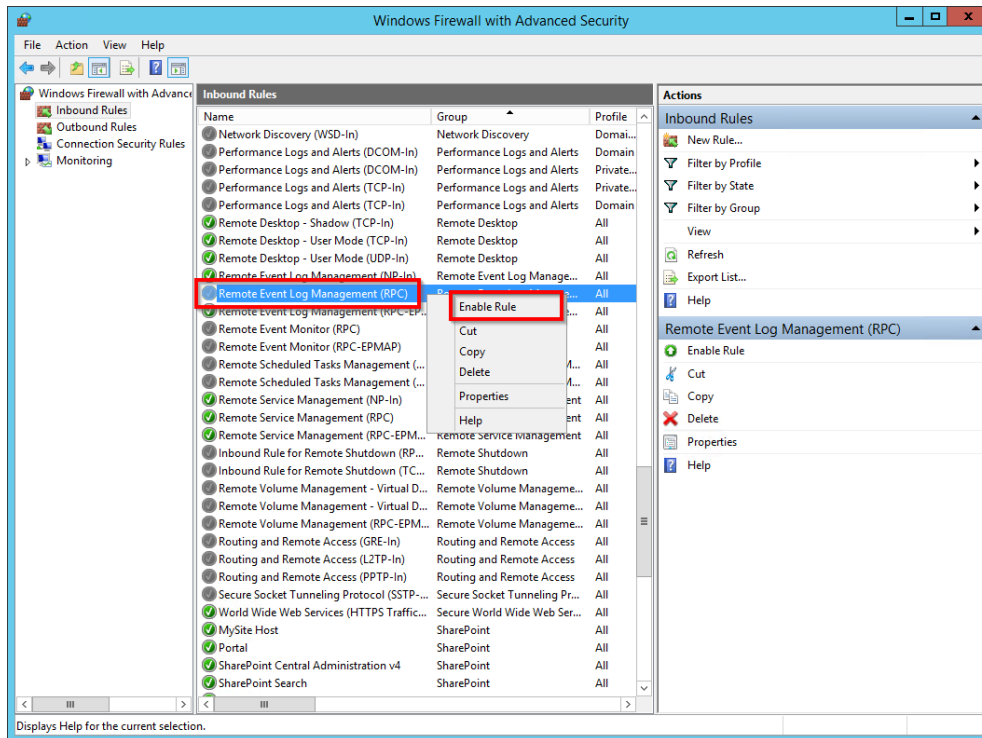
If the firewall is blocking communication between client and server, then a random port range can be selected to be excluded from the firewall and allow proper communication. In these cases please contact [support](#).

2.5.4 Communication between the 8MAN Server and SQL Server

By default 8MAN uses TCP port 1433 for all communication between the 8MAN server and SQL server. Collectors only communicate with the 8MAN server and do not communicate directly with the SQL server.

For more information regarding remote access to SQL servers and the required firewall settings, please contact [Microsoft](#).

2.5.5 Configuring the Windows Firewall for AD Logga



If the Windows firewall is applied on the DC that you would like to monitor, then a pre-defined Microsoft rule "Remote Event Log Management (RPC)" must be enabled.

Repeat the process as needed for all DCs that you would like to monitor.

2.6 8MAN service account permissions

We recommend using service accounts (dedicated user accounts for 8MAN). This ensures that:

- the access rights of the service accounts are used by 8MAN, for example Active Directory read only without change rights
- it is easy to identify whether an action was performed by 8MAN or by a domain admin
- if the domain admin changes his password, the 8MAN configuration is not affected
- Avoid restrictions through activity limits (for example, Exchange Online allows only three parallel requests).

This approach allows for more detailed concepts by using several service accounts. In general, the more service accounts, the better you can fine tune and keep track of access rights. Please note that more detailed concepts generally also require more administrative efforts. The most basic concept only required one service account whom all required access rights are assigned to.

For 8MAN service accounts, please be sure to activate the option "Password never expires".

Feature	required access rights
8MAN server	<p>The service account requires local administrator rights on the 8MAN server.</p> <p>If the service account is a member of the domain Admin group, then this requirement is automatically fulfilled. If a server computer becomes a member of the domain (domain join) then the group Domain Admins will become a member of the local administrator group.</p>
SQL Server	<p>The 8MAN setup requires the role "dbcreator" on the SQL server. If you create a data base before, then 8MAN requires the role "dbowner". You can work with either Windows or SQL-server authorization.</p>
Active Directory (AD)-Scan	<p>Every user account requires at least read-only rights in order to be able to generate an AD scan.</p> <p>If you utilize delegation in your organization, then you must add the service account to a group that can read the required OUs.</p>
AD Modify (8MAN Enterprise)	<p>If you work with delegation in your company, you must assign the service account to a group that is allowed to change the relevant OUs.</p> <p>Without delegation: The service account becomes a member of the Domain admin group.</p>
File Server (FS)-Scan	<p>The user account requires access rights in order to be able to read NTFS permissions as well as traverse folder so that it can access the required folders. The service account can become a member of the domain admin group. If the domain admin account does not have access to all folders (for example user folders) then add the service account to the backup operators on the file server.</p>

Feature	required access rights
AD Logga	The service account must be a member of the group "event log reader". Members of the domain admin group also have the required access rights to be able to read event protocols.
FS Logga	No service account is required for the FS-Logga functionality. The "NT Authority system" must have access to the monitored directories. You can find more information regarding required settings in the FS Logga handbook.
8MATE Exchange	<p>To read exchange access rights please add the service account to the group "View-Only Organization Management".</p> <p>To be able to change access rights on the Exchange server please add the service account to the group "Organization Management" (read only rights are included).</p> <p>The service account requires admin rights on the collector server.</p> <p>Further access settings (impersonation, own mailbox) may be required and are contained in the section "Exchange Scans".</p>
8MATE SharePoint	<p>The service account must be a member of the group "local administrator" of the SharePoint server.</p> <p>The service account must be a member of the SharePoint farm administrator group.</p> <p>The service account requires the special access right "SharePoint_Shell_Access" and must be a member of the local group "WSS_Admin_WPG".</p> <p>The service account requires "full access" to run the web interface.</p> <p>Further access settings are required (Authorization of the SharePoint data base, which is further described in the SharePoint handbook).</p>
8MATE SharePoint (site collection)	The required permissions are described in chapter Accounts for a SharePoint scan via Remote Connector .
8MATE Exchange Logga	The logon account must be a member of the Organization Management and Records Management roles on the selected Exchange Server.

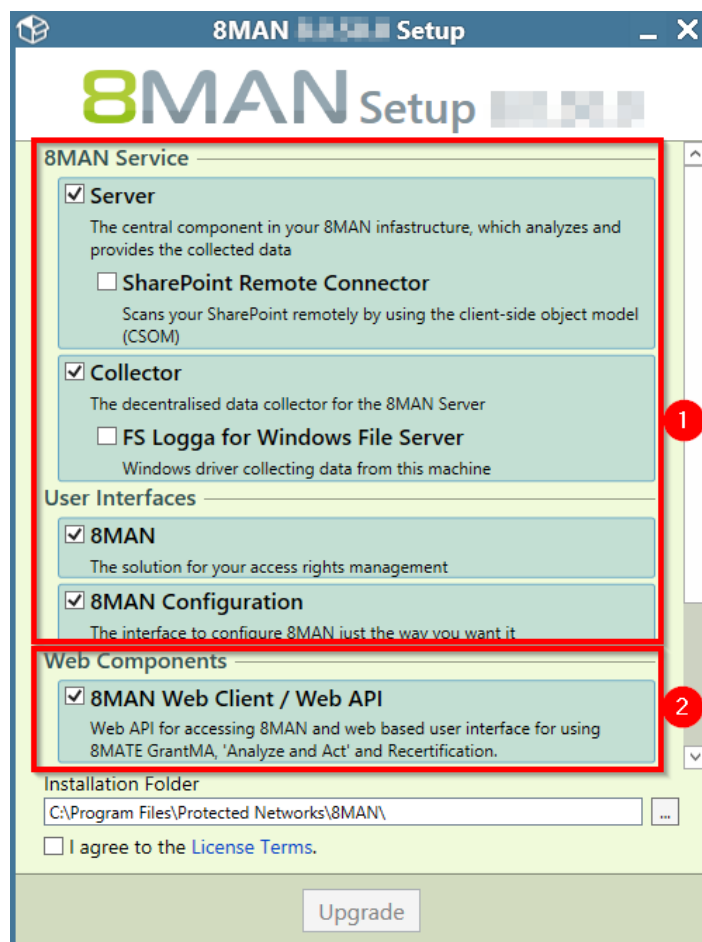
3 Installation

3.1 Perform a new installation

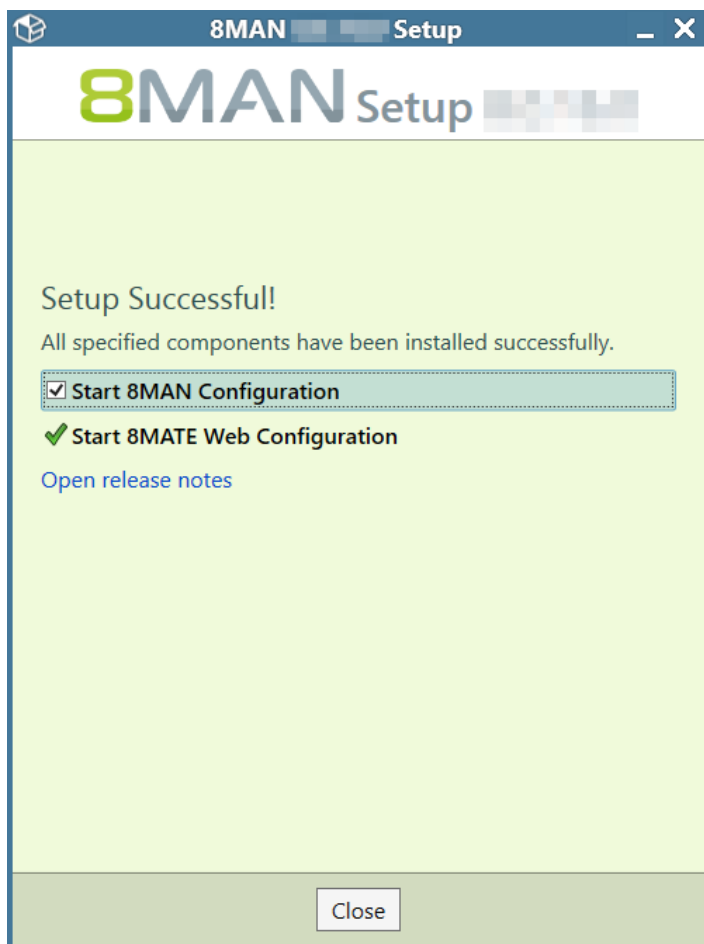
In order to install 8MAN all [system requirements](#) must be fulfilled.

1. Copy 8MAN setup.exe into a local folder (do not use a network folder).
2. To start the installation, run the file with administrator rights.

The setup language is automatically selected to match the language of the operating system for the following languages: German, English, French. Otherwise English is used.



1. To run a new 8MAN server installation you must at least select the 8MAN services "server" and "collector" as well as both graphical user interfaces. You are not able to activate the FS Logga option here. 8MAN server and FS Logga Windows file server driver can not be run on the same server. Please refer to chapter: [Installing the Filter Driver for the FS Logga on Windows File Servers](#).
2. Activate this option to install web components required for any 8MAN web functionality and the web API. Disable this option to install web components to a different (web-) server.



After a successful installation the following dialogue will be shown.

The displayed options depend on the previously selected installation range.

3.2 Perform an update installation

Before installing an update, the following requirements must be fulfilled:

1. Please read the release notes. These include information about whether the update includes comprehensive and long term changes to the data base. If you have any doubts about these effects, please contact [support](#).
2. Please ensure that no jobs are planned or running during the update. You can use the job overview according to the status "Scheduled" or "Executing". More information can be found in the chapter [job overview](#).
3. Access to the SQL data base must be ensured during the time of the update. Please ensure that no database backup is performed during the update.
4. The 8MAN server may not be in "waiting for restart" status, for example, due to Windows updates.
5. No users should be logged in the the 8MAN GUI. At the end of the update the 8MAN service is restarted. This leads to a crash on any open user interfaces. You can [identify logged in users](#) in the server-status menu.

If all requirements are fulfilled, you can start the update:

1. Copy 8MAN setup.exe into a local folder (do not use a network folder).
2. To start the installation, run the file with administrator rights.

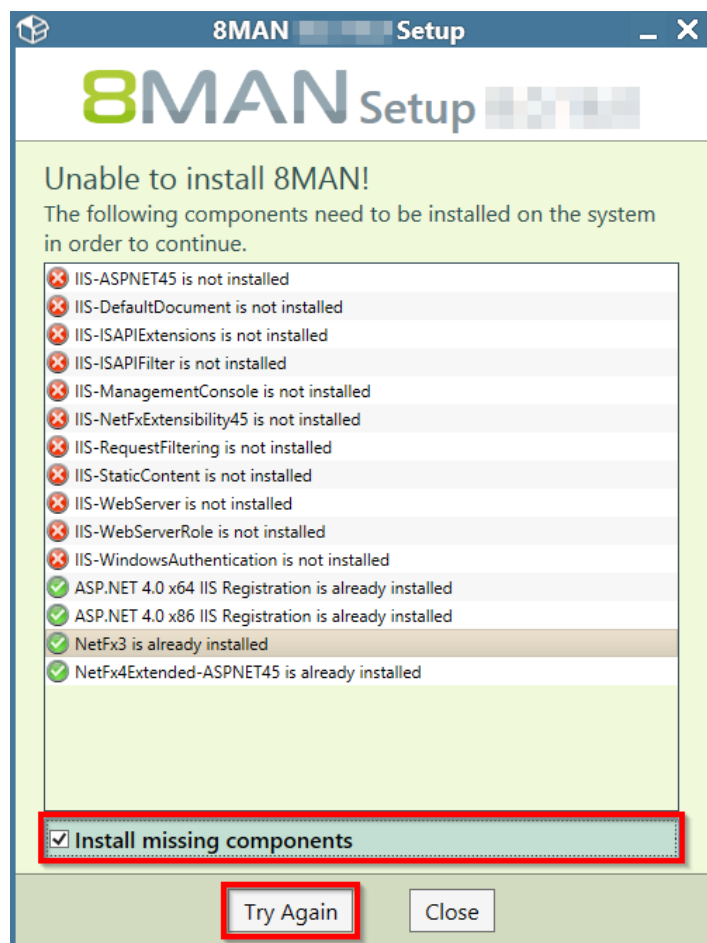
The setup language is automatically selected to match the language of the operating system for the following languages: German, English, French. Otherwise English is selected.

The installation will identify the currently installed version and will perform an update on older installations or interrupt the process if a newer version is already installed.

If several collectors are in use, these will be automatically updated. More information on collector updates can be found in the following chapter: [collector updates](#).

For updates, one release version can be skipped. For larger version jumps, make interim updates or contact our [support](#).

3.3 Install missing components

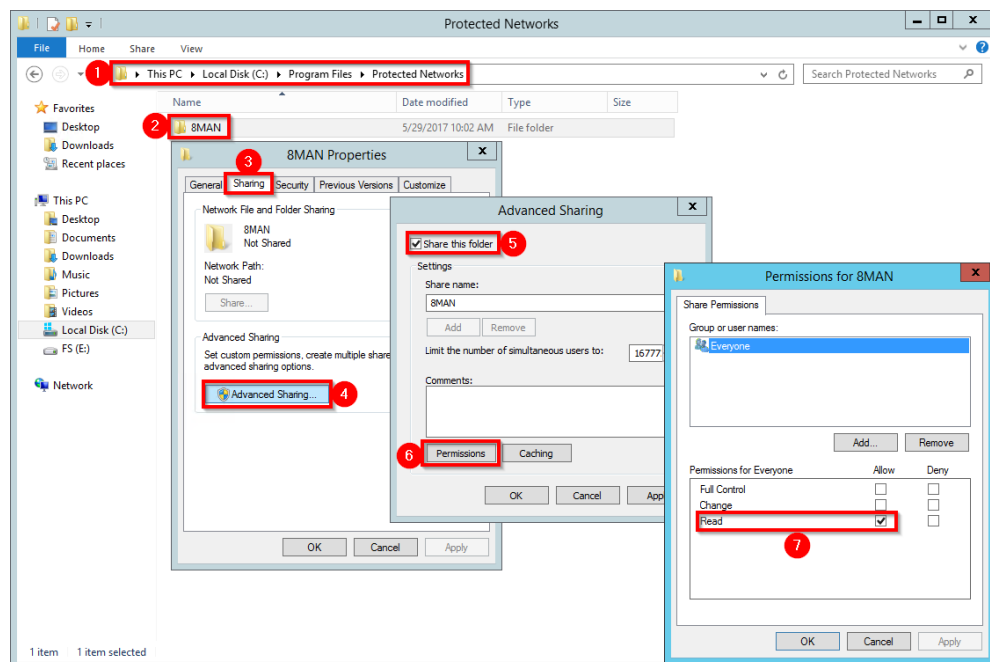


During the installation 8MAN setup will automatically check whether all required components have been installed. If you are missing any required components the following message will be shown.

You can install the required components either manually, and then restart the installation process, or by selecting the option "Install missing components" and then selecting "Try Again".

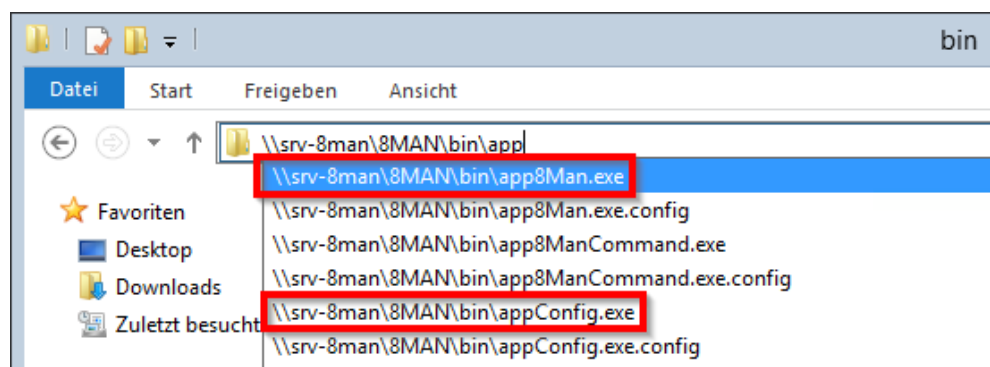
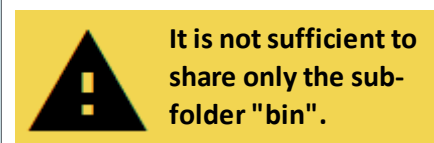
3.4 Provide the GUI

3.4.1 Provide GUIs through a share



In order to give users access to the 8MAN GUIs you must share the following folder with read permissions:

`%ProgramFiles%\protected networks\8MAN`

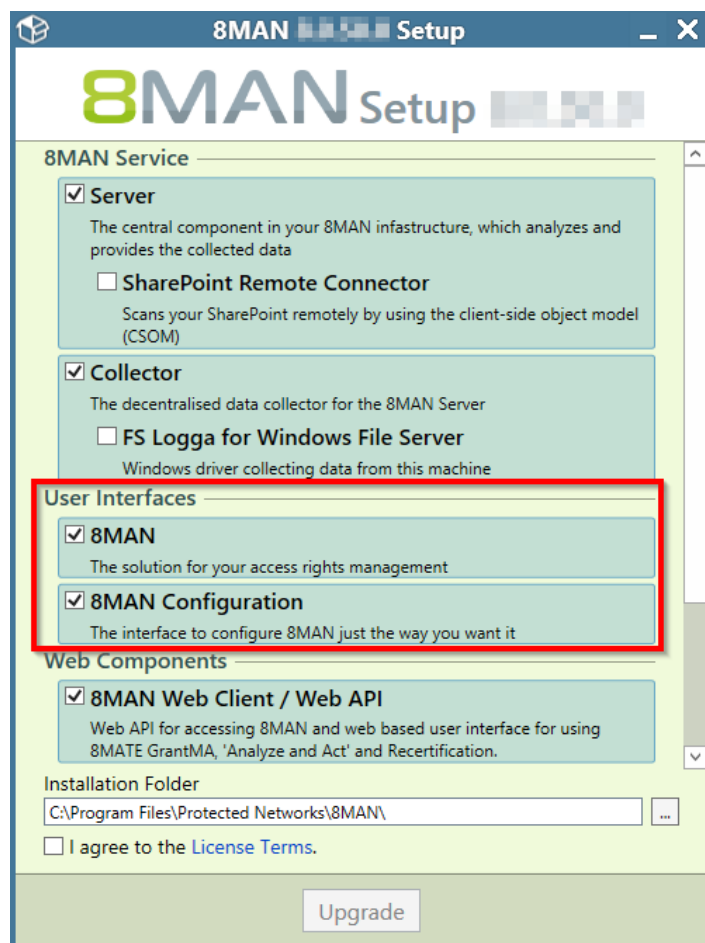


You can create shortcuts for users to the 8MAN GUIs in the bin folder `app8man.exe` and `appConfig.exe`.

This "deployment via sharing" procedure minimizes the amount of maintenance required for updates compared to installation on the client computer.

After clicking on a start shortcut, larger amounts of data are transferred over the network than with a local installation. With low bandwidth (WAN routes), this can result in a longer start time.

3.4.2 Install the 8MAN GUI



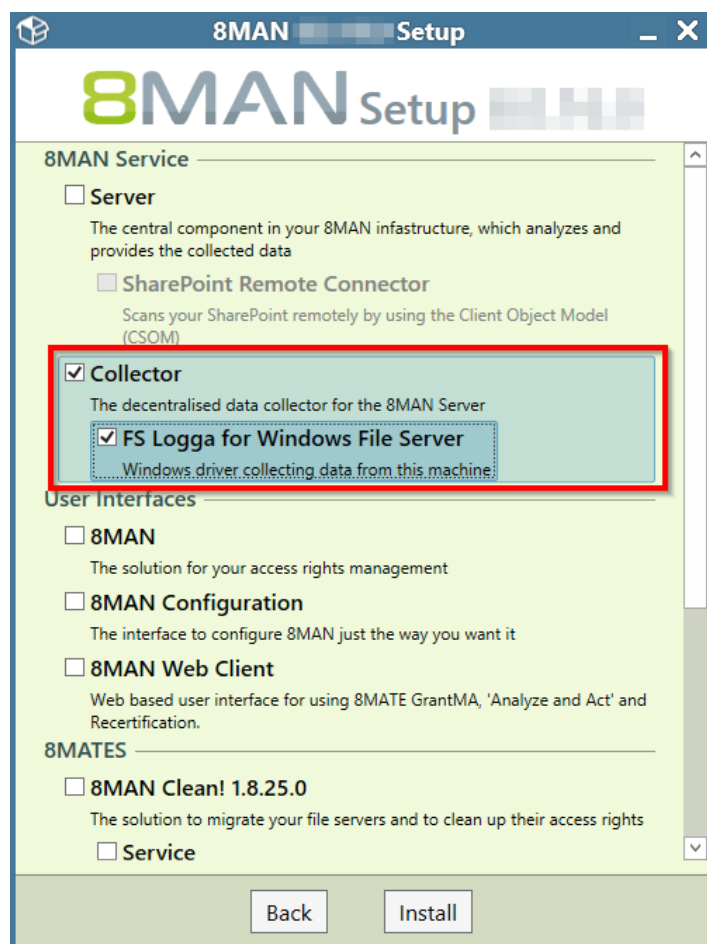
You can install the 8MAN GUI on client computers (servers too) as often as desired.

If the web components are installed on a server computer, the web based applications are available via supported browsers on any client without any further installation.

3.5 Install the filter driver for the FS Logga on Windows file servers

The [collector requirements](#) and [Windows file server requirements](#) must be fulfilled.

To run the FS Logga on Windows file servers, a collector must be installed with the option FS Logga on all file servers that you would like to monitor.



Activate the option "collector" and "FS Logga for Windows File Server".

The collector and the filter driver are installed to collect file server events.

3.5.1 Verify filter driver activity

You can verify the activity on the filter driver via the command prompt. In order to be able to execute commands you must start the command prompt with administrator rights.

The screenshot shows an Administrator Command Prompt window. The first command executed is `fltmc`, which lists loaded filter drivers. The second command is `sc query minitrc`, which displays detailed information about the minitrc service.

```

Administrator: Command Prompt
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.
C:\Windows\system32>fltmc

Filter Name      Num Instances  Altitude  Frame
-----
Minitrc          1             386020    0
fslogga          1             135000    0
npsvcstrig       1             46000     0
C:\Windows\system32>sc query minitrc

SERVICE_NAME: minitrc
        TYPE               : 2  FILE_SYSTEM_DRIVER
        STATE                : 4  RUNNING
                        (STOPPABLE, NOT_PAUSABLE, IGNORES_SHUTDOWN)
        WIN32_EXIT_CODE       : 0  (0x0)
        SERVICE_EXIT_CODE    : 0  (0x0)
        CHECKPOINT           : 0x0
        WAIT_HINT            : 0x0

C:\Windows\system32>_
  
```

You can list loaded filter drivers with the following command:

`fltmc`

The filter driver of the FS logga will respond with "Minitrc". The number of instances must be at least 1.

You can see details of the filter driver with the following command:

`sc query minitrc`

4 Provide web components

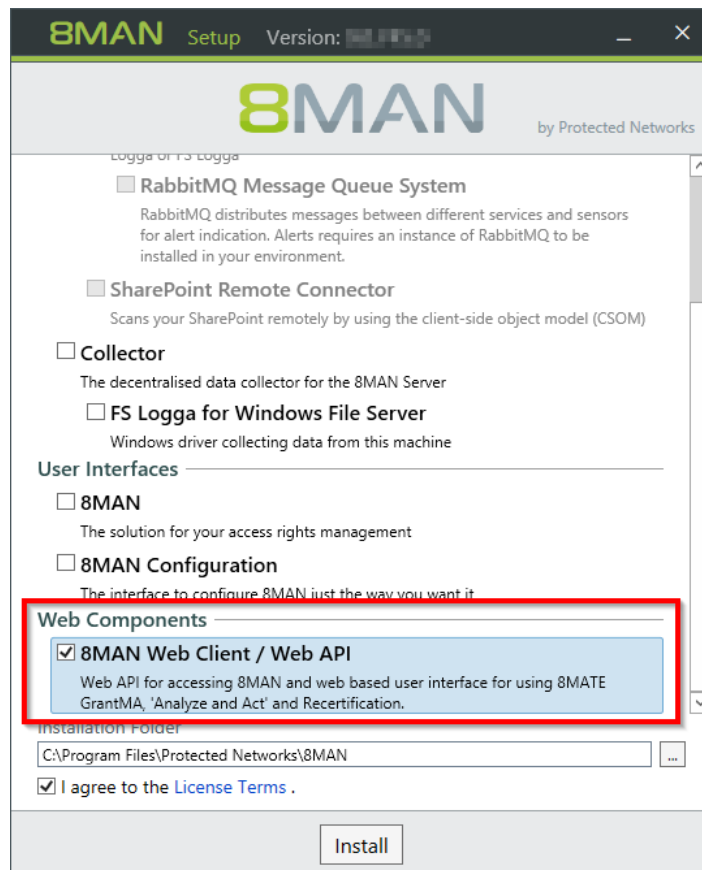
Web components are required for the following applications and processes:

- Analyze & Act (flexible reports and bulk operations)
- Recertification (periodic approval and review of access rights by data owners)
- 8MATE GrantMA (web-based request and assignment of access rights)
- webAPI (Interface enabling the use of 8MAN functionality in other applications)

4.1 Install web components

You can run web components on the 8MAN server or any other Microsoft Internet Information Server (IIS).

1. Copy the 8MAN Setup.exe file into a local folder (do not use a network folder).
2. To start the installation, execute the file with admin rights. By default the system language will be set to the language of your operating system if supported (German, English, French). If your language is not supported English will be used.



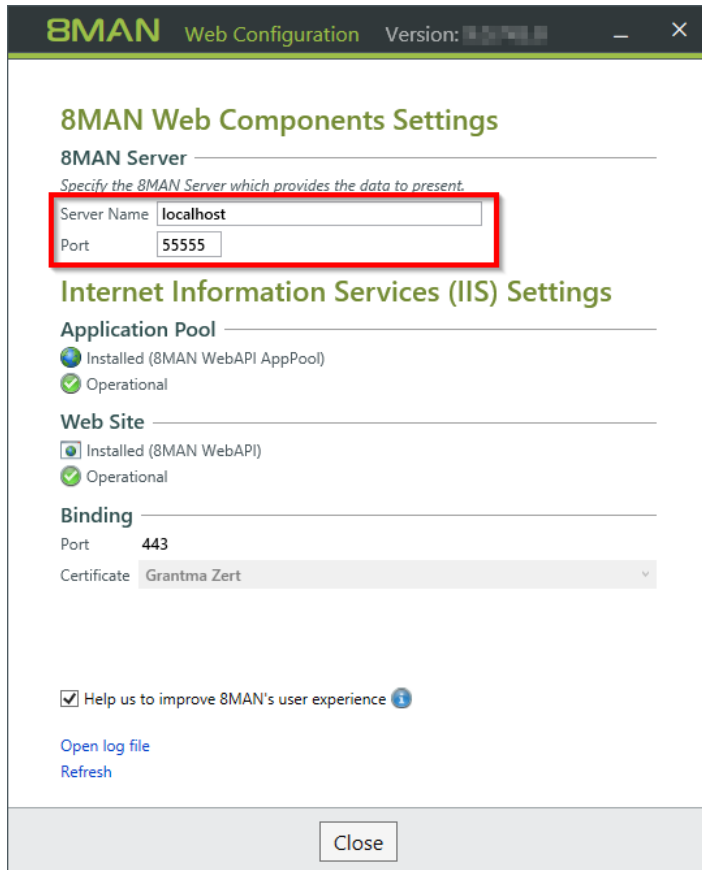
Activate the option "web components".

Required IIS components are installed if necessary. Please see: "[Install missing components](#)".

4.2 Configure web components



Open the configuration module.



Enter the name of the 8MAN server. If executing both web components and the 8MAN server on the same machine, no changes to the server name are required.

Enter the port of the 8MAN server. By default the 8MAN server communicates through port "55555".

If you require any changes to this port, please contact our [support](#).

8MAN Web Components Settings

8MAN Server

Specify the 8MAN Server which provides the data to present.

Server Name

Port

Internet Information Services (IIS) Settings

Application Pool

Installed (8MAN WebAPI AppPool)

Operational

Web Site

The Web Site (8MAN WebAPI) does not exist yet and must be created.

Binding

Port

Certificate

☒ Help us to improve 8MAN's user experience

[Open log file](#)

[Refresh](#) [Skip this step](#)

Deploy 8MAN Web Components

1. Enter a port for the binding of the certificate to the website. The standard https port is 443. If you enter any other port you must consider this when starting the 8MAN website (providing the URL to users).
2. Select a certificate. If no certificate is offered, please reference the following chapters: "[Use a self-signed certificate](#)" and "[Bind a certificate to your site](#)".
3. You can reload the list of available certificates by clicking on "Refresh".
4. Deploy web components.

8MAN Web Components Settings

8MAN Server

Specify the 8MAN Server which provides the data to present.

Server Name

Port

Internet Information Services (IIS) Settings

Application Pool

Installed (8MAN WebAPI AppPool)

Operational

Web Site

Installed (8MAN WebAPI)

Operational

Binding

Port

Certificate

☒ Help us to improve 8MAN's user experience

[Open log file](#)

[Refresh](#)

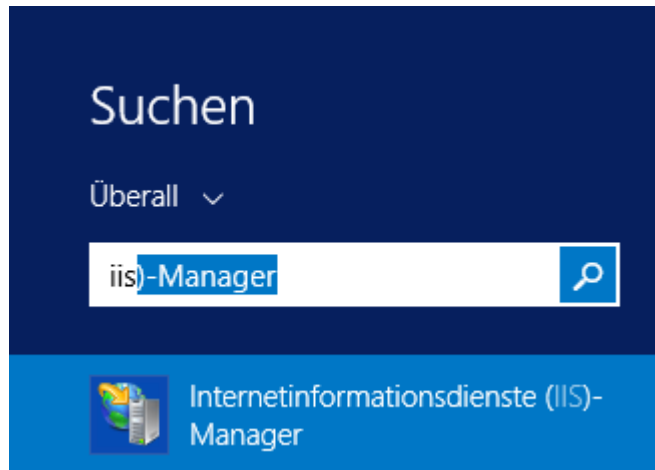
Close

The web components will be available once all settings for "Application Pool" and "Web Site" are shown as operational.

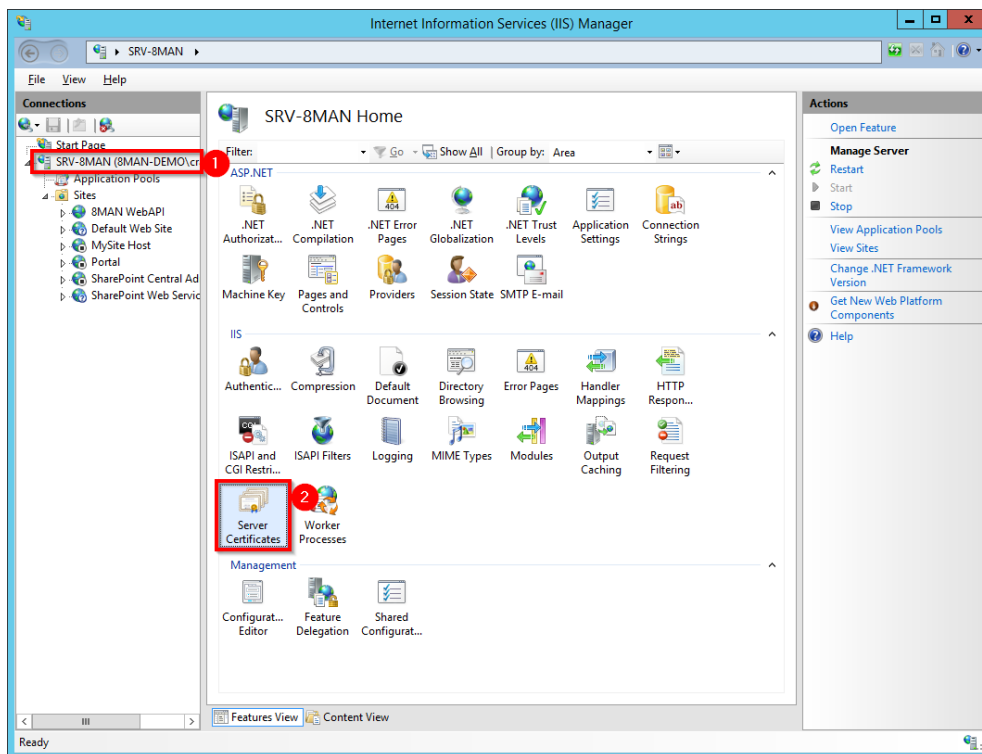
4.2.1 Generate a self-signed certificate

The following steps are optional.

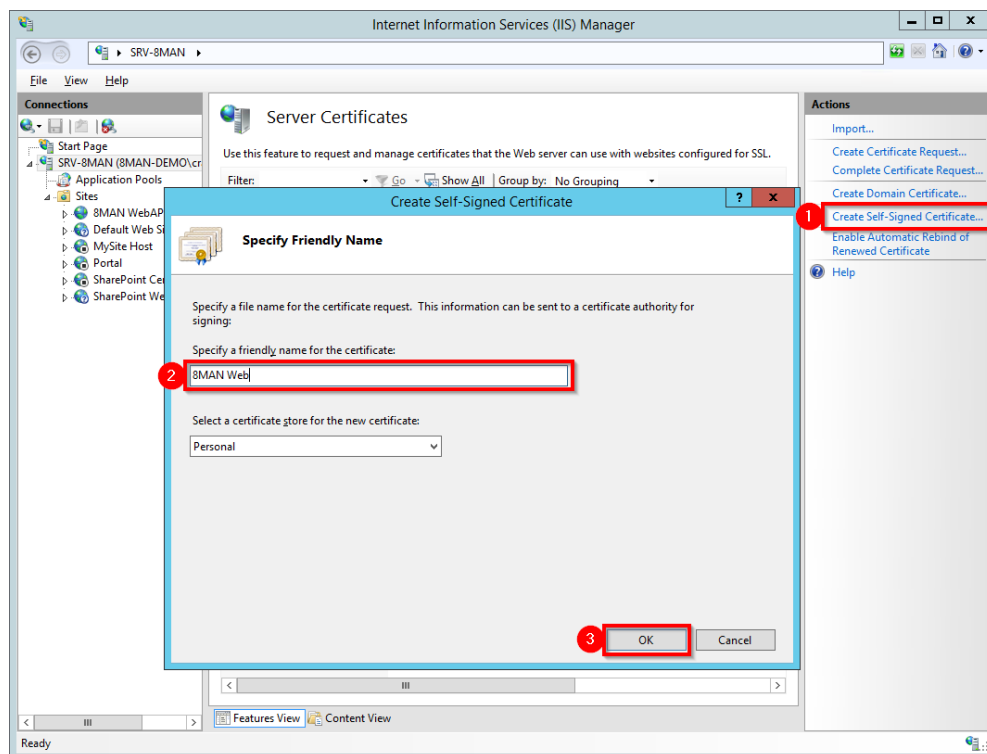
The self-signed certificates described in the following steps create security warnings in various browsers, as an out-of-date SHA-1 based encryption is used. Use certificates with SHA2 / 256 encryption for productive use.



Start the IIS-Manager.



1. Select the server.
2. Double click on "Server Certificates".

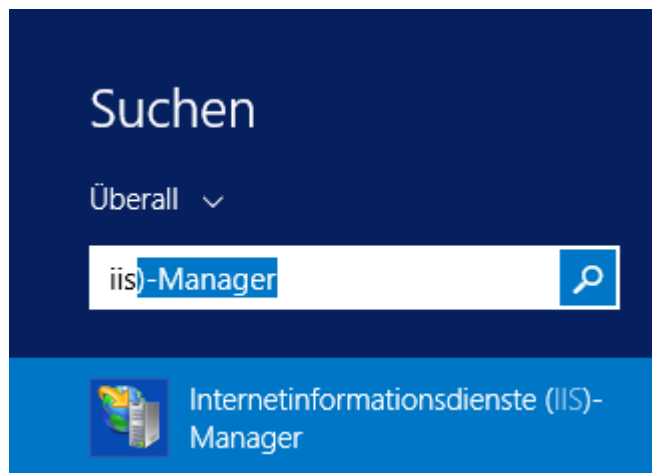


1. Click "Create Self-Signed Certificate".
2. Give the certificate a name.
3. Generate the certificate.

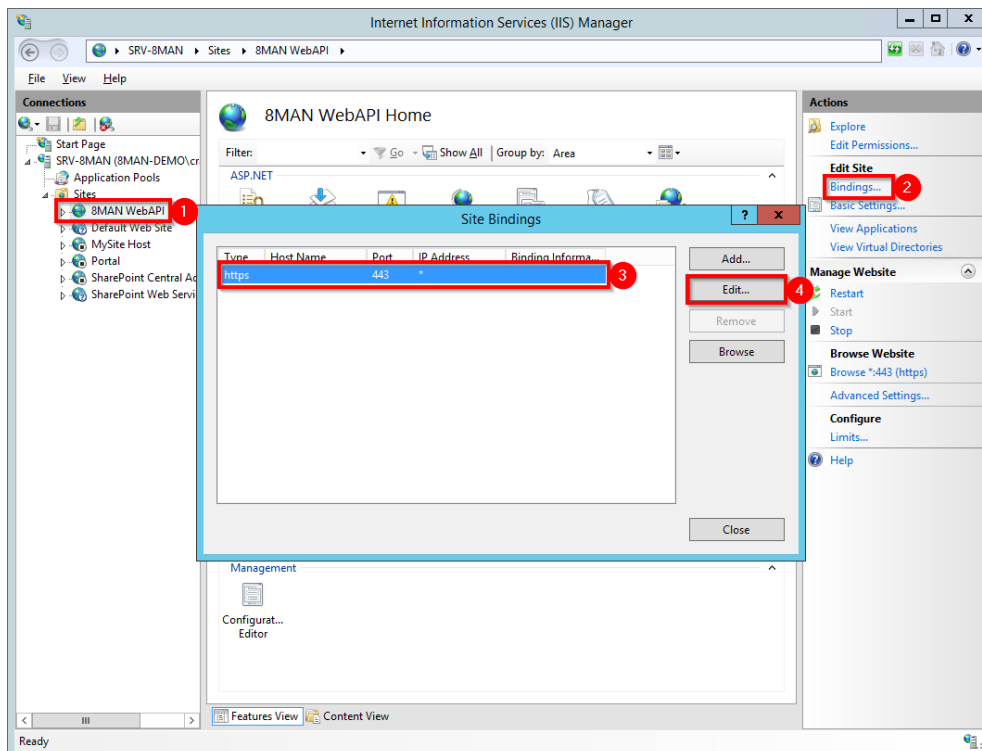
In the next step you have to bind the certificate to the site.

4.2.2 Bind a certificate to a site

You can add a certificate to the site during the provisioning process. It may be necessary to add another certificate, for example when the old one has expired.



Start the IIS-Manager.



1. *Navigate to the site "8MAN WebAPI"*
2. *Click "Bindings..."*
3. *Select the certificate with type "https" and port "443" (standard settings)*
4. *Click "Edit..."*

Edit Site Binding

?

x

Type:

https

IP address:

All Unassigned

Port:

443

Host name:

☐ Require Server Name Indication

SSL certificate:

srv-8man.8man-demo.local

Select...

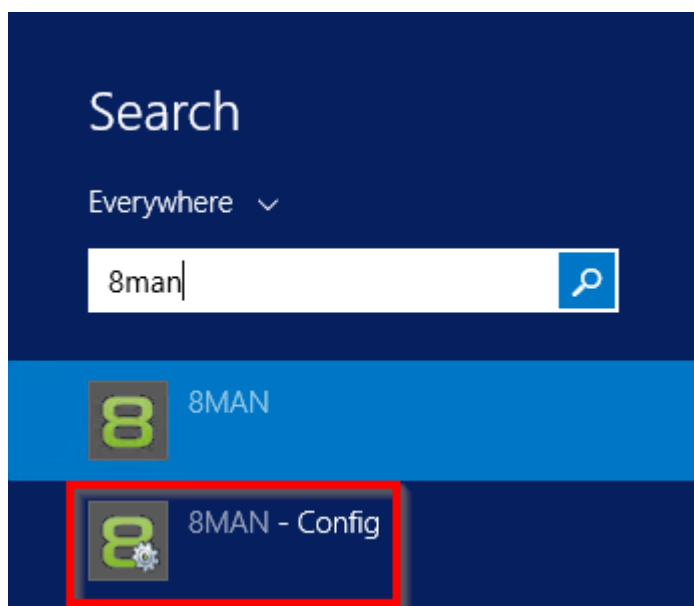
View...

OK

Cancel

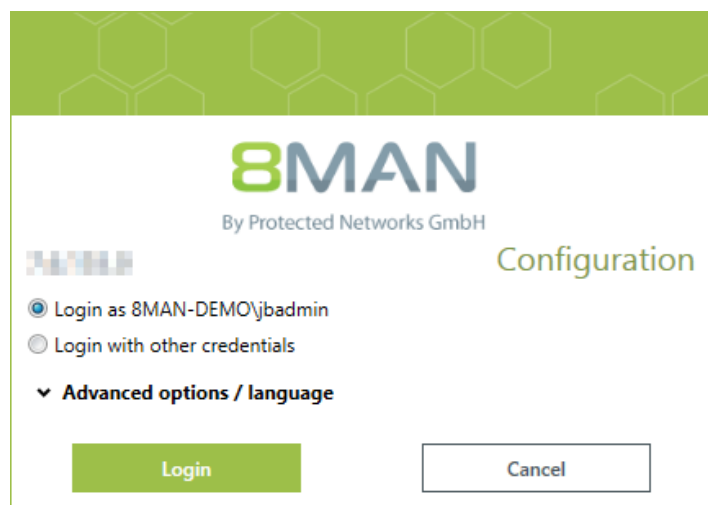
Select a certificate. By clicking on "OK" you bind the certificate to the site.

5 Start the configuration module



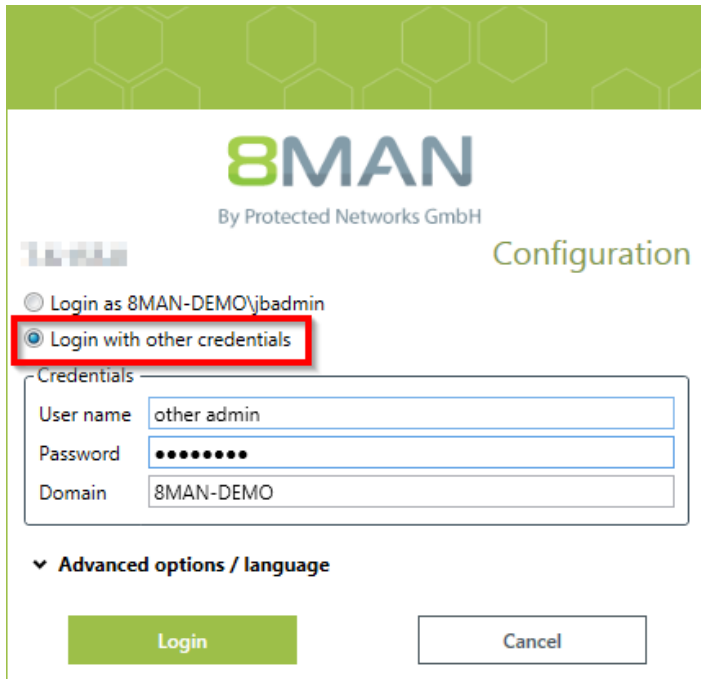
Start the configuration module.

Login



After installing 8MAN there is only one user that can log in to the application. This is the user that was used to perform the installation.

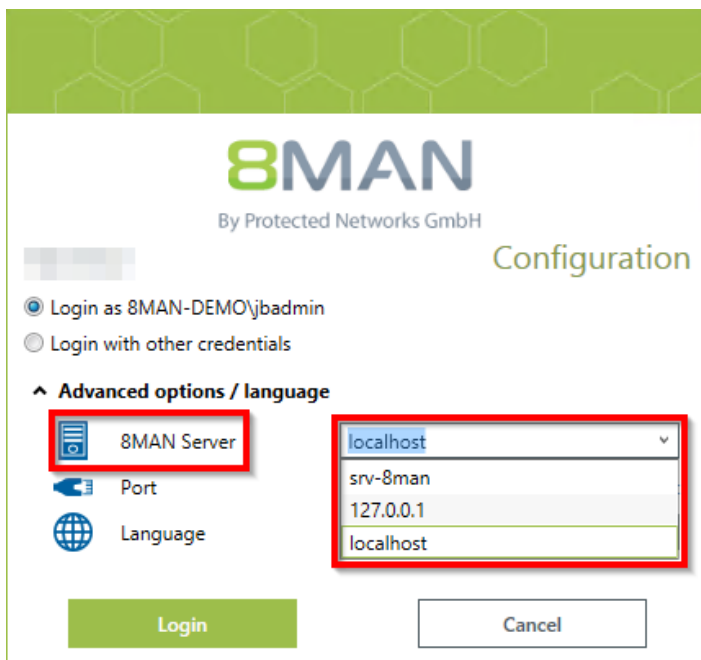
More information on adding 8MAN users can be found in the chapter [8MAN user management](#).



The screenshot shows the 8MAN Configuration window. At the top, the 8MAN logo is displayed with the text "By Protected Networks GmbH". Below the logo, the word "Configuration" is written in a large, green font. There are two radio buttons for login options: "Login as 8MAN-DEMO\jbadmin" and "Login with other credentials". The second option is selected and highlighted with a red rectangle. Below these options is a "Credentials" section with three input fields: "User name" containing "other admin", "Password" containing seven dots, and "Domain" containing "8MAN-DEMO". At the bottom, there is a section titled "Advanced options / language" with a dropdown arrow. Below this section are two buttons: "Login" (green) and "Cancel" (white).

If additional users have already been added you can use their credentials.

Advanced Login Options

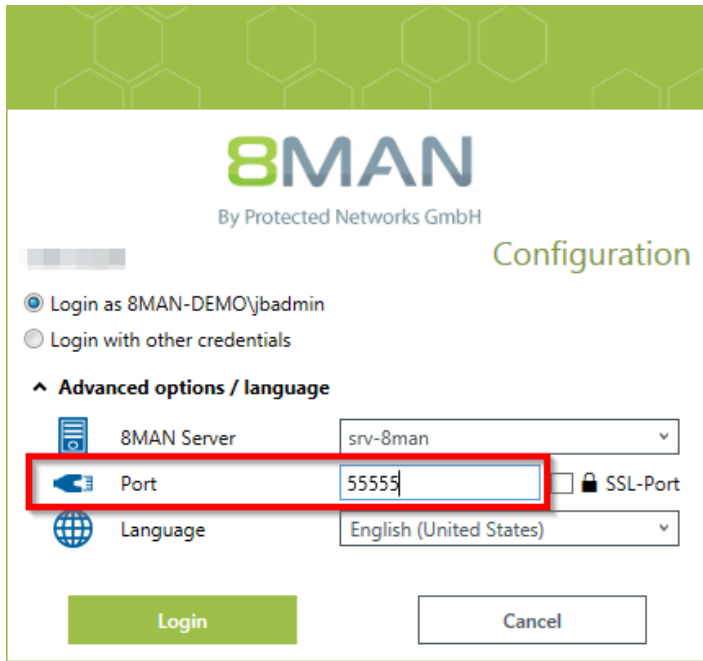


The screenshot shows the 8MAN Configuration window with the "Advanced options / language" section expanded. The "Login with other credentials" radio button is selected. Under the expanded section, there are three items: "8MAN Server" (highlighted with a red rectangle), "Port", and "Language". The "8MAN Server" item has a dropdown menu open, showing a list of options: "localhost", "srv-8man", "127.0.0.1", and "localhost" (highlighted with a red rectangle). At the bottom, there are "Login" (green) and "Cancel" (white) buttons.

Enter the name of the 8MAN server, for example "srv-8MAN" (without "\\").

If working locally on the 8MAN server you may also use "localhost".

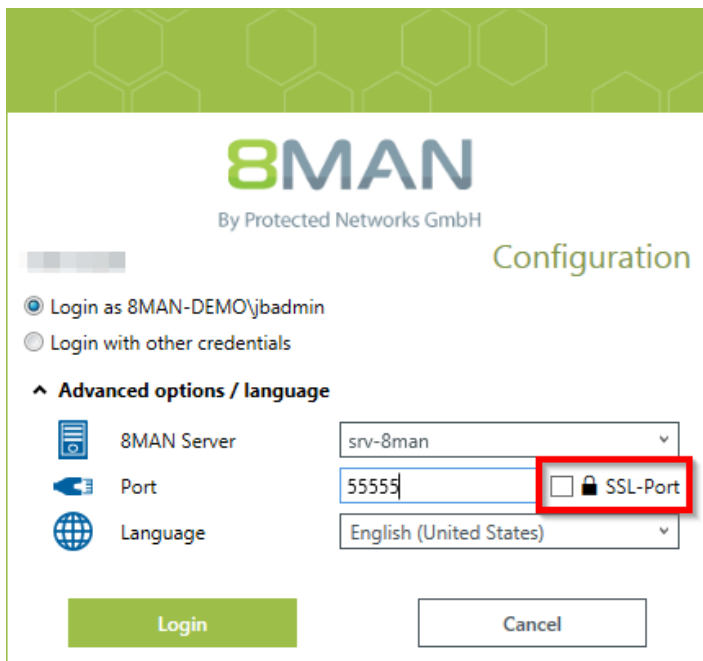
It is also possible to reference an IP address.



The image shows the 8MAN Configuration window. At the top, the 8MAN logo is displayed with the text "By Protected Networks GmbH" below it. The title "Configuration" is on the right. There are two login options: "Login as 8MAN-DEMO\jbadmin" (selected) and "Login with other credentials". Under "Advanced options / language", there are three settings: "8MAN Server" (set to "srv-8man"), "Port" (set to "55555" and highlighted with a red box), and "Language" (set to "English (United States)"). There is also an unchecked checkbox for "SSL-Port". At the bottom are "Login" and "Cancel" buttons.

By default, the communication between 8MAN server and GUI passes through port "55555". If changes are required, please contact our [support](#).

Please note the required [Firewall-settings](#).



This image is similar to the first one, showing the 8MAN Configuration window. In this version, the "SSL-Port" checkbox is checked and highlighted with a red box. The "Port" field still contains "55555". All other elements, including the login options and the "8MAN Server" dropdown, remain the same.

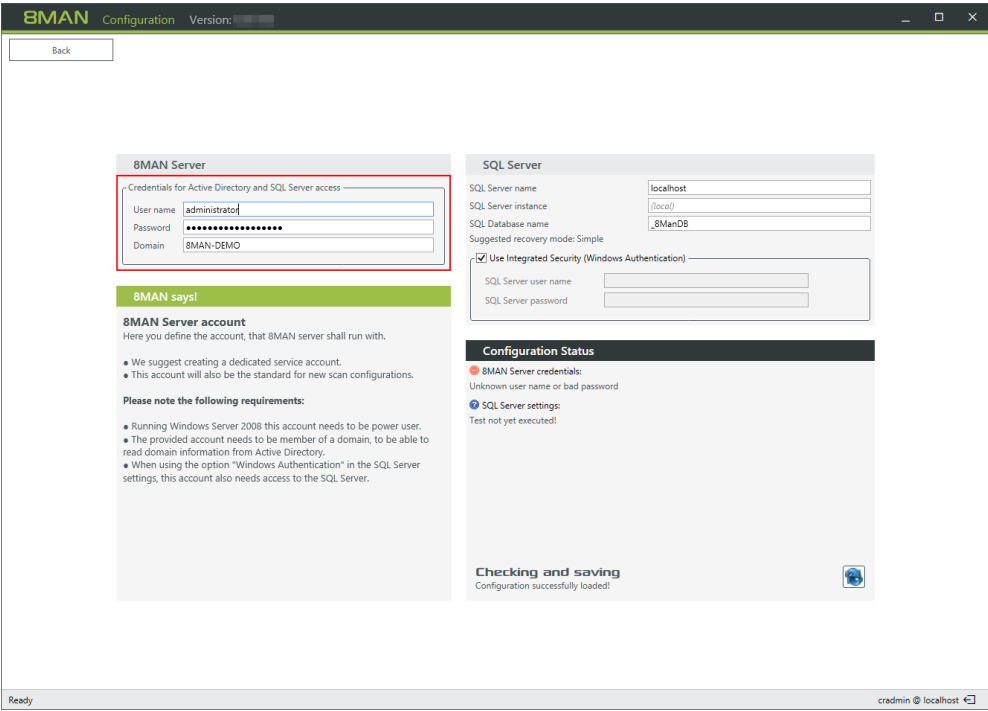
If you activate the SSL option, all communication between 8MAN server and GUI will be encrypted.

Encryption must first be activated and configured. If you require configuration please contact our [support](#).

6 Basic configuration

The 8MAN server is a service that runs on local permissions. The 8MAN server requires login credentials to login to Active Directory and the SQL server.

Login credentials are suggested by default for new scan configurations.



Initially, the 8MAN configuration module will automatically show the basic configuration view.

6.1 Enter 8MAN server credentials

8MAN Configuration Version: 8.0.16.0

Back

8MAN Server

~Credentials for Active Directory and SQL Server access~

User name: sa-8man

Password: *****

Domain: 8MAN-DEMO

8MAN says!

8MAN Server account

Here you define the account, that 8MAN server shall run with.

- We suggest creating a dedicated service account.
- This account will also be the standard for new scan configurations.

Please note the following requirements:

- Running Windows Server 2008 this account needs to be power user.
- The provided account needs to be member of a domain, to be able to read domain information from Active Directory.
- When using the option "Windows Authentication" in the SQL Server settings, this account also needs access to the SQL Server.

SQL Server

SQL Server name: localhost

SQL Server instance: (local)

SQL Database name: .8ManDB

Suggested recovery mode: Simple

☒ Use Integrated Security (Windows Authentication)

SQL Server user name:

SQL Server password:

Configuration Status

8MAN Server credentials: Test successful

SQL Server settings: Test successful

Checking and saving

Configuration successfully loaded!

Ready

Enter the login credentials for Active Directory.

Please see additional notes and references for the use of [Service accounts](#).

8MAN Configuration Version: 8.0.16.0

Back

8MAN Server

~Credentials for Active Directory and SQL Server access~

User name: sa-8man

Password: *****

Domain: 8MAN-DEMO

8MAN says!

8MAN Server account

Here you define the account, that 8MAN server shall run with.

- We suggest creating a dedicated service account.
- This account will also be the standard for new scan configurations.

Please note the following requirements:

- Running Windows Server 2008 this account needs to be power user.
- The provided account needs to be member of a domain, to be able to read domain information from Active Directory.
- When using the option "Windows Authentication" in the SQL Server settings, this account also needs access to the SQL Server.

SQL Server

SQL Server name: localhost

SQL Server instance: (local)

SQL Database name: .8ManDB

Suggested recovery mode: Simple

☒ Use Integrated Security (Windows Authentication)

SQL Server user name:

SQL Server password:

Configuration Status

8MAN Server credentials: Test successful

SQL Server settings: Test successful

Checking and saving

Configuration successfully loaded!

Ready

If valid credentials are entered, 8MAN will display the message "Test successful". Successful means that the credentials are valid for Active Directory login.

6.2 Enter SQL server credentials

8MAN Configuration Version: 8.0.16.0

Back

8MAN Server

~Credentials for Active Directory and SQL Server access~

User name: sa-8man
Password: *****
Domain: 8MAN-DEMO

8MAN says!

8MAN Server account
Here you define the account, that 8MAN server shall run with.

- We suggest creating a dedicated service account.
- This account will also be the standard for new scan configurations.

Please note the following requirements:

- Running Windows Server 2008 this account needs to be power user.
- The provided account needs to be member of a domain, to be able to read domain information from Active Directory.
- When using the option "Windows Authentication" in the SQL Server settings, this account also needs access to the SQL Server.

SQL Server

SQL Server name: localhost
SQL Server instance: (local)
SQL Database name: .8ManDB
Suggested recovery mode: Simple

☒ Use Integrated Security (Windows Authentication)

SQL Server user name:
SQL Server password:

Configuration Status

✓ 8MAN Server credentials:
Test successful

✓ SQL Server settings:
Test successful

Checking and saving
Configuration successfully loaded!

Ready

Enter the SQL server name, the name of the instance and data base (no spaces allowed).

Please note additional information to the [SQL instance name](#).

By default, the simple recovery mode is configured for the 8MAN data base. Switching to the full recovery mode is only possible once the initial configuration has been completed (also see [Switching data base recovery mode](#)).

8MAN Configuration Version: 8.0.16.0

Back

8MAN Server

~Credentials for Active Directory and SQL Server access~

User name: sa-8man
Password: *****
Domain: 8MAN-DEMO

8MAN says!

8MAN Server account
Here you define the account, that 8MAN server shall run with.

- We suggest creating a dedicated service account.
- This account will also be the standard for new scan configurations.

Please note the following requirements:

- Running Windows Server 2008 this account needs to be power user.
- The provided account needs to be member of a domain, to be able to read domain information from Active Directory.
- When using the option "Windows Authentication" in the SQL Server settings, this account also needs access to the SQL Server.

SQL Server

SQL Server name: localhost
SQL Server instance: (local)
SQL Database name: .8ManDB
Suggested recovery mode: Simple

☒ Use Integrated Security (Windows Authentication)

SQL Server user name:
SQL Server password:

Configuration Status

✓ 8MAN Server credentials:
Test successful

✓ SQL Server settings:
Test successful

Checking and saving
Configuration successfully loaded!

Ready

Determine the type of registration on the SQL server.

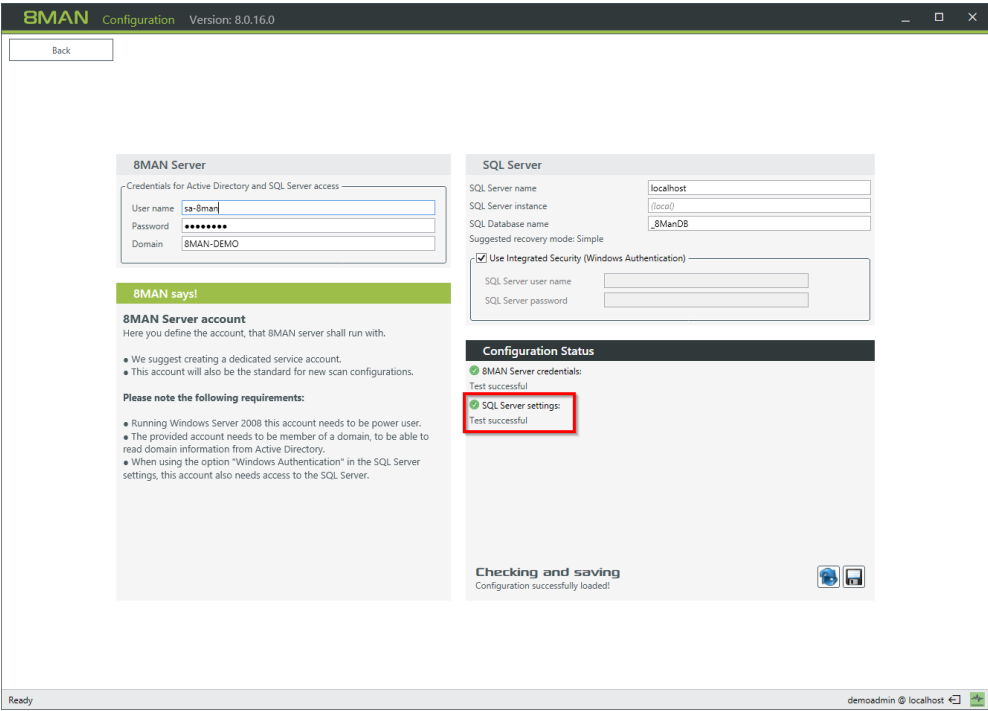
Option activated

Windows authentication is performed with the credentials of the 8MAN server (on the left-hand side)

Option deactivated

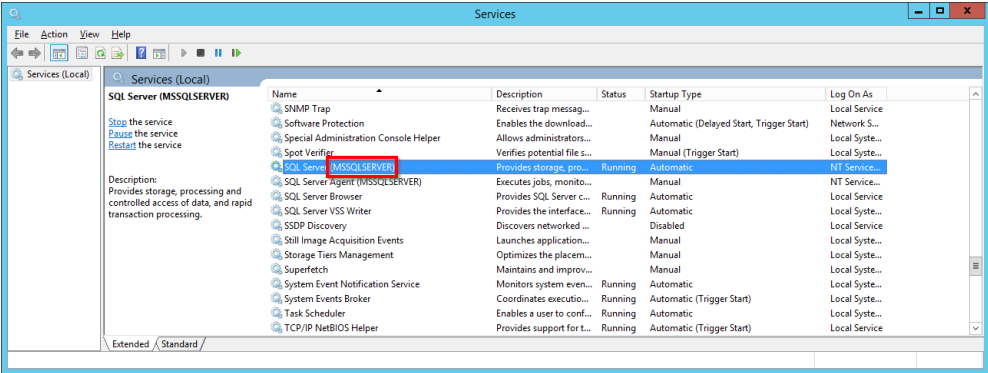
SQL server authentication is utilized. Please enter user name and password to login to the SQL server.

Please see additional notes and references for the use of [Service accounts](#).



If valid credentials have been entered, 8MAN will display the message "Test successful".

6.2.1 Identify the SQL server instance name



The instance name can be identified by using the services console:

services.msc

8MAN Configuration Version: 8.0.16.0

Back

8MAN Server

Credentials for Active Directory and SQL Server access

User name: sa-8man
Password: *****
Domain: 8MAN-DEMO

8MAN says!

8MAN Server account
Here you define the account, that 8MAN server shall run with.

- We suggest creating a dedicated service account.
- This account will also be the standard for new scan configurations.

Please note the following requirements:

- Running Windows Server 2008 this account needs to be power user.
- The provided account needs to be member of a domain, to be able to read domain information from Active Directory.
- When using the option "Windows Authentication" in the SQL Server settings, this account also needs access to the SQL Server.

SQL Server

SQL Server name: localhost
SQL Server instance: (local)
SQL Database name: 8ManDB

Suggested recovery mode: Simple

☒ Use Integrated Security (Windows Authentication)

SQL Server user name:
SQL Server password:

Configuration Status

8MAN Server credentials:
Test successful

SQL Server settings:
Test successful

Checking and saving
Configuration successfully loaded!

Ready demoadmin @ localhost

EXCEPTION:

A standard SQL server (or higher) can be installed without assigning an instance name. This will then be displayed as "SQL Server (MSSQLSERVER)" in the services console.

In this scenario the SQL server instance field must remain empty when using the 8MAN basic configuration. The word "(local)" is shown in grey as a placeholder.

6.3 Switch data base recovery mode

8MAN Configuration Version: 8.0.16.0

Back

8MAN Server

Credentials for Active Directory and SQL Server access

User name: sa-8man
Password: *****
Domain: 8MAN-DEMO

8MAN says!

SQL Server
All data of the 8MAN Server are saved in SQL Server database.

You can use a Microsoft SQL Server Express version. But be aware that the database cannot exceed 4 GB (version 2008 and below) or 10 GB (version 2008 R2) of hard disk memory in this case.

You can configure the following SQL settings:

SQL Server name

- Please insert the name or IP-Address of the SQL Server.
- If the SQL Server is running on the same machine as the 8MAN Server you can use "localhost" or "(local)" (without the quotes).

SQL Server instance

- Please insert the name of the SQL Server instance, that has been created during the SQL Server installation.
- The default instance of an SQL server express installation is usually "sqlexpress". In contrast to that, the default instance of full versions is usually empty. So, in that case, please keep the instance name blank.
- If you do not know the name of the SQL Server instance, please ask your database administrator.

SQL Server

SQL Server name: localhost
SQL Server instance: (local)
SQL Database name: 8ManDB

Recovery mode: Simple

☒ Use Integrated Security (Windows Authentication)

SQL Server user name:
SQL Server password:

Configuration Status

8MAN Server credentials:
Test successful

SQL Server settings:
Test successful

Recovery mode: Simple
Size of the log file: 1 MB
Last log backup: never

Checking and saving
Recovery mode successfully changed to "Simple".

Ready demoadmin @ localhost

The recovery mode can only be changed after the initial configuration has been completed and the message "Test successful" has been displayed.

You can switch the recovery mode from "simple" to "full" and back again.

The change occurs immediately after you click on the change button. You do not need to save the configuration again.

You can obtain more information on the recovery mode from [Microsoft](#).

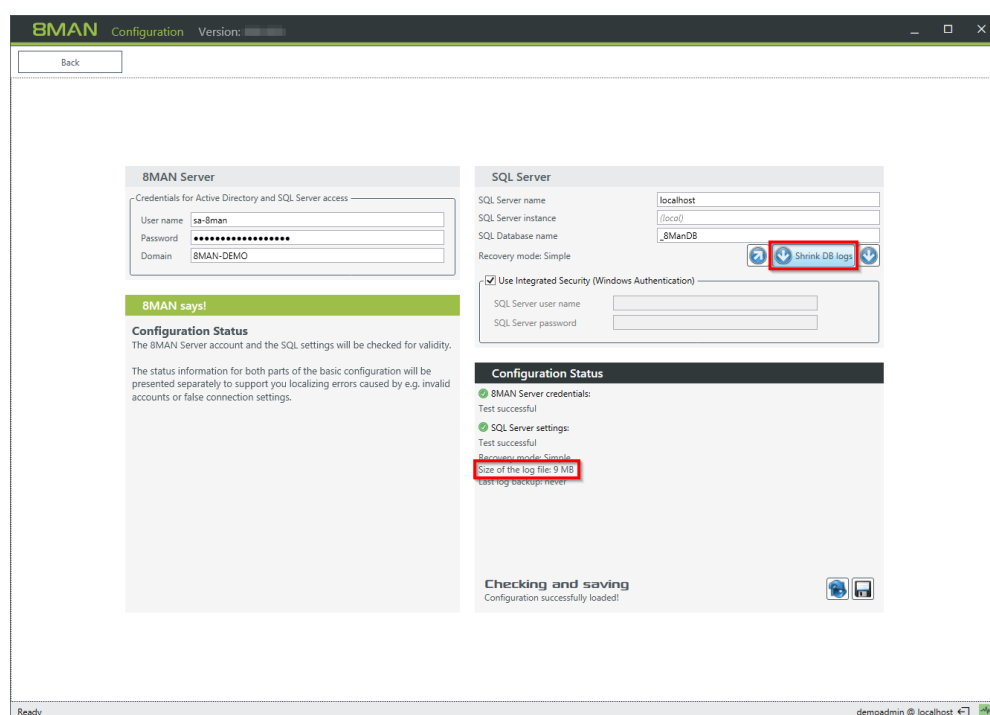
6.4 SQL server data base maintenance

Every morning at 5am the 8MAN server completes scheduled maintenance by removing and archiving old scans from the 8MAN data base. These settings can be managed in the menu item server in the [Data storage](#) section.

Scheduled data base maintenance is only performed if all 8MAN user interfaces are closed. You can [identify registered users](#) in the menu item server status.

Please contact [Support](#) if you would like to change the time of scheduled data base maintenance.

6.4.1 Shrink data base logs

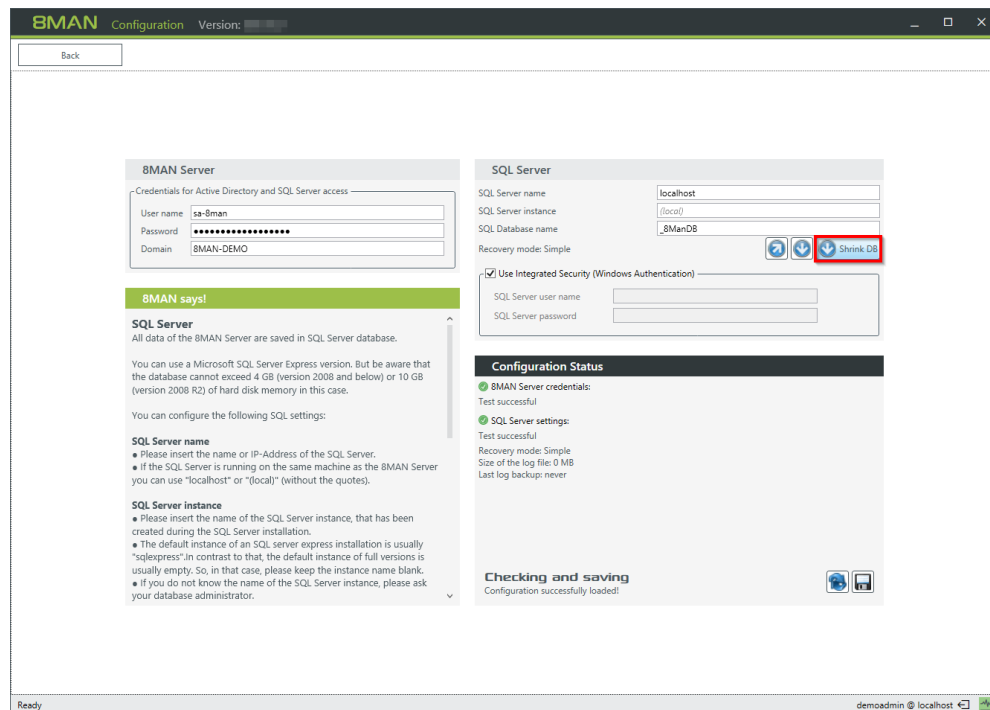


Shrinking of data base logs frees up disk space.

The actual size of logs is shown below.

The action is performed immediately after clicking on the "Shrink DB logs" button.

6.4.2 Shrink data base



Shrinking data base frees up disk space.

This action is performed immediately when clicking on the "Reduce DB size" button.

Please see the following sections for more information on data base size or available disk space: [Server Health-Check](#).

Please see additional notes on [SQL Express Edition](#).

6.5 Complete and save basic configuration

If all login credentials have been entered and tested successfully you can save the configuration.

Submit changes?

You have to confirm the changes.

Changing the 8MAN-Server and SQL Server settings will cause the 8MAN-Server-Service to restart and connect to another SQL database with different settings. Do you want to continue?

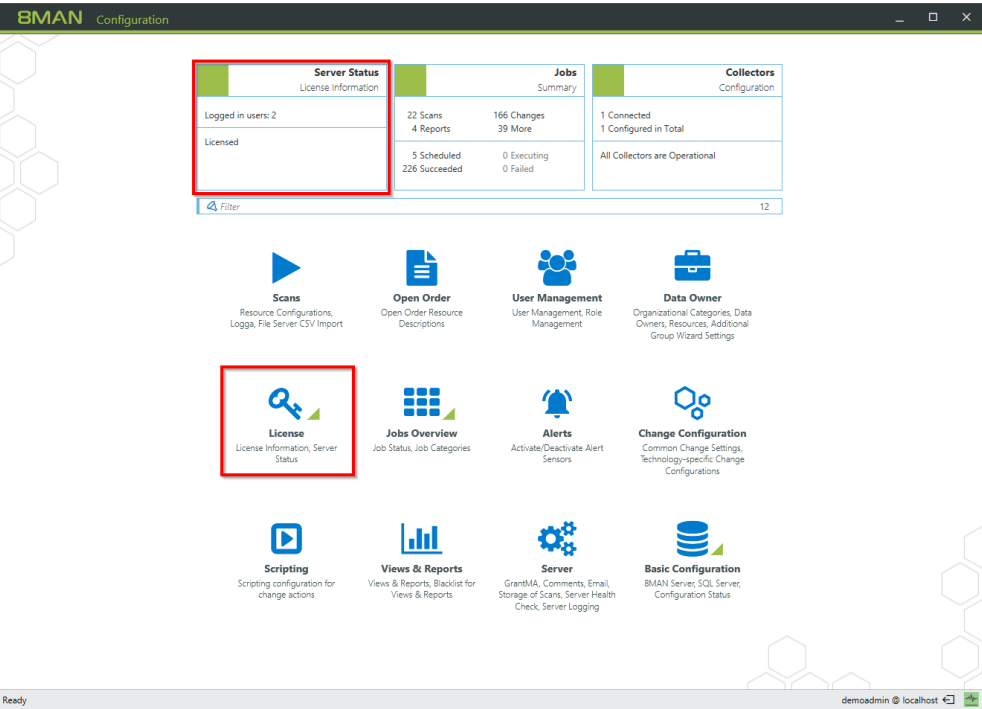
yes

no

If you have confirmed by clicking "yes" the desired changes will be made.

The connection between 8MAN server and 8MAN GUI is inactive while the 8MAN service is being restarted. The connection will then be automatically reactivated.

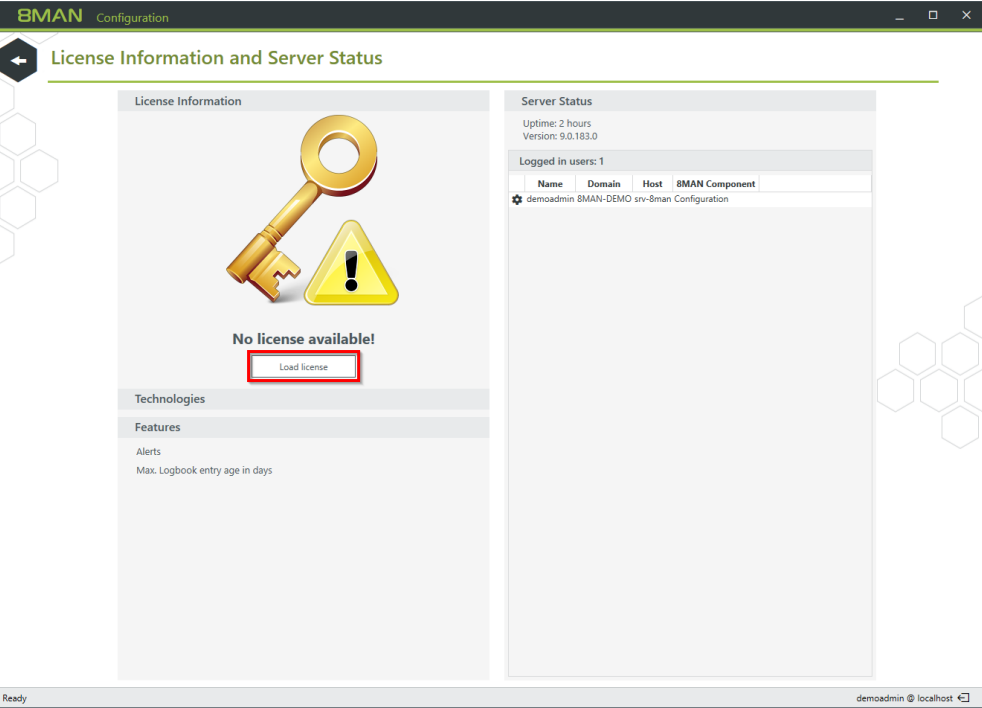
7 License and server status



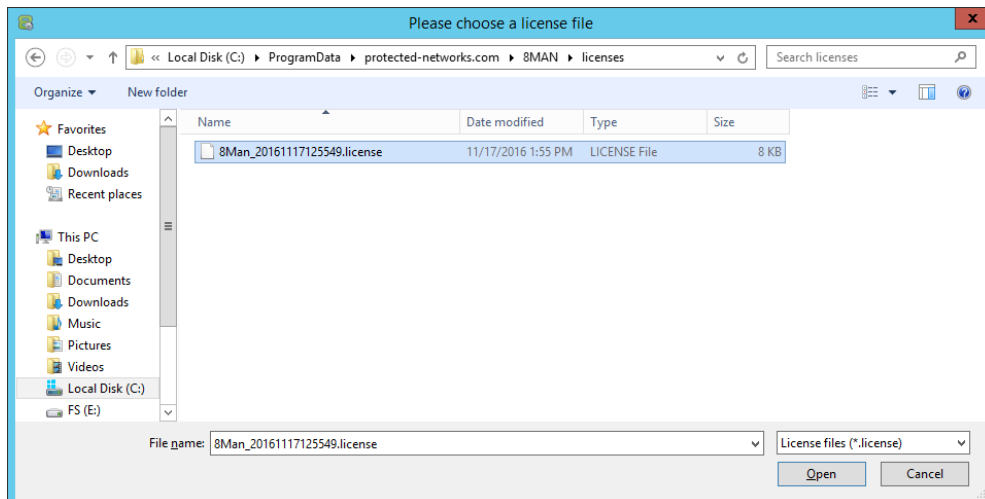
The 8MAN configuration home page displays information about the "Server Status" including license information.

Click on the tile "Server Status" or the category "License" for more details on the server status.

7.1 Load the license file and check covered features



Click on "Load license".



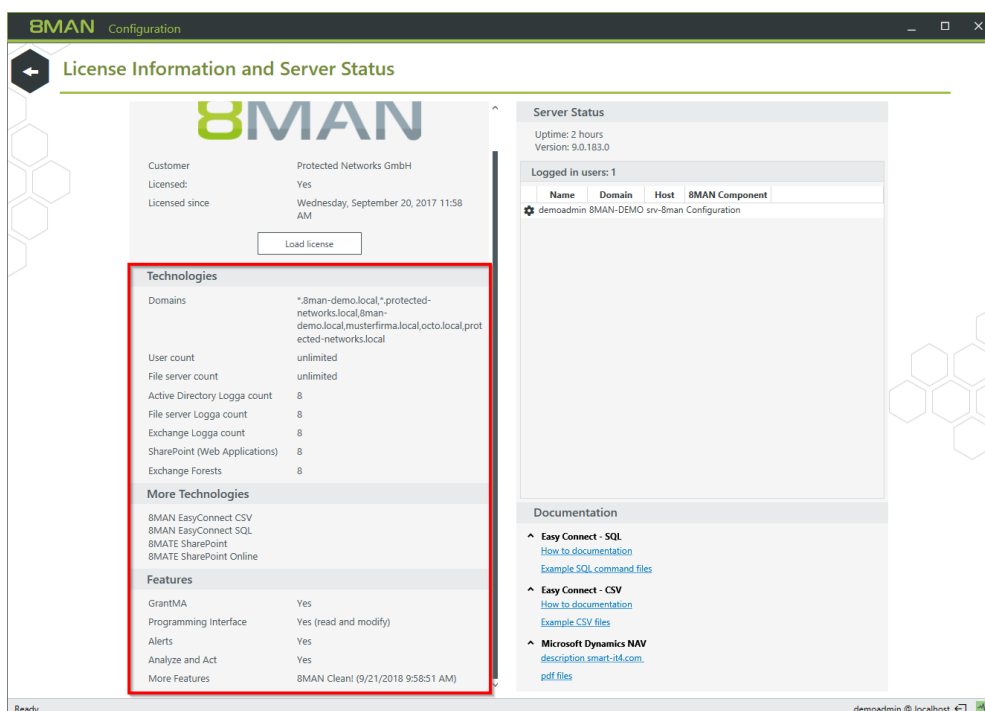
Select the path where your license key is stored.

8MAN license files have the file extension ".license".

After clicking on open, the license key will be copied to

%ProgramData%protected-networks.com\8MAN\licenses

All licensed features are activated immediately.



If the license file has been successfully loaded you will see detailed information on licensed features.

7.2 Identify logged in users

The screenshot shows the 8MAN Configuration window with the 'License Information and Server Status' tab selected. The window is divided into several sections:

- License Information:**
 - Customer: Protected Networks GmbH
 - Licensed: Yes
 - Licensed since: Wednesday, September 20, 2017 11:58 AM
 - Load license button
- Technologies:**
 - Domains: *.8man-demo.local, *.protected-networks.local, *.8man-demo.local, *.musterfirma.local, *.octo.local, *.protected-networks.local
 - User count: unlimited
 - File server count: unlimited
 - Active Directory Logga count: 8
 - File server Logga count: 8
 - Exchange Logga count: 8
 - SharePoint (Web Applications): 8
 - Exchange Forests: 8
- More Technologies:**
 - 8MAN EasyConnect CSV
 - 8MAN EasyConnect SQL
 - 8MATE SharePoint
 - 8MATE SharePoint Online
- Features:**
 - GrantMA: Yes
 - Programming Interface: Yes (read and modify)
 - Alerts: Yes
- Server Status:**
 - Uptime: 2 hours
 - Version: 9.0.183.0
 - Logged in users: 2
 - Table with columns: Name, Domain, Host, 8MAN Component
 - Table content:

Name	Domain	Host	8MAN Component
demoadmin	8MAN-DEMO	srv-8man	8MAN
demoadmin	8MAN-DEMO	srv-8man	Configuration
- Documentation:**
 - Easy Connect - SQL: [How to documentation](#), [Example SQL command files](#)
 - Easy Connect - CSV: [How to documentation](#), [Example CSV files](#)
 - Microsoft Dynamics NAV: [description smart-it4.com.pdf files](#)

The status bar at the bottom shows 'Ready' and 'demoadmin @ localhost'.

In the Server status section you can see which users are currently logged in.

The 8MAN user interface can be opened multiple times - even multiple instances on the same computer.

Only one user can be logged in to the 8MAN configuration module.

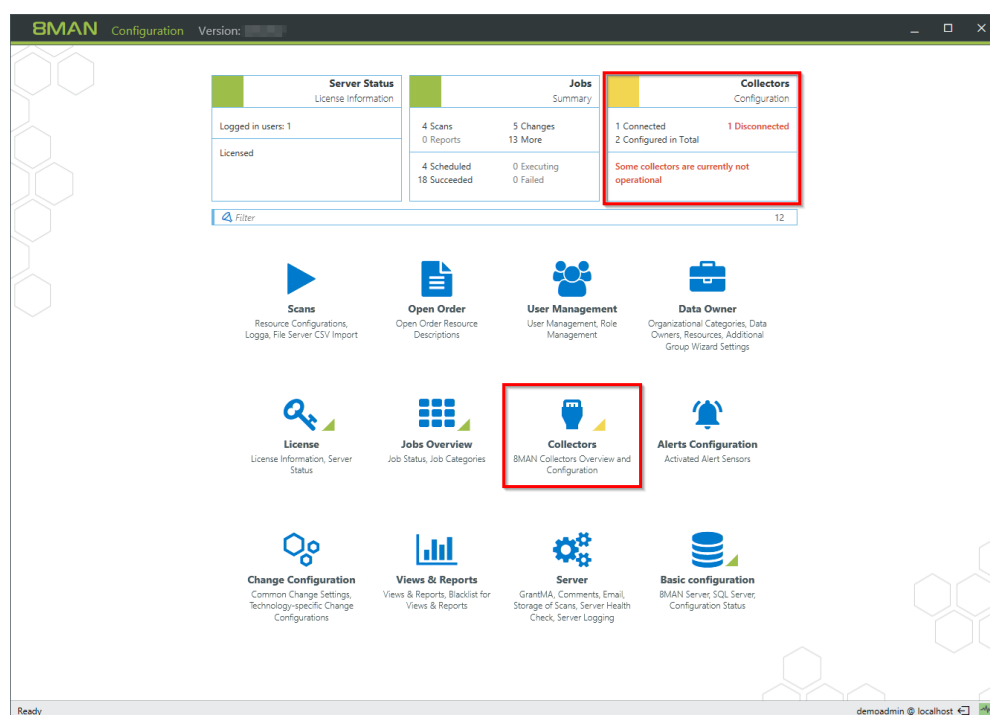
8 Collectors

After the initial installation 8MAN runs one collector installed on the 8MAN server itself.

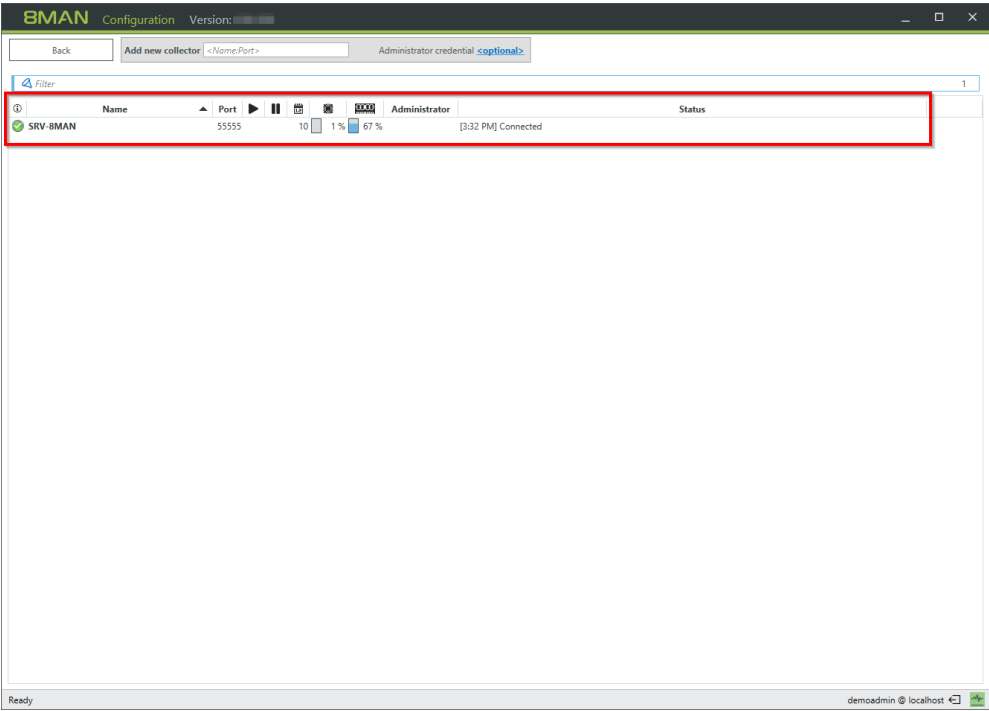
Additional collectors may be installed for the following reasons:

1. You want to connect remote resources. Installing collectors on remote systems reduces the WAN footprint and improves performance when performing scans or making access rights changes.
2. Some resource types and 8MATEs require the installation of additional collectors, for example FS Logga for Windows Fileserver.
3. Load balancing.
4. To incorporate foreign domains (non-trusted) a collector must be installed. Please see [Collectors in foreign domains \(non-trusted\)](#) for more details.

More information can be found in the following chapter: [8MAN Architecture](#).



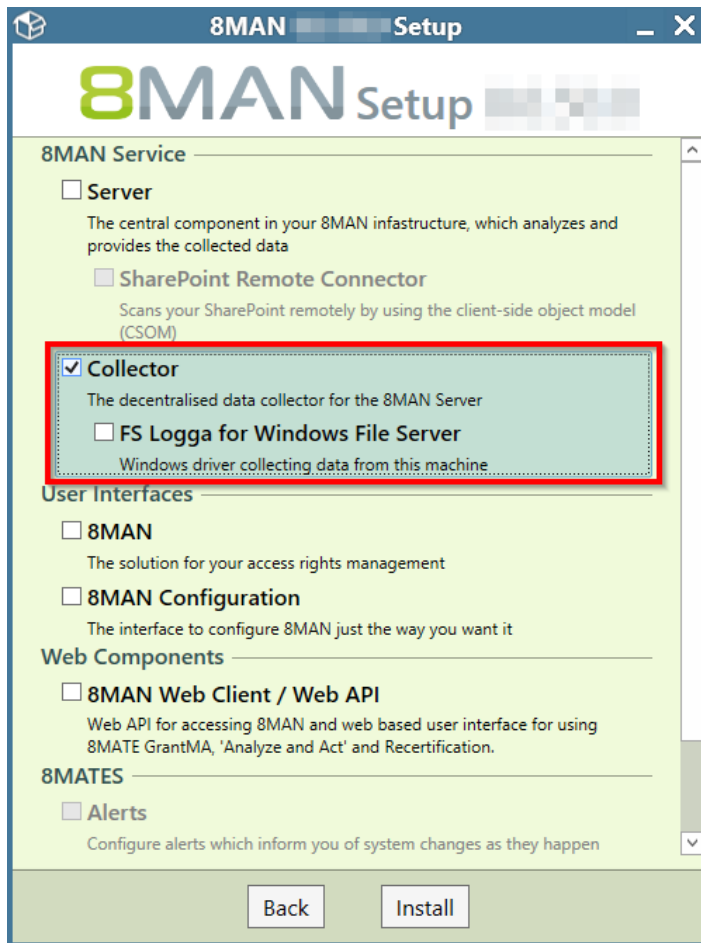
Click on the tile or the category "Collectors" for displaying information on the configured collectors or add new ones.



The list of collectors contains more detailed information on the selected port, storage and CPU workload, number of scheduled jobs, connection status. If you are having problems with the connection please see [Firewall settings](#).

8.1 Install additional collectors

Add collectors using setup



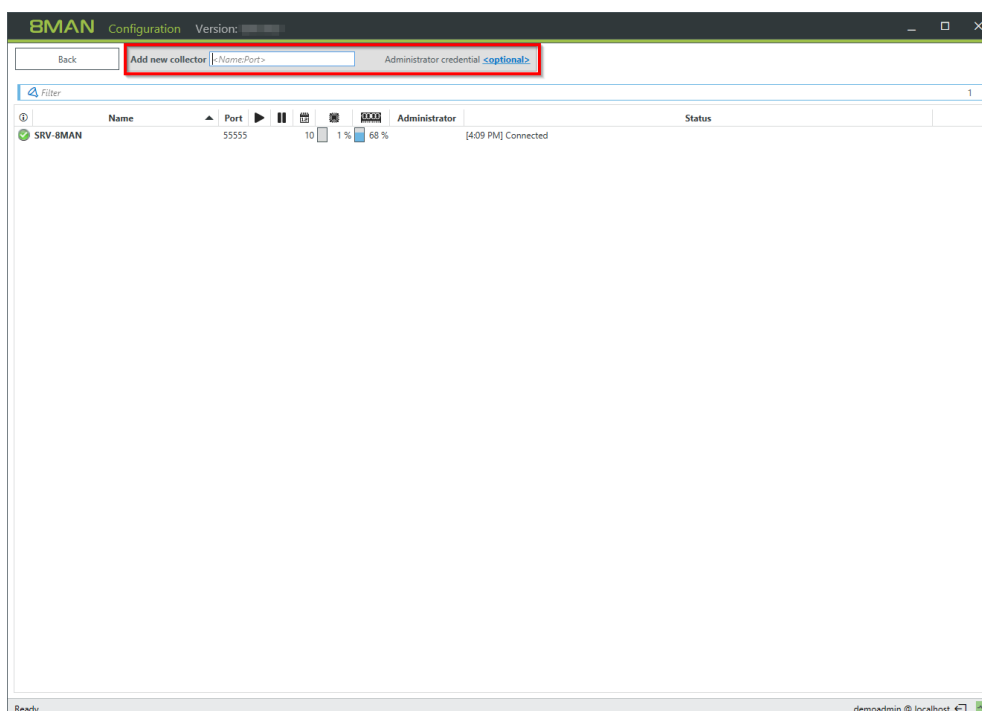
If there is no trust between the 8MAN server (domain) and a resource (domain) this method of installing a collector must be used.

Log on to the desired system and copy the setup.exe file into a local folder (do not use a network folder). Start the file with administrator rights.

Activate the "Collector" option.

After the installation is complete the collector must be added to the 8MAN configuration (please see next paragraph).

