



# NovaBACKUP®

## CMon v19.8

### User Manual

The screenshot displays the NovaBackup CMon Dashboard. The top navigation bar includes links for Dashboard, Agents and Groups, Jobs, Notifications, Cloud Storage Accounts, Storage Server, Settings, Help, and Admin. The main content area is divided into two sections: Agents and Job History.

**Agents Table:**

Name	Connected	Last Backup Date	Last Backup Status	Last Backup Size	Last Backup Duration
Kevin	●	10/9/2020 11:02:43 AM	●		
Robert	●	10/9/2020 4:32:43 AM	●	1.46 GB	1 hour
Jeff	●	10/8/2020 11:32:43 PM	●	2.18 GB	1 hour
David	●	10/8/2020 11:32:42 PM	●	9.14 GB	1 hour
Ruth	●	10/8/2020 10:32:43 PM	●	879.73 MB	1 hour
Nancy	●	10/8/2020 9:32:43 PM	●	3.18 GB	1 hour

**Job History Table:**

Group	Agent	Job	Type	Started	Ended	Status	Size	Files	Duration
Marketing	Kevin	Daily	Backup	10/9/2020 11:02:43 AM		●			
Engineering	Robert	Daily	Backup	10/9/2020 4:32:43 AM	10/9/2020 6:32:43 AM	●	1.46 GB		1 hour
Sales	Jeff	Daily	Backup	10/8/2020 11:32:43 PM	10/9/2020 12:32:43 AM	●	2.18 GB		1 hour
Sales	David	Daily	Backup	10/8/2020 11:32:42 PM	10/9/2020 12:32:42 AM	●	9.14 GB		1 hour
Accounting	Ruth	Daily	Backup	10/8/2020 10:32:43 PM	10/8/2020 11:32:43 PM	●	879.73 MB		1 hour
Human Resources	Nancy	Daily	Backup	10/8/2020 9:32:43 PM	10/8/2020 10:32:43 PM	●	3.18 GB		1 hour

The Job History table includes a 'Sum' row at the bottom showing a total size of 18.82 GB. A 'More' dropdown menu is visible on the right side of the Job History table, showing a 'Duration' filter set to '0 seconds' with a 'View' button.

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

# Table of Contents

Introduction

System Requirements

Installation

Setting up the backup client

Logging In

The Dashboard

Agents & Groups

Agents

Details

Devices

Create Device

Cloud Device

Create Cloud Device

Create Cloud Device From Existing Cloud Storage Account

View Cloud Device Details

Edit Cloud Device

Network Device

Create Network Device

View Network Device Details

Edit Network Device

Troubleshooting managing devices

Jobs

File Backup Job

Destination

Settings

Schedule

Log Viewer

Notification Triggers

Account Management

Set Password

Password

Time Zone

Language

Cloud Storage Accounts

Create an account

Connect to an account

View details of an account

View computers

Edit cloud storage account

Change the password

Change the license key

Delete an account

Delete a computer

Storage Server

Settings

Agent Settings

Security Settings

Notification Settings

Users

User registration

User registration and creating a cloud storage account in one step

Create a user

View a user

Edit a user

Delete a user

User Registration

Roles

Storage Servers

Add a storage server

[Web Hook](#)

[Update](#)

[Application](#)

[Server Administration Desktop Application](#)

[Scheduled Task](#)

[Web Configuration File](#)

[Web Hook IP Filter](#)

[Application Programming Interface \(API\)](#)

[Help](#)

[Documentation](#)

[About](#)

[Known Issues](#)

[Troubleshooting Tips](#)

[Windows Service Logging](#)

[Standalone Web Server Logging](#)

[Web Site Logging](#)

[Scheduled Task Logging](#)

[Glossary](#)

# Introduction

Thank you for choosing NovaBACKUP® CMon.

**CMon** (Central Monitoring Console) is an application that works along side your NovaBACKUP PC, Server, and Business Essentials backup software. The CMon can be utilized to monitor the associated backup jobs in your entire backup environment, all from a single pane of glass style website interface. CMon is accessible via web browser and can be viewed via Internet Explorer 9+, Google Chrome, Mozilla Firefox as well as most smart phone web browsers.

NovaBACKUP® CMon is composed of 2 components.

1. The CMon (Central Monitoring Console) application enables the capability to monitor backup agents from any edition of NovaBACKUP® PC, Server, or Business Essentials, **version 18.0** and above. Typically CMon is installed on a Windows Server machine which does not have NovaBACKUP backup software installed on it. CMon can run on the same server that NovaBACKUP backup client is installed but it may perform better on a separate server. Read the [System Requirements](#) section for more information.
2. Your installations of NovaBACKUP® PC, Server and Business Essentials, version 18.0 or higher, which are installed on your systems to backup critical data, such as SQL and Exchange databases, as well as virtual environments. This quick start guide will describe how to setup the CMon, along with how to connect one installation of NovaBACKUP® (referred to as an agent) to the CMon. Subsequent installations of NovaBACKUP® PC, Server and Business Essentials will require configuration to connect to the CMon in the same manner.

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

## Microsoft .NET Framework

Microsoft .NET Framework 4.7.2 or higher

## SQL Server (Optional)

Microsoft SQL Server is recommended when using more than 5 backup agents.

- 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](#)
- Microsoft SQL Server 2012

[How to determine the version, edition, and update level of SQL Server and its components](#)

## Web Server (Optional)

IIS with IIS 6 compatibility

## Networking

- TCP/IP network

## Web Browser

- Modern [HTML5](#) supported **desktop web browsers** such as Internet Explorer 9 and above, Chrome, Firefox, Safari, Opera, Edge
- Modern [HTML5](#) supported **mobile web browsers** such as Android 5.0, iOS 9.0, Windows 10, BlackBerry 10, Opera Mobile, Amazon Silk

**Note:** To test [HTML5](#) compatibility with your current browser please test it here:

<https://html5test.com/>. A points score closer to 500 is optimal.



