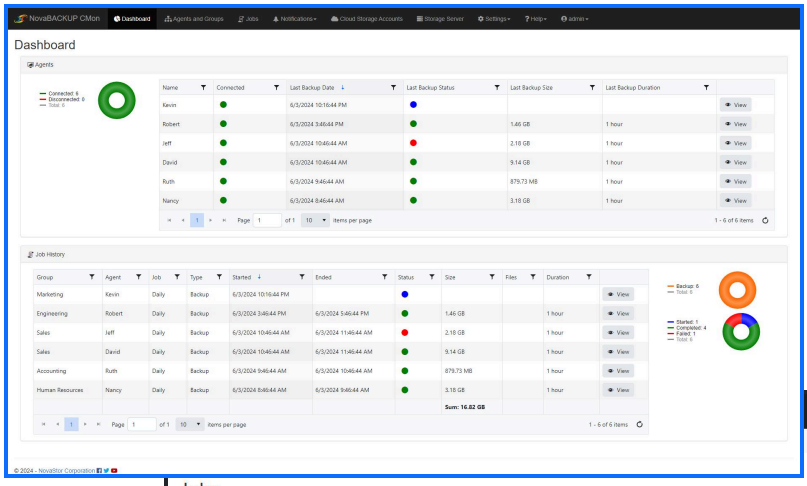
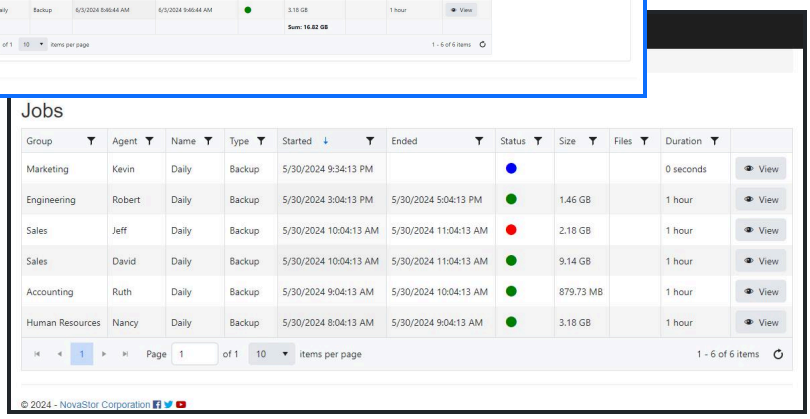
NovaBACKUP®

CMon v**21.1**

User Manual





Features and specifications are subject to change without notice.
The information provided herein is provided for informational and planning purposes only.

© 2024 NovaStor. All Rights Reserved

Table of Contents

Introduction ---- 5
System Requirements ---- 6
Installation ---- 8
    Setup Installer Command Line Options ---- 19
Setting up the backup client ---- 26
Logging In ---- 29
Dashboard ---- 31
Agents & Groups ---- 33
    Agents
        Details ---- 35
        Devices ---- 38
            Create Device ---- 39
            Amazon S3 Compatible Device
                Create Amazon S3 Compatible Device ---- 41
                Create Amazon S3 Compatible Device From Existing Cloud Storage Account ---- 45
                View Amazon S3 Compatible Device ---- 47
            Cloud Device
                Create Cloud Device ---- 50
                Create Cloud Device From Existing Cloud Storage Account ---- 54
                View Cloud Device Details ---- 59
                Edit Cloud Device ---- 62
            Network Device (Deprecated)
                View Network Device Details ---- 67
                Edit Network Device ---- 68
            Local or Network Storage Device
                Create Local or Network Storage Device ---- 69
                View Local or Network Storage Device ---- 71
            Troubleshooting managing devices ---- 74
        Jobs ---- 75
            File Backup Job ---- 78
                Destination ---- 84
                Settings ---- 87
                Schedule ---- 105
        License ---- 112
    Groups
        Add Group ---- 116
        View Group ---- 119
Log Viewer ---- 123

Notification Triggers 125
Account Management 131
Set Password 132
Password 133
Time Zone 134
Language 135
Download Customized Backup Client Setup Installer 136
Cloud Storage Accounts 137
Create an account 140
Connect to an account 143
View details of an account 144
View computers 147
Edit cloud storage account 148
Change the password 153
Change the license key 155
Delete an account 157
Delete a computer 158
Add Amazon S3 compatible cloud storage account 159
View Amazon S3 compatible cloud storage account 162
Devices 166
Storage Server 168
Settings
Agent Settings 170
Security Settings 172
Notification Settings 173
Users 176
User registration 179
User registration and creating a cloud storage account in one step 180
Create a user 181
View a user 188
User Registration 194
Roles 197
Storage Servers 201
Add a storage server 203
Add Amazon S3 compatible storage server 210
View Amazon S3 compatible storage server 212
Used Space 214
Web Hook 216
Update 218
Application 219

Backup Client Setup Installers 220
Upload backup client setup installer 222
Customize Backup client setup installer 223
Server Administration Desktop Application 225
Scheduled Task 226
Web Configuration File 227
Web Hook IP Filter 228
Application Programming Interface (API) 229
Help 231
Documentation 232
About 233
Known Issues 236
Troubleshooting Tips 237
Windows Service Logging 239
Standalone Web Server Logging 243
Web Site Logging 245
Scheduled Task Logging 247
Glossary 248

Introduction

Thank you for choosing NovaBACKUP® CMon by NovaStor

The Central Monitoring Console (CMon) is an application that works along side the NovaBACKUP backup client software.

The CMon can be used to manage user accounts, backup client setup installers, agents, devices, storage, and backup jobs in your entire environment.

CMon is accessible via a modern web browser.
See Supported Web Browsers for more details.

The NovaBACKUP® CMon environment is composed of 2 components.

1. The CMon application, which manages backup agents from any edition of NovaBACKUP®. CMon is best installed on a separate Windows Server machine to take advantage of features only found in server-based architectures, and the improved performance available for utilizing dedicated computing resources. See Installation for more details.
2. The installation of NovaBACKUP®, version 18.0 or higher, on remote systems, configured to connect to CMon. See Setting up the backup client for more details.

System Requirements

Hardware

- Intel Dual Core CPU or better
- 4 GB of RAM minimum
- 3 GB free hard drive available space on OS drive

Operating System

- Microsoft Windows Server 2022
- Microsoft Windows Server 2019
- Microsoft Windows Server 2016
- Microsoft Windows Server 2012 R2

Microsoft .NET Framework

Microsoft .NET Framework 4.7.2 or higher

SQL Server

One of the following Microsoft SQL Servers:

- Microsoft SQL Server 2022 Download Microsoft SQL Server 2022 Express
- Microsoft SQL Server 2019 Download Microsoft SQL Server 2019 Express
- Microsoft SQL Server 2017
  Download Microsoft SQL Server 2017 Express
- Microsoft SQL Server 2016
  Download Microsoft SQL Server 2016 SP2 Express
- Microsoft SQL Server 2014
  Download Microsoft SQL Server 2014 SP2 Express

How to determine the version, edition, and update level of SQL Server and its components

Web Server

Required Windows features:

- IIS
  - IIS 6 Management Compatibility
  - Application Initialization

Networking

- TCP/IP network

Supported Web Browsers

- Desktop:
  - Apple Safari
  - Google Chrome
  - Microsoft Edge
  - Mozilla Firefox
  - Opera
- Mobile:
  - Android 5.0+
  - Amazon Silk
  - Apple iOS 9.0+
  - Edge
  - Opera Mobile

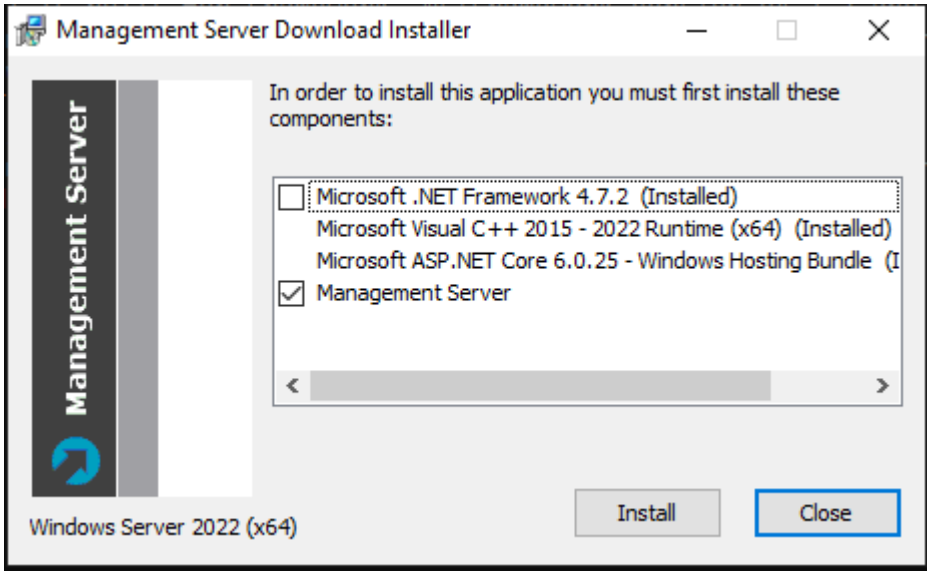
Installation

Please make sure the machine meets the [System Requirements]() before continuing.

Run the setup executable to begin the installation wizard.

Download Installer

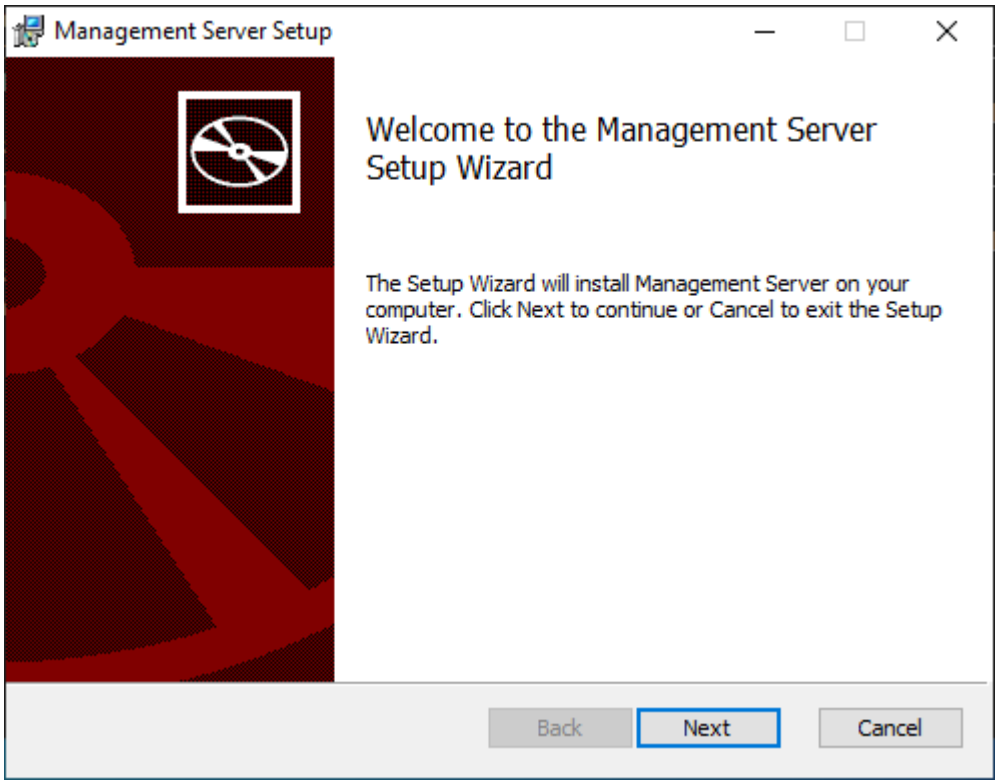
The `Download Installer` dialog indicates the missing required prerequisites and automatically downloads and installs them.



Click the `Install` button to continue.

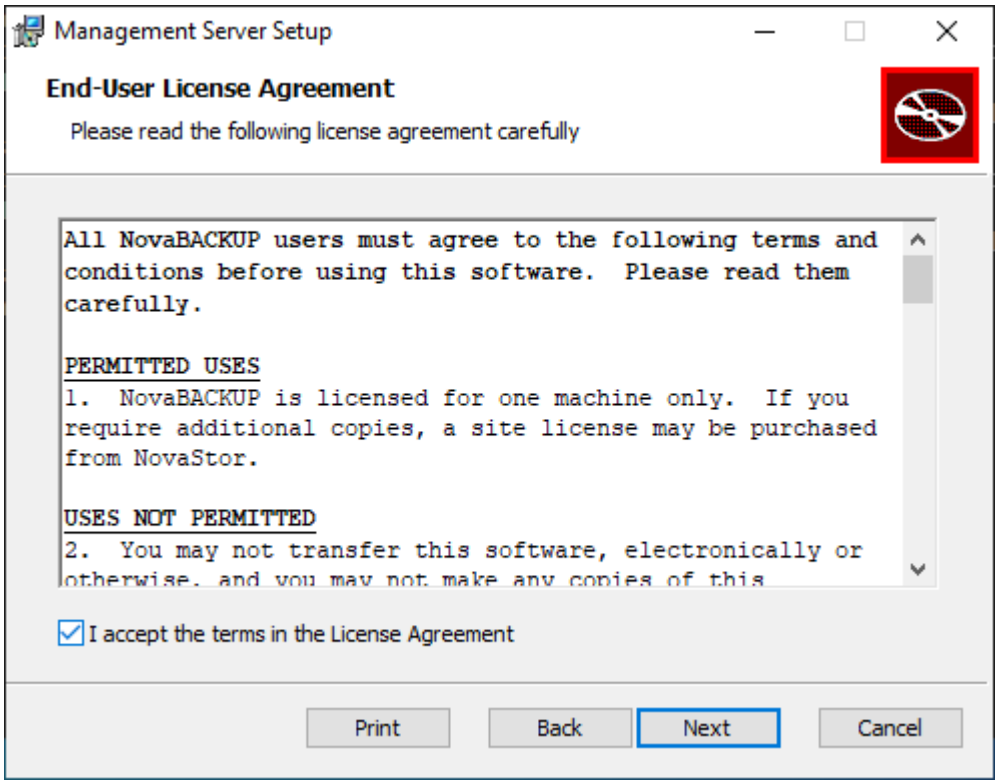
Welcome

After the prerequisites are installed, the CMon installation wizard's `Welcome` dialog is displayed.



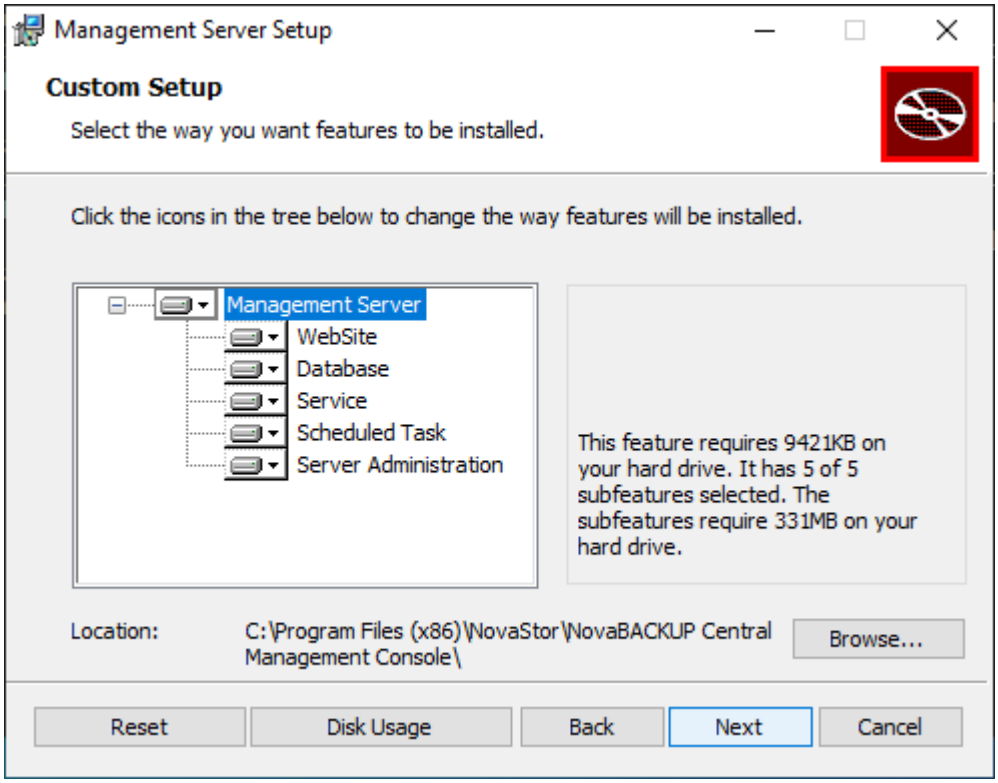
Click the `Next` button to continue.

End-User License Agreement



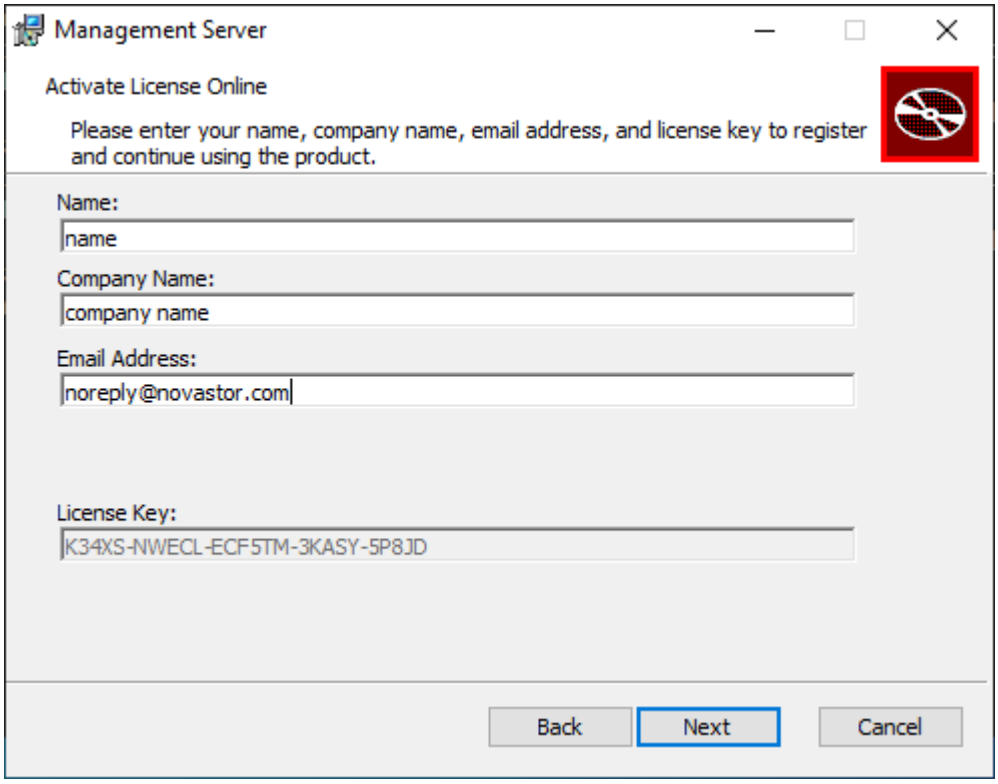
Check-mark the `I accept the terms in the License Agreement` check-box and click the `Next` button to continue.

Custom Setup



Click the `Next` button to continue.

License Activation

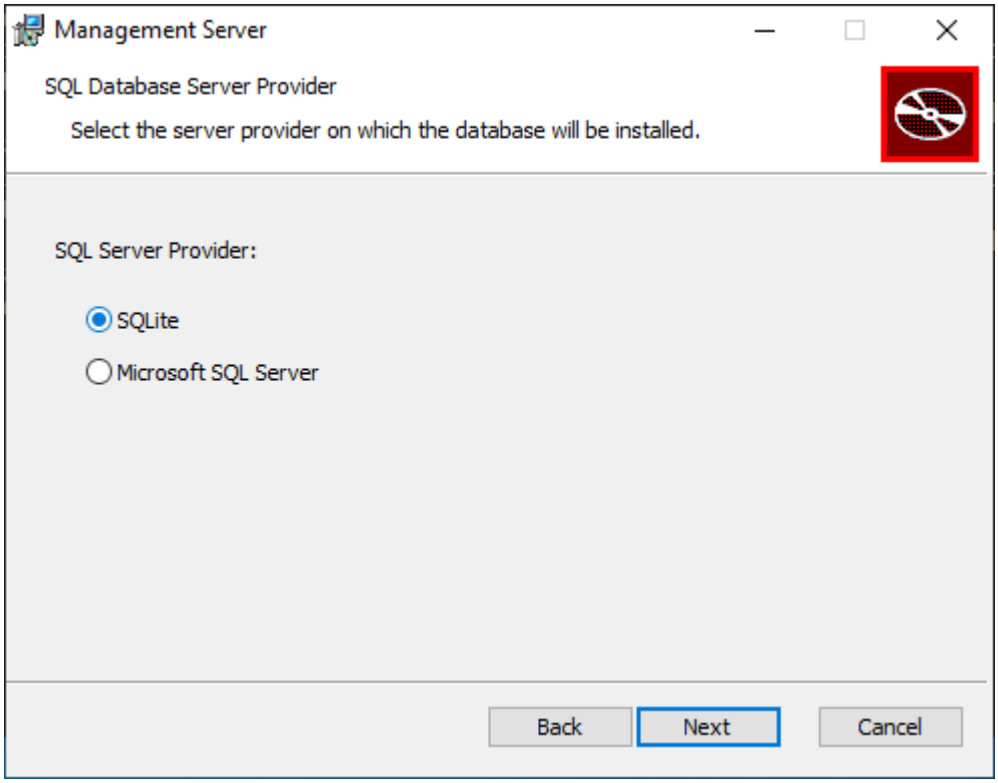


Enter the required values and click the `Next` button to continue.

SQL Database Server Provider

Select the server provider on which the database will be installed.

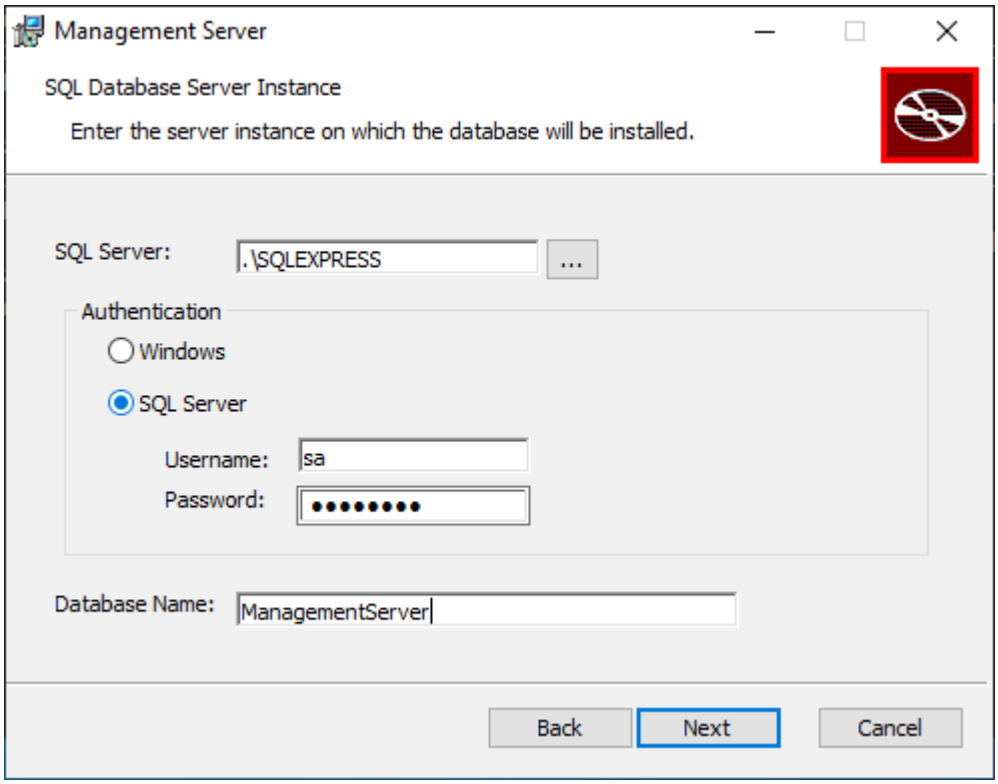
It is required to select Microsoft SQL Server in CMon 19.8+. Do not select SQlite.



Click the `Next` button to continue.

SQL Database Server Instance

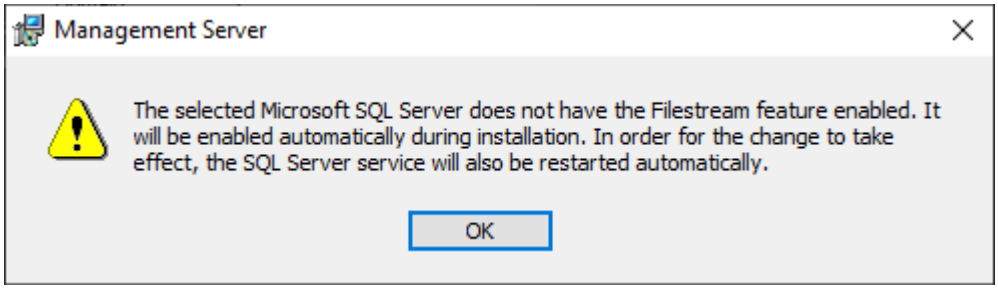
If `Microsoft SQL Server` was selected, the `SQL Database Server Instance` dialog is displayed.



Enter the required values and click the `Next` button to continue.

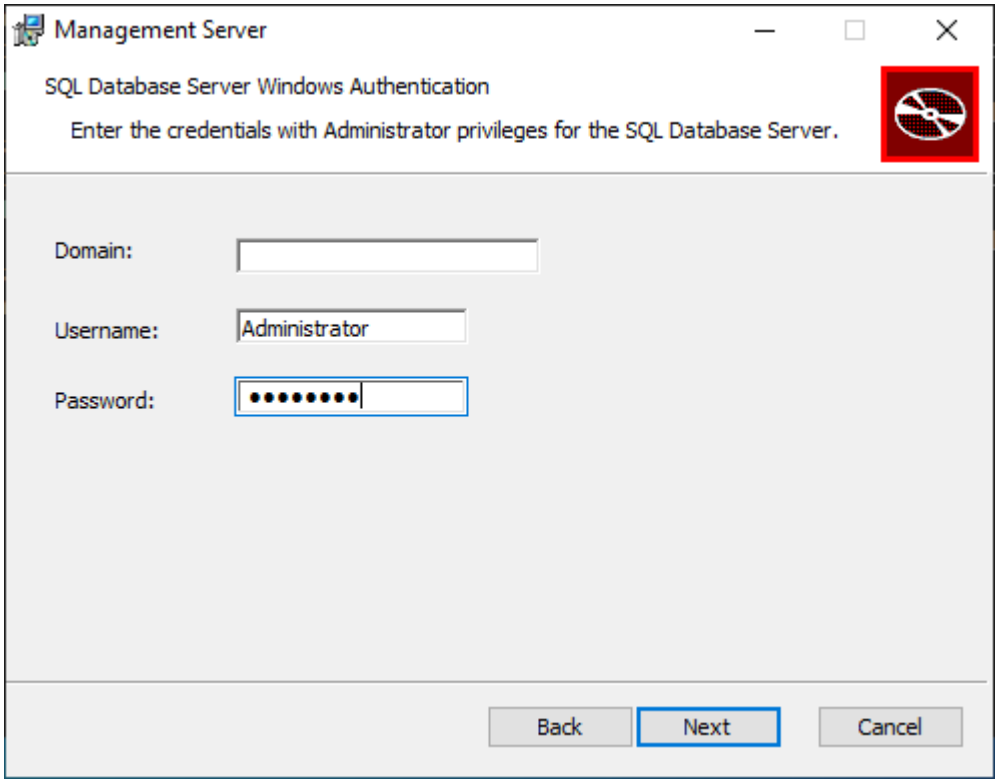
> **NOTE**
> If the Microsoft SQL Server is on a remote machine, Windows Management Instrumentation (WMI) must be enabled for remote communication through the firewall.

> **WARNING**
> If the Microsoft SQL Server Filestream feature is not enabled on the selected instance, it will be enabled automatically during installation. In order for the change to take effect, the SQL Server service will also be restarted automatically.



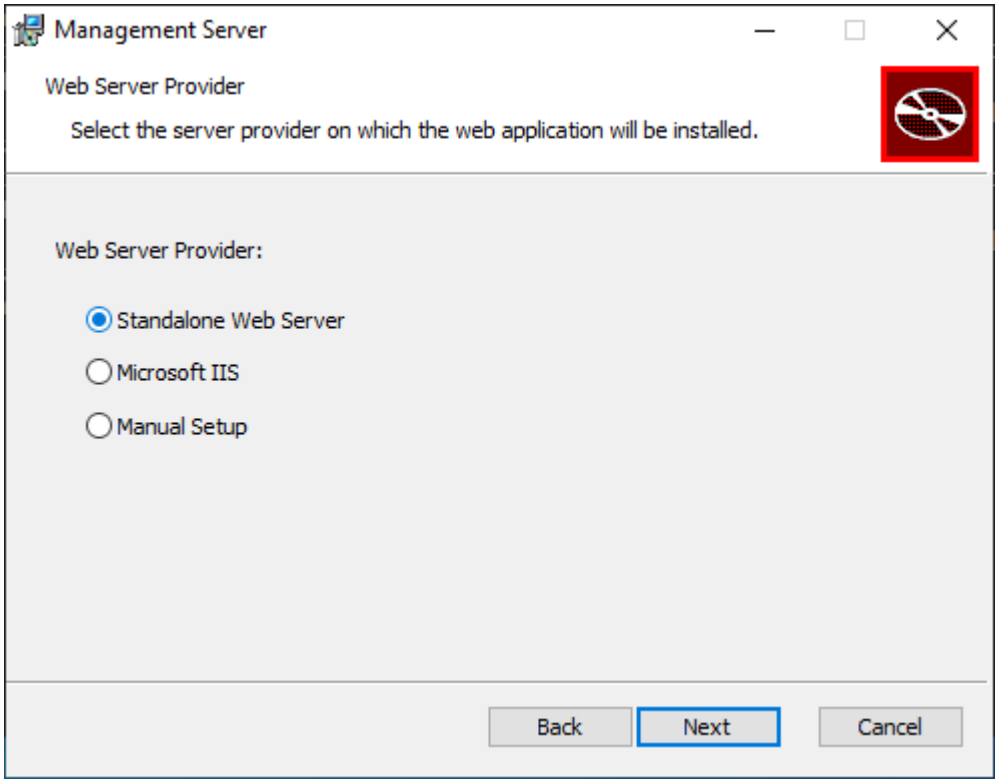
SQL Database Server Windows Authentication

If `Microsoft SQL Server` was selected, the `SQL Database Server Windows Authentication` dialog is displayed.



Enter the required values and click the `Next` button to continue.

Web Server Provider



Select the server provider on which the web application will be installed.

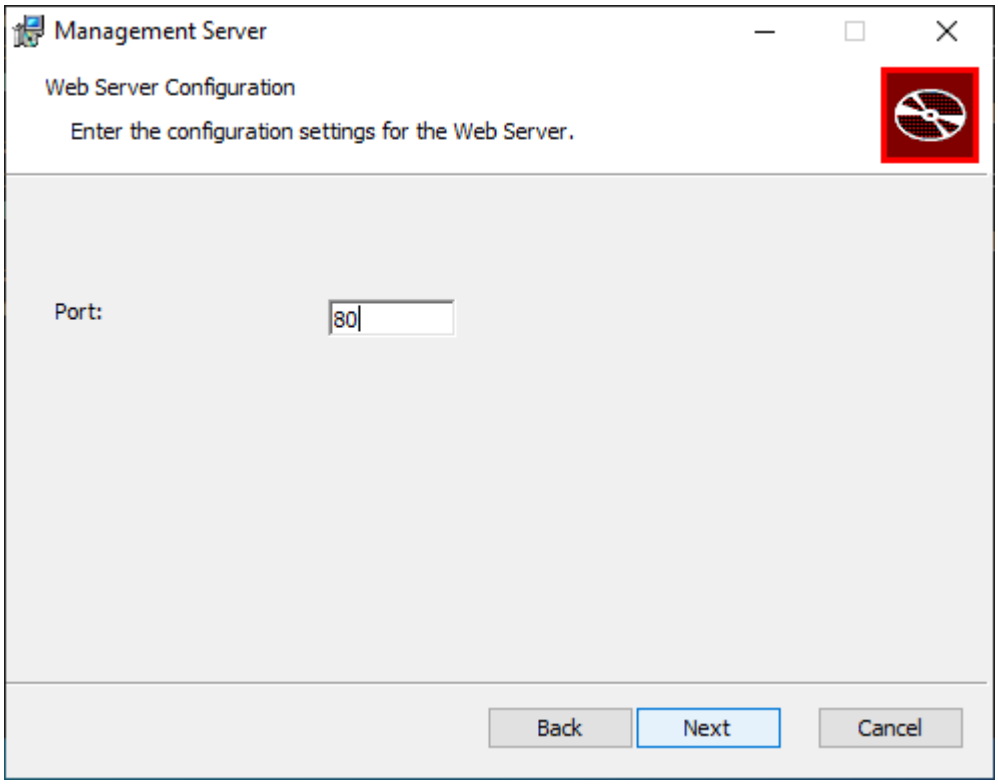
Microsoft IIS is recommended for better performance, an improved experience, and greater security.

Web Server Configuration

If `Standalone Web Server` is selected, the `Web Server Configuration` dialog is displayed.

The setup installer will automatically open this port on the Windows firewall.

Make sure network traffic on the selected port is allowed to enable accessing the CMon web application from a web browser.

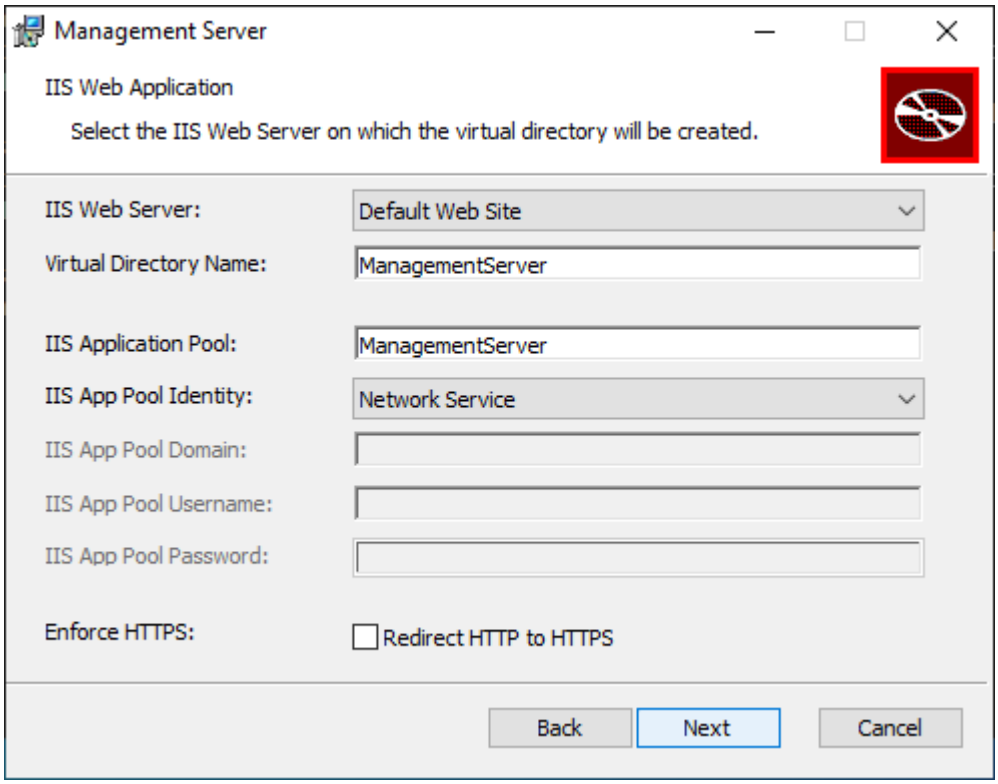


Click the `Next` button to continue.

IIS Web Application

If `Microsoft IIS` was selected, the `IIS Web Application` dialog is displayed.

Make sure network traffic on the web server ports are allowed to enable accessing the CMon web application from a web browser.



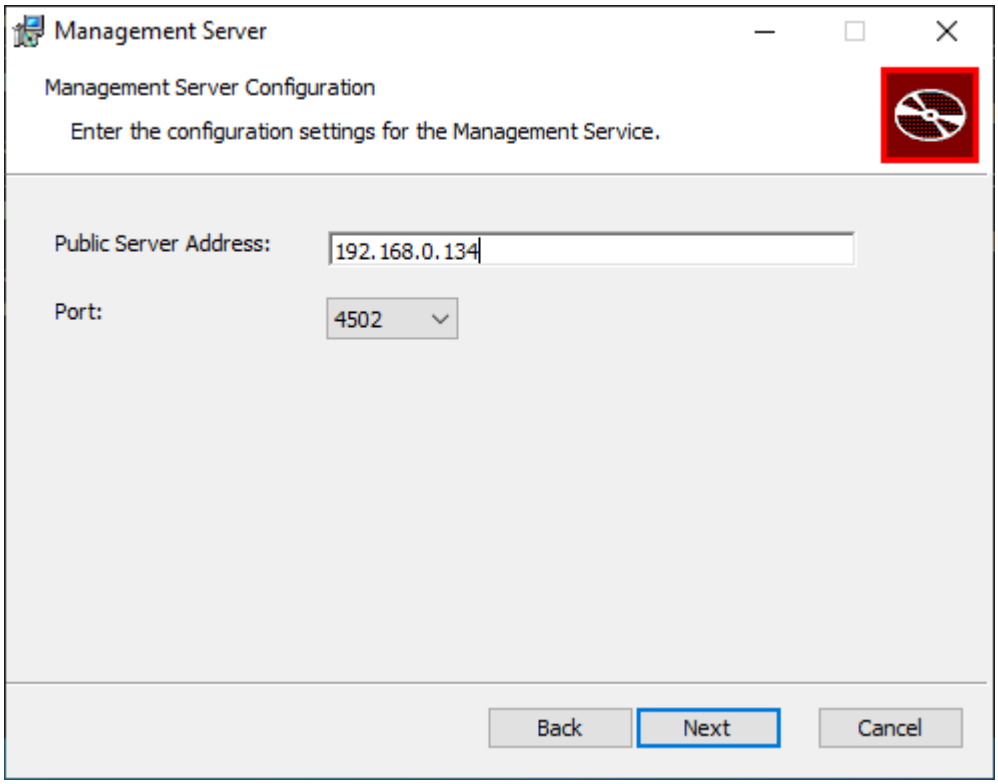
Check-mark the `Redirect HTTP to HTTPS` check-box to enforce requests to use HTTPS.

Using HTTPS is recommended for greater security.

The IIS Web Site in Microsoft IIS must be configured to support HTTPS.

Enter the required values and click the `Next` button to continue.

Management Server



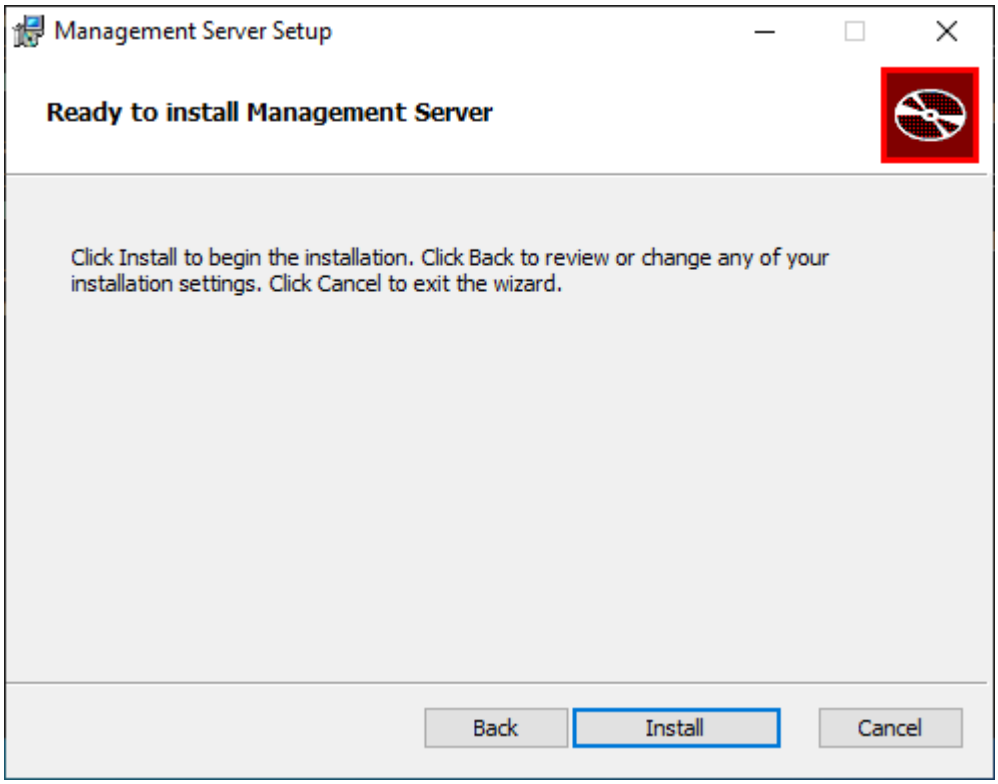
The `Public Server Address` (IP address, DNS, or computer name) and `Port` need to be configured in backup client agents in order to connect to CMon.

The setup installer will automatically open this port on the Windows firewall.

Make sure network traffic on the selected port is allowed to enable backup client agents from communicating with the CMon service.

Click the `Next` button to continue.

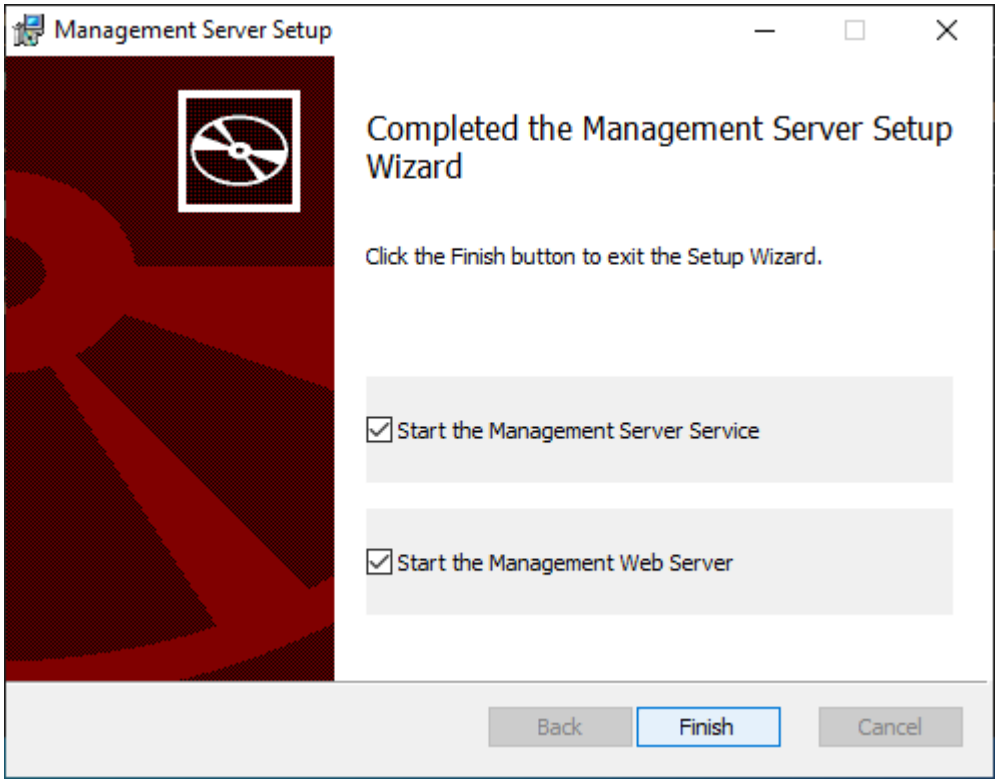
Ready to Install



Click the `Install` button to start the installation.

Finish

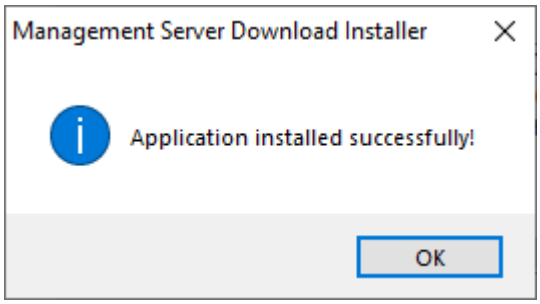
After a successful installation, the `Finish` dialog is displayed.



Check-mark the check-boxes to start the required services.

Click the `Finish` button to exit the installation.

Application Installed Successfully

> 
>

Click the `OK` button to close the installer.

Next Steps

[Logging in]

[Setting up the backup client]

Setup Installer Command Line Options

Silent installation

The setup installer will automatically install the pre-requisites appropriate for the target operating system.

> **NOTE**
> If the Microsoft SQL Server is on a remote machine, Windows Management Instrumentation (WMI) must be enabled for remote communication through the firewall.

> **WARNING**
> If the Microsoft SQL Server Filestream feature is not enabled on the selected instance, it will be enabled automatically during installation. In order for the change to take effect, the SQL Server service will also be restarted automatically.

Command Line Arguments

`/?` or `/help`
Display a help screen.

`/ConfigFile [path]`
Optional configuration file name and location, defaults to configuration.xml in the same location as the dotNetInstaller executable.

`/i`
Install components (default).

`/x`
Uninstall components.

`/q`
Forces silent UI mode, overriding the configuration's ui_mode attribute.

`/qb`
Forces basic UI mode, overriding the configuration's ui_mode attribute. A basic UI mode shows progress dialogs but does not require any user interaction.

`/nq`
Forces full UI mode, overriding the configuration's ui_mode attribute.

`/nosplash`
Do not display splash screen.

`/noreboot`
Do not actually reboot Windows even if a reboot was required by a component or the user chooses to reboot when prompted.

`/noRunOnReboot`
Do not actually write the RunOnReboot registry key if a reboot is required by a component or the user chooses to reboot when prompted.

`/CompleteCommandArgs`
Specify additional arguments for the complete_command. For example, if your complete command is an MSI this lets you pass additional parameters.

`/Log`
Creates a log file during installation with information and errors useful for debugging.
You can find this file in the user temporary directory with the name dotNetInstallerLog.txt
(eg. C:\Documents and Settings\YOUR_NAME\Local Settings\Temp\dotNetInstallerLog.txt).
Its location and name can be specified with /LogFile.

`/LogFile [path]`
Optional log file name and location.

`/ExtractCab`
If this package contains an embedded CABs, extract all contents under a new folder called SupportFiles in the current directory.
When specified, all other options are ignored and no installations are run.

`/DisplayCab`
If this package contains an embedded CAB, display its contents.

`/DisplayConfig`
Display the complete list of configurations and components without checking processor architecture or lcid.

`/ComponentArgs "*|id|display_name":"value"`
Additional component parameters.
This enables passing additional command-line arguments to all (*) or specific components by their id and/or display_name, in this order.

The value is appended to both non-silent and silent command lines of msi and cmd type components. The component id or display_name must match exactly the one in the configuration.xml.

> **NOTE**
> To insert values with spaces use a double-quote.
> Quotation marks should be escaped when inserting them on the command line.

`/ControlArgs "id":"value"`
Additional user-defined control parameters.
This enables overriding user control values.

> **NOTE**
> Note that if multiple user controls are declared with the same id the parameter applies to all.
> Control arguments applied to user controls that don't exist are ignored.

Exit Codes

Code	Description
`0`	Success.
`-1`	Any non-specific error.
`-2`	User pressed Cancel in the main dialog.
`3010`	A reboot was required.
Any other non-zero value	Error code of a failed component. This is the msiexec return code for msi components and process exit code for cmd components.

UI Tricks

Holding the keyboard `Control` key and double-clicking on a bootstrapper component in the components list will install it, regardless of whether the component is selected or not.

Holding the keyboard `Shift` key and double-clicking on a bootstrapper component in the components list will toggle it's selected state, regardless of whether the component is required or not.

Setup installer components

- `Windows Server 2012 R2 Update (KB2919442) (x64)`
- `Windows Server 2012 R2 Update (KB2919355) (x64)`
- `Microsoft .NET Framework 4.7.2`
- `Microsoft ASP.NET Core 3.1.26 - Windows Hosting Bundle`
- `Microsoft ASP.NET Core 6.0.25 - Windows Hosting Bundle`
- `Microsoft ASP.NET Core 8.0.0 - Windows Hosting Bundle`
- `Microsoft Visual C++ 2015 - 2022 Runtime (x86)`
- `Microsoft Visual C++ 2015 - 2022 Runtime (x64)`
- `Management_Server`

MSI properties

Property Name	Values
`SQL_SERVER_PROVIDER`	`System.Data.SQLite` (Default) `System.Data.SqlClient`
`SQL_SERVER_USER`	
`SQL_SERVER_PASSWORD`	
`SQL_SERVER_DOMAIN`	
`SQL_USER`	
`SQL_PASSWORD`	
`SQL_SERVER`	
`SQL_DB_NAME`	`ManagementServer` (Default)
`SQL_WINDOWS_AUTH`	`True` (Default) `False`
`IIS_SERVER`	
`IIS_VIRTUAL_DIRECTORY`	`ManagementServer` (Default)
`IIS_SERVER_WEB_SITE`	
`IIS_SERVER_PORT`	
`IIS_SERVER_HEADER`	
`IIS_APP_POOL`	`ManagementServer` (Default)

Property Name	Values
IIS_APP_POOL_IDENTITY	networkService (Default) localService localSystem other
IIS_APP_POOL_USERNAME	
IIS_APP_POOL_DOMAIN	
IIS_APP_POOL_PASSWORD	
INSTALLLOCATION	
MANAGEMENT_SERVER_PUBLIC_SERVER_ADDRESS	
MANAGEMENT_SERVER_PORT	4502 (Default)
WEB_SERVER_PORT	80 (Default)
STANDALONE_WEB_SERVER_STARTMODE	Automatic (Default) Manual Disabled
WEB_SERVER_PROVIDER	XSP (Default) IIS Manual
CROSS_DOMAIN_SUPPORT	RequireOutOfBrowser (Default) EnablePolicyServer UseIIS
ENABLE_DATABASE_VERBOSE_LOGGING	False (Default) True
LICENSE_NAME	
LICENSE_COMPANY_NAME	
LICENSE_EMAIL_ADDRESS	
LICENSE_KEY	K34XS-NWECL-ECF5TM-3KASY-5P8JD (Default)
SERIAL_NUMBER	

Property Name	Values
`LICENSE_TYPE`	`Evaluation` `IHaveALicenseKey` (Default)
`OFFLINE_ACTIVATION`	`False` (Default) `True`
`LICENSE_OFFLINE_ACTIVATION_KEY`	
`ENFORCE_HTTPS`	`false` (Default) `true`

Examples

Create a log of the msi setup installer

```
"Setup Installer.exe" /ComponentArgs "Management_Server":"/l*v c:\setuplog.txt"
```

In this case, the msi log file will be created as c:\setuplog.txt.

Silently install CMon using the standalone web server and an SQLite database

```
"Setup Installer.exe" /ComponentArgs "Management_Server":"/q /l*v c:\setuplog.txt
LICENSE_NAME=Name LICENSE_COMPANY_NAME=CompanyName LICENSE_EMAIL_ADDRESS=noreply@novabackup.com
MANAGEMENT_SERVER_PUBLIC_SERVER_ADDRESS=192.168.0.2 WEB_SERVER_PROVIDER=XSP WEB_SERVER_PORT=81
SQL_SERVER_PROVIDER=System.Data.SQLite"
```

Silently install CMon using IIS web server and a Microsoft SQL Server database

```
"Setup Installer.exe" /ComponentArgs "Management_Server":"/q /l*v c:\setuplog.txt
LICENSE_NAME=Name LICENSE_COMPANY_NAME=CompanyName LICENSE_EMAIL_ADDRESS=noreply@novabackup.com
MANAGEMENT_SERVER_PUBLIC_SERVER_ADDRESS=192.168.0.2 WEB_SERVER_PROVIDER=IIS IIS_SERVER=\"Default
Web Site\" SQL_SERVER_PROVIDER=System.Data.SqlClient SQL_SERVER=.\sqlServerInstanceName
SQL_SERVER_USER=Administrator SQL_SERVER_PASSWORD=AdministratorPassword SQL_USER=sa
SQL_PASSWORD=saPassword"
```

After installation, manually start the "Management Server" service: net start "Management Server"

When using the standalone web server, manually start the Management Web Server service: net start "Management Web Server"

Notes:

After installation, run Start > All Programs > Management Server > Management Server

Setting up the backup client

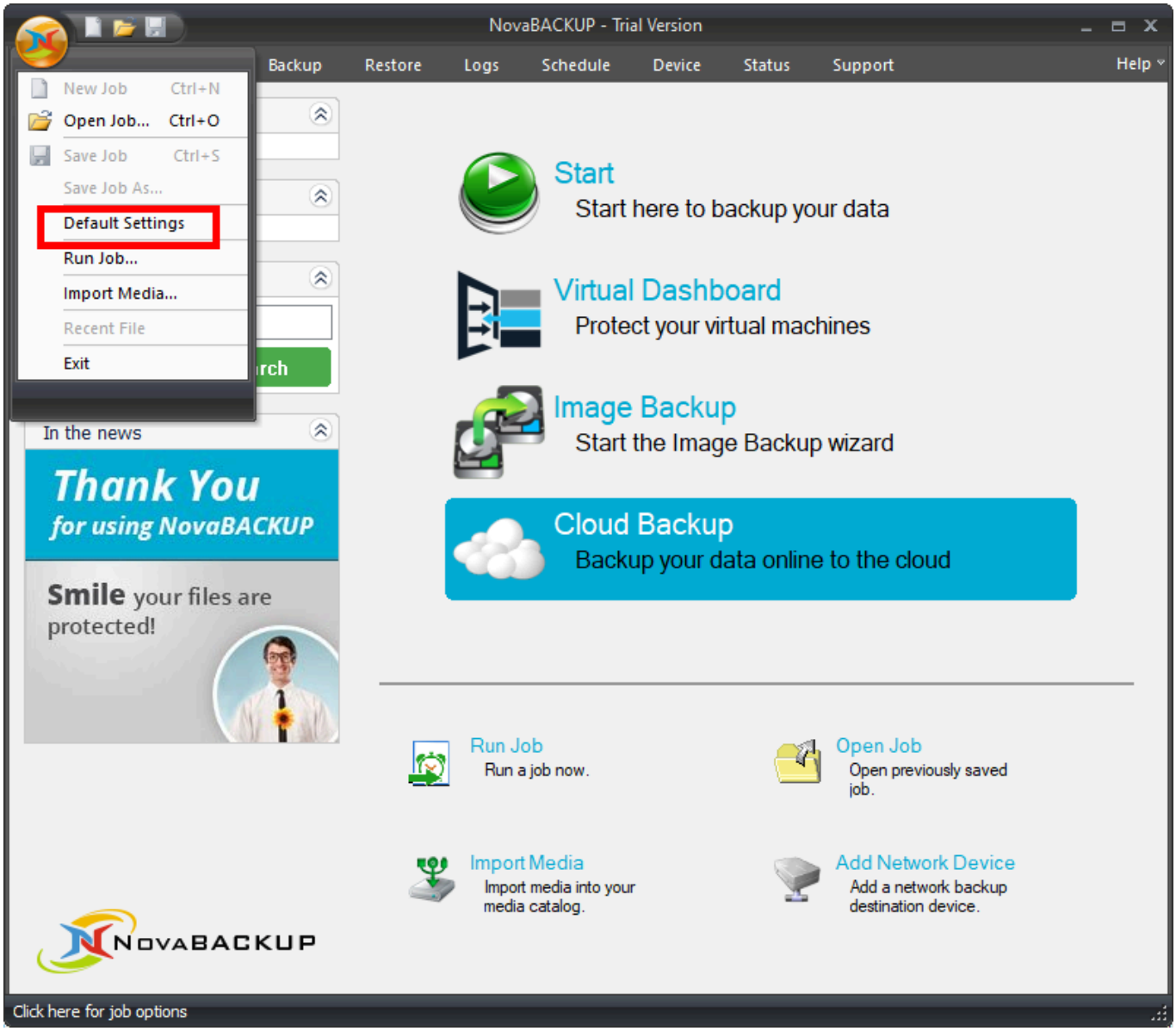
The CMon needs to be successfully installed in order for the agent to connect to it.

NovaBACKUP clients need to be configured in order for the backup client agent to connect to CMon.

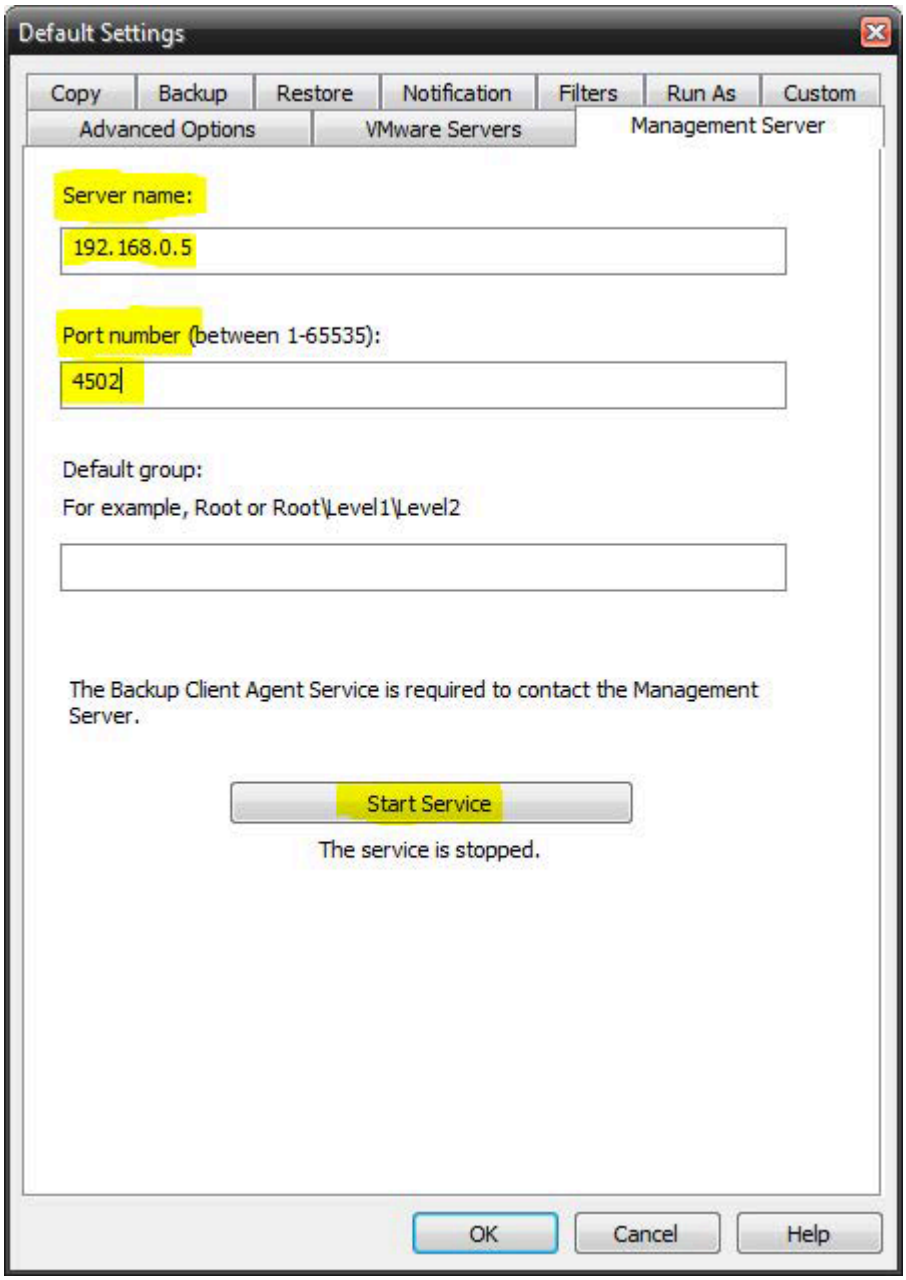
You can create a custom backup client setup installer pre-configured to automatically connect to CMon. See [Customize Backup Client Setup Installer]() for more details.

To manually configure the backup client to connect to CMon, follow these steps:

1. Install the NovaBACKUP® backup client. See the `NovaBACKUP® Quick Install Guide` for more details.
2. Launch NovaBACKUP.
3. Click the large circular button with the NovaStor logo, highlighted at the top left, and then click `Default Settings`.