Add collectors or install via push method



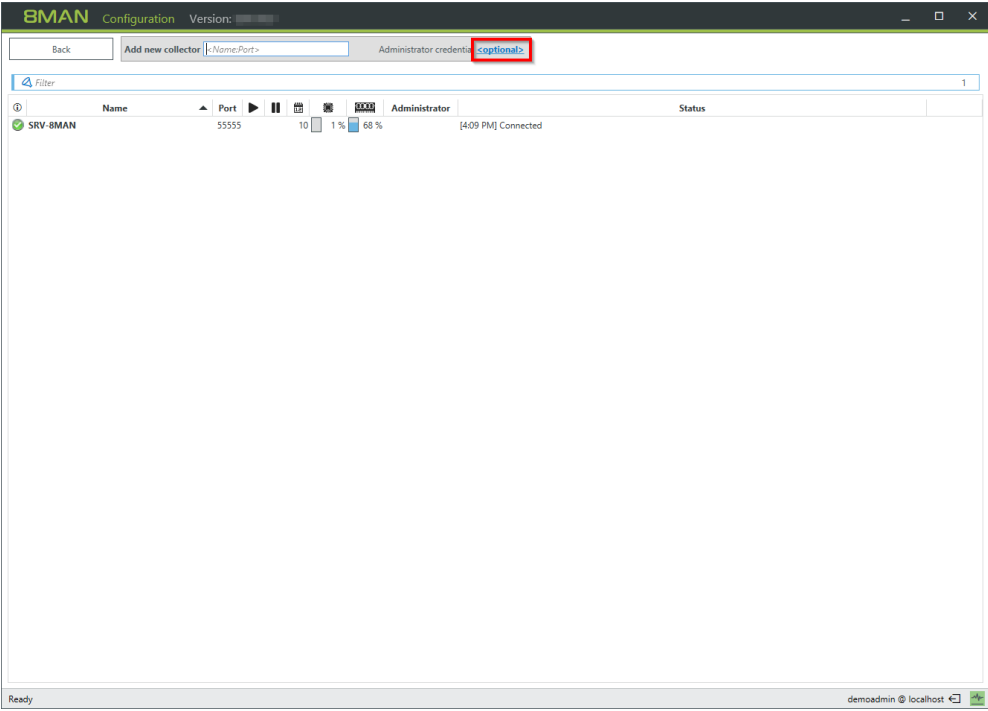
Enter the name of the desired server.

Enter a port number after the name, if you have modified the standard port "55555".

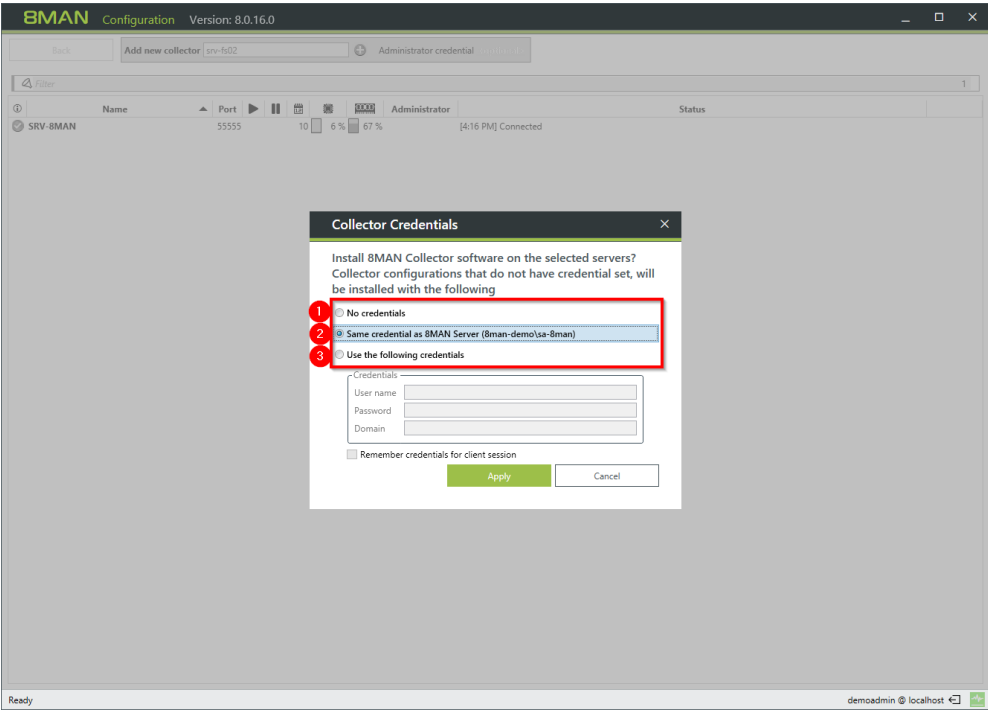
If the target system already has a collector installed, it will be added to a lists of collectors and establish a connection. You do not need to enter any login credentials.

If the target system is in a foreign domain (non-trusted), please note the following section: [Collectors in foreign domains \(non-trusted\)](#).

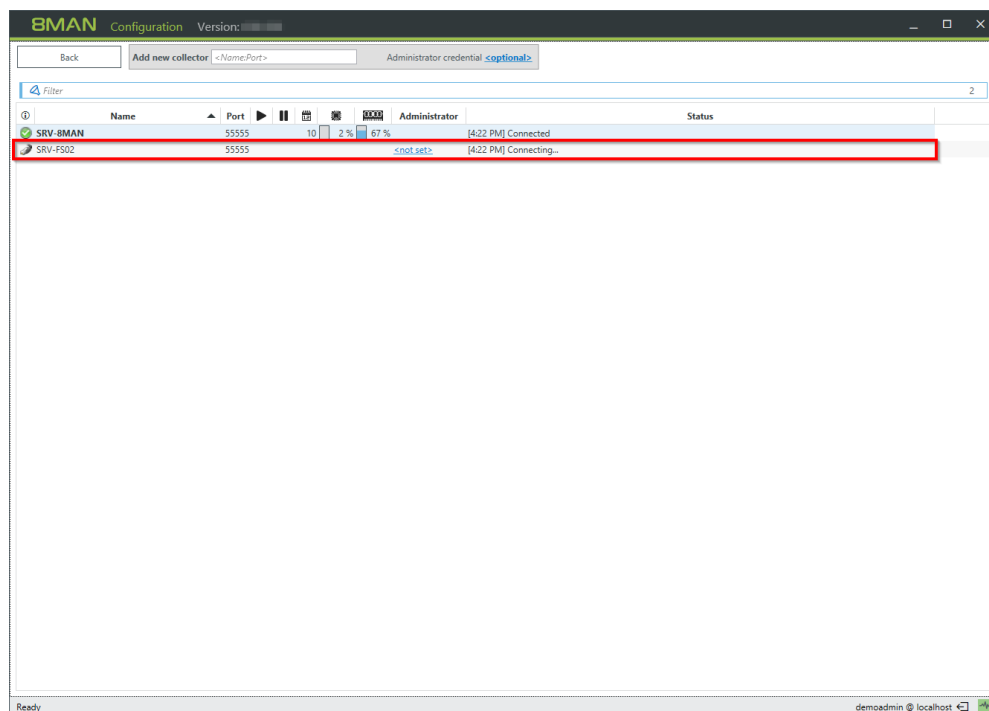
If you are having connection problems please note our comments regarding [Firewall settings](#).



If a collector has not been installed on the target system an installation will be attempted through the push method. Click the link "<optional>" and enter your login credentials, that are required for setup execution on the target system.



1. Select "No credentials" if you would like to remove previously entered credentials.
2. The installation is performed using the credentials from the basic configuration.
3. Enter any additional credentials you would like to use for collector installation.

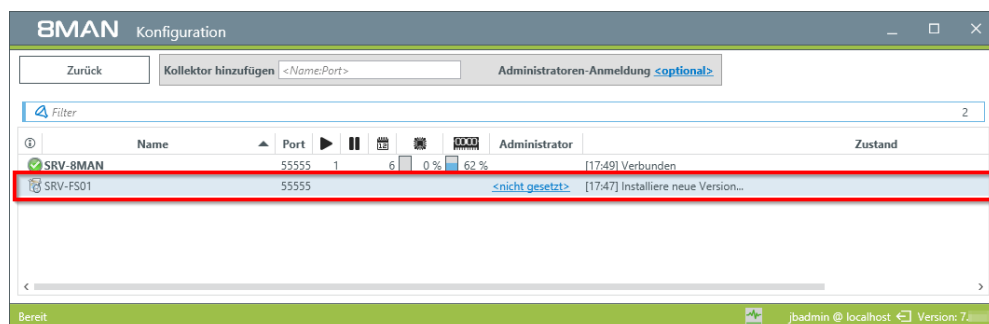


Information on the progress of the installation process are shown in the column "Status".

If the target system is in a foreign domain (non-trusted), please reference the following section: [Collectors in foreign domains \(non-trusted\)](#).

If you are having connection problems please note our comments regarding [Firewall settings](#).

8.2 Update collectors



To ensure successful communication between the 8MAN server and collector both components must be available in the same version.

8MAN performs automatic updates of all collectors occurs automatically (via push method), as long as a network connection is active.

Up to 2 collectors are updated simultaneously.

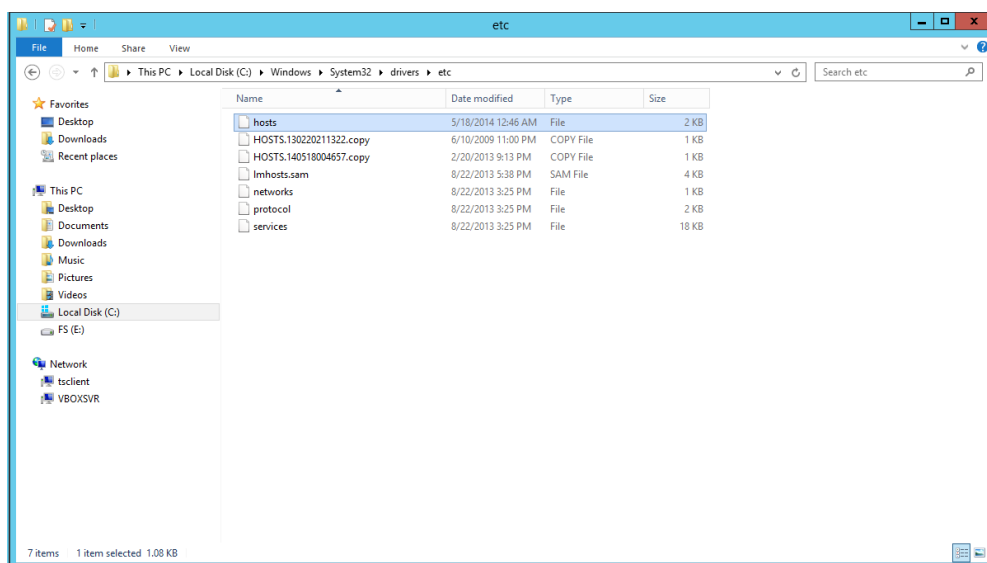
8.3 Run collectors in foreign (non-trusted) domains

You must install a collector on foreign domains (non-trusted) to add resources of them to 8MAN.

The installation of this collector must be performed manually described in Adding collectors using setup.

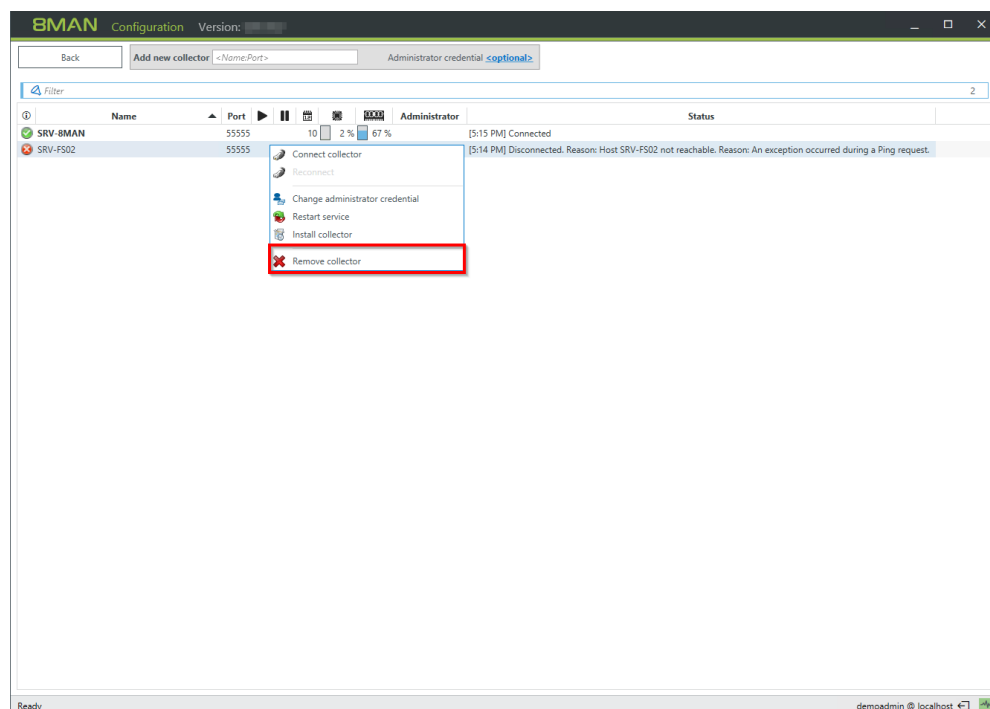
Depending on your network configuration, it is possible that the automatic update of collectors is not performed as plans. In such cases updates must be started manually.

Once installed, the collector must be added to the configuration. Collectors in foreign domains can be added immediately via the IP address.



In order to be able to use a name for the 8MAN collector in foreign (non-trusted) domains, you must expand the hosts file on both 8MAN server and collector server.

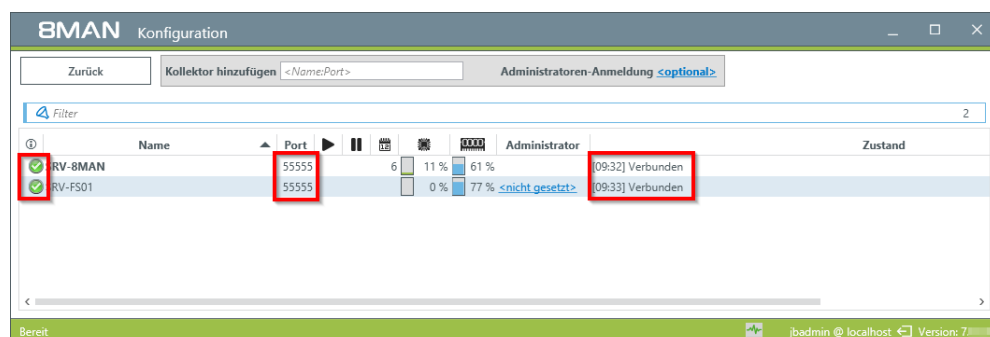
8.4 Remove collectors



You can remove a collector by right-clicking on it and selecting "Remove collector" from the context menu.

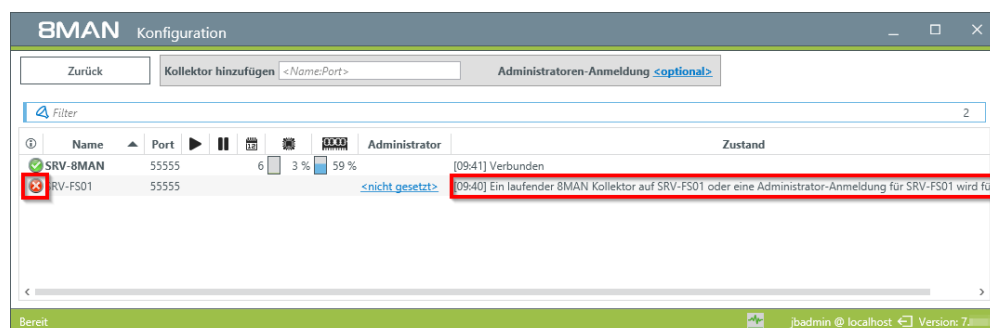
The installation on the target system remains intact. You can remove the collector software from the target system by uninstalling it in the control panel.

8.5 Verify collector connection status



You can find more details on the current connection status in collectors section of the configuration module.

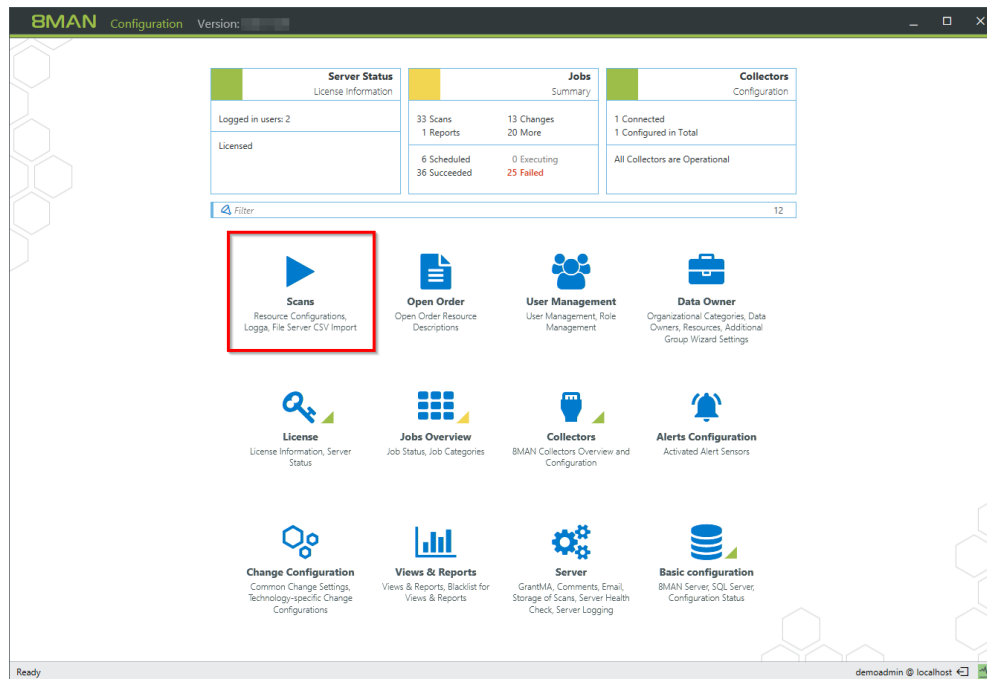
By default 8MAN uses port "55555". If any changes are required, please contact [support](#).



If you see a red symbol in the first column, the collector is not available. Often this can be caused by a firewall issue (rather than missing Admin credentials).

For more details please reference [Firewall-settings](#).

9 Configure scans and logga



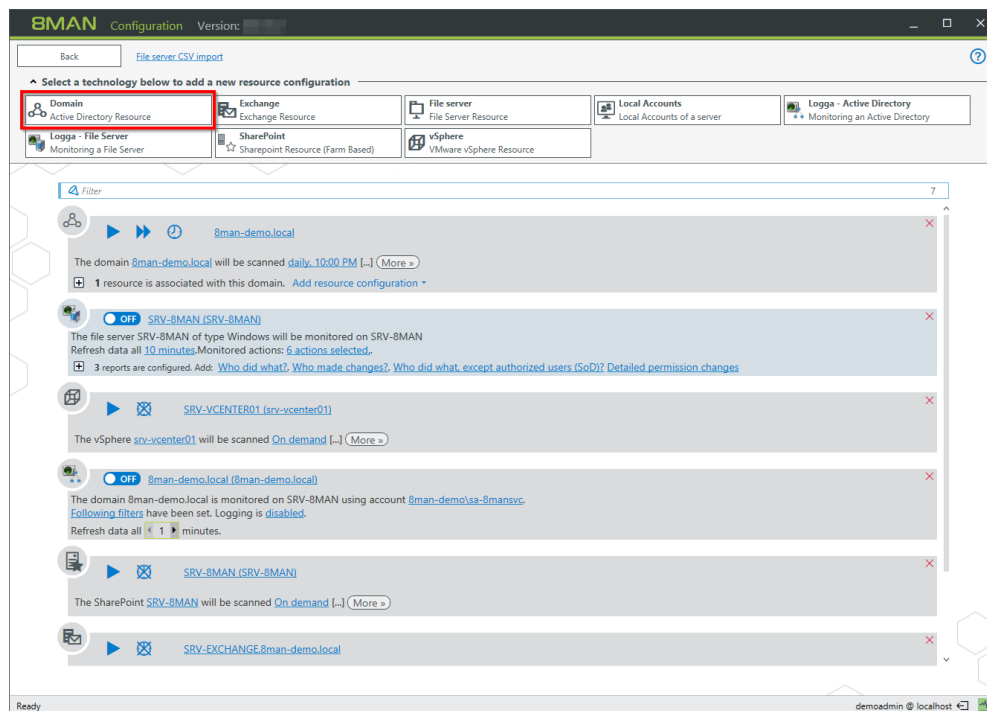
8MAN scans access rights structures from different resource systems in configurable intervals. The scan results are stored in an SQL data base. Users can access these results quickly via the 8MAN GUI, as they are already located in the data base.

Events that occur in between scans are captured by the 8MATES AD Logga and FS Logga. 8MATES are modules that can be added to 8MAN and require the appropriate license.

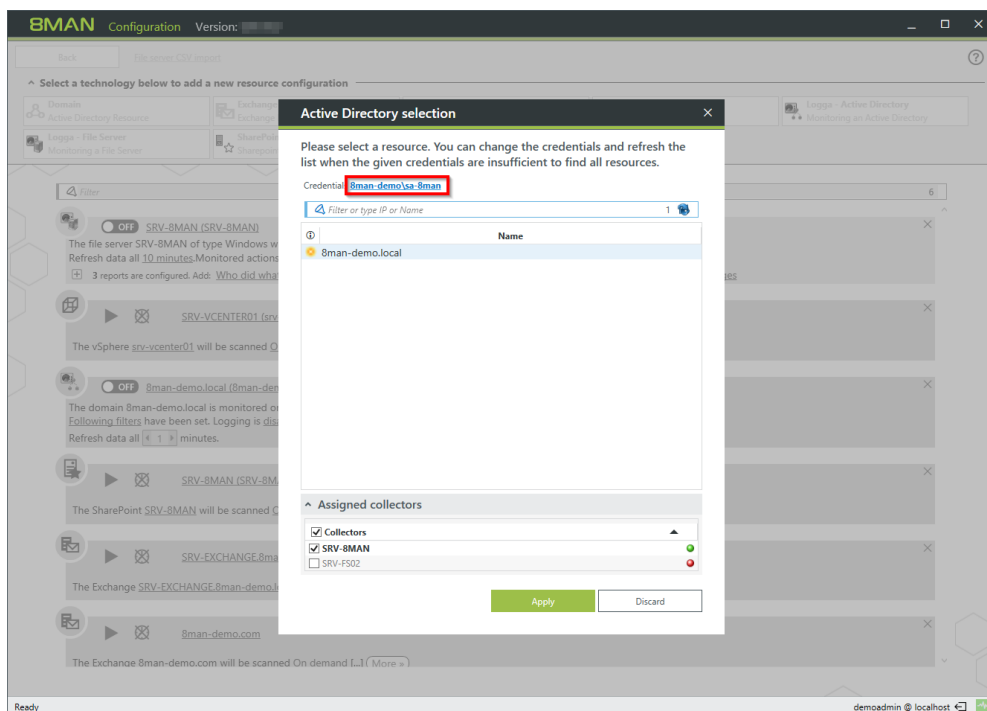
Click on "Scans" to configure resource scans and Logga settings.

9.1 Active Directory (AD) Scans

9.1.1 Add AD scans

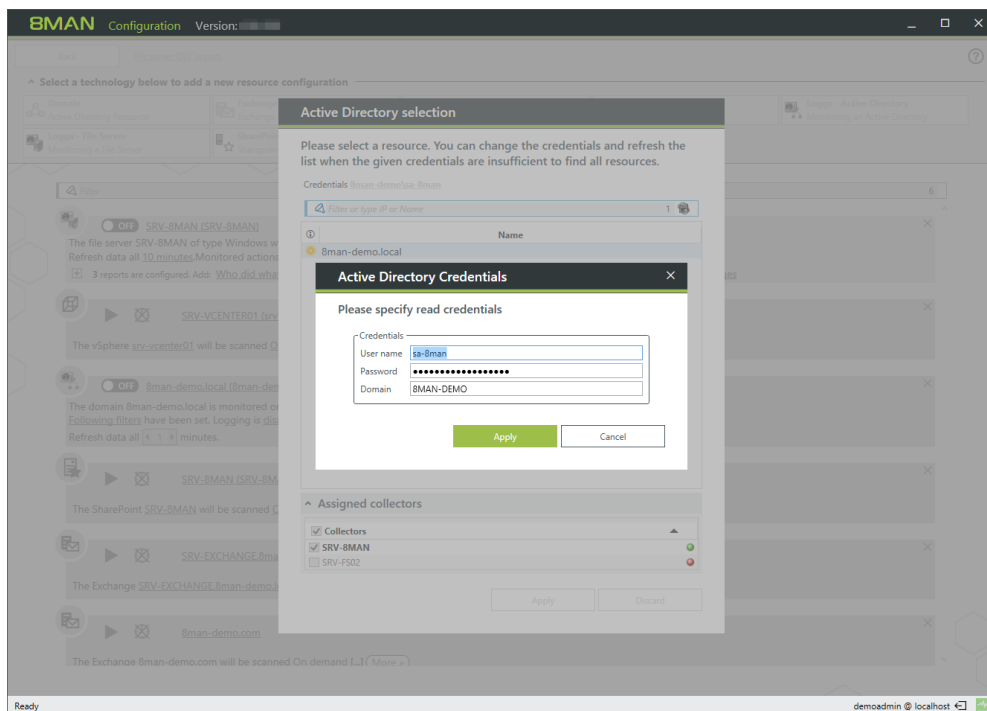


Click on "Domain" to add an AD scan.



Select the desired domain and collector for the AD scan.

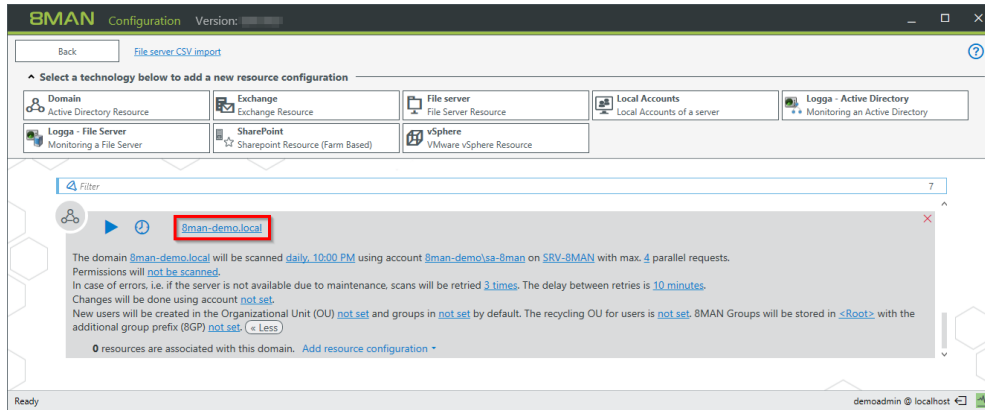
By default the credentials from the 8MAN server basic configuration will be used.



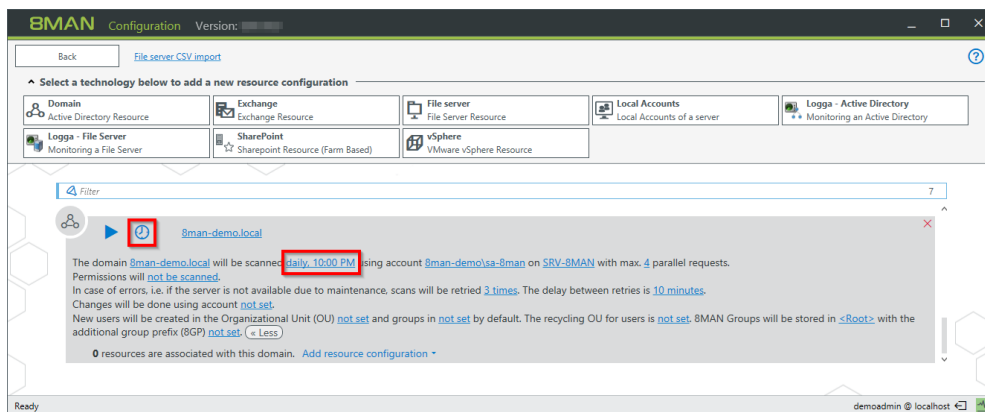
If the desired domain is not shown please check the following:

1. If the credentials for the desired domain are valid. Correct the entered information if necessary.
2. If the desired domain is included in the license ([See license information](#)),
3. If the requirements for scanning in foreign (non-trusted) domains are adhered to:
 - required collector information (running service) in the foreign domain and
 - a valid collector configuration. Please reference [Collectors in foreign domains](#) for more details.

9.1.2 Configure AD scans

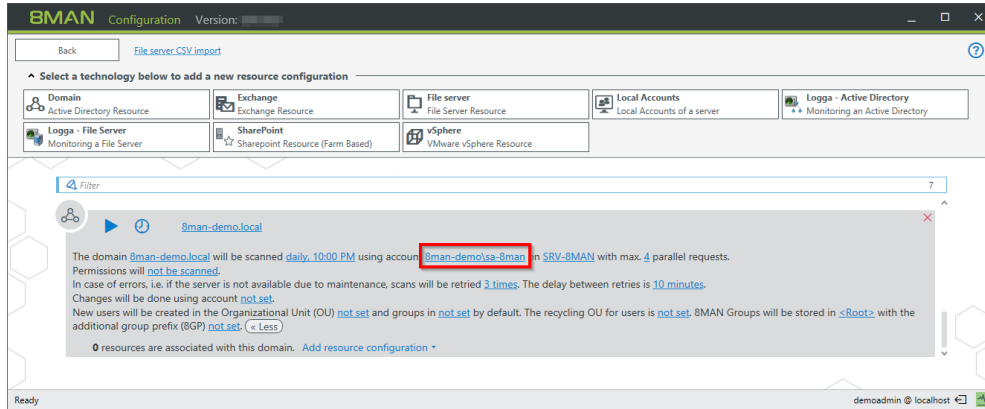


You can edit the name of the AD scan configuration.



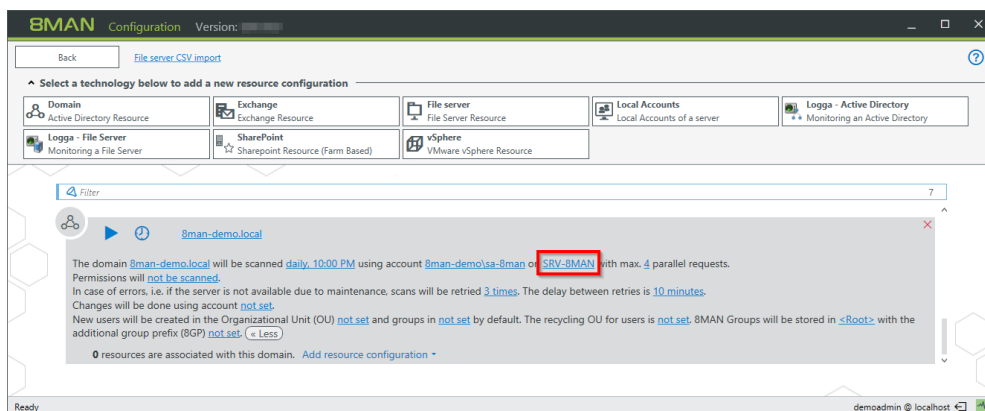
You can time the AD scans by clicking on the clock icon or the link in the text. You can also deactivate the scheduling functionality.

An AD scan only adds limited load to your resources. Select the time so that further resource scans are started at the same time.



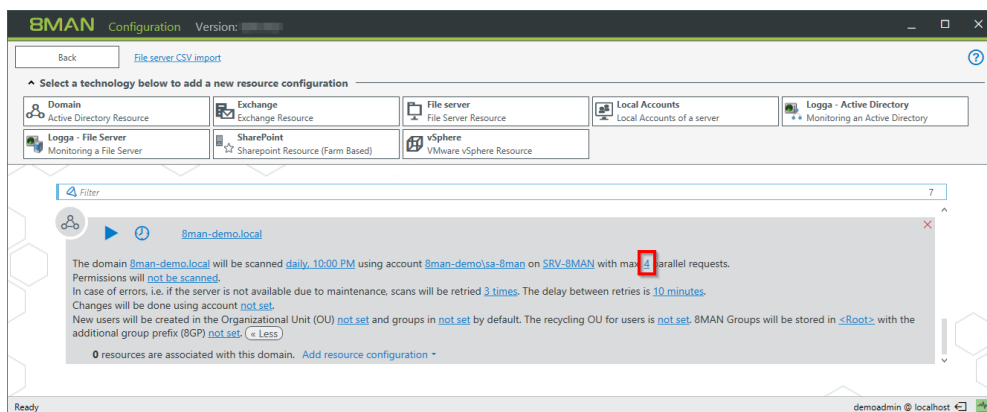
This is where you define the AD scan's login information.

Please reference [Recommendations for the use of service accounts](#) for additional information.



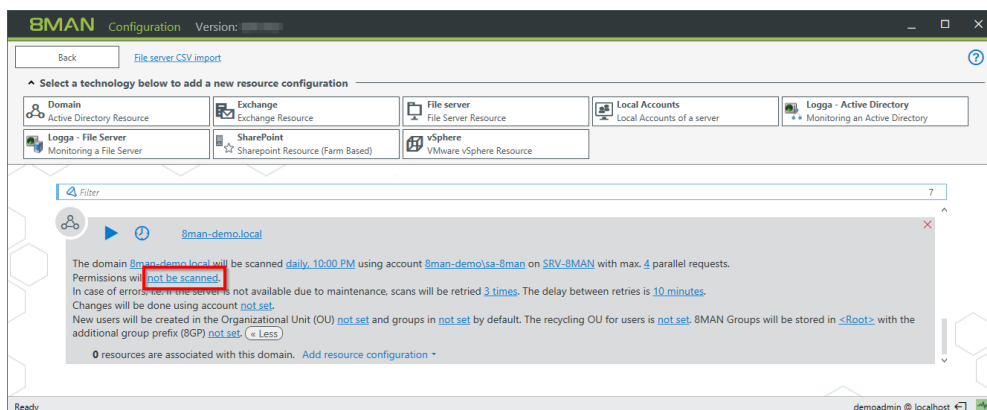
Determine which collector performs the scan.

You can select several collectors. 8MAN automatically decides by means of CPU load and memory usage, by which collector the scan is executed.



You can configure the number of parallel requests. The more parallel requests the faster the scan and the higher the CPU load.

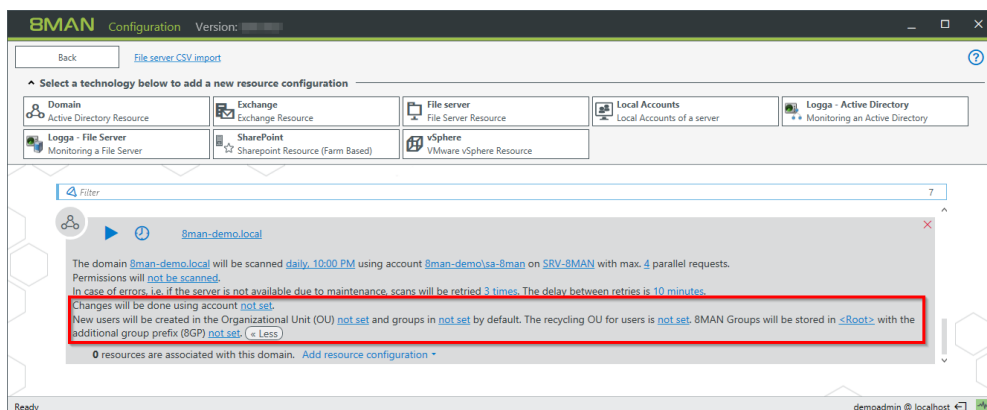
Possible values are 1 (no parallel requests) to 128.



You can determine which object classes in Active Directory are scanned for permissions.

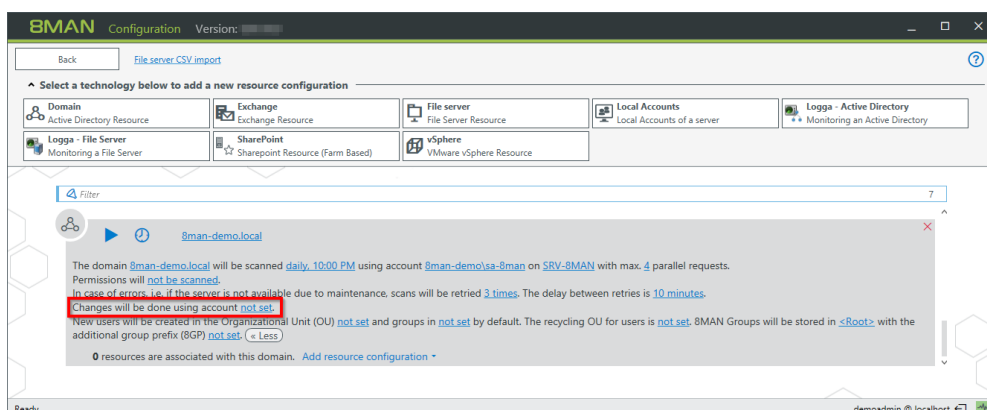
This option is useful if you are working with delegation.

9.1.3 Change AD configuration (8MAN Enterprise)



The marked area shows the AD change configuration.

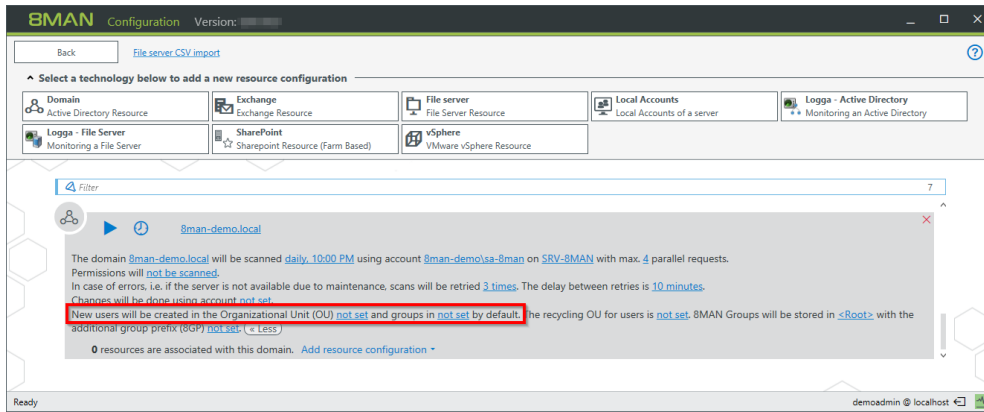
These settings are only relevant if you have an 8MAN Enterprise license.



Enter credentials that 8MAN can use to make changes to AD.

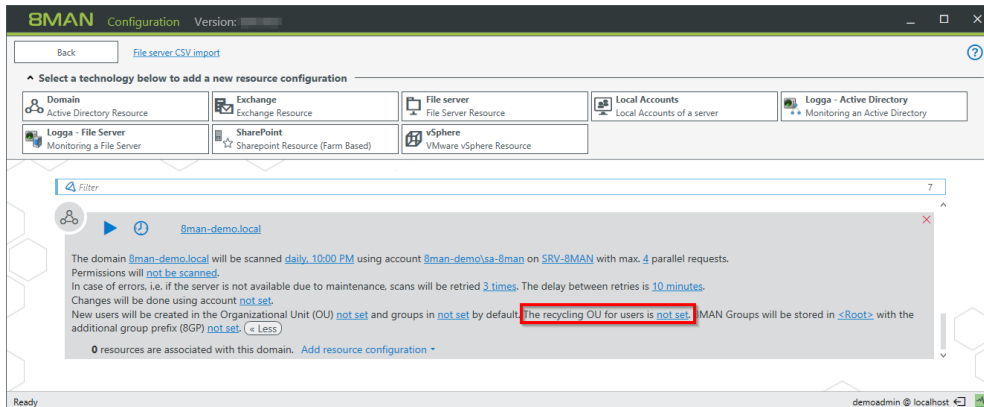
If you leave this configuration on "not set" then credentials will be requested every time.

Please reference [Recommendations for the use of service accounts](#) for additional information.

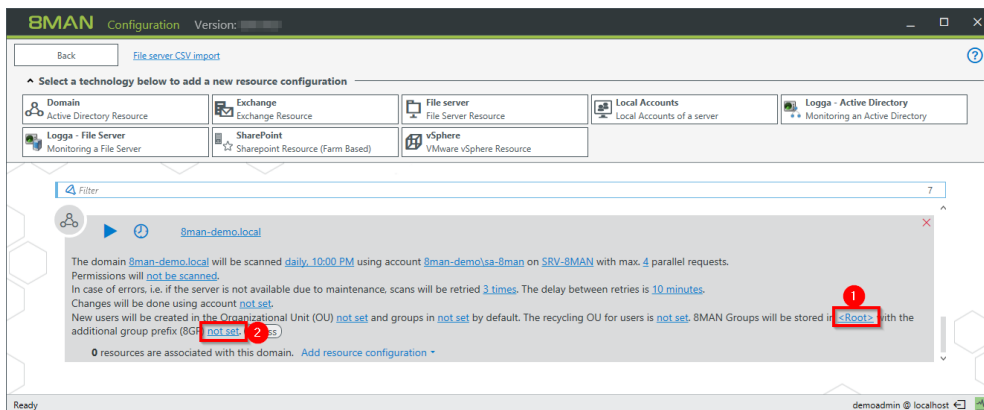


You can configure in which OU you want 8MAN to create new users and groups.

If you leave this configuration on "not set" the user will need to choose the OU the first time they create a new user or group. 8MAN will remember this choice on a per user basis and suggest the chosen OU the next time.

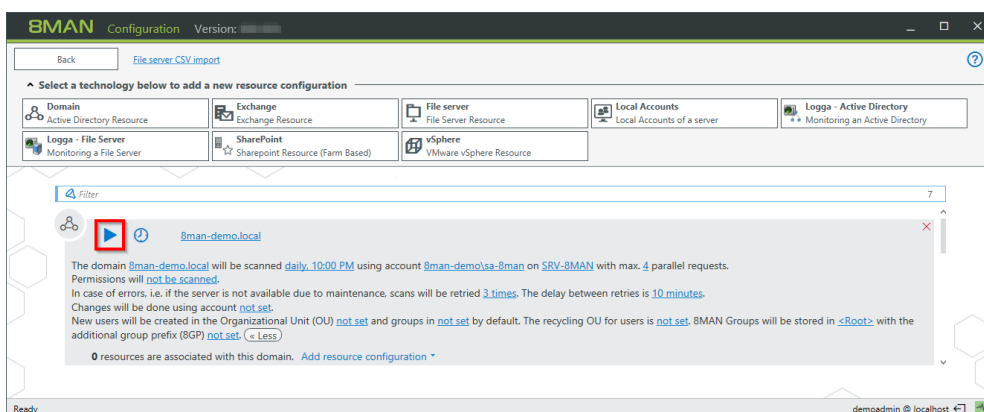


Determine an recycling OU. The OU is used for the "soft delete" function.



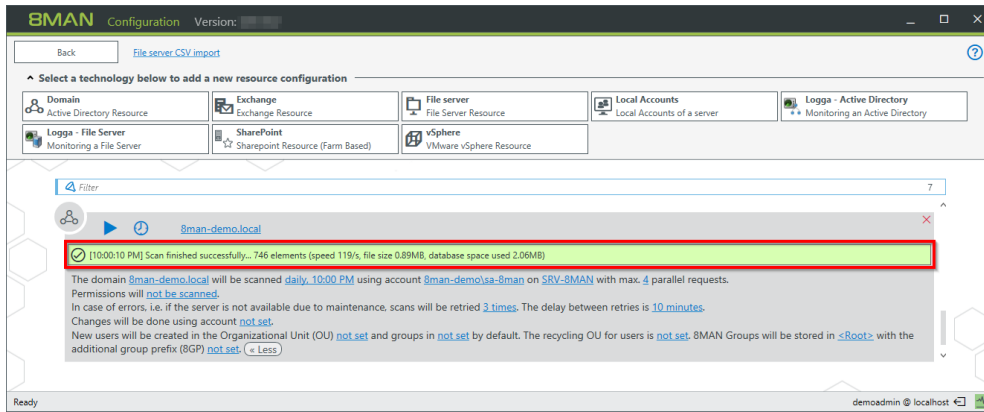
1. If using the group wizard, you can determine into which OU automatically created 8MAN groups are placed.
2. You are also able to add an 8MAN group prefix.

9.1.4 Start AD scans



Start the AD scan.

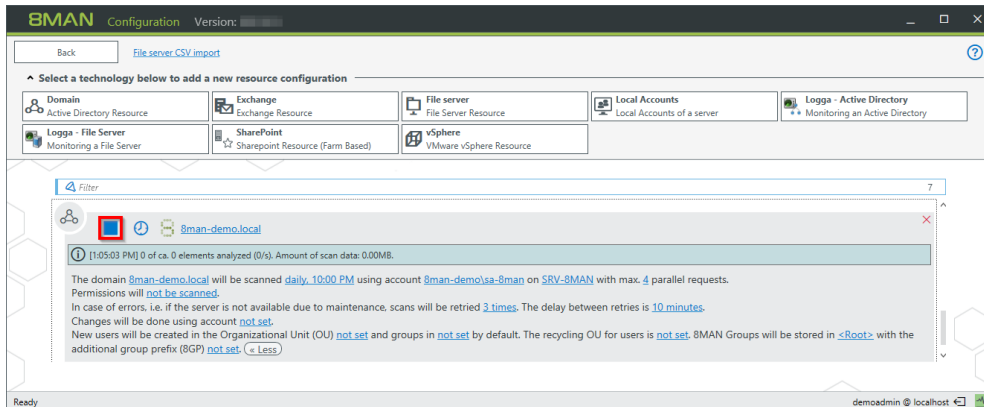
Typically AD scans only take a couple of minutes.



Status information is shown during and after the AD scan.

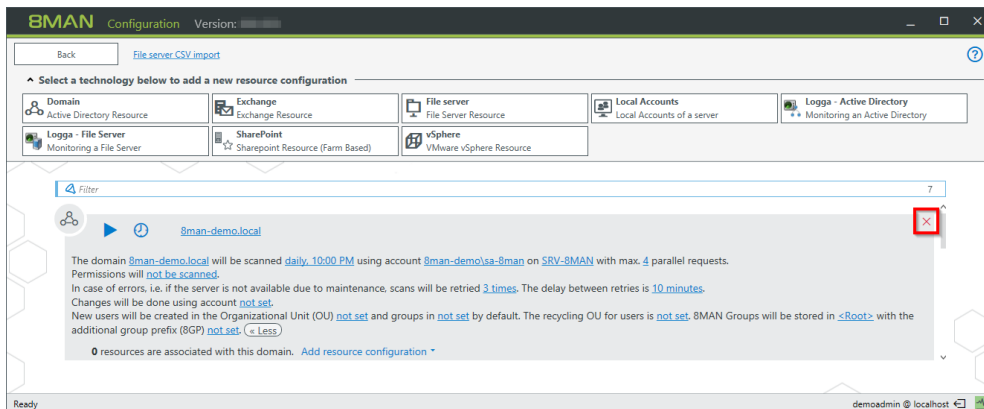
These are no longer shown if you leave and re-enter the scan menu.

You can find the information in [Job overview](#).

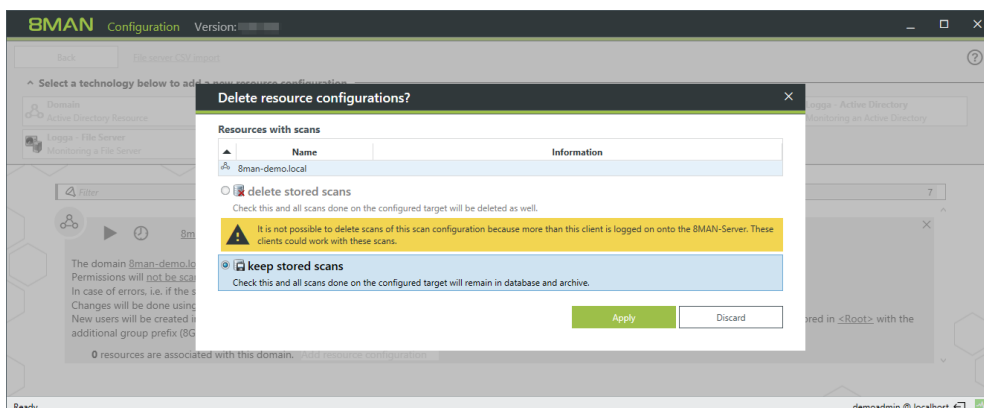


Cancel a running AD scan.

9.1.5 Delete AD scan configurations



Delete an AD scan configuration.



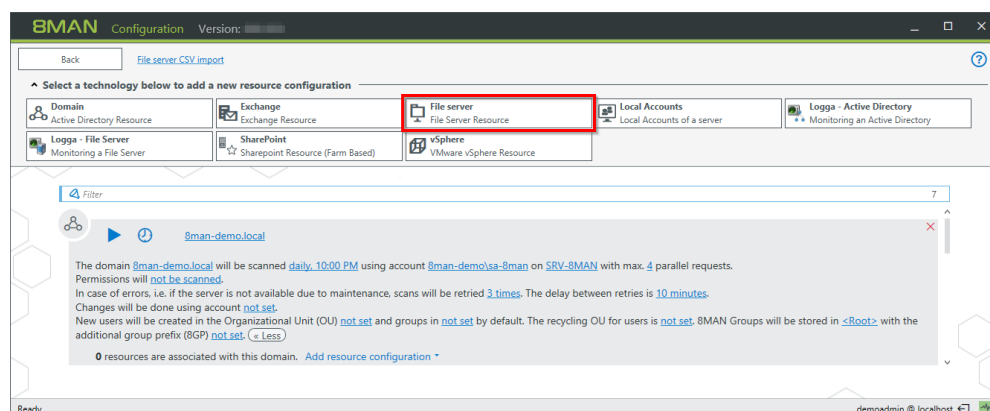
If you delete a scan configuration, you can either keep or delete the stored scan data.

Deleting is only possible if all other user interfaces are closed.

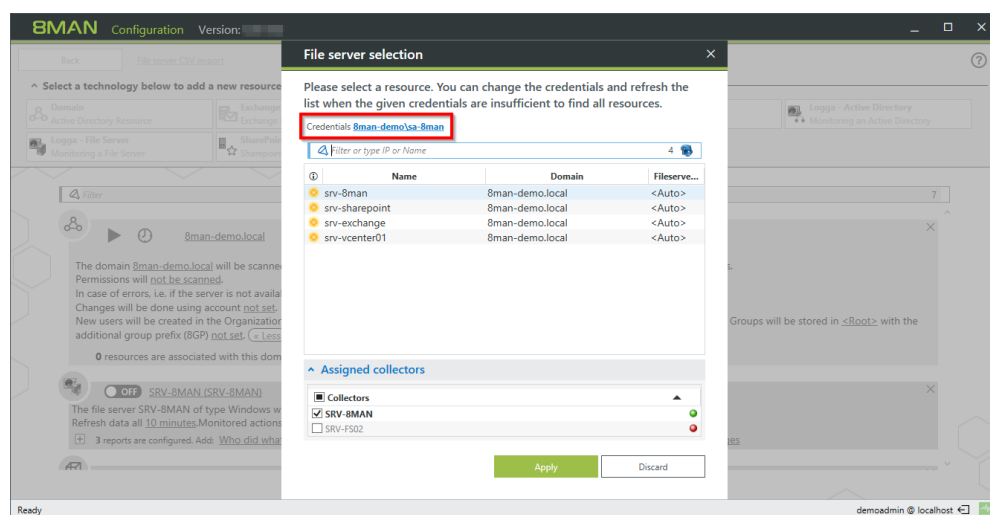
You can [identify logged in users](#) in the Server status section.

9.2 File server (FS) scans

9.2.1 Add AD scans



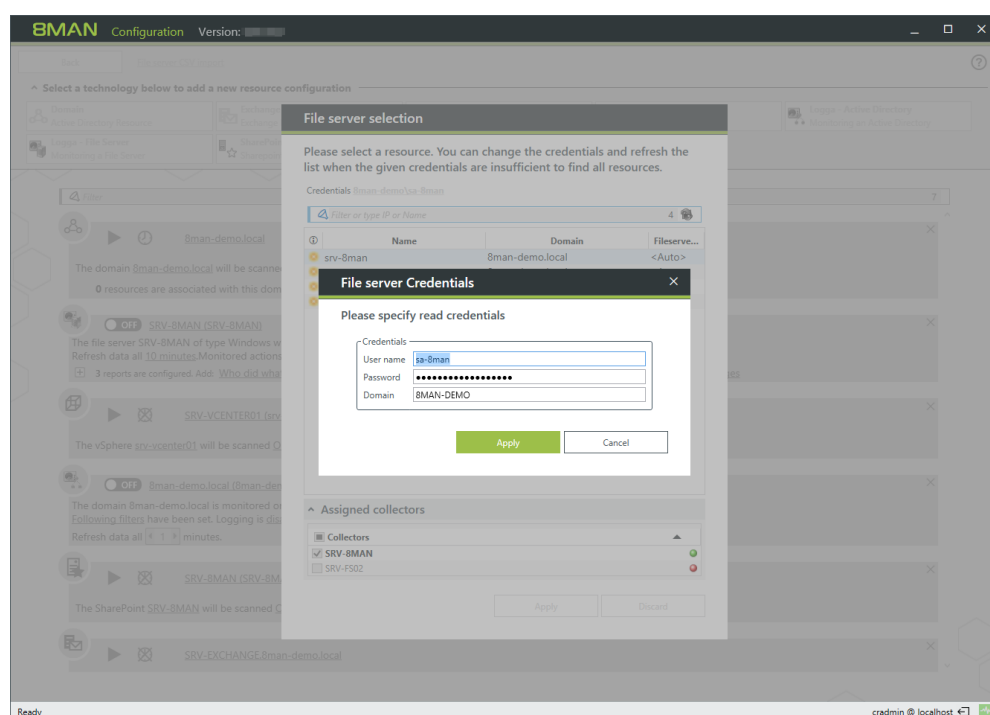
Click on file server to add an FS scan.



Select the desired file server and a collector for the FS scan.

By default the **8MAN server basic configuration** credentials will be used.

The list of computers is scanned from AD.



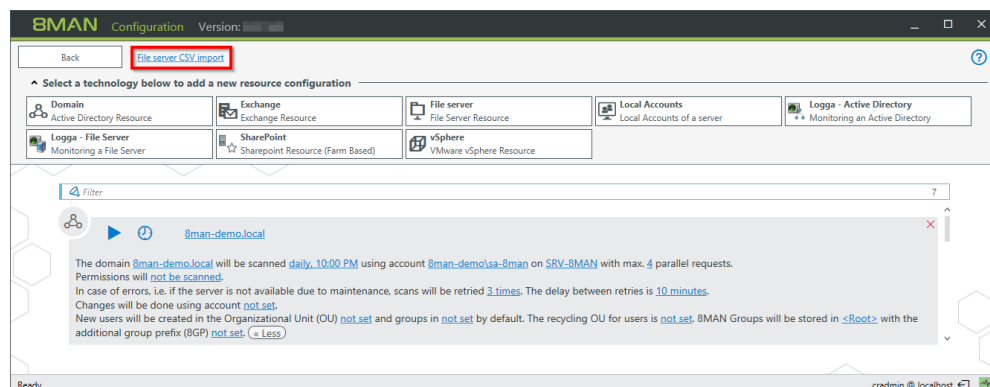
If the desired file server is not shown please check the following:

1. Are the credentials for the desired domain valid? Correct the entered information if necessary.
2. If the requirements for scanning in foreign (non-trusted) domains are adhered to: **Scanning file servers in foreign (non-trusted) domains**

You can also enter a (not listed) name into the filter / search field.

If the scan configuration is invalid you will see an error message at the start of the scan. This will also be recorded in a **Logfile**.

9.2.1.1 Import FS scan configurations



Click on "File server CSV import" to import a file server configuration file.

We recommend using the CSV import functionality to manage a large number of FS scan configurations and add these to 8MAN with just a few clicks.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	server	share	collector	usage	cost centre									
2	srv-fs01	organization	srv-fs01	departments	5014									
3	srv-fs01	user	srv-fs01	user folders	2315									
4	srv-fs01	templates	srv-fs01	company templates	3421									
5	srv-fs01	projects	srv-8man	projects	7159									
6														
7														
8														
9														
10														
11														
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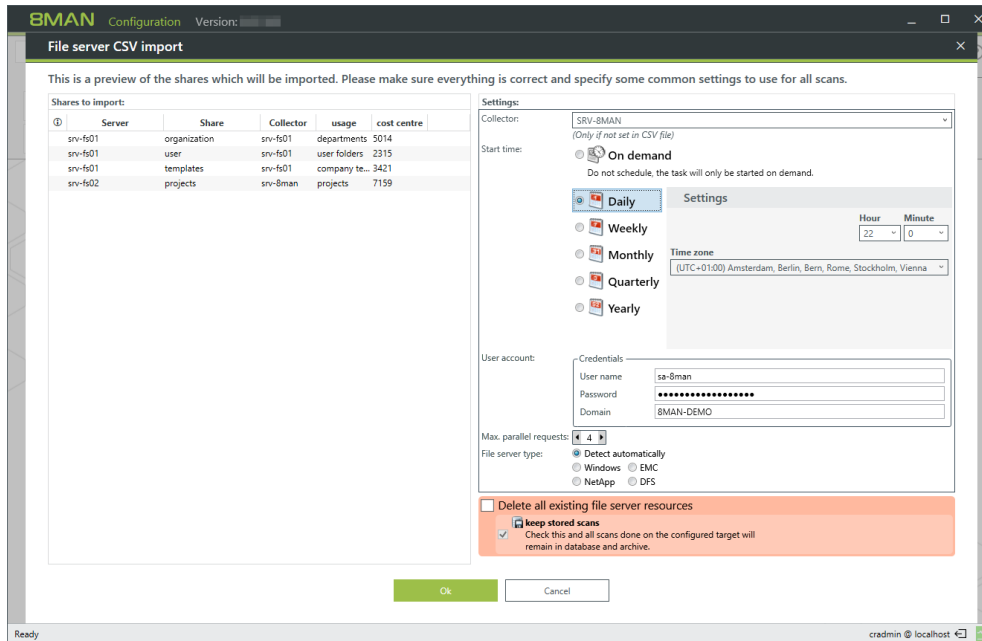
The CSV file must contain, at minimum, the following columns:

- "Server"
- "Approval" or "share" optional columns
- "Collector" or "kollektor"
- additional descriptions
- Please chose tab or semi-colon as a delimiter

If the column "collector" is not created, then the collector defined in the import dialog will be used for all scans.

The following descriptions may not be used:

- "Bemerkung" or "Description"
- "Präfix" or "Prefix" as well as "8ManUser"



This is a preview of the shares which will be imported. Please make sure everything is correct and specify some common settings to use for all scans.

ID	Server	Share	Collector	usage	cost centre
srv-fs01	organization	svr-fs01	departments	5014	
srv-fs01	user	svr-fs01	user folders	2315	
srv-fs01	templates	svr-fs01	company te...	3421	
srv-fs02	projects	svr-8man	projects	7159	

Settings:

Collector: SRV-8MAN
(Only if not set in CSV file)

Start time: ☒ On demand
Do not schedule, the task will only be started on demand.

Daily **Settings**

Hour: 22 Minute: 0

Time zone: (UTC+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna

User account: sa-8man
Password:
Domain: 8MAN-DEMO

Max. parallel requests: 4

File server type: ☒ Detect automatically ☐ Windows ☐ EMC ☐ NetApp ☐ DFS

☐ Delete all existing file server resources

☒ keep stored scans
Check this and all scans done on the configured target will remain in database and archive.

Ok Cancel

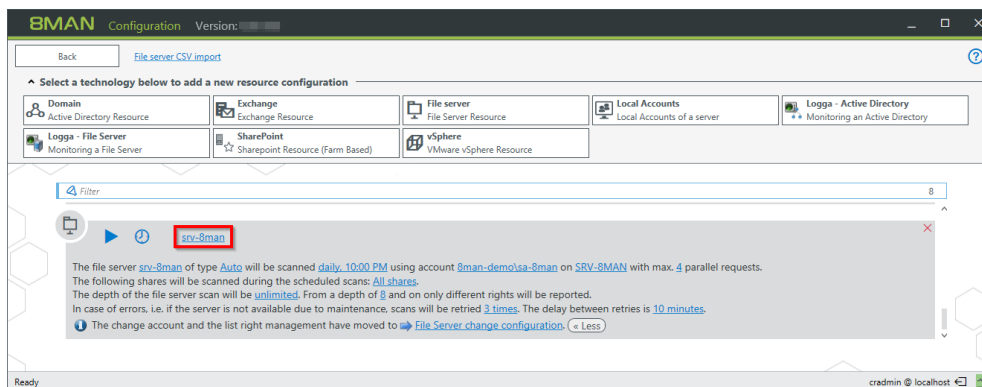
Determine the import settings:

- which collector(s) perform(s) scans (only required if not included in the CSV file)
- at what time the scans are performed
- how many parallel requests are performed
- file server type
- if previously entered scan configurations should be deleted



The settings in the import dialog are valid for all approvals.

9.2.2 Configure FS scans



Back File server CSV import

Select a technology below to add a new resource configuration

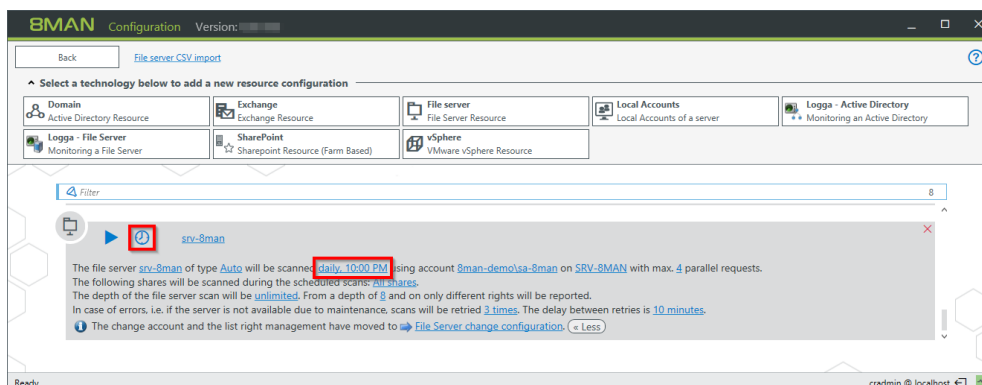
Domain Active Directory Resource Exchange Exchange Resource File server File Server Resource Local Accounts Local Accounts of a server Logga - Active Directory Monitoring an Active Directory Logga - File Server Monitoring a File Server SharePoint Sharepoint Resource (Farm Based) vSphere VMware vSphere Resource

Filter 8

srv-8man

The file server **srv-8man** of type **Auto** will be scanned **daily, 10:00 PM** using account **8man-demo\sa-8man** on **SRV-8MAN** with max. 4 parallel requests. The following shares will be scanned during the scheduled scans: **All shares**. The depth of the file server scan will be **unlimited**. From a depth of **8** and on only different rights will be reported. In case of errors, i.e. if the server is not available due to maintenance, scans will be retried **3 times**. The delay between retries is **10 minutes**. The change account and the list right management have moved to [File Server change configuration](#) < Less

Edit the name of the FS scan configuration.



Back File server CSV import

Select a technology below to add a new resource configuration

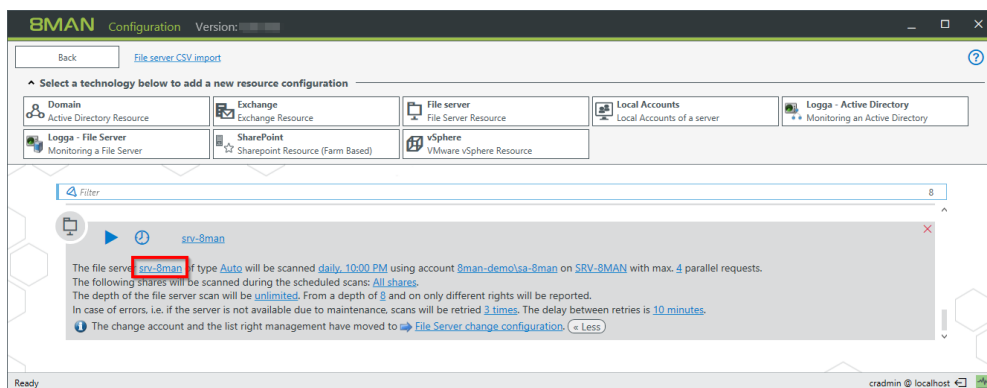
Domain Active Directory Resource Exchange Exchange Resource File server File Server Resource Local Accounts Local Accounts of a server Logga - Active Directory Monitoring an Active Directory Logga - File Server Monitoring a File Server SharePoint Sharepoint Resource (Farm Based) vSphere VMware vSphere Resource

Filter 8

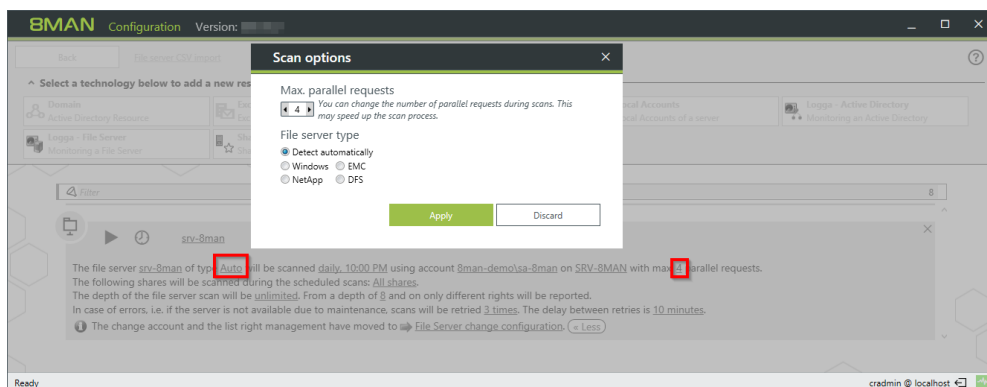
srv-8man

The file server **srv-8man** of type **Auto** will be scanned **daily, 10:00 PM** using account **8man-demo\sa-8man** on **SRV-8MAN** with max. 4 parallel requests. The following shares will be scanned during the scheduled scans: **All shares**. The depth of the file server scan will be **unlimited**. From a depth of **8** and on only different rights will be reported. In case of errors, i.e. if the server is not available due to maintenance, scans will be retried **3 times**. The delay between retries is **10 minutes**. The change account and the list right management have moved to [File Server change configuration](#) < Less

Schedule the FS scan by clicking on the clock icon or the link in the text. You can also deactivate the scheduling functionality.



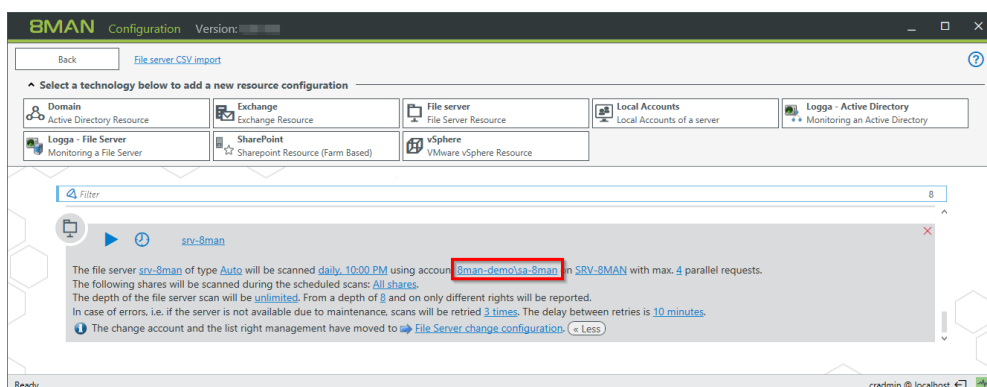
You can change the file server for which this scan configuration is valid.



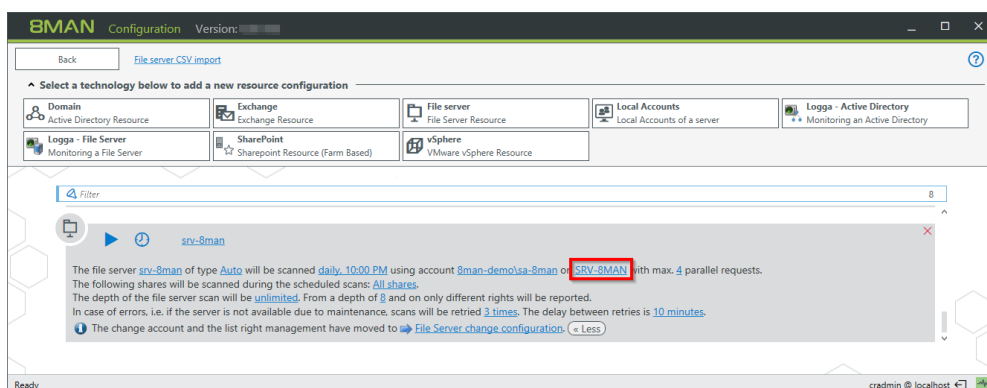
You can configure the number of parallel requests. The more parallel requests the faster the scan and the higher the CPU load. Possible values are 1 (no parallel requests) to 128.

Chose the appropriate option for file server type.

8MAN detects Windows/DFS file server types automatically. For NetApp and EMC, you must set the correct type for optimal performance.

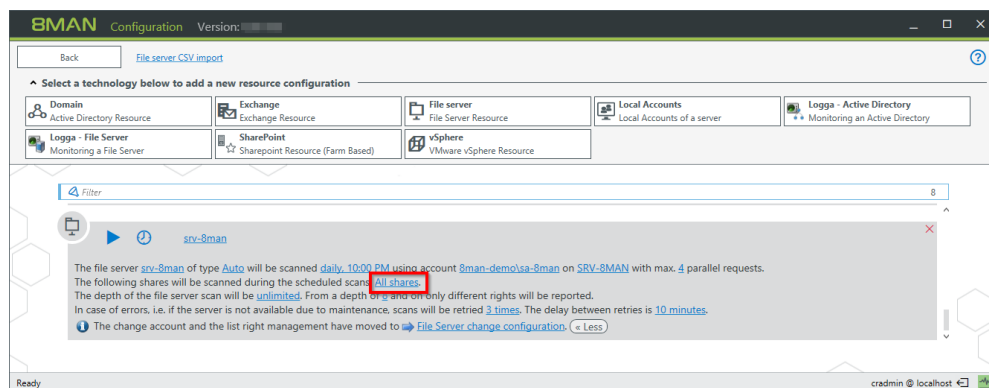


Determine which credentials are used to perform the FS scan. Please reference the following section for additional information: [Service accounts.](#)



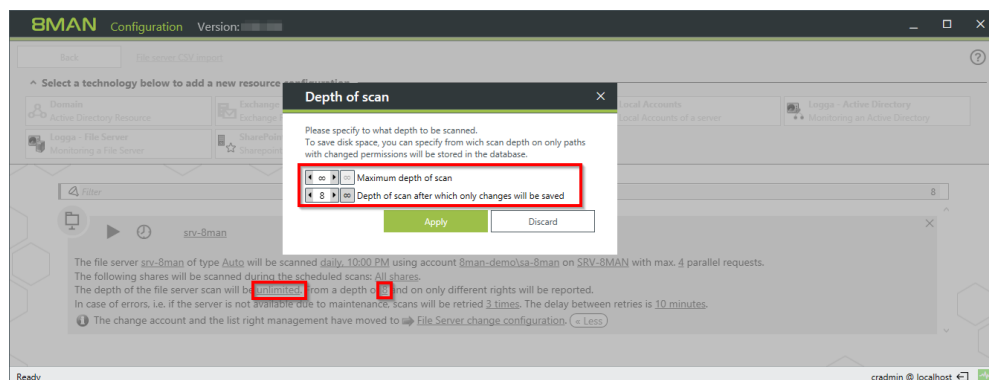
Determine which collectors are used to perform the scan.

If you have configured multiple collectors, 8MAN will automatically determine which collector to use based upon CPU load and RAM usage.



Determine the shares that will be scanned.

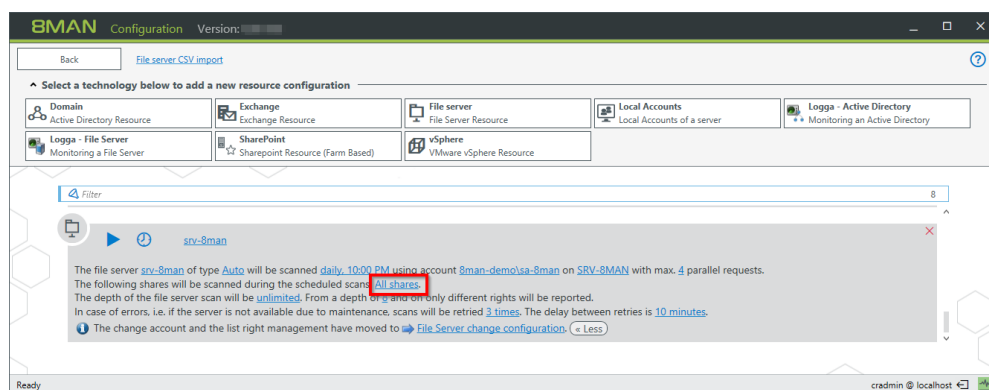
Please reference the following section: [Selecting and labeling shares](#).



Determine the scan depth.

To save data base storage, you can specify from which depth only paths with changed permissions will be stored.

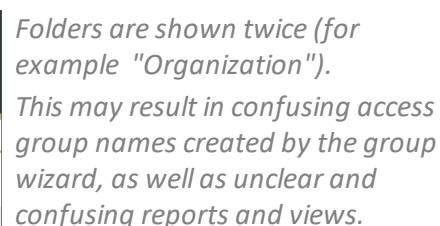
9.2.2.1 Select and label shares



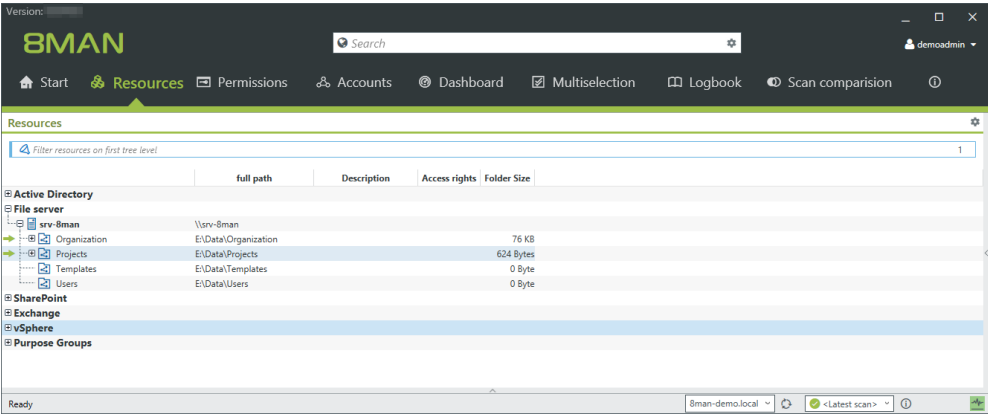
In order to ensure optimal results for reports and viewing information in the 8MAN resource view, please consider the following points when selecting shares.



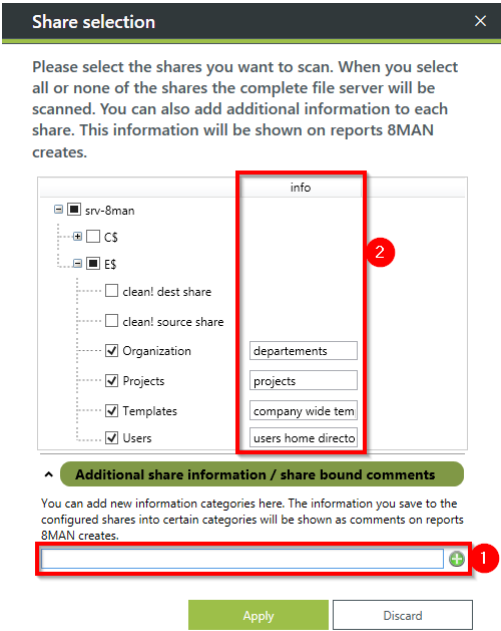
A selection of these shares will result in the following resource view:



Only select shares, which are entry points and visible/relevant for users.



The permissions are displayed in the usual manner in the 8MAN resource view.



You can add descriptions and additional information to shares.

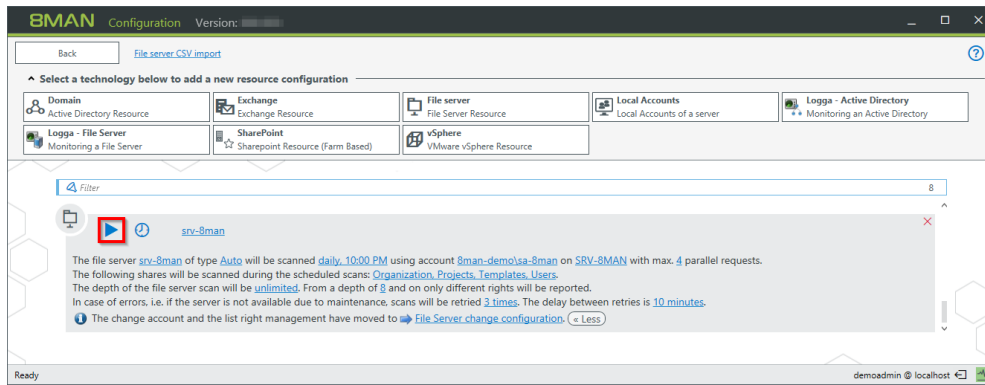
1. Enter a column description into the appropriate field. Click on the plus icon. This creates a new description column.
2. Enter a description for the shares.

The descriptions are shown in 8MAN reports.

9.2.3 Scan file servers in foreign (non-trusted) domains

It is required to have a collector installation (running service) on the foreign domain as well as a valid connector configuration. See [Collectors in foreign domains](#).

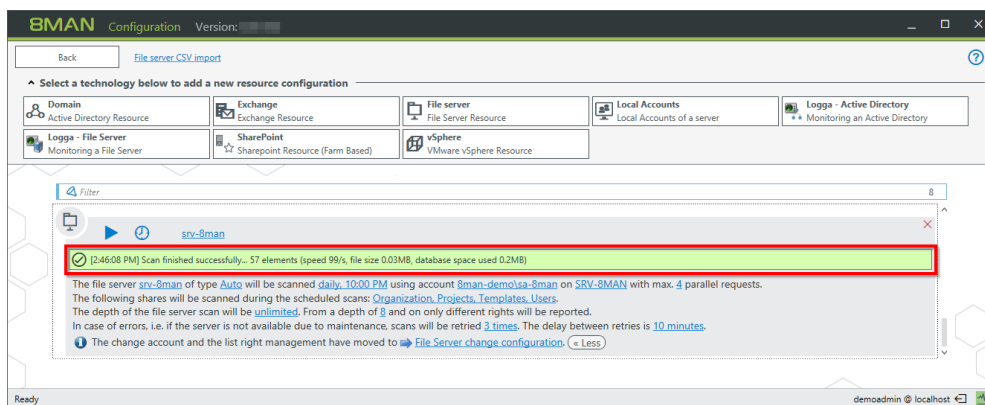
9.2.4 Start FS scans



Start the FS scan.

FS scans may take a long time depending on your file server performance and load, network load, and most significantly the number of file server directories that need to be scanned.

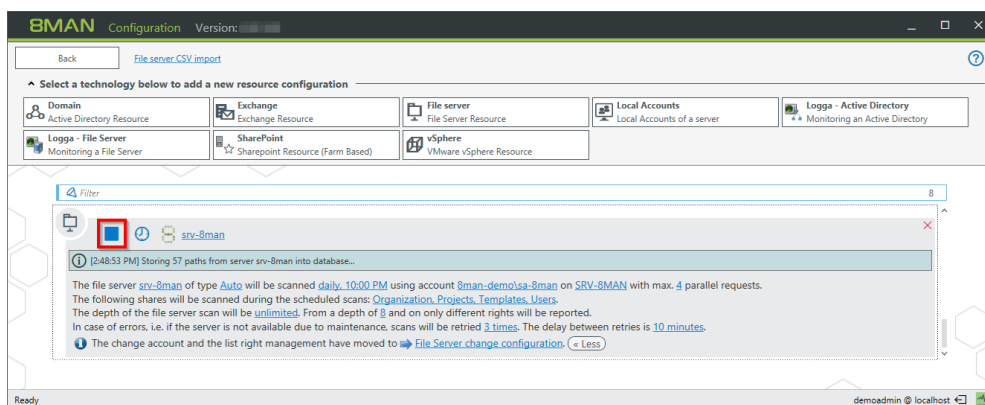
Initially you can limit your scans on a few shares and lesser scan depth.



Status information is shown during and after the FS scan.

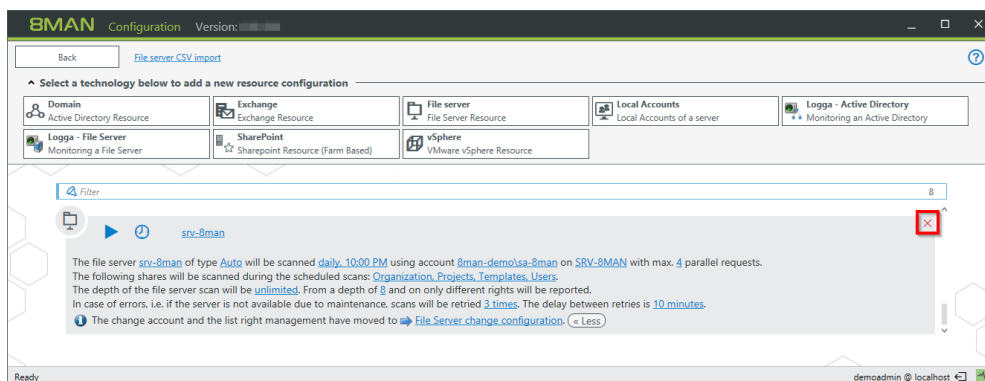
These are no longer shown if you leave and re-enter the scan menu.

You can find the information in [Jobs overview](#).

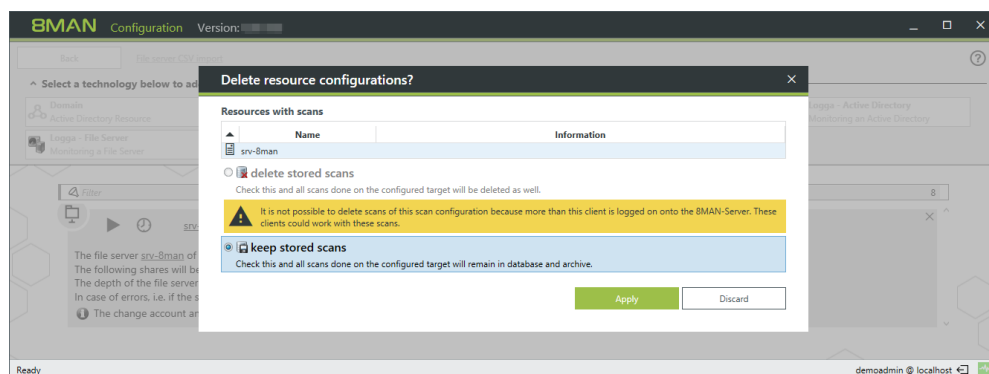


You can cancel a running FS scan.

9.2.5 Delete FS scan configurations



Delete an FS scan configuration.



If you delete a scan configuration, you can either store or delete the scan information.

Deleting is only possible if all other user interfaces are closed.

You can identify logged in users in the Server status section.

9.3 Exchange scans

8MATE for Exchange allows you to integrate Exchange into the 8MAN Access Rights Management system as a resource.

8MATE for Exchange requires the appropriate license. You can find more information on how to verify your license status and load a new license in the following chapter: "[Loading the Product License](#)"

All system requirements must be adhered to. Please reference the following chapter: "[Exchange Requirements](#)".

An overview of the required permissions can be found in the following chapter: "[Service Account Permissions](#)". There are some more settings required as described on the following pages.

9.3.1 Prepare Exchange scans

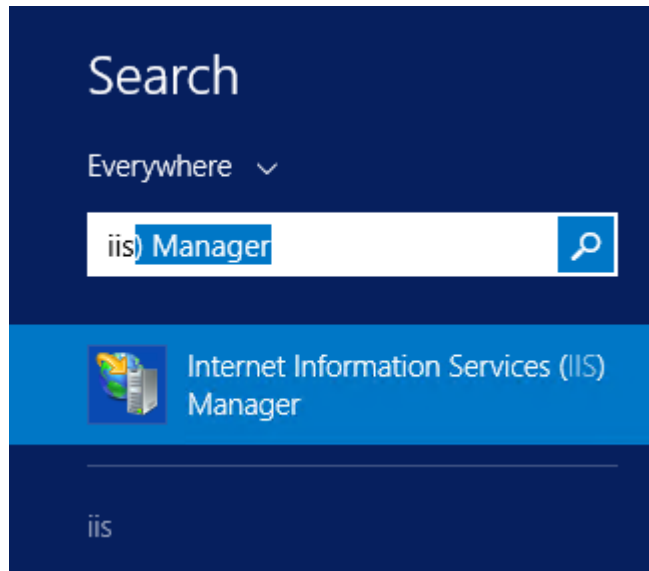
8MATE reads information from the Exchange server via a remote PowerShell connection.

An Exchange scan can be performed by any collector. The connection is established using a client access server or a DAG (database availability group).

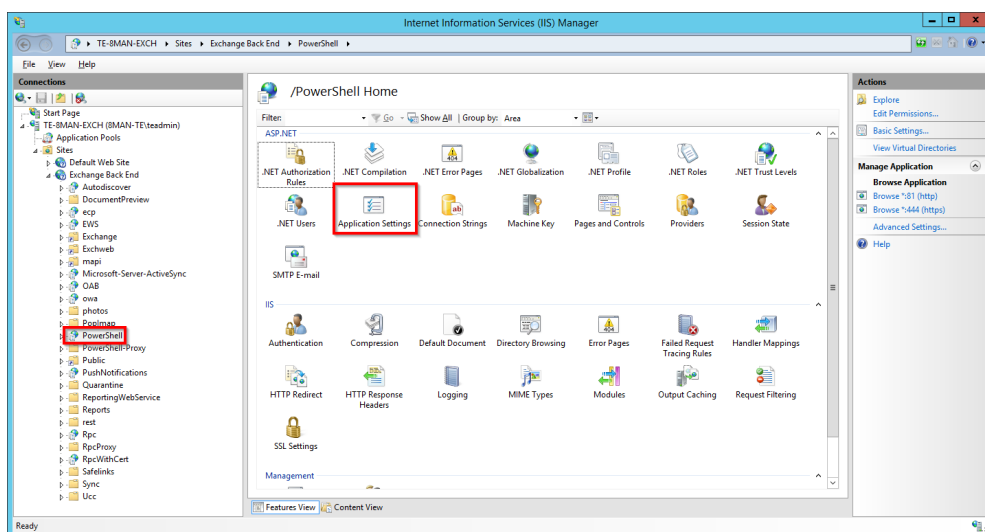
9.3.1.1 Prepare the PowerShell website

The steps described in this chapter are not required for Exchange Online.

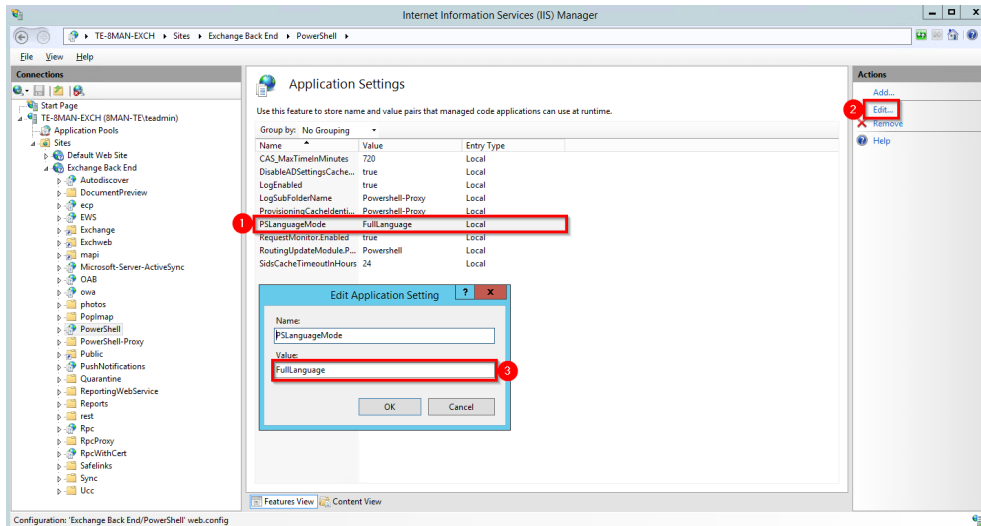
The Exchange Client Access Server (CAS) hosts a site within the IIS, that allows users to access the Exchange Server. It is called „Default Web Site" (2010) or „Exchange Back End" (2013 and higher) and includes the sub-site "PowerShell". This must be configured to allow 8MATE Exchange access.



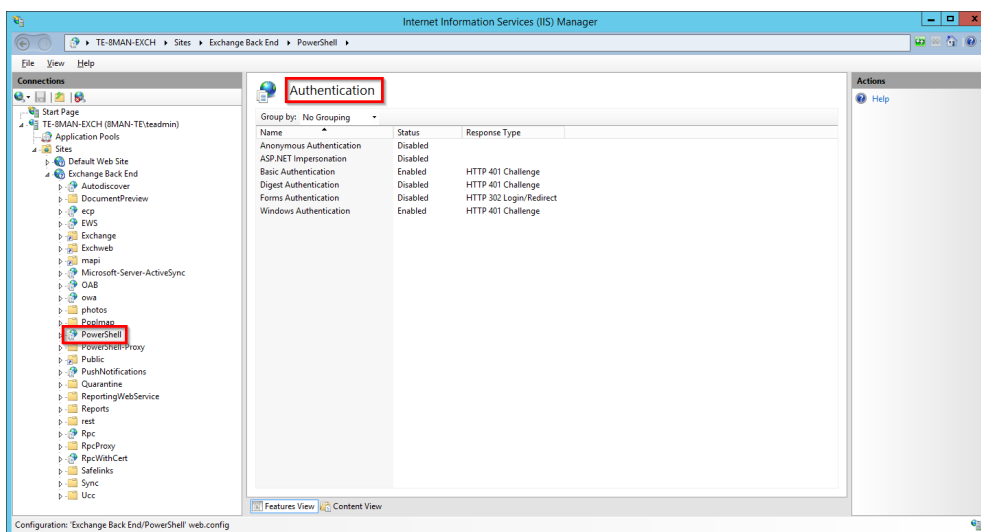
Start the IIS Manager on the CAS.



Navigate to "Powershell". In Exchange 2010 this can be found under "Default Web Site". In Exchange 2013 it is found under „Exchange Back End". Double-click "Application Settings".



1. Select "PS LanguageMode"
2. Click "Edit"
3. Enter the value "FullLanguage".



Activate the desired authentication method. You must later select the same authentication method in the [Exchange scan configuration](#) that you activate here.

More useful information on authentication can be found at [Microsoft](#).

Alternatively you can activate the authentication with PowerShell.

For example: Activate Windows-authentication (Kerberos)

`Get-PowerShellVirtualDirectory | Set-PowerShellVirtualDirectory -WindowsAuthentication $true`



You must restart the IIS in order to apply any changes.

For example in the command line or PowerShell:

`iisreset`

9.3.1.2 Set up required permissions

The service account that is used to scan Exchange requires the following access rights:

1. Membership in the Exchange security group "View-Only Organization Management"
2. Read permissions in Active Directory (During the scan distinguished names are resolved and access rights are partially read from the mailbox user)
3. Impersonation rights to recall deputy rules, mailbox folders. Please see the following chapter: "[Exchange Web Service – Impersonation](#)"
4. Its own mailbox to scan public folders

The service account that you want to use to modify Exchange requires additional different rights:

Membership in the Exchange security group "Organization Management"

Please note that deny rights applied to mailbox content may hinder successful scans.

For Exchange Online, create a user (with an email address) that is "Global Administrator" on the server and does not need to be licensed. Add the user to the group "View-Only Organization Management" for read only access, "Organization Management" for modify access.

9.3.1.3 Exchange Web Services - Impersonation

PowerShell allows you to recall administrative information, such as the structure and permissions of objects, from Exchange, via mailboxes and public folders. The Exchange Web Service allows you to access their content.

Substitution rules can currently only be recalled from the Exchange Web Service.



Before you decide to recall and view mailbox folders, you should ensure that this adheres to your company data security policy. You may be able to view sensitive information by only viewing folder structures.

Access to the Exchange Web Service always happen in context with the mailbox user. This requires that the scan account (service account) has the right to impersonate.

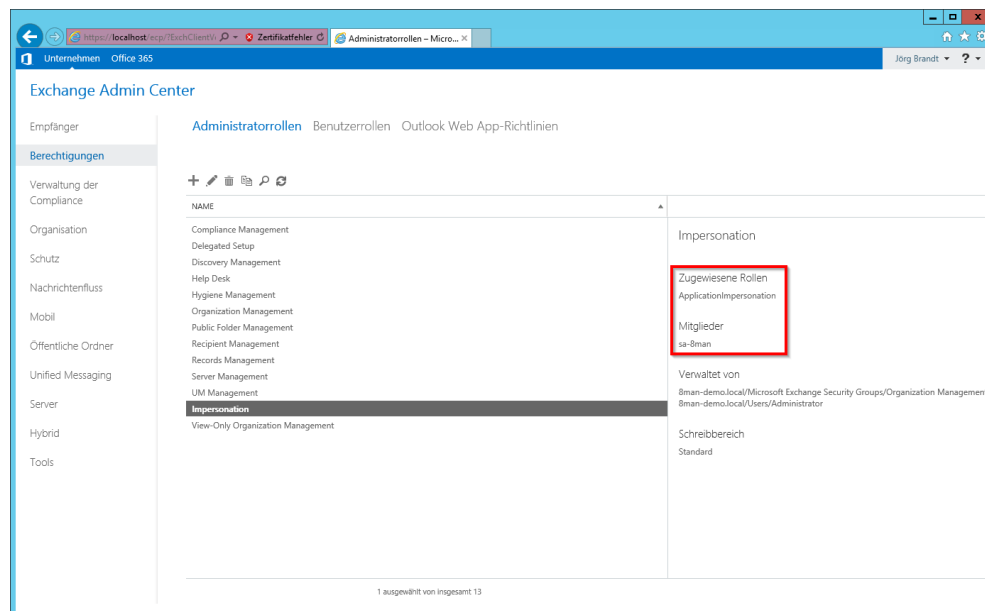
Please note that impersonation only works on *active* Active Directory accounts.