# Installation

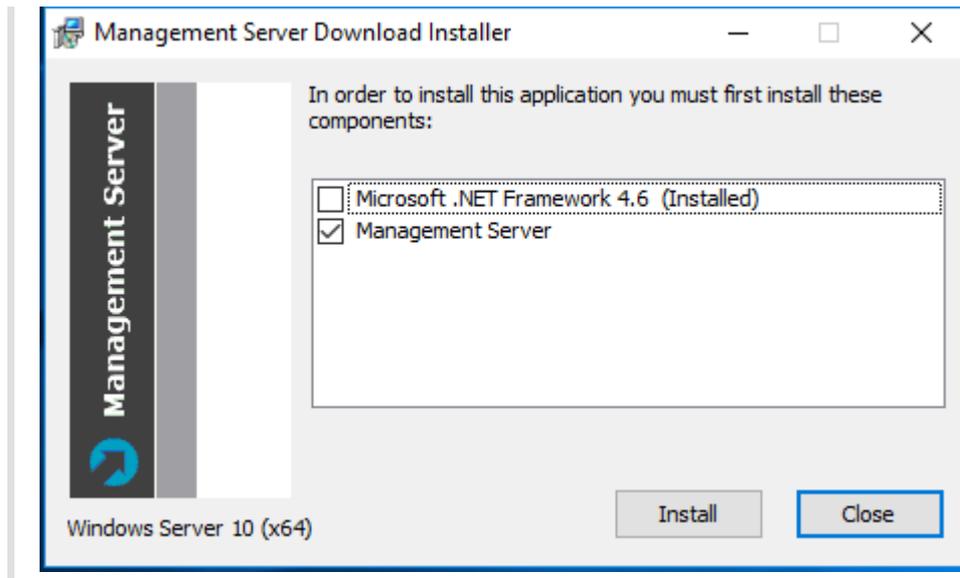
Please make sure the machine meets the [System Requirements](#) before continuing.

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.

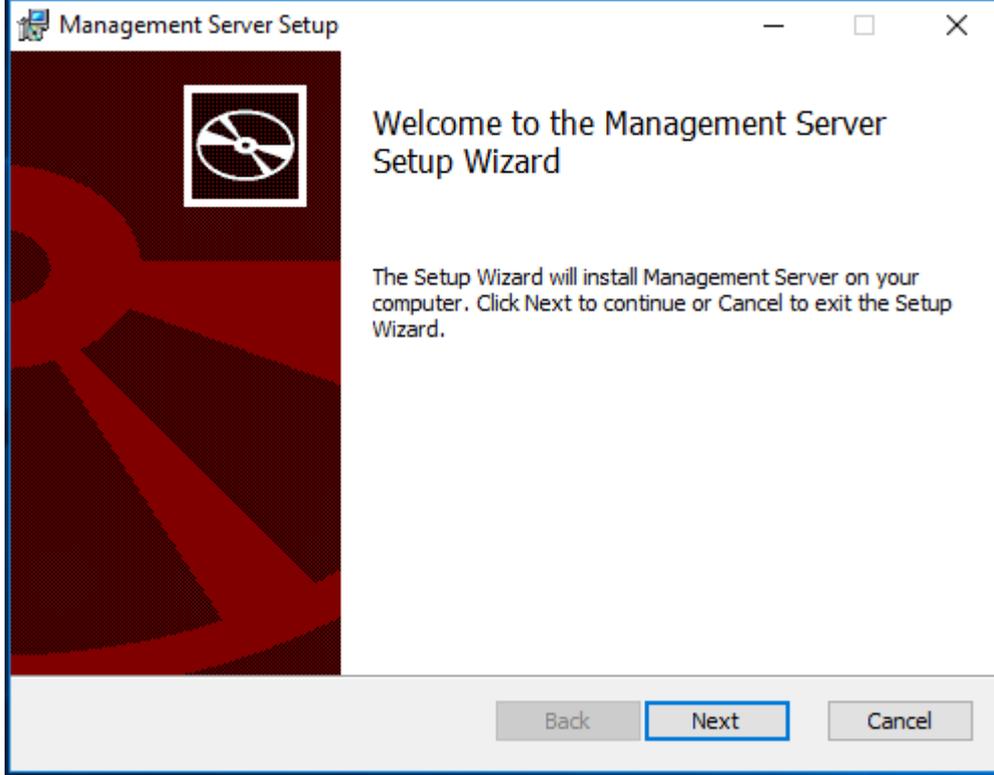


Click the `Install` button to continue.

## Welcome

---

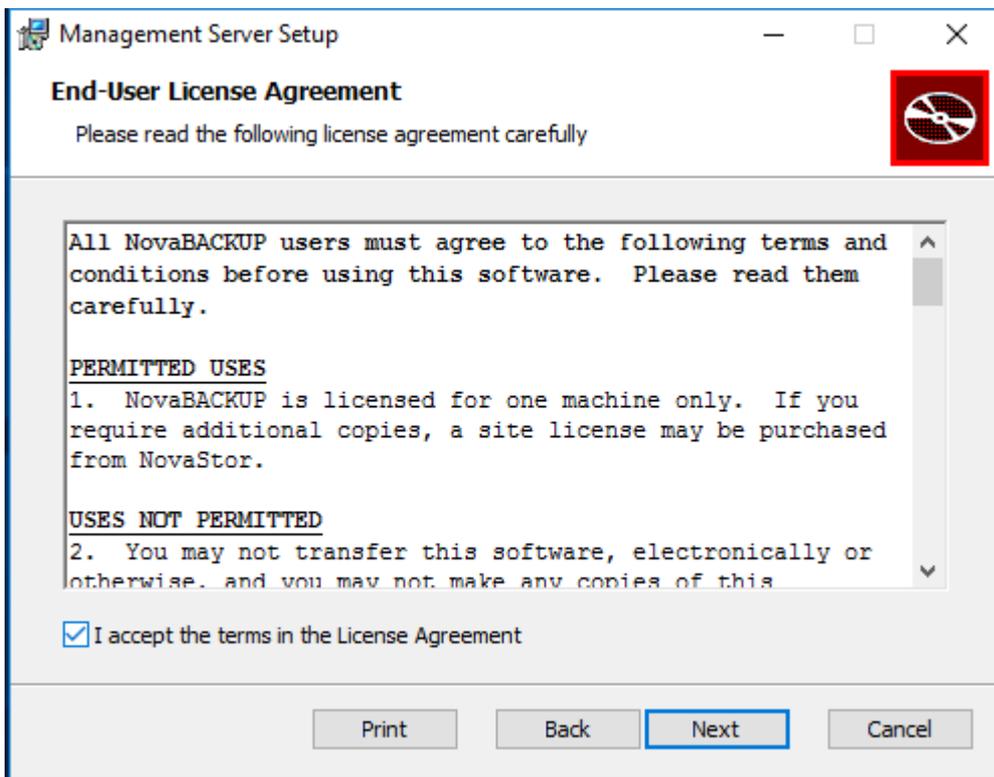
After the prerequisites are installed, the CMon installation wizard's `Welcome` dialog is displayed.



Click the **Next** button to continue.