4. Click on the `Management Server` tab. Enter the server address or IP address of the machine where CMon is installed in the `Server name` field. Enter the port number CMon is configured to use in the `Port number` field. These values should be the same values entered during the CMon installation. The default port number is `4502`. The `Default group` option on this screen will automatically place this agent into the group specified on the CMon. In general you do not need to enter anything in the `Default Group` option at this point. If you do not choose a default group the agent will be placed in the `Pending` group in CMon.



5. Click the `Start Service` button to start the service. `The service is started` is displayed when the service has started successfully which is required in order to connect to CMon. Click the `OK` button to save the changes. Now you have the CMon installed, the backup client installed, and the agent connected to CMon. You should now be able to login to the CMon and see the agent.

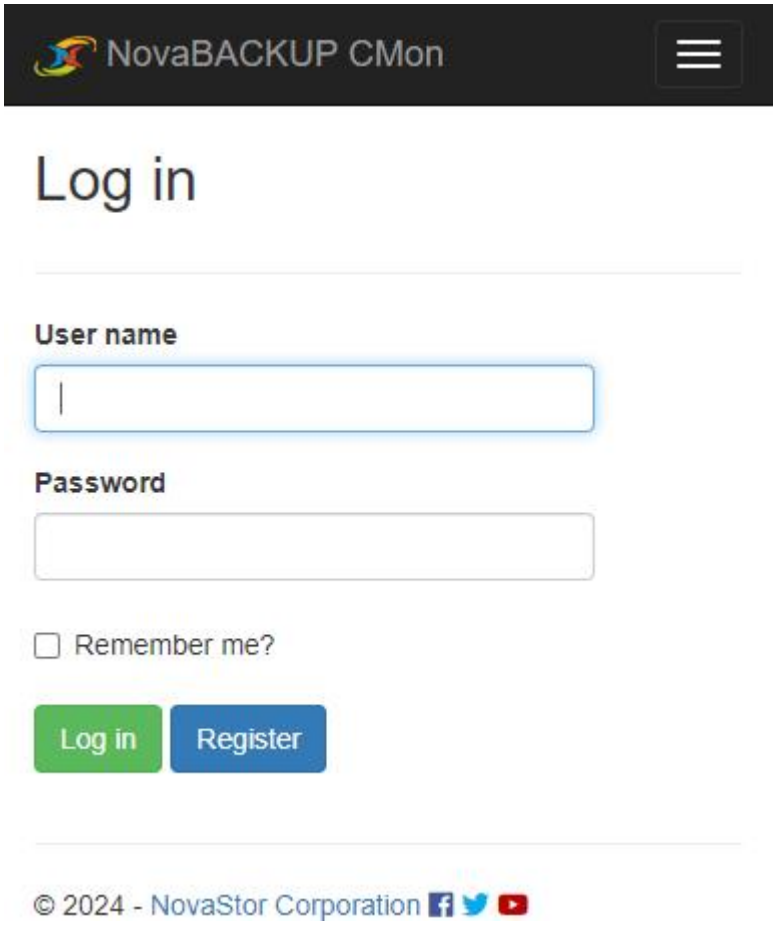
6. Verify the service automatically starts with Microsoft Windows:
   a. Click `Start`, type `Services`, and launch `Services`. Alternatively, launch `services.msc`. b. Right-click on the `Backup Client Agent Service` and select `Properties`.
   This is the service which connects to CMon, and runs in the background, so the agent can be managed. c. Set the `Startup type` field to `Automatic (Delayed Start)`. d. Click the `OK` button. e. Close the `Services` window.

Logging In

To log in to CMon, navigate to the server address where CMon is installed using a modern web browser. See Supported Web Browsers for more details.

A shortcut to the website is installed on the computer where CMon is installed in the `NovaStor Start Menu` group.

For example, `https://<server address>/ManagementServer`



The default user name and password is `admin`:
User name: `admin`
Password: `admin`

After logging in for the first time, it's recommended to change your password using the Account Management page.

If the number of times a user fails to log in because of an invalid password exceeds the maximum number configured in the Web Configuration File, the user will be locked out. Use the Users page to unlock an account. To unlock the admin account, use the Server Administration Desktop Application.

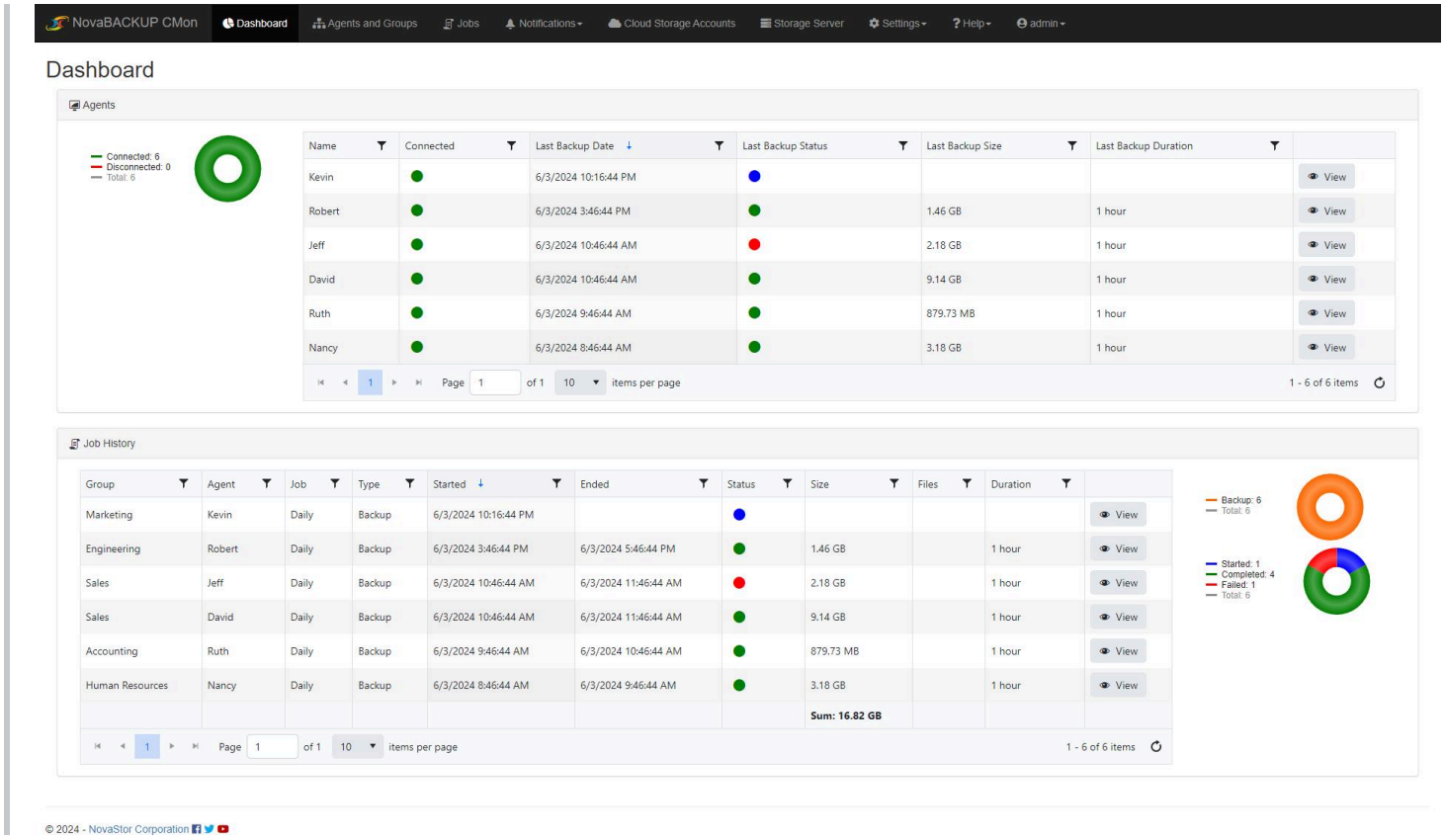
Users logging in or registering from the backup client will automatically be redirected to view or create a new cloud storage account if permitted.

If the "Remember me?" check box is checked, a cookie will be created which allows the user to remain logged in for up to 7 days of inactivity by default.

Dashboard

The CMon can be utilized to monitor all of the NovaBACKUP clients and the associated backup jobs in your environment, all from a single pane of glass interface. CMon is accessible via a modern web browser. See Supported Web Browsers for more details.

The **Dashboard** is displayed just after login. It is an overview of your NovaBACKUP environment.



The **"Menu"** that is displayed on the top of each page shows the various functions that can be quickly accessed. If the browser's width is too narrow, the menu will be collapsed and in order to expand the menu, click on the 3 horizontal lines near the top right corner of the page.

On the Dashboard screen you can perform various functions.

To view more details about a particular NovaBACKUP Agent in your environment, you can double-click on an "Agent" via the Dashboard screen. An Agent is simply a computer that is running NovaBACKUP backup client software that was configured to utilize the CMon application for monitoring.

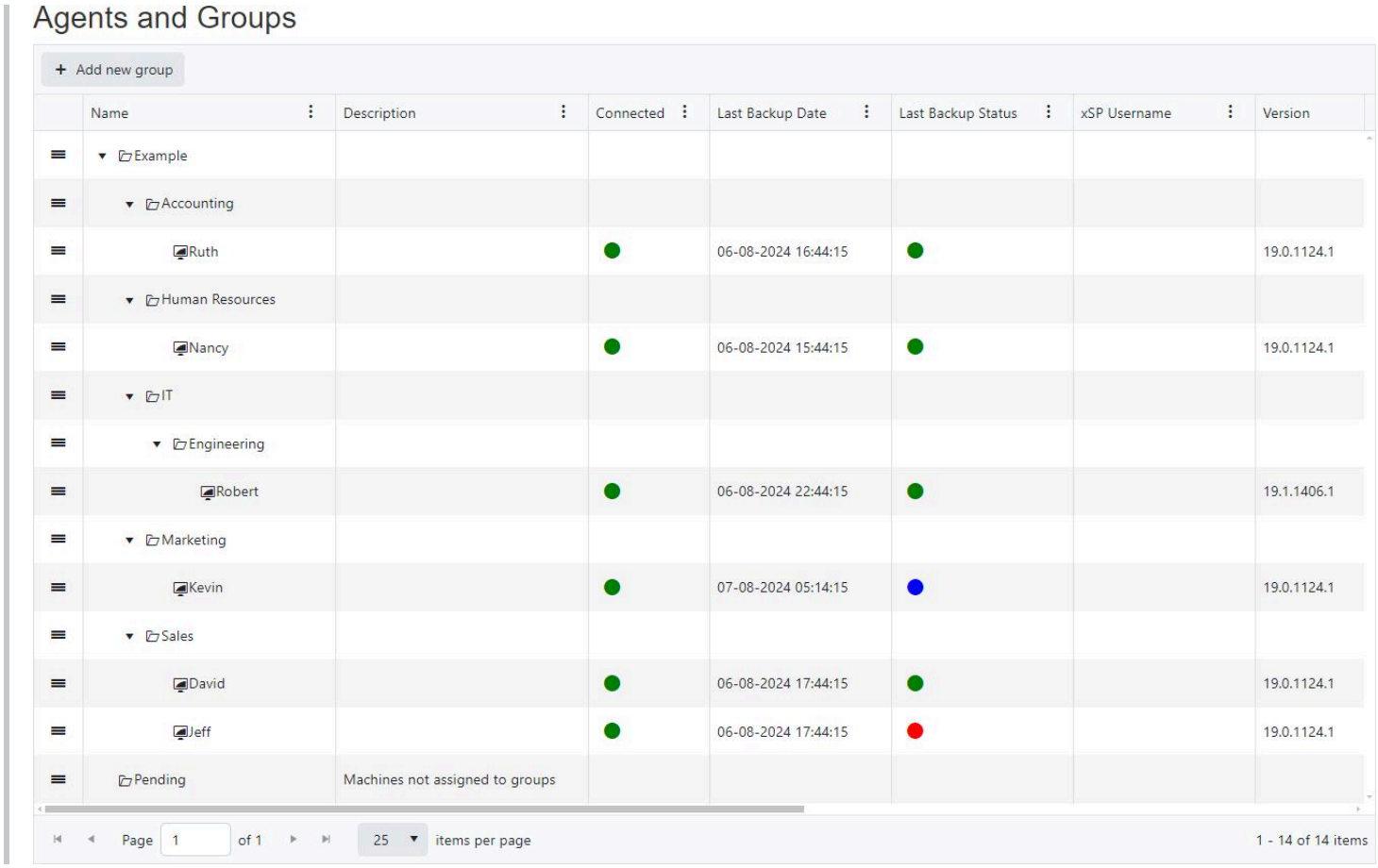
You can hover over the circular pie-chart graphic near the bottom right of the screen to see your job statuses. To display jobs with all of the various types of status including Failed, Successful, Warning, Stopped, and Started jobs.

PERMISSIONS REQUIRED

View Dashboard

Agents and Groups

Agents and Groups is the area in CMon where you will view all of your client software that has been configured to connect to the CMon.



Add new group

Click the `Add new group` button to create a new group.
Only users with permission to `Edit Groups` are authorized to create a new group.

Display All Columns

Click the `Display All Columns` button to display all columns, since some columns are hidden by default.

Reset Display Columns

Click the `Reset Display Columns` button to reset the visible columns back to their original display setting.

Columns

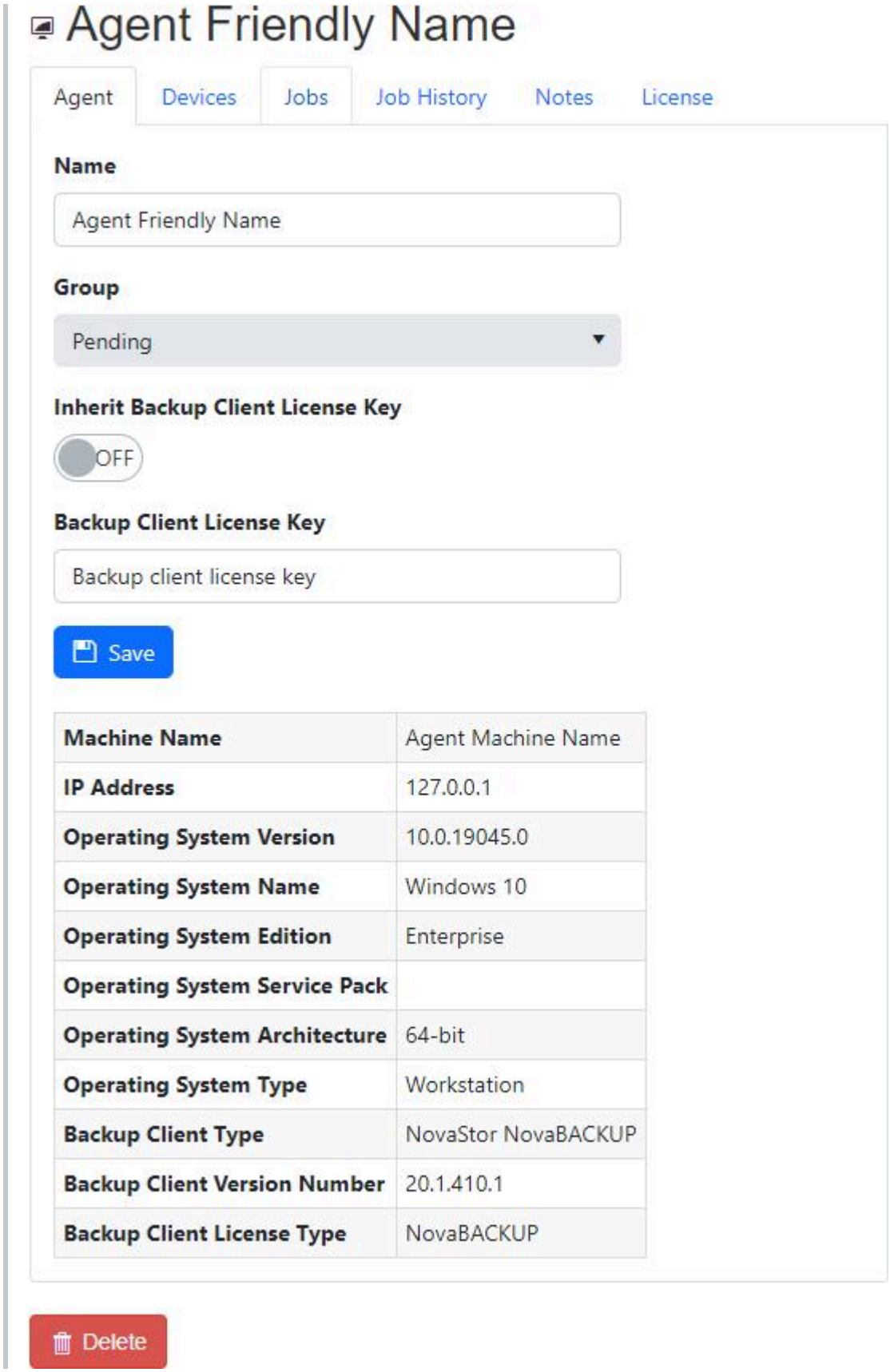
Name	Description
Name	The name of the Group or Agent.
Description	The description for the group.
Connected	Whether the agent is connected or disconnected.
Last Backup Date	The last backup date for the agent.
Last Backup Status	The last backup status for the agent.
xSP Username	NovaBACKUP cloud device user name.
Version	The backup client version number.
Last Backup Size	The last backup size.
Last Backup Number of Files	The last backup number of files.
Last Backup Duration	The last backup duration.
Last Note	The Last note.
Last Activity Date	The last activity date.
Operating System Name	The agent operating system name.
Operating System Type	The agent operating system type.
Backup Client License Type	The license type of the backup client.
Backup Client License Key	The license key of the backup client.

PERMISSIONS REQUIRED

View Agents and Groups

Agent Details

The `Agent details` page displays and allows users to edit the details of the agent.



The input fields and buttons are enabled for users with `Edit Agents` permission.

The backup client license key cannot be removed if it was previously set.

The backup client license key can be updated, even when the license's upgrade subscription has expired, as long as the backup client's major version is less than or equal to the license's latest qualified major version.

Agents will inherit their backup client license keys by default.

Field Name	**Description**
Name	The name of the agent.
Group	The name of the parent group of the agent.
Inherit Backup Client License Key	Indicates whether or not the backup client license key is inherited from its parent group.
Backup Client License Key	The license key of the backup client. The backup client must be greater than version 14.0 in order for the license key to be updated.
Inherited Backup Client License Key	The inherited backup client license key.
Machine Name	The name of the agent machine.
IP Address	The IP address of the agent machine.
Operating System Version	The version of the operating system.
Operating System Name	The name of the operating system. (ex. Windows 10, Windows Server 2012 R2, etc.)
Operating System Edition	The edition of the operating system. (ex. Standard, Professional, Datacenter, Enterprise, etc.)
Operating System Service Pack	The service pack of the operating system.
Operating System Architecture	The architecture of the operating system. (i.e. 32-bit, or 64-bit)

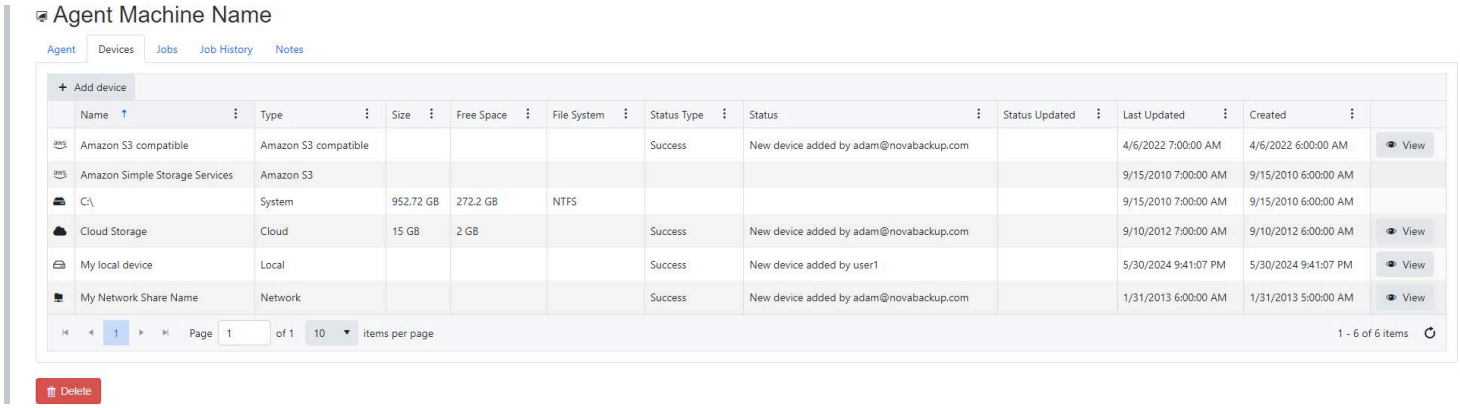
Field Name	Description
Operating System Type	The type of the operating system. (i.e. Workstation, Server, or Domain Controller)
Backup Client Type	The type of the backup client. (ex. NovaStor NovaBACKUP)
Backup Client Version Number	The version number of the backup client.
Backup Client License Type	The license type of the backup client. (ex. NovaBACKUP)

PERMISSIONS REQUIRED

View Agents and Groups

Agent Devices

The Devices tab of the Agent's details view lists the devices on the agent.



Users with permissions to edit the agent can add a new device.

Double-click on the row or click the `View` button to view the details of a device.

Related Topics

[Create Device]
[View Network Device Details]
[View Cloud Device Details]
[View Amazon S3 Compatible Device Details]
[View Local Storage Device Details]

PERMISSIONS

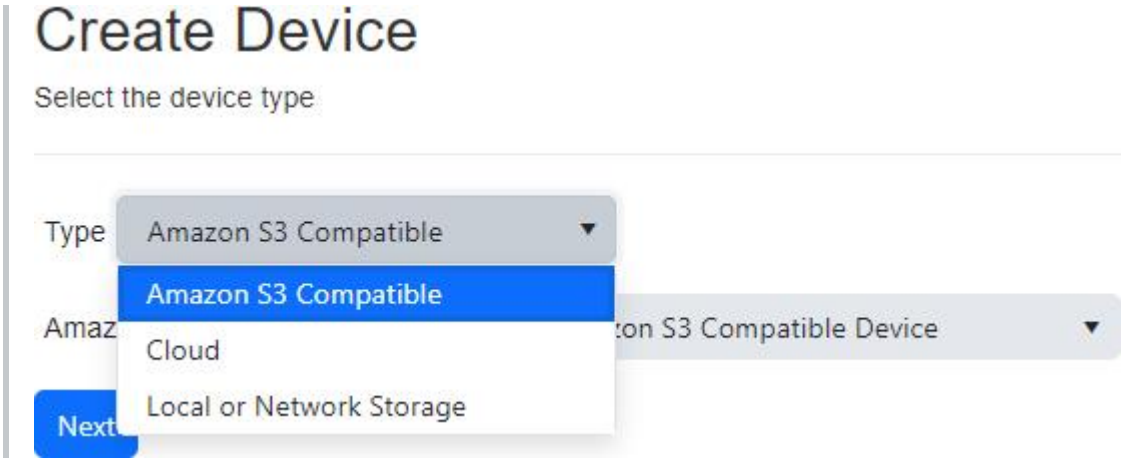
One of the following permissions are required:

View Agents and Groups

Edit Agents

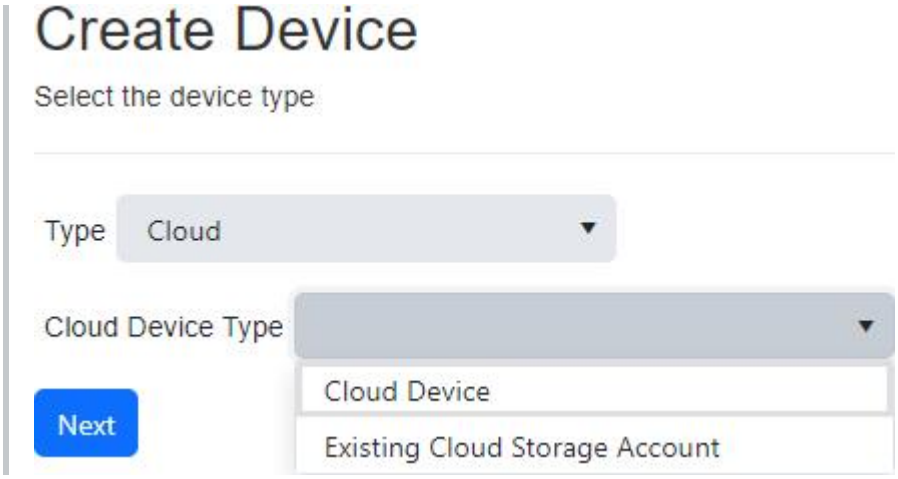
Create Agent Device

To add a new device, select the type of device in the Create Agent Device view.



A cloud device can only be added if the agent doesn't already have a cloud device because an agent is limited to one cloud device.

If a storage server is configured and the user has permissions to view cloud storage accounts, a cloud device can be added from an existing cloud storage account.



If the agent is disconnected, the device will be pending its addition until the agent reconnects.

In this case, the `Status Type` will be set to `Add Device Pending`.

If the agent is connected and the backup client service is running, the device will get created immediately.

In this case, the `Status Type` will be set to `Success`.

Related Topics

Create Amazon S3 Compatible Device
Create Amazon S3 Compatible Device From Existing Cloud Storage Account
Create Cloud Device From Existing Cloud Storage Account
Create Cloud Device
Create Local or Network Storage Device

PERMISSIONS REQUIRED

Edit Agents

Create Agent Amazon S3 Compatible Device

Enter the device settings and click the `Add Device` button to add an Amazon S3 compatible device to the backup client.

Amazon S3 Compatible Device

Configure the Amazon S3 compatible device settings

Name

My Amazon S3 compatible device

URL

https://s3.novabackup.com

Access key id

access key id

Secret access key

••••••••••••••••

Bucket name

bucket name

User name

user_name

Backup directory

backup_directory

Domain

domain

Machine name

machine name

Encryption key

••••••••••••••

Confirm encryption key

••••••••••••••

Quota in gigabytes

2039

> Add Device

An Amazon S3 compatible device created in CMon is considered a "managed" device and will be hidden in the backup client desktop application to prevent end-users from easily changing its properties.

Name

- Required
- Maximum length is 99
- Default value: My Amazon S3 compatible device

URL

- Required
- Maximum length is 256
- Must be in a valid URL format

Access Key Id

- Required
- Maximum length is 128

Secret Access Key

- Required
- Maximum length is 256

Bucket Name

- Required
- Minimum length is 3
- Maximum length is 63

User Name

- Required
- Maximum length is 40
- Only the following characters are valid:
  - 0-9
  - a-z
  - A-Z
  - !'()*-._

Backup Directory

- Required
- Maximum length is 99
- Only the following characters are valid:
  - 0-9
  - a-z
  - A-Z
  - !'()*-._

Domain

- Maximum length is 16

Machine Name

- Maximum length is 16

Encryption Key

- Minimum length is 10
- Maximum length is 30

Quota In Gigabytes

- Minimum value is 0
- Maximum value is 2147483647

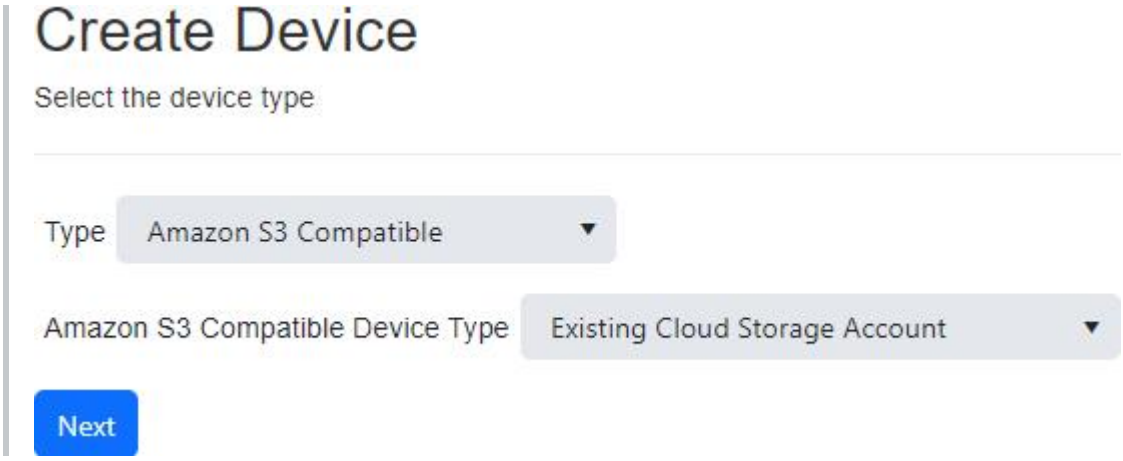
PERMISSIONS REQUIRED

Edit Agents

Create Agent Amazon S3 Compatible Device From Existing Cloud Storage Account

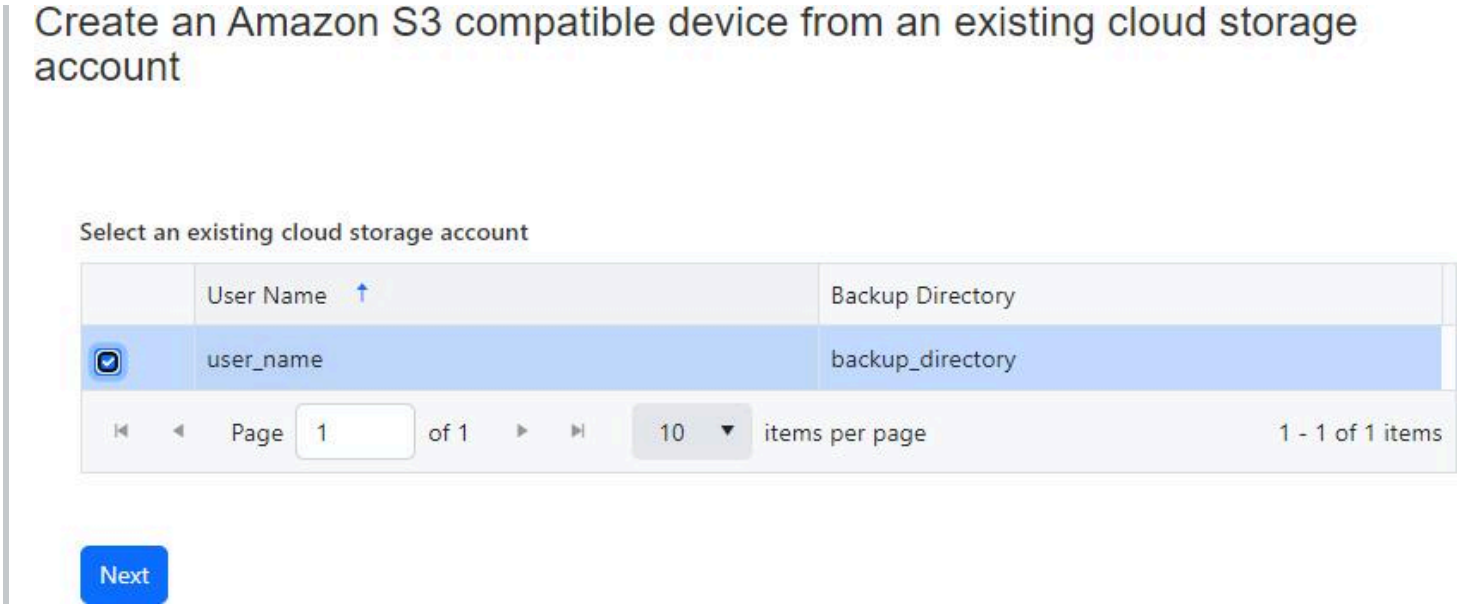
Create Agent Device

To add an Amazon S3 compatible device from an existing cloud storage account, select the appropriate type of device in the `Create Agent Device` page. An Amazon S3 compatible storage server must exist and the user must have `View Cloud Storage Accounts` permissions for the `Existing Cloud Storage Account` item to appear.



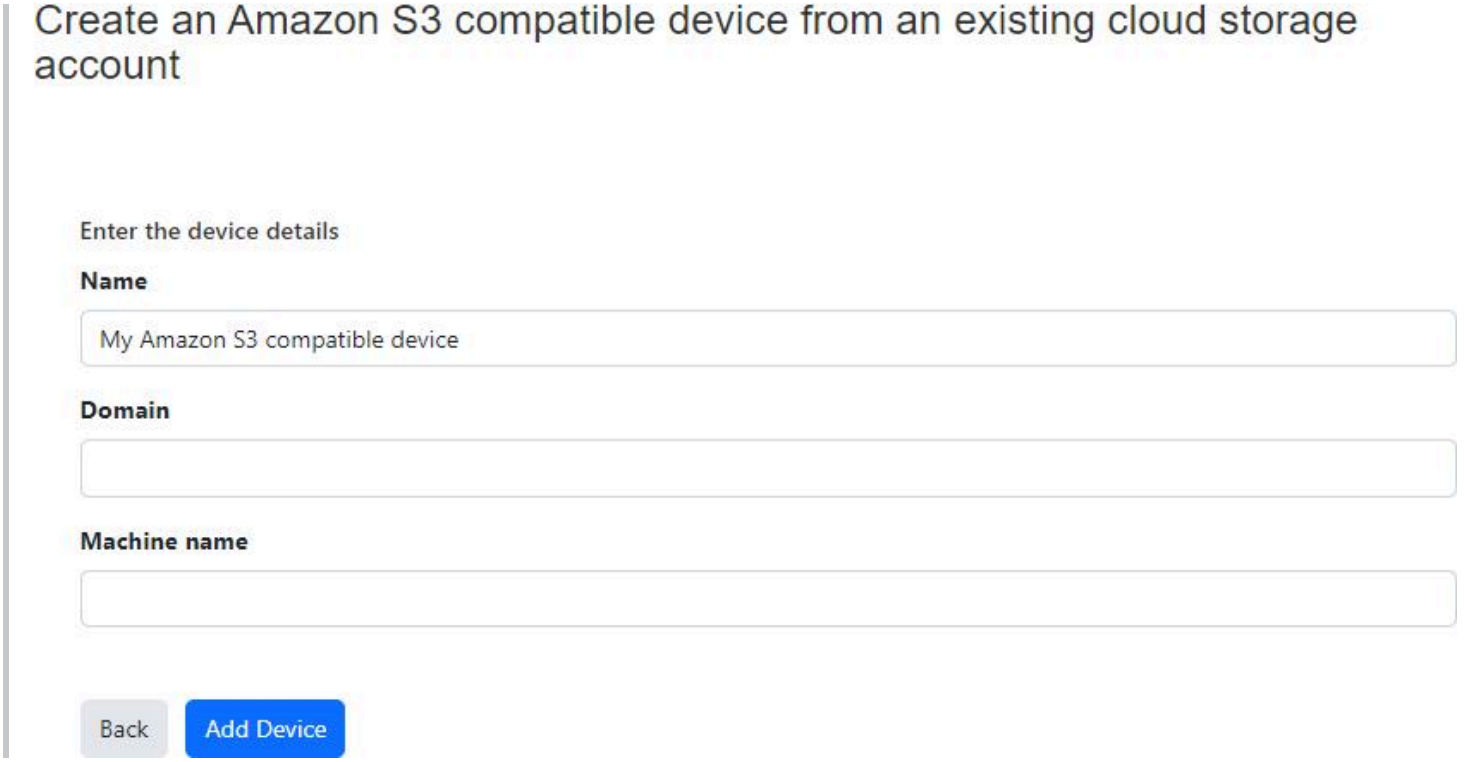
Select an existing cloud storage account

Select the existing cloud storage account and click the `Next` button to continue.



Device Details

Enter the device details and click the `Add Device` button to add the device.



Name

- Required
- Maximum length is 99
- Default value: My Amazon S3 compatible device

Domain

- Maximum length is 16

Machine Name

- Maximum length is 16

PERMISSIONS REQUIRED

Edit Agents

View Cloud Storage Accounts

View Agent Amazon S3 Compatible Device

Users with the `Edit Agents` role permission may edit and delete the device.

If the device has already been added to the agent, the following fields will be read-only:

- Name
- URL
- Bucket Name
- User Name
- Backup Directory
- Domain
- Machine Name

If the device is an unmanaged device, the following fields will be read-only:

- Quota
- Quota in gigabytes

If the device is marked for deletion, the device is read-only.

The device can't be deleted if it's currently being used as a target destination for a job.

General

My Amazon S3 compatible device

General | Status

Name

My Amazon S3 compatible device

URL

http://s3.novabackup.com

Access key id

access key id

Secret access key

••••••••••

Bucket name

bucket name

User name

user_name

Backup directory

backup_directory

Domain

domain

Machine name

machine name

Encryption

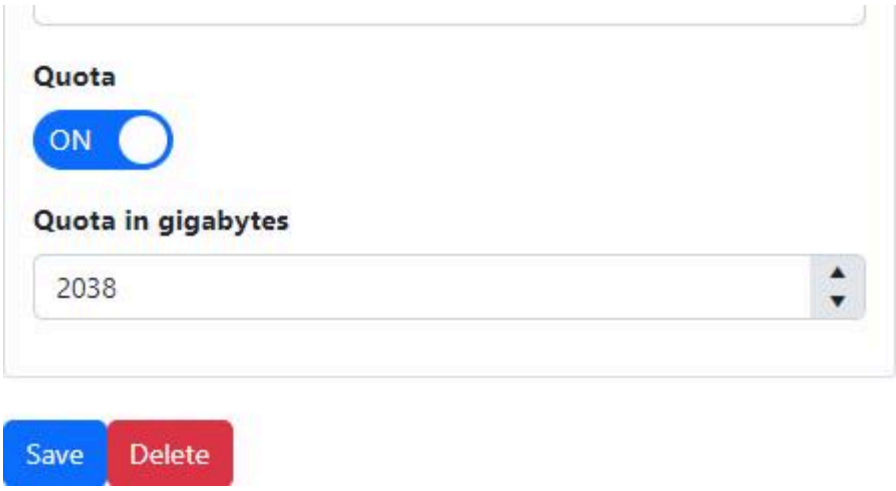
ON

Encryption key

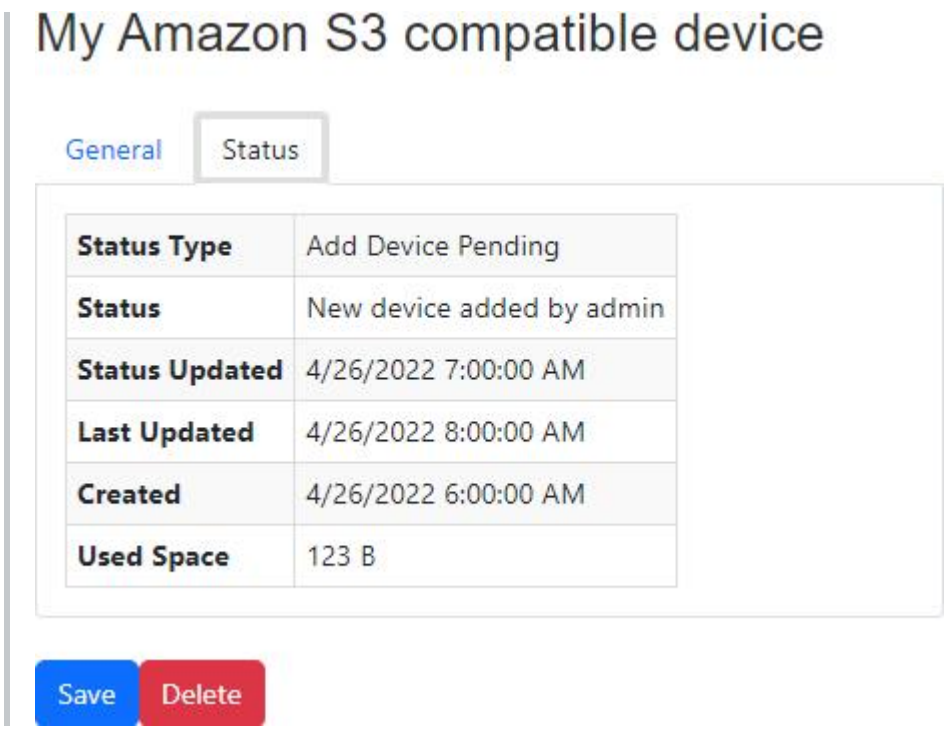
••••••••••

Confirm encryption key

••••••••••



Status



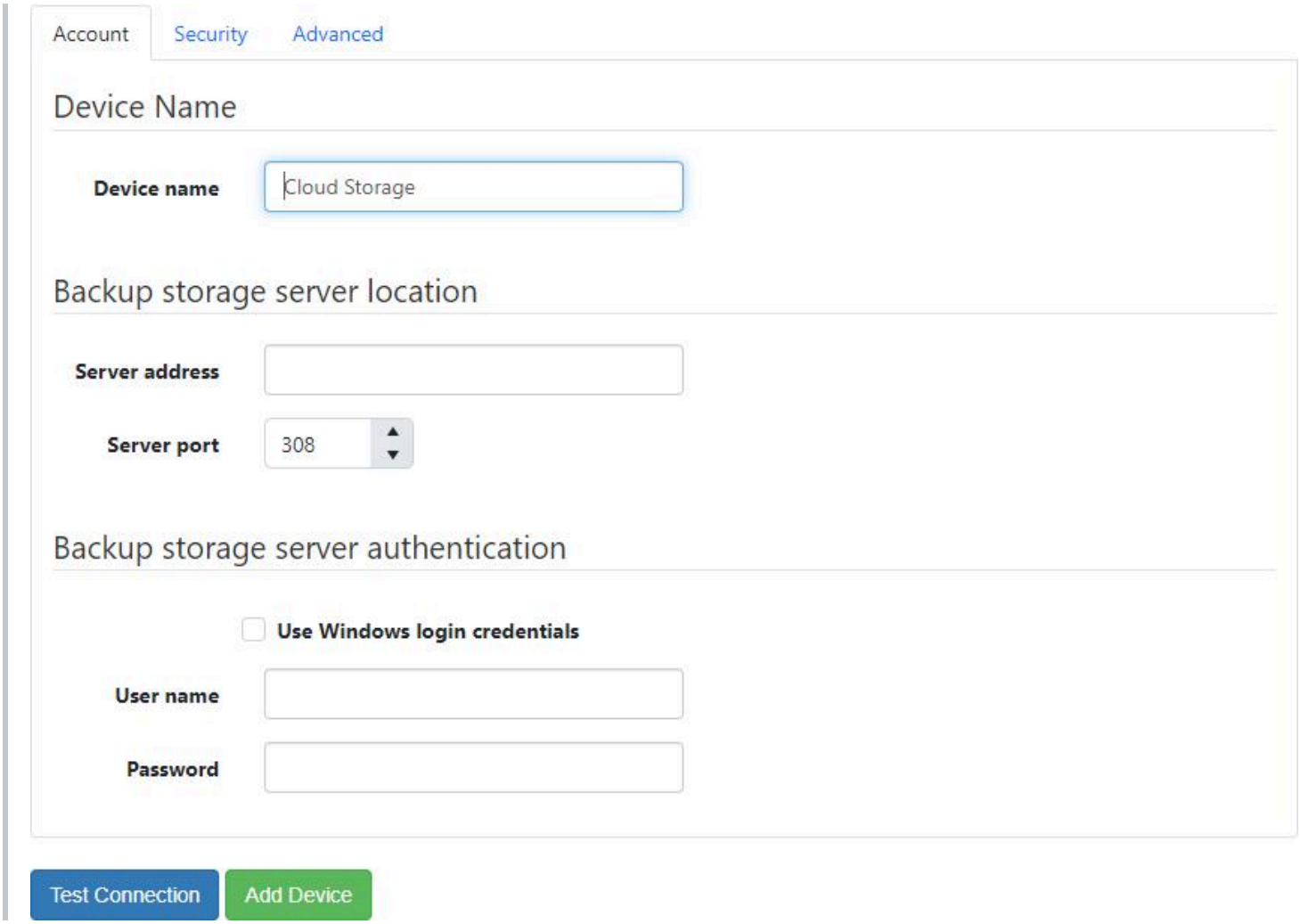
PERMISSIONS REQUIRED

View Agents

Create Agent Cloud Device

To add a cloud device to the backup client, enter the server address and user credentials, and click the `Add Device` button to create the device.

Account



Device name

- Required
- Maximum length is 99
- Default value: Cloud Storage

Server address

- Required
- Maximum length is 64

Server port

- Required
- Must be between 1 and 65535
- Default value: 308

Use Windows login credentials

- Default value: Do not use Windows login credentials

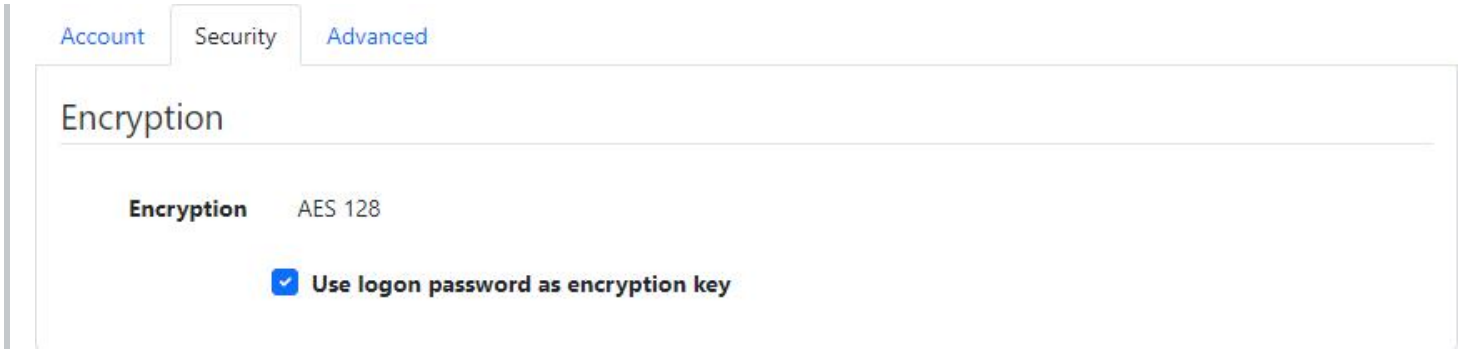
User name

- Required if "Use Windows login credentials" is checked
- Maximum length is 64

Password

- Required if "Use Windows login credentials" is checked
- Maximum length is 64

Security



Use logon password as encryption key

- Default value: Use logon password as encryption key

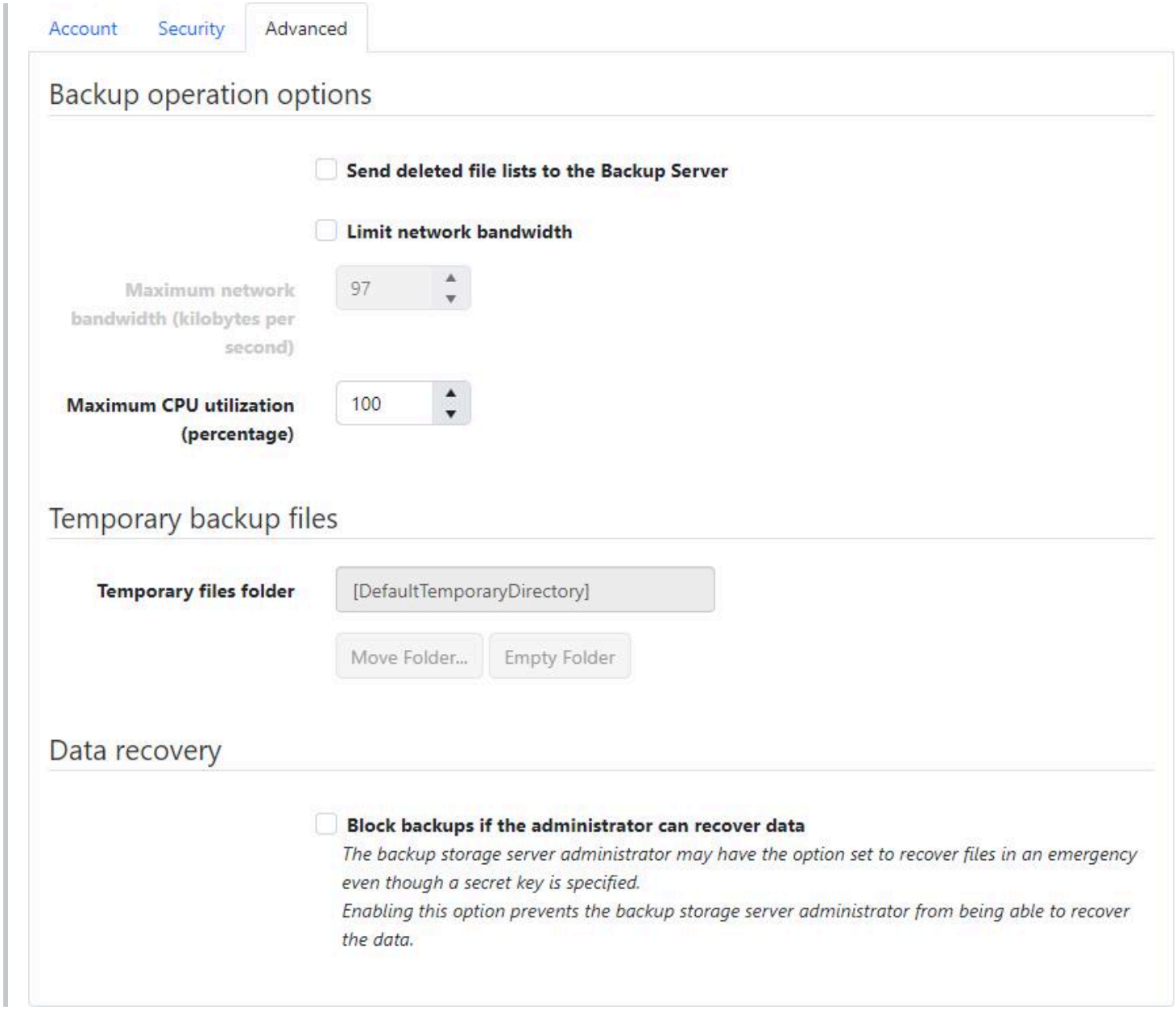
Encryption key

- Required if "Use logon password as encryption key" is checked
- Maximum length is 64

Encryption key hint

- Maximum length is 64

Advanced



Send deleted file lists to the Backup Server

- Default value: Do not send deleted file lists to the Backup Server

Limit network bandwidth

- Default value: Do not limit network bandwidth

Maximum network bandwidth (kilobytes per second)

- Required if "Limit network bandwidth" is checked
- Must be between 1 and 2097151
- Default value: 97

Maximum CPU utilization (percentage)

- Must be between 1 and 100
- Default value: 100

Temporary files folder

- Read-only
- Default value: [DefaultTemporaryDirectory]
- The default value, `[DefaultTemporaryDirectory]`, will automatically get converted to an actual path after the device is created by the agent (ex. `C:\ProgramData\NovaStor\NovaStor NovaBACKUP\Cloud Storage\Backup`)

Block backups if the administrator can recover data

- Default value: Do not block backups if the administrator can recover data

Test Connection

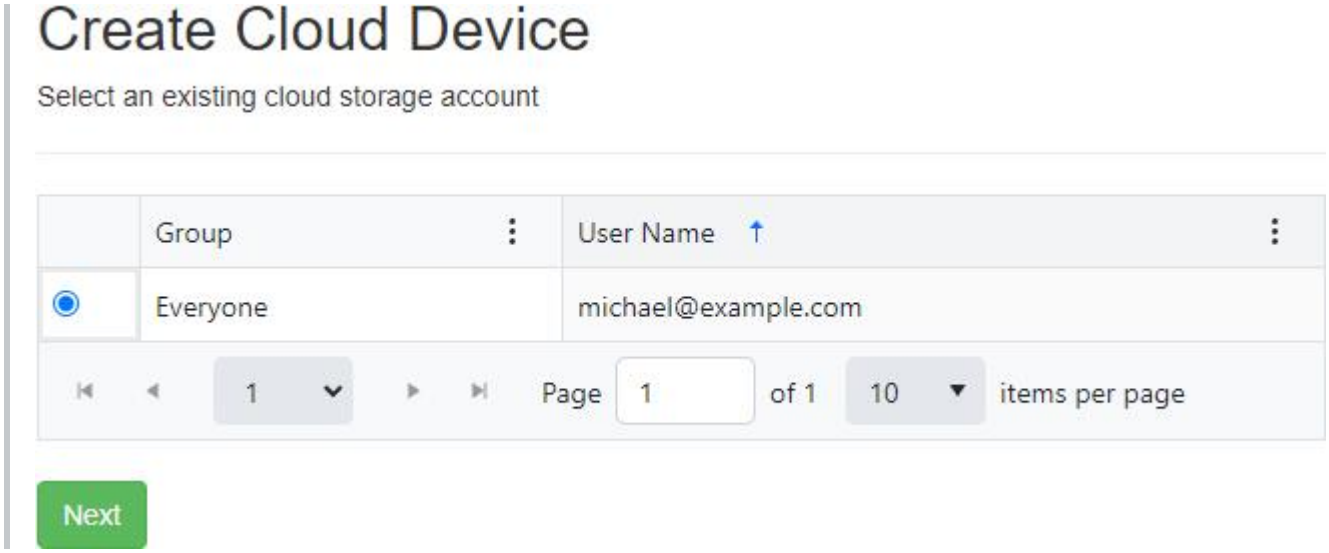
The `Test Connection` button is available only when the agent is currently connected.

> **PERMISSIONS REQUIRED**
>
> Edit Agents

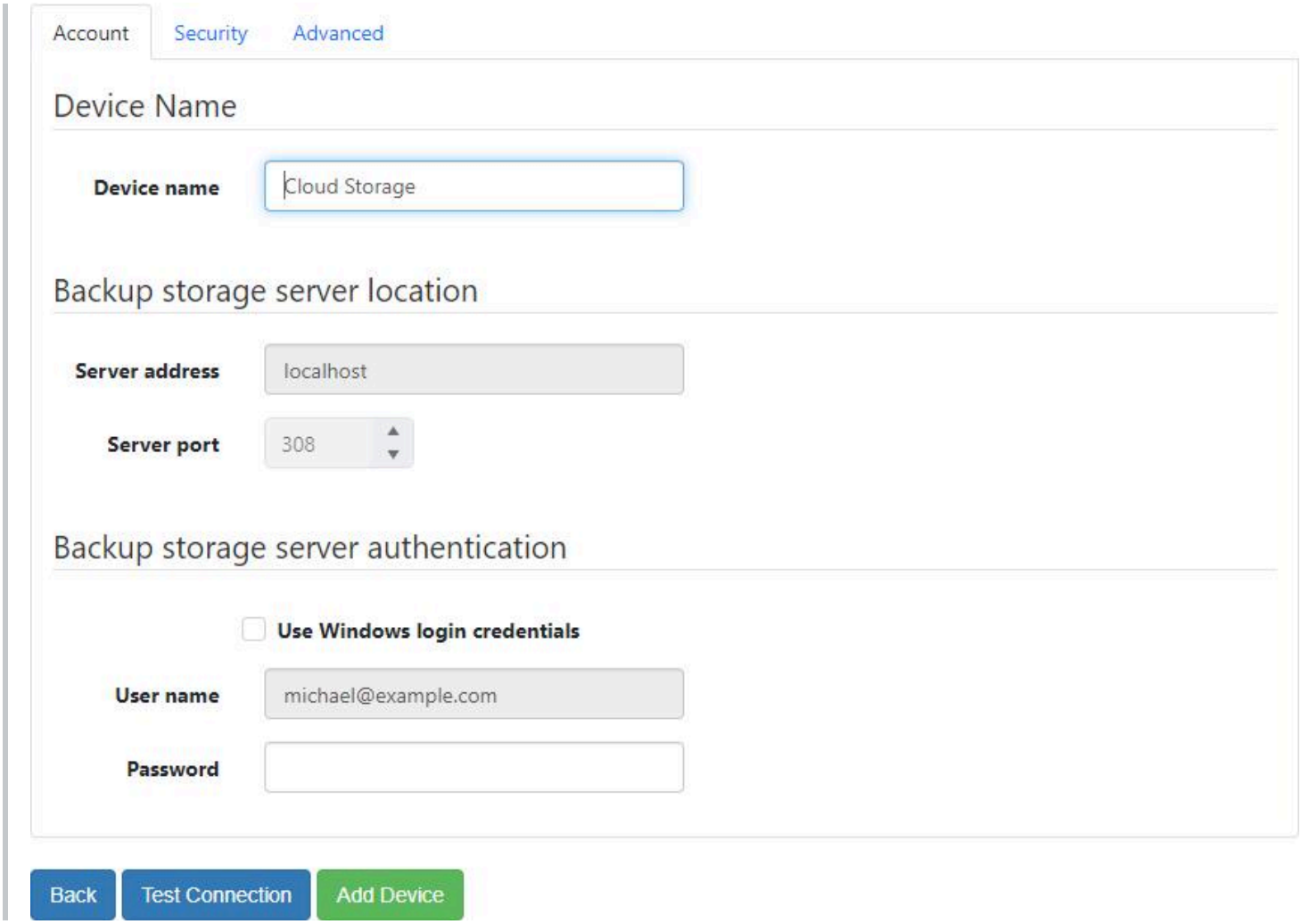
Create Agent Cloud Device From Existing Cloud Storage Account

Select an existing cloud storage account

To add a cloud device from an existing cloud storage account, first select the existing cloud storage account and click the `Next` button to continue.