Examples for the configuration of impersonations via Power Shell can be found here:

Exchange 2010 (en): [https://msdn.microsoft.com/en-us/library/office/bb204095\(v=exchg.140\).aspx](https://msdn.microsoft.com/en-us/library/office/bb204095(v=exchg.140).aspx)

Exchange 2013, online und Office 365 (de): [https://msdn.microsoft.com/de-de/library/office/dn722376\(v=exchg.150\).aspx](https://msdn.microsoft.com/de-de/library/office/dn722376(v=exchg.150).aspx)

Alternatively to the process described by Microsoft you can use the GUI of the Exchange Admin Center:



You can define a new Administrator role (Group) in the Exchange Admin Center. Assign "ApplicationImpersonation" to the new role.

Alternatively, you can also assign "ApplicationImpersonation" to the built-in role "Discovery Management".

Add the service account as a member of the appropriate role.

Summary: The scan account must be assigned a management role, including the explicit impersonation right.

9.3.1.4 Test the connection to Exchange PowerShell

Please use the following process to test the connection to PowerShell:

1. Start a power shell console with the credentials that are also used for the remote session. (STRG+SHIFT+right-click on the PowerShell-Icon -> "Run as different user")

2. Create a credential object.

```
$cred = get-credential
```

3. Create a SessionOption Objekt (Turn off all checks for the test).

```
$so = New-PSSessionOption -SkipCACheck -SkipCNCheck -SkipRevocationCheck
```

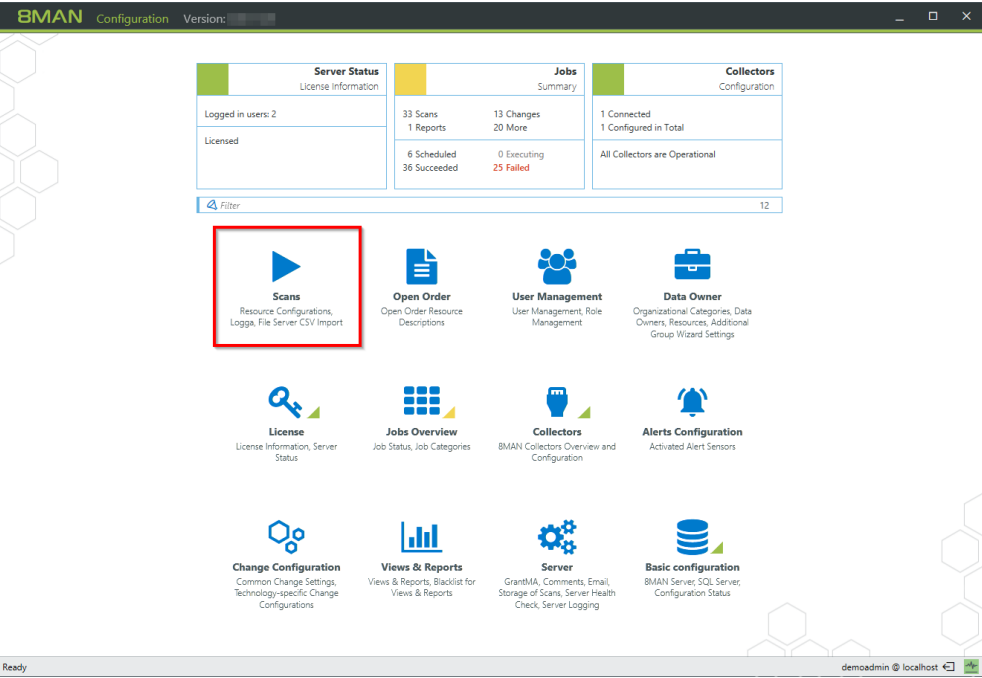
3. Create a session. Adjust the URI, Authentication (authentication mechanism) and encryption http(s).

```
$session = New-PSSession -configurationname Microsoft.Exchange -connectionURI https://srv-ex01/PowerShell/ -Credential $cred -SessionOption $so -Authentication Default
```

4. Starting the session. You can execute cmdlets (which ones, depends on their rights).

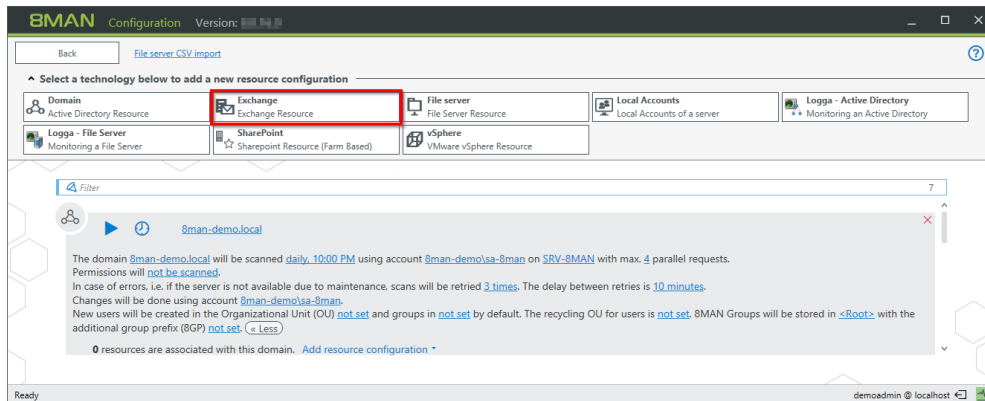
```
Enter-PSSession $session
```

9.3.2 Configure Exchange scans

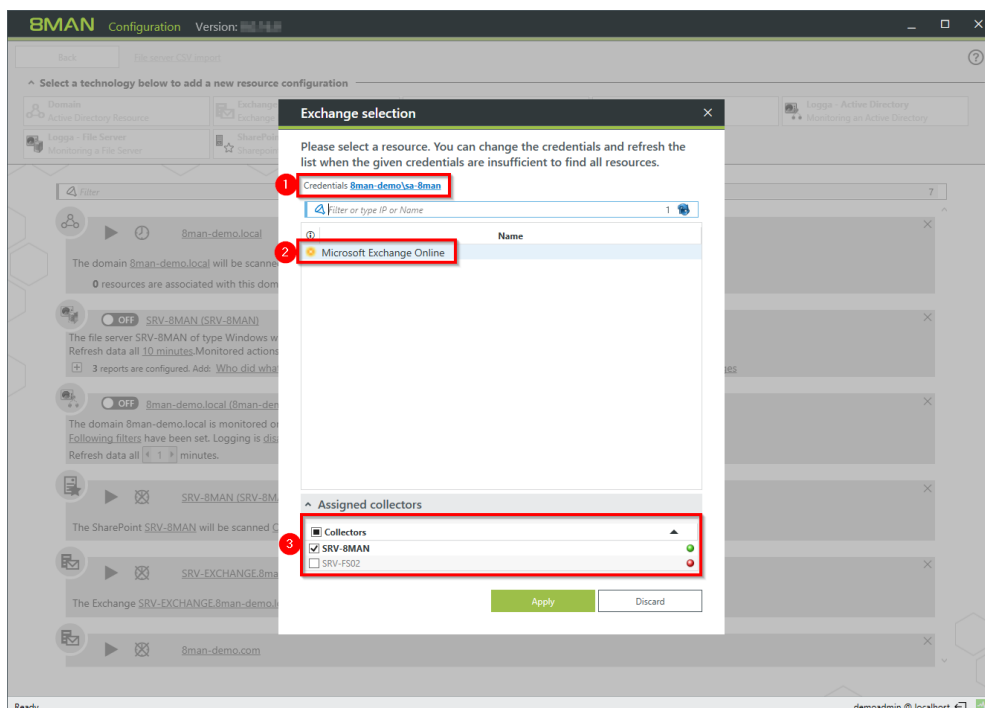


Select "scans" from the home page of the configuration module.

9.3.2.1 Add an Exchange scan



Select "Exchange".



1. Enter the account information for the account that should be used to execute the Exchange scan. The credentials from the [basic configuration](#) will be suggested automatically.
2. Select the Exchange Server. All DAGs* or servers that are contained in the current Active Directory site will be listed. Enter the desired server into the search field (this is possible even when it is not listed).
3. Assign a collector.

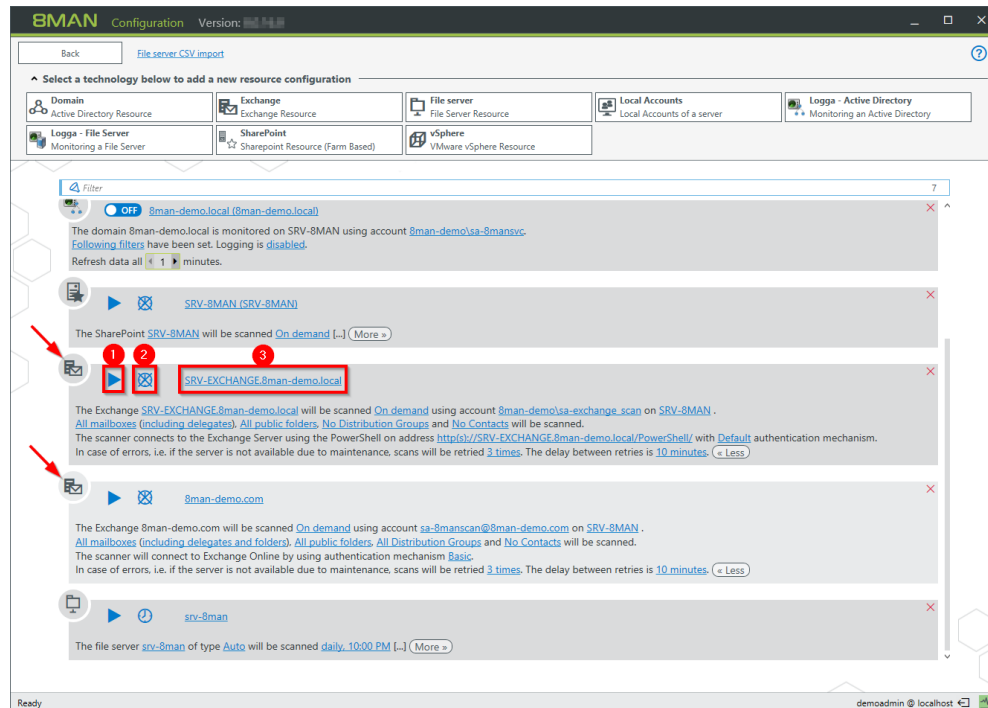
Special considerations for Exchange Online:

1. The credentials displayed here are not relevant for Exchange Online. They must be adjusted later in the [Scan configuration](#).
2. Exchange Online is always shown.
3. For Exchange Online the collector requires internet access.

* 8MAN can connect to DAG servers (Database Availability Groups) and execute scans on them. You are able to select the DAG server directly in the scan configuration. Please note that you have to adjust the settings described in the chapter "[Preparing the PowerShell Website](#)" on every involved DAG Exchange server. The decision, which server the collector establishes a connection with is made by the DAG during the initial connection build up. This means that successive scans may take place on different servers.

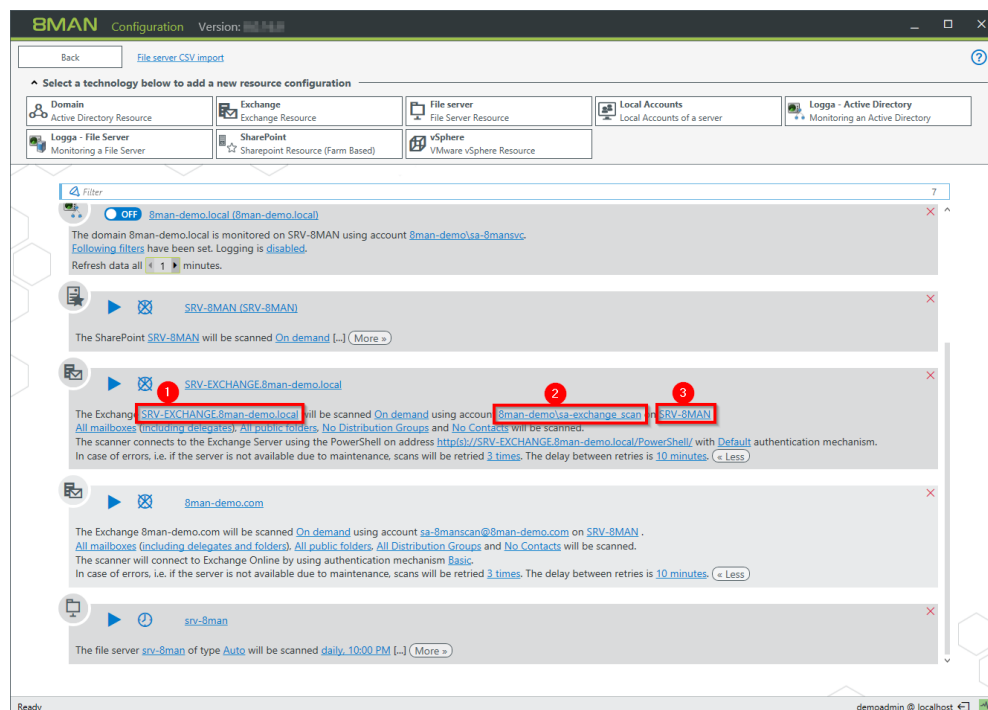
Since IP less DAGs (from Exchange 2016 Default Setting, optional in Exchange 2013) do not have an Administrative Access Point (AAP), the Exchange server cannot be managed via this DAG. In this case, specify an Exchange server directly or use the load balancing namespace.

9.3.2.2 Customize an Exchange scan configurations

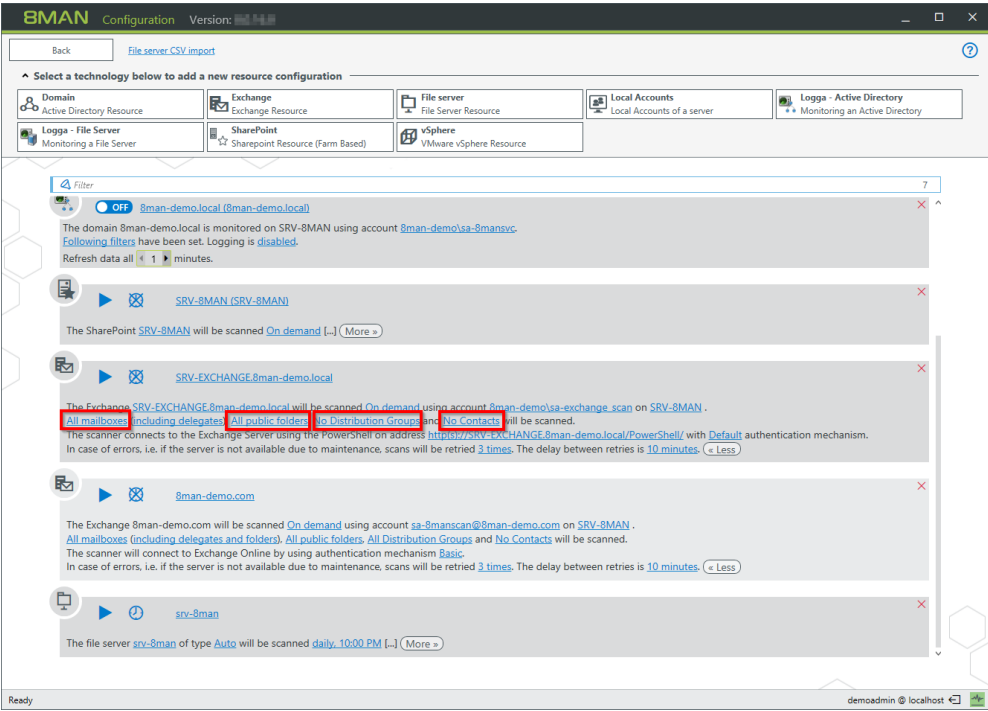


1. You can start an Exchange Scan in the configuration menu. The typical scan speed is around 10 elements per second. You can interrupt a running scan.
2. Schedule regular scans.
3. Change the name of the configuration.

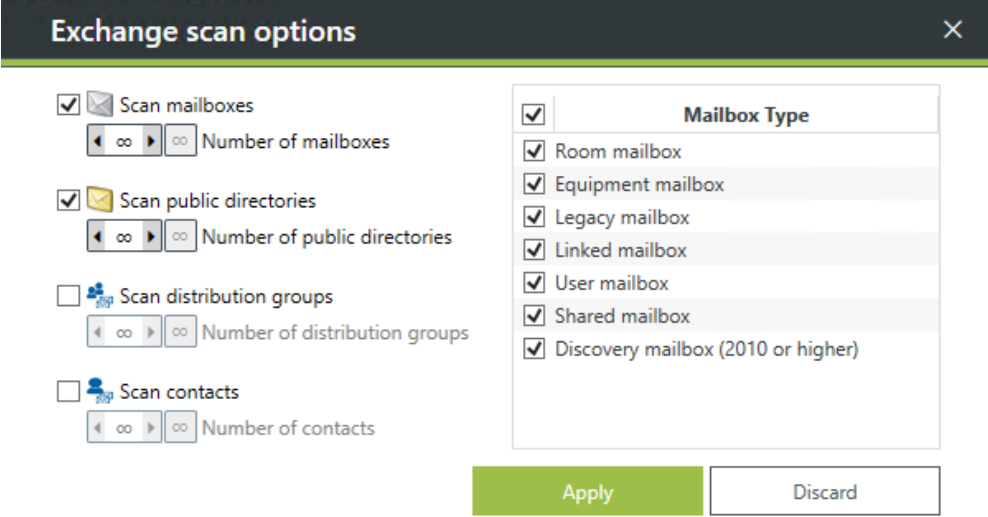
Arrows: The symbol allows you to quickly identify an Exchange scan configuration.



1. Change the Exchange Server that you want to scan.
2. Change the credentials that are used to execute the scan.
3. Switch the collector server. Please note that the collector server requires internet access when using Exchange Online.



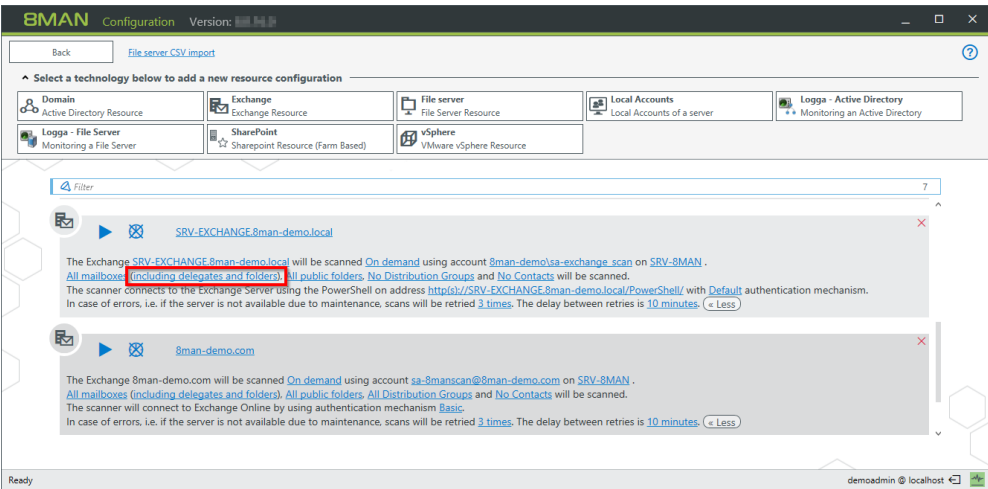
Define the range of the scan
The links lead to the following dialog...



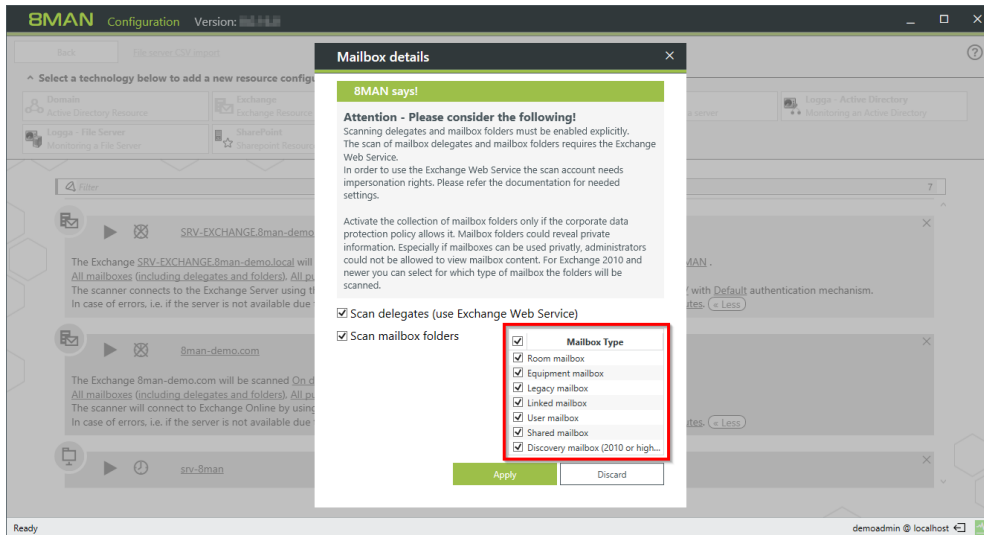
If you select only a subset of folders for readable public folders, then no statistical data will be available.

Administrative permissions to public folders are not available (since Exchange 2013).

A filter is applied to the mailbox property "RecipientTypeDetails", to select the mailbox type.

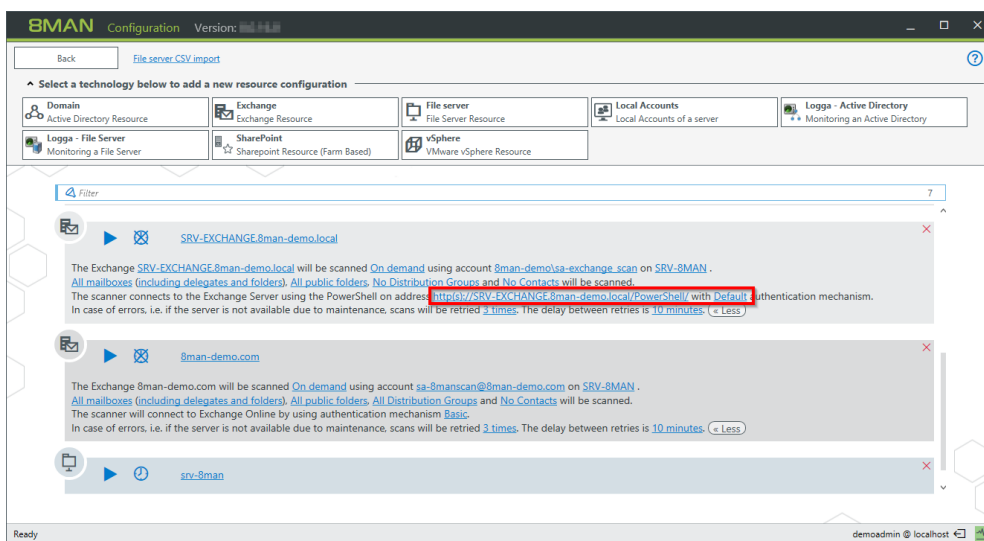


You can determine if substitution rules and mailbox folders are read. Please note that "Exchange Web Services - Impersonation" is used.

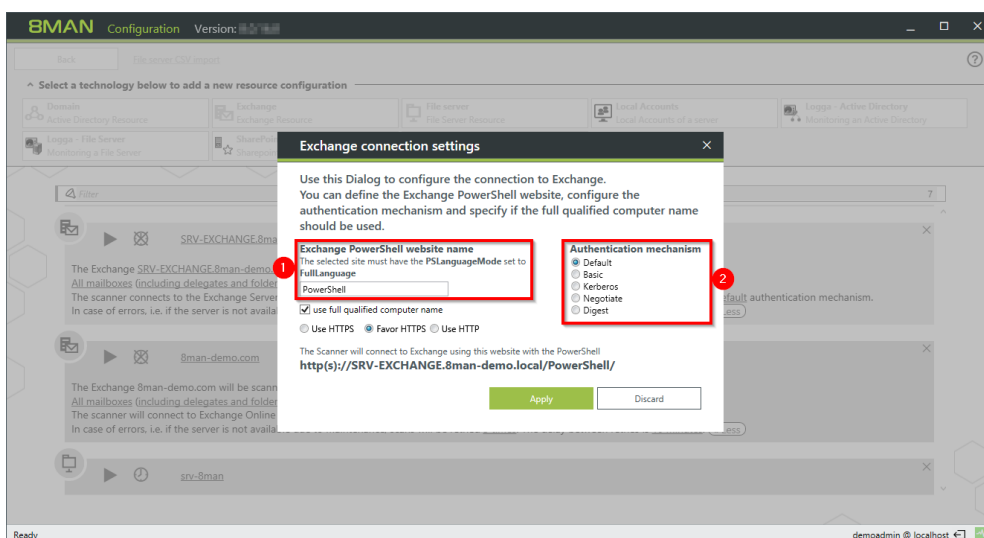


Determine the range in which mailbox details are read with Exchange Web Service (EWS).

The selection of mailbox type is independent for scans with PowerShell and EWS. This means that you can determine which mailbox types are scanned and for which mailbox types the mailbox folders are scanned.

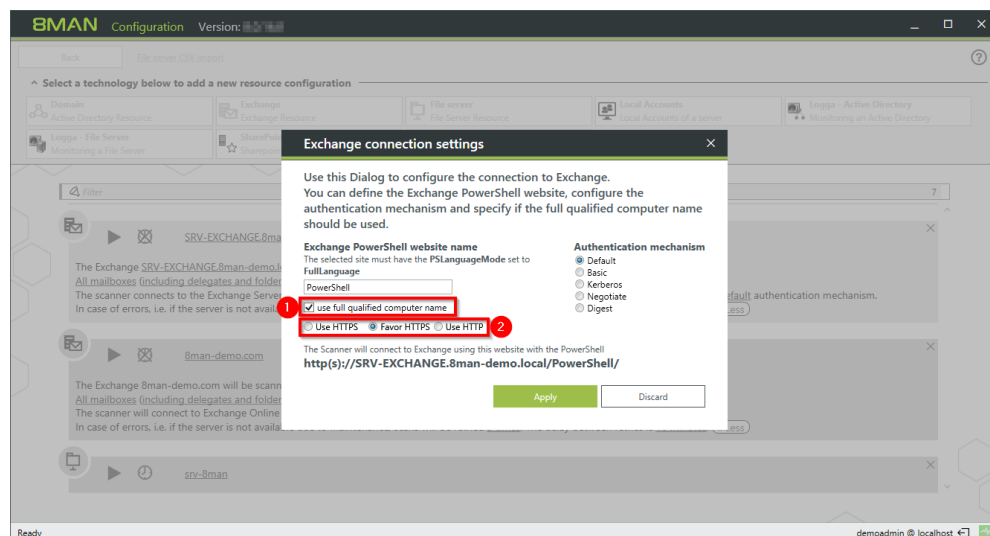


Click one of the links to configure the connections settings for the Exchange scan.



The following settings must match those of the IIS-website. These are described in the chapter "Preparation of the PowerShell website".

1. Enter the name of the Exchange PowerShell website. In standard settings this is "PowerShell".
2. Select an authentication mechanism. For Exchange Online select "Basic".



1. In some cases the client access server is not reachable via the fully qualified computer name. In this scenario, deactivate this option. Please note the preview.
2. Select if an encrypted connection should be used. This setting must match those of the PowerShell website.

9.3.3 Advanced Exchange scan settings in the configuration files

Some settings can not be made in the graphical configuration interface. Advanced settings must be adjusted in the configuration files.

The settings are only effective after a new scan.

9.3.3.1 Change the attribute for the creation of mailbox categories

By default 8MAN sorts mailboxes into categories, upwards of 1000 mailboxes, according to the Active Directory property "sn".

The selected property can be changed to any desired text attribute from Active Directory, via the configuration file.

Configuration file:

pnJob.config.xml

Computer:

Collector server which is configured for the Exchange Scan.

Path:

%ProgramData%\protected-networks.com\8MAN\cfg

If the file is not available, copy the "template" from the following path, delete the content and enter the code.

%ProgramFiles%\protected-networks.com\8MAN\etc

Code:

```
<?xml version="1.0" encoding="utf-8"?>
```

```
<config>
```

```
  <collector.scanner.exchange.sortingProperty  
    type="System.String">sn</collector.scanner.exchange.sortingProperty>
```

```
</config>
```

Possible Values:

Replace "sn" with any desired text attribute.

9.3.3.2 Change the cut-off rules for the mailbox categories

By default the category descriptions are generated from the first 10 characters of the first and last mailbox. You can change the length of utilized descriptions.

Configuration file:

pnServer.config.xml

Computer:

8MAN-Server

Path:

%ProgramData%\protected-networks.com\8MAN\cfg

Code:

in the section <config>

```
<exchange.CategoryLength type="System.Int32">10</exchange.CategoryLength>
```

Possible values:

1 to 500

9.3.3.3 Prevent the formation of mailbox categories

By default 8MAN sorts mailboxes into categories, upwards of 1000 mailboxes. You can turn off the creation of categories.

Configuration file:

pnServer.config.xml

Computer:

8MAN-Server

Path:

%ProgramData%\protected-networks.com\8MAN\cfg

Code:

in the section <config>

```
<exchange.makeMailBoxCategories type="System.Boolean">false</exchange.makeMailBoxCategories>
```

Possible values:

false no categories (flat list of mailboxes in the resource view) eine Kategorien (flache Liste von Postfächern in der Ressourcen-Ansicht)

true Utilize categories

9.3.3.4 Adjust the throttling factor

The Exchange Web-Service is used for the recalling of delegations. The scan orients itself based on the throttling settings of the Exchange server for the scan account (service account).

The scan can be accelerated with an optimal throttling setting. Please also see: [http://technet.microsoft.com/en-us/library/dd298094\(v=exchg.150\).aspx](http://technet.microsoft.com/en-us/library/dd298094(v=exchg.150).aspx)).

The setting „EWSMaxConcurrency" is important. It affects the number of parallel requests used by the scan to recall delegation rules.

By default 8MAN uses the maximum number of possible parallel requests allowed by the throttling policy. If the throttling policy allows for an unlimited number of parallel requests, then the number of processors is multiplied by 8. You are able to change this value.

Configuration file:

pnJob.config.xml

Computer:

Kollektor-Server, der für den Exchange-Scan konfiguriert ist.

Path:

%ProgramData%\protected-networks.com\8MAN\cfg

Code:

in the section <config>

```
<?xml version="1.0" encoding="utf-8"?>
```

```
<config>
```

```
  <collector.scanner.exchange.processormultiplierForUnlimitedThrottling
    type="System.Int32">8</collector.scanner.exchange.processormultiplierForUnlimitedThrottling>
```

```
</config>
```

Possible values:

Replace the value "8" with your desired number. The entered number will be multiplied with the number of processors and its product indicates the number of parallel requests to the Exchange Web Service.

9.4 Scan SharePoint via Remote Connector

With the 8MATE for SharePoint, you can integrate SharePoint as a resource into 8MAN Access Rights Management.

For a transitional period we offer from version 8.0 on two SharePoint modules, which can be operated simultaneously:

1. Previous 8MATE for SharePoint

- uses the Server Side Object Model (SSOM)
- Requires a local installation on the SharePoint server
- Supports only the SharePoint versions 2010 and 2013 (on premise)

2. 8MATE for SharePoint with SharePoint Remote Connector

- uses the Client Side Object Model (CSOM)
- No installation on the SharePoint server is required
- Supports SharePoint versions 2010, 2013, 2016, and SharePoint Online

For the 8MATE for SharePoint you need an appropriate license. The section "[Load the product license](#)" describes how to check the license scope and, if necessary, reload a license file.

The system requirements must be fulfilled. See Chapter "[SharePoint requirements](#)".

For an overview of the required access rights, please refer to chapter "[Setting up service accounts for 8MAN](#)".

9.4.1 Install the SharePoint Remote Connector

The image shows the 8MAN Setup window. The title bar includes the 8MAN logo, the word 'Setup', and the version number. The main window has a header with the 8MAN logo and the text 'by Protected Networks'. Below this, there are sections for '8MAN Service' and 'User Interfaces'. In the '8MAN Service' section, there are four sub-sections: 'Server', 'Alerts', 'RabbitMQ Message Queue System', and 'SharePoint Remote Connector'. Each sub-section has a checkbox and a description. The 'SharePoint Remote Connector' checkbox is checked and highlighted with a red rectangle. Below the '8MAN Service' section is the 'User Interfaces' section, which has one sub-section: '8MAN'. At the bottom of the window are two buttons: 'Back' and 'Install'.

8MAN Setup Version: 8.1.1.1

8MAN by Protected Networks

8MAN Service

- ☒ **Server**
The central component in your 8MAN infrastructure, which analyzes and provides the collected data
 - ☒ **Alerts**
Notifies you about your configured events as soon as they are detected by AD Logga or FS Logga
 - ☒ **RabbitMQ Message Queue System**
RabbitMQ distributes messages between different services and sensors for alert indication. Alerts requires an instance of RabbitMQ to be installed in your environment.
 - ☒ **SharePoint Remote Connector**
Scans your SharePoint remotely by using the client-side object model (CSOM)
- ☒ **Collector**
The decentralised data collector for the 8MAN Server
 - ☐ **FS Logga for Windows File Server**
Windows driver collecting data from this machine

User Interfaces

- ☒ **8MAN**
The solution for your access rights management

Back Install

Enable the SharePoint Remote Connector.

You install an additional 8MAN server component. No additional installation of dedicated collectors is required.

9.4.2 Accounts for a SharePoint scan via Remote Connector

For a SharePoint scan, two accounts are to be configured:

1. "Process Account"

The "Process account" is used to execute the scan process on the selected collector. This account must have local administrative rights and interactive logon privileges on the collector.

2. "Scan Account"

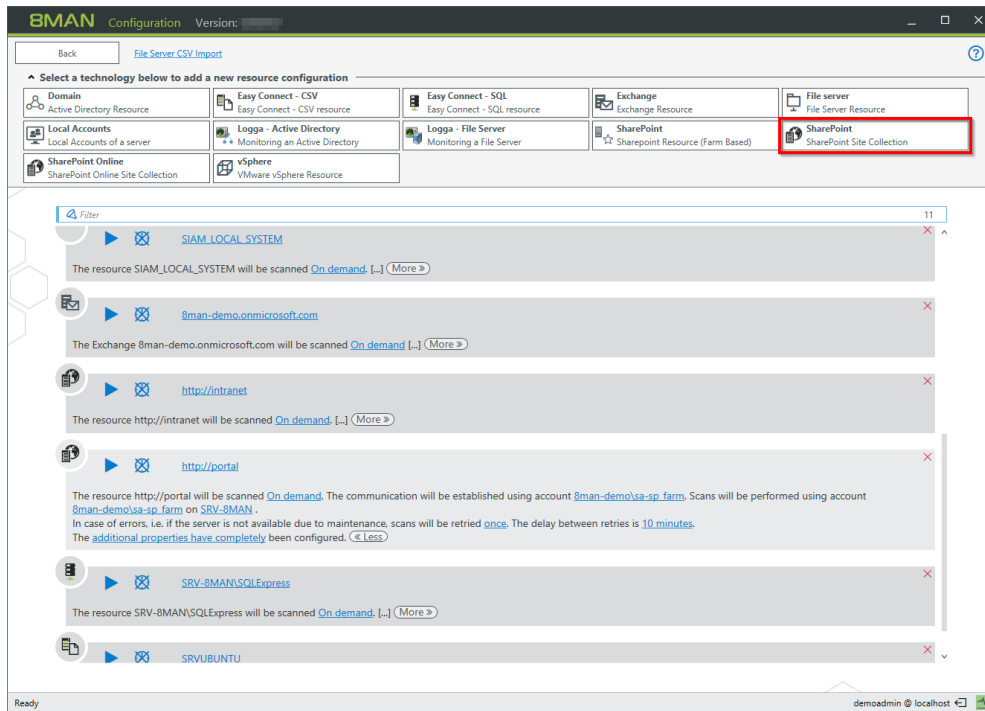
The "scan account" is used for the actual scan. This account must always be the same as the owner account registered for the site collection (= primary site collection administrator). The corresponding user account is defined when a site collection is created and can only be viewed or changed via the SharePoint central administration.

Navigate in the Central Administration to:

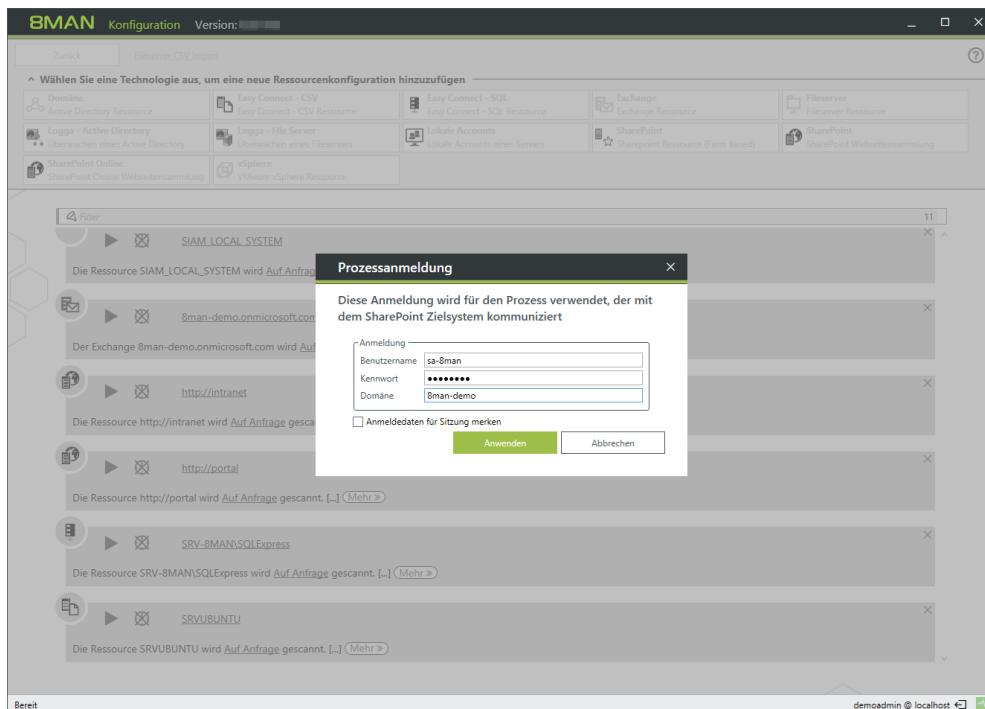
application management -> site collections -> Change site collection administrators -> Selection of the site collection -> Primary site collection administrator

If the primary site collection administrator's credentials are not accessible, other SharePoint accounts can also be used for the scan. Please contact our [support team](#) in these cases.

9.4.3 Add a SharePoint scan via Remote Connector



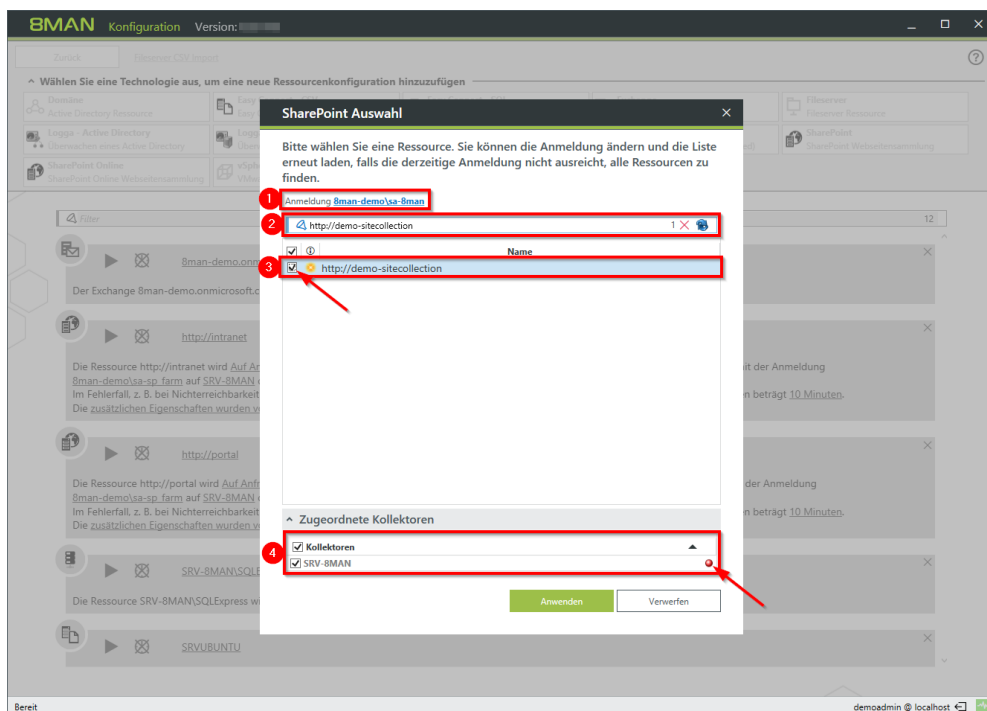
Add a scan configuration.



Specify the credentials for the **"Process Account"**.

The account is not used to scan the SharePoint site collection. This account will be set up in a later step.

After successfully checking the "Process account", the selection of available resources opens.



1. If necessary, change the "Process account".
2. Specify the URL of the site collection. Confirm your entry with the ENTER key.

For on-premise SharePoint servers, you can specify the name of the server and later select the sites/site collections.

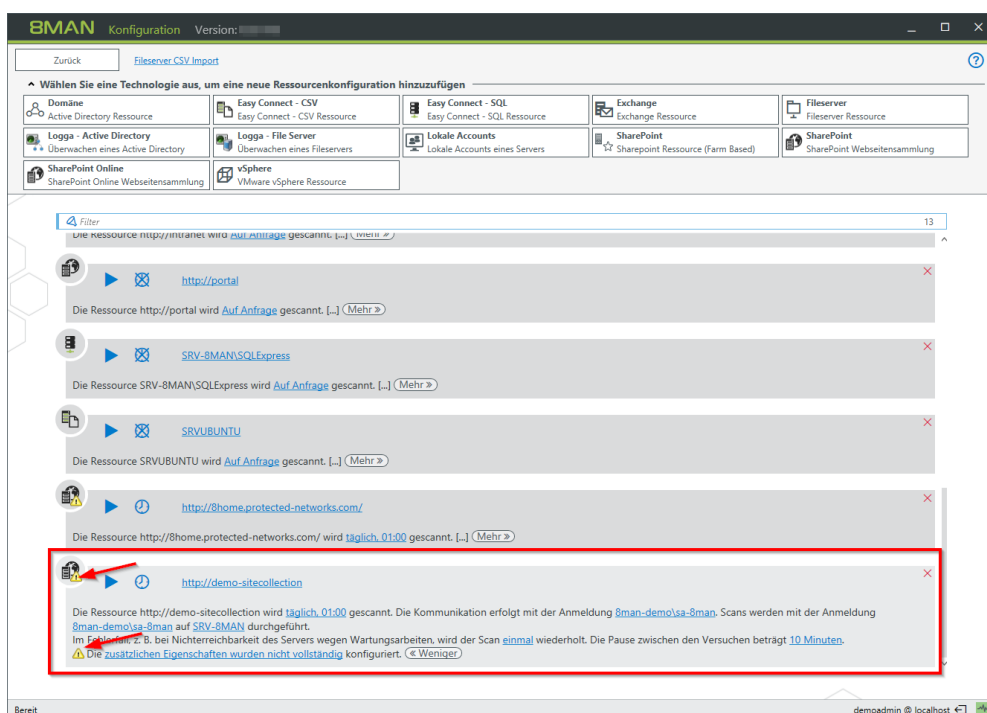
3. Select the added entry (set the checkmark).
4. Select one or more collectors to perform the scan.

Collector indicator green:

A connection to the specified SharePoint URL was successful. This does not mean that all content can be completely scanned. Please refer to the information on the scan account required in the next step.

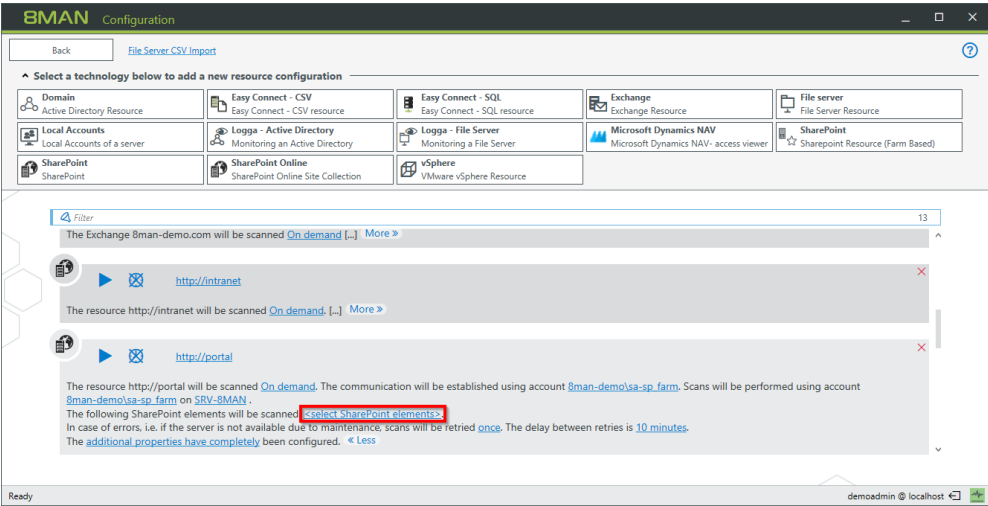
Collector indicator red:

Unable to successfully connect to the specified SharePoint URL. You can still save the settings and correct them in the following step.

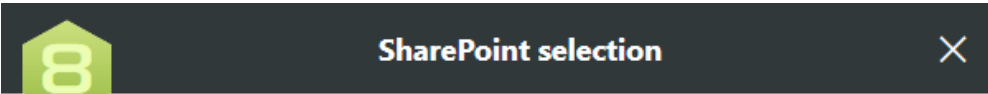


You have created a new SharePoint configuration.

The warning indicates that you must configure additional properties before you can successfully perform a scan.

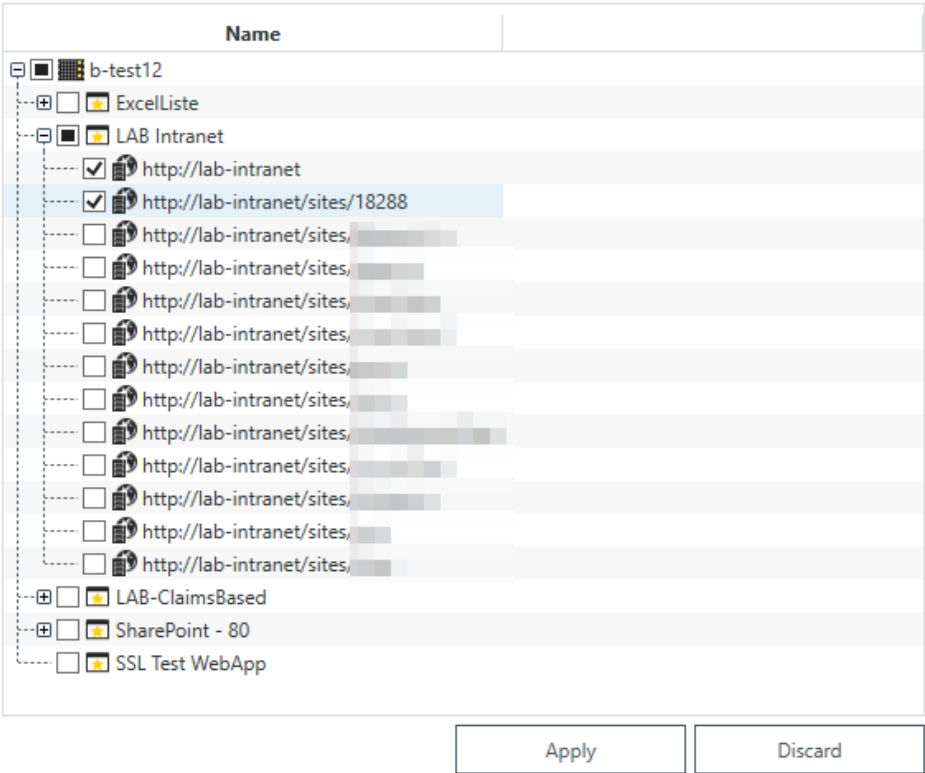


Click on "Select SharePoint elements" in the SharePoint configuration.

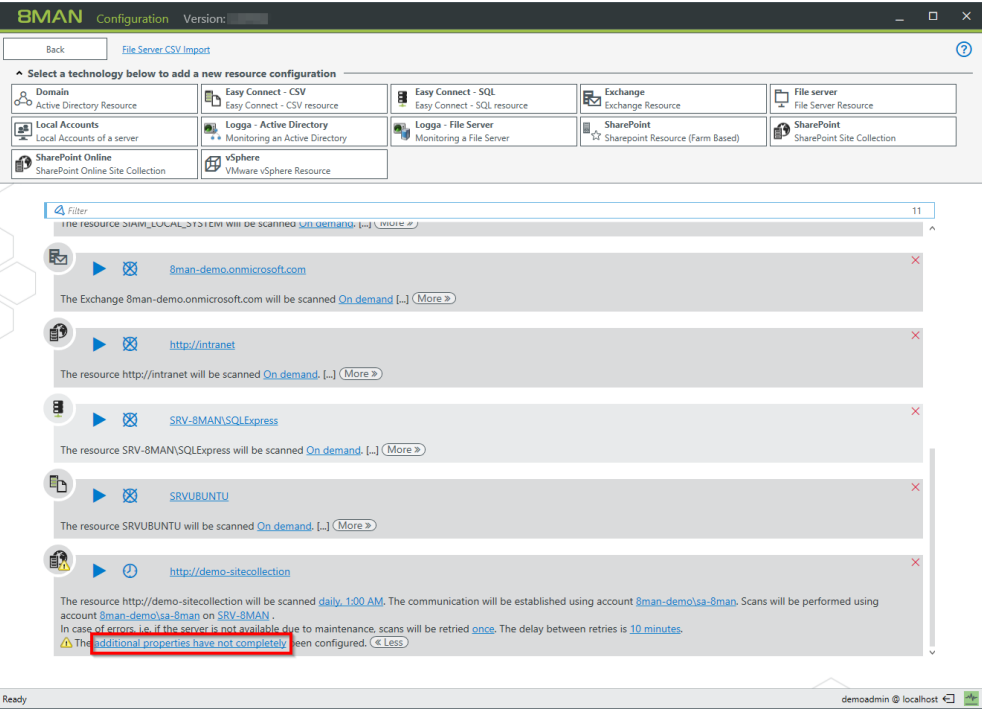


Select the resources to be scanned.

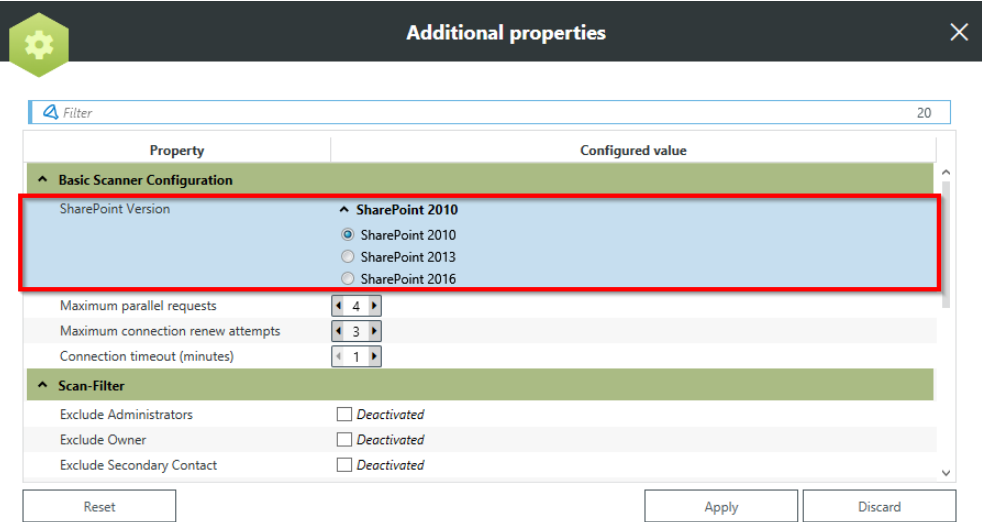
Credentials pn\sa-sp test



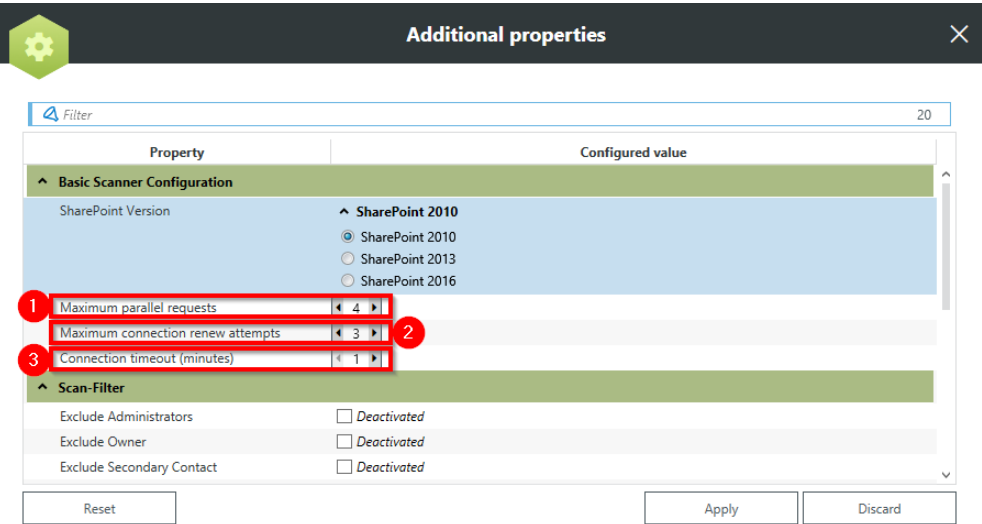
9.4.4 Configure additional properties



Click the link.



Select the SharePoint version.
To communicate with the SharePoint system, 8MAN uses Microsoft components that are specific to the version of the SharePoint system that is used. Specifying the correct SharePoint version ensures that all information is shared correctly with the SharePoint system. If the configured version of SharePoint differs from the actual version, this may result in incomplete or incorrect data.



- 1. Determine how many maximum parallel requests the scan will perform. The higher the number, the higher the scanning speed and the load on the SharePoint server. Possible values: 1 to 10
- 2. Specify how often an attempt is made to connect to the SharePoint server.
- 3. Specify how long 8MAN waits for the connection to the SharePoint Server or the result of a query.. Possible values: 1 to 120 min,

Recommended for systems with lists and libraries < 5,000 elements: 10 min

Recommended for systems with lists and libraries > 5,000 elements: 60 min

Property	Configured value
Scan-Filter	
Exclude Administrators	<input type="checkbox"/> Deactivated
Exclude Owner	<input type="checkbox"/> Deactivated
Exclude Secondary Contact	<input type="checkbox"/> Deactivated
Exclude Limited Access	<input checked="" type="checkbox"/> Activated
Exclude hidden lists	<input type="checkbox"/> Deactivated
Exclude list items	<input type="checkbox"/> Deactivated
Include list items with unique rights only	<input type="checkbox"/> Deactivated
Maximum element scan attempts	3
List view threshold	2,000
Diagnostic settings	
Detailed logging	<input type="checkbox"/> Deactivated

1. Option enabled:

8MAN excludes administrators from the scan. They are not available in views and reports.

2. Option enabled:

8MAN excludes owner from the scan. They are not available in views and reports.

This option is not effective for SharePoint 2010. Microsoft does not provide the information about the owner in this release.

Property	Configured value
Scan-Filter	
Exclude Administrators	<input type="checkbox"/> Deactivated
Exclude Owner	<input type="checkbox"/> Deactivated
Exclude Secondary Contact	<input type="checkbox"/> Deactivated
Exclude Limited Access	<input checked="" type="checkbox"/> Activated
Exclude hidden lists	<input type="checkbox"/> Deactivated
Exclude list items	<input type="checkbox"/> Deactivated
Include list items with unique rights only	<input type="checkbox"/> Deactivated
Maximum element scan attempts	3
List view threshold	2,000
Diagnostic settings	
Detailed logging	<input type="checkbox"/> Deactivated

Option enabled:

8MAN excludes secondary contacts from the scan. They are not available in views and reports.

The secondary contact is optional in SharePoint. The option is ineffective if no secondary contact is entered.

This option is not effective for SharePoint 2010. Microsoft does not provide the secondary contact information in this release.

Additional properties ✕

Filter 20

Property	Configured value
Scan-Filter	
Exclude Administrators	<input type="checkbox"/> Deactivated
Exclude Owner	<input type="checkbox"/> Deactivated
Exclude Secondary Contact	<input type="checkbox"/> Deactivated
Exclude Limited Access	<input checked="" type="checkbox"/> Activated
Exclude hidden lists	<input type="checkbox"/> Deactivated
Exclude list items	<input type="checkbox"/> Deactivated
Include list items with unique rights only	<input type="checkbox"/> Deactivated
Maximum element scan attempts	3
List view threshold	2,000
Diagnostic settings	
Detailed logging	<input type="checkbox"/> Deactivated

Reset Apply Discard

1. Option enabled:

8MAN excludes the limited access from the scan. This information is not available in views and reports. Limited access is automatically granted by the SharePoint system to a large extent, ensuring that SharePoint users can navigate through the system.

2. Option enabled:

8MAN excludes hidden lists from the scan. They are not available in views and reports.

Additional properties ✕

Filter 20

Property	Configured value
Scan-Filter	
Exclude Administrators	<input type="checkbox"/> Deactivated
Exclude Owner	<input type="checkbox"/> Deactivated
Exclude Secondary Contact	<input type="checkbox"/> Deactivated
Exclude Limited Access	<input checked="" type="checkbox"/> Activated
Exclude hidden lists	<input type="checkbox"/> Deactivated
Exclude list items	<input type="checkbox"/> Deactivated
Include list items with unique rights only	<input type="checkbox"/> Deactivated
Maximum element scan attempts	3
List view threshold	2,000
Diagnostic settings	
Detailed logging	<input type="checkbox"/> Deactivated

Reset Apply Discard

1. Option enabled:

8MAN excludes list items from the scan. They are not available in views and reports.

2. Determine whether only list elements or documents with specific permissions (interrupted inheritance) will be scanned.

Additional properties ✕

Filter 20

Property	Configured value
Scan-Filter	
Exclude Administrators	<input type="checkbox"/> Deactivated
Exclude Owner	<input type="checkbox"/> Deactivated
Exclude Secondary Contact	<input type="checkbox"/> Deactivated
Exclude Limited Access	<input checked="" type="checkbox"/> Activated
Exclude hidden lists	<input type="checkbox"/> Deactivated
Exclude list items	<input type="checkbox"/> Deactivated
Include list items with unique rights only	<input type="checkbox"/> Deactivated
Maximum element scan attempts	3
List view threshold	2,000
Diagnostic settings	
Detailed logging	<input type="checkbox"/> Deactivated

Reset Apply Discard

1. Determine the maximum number of attempts after which the scan of a specific SharePoint object is canceled. Possible values: 1 to 5, Recommended: 3**2. With the threshold value for reading list elements, you determine how many list elements are read at maximum.**

Additional properties ✕

Filter 20

Property	Configured value
Exclude Secondary Contact	<input type="checkbox"/> Deactivated
Exclude Limited Access	<input checked="" type="checkbox"/> Activated
Exclude hidden lists	<input type="checkbox"/> Deactivated
Exclude list items	<input type="checkbox"/> Deactivated
Include list items with unique rights only	<input type="checkbox"/> Deactivated
Maximum element scan attempts	3
List view threshold	2,000
Diagnostic settings	
Detailed logging	<input type="checkbox"/> Deactivated
Advanced settings	
Ignore domain in SharePoint-Credentials	<input type="checkbox"/> Deactivated
PowerShell CredSSP-Authentication	<input type="checkbox"/> Deactivated

Reset Apply Discard

Enable the option for extended error analysis only.

If this option is enabled, the scan speed will slow down and the size of the log file of the 8MAN server will increase faster.

Additional properties ✕

Filter 20

Property	Configured value
Exclude Secondary Contact	<input type="checkbox"/> Deactivated
Exclude Limited Access	<input checked="" type="checkbox"/> Activated
Exclude hidden lists	<input type="checkbox"/> Deactivated
Exclude list items	<input type="checkbox"/> Deactivated
Include list items with unique rights only	<input type="checkbox"/> Deactivated
Maximum element scan attempts	3
List view threshold	2,000
Diagnostic settings	
Detailed logging	<input type="checkbox"/> Deactivated
Advanced settings	
Ignore domain in SharePoint-Credentials	<input type="checkbox"/> Deactivated
PowerShell CredSSP-Authentication	<input type="checkbox"/> Deactivated

Reset Apply Discard

only for SharePoint on-premise:

Activate this property if the system to be scanned is not operated in the local network infrastructure (e.g. by an external service provider) and the account name is used in the form abc@xxx.com.

Additional properties ✕

Filter 20

Property	Configured value
Exclude Secondary Contact	<input type="checkbox"/> Deactivated
Exclude Limited Access	<input checked="" type="checkbox"/> Activated
Exclude hidden lists	<input type="checkbox"/> Deactivated
Exclude list items	<input type="checkbox"/> Deactivated
Include list items with unique rights only	<input type="checkbox"/> Deactivated
Maximum element scan attempts	3
List view threshold	2,000
Diagnostic settings	
Detailed logging	<input type="checkbox"/> Deactivated
Advanced settings	
Ignore domain in SharePoint-Credentials	<input type="checkbox"/> Deactivated
PowerShell CredSSP-Authentication	<input type="checkbox"/> Deactivated

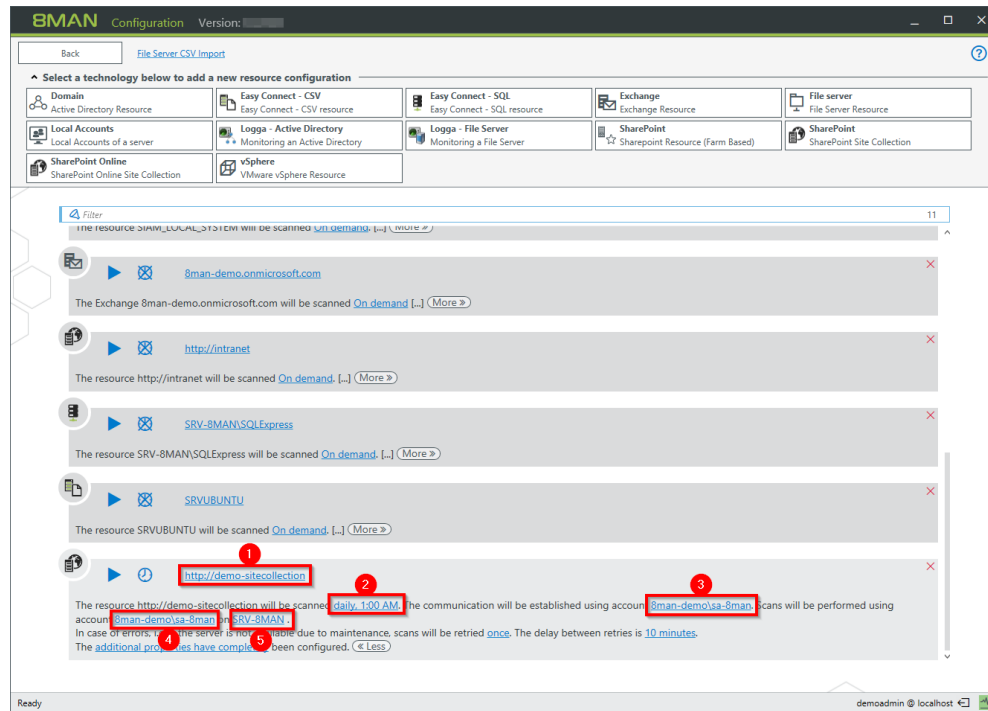
Reset Apply Discard

This option is only relevant for scanning an entire SharePoint farm.

Enable it if SharePoint is running in a multi-server environment, i.e. if dedicated servers are used for front end and database.

In order for the scanner to work properly, you must first configure WinRM and prepare PowerShell to use CredSSP authentication.

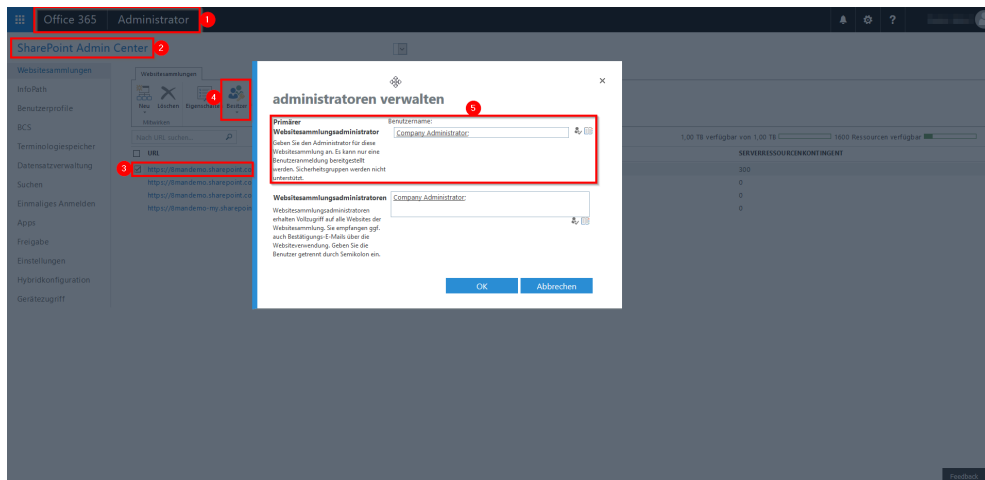
9.4.5 Customize a SharePoint scan configuration



1. Change the SharePoint Scan configuration name.
2. Change scheduling for scanning.
3. Change the "Process Account".
4. Change the "Scan Account".
5. Change the collector that runs the scan.

9.4.6 Configure the scan account for SharePoint Online

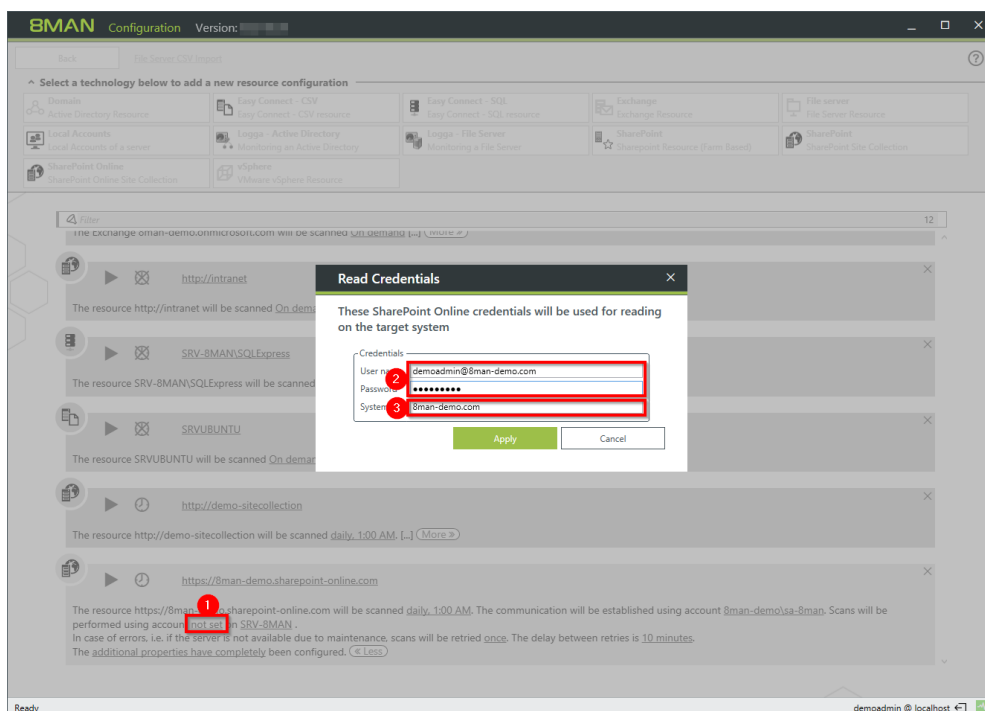
Identify the primary site collection administrator



1. Log into your Office 365 environment as an administrator.
2. Go to the SharePoint Admin Center.
3. Select the collection to be scanned (set the checkmark).
4. Click Owner-> Manage Administrators.
5. You will see the primary site collection administrator.

The Company Administrator placeholder is for all Office 365 administrators.

Enter the scan account into the configuration



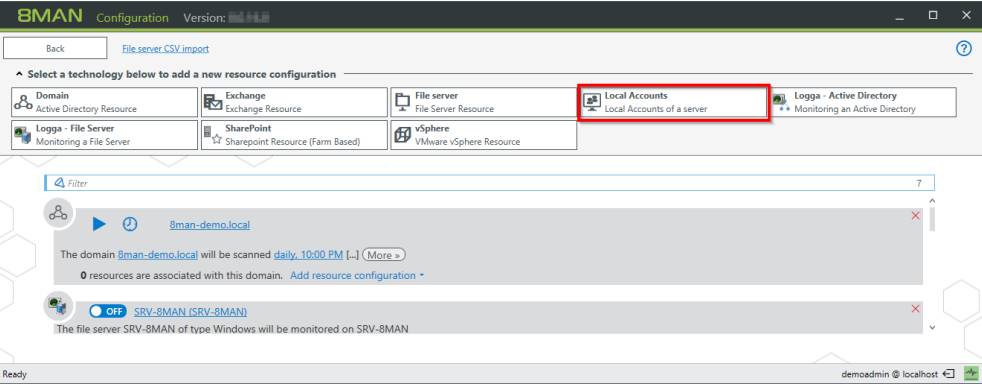
1. Click "Not Set".
2. Specify user name and password.
3. Specify the domain of the user.

Note that the collector server that is running the scan requires an Internet connection.

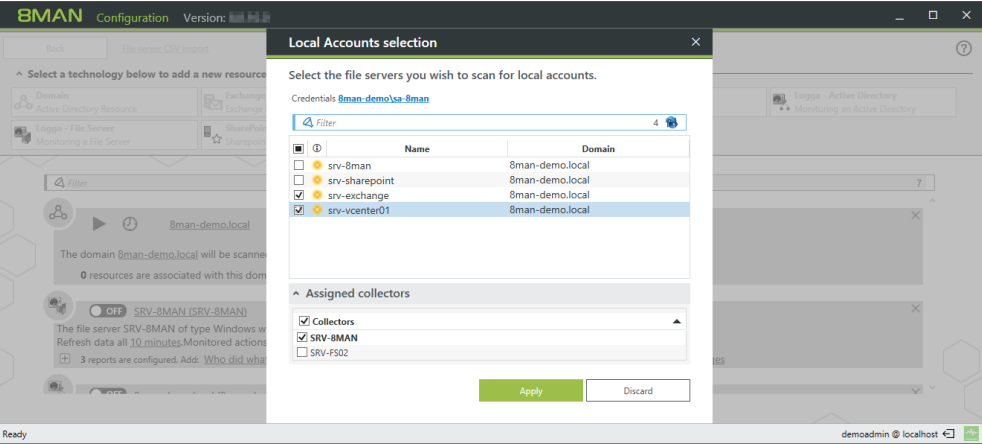
9.5 Scan local accounts

8MAN is able to read local accounts of computers (and not just file servers).

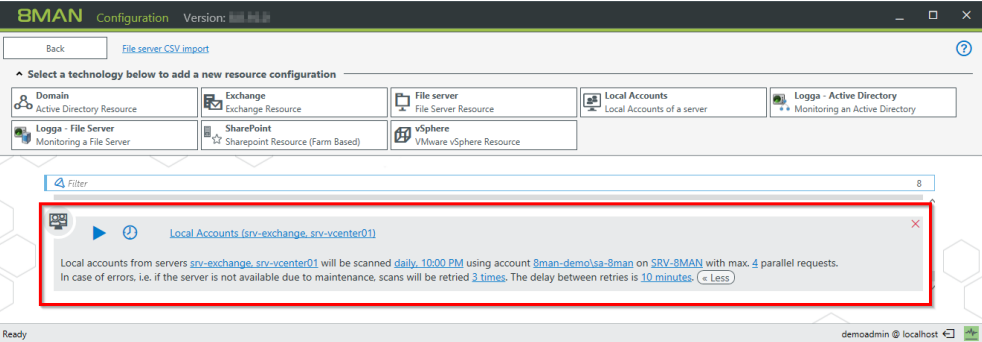
Adding Local Accounts Scans



Select "Local Accounts".



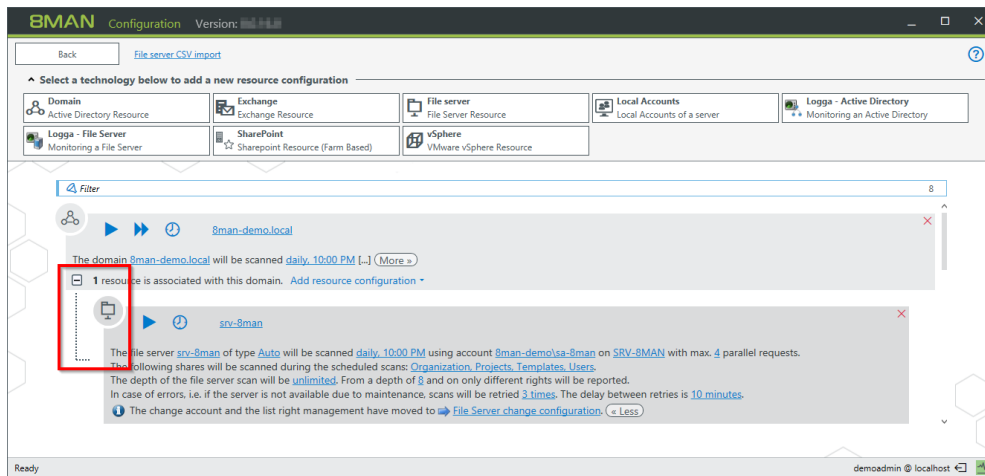
Select the computer for which you want to read local accounts.



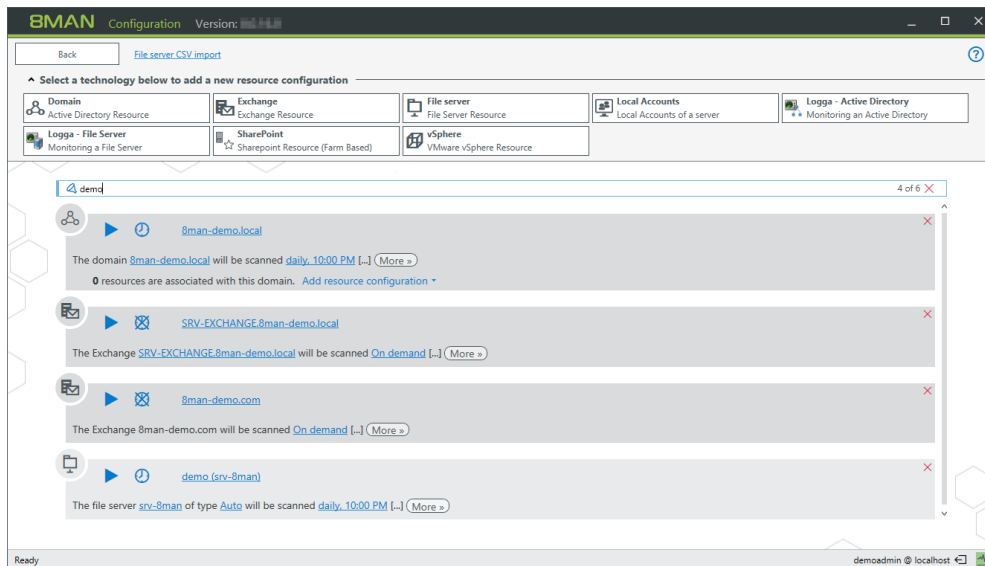
The available configuration options are the same as with an AD-scan.

9.6 Assign resources to a domain

You can assign a file server, Exchange or SharePoint scan to a domain. Use drag & drop in order to make this assignment, or to remove it.



8MAN will only show any added resources in the 8MAN GUI, if the appropriate domain has been selected.



Resources that have not been assigned are always shown by 8MAN GUI, regardless of which domain is selected by the user.

9.7 Configure Active Directory (AD) Logga

9.7.1 Enable audit policies for the AD Logga

9.7.1.1 Configure audit policies for the domain controllers (DC)

In order to be able to access AD Logga functionality you must activate a special audit policy.

If you want to make changes to audit policy you must be a member of the appropriate domain admin or organization admin group.

9.7.1.1.1 Configure audit policies for DCs on Server 2008

Before configuring audit policies you should verify that all required categories are activated.

You can activate the required audit policies by running the following commands on every DC with admin rights:

For "Monitor policy changes":

```
auditpol /set /subcategory:{0CCE922F-69AE-11D9-BED3-505054503030} /success:enable
```

For "Directory service changes":

```
auditpol /set /subcategory:{0CCE923C-69AE-11D9-BED3-505054503030} /success:enable
```

For "Managing User Accounts", "Managing computer accounts", "Managing security groups", "Managing distribution groups", "Managing application groups" and "other account management events":

```
auditpol /set /subcategory:{0CCE9235-69AE-11D9-BED3-505054503030} /success:enable
auditpol /set /subcategory:{0CCE9236-69AE-11D9-BED3-505054503030} /success:enable
auditpol /set /subcategory:{0CCE9237-69AE-11D9-BED3-505054503030} /success:enable
auditpol /set /subcategory:{0CCE9238-69AE-11D9-BED3-505054503030} /success:enable
auditpol /set /subcategory:{0CCE9239-69AE-11D9-BED3-505054503030} /success:enable
auditpol /set /subcategory:{0CCE923A-69AE-11D9-BED3-505054503030} /success:enable
```



Repeat this process for every DC!

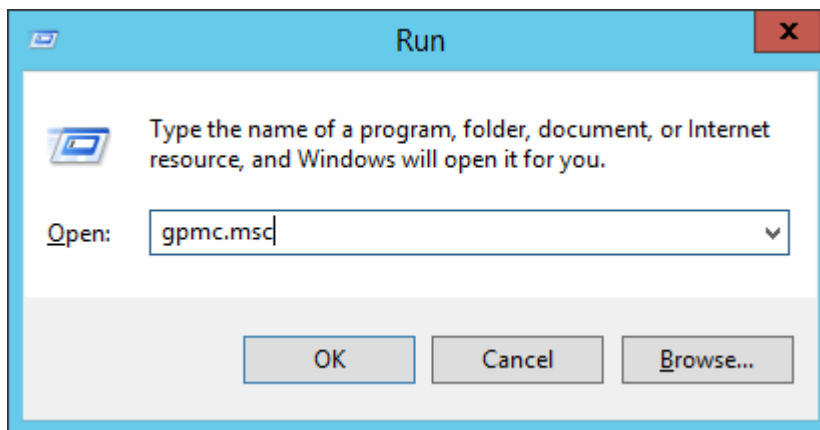
9.7.1.1.2 Configure audit policies for DCs on Server 2008 R2 or higher

You can use the group policy editor to manage audit policy on server 2008 R2 or higher. This means you only need to implement the policy once rather than having to repeat it for every DC.

Please note that the activation of audit policy may be delayed on the domain controllers (DCs) depending on your replication interval.

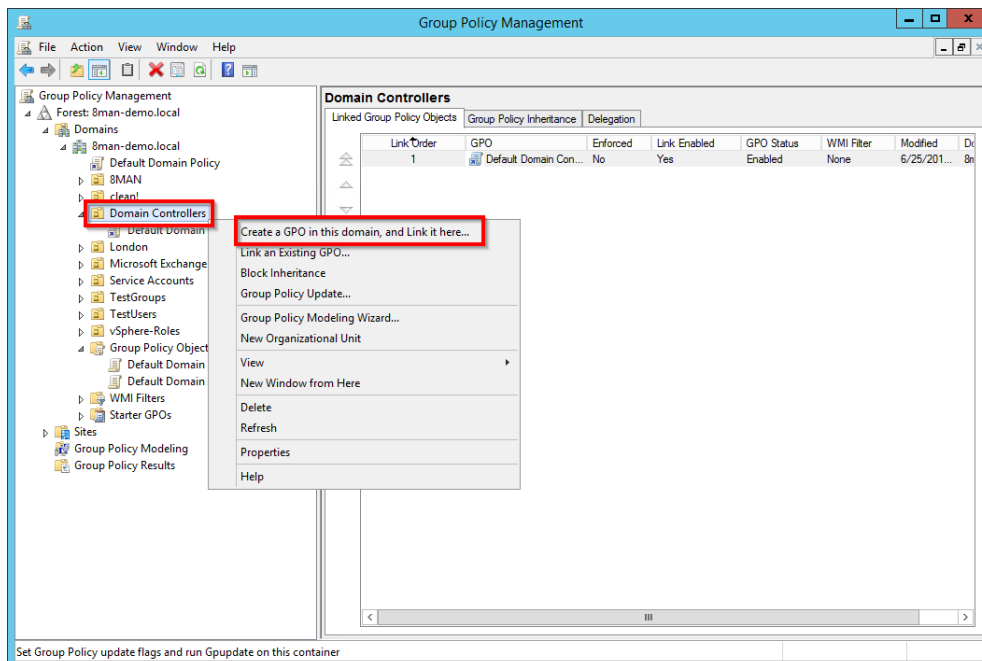
Once you have completed these settings:

- complete a manual policy update with the command "gpupdate /force"
- [Verifying the execution of audit policies](#)



Start managing group policies, by opening:

gpmc.msc

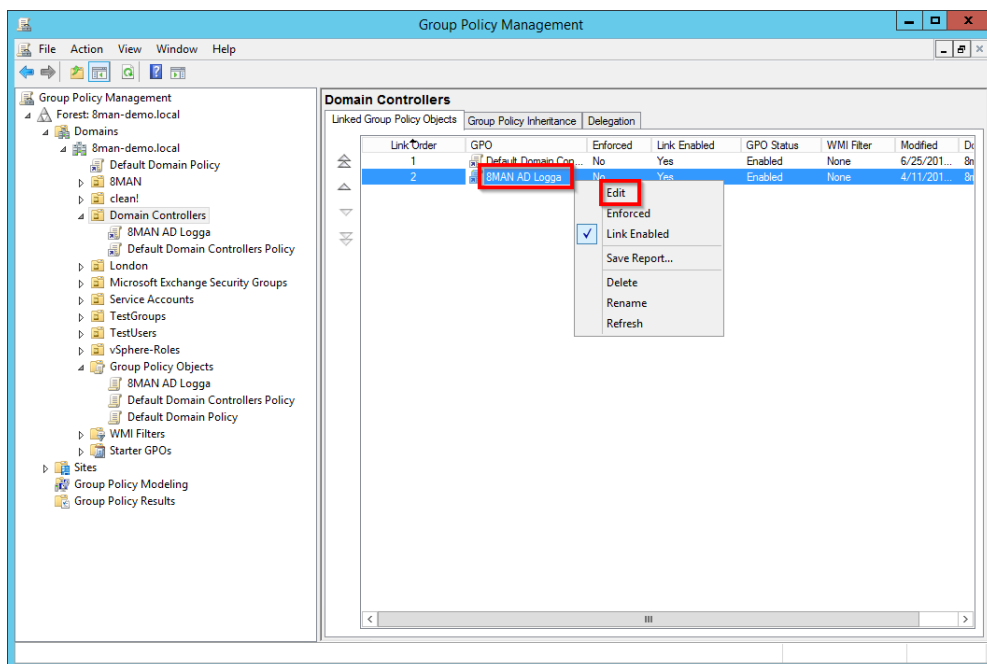


Create a new group policy.

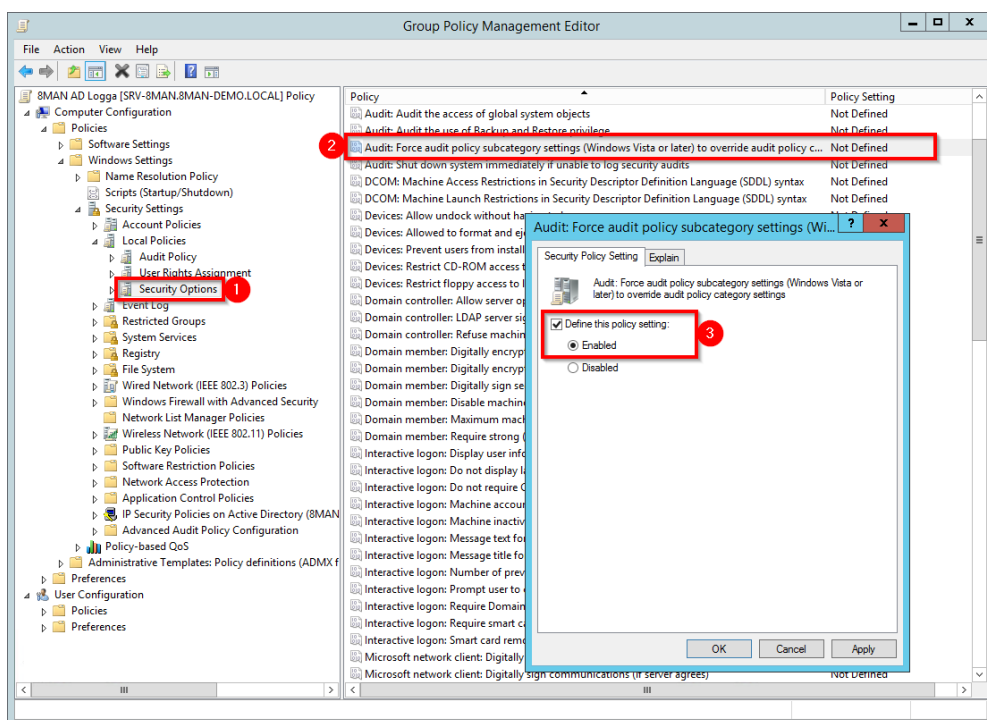
Select the OU in which the DC computer accounts are located. By default they are located in the OU "Domain Controllers".

Please ensure that the newly created policy is applied/winning to the appropriate DCs (hierarchy and order).

The order in which you set the options affects the effectiveness of the policy. Follow the order given here!



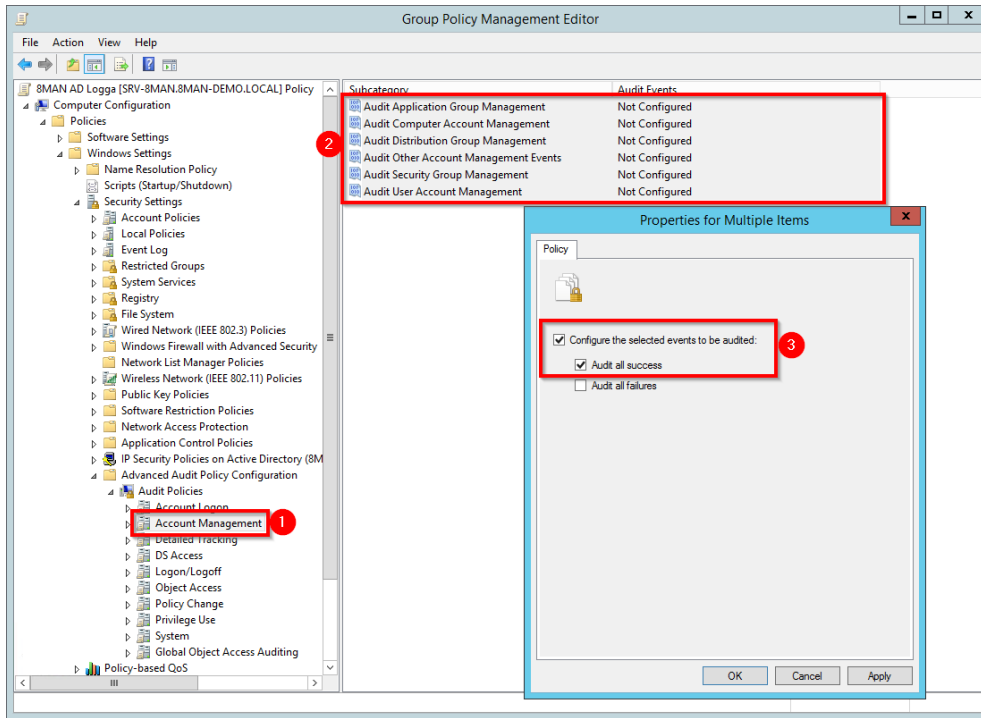
Select the newly created group policy by right clicking and selecting "edit".



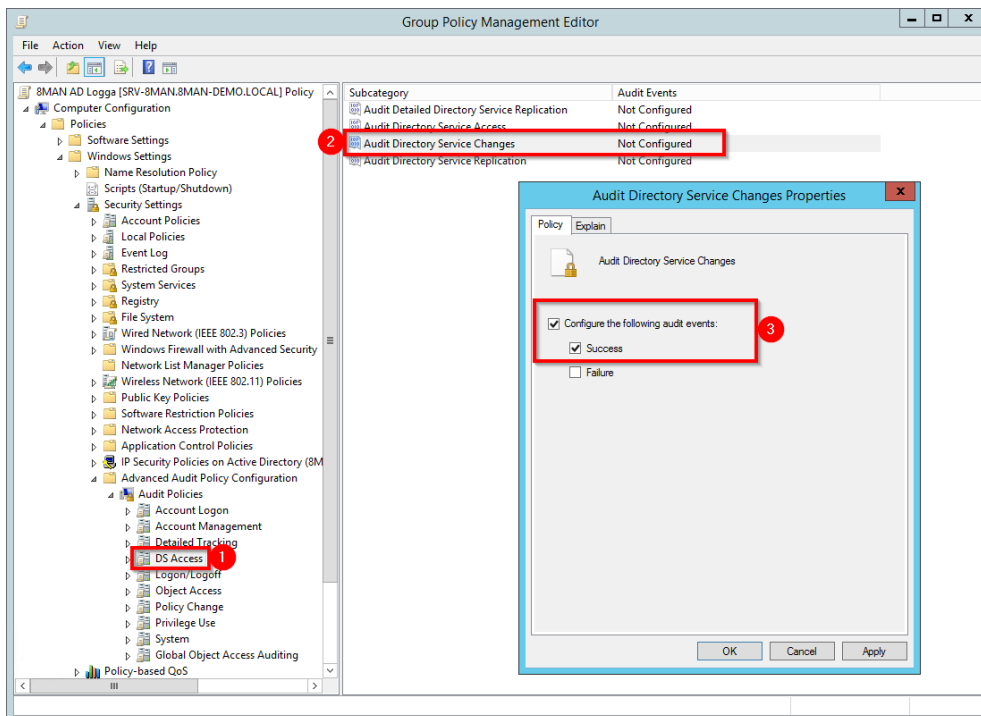
1. Navigate to "security options".
2. Select the policy "Audit: Force audit policy...".
3. You can activate the security policy by right-clicking and selecting "Properties", as shown in the diagram.

The order in which you set the options affects the effectiveness of the policy. Follow the order given here!

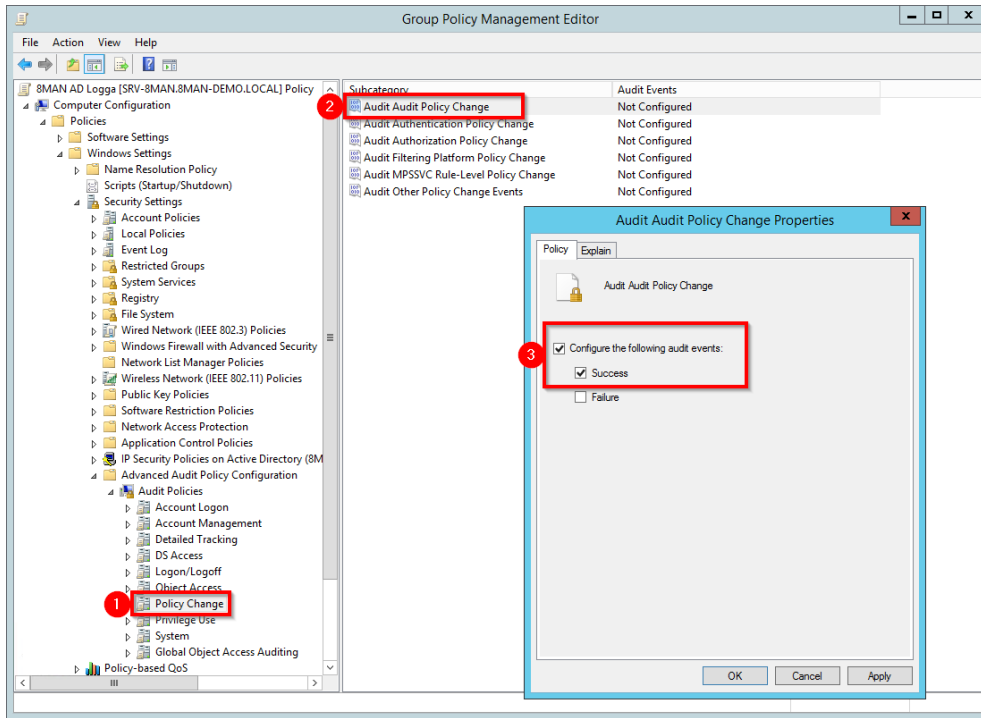




1. Navigate to account management.
2. Use multi-select and select all subcategories.
3. Activate the audit by right-clicking and selecting "Properties", as shown in the diagram.



1. Navigate to "DS Access".
2. Select the subcategory "Audit Directory Service Changes".
3. You can activate the audit by right-clicking and selecting "Properties", as shown in the diagram.



1. Navigate to "Change policy".
2. Select the subcategory "Audit Audit Policy Change".
3. You can activate the audit by right-clicking and selecting "Properties", as shown in the diagram.

Once you have completed these settings:

- complete a manual policy update with the command "gpupdate /force"
- Verifying the execution of audit policies

9.7.1.1.3 Configure the AD Logga disk space requirement

1000 events require approximately 0.57 MB of storage in the data base.

By default the storage period of AD Logga events is set to 30 days and can be managed under server -> [storage of scans](#).

9.7.1.1.4 Set the size of the Windows event log

To ensure that you don't "lose" any events, you must configure the maximum size for security event logs appropriately. For audit policy settings the storage requirements is roughly 1KB per event.

For example:

For a server outage or maintenance time (of the collector server selected for the AD Logga) of one hour, with approximately 1000 events per hour, the absolute minimum security event log size would be 1MB. Considering the low storage space requirements for 1000 events, the uncertainty of outage times as well as the potential relevance of individual security events we highly recommend that you ensure that enough storage space is available.