## End-User License Agreement

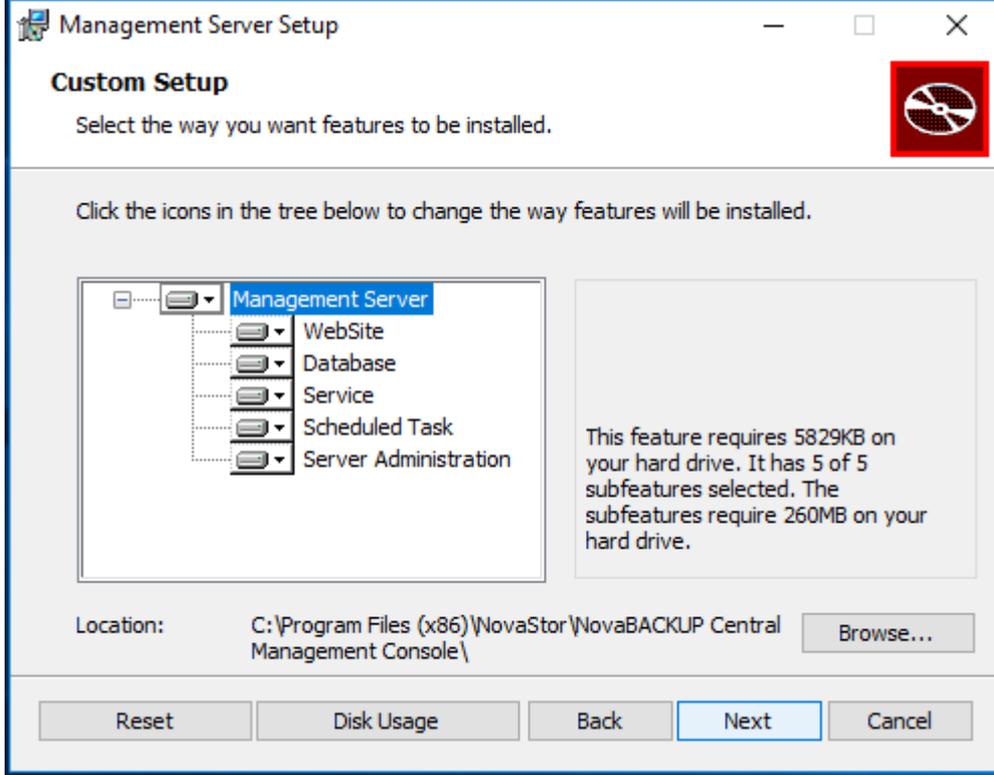
---



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

## Custom Setup

---



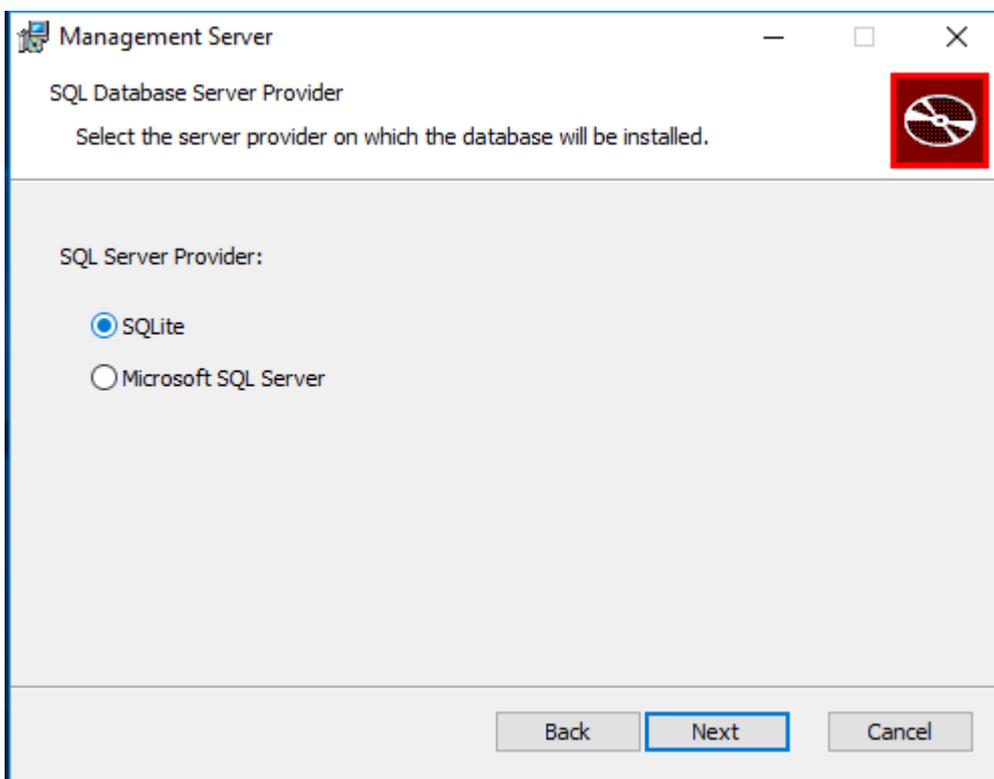
Click the **Next** button to continue.

## SQL Database Server Provider

---

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

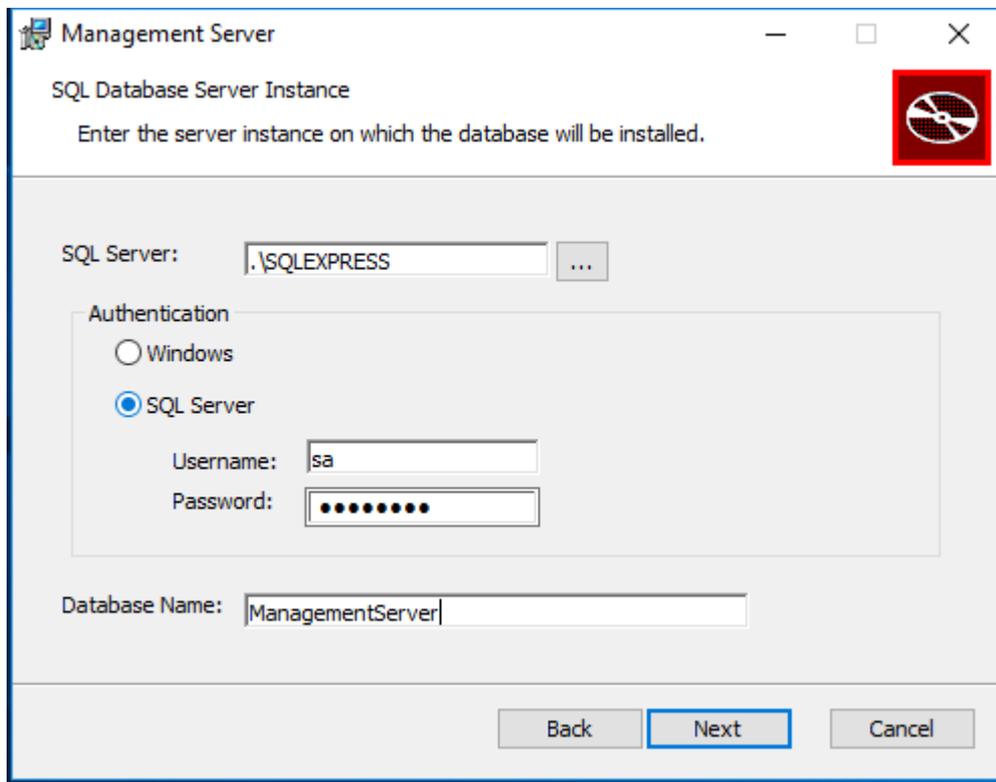
Microsoft SQL Server is recommended for better performance and an improved experience.