Account



Device name

- Required
- Maximum length is 99
- Default value: Cloud Storage

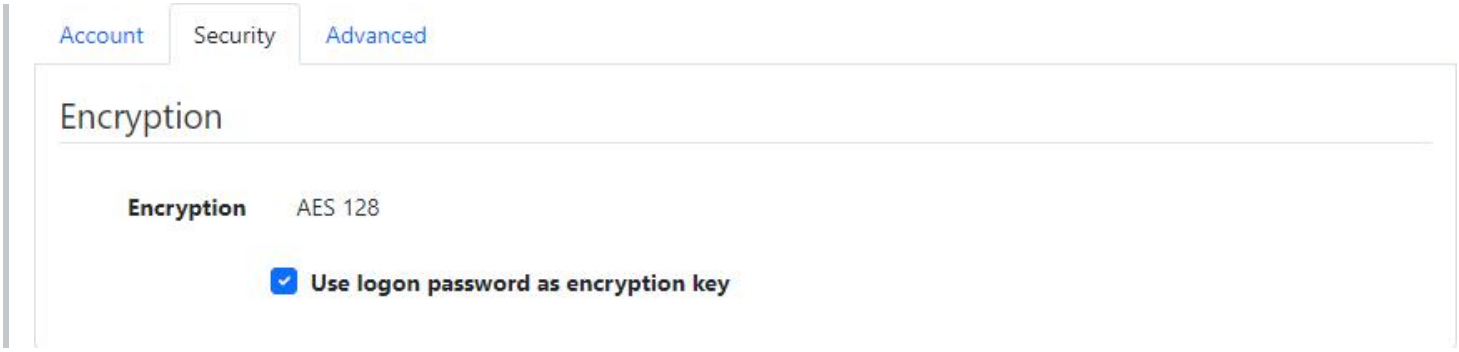
Use Windows login credentials

- Default value: Do not use Windows login credentials

Password

- Required if "Use Windows login credentials" is checked
- Maximum length is 64

Security



Use logon password as encryption key

- Default value: Use logon password as encryption key

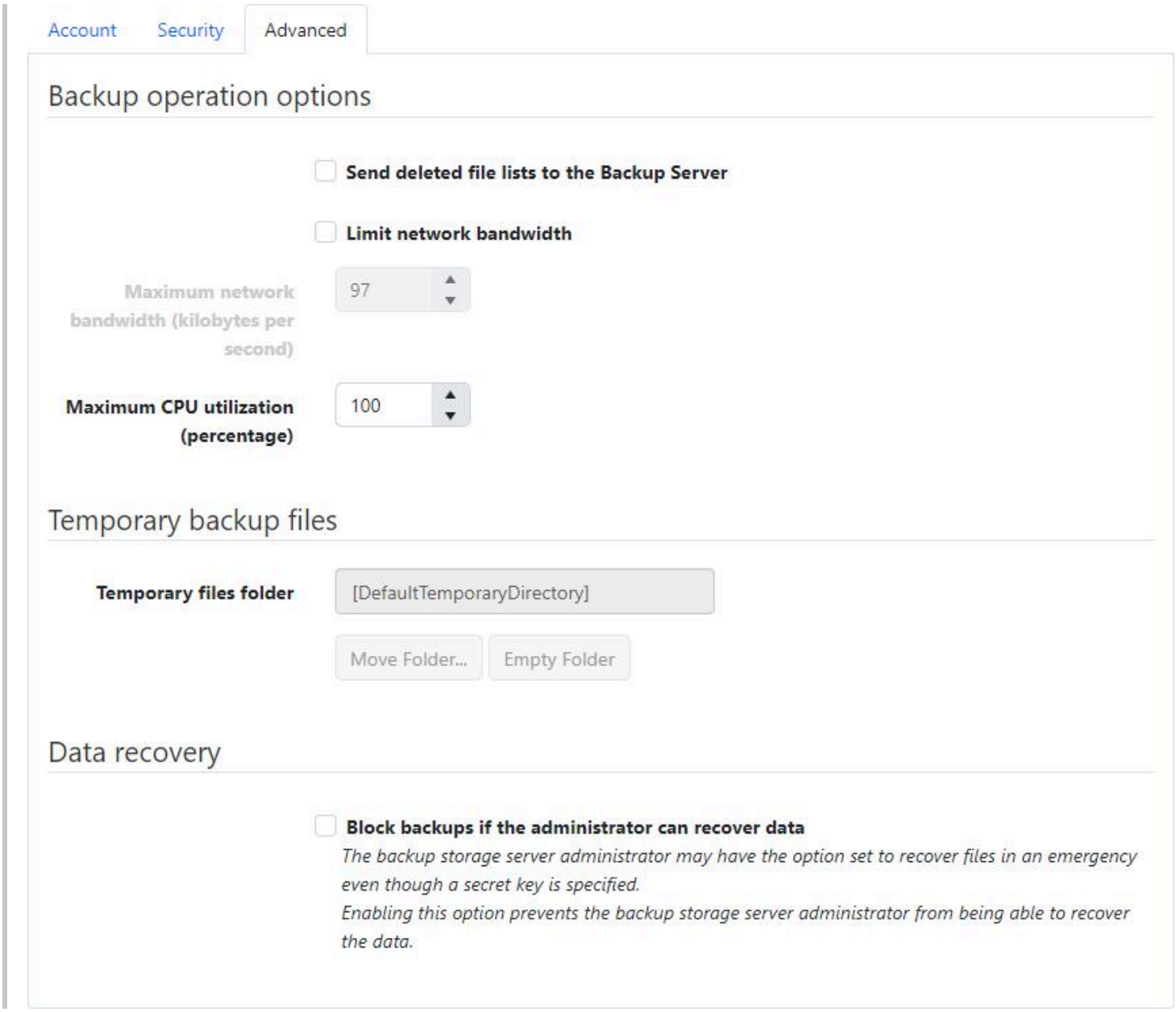
Encryption key

- Required if "Use logon password as encryption key" is checked
- Maximum length is 64

Encryption key hint

- Maximum length is 64

Advanced



Send deleted file lists to the Backup Server

- Default value: Do not send deleted file lists to the Backup Server

Limit network bandwidth

- Default value: Do not limit network bandwidth

Maximum network bandwidth (kilobytes per second)

- Required if "Limit network bandwidth" is checked
- Must be between 1 and 2097151
- Default value: 97

Maximum CPU utilization (percentage)

- Must be between 1 and 100
- Default value: 100

Temporary files folder

- Read-only
- Default value: [DefaultTemporaryDirectory]
- The default value, `[DefaultTemporaryDirectory]`, will automatically get converted to an actual path after the device is created by the agent (ex. `C:\ProgramData\NovaStor\NovaStor NovaBACKUP\Cloud Storage\Backup`)

Block backups if the administrator can recover data

- Default value: Do not block backups if the administrator can recover data

Test Connection

The `Test Connection` button is available only when the agent is currently connected.

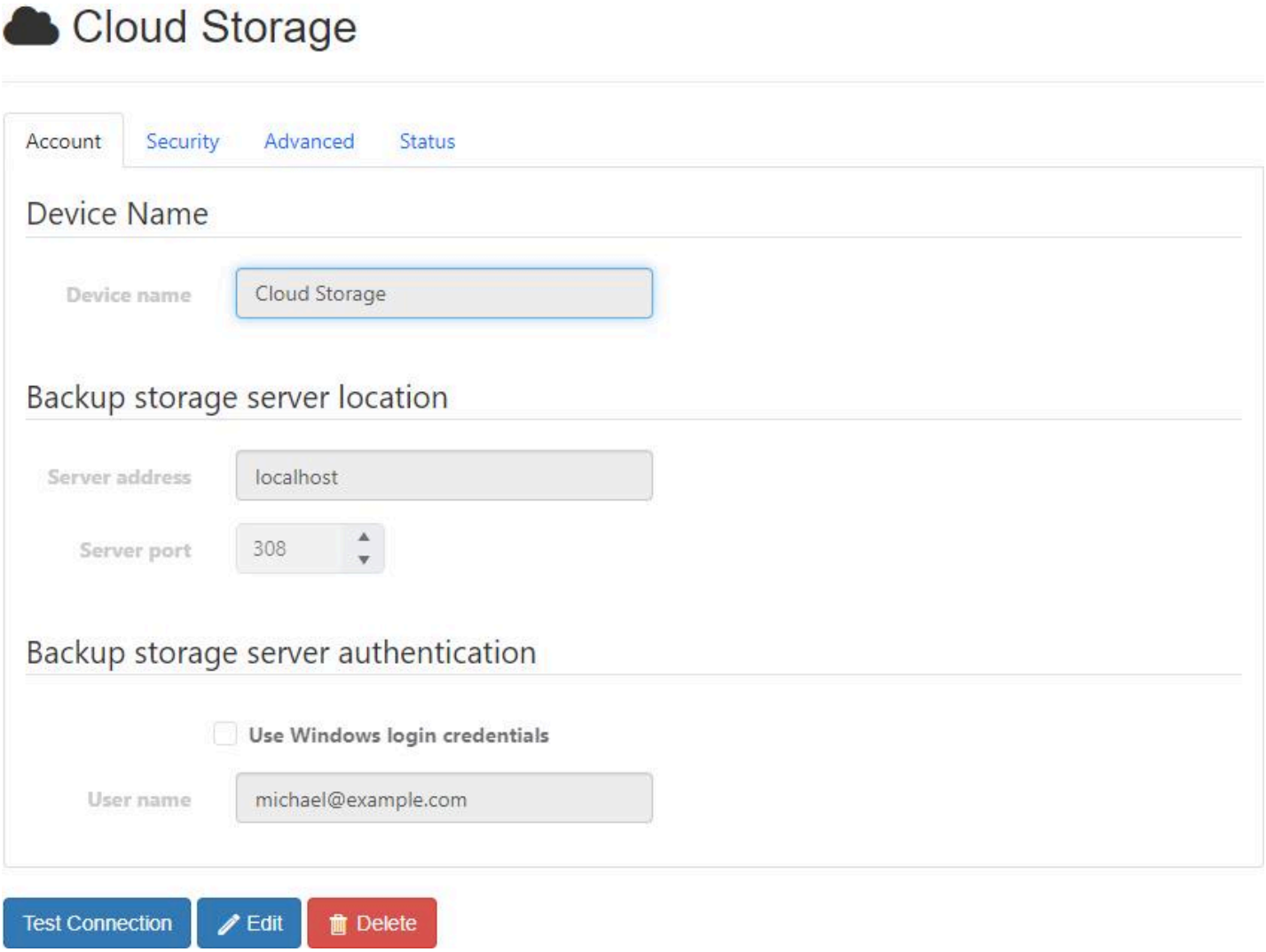
PERMISSIONS REQUIRED

Edit Agents

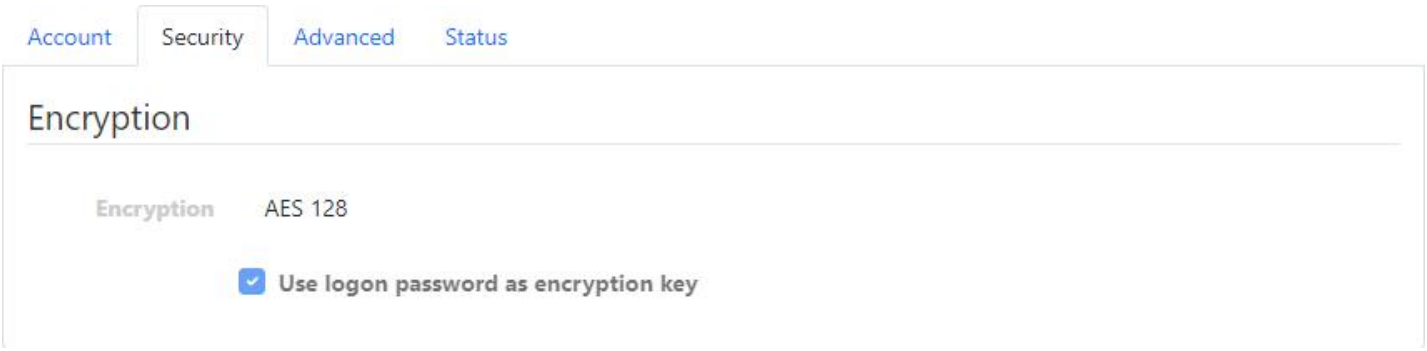
View Cloud Storage Accounts

Cloud Device Details

Account



Security



Advanced

Account Security Advanced Status

Backup operation options

Send deleted file lists to the Backup Server

Limit network bandwidth

Maximum network bandwidth (kilobytes per second) 97

Maximum CPU utilization (percentage) 100

Temporary backup files

Temporary files folder [DefaultTemporaryDirectory]

Move Folder... Empty Folder

Data recovery

Block backups if the administrator can recover data

The backup storage server administrator may have the option set to recover files in an emergency even though a secret key is specified.

Enabling this option prevents the backup storage server administrator from being able to recover the data.

Status

Account Security Advanced Status

Status Type	Add Device Pending
Status	New device added by admin
Last Updated	5/30/2024 9:39:38 PM
Created	5/30/2024 9:39:38 PM

Users with the `Edit Agents` role permission may edit and delete the cloud device. The device can't be deleted if it's currently being used as the destination for a job.

Test Connection

The `Test Connection` button is available only when the agent is currently connected.

Related Topics

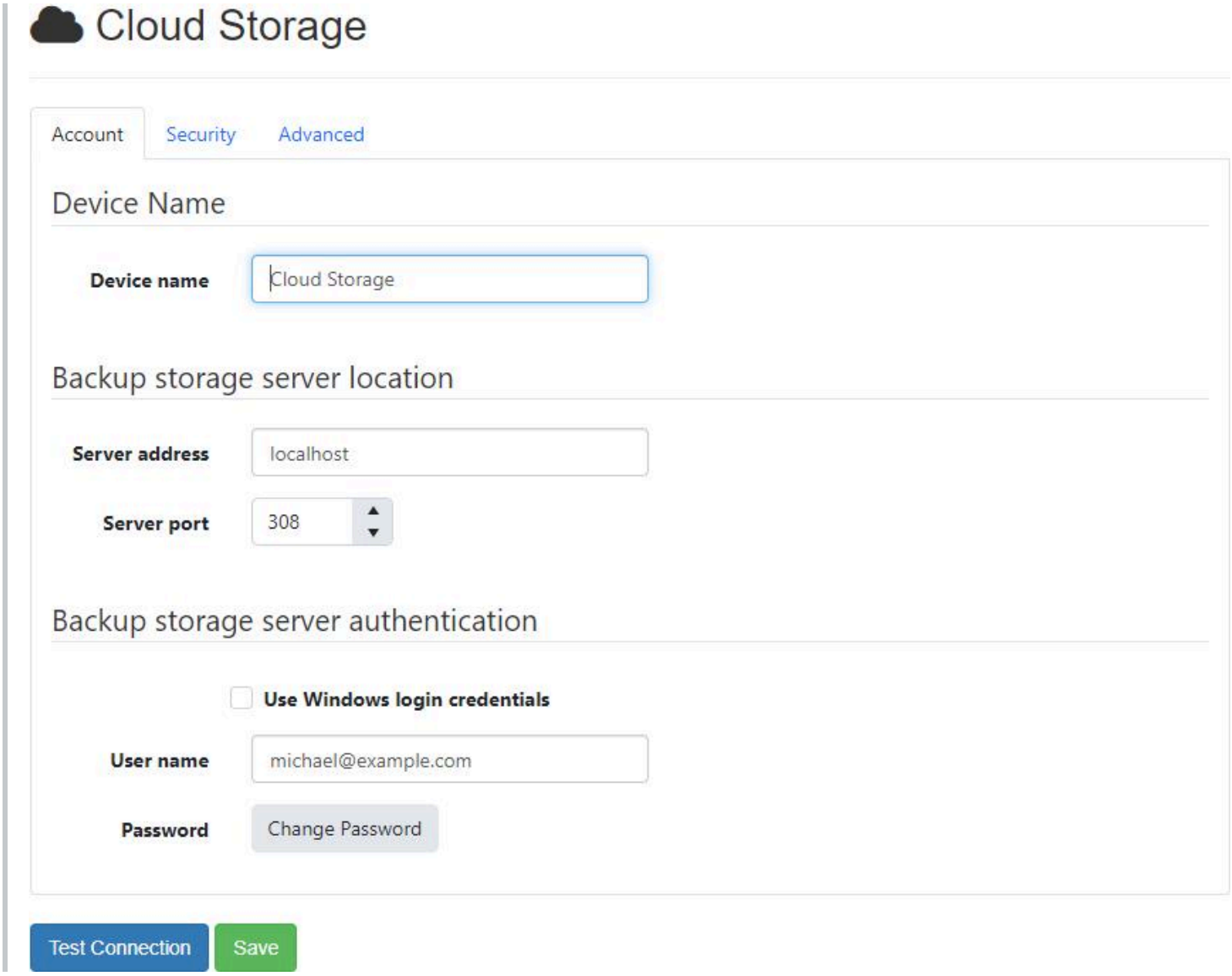
Create Cloud Device From Existing Cloud Storage Account

PERMISSIONS REQUIRED

View Agents and Groups

Edit Cloud Device

Account



Device name

- Required
- Maximum length is 99
- Default value: Cloud Storage
- The device name can only be modified if the device hasn't already been added.

Use Windows login credentials

- Default value: Do not use Windows login credentials

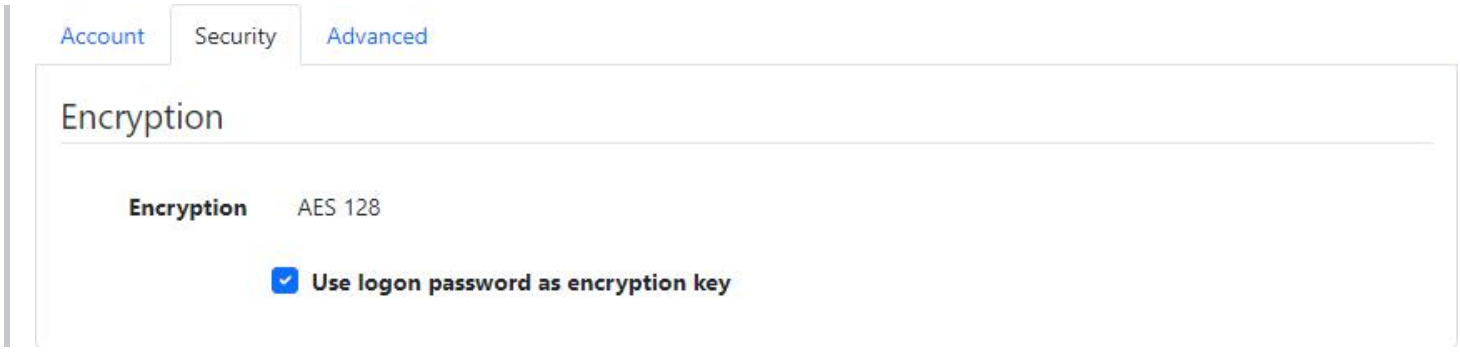
User name

- Required if "Use Windows login credentials" is checked
- Maximum length is 64

Password

- Required if "Use Windows login credentials" is checked
- Maximum length is 64

Security



Use logon password as encryption key

- Default value: Use logon password as encryption key

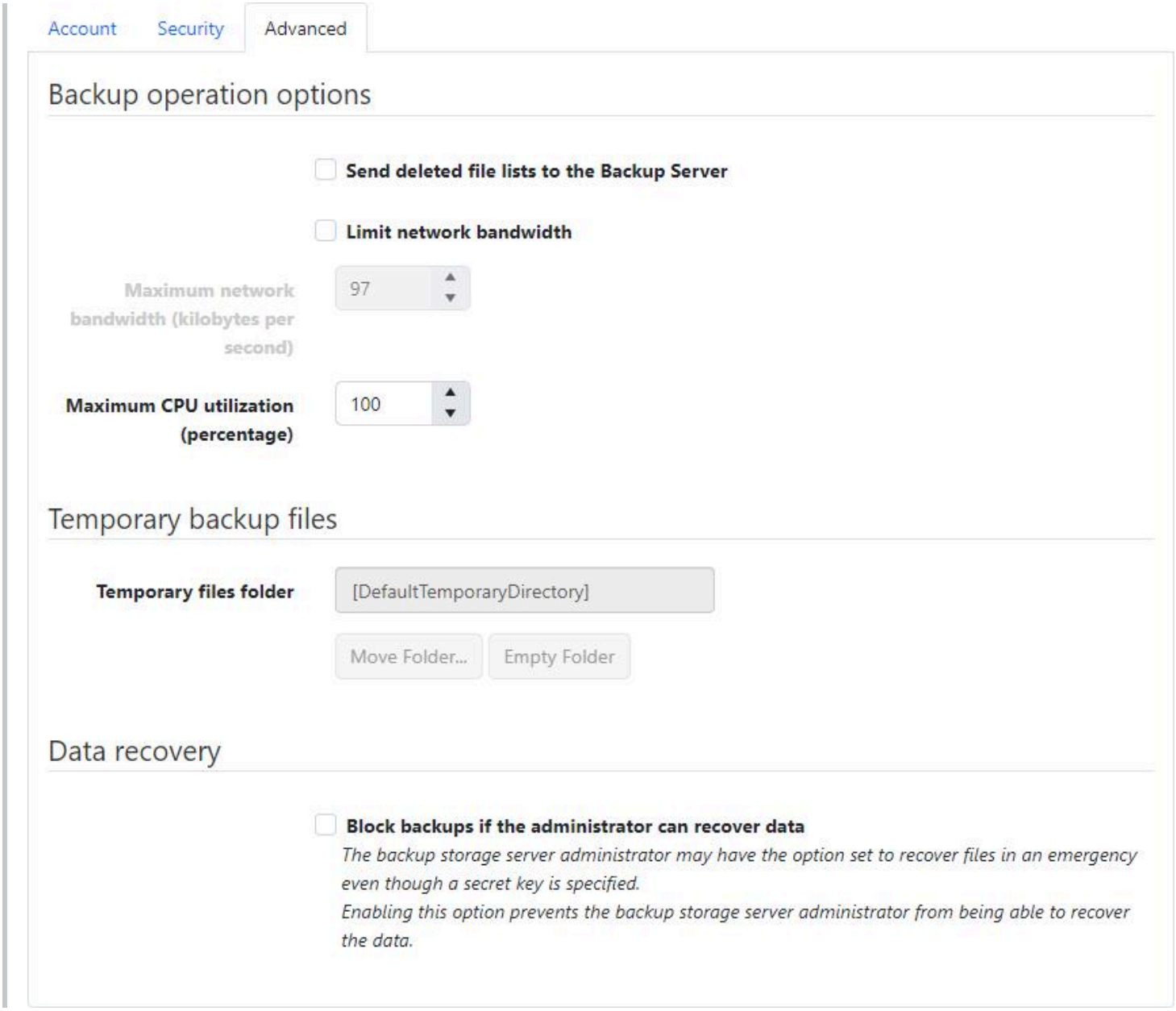
Encryption key

- Required if "Use logon password as encryption key" is checked
- Maximum length is 64

Encryption key hint

- Maximum length is 64

Advanced



Send deleted file lists to the Backup Server

- Default value: Do not send deleted file lists to the Backup Server

Limit network bandwidth

- Default value: Do not limit network bandwidth

Maximum network bandwidth (kilobytes per second)

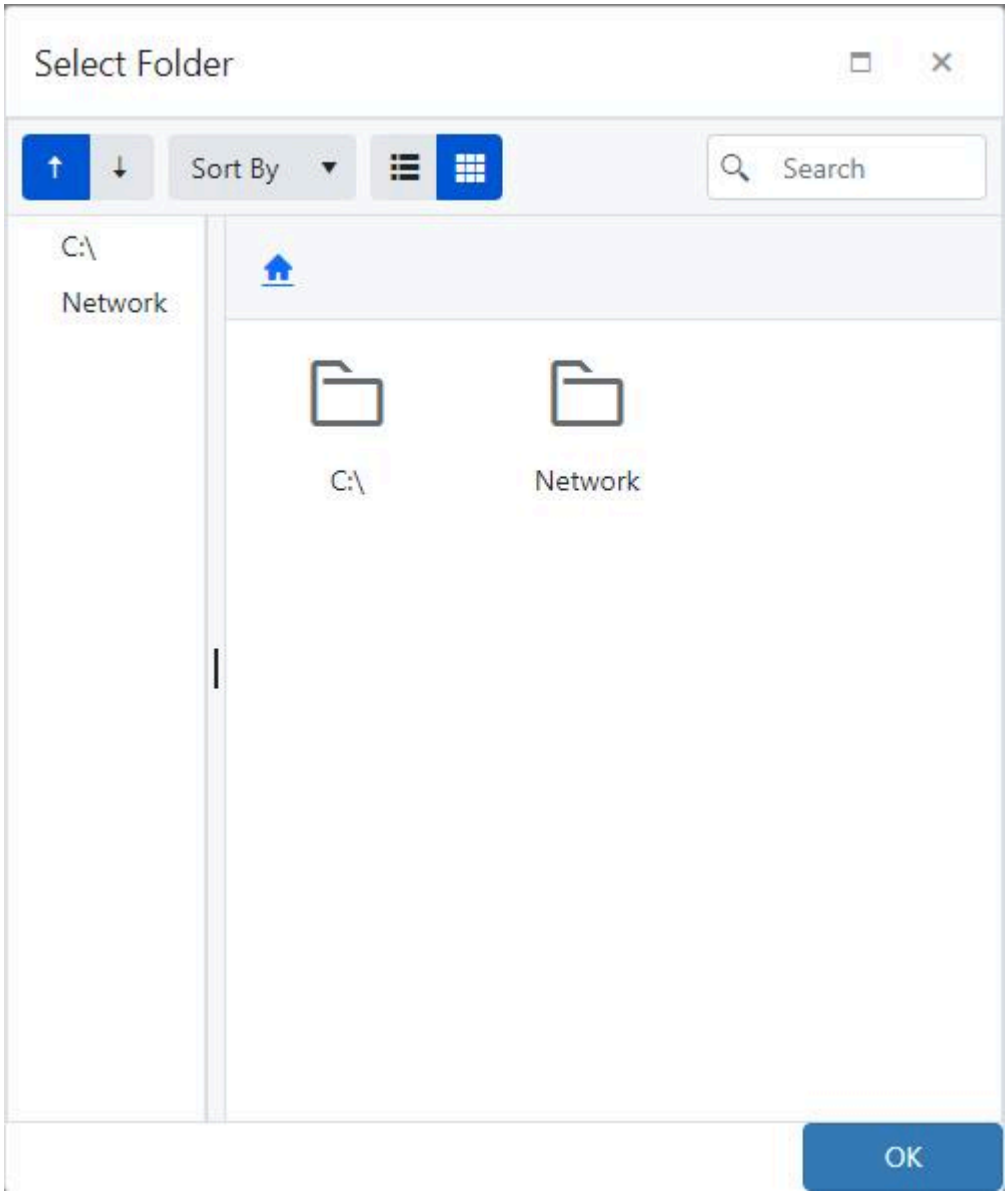
- Required if "Limit network bandwidth" is checked
- Must be between 1 and 2097151
- Default value: 97

Maximum CPU utilization (percentage)

- Must be between 1 and 100
- Default value: 100

Temporary files folder

- Required
- Maximum length is 256
- Must be a valid Windows path
- If this is a local path and doesn't end with `\Backup`, `\Backup` will be appended to it.
- If this is changed to a UNC path, the contents of the previous directory will not be moved.
- The temporary files folder can only be changed after the device has been created on the agent.
- The temporary files folder can only be changed by browsing the file system, with the `Move Folder...` button, when the agent is connected.



- The temporary files folder can only be emptied, with the `Empty Folder` button, when the agent is connected.

Block backups if the administrator can recover data

- Default value: Do not block backups if the administrator can recover data

Test Connection

The `Test Connection` button is available only when the agent is currently connected.

> **PERMISSIONS REQUIRED**
>
> Edit Agents

Network Device Details

My Network Share Name

Path	\\BackupStorage\MyShareName
Domain	my corporate domain
User name	user name
Status Type	Success
Status	Successfully added by agent.
Status Updated	8/7/2024 8:53:57 PM
Last Updated	8/7/2024 8:53:57 PM
Created	8/7/2024 8:53:57 PM

Edit Delete

Users with the `Edit Agents` role permission may edit and delete the network device. The device can't be deleted if it's currently being used as the destination for a job.

Related Topics

Create Local or Network Storage Device

PERMISSIONS REQUIRED

View Agents and Groups

Edit Network Device

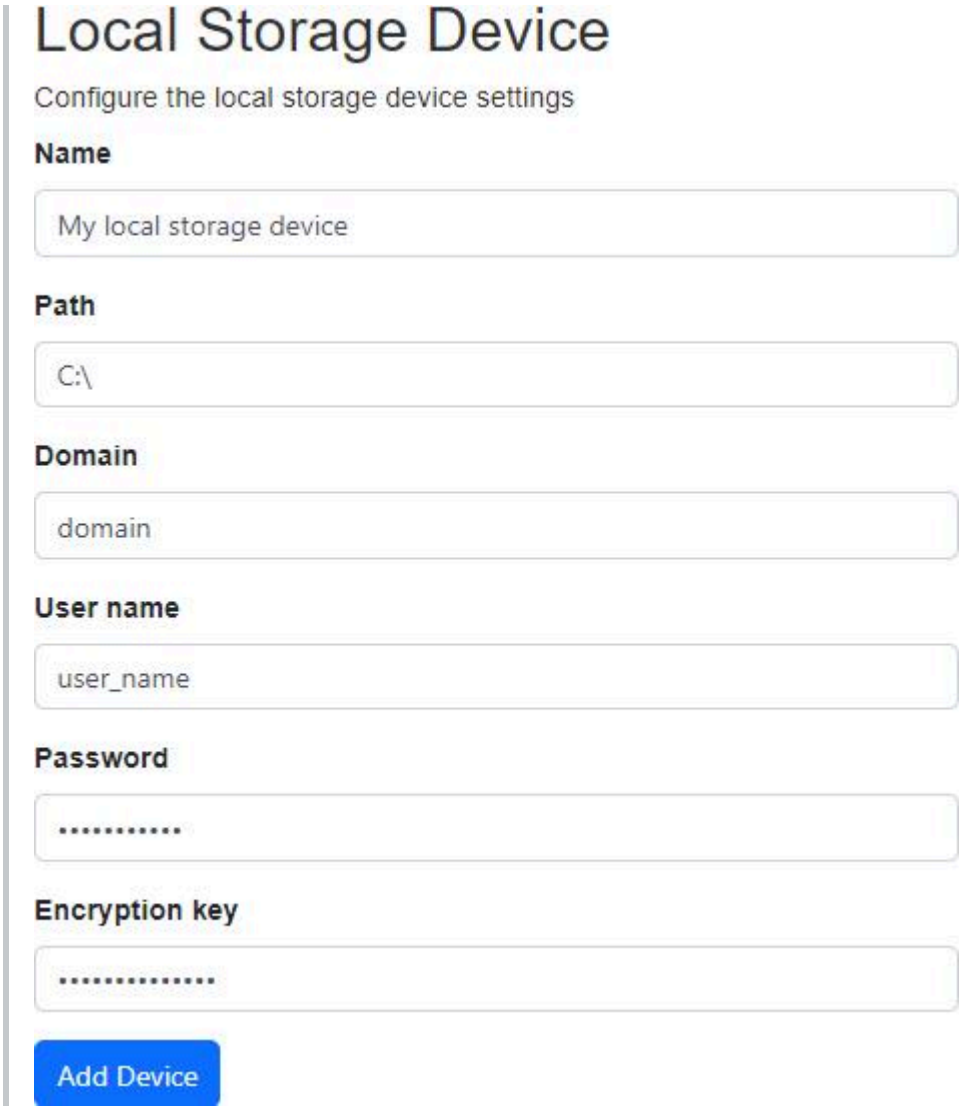
The device name can only be modified if the device hasn't already been added.

PERMISSIONS REQUIRED

Edit Agents

Create Local Storage Device

Enter the device settings and click the `Add Device` button to add a local or network storage device to the backup client.



A local or network storage device created in CMon is considered a "managed" device and will be hidden in the backup client desktop application to prevent end-users from easily changing its properties.

Name

- Required
- Must be unique
- Must not equal "Network"
- Maximum length is 99
- Default value: My local storage device

Path

- Required
- Maximum length is 1024
- Must be a valid Windows or network path
- Network paths must begin with a double back slash and contain a network share (ex. `\\server-name\network share\`)

Domain

- Maximum length is 64

User Name

- Maximum length is 256
- The following characters are invalid:
  `\ / [ ] : " | < > + = ; , ? % @`

Password

- Maximum length is 1048

Encryption Key

- Minimum length is 10
- Maximum length is 30

PERMISSIONS REQUIRED

Edit Agents

View Agent Local Storage Device

Users with the `Edit Agents` role permission may edit and delete the device.

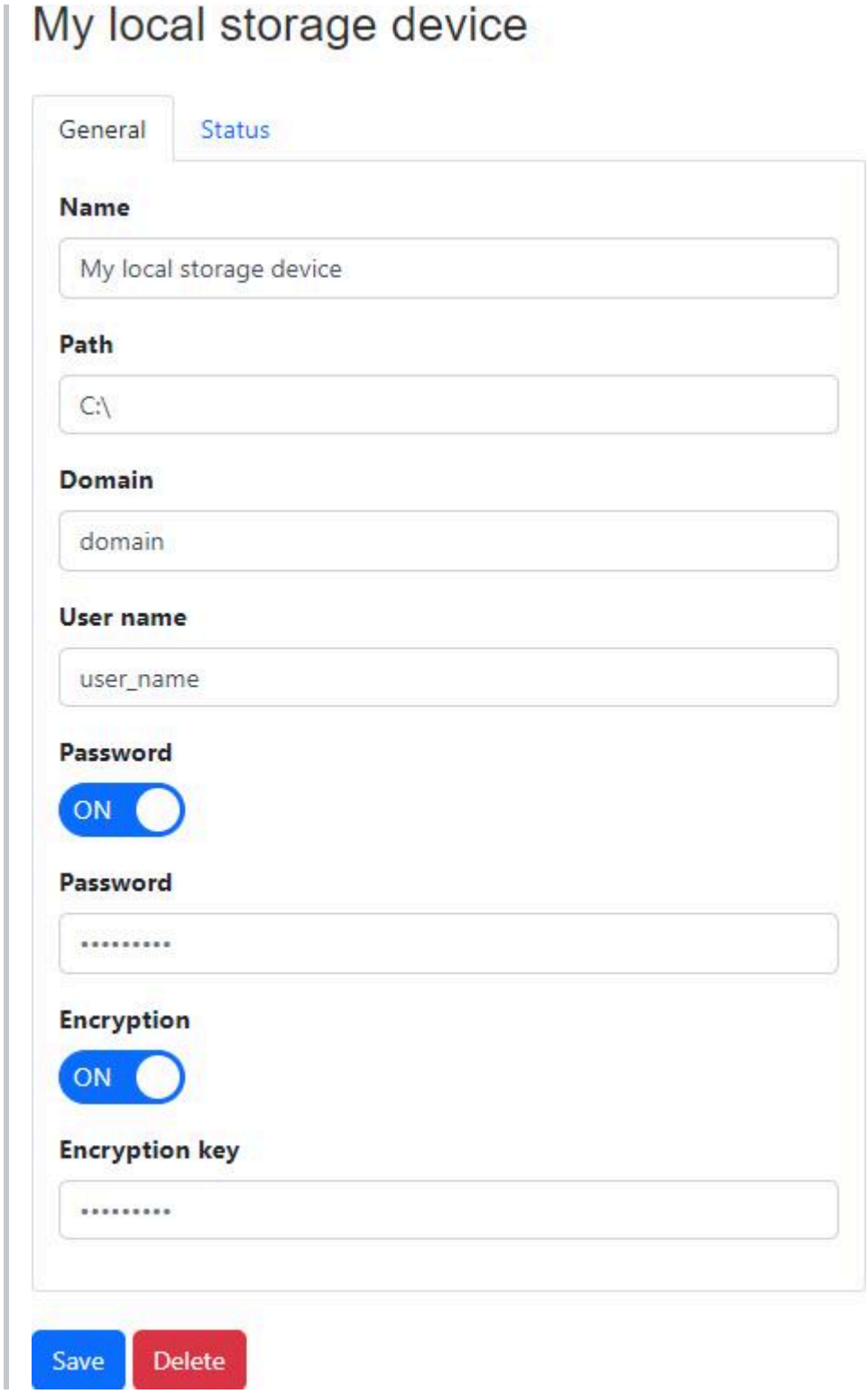
If the device has already been added to the agent, the following fields will be read-only:

- Name
- Path

If the device is marked for deletion, the device is read-only.

The device can't be deleted if it's currently being used as a target destination for a job.

General


My local storage device
General
Status
Name
My local storage device
Path
C:\
Domain
domain
User name
user_name
Password
ON
Password
Encryption
ON
Encryption key
Save
Delete

Status

My local storage device

General | Status

Status Type	Add Device Pending
Status	New device added by admin
Status Updated	4/26/2022 6:00:00 AM
Last Updated	4/26/2022 8:00:00 AM
Created	4/26/2022 7:00:00 AM
Used Space	123 B

Save Delete

PERMISSIONS REQUIRED

View Agents

`Error updating device` and `Error deleting device`

Backup clients with versions 19.4 and older may not allow the CMon to remotely control its devices.

In this case, the backup client can be configured to explicitly allow the CMon to manage its devices as follows:

1. Stop the `NovaStor NovaBACKUP Backup/Copy Engine` (nsService) Windows service.
2. Open `C:\ProgramData\NovaStor\NovaStor NovaBACKUP\Profiles\nsconfig.ini` in a text editor such as notepad for example.
3. Set the following key/value pair in the `[configuration]` section: `CMCDeviceControl=1`
4. Save `nsconfig.ini`.
5. Start the `NovaStor NovaBACKUP Backup/Copy Engine` (nsService) Windows service.

Test connection fails and displays messages on the machine running the backup client

Backup clients with version 19.6.1012 and older may not be able to complete a test connection successfully, specifically when the backup client tray control is running.

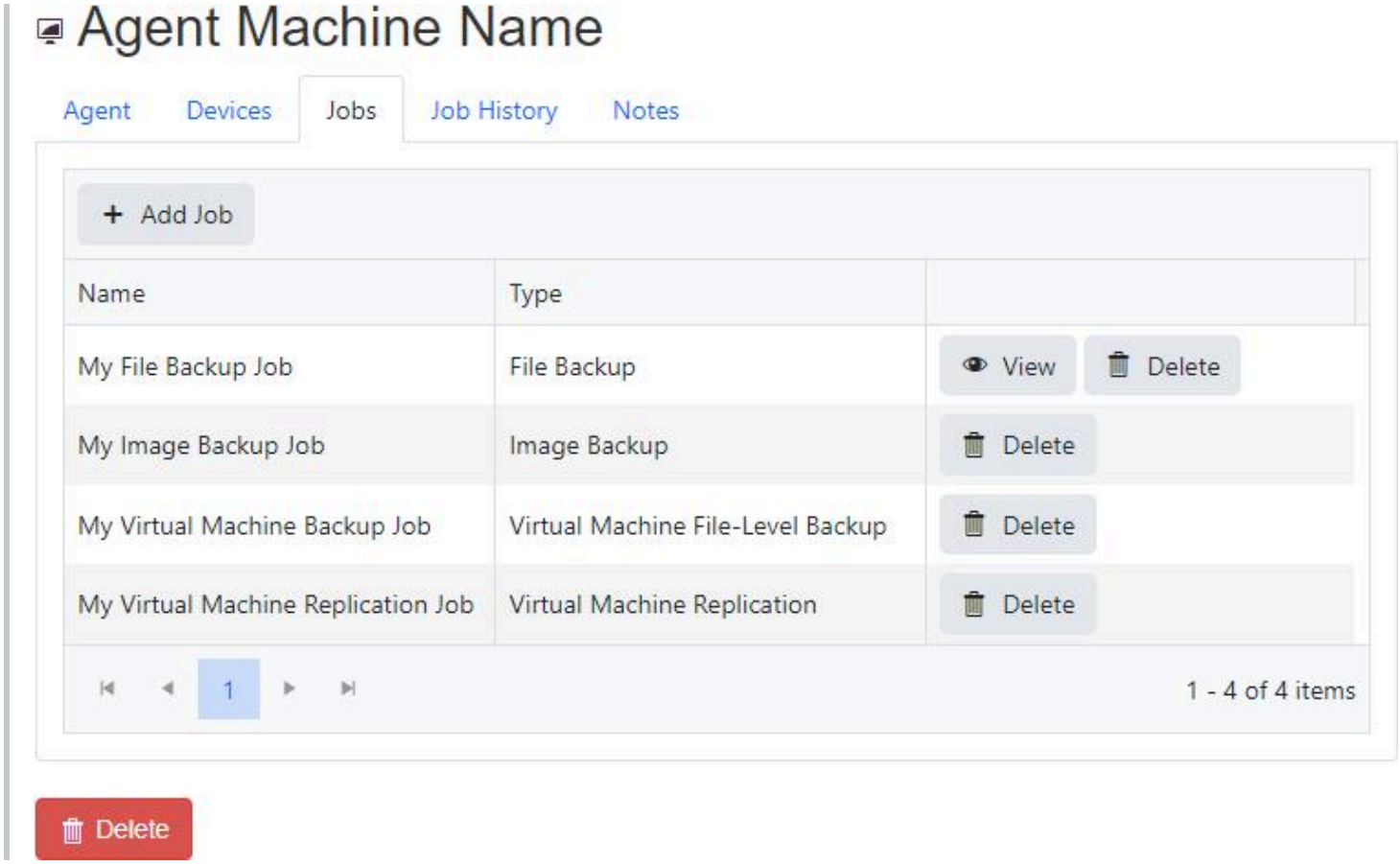
When the backup client tray control is running, messages on the machine running the backup client tray control may appear with the result of the connection test.

Agent Jobs

The Jobs tab displays the jobs configured for the agent, inherited policies from its parent groups, and also scheduled or virtual machine jobs in the backup client that aren't managed by CMon.

Jobs with multiple schedules will be displayed for each schedule.

If the backup client agent is disconnected, unmanaged scheduled or virtual machine jobs aren't displayed.



By default, the data is sorted on the Name column and has a page size of 10 records.

The grid's column headers can be used to sort and filter the data.

View

Click the "View" button to view the details of a job.

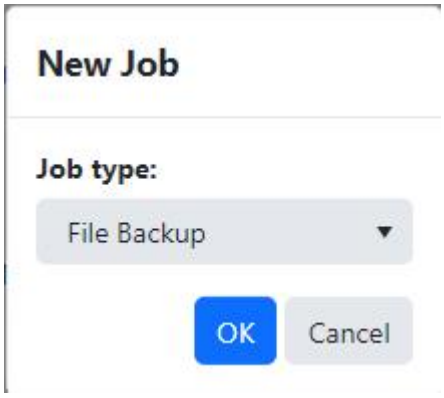
Currently, only the details of a file backup job can be displayed.

Add

Click on the `Add Job` button to add a new job.

Currently, only file backup jobs can be added.

The `Add Job` button is disabled if the user doesn't have permissions to edit jobs.



Delete

Click on the `Delete` button to delete the job.

Currently, only managed file backup jobs can be deleted.

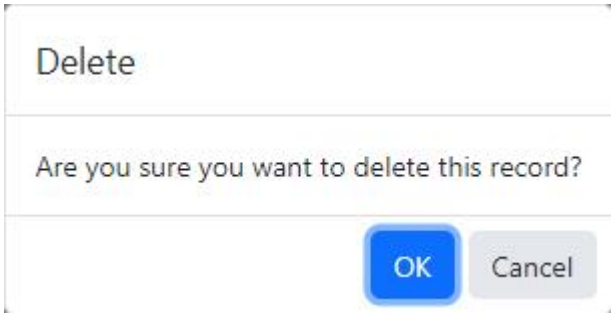
The user must confirm deleting a job.

The `Delete` button is disabled if the user doesn't have permissions to edit jobs.

If the agent is online, the job will be deleted promptly.

If the agent is offline, the job will be deleted when the agent reconnects to CMon.

Jobs are only marked as deleted, and will still remain in the CMon database.



PERMISSIONS

One of the following permissions are required:

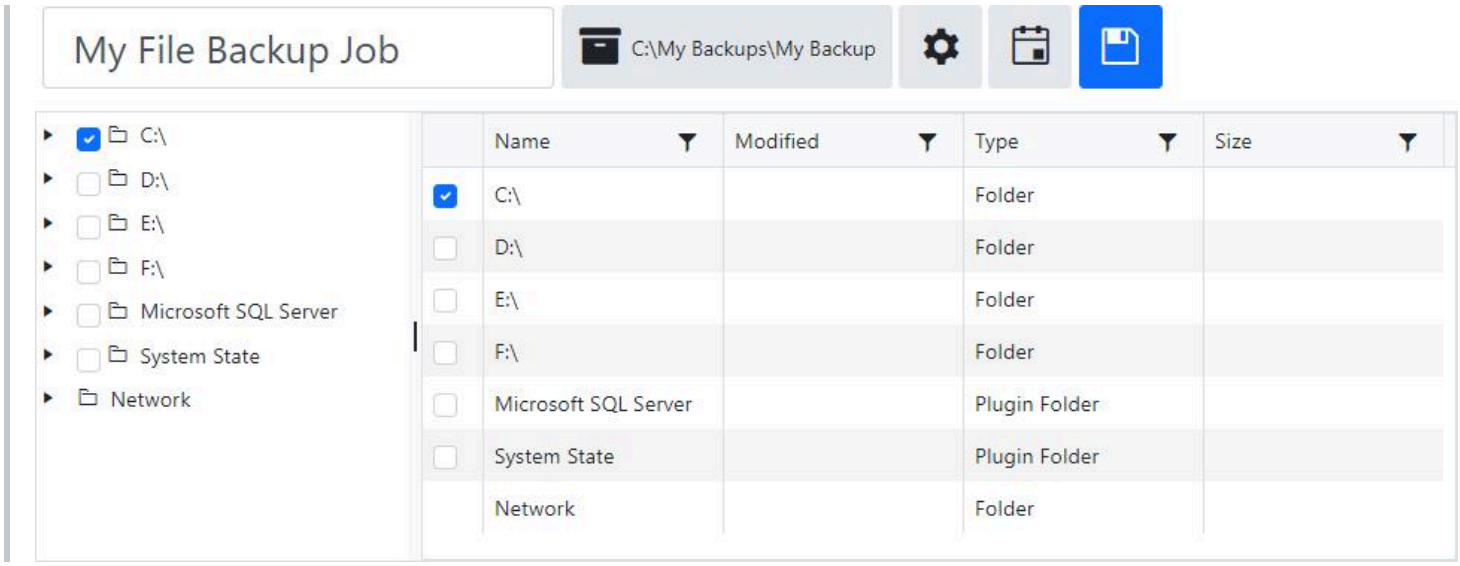
View Jobs and Job History

View Jobs Logs

Edit Jobs

Job

The Job page displays the details of a job configured for the agent managed by CMon, or scheduled or virtual machine jobs in the backup client that aren't managed by CMon.



At least one selection is required.

Paths have a maximum length of 512 characters.

Unmanaged jobs

Unmanaged jobs can't be modified so the Save button isn't displayed.

Managed jobs

The job's name itself can't be modified, but the job's session name can be modified.

The Save button is disabled for users without permissions to edit jobs.

Destination

The job's destination path is displayed in the destination device button.

A destination must be selected in order to view the job's settings.

Check boxes

Check boxes are disabled for users without permissions to edit jobs.

The check boxes have three states: checked, unchecked, and mixed.

Check-marked items and their children are included as part of the backup job.

Unchecked items are not included as part of the backup job.

Check boxes for items with some children included and some not included as part of the backup job will be displayed as a mixed check-mark.

New items which exist within items that are checked or mixed checked at the time of the backup will be included as part of the backup job.

Connected agents

By default, the tree and grid display all root backup sources available for the backup job.

The available backup sources are displayed based on the agent's backup client license.

Files are not displayed in the tree, and are only displayed in the grid.

By default, the tree displays folders first, then followed by plug-in folders.

By default, the grid displays folders first, then followed by plug-in folders, then followed by files.

The Modified date and time format of folders and files are displayed in the grid according to the user's preferences.

The Size of files are also displayed in the grid.

Clicking on an item in the tree displays it's children in the grid.

Clicking on an item in the tree without children, or if the agent doesn't have access to that folder, doesn't display any items in the grid.

Double-clicking on a row in the grid expands the item in the tree and displays its children in the grid.

Network

Check boxes for the `Network` node and computers one level under the `Network` node are not displayed.

When scanning the network for computers running file and folder sharing services, the backup client agent will only detect computers which respond on port 445 within 3 seconds.

The account the backup client agent service is running as will need to have permissions for the network shares in order to browse to and access them.

Network Credentials

The backup client agent service queries the Windows Credential Manager to retrieve stored credentials that can be used to connect and enumerate protected network shares, which must meet the following requirements:

1. Credentials must be stored for the same user as the user account used to run the backup client agent windows service (i.e. the log on user account).
2. Credentials must be stored as a "Generic" type.
3. Credentials must be stored using the "Local Machine" or "Enterprise" persistence type.
4. The target name must match the display name (i.e. fully qualified host name) of the computer.

Credentials can be saved to the Windows Credential Manager in any one of the following ways:

1. Using a graphical user interface:

   a. Open Control Panel > (User Accounts) > Credential Manager.

   b. Click "Windows Credentials".

   c. Click "Add a generic credential".

   d. Enter the "Internet or network address", "User name", and "Password", and then click OK.

2. Use a command line interface by opening an elevated Windows PowerShell and running the following commands:

   > **TIP**
   > To run PowerShell as the "Local System" (NT AUTHORITY\SYSTEM) account, [PsExec](https://docs.microsoft.com/en-us/sysinternals/downloads/psexec) can be used with the following command: ``` PsExec.exe -i -s powershell.exe ```

   a. Install the PowerShell NuGet Package Provider, if it's not already installed:

   ```
   Install-PackageProvider -Name NuGet -Force
   ```

   b. Install the CredentialManager PowerShell Module, if it's not already installed:

   ```
   Install-Module -Name CredentialManager -Force
   ```

   c. Add a generic credential:

   ```
   New-StoredCredential -Type Generic -Persist LocalMachine -Target $computerName -UserName
   $userName -Password $password
   ```

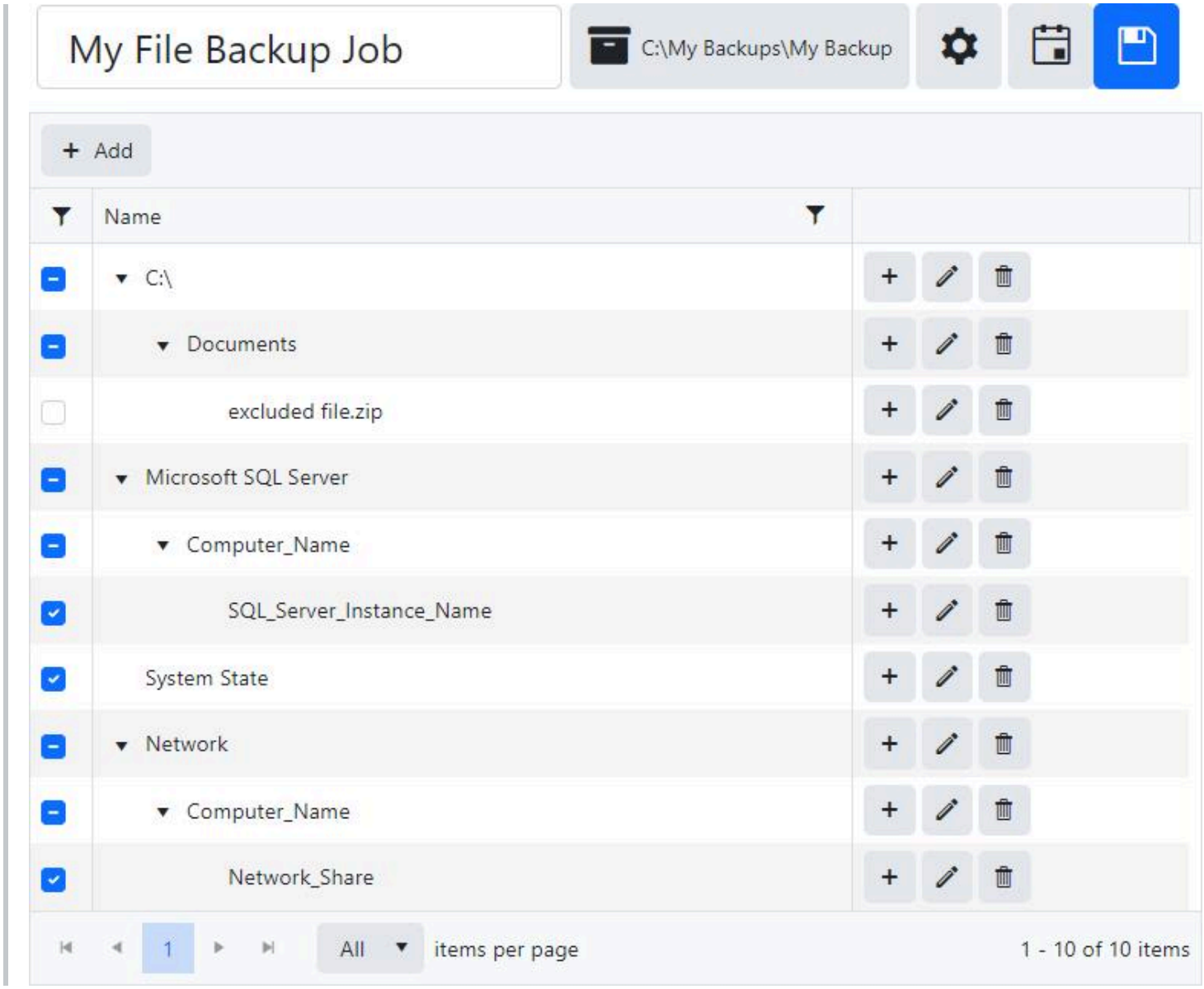
> **TIP**
> To remove stored credentials, run the following PowerShell command: ``` Remove-StoredCredential -Type Generic -Target $computerName ```

In order for the backup client service to be able to access the network resources during a backup, one or more of the following may be required:

1. Use a Network Device as the target destination of a backup job.
2. Save the network credentials in the Network Credentials settings of the job.
3. Configure the job to Run As an account with permissions to access the network resources.
4. Map the network path to a network drive.
5. Use a symbolic link to a network path.
6. Configure the backup client service to "Log On" and run as a different user account.

Disconnected agents

If the backup client agent is disconnected, unmanaged jobs can't be displayed.



Click on the `+ Add` button on the tree list tool bar to add a new item to the root.

Click on the `+` button on a tree list item to add a new child item.

New items added to the tree list are check-marked by default.

Click on the pencil icon to edit an item.

In edit mode, click on the cancel icon to cancel editing an item.

Click on the trash can icon to delete an item.

The Name field is required and must be unique on the same hierarchical level.

By default, the data is not sorted and has a page size of 10 records.

The tree list's column headers can be used to sort and filter the data, and column separators to resize the columns.

PERMISSIONS

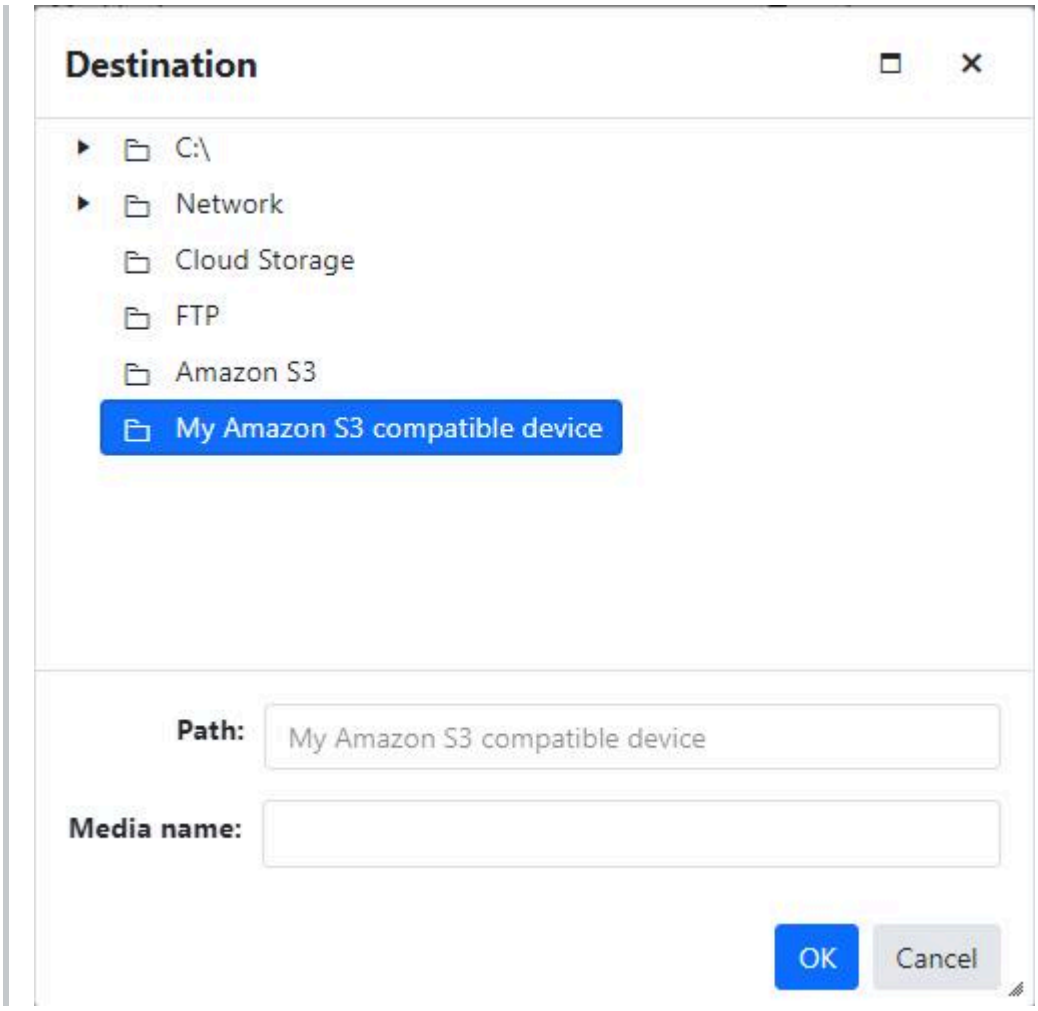
One of the following permissions are required:

View Jobs and Job History

View Jobs Logs

Edit Jobs

Destination



The `Path` is required and has a maximum length of 256 characters.

The device specified in the `Path` must already exist on the agent.

The `Media Name` is required and has a maximum length of 100 characters.

If a cloud storage, Amazon S3, or generic S3 device is selected or entered in the `Path` field, the `Media Name` field is disabled and must be empty.

When applicable, the value in the `Media Name` field must be valid windows file name and is used as the prefix of the file name of the backup file with the `nbd` file extension.

When applicable, the `Path` field must be a valid windows or network path.

The `Destination` window can be resized by using the resizing handle on the bottom right corner.

The `Destination` window can be maximized by clicking on the `maximize window` icon in the window's title bar.

Clicking on the `Cancel` or `x` buttons will close the window and not save any changes.

Path format

Device type	Path format
Local (Deprecated)	`<Drive Letter>:\<Folder Path>`
Universal Naming Convention (UNC) network path (Deprecated)	`Network\<Server Address>\<Share Name>`
Network (Deprecated)	`<Network Device Name>\\<Server Address>\<Share Name>`
Cloud storage, Local or network storage device, Amazon S3, or Amazon S3 compatible device	`<Device Name>`

Unmanaged jobs

Unmanaged jobs can't be modified so the `OK` button is disabled.

Managed jobs

The `OK` button is disabled for users without permissions to edit jobs.

Connected agents

By default, the tree displays all root backup targets available for the backup job.

The available targets are displayed based on the agent's backup client license and configured devices.

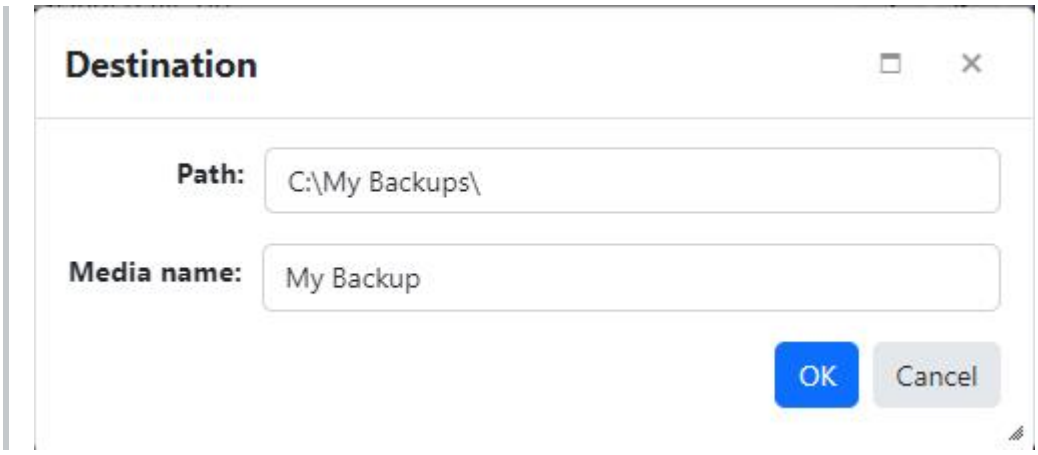
Files are not displayed in the tree.

By default, the tree displays folders first, then followed by plug-in folders.

Clicking on an item in the tree updates the `Path` field.

Disconnected agents

If the backup client agent is disconnected, the tree is not displayed and the `Path` has to be entered manually.



Related Topics

Network
Network Credentials

PERMISSIONS

One of the following permissions are required:

View Jobs and Job History

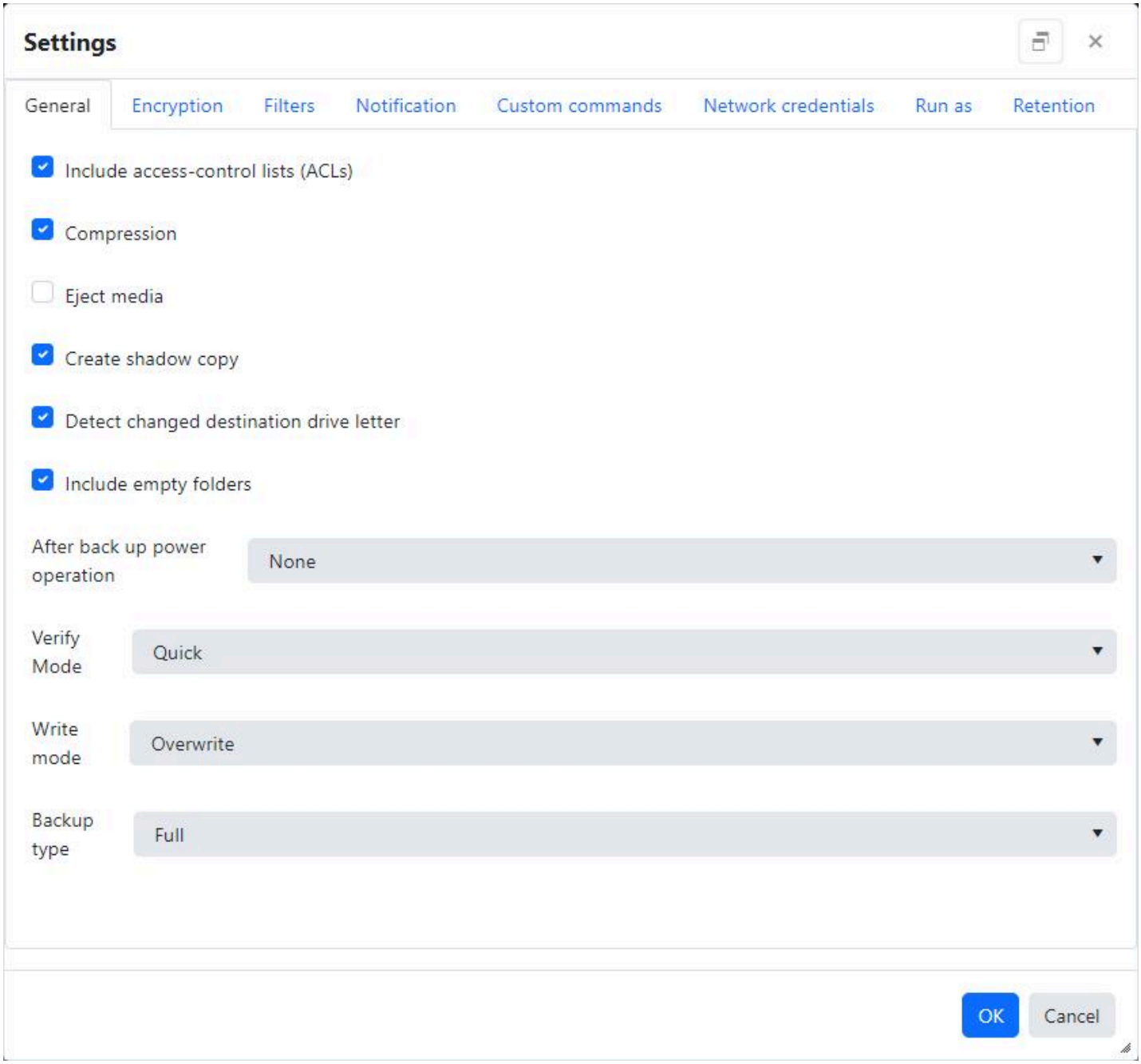
View Jobs Logs

Edit Jobs

Settings

The input fields and the `OK` button are disabled for users without permissions to edit jobs and for unmanaged jobs.