More information on how to manage storage size can be found at [Microsoft](#).

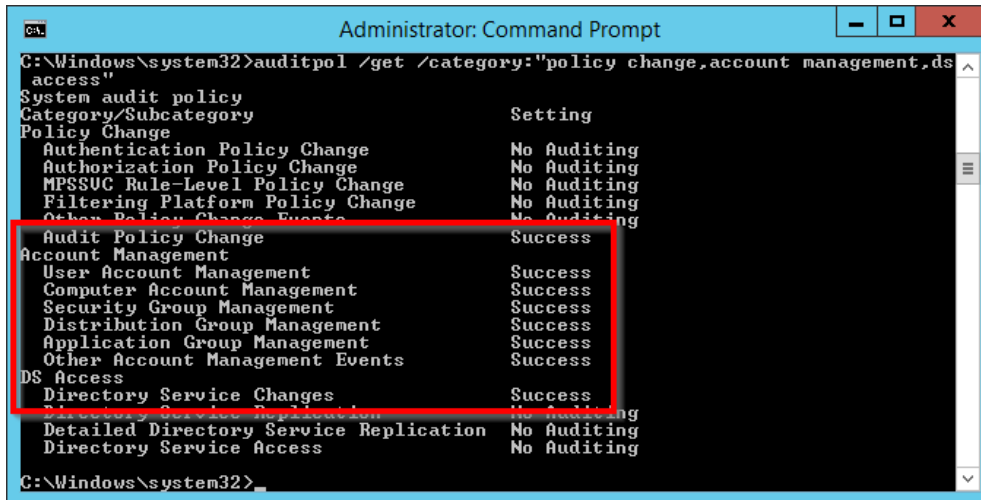
9.7.1.1.5 Verify the audit policy settings

You can verify the effectiveness of audit policies by starting the command prompt with admin rights and entering the following command:

```
auditpol /get /category:"policy change,account management,ds access"
```

or

```
auditpol /get /category:*
```



```
Administrator: Command Prompt
C:\Windows\system32>auditpol /get /category:"policy change,account management,ds
access"
System audit policy
Category/Subcategory                                Setting
Policy Change
Authentication Policy Change                        No Auditing
Authorization Policy Change                         No Auditing
MPSSVC Rule-Level Policy Change                     No Auditing
Filtering Platform Policy Change                    No Auditing
Other Policy Change Events                          No Auditing
Audit Policy Change                                 Success
Account Management
User Account Management                             Success
Computer Account Management                         Success
Security Group Management                           Success
Distribution Group Management                       Success
Application Group Management                         Success
Other Account Management Events                     Success
DS Access
Directory Service Changes                           Success
Directory Service Replication                       No Auditing
Detailed Directory Service Replication               No Auditing
Directory Service Access                             No Auditing
C:\Windows\system32>
```

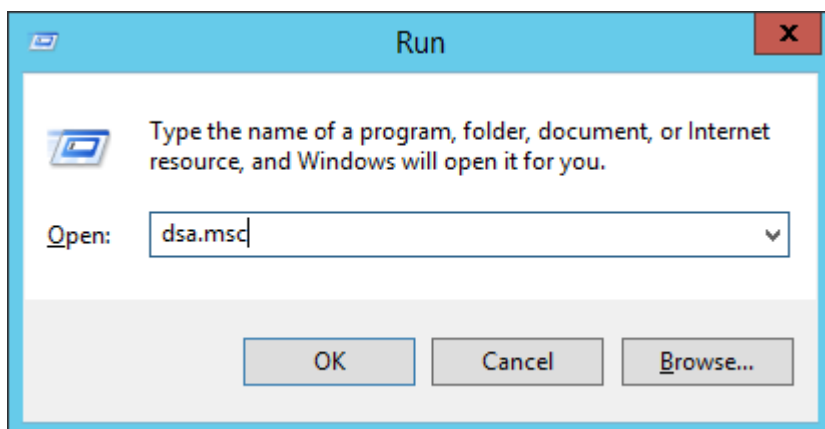
The marked subcategories must be set to "Success".

9.7.1.2 Set audit permissions in the AD object SACLs

After activating the audit policies you must set the audit permissions for AD objects (SACL) accordingly.

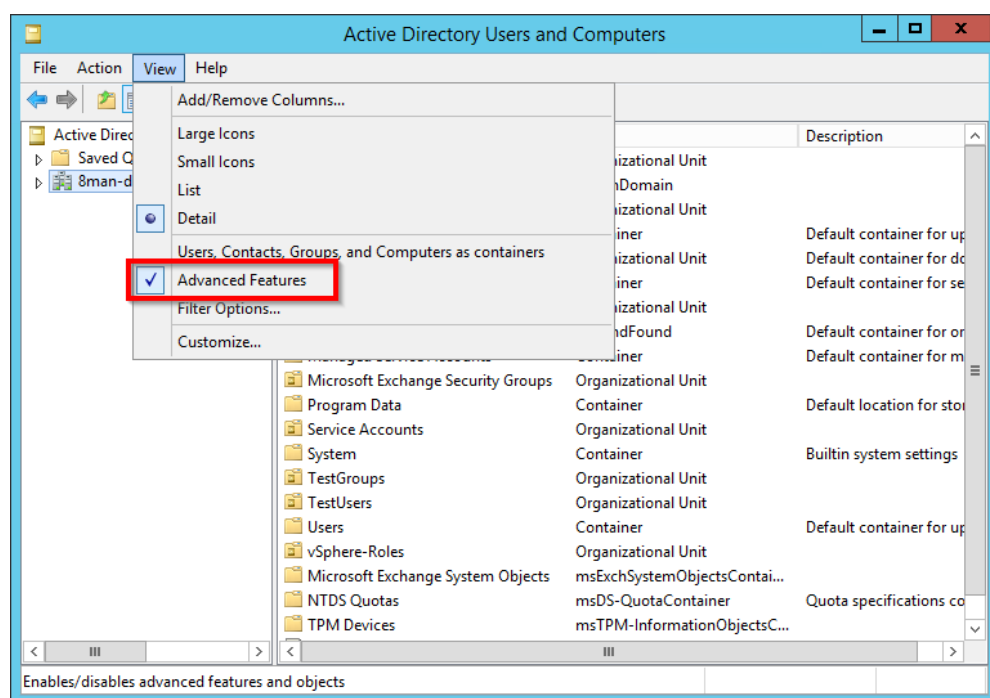
The user right "Manage auditing and security log" is required for the configuration of the SACL (this corresponds to the privilege "SeSecurityPrivilege"). You must be a member of the "event log reader" or domain admin group.

The configuration of the SACL is only required for one of the domain controllers. All other DCs receive the configuration via replication.

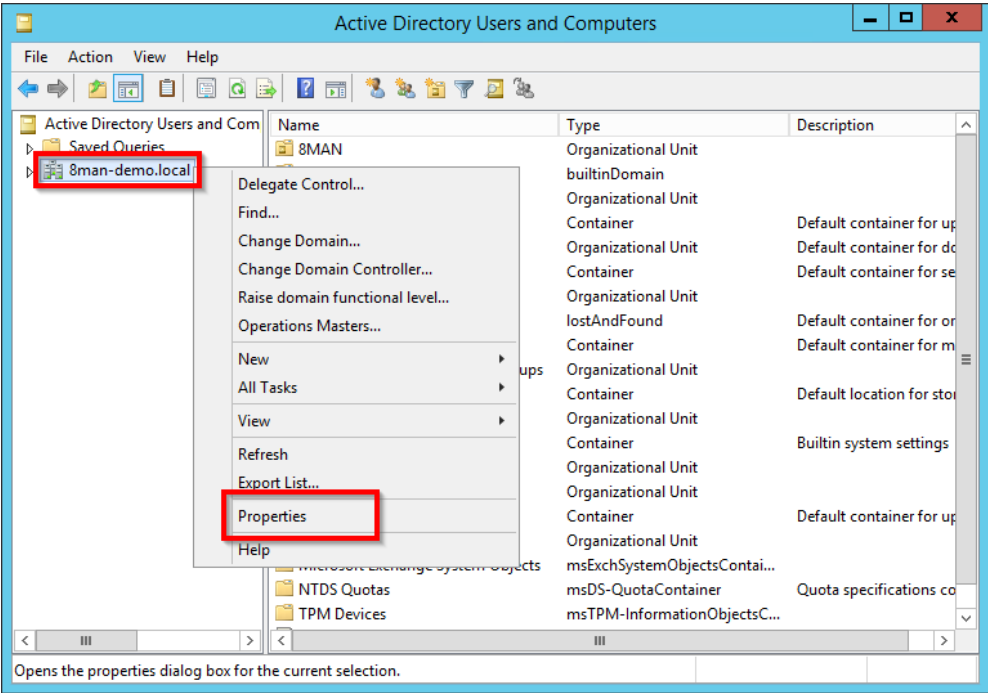


Start the management of Active Directory users and computers on a DC by opening

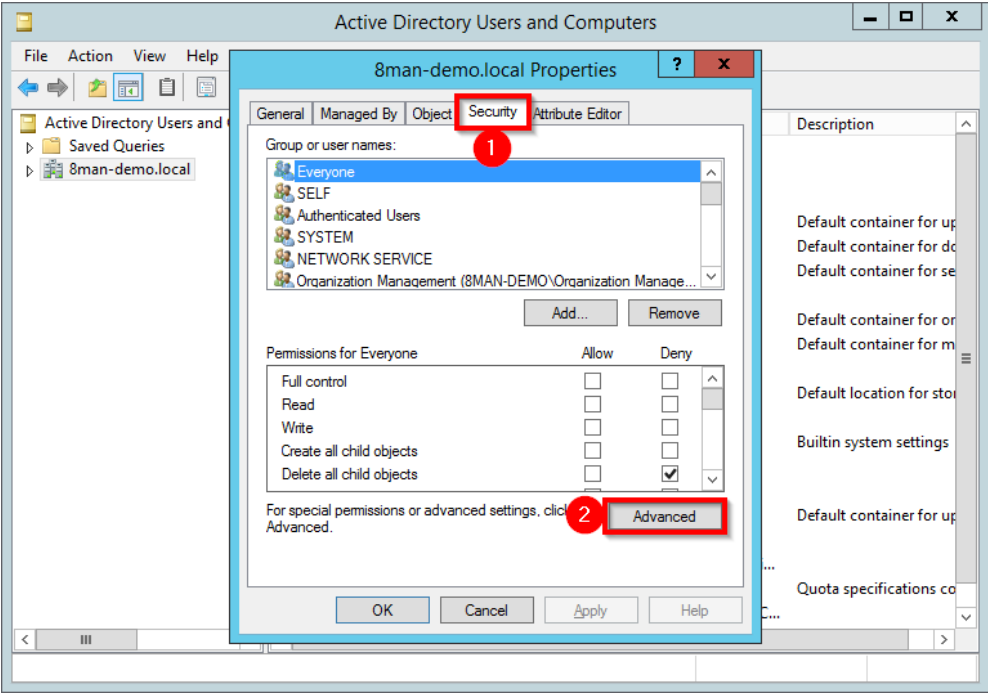
dsa.msc



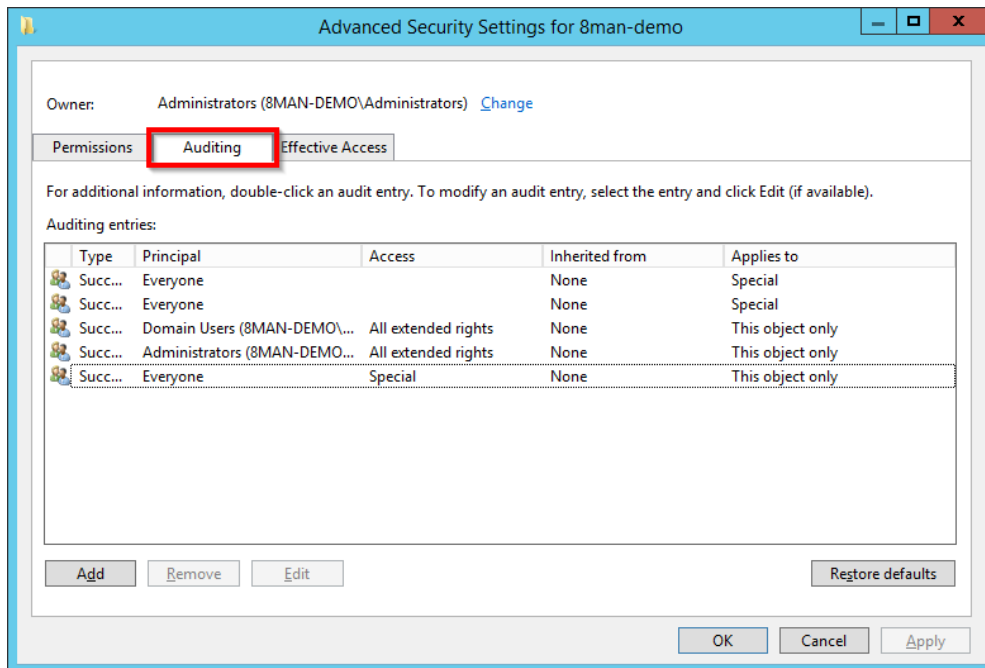
Activate the option "Advanced Features".



Select the domain that you want to monitor by right-clicking on it and selecting "Properties".



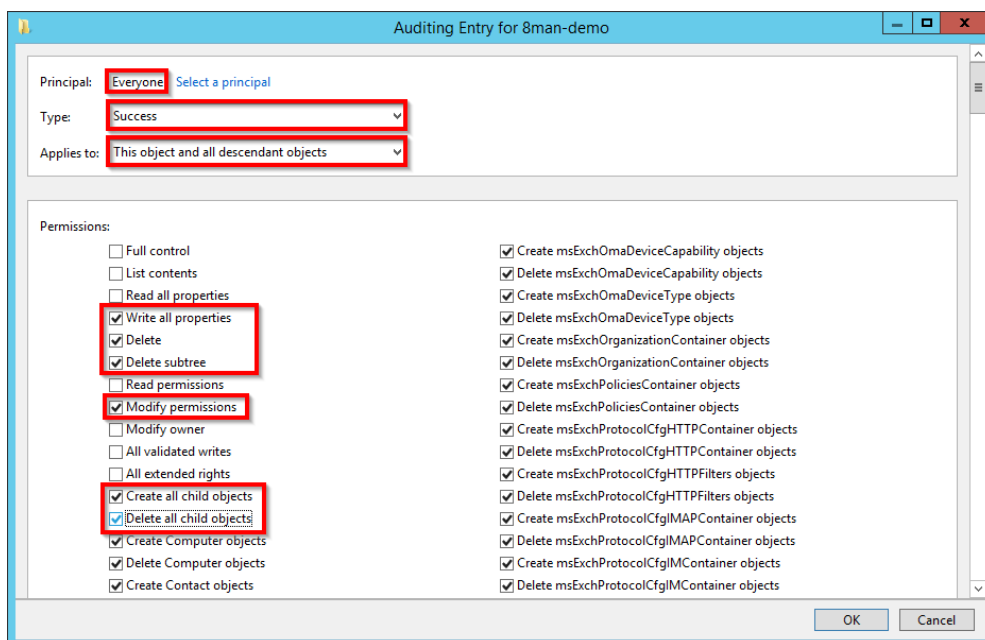
In the properties window, select the tab "Security" and then click on "Advanced".



Select the tab "Auditing".

Analyze the existing access rights. Perhaps the required permissions already exist.

If required, expand the access rights of an existing "Everyone" principal or add the desired entry.



At minimum, the following is required:

Principal: "Everyone"

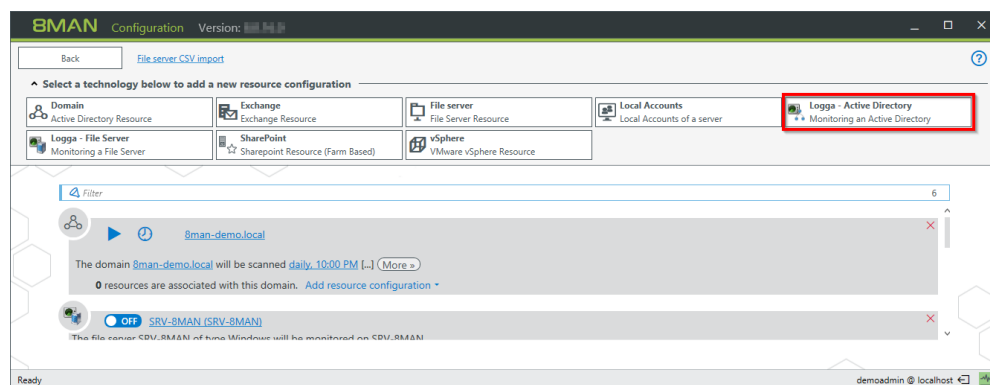
Type: "Successful"

Apply to: "This object and all descendant objects"

Permissions:

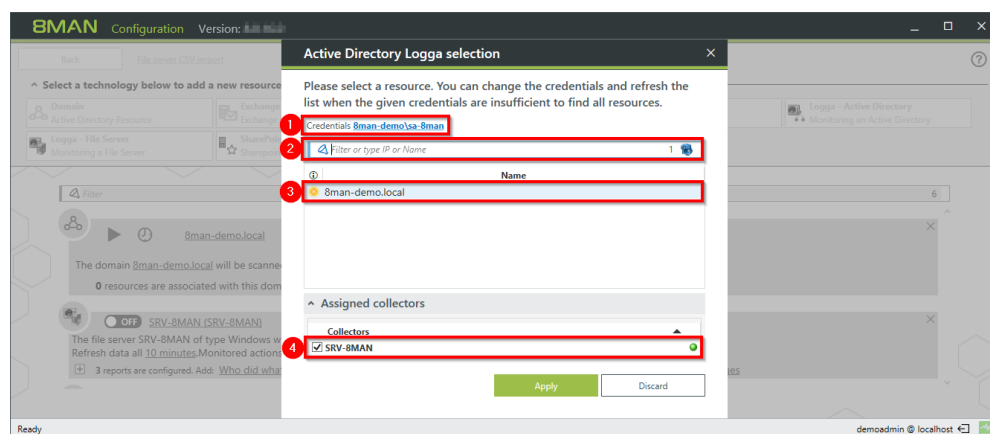
- Write all properties
- Delete
- Delete subtree
- Modify permissions
- Create all child objects
- Delete all child objects

9.7.2 Add an AD Logga configuration



On the configuration home page select "Scans".

Select "Logga - Active Directory".

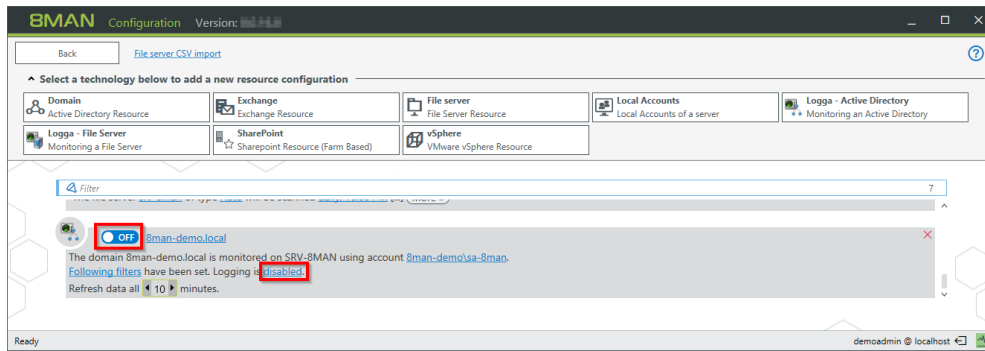


1. Enter valid credentials for the domain that you want to monitor.
2. Use the filters to find the desired domains.
3. Select a domain. Child domains are not monitored. Every domain must be configured separately.
4. Select a collector server. You can only select one collector per domain.

After adding an AD Logga configuration, it initially remains deactivated.

You must activate the AD Logga to record events.

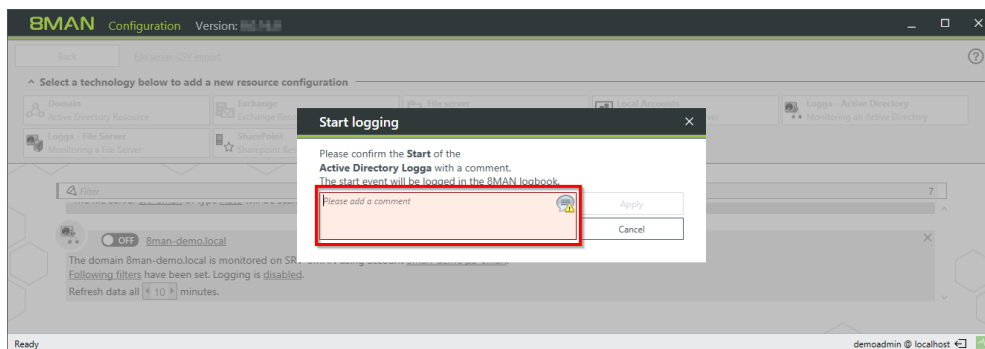
9.7.3 Activate/deactivate AD Logga



On the configuration home page select "Scans".

Click on the switch icon or link of the desired AD Logga configuration in order to activate it.

AD Logga events are stored by default for 30 days. See [Configure storage of scans settings](#).

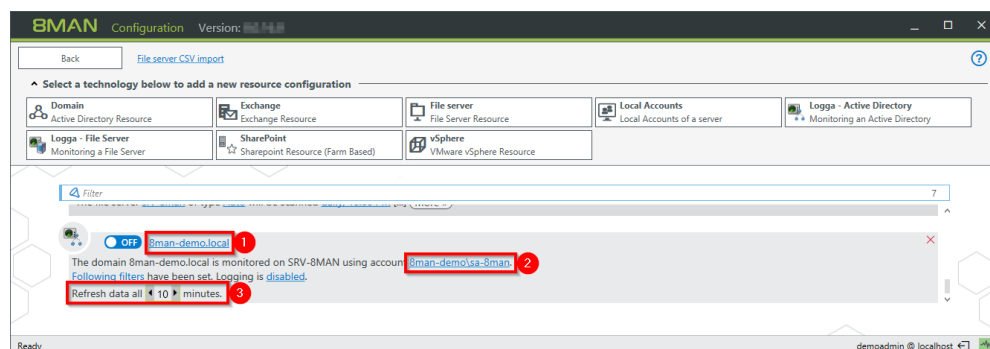


You must enter a comment.

Follow the same steps for deactivation.

9.7.4 Customize an AD Logga configuration

On the configuration home page select "Scans".



1. Give the configuration a different name.
2. Set the account used by AD Logga to read events from the domain controller.
The account must be a member of the group "event log readers" or "domain admins".
You can only change this setting when the Logga is turned off.
3. Determine how frequently Logga data is updated. Events are cached by the collector and transferred to the data base via the 8MAN server in configured intervals.
Standard setting: 10 minutes
Possible values: 1 to 60 minutes.

9.7.4.1 Filter AD Logga Events

You can filter out desired events in order to focus on specific and relevant entries. Filtering means that filtered events will not be displayed.

This allows you to significantly improve your overview and reduce data volume. A typical example are frequent attribute changes of the Exchange server.

You are only able to configure filters if at least one AD scan is stored in the database.

9.7.4.1.1 Understand the filter principles

The AD Logga filter is considered a blacklist filter. In this case, blacklist means: The AD Logga records all possible events. You can determine which results are excluded.

By default the filter is set to the object classes "Service-Connection-Point" and "Print-Queue".

The filter criteria work cumulatively. An event is excluded if criteria 1, or criteria 2, or criteria 3 is fulfilled, or multiple criteria simultaneously.

The filter criteria do not correlate to each other. The events are evaluated by the AD Logga consecutively based upon the entered criteria. If one of the criteria is fulfilled, the AD Logga immediately excludes the result independent of whether any other criteria have been evaluated.

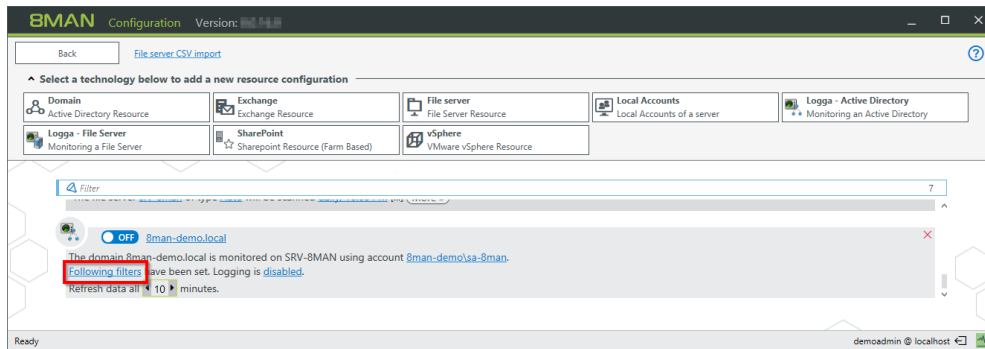
For example:

- If User A is configured as a filter, then all changes made by him will be excluded, even if the object classes or attributes that he made changes to are not configured as a filter. Changes that affect User A are still included.
- If object class X is configured as a filter, then all events, that include this object class explicitly will be excluded, even if the event author or changed attribute is not configured as a filter. This also applies to attribute filters.

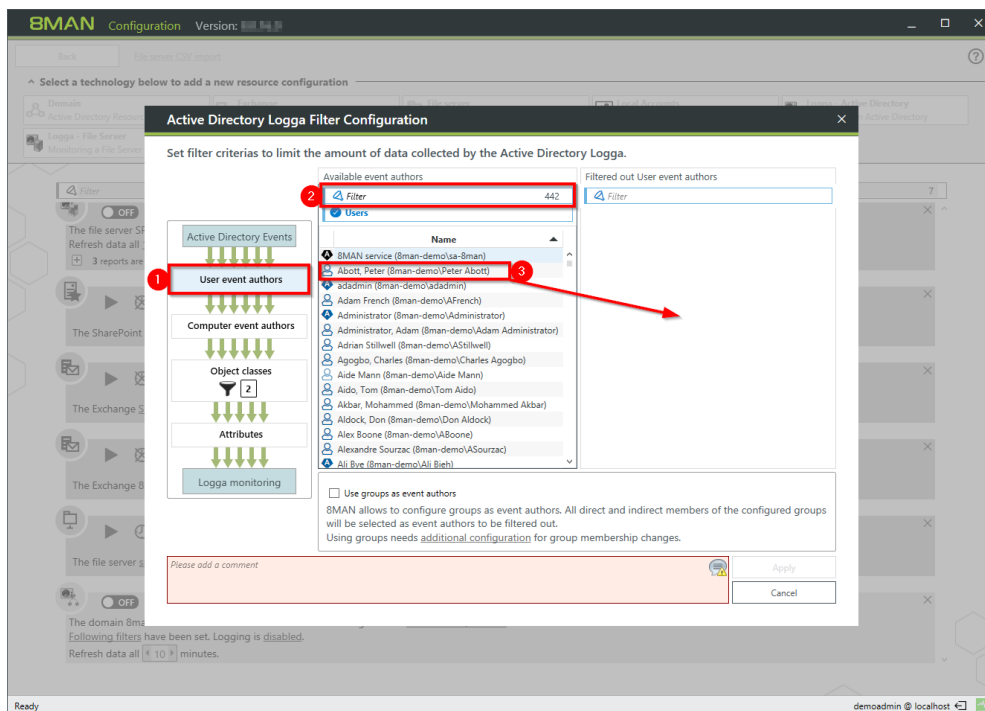
Please note:

Not all security logs include affected object classes or attributes. For example changes to group memberships will not be excluded, even if the object classes "User" and "Group" and the attribute "Member" are configured as filters.

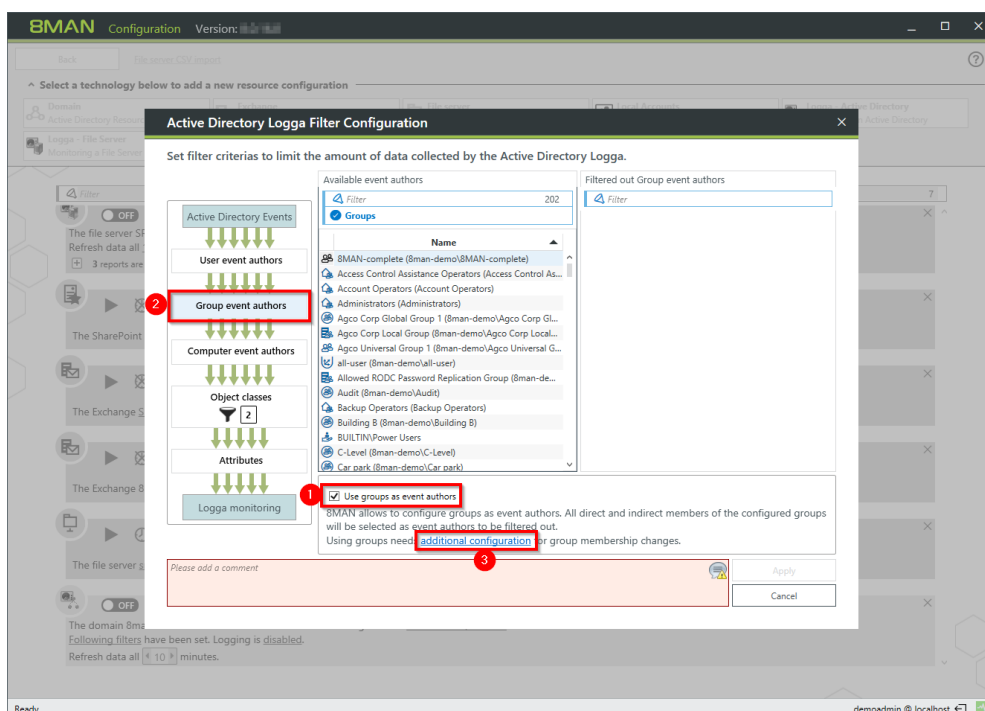
9.7.4.1.2 Configure the event filters



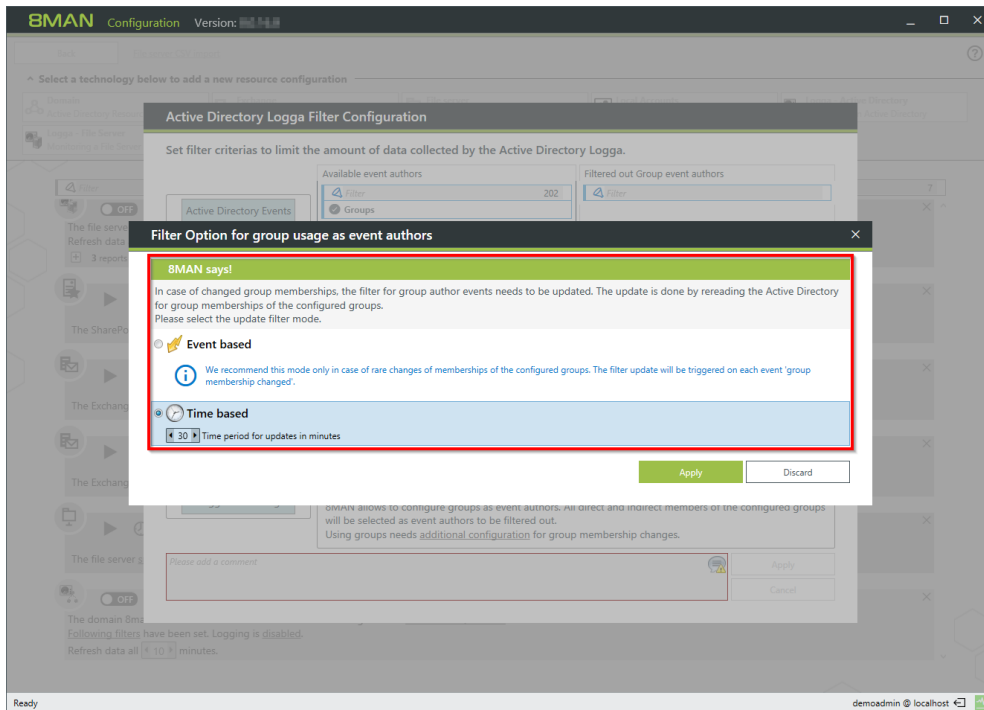
Click on the link "Following filters".



1. Filter events related to specific users.
2. Use the filter to find the desired user. You can search for either display name or CommonName.
3. Select the desired user and move him with drag&drop into the right hand column.



1. You can filter groups as event authors. Activate the option.
2. The filter level is shown. By moving groups into the right hand column with drag & drop, all events of users who are direct or indirect members of that group are filtered and excluded.
3. Click on "additional configuration".



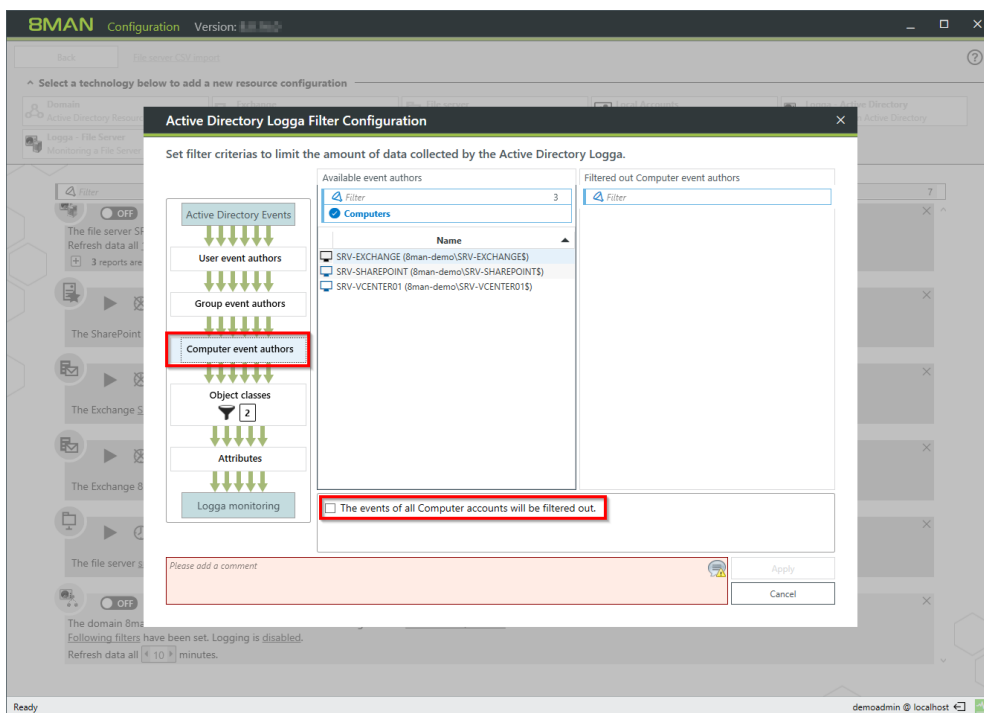
Determine which mode is used by the filter to update group memberships.

Please note the information in the displayed dialog.

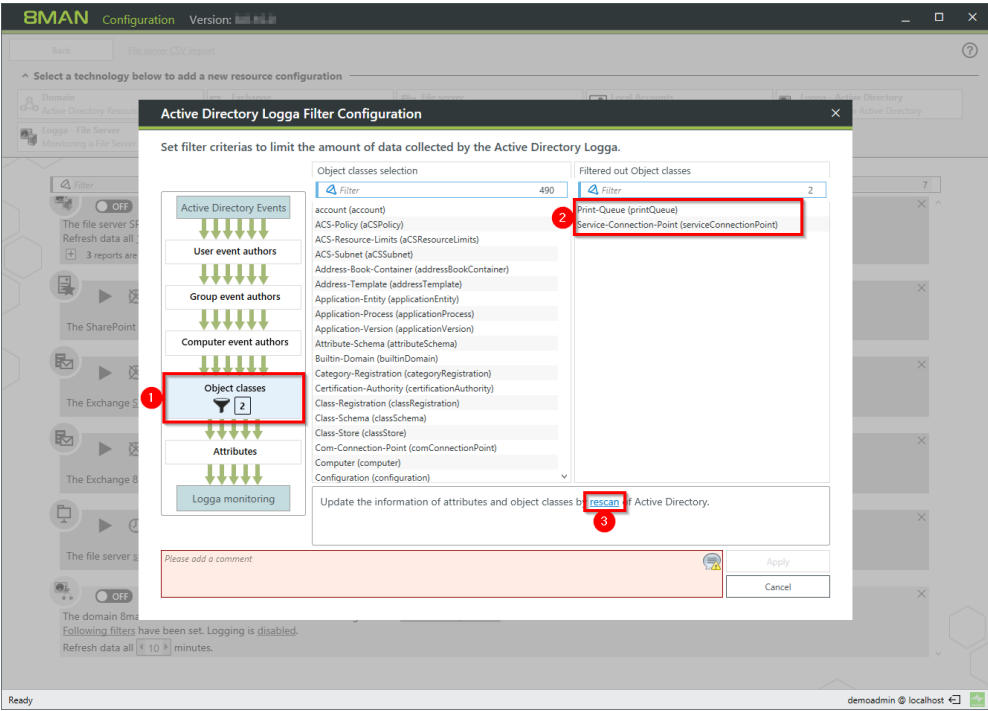
Only use "event-based" if memberships in the filtered groups change rarely.

The update interval for the "time-based" option can be set anywhere between 10 and 1440 min (24h).

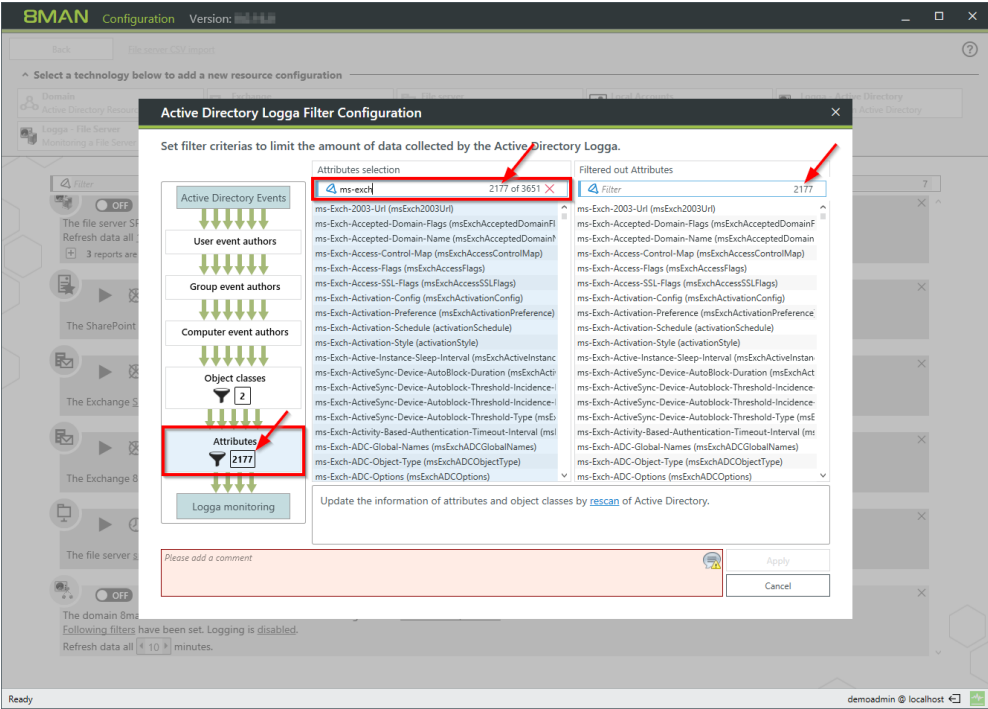
The shorter the interval, the higher the load on your AD.



Filter events for selected or all computer accounts.

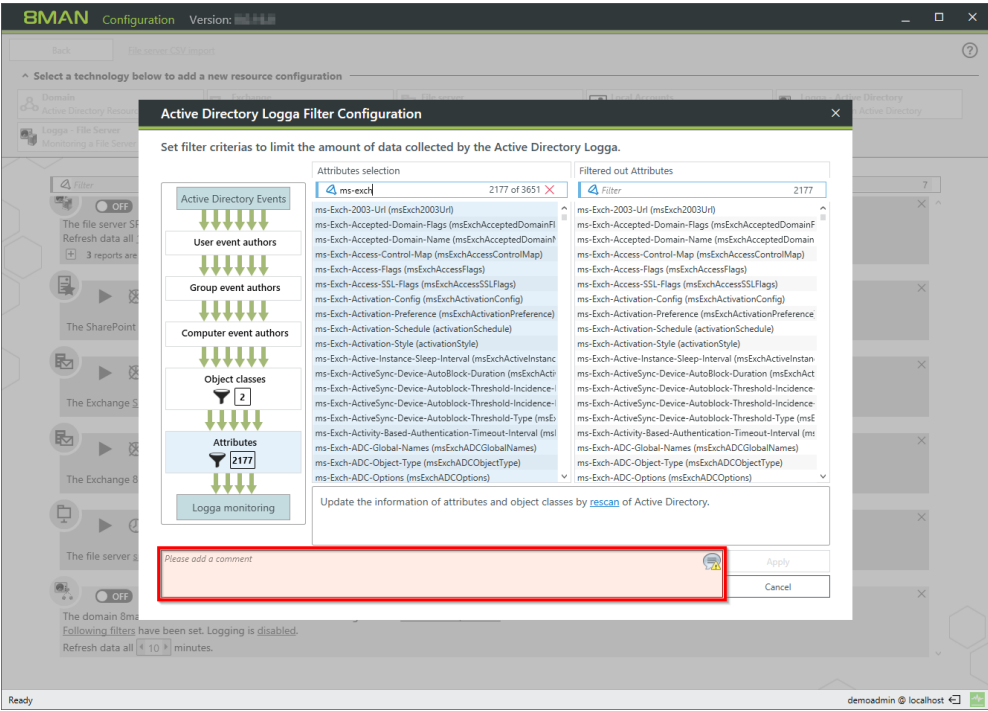


1. Filter the events of specific object classes.
2. By default events relating to the two selected object classes will be filtered.
3. The initial loading (and a rescan) of object classes from AD may take some time. After that the object classes will be loaded from the data base.



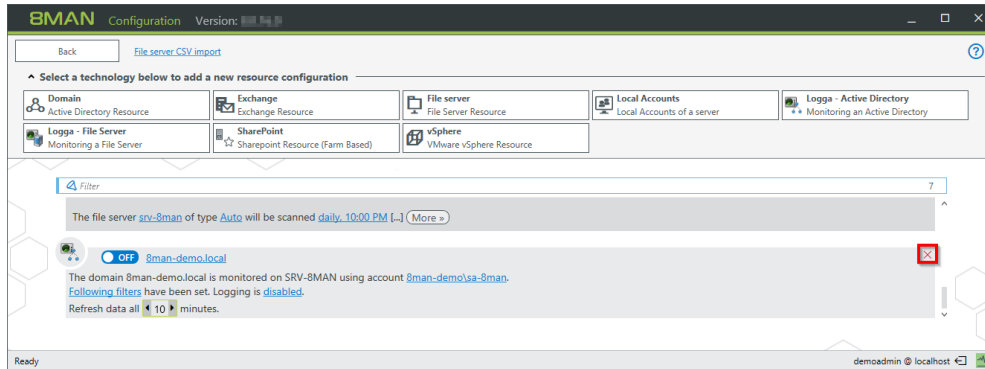
Filter events related to specific attributes.

For example:
All events related to attributes that include "ms-exch" are filtered out / excluded.



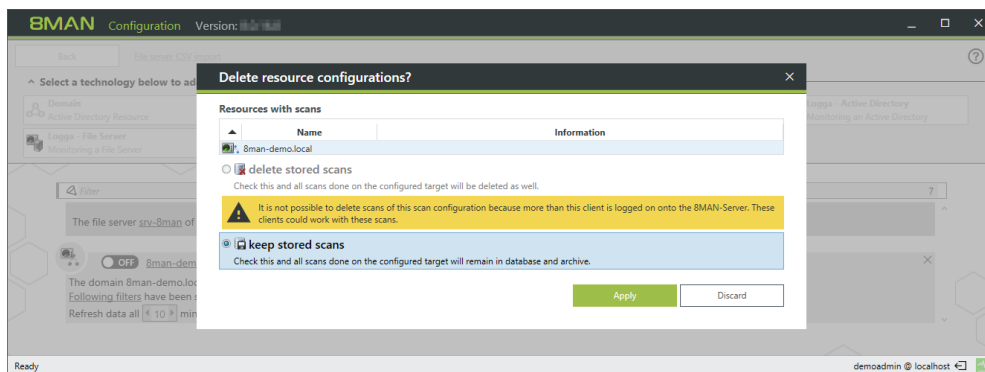
You must enter a comment to apply any changes made to filter settings.

9.7.5 Delete an AD Logga configuration



On the configuration home page select "Scans".

Select the desired AD Logga configuration. Click on the red "X".



You can decide if you would like to keep or delete the available Logga data.

Deleting is only possible if all user interfaces are closed.

You can identify logged in users in the server status menu.

9.8 Configure the File Server (FS) Logga

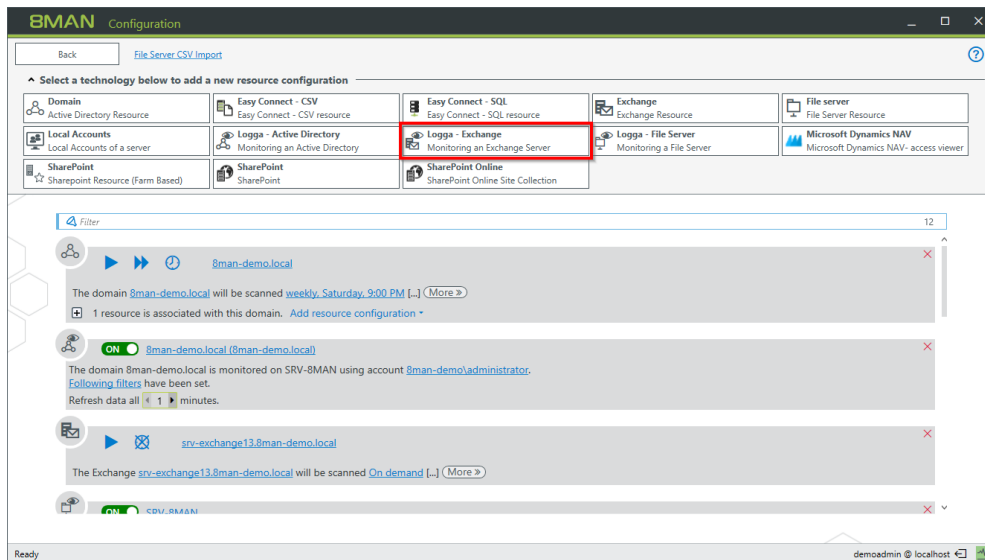
All information for the configuration of FS Logga can be found in the 8MATE FS Logga manual.

The FS Logga manual is available for [download in PDF-format](#).

The configuration of the file server alerts is described in the user manual.

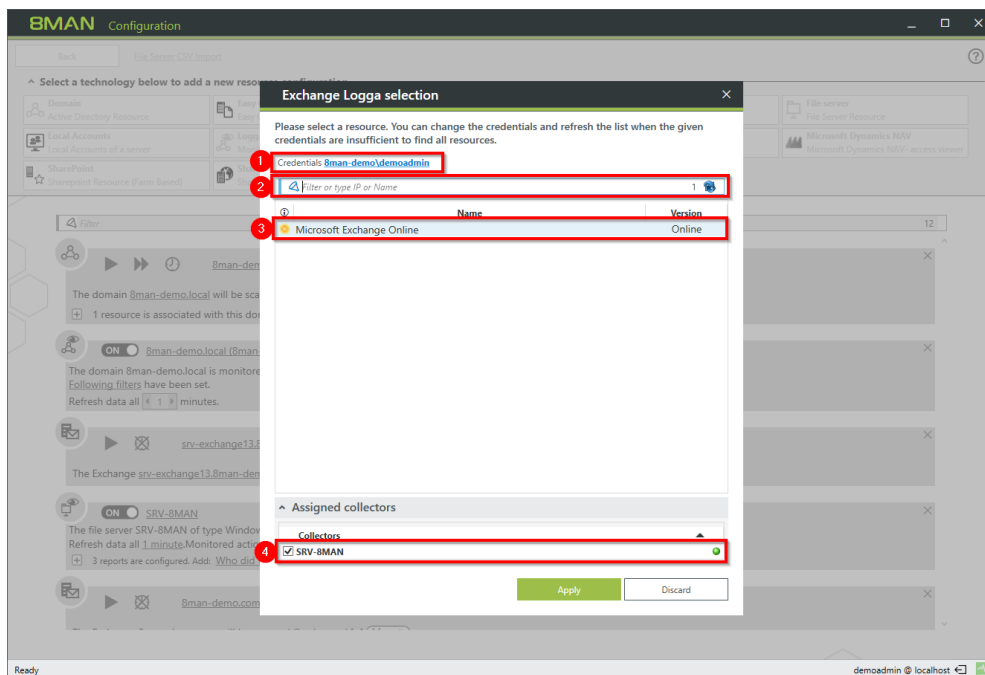
9.9 Configure Exchange Logga

9.9.1 Add an Exchange Logga configuration



On the start page of the configuration, select "Scans".

Select "Logga - Exchange".

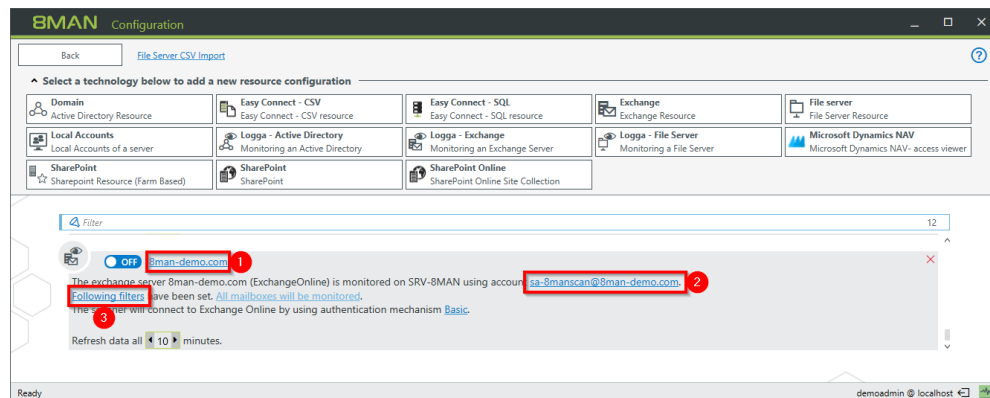


1. Specify valid credentials for the Exchange to be monitored. See also: [required permissions](#)
2. Optional: Use the filter to find the desired server.
3. Select a server.
4. Choose a collector server. You can only select one collector per Exchange.

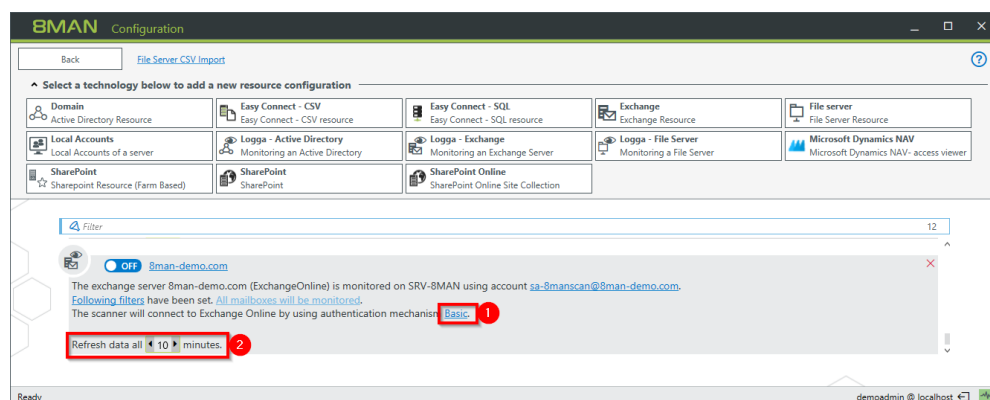
If you have added an Exchange Logga configuration, the Logga is initially disabled.

You must [enable the Exchange Logga](#) to record events.

9.9.2 Customize an Exchange Logga configuration

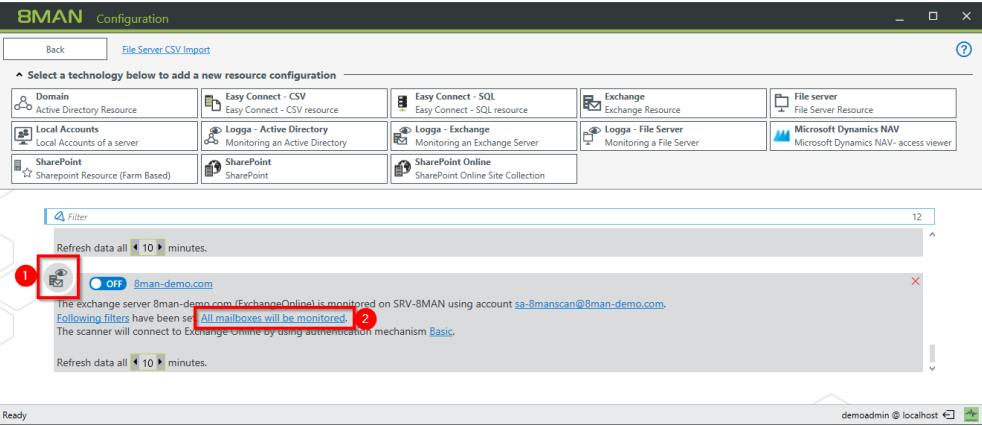


1. Change the name of the configuration.
2. Change the credentials used by the Exchange Logga to read the events from the Exchange Server. See also: [required permissions](#).
3. Optional: [Put filters](#).

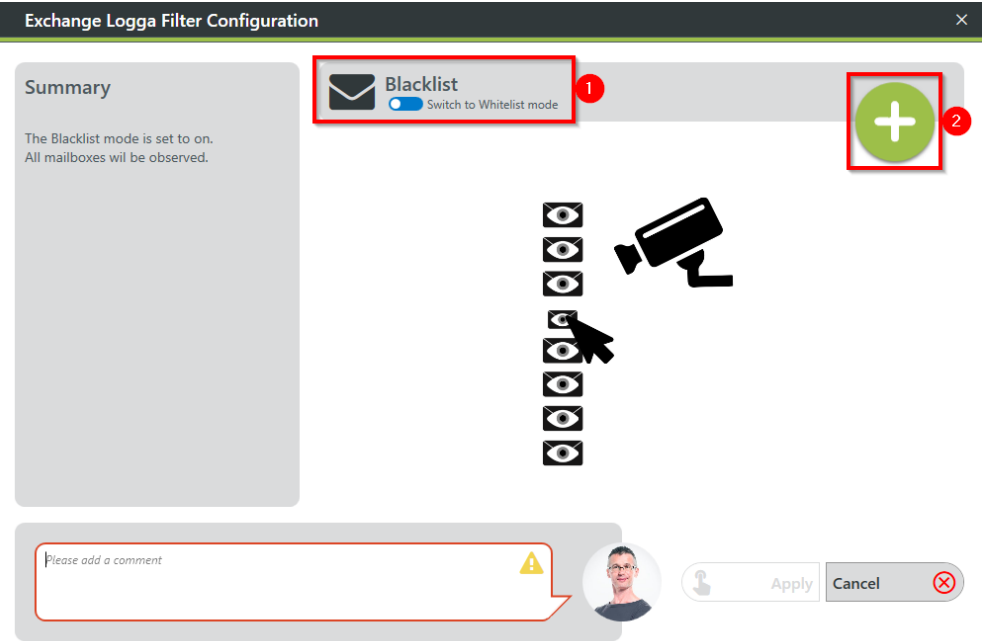


1. Choose the authentication method that must match the [PowerShell website](#) configuration.
2. Set the interval for the data refresh. The events are collected by the collector and passed to the 8MAN server in the defined interval. Default value (recommended): 10 minutes.

9.9.3 Select the mailboxes to be monitored



- 1. The symbol indicates an Exchange Logga configuration.
- 2. Click on the link. By default, all mailboxes are monitored.



- 1. First select a mode.
- Blacklist**
By default all mailboxes will be monitored, including those added in the future. You specify which mailboxes are excluded from monitoring.

Whitelist
You explicitly specify which mailboxes are monitored.
- 2. Click on the plus to add entries.

Exchange Logga Filter Configuration

PLEASE SELECT THE DESIRED MAILBOXES

Filter 5

	Name
<input type="checkbox"/>	Delmar Atkins
<input checked="" type="checkbox"/>	Dexter Ward
<input type="checkbox"/>	IntegrationTestUser
<input type="checkbox"/>	IntegrationTestUser2
<input type="checkbox"/>	Gerd ExLoggaTest

1

2

3

+

Add

Cancel

1. Use the search to find desired mailboxes.
2. Select the desired mailboxes.
3. Click "Add".

Exchange Logga Filter Configuration

Summary

The Blacklist mode is set to on.
1 mailboxes will be excluded by the Exchange Logga.

Blacklist ☒ Switch to Whitelist mode

Filter 1

Name

+ Dexter Ward

1

2

Please add a comment

3

Apply

Cancel

1. Klicken Sie auf das "X", um Einträge zu entfernen.
2. Sie müssen einen Kommentar eingeben.
3. Klicken Sie auf "Anwenden", um Ihre Konfiguration zu speichern.

9.9.4 Filter the Exchange Logga events

Filter out uninteresting events to record only relevant entries. Filtering here means that filtered out events are not recorded.

This significantly increases the overview and reduces data volumes.

9.9.4.1 Understand the filter principles

The Exchange Logga Filter is designed as a blacklist filter. Blacklist means here: The Exchange Logga records to the maximum extent. You determine which events are not recorded (discarded).

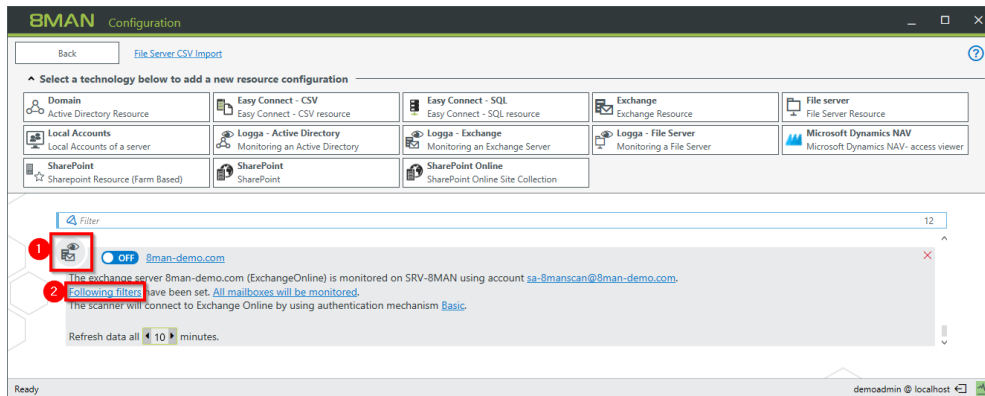
The filter criteria work additively. An event is rejected if criterion 1 or criterion 2 or criterion 3 applies, or several criteria simultaneously.

The filter criteria are not correlated with each other. The events are evaluated by the Exchange Logga one after the other according to the criteria. In the case of a hit, the event is immediately rejected and no longer checked, regardless of whether another criterion has already been evaluated or not.

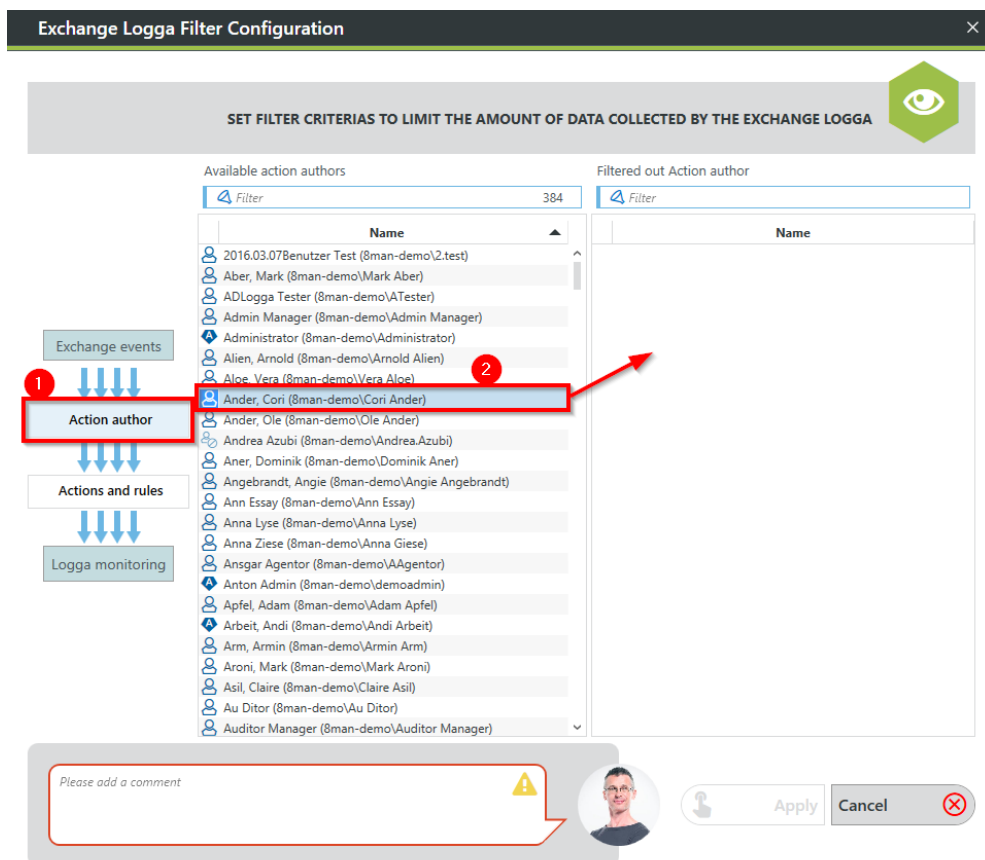
Example:

If user A is configured as an "action author" filter, all changes made by him in Exchange will be discarded, even if the actions or roles he has performed are not configured as a filter.

9.9.4.2 Configure the event filters



1. The symbol indicates an Exchange Logga configuration.
2. Click on the link.



1. Filter events from users.
2. Select one or more users and drag them to the right column. Events triggered by these users are not recorded (blacklist).

Exchange Logga Filter Configuration

SET FILTER CRITERIAS TO LIMIT THE AMOUNT OF DATA COLLECTED BY THE EXCHANGE LOGGA

Exchange events

Action author

Actions and rules

Logga monitoring

	Administrator	Delegate	Owner	
Copy				
Create				
FolderBind				
HardDelete				
MessageBind				
Move				
MoveToDeletedItems				
SendAs				
SendOnBehalf				
SoftDelete				
Update				

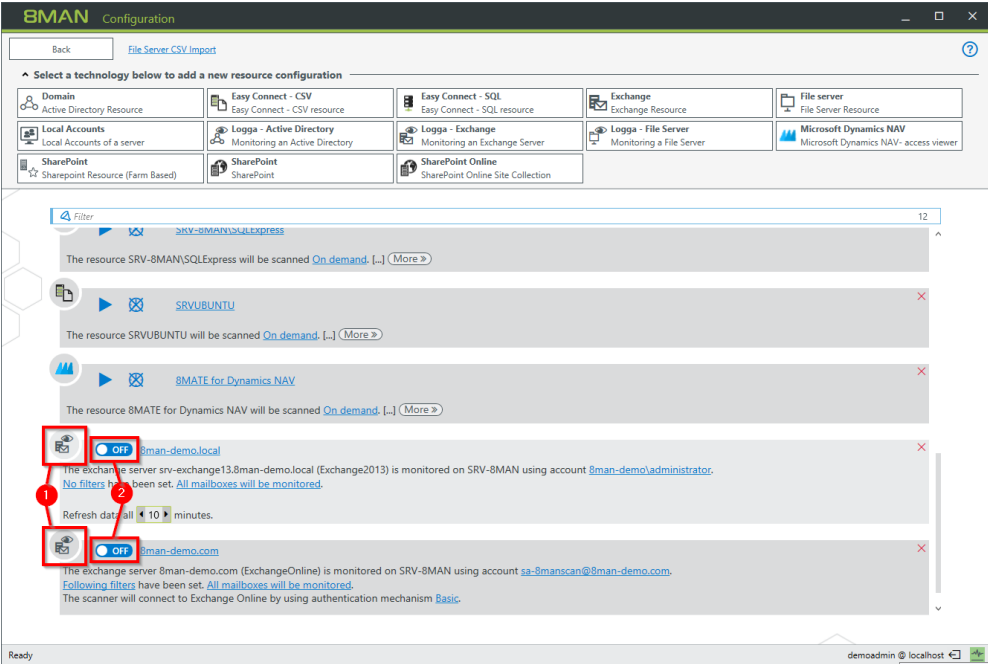
Please add a comment

Apply

Cancel

- 1. Filter events based on specific login types or actions.
- 2. Actions (lines) of login types (columns) with an eye icon are recorded.
- 3. You must enter a comment to save changes to the filter settings.

9.9.5 Enable/disable the Exchange Logga



On the start page of the configuration, select "Scans".

- 1. The symbol indicates an Exchange Logga configuration.
- 2. In the desired Exchange Logga configuration, click the switch to enable the Exchange Logga.

AD Logga events are stored by default for 30 days. See [Configure storage of scans settings](#).



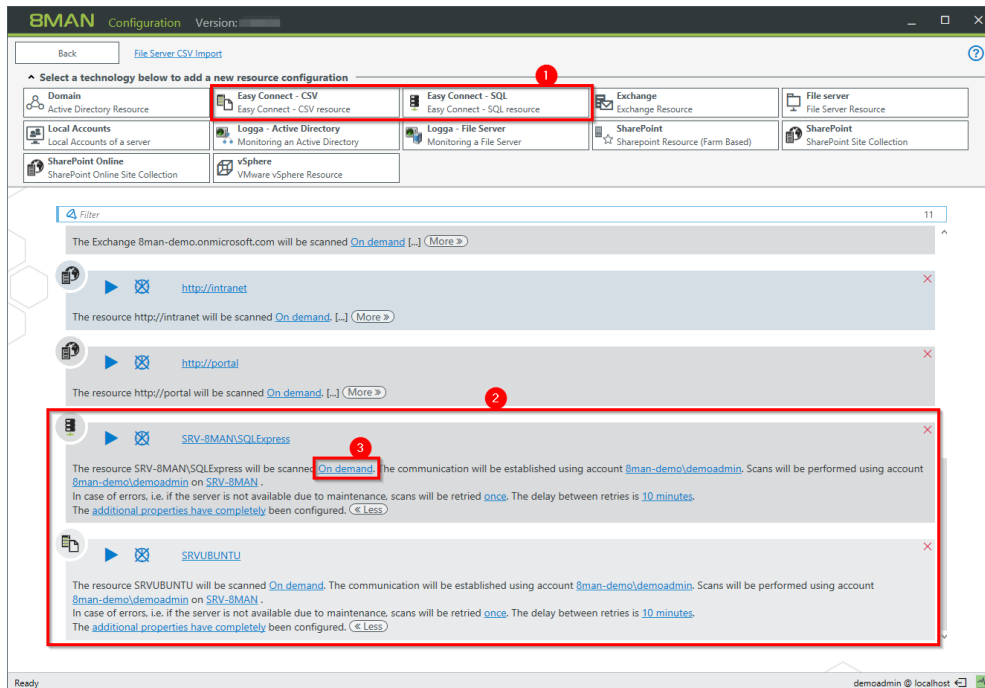
You must enter a comment.

Please confirm the Start of the Exchange Logga with a comment.
The start event will be logged in the 8MAN logbook.

Proceed in the same way for deactivation.

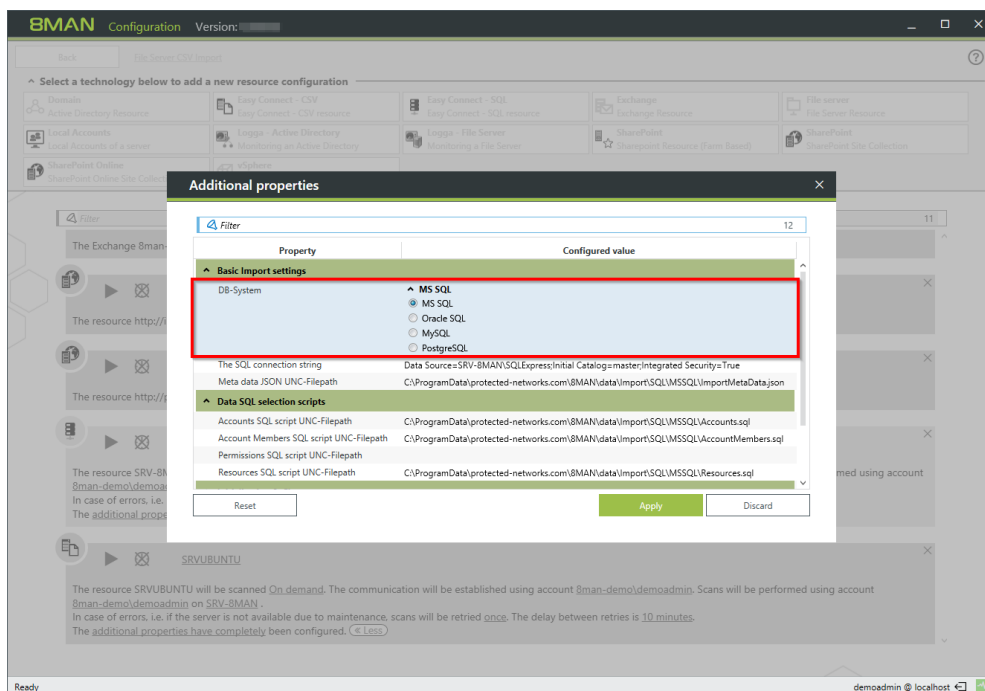


9.10 Integrate Easy Connect ressources



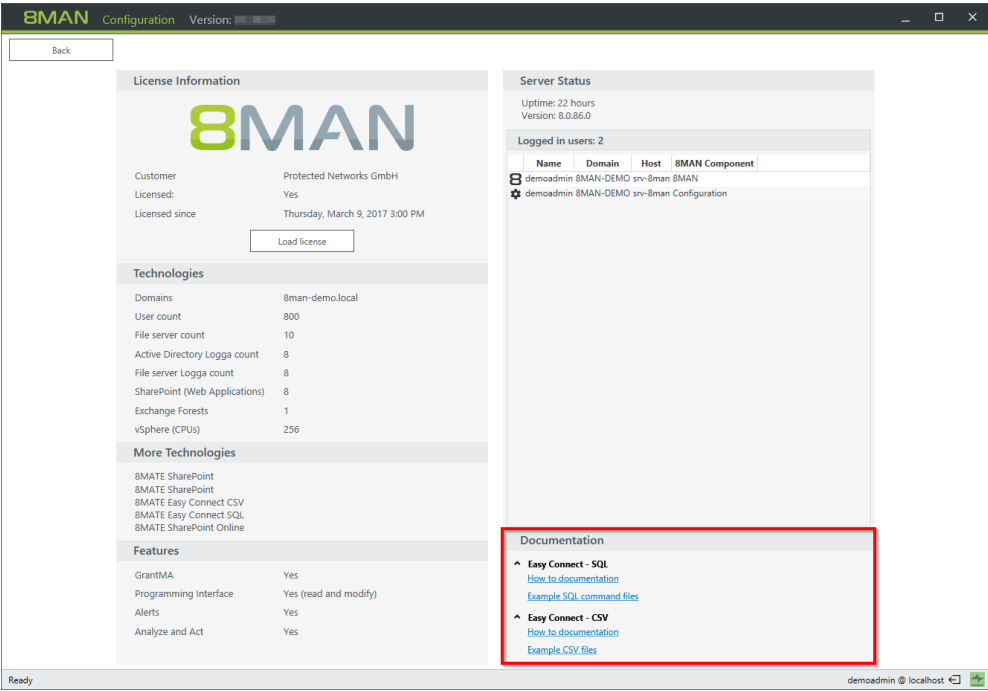
Click "Scans" on the 8MAN configuration module homepage.

1. Add an Easy Connect resource.
2. The configuration is seamlessly integrated.
3. Configure a regularly import.



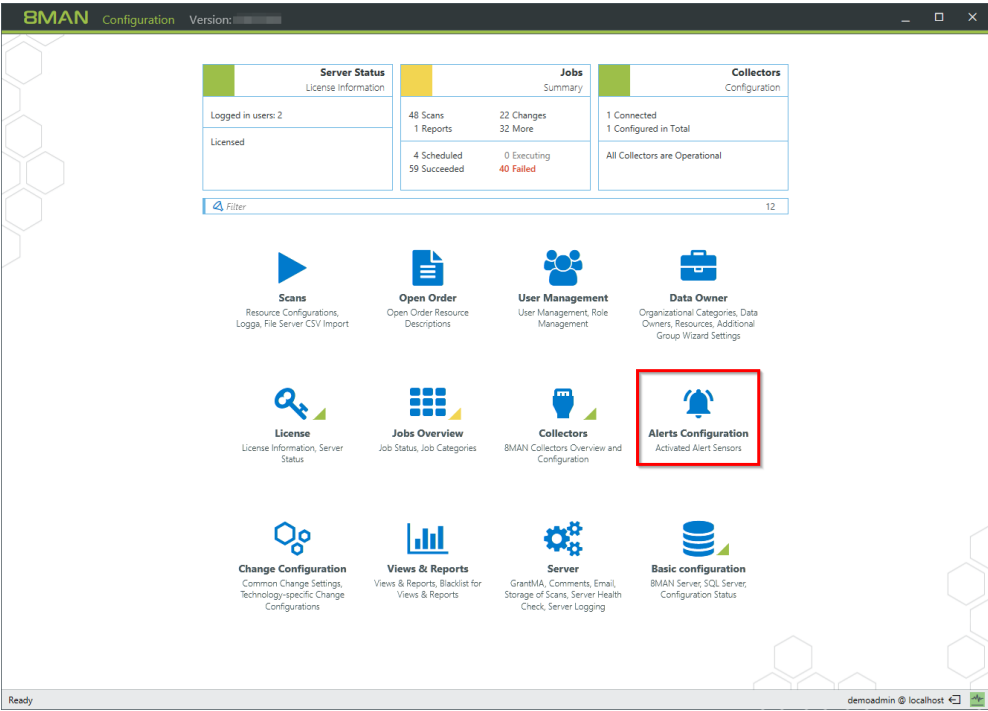
8MAN supports the following SQL-server:

- Microsoft SQL
- Oracle SQL
- MySQL
- PostgreSQL



Find a detailed documentation on required CSV-file structure and example files under "License" in the configuration module.

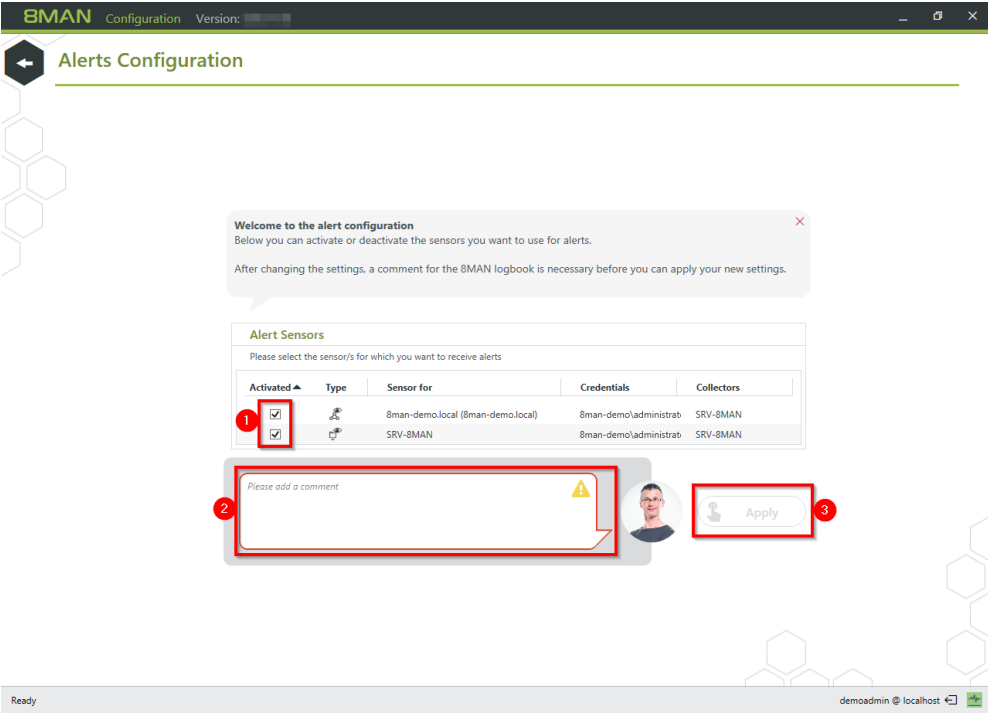
10 Alerts



In the "Alerts" category, activate and deactivate the alert sensors. With active alert sensors, you can create alerts for groups or user accounts. Manage alerts in the 8MAN user interface.

You need a [license](#) for the 8MATE AD Logga or FS Logga.

10.1 Enable/disable alert sensors



1. Enable/disable alert sensors.
 2. You must enter a comment.
 3. Apply the settings.
- Only with active alarm sensors are the alarm configurations effective.

10.2 Manage alerts

Background / Value

Adapt alerts to changing conditions or delete unnecessary alert configurations.

Additional Services

Enable alerts for file server directories

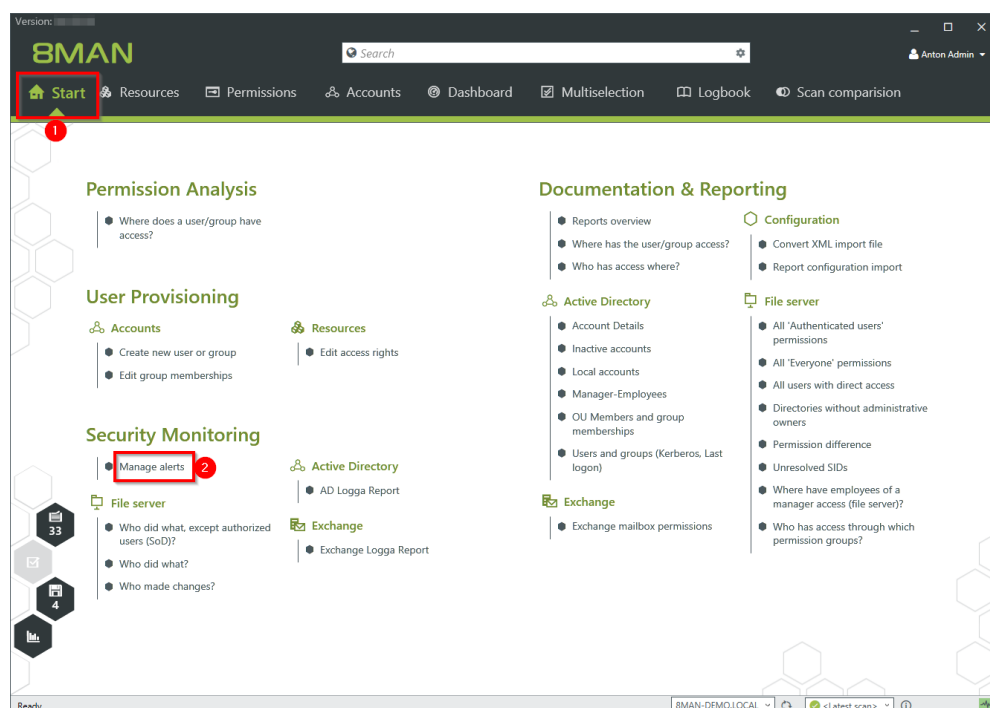
Enable alerts for suspected data theft (file server)

Enable alerts for data deletion (file server)

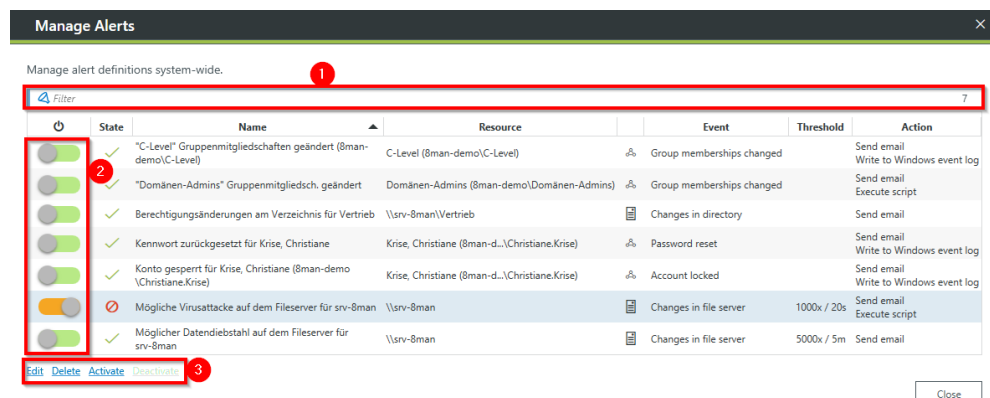
Enable alerts for suspected cases on ransomware (file server)

Run a script after an alert

Step by step process



1. Select "Start".
2. Click "Manage alerts".

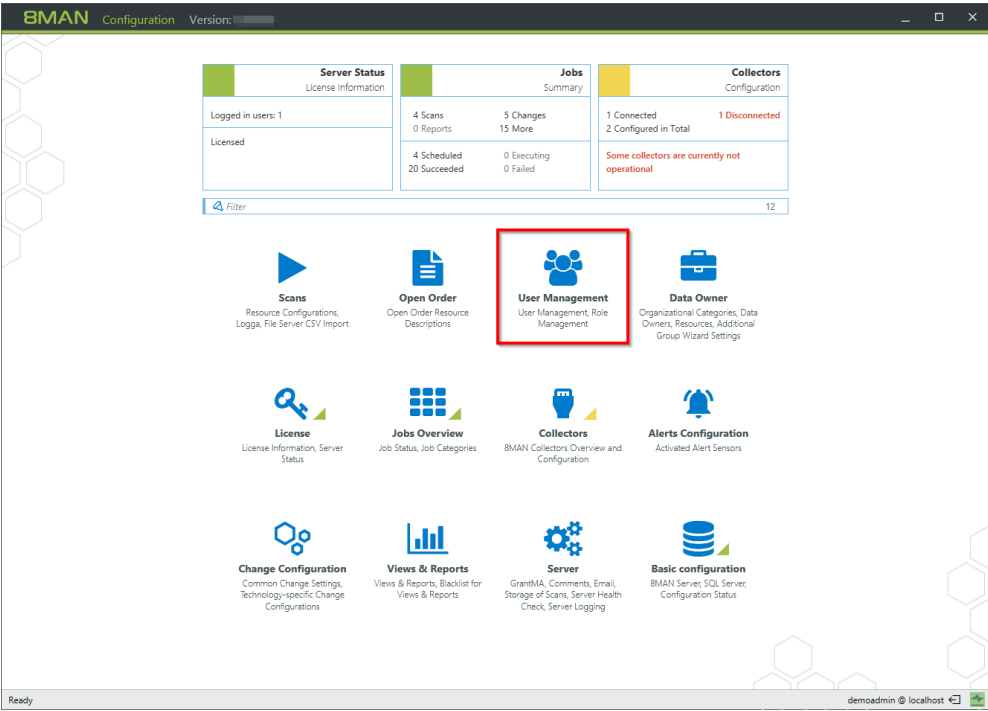


8MAN shows you all alert configurations.

Double click on an entry to adjust an alert configuration.

Search for an alert configuration.
Turn alerts on or off.
Delete the selected alert configuration.

11 Manage 8MAN users



Click "User Management" to create 8MAN-Users and assign roles.

11.1 Add 8MAN users

8MAN Configuration Version: [version]

Users and Role Management [Switch to Role Management](#)

User Management

Available accounts
Credentials for searching 8man-demo\demoadmin

Q domain2\another.user X

Users Groups

List of accounts which can use 8MAN

Name	Role
Arbeits, Andi (8MAN-DEMO\Arbeits, Andi)	Administrator
Krise, Christiane (8MAN-DEMO\Krise, Christiane)	Administrator
Administrator (PN\Administrator)	Administrator
Anton Admin (8man-demo\Anton Admin)	Administrator
Admin Manager (8man-demo\Admin Manager)	Administrator
neadmin (8MAN-DEMO\neadmin)	Administrator
cradmin (8MAN-DEMO\cradmin)	Administrator
Sam Sales (8MAN-DEMO\Sam Sales)	Data Owner
Bill Anz (8MAN-DEMO\Bill Anz)	Data Owner
Dirk DataOwner (8man-demo\Dirk DataOwner)	Data Owner
Orak, Ann (8man-demo\Ann Orak)	Data Owner
Rohsoft, Maik (8man-demo\Maik Rohsoft)	Data Owner
Fall, Klara (8MAN-DEMO\Klara Fall)	Data Owner
Mel Odie (8MAN-DEMO\Mel Odie)	Data Owner
Gitta Rensolo (8MAN-DEMO\Gitta Rensolo)	Data Owner
C-Level (8MAN-DEMO\C-Level)	Data Owner
Angebrandt, Angie (8man-demo\Angebrandt, Angie)	Data Owner
Erkan Alles (8man-demo\Erkan Alles)	Data Owner
Elios, Mark (8MAN-DEMO\Elios, Mark)	Data Owner

8MAN says!

How does the 8MAN User Management work?

The 8MAN User Management allows you to configure, which accounts shall be able to log into 8MAN and which features of 8MAN they shall be able to use.

After activating the User Management you can search for users and groups - just not built-in groups - on the left. The search happens directly on your Active Directory. By dragging an entry to the right side or double clicking it you grant that user or group access to the 8MAN.

Newly created 8MAN users can do read by default (All Others). On the right you are able to configure what a user can do: either just look at data and create reports, or additionally change or even administrate 8MAN. You can also deactivate or delete users from the Access List. You are not able to cut your own rights.

Users will also be added to the 8MAN users list or activated when they log into the 8MAN while the User Management is disabled (default behavior).

Users will not yet be able to access 8MAN when only their primary group has access.

In a multi domain environment you might want to change the credentials used for the search by selecting it in the selection above.

Use the link to switch between user and role management (arrow).

8MAN triggers a live request from your AD when adding an 8MAN User. It is therefore not required to perform an AD scan prior to adding a user.

Available search options:

- If no domain is entered into the search field, 8MAN scans the domain that the registered account is located in.
- If a domain is entered (for example: "domain2\another.user"), then 8MAN will search that domain.
- If a "\" is entered in front of the user name then 8MAN will search all licensed domains.



When designating a user with change role - such as a data owner - that user initially has access to all resources. If you want to limit their access further you must do this via the [Data Owner configuration](#).

8MAN Configuration Version: [version]

Users and Role Management [Switch to Role Management](#)

User Management

Available accounts
Credentials for searching 8man-demo\demoadmin

Q ricky X

Users Groups

List of accounts which can use 8MAN

Name	Role
Arbeits, Andi (8MAN-DEMO\Arbeits, Andi)	Administrator
Krise, Christiane (8MAN-DEMO\Krise, Christiane)	Administrator
Administrator (PN\Administrator)	Administrator
Anton Admin (8man-demo\Anton Admin)	Administrator
Admin Manager (8man-demo\Admin Manager)	Administrator
neadmin (8MAN-DEMO\neadmin)	Administrator
cradmin (8MAN-DEMO\cradmin)	Administrator
Sam Sales (8MAN-DEMO\Sam Sales)	Data Owner
Bill Anz (8MAN-DEMO\Bill Anz)	Data Owner
Dirk DataOwner (8man-demo\Dirk DataOwner)	Data Owner
Orak, Ann (8man-demo\Ann Orak)	Data Owner
Rohsoft, Maik (8man-demo\Maik Rohsoft)	Data Owner
Fall, Klara (8MAN-DEMO\Klara Fall)	Data Owner
Mel Odie (8MAN-DEMO\Mel Odie)	Data Owner
Gitta Rensolo (8MAN-DEMO\Gitta Rensolo)	Data Owner
C-Level (8MAN-DEMO\C-Level)	Data Owner
Angebrandt, Angie (8man-demo\Angebrandt, Angie)	Data Owner
Erkan Alles (8man-demo\Erkan Alles)	Data Owner
Elios, Mark (8MAN-DEMO\Elios, Mark)	Data Owner

8MAN says!

How does the 8MAN User Management work?

The 8MAN User Management allows you to configure, which accounts shall be able to log into 8MAN and which features of 8MAN they shall be able to use.

After activating the User Management you can search for users and groups - just not built-in groups - on the left. The search happens directly on your Active Directory. By dragging an entry to the right side or double clicking it you grant that user or group access to the 8MAN.

Newly created 8MAN users can do read by default (All Others). On the right you are able to configure what a user can do: either just look at data and create reports, or additionally change or even administrate 8MAN. You can also deactivate or delete users from the Access List. You are not able to cut your own rights.

Users will also be added to the 8MAN users list or activated when they log into the 8MAN while the User Management is disabled (default behavior).

Users will not yet be able to access 8MAN when only their primary group has access.

In a multi domain environment you might want to change the credentials used for the search by selecting it in the selection above.

Once you have found the desired user you can add him via drag&drop or by double-clicking.

11.1.1 Use groups as 8MAN users

You can use AD groups as 8MAN users. The process is identical to adding an 8MAN user.

Please note the following:

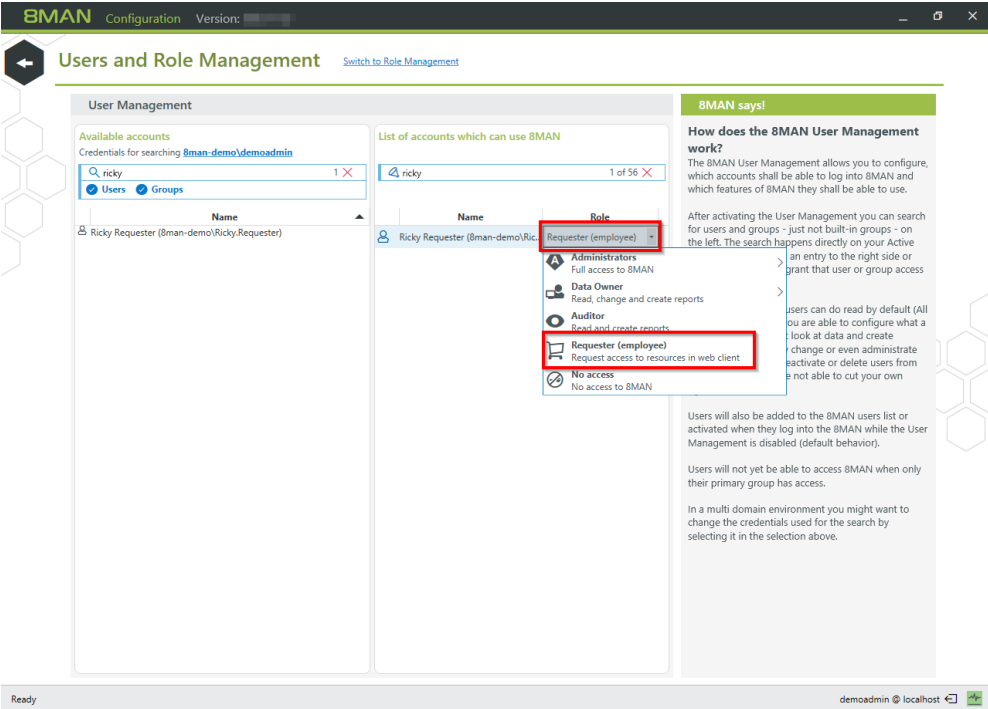
1. Nested group structures

By default only direct group memberships are considered. If you would like to resolve any nested levels of group membership, please contact [support](#). You will find a howto in our support knowledge base in the article "[Use nested groups as an 8MAN user](#)" (support login required). Using complex group structures will increase login time significantly.

2. Hierarchy of role assignments

By using groups, it is possible to assign several roles to a user. In this scenario the login mechanism verifies role columns from left to right and uses the first match. There is no combination of roles.

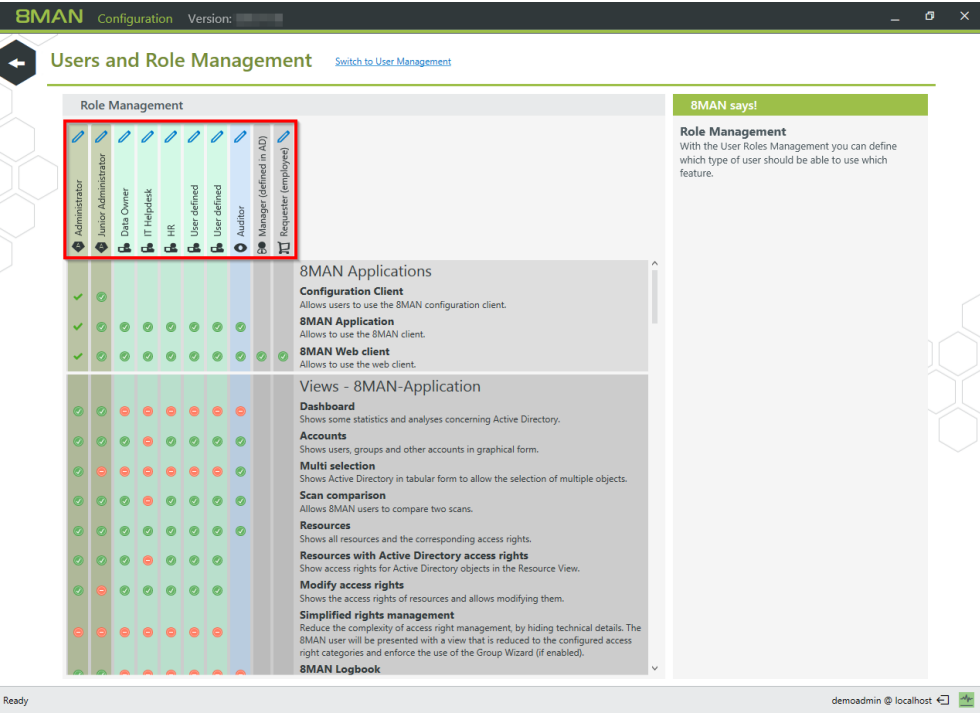
11.2 Assign a role to 8MAN users



Use the drop down menu to assign a role to an 8MAN user.