Click the **Next** button to continue.

## SQL Database Server Instance

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

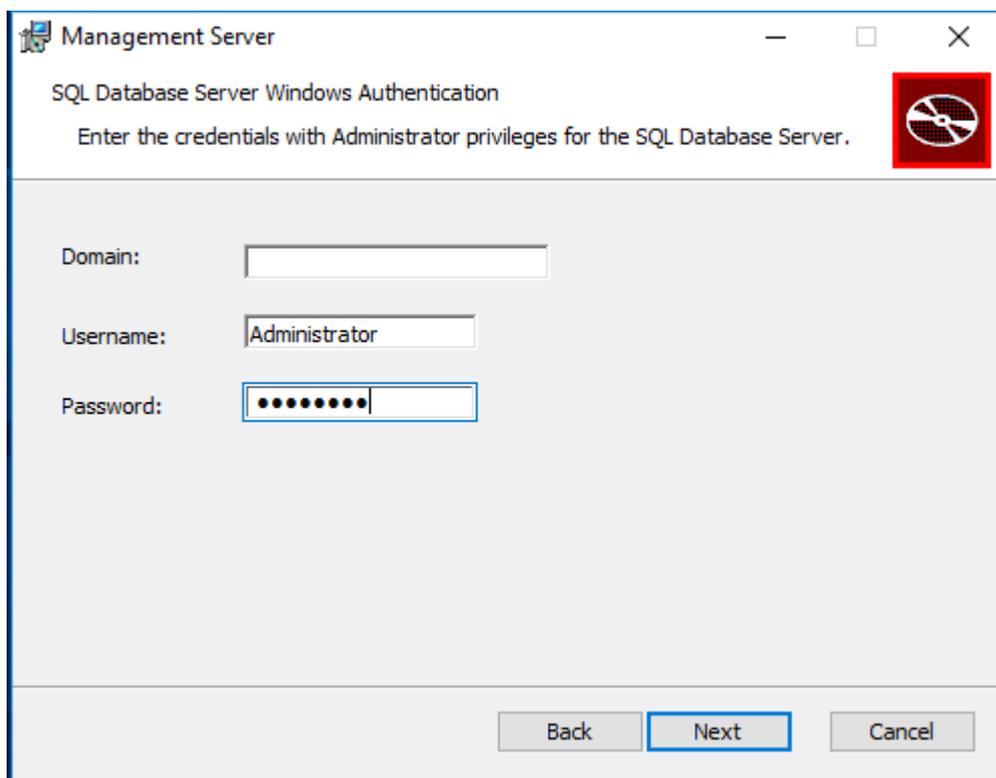


The screenshot shows a dialog box titled "Management Server" with the subtitle "SQL Database Server Instance". The main instruction is "Enter the server instance on which the database will be installed." The "SQL Server:" field contains ".\SQLEXPRESS". Under the "Authentication" section, "SQL Server" is selected with a radio button. The "Username:" field contains "sa" and the "Password:" field is masked with dots. The "Database Name:" field contains "ManagementServer". At the bottom, there are "Back", "Next", and "Cancel" buttons.

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

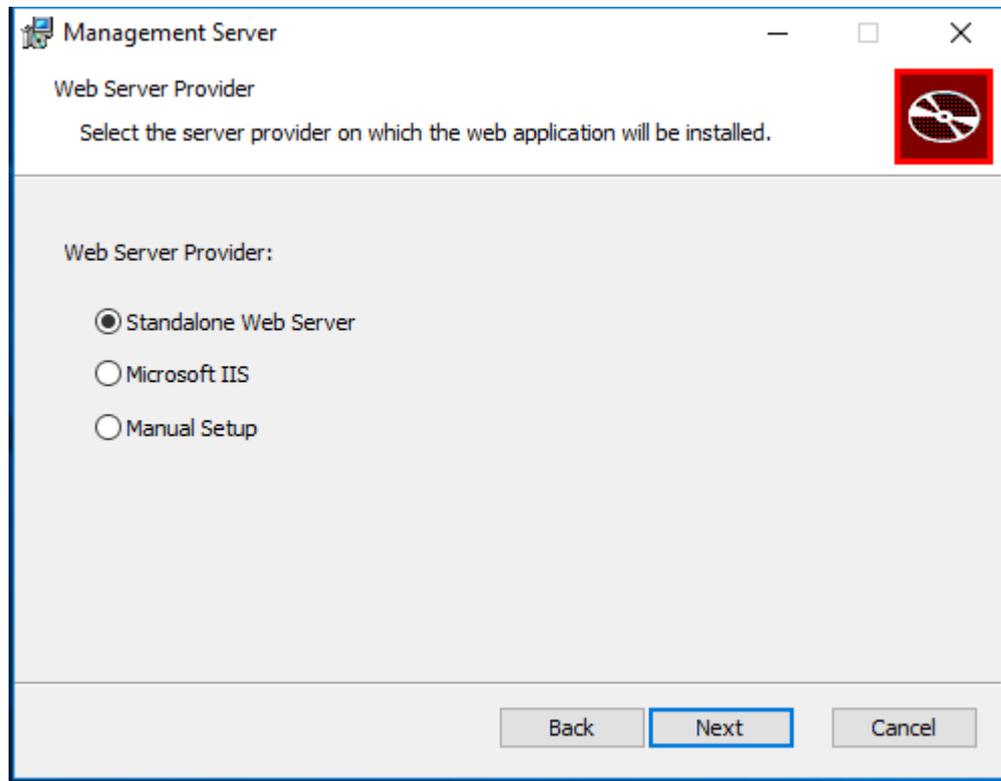
## SQL Database Server Windows Authentication

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



The screenshot shows a dialog box titled "Management Server" with the subtitle "SQL Database Server Windows Authentication". The main instruction is "Enter the credentials with Administrator privileges for the SQL Database Server." The "Domain:" field is empty. The "Username:" field contains "Administrator" and the "Password:" field is masked with dots. At the bottom, there are "Back", "Next", and "Cancel" buttons.

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



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.