General



Include access-control lists (ACLs)

Check-mark this check box to include access-control lists (ACLs) for files and folders selected during a back up.

ACLs contain the user and group permissions for files and folders.

It's recommended to back up ACLs to maintain the same security configuration if the files and folders are restored.

Device	Supported	Required
Amazon S3 (Deprecated)	✔	
Amazon S3 compatible	✔	✔
Local (Deprecated)	✔	
Local storage	✘	
Network (Deprecated)	✔	
NovaBACKUP Cloud	✔	
Optical disk drive	✔	
Tape drive	✔	
USB drive	✔	

Compress backup

Check-mark this check box to enable compressing the data selected during a back up.

Compressing the data usually saves space on the target destination, increases backup transfer speeds, and saves bandwidth.

Device	Supported	Required
Amazon S3 (Deprecated)	✔	
Amazon S3 compatible	✘	
Local (Deprecated)	✔	
Local storage	✘	
Network (Deprecated)	✔	
NovaBACKUP Cloud	✔	✔

Device	Supported	Required
Optical disk drive	✔	
Tape drive	✔	
USB drive	✔	

Eject Media

Check-mark this check box to automatically eject the media after a backup has completed.

The device must support the ability to eject media.

Device	Supported
Optical disk drive	✔
Tape drive	✔
USB drive	✔

Create shadow copy

Check-mark this check box to automatically backup open files on the local system using Volume Shadow Copy Service (VSS).

Device	Supported	Required
Amazon S3 (Deprecated)	✔	
Amazon S3 compatible	✔	
Local (Deprecated)	✔	
Local storage	✔	✔
Network (Deprecated)	✔	
NovaBACKUP Cloud	✔	
Optical disk drive	✔	
Tape drive	✔	

Device	Supported	Required
USB drive	✔	

Detect changed destination drive letter

Check-mark this check box to automatically select the correct removable disk device (USB) even when it's drive letter changes.

Device	Supported
Local (Deprecated)	✔
Optical disk drive	✔
Tape drive	✔
USB drive	✔

Include empty folders

Check-mark this check box to backup empty folders.

Device	Supported	Required
Amazon S3 (Deprecated)	✔	
Amazon S3 compatible	✘	
Local (Deprecated)	✔	
Local storage	✔	✔
Network (Deprecated)	✔	
NovaBACKUP Cloud	✘	
Optical disk drive	✔	
Tape drive	✔	
USB drive	✔	

After back up power operation

Select an option from the `After back up power operation` drop down to allow the action to perform after the backup job completes.

Value	Description
None	Nothing will occur after the backup job completes.
Shutdown	Shutdown the computer when the backup job completes.
Restart	Restart the computer when the backup job completes.

Verify Mode

Select an option from the `Verify Mode` drop down to allow the backup verify after completion.

Value	Description
None	Do not perform any verification.
Quick	Perform fast verification of media indexes only.
Advanced	Perform full comparison of the backup file to the original file.

Device	Supported	Required
Amazon S3 (Deprecated)	✔	
Amazon S3 compatible	✔	Quick
Local (Deprecated)	✔	
Local storage	✔	Quick
Network (Deprecated)	✔	
NovaBACKUP Cloud	✘	
Optical disk drive	✔	
Tape drive	✔	
USB drive	✔	

Write mode

Select an option from the `Write mode` drop down to set the backup write mode.

Value	Description
Append	Appends to recognized media. Automatically formats blank or unrecognized media.
Overwrite	Overwrites all recognized media. Automatically formats blank or unrecognized media.

Device	Supported	Required
Amazon S3 (Deprecated)	✔	Overwrite
Amazon S3 compatible	✔	Append
Local (Deprecated)	✔	
Local storage	✔	Append
Network (Deprecated)	✔	
NovaBACKUP Cloud	✔	Append
Optical disk drive	✔	
Tape drive	✔	
USB drive	✔	

Backup type

Select an option from the `Backup type` drop down to set the backup mode.

Value	Description
Full	Creates a full backup
Incremental	Creates a backup containing only the incremental changes since the last backup
Differential	Creates a backup containing on the the differential changes since the last full backup
Snapshot	Creates a full backup without setting the `Archive` attribute on files

Device	Supported
Local storage	❌

Encryption

Encryption type

Select an option from the `Encryption type` drop down to set the encryption type.

`Encryption type` must match the device's encryption type when the target destination is a cloud storage device.

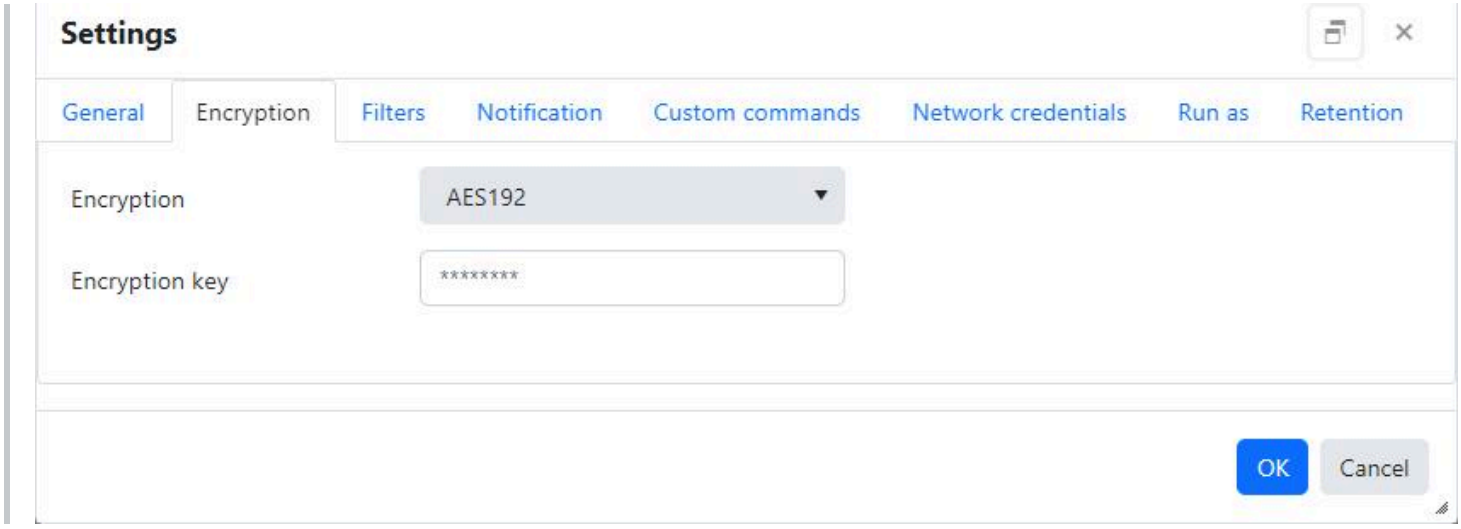
Value	Description
None	No encryption
Blowfish	Blowfish encryption
AES128	AES-128 encryption
AES192	AES-192 encryption
AES256	AES-256 encryption

Device	Supported
Amazon S3 compatible	❌

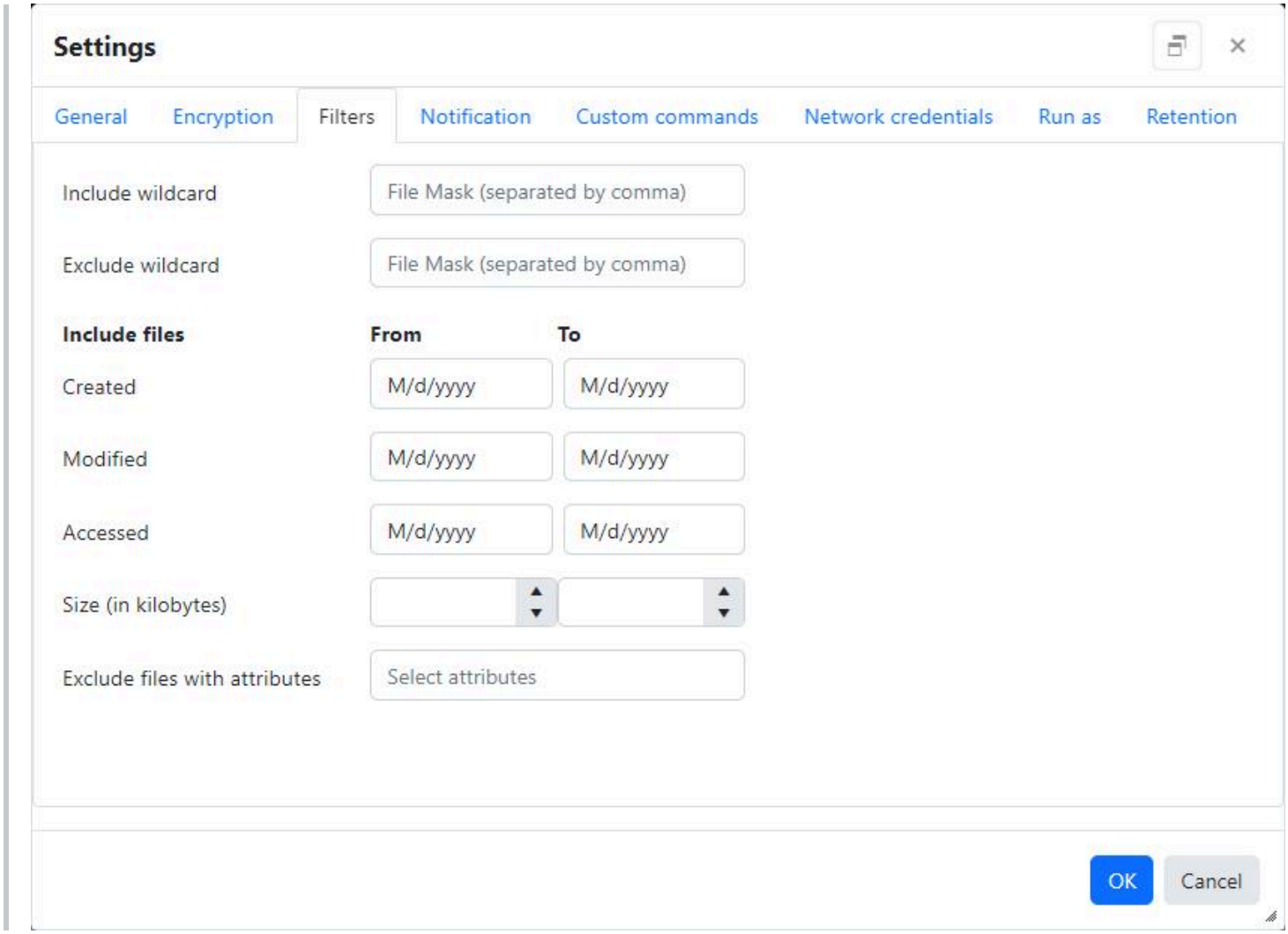
Encryption key

The `Encryption key` is your personal encryption key. The `Encryption key` you enter must be between 8 to 20 characters long.

Device	Supported
NovaBACKUP Cloud	❌


Settings
General
Encryption
Filters
Notification
Custom commands
Network credentials
Run as
Retention
Encryption
AES192
Encryption key
****
OK
Cancel

Filters


Settings
General
Encryption
Filters
Notification
Custom commands
Network credentials
Run as
Retention
Include wildcard
File Mask (separated by comma)
Exclude wildcard
File Mask (separated by comma)
Include files
From
To
Created
M/d/yyyy
M/d/yyyy
Modified
M/d/yyyy
M/d/yyyy
Accessed
M/d/yyyy
M/d/yyyy
Size (in kilobytes)
Exclude files with attributes
Select attributes
OK
Cancel

Device	Supported
Amazon S3 compatible	❌

Include files

Wildcard file masks with comma separated (e.g. *.doc) can be used to filter the files to be included for backup.

The length must be 3072 characters or fewer.

Exclude files

Wildcard file masks with comma separated (e.g. *.exe) can be used to filter the files to be excluded for backup.

The length must be 3072 characters or fewer.

Include files created from

Includes files whose created date starts from this date.

The date and time must be set at a minimum from 1970 to the maximum 2038-1-18 11:59:59 PM, in UTC.

'From' date must be less than the 'To' date.

Include files created to

Includes files whose created date ends with this date.

The date and time must be set at a minimum from 1970 to the maximum 2038-1-18 11:59:59 PM, in UTC.

'To' date must be greater than the 'From' date.

Include files modified from

Includes files whose modified date starts from this date.

The date and time must be set at a minimum from 1970 to the maximum 2038-1-18 11:59:59 PM, in UTC.

'From' date must be less than the 'To' date.

Include files modified to

Includes files whose modified date ends with this date.

The date and time must be set at a minimum from 1970 to the maximum 2038-1-18 11:59:59 PM, in UTC.

'To' date must be greater than the 'From' date.

Include files accessed from

Includes files whose accessed date starts from this date.

The date and time must be set at a minimum from 1970 to the maximum 2038-1-18 11:59:59 PM, in UTC.

'From' date must be less than the 'To' date.

Include files accessed to

Includes files whose accessed date ends with this date.

The date and time must be set at a minimum from 1970 to the maximum 2038-1-18 11:59:59 PM, in UTC.

'To' date must be greater than the 'From' date.

Include files minimum size in kilobytes

Includes files with the given minimum size in kilobytes.

The file size must be set at a minimum from 0 to the maximum 9007199254740991.998046875 KBs.
Value must have a maximum of 28 decimal places.

Minimum Size must be less than or equal to the Maximum Size.

Include files maximum size in kilobytes

Includes files with the given maximum size in kilobytes.

The file size must be set at a minimum from 0 to the maximum 9007199254740991.998046875 KBs.
Value must have a maximum of 28 decimal places.

Maximum Size must be greater than or equal to the Minimum Size.

Exclude files with attributes

Excludes the files with selected attributes.

Notification

Settings

General | Encryption | Filters | Notification | Custom commands | Network credentials | Run as | Retention

☑ Send e-mail notifications

Email Server Type: Custom Email Server

To

noreply@novabackup.com

Separate multiple email addresses with a semicolon (;).

Cc

noreply@novabackup.com

Separate multiple email addresses with a semicolon (;).

Subject

My Email Subject

☑ Attach Log Files

Sender Name

Sender name

Sender Email Address

noreply@novabackup.com

Server Address

localhost

Server Port

25

☑ Enable SSL

☑ Enable Authentication

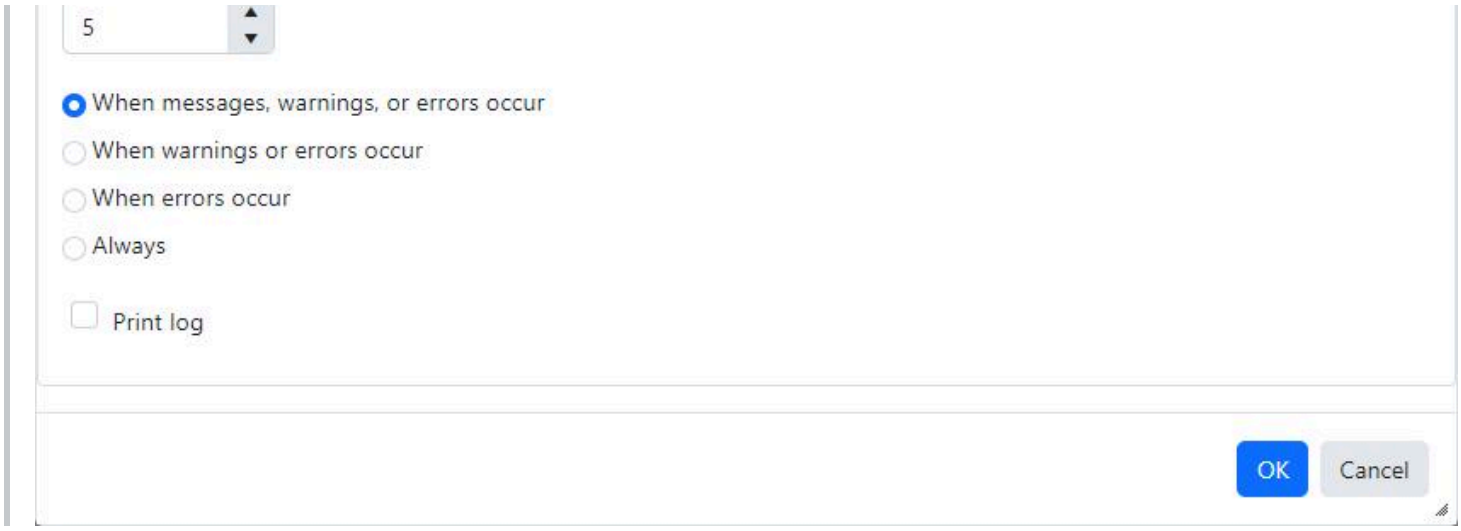
User name: admin

Password: **********

Retry Count

1

TimeOut(Seconds)



Print log

Check-mark this check box to automatically print the log to the agent's default printer.

Send e-mail notifications

Check-mark this check box to enable email notifications for the backup job.

Email Server Type

Select an option from the `Email Server Type` drop down to set the email server type.

Value	Description
NovaBACKUP Email Server	A pre-configured email notification service.
Custom Email Server	Configurable SMTP server settings.

To

The recipient e-mail address is required to send notifications when email notification is enabled.

Separate multiple email addresses by a semicolon.

The length of recipient e-mail address must be less than or up to 128 characters.

CC

The carbon copied email recipients.

Separate multiple email addresses by a semicolon.

The length of e-mail address must be less than or up to 128 characters.

Subject

The email subject.

The length of subject must be less than or up to 30000 characters.

Attach log file

Check-mark this check box to attach the log to the email.

Sender Name

The name of the email sender.

The sender name is required for server type custom SMTP.

The length of sender name must be less than or up to 50 characters.

Sender Email Address

The email sender address.

The sender email address is required for server type custom SMTP.

The length of sender email address must be less than or up to 128 characters.

Server Address

The email server address.

The email server address is required for server type custom SMTP.

The length of email server address must be less than or up to 50 characters.

Server Port

The email server port.

The email server port is required for server type custom SMTP.

The email server port value must be between 1 and 65535.

Enable SSL

Check-mark this check box indicating whether SSL is used.

The SSL is enabled when server type is custom SMTP.

Enable Authentication

Check-mark this check box to enable email authentication.

User Name

User name for enable authentication.

Length of `UserName` must be less than or up to 50 characters.

Password

Password for enable authentication.

Length of `Password` must be less than or up to 256 characters.

Retry Count

The maximum number of times to retry sending the email on failure.

The retry count value must be between 1 and 5.

TimeoutSeconds

The number of seconds to wait before the request times out.

The timeout seconds value must be between 1 and 30.

Condition

The 'Condition' is enabled either check-marked print log or send email notification check box.

Select an option from the `Condition` option to set the notification condition.

Value	Description
WhenLogContainsMessagesOrWarningsOrErrors	When log contains messages, warnings, or errors.
WhenLogContainsWarningsOrErrors	When log contains warnings or errors.
WhenLogContainsErrors	When log contains errors.
Always	Always.

Custom commands

Run before backup

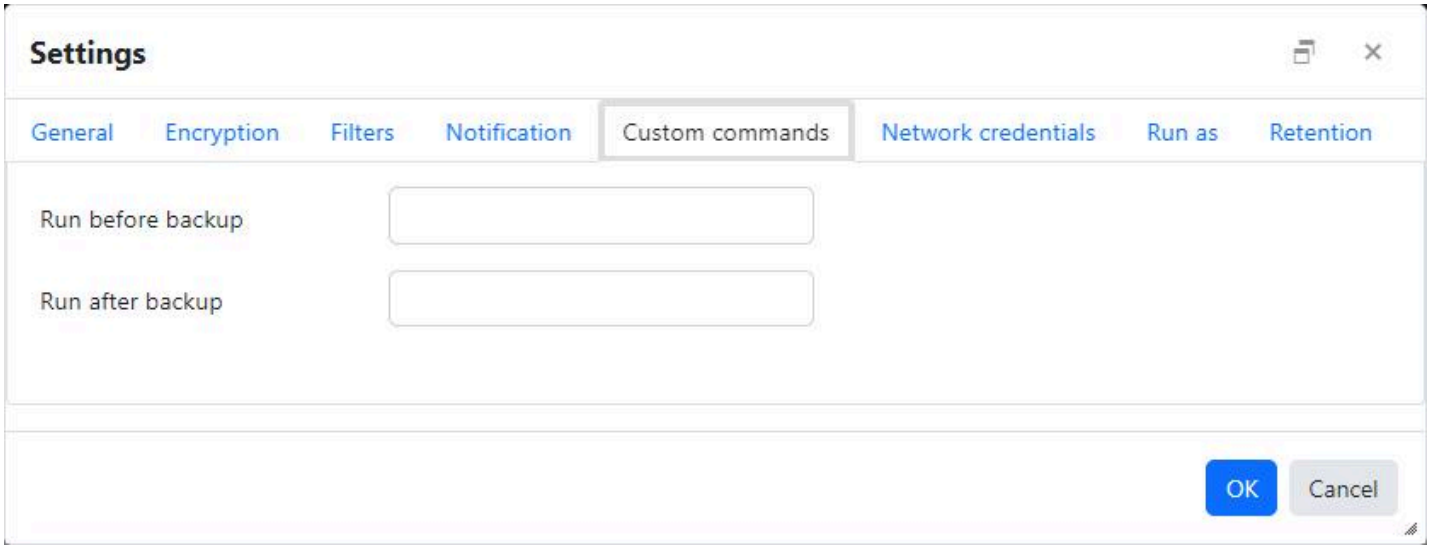
Enter the command or program you want to execute before a backup operation.

The length of `Run before backup` must be less than or up to 256 characters.

Run after backup

Enter the command or program you want to execute after a backup operation.

The length of `Run after backup` must be less than or up to 256 characters.



Network credentials

Device	Supported
Local storage	❌

User name

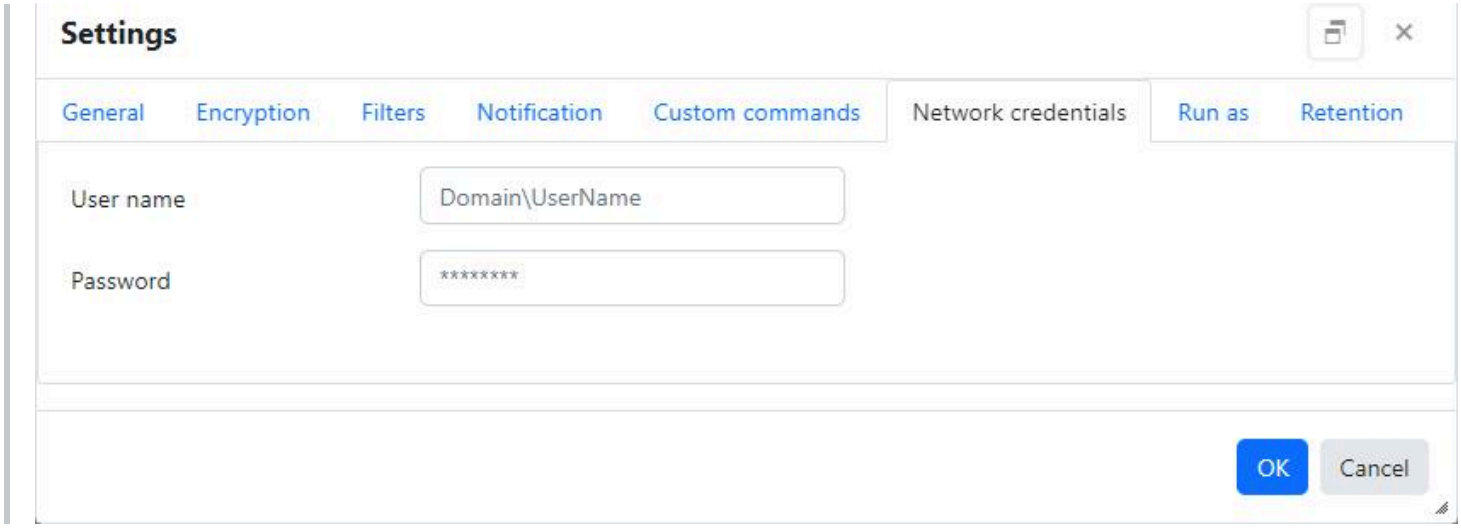
User name for connecting to network location such as NAS device or network share with a specific username and password. User name can be given in `domain\username` format.

Length of `domain` and `username` must be less than or up to 50 characters each.

Password

Password for connecting to network location such as NAS device or network share with a specific username and password.

Length of `Password` must be less than or up to 256 characters.



Run as

Run as type

Select `Run as type` from `Logged in user` and `Specific user` options.

User name

User name for run as a specific username and password. User name can be given in `domain\username` format.

Length of `domain` and `username` must be less than or up to 50 characters each.

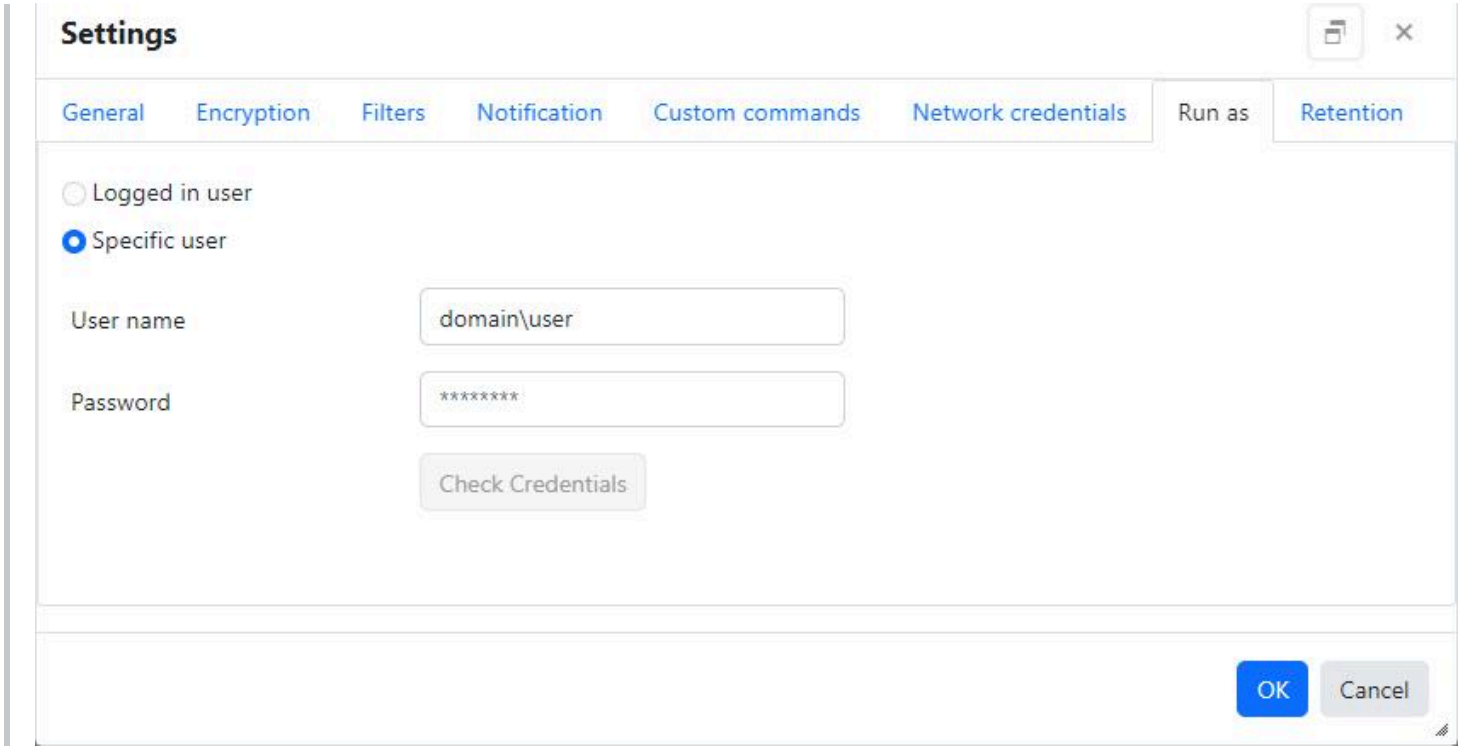
Password

Password for run as a specific username and password.

Length of `Password` must be less than or up to 256 characters.

Check credentials

Click `Check credentials` to verify the credentials.



Retention

Delete backups older than

Check-mark the check box `Delete backups older than` and select the maximum age of backups to keep.

When the `Delete backups older than` check box is first check-marked, the default retention period is 30 days.

Device	Supported
Amazon S3 (Deprecated)	❌
Amazon S3 compatible	✅
Local (Deprecated)	❌
Local storage	✅
Network (Deprecated)	❌
NovaBACKUP Cloud	❌
Optical disk drive	❌
Tape drive	❌

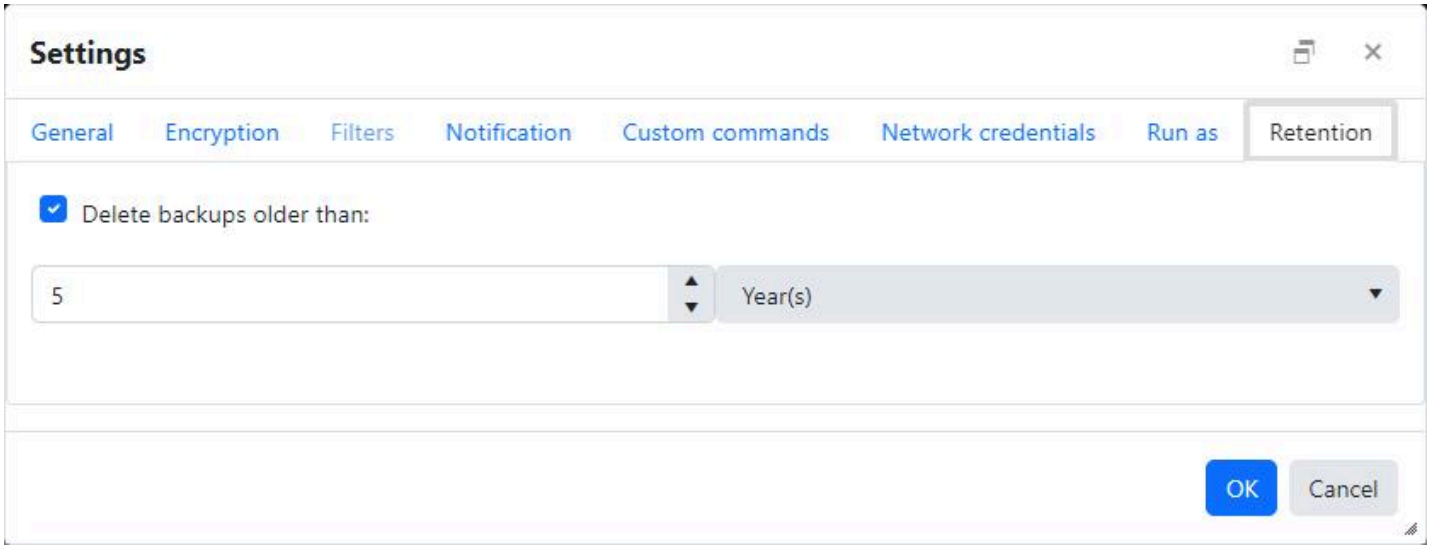
Device	Supported
USB drive	❌

Retention Period

The minimum retention period is `1` and the maximum is `99`.

Retention Period Type

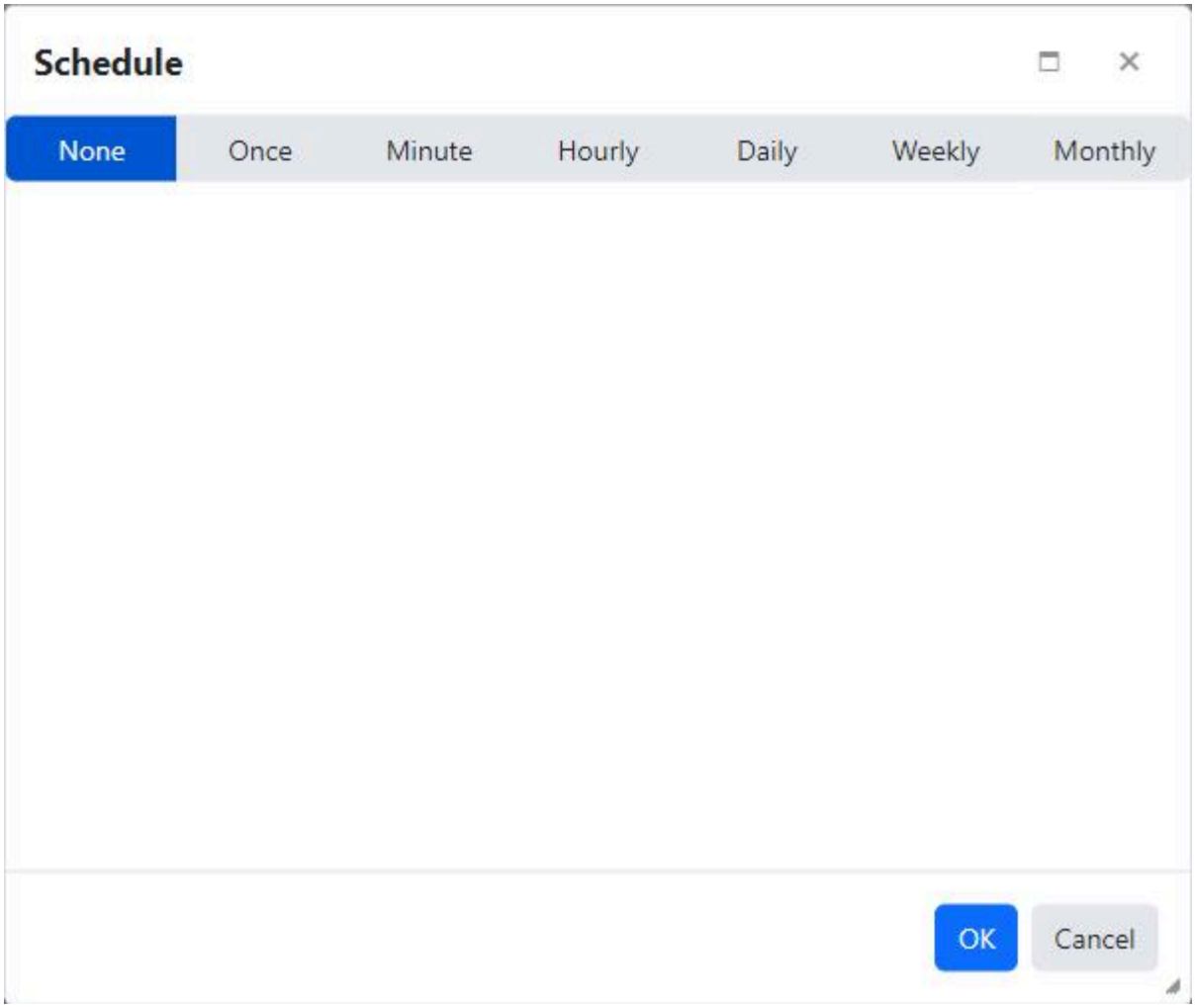
The retention period type must be `Day(s)`, `Month(s)`, or `Year(s)`.



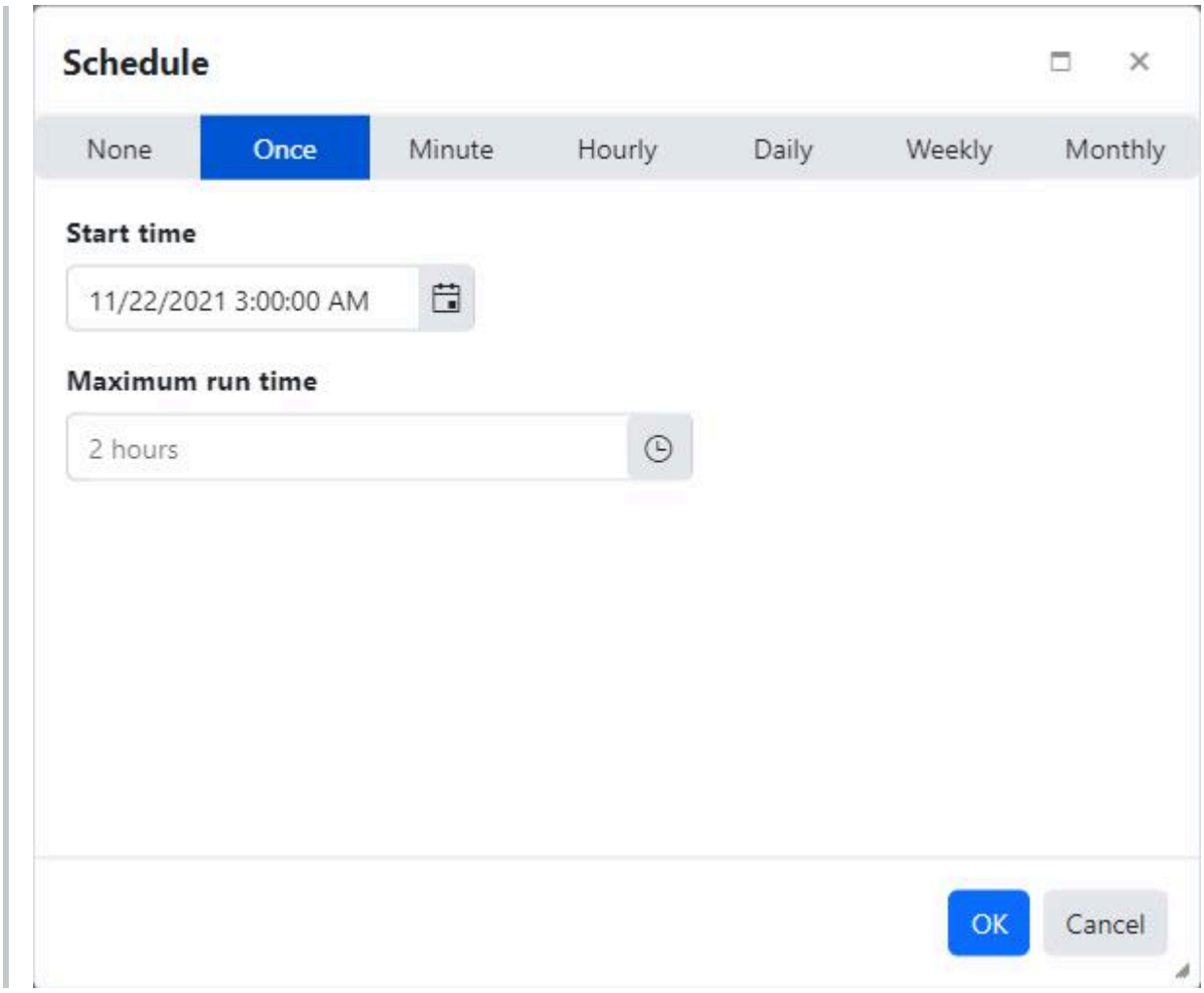
Schedule

The input fields and the `OK` button are disabled for users without permissions to edit jobs and for unmanaged jobs.

None



Once



Start time

The date and time the scheduled job will start.

The date and time must be set at a minimum from 1970 to the maximum 3001-1-18 11:59:59 PM, in UTC.

The date and time is displayed relative to the CMon user account's time zone and according to the pattern from their selected language.

Maximum run time

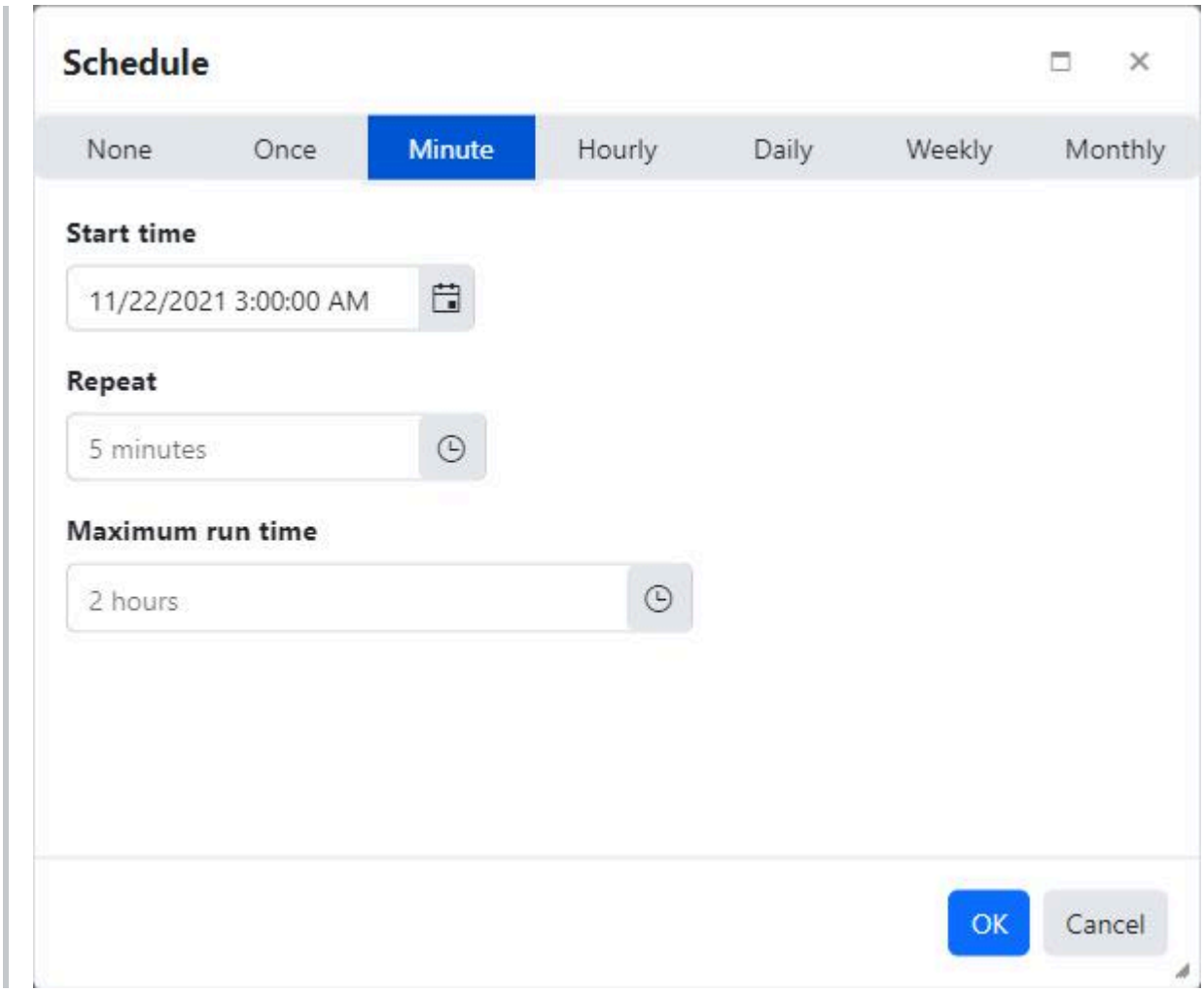
The maximum time the job must complete before it will be forced to stop.

The maximum run time must be less than 16 hours and 40 minutes.

An empty field indicates the job will not be limited to complete within a certain amount of time.

Setting the hours and minutes to 0 will clear the field.

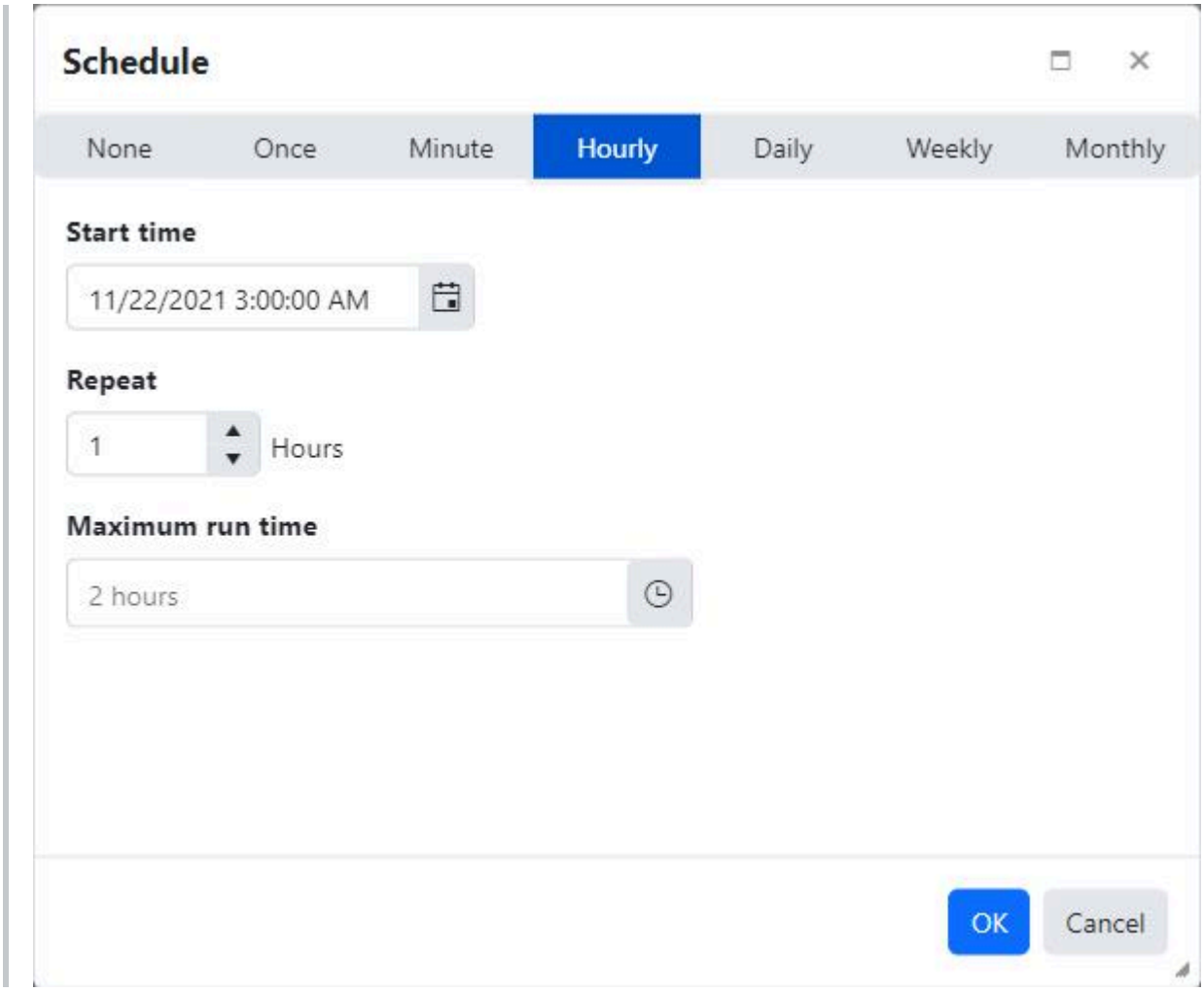
Minute



The repeat interval for the `Minutes` and `Seconds` fields must be between 0 and 59.

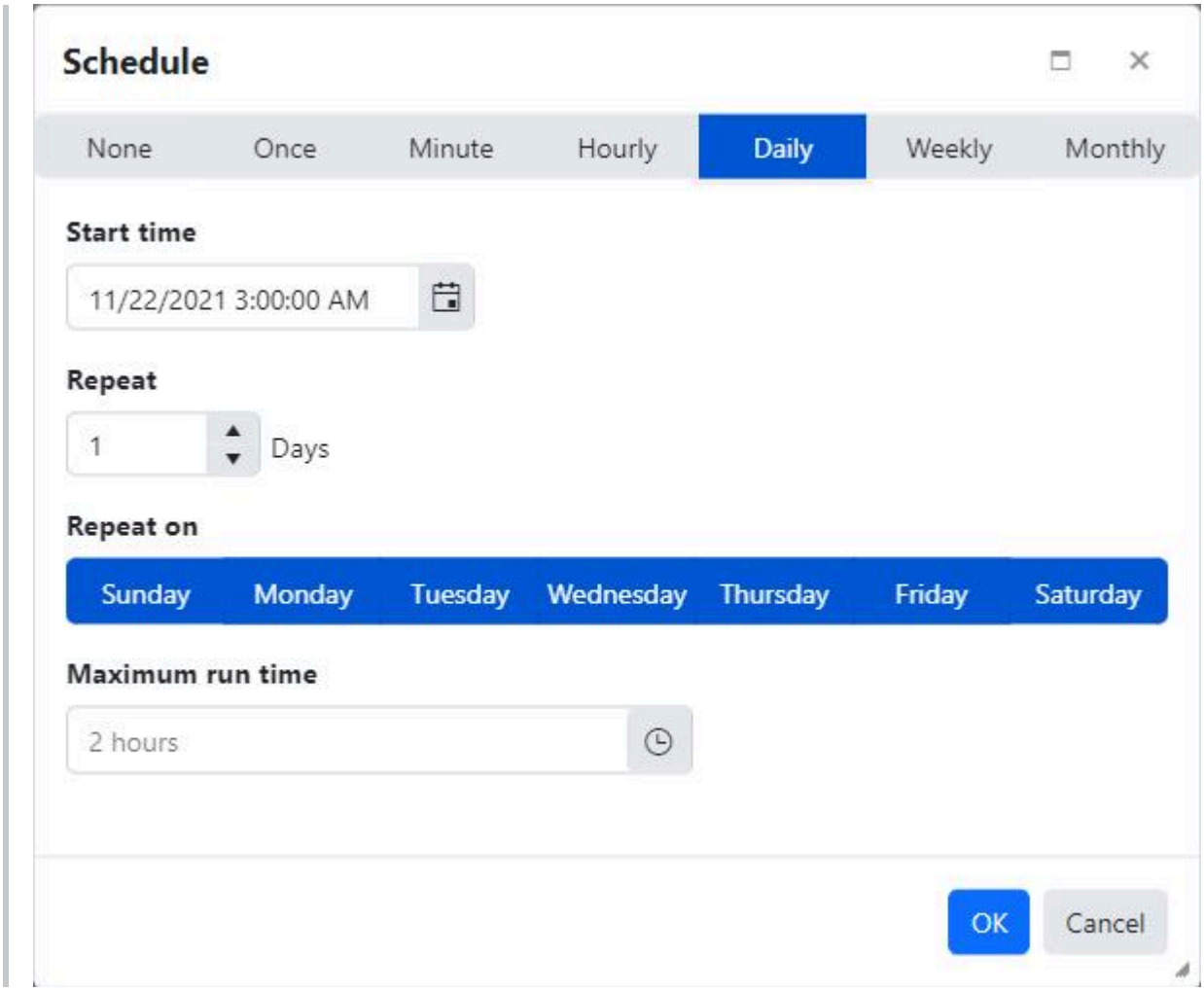
The `Minutes` and `Seconds` fields must not both be 0.

Hourly



The `Hours` field must be between 1 and 23.

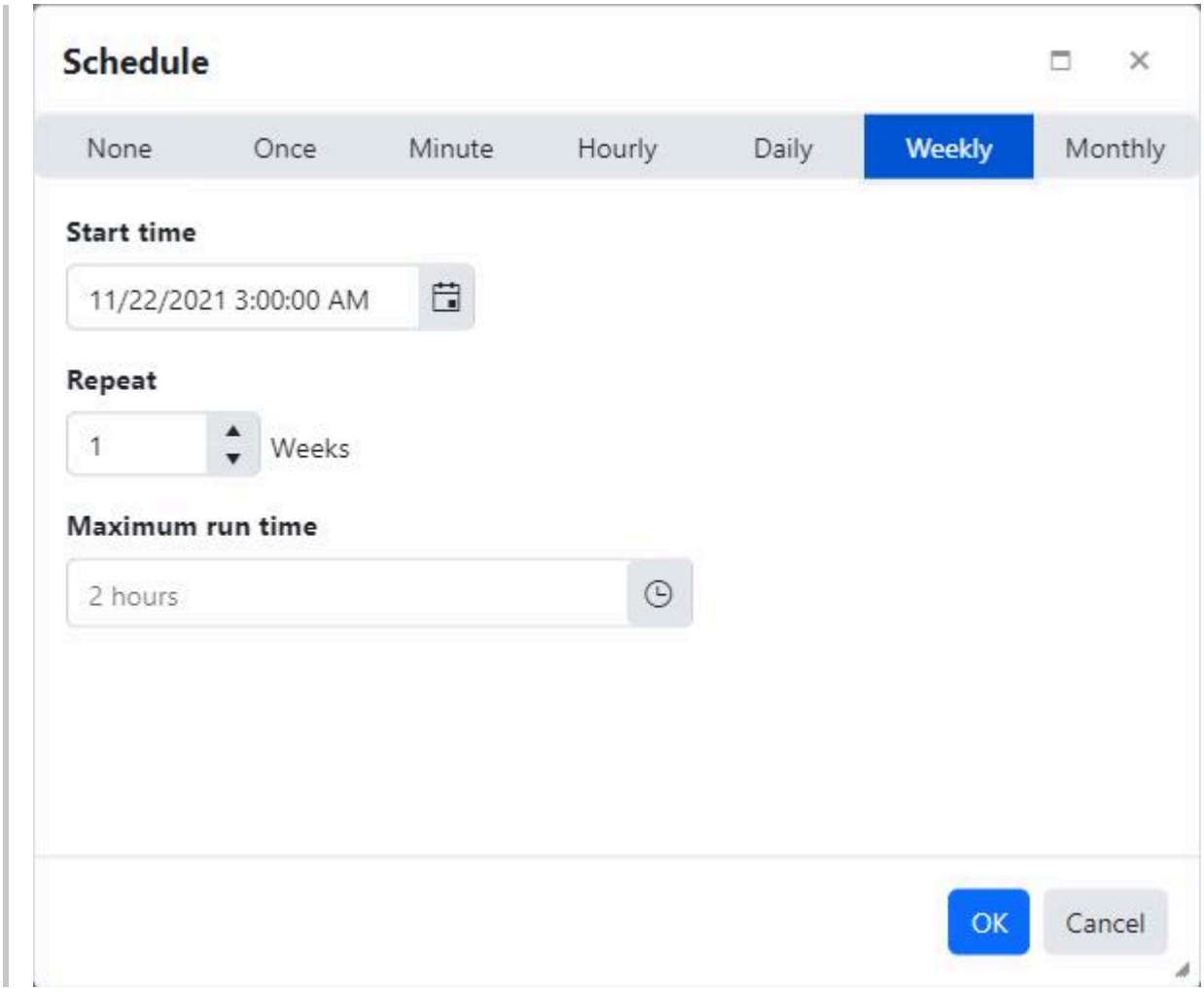
Daily



The `Days` field must be between 1 and 999.

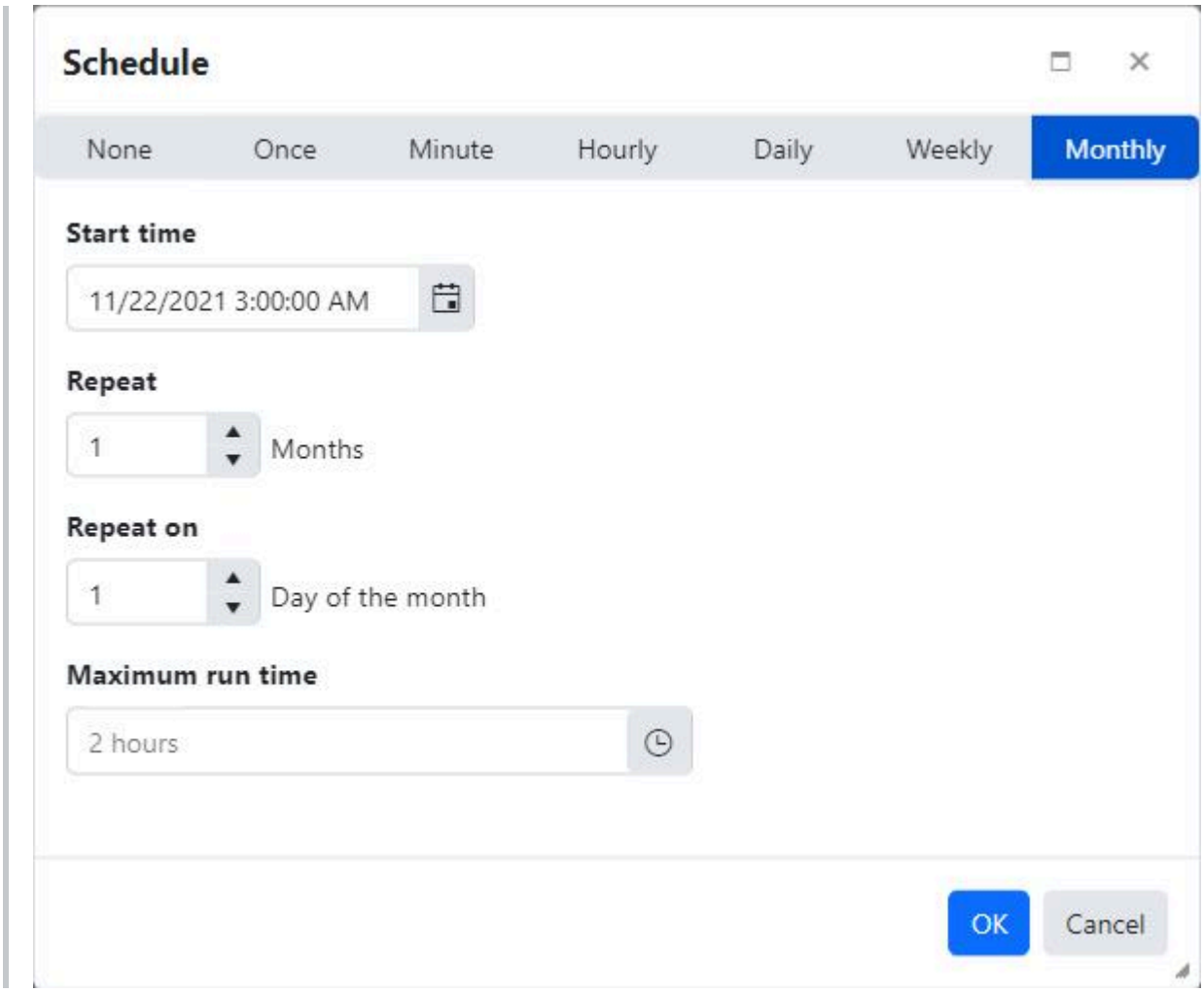
At least one day of the week must be selected.

Weekly



The `Weeks` field must be between 1 and 52.

Monthly



The `Months` field must be between 1 and 12.

The `Day of the month` field must be between 1 and 31.

License Details

The License tab displays the license information.

Agent Friendly Name

Agent | Devices | Jobs | Job History | Notes | License

Backup Client License Key	Backup client license key
Enabled	True
Expiration Date	
Deactivation Date	
Upgrade Expiration Date	
Maximum Number Of Activations	1
Storage Server Data Storage Quota	1 GB
Product Name	NovaBACKUP PC Agent
Copy	True
Backup	True
Magnetic Disk Devices	True
Optical Devices	True
Tape Devices	True
Internet Devices	True
NovaBACKUP Cloud Device	True
Network Devices	True
Removable Devices	True
Image	True
Virtual Machine	True
Local Backup	True
Microsoft Exchange	True
Microsoft SQL	True
Server Operating System	True
Virtual Machine Replication	True
Virtual Machine Single File Restore	True

Delete

The License tab is not displayed if the agent doesn't have a backup client license key.