For more information on how to define roles please reference the chapter: [Defining roles](#).

11.3 Define 8MAN user roles



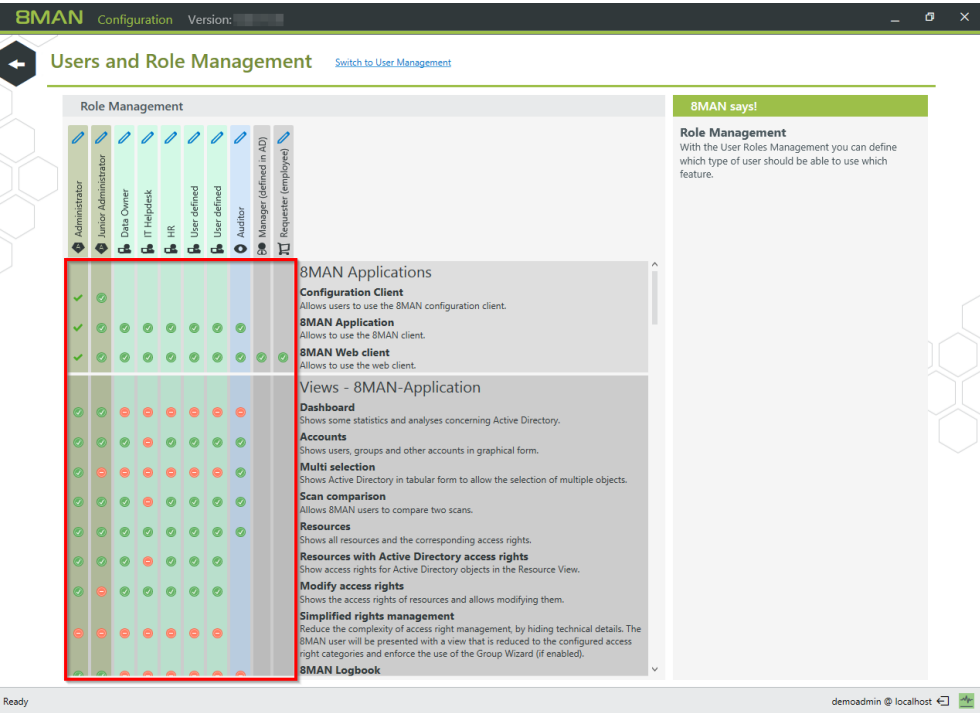
8MAN provides different user role types (from left to right):

- 2 Administrator-roles
- 5 Change-roles
- 1 Read only-role
- 1 Manger Role
- 1 Requester Role

The Manager Role can not be assigned by the 8MAN user management. It is assigned by the AD attribute "Manager".

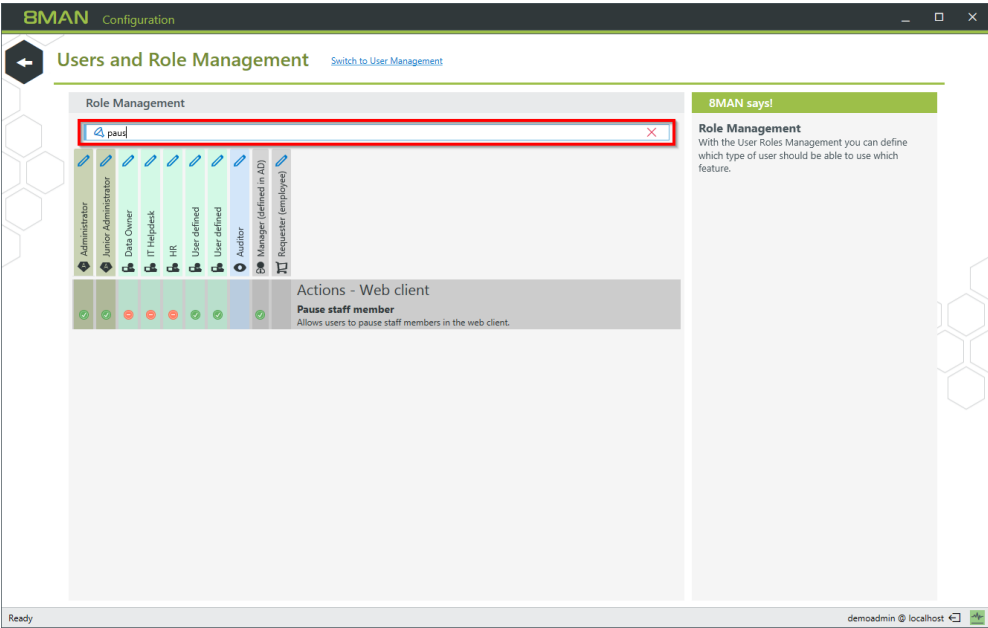
You can change the name of the role by clicking on the pen icon.

Only the first administrator role (left column) can use the user management.



Use the "check box matrix" to determine which role can use which views and functions.

Unlicensed views and features are grayed out.



Use the filter to quickly find the desired option.

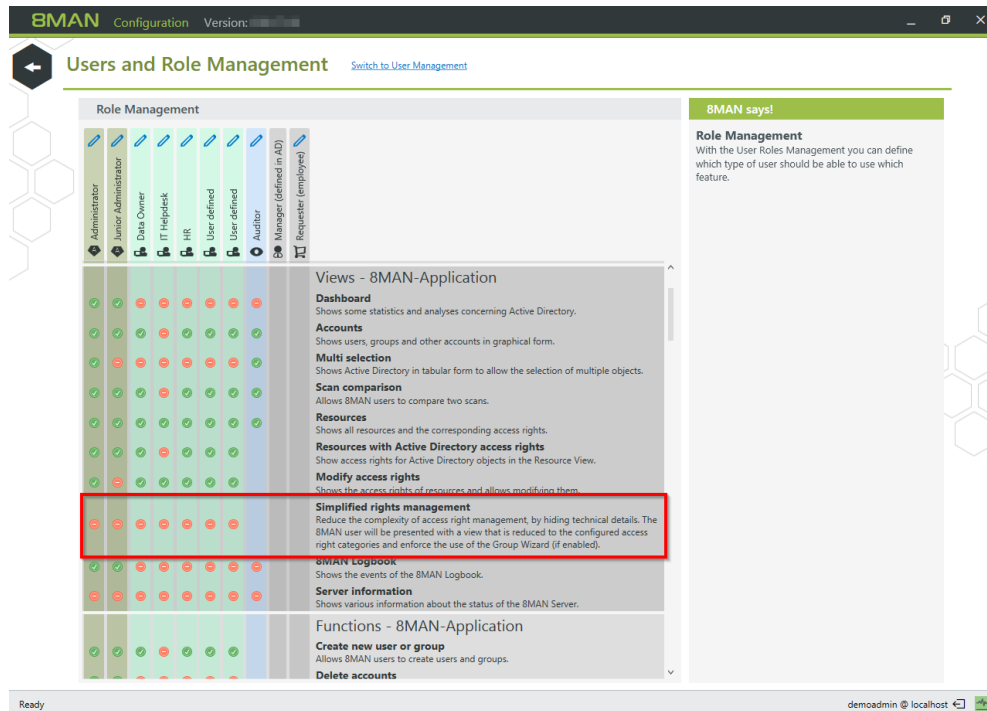
Please note that certain functions require specific access and views.

For example:

The functionality "reset user password" requires either the "Accounts" or the "Resource" view.

The changes take effect immediately without requiring users to log in again.

11.3.1 Simplified rights management



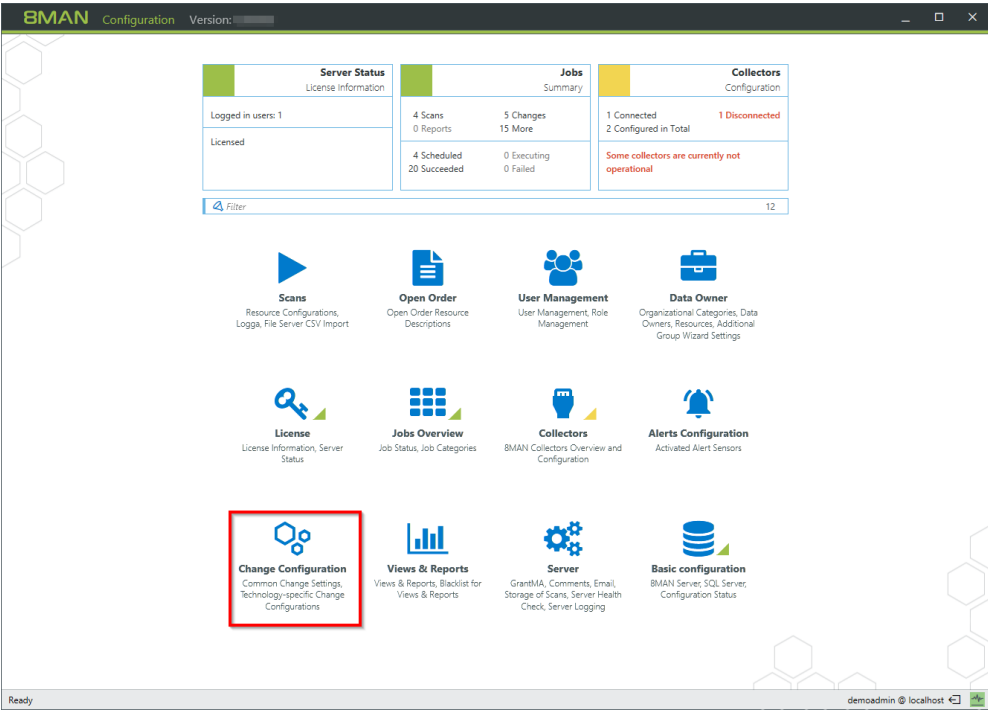
When activating simplified user management, the user is not able to see specific details.

This option is suitable for Data Owners that are not very technical.

Limitations of simplified rights management:

- The group wizard creates groups and members. The group wizard must be activated when using simplified user management. It is possible to select this option with deactivated group wizard, however an error message will be shown.
- The option "apply to all" is not available in the group wizard, meaning that existing direct access rights can not be turned into group memberships.
- A list of planned changes is not displayed.
- Only the content of 8MAN groups is displayed. Existing access rights (direct or via other non-8MAN groups) as well as "Applies to" information (propagation) is not displayed.

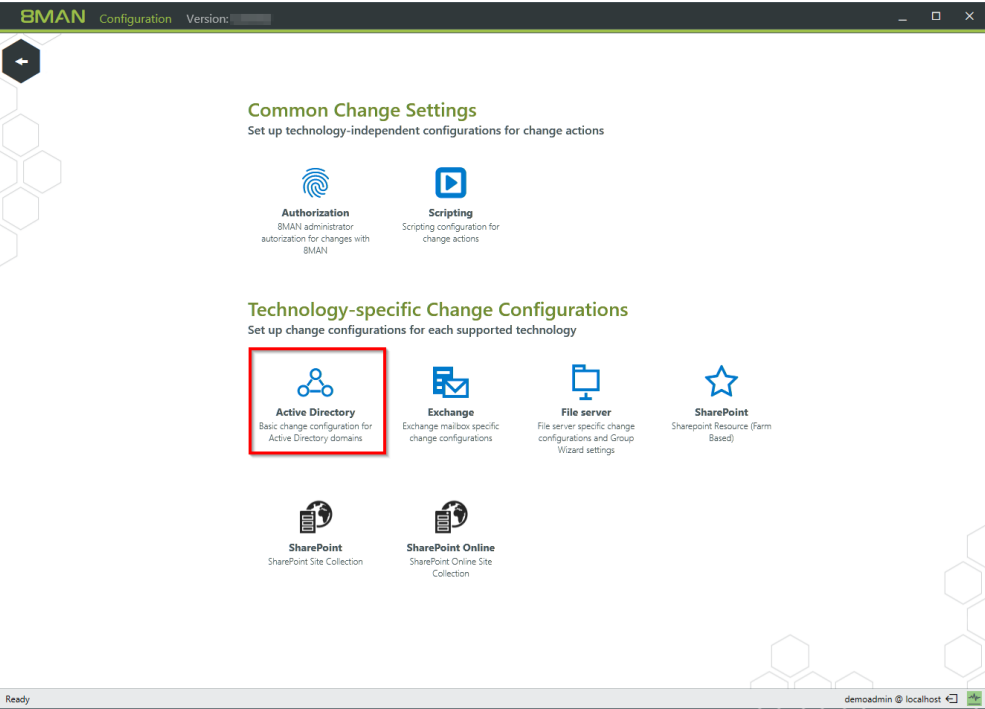
12 Change configuration



Click on "Change configuration".

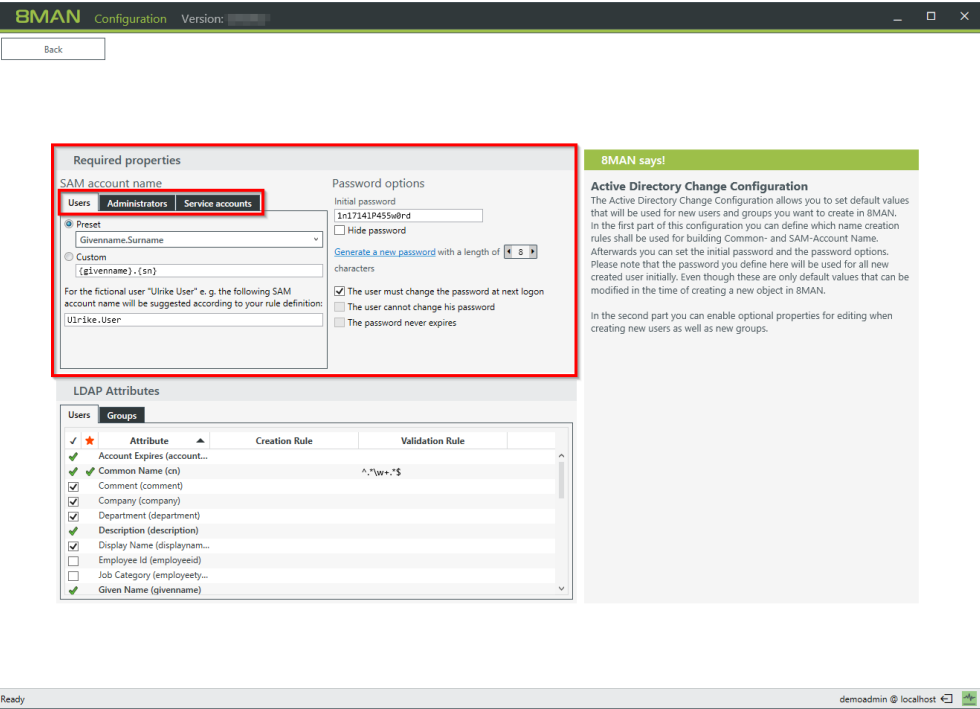
Settings made in "Change configuration" are only relevant if your license includes 8MAN Enterprise.

12.1 Manage Active Directory (AD) change configuration



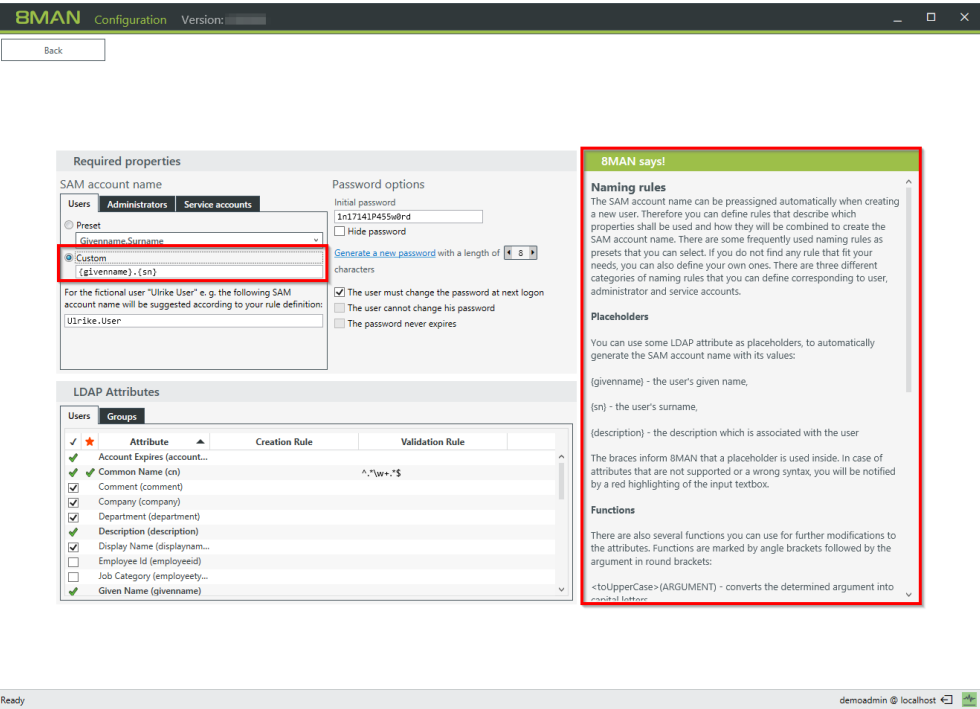
Click on "Active Directory".

12.1.1 Configuring new user default settings



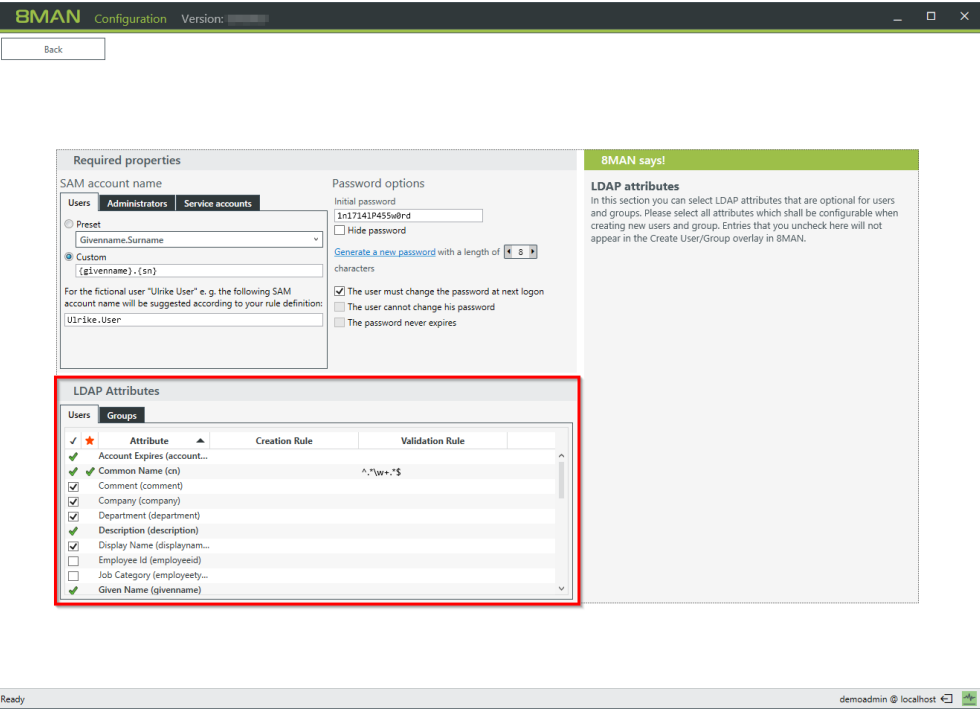
You can determine default settings that are applied to newly created users in the 8MAN GUI.

The naming conventions for user names can be applied differently for users, administrators and service accounts. You can manage these settings in the appropriate tabs.



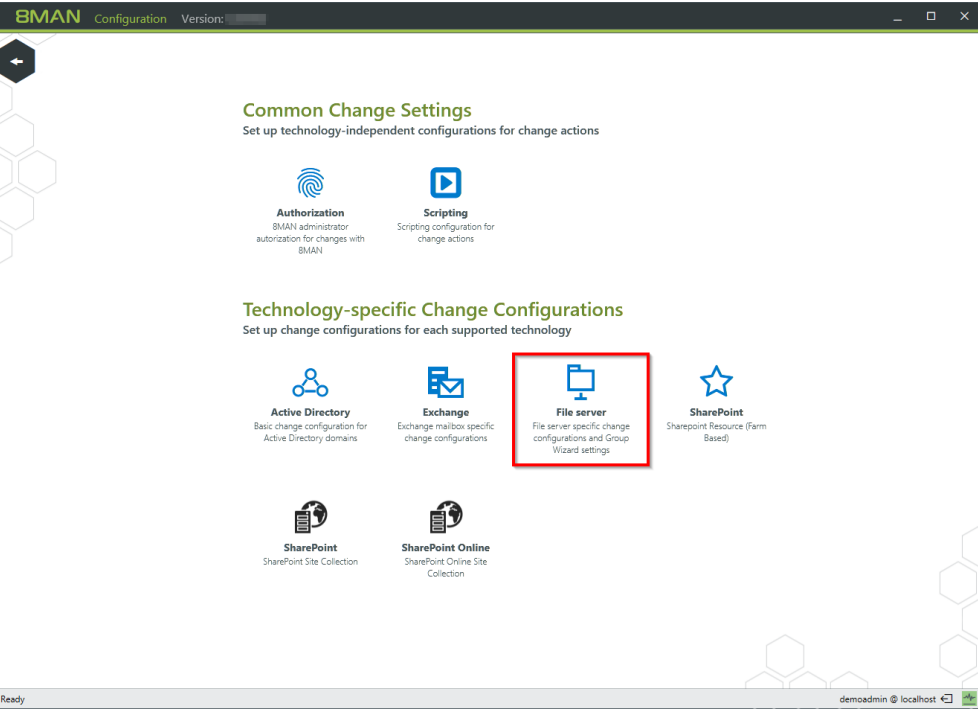
Different possibilities for naming rules are described in the "8MAN says!" section.

12.1.2 Selecting available LDAP attributes



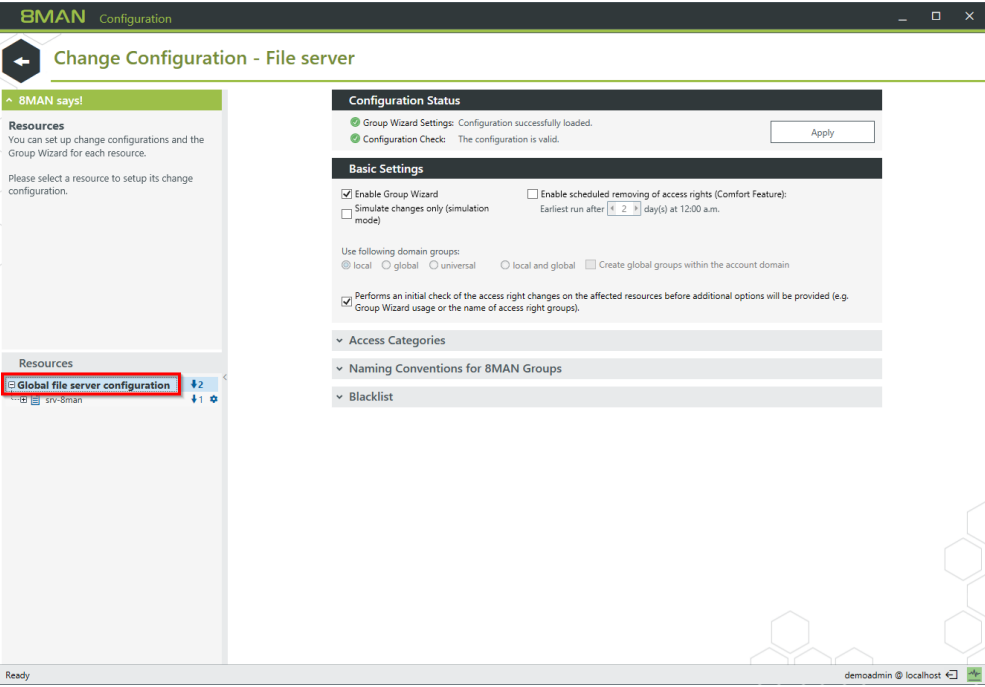
You can select which LDAP attributes are available in the 8MAN GUI for the creation of new users and groups. Attributes that are marked with a green check in the first column can not be deselected. Attributes with an additional green check in the second column are mandatory fields that must be filled in. 8MAN reads and displays a standard set of LDAP attributes. If you would like to use additional attributes, please contact [support](#).

12.2 File server (FS) change configuration



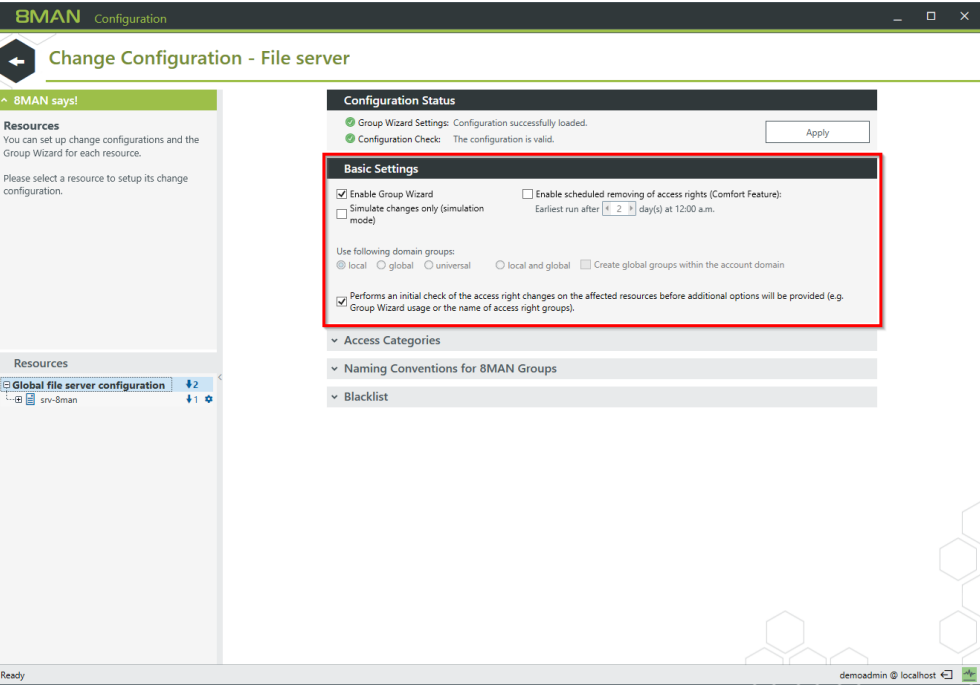
Click on "File server".

12.2.1 Manage global settings for FS changes



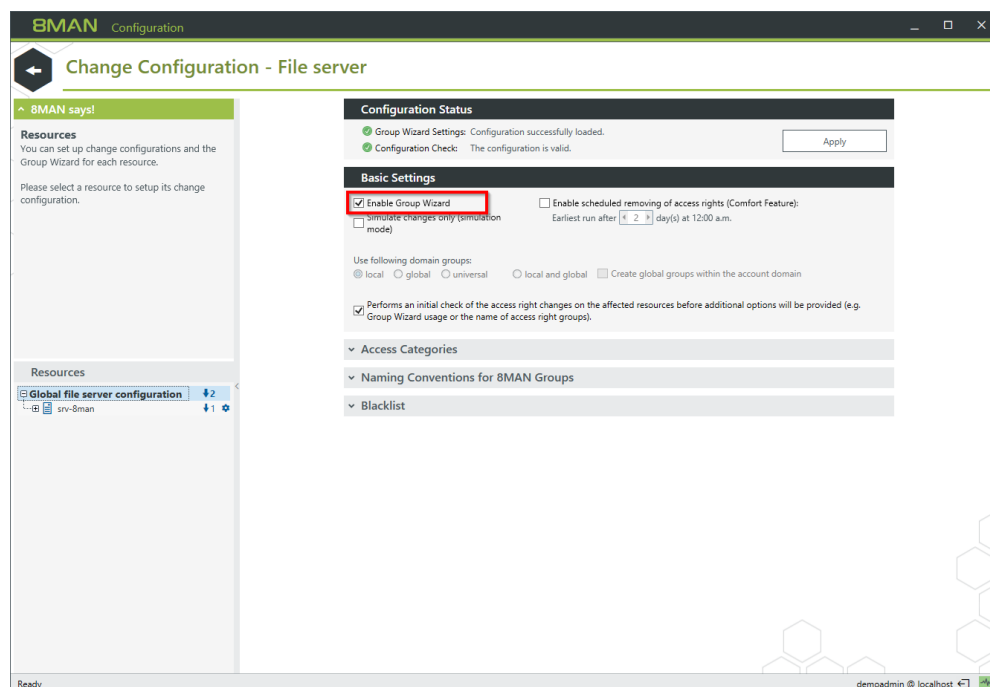
Click "Global file server configuration" in the "Resource" section.

12.2.1.1 Basic settings



Determine the basic settings for group wizard, comfort feature and sandbox.

12.2.1.1.1 Use the group wizard



The group wizard is one of the most powerful features of 8MAN Enterprise.

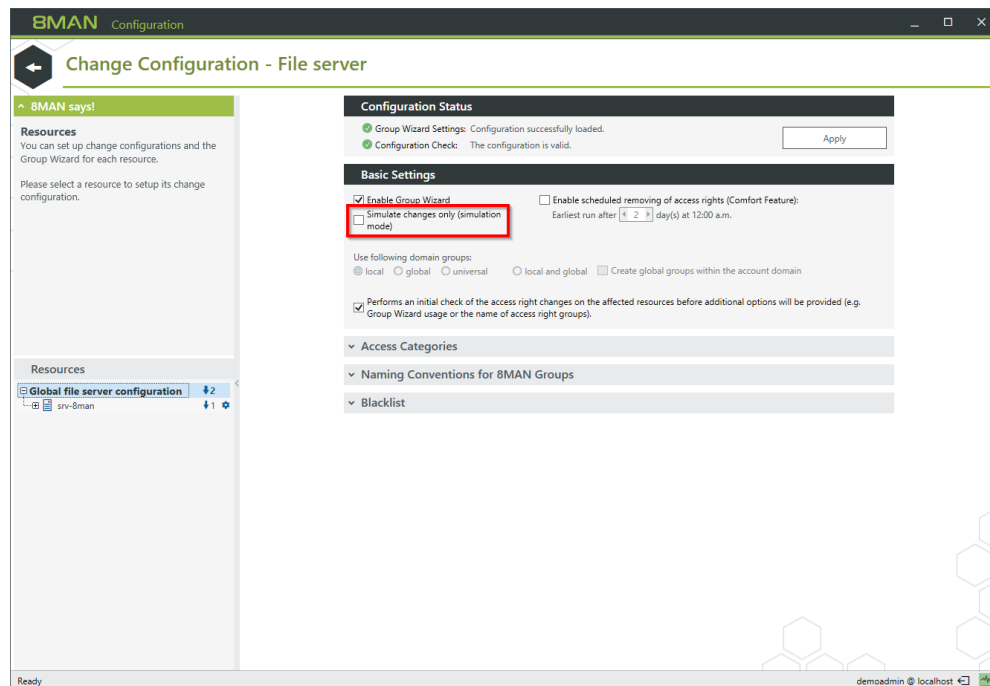
Option disabled

Access rights changes made with 8MAN are written directly into the ACL (Access Control List). If you do this with users and not with groups, this procedure contradicts Microsoft's recommended best practices.

Option enabled

8MAN creates permission groups (8MAN-groups). Users and groups are then assigned memberships in these 8MAN groups.

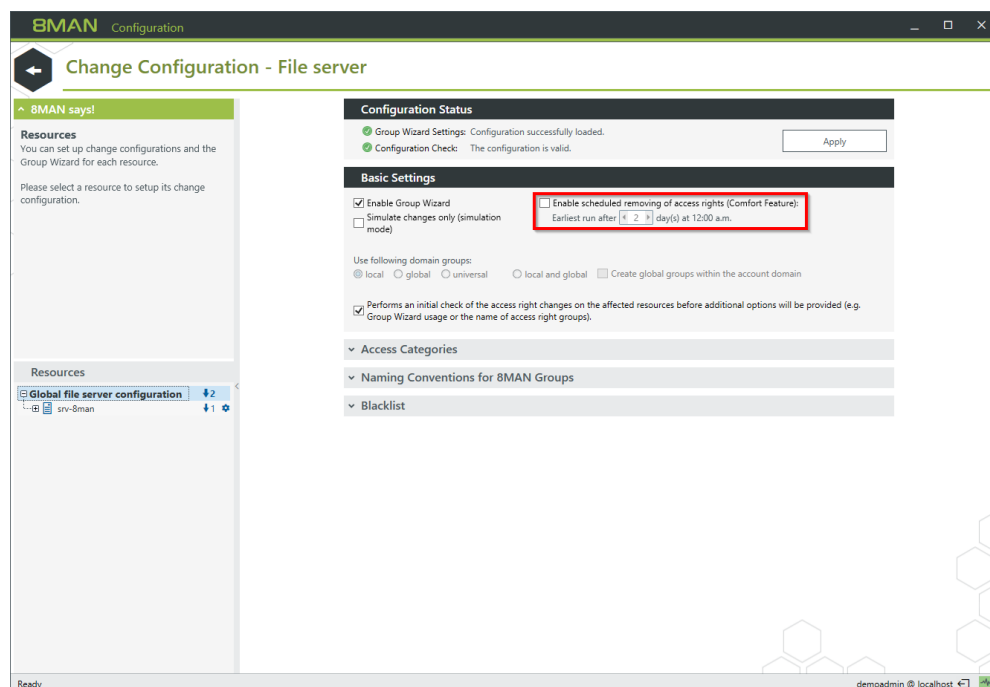
12.2.1.1.2 Use the simulation mode



Activate the simulation mode to preview all planned changes, for example, which groups would be created. You can not apply changes in this mode.

If you want to execute changes with 8MAN, the simulation mode must be deactivated.

12.2.1.1.3 Use the comfort feature



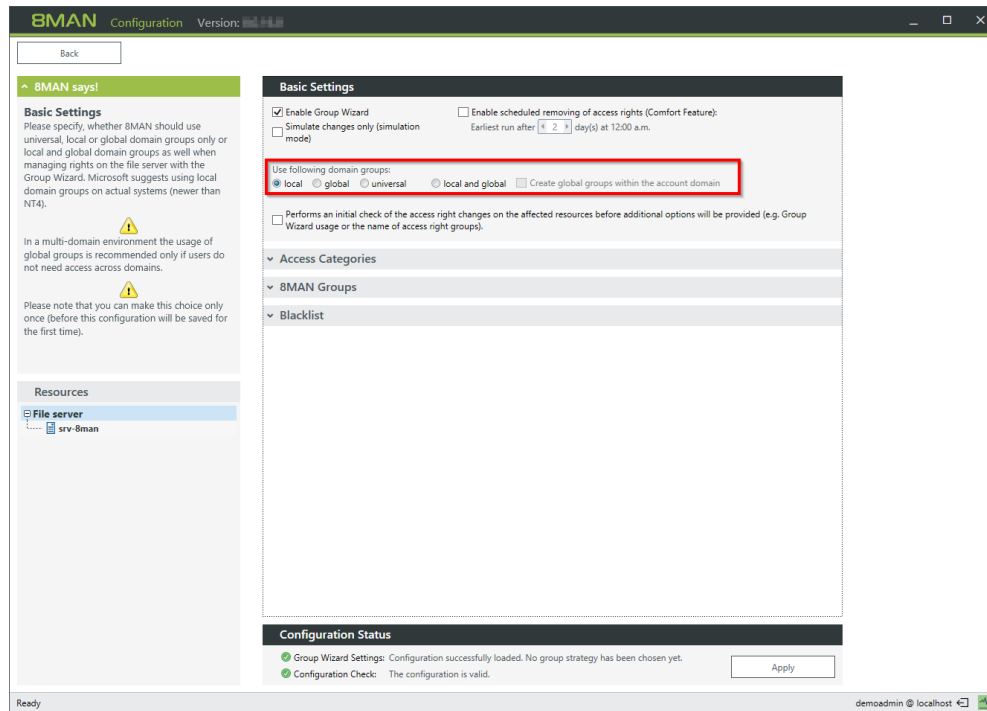
When users register on the network, their group memberships are verified and added to the Kerberos token. When assigning permissions with the group wizard via group memberships, they only become active after the user logs out of and into the system again.

By activating the "comfort feature", users temporarily receive direct access rights. These are active immediately and are automatically removed after a configurable time. This allows the user to access required resources immediately without having to log out and in again.

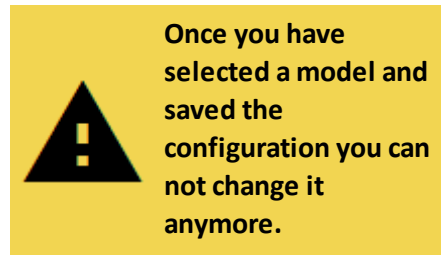


8MAN does not set temporary list permissions. Users may not be able to navigate to the folders.

12.2.1.1.4 Set AD group types for the Group Wizard



You can configure how group wizard groups are created.



The different models are described in the following chapters.

It can be extremely cumbersome to make any changes to the model after it has been saved so please select carefully!

If you do require any changes please contact [support](#).

More information regarding the use of AD groups can be found on the following pages and from [Microsoft](#).

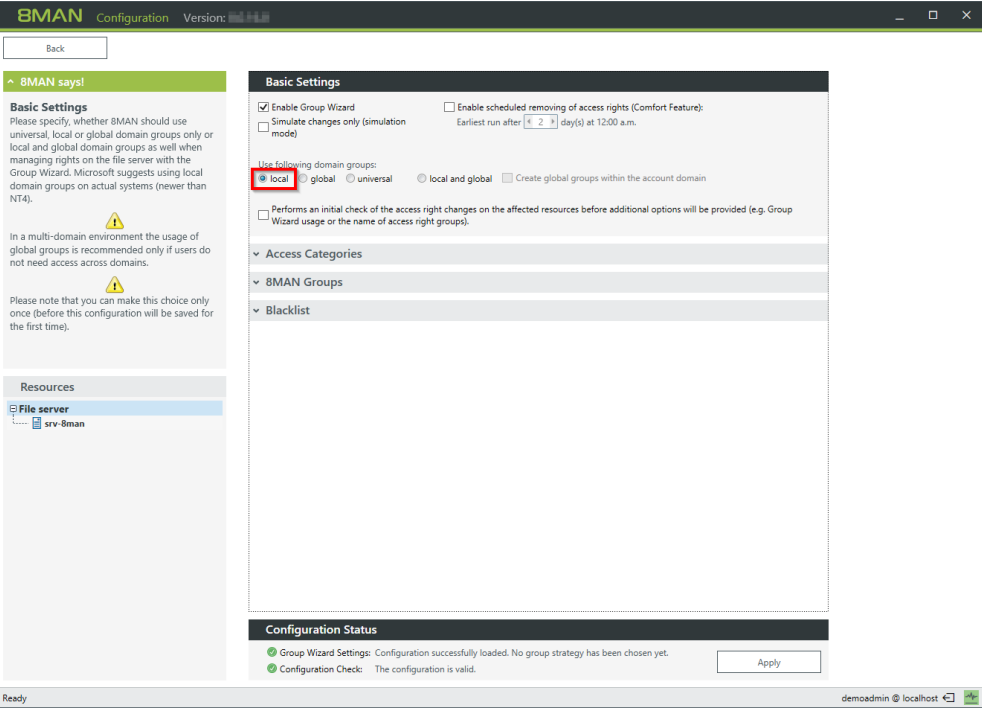
12.2.1.1.4.1 Use local AD groups

A -> DL -> P

A - account (user-account)

DL - domain local group (local AD group)

P - permission



- 1. 8MAN creates AD groups with the type local.
- 2. 8MAN adds the required users to this group.
- 3. 8MAN assigns permissions to file server resources for this group.

Advantages

Disadvantages

Users and groups from other domains or forests can be a member of a local AD group and thereby be assigned permissions.

Membership in a local group requires 40 bytes of storage in the Kerberos token. This can cause Kerberos token size to be exceeded, especially in large environments, where users have a large number of group memberships.

Local AD-groups are only visible and applicable in their assigned domain.

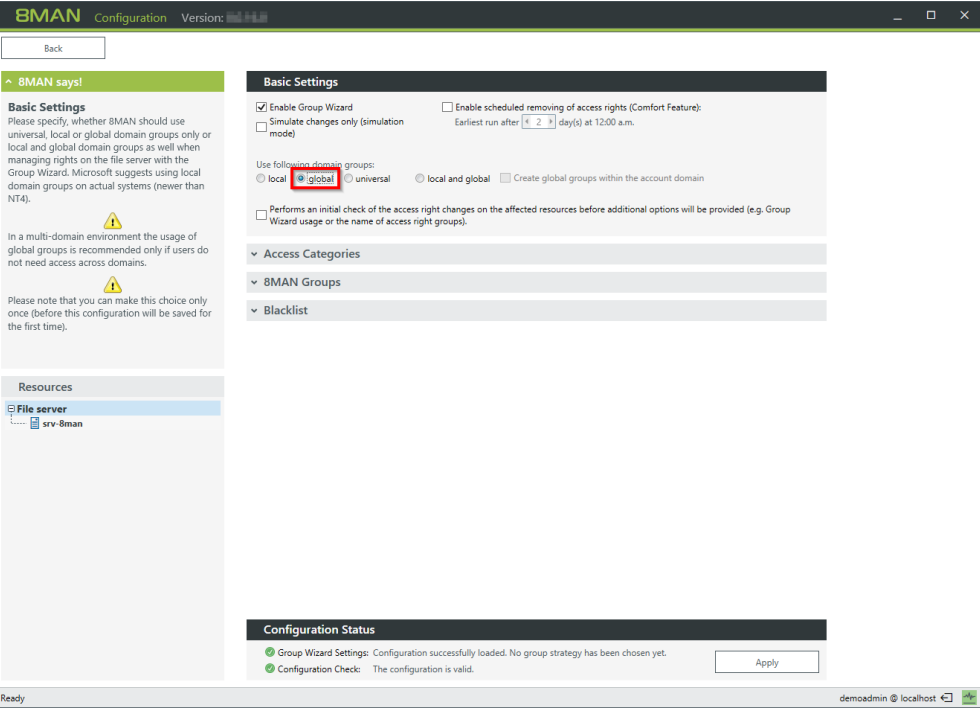
12.2.1.1.4.2 Use global AD groups

A -> G -> P

A - account (user account)

G - global group (global AD-group)

P - permission



- 1. 8MAN creates AD groups of the type global.
- 2. 8MAN adds the required users to this group.
- 3. 8MAN assigns permissions to file server resources for this group.

Advantages	Disadvantages
Membership in a global AD-group requires 8 bytes of storage space in the Kerberos token. This is the most "frugal" group-type, in case you are having issues with Kerberos token limits.	Only users and groups of the assigned domain can be members of global AD-groups. Therefore this approach is unsuitable for multi-domain environments.

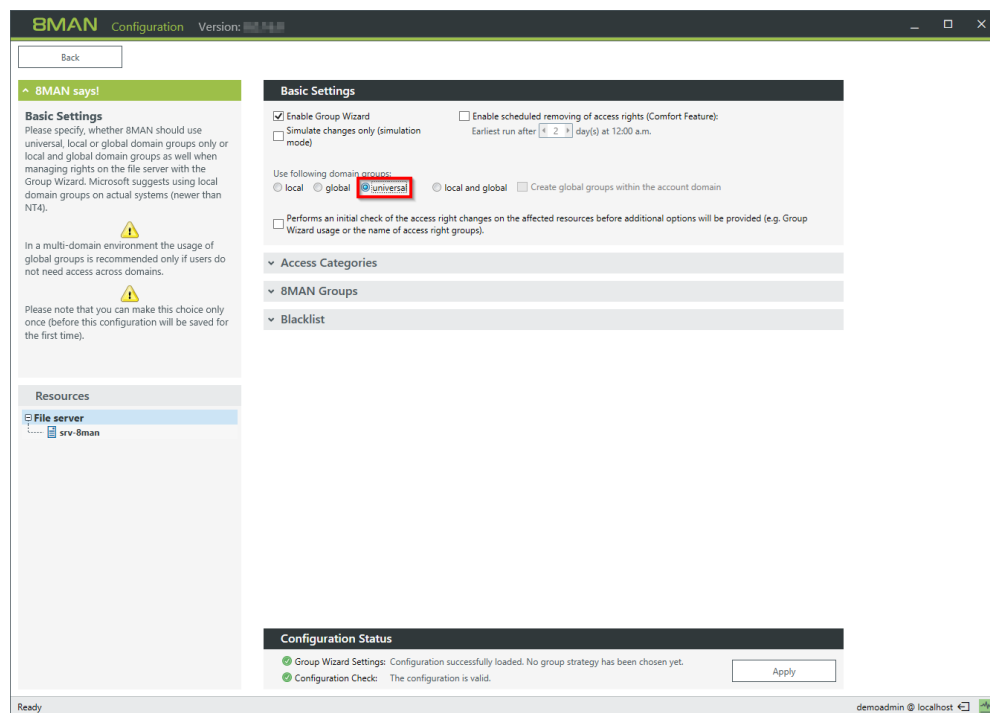
12.2.1.1.4.3 Use universal AD groups

A -> U -> P

A - account (user-account)

U - universal group (universal AD-group)

P - permission



1. 8MAN creates AD groups with the type universal.
2. 8MAN adds the required users to this group.
3. 8MAN assigns permissions to file server resources for this group.

Advantages

Membership in a universal group requires 8 bytes (foreign domain) or 40 bytes (own domain) of storage in the Kerberos token. A universal group can be a member on foreign domains as long as these belong to the same forest. It is therefore possible to use a group in multiple domains within the same forest.

Disadvantages

Universal AD-groups may not have local AD-groups as members. Nested grouping (parent - child relationships) are part of this restriction. Universal groups can not be used across multiple forests. Therefore this approach is unsuitable in multi-forest environments.

12.2.1.1.4.4 Use local and global AD-groups

A -> G -> DL -> P

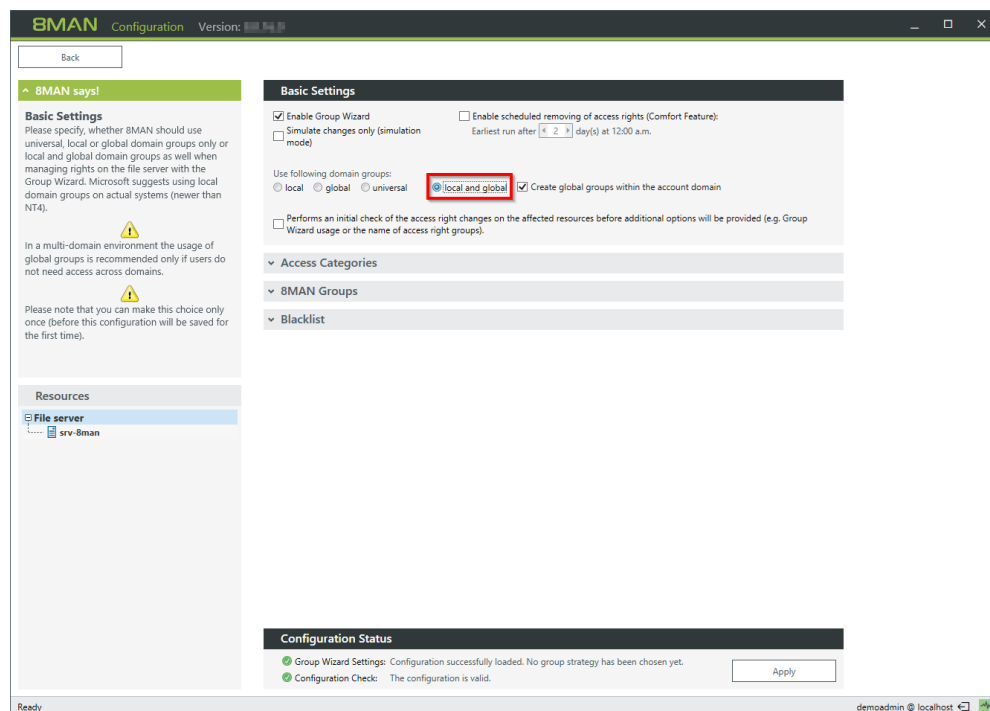
A - account (user-account)

G - global group (global AD-group)

DL - domain local group (local AD-group)

P - permission

Consider all groups created by the group wizard as file server resource groups. You should not use these groups for other purposes (for example: VPN access).



1. 8MAN creates a group of the type global for users.
2. 8MAN adds the desired users to the global group.
3. 8MAN creates another group of the type local.
4. 8MAN nests the group. The global group (child) becomes a member of the local group (parent).
5. 8MAN gives the local group access rights to file server resources.

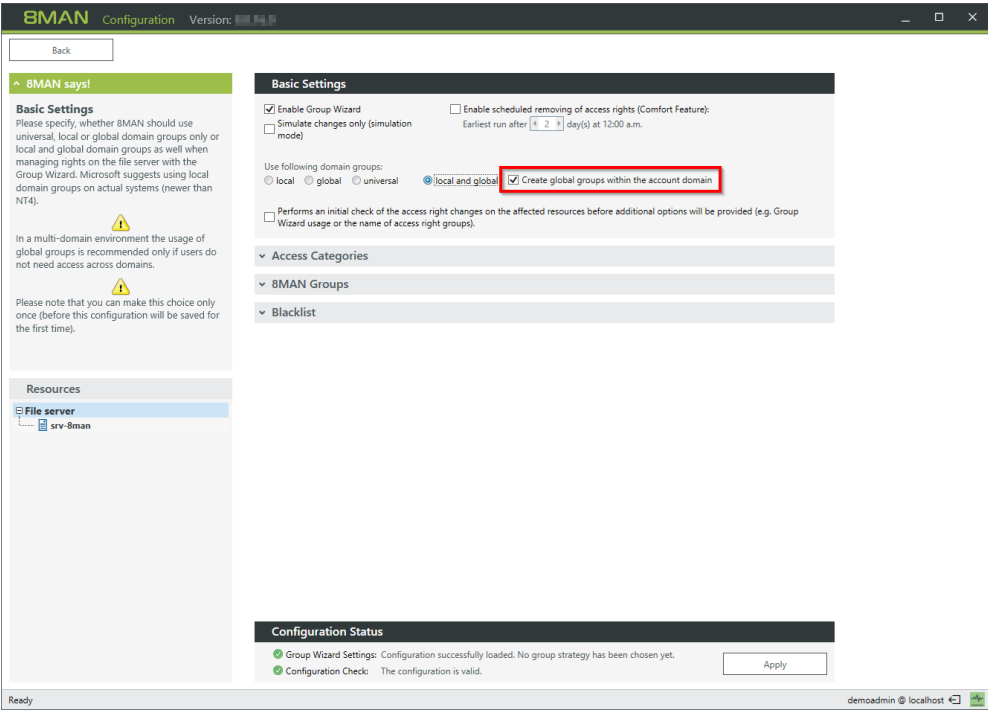
Example

"Sam Sales" (A) ->

"g_fs01_share01_sales_md" (G) ->

"l_fs01_share01_sales_md" (DL) ->

permission (P) "Modify" on the folder "Sales".

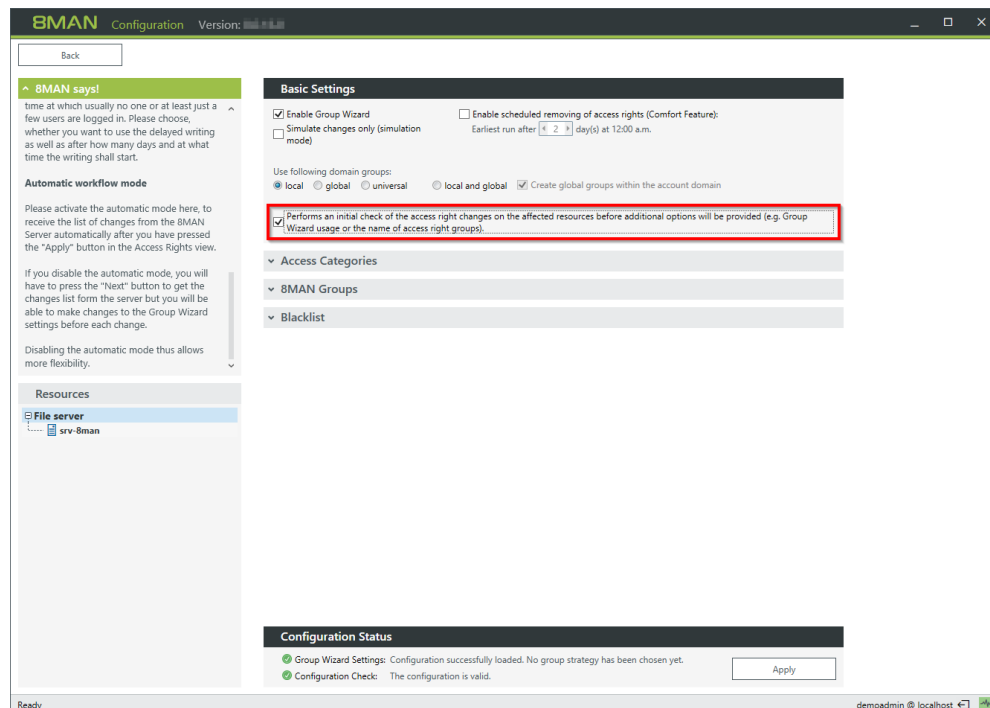


Option enabled (recommended)
The global group is created in every domain that members are located in (this including possibly multiple times). Only by activating this function can you assign access rights across multiple domains.

Option disabled
The global group is only created in the domain that the resource is located in. In this scenario it is not possible to assign access rights across multiple domains.

Advantages	Disadvantages
<p>The A-G-DL-P-principle ensures a variety of different options and approaches in multi-domain and multi-forest environments.</p>	<p>Users require two or more group memberships for their permissions. Therefore this approach may lead to issues with token size.</p>

12.2.1.1.5 Activate/deactivate an initial test



Option enabled:

The group wizard will determine all required steps for access rights changes in the 8MAN GUI immediately after clicking on "Apply".

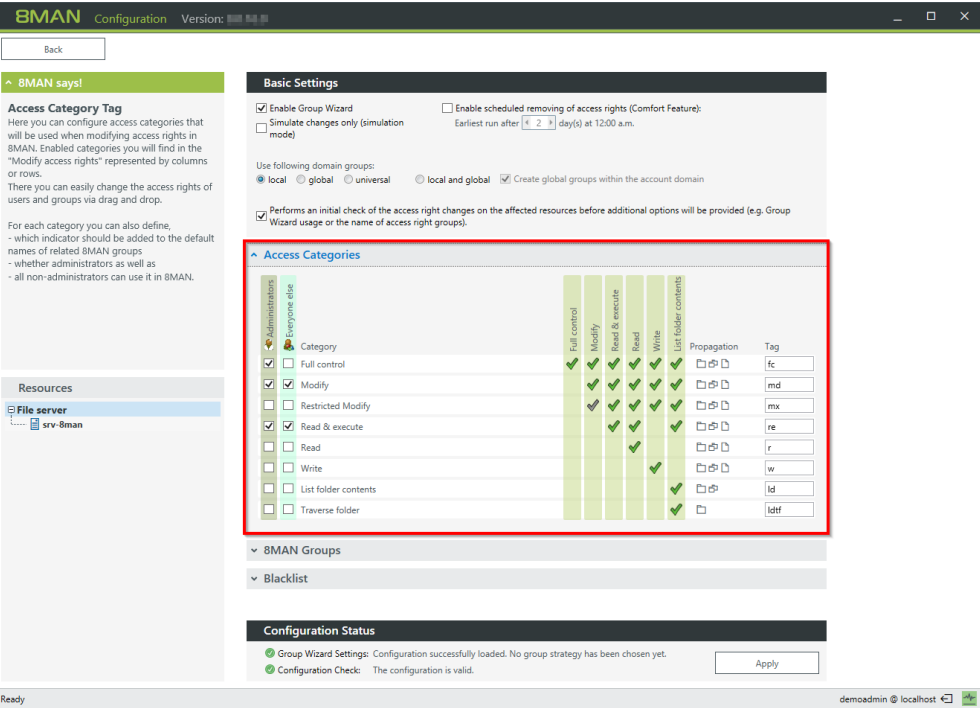
Option disabled:

Before determining the required changes, a dialog box will open, allowing you to make changes to group wizard options.

This can save a lot of time, especially if you want to perform complex access rights changes with non-standard group wizard options.

12.2.1.2 Select access categories available in 8MAN

8MAN summarizes the access rights combinations available in Microsoft environments. This allows for a simplification of access rights assignment.

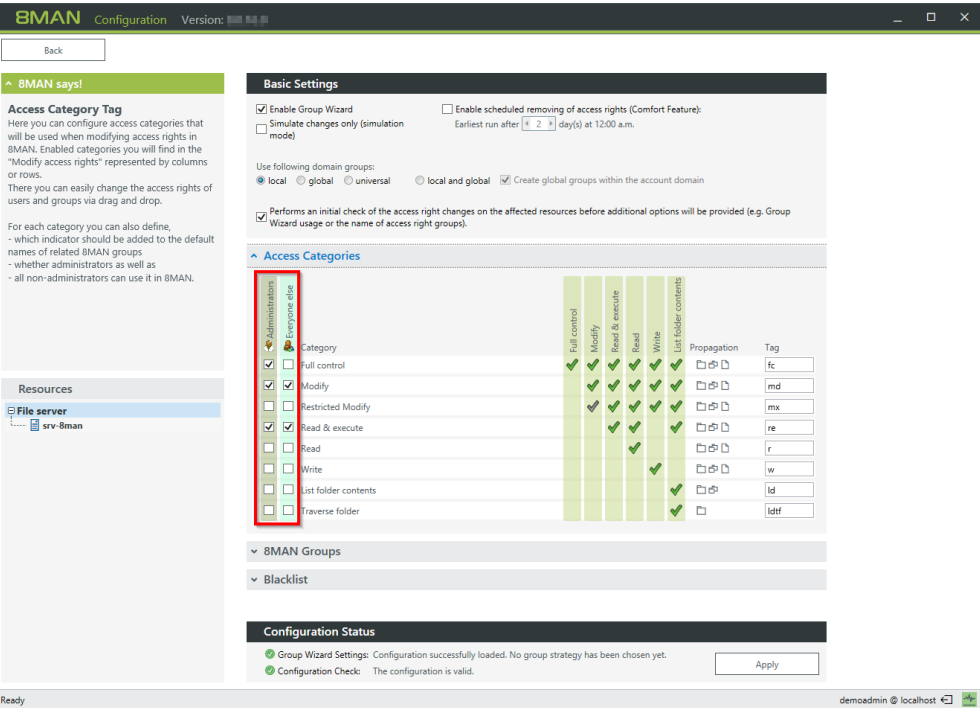


Select the access category that you would like to make available in 8MAN.

Selected access categories will then be visible as columns in the 8MAN GUI.

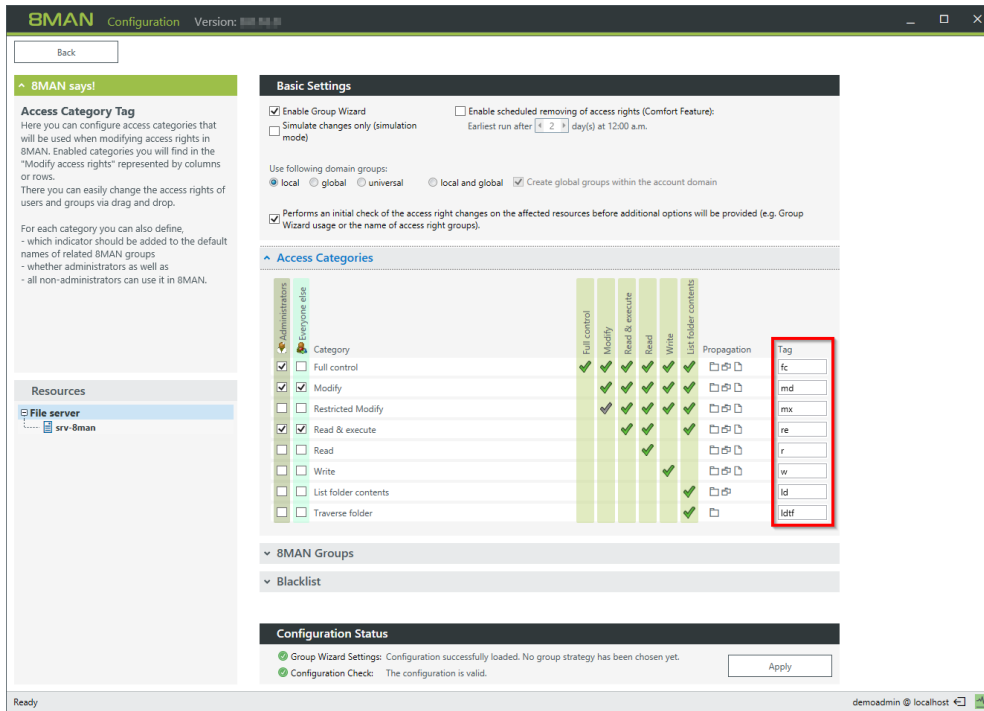
If you would like to clean up the access rights situation on your file server(s) in one fell swoop and manage hundreds or even thousands of folders simultaneously you should consider 8MATE clean!.

For more details on this service please refer to the following section of the 8MAN user manual: Replacing divergent access rights on a file server.



Determine which access categories should be available for which 8MAN-user roles.

You can configure these settings so that the administrator role can manage different access categories than the other 8MAN-user roles.

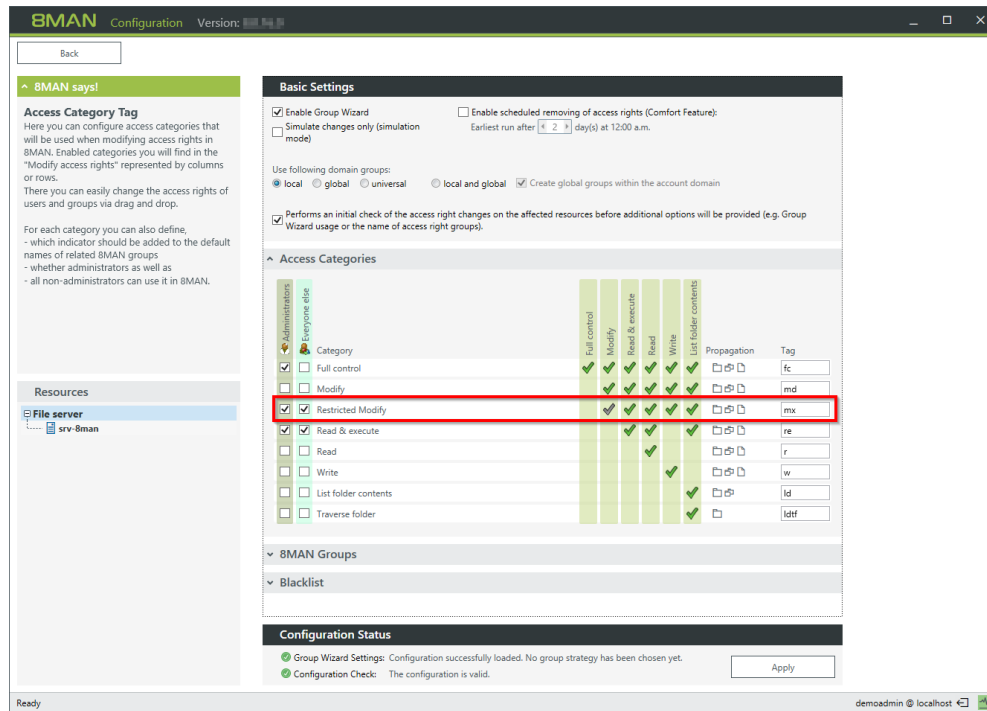


Determine the abbreviations for the individual access categories. The abbreviations can also be used for the naming convention of 8MAN-groups.

Default abbreviations have the following significance:

fc - full control
md - modify
mx - restricted modify
re - read & execute
r - read
w - write
ld - list directory
ldtf - list directory this folder (only)

12.2.1.2.1 Restricted modify

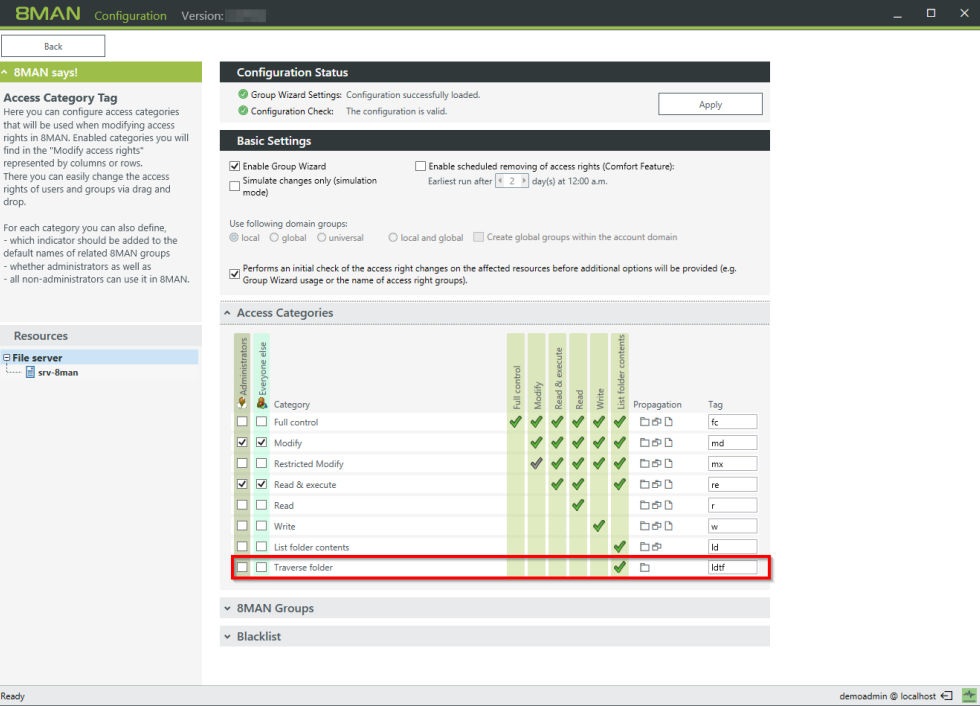


Restricted modify is a special combination of permissions where users have modify rights to folders and sub-folders but are not able to delete this folder (keep it as parent for inheritance).

Three permission are assigned:

- *Modify (applies to: this folder, subfolders and files)*
- *Deny Delete (applies to: this folder only)*
- *Delete (applies to: subfolders and files)*

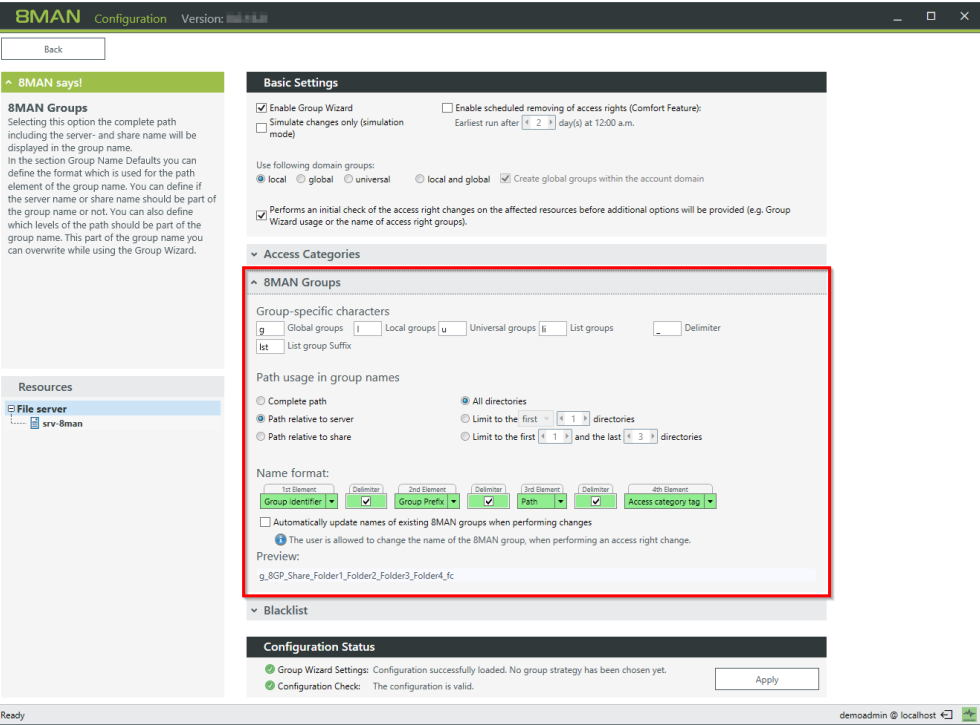
12.2.1.2.2 Traverse folder



"Traverse folder" is a special combination of access rights where the user only has rights to traverse the folder for navigation (Applies to: this folder only).

This access category is not visible to users if 8MAN manages list rights automatically.

12.2.1.3 Define 8MAN group names

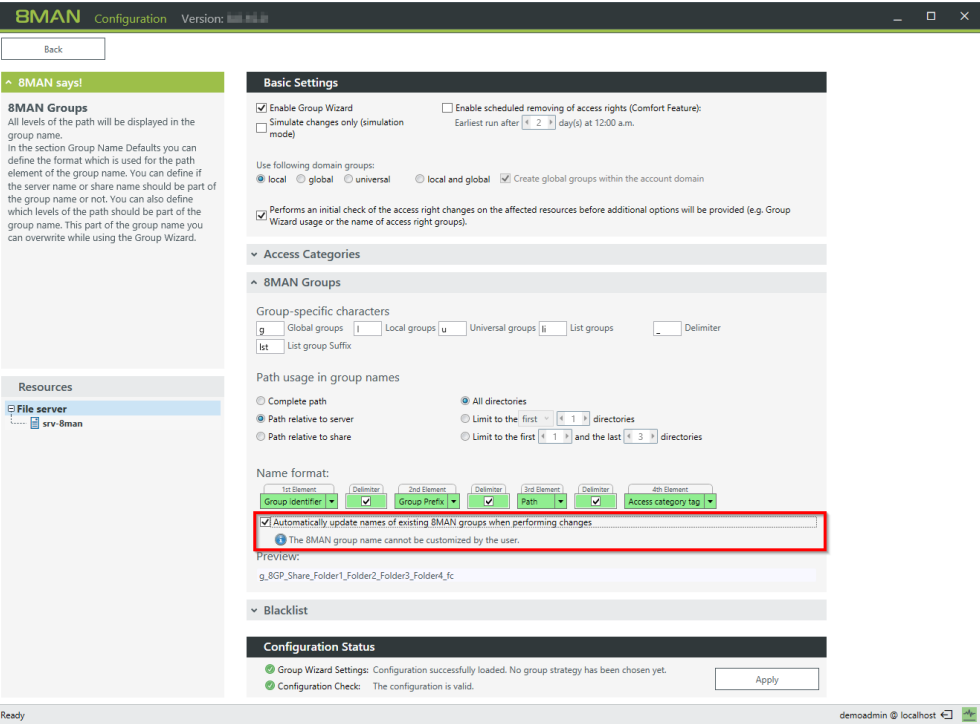


Determine how names of 8MAN groups are build.

Please note the preview in the bottom section.

12.2.1.3.1 Change 8MAN group names automatically

By default 8MAN group names are build according to the defined naming convention.



Option enabled:

When changing folder names, 8MAN-groups are automatically renamed the next time access rights are changed (except list groups).

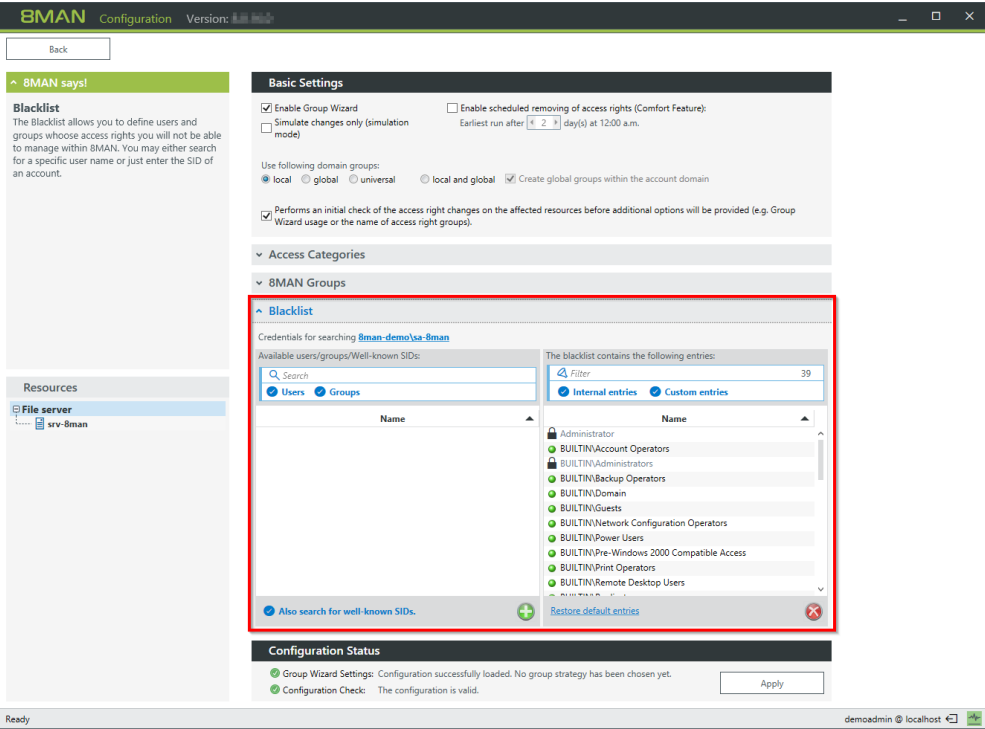
Users are not able to change the name of the 8MAN-group in the 8MAN GUI.

Option disabled:

When changing folder names, 8MAN-groups are not automatically renamed.

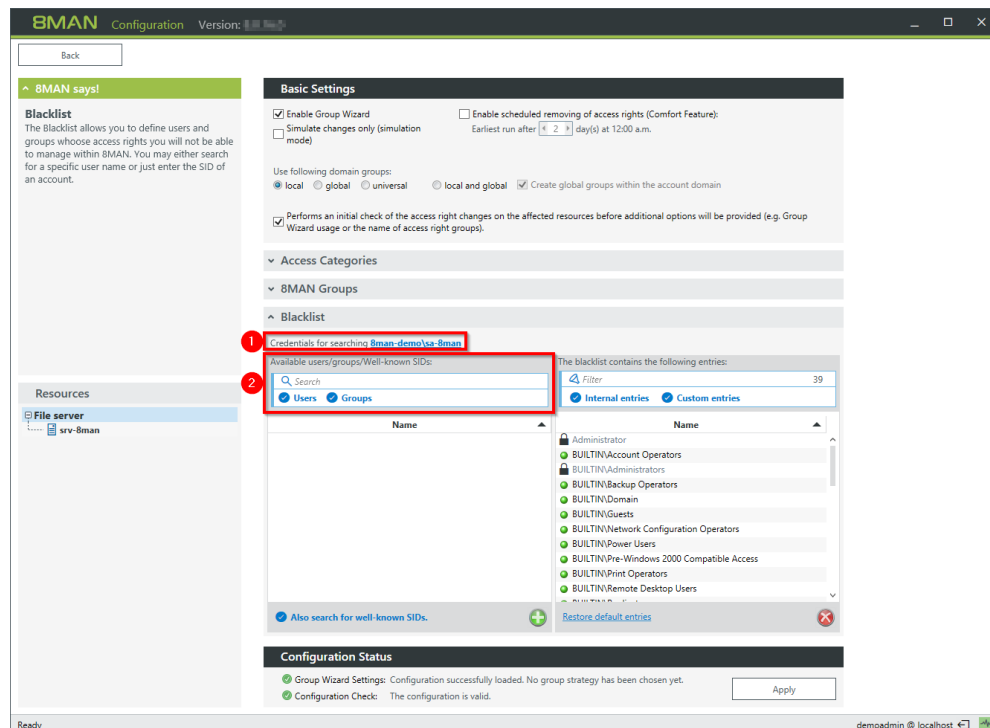
Users are able to change the name of the 8MAN-group in the 8MAN GUI.

12.2.1.4 Blacklist - Exclude users and groups from use



Determine which users and groups are excluded from usage within 8MAN for granting and removing access.

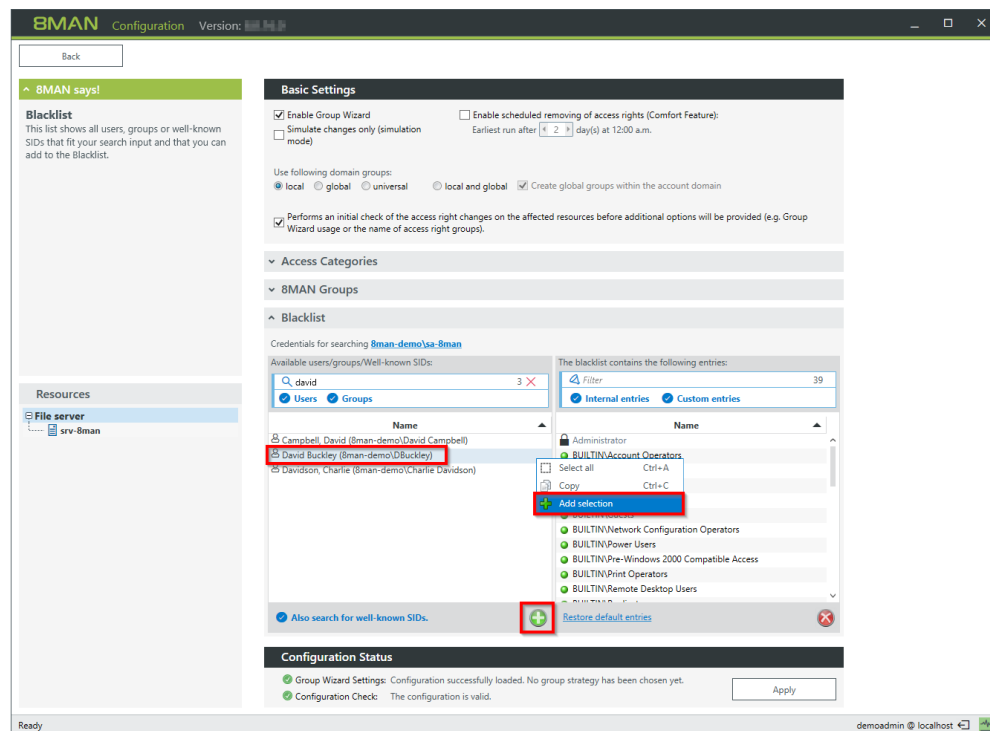
12.2.1.4.1 Add entries to the blacklist



1. You can determine which domain is searched based upon the login credentials. By default the credentials from the [basic configuration](#) are used.
2. When searching for users and groups a "live-request" is sent to the Active Directory. This search works independently of existing AD scans. The search only works in licensed domains.

Available search options:

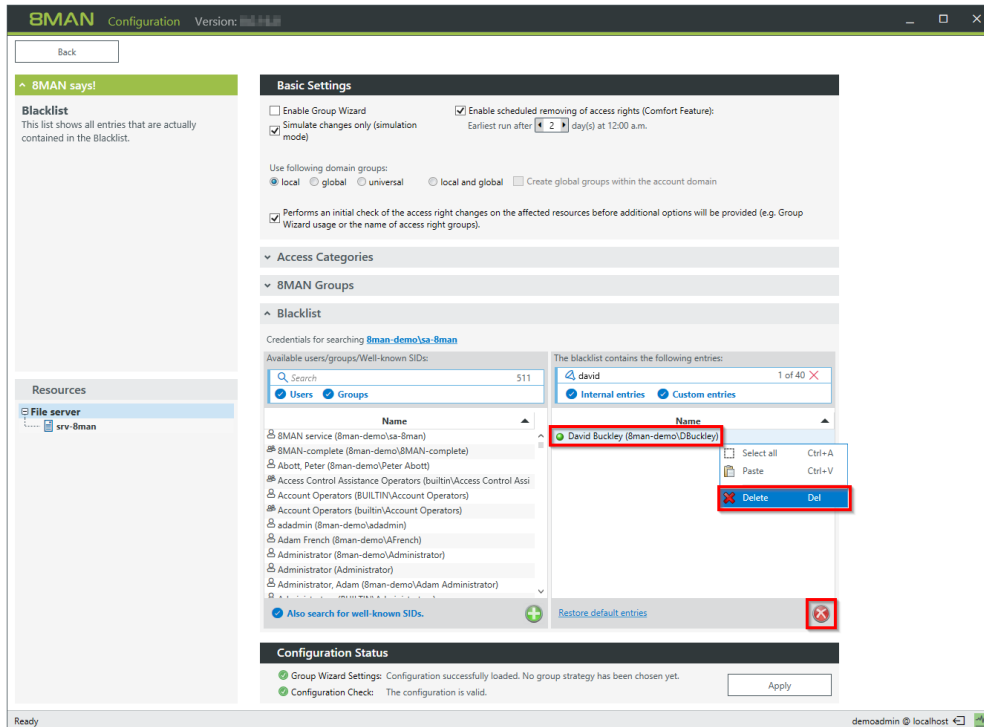
- If no domain is entered into the search field, the domain is selected based upon the credentials.
- If a domain is entered (for example: „domain2\another.user"), 8MAN will search that domain (domain2)
- If you enter a "\" before the user name, 8MAN searches all licensed domains.



To add a user or group to the blacklist you can:

- Double-click
- Use drag&drop
- Right-click on the object and select from the context menu
- Use the green plus icon

12.2.1.4.2 Remove entries from the blacklist

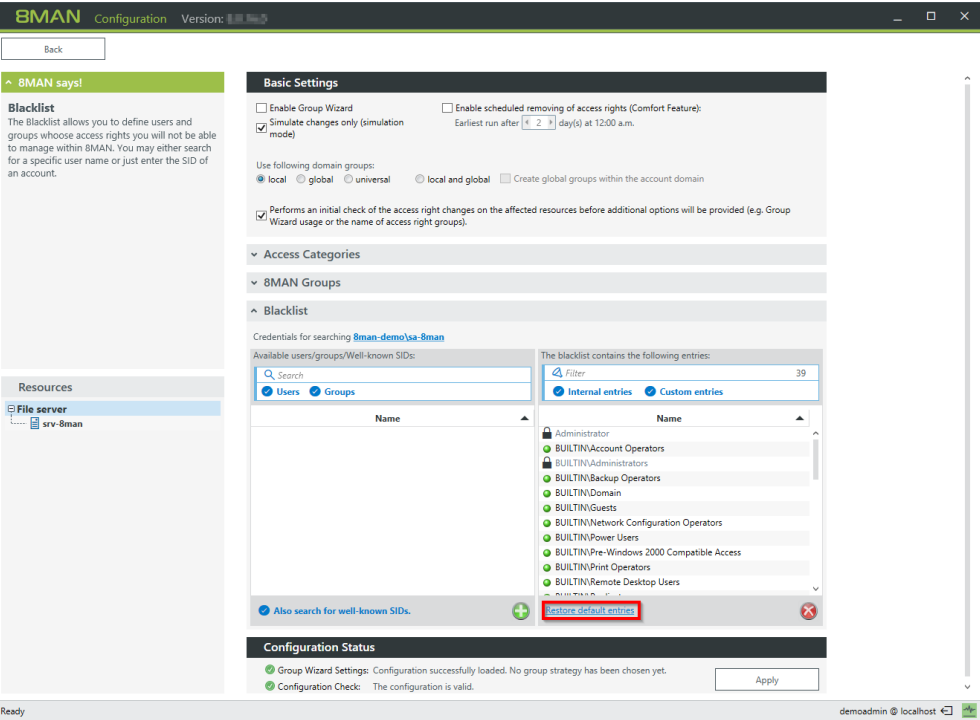


Filter the entries and remove the desired entry by:

- Right-clicking on the object and selecting from the context menu.
- Drag & drop onto the recycle bin icon or the red X icon.

Please note that **default entries** with the "internal" type can not be removed.

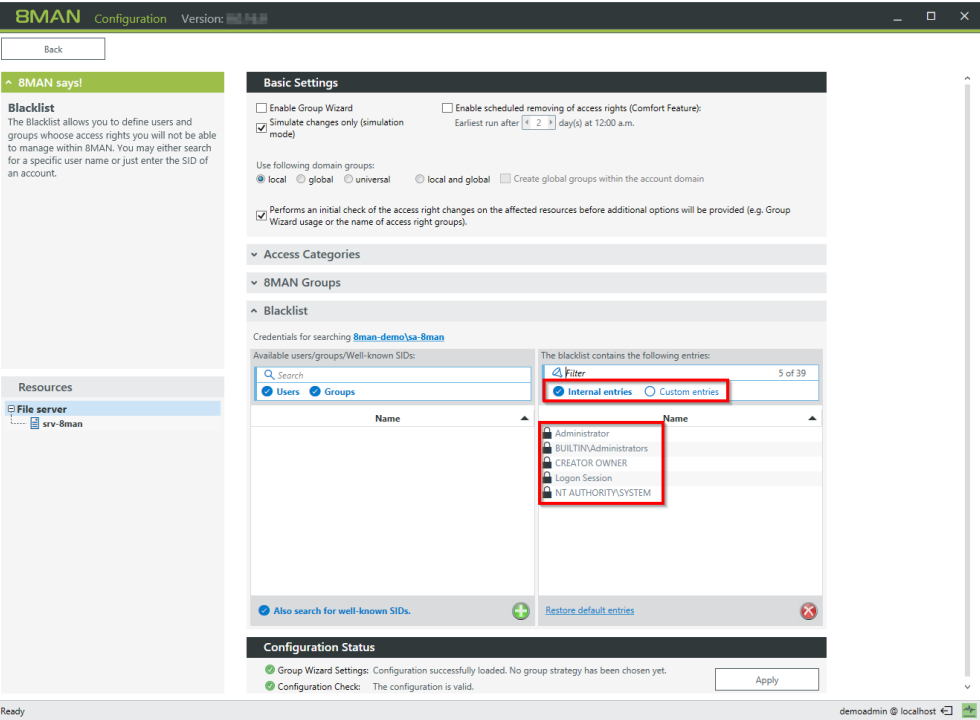
12.2.1.4.3 Restore default blacklist entries



In factory settings the blacklist contains 39 default entries. These are Microsoft built in/predefined accounts and should not be used in conjunction with 8MAN.

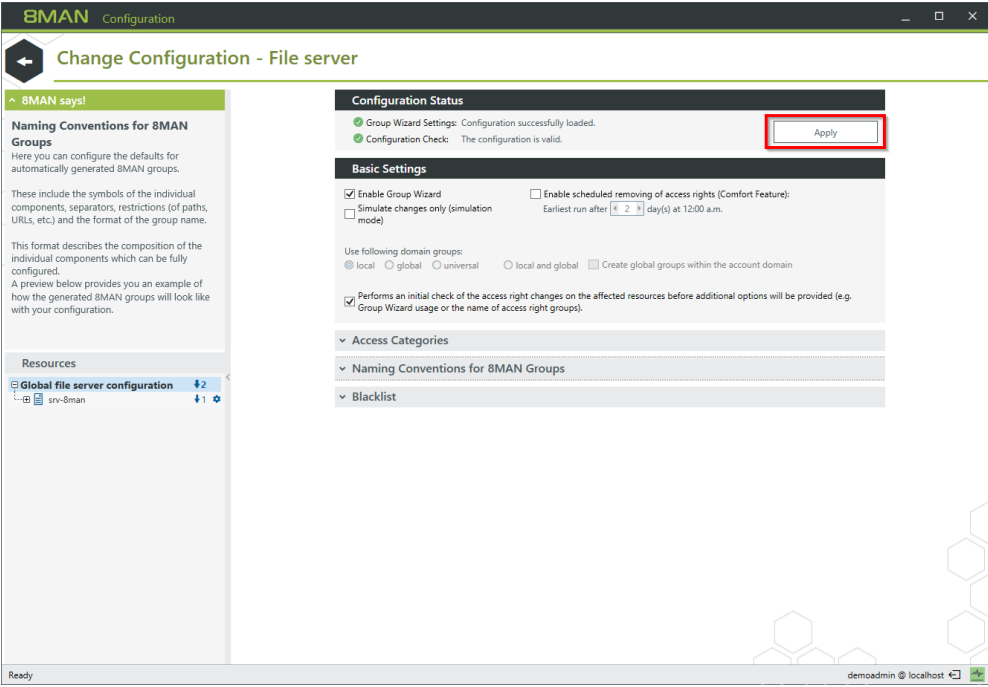
You are able to remove and restore the entries with the green dot. This may be required if you need to remove "Everyone" access rights, for example.

When restoring the blacklist only the removed standard entries are added again. Any individual additional entries remain stored in the blacklist.



"Internal entries" are marked with a lock and gray font and can not be removed.

12.2.2 Apply global file server configuration



You must confirm changes in the global file server configuration by clicking "Apply".
If you click "Back" instead, no changes will be applied.

12.2.3 Add FS-specific change configurations

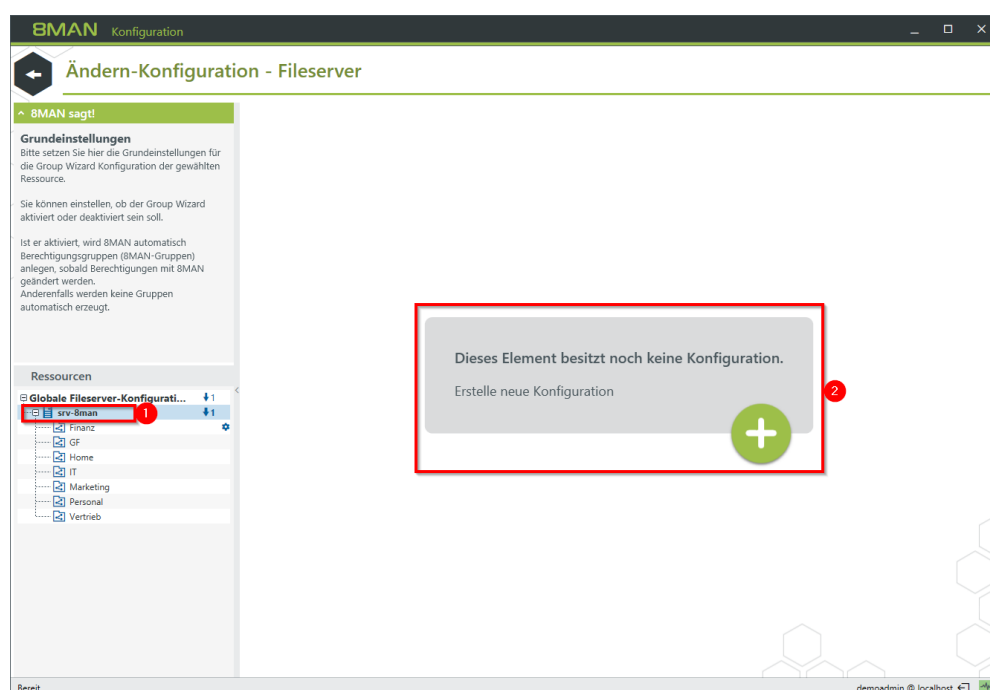
You can configure specific settings for each file server:

- the account used to make the changes,
- in which domain the 8MAN groups are stored,
- the Group Wizard Settings ([Zugriffskategorien](#), [Gruppennamen](#), [Blacklist](#)),
- wie die Listrechte verwaltet werden.

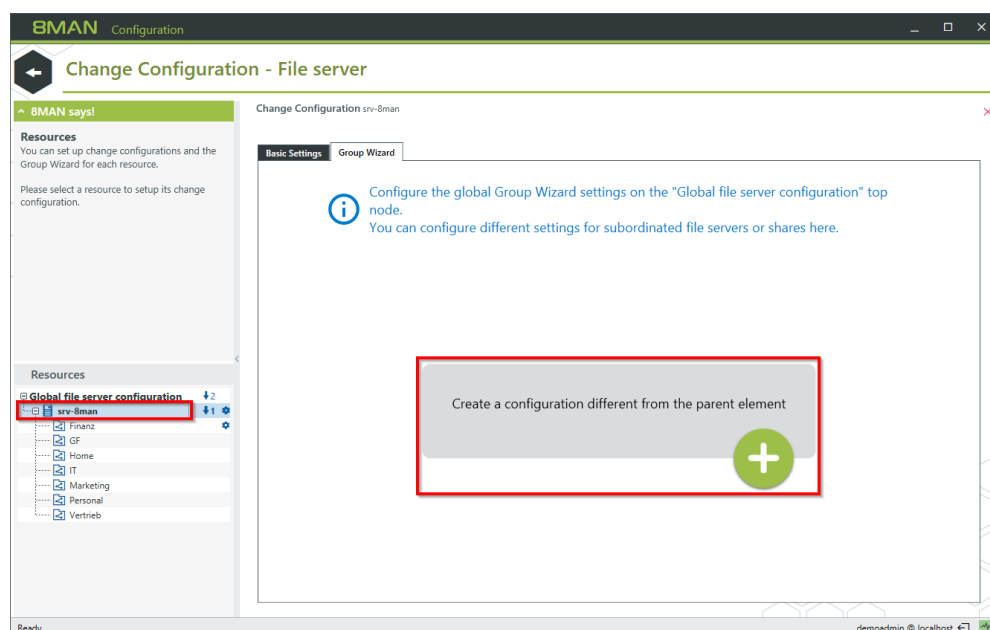
Für jede Freigabe können Sie spezifisch einstellen:

- die Group-Wizard-Einstellungen ([Zugriffskategorien](#), [Gruppennamen](#), [Blacklist](#)).

Legen Sie keine optionalen Group-Wizard-Einstellungen fest, werden die Einstellungen der übergeordneten Ebene verwendet.