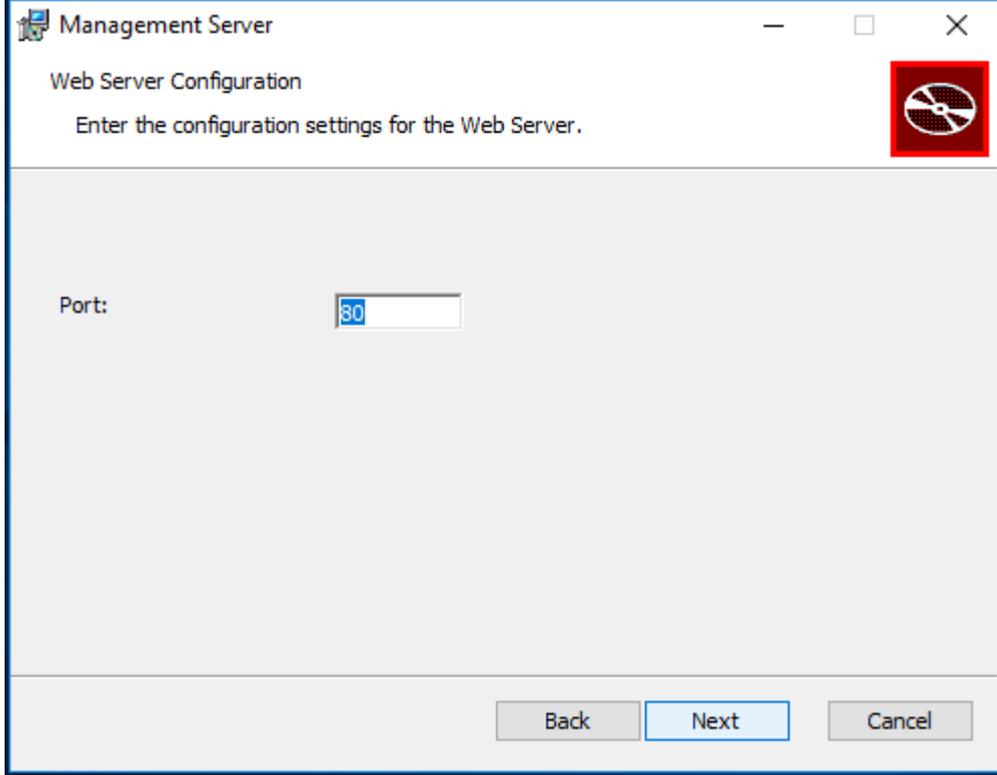
### Web Server Configuration

---

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.



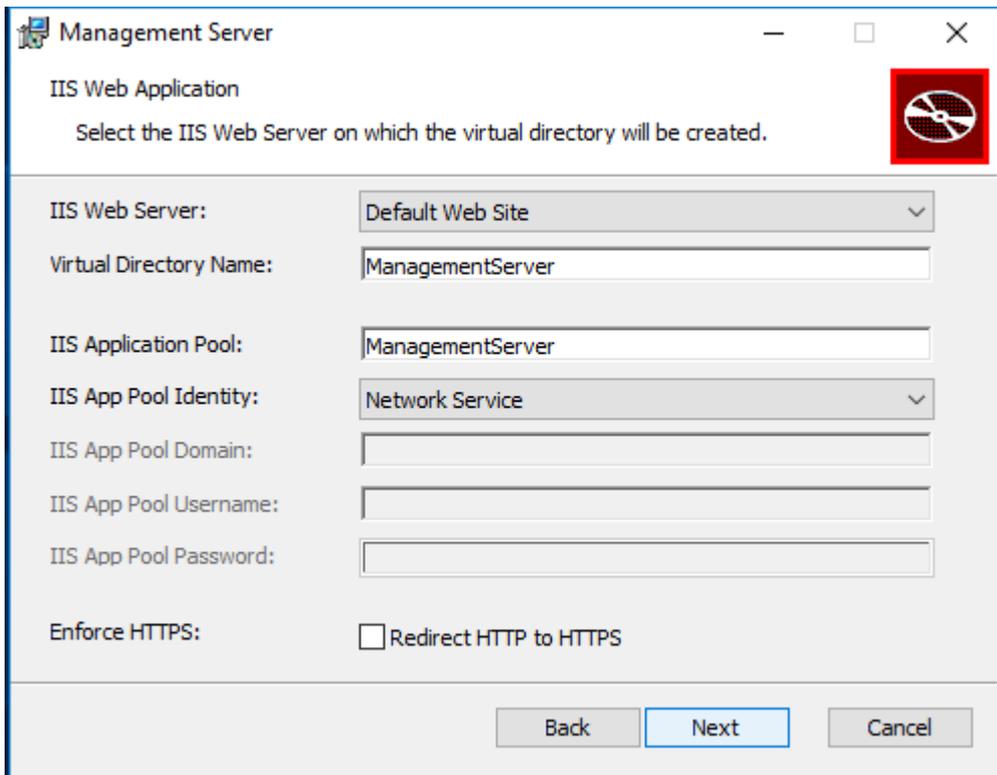
Click the `Next` button to continue.

## 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.

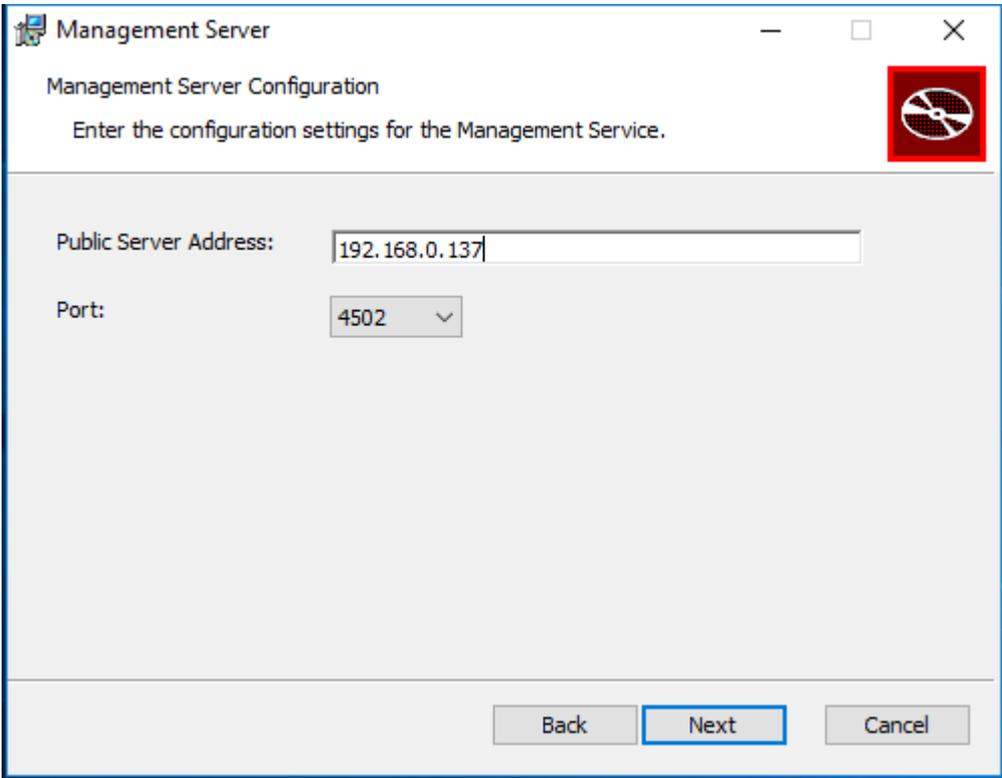
Using HTTPS is recommended for greater security.