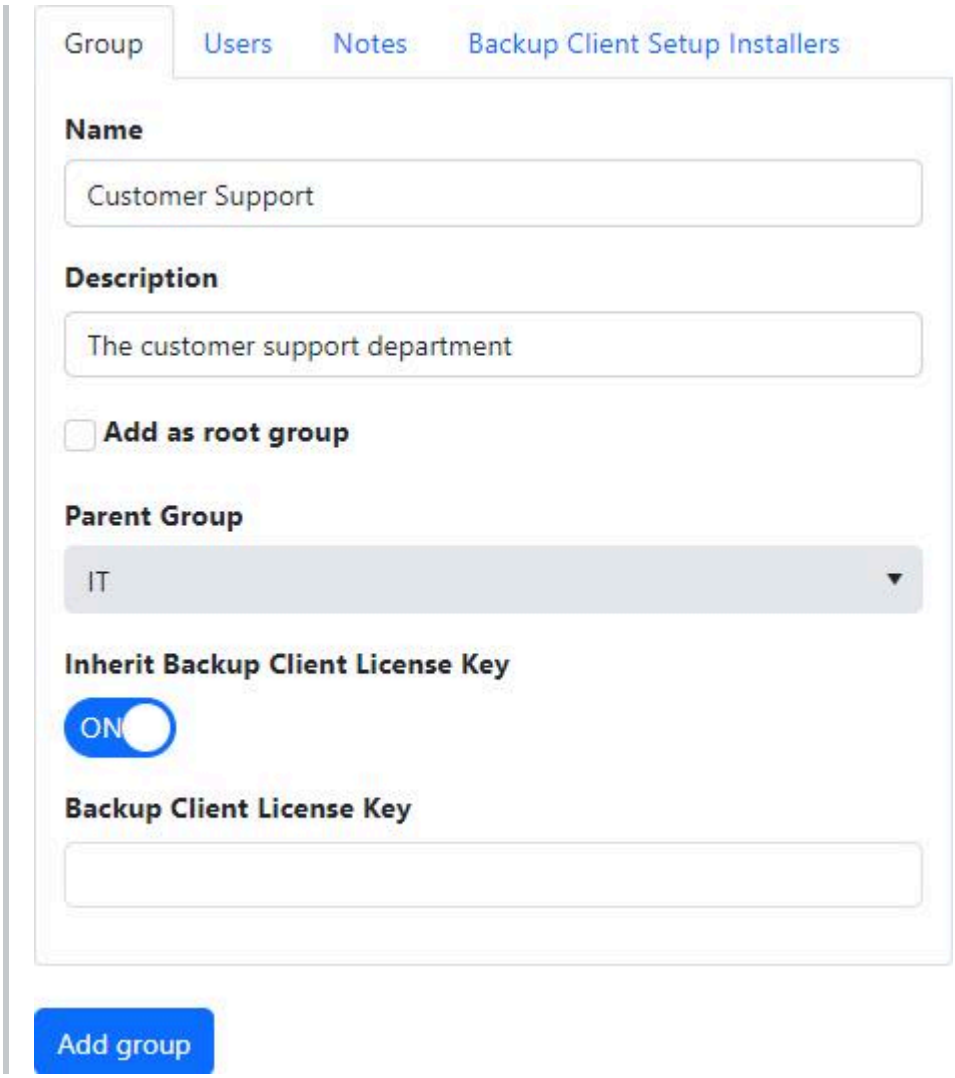
If the backup client license key is not available in the license server then a warning message is displayed.

Field Name	Description
Backup Client License Key	The backup client license key.
Enabled	Indicates whether or not the license is enabled.
Expiration Date	The expiration date.
Deactivation Date	The deactivation date.
Upgrade Expiration Date	The upgrade expiration date.
Maximum Number Of Activations	The maximum number of activations.
Storage Server Data Storage Quota	The maximum amount of storage available for cloud devices in gigabytes.
Product Name	The name of the product.
Copy	Indicates if this license can be used to create a copy job.
Backup	Indicates if this license can be used to create a backup job.
Magnetic Disk Devices	Indicates if this license can be used to back up to magnetic disk devices.
Optical Devices	Indicates if this license can be used to back up to optical devices.
Tape Devices	Indicates if this license can be used to back up to tape devices.
Internet Devices	Indicates if this license can be used to back up to internet devices.
NovaBACKUP Cloud Device	Indicates if this license can be used to back up to NovaBACKUP cloud devices.
Network Devices	Indicates if this license can be used to back up to network devices.
Removable Devices	Indicates if this license can be used to back up to removable devices.
Image	Indicates if this license can be used to create an image backup.

Field Name	Description
Virtual Machine	Indicates if this license can be used to back up virtual machines.
Local Backup	Indicates if this license can be used to back up to local devices.
Microsoft Exchange	Indicates if this license can be used to back up Microsoft Exchange Servers.
Microsoft SQL	Indicates if this license can be used to back up Microsoft SQL Servers.
Server Operating System	Indicates whether this license can be used on a server operating system.
Virtual Machine Replication	Indicates whether this license can be used to create a virtual machine replication job.
Virtual Machine Single File Restore	Indicates whether this license can be used to create a virtual machine backup job which can be used to restore individual files from the backup.

Create a group

The `Create group` page is used to add a new group.



Group

Group name

- Required
- Must be less than or equal to 64 characters
- Must be unique by parent group

Description

- Must be less than or equal to 50 characters

Add as root group

- This check box is displayed only when the user has permissions to access all groups.

- Check-mark this check box to create a root group.

Parent Group

This field is displayed when "Add as root group" is check-marked, or the logged in user doesn't have permission to access all groups.

- Only the groups the user is authorized to manage are listed.
- A parent group is required if the user doesn't have permissions to access all groups.

Inherit backup client license key

- Indicates whether or not the backup client license key is inherited from its parent group.

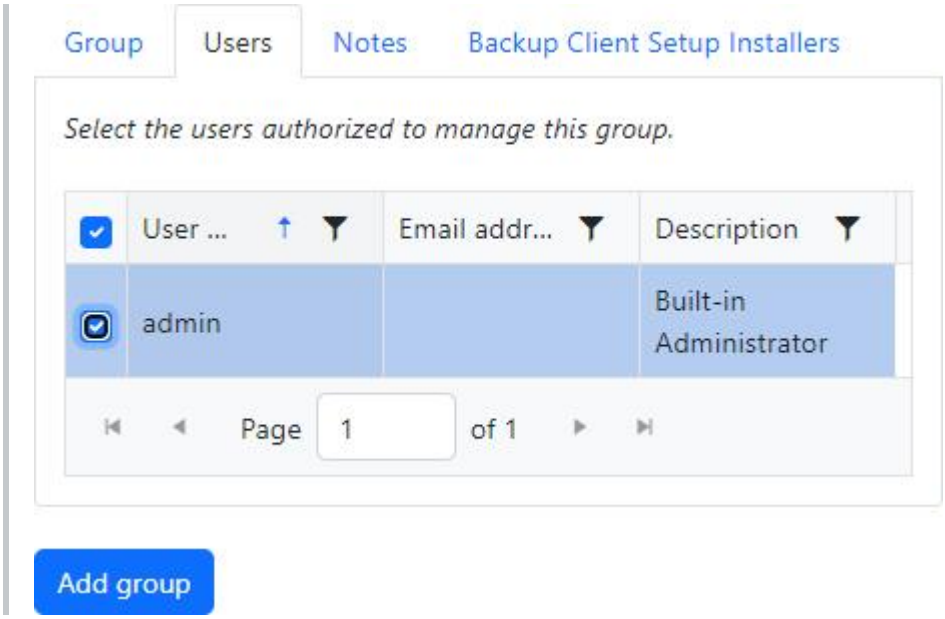
Backup client license key

- The license key of the backup client. The backup client must be greater than version 14.0 in order for the license key to be updated.
- Backup Client License Key is read-only if backup client license key is inherited.

Users

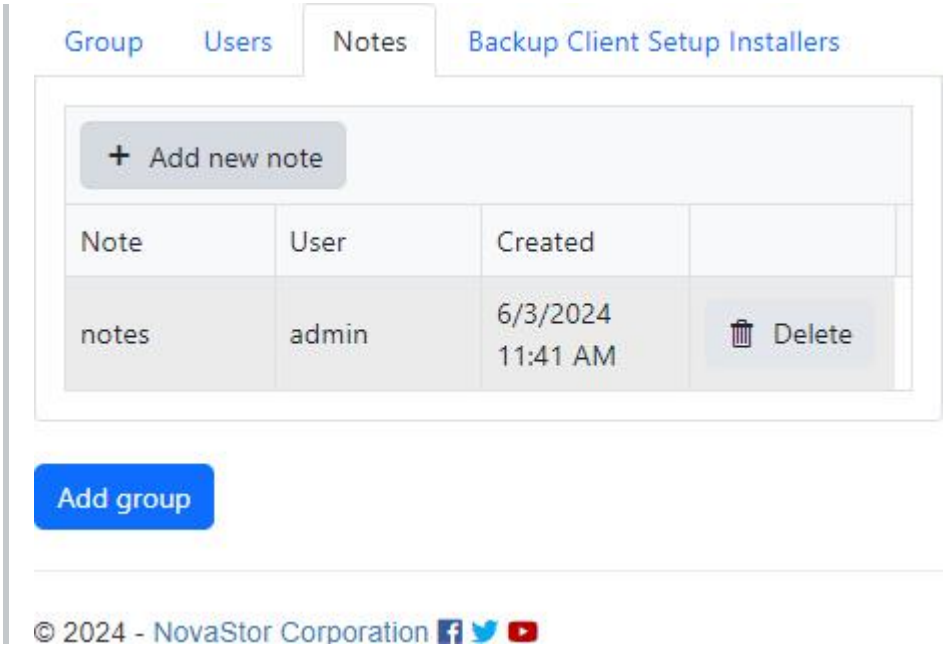
The Users tab is enabled only when the logged in user has permissions to Edit Users.

Select the users authorized to manage this group.



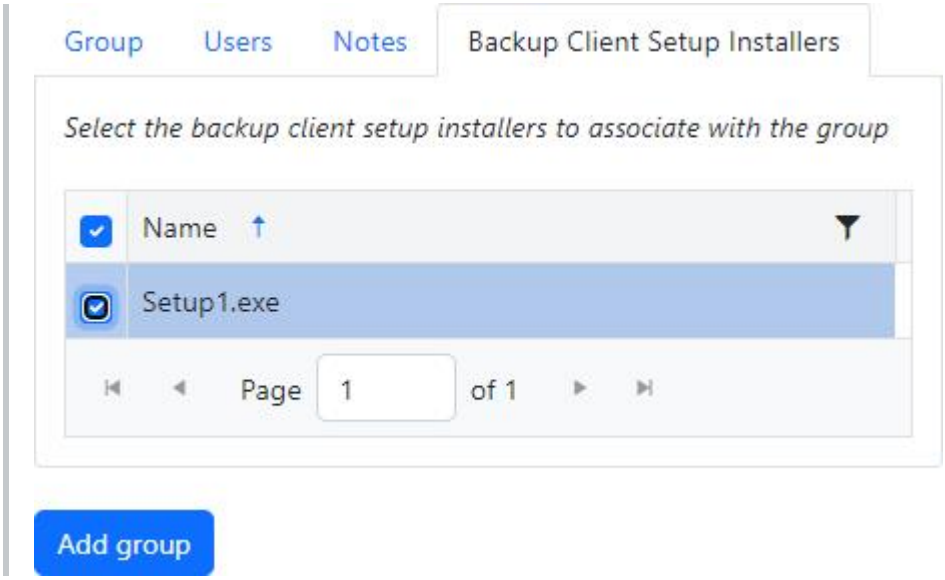
Notes

Create notes to associate with the group.



Backup Client Setup Installers

Select the backup client setup installers to associate with the group.



Add group

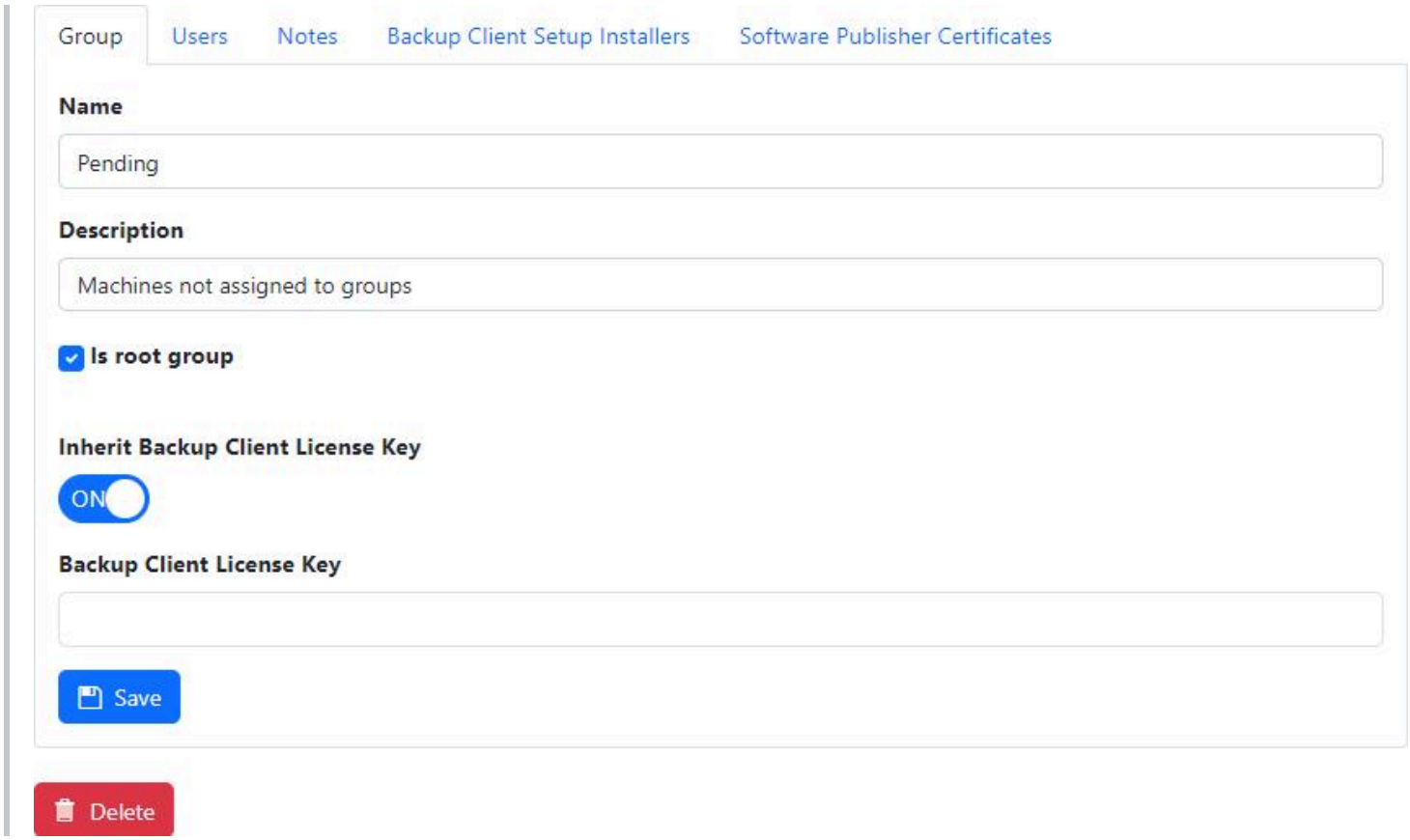
Click the "Add group" button to create the group.

PERMISSIONS REQUIRED

Edit Groups

View details for a group

The `Group details` page is used to display the details of a group.



The `Edit` and `Delete` buttons are enabled for users with `Edit Groups` permission.

Group

The following fields are editable if user has `Edit Groups` or `Access All Groups` permission:

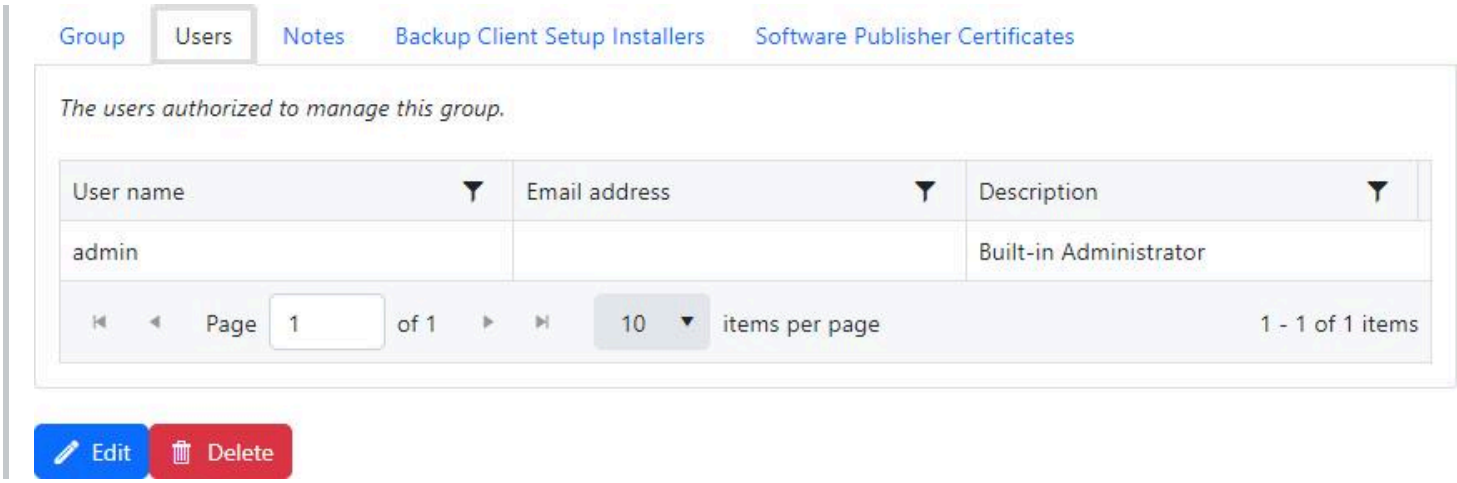
- Group name
- Description
- Parent Group
- Is root group
- Inherit Backup Client License Key
- Backup Client License Key is read-only if backup client license key is inherited.

Agents will inherit their backup client license keys by default.

Users

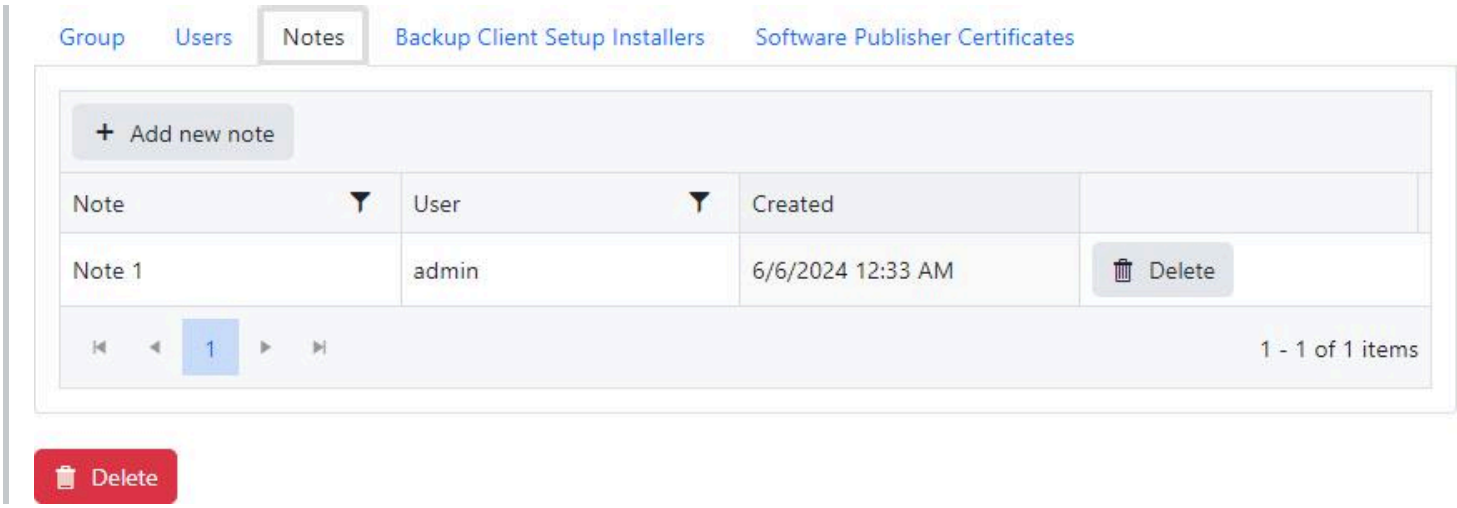
The `Users` tab displays the users associated with the group.

The `Users` tab is only enabled for users with `View Users` permission.



Notes

The `Notes` tab displays the notes associated with the group and can be used to create and delete notes.

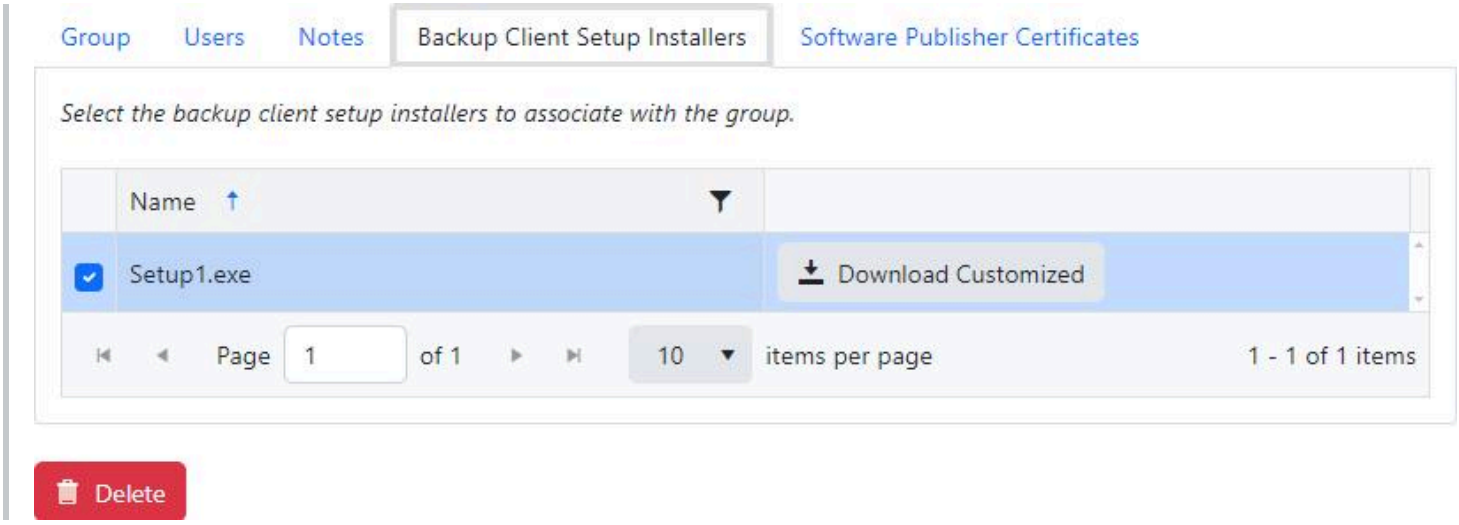


Backup Client Setup Installers

The `Backup Client Setup Installers` tab displays the backup client setup installers associated with the group and can be used to modify the associations.

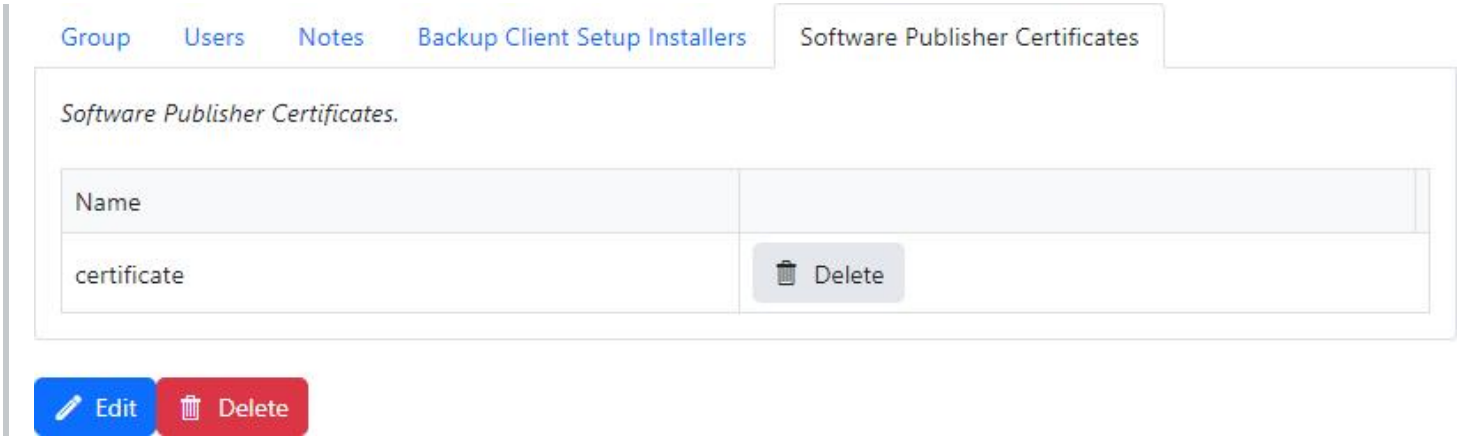
Click on the `Download Customized` button to download the backup client setup installer customized as follows:

- The backup client agent will automatically connect to the default `Management Server URL`, as configured during the CMon installation.
- The backup client agent will automatically connect to the current group.
- The backup client setup installer will be signed with the software publisher certificate associated with the current group, if one is configured.

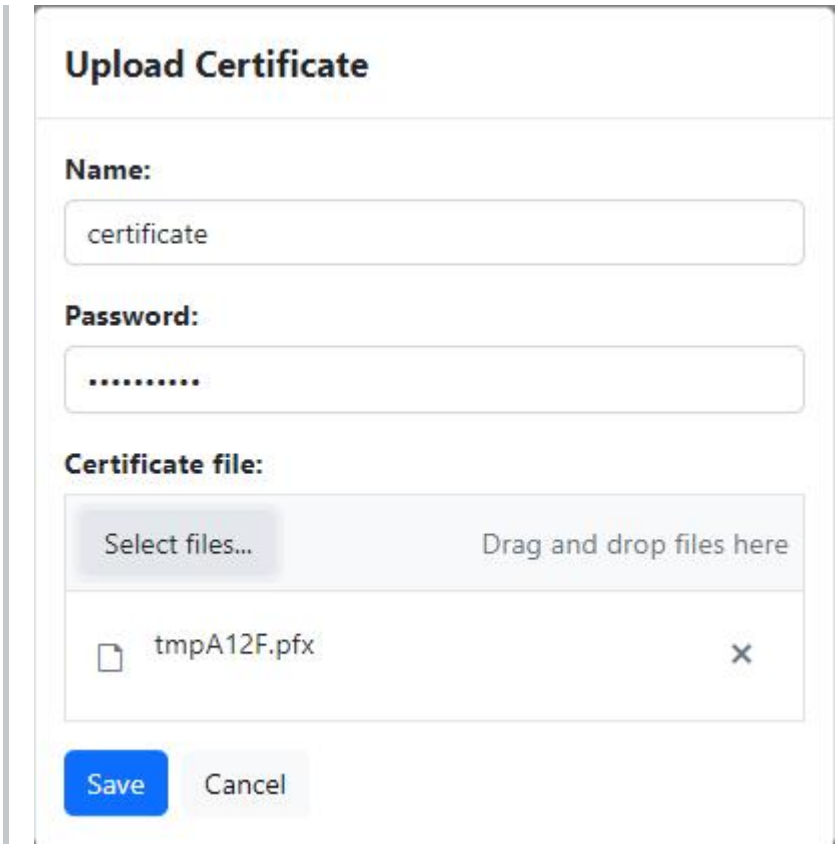


Software Publisher Certificates

The `Software Publisher Certificates` tab displays the software publisher certificates associated with the group and can be used to upload or delete the certificate.



Upload a certificate



Name

- Required
- Must be less than or equal to 256 characters

Password

- Optional
- Must be less than or equal to 256 characters

Certificate File

- Required
- Extension must be 'pfx'
- Must be usable to digitally sign files
- Size must be less than or equal to 15 MB
- Must be a valid certificate, and include the private key

One of the following permissions is required:

View Agents and Groups

Access All Groups

Log Viewer

Log Viewer via the Dashboard example (1 of 2):

Via the Dashboard you can double-click on any agent name that you are interested in seeing the log for and it will display the backup log as seen in this example.

This first example is a job with Successful status.

Backup - My Backup

Successful

Started	5/30/2024 10:04:13 AM
Ended	5/30/2024 11:04:13 AM
Duration	1 hour
Objects Selected	65
	9 GB
Objects Completed	65
	9 GB
Media	Media Name
Device	C:\
Backup Location	C:\backup

Backup Type	Full
Write Mode	Overwrite
Backup Open Files	On
Compression	On
Encryption	Off
Security	Full Security Backup
Application	NovaBACKUP v19.0.1124
Operating System	v6.01.7601 Service Pack 1
Language	English

Messages

Type	Message	Timestamp
	No messages were logged.	

0 Page 0 of 0 20 items per page No items to display

Delete

Log Viewer via the Dashboard example (2 of 2):

This second example is a job with Failed status.

Backup - My Backup

Failed

Started	5/30/2024 10:04:13 AM
Ended	5/30/2024 11:04:13 AM
Duration	1 hour
Objects Selected	65
	2 GB
Objects Completed	65
	2 GB
Media	Media Name
Device	C:\
Backup Location	C:\backup

Backup Type	Full
Write Mode	Overwrite
Backup Open Files	On
Compression	On
Encryption	Off
Security	Full Security Backup
Application	NovaBACKUP v19.0.1124
Operating System	v6.01.7601 Service Pack 1
Language	English

Messages

Type	Message	Timestamp
Error	Error e0020038: The license has expired.	12/31/1969 4:02:03 PM

1 Page 1 of 1 20 items per page 1 - 1 of 1 items

Delete

PERMISSIONS REQUIRED

View Job History

or

View Jobs and Job History

or

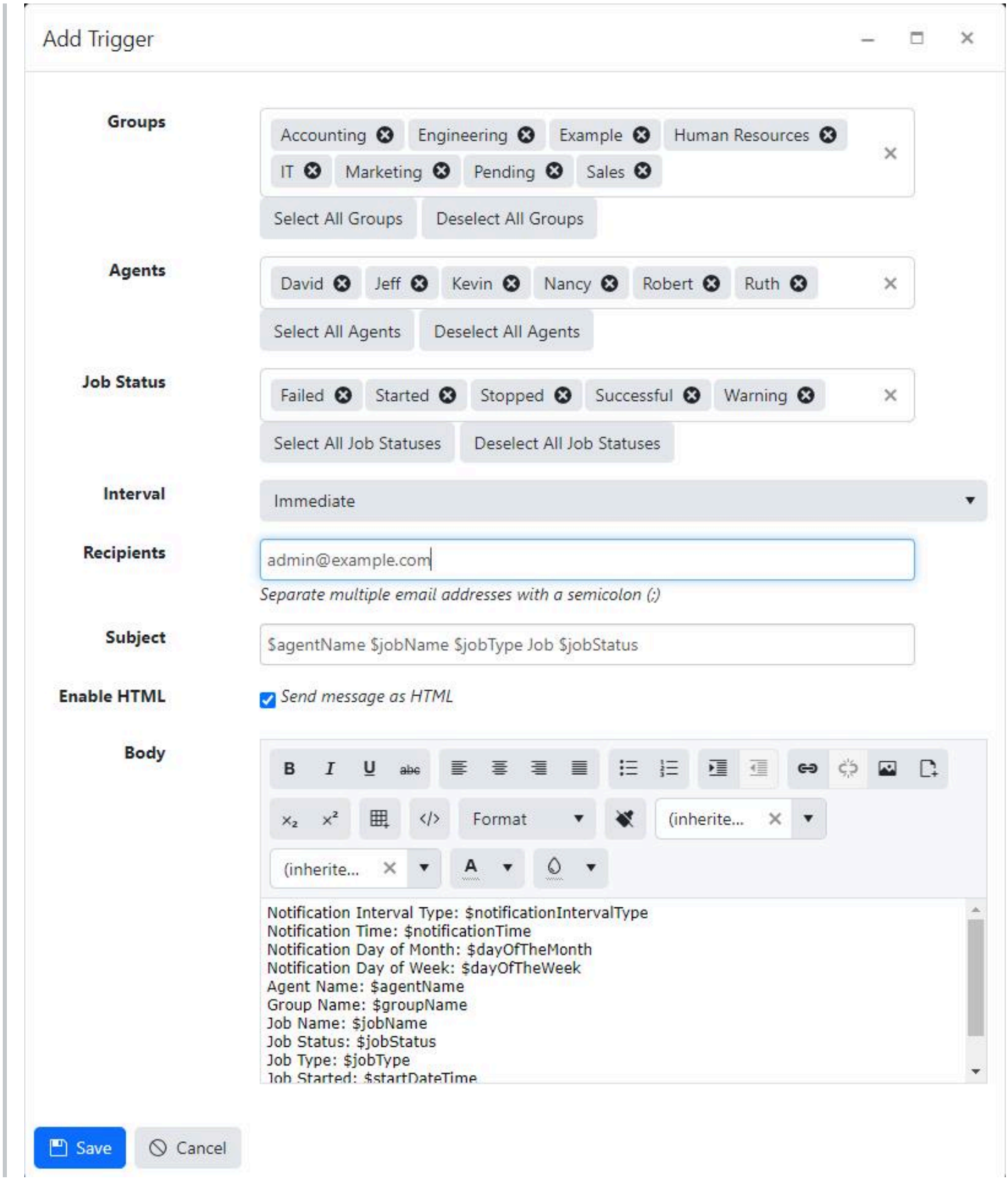
View Jobs Logs

Notification Triggers

A **Notification Trigger** is an e-mail notification for selected groups of agents on an interval basis. A single trigger can be created for an entire group of agents. The notification will be an e-mail sent to the e-mail addresses specified in the trigger configuration. The current triggers are shown in the "Notification > Triggers" page.

> Notification Triggers
>
> + Add Trigger
>
> | Groups | Agents | Job Statuses | Last Checked | |
> |---|---|---|---|---|
> | Pending, Example, Accounting, Human Resources, IT, Engineering, Marketing, Sales | David, Jeff, Kevin, Nancy, Robert, Ruth | Started, Successful, Failed, Stopped, Warning | 5/30/2024 10:05:34 PM | View Delete |
>
> 1 Page 1 of 1 10 items per page 1 - 1 of 1 items

When creating a **New Trigger** , you are asked some questions including the agents and groups that will be included in the notification. The " **Notification Interval** " choices are Daily, Weekly, Monthly and Immediate. You can set a custom subject, message text, etc. When done configuring click the Save button.



Once a **New Trigger** is added you can "**View**" or "**Delete**" the existing trigger by clicking on the buttons on the right-side of the screen in the Action column. To **Edit** you can click the **View** button.

The following custom email substitution variables can be used in the subject and body of the notification email.

Variable	Description	Examples
$notificationIntervalType	The notification interval type name.	Daily Weekly Monthly Immediate
$notificationTime	The notification time in the format *hh:mm:ss tt* as specified for a Daily interval.	07:34:55 PM
$dayOfTheMonth	The notification day of the month as specified for a Monthly interval.	15
$dayOfTheWeek	The notification day of the week as specified for a Weekly interval.	Sunday
$agentName	The agent friendly name for which the job was run on.	agent1
$groupName	The group name of the agent for which the job was run on.	group1
$jobName	The name of the job that ran.	job1
$jobStatus	The status of the job at the time of the notification.	Started Successful Failed Stopped Warning
$jobType	The type of the job.	Backup Restore Copy Import Image Backup Virtual Machine File Level Backup Virtual Machine Replication Backup Virtual Machine File Level Restore
$startDateTime	The time the job started.	6/15/2016 7:47:34 PM

$endDateTime	The time the job finished. If the job has not finished yet, the value will be empty.	6/15/2016 7:54:13 PM
$backupClientVersionNumber	The backup client version number.	18.0.1813.1

Example:

Edit Trigger

Groups

Pending Example Accounting Human Resources IT Engineering Marketing Sales

Select All Groups | Deselect All Groups

Agents

David Jeff Kevin Nancy Robert Ruth

Select All Agents | Deselect All Agents

Job Status

Started Successful Failed Stopped Warning

Select All Job Statuses | Deselect All Job Statuses

Interval

Immediate

Recipients

admin@example.com

Separate multiple email addresses with a semicolon (;)

Subject

$agentName $jobName $jobType Job $jobStatus

Enable HTML

☑ *Send message as HTML*

Body

Format (inherite... (inherite...

```
Notification Interval Type: $notificationIntervalType
Notification Time: $notificationTime
Notification Day of Month: $dayOfTheMonth
Notification Day of Week: $dayOfTheWeek
Agent Name: $agentName
Group Name: $groupName
Job Name: $jobName
Job Status: $jobStatus
Job Type: $jobType
Job Started: $startDateTime
```

Save | Cancel

PERMISSIONS REQUIRED

View Alerts

Edit Alerts

Account Management

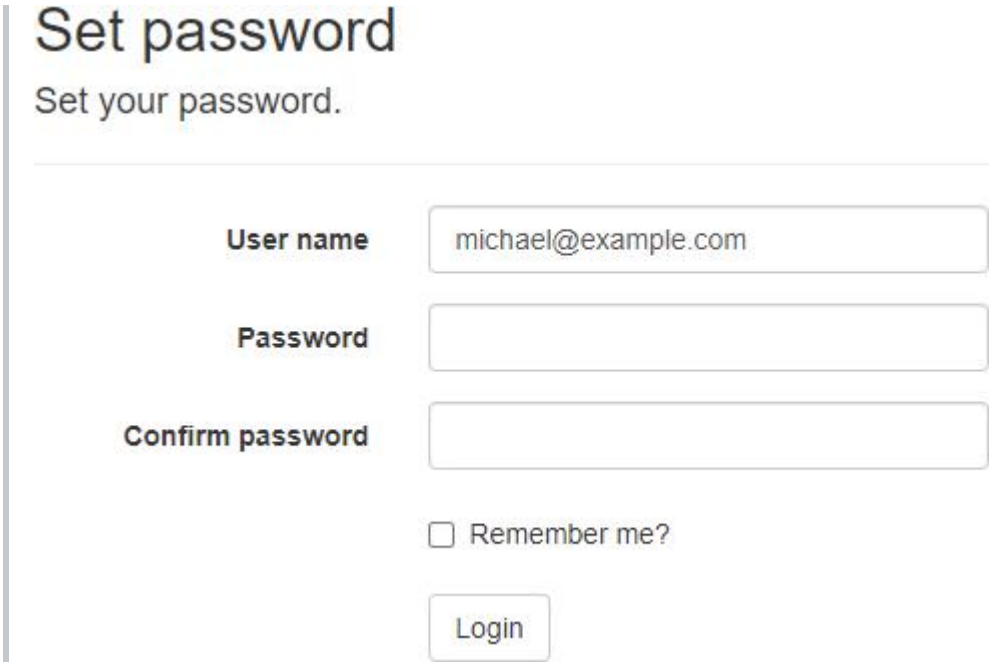
To manage the currently logged in user account, click on the username in the navigation menu.

The account management page provides the ability to change the following:
* Password
* Time zone
* Language

The logged in user can quickly download the backup client setup installer customized with their cloud account.

Set Password

New users created without a password must set their password from the "Set Password" page using the link provided in the user registration email.

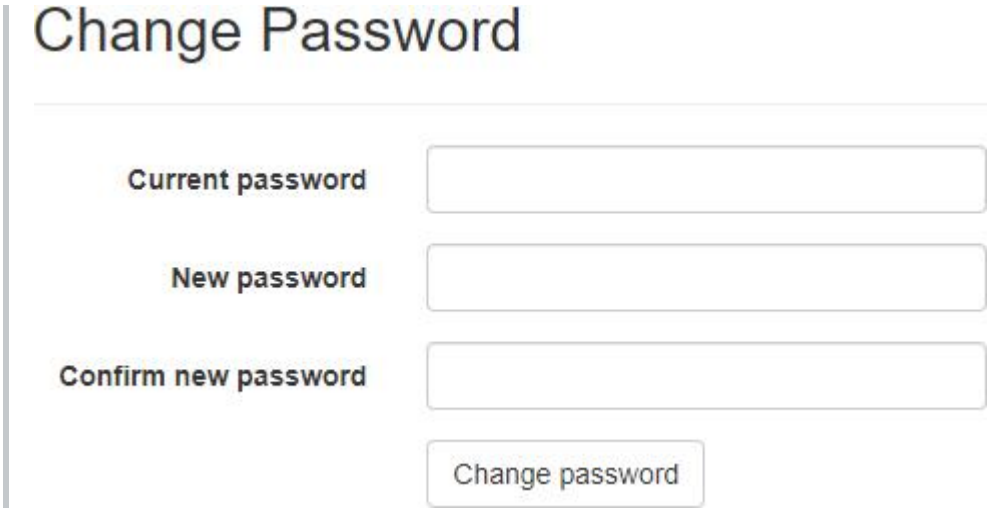


After setting their password, they'll be logged in.

If the "Remember me?" check box is checked, a cookie will be created which allows the user to remain logged in for up to 7 days of inactivity by default.

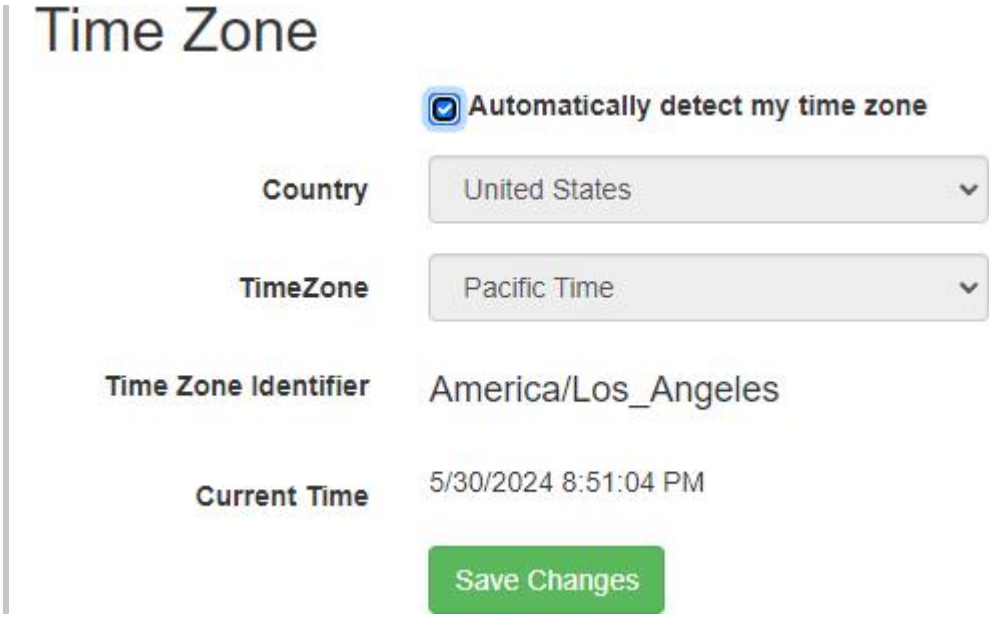
Password

The password for the currently logged in user can be changed from the "Change Password" page.



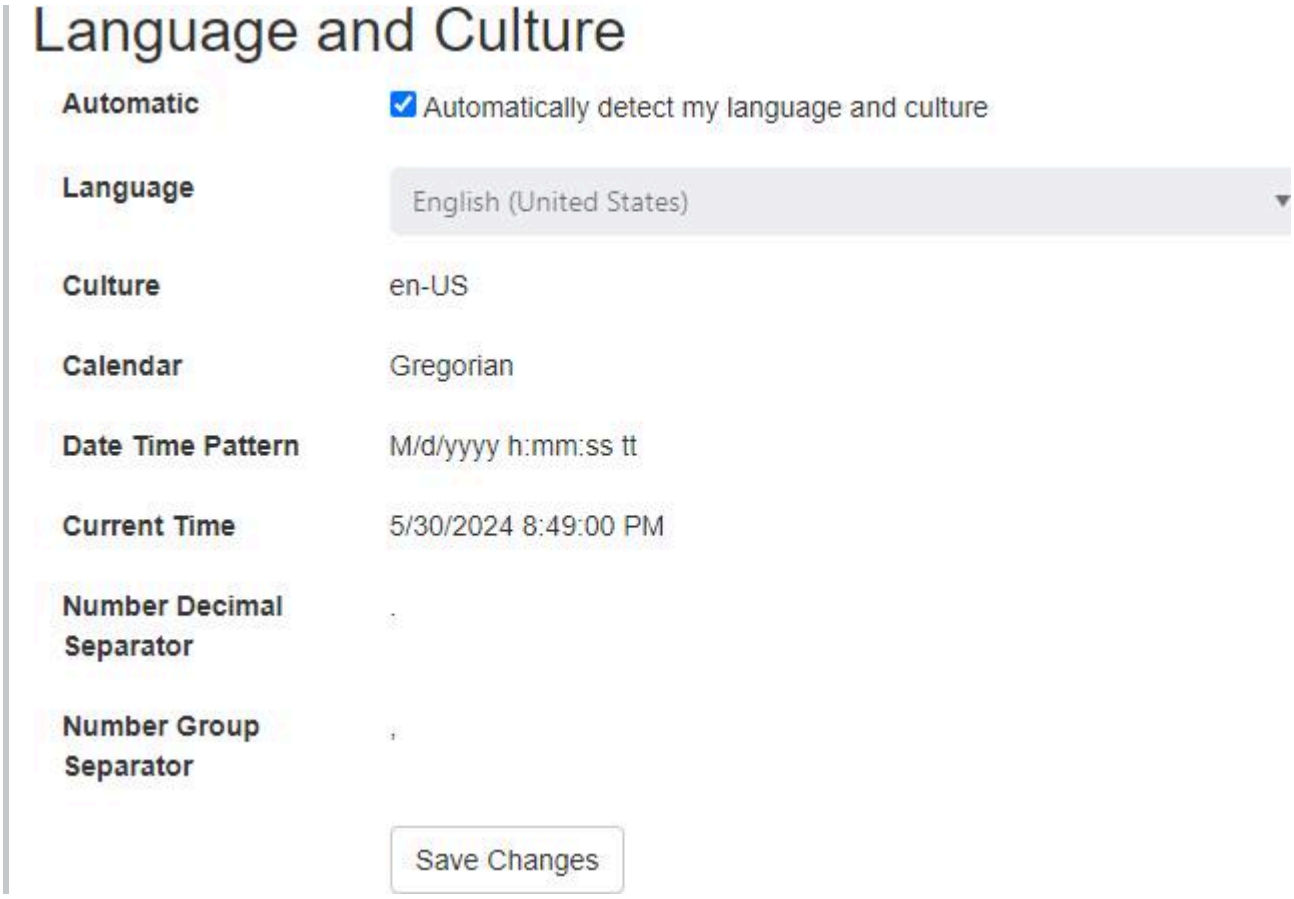
Time Zone

The date and time for the currently logged in user can be changed from the "Time Zone" page.



Language and Culture

The format dates, times, and numerals are displayed for the currently logged in user can be changed from the "Language and Culture" page.



Download Customized Backup Client Setup Installer

The "Download" link is visible only when the user is associated with a previously uploaded, at least one group with backup client setup installer.

The backup client setup installer will be customized with the "Management Server URL" and the specific group the backup client agent will automatically connected to upon installation.

The customized backup client setup installer will automatically start downloading if the user is associated with only one group which is associated with only one backup client setup installer.

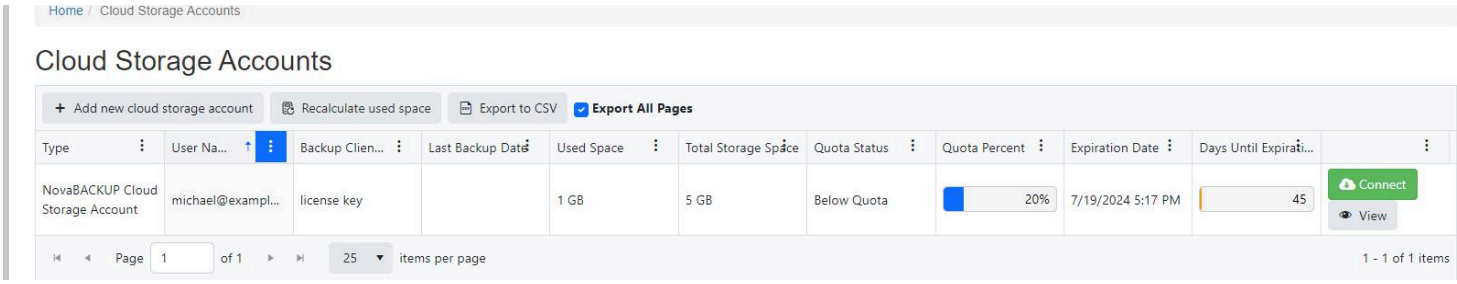
If the user is associated with only one group which is associated with more than one backup client setup installer, they are redirected to the group's details page to allow selecting the specific backup client setup installer which should be customized and downloaded.

If the user is associated with more than one group, they are redirected to the "Agents and Groups" page, where they have to select the specific group first before selecting a backup client setup installer which should be customized and downloaded.

Cloud Storage Accounts

The "Cloud Storage Accounts" view allows users to manage their cloud storage accounts.

The administrator must add a Storage Server in order for users to create cloud storage accounts.

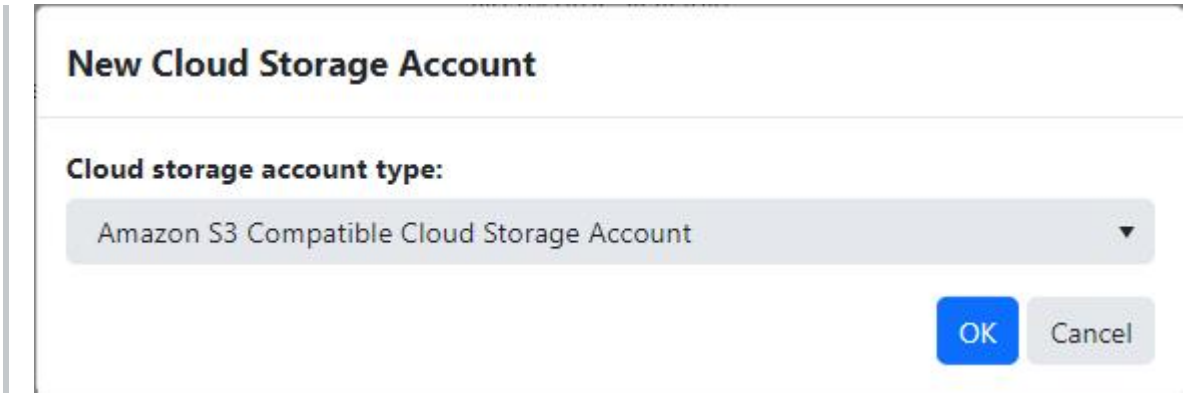


Add new cloud storage account

Click on the "Add new cloud storage account" button to add a new cloud storage account.

If there's only one accessible storage server, then the user is automatically redirected to the appropriate page to create a new cloud storage account.

Otherwise, the "Cloud storage account type" drop down will contain the options "Amazon S3 Compatible Cloud Storage Account" and "NovaBACKUP Cloud Storage Account" to allow the user to select the appropriate cloud storage account type to create.



Recalculate used space

Click the "Recalculate used space" button to recalculate the used space for cloud storage accounts.

When clicked, the button is disabled and the animation indicates the recalculations are running in the background.

Interaction with the grid is not blocked while the recalculations are running.

Only the used space for the cloud storage accounts accessible to the current user are recalculated.

After the recalculations have completed successfully, the user can click the button again to refresh the data in the grid so any changes to the used space are displayed.

View

Click on the "View" button next to the cloud storage account to view its details.

Columns

Columns are dynamically displayed depending on the width of the browser window.

The column menus can be used to lock, sort, show and hide columns, and filter the data.

The "Group", "Free Space", "Enabled", "Status", "Number Of Computers", and "License Status" columns are hidden by default.

The "Quota Percent" will turn from blue to orange when the account is near quota, and red when at or over quota. If there's no quota on the account, the percentage bar isn't displayed.

The "Expiration Date" field displays the closest expiration date for the license or its upgrade subscription, if a license key was used to create the account.

The "Days Until Expiration" will start as orange and fill up when there are 45 or less number of days until the license expires, and red when there are 14 or less. If the license doesn't expire, the countdown timer bar is not displayed.

Export to CSV

Click on the "Export to CSV" button to create a comma-separated values (CSV) file containing the list of cloud storage accounts, sorted, and filtered as the current view.

If the "Export All pages" check box is check-marked, then the data in all pages will be exported.

The exported CSV file will contain the following columns:

Column Name	Description
DisplayType	The type of account. ("NovaBACKUP Cloud Storage Account" or "Amazon S3 Compatible Cloud Storage Account")
GroupName	The name of the storage server group.
UserName	The user name in the storage server.
BackupClientLicenseKey	The backup client license key.

Column Name	Description
LastBackupDate	The date and time of the last backup in UTC.
UsedBytes	The amount of storage space used in bytes since it was last calculated. An empty value indicates the storage server could not be contacted.
FreeBytes	The amount of storage space remaining in bytes.
QuotaBytes	The total amount of storage space available in bytes.
Enabled	Indicates whether or not the cloud storage account is enabled.
AccountStatus	The account status. ("Active", "Deleted", or "Pending")
NumberOfComputers	The number of computers.
QuotaStatus	The quota status. ("NONE", "BELOW", "NEAR", "AT", or "OVER")
QuotaPercent	The amount of used space as a percentage of the quota.
ExpirationDate	The backup client license's expiration date in UTC.
DaysUntilExpiration	The number of days until the backup client license's expiration date.
LicenseStatus	The status of the license in the storage server. ("Normal" or "Evaluation")

PERMISSIONS REQUIRED

View Cloud Storage Accounts

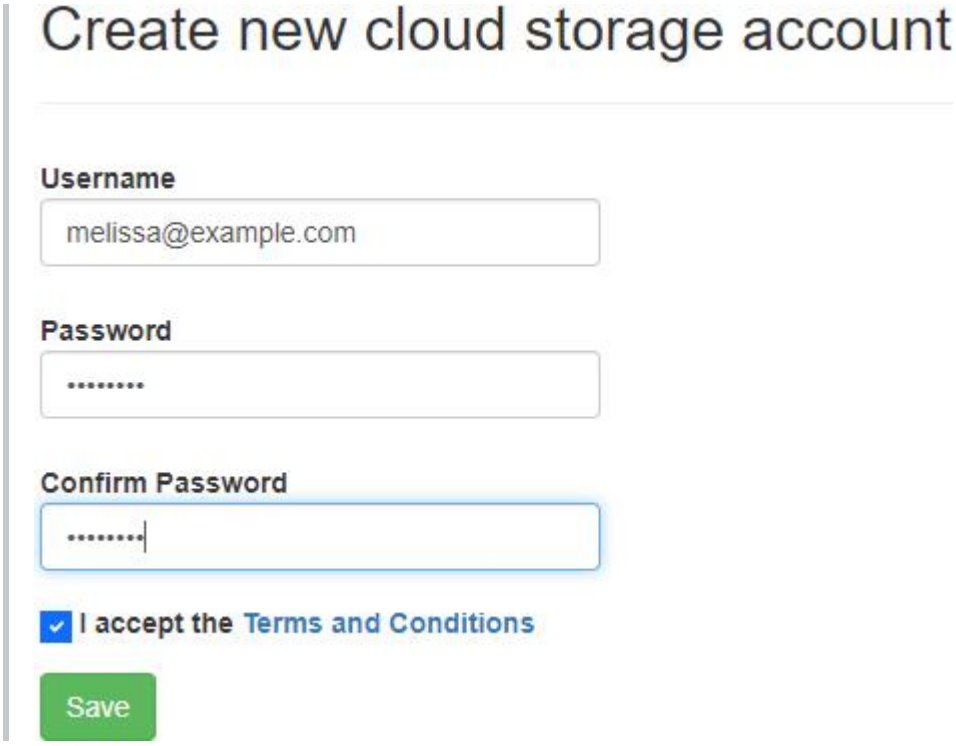
Related topics:

Add an Amazon S3 compatible cloud storage account
Add a NovaBACKUP cloud storage account

Create an account

From the `Cloud Storage Accounts` view, click on the `Add new cloud storage account` button to create a new cloud storage account.

Enter a username, password, and click the `Save` button to create a new cloud storage account.

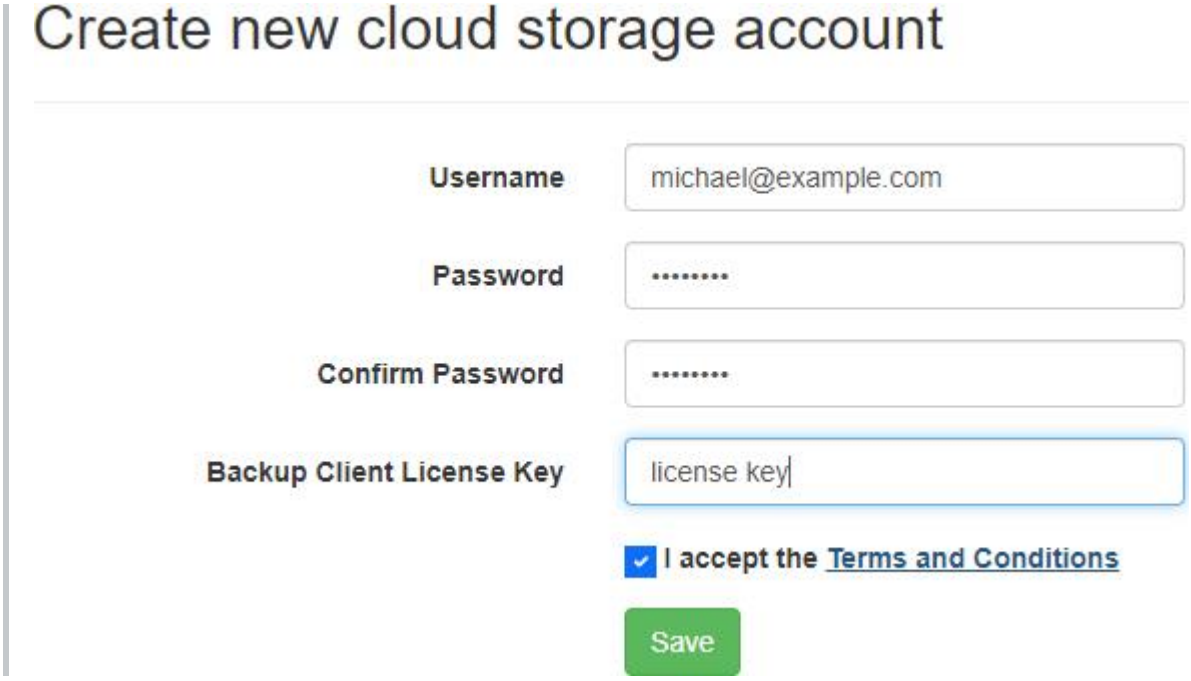


The username must be unique.

A new `Cloud Storage` device will automatically be added to the backup client when the user signs up from the backup client, or re-connects to an existing cloud storage account.

When re-connecting to an existing cloud storage account, the user will be asked for their cloud storage account password if it's different then their user account password.

A backup client license key may be required to create a cloud storage account.



In this case, if the backup client license is disabled, expired, doesn't support cloud storage, or if it has an expired upgrade subscription, it can't be used to create a cloud storage account.

The backup client license key will be automatically populated if the user is signing up from the backup client.