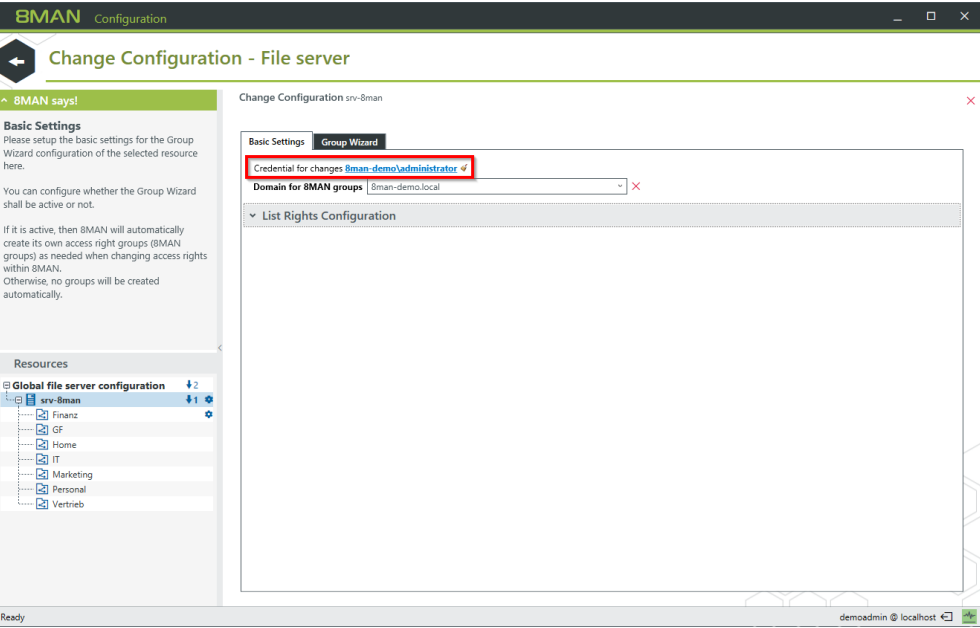


1. Select the desired file server in the "Resources" area. How to add a file server is described in the chapter [Adding FS scans](#). Newly added file servers do not have a configuration.
2. Create a new configuration.



8MAN shows you how many configurations exist below (arrow with number) and where they are (gear).

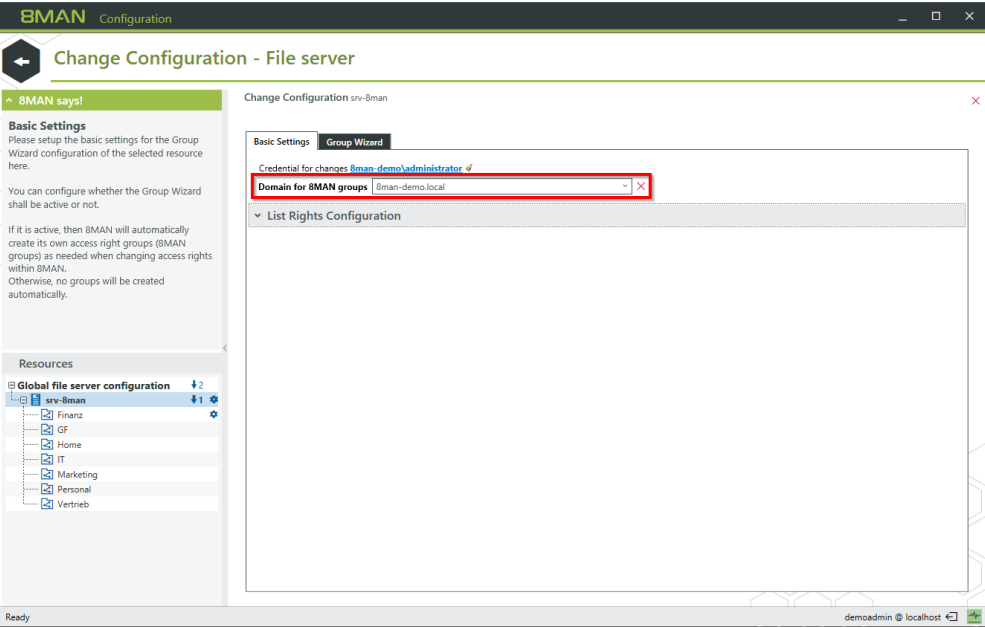
12.2.3.1 Configure the FS-change account



Determine which account is used to apply changes to the selected file server resource.

If you don't enter credentials these will be requested in the 8MAN GUI.

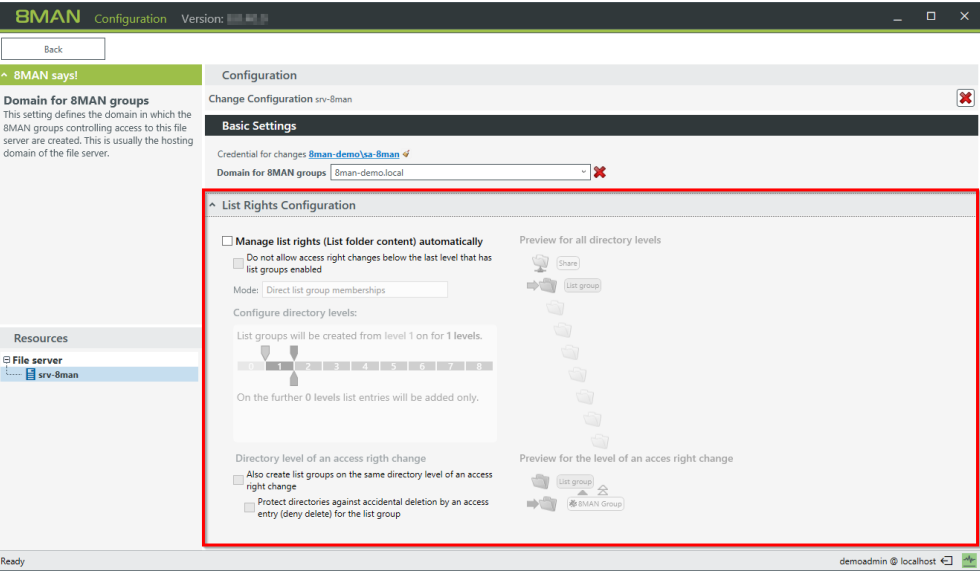
12.2.3.2 Determine the domain for 8MAN-groups



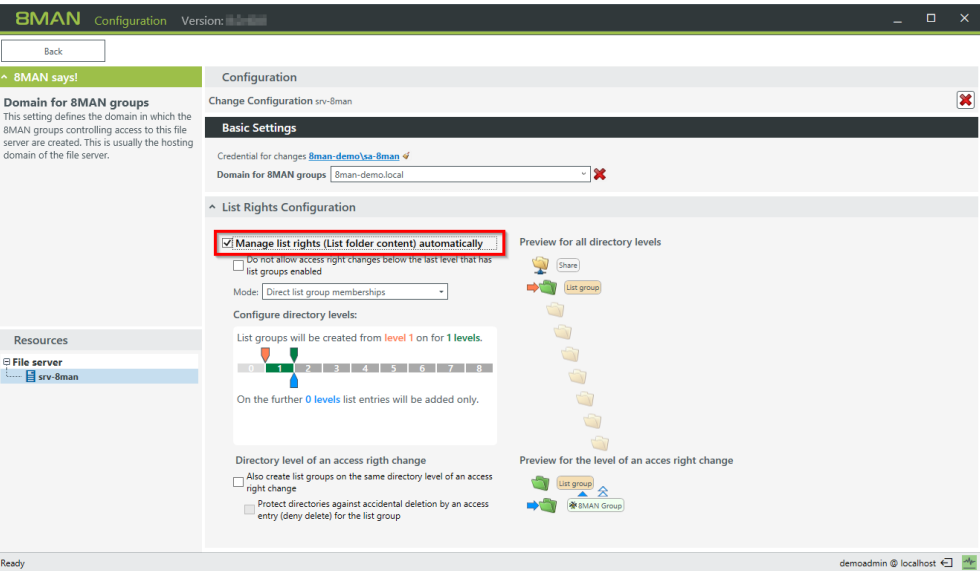
Select the domain in which the 8MAN groups are stored.

If you don't enter a domain, the 8MAN-groups will automatically be stored in the domain that the user has selected in the 8MAN GUI.

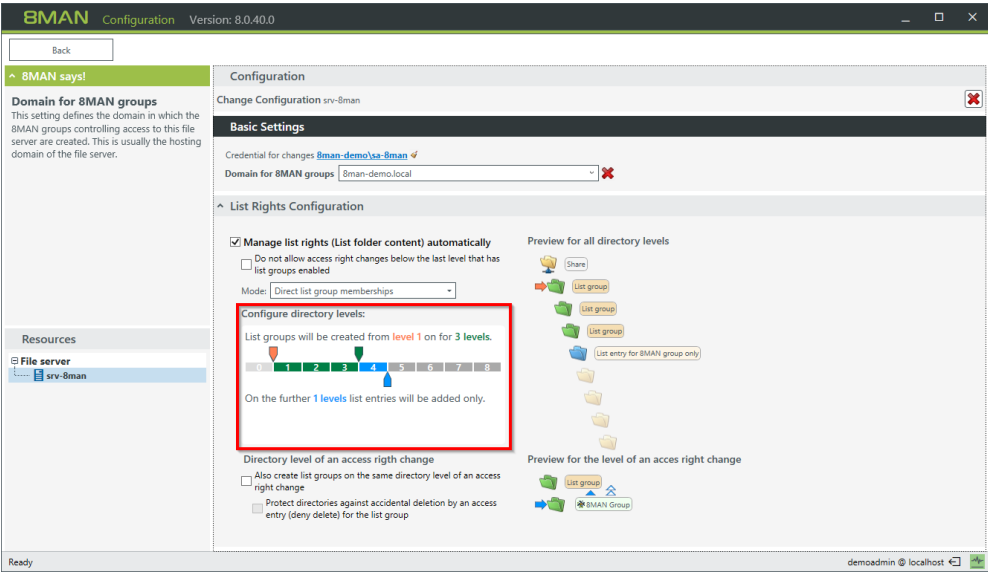
12.2.3.3 Configure automatic list rights management



The list right configuration includes several options for determining how 8MAN automatically ensures that users can navigate to the folders that they have access to. Compared to Microsoft native tools you can avoid many cumbersome and error prone administrative steps.



Activate the automatic list rights management option.



Use the slider to determine the level of folder depth that 8MAN manages.

Level 0

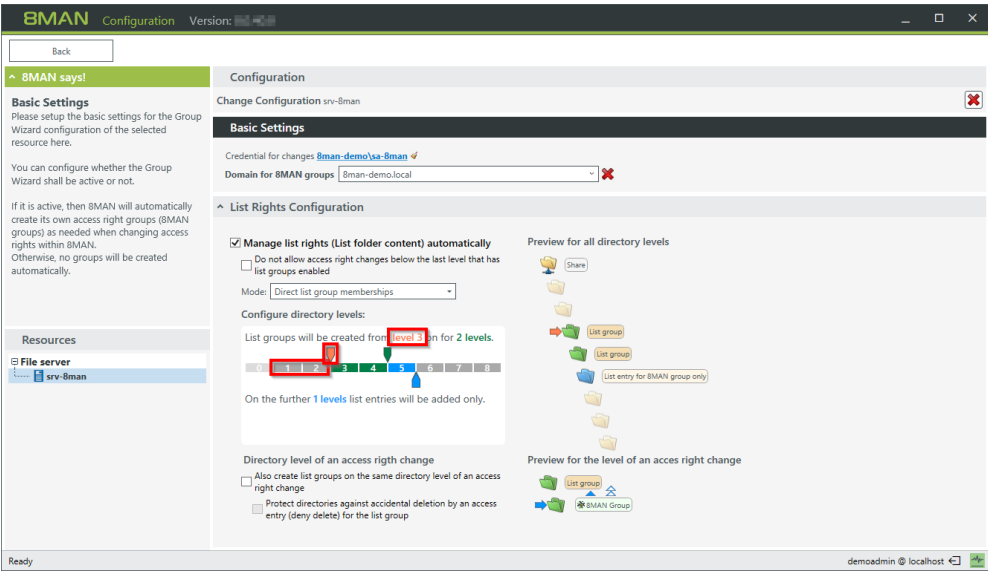
Level 0 is the shared folder (share level). This folder is visible to users based on share rights. An assignment of list rights on this level is not required.

green levels

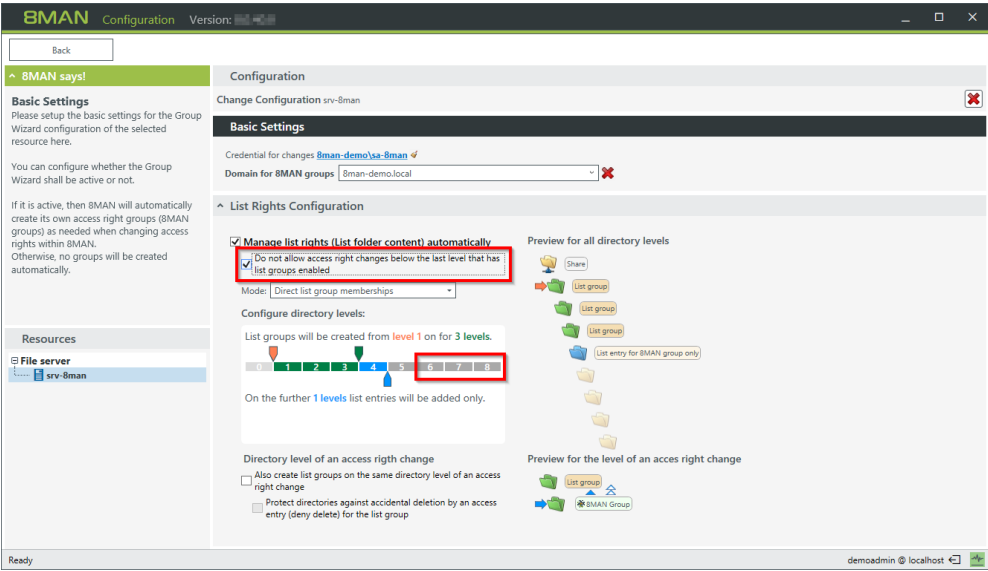
8MAN creates list groups for every level. The access rights groups become members of list groups.

blue levels

8MAN does not create list groups for these levels. Access groups are provisioned by entering list rights directly into the Access Control List (ACL). This way overall less groups are created and Kerberos token size is minimized. On the other hand more ACL entries are required which may cause performance issues.

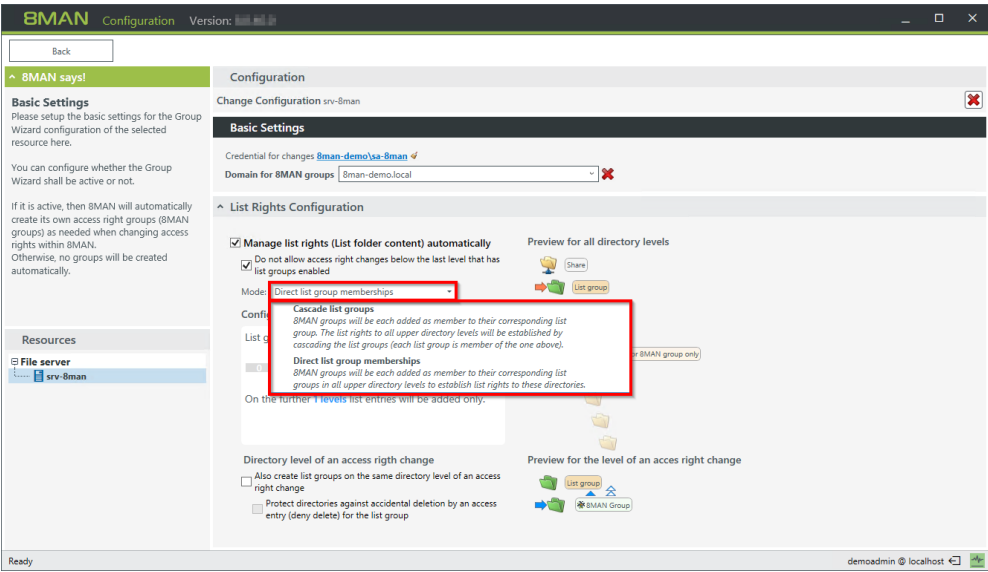


Move the orange slider to exclude folder levels from the automatic creation of list groups. This is useful if users already have list rights to these folder levels.



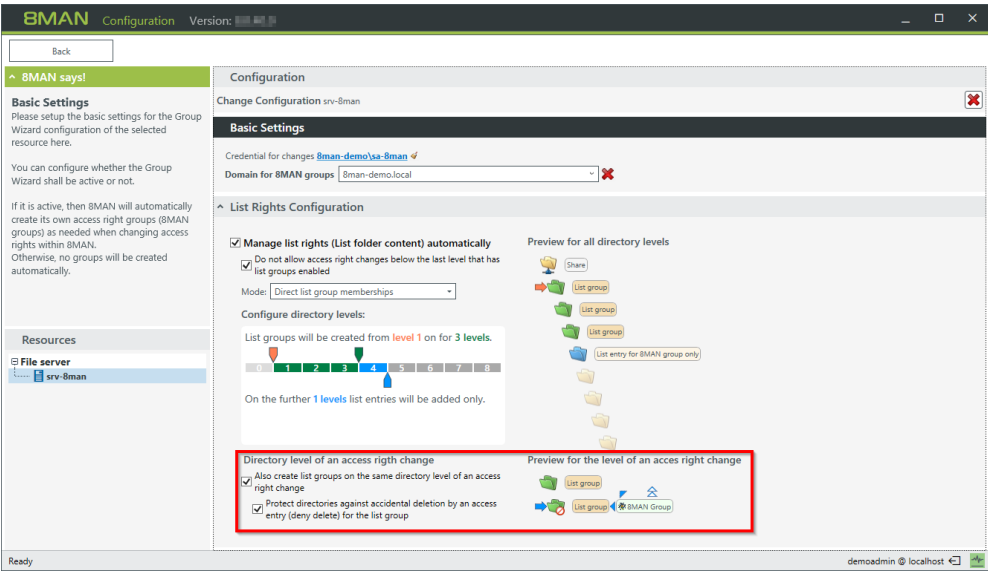
Activate this option to prevent access rights changes below the lowest "list-rights-level" plus one (for example level 6, as in the screenshot).

You should activate this option to prevent users from gaining access to levels that they are not able to navigate to.



Select a list group mode.

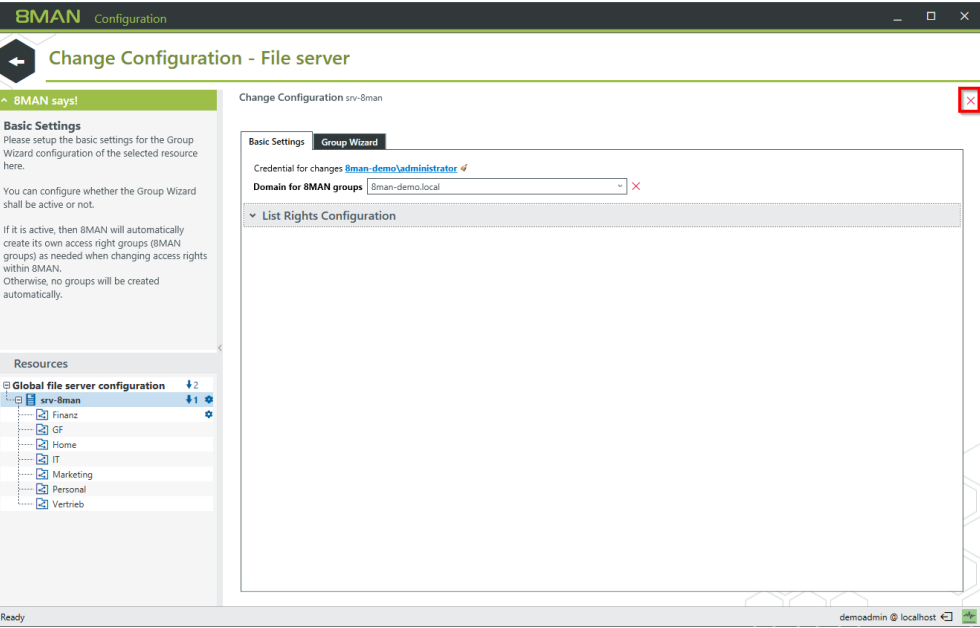
This setting has no influence on Kerberos token size.



This option allows you to prevent permission changes to specific folder levels (keep it as parent for inheritance).

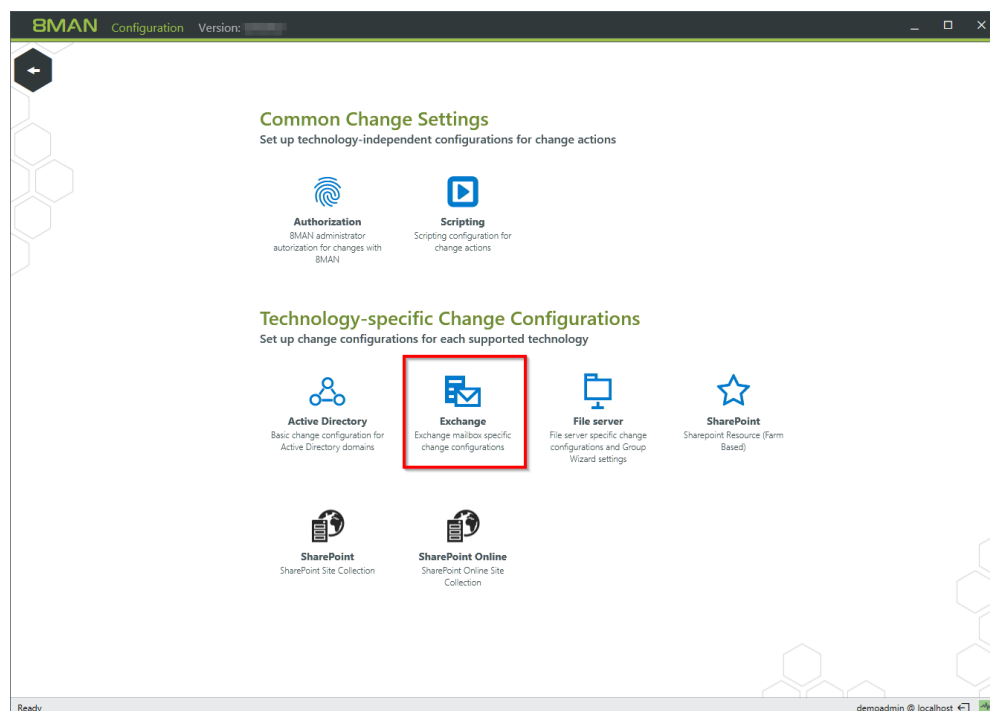
It is more beneficial to protect folder levels by assigning "restricted modify", as these require fewer group memberships.

12.2.3.4 Delete a FS-specific configuration



Click on the red cross to completely remove the FS-specific configuration.

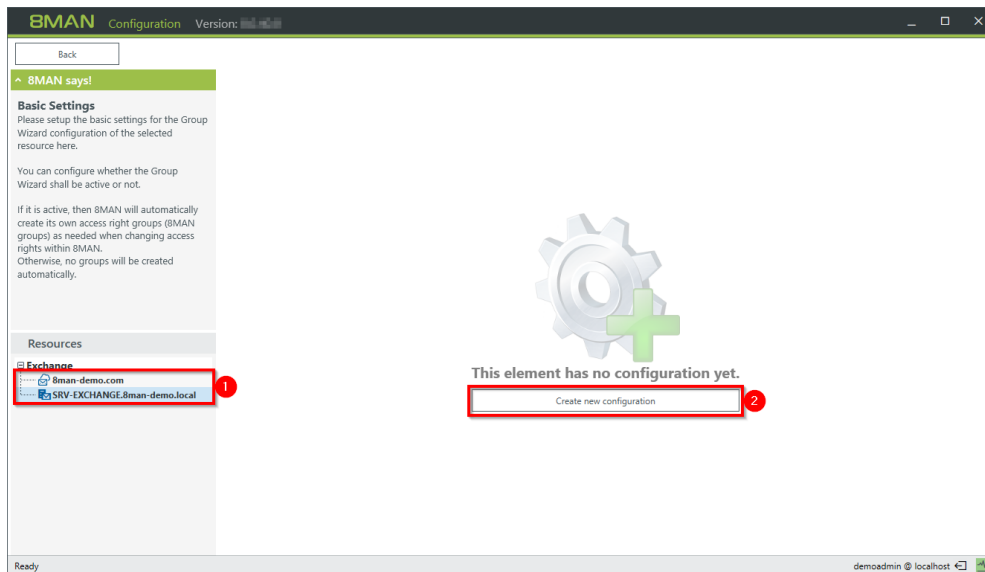
12.3 Exchange change configuration



Select "Change configuration" from the 8MAN configuration home menu.
Click "Exchange".

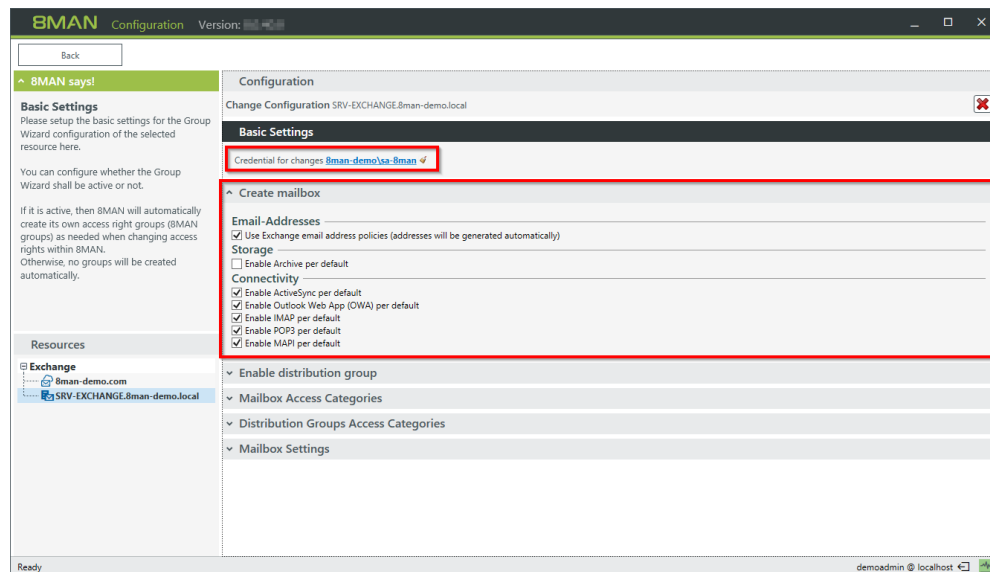
12.3.1 Create an Exchange change configuration

After creating an [Exchange Scan](#), the Exchange resource does not have a valid change configuration. You must have executed an Exchange scan in order to create a change configuration.



1. Select an (already scanned) Exchange server.
2. Click "Create new configuration".

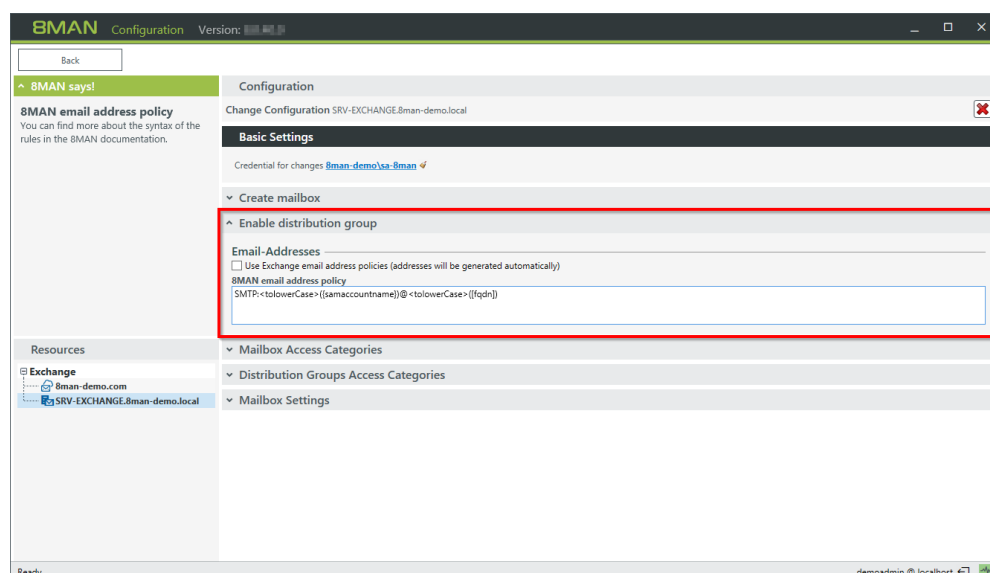
12.3.2 Customize an Exchange change configuration



1. Enter the desired credentials to make changes to Exchange. Please note additional information in the following sections: [Service accounts](#) and [required permissions](#). If you don't enter any credentials, users will be requested to enter this information for every change or session.

2. Designate the settings for the creation of a mailbox.

Creating mailboxes for Exchange Online is not supported.



Determine how email addresses for mailing lists are built.

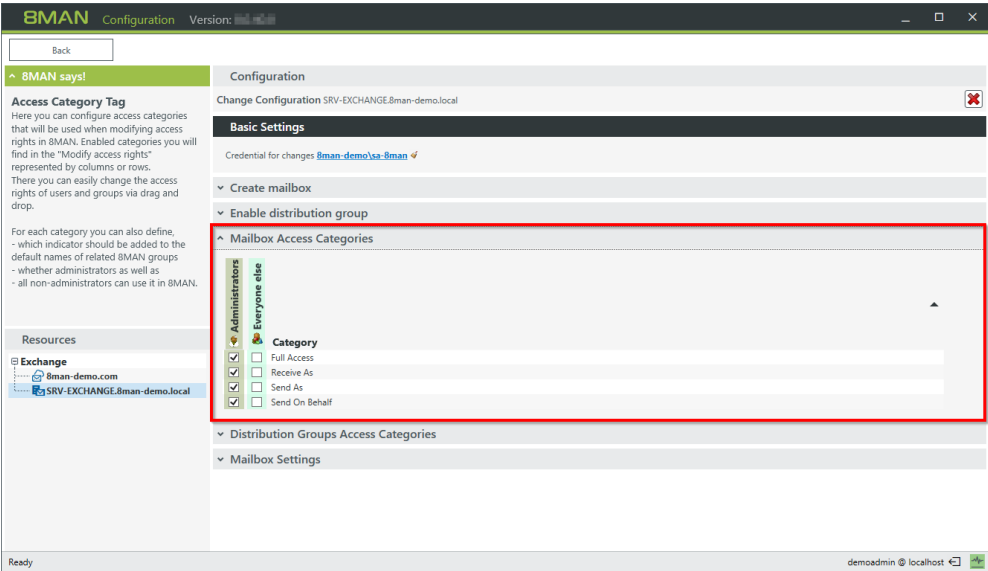
Option activated:

E-Mail-Addresses are automatically built based on Exchange guidelines. When activating emails for mailing lists the email address can not be changed.

Option deactivated:

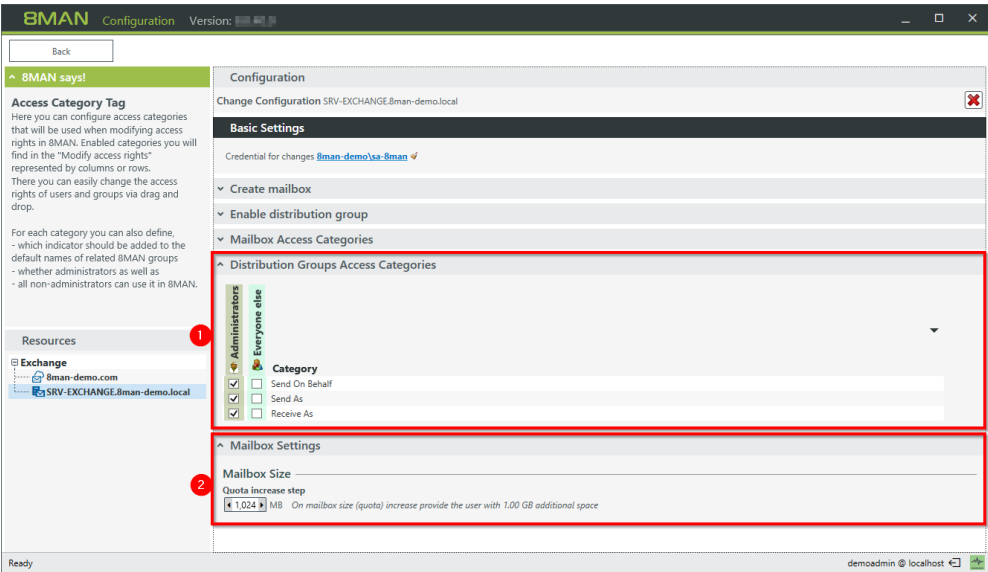
Email addresses are generated based upon the defined settings. For example, you can use the OU instead of the group name. You may define email addresses differently than allowed by standard Exchange guidelines. When activating emails for mailing lists, the email address can be changed.

Creating distribution groups in Exchange Online is not supported.



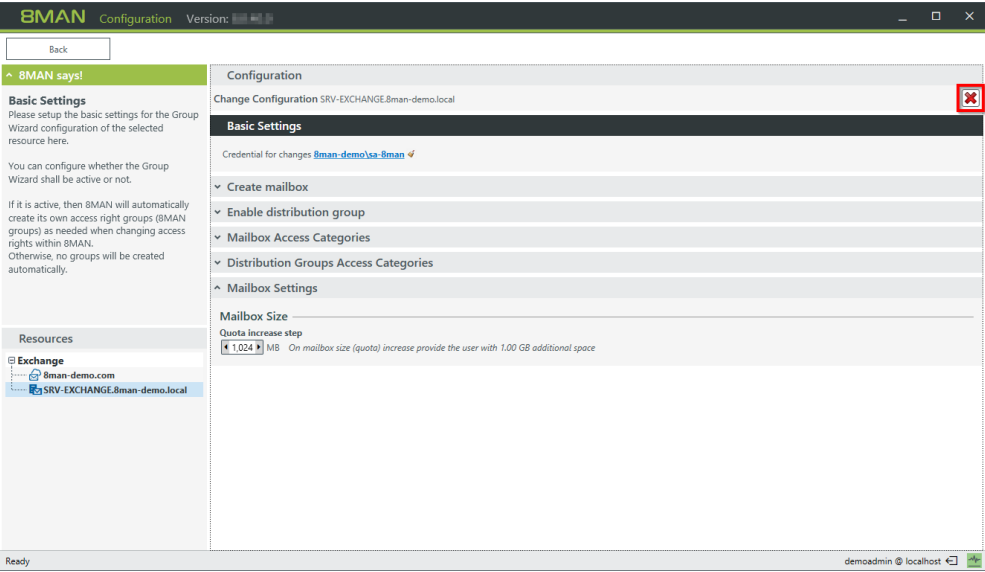
Determine which mailbox access categories are available to 8MAN users.

The category "Receive As" is not supported by Exchange Online.



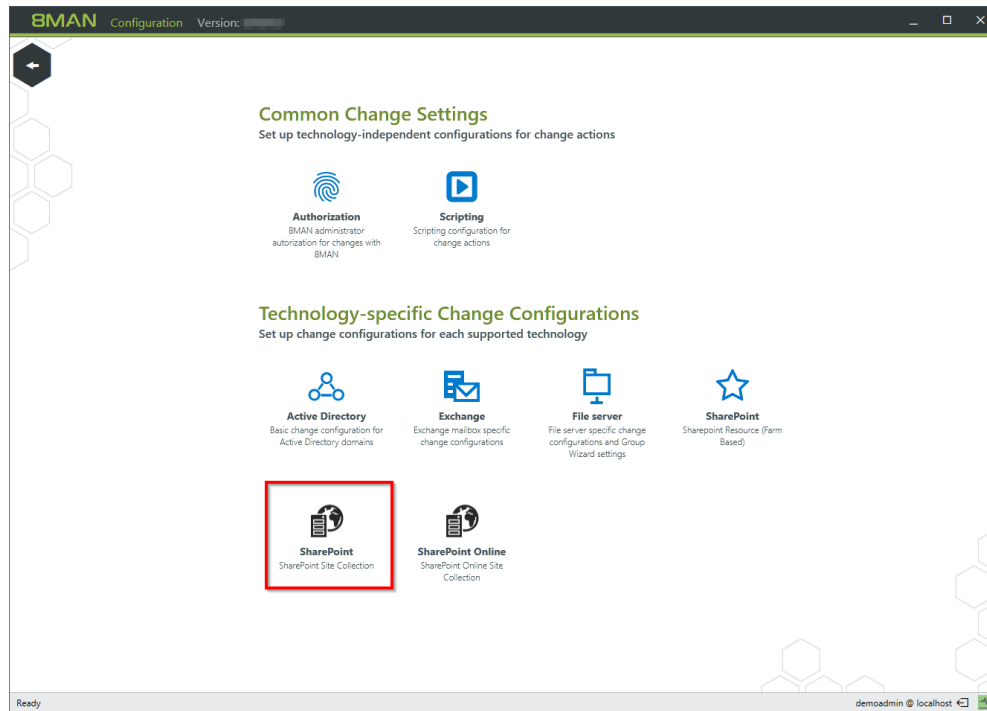
1. Determine which distribution group access categories are available to 8MAN users.
2. Determine the increments that will be used to increase mailbox size.

12.3.3 Delete an Exchange change configuration



If you delete an Exchange change configuration you lose all customized settings and can create a new configuration with default settings.

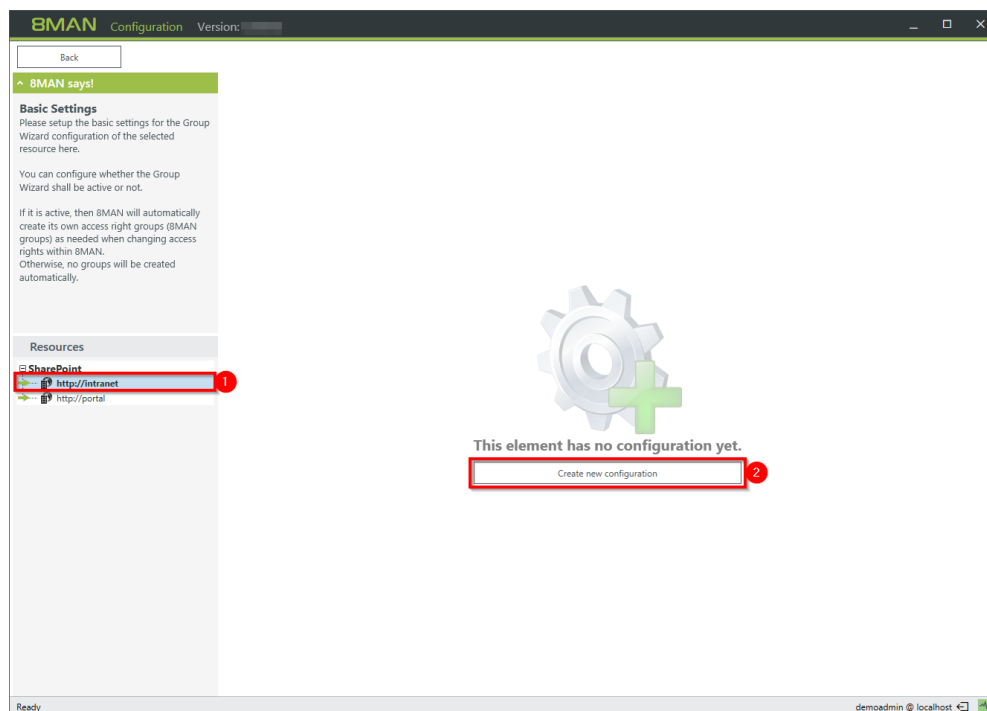
12.4 SharePoint change configuration



In the 8MAN configuration, navigate to "Change Configuration" -> "SharePoint".

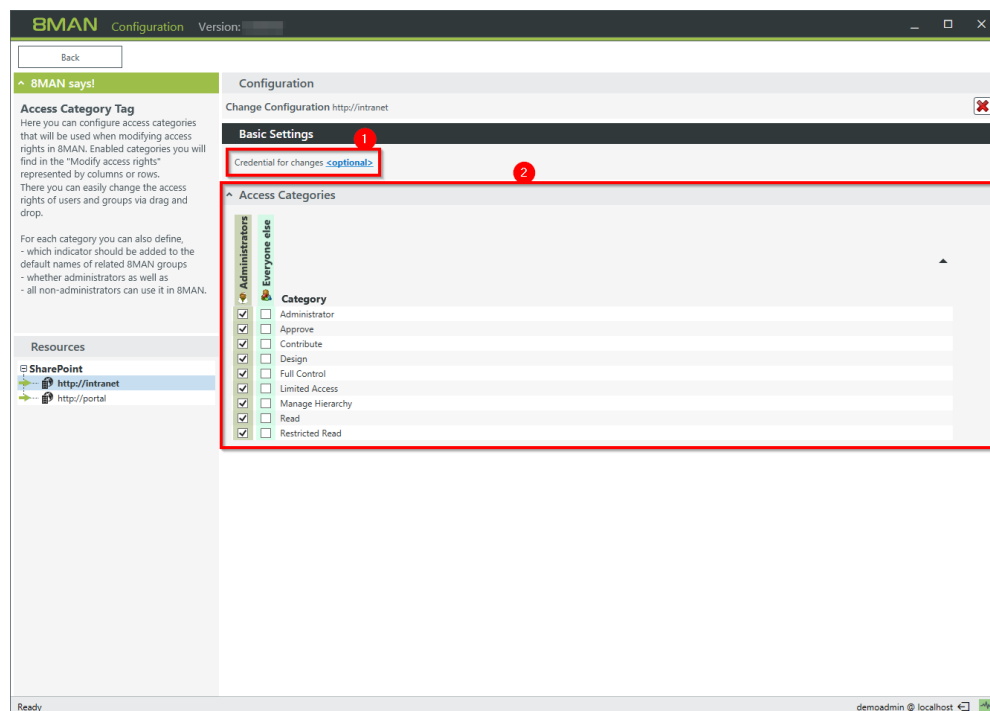
You must have run at least one SharePoint scan to create a change configuration.

Add a SharePoint change configuration



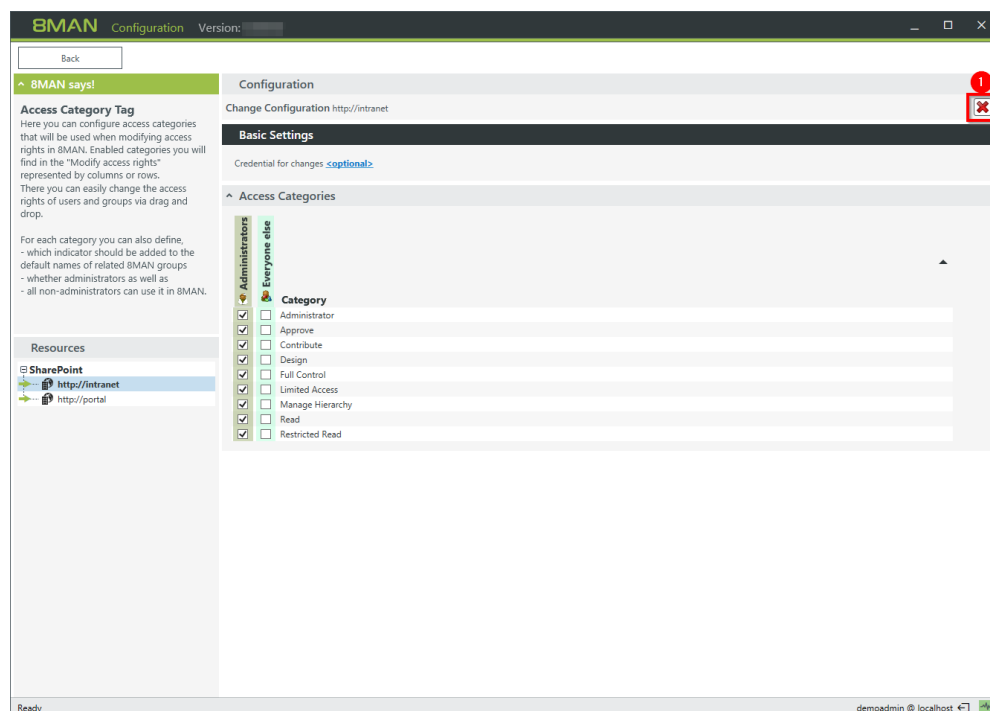
1. Select a SharePoint resource.
2. Click "Create new configuration".

Modify a SharePoint change configuration



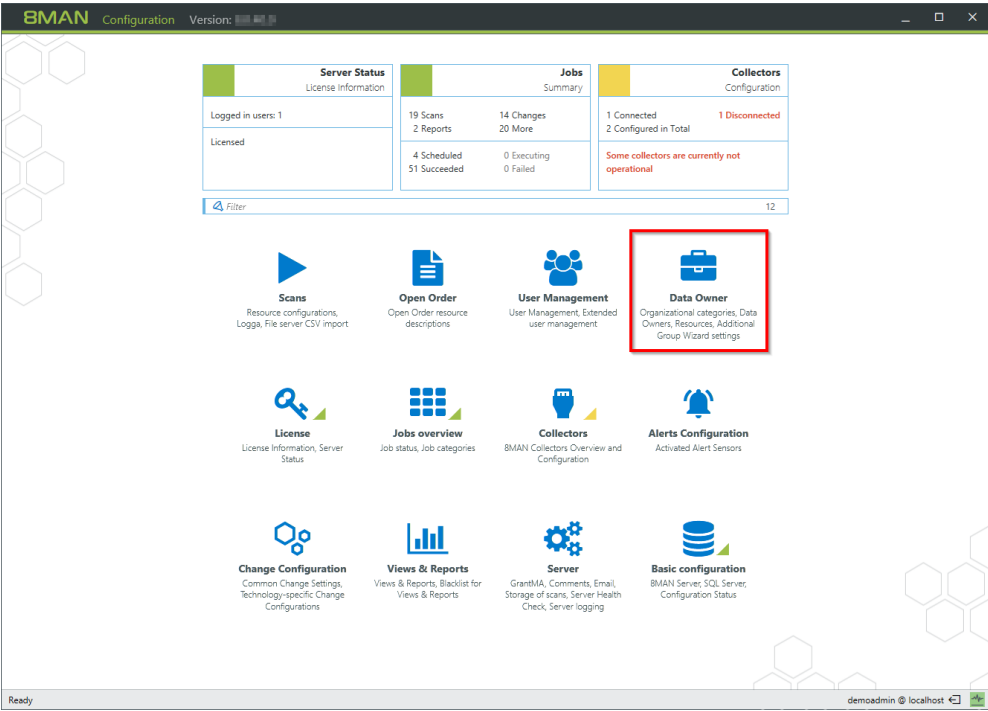
1. Specify which credentials are used to make changes to the SharePoint resource.
If you do not specify any, the 8MAN users are prompted for each change.
2. Determine which access categories are available for 8MAN users to change access rights. Define a set for 8MAN administrators and another for all 8MAN modify user roles (See also: [8MAN user management](#)).

Delete a SharePoint Change configuration



1. Delete a SharePoint change configuration.

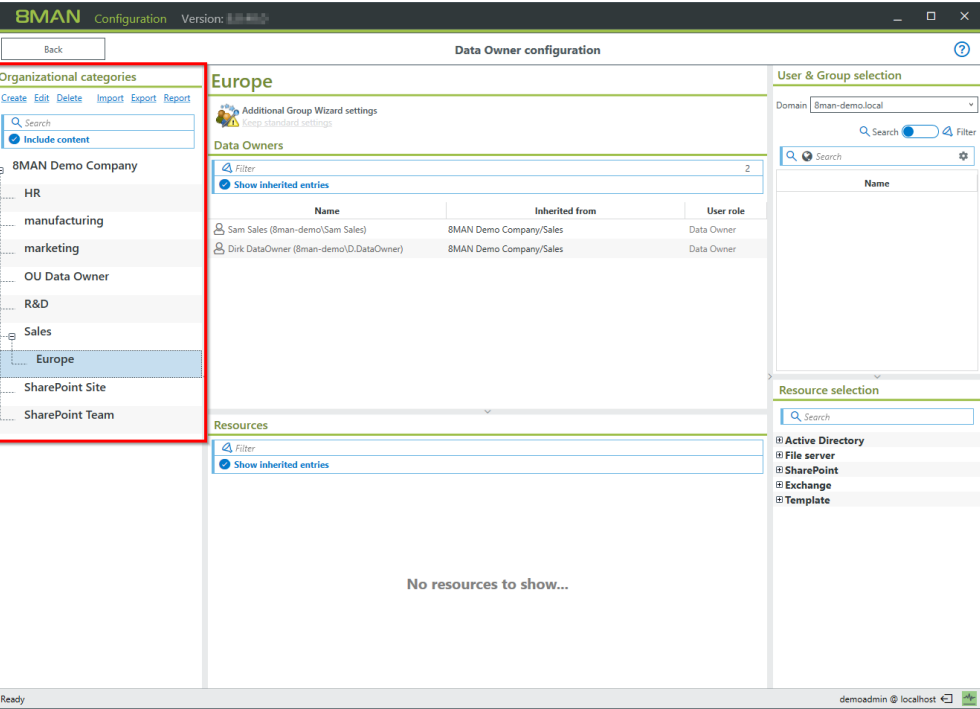
13 Data Owner



Data Owners, from an 8MAN perspective are persons or roles in an organization that know, which employees need access to specific resources to do their jobs.

You create organizational categories in the data owner configuration. You can determine which users are assigned the Data Owner role and which rights they can assign.

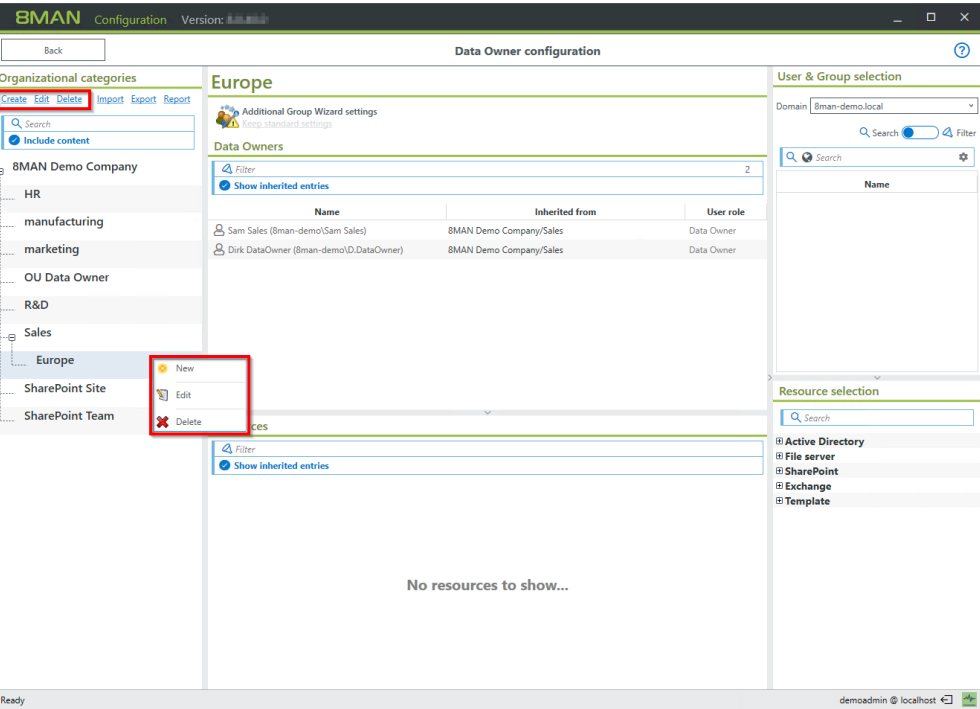
13.1 Create organizational categories



Organizational categories form the containers that Data Owners can manage.

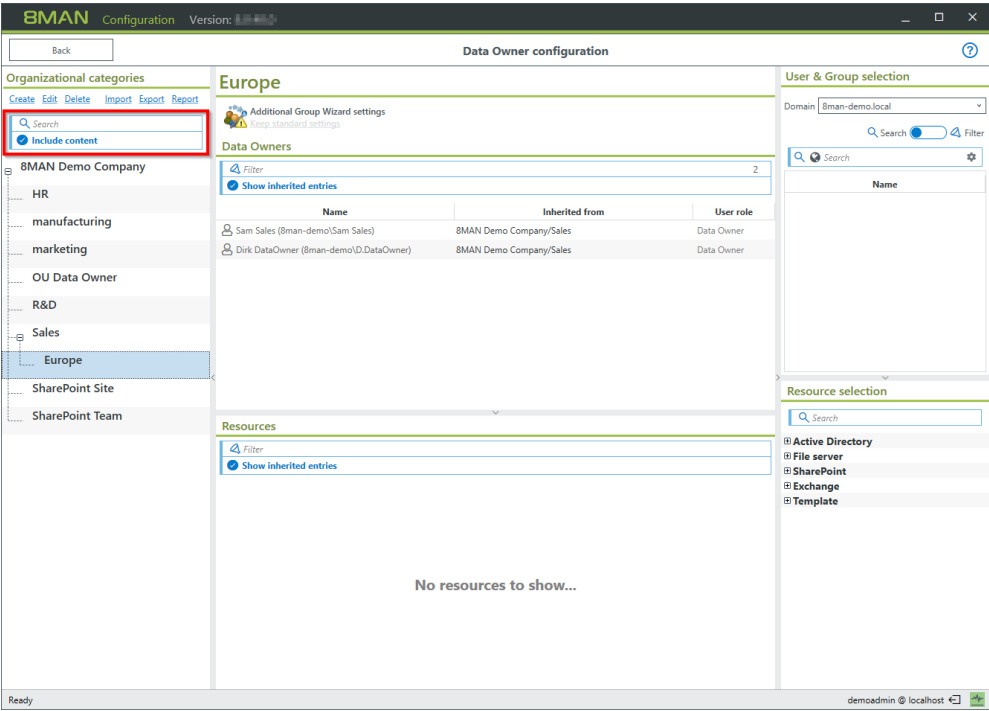
You can create structures and hierarchies similar to your companies org chart.

You can add a description to all organizational categories.



Create as many organizational categories as you like. You can do this by using the symbols on the top or by right-clicking and using the context menu.

You can move the organizational categories with drag & drop.



You can search the organizational categories.

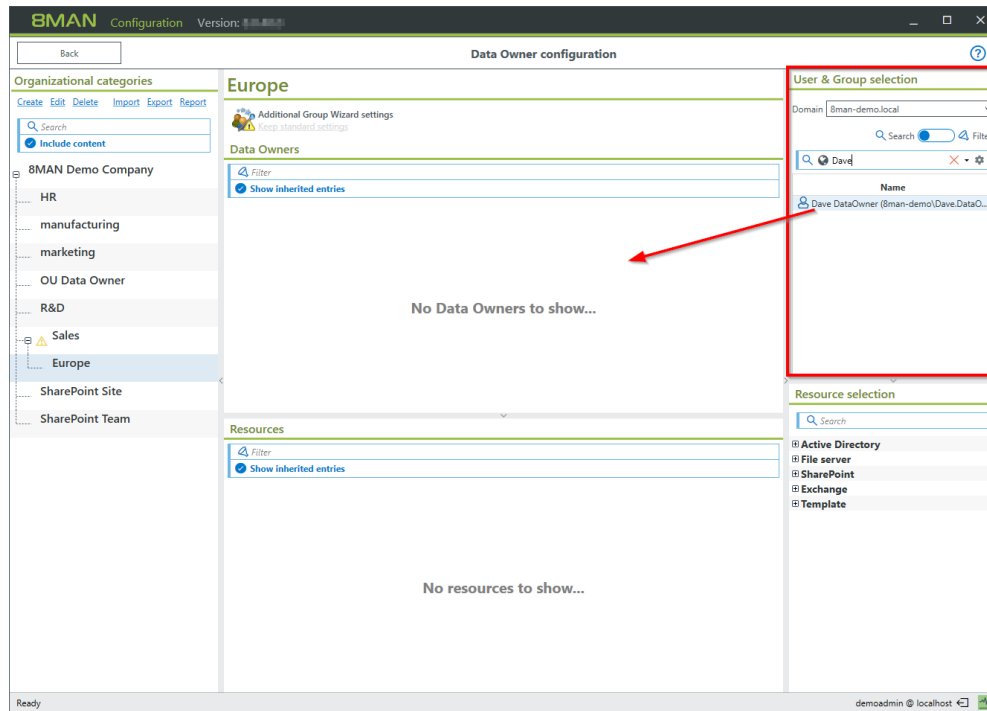
Option "Include content" deactivated:

The search is only applied to names and descriptions of the organizational category.

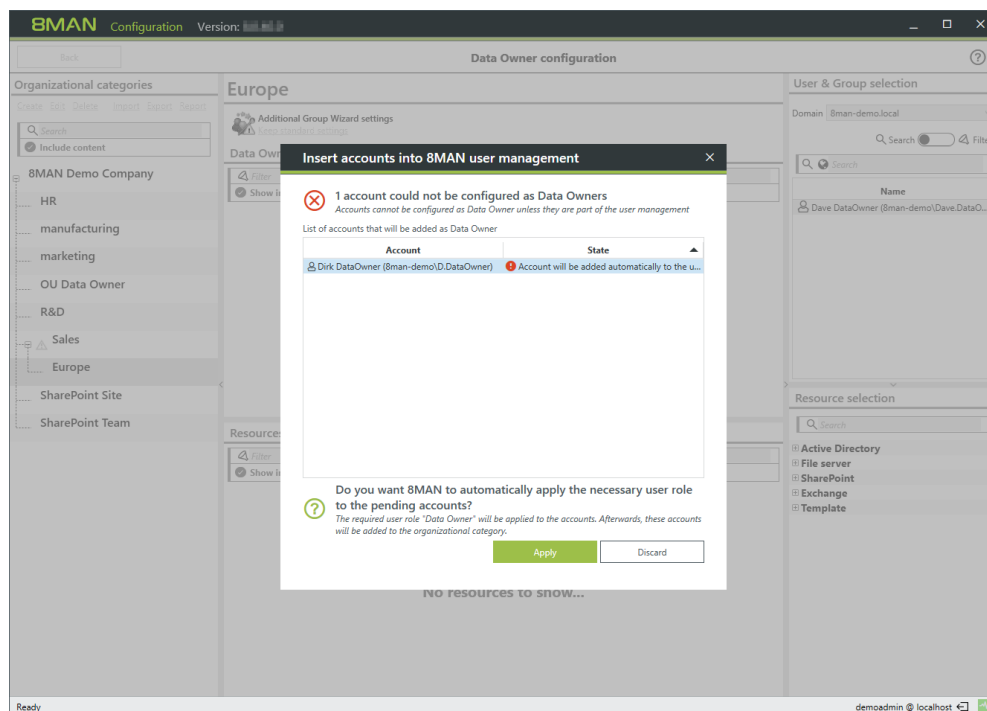
Option "Include content" activated:

The search also includes Data Owners and resources.

13.2 Assign a Data Owner to an organizational category



Select a user via drag & drop or by double-clicking on him.

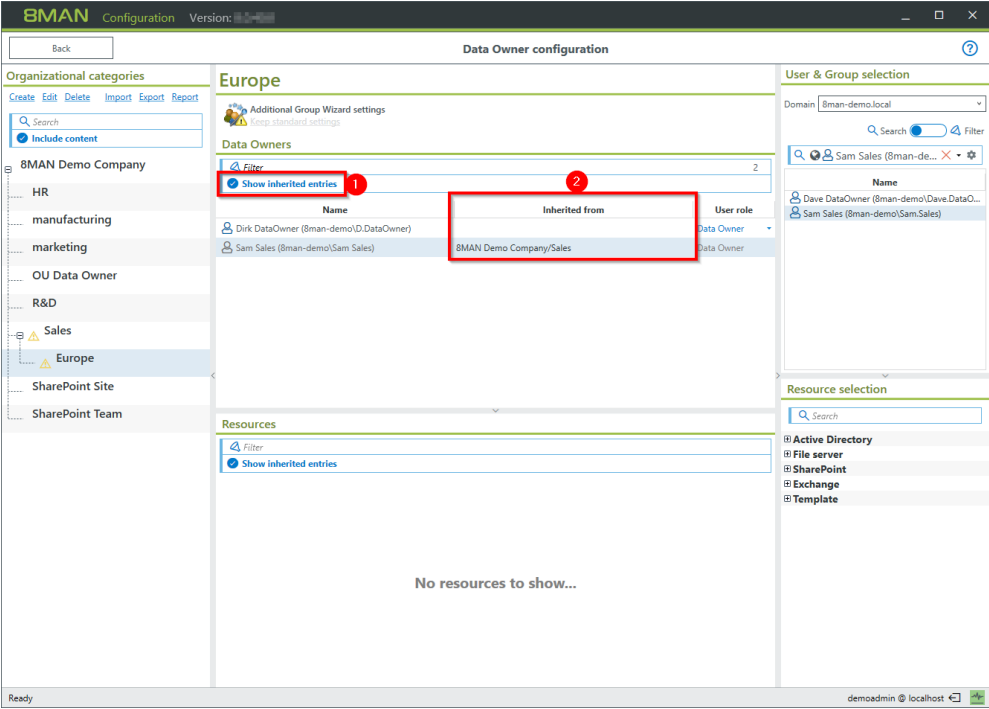


Data Owners must have either a "change" or a "read" user role in the 8MAN user management. 8MAN-Admins can not be configured as Data Owners.

If you want to assign Data Owners that do not own the required role, then this the dialogue box is shown.

When clicking on "Apply" the required change role is assigned to the user.

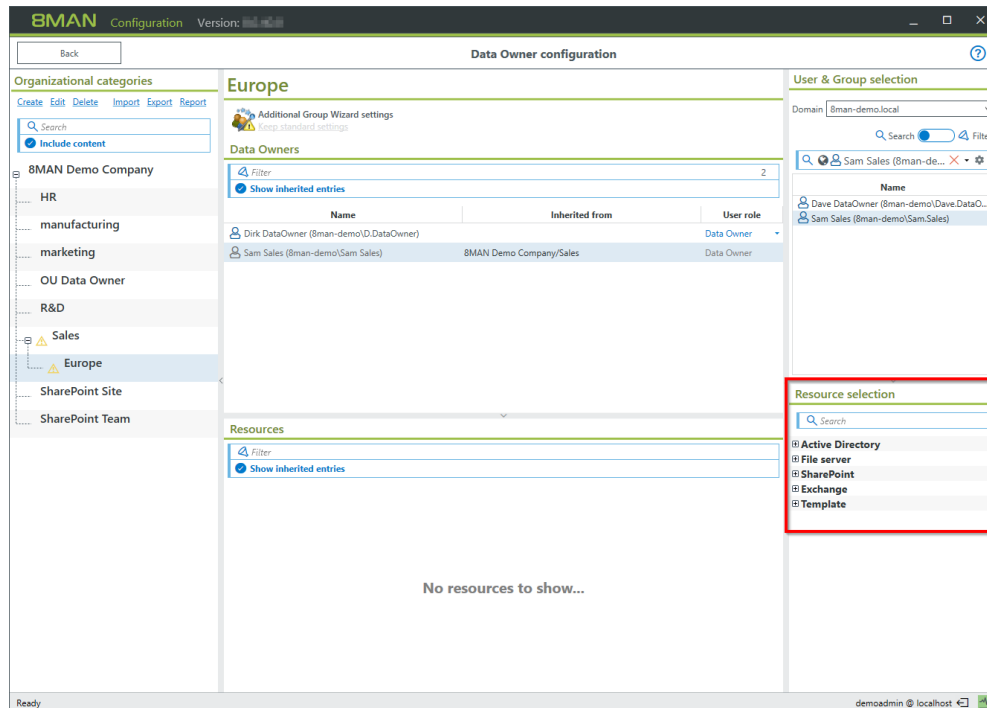
You can change the role afterwards.



Hierarchy rule:
Data Owners are able to manage the assigned organizational category and all sub-categories.

1. You can activate the option "Show inherited entries".
2. The column "inherited from" shows the origin.

13.3 Assign resources to an organizational category

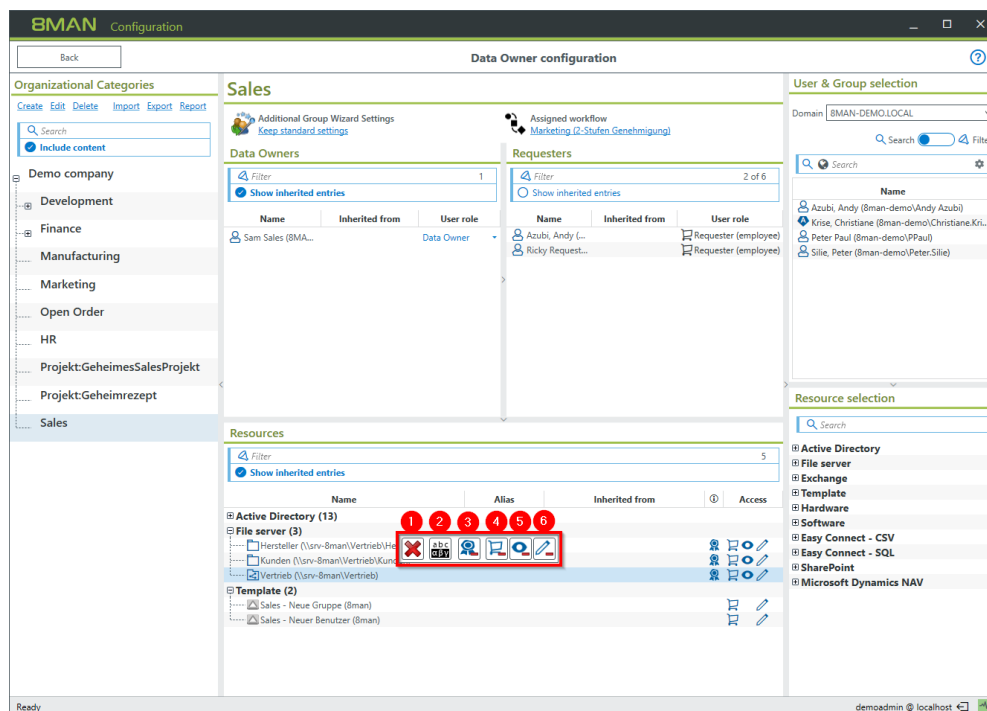


Select the desired resource and add it to the organizational category via drag & drop or by double-clicking on it.

You can only add resources which have been scanned.

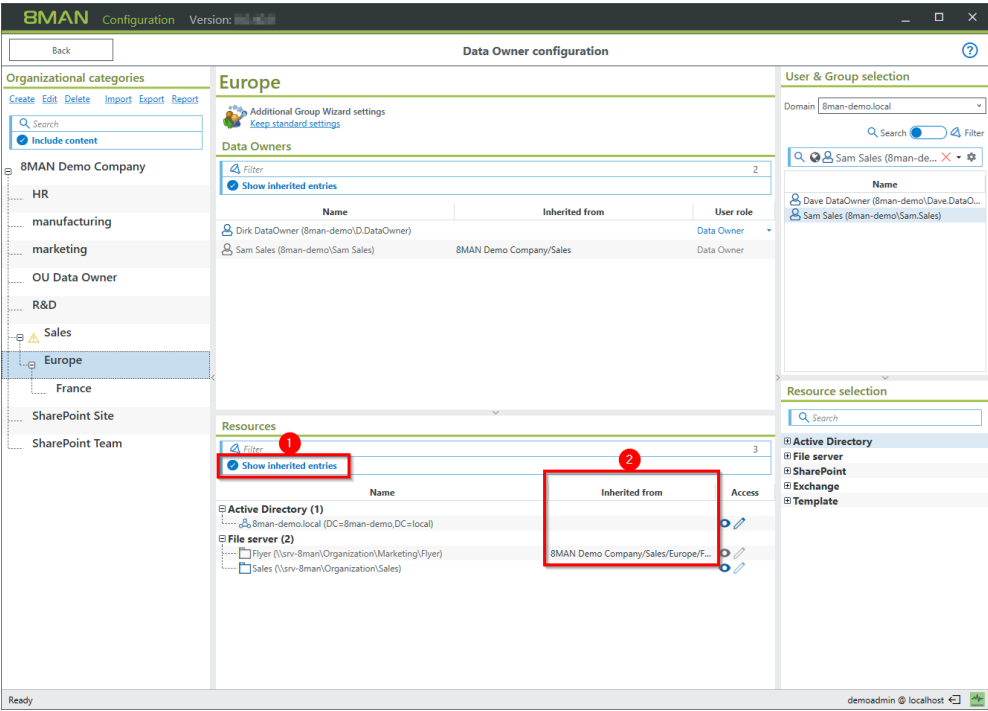
Open order resources such as "template", "hardware" or "software" can only be added if:

- you have the required license and
- you have imported an open order configuration.



Select a resource to perform the following functions in the flyout:

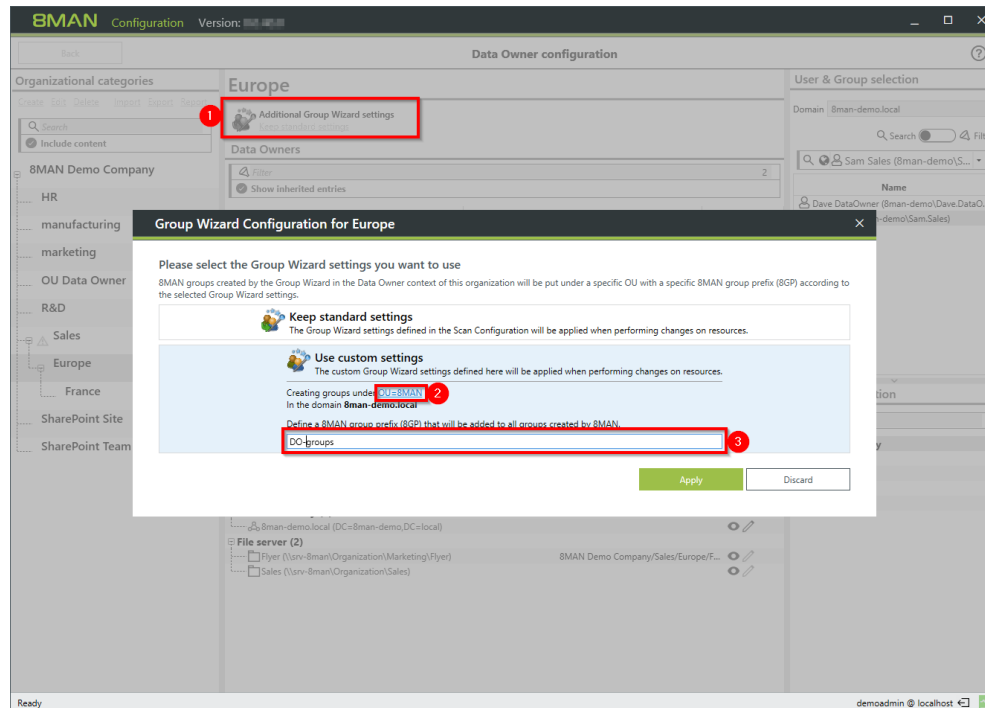
1. Remove resource.
2. Assign aliases and description to simplify ordering in GrantMA.
3. Enable/disable recertification.
4. Enable/disable orderability in GrantMA.
5. Enable/disable visibility.
6. Enable/disable changeability.



Hierarchy rule:
Resources are available in the assigned organizational category and all higher categories (from bottom to top as opposed to Data Owner and NTFS rights inheritance).

1. Activate the option "Show inherited entries" to display inherited entries in gray.
2. The column "inherited from" shows the origin.

13.4 Assign specific group wizard settings to organizational categories

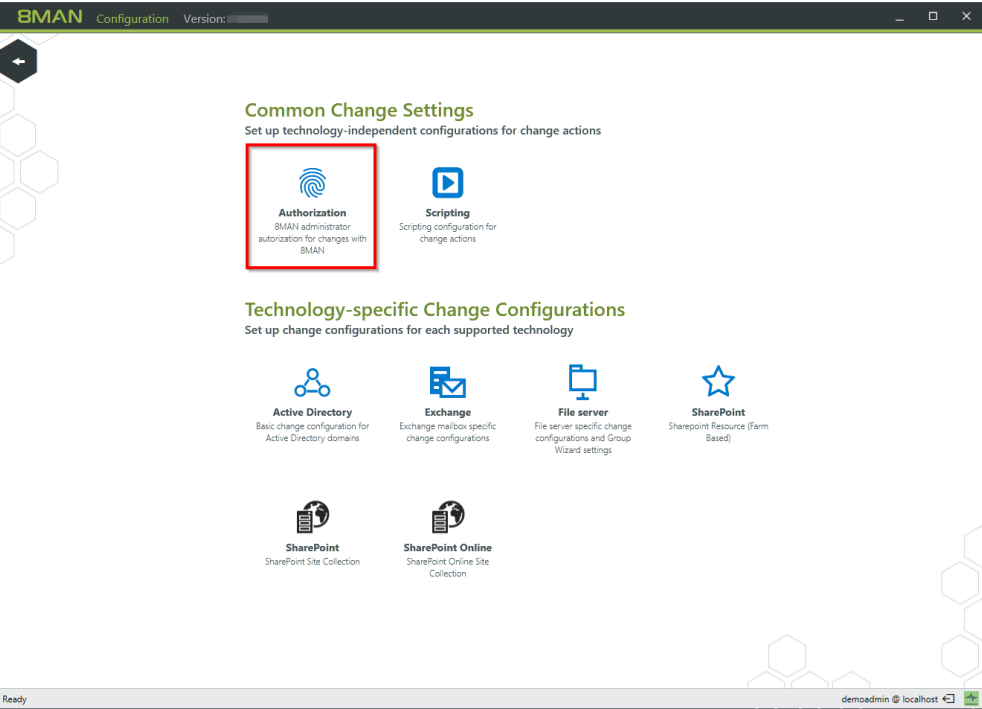


1. You can modify the group wizard configuration for every organizational category.

This allows you to use

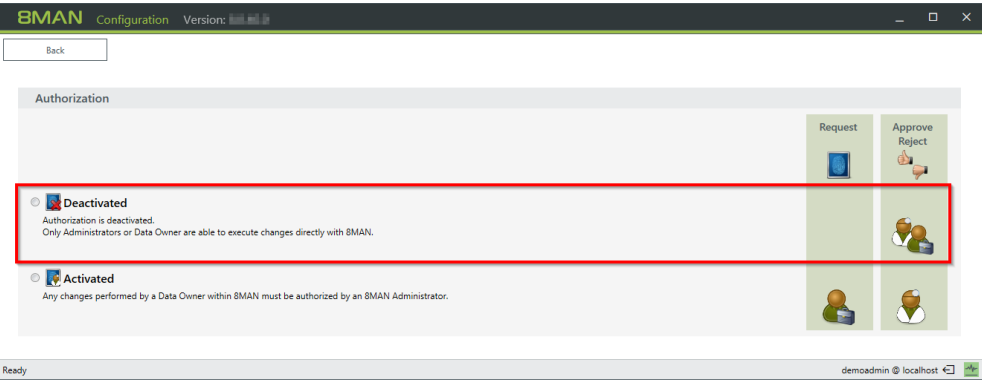
2. separate OUs
3. group names (prefix) for 8MAN groups that are created by Data Owners.

13.5 Activate/deactivate simple approvals for Data Owners

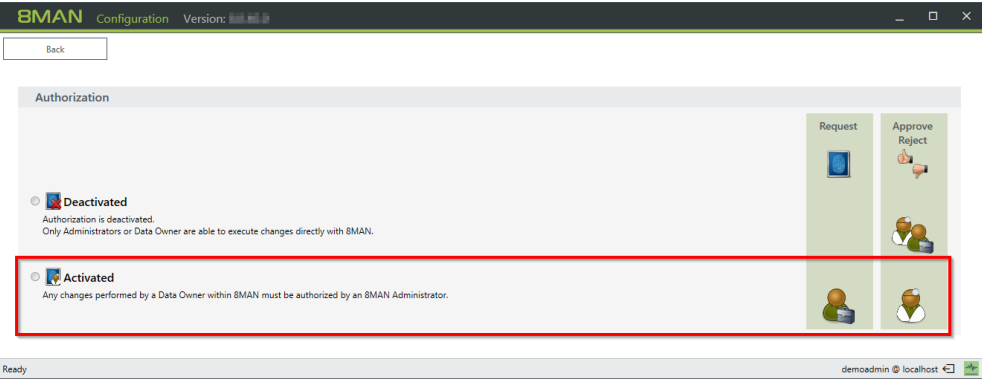


"Authorization" can be found in the "Change Configuration".

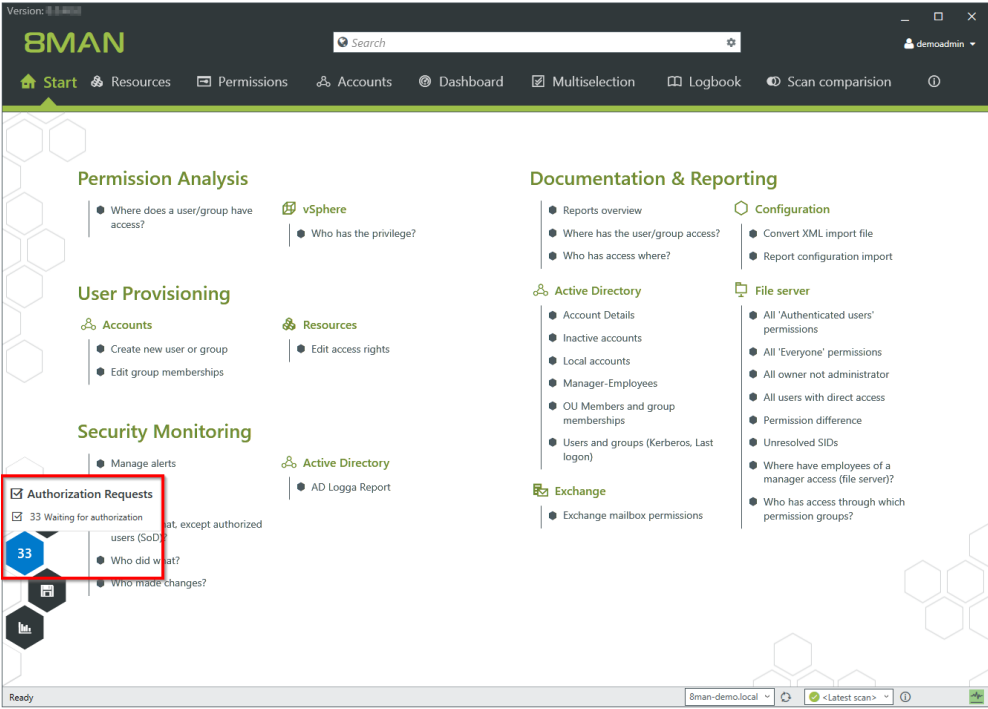
The authorization settings do not affect 8MATE GrantMA workflows.



Option "Deactivated":
8MAN implements changes made by Data Owners without any further approval.



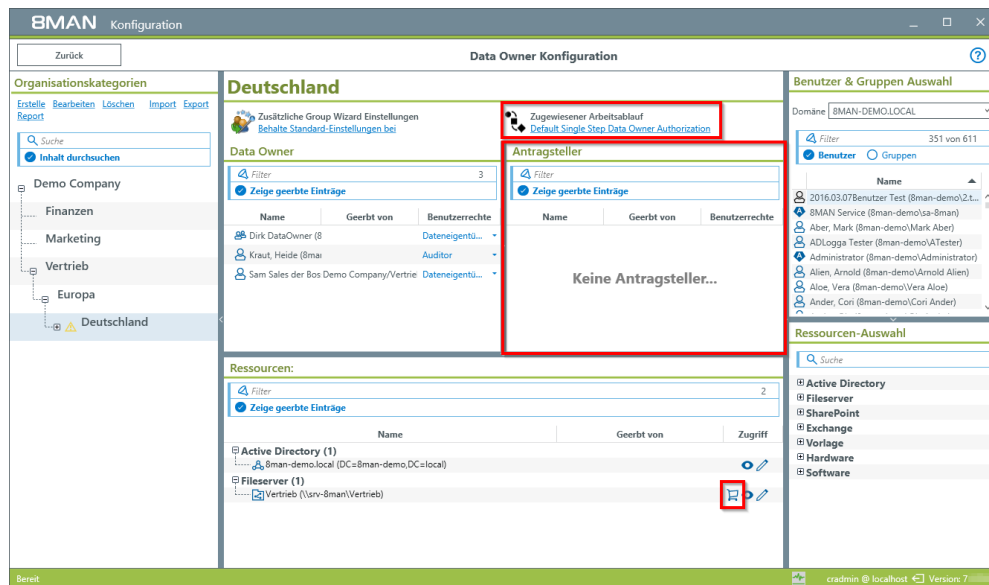
Option "Activated":
Changes made by Data Owners must be approved by an 8MAN Administrator.



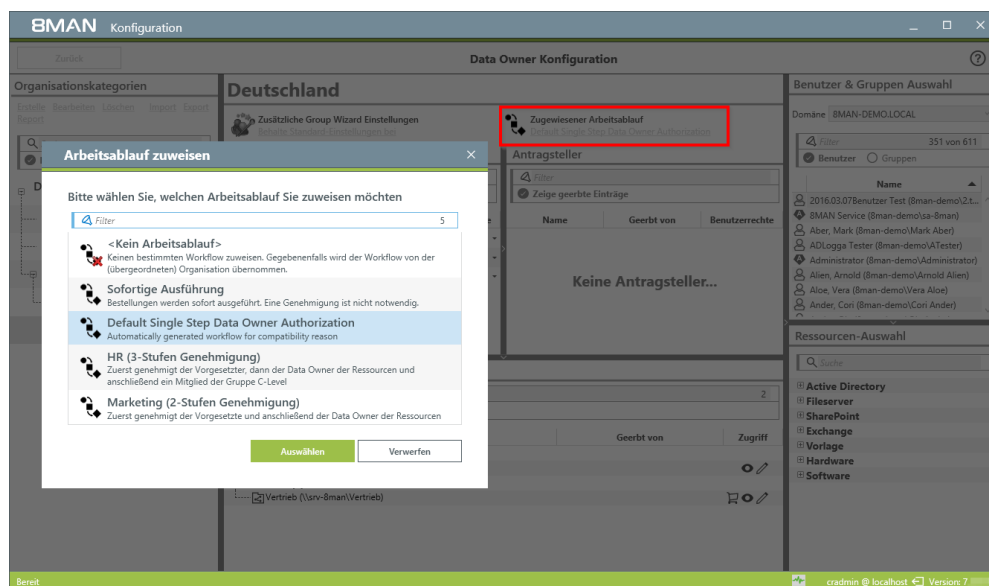
8MAN Administrators need to log in to 8MAN and find "Authorization Requests" on the home page.

Simple approvals without 8MATE
GrantMA do not include any active notification functionality.

13.6 Data Owner configuration and GrantMA

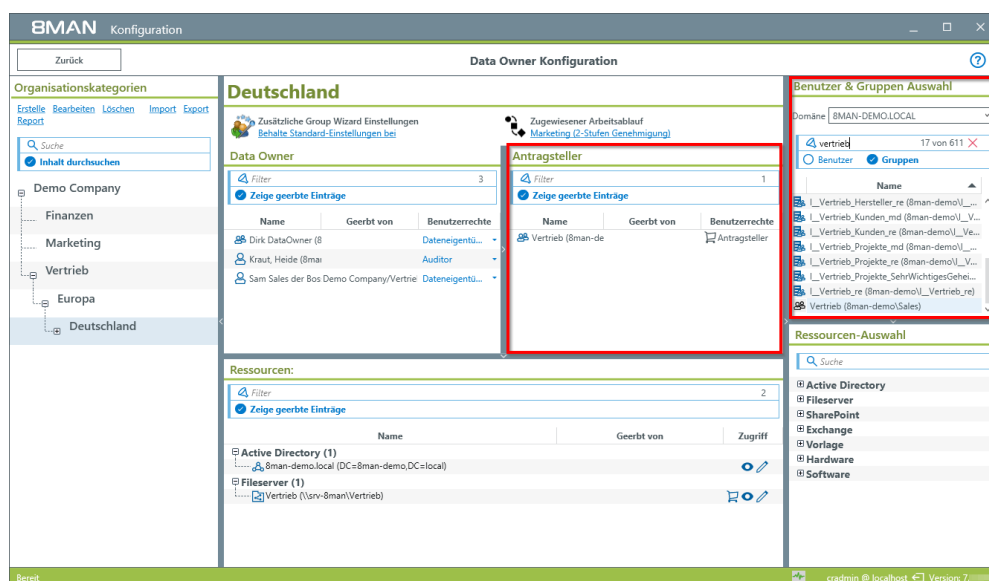


If your license includes 8MATE GrantMA you can see additional options in the Data Owner configuration.



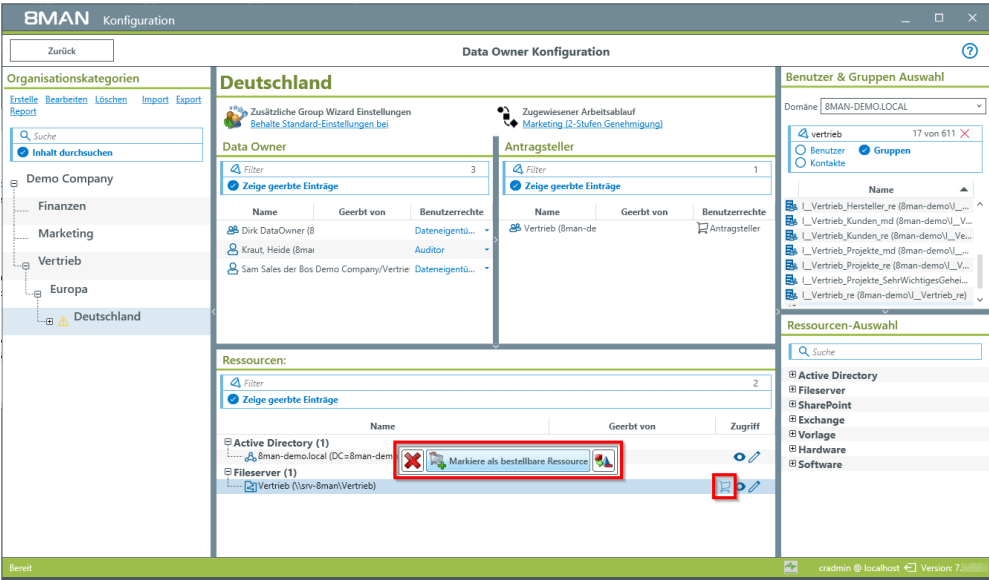
Assign a workflow for an organizational category. This way, you can determine which approval steps are required.

Workflows are created in the 8MATE Grant MA web interface. See chapter: "Define individual approval workflows".



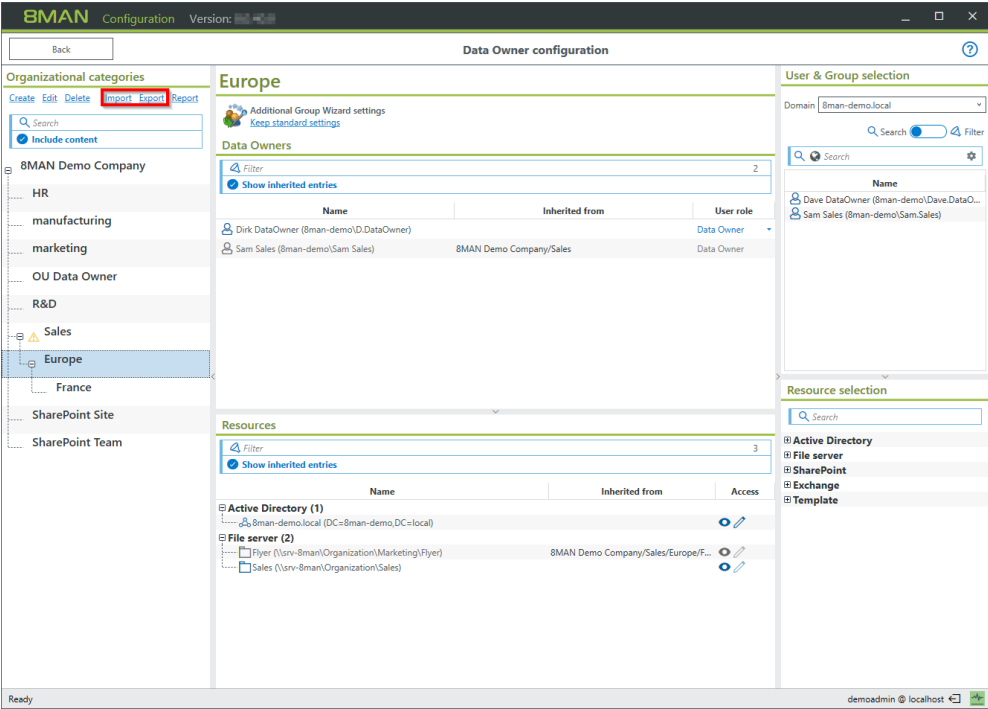
When using 8MATE GrantMA, there is an additional user role: "Requester".

Select a user or group from the account selection area. Add your selection to the "Requester" section via drag & drop.



Mark the resources as available, so that they can be shown in the 8MATE GrantMA web interface.

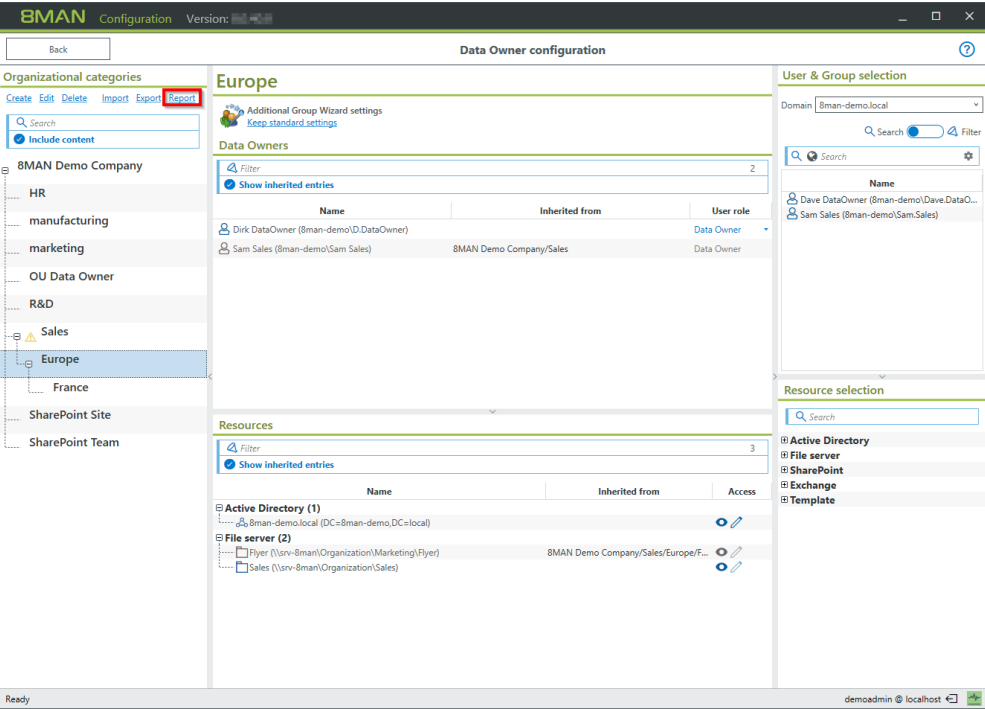
13.7 Import/export Data Owner configurations



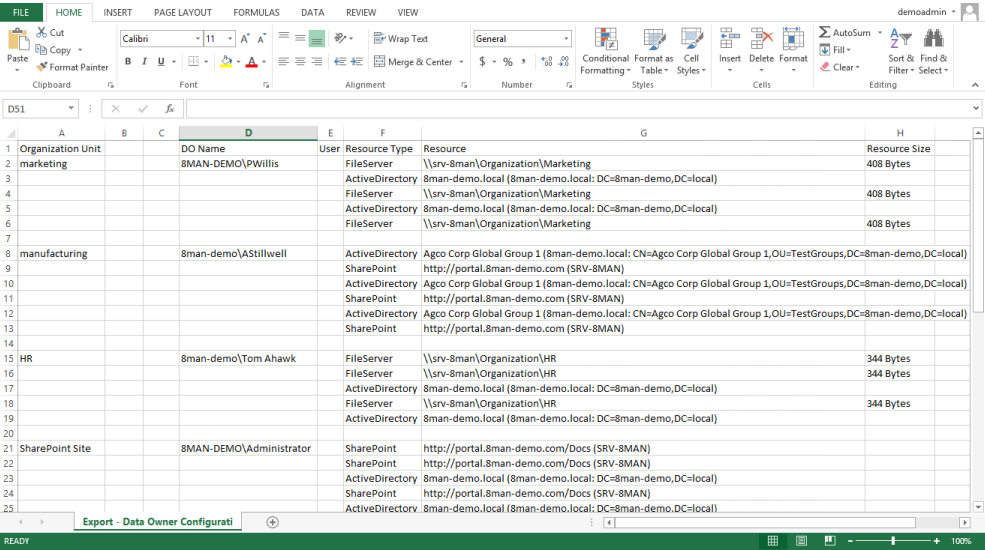
You can export an existing Data Owner configuration in order to be able to perform bulk operations or a transfer to and from other systems (for example from testing to productive).

For more information on bulk operations and the import of Data Owner configurations in a JSON format please contact our professional services team.

13.8 Create a Data Owner configuration report



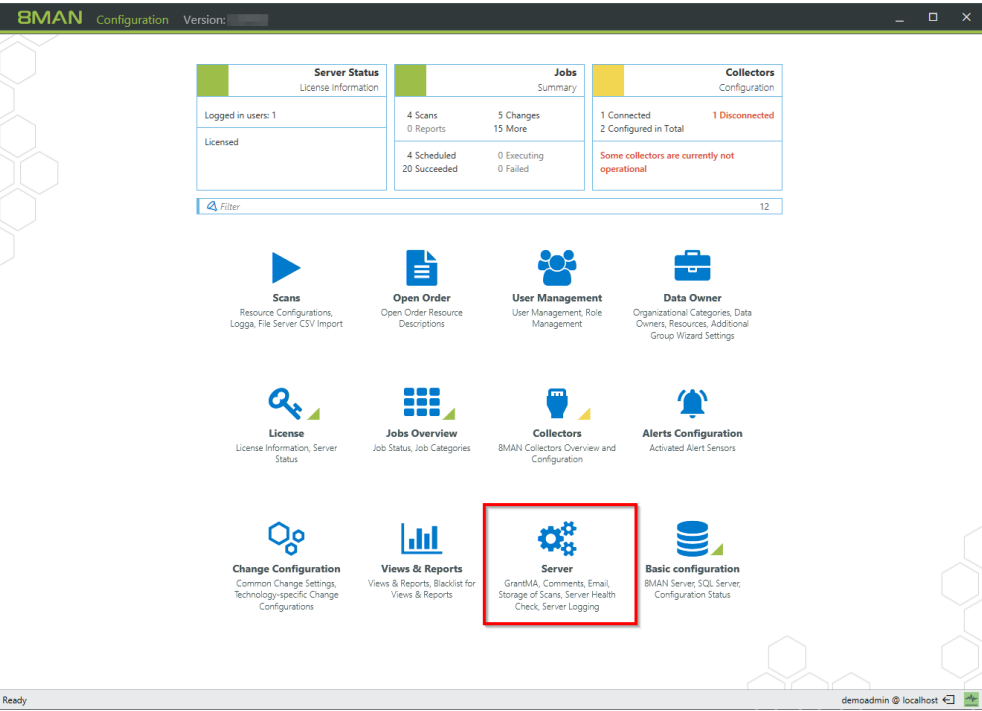
You can create a Data Owner configuration report in CSV format.