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 screenshot shows a Windows dialog box titled "Management Server" with the subtitle "Management Server Configuration". The main text reads "Enter the configuration settings for the Management Service." There is a red square icon with a white circular symbol in the top right corner. Below the text, there are two input fields: "Public Server Address:" with the value "192.168.0.137" and "Port:" with a dropdown menu showing "4502". At the bottom, there are three buttons: "Back", "Next" (highlighted with a blue border), and "Cancel".

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.

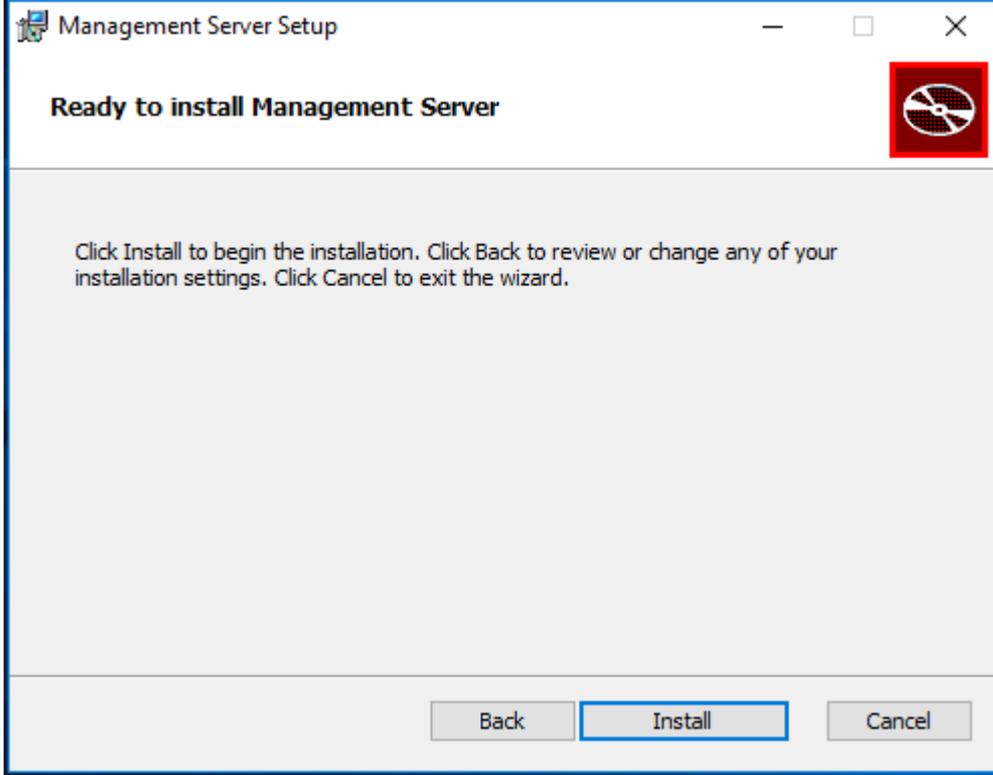
The setup installer will automatically open this port on the Windows firewall.

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

---

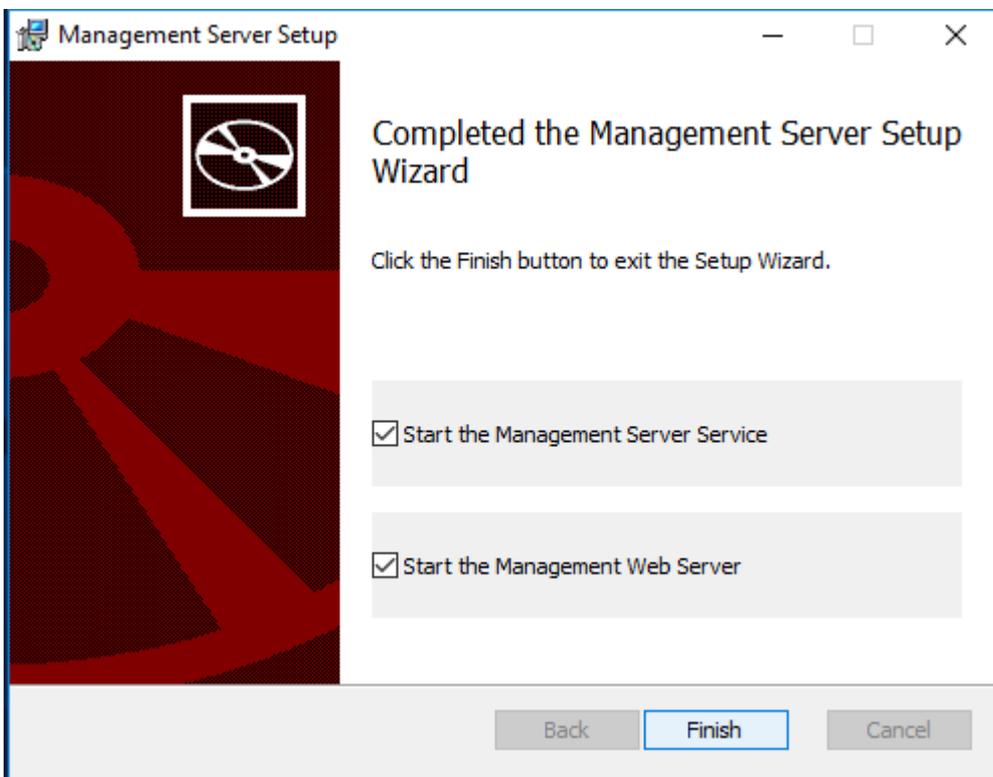


Click the **Install** button to start the installation.

Finish

---

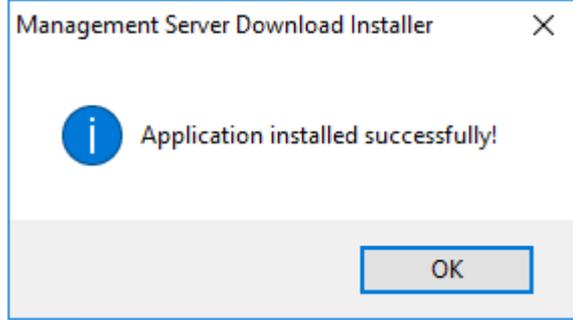
After a successful installation, the **Finish** dialog is displayed.