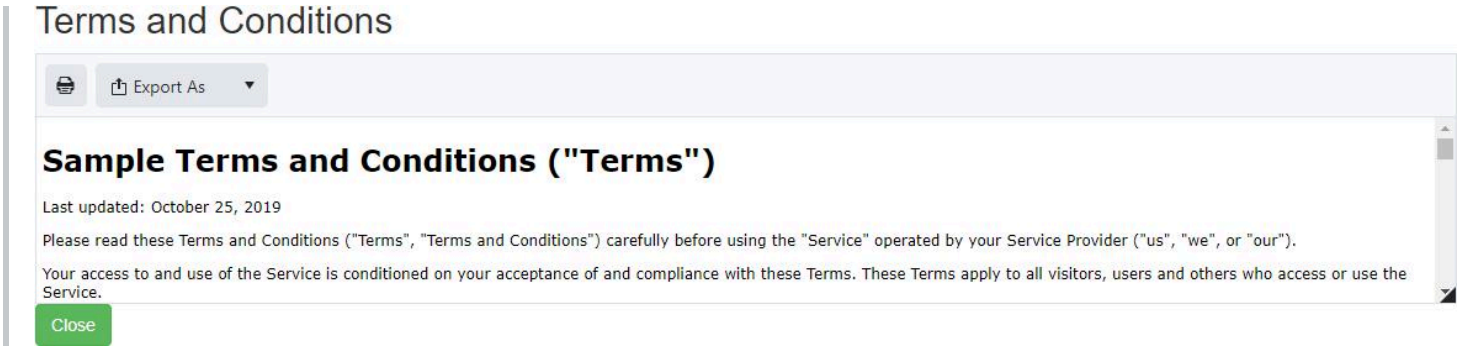
Terms and Conditions

Acceptance of the terms and conditions may be required.

The `Terms and Conditions` hyperlink will open a new window.

The new window displays the Terms and Conditions with options to print and save as a file in a different format.

The terms and conditions can be exported as a Microsoft Office Open XML Format word processing document (DOCX), Rich Text Format (RTF), Adobe Portable Document Format (PDF), HyperText Markup Language (HTML), and plain text (txt).



PERMISSIONS REQUIRED

Edit Cloud Storage Accounts

Related topics:

Add a storage server

User registration and creating a cloud storage account in one step

Connect to an account

You can automatically connect a cloud storage account from within the backup client, using either the `Home` or the `Device` tab:

- From the `Home` tab, click on the `Cloud Backup` button.
- From the `Device` tab, click on the `Click HERE to add an online device` list item.

The default web browser will be opened from the backup client to allow users to log in to their account and connect to a cloud storage account.

If a cloud storage account has already been added, the web browser will not be opened.

PERMISSIONS REQUIRED

View Cloud Storage Accounts

View details of an account

From the "Cloud Storage Accounts" view, click on the "View" button next to the cloud storage account to view its details.

Username	melissa@example.com
Status	Active
Enabled	Yes
License	Normal
Used space	0 B
Free space	200 MB
Total storage space	200 MB
Quota status	Below Quota
Quota	0%
Maximum number of computers	1
Group	melissa@example.com
Quota type	Custom
Near quota	90%
Near quota action	Report Warning
At quota action	Warning Window
Over quota	110%
Over quota action	Disable Backup
Restore window	1 month
Allow data access using master key	Yes

If a cloud storage account has a license key, it's also displayed.

Cloud device

Connect | Refresh | Edit | View computers | Delete

Username	michael@example.com
Backup client license key	license key
Expiration date	7/19/2024 5:17:47 PM
Days until expiration	45
Status	Active
Enabled	Yes
License	Normal
Used space	1 GB
Free space	4 GB
Total storage space	5 GB
Quota status	Below Quota
Quota	20%
Maximum number of computers	1
Group	michael@example.com
Quota type	Custom
Near quota	90%
Near quota action	Report Warning
At quota action	Warning Window
Over quota	110%
Over quota action	Disable Backup
Restore window	1 month
Allow data access using master key	Yes

The administrator has the ability to view more details on the account.

Cloud device

Connect | Refresh | Edit | View computers | Delete

Username	melissa@example.com
Status	Active
Enabled	Yes
License	Normal
Used space	0 B
Free space	200 MB
Total storage space	200 MB
Quota status	Below Quota
Quota	0%
Maximum number of computers	1
Group	melissa@example.com
Quota type	Custom
Near quota	90%
Near quota action	Report Warning
At quota action	Warning Window
Over quota	110%
Over quota action	Disable Backup
Restore window	1 month
Allow data access using master key	Yes
Primary storage	C:\UserData
Restrict backups to primary storage	Yes
User data directory name	melissa@example.com

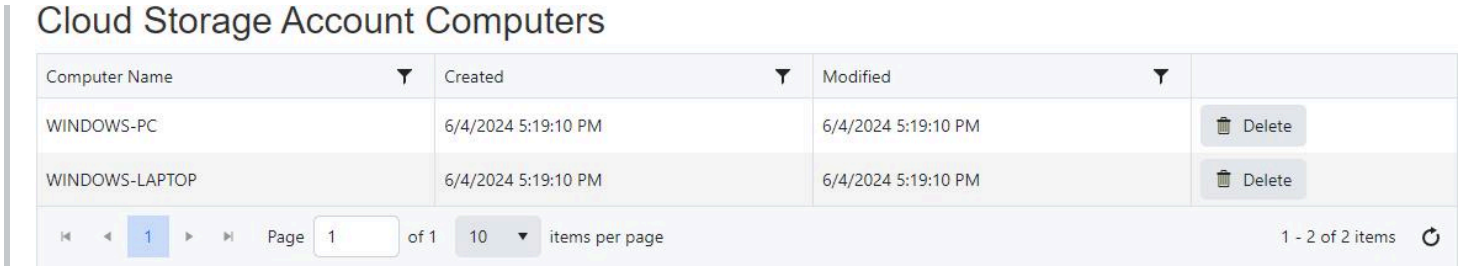
The administrator doesn't have the ability to connect to a cloud storage account of another user.

PERMISSIONS REQUIRED

View Cloud Storage Accounts

View computers

From the cloud storage account details view, click on the "View computers" button to view the computers attached to the cloud storage account.



PERMISSIONS REQUIRED

View Cloud Storage Accounts

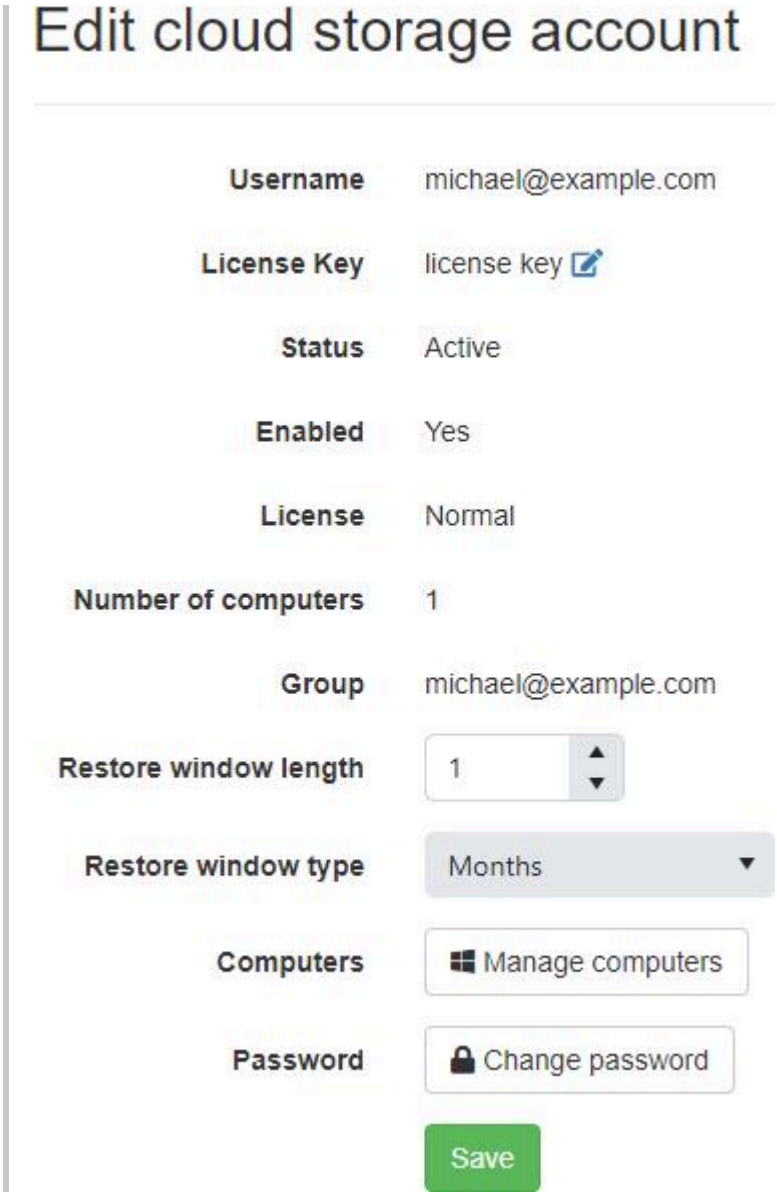
Edit cloud storage account

From the cloud storage account details view, click on the "Edit" button.

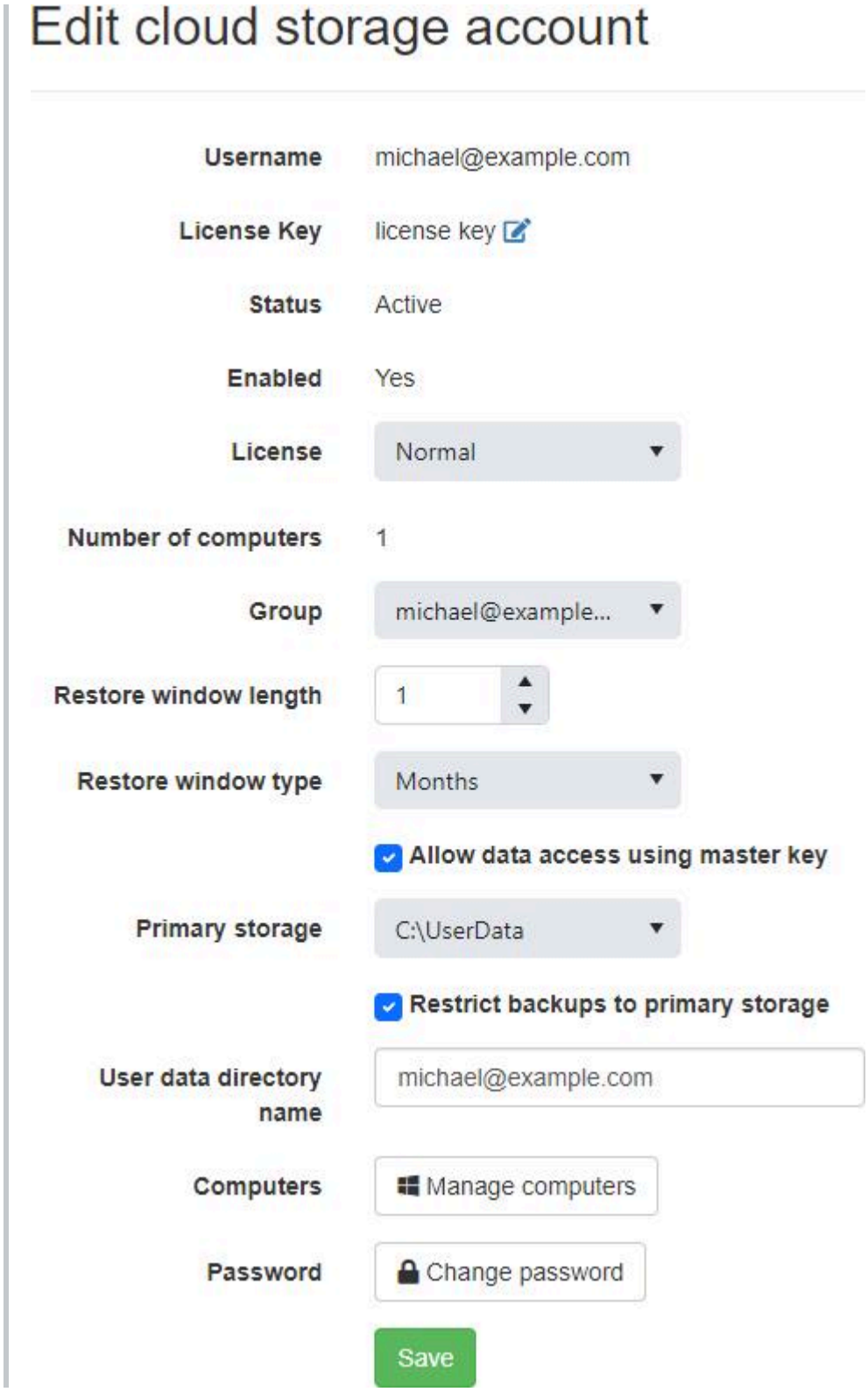
The editable fields depend on whether or not a license key is required and also the role of the logged in user.

License key is required

If a license key is required for the cloud storage account, only the license key and restore window can be modified. This is because the quota and the number of computers are retrieved from the license server.



The administrator can also modify the "License status", storage server group, master key access, primary storage, and user data directory fields of the cloud storage account.



License key not required

If a license key is not required for the cloud storage account, the number of computers, quota, and restore window fields can be modified.

Edit cloud storage account

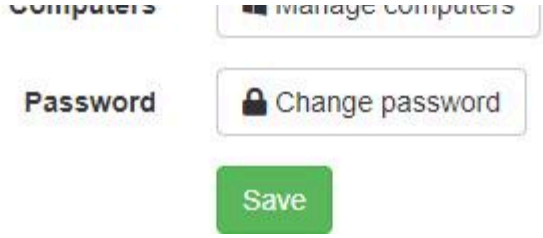
Username	melissa@example.com
Status	Active
Enabled	Yes
License	Normal
Number of computers	1
Group	melissa@example.com
Quota type	Custom
Quota (megabytes)	200
Near quota percent	90
Near quota action	Report Warning
At quota action	Warning Window
Over quota percent	110
Over quota action	Disable Backup
Restore window length	1
Restore window type	Months
Computers	Manage computers
Password	Change password

Save

The administrator can also modify the "Account status", "Enabled", "License status", storage server group, master key access, primary storage, and user data directory fields of the cloud storage account.

Edit cloud storage account

Username	melissa@example.com
Status	Active
	☑ **Enabled**
License	Normal
Number of computers	1
Group	melissa@example....
Quota type	Custom
Quota (megabytes)	200
Near quota percent	90
Near quota action	Report Warning
At quota action	Warning Window
Over quota percent	110
Over quota action	Disable Backup
Restore window length	1
Restore window type	Months
	☑ **Allow data access using master key**
Primary storage	C:\UserData
	☑ **Restrict backups to primary storage**
User data directory name	melissa@example.com
Computers	Manage computers

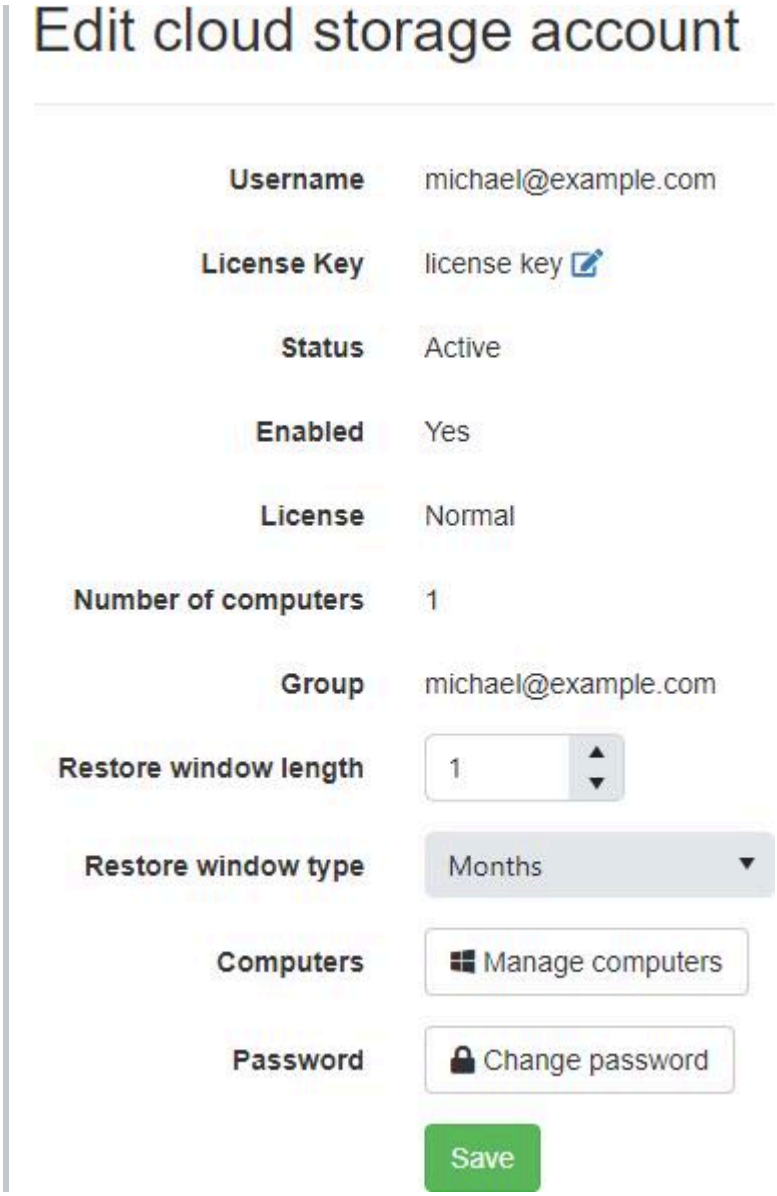


PERMISSIONS REQUIRED

Edit Cloud Storage Accounts

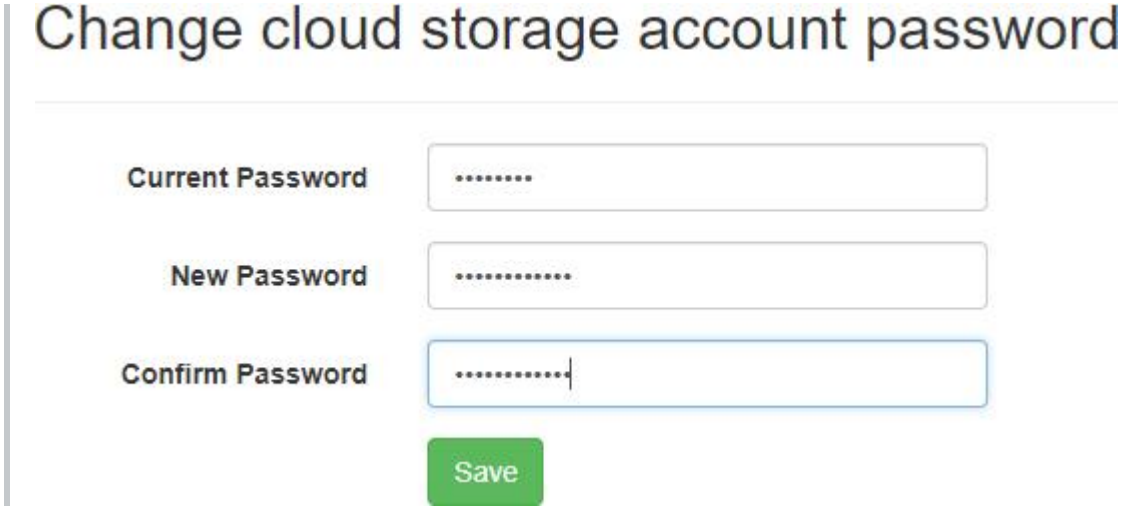
Change the password

From the cloud storage account details view, click on the "Edit" button.



Click on the "Change password" button.

Enter the current cloud storage account password, the new cloud storage account password, and click on "Save" to continue.



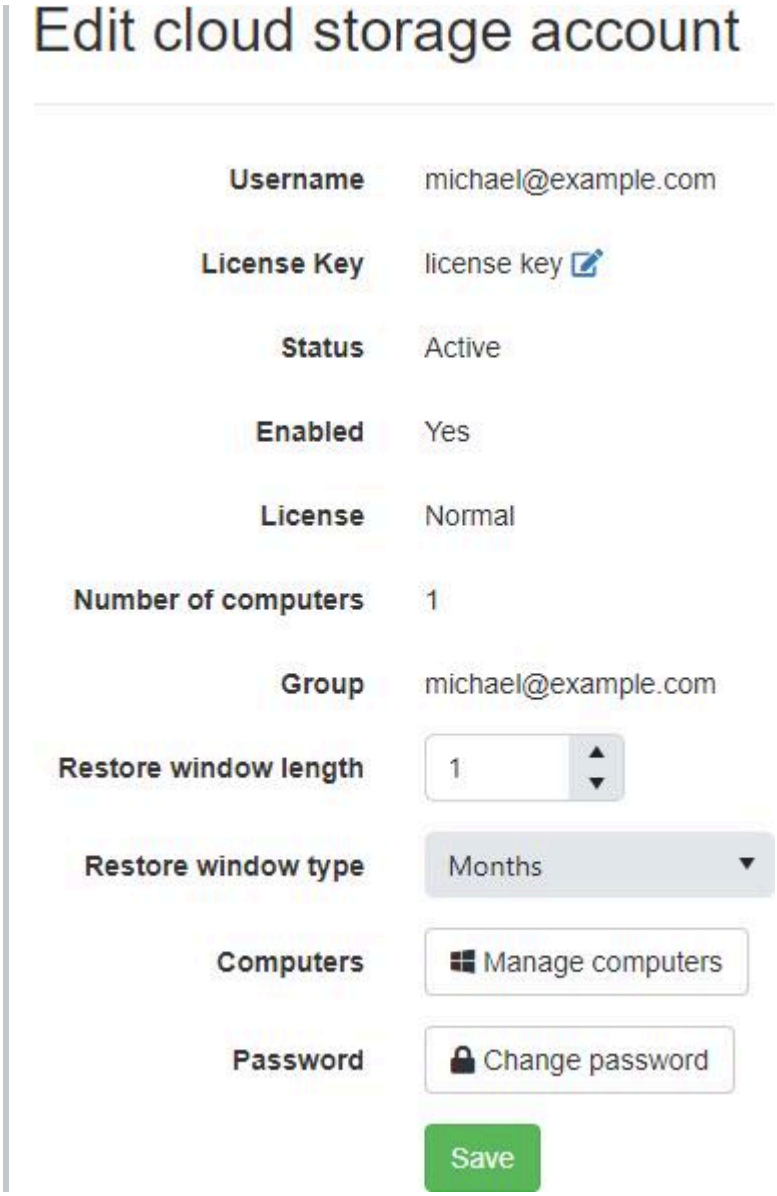
PERMISSIONS REQUIRED

Edit Cloud Storage Accounts

Change the license key

The backup client license key can be changed only if one was used to create the cloud storage account.

From the cloud storage account details view, click on the "Edit" button.

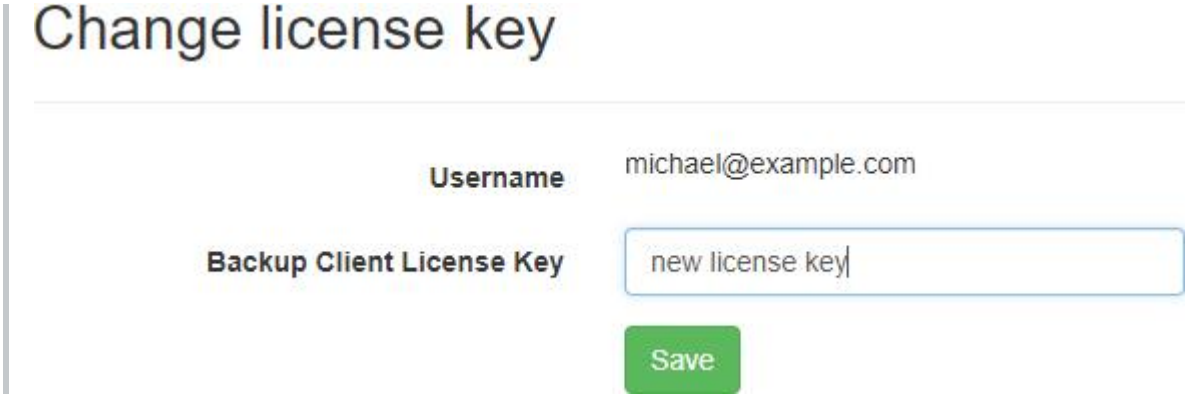


Click on the "Edit" icon next to the "License Key" field.

The "Edit" icon will not be displayed if a license key wasn't used to create the cloud storage account.

Enter the new backup client license key and click on "Save" to change the license key associated with the cloud storage account.

If the backup client license is disabled, expired, doesn't support cloud storage, or if it has an expired upgrade subscription, it can't be used as the new license key.



PERMISSIONS REQUIRED

Edit Cloud Storage Accounts

Delete an account

To permanently delete your cloud storage account, and its associated data, from the cloud storage account details view, click on the "Delete" button.

The following page will allow you to confirm its deletion.

You will not be able to restore any data associated with the account after deleting it.

> Are you sure you want to delete this cloud storage account?
>
> | | |
> |---|---|
> | **Username** | michael@example.com |
> | **Backup Client License Key** | license key |
>
> Delete

PERMISSIONS REQUIRED

Edit Cloud Storage Accounts

Delete a computer

To permanently delete a computer attached to the cloud storage account, and its associated data, from the "Cloud Storage Account Computers" view, click on the "Delete" button next to the computer. The following page will allow you to confirm its deletion.

You will not be able to restore any data associated with the computer after deleting it.

> Are you sure you want to delete this computer?
>
> **Computer Name** WINDOWS-PC
>
> Delete

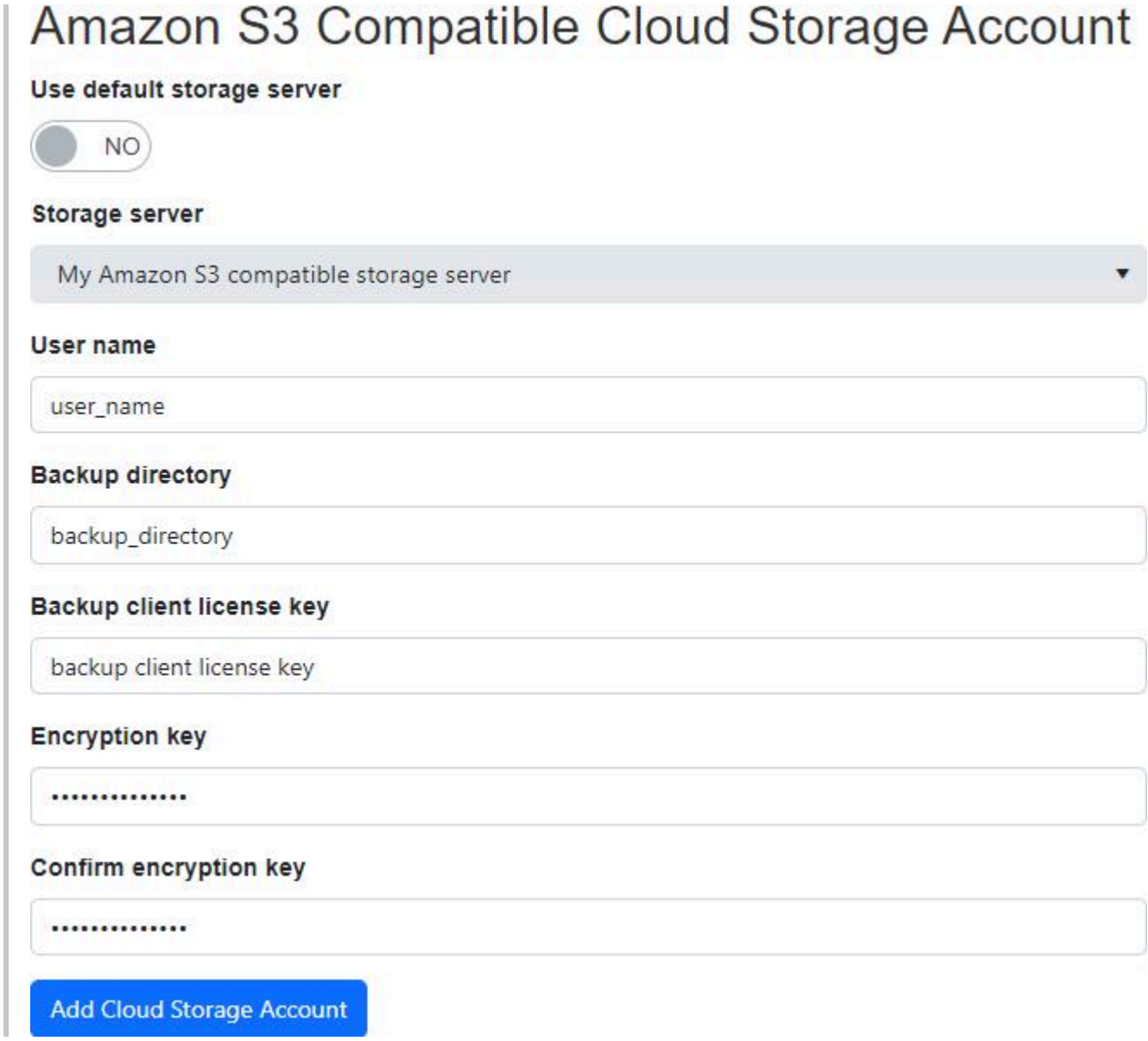
PERMISSIONS REQUIRED

Edit Cloud Storage Accounts

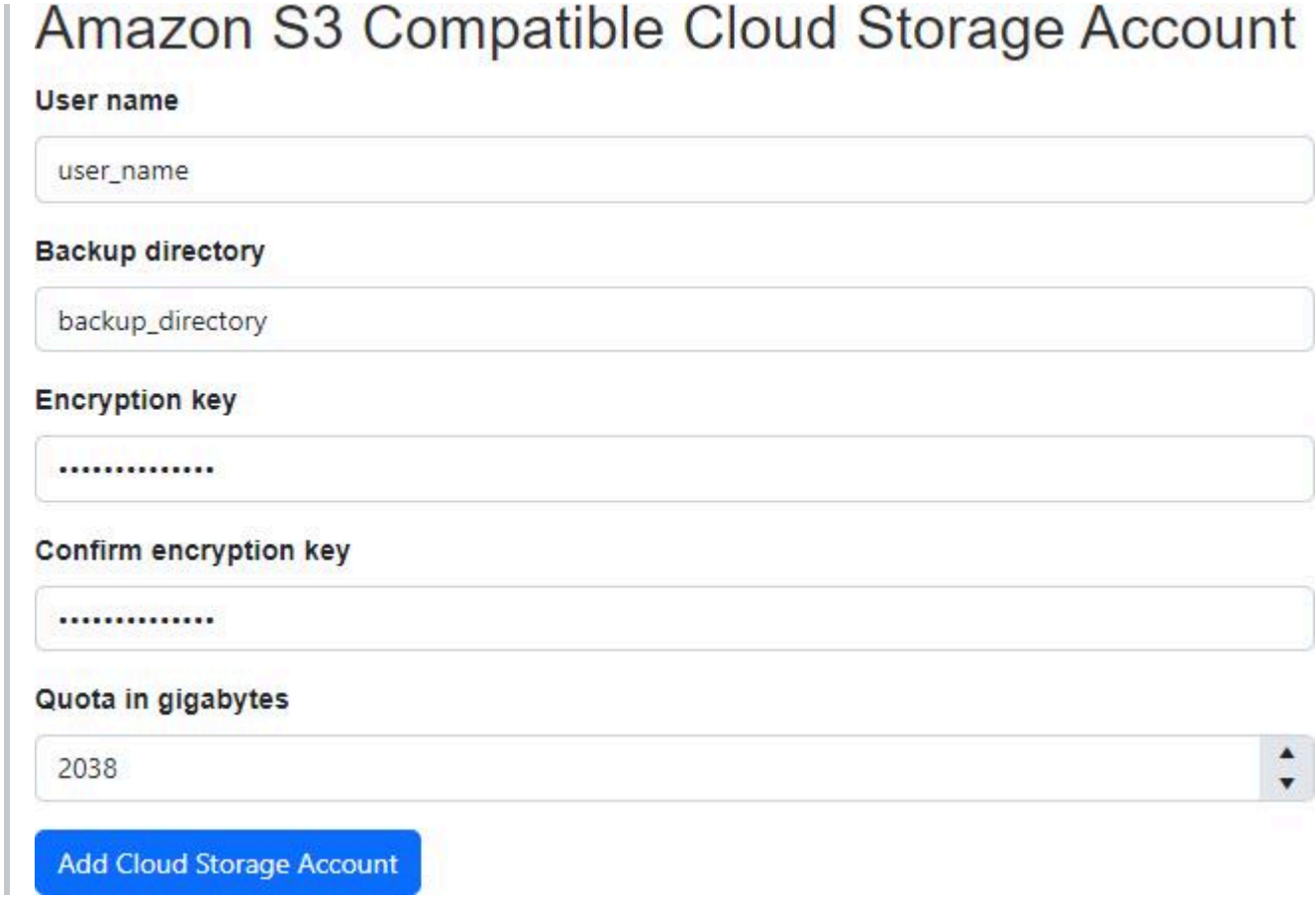
Add Amazon S3 compatible cloud storage account

Enter the required values and click on the "Add Cloud Storage Account" button.

After creating the Amazon S3 compatible cloud storage account, it will be displayed in the data grid.



After creating the Amazon S3 compatible cloud storage account with quota, it will be displayed in the data grid.



Use default storage server

The "Use default storage server" switch is displayed for users who can select more than one storage server and don't have explicit access to the default storage server.

When this is switched off, the user can select a specific storage server, if any are accessible for the logged in user.

Storage server

The "Storage server" drop down list is displayed for users who have access to select more than one storage server. If the "Use default storage server" switch is displayed, it must also be switched off.

The selected storage server will be used when creating the cloud storage account.

User name

- Required
- Maximum length is 40

Backup directory

- Required

- Maximum length is 19

Backup client license key

- Required if displayed.
- Not displayed if not required.
- Maximum length is 256
- The license key must meet the following requirements:
  - A valid backup client license key
  - Enabled
  - Not expired (NovaCare)
  - Has cloud storage capacity
- Is mutually exclusive with the quota.

Encryption key

- Minimum length is 10
- Maximum length is 30

Quota (in Gigabytes)

- An empty value indicates there is no/unlimited quota.
- Is mutually exclusive with the backup client license key.
- Minimum value is 0
- Maximum value is 2147483647

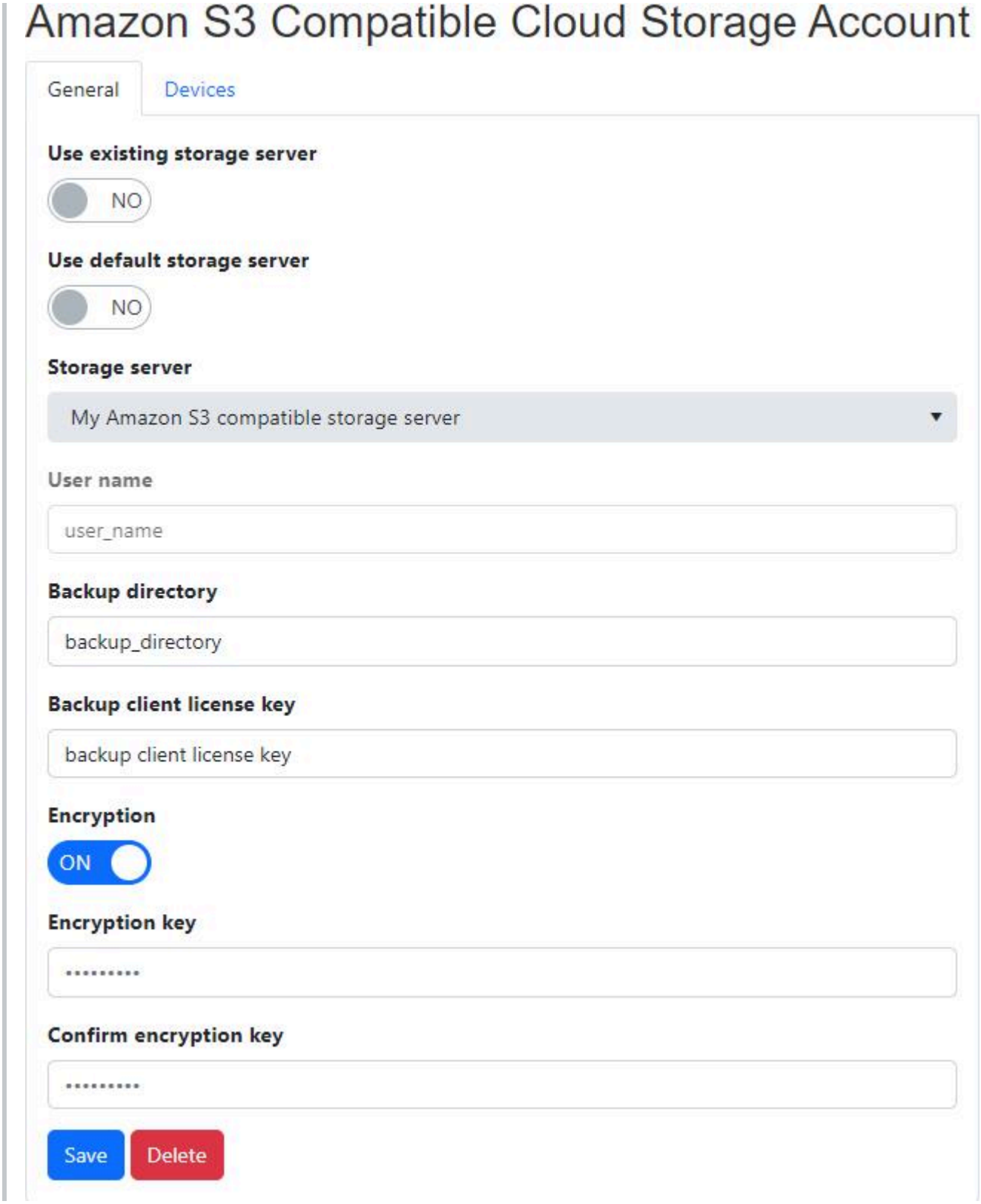
PERMISSIONS REQUIRED

Edit Cloud Storage Accounts

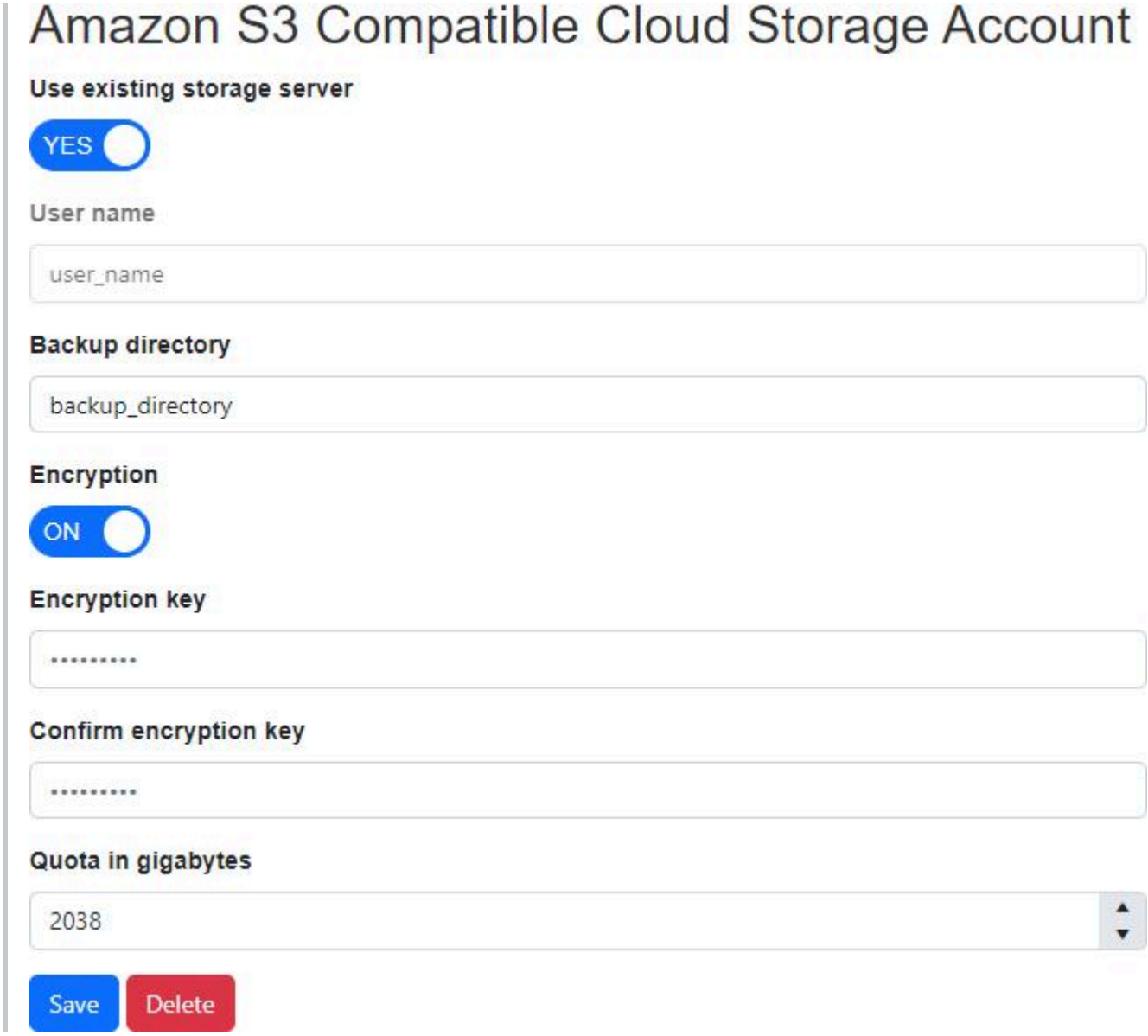
Related topics:

Create a cloud storage account

View Amazon S3 compatible cloud storage account



View Amazon S3 compatible cloud storage account with quota



The User Name will always appear as read only regardless of whether user have `Edit Cloud Storage Accounts` permission or not.

Users with the `Edit Cloud Storage Accounts` role permission may edit the Amazon S3 Compatible Cloud Storage Account. Otherwise the following fields will be read-only:

- Use existing storage server
- Use default storage server
- Storage server
- Backup Directory
- Backup Client License Key

- Encryption
- Encryption Key
- Quota (in Gigabytes)

Use existing storage server

The "Use existing storage server" switch is displayed for users who don't have explicit access to the original storage server associated with the cloud storage account and can select more than one storage server.

If the storage server is changed from this inaccessible non-default storage server, the cloud storage account will no longer be able to be updated back to the original storage server.

Use default storage server

The "Use default storage server" switch is displayed for users who can select more than one storage server and don't have explicit access to the default storage server.
If the "Use existing storage server" switch is displayed, it must also be switched off.

When this is switched off, the user can select a specific storage server, if any are accessible for the logged in user.

The "Use default storage server" switch will be disabled if there are no other accessible storage servers.

Storage server

The "Storage server" drop down list is displayed for users who have access to select more than one storage server.
If the "Use existing storage server" switch is displayed, it must also be switched off.
If the "Use default storage server" switch is displayed, it must also be switched off.

The selected storage server will be used when updating the cloud storage account.

Update

Click on the "Save" button to update an Amazon S3 compatible cloud storage account.

Delete

Click on the "Delete" button to delete an Amazon S3 compatible cloud storage account.

- "Delete" button is disabled if the user doesn't have permission to "Edit Cloud Storage Accounts".

PERMISSIONS REQUIRED

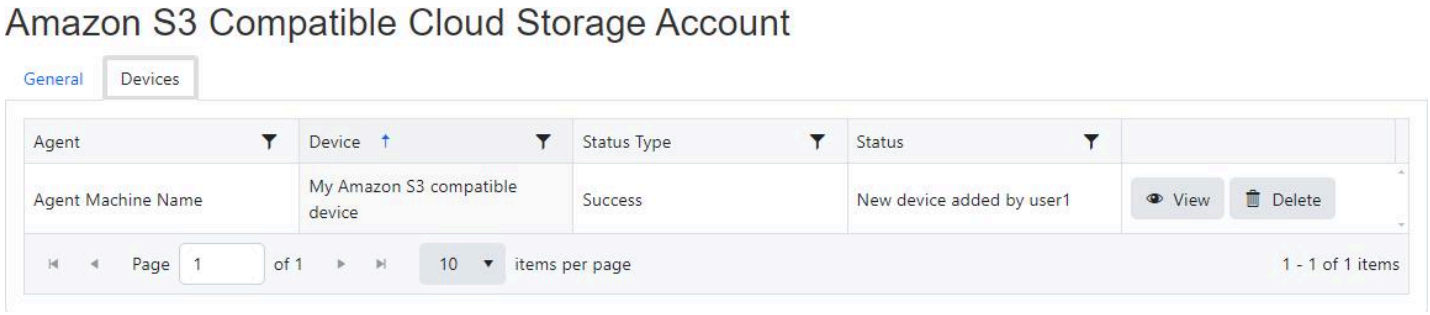
View Cloud Storage Accounts

Related topics:

Add Amazon S3 compatible cloud storage account

Devices

The `Devices` tab displays the devices associated with the Amazon S3 compatible cloud storage account.



The grid will contain the following columns:

Column Name	Description
Agent	The name of the agent associated with the device.
Device	The name of the device.
StatusType	The status type of the device.
Status	The status of the device.

View

Click on the "View" button next to the device to view its details.

Delete

Click on the "Delete" button next to the device to delete the device.

The 'Delete' button is read-only if the device is marked for deletion or if the user does not have the 'Edit Agents' or 'View All Groups' permissions.

PERMISSIONS REQUIRED

View Cloud Storage Accounts

View Agents and Groups

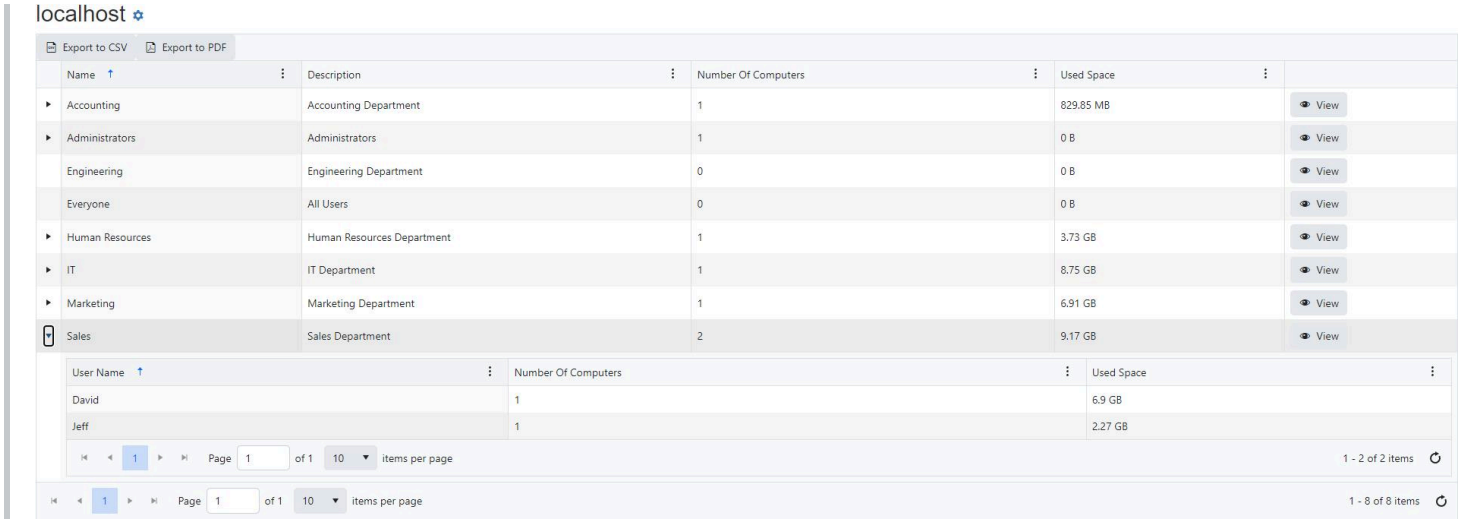
Related topics:

View Amazon S3 compatible cloud storage account

Storage Server

The "Storage Server" view allows an administrator to view NovaBACKUP Storage Server groups and users.

The administrator must first add a Storage Server.



The column menus can be used to sort, show and hide columns, and filter the data.

The "Status", "Quota Setting", "Quota", "Number Of Users", and "Used Gigabytes" columns are hidden by default.

Users can click on the "Export to CSV" button to create a comma-separated values (CSV) file containing the list of all storage server groups without users.

Users can click on the "Export to PDF" button to create a Portable Document Format (PDF) file containing the list of all storage server groups without users.

The exported file will contain the following columns:

Column Name	**Description**
Name	The name of the storage server group.
Description	The description of the storage server group.
NumberOfUsers	The number of users in the storage server group.
NumberOfComputers	The total number of computers in the storage server group.
UsedGigabytes	The amount of storage space used in gigabytes.

PERMISSIONS REQUIRED

One of the following permissions is required:

View Storage Server Groups

Edit Storage Server Groups

Agent Settings

The Agent Settings page allows you to configure the timeout and ping interval for agent connections.

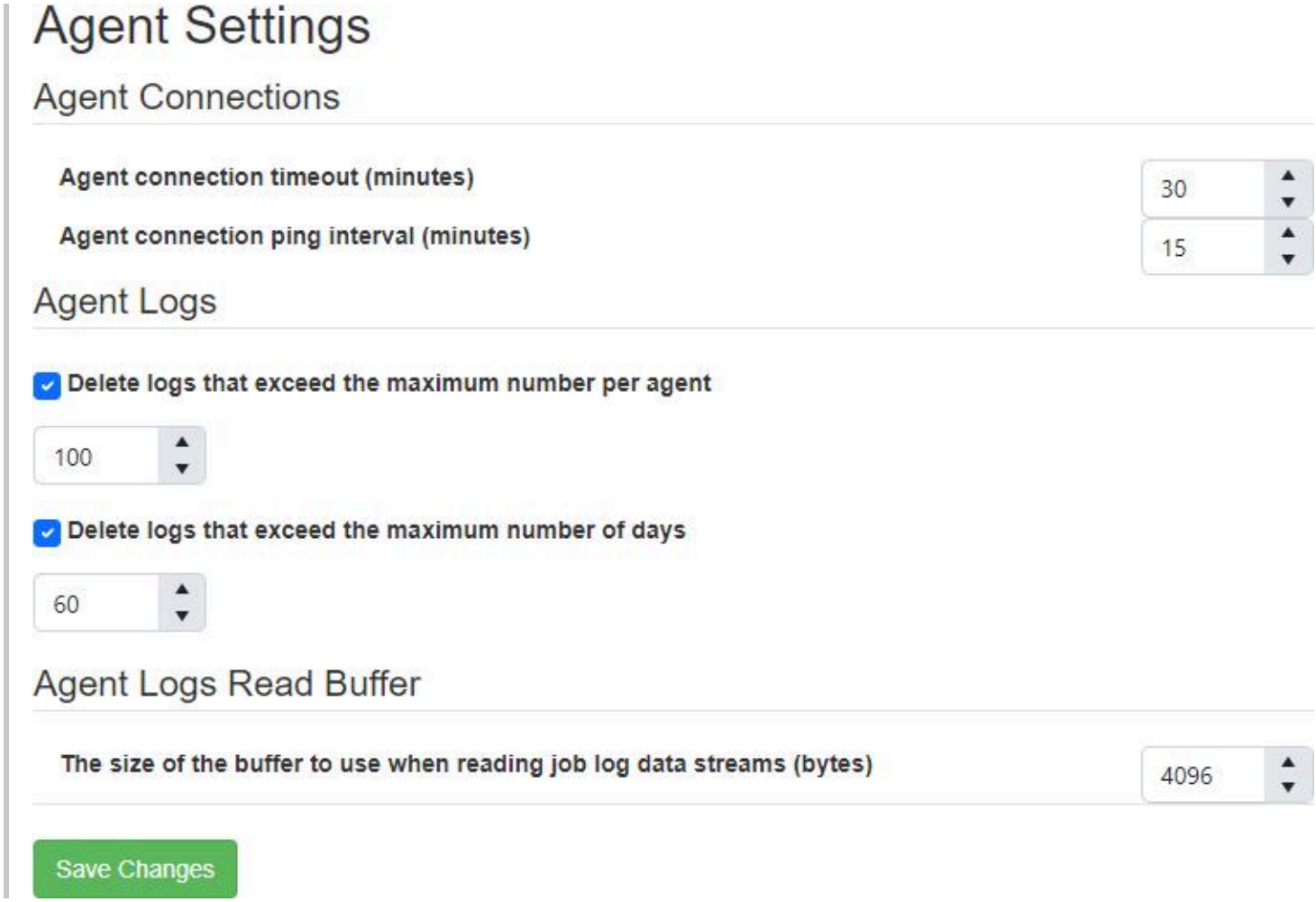
It also allows you to configure the maximum number of logs per agent and the time old logs are purged from the database.

When using the SQLite database provider:

- The buffer size on the server used when reading log files streamed from the client is configurable on this page.
- The maximum log file size that can be stored in the database is around 1GB.

When using the Microsoft SQL Server database provider:

- The maximum log file size that can be stored in the database is around 2GB.



PERMISSIONS REQUIRED

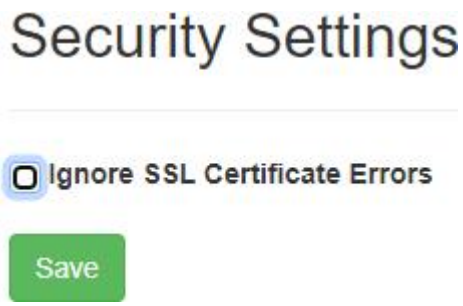
View Settings

Edit Settings

Security Settings

The "Security Settings" view allows an administrator to ignore SSL certificate errors.

Ignoring SSL certificate errors is not recommend.



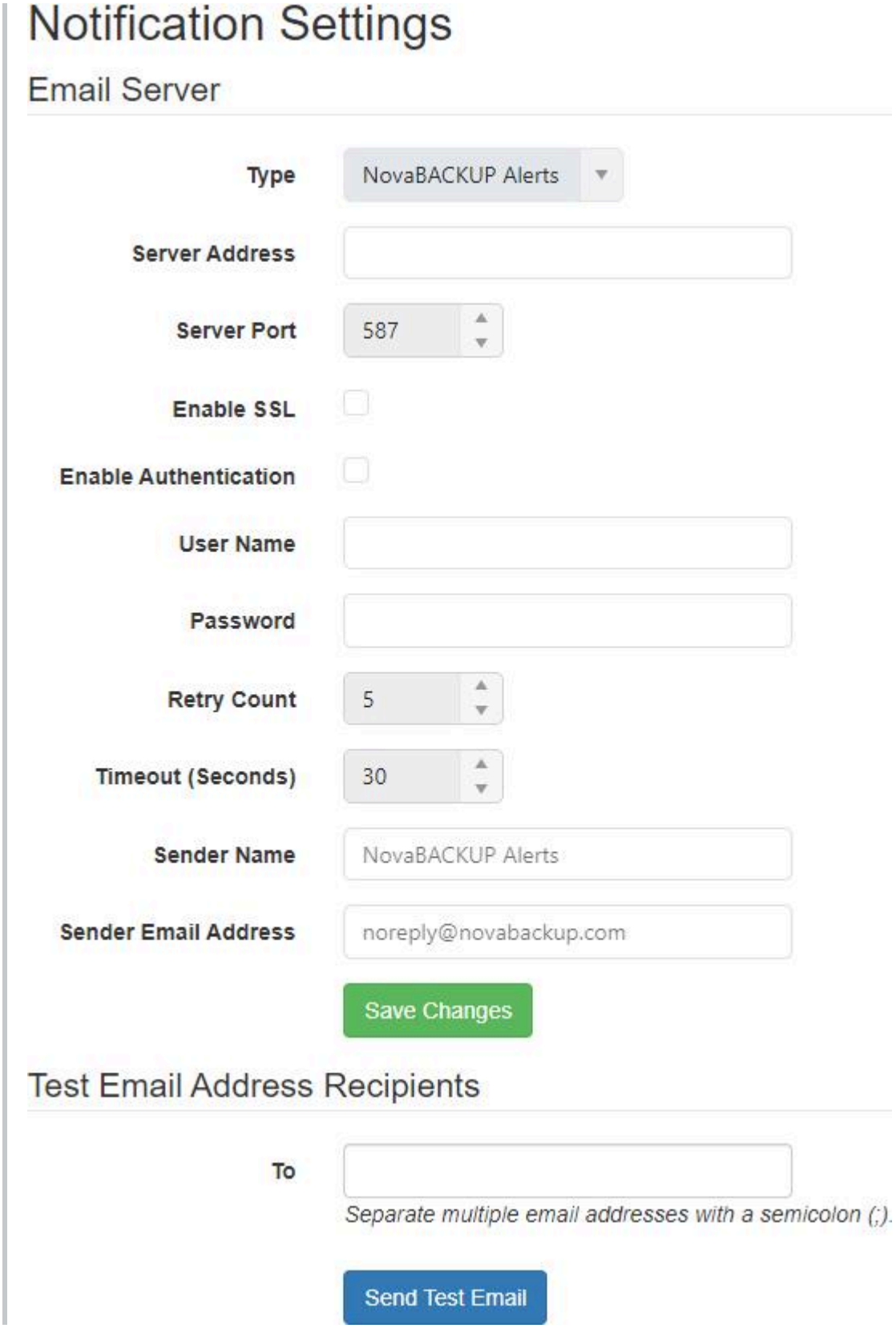
PERMISSIONS REQUIRED

View Settings

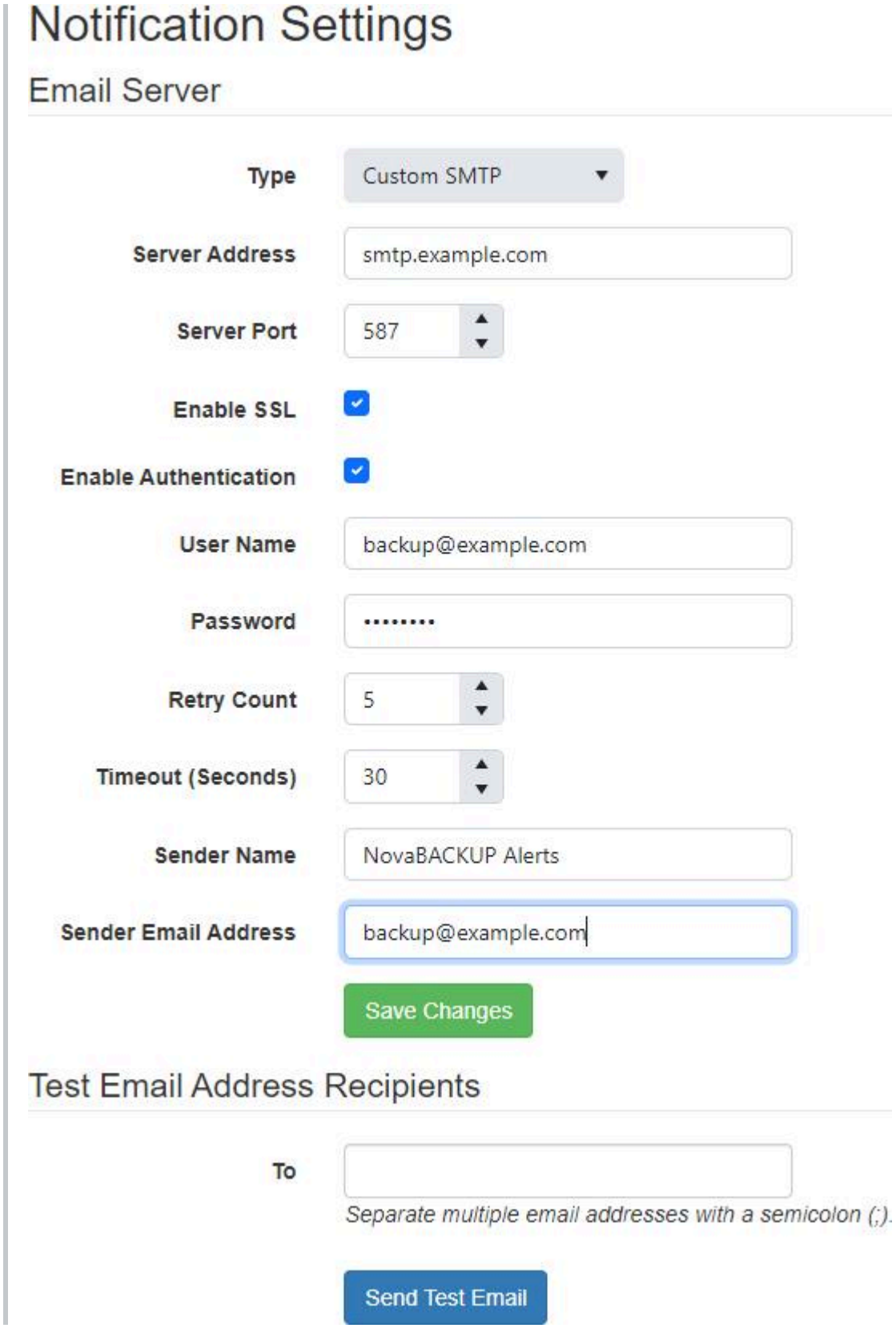
Edit Settings

Notification Settings

To configure how the **Notification e-mails** are sent you, click on the "**Notification**" menu item under the "**Settings**" menu item. Notification e-mails are delivered **by default** via the built-in "NovaBACKUP Alerts" SMTP service.