The last column contains information on data storage of file server resources.

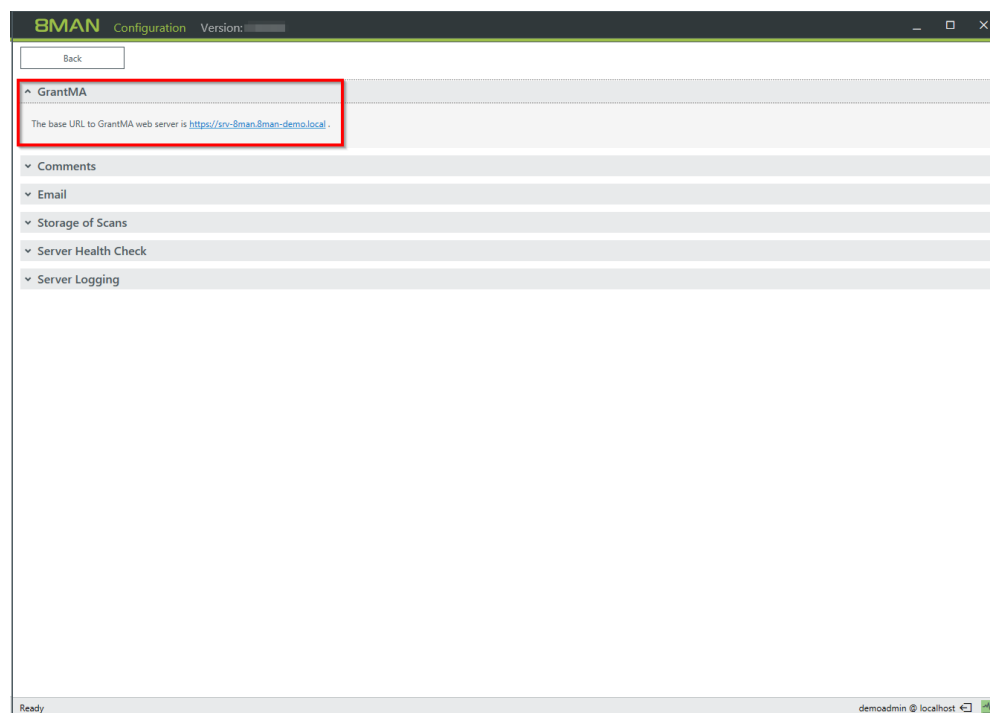
The column users will only contain values if a group has been configured as the Data Owner.

14 Server



Click "Server" to manage settings related to comments, email, data storage, health-check and event logs.

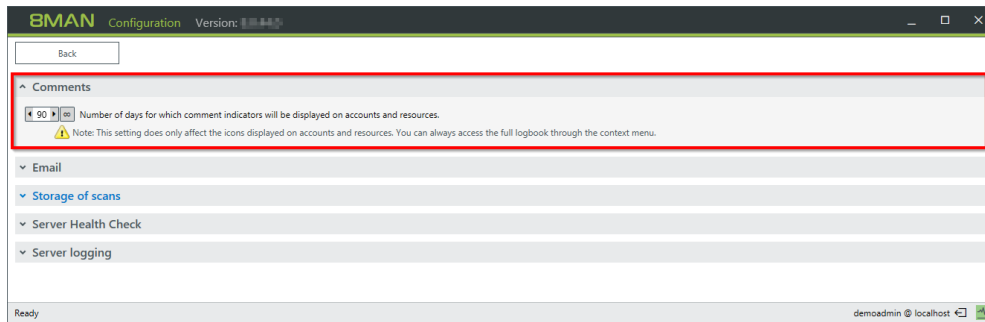
14.1 Configure the GrantMA URL



Specify the URL of the web server running the GrantMA Website.

This is used for the link in the notification emails.

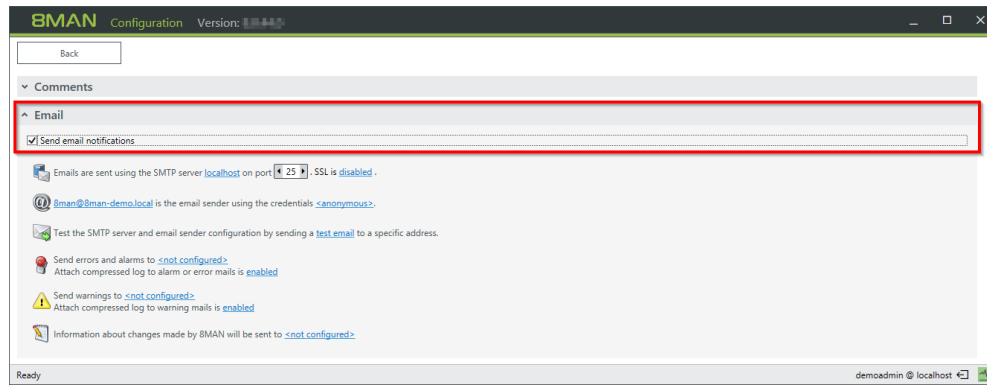
14.2 Set the display duration for comment icons



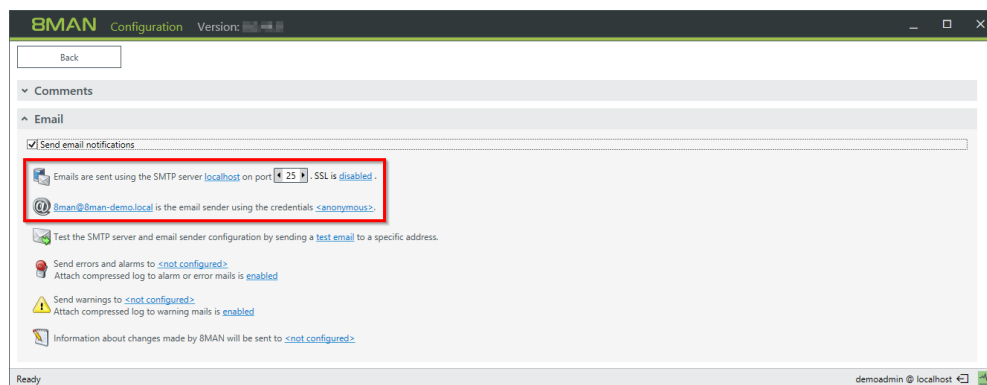
8MAN shows a note icon for stored comments or AD Logga information.

The longer you use 8MAN, the more notes will be created. You can reduce the length of time that notes are displayed, if you see too many notes.

14.3 Configure e-mail settings



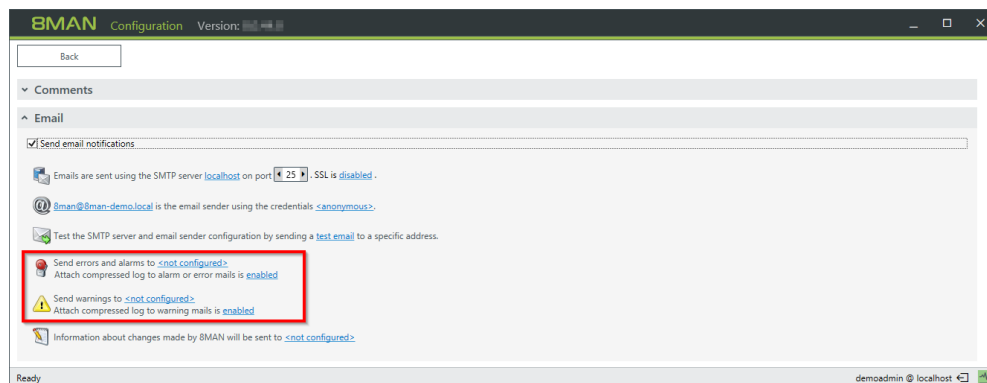
Activate email support in 8MAN.



Configure an SMTP-Server for sending emails.

Standard ports for SMTP:

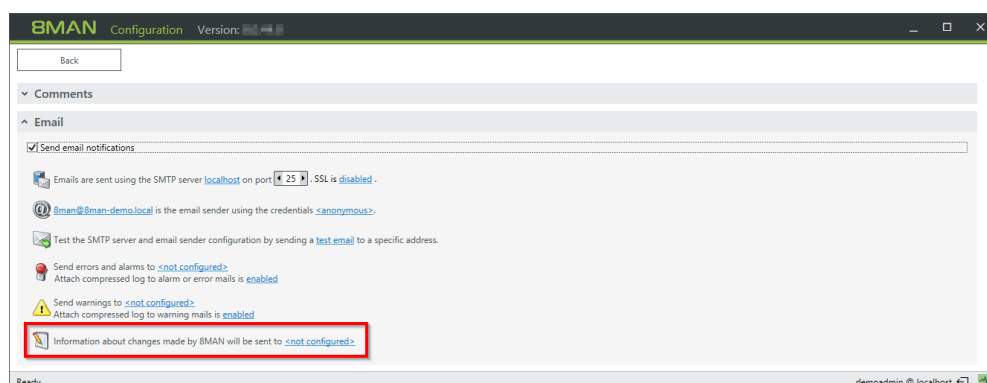
- 25 without SSL
- 465 or 587 with SSL/TLS



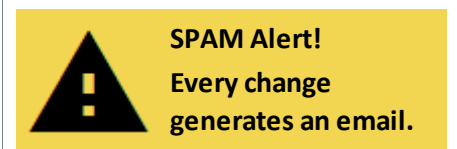
Sources for errors, alerts and warnings include the following:

- Thresholds from the [Server Health-Check](#)
- Errors when running 8MAN

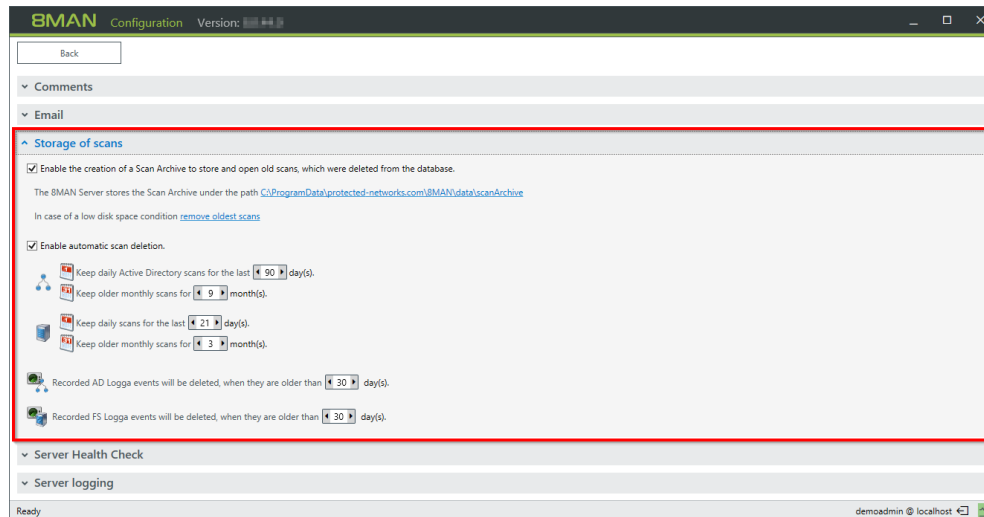
Emails include the events of the last 4 hours.



Enter an email address if you want to be alerted every time a user completes a change with 8MAN.

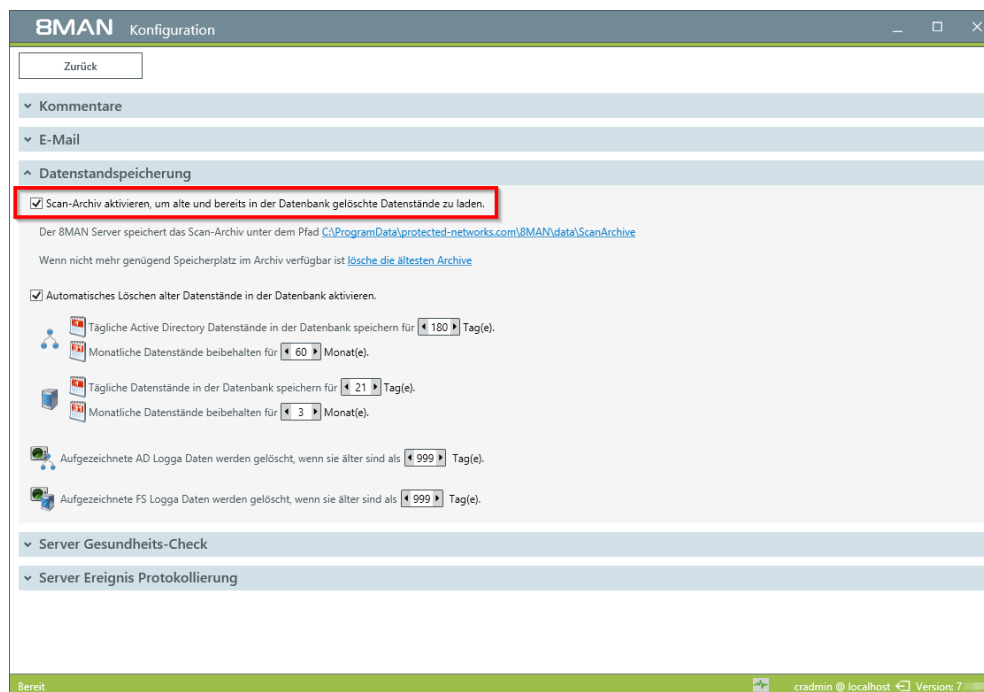


14.4 Configure storage of scans settings



The "Storage of Scans" configuration allows you to determine how long scan and Logga data are stored. This affects the size of your data base and required disk storage.

Please refer to the chapter [SQL Express](#).

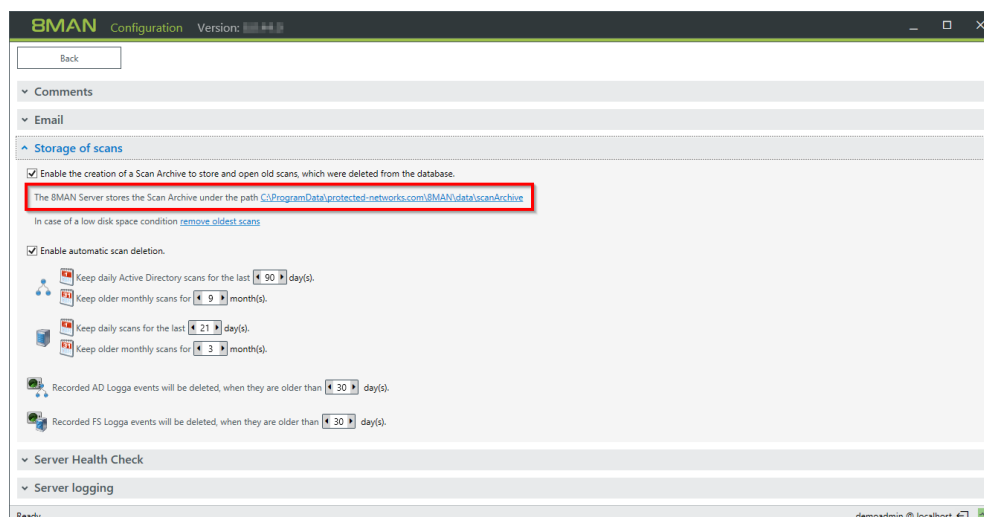


Option activated:

8MAN creates an encrypted and password protected zip file and stores it on the file system. This data can be reloaded in the 8MAN GUI even if it has been deleted from the data base. Activate this option when using SQL Express.

Option deactivated:

8MAN does not create a scan archive. 8MAN users are only able to access data available in the data base.

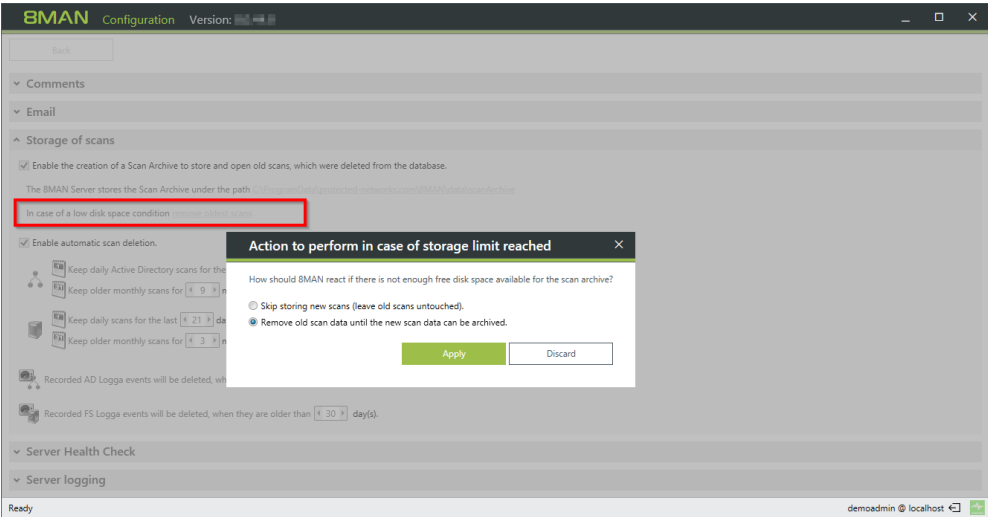


Determine where the 8MAN scan archive is located.

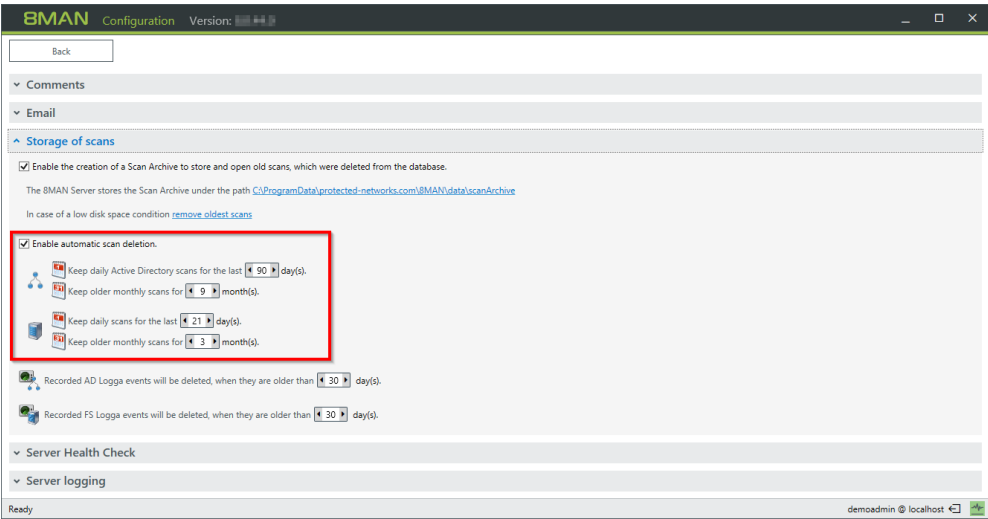
For example, you can store the scan archive on another volume.

Default path for the scan archive:

%ProgramData%\protected-networks.com\8MAN\data\ScanArchive

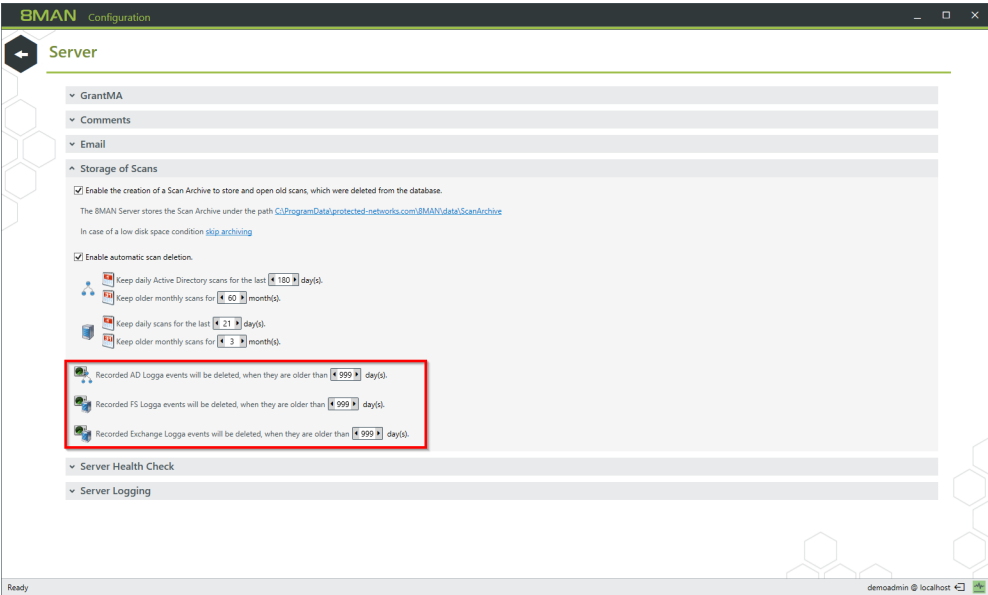


Determine how 8MAN reacts in case of low disk space (volume full).



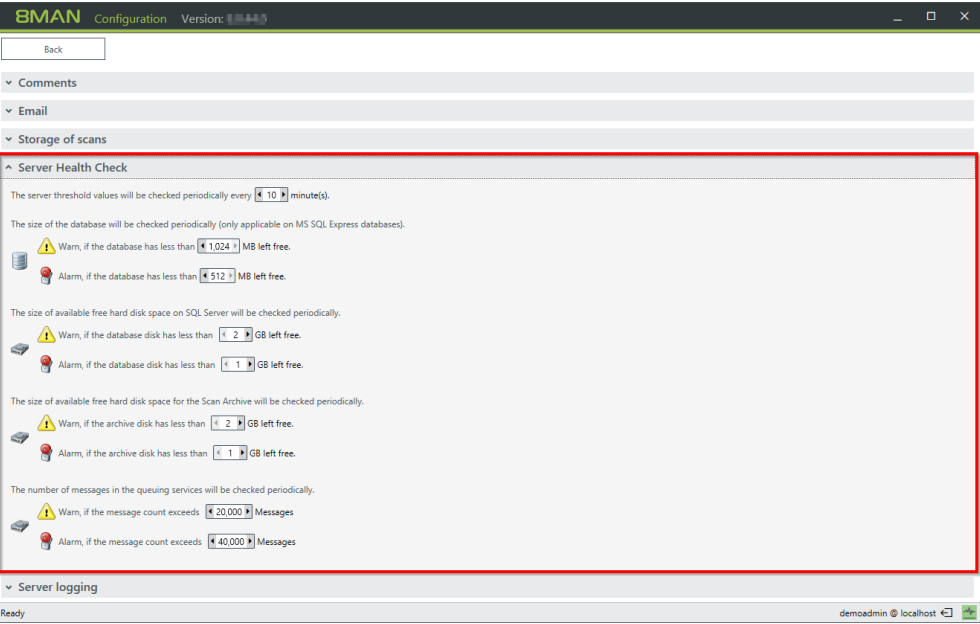
Option deactivated:
8MAN does not delete any scans from the data base.

Option activated:
Determine how long 8MAN retains scans in the database.
Activate this option when using SQL Express and select a short period of retention.
Please see further information in [Data base maintenance](#).

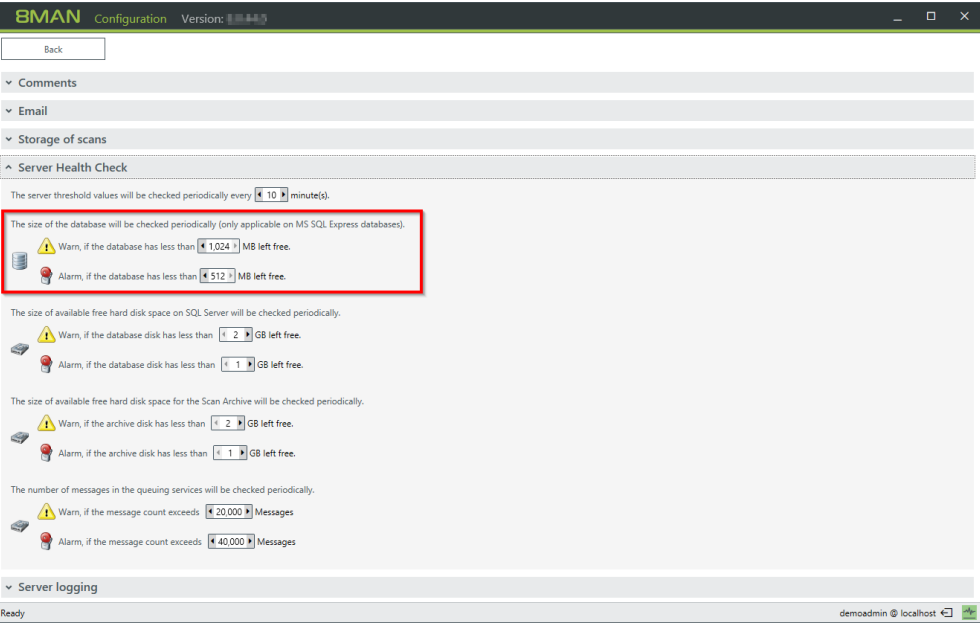


Determine how long 8MAN Logga data is stored.
Default: 30 days
An event generates the following average amount of data:
FS Logga about 43 bytes
AD Logga about 600 bytes
Exchange Logga about 600 bytes

14.5 Determine server thresholds



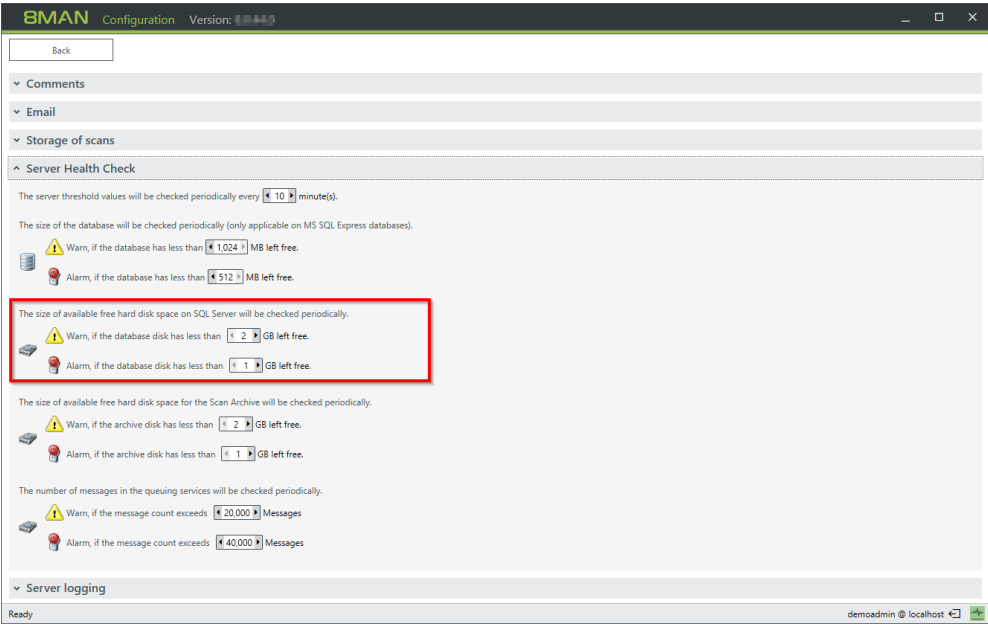
Determine server thresholds and monitoring frequency.
Please reference the following chapter for more information on actual thresholds:[Displaying actual server thresholds](#).



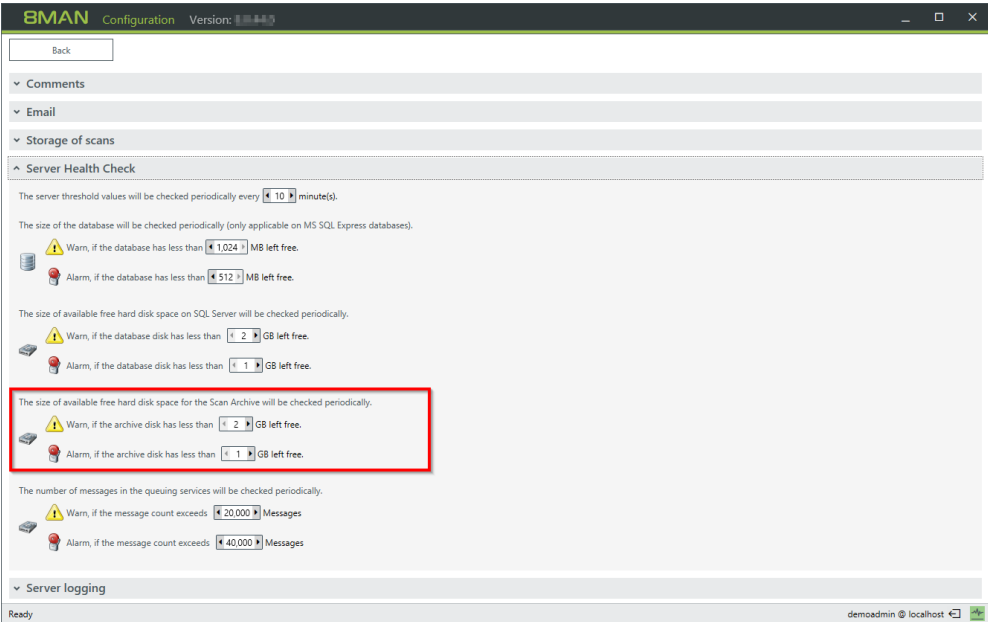
8MAN identifies automatically whether you are using SQL Express.
In this case you can determine thresholds for data base size.

If you are using a "full" SQL server, then these settings are not relevant.

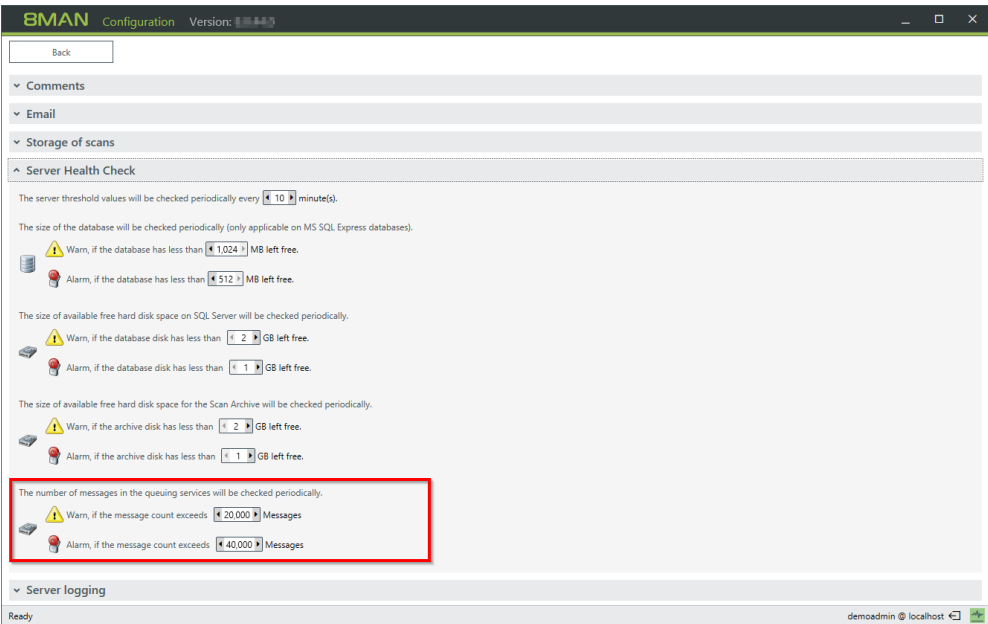
Please refer to the following section for additional information: [SQL Express](#).



8MAN automatically determines the available disk space on the volume storing SQL data base files. Determine thresholds for available storage space.

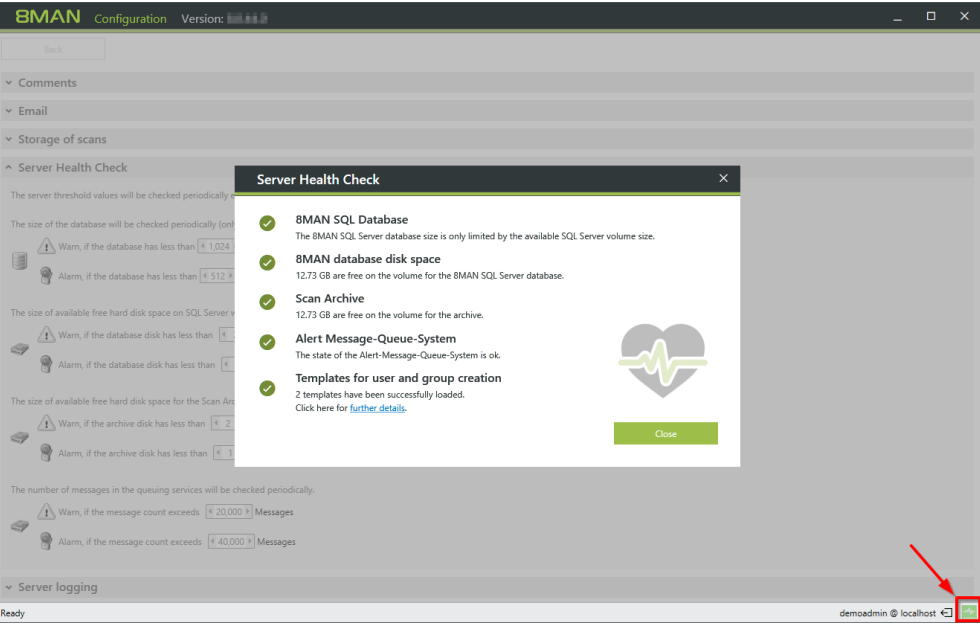


Determine the thresholds for available disk space of the scan archive. Settings for the scan archive can be found in [Storage of Scans](#).



Determine the thresholds for the message queuing. The settings are only relevant if you use 8MATE Logga alerts ([alert sensors](#) enabled).

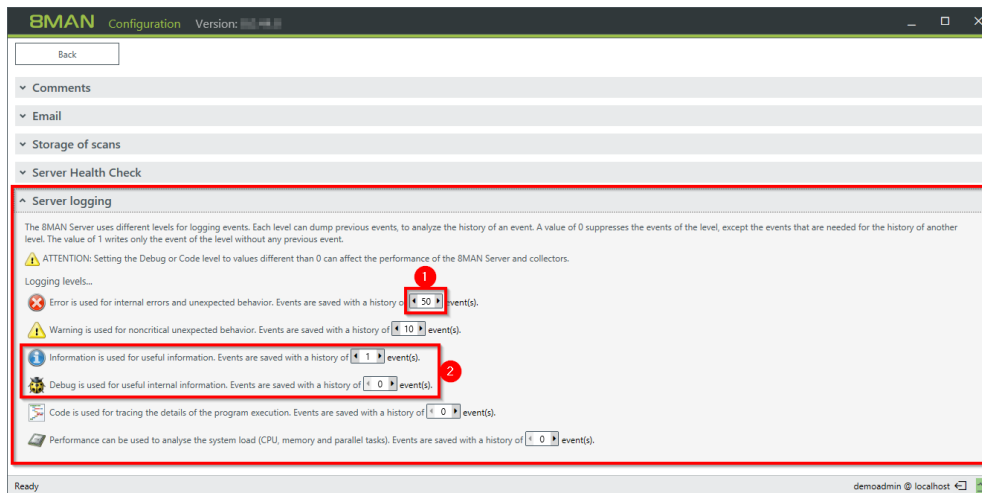
14.5.1 Display the server health check



Click on the marked symbol in the status bar to see the current server values.
This works in both 8MAN modules.

14.6 Server event logging

14.6.1 Determine the logging level



Determine the number of details that 8MAN captures in event logs.

1. Set the value for the number of stored errors to at least 50.
2. Activate the levels Debug or Code only for the diagnosis of severe issues.

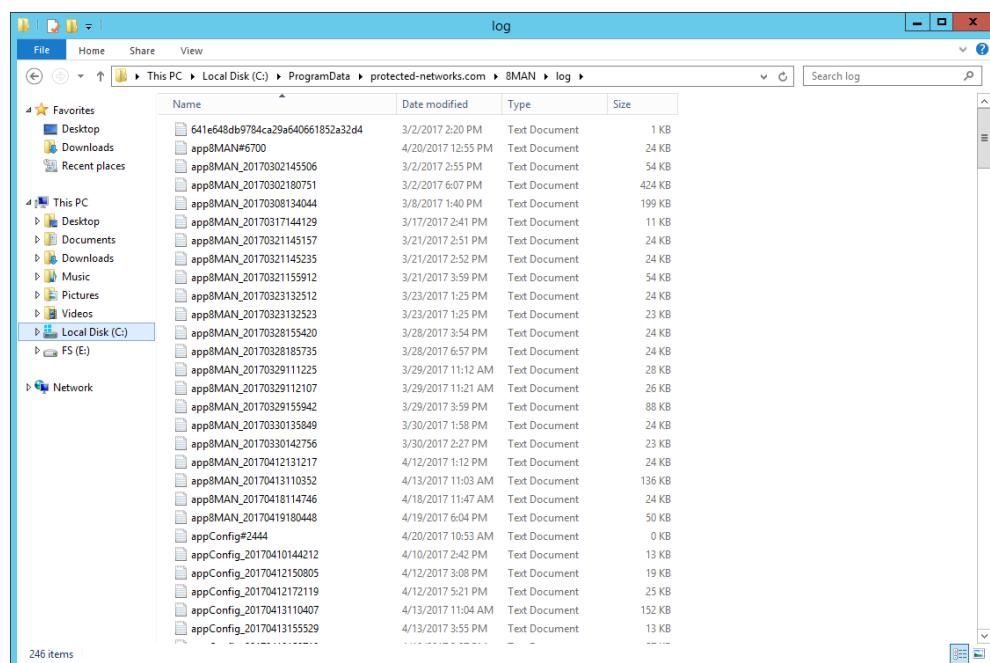
14.6.2 Retrieve event logs

8MAN saves all log files in the following folder:

`%ProgramData%\protected-networks.com\8MAN\Log`

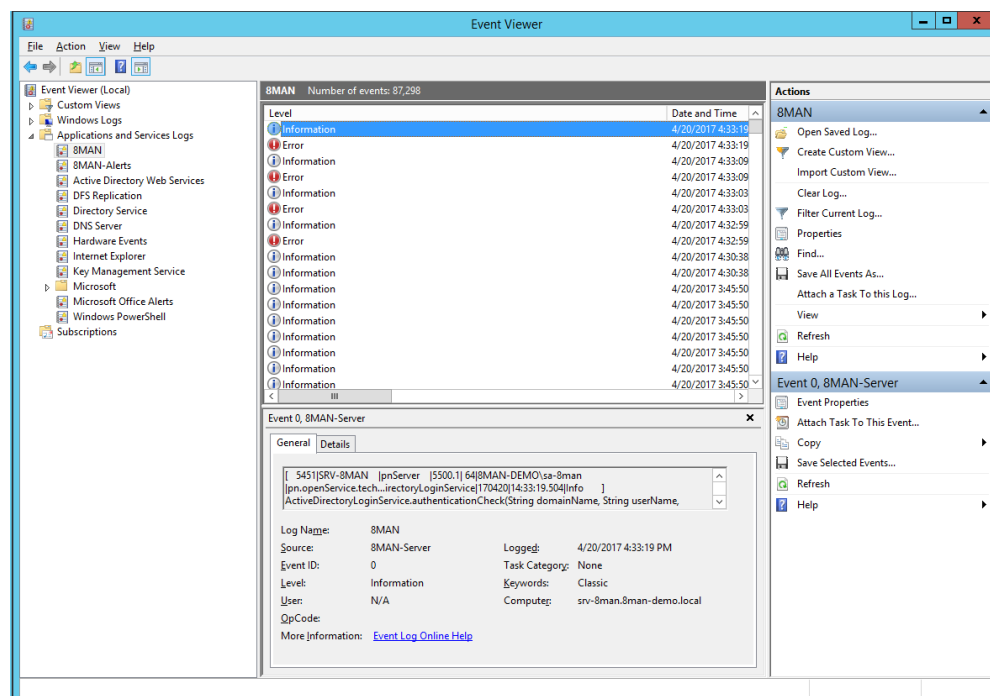
All events are saved centrally on the 8MAN-server, including events from remote collectors.

Log files either grow to a size of 50MB or 7 days. When restarting the 8MAN service a new log file is started. 8MAN saves a maximum of 20 log files per [type](#).



The current version does not have a time stamp in the file name.

Current log files may be shown with a 0KB size in Windows Explorer, even if they contain data. Please zip the files before sending them to [support](#).



The following event types are entered into the Windows event log: "Error", "Warning" and "Information". 8MAN creates its own node under "Application and Service Logs".

14.6.3 Logfile types

Filename	contains...
pnServer	Information on the 8MAN server, collectors and jobs. Is most frequently used in support requests. Please don't confuse this with pnService.
pnService	Information relating to the start of the 8MAN service.
app8MAN	Information on the 8MAN graphical user interface (GUI). Useful in case of program crashes.
appConfig	Information on the configuration interface. Useful in case of crashes of the configuration.
pnTracer	Information on Logga 8MATES.
pnRun	Watchdog for pnServer service.
pnAlert	Information about alert engine (FS Logga and AD Logga).
grantMa	Information on GrantMA, webAPI.

15 Scripting

15.1 Configure scripts

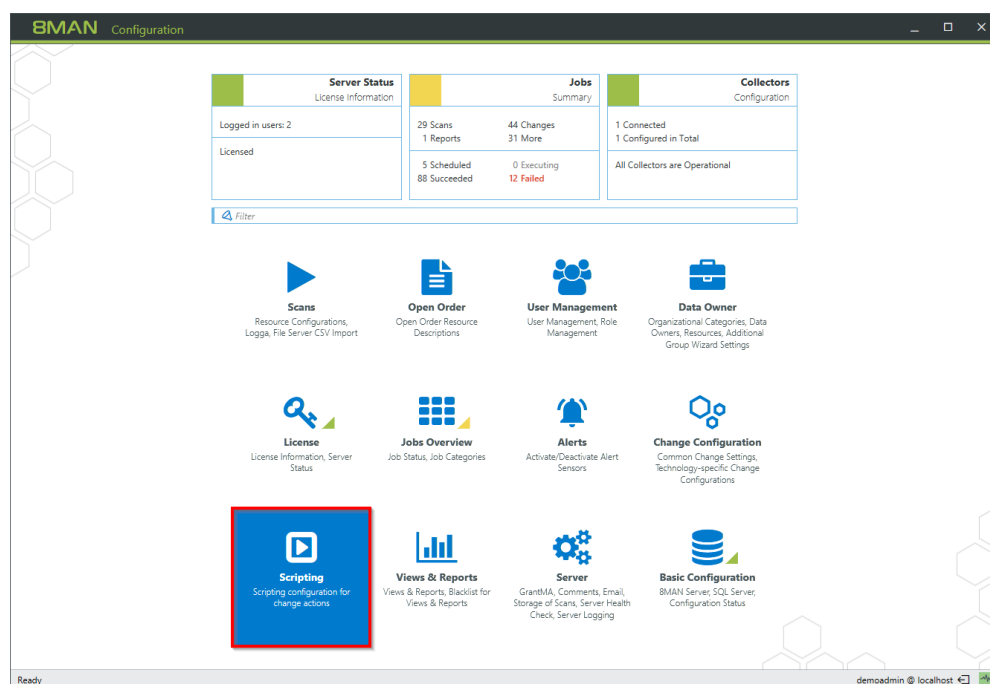
Scripts must be stored in the following directory:

`%ProgramData%\protected-networks.com\8MAN\scripts\analyze`

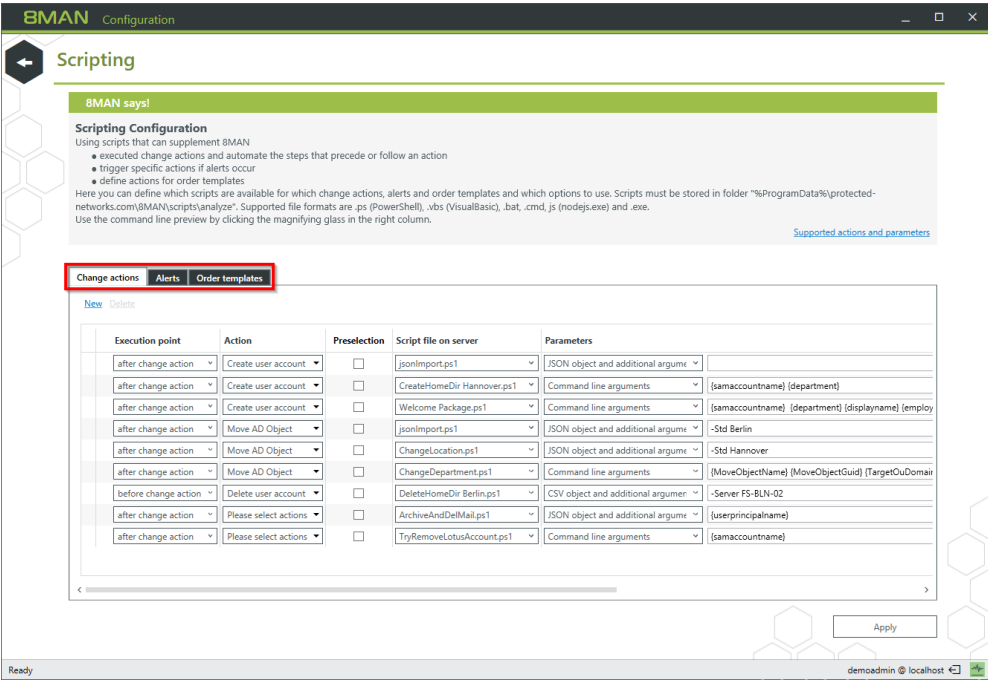
Supported file types are:

- .ps (PowerShell)
- .vbs (VisualBasic)
- .bat
- .cmd
- .js (nodejs.exe)
- .exe

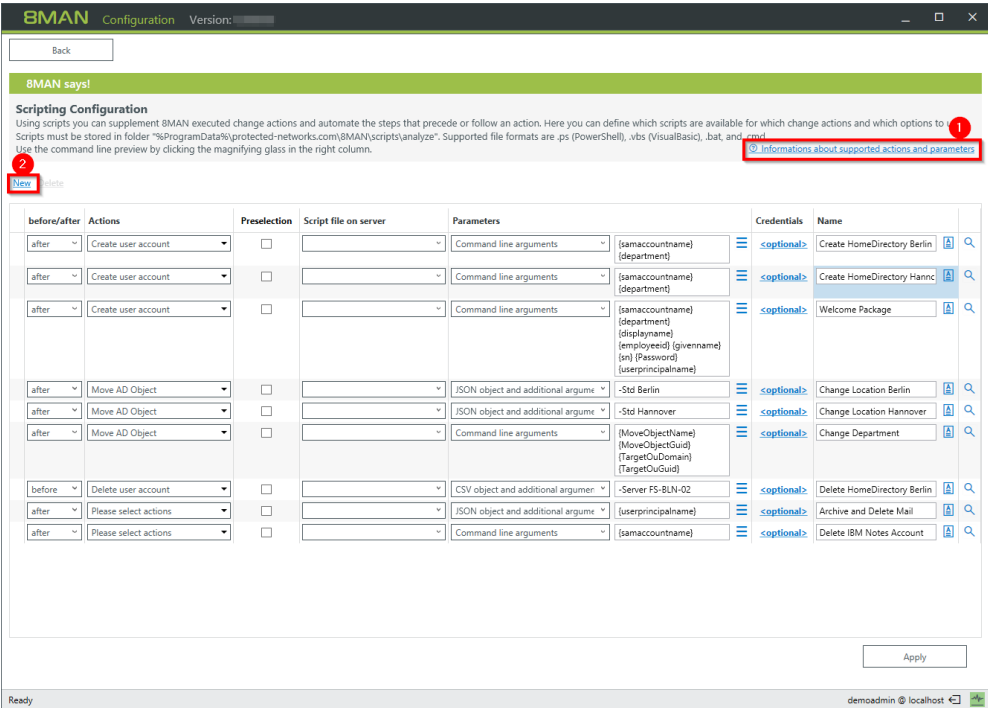
Required PowerShell modules must be installed on the 8MAN server.



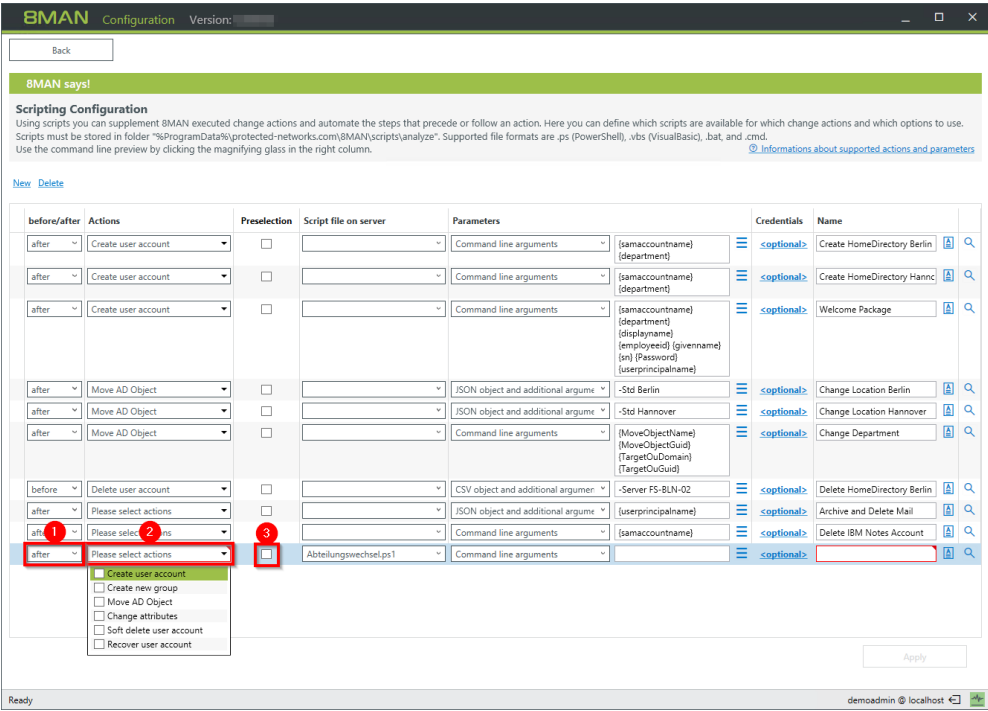
Navigate to "Scripting".



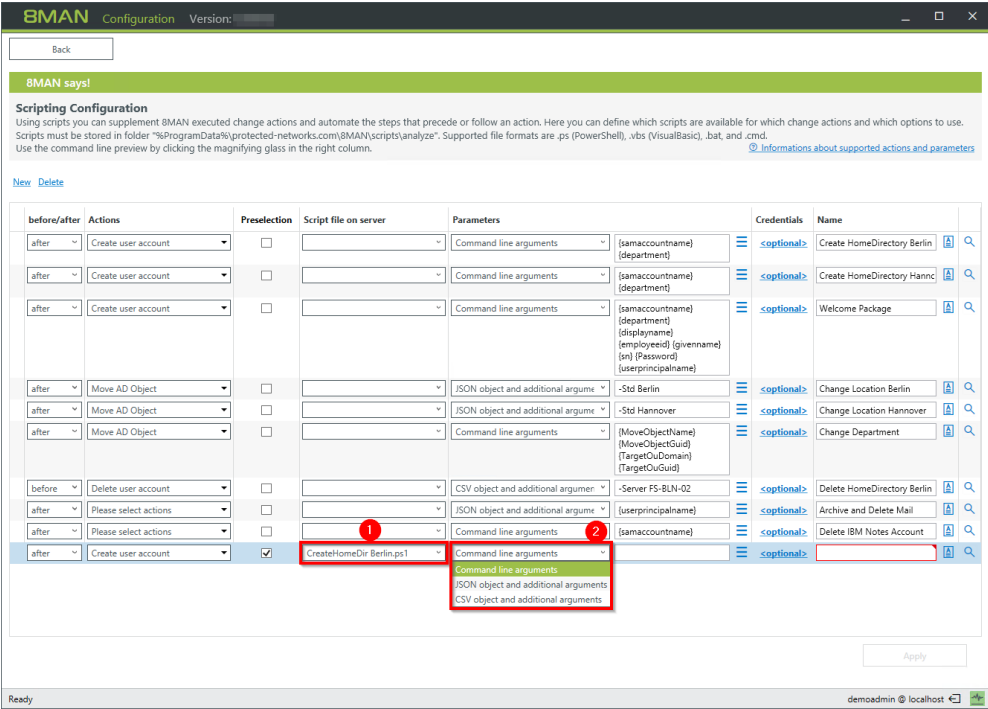
Select the area for which you are configuring scripts.



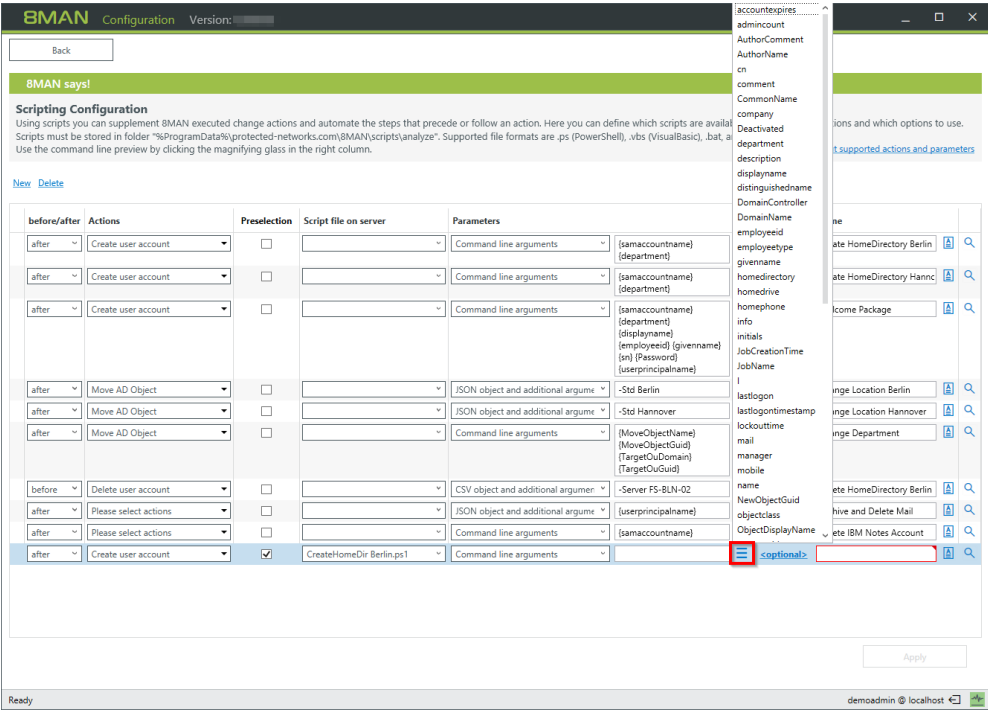
1. 8MAN shows you a list of all the supported change actions before or after which scripts can be executed, as well as available parameters.
2. Create a new script configuration.



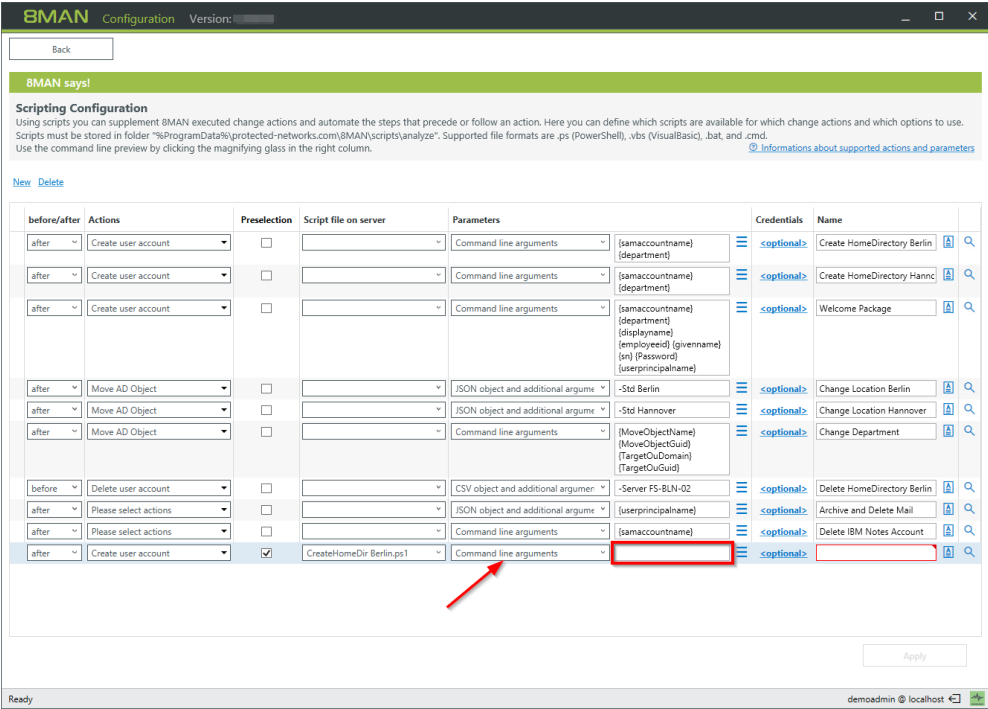
1. Select whether to run the script before or after the action. Your selection filters the available actions (column 2).
2. Select an action for which you want to make a script available.
3. If you have several scripts available for an action, specify the default settings for the 8MAN users in the drop-down menu.



1. Select a script file.
2. Select how 8MAN passes the parameters to the script. You can select the parameters directly or pass them as JSON or CSV objects.

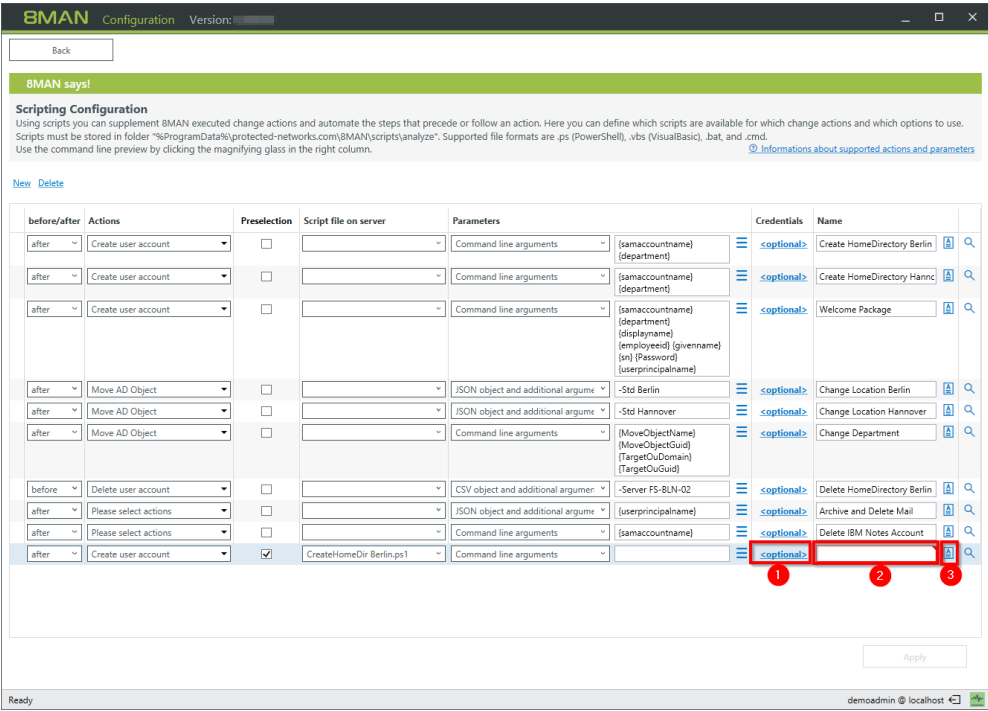


Select the command line parameters.

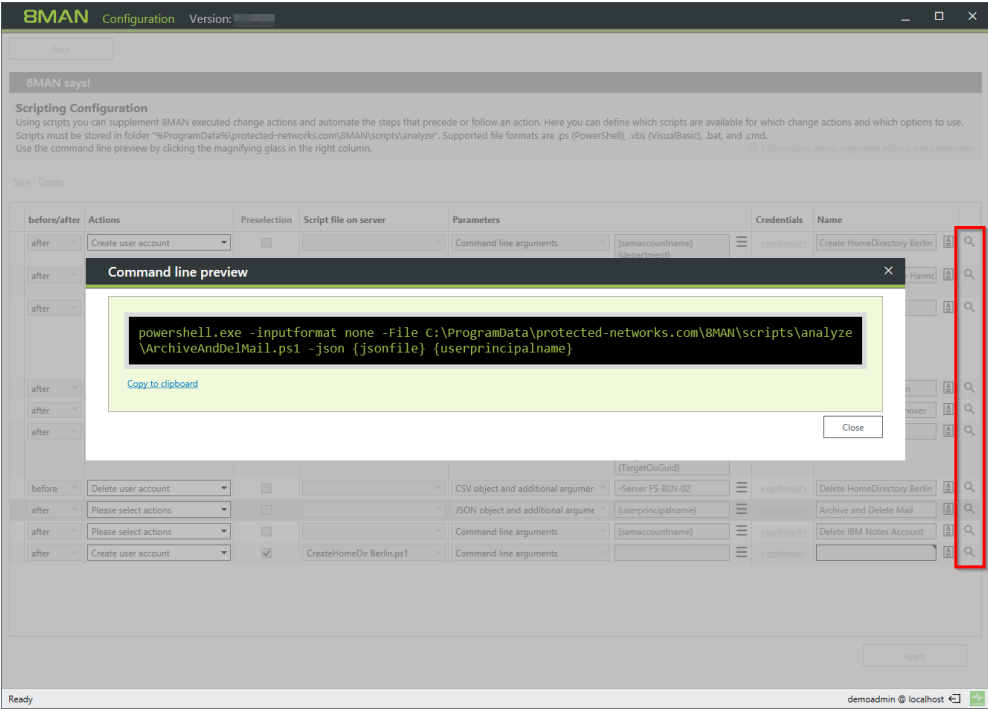


Select the type of data transfer to the script. Using a JSON or CSV object as a selection causes the script to provide a temporary file that contains the object data in the selected format.

For information on the available parameters in the CSV / JSON objects, please contact [support](#). Use the [command line preview](#) for a detailed view of passing.



1. Specify credentials to run the script. If you do not specify any, the credentials from the **base configuration** are used.
2. Give the script assignment a unique name for the selection in the 8MAN user interface.
3. Leave a description.



Get a command line preview at any time.

15.2 DEEP DIVE: Pass parameters to a script via JSON or CSV

In the "Deep Dive" you learn how exactly parameters are transferred to a script via JSON or CSV file.

The following chapters describe:

1. General: Include a template with a script call in 8MAN.
2. In detail: Pass the parameters to the script via JSON or CSV.

15.2.1 Disable a user via GrantMA

Background / Value

Ordering a new user on the GrantMA Self-Service Portal is natively supported by 8MAN. Disabling a user after the order workflow has been completed becomes possible through the use of scripts. The combination GrantMA - Scripts - 8MAN webAPI opens up a multitude of further possibilities to automate documented processes.

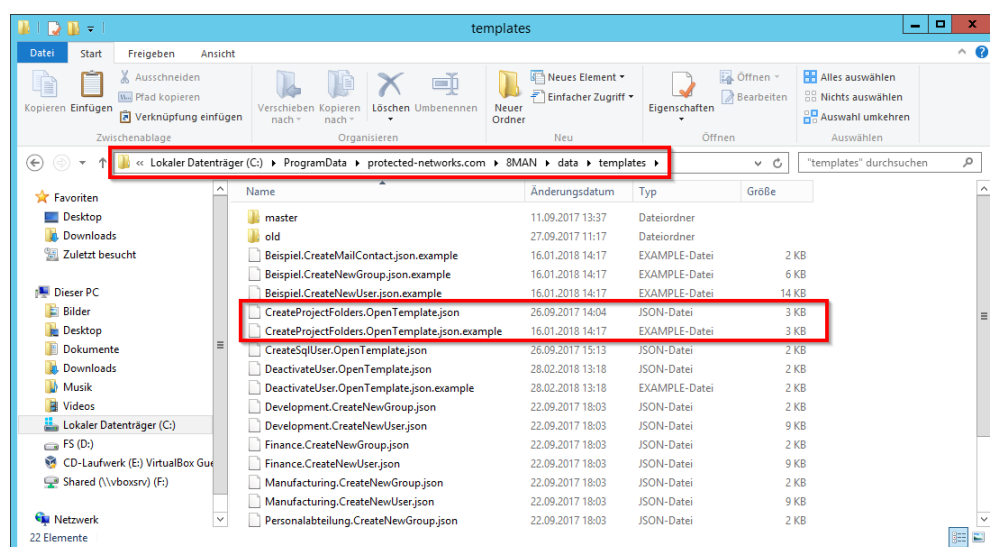
An example is the option described below of ordering the deactivation of a user:

1. Define an open template and ask for required values in a request in GrantMA.
2. After approval, the values are passed to a script.
3. The script controls 8MAN via the webAPI to perform the required action in 8MAN.
4. 8MAN executes the action and logs it in the 8MAN logbook.

Related services

Create a user account as an HR employee

Step by step process



In the directory

%programdata%\protected-networks.com\8MAN\data\templates

8MAN provides a sample template for disabling users.

Copy the sample file, remove the suffix ".example" and make adjustments as needed. For more information, see the "Customizing Templates" manual.

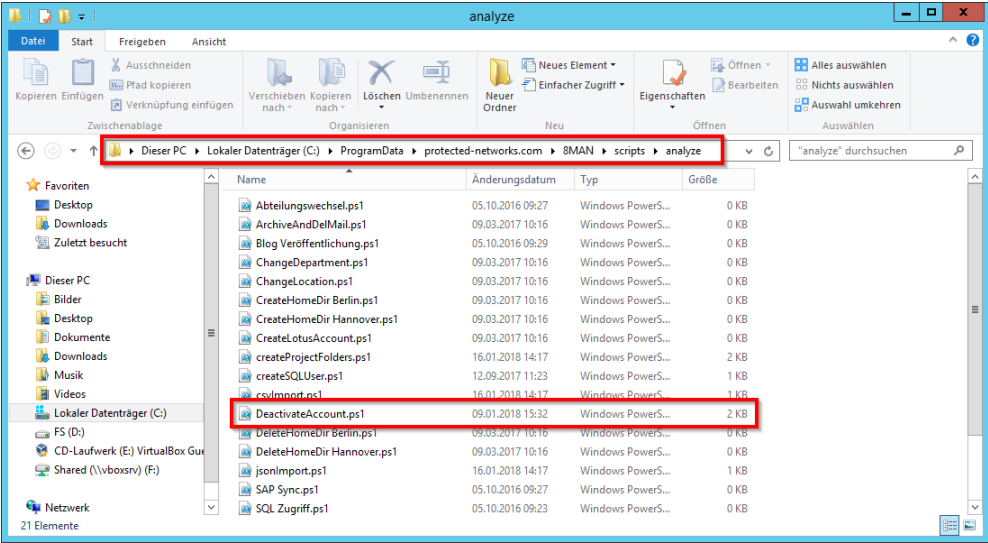
The template will be loaded automatically. Errors while loading

the template are displayed in the server health check.

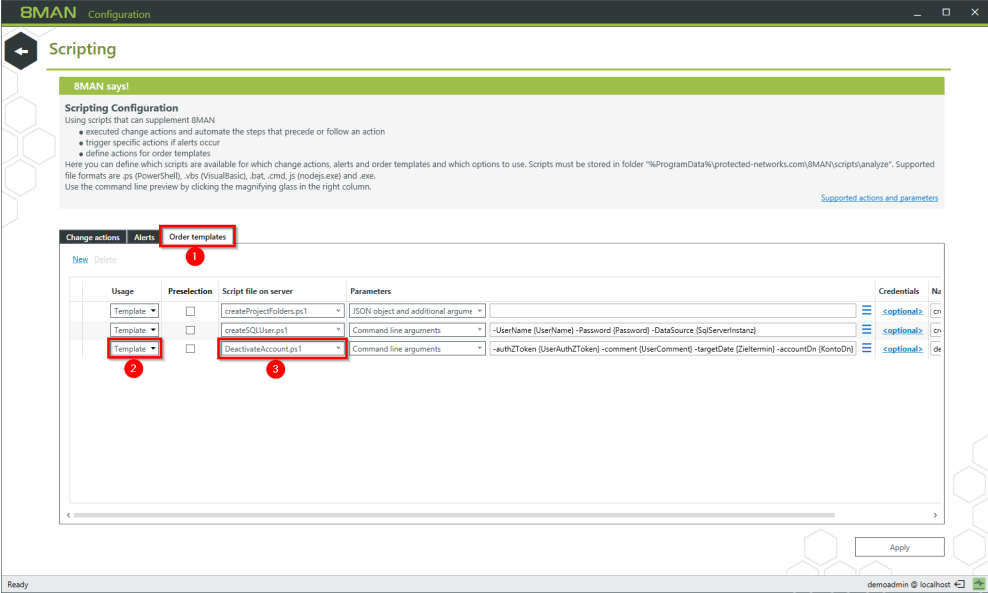
In the directory

%programdata%\protected-networks.com\8MAN\scripts\analyze

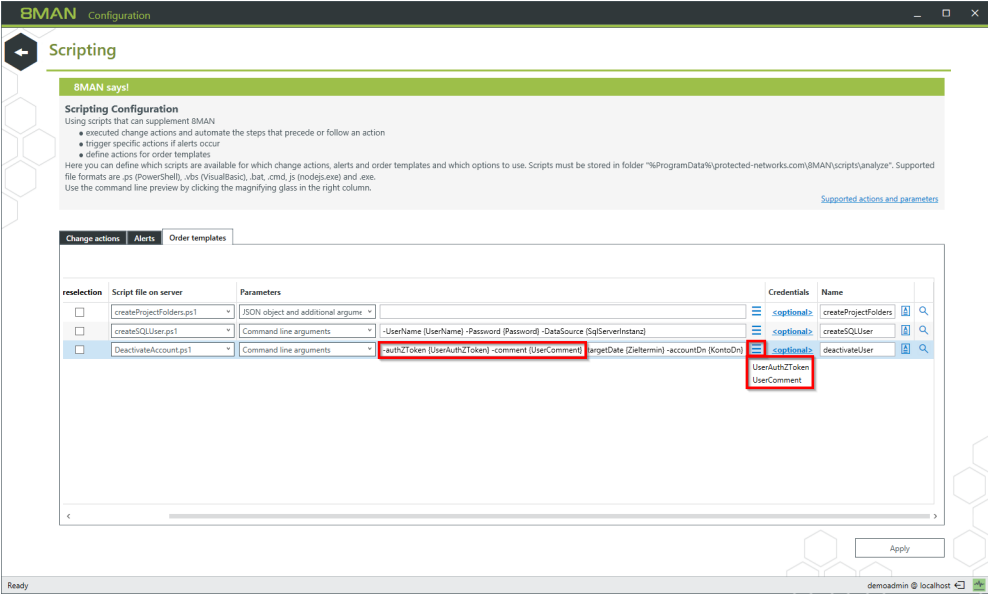
8MAN provides a sample script for disabling users.

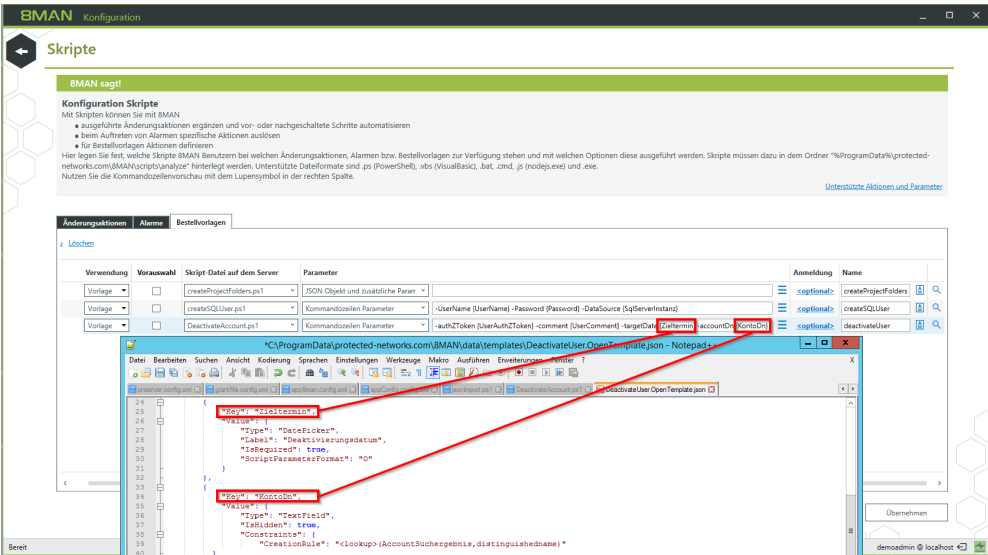


- On the start page of the 8MAN configuration select "Scripts".
1. Click on the tab "Order templates".
 2. Choose "Template".
 3. Select the script, in this example here "DeactivateAccount.ps1".



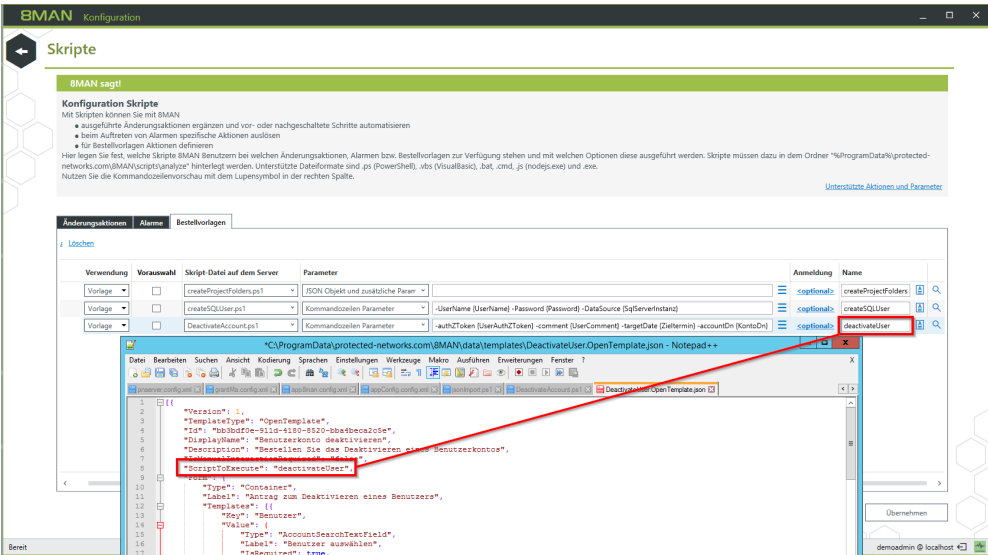
Specify which parameters are passed to the script.
In the example here, the authentication token and the comment are passed.



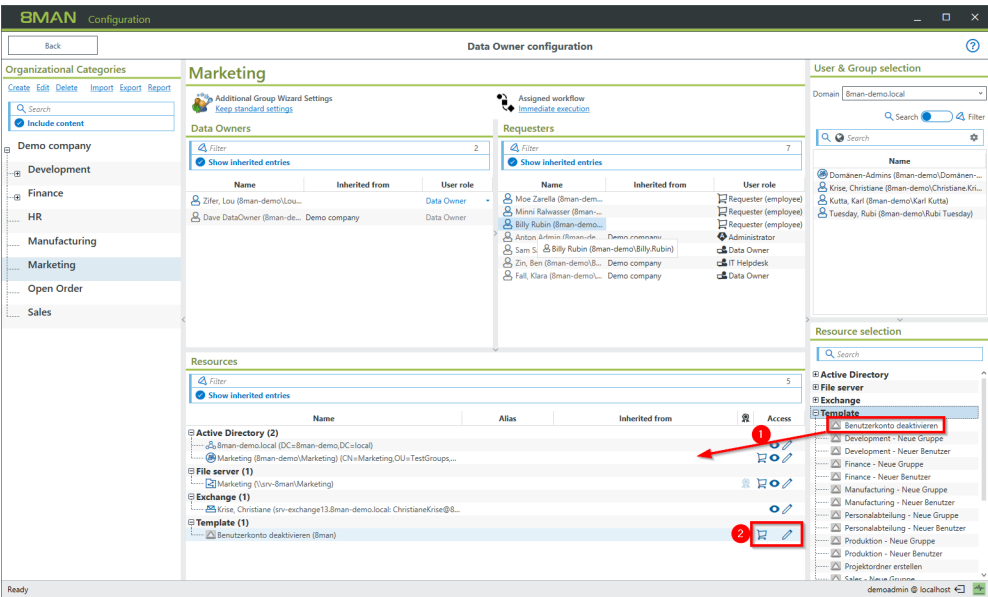


In addition, the values queried in the template are passed to the script:

- The name of the account to be deactivated
- The date on which the account should be deactivated

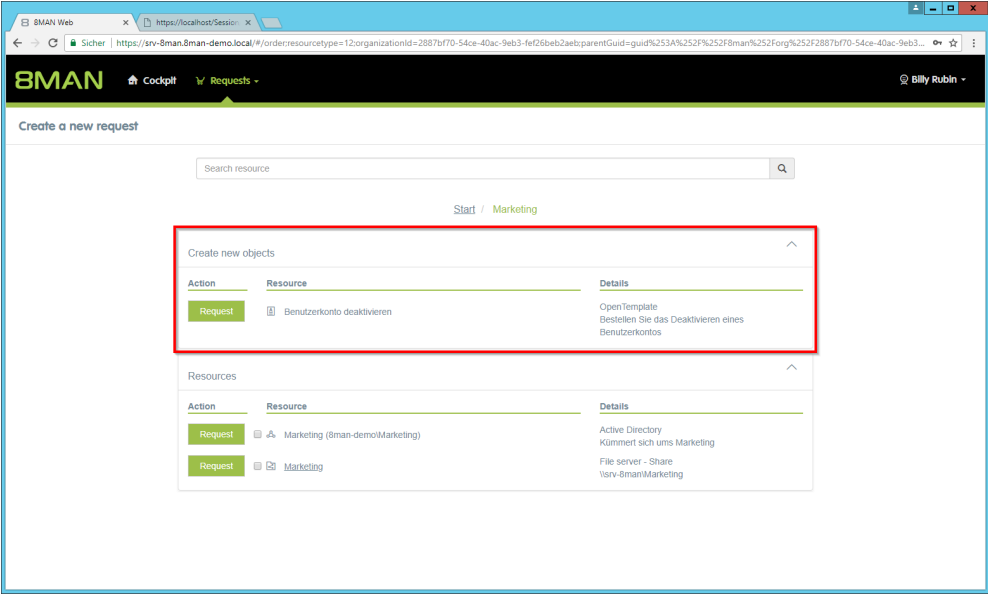


Enter the name of the script. The name must match the call in the template.

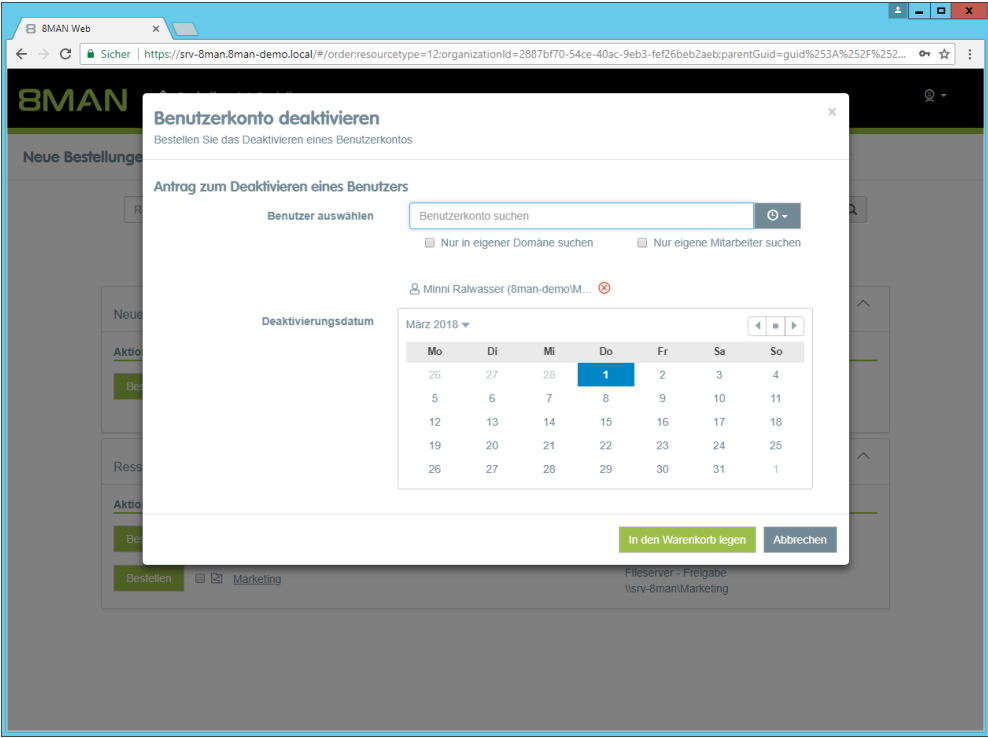


In the Data Owner configuration you set the template to requestable.

1. Use Drag & Drop to order the template in an organization category.
2. The template must be requestable (default) and modifiable.



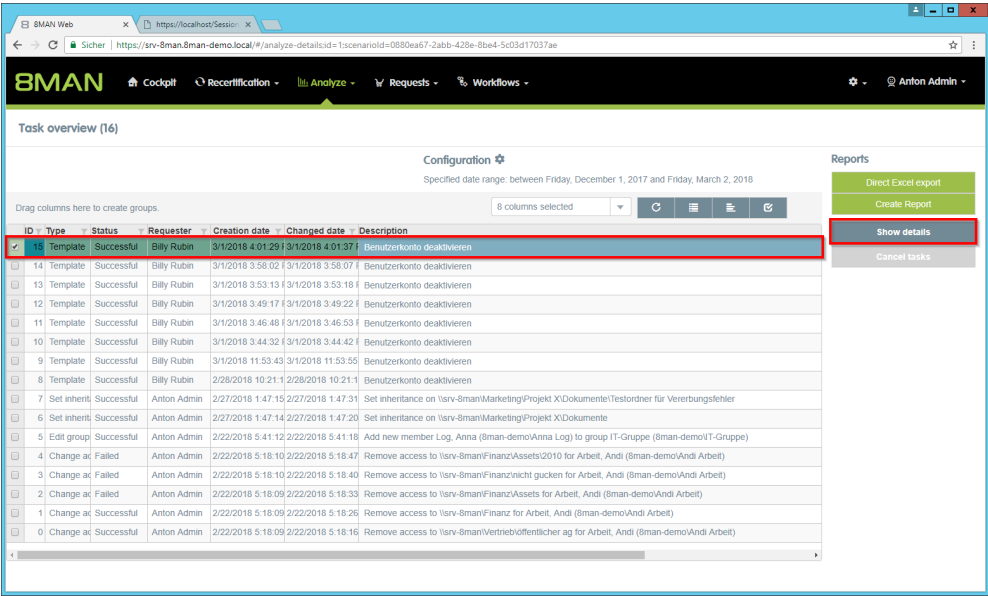
Start the request in GrantMA.



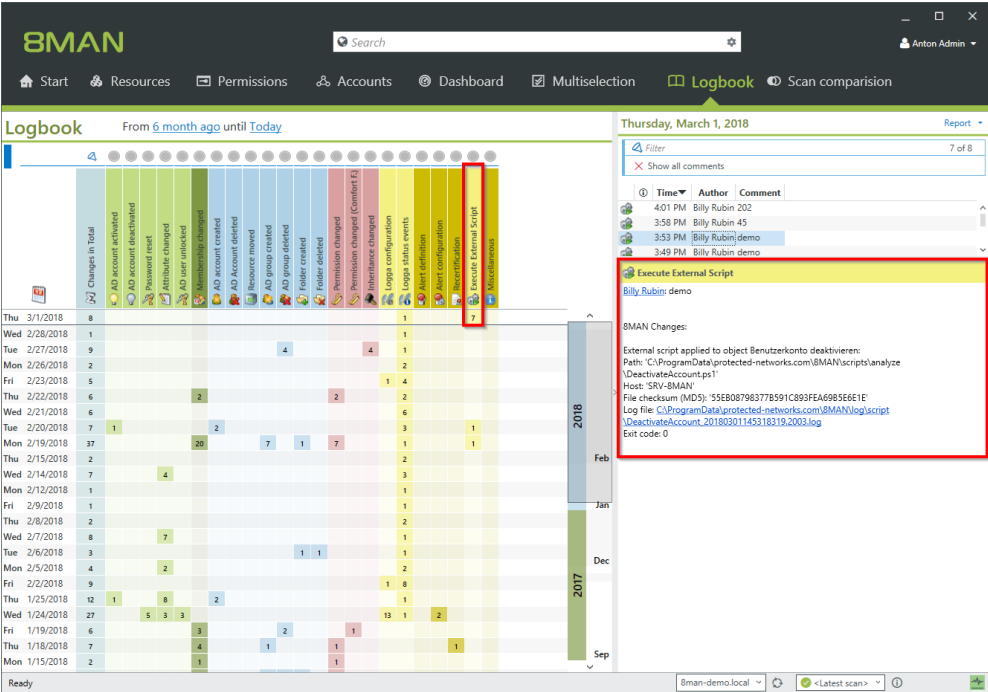
The freely configurable template queries the values that will later be passed as parameters to the script. In the example here:

- The account to be deactivated.
- The date on which the account should be deactivated.

After completing and approving the order as usual, the script will be executed automatically.



In the task overview, you can see details about job execution. Successful job execution here means that the script started successfully.



For information about the script execution, see the 8MAN Log. To diagnose script execution errors, use the linked log file.

15.2.2 Pass parameters to a script via JSON or CSV

The transfer of parameters to the script can be done either directly or through a JSON or CSV file. The direct entry is described in the previous chapter "[Disabling a user via GrantMA](#)".

Using a JSON or CSV file is especially convenient if you want to pass many parameters to a script. In particular, the JSON format in Powershell can be used immediately as an object.

Here's a sample PowerShell script that simply outputs the parameters passed by JSON.

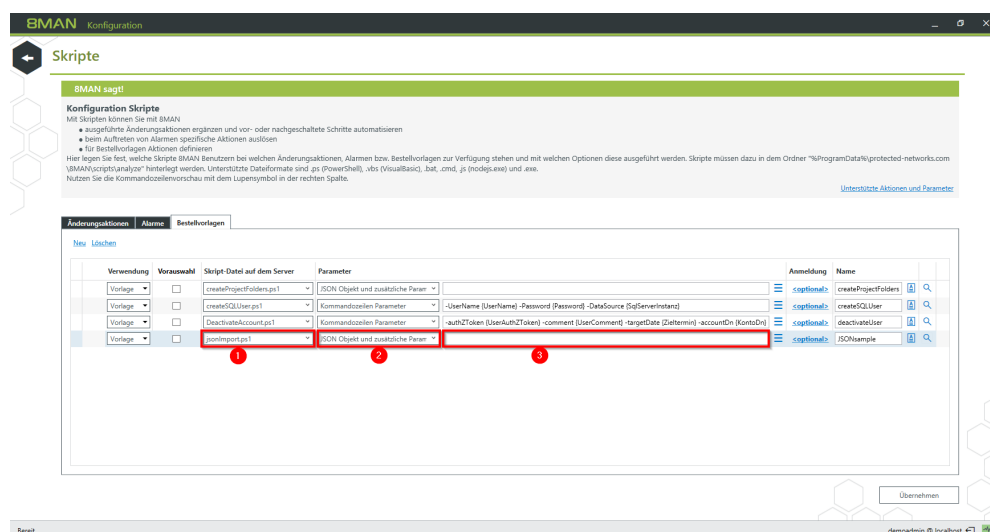
location

%ProgramData%\protected-networks.com\8MAN\scripts\analyze\jsonImport.ps1

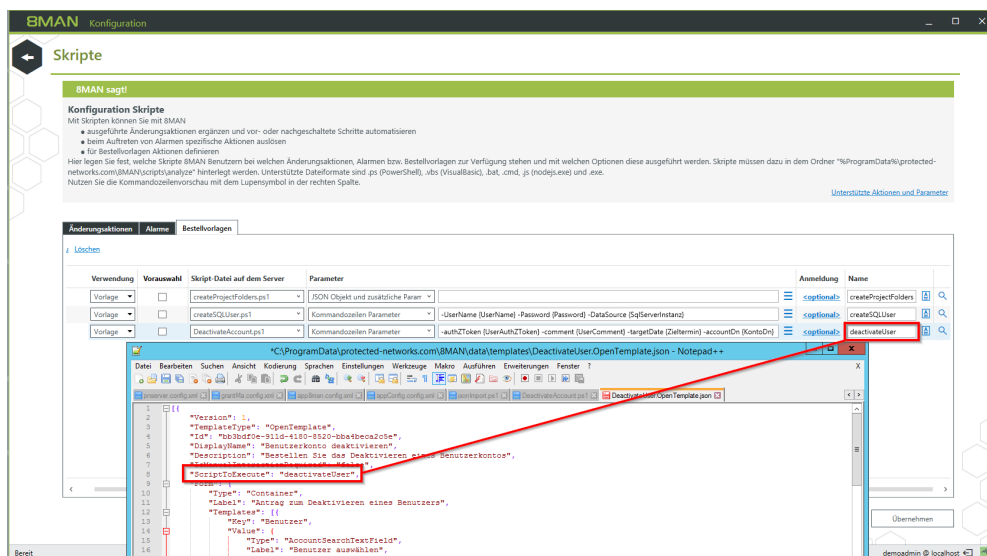
Code

```
param(
[string]$json
)
# example for reading json formatted data addressed by $json over command line
# Read all data from json file into an object
Write-Host $json
(Get-Content $json) -join "`n" | ConvertFrom-Json | Write-Host
# here you can alternatively assign and compute the object
```

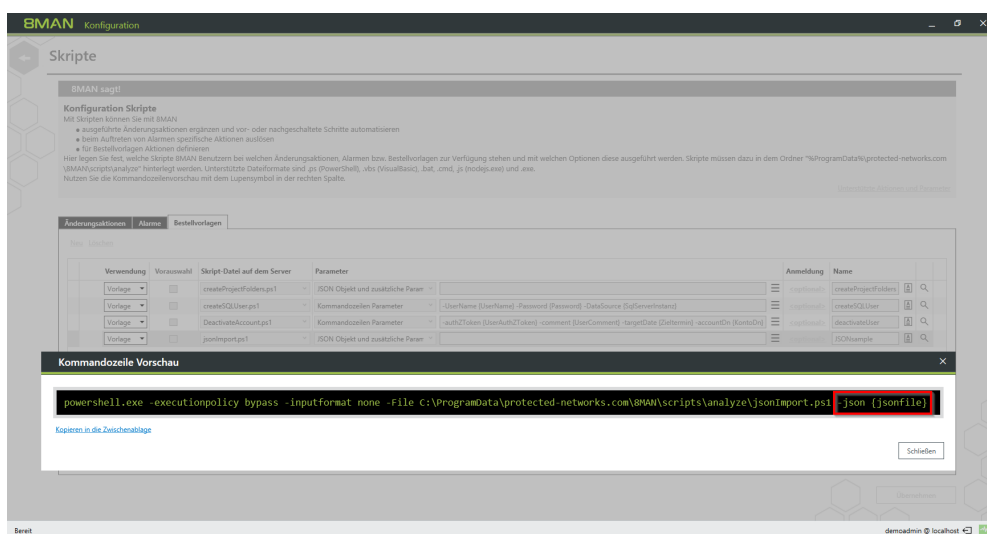
Configuration of the script



1. Enter the name of the script.
2. Select "JSON object and additional parameters" dropdown.
3. Optional: Specify additional parameters that will be passed to the script in addition to those contained in the JSON file.



Enter the name of the script. The name must match the call in the template.



In the command line preview, you will see the call to the JSON file.

The JSON file is temporarily stored here after filling in the template:

%ProgramData%\protected-networks.com\8MAN\tmp\script

and gets a file name with timestamp, for example:

jsonImport_param_20180318130028263.json

The file name is used automatically in the command line as the value of the variable {jsonFile}.

Supported field types / input options from the templates

Textfield

Returns the text content. If the field is empty, it will not be transported.

DropDown

Returns the value of the selection, not the display value.

Checkbox

Returns the text "True" if the box was selected, otherwise "False".

DatePicker

Returns the text of the selected time. The output format can be influenced by the parameter "ScriptParameterFormat". ([.net definitions](#)).

RadioButton

Returns the text of the selected radio button. The key is the Radio GroupId.