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

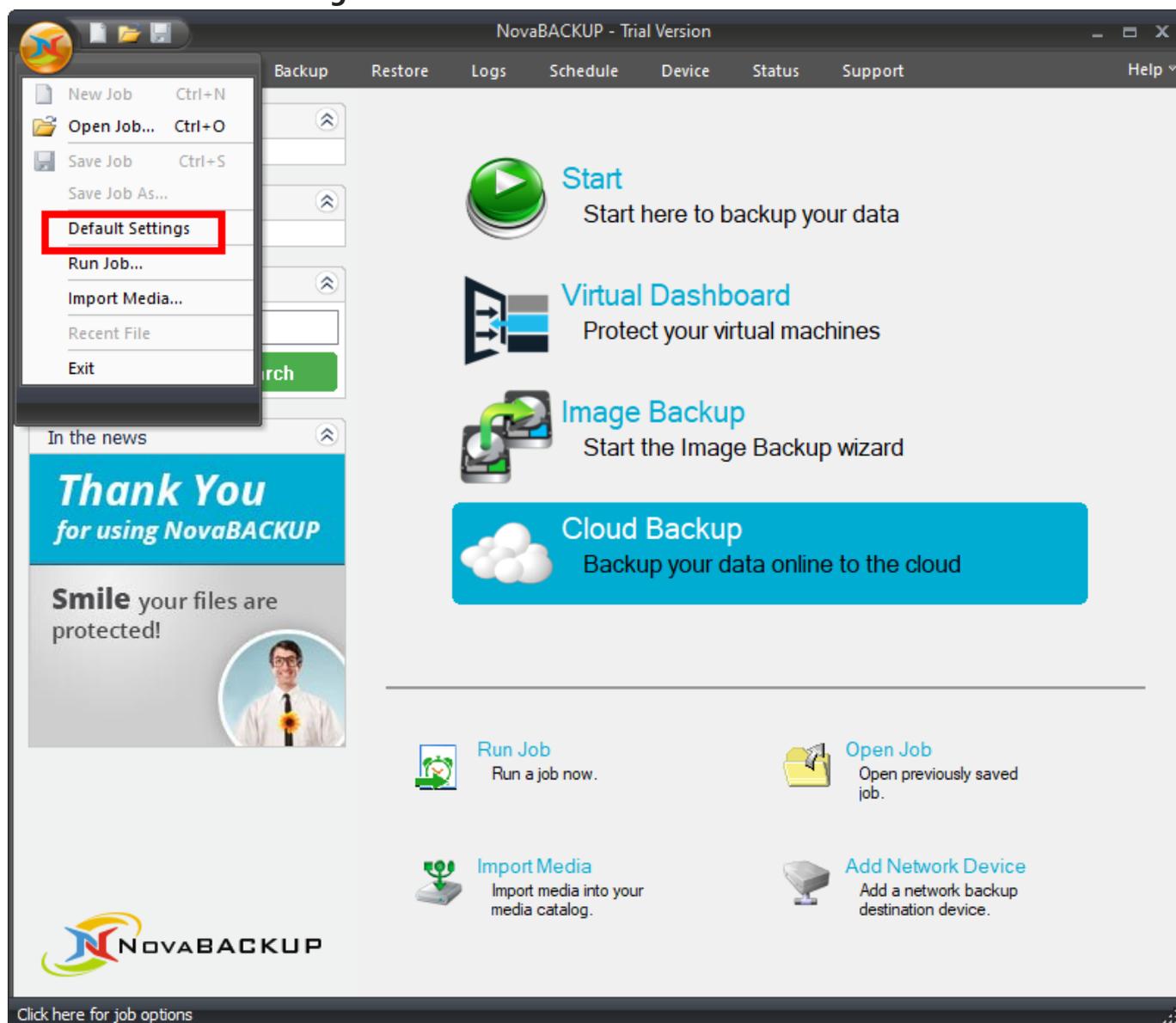
[Logging in](#)

[Setting up the backup client](#)

# Setting up the backup client

Now that you have the CMon successfully installed it's time to connect an agent to it. This section will cover how to setup the backup client software to connect to CMon.

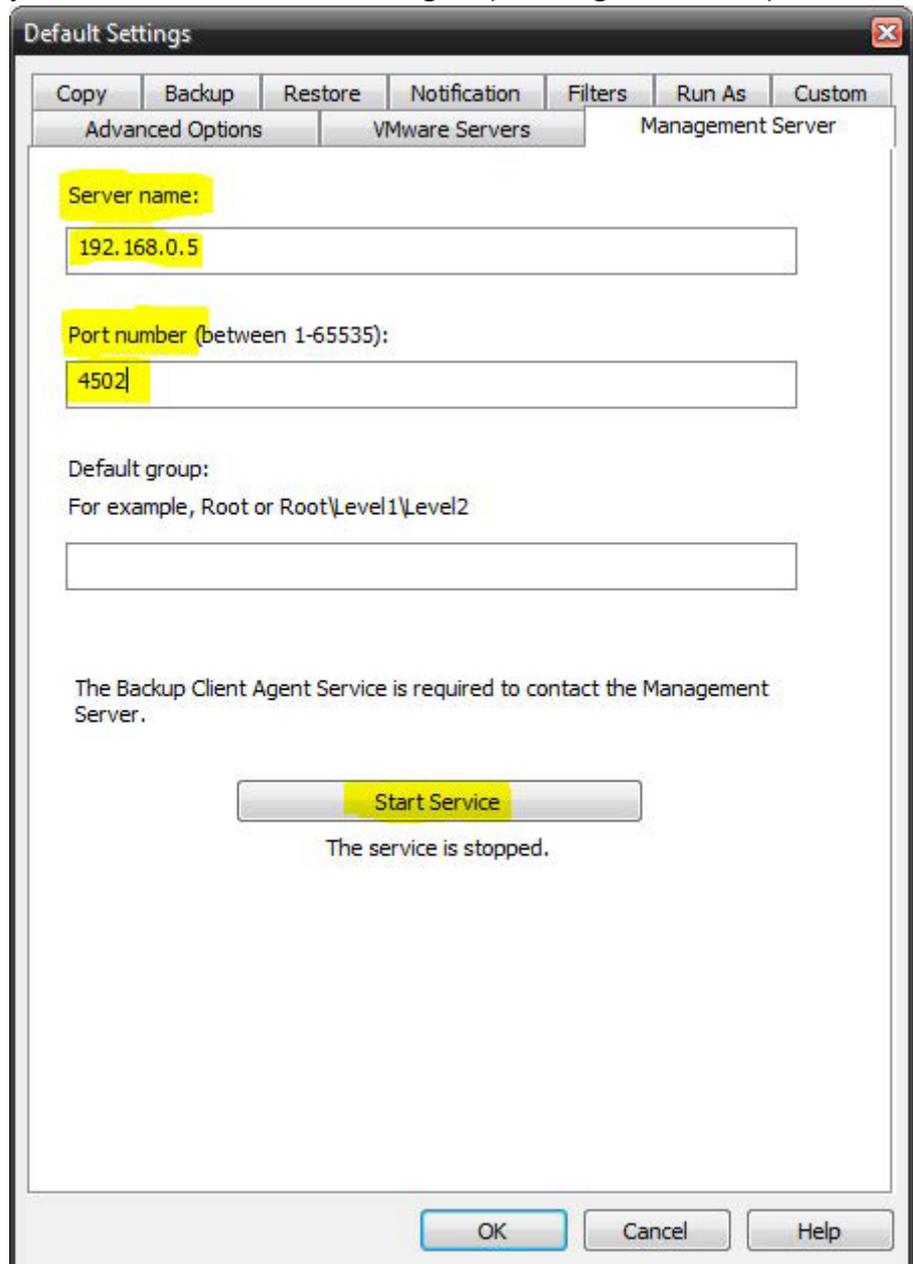
1. The first thing you need to do is install a backup client (NovaBACKUP® PC, Server, or Business Essentials) on the machine you'd like to back up. For instructions on how to do this please consult the NovaBACKUP® Quick Install Guide. By accepting all default options during installation, all necessary items will be installed. Once NovaBACKUP® PC, Server, or Business Essentials is installed we need to configure the connection to CMon. NovaBACKUP PC, Server, and Business Essentials clients require a setting to be configured in order for the backup client to become an Agent.
2. Start the NovaBACKUP client and click on the Home tab.
3. From the main menu click the large circle NovaStor logo button highlighted at the top left, and then click " **Default Settings** ". >



This will open a screen with a series of additional tabs.

4. Once in " **Default Settings** " you will click on the " **Management Server** " tab. You will be required to configure the " **Server name** " and " **Port number** " variables on this screen. 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 this agent will be placed in the



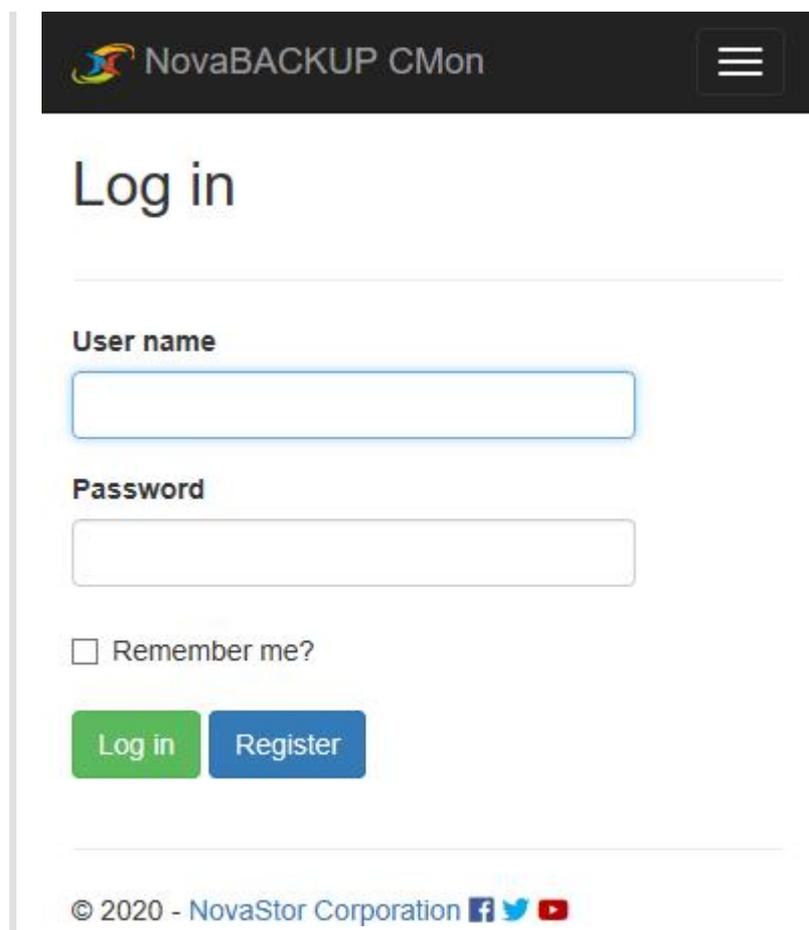
"Pending" group in CMon. >

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. To verify the service is an automatically starting service, open up Windows Services. Once in the Services screen, find the service named "Backup Client Agent Service". This is the service that actually connects to the CMon so you can monitor your agent. By default this service is set to Manual, go to the properties of this service and set it to Automatic (Delayed Start), and [Apply]. You may now exit out of Windows Services.
7. Additional agents may be connected using these same steps.

# Logging In

Logging in to the CMon is as simple as opening a web browser on your computer and browsing to the IP address, DNS name, or computer name along with the port number that you configured during the CMon installation; the default web port is 80. A shortcut to the website is installed on the computer where CMon was installed in the Start Menu in the "NovaStor" group for convenience.

The CMon website should work with any modern web browser including Internet Explorer 9 and above, Google Chrome, Mozilla Firefox as well as most smart phone web browsers.



NovaBACKUP CMon

## Log in

User name

Password

Remember me?

Log in Register

© 2020 - NovaStor Corporation

The default login Username is **admin** with a Password of **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 embedded web browser in 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 web browser and can be viewed via Internet Explorer 9 +, Google Chrome, Mozilla Firefox as well as most smart phone web browsers.

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

**Agents**

Name	Connected	Last Backup Date	Last Backup Status	Last Backup Size	Last Backup Duration	
Kevin	●	10/9/2020 11:02:43 AM	●			<a href="#">View</a>
Robert	●	10/9/2020 4:32:43 AM	●	1.46 GB	1 hour	<a href="#">View</a>
Jeff	●	10/8/2020 11:32:43 PM	●	2.18 GB	1 hour	<a href="#">View</a>
David	●	10/8/2020 11:32:42 PM	●	9.14 GB	1 hour	<a href="#">View</a>
Ruth	●	10/8/2020 10:32:43 PM	●	879.73 MB	1 hour	<a href="#">View</a>
Nancy	●	10/8/2020 9:32:43 PM	●	3.18 GB	1 hour	<a href="#">View</a>

Page 1 of 1 | 10 items per page | 1 - 6 of 6 Items

**Job History**

Group	Agent	Job	Type	Started	Ended	Status	Size	Files	Duration	
Marketing	Kevin	Daily	Backup	10/9/2020 11:02:43 AM		●				<a href="#">View</a>
Engineering	Robert	Daily	Backup	10/9/2020 4:32:43 AM	10/9/2020 6:32:43 AM	●	1.46 GB		1 hour	<a href="#">View</a>
Sales	Jeff	Daily	Backup	