You can also configure CMon to send Notifications using a "**Custom SMTP**" server. Make sure to fill in all of the details that are prompted for. Once the prompts are filled in click the " **Test Email Settings** " button to verify all of the settings are correct prior to saving, otherwise your Notification e-mails will fail.



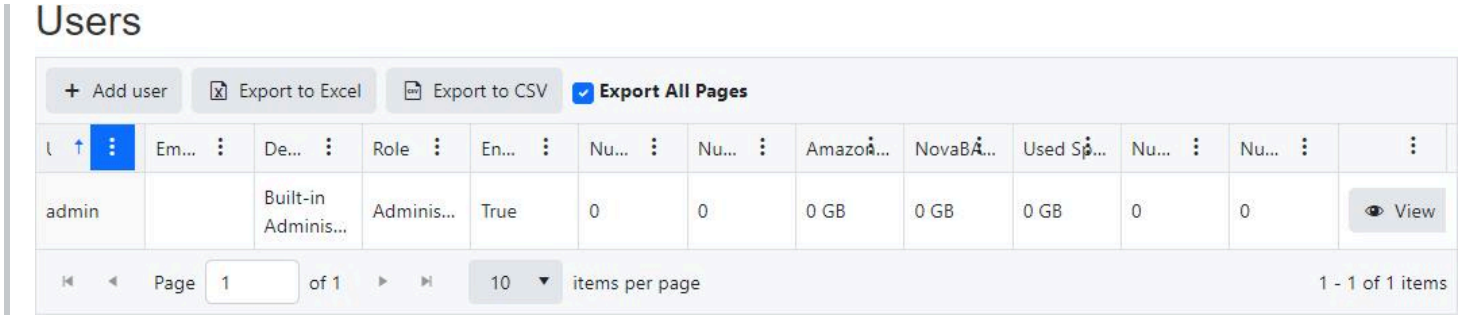
PERMISSIONS REQUIRED

View Settings

Edit Settings

#Users

The `Users` page is used to manage user accounts.



Users with permissions to `Edit Users` can click the `Add user` button to create a new user.

The column menus on the data grid can be used to sort, show, hide, lock columns, and filter data.

The `Storage Server Group` column is hidden by default.

Click on the `View` button next to the user to navigate to the user's details page, where they can also be updated and deleted.

Export

The exported file contains the list of users, sorted and filtered to match the current view.

If the "Export All pages" check box is check-marked, then the data in all pages will be exported.

The exported file will contain the following columns:

Column Name	Description
UserName	The user name.
EmailAddress	The email address for the user.
Description	The user description.
Role	The user role.
Enabled	Indicates whether the user is enabled or not.
StorageServerGroup	The NovaBACKUP Storage Server group.

Column Name	Description
NumberOfAgents	Total number of agents the user can manage.
NumberOfCloudStorageAccounts	Total number of cloud storage accounts the user can manage.
AmazonS3CompatibleCloudStorageAccountsUsedSpaceInGigabytes	Total space used for Amazon S3 compatible cloud storage accounts the user can manage, which has been previously calculated.
NovaBackupCloudStorageAccountsUsedSpaceInGigabytes	Total space used for NovaBACKUP cloud storage accounts the user can manage.
UsedSpaceInGigabytes	Total space used for NovaBACKUP and Amazon S3 compatible cloud storage accounts the user can manage.
NumberOfAgentsRunningOnMicrosoftWindowsWorkstationOperatingSystem	Total number of agents the user can manage which are running on a Microsoft Windows Workstation operating system.
NumberOfAgentsRunningOnMicrosoftWindowsServerOperatingSystem	Total number of agents the user can manage which are running on a

Column Name	Description
	Microsoft Windows Server operating system.

Export to CSV

Click on the "Export to CSV" button to create a comma-separated values (CSV) file.

Export to Excel

Click on the "Export to Excel" button to create a excel file.

PERMISSIONS REQUIRED

View Users

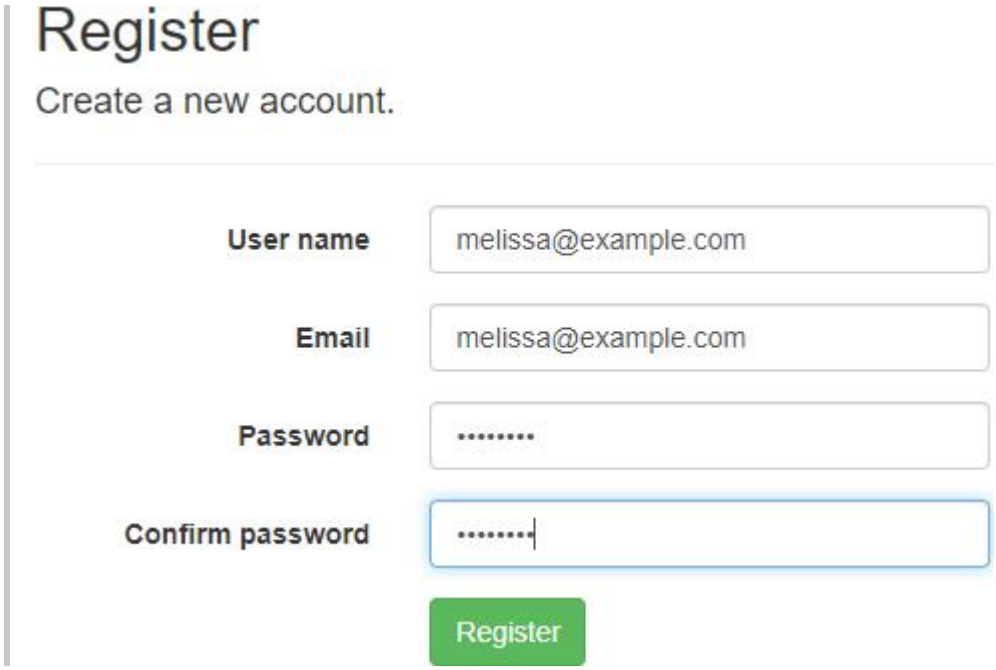
Related topics:

Create a user
View a user

User registration

From the "Log in" view, click on the "Register" button to register for a new account.

Enter a username, password, email address, and click the "Register" button to continue.



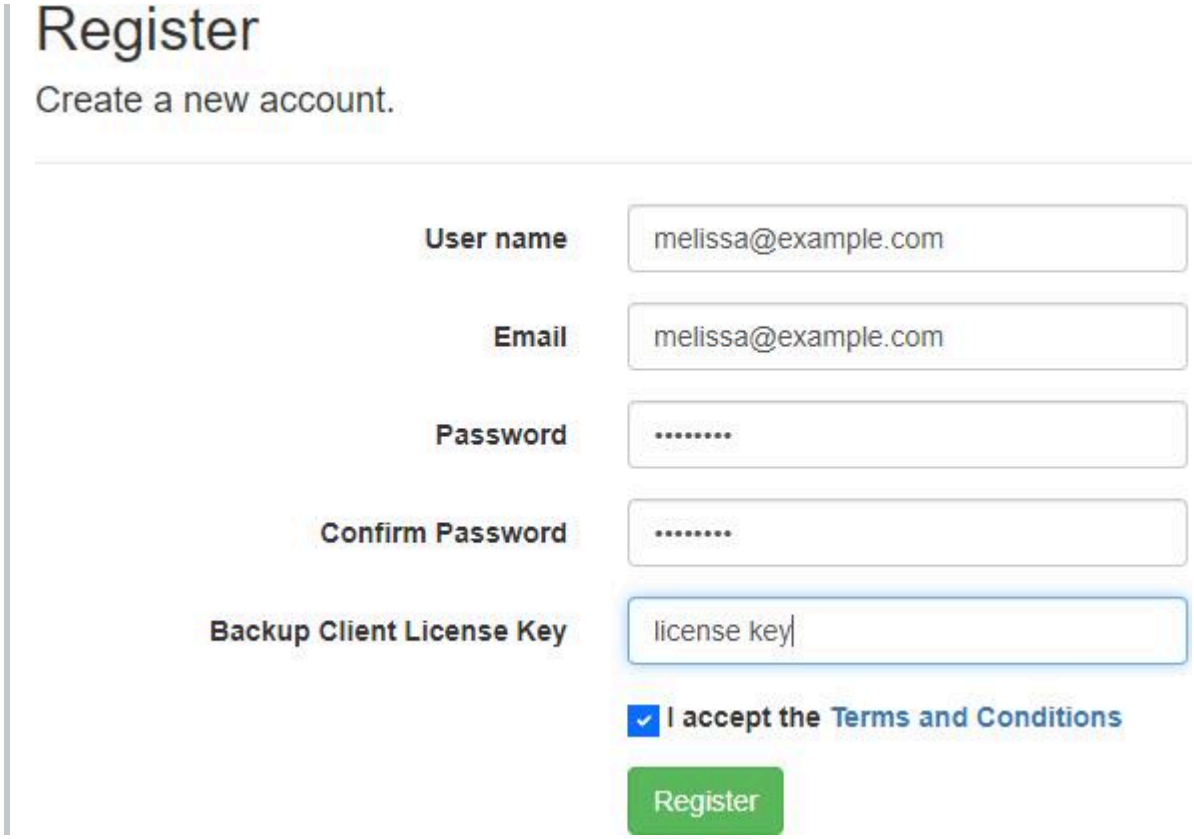
The username must be unique.

Related topics:

[User registration settings]
[User registration and creating a cloud storage account in one step]

User registration and creating a cloud storage account in one step

When launched from within the backup client, clicking on the "Register" button from the "Log in" view displays a page allowing you to register for a new account and create a cloud storage account in one step.



Related topics:

[User registration settings]
[User registration]
[Add a storage server]
[Create a cloud storage account]

Create a user

The `Create user` page is used to add a new user.

User | Groups | Storage Server Groups | Storage Servers

User name

michael@example.com

Password

••••••••

Confirm password

••••••••

Email address

michael@example.com

Send registration email now

YES

User must change password on next login

A password is optional if it must be set at first login.

NO

Description

Role

User

Create storage server group for this user

YES

Storage server group

michael@example.com

Comments

Add user

User

User name

- Required
- Must be less than or equal to 50 characters
- Must be unique

Password

- If set, must be between 6 and 100 characters
- If not set, then `Send registration email now` and `User must change password on next login` must be enabled.

Confirm password

If set, the password and confirmation password must match.

Email address

- Required
- Must be less than or equal to 128 characters
- Must be a valid email address format

Send email registration now

Sends the user a registration email which contains a link to the Set Password page, to allow them to set their password.

The set password link expires after 30 days.

User must change password on next login

Requires the user to change their password the next time they login.

Description

- Must be less than or equal to 128 characters

Role

- Required

Create storage server group for user

This field is displayed if the logged in user can view storage servers and storage server groups, and a NovaBACKUP storage server exists.

If enabled, a storage server group is created when the user is created.

Storage server group

This field is displayed if the logged in user can view storage servers and storage server groups, and a NovaBACKUP storage server has been configured.

- Required
- Must be less than or equal to 128 characters
- Must be unique if `Create storage server group for user` is enabled

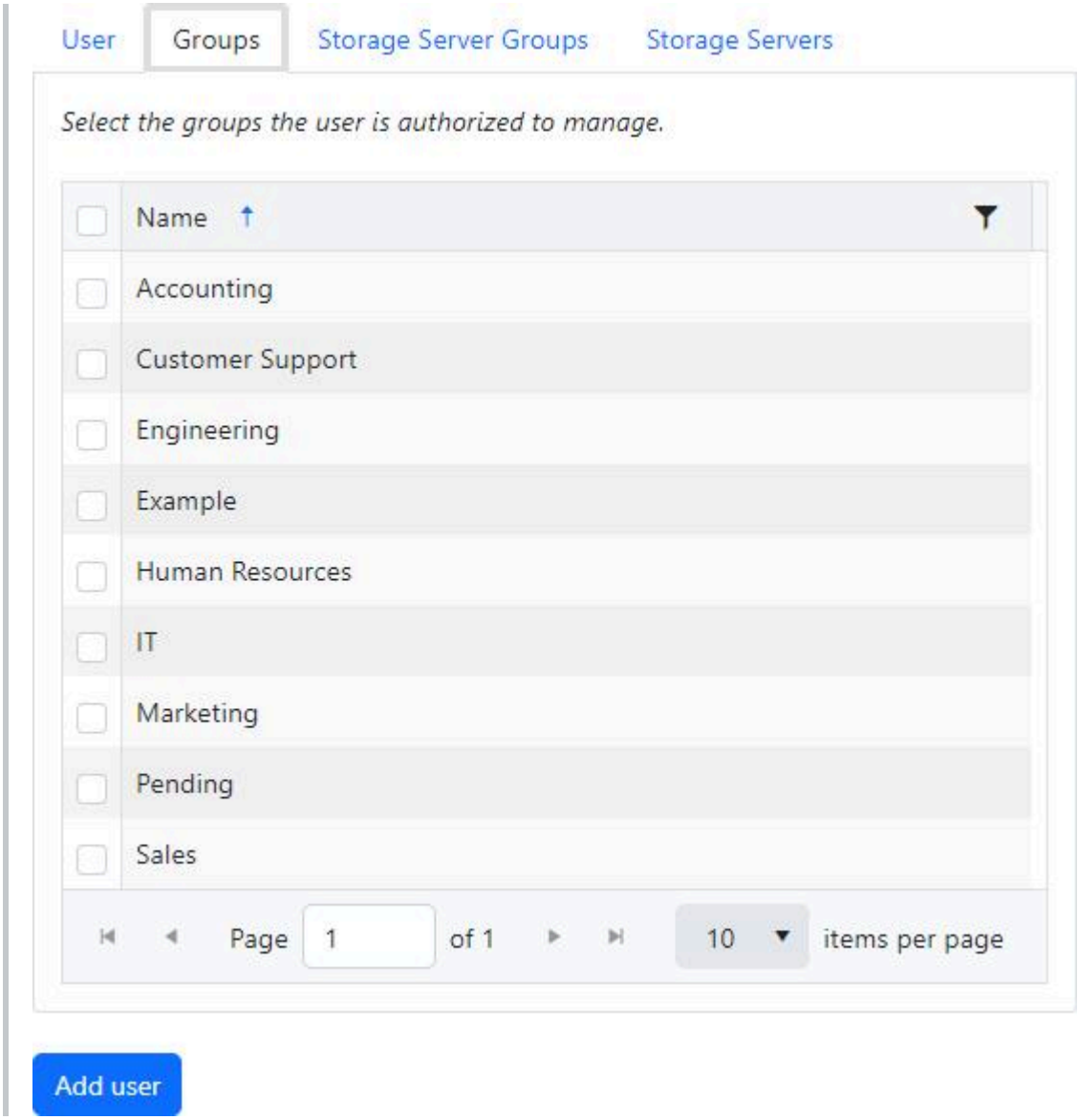
Comments

- Must be less than or equal to 255 characters

Groups

The `Groups` tab is enabled if the logged in user has permissions to `View Agents and Groups`.

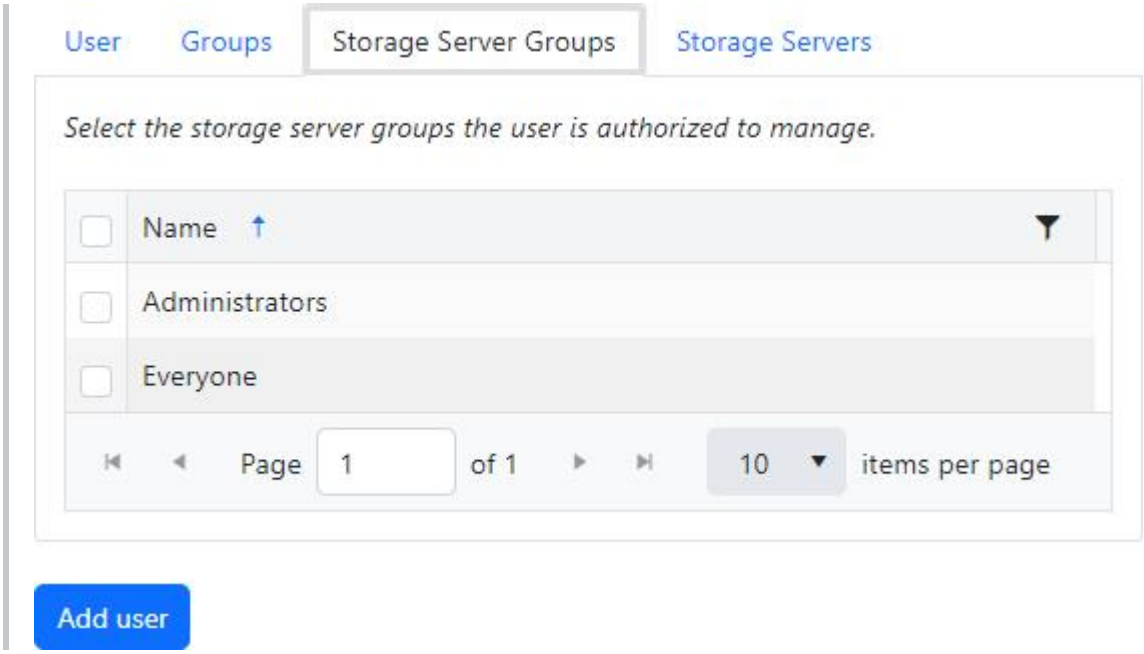
Select the groups the user is authorized to manage.



Storage Server Groups

The `Storage Server Groups` tab is enabled if the logged in user has permissions to `View Storage Servers` and a NovaBACKUP storage server has been configured.

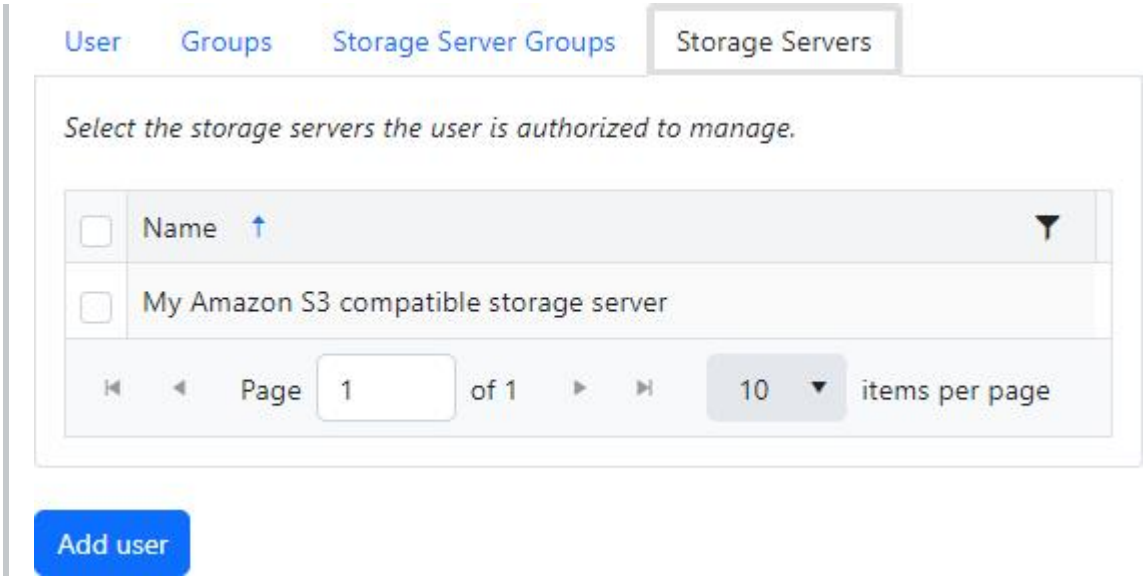
Select the NovaBACKUP storage server groups the user is authorized to manage.



Storage Servers

The `Storage Servers` tab is enabled if the logged in user has permissions to `View Storage Servers` and has access to at least one Amazon S3 compatible storage server.

Select the Amazon S3 compatible storage servers the user is authorized to manage.



Add user

Click the "Add user" button to create the user.

PERMISSIONS REQUIRED

Edit Users

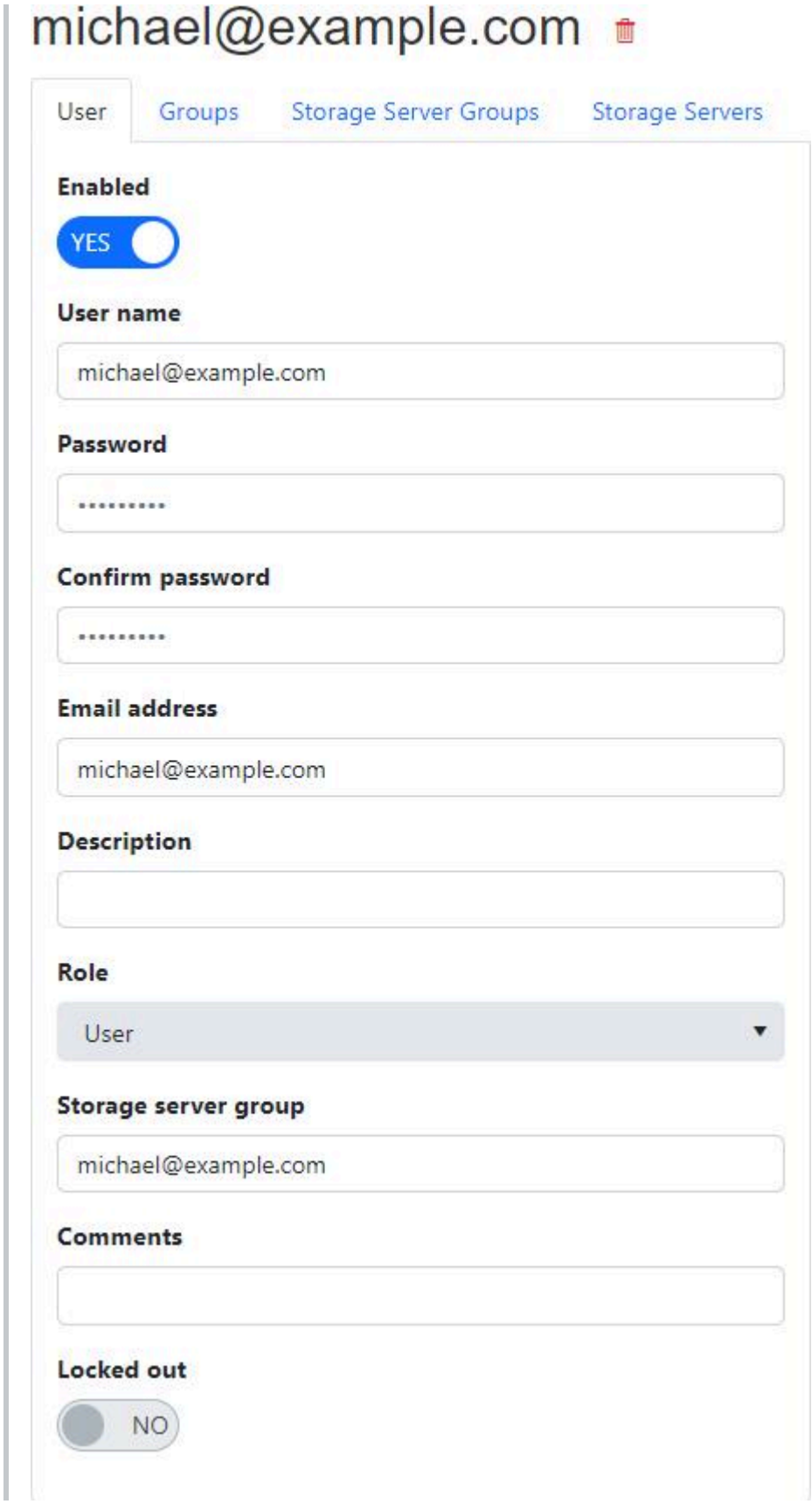
Related topics:

Roles

Storage Servers

View a user

The `User details` page is used to display the details of a user.



Users with `Edit Users` permissions can also update and delete the user.

Changes to the user are automatically saved.

Delete

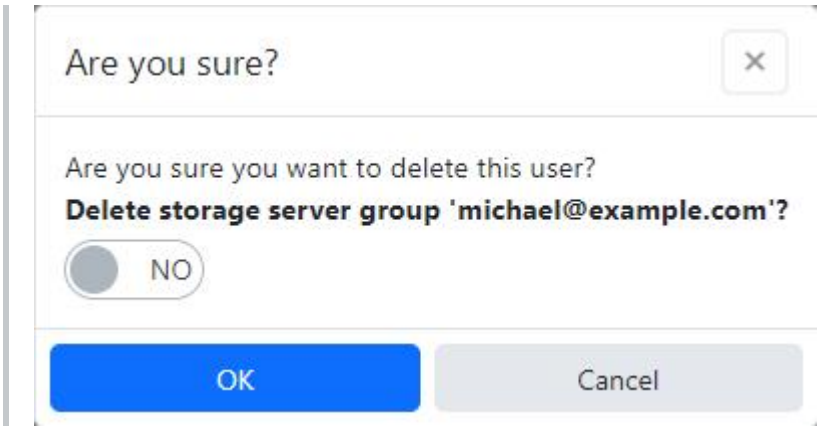
The logged in user must have permissions to `Edit Users` to delete a user.

The logged in user cannot be deleted.

If the user is attached to a storage server group, the logged in user must have permission to `Edit Storage Server Groups` to delete the user in order to determine if the storage server group should also be deleted or not.

If the user's user name is `admin`, they cannot be deleted.

Click on the `Delete` button to delete the user.



If "Delete Storage Server Group" is switched on, the storage server group attached to the user will also be deleted.

The default storage server group cannot be deleted.

The storage server group cannot be deleted if it's associated with other users.

The storage server group cannot be deleted if it's being used with one or more cloud storage accounts.

Click on the `OK` button to confirm to delete the user.

User

Enabled

If the user is disabled, they cannot log in.

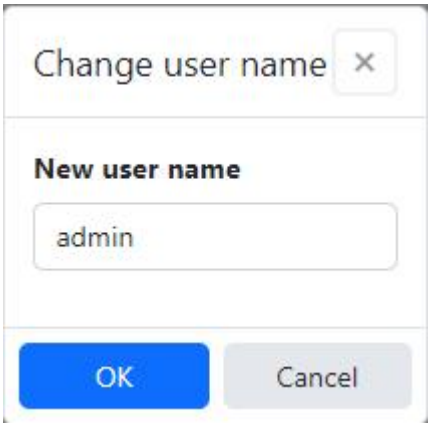
The logged in user cannot be disabled.

User name

- Required
- Must be less than or equal to 50 characters
- Must be unique

To change the user name of the logged in user, click on the `pencil` icon.

When changing the user name of the logged in user, the page will refresh automatically.



Password

The logged in user must have permission to `Reset User Passwords` in order to change the user's password.

- If set, must be between 6 and 100 characters

Confirm password

If set, the password and confirmation password must match.

Email address

- Required
- Must be less than or equal to 128 characters
- Must be a valid email address format

Description

- Must be less than or equal to 128 characters

Role

The logged in user must have permission to `View Roles` in order to view the user's role.

- Required

Storage server group

This field is displayed if the logged in user can view storage server groups, and a NovaBACKUP storage server has been configured.

- Required
- Must be less than or equal to 128 characters
- Must exist in the storage server

Comments

- Must be less than or equal to 255 characters

Locked out

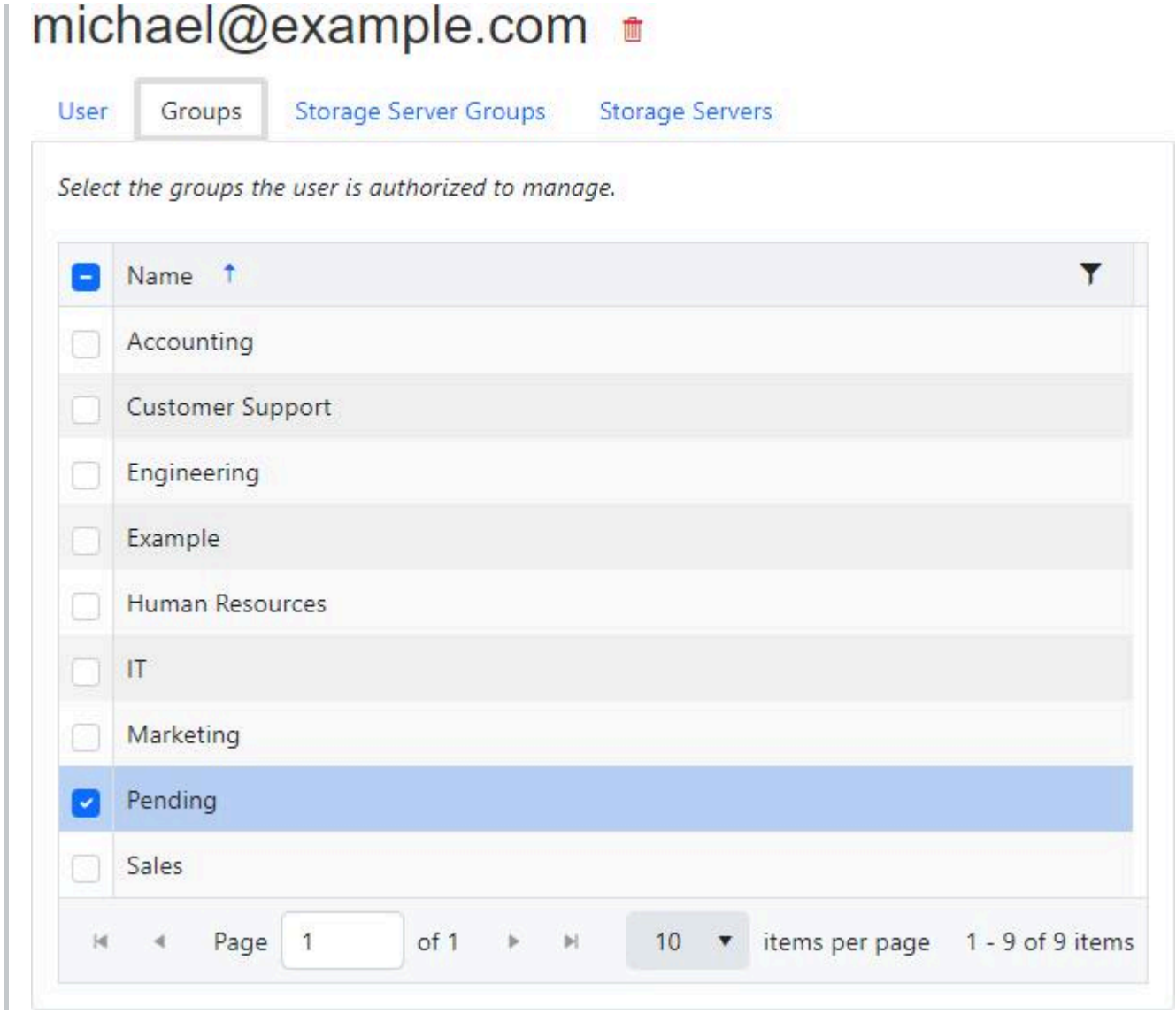
Only users who are locked out can be unlocked.

Users may be locked out after too many consecutive attempts to login because of an invalid password.

Groups

The `Groups` tab is enabled if the logged in user has permissions to `View Agents and Groups`.

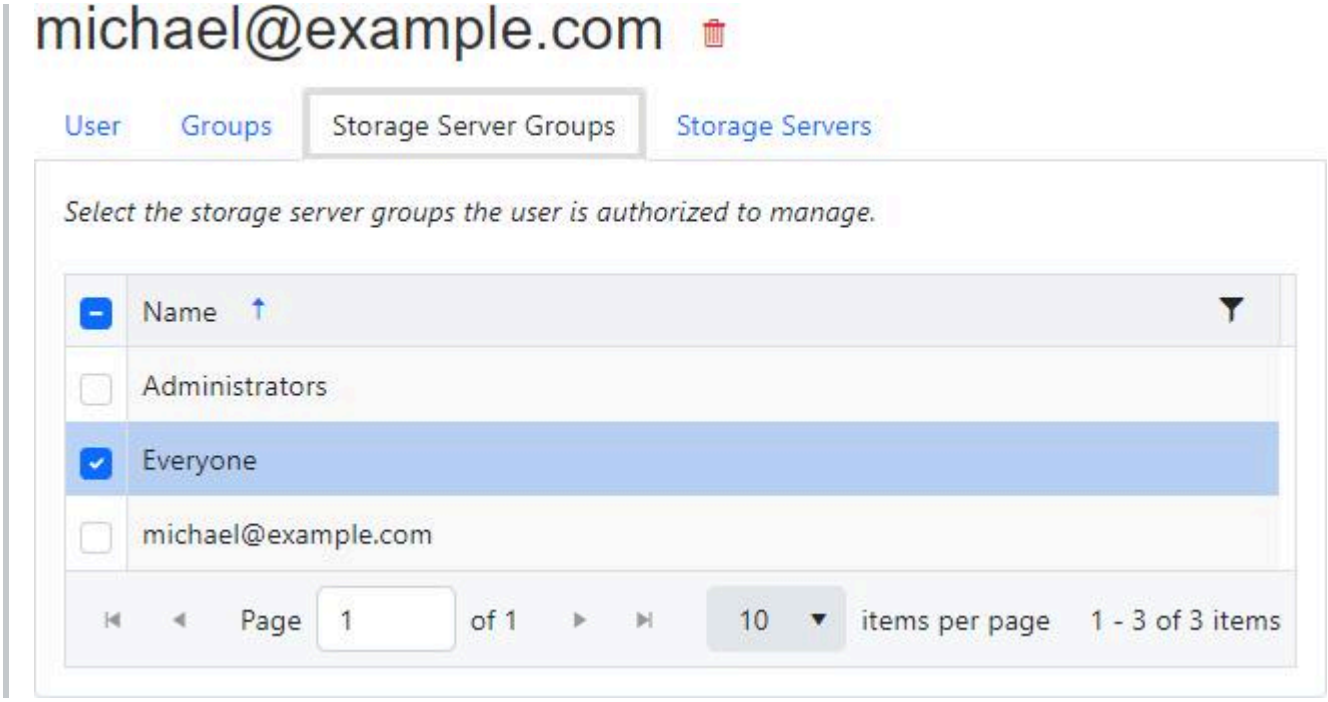
Select the groups the user is authorized to manage.



Storage Server Groups

The `Storage Server Groups` tab is enabled if the logged in user has permissions to `View Storage Servers` and a NovaBACKUP storage server has been configured.

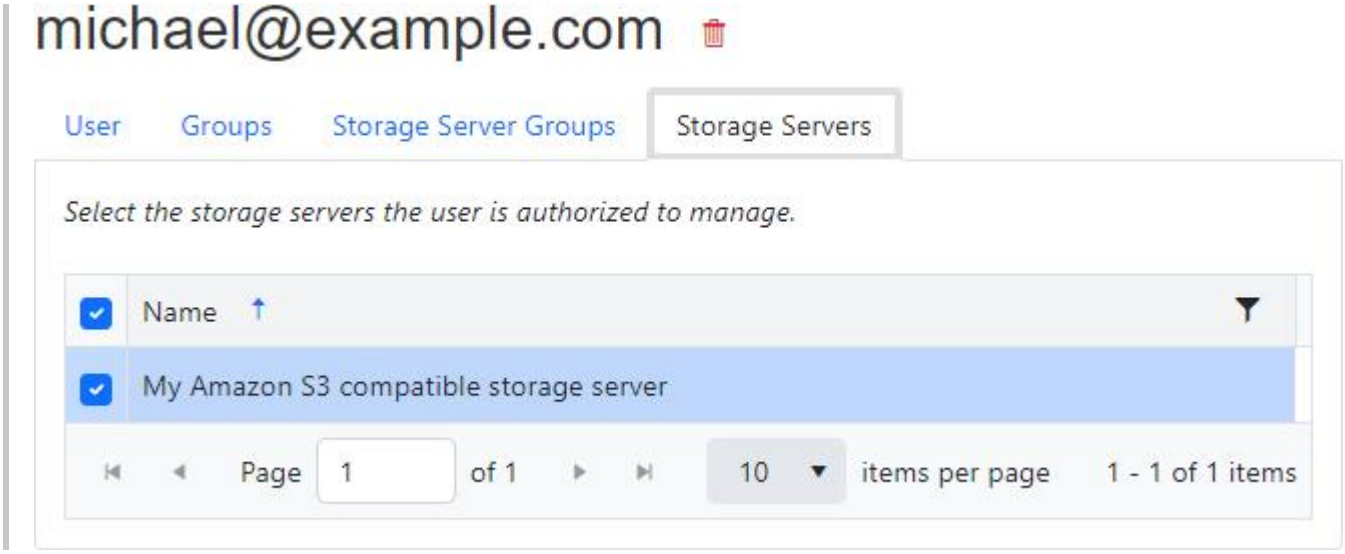
Select the NovaBACKUP storage server groups the user is authorized to manage.



Storage Servers

The `Storage Servers` tab is enabled if the logged in user has permissions to `View Storage Servers` and has access to at least one Amazon S3 compatible storage server.

Select the Amazon S3 compatible storage servers the user is authorized to manage.

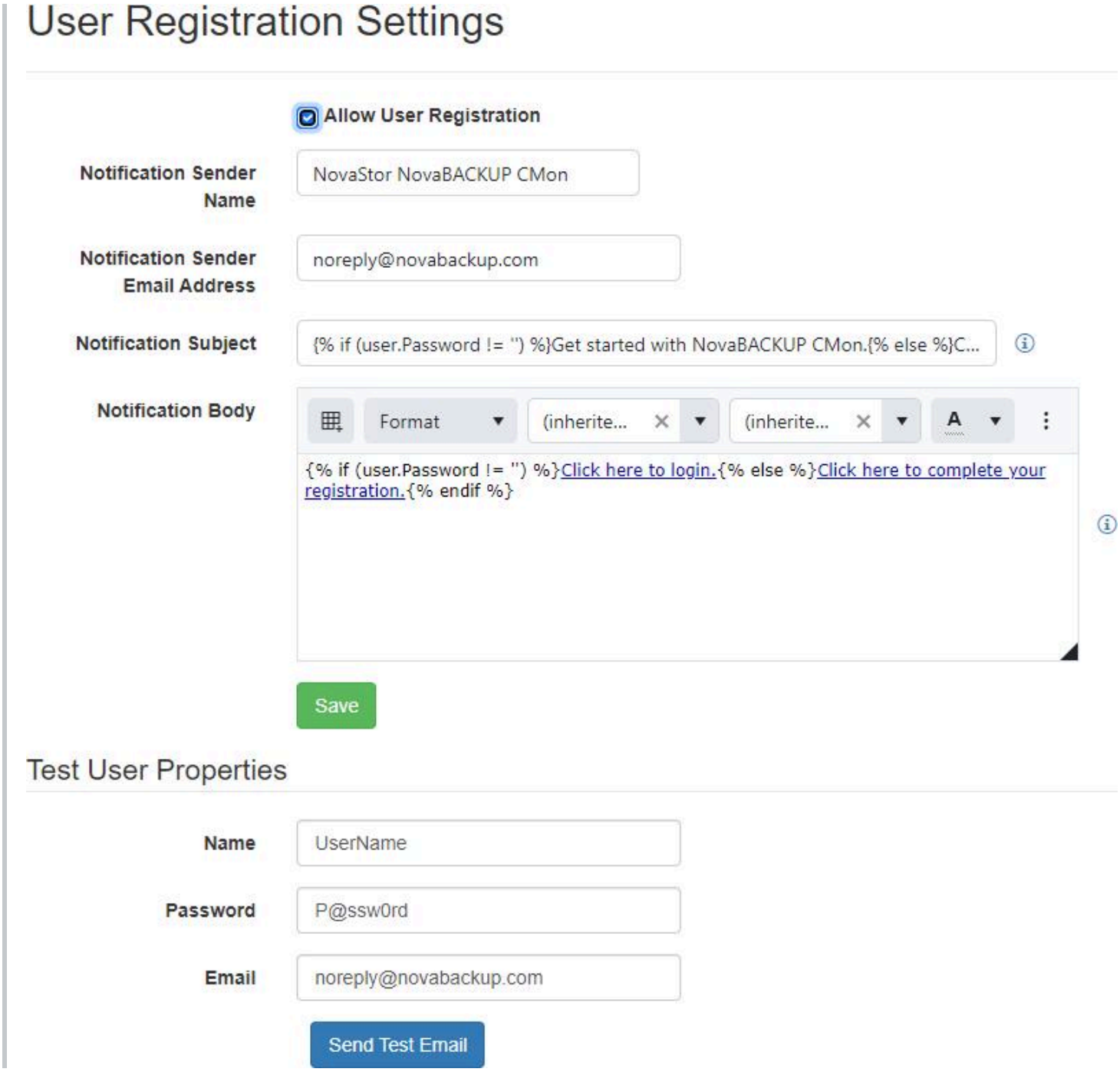


PERMISSIONS REQUIRED

View Users

User Registration Settings

The "User Registration Settings" view allows an administrator to enable or disable user registrations and configure the user registration email template.



The notification email sender name and email address are editable only when using a custom SMTP server.

Notification Email

The user registration notification email subject and body are templates that use markup to output text based on conditions and variables.

Syntax

Introduction

Type	Description
Objects	Objects produce content. Object names are denoted by double curly braces: {{ and }}.
Tags	Tags create the logic and control flow for templates. They are denoted by curly braces and percent signs: {% and %}. The markup used in tags does not produce any visible text.

Control flow

Syntax	Description
if	Executes a block of code only if a certain condition is true.
elsif / else	Adds more conditions within an if block.
endif	Indicates the end of an if control block.

Operators

Syntax	Description
==	equals
!=	does not equal
>	greater than
<	less than
>=	greater than or equal to
<=	less than or equal to
or	logical or
and	logical and

Built-in objects

Object Name	Description
user.Name	The user's username.
user.Email	The user's email address.
user.Password	The user's password. Putting a password in plain text in an email isn't recommended.
SetPasswordToken	The token used to set the user's password.
SetPasswordUrl	The URL of the page which allows the user to set their password.
LoginUrl	The URL of the login page.

PERMISSIONS REQUIRED

View Settings

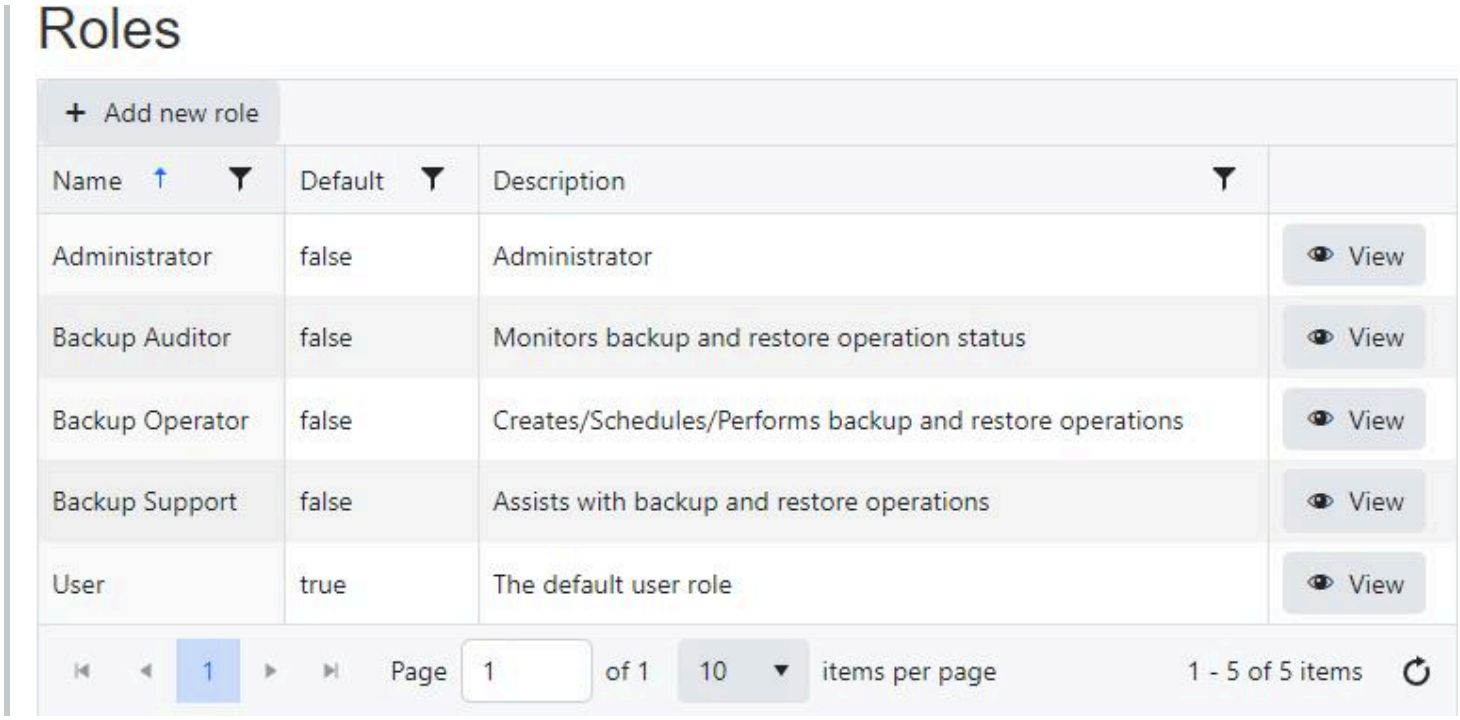
Edit Settings

Related topics:

Notification Settings
User registration

#Roles

The "**Roles**" page contains the ability to create, view, and edit Roles. Once on the **Roles** page you can click on "**Add new role**" button to add new roles. From there you will be able to define a custom role.



Click on the **View** button to view the details of a role.

Administrator

View users in this role

GENERAL

Name

Administrator

Description

Administrator

☐ **Default**

The default role for new user registrations.

AGENTS AND GROUPS

☑ **View Agents and Groups**

View authorized agents and groups, and associated devices and notes.

☑ **Edit Groups**

View, create, edit, and delete authorized groups and associated notes.

☑ **Edit Agents**

View, edit, and delete authorized agents and associated devices and notes.

☑ **Edit All Agents and Groups**

View, create, edit, and delete all agents and groups.

CLOUD STORAGE ACCOUNTS

☑ **View Cloud Storage Accounts**

View cloud storage accounts.

☑ **Edit Cloud Storage Accounts**

View, edit, and delete cloud storage accounts.

DASHBOARD

☑ **View Dashboard**

View the dashboard for authorized agents and groups.

☑ **Edit Dashboard**

Edit dashboard

JOBS

- [x] **View Jobs and Job History**

View jobs and job histories for agents in authorized groups.

- [x] **View Jobs Logs**

View jobs, job history, and logs for agents in authorized groups.

- [x] **View Job History**

View jobs, job history, and logs for agents in authorized groups.

- [x] **Edit Jobs**

View jobs, job history, and delete job logs for agents in authorized groups.

- [x] **Start Backup Jobs**

Start all the backup jobs.

- [x] **Create Restore Jobs**

Create restore jobs.

- [x] **Stop Jobs**

Stop all the jobs.

NOTIFICATIONS

- [x] **View Notifications**

View triggers, notification history, and notification settings.

- [x] **Edit Notifications**

View, create, edit, and delete triggers, notification history, and notification settings.

REPORTS

- [x] **View Reports**

View the reports for authorized agents and groups.

- [x] **Edit Reports**

Edit the reports.

ROLES

- [x] **View Roles**

View all roles.

- [x] **Edit Roles**

View, create, edit, and delete all roles.

SETTINGS

- [x] **View Settings**
  View global application settings.
- [x] **Edit Settings**
  View, edit, and delete global application settings.

STORAGE SERVERS

- [x] **View Storage Servers**
  View storage servers.
- [x] **View Storage Server Details**
  View storage server details.
- [x] **View Storage Server Groups**
  View storage server groups.
- [x] **Edit Storage Servers**
  View, edit, and delete storage servers.
- [x] **Edit Storage Server Groups**
  View and edit storage server groups.
- [x] **Edit All Storage Servers**
  View, create, edit, and delete all storage servers.
- [x] **Edit All Storage Server Groups**
  View, create, edit, and delete all storage server groups.

PERMISSIONS REQUIRED

View Roles

Edit Roles

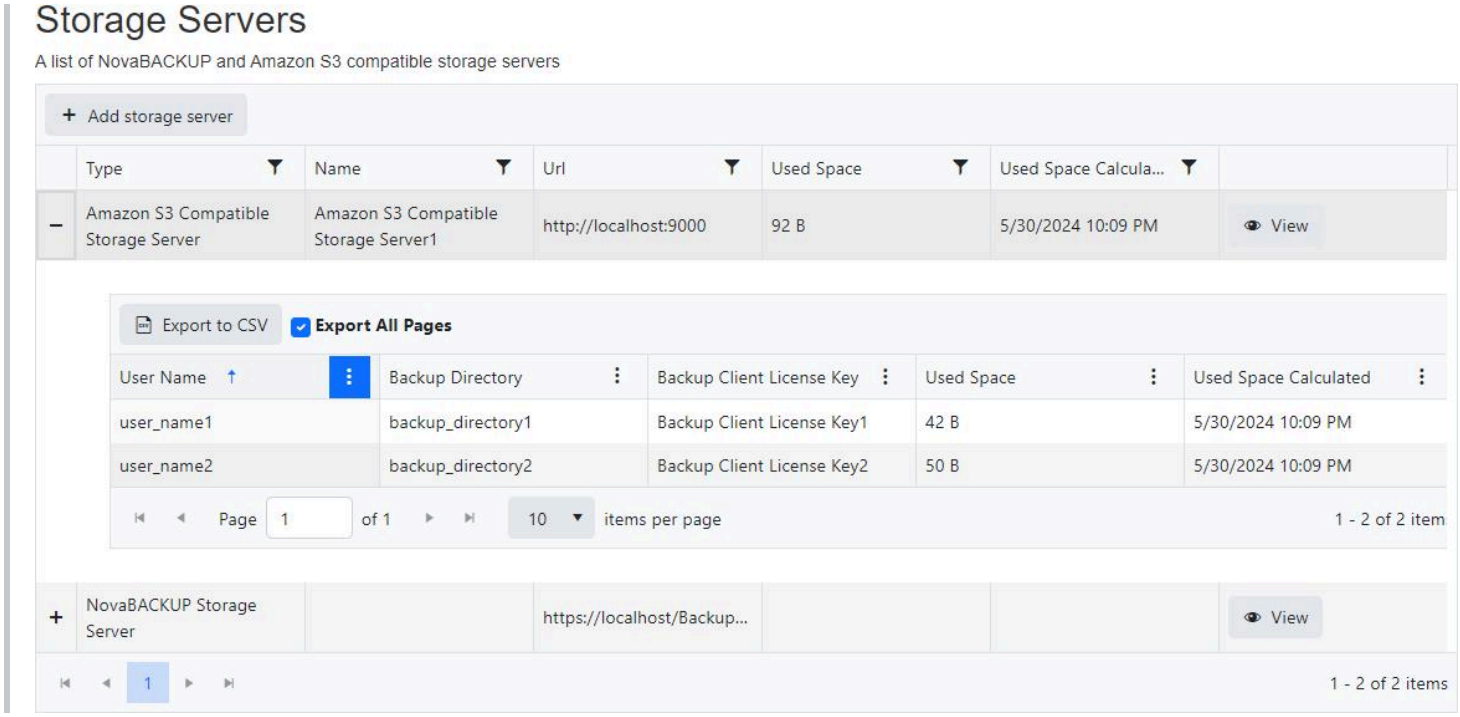
- [x] **Reset User Passwords**
  Reset user passwords.

Save Delete

Storage Servers

The "Storage Servers" view allows an administrator to manage NovaBACKUP Storage Servers and Amazon S3 compatible storage servers.

In order for users to create cloud storage accounts, a Storage Server must be added.



Column Name	Description
Type	The type of storage server. ("NovaBACKUP Storage Server" or "Amazon S3 Compatible Storage Server")
Name	The name of the storage server.
Url	The URL of the storage server.
Used Space	The amount of storage space used in bytes since it was last calculated. An empty value indicates the storage server could not be contacted.
Used Space Calculated	The date and time when the successful calculation of "Used Space" was completed.

PERMISSIONS REQUIRED

View Storage Server Details

Add a storage server

From the "Storage Servers" view, click on the "Add storage server" button to add a new storage server.

Select "NovaBACKUP Storage Server" from the "Storage server type" drop down.

Enter the web URL and key for the Storage Server API and click the Next button to continue.

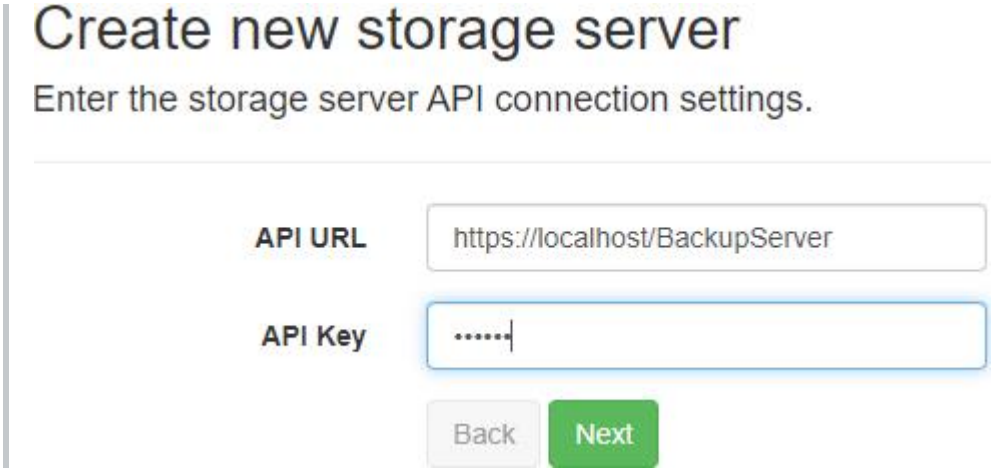
The storage server API is an optional feature installed with the NovaBACKUP Storage Server by default.

It's recommended to use HTTPS for a secure connection.

If a secure connection could not be established because of SSL certificate errors, the errors can be ignored in [Security Settings](), but this is not recommended.

The API key is configured in the storage server API's "appSettings.config" file and is case sensitive.

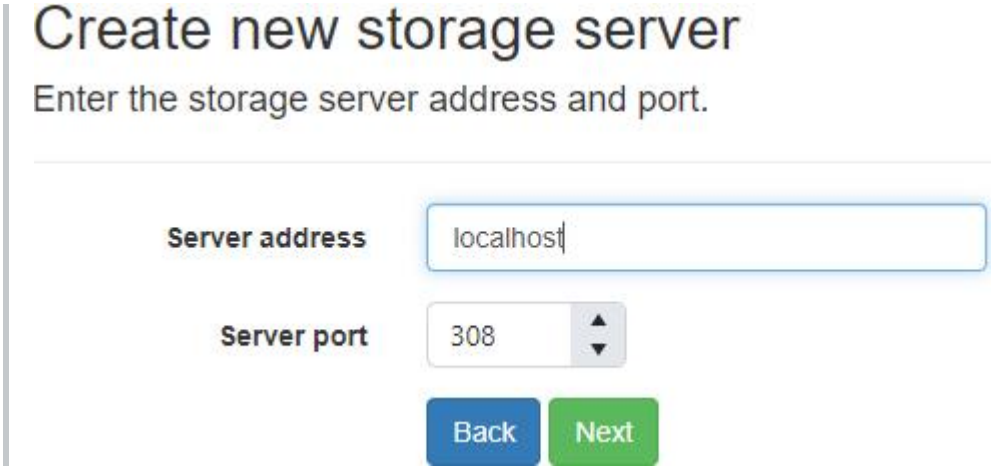
A randomly generated API key is created by default.



Enter the storage server address and port and click the "Next" button to continue.

The storage server address should be publicly resolvable by the backup client.

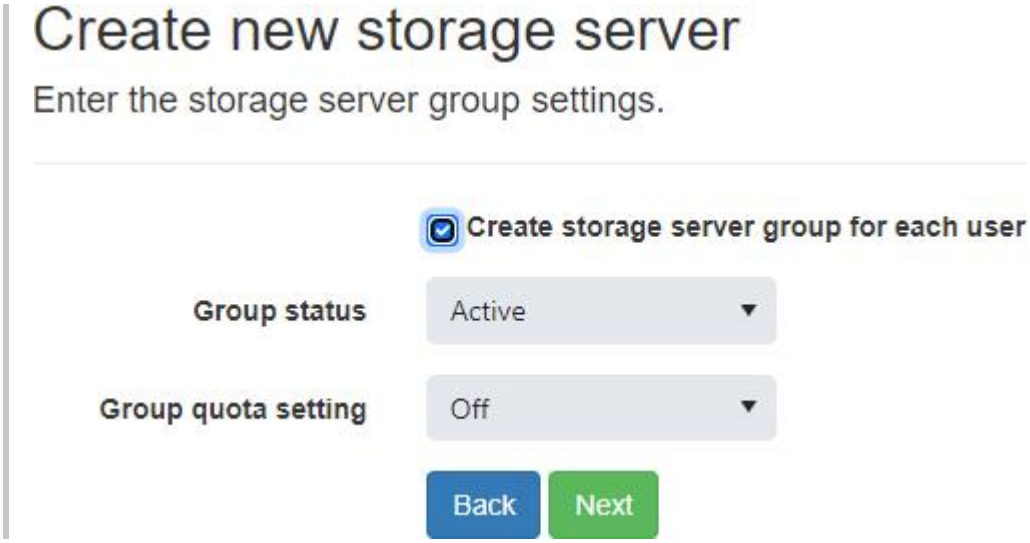
The storage server port is the port the backup server is configured to listening on.



Enter the storage server group settings and click the "Next" button to continue.

If the "Create storage server group for each user" check box is checked:

1. A new storage server group is created for new CMon users.
2. The name of the storage server group will be the same as the username of the CMon user.
3. New cloud storage accounts created for new CMon users will be assigned that storage server group.
4. The group status and quota settings will be used for the new storage server group.



Enter the storage server account settings and click the "Next" button to continue.

When the user is required to enter a backup client license key and the "Account Quota Setting" field is set to "Custom", the user account's quota will be set according to the quota specified for the backup client license key provided when the user signs up for an account.

Otherwise, the "Account Quota (Megabytes)" field must be specified if the user is not required to enter a backup client license key and the "Account Quota Setting" field is set to "Custom".

If a backup client license is used with a data storage quota greater than 2,147,483 GB, then the data storage quota on the cloud storage account will be limited to 2,147,483,647 MB.

When the "Account Quota Setting" field is set to "Group", the user account's quota will be set according to the quota specified for the storage server group specified in the previous step.