Example JSON-File

```
{
  "OnBoardingUser": "Horst Peter (8man-demo\\H.Peter)",
  "Vorname": "Horst",
  "Nachname": "Peter",
  "Loginname": "H.Peter",
  "VPN2": "False",
  "VPN": "True",
  "WLAN": "True",
  "Teamwarp": "True",
  "Jira": "False",
  "HomeDir": "True",
  "When": "2018-03-28T22:00:00.0000000Z",
  "DropDownWert": "Value B",
  "UserComment": "LOL"
}
```

16 8MAN jobs overview

The screenshot shows the 8MAN Configuration web interface. At the top, there are three summary tiles: Server Status, Jobs, and Collectors. The Jobs tile is highlighted with a red box and contains the following data:

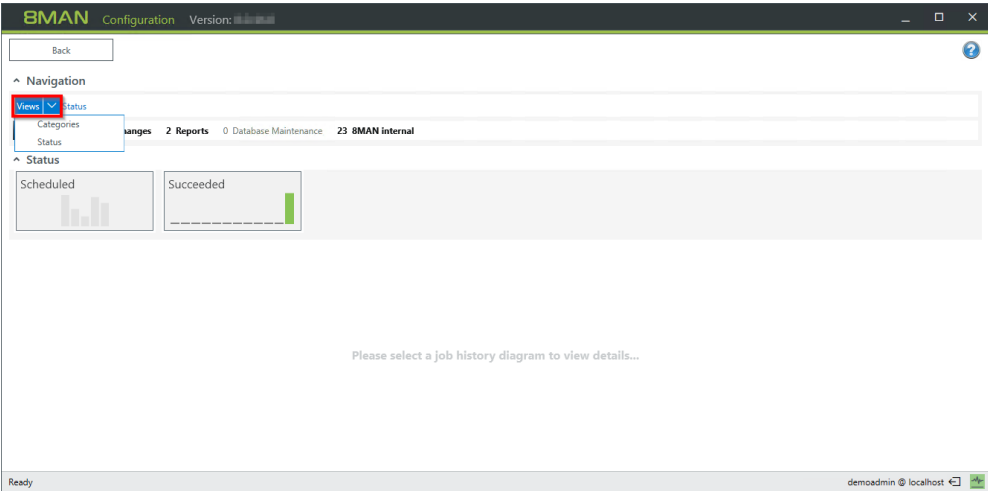
Jobs Summary	
4 Scans 0 Reports	5 Changes 15 More
4 Scheduled 20 Succeeded	0 Executing 0 Failed

Below the summary tiles is a grid of functional tiles. The 'Jobs Overview' tile, which shows 'Job Status, Job Categories', is also highlighted with a red box. Other tiles include Scans, Open Order, User Management, Data Owner, License, Collectors, Alerts Configuration, Change Configuration, Views & Reports, Server, and Basic configuration.

The job overview contains a variety of information including scan speed and the amount of collected data.

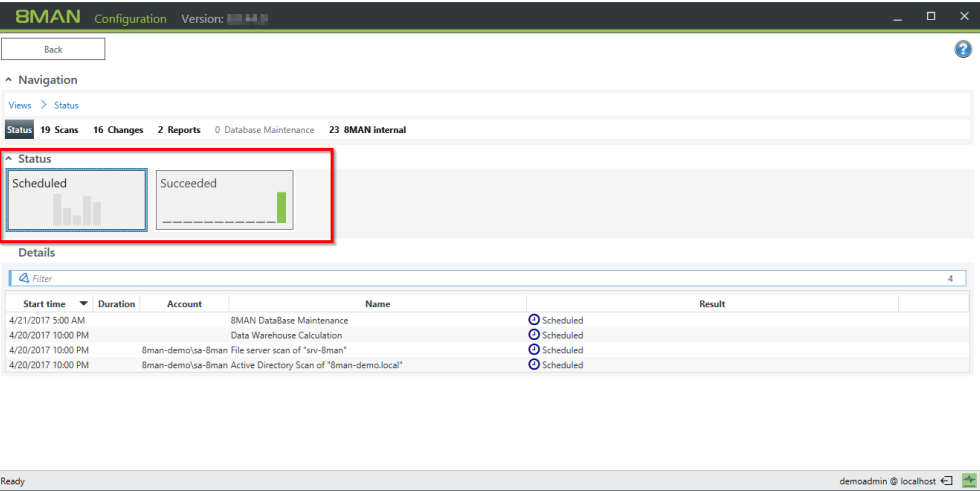
You are not able to edit or configure the displayed information in the job overview tile. Successful jobs are displayed for 2 weeks, failed jobs for 4 weeks.

Click the tile for more details.



Select between two views.

16.1 Group jobs according to status

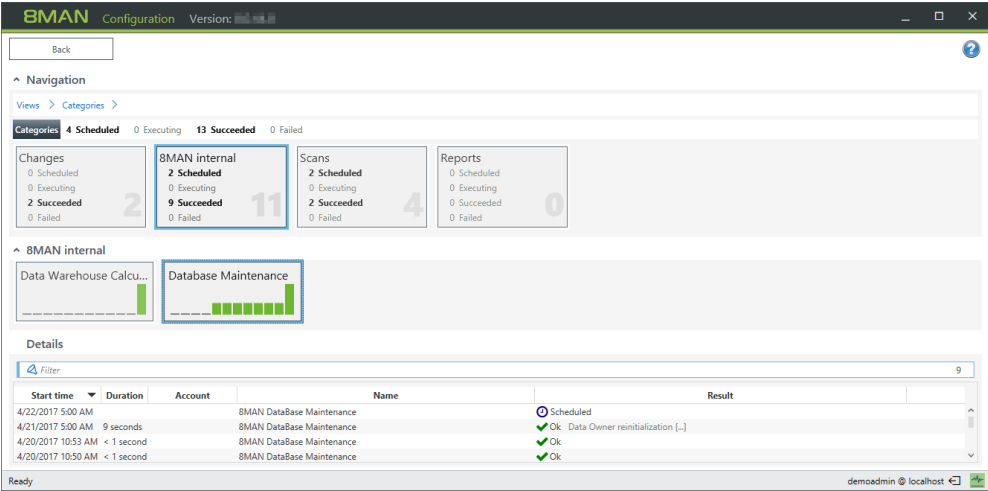


You can see a job progress diagram for every status.

Click on a diagram to view the associated jobs.

Hover over the bars in the diagram to receive a quick preview.

16.2 Display jobs grouped by category

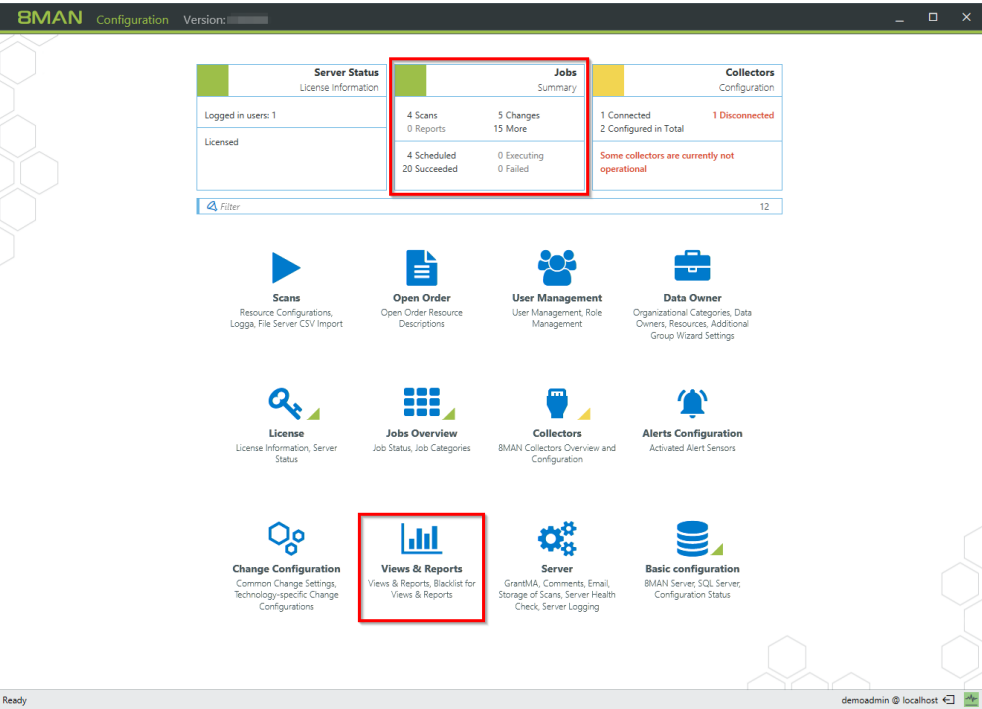


In the category view the jobs are listed in more granularity.

8MAN provides job progress diagrams for each category.

Click on a diagram to list the associated jobs.

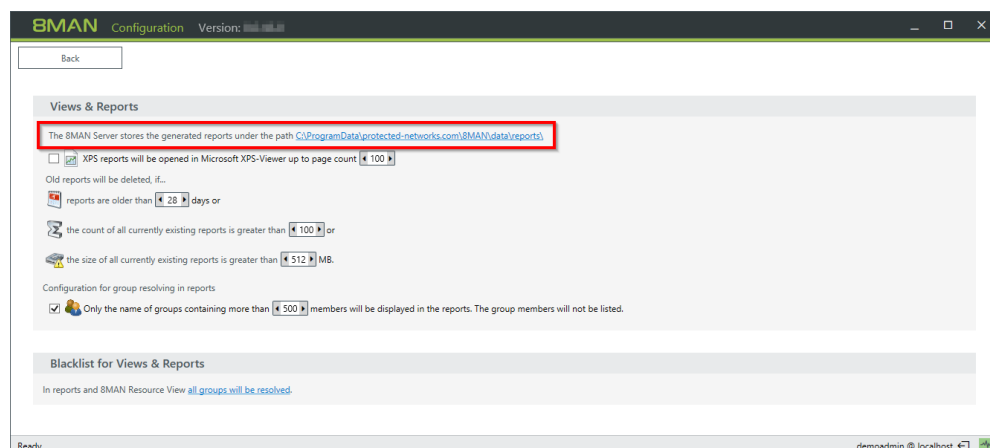
17 Configure views & reports



Determine the options for report creation, views and blacklists

Click on "Views & reports".

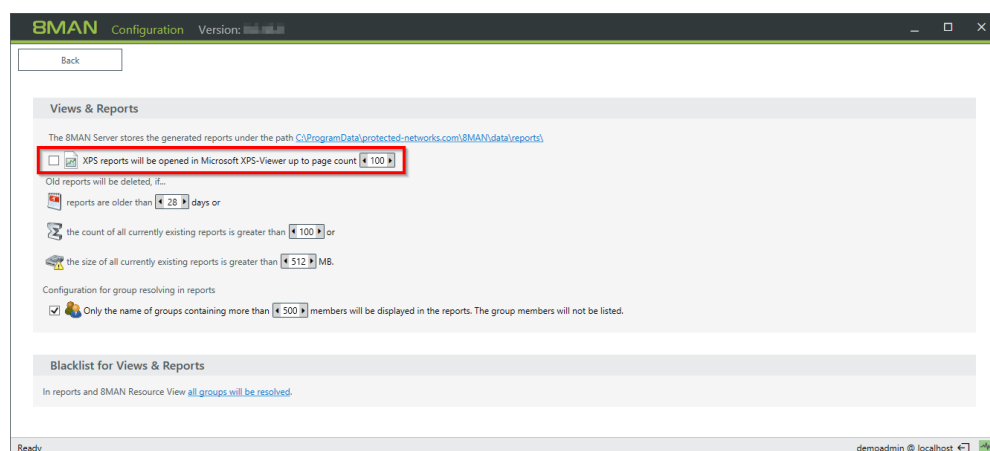
17.1 Configure report options



Determine where 8MAN stores reports.

The default path is:

%ProgramData%\protected-networks.com\8MAN\data\reports



By default 8MAN uses its own XPS viewer when opening files in an XPS format. The 8MAN user interface is locked when displaying XPS reports.

Please use the Microsoft XPS viewer if you require the simultaneous availability of both report and 8MAN user interface. From 8MAN version 8 on reports will no longer be created in XPS format. For compatibility reasons the XPS viewer will stay included to view earlier created reports in XPS format.

17.2 Configure the blacklist for views and reports

You can determine the groups for which members are not resolved in the views and reports. This allows for a better overview, especially for groups with large numbers of users. Affected are:

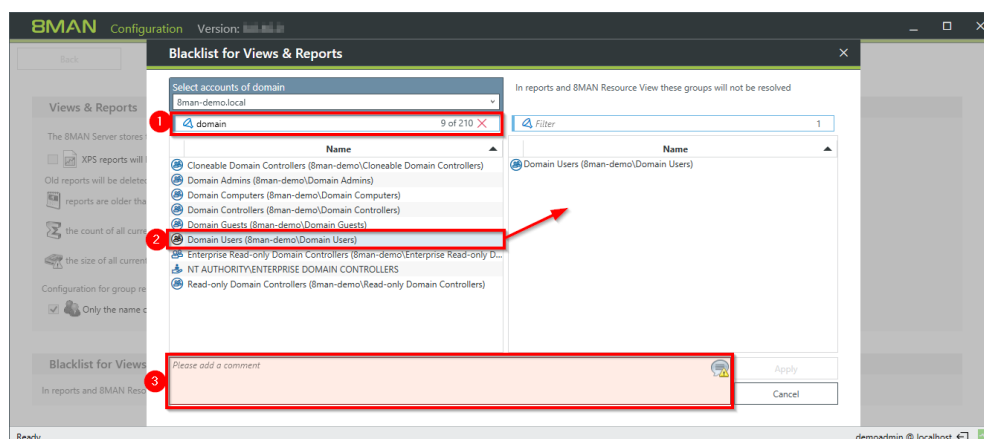
- reports
- views in 8MAN GUI
- Analyze&Act web interface

Examples:

- Domain users - This groups includes all users in the applied domain.
- Users (predefined) - This group includes all users withing a selected context (for example domain, file server)

Hiding group memberships may also be required in order to ensure compliance with company regulations and guidelines.

Groups included in the blacklist are indicated with a blacklist icon in the resource view of the 8MAN user interface. Their members are not displayed.

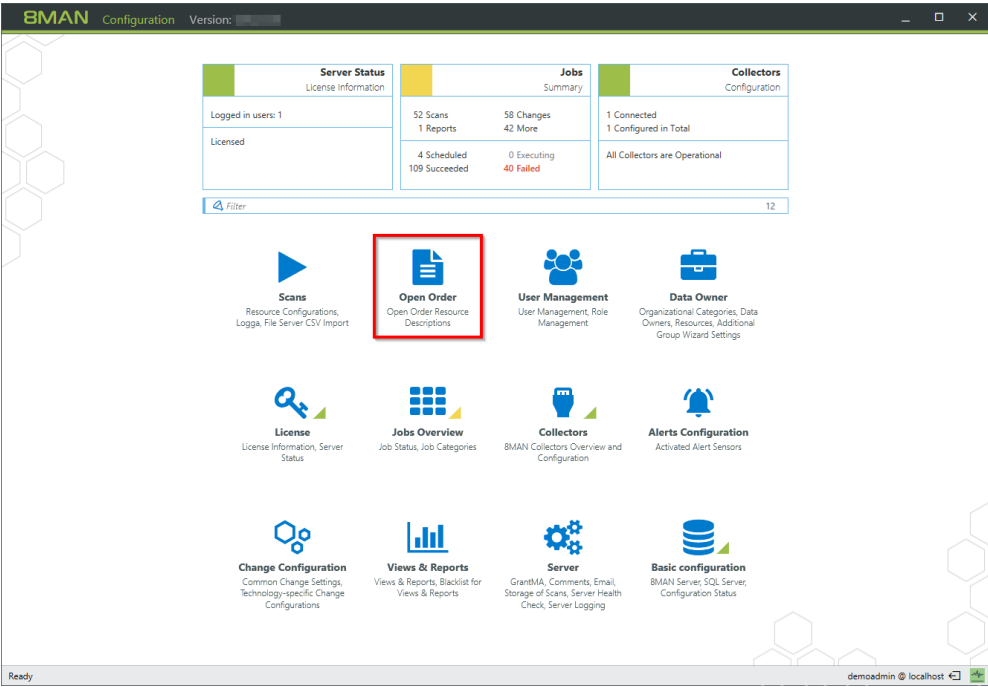


Use the search to find the desired accounts.

Move accounts in and out of the blacklist via drag & drop.

You must enter a comment for the log book in order to be able to apply these changes.

18 Open Order



With OpenOrder, you use GrantMA workflows for orders that are not executed with 8MAN after completion.

You define the available technologies and resources in an XML file, e.g. Hardware, software, or permissions for systems not integrated into 8MAN.

Customize the order with customizable templates (see manual for templates).

18.1 Define the available technologies and resources

You can define the available technologies and resources in an XML file.

The XML file has the following structure:

1. Set technology
2. Define technology
 - Define permissionsets
 - Summarizing permissions for types
3. Describe resources
 - Define resource root
 - Define resources

Example:

```
<?xml version="1.0" encoding="utf-8"?>

<!-- do not change -->
<resourceImport Version="3">

  <!-- technology definition -->
  <technology Id="D54C16F2-42C1-477A-BD20-3285158F68D3" Name="Hardware" IconId="2" Color="#0000be">
    <definitions>
      <permissionSets>
        <permissionSet PermissionSetId="1" Description="['en-US:Buy','de-DE:Kaufen']" />
        <permissionSet PermissionSetId="2" Description="['en-US:Lease','de-DE:Leasen']" />
        <permissionSet PermissionSetId="3" Description="['en-US:Rent','de-DE:Mieten']" />
      </permissionSets>
      <types>
        <type Id="1" Description="['en-US:Hardware','de-DE:Hardware']" IconId="Container"
PermissionSetIds="[]" />
        <type Id="3" Description="['en-US:Desktop','de-DE:Desktop']" IconId="Computer"
PermissionSetIds="[1,2,3]" />
      </types>
    </definitions>

    <!-- resource definition -->
    <data>
      <root Id="6CE9B526-9FFD-46A5-9ED0-36FB4E1303B5" Name="Computer" TypeId="1" Merge="no">
        <resource Name="Desktop PCs" TypeId="3" Description="['en-US:Stationary PC','de-DE:Stationäre
Arbeitsplatz-PCs']">
          <resource Name="Desktop-PC Einfach" TypeId="3" />
          <resource Name="Desktop-PC Standard" TypeId="3" />
          <resource Name="Desktop-PC konfigurierbar" TypeId="3" TemplateID="E3865726-6FDF-489E-A7D5-
4ABBA5B2BF83" />
        </resource>
      </root>
    </data>
  </technology>
</resourceImport>
```

18.1.1 Set technology

An OpenOrder XML configuration can contain several technologies. In the first line of a technology section, specify the ID, name, and icon.

Example:

```
<!-- technology definition -->
<technology Id="D54C16F2-42C1-477A-BD20-3285158F68D3" Name="Hardware" IconId="2">
```

Id

Identifies the technology and must be unique within Open Order. Our recommendation: Use a GUID, e.g. from guidgen.com

Name

Display name of the technology.

IconId

Displayed icon for the DataOwner configuration (not for the GrantMA). See [predefined Icons](#).

18.1.1.1 Define permission sets

In the `permissionSets` section, you define the technology's permission sets.

Example:

```
<permissionSets>
  <permissionSet PermissionSetId="1" Description="['en-US:Buy','de-DE:Kaufen']" />
  <permissionSet PermissionSetId="2" Description="['en-US:Lease','de-DE:Leasen']" />
  <permissionSet PermissionSetId="3" Description="['en-US:Rent','de-DE:Mieten']" />
</permissionSets>
```

PermissionSetId

Assign an integer that identifies the entry in the permission set.

Description

See Chapter [Descriptions](#).

18.1.1.2 Define types

A type definition of a technology contains 0 to n permissions and an icon.

Example:

```
<types>
  <type Id="1" Description="[ 'en-US:Hardware', 'de-DE:Hardware' ]" IconId="Container"
PermissionSetIds=[]" />
  <type Id="3" Description="[ 'en-US:Desktop', 'de-DE:Desktop' ]" IconId="Computer"
PermissionSetIds="[1,2,3]" />
</types>
```

Id

Assign an integer that identifies the type.

Description

The displayed description of type.

IconId

Displayed icon for the DataOwner configuration (not for the GrantMA). See [predefined icons](#).

PermissionSetIds

A list of possible permissions for the type. An empty list of PermissionSetIds implies that a resource with the authorization type can not be ordered.

18.1.2 Define resources

In the **data** section, you define the resources. A resource node starts with a root entry. You then specify the available resources.

18.1.2.1 Define root

With a node entry (root), you define the topmost entry of a resource.

Example:

```
<data>
  <root Id="6CE9B526-9FFD-46A5-9ED0-36FB4E1303B5" Name="Computer" TypeId="1" Merge="no">
    <resource Name="Desktop PCs" TypeId="3" Description="['en-US:Stationary PC','de-DE:Stationäre
Arbeitsplatz-PCs']">
      <resource Name="Desktop-PC Einfach" TypeId="3" />
      <resource Name="Desktop-PC Standard" TypeId="3" />
      <resource Name="Desktop-PC konfigurierbar" TypeId="3" TemplateID="E3865726-6FDF-489E-A7D5-
4ABBA5B2BF83" />
    </resource>
  </root>
</data>
```

Id

Assign an ID to the top node. The ID must be unique within Open Order. Our recommendation: Use a GUID, e.g. from guidgen.com

Name

Assign an display name for the node.

TypeId

Specify the type of the top node.

Merge

Set the update behavior if you re-upload the XML configuration.

Merge="no"

An existing configuration of the same root ID is removed and replaced by the new upload.

Merge="yes"

For an existing root ID:

- new entries (new name) will be added,
- same entries (same name) will be added creating duplicates,
- old entries will be kept.

18.1.2.2 Define resource

Within the root, you define the resources in the **resource** section. You can nest the resources as much as you want.

Example:

```
<data>
  <root Id="6CE9B526-9FFD-46A5-9ED0-36FB4E1303B5" Name="Computer" TypeId="1" Merge="no">
    <resource Name="Desktop PCs" TypeId="3" Description="['en-US:Stationary PC','de-DE:Stationäre
Arbeitsplatz-PCs']">
      <resource Name="Desktop-PC Einfach" TypeId="3" />
      <resource Name="Desktop-PC Standard" TypeId="3" />
      <resource Name="Desktop-PC konfigurierbar" TypeId="3" TemplateID="E3865726-6FDF-489E-A7D5-
4ABBA5B2BF83" />
    </resource>
  </root>
</data>
```

Name

In 8MAN displayed name of the resource.

TypeId

Mandatory: Assign a type to the resource.

Description

Optionally provide a description of the resource.

18.2 Predefined icons



To display the technologies and resources in the data owner configuration, use predefined icons.

Use either the ID or the tag (tags are case-insensitive).

Example

IconId="1" or IconId="Server" or IconID="SERVER"

Tag (case-insensitive)	ID	Icon	Tooltip German	Tooltip English	Notes
Unknown	0		Unbekannt	Unknown	(1)
Server	1		Server	Server	(2)
Domain	2		Domäne	Domain	
OrganizationalUnit	3		Organisationseinheit	Organizational Unit	
Container	4		Container	Container	
Computer	5		Computer	Computer	
Share	6		Freigabe	Share	
Directory	7		Verzeichnis	Directory	
File	8		Datei	File	
Contact	9		Kontakt	Contact	
Item	10		Element	Item	
Group	11		Gruppe	Group	
User	12		Benutzer	User	
Memorystick	13		Memorystick	Memorystick	
BoxSoftware	14		Softwarebox	Software box	
Cd	15		CD	CD	
Laptop	16		Laptop	Laptop	

Smartphone	17		Smartphone	Smartphone	
Printer	18		Drucker	Printer	

- (1) Default for resources if no or an invalid value (tag or ID) was specified.
- (2) The default setting for resource nodes (root), if no or an invalid value (tag or ID) was specified.

18.3 Descriptions

Descriptions can be given in several languages.

Example

Description="['en-US:Buy', 'de-DE:Kaufen', 'fr-FR:Acheter']

You can add additional languages. Use the Windows Language Code Identifier (LCID).

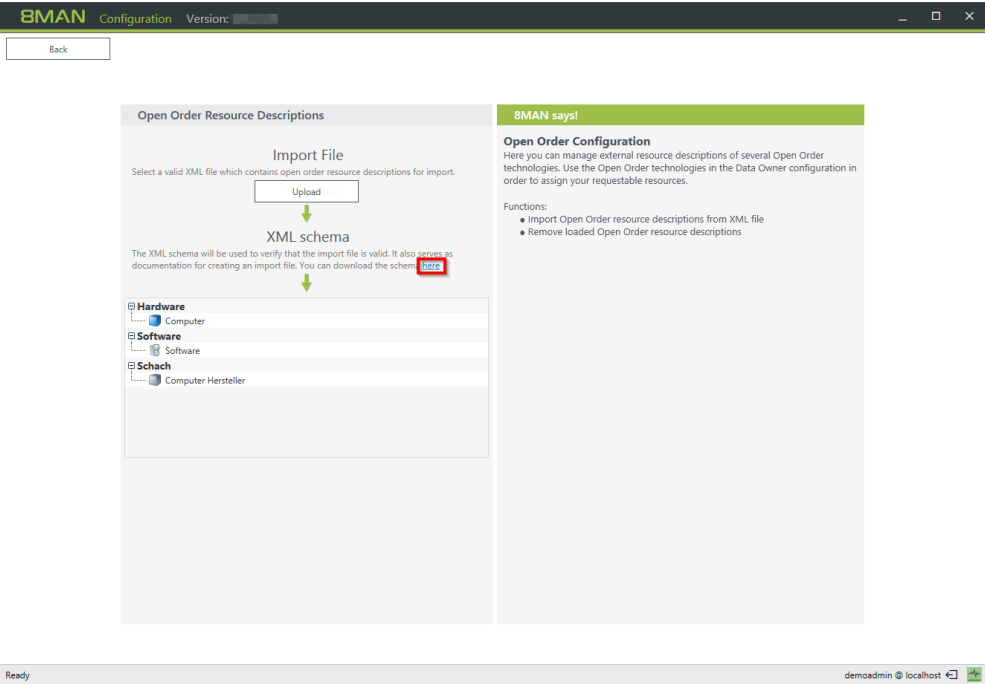
Note

If you need to use an apostrophe (escape character) within the description text, this must be quoted:

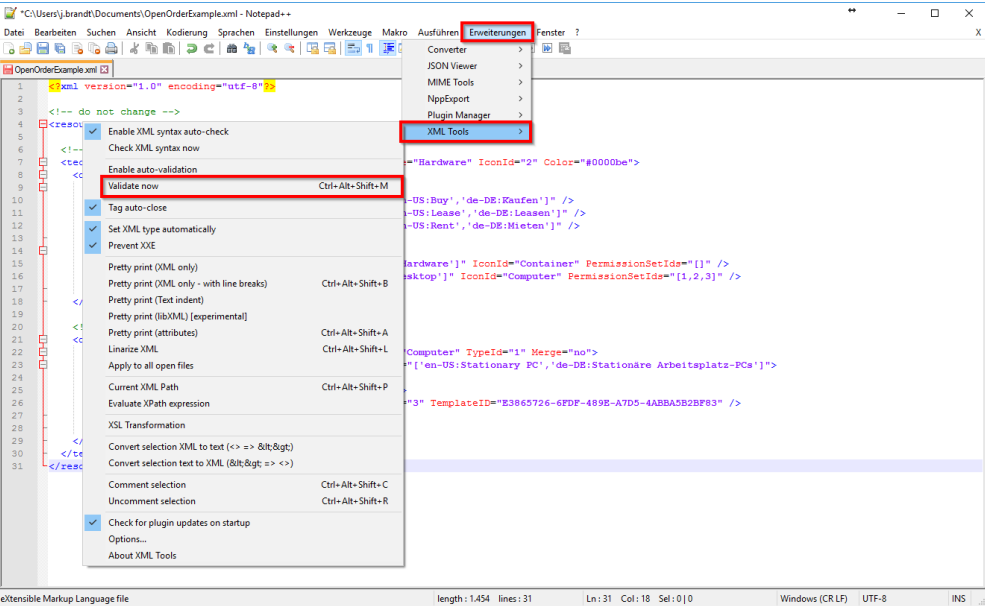
Description="['en-US:PC"']

18.4 Validate an XML configuration file

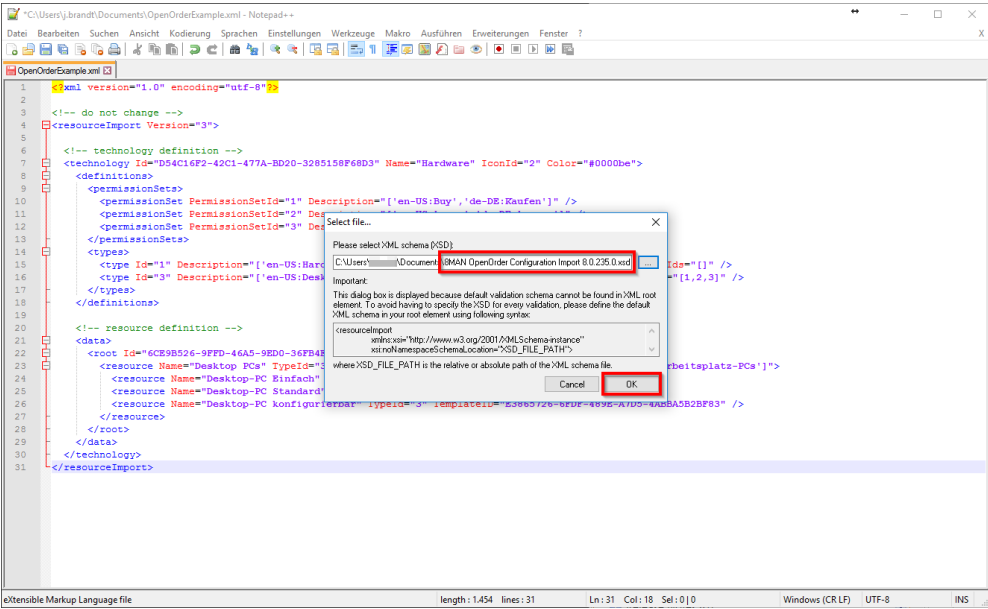
At the latest when uploading to the 8MAN configuration, your XML configuration is validated. You can already check the structure of your XML data in the editor for validity.



In the 8MAN configuration, navigate to "Open Order". Click "here" to download the XML schema file.



In Notepad ++ with XML Tools enabled, you can perform a schema validation. Click Plugins > XML Tools > Validate Now.



Select the schema file (8MAN OpenOrder Configuration Import.xsd) downloaded from 8MAN.
Click "OK" to start the validation.

18.5 Integrate Open Order templates in the 8MATE GrantMA

To create Open Order Templates, follow these steps:

1. [Enter the template's call into the XML Resource Configuration](#)
2. [Upload an XML resource configuration to the Data Owner configuration](#)
3. [Set the Open Order resource to requestable](#)

18.5.1 Enter the template's call into the XML Resource Configuration

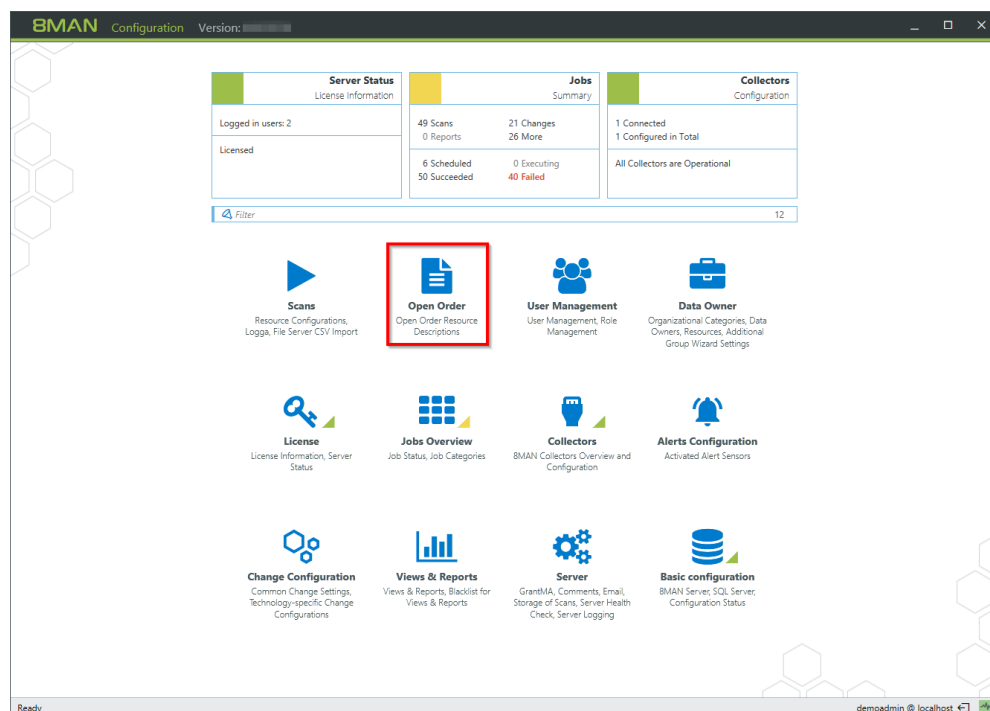
Assign the unique ID of the OpenOrderTemplate to one or more resources.

For more information on the structure of the XML resource configuration, see the Open Order manual.

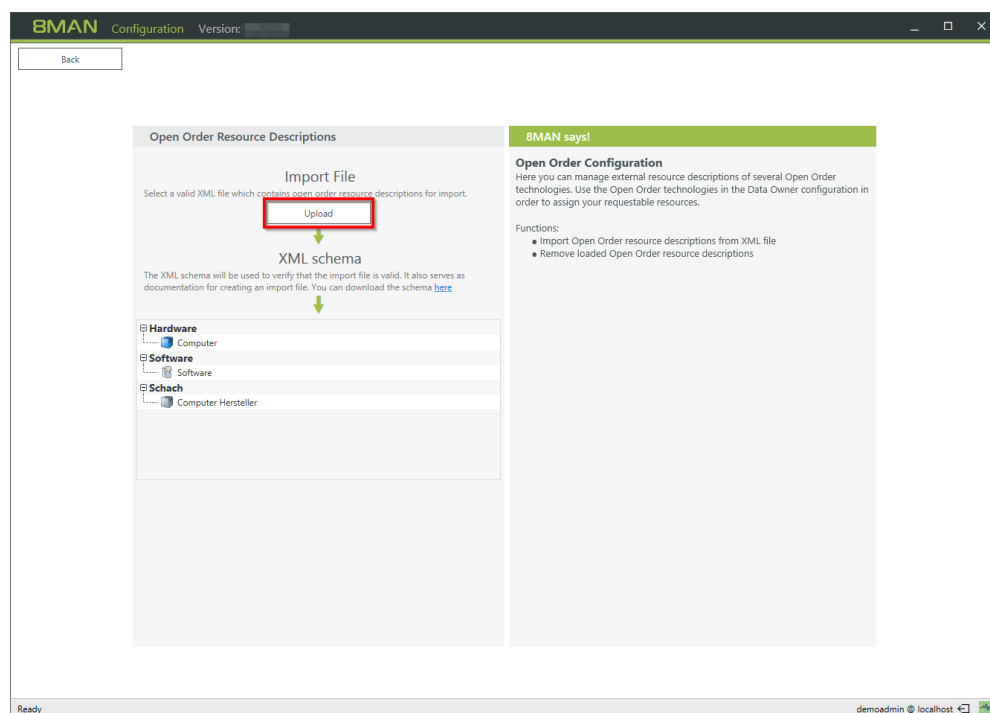
Example

```
<?xml version="1.0" encoding="utf-8"?>
<resourceImport Version="3">
  <technology Id="D54C16F2-42C1-477A-BD20-3285158F68D3" Name="Hardware" IconId="2" Color="#0000be">
    <definitions>
      <permissionSets>
        <permissionSet PermissionSetId="1" Description="['en-US:Buy','de-DE:Kaufen']" />
        <permissionSet PermissionSetId="2" Description="['en-US:Lease','de-DE:Leasen']" />
        <permissionSet PermissionSetId="3" Description="['en-US:Rent','de-DE:Mieten']" />
      </permissionSets>
      <types>
        <type Id="1" Description="['en-US:Hardware','de-DE:Hardware']" IconId="Container"
PermissionSetIds="[]" />
        <type Id="3" Description="['en-US:Desktop','de-DE:Desktop']" IconId="Computer"
PermissionSetIds="[1,2,3]" />
      </types>
    </definitions>
    <data>
      <root Id="6CE9B526-9FFD-46A5-9ED0-36FB4E1303B5" Name="Computer" TypeId="1" Merge="no">
        <resource Name="Desktop PCs" TypeId="3" Description="['en-US:Stationary PC','de-DE:Stationäre
Arbeitsplatz-PCs']">
          <resource Name="Desktop-PC Simple" TypeId="3" />
          <resource Name="Desktop-PC Standard" TypeId="3" />
          <resource Name="Desktop-PC Custom" TypeId="3" TemplateID="E3865726-6FDF-489E-A7D5-
4ABBA5B2BF83" />
        </resource>
      </root>
    </data>
  </technology>
</resourceImport>
```

18.5.2 Upload an XML resource configuration to the Data Owner configuration

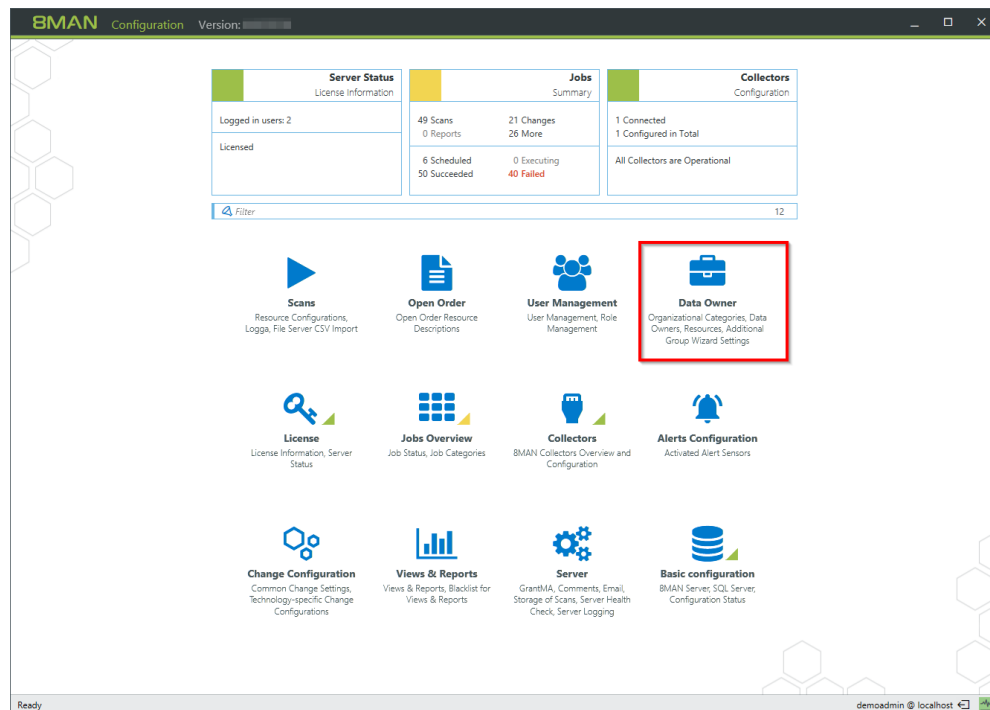


In the 8MAN configuration, click "Open Order".

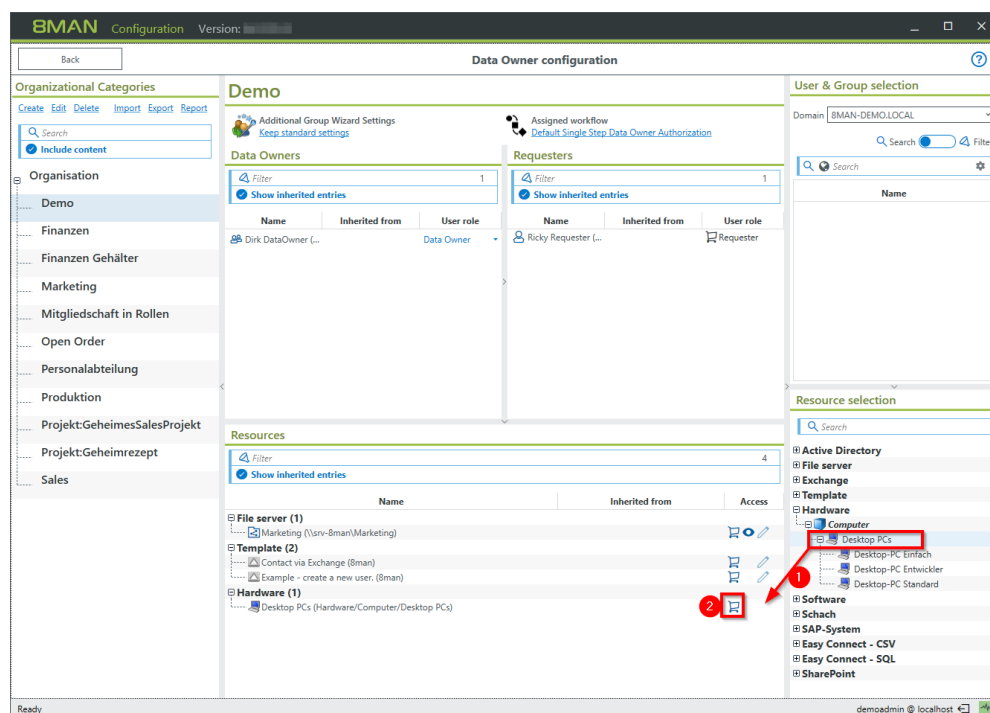


Click "Upload" to import the XML Resource Configuration. After successful import, the resources are available in the Data Owner configuration and can be assigned to organizational categories.

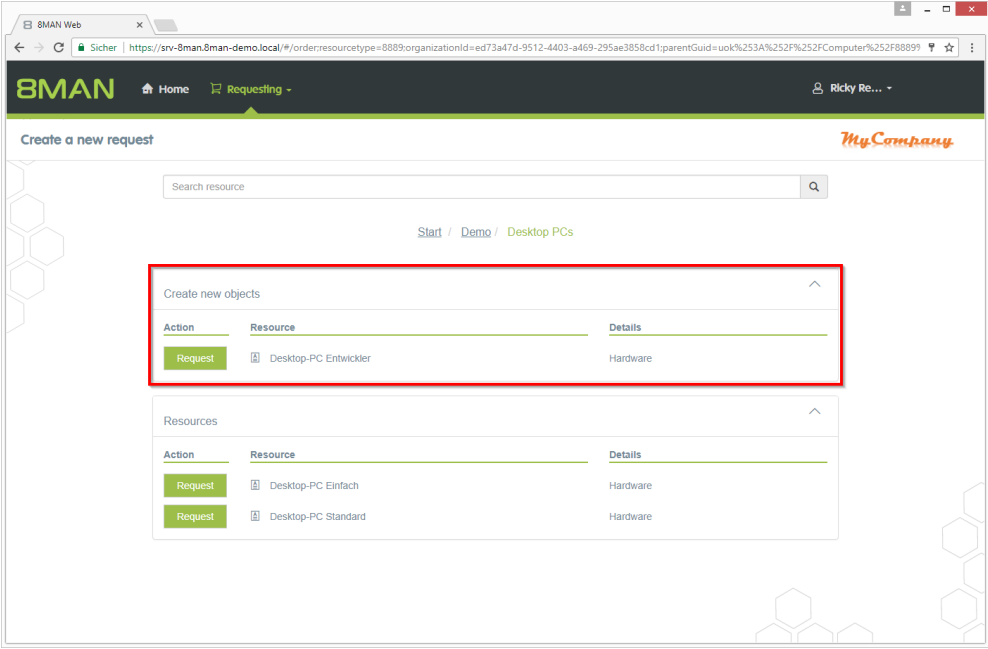
18.5.3 Set the Open Order resource to requestable



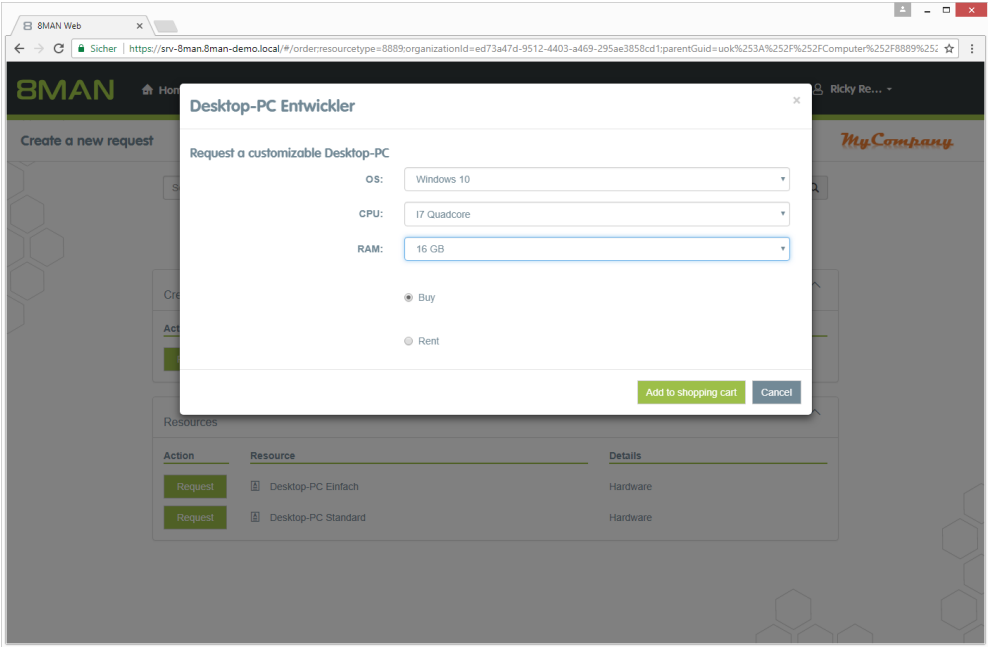
In the 8MAN configuration, click "Data Owner".



1. Add the desired resource by drag & drop.
2. The resource is automatically marked as requestable.



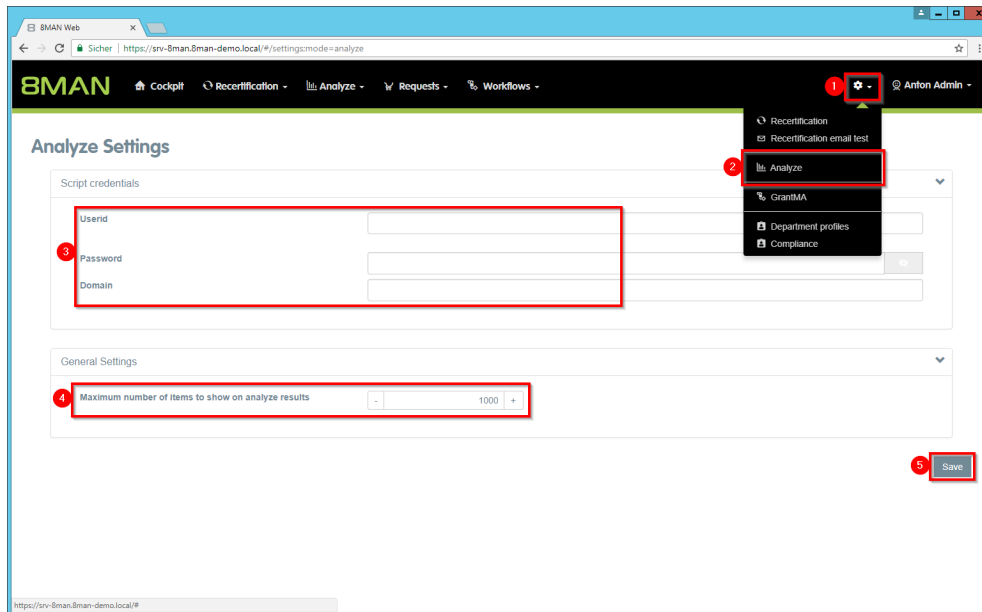
The requester can find the resource available via Open Order in the "Create new objects" area.



Example for an template based Open Order request.

19 Configuration in the web client

19.1 Set analyze options



Log into the WebClient as 8MAN administrator.

1. Click the gear.
2. Select Analyze.
3. Specify credentials for the execution of scripts. Specify an account that has the permissions to perform the actions of the scripts.
4. Define the maximum number of lines to be displayed in the scenarios. A high number of lines can lead to performance problems (see [Browser Recommendations](#)).
5. Save the settings.

19.2 Configure Recertifications

Activate/deactivate

The screenshot shows the 8MAN web client interface for configuring recertifications. The top navigation bar includes links for Home, Recertification, Analyze, Requesting, and Workflows. The 'Recertification' link is highlighted with a red box and a red circle. The main content area is titled 'Settings Recertification' and contains a 'Configuration' section. Within this section, the 'Recertification date range' is configured. A red box highlights the 'end date' field, which is set to '30' days. The 'Recertification date range' section also shows a calendar for March 2017 with the start date set to March 20, 2017.

1. Login with 8MAN administrator credentials and select "Recertification".
2. Select a start date. Recertification is active from this date on.
3. Select an end date. Recertification is deactivated from this date on. There is no other option to deactivate the recertification. All Data Owners with open recertification requests will be informed by email.

These settings are valid globally for all Data Owners.

Which resources need to be certified is specified in the [DataOwner configuration](#).

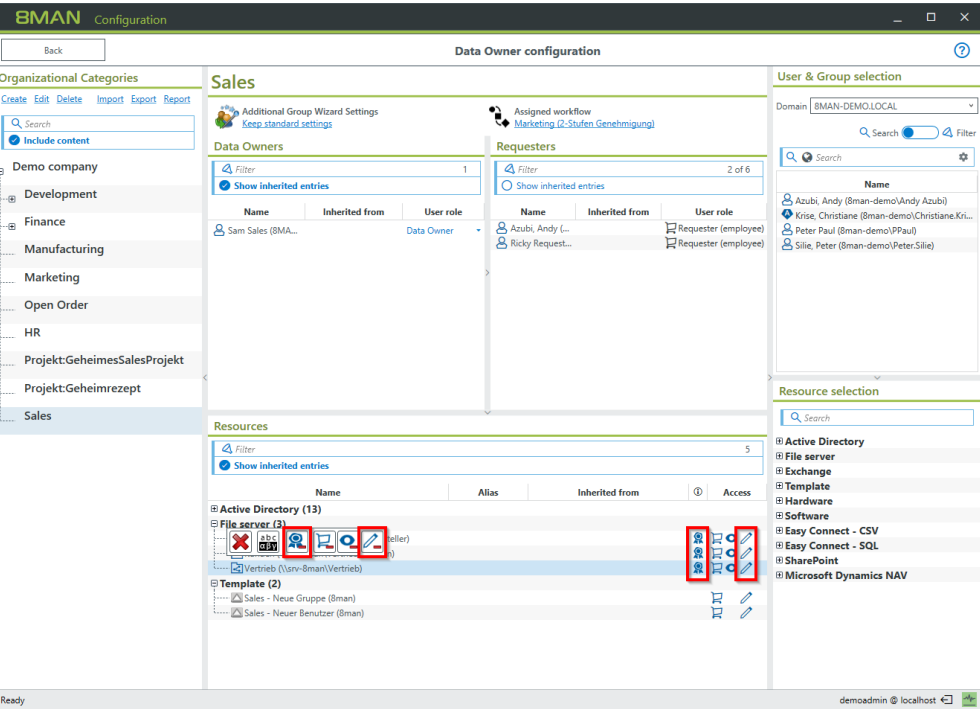
Deadlines and Intervals

The screenshot shows the 8MAN web client interface for configuring recertifications. The top navigation bar includes links for Home, Recertification, Analyze, Requesting, and Workflows. The 'Recertification' link is highlighted with a red box and a red circle. The main content area is titled 'Settings Recertification' and contains a 'Configuration' section. Within this section, the 'Recertification date range' is configured. A red box highlights the 'end date' field, which is set to '30' days. The 'Recertification date range' section also shows a calendar for March 2017 with the start date set to March 20, 2017.

1. Login with 8MAN Administrator credentials and select "Recertification".
2. Determine how much time Data Owners are given to complete recertifications.
3. Determine the frequency of the recertification process.

These settings are valid globally for all Data Owners.

Activate Recertifications in the Data Owner Configuration

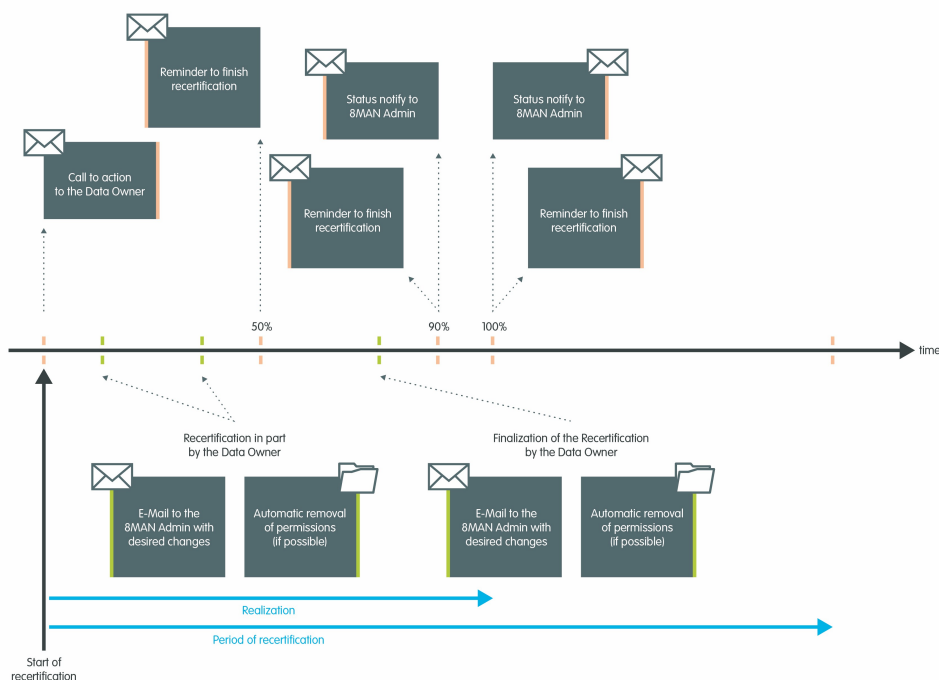


To make resources appear in the Data Owner recertification process, you must mark them as editable and activate the recertification.

Select a resource and use the flyout menu bar to activate the recertification.

19.2.1 Customize notification emails

Manage the frequency of email notifications



During the recertification process, email notifications are sent frequently to data owners and 8MAN administrators.

The timeline diagram visualizes when emails are sent and whom they are sent to. Every email above the timeline (with an orange marking) can be deactivated. In this case please contact [support](#).

Adjust content and style of the notification email

8MAN offers standard templates in XML stylesheet format. You can find them in the following directory:

`%ProgramFiles%\Protected Networks\8MAN\etc\mails\Recertification`

In case you want to modify these templates, please copy the files (*.xslt und css.html) to:

`%ProgramData%\protected-networks.com\8MAN\cfg\mails\Recertification`

The sub-directory "mails\recertification" must be created in advance.

Adjust the templates in "ProgramData". 8MAN primarily uses the modified templates in "ProgramData".

When updating to a newer 8MAN version the data in "ProgramFiles" will be overwritten.

19.2.2 Test notification emails for recertification

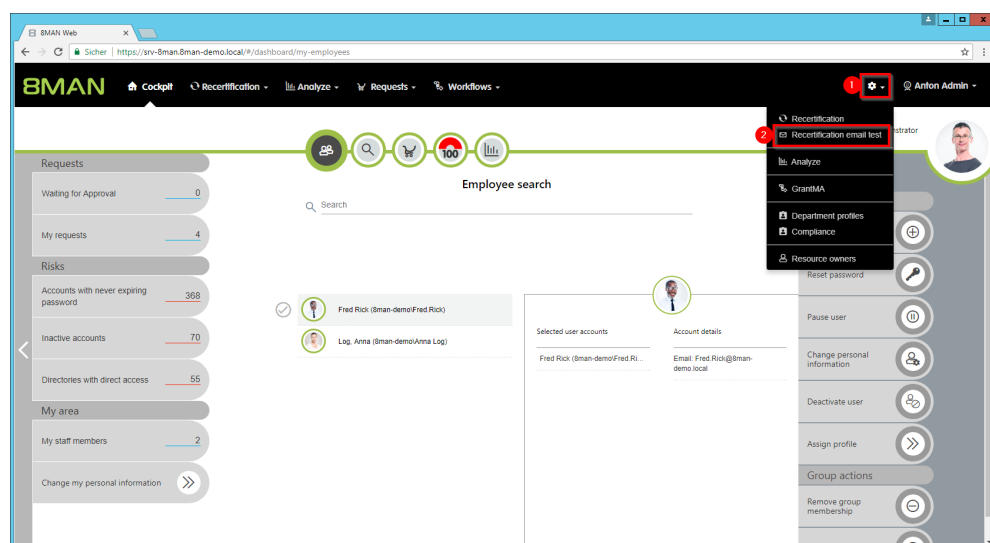
Background / Value

In the stages of recertification, 8MAN sends various notification emails. Test the notification emails - including your adjustments if necessary, before you enable recertification.

Additional Services

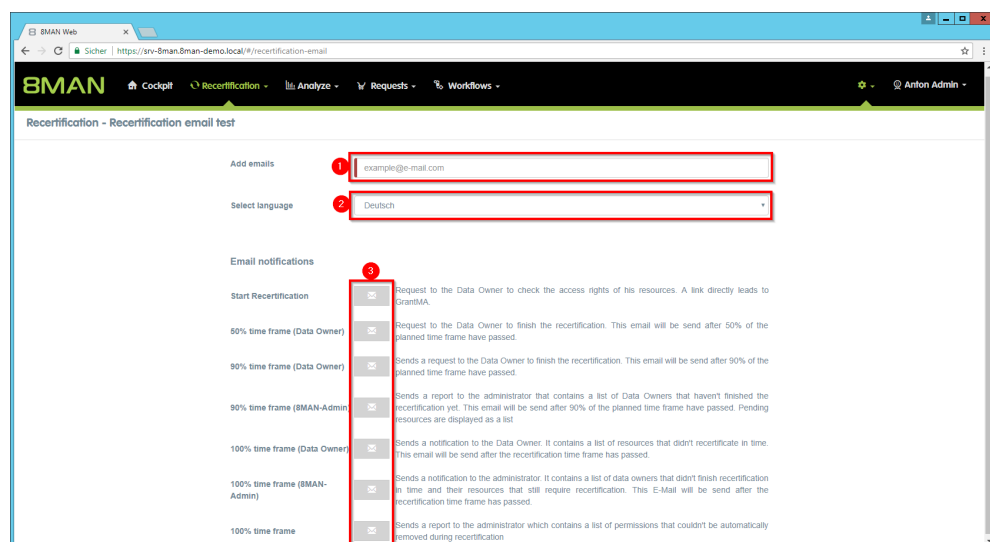
[Customize notification emails for recertification](#) (Administrator)

Step by step process



Log into the web client as an administrator.

1. Click on the gear.
2. Select "Recertification Test Email".



1. Enter one or more recipients.
2. Choose the language.
3. Send the desired notification email.

Recertification

Dear Anton Admin,

a new scheduled recertification is pending. It has to be finished by 3/16/2018.
Please check the permissions on the following resources:

Permissions

Resource	Description
ProjectX	Project X
ProjectY	Project Y

Follow the [link](#) to login to the 8MAN recertification website.

Regards

8MAN recertification

Example of a notification at the beginning of the recertification.

19.2.3 Configure the display settings

Eliminate the display of technical accounts

The recertification process has been designed to check the permissions of real users. Technical accounts (see the following list) are not displayed:

- Creator Owner (S-1-3-0)
- Creator-Group (S-1-3-1)
- Creator-Owner-Server (S-1-3-2)
- Creator group-Server (S-1-3-3)
- All Services (S-1-5-80-0)
- RDT (S-1-5-1)
- Network (S-1-5-2)
- Batch processing (S-1-5-3)
- Interactive (S-1-5-4)
- Domain controller (S-1-5-9)
- Local System (S-1-5-18)
- Local Service (S-1-5-19)
- Network service (S-1-5-20)

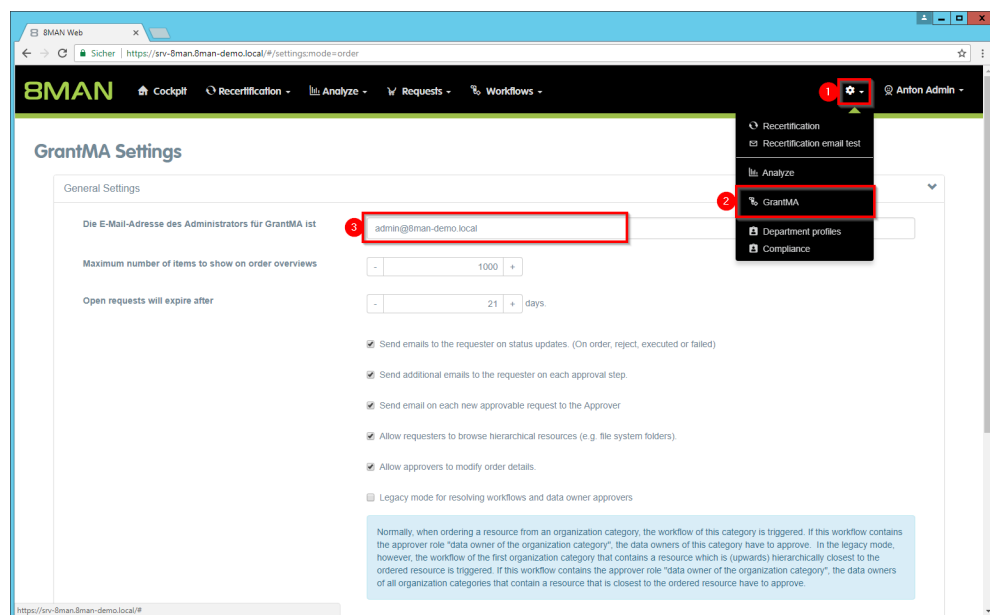
Please [contact support](#) if you require any modifications of this list.

Manage display settings for resolving group memberships

Recertifications adopt the settings of the blacklist for views and reports. Please see the chapter "[Configure the Blacklist for Views & Reports](#)".

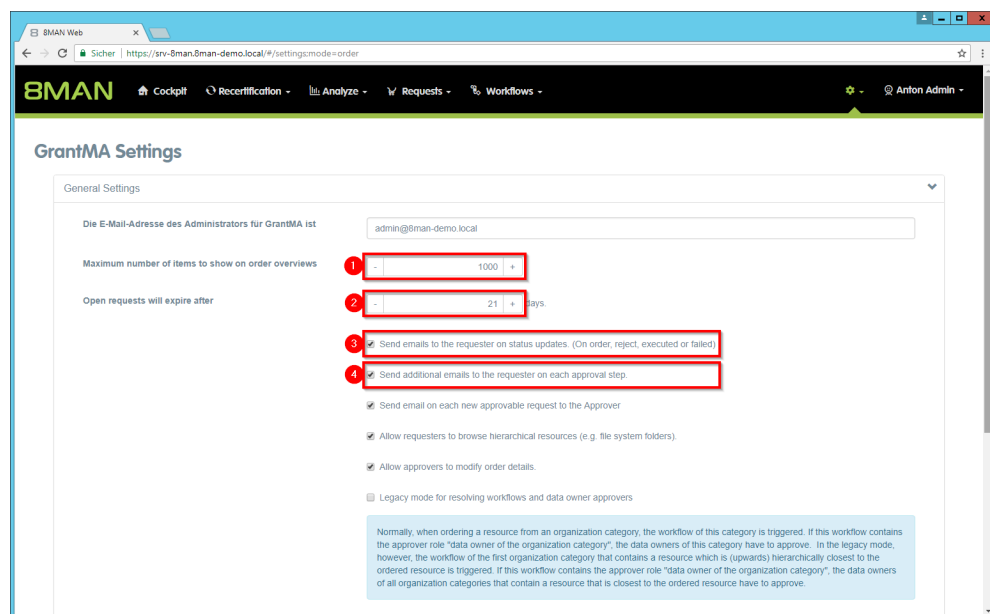
By viewing accounts and groups without the technical ones Data Owners get a far better overview.

19.3 GrantMA settings

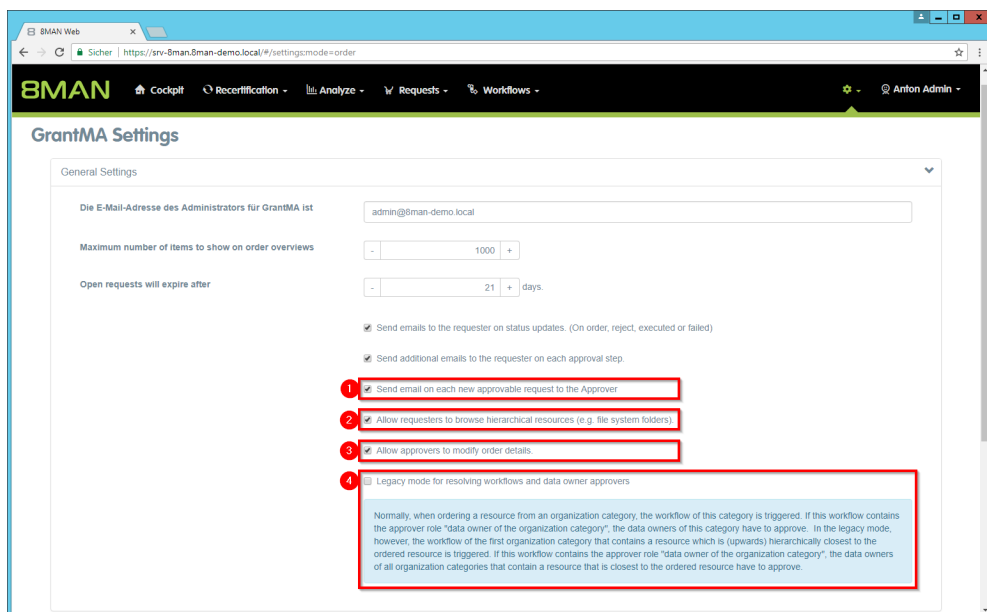


Log into the web client as an 8MAN administrator.

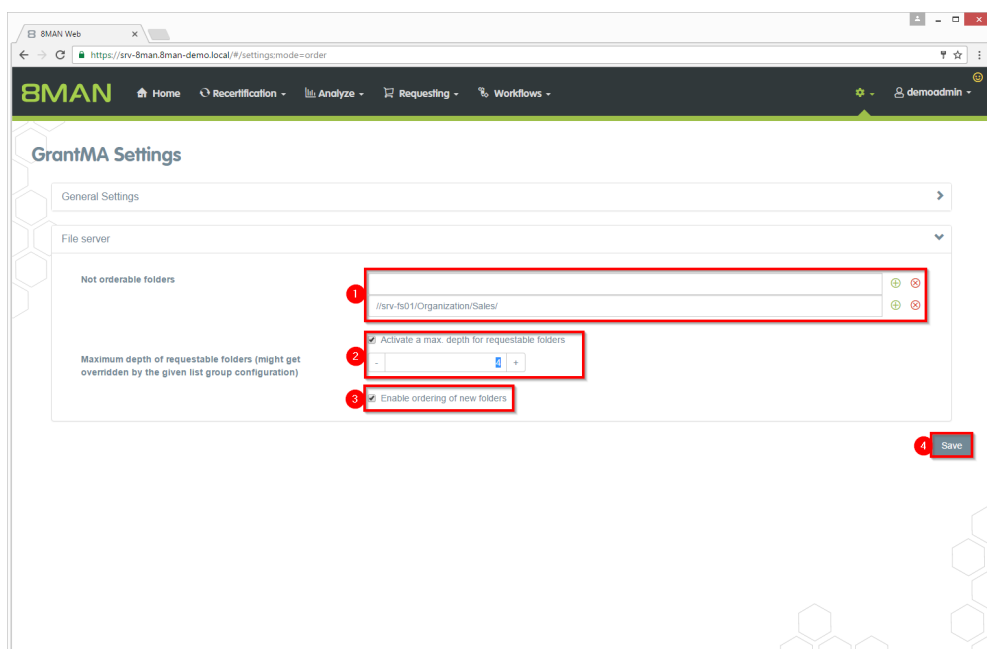
1. Click the gear.
2. Select GrantMA.
3. Specify the administrator's email address for GrantMA. 8MAN sends emails if errors occur in the order process (not for Recertification and Analyze & Act).



1. Define the maximum number of lines to be displayed in the scenarios. A high number of lines can lead to performance problems (see [Browser Recommendations](#)).
2. Specify the number of days of unfinished jobs by Data Owners being marked as expired. Administrators see these requests as expired in the order summary. No emails will be sent.
3. Option enabled:
The requester receives an email when the status of his order changes.
4. Option enabled:
The applicant receives additional emails at each approval step.



1. Option enabled:
The approver will receive an email for a new request. We recommend that you enable this option.
2. Option enabled:
Requesters can navigate into hierarchical resources, e.g. subdirectories.
3. Option enabled:
Approvers can modify a request.
4. If necessary, enable the legacy mode.



1. Define a blacklist for which directories are hidden for orders. Use UNC paths.
2. Define a directory depth up to which users can order.
3. Enable ordering new directories.
4. Save your settings.

19.4 Resource owners

19.4.1 Assign resource owners using the web client

Background / Value

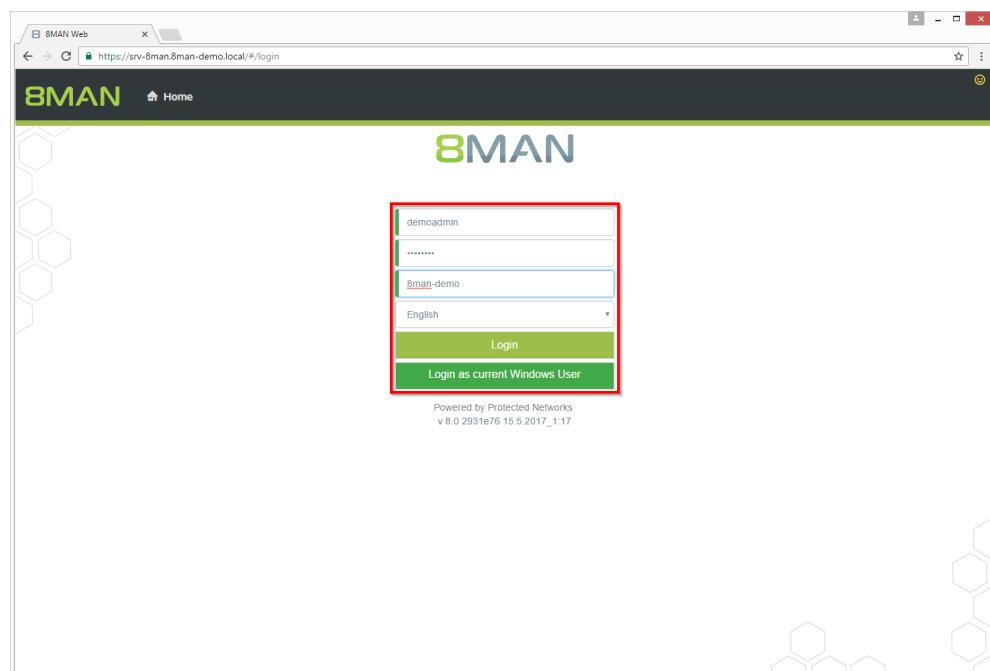
With version 8.0 8MAN releases new features to move the GrantMA configuration into the web client. We inserted the new role "Resource Owner". Assign this role completely using the web client. Due to the requirements of our customers we designed a direct assignment between the Resource Owner and the resource - without the need of creating organizational categories in the data owner configuration.

The functionality is deactivated by default. Please contact [support](#) for activating.

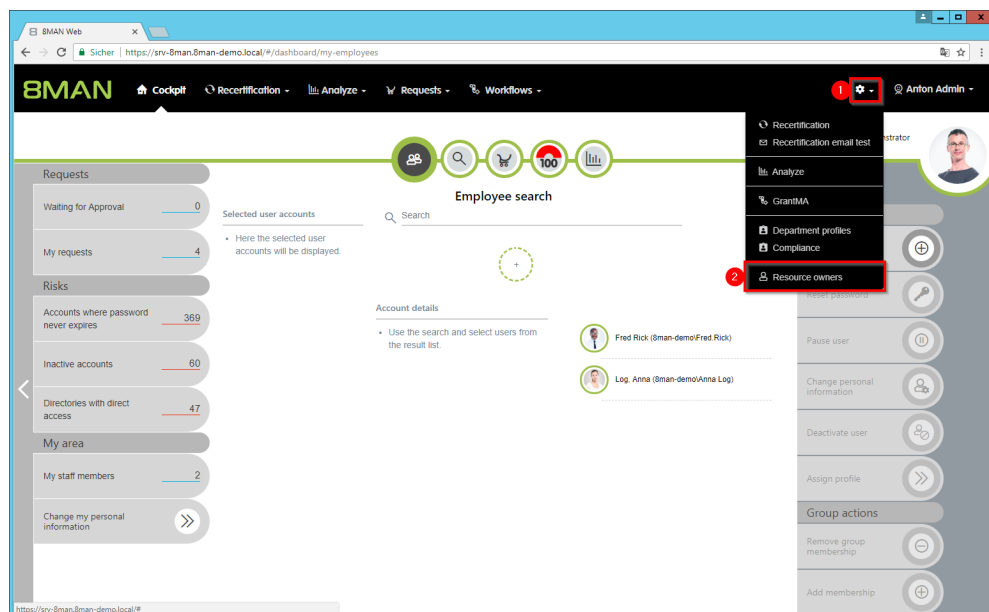
Additional Services

Defining individual approval workflows

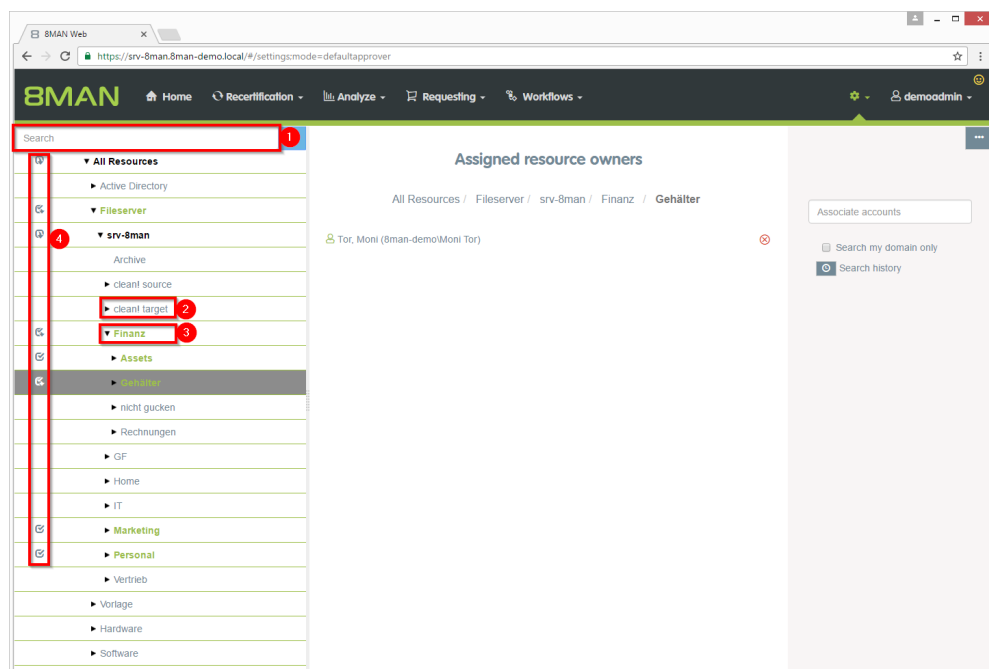
Step by step process



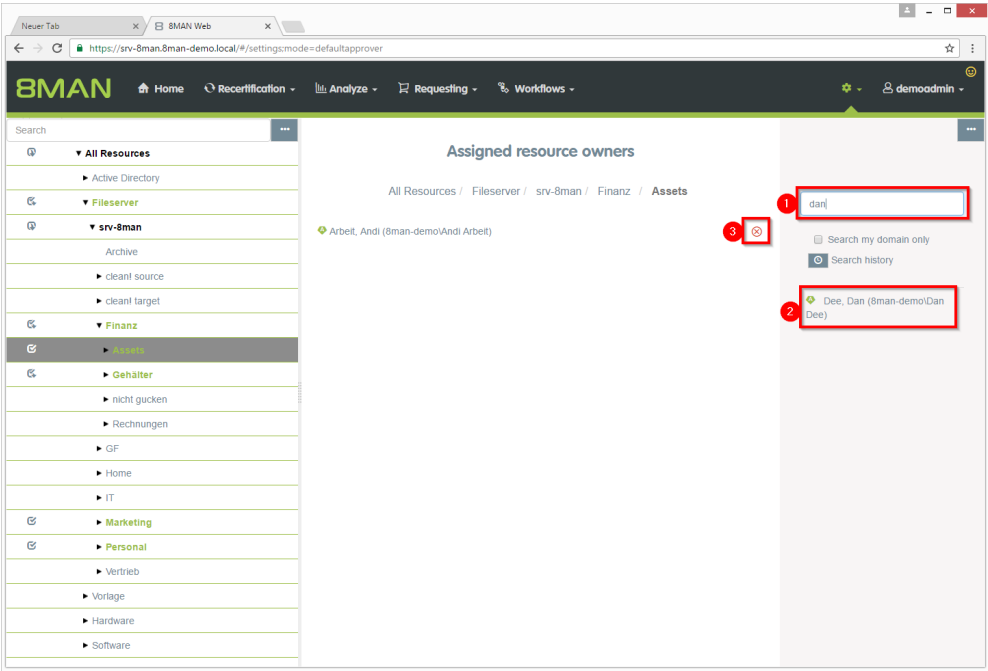
Login to the web interface with admin credentials.



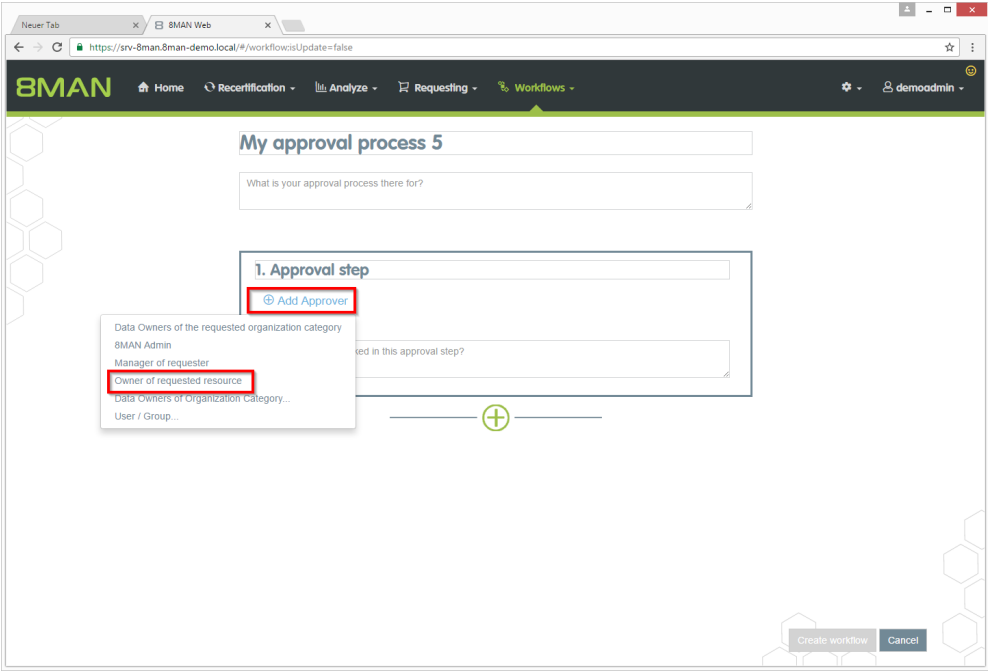
1. Click the gear-wheel.
2. Select "Resource owners".



1. Search for resources or alternatively navigate through the tree.
2. Gray text color indicates that no resource owner is assigned to the directory.
3. Green text color indicates an existing assignment.
4. The icons indicate assignments and assignments in subdirectories.



1. Find an user or a group.
2. Click a search result to set an assignment.
3. Delete an existing assignment.



Design individual workflows with the new role resource owner as an approver.

19.4.2 Import/export resource owner configurations

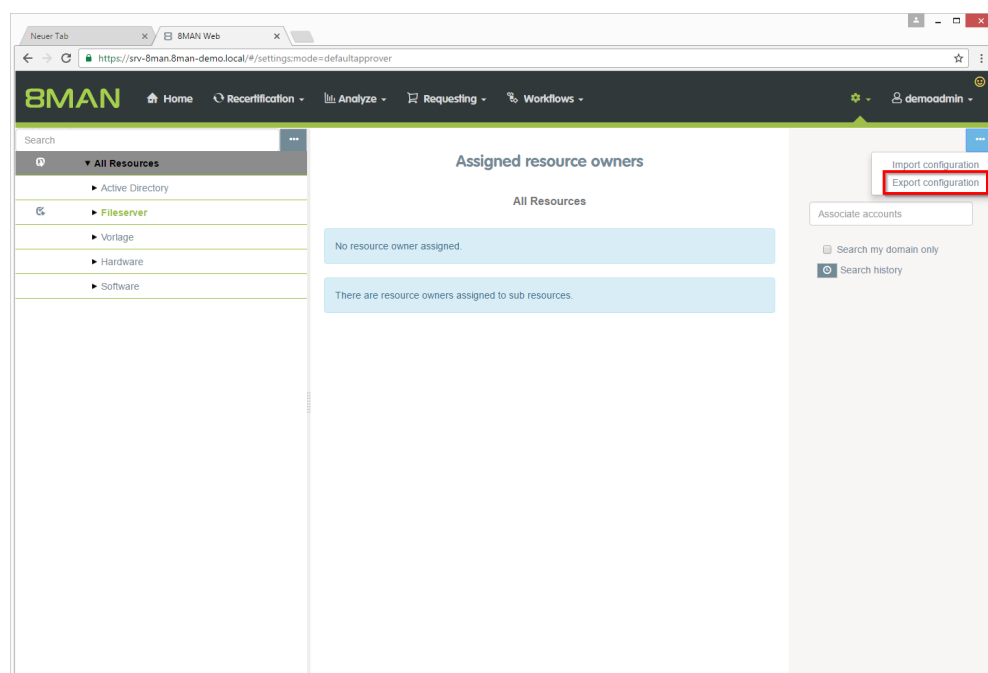
Background / Value

Automate and accelerate the assignment of resource owners by editing a CSV-file. Import/export the assignments to transfer the configuration from one system to another, for example from a testing to a productive environment.

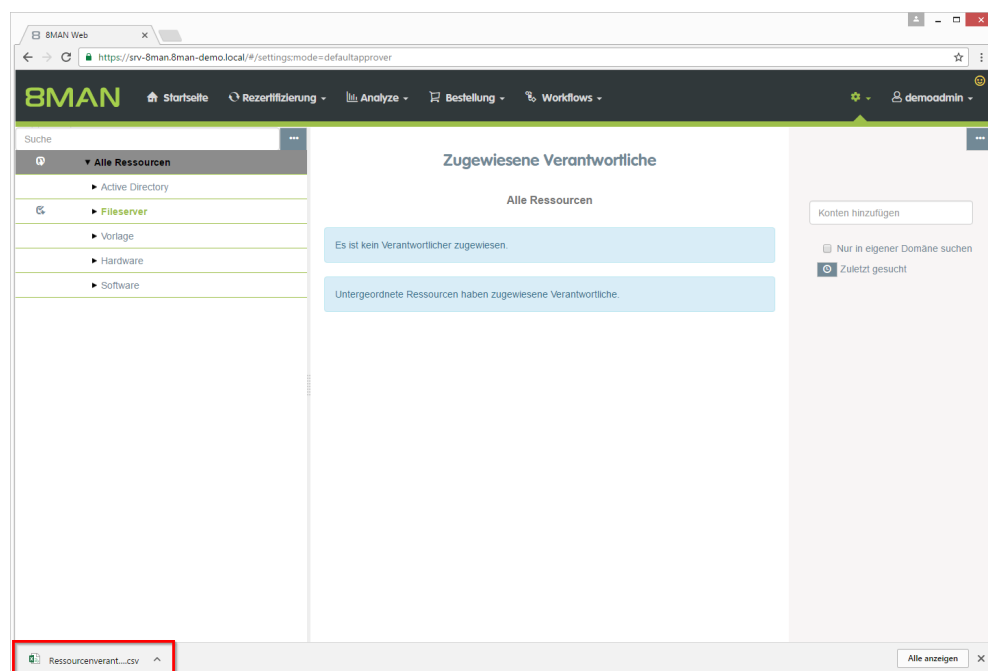
Additional Services

Defining individual approval workflows

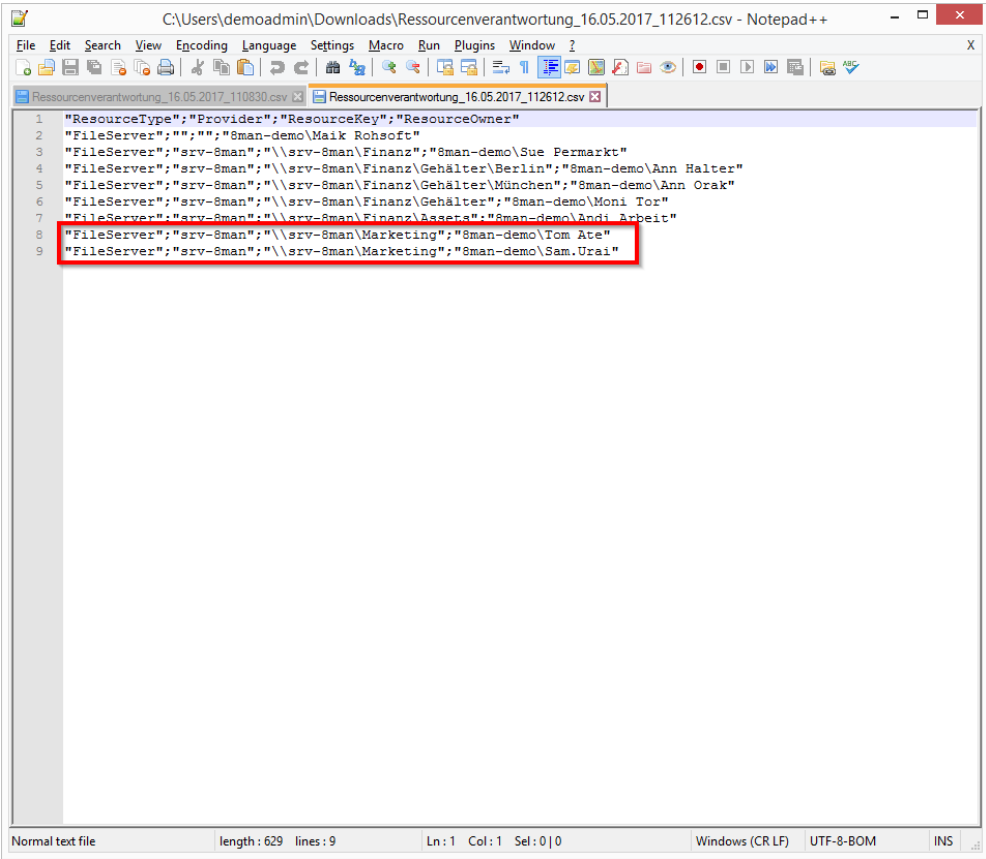
Step by step process



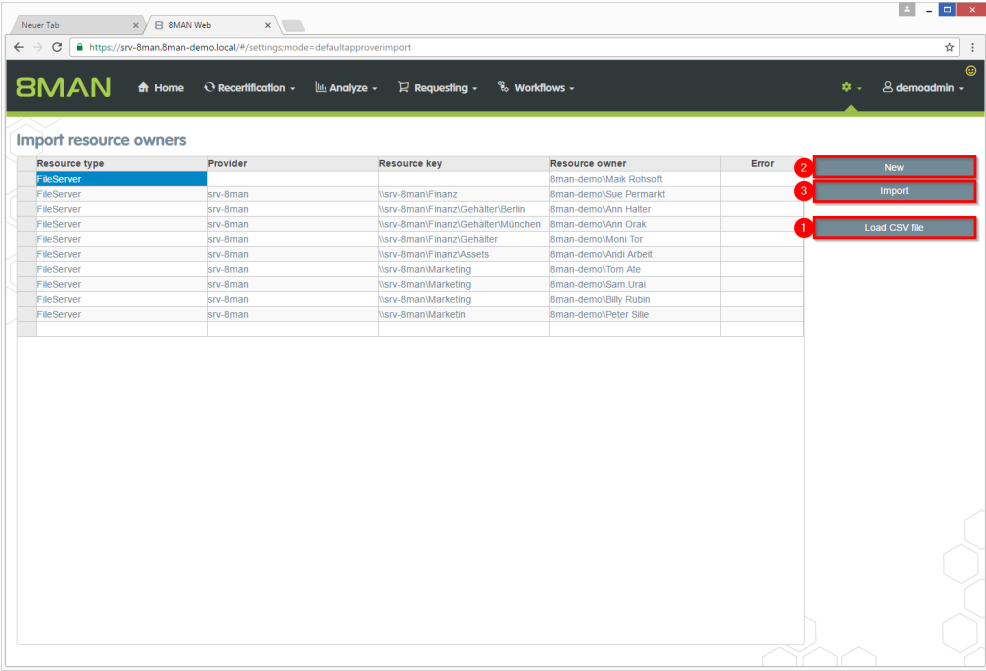
Export the configuration to a CSV-file after assigning resource owners. Click "Export configuration".



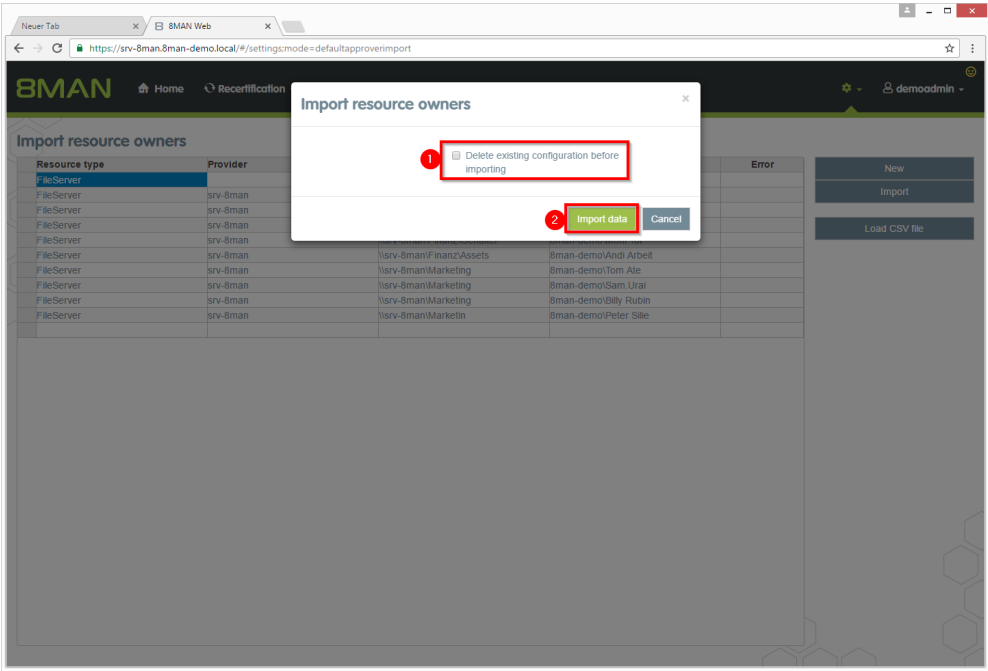
The export file is handled as a download. Displaying and saving of the file depends on the browser.



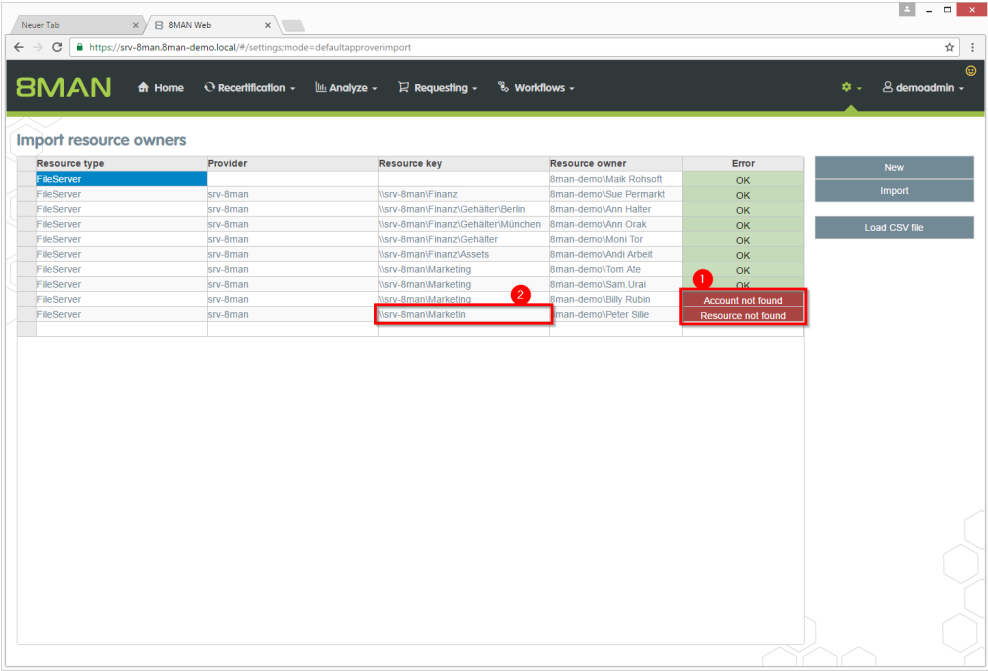
You can edit the CSV-file.
Please note that the assignment is
always one-to-one.



1. Load a CSV-file.
2. Clear the loaded list.
3. Click "Import".



- 1. **Option activated:**
The existing configuration will be deleted before the import.
- Option deactivated:**
The existing configuration will be retained. The import will be added. No duplicates will be generated.
- 2. Start the import process.



- 1. 8MAN shows you where errors occurred during import.
- 2. Edit the fields of the table to fix small errors immediately.

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- Microsoft Windows Driver Development Kit, © Microsoft, EULA, installed on the computer on which the FS Logga for Windows file servers is installed: C:\Program Files\protected-networks.com\8MAN\driver (Usage only for FS Logga for Windows file server)
- NetApp Manageability SDK, © 2013 NetApp, <https://communities.netapp.com/docs/DOC-1152> (Usage only for FS Logga for NetApp Fileserver)
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