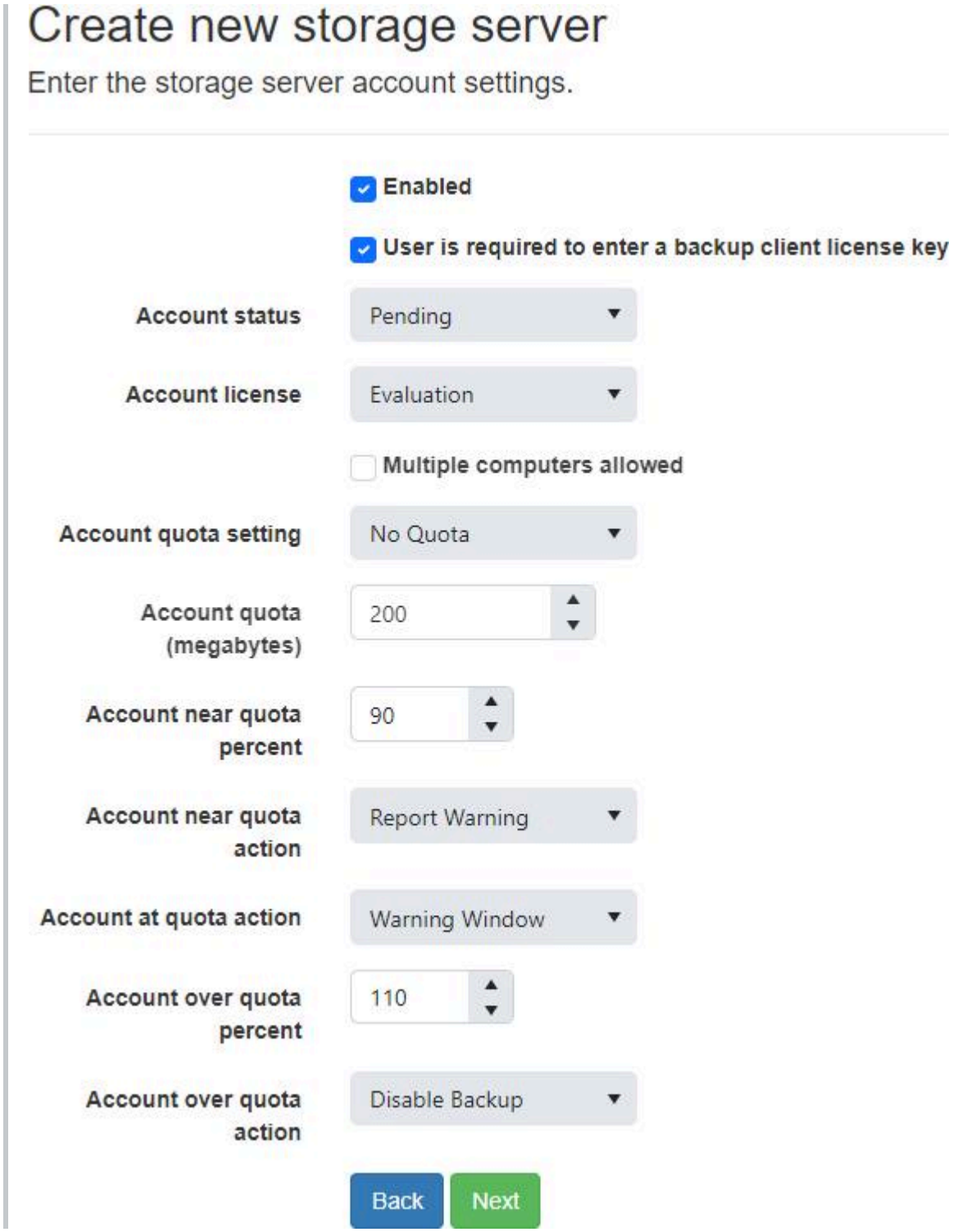
When the "Account Quota Setting" field is set to "No Quota", the user's account will have an unlimited amount of storage space.

The number of computers that can be backed up to the cloud storage account will be based on the maximum number of activations set on the backup client license used to create the account.

If a backup client license is used with a maximum number of activations greater than 5000, then the number of computers on the cloud storage account will be limited to 5000.

If the user is not required to enter a backup client license key, then the "Number of computers" must be specified if the "Multiple computers allowed" checkbox is checked.

The storage server help documentation contains more details about the other settings.



Enter the storage server account data storage and retention policy settings and click the "Next" button to continue.

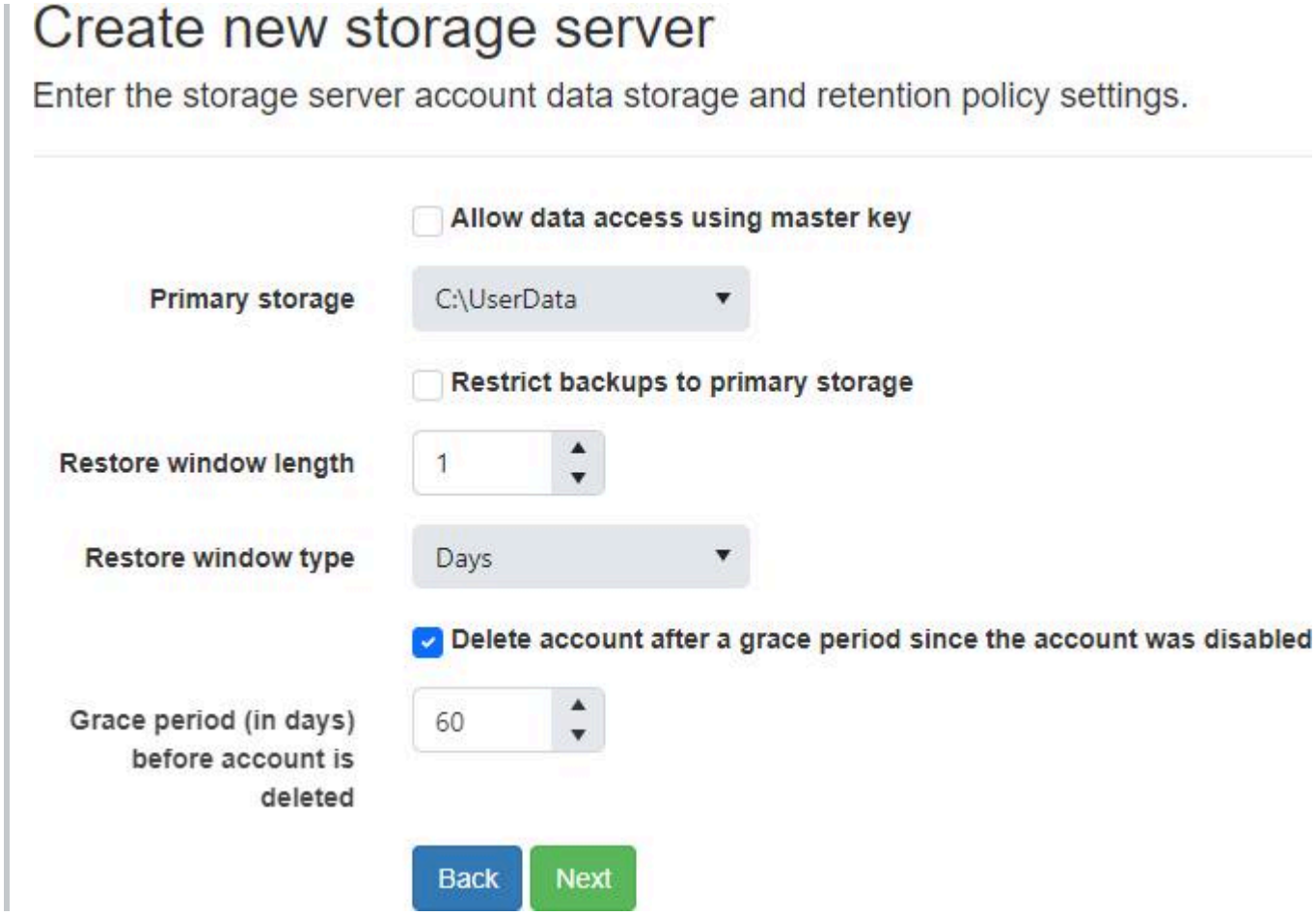
If the cloud storage account was created with a backup client license key, the account will automatically be disabled if the backup client license is disabled, expired, no longer supports cloud storage, or if the upgrade subscription is expired.

The cloud storage account will automatically be re-enabled if the license and upgrade subscription, if any, become valid again.

An account can also be disabled from the storage server directly.

After an account is disabled, the user will not be able to connect to the storage server.

If the "Delete account after a grace period since the account was disabled" check box is checked, the account will be deleted after the specified grace period since the account was disabled.

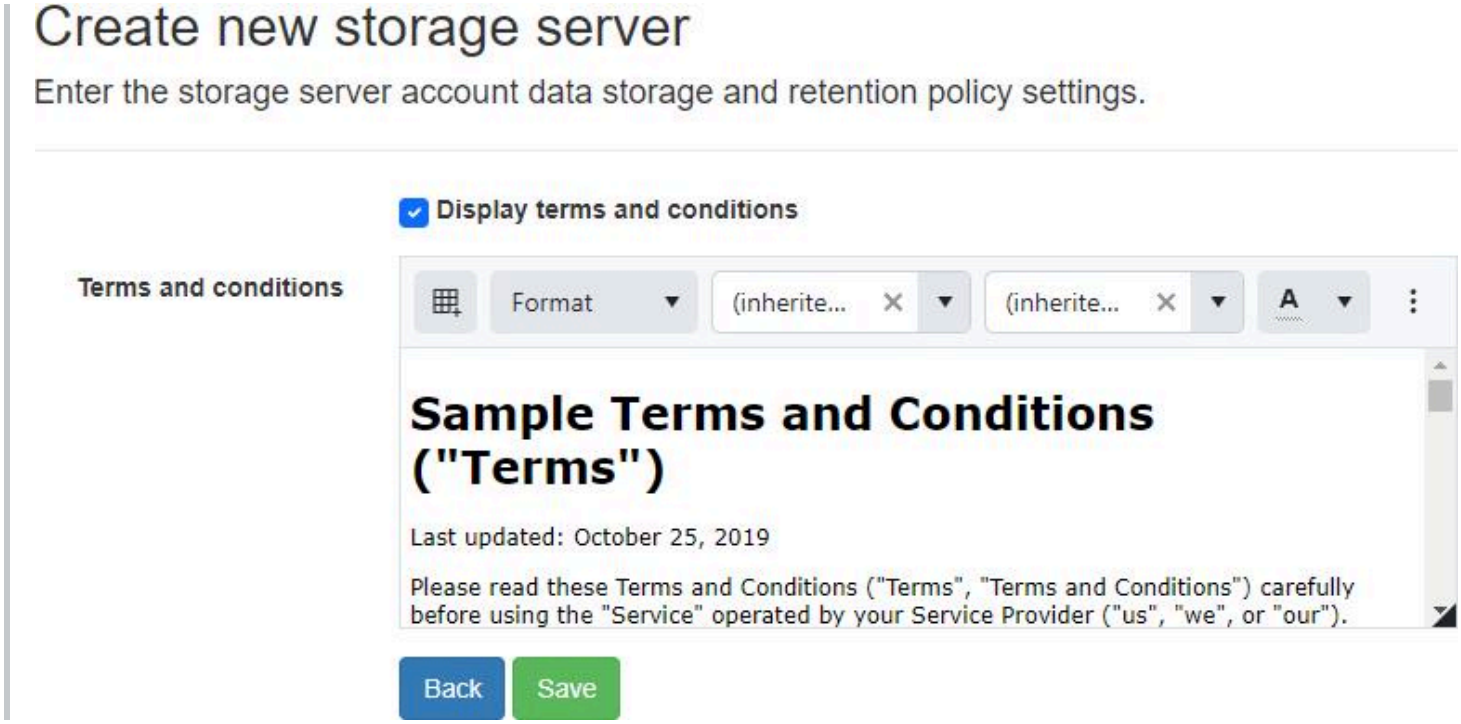


Optionally enable displaying the terms and conditions and click the "Save" button to continue.

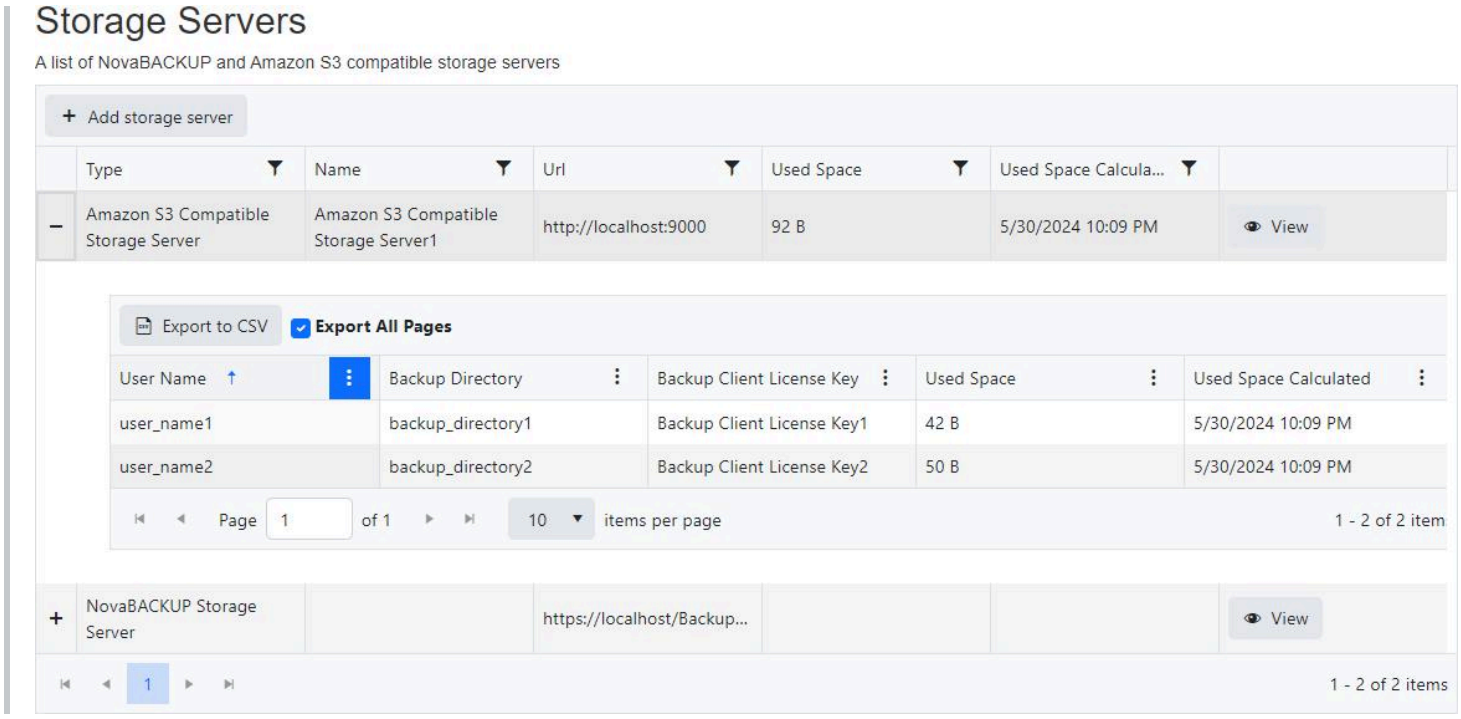
If enabled, the user must accept the terms and conditions before a cloud storage account is created.

The Import button can be used to insert a Microsoft Office Open XML Format word processing document (DOCX), Rich Text Format (RTF), Adobe Portable Document Format (PDF), HyperText Markup Language (HTML), and plain text (txt) file into the terms and conditions editor.

For more details on how the terms and conditions is displayed, see [Terms and Conditions](#).



After creating the storage server, it will be displayed in the data grid.



Only one storage server is supported.

The CMon will periodically query the license for any changes and update the cloud account accordingly.

PERMISSIONS REQUIRED

Edit Storage Servers

Related topics:

Create a cloud storage account

Add Amazon S3 compatible storage server

From the "Storage Servers" view, click on the "Add storage server" button to add a new Amazon S3 compatible storage server.

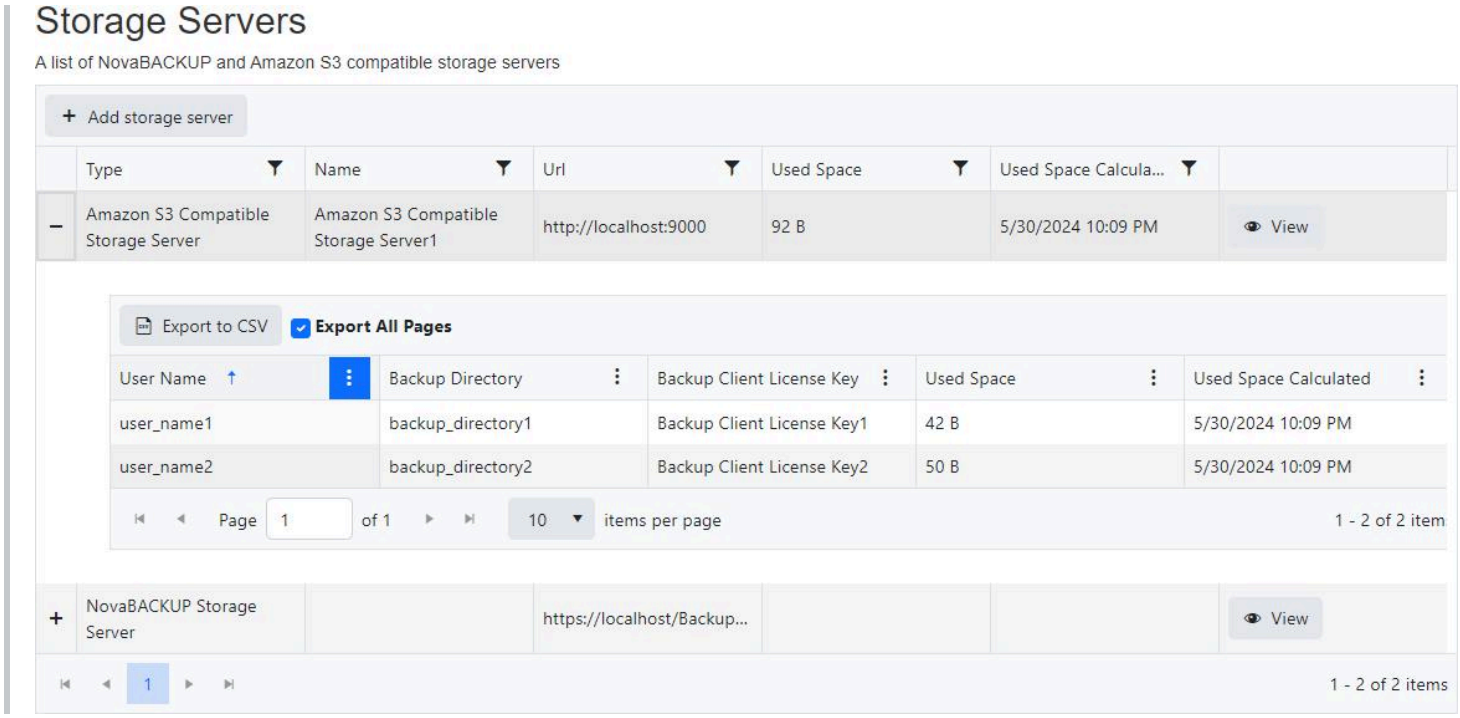
Select "Amazon S3 Compatible Storage Server" from the "Storage server type" drop down.

Enter the Name, URL, Access Key Id, Secret Access Key and Bucket Name.

Optionally enable/disable "User is required to enter backup client license key".

Also optionally enter the "Terms and Conditions" and click on the "Add Storage Server" button.

After creating the storage server, it will be displayed in the data grid.



Default

Indicates whether this is the default storage server to use for new cloud storage accounts.

- Default value: Yes

Name

- Required
- Maximum length is 50
- Default value: My Amazon S3 compatible storage server

URL

- Required
- Maximum length is 256
- Must be in a valid URL format

Access Key Id

- Required
- Maximum length is 128

Secret Access Key

- Required
- Maximum length is 256

Bucket Name

- Required
- Minimum length is 3
- Maximum length is 63

Timeout

- OFF: infinite
- Minimum duration: 1 second
- Maximum duration: 23 hours, 59 minutes, and 59 seconds
- Default duration: 1 minute, 40 seconds
- Minimum hours: 0
- Maximum hours: 23
- Minimum minutes: 0
- Maximum minutes: 59
- Minimum seconds: 0
- Maximum seconds: 59

PERMISSIONS REQUIRED

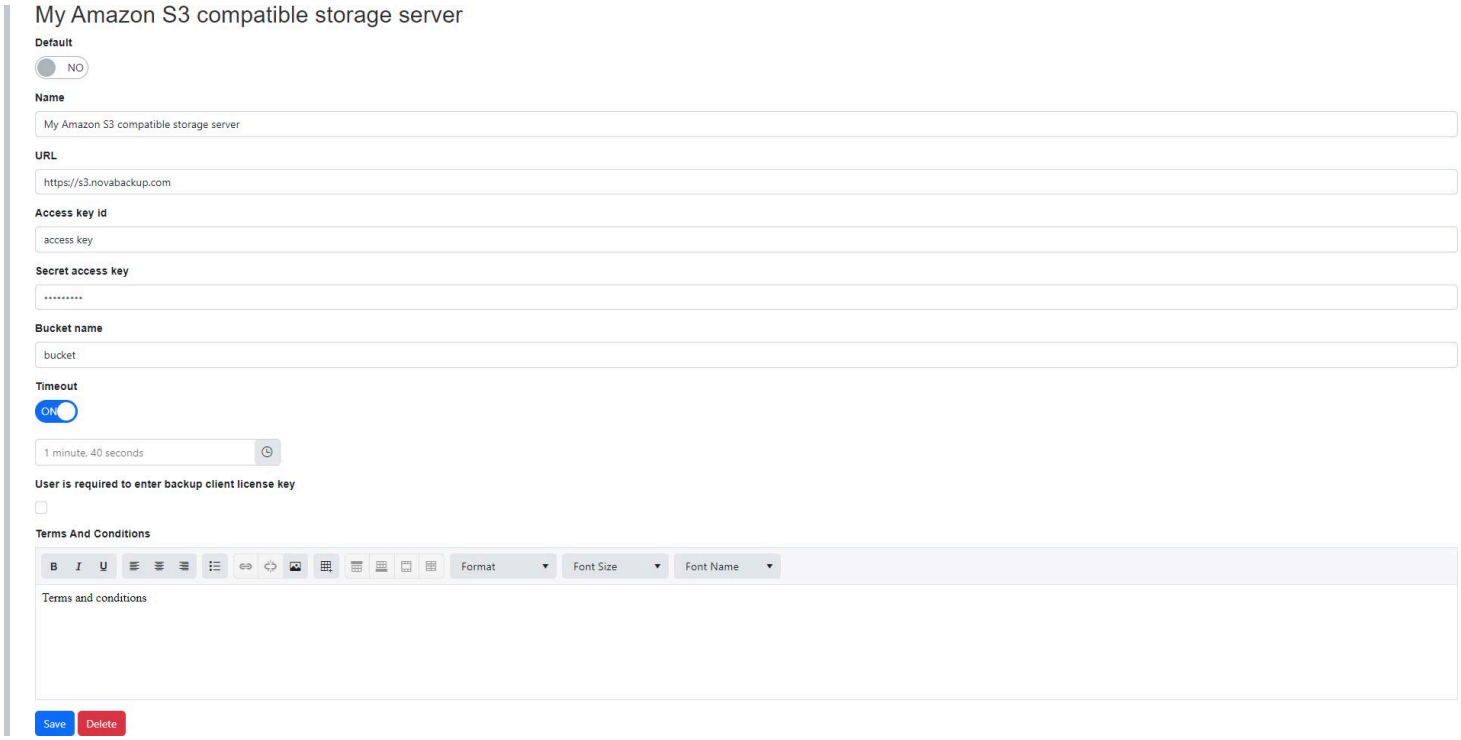
Edit Storage Servers

Related topics:

Create a cloud storage account

View Amazon S3 compatible storage server

From the "Storage Servers" view, click on the "View" button next to the Amazon S3 Compatible Storage Server to view its details.



Users with the `Edit Storage Servers` role permission may edit the Amazon S3 Compatible Storage Server. Otherwise the following fields will be read-only:

- Name
- URL
- Access Key Id
- Secret Access Key
- User Is Required To Enter Backup Client License Key
- Bucket Name
- Terms and Conditions

Delete Amazon S3 compatible storage server

The "Delete" button will be disabled if any of the following conditions is true:

- The user doesn't have permission to "Edit Storage Servers"
- The storage server is marked as the default storage server
- The storage server has cloud storage accounts

PERMISSIONS REQUIRED

View Storage Server Details

Related topics:

Add Amazon S3 compatible storage server

Used Space and Backup Client License Storage Settings

The "Used Space and Backup Client License Storage Settings" page is used to configure the behavior of periodically recalculating the used space for storage servers and cloud storage accounts.

The background service is disabled and has a 12 hour interval period by default.

If enabled, the used space for storage servers and cloud storage accounts will be recalculated when the web application is started.

The background service will iterate through each storage server and cloud storage account to recalculate their used space.

If there are any cloud storage accounts associated with backup client license keys, the backup client license expiration dates are also retrieved from the license server.

After the background service has finished recalculating the used space, it will wait until the specified interval period has elapsed before recalculating the used space again.

The used space will be recalculated for each storage server and cloud storage account in parallel, with a maximum degree of parallelism set to the number of processors of the current machine.

The minimum interval is 1 minute.

The maximum interval is 99 days, 23 hours, and 59 minutes.

If the background service is currently recalculating used spaces, any changes to these fields will take affect after the recalculation has completed.

If the background service is disabled and not currently recalculating used spaces, the web application will check every 5 minutes to see if it has been enabled.

Saving

Only users with the `Edit Settings` role permission may save changes to these fields.

Logging

To enable logging specifically for the periodic timer:

1. Enable logging for the "Management Server" Web Site to at least the `Info` logging level.
2. Update `appsettings.json` and add the component within `LogLevel`:
   `"ManagementServer.Web.Infrastructure.CloudStorageAccounts": "Information"`
3. A message will be logged in the logs directory (ex. "C:\Program Files (x86)\NovaStor\NovaBACKUP Central Management\WebRoot\Web\bin\Logs"). For example:

- `Periodic recalculation of used space background service has started.`
- `Periodic recalculation of used space background service has completed.`
- `Periodic recalculation of used space background service failed.`

PERMISSIONS REQUIRED

View Settings

Web Hook Settings

The `Web Hook Settings` page allows a user to view and modify the current web hook settings.

The web hook receiver is used to receive notifications from the License Server when a license has been updated. When a notification has been received, the cloud storage account associated with that license will be updated.

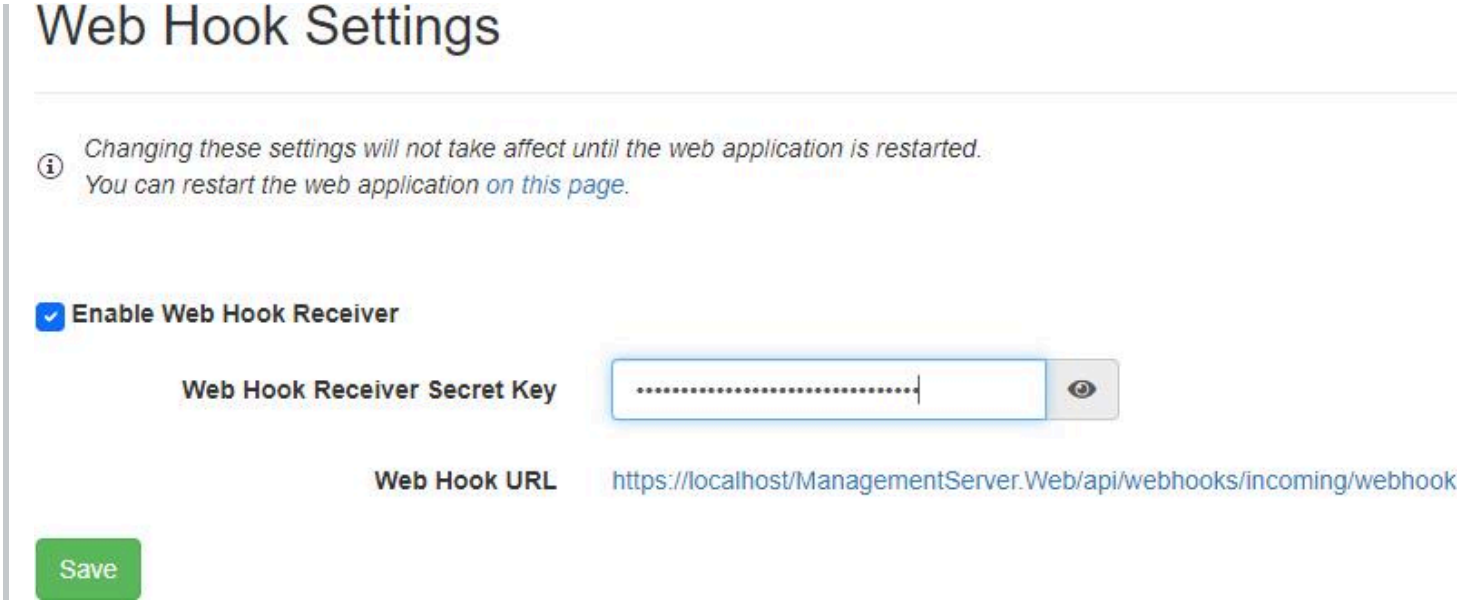
The web hook receiver secret key is required and must have a minimum of 32 and a maximum of 256 characters.

The web hook receiver secret key must not contain commas, equals signs, and leading or trailing spaces.

The secret key is used to verify that the caller is authorized to send requests.

The web hook receiver must be accessible using HTTPS for it to accept requests.

The web hook URL displayed is built based on the URL of the current page and may not be accurate depending on the hosting environment.



The web hook receiver also restricts access depending on the IP address of the caller.

See [Web Hook IP Filter]() for more information.

PERMISSIONS REQUIRED

View Settings

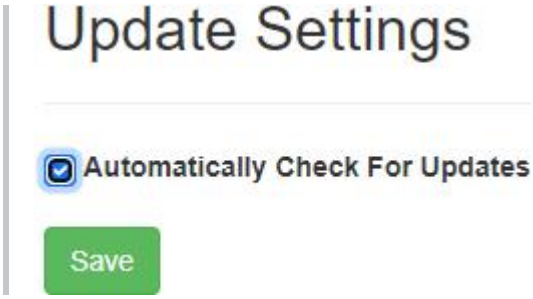
Edit Settings

Update Settings

The "Update Settings" view allows an administrator to enable or disable automatically checking for updates.

It's recommend to enable automatically checking for updates to automatically receive notifications when a new update is available.

If enabled, the "Management Server" windows service automatically checks for updates every 7 days.



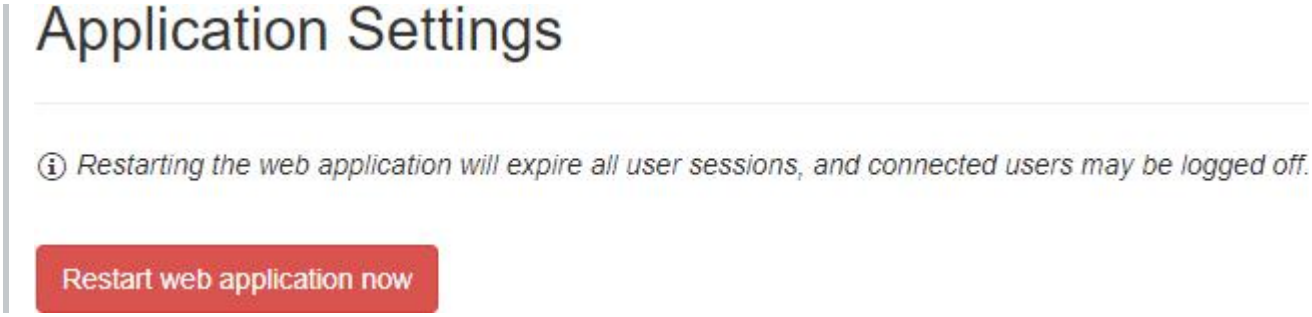
PERMISSIONS REQUIRED

View Settings

Edit Settings

Application Settings

The `Application Settings` page allows a user to restart the web application.

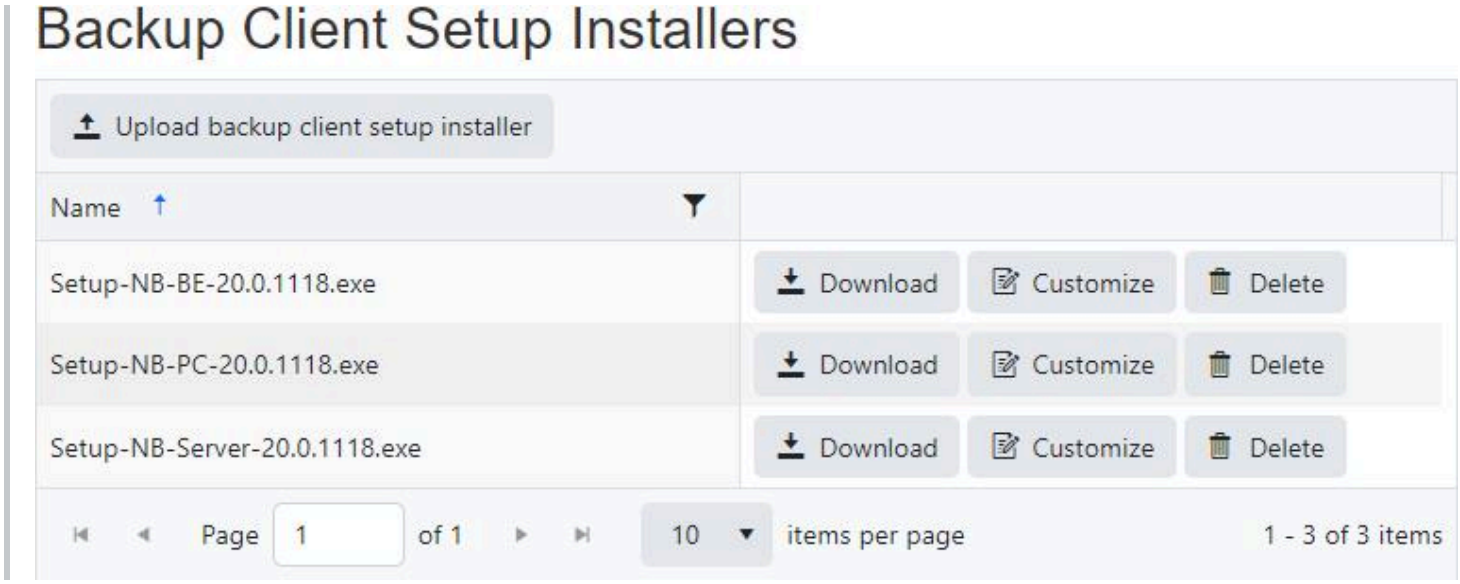


PERMISSIONS REQUIRED

Edit Settings

Backup Client Setup Installers

The "Backup Client Setup Installers" page displays the list of previously uploaded backup client setup installers.



Column Name	Description
Name	The name of the backup client setup installer file.

Action	Description
Download	Downloads the original backup client setup installer
Customize	Customizes the backup client setup installer
Delete	Deletes the backup client setup installer

Cache

The customized backup client setup installer will be cached only when the following conditions are met:

- It is configured with a group
- It is configured with the default `Management Server URL`, as configured during the CMon installation

The cached customized backup client setup installer will be used in subsequent downloads so it doesn't need to be re-generated every time.

If the group or the default `Management Server URL` changes, the backup client setup installer will be re-generated and the cache will be updated.

Software publisher certificate

The backup client setup installer will be signed with the software publisher certificate associated with the group.

The following timestamp URLs are used to sign the backup client setup installer:

- http://timestamp.digicert.com
- http://timestamp.comodoca.com/authenticode
- http://timestamp.globalsign.com/scripts/timestamp.dll
- http://tsa.starfieldtech.com
- http://timestamp.comodoca.com/rfc3161
- http://timestamp.sectigo.com?td=sha256

PERMISSIONS REQUIRED

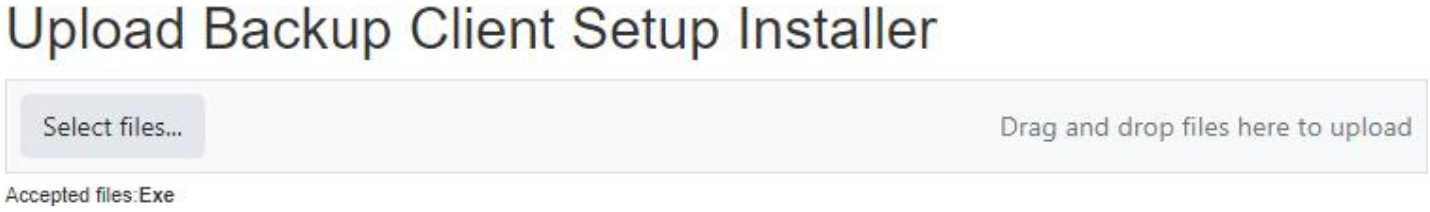
View Agents And Groups

Related topics:

Upload Backup client setup installer
Customize Backup client setup installer

Upload Backup Client Setup Installers

The "Upload Backup Client Setup Installers" page allows uploading a new backup client setup installer.



File Validation Rules

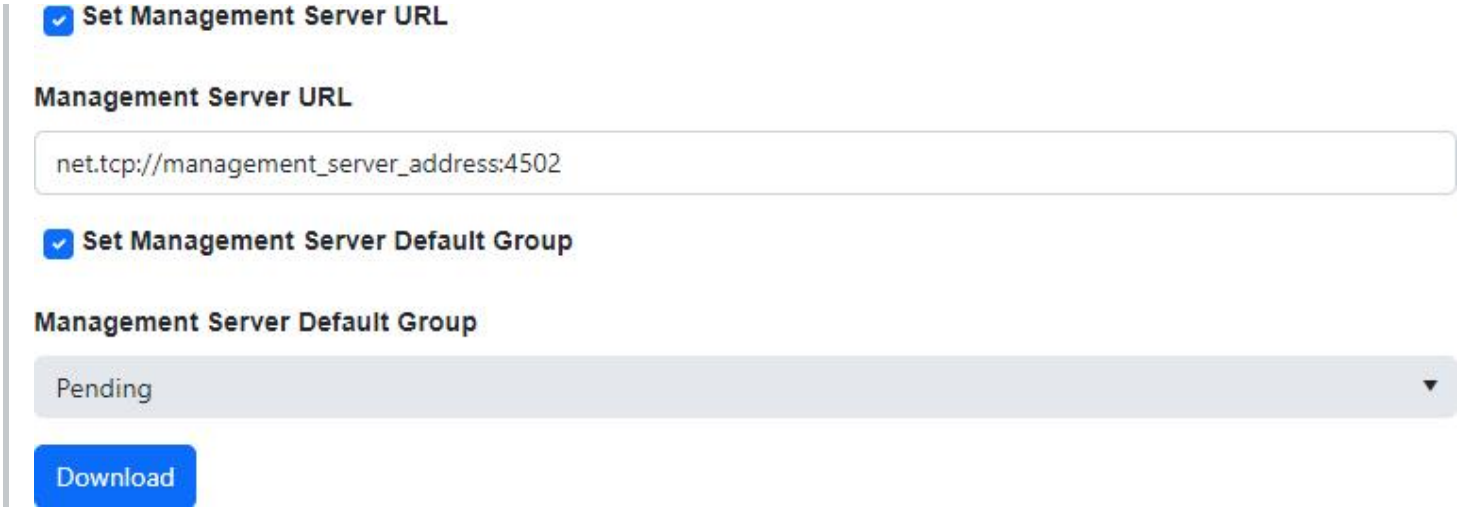
- The file is required
- The file name must be between 5 and 256 characters.
- The file name must have an exe file extension.
- The file name must be a valid windows file name.
- The file name should be unique.
- The file size must be between 1 byte and 1 GB.

PERMISSIONS REQUIRED

Edit Groups

Customize Backup Client Setup Installer

The "Customize Backup Client Setup Installer" page allows downloading a customized backup client setup installer with the Management Server URL for the agent to connect to automatically, and the default group the agent will appear under.



Set Management Server URL

- If check-marked, the backup client agent's management server URL will be modified.
- If not check-marked, the backup client agent's management server URL will not be modified.

Management Server URL

- If the logged in user has `View Settings` permissions, then the Management Server Public Server Address and Port, as configured in the CMon setup installer, are used to create the URL and is displayed by default.
- If this value is empty, the backup client agent's management server URL will be empty.
- URL Format like `net.tcp://<management_server_address>:<port>`
- Port must be between 1 and 65535

Set Management Server Default Group

- If check-marked, the backup client agent's management server's default group will be modified.
- If not check-marked, the backup client agent's management server's default group will not be modified.

Management Server Default Group

- If this value is empty, the backup client agent's management server's default group will be empty.
- Maximum length is 20

PERMISSIONS REQUIRED

Edit Group

View Agents and Groups

Related topics:

Backup client setup installer cache

Server Administration Desktop Application

The CMon Server Administration utility is a desktop application installed on the local server where CMon is installed.

A shortcut is created in the Start menu called "NovaBACKUP CMon Server Administration".

It allows you to change the CMon server address and port number and unlock user accounts.

Scheduled Task

A scheduled task named "NovaBACKUPManagementServer" is created in the Windows Task Scheduler that's responsible for sending notifications and deleting old job logs as configured in the settings.

The task does not delete job logs which have unsent notifications.

The configuration file contains a setting for the database command timeout.

The file is located in the Web installation directory. For example, `C:\Program Files (x86)\NovaStor\NovaBACKUP Central Management Console\ScheduledTask\ManagementServer.Service.ScheduledTask.Console.exe.config`

Database Command Timeout

The default value is 0 which prevents the command from timing out. An empty value will instruct the application to use the default database provider's timeout value.

```
<appSettings>
  <add key="DatabaseCommandTimeout" value="0"/>
</appSettings>
```

Web Configuration File

The web configuration file (web.config) contains some of the application settings such as the database connection string, log file path, log verbosity, and persistent login behavior.

The file is located in the Web installation directory. For example, `C:\Program Files (x86)\NovaStor\NovaBACKUP Central Management Console\WebRoot\Web\bin\web.config`

Persistent login settings

When a user chooses to login and persist their login information, the default behavior is to keep them logged in for 7 days since they last visited the web application.

```
<authentication mode="Forms">
  <!-- forms session times out in 7 days -->
  <forms loginUrl="~/Account/Login" slidingExpiration="true" path="/"
name="ManagementServer" timeout="10080" protection="All"/>
</authentication>
```

For more technical information about these configuration settings, see [forms Element for authentication (ASP.NET Settings Schema)](#).

Web Hook IP Filter

The web hook receiver restricts access depending on the IP address of the caller.

These restrictions are specified in the `appsettings.json` file in the web application installation directory.

Default File Path

32-bit Operating System

`C:\Program Files\NovaStor\NovaBACKUP Central Management Console\WebRoot\Web\bin\appsettings.json`.

64-bit Operating System

`C:\Program Files (x86)\NovaStor\NovaBACKUP Central Management Console\WebRoot\Web\bin\appsettings.json`.

Syntax

A semi-colon delimited list of allowed IP addresses.

Examples

One IP Address

```
{
  "WebHooksSafeList": "192.168.100.1"
}
```

Multiple IP Addresses

```
{
  "WebHooksSafeList": "192.168.100.1;192.168.100.2"
}
```

Application Programming Interface (API)

The API may change at any time in the future.

The documentation for the API is included with each installation instance of the CMon web application.

For example, https://localhost/ManagementServer/docs.

Replace "localhost" with the address of the web server.

The web page that hosts the documentation can also be used to send queries through the API.

Quick Start

To authenticate, send a `POST` request to `https://localhost/ManagementServer/api/Account/Authenticate`.

To get a list of cloud storage accounts, send a `GET` request to `https://localhost/ManagementServer/api/CloudStorageAccounts?$top=1`.

Without `$top=1`, it will return all cloud storage accounts, which may be expensive, so this request should be filtered.

To filter by a backup client license key, send a `GET` request to `https://localhost/ManagementServer/api/CloudStorageAccounts?$filter=BackupClientLicenseKey eq 'licenseKey'`.

Replace `licenseKey` with the license key.

If the response returns an entity, then the license key is being used with a cloud storage account.

The returned enttiy will also contain properties for the used storage space and storage quota.

To minimize the amount of data being returned for improved performance, you can select only the properties you want.

For example, `https://localhost/ManagementServer/api/CloudStorageAccounts?$filter=BackupClientLicenseKey eq 'licenseKey'&$select=UsedBytes,ComputedFreeBytes,ComputedQuotaBytes`

More technical documentation for specific query options can be found here:

http://docs.oasis-open.org/odata/odata/v4.01/odata-v4.01-part1-protocol.html

https://docs.oasis-open.org/odata/odata/v4.01/csprd06/part2-url-conventions/odata-v4.01-csprd06-part2-url-conventions.html

Help

For the most recent help documentation please click here.

Help Documentation

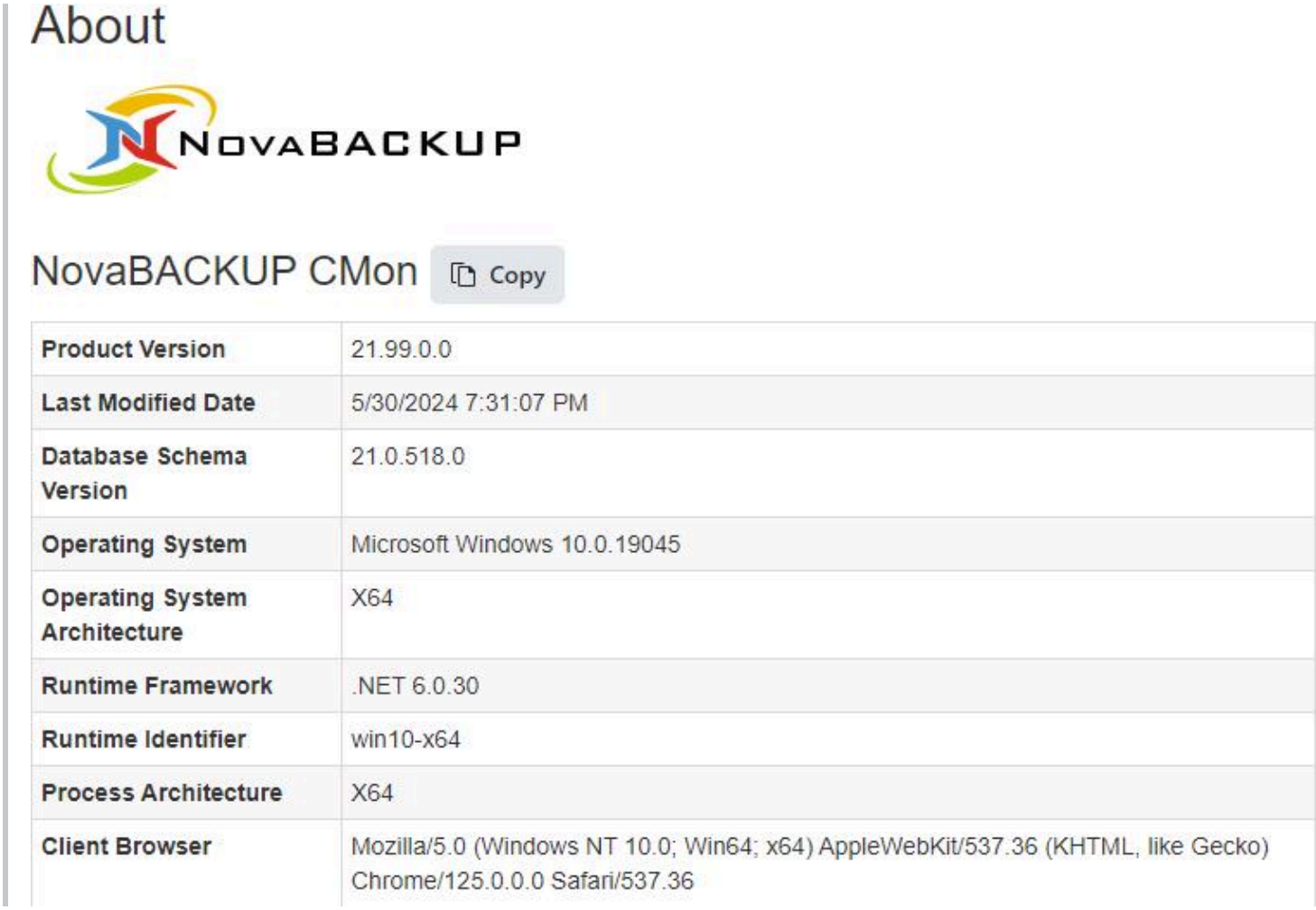
The Help Documentation link opens a new window to display the Central Monitoring Console (CMon) User Manual in a web browser.

A download link is provided on the bottom of each page to download a PDF version.

You can also send us feedback by clicking the email link on the bottom.

About

The About page displays product version information about CMon for logged in users.



About

NovaBACKUP CMon Copy

Product Version	21.99.0.0
Last Modified Date	5/30/2024 7:31:07 PM
Database Schema Version	21.0.518.0
Operating System	Microsoft Windows 10.0.19045
Operating System Architecture	X64
Runtime Framework	.NET 6.0.30
Runtime Identifier	win10-x64
Process Architecture	X64
Client Browser	Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/125.0.0.0 Safari/537.36

Logged in users in a role with "View Settings" permission can also manually check for product updates on this page.

CMon can be configured to automatically check for product updates in the [Update Settings page](#).

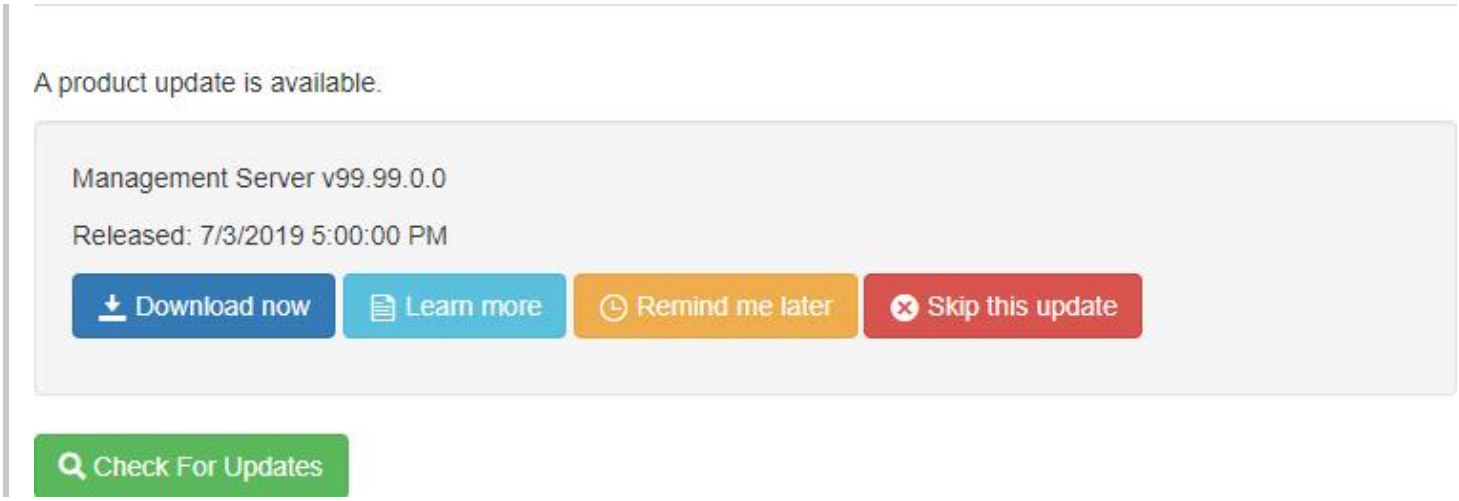
If an update is available, a notification is displayed on all pages, except the About page, for logged in users in a role with "View Settings" permission.

The product update notification contains a "More Information" button, which redirects them to the About page.

If a product update is available, the About page will display information about the new version:

- The new version number.
- The released date of the new version.
- Links to "Download now" and "Learn more" if available.
- The last time a check for updates was performed.
- A "Remind me later" button which will snooze the product update notification for 24 hours.
- The next time the product update notification will appear if the "Remind me later" button was clicked.
- A "Skip this update" button which will dismiss/skip the product update notification, specifically for the new version.

If the "Skip this update" button was clicked and a version is available that's newer than the version that was previous skipped, then the product update notification will re-appear.



If no updates are available, the About page displays the message, "The latest version is already installed".

If there's more than one update available, the About page will only display the latest version.

If the "Skip this update" button was clicked, and then the "Remind me later" button is clicked, the product update notification will re-appear after 24 hours.

PERMISSIONS REQUIRED

View Settings

Known Issues

- Retention and Import jobs are not monitored/reported
- When using CMon over HTTP, usernames and passwords are sent in plain text
- It is recommended to use SSL/HTTPS for security reasons.
- Some inputs are not validated for maximum lengths.

Troubleshooting Tips

The Management Service may not be started.

The Management Service must be started to be accessible. Run the Services control panel and start the "Management Service" windows service. If it fails to start, see Windows Service Logging for troubleshooting.

The Web Server may not be started.

The Web Server must be started to be accessible. Depending on which web server hosts the console application, run the Services control panel and start the appropriate windows service:

- If using the standalone web server, start the "Management Web Server" windows service. If it fails to start, see Standalone Web Server Logging for troubleshooting.
- If using Internet Information Services (IIS), start the "World Wide Web Publishing Service" windows service.

A firewall may be blocking one or more required ports.

If the Management Service is behind a firewall, make sure its configured port is open. The port number was specified during installation and saved in the "Management Server" windows service "system.serviceModel.services.config" configuration file. You can launch the Server Administration utility to quickly view and optionally edit the port number. The Management Service uses the TCP protocol.

If the web server is behind a firewall, make sure its configured port is open. The port number may have been specified during installation and saved in the main "Management Web Server" windows service configuration file if the standalone web server was selected.

The Management Service address may be incorrect.

The Management Service address must be configured correctly to be accessible. The server address was specified during installation and saved in the "Management Server" windows service "system.serviceModel.services.config" configuration file. You can launch the Server Administration utility to quickly view and optionally edit the server address.

Log Files

The best way to determine the underlying cause of issues is to analyze the logs.

The application configuration files contain settings that may need to be modified in order to enable logging.

These application configuration files can be edited in a simple text editor (ex. notepad).

After you are done troubleshooting, remember to revert your changes.

Windows Service Logging

Standalone Web Server Logging

Web Site Logging

Scheduled Task Logging

Windows Service Logging

Windows Service Configuration File

The "Management Server" windows service configuration file with a default installation is located here: "C:\Program Files\NovaStor\NovaBACKUP Central Management Console\Service\ManagementServer.Service.WindowsServiceHost.exe.config"

When this file is modified, the internal services will automatically restart and use the latest changes.

If the configuration file contains errors, the windows service will not start.

If the windows service is already started, it will automatically stop.

Log File Location

With a default installation, the log files are located here: "C:\Program Files\NovaStor\NovaBACKUP Central Management Console\Service\Logs"

How to enable logging for the "Management Server" windows service

Open the main "Management Server" windows service configuration file, unless otherwise specified, perform the steps outlined below, and then save the file. This generates a fairly large amount of trace data in the Logs directory.

Enable Log Listeners

Enable logging to the Application Event Log and a Flat File.

Change this: **XML**

```xml
<configuration>
  ...
  <loggingConfiguration ...>
    ...
    <categorySources>
      <add switchValue="All" name="General" />
    </categorySources>
  ...
```

to: **XML**

```
<configuration>
  ...
  <loggingConfiguration ...>
    ...
    <categorySources>
      <add switchValue="All" name="General" >
        <listeners>
          <add name="Event Log Listener" />
          <add name="Flat File Trace Listener" />
        </listeners>
      </add>
    </categorySources>
  ...
```

Errors will now be logged in the trace.log file in the Logs directory by default.

Enable WCF Verbose Activity Tracing

For communication issues bet, Set the switchValue attributes to Verbose, ActivityTracing.

Change this: **XML**

```
<configuration>
  ...
  <system.diagnostics>
      <sources>
        <source name="System.ServiceModel" switchValue="Warning" propagateActivity="true">
        ...
        <source name="System.ServiceModel.MessageLogging" switchValue="Warning">
    ...
```

to: **XML**

```
<configuration>
  ...
  <system.diagnostics>
      <sources>
        <source name="System.ServiceModel" switchValue="Verbose,
ActivityTracing" propagateActivity="true">
        ...
        <source name="System.ServiceModel.MessageLogging" switchValue="Verbose,
ActivityTracing">
    ...
```

Errors will now be logged in app_tracelog.svclog and app_messages.svclog files in the Logs directory by default.

Enable Message Logging

Open "system.serviceModel.diagnostics.config" and enable logMessagesAtServiceLevel, logMalformedMessages, and logMessagesAtTransportLevel.

Change this: **XML**

```
<configuration>
  ...
  <system.serviceModel>
    ...
      <diagnostics>
      <messageLogging logMessagesAtServiceLevel="false" logMalformedMessages="false"
logMessagesAtTransportLevel="false"  />
    ...
```

to: **XML**

```
<configuration>
  ...
  <system.serviceModel>
    ...
      <diagnostics>
      <messageLogging logMessagesAtServiceLevel="true" logMalformedMessages="true"
logMessagesAtTransportLevel="true" />
    ...
```

Enable Message Logging with Personally Identifiable Information

For example, this logs the remote IP address of clients connecting to the service.

Open "C:\Windows\Microsoft.NET\Framework\v4.0.30319\Config\machine.config" and set enableLoggingKnownPii.

Change this: **XML**

```
<configuration>
  ...
  <system.serviceModel>
    ...
```

```
      <machineSettings enableLoggingKnownPii="false" />
    ...
```

to: **XML**

```
<configuration>
  ...
  <system.serviceModel>
    ...
      <machineSettings enableLoggingKnownPii="true" />
    ...
```

Open "system.serviceModel.diagnostics.config" and enable logMessagesAtServiceLevel, logMalformedMessages, logMessagesAtTransportLevel, logEntireMessage, and logKnwonPii.

Change this: **XML**

```
<configuration>
  ...
  <system.serviceModel>
    ...
      <diagnostics>
      <messageLogging logMessagesAtServiceLevel="false" logMalformedMessages="false"
logMessagesAtTransportLevel="false"  />
    ...
```

to: **XML**

```
<configuration>
  ...
  <system.serviceModel>
    ...
      <diagnostics>
      <messageLogging logMessagesAtServiceLevel="true" logMalformedMessages="true"
logMessagesAtTransportLevel="true" logEntireMessage="true" logKnwonPii="true" />
    ...
```

Standalone Web Server Logging

Standalone Web Server Configuration File

The "Management Web Server" windows service configuration file with a default installation is located here: "C:\Program Files\NovaStor\NovaBACKUP Central Management Console\WebRoot\Web\bin\ManagementServer.WebServer.WindowsServiceHost.exe.config"

Log File Location

With a default installation, the log files are located here: "C:\Program Files\NovaStor\NovaBACKUP Central Management Console\WebRoot\Web"

How to enable logging for the "Management Web Server" windows service

Open the "Management Web Server" windows service configuration file, perform the step outlined below, and then save the file. This generates a web.log file in "C:\Program Files\NovaStor\NovaBACKUP Central Management Console\WebRoot\Web" for example.

Enable Log Listeners

Enable logging to a Flat File.

Change this: **XML**

```xml
<configuration>
  ...
  <loggingConfiguration ...>
    ...
    <categorySources>
      ...
      <add name="Info" switchValue="All" />
    </categorySources>
  ...
```

to: **XML**

```xml
<configuration>
  ...
  <loggingConfiguration ...>
    ...
    <categorySources>
      ...
```

```
    <add name="Info" switchValue="All" >
      <listeners>
        <add name="Flat File Destination" />
      </listeners>
    </add>
  </categorySources>
...
```

Web Site Logging

Configuration Files

The "Management Server" Web Site configuration files with a default installation are located here:

"C:\Program Files\NovaStor\NovaBACKUP Central Management Console\WebRoot\Web\bin"

File name	Contents	More Technical Information
appsettings.json	Database connection string, database command timeout, component log levels	https://docs.microsoft.com/en-us/aspnet/core/fundamentals/configuration/?view=aspnetcore-3.1#appsettingsjson
nlog.config	Logging rules and log file location	https://github.com/NLog/NLog/wiki/Configuration-file
web.config	IIS hosted web application settings	https://docs.microsoft.com/en-us/aspnet/core/host-and-deploy/iis/web-config?view=aspnetcore-3.1

How to enable logging for the "Management Server" Web Site

The "Management Server" Web Site is not configured with logging enabled by default.

Edit `appsettings.json` and set the appropriate `LogLevel` for the components to log.

For example:

```
"Default": "Error"
"Microsoft": "Error"
"Microsoft.Hosting.Lifetime": "Error"
"ManagementServer": "Error"
```

Edit `nlog.config` and change the value of the attribute `minlevel` from `Off` to one of the following values:

`Fatal`
`Error`

`Warn`
`Info`
`Debug`
`Trace`

For more technical information, see NLog configuration log levels.

Log Files Location

With a default installation, the log files are located here: "C:\Program Files\NovaStor\NovaBACKUP Central Management Console\WebRoot\Web\bin\Logs"

Scheduled Task Logging

Scheduled Task Configuration File

The "NovaBACKUPManagementServer" Scheduled Task configuration file with a default installation is located here: "C:\Program Files\NovaStor\NovaBACKUP Central Management Console\ScheduledTask\ManagementServer.Service.ScheduledTask.Console.exe.config"

Log File Location

With a default installation, the log files are located here: "C:\Program Files\NovaStor\NovaBACKUP Central Management Console\ScheduledTask\Logs"

How to enable logging for the "Management Server" Web Site

The "Management Server" Web Site configuration file is configured with logging enabled by default. This generates a trace.log file in the Logs folder.

Glossary

Cloud account

The account in the NovaBACKUP Storage Server with settings to describe how data is stored, its retention period, and capacity.

Cloud device

A component in the backup client which represents the connection to the cloud account in the NovaBACKUP Storage Server.

The cloud device also contains settings to describe how data is transmitted between the backup client and server.

When performing a backup, the cloud device can be used as the destination to store data on the server.

When performing a restore, the cloud device can be used as the source to retrieve data from the server.

Cloud storage account

A component in the CMon which ties a cloud account with a CMon user account, and optionally a backup client license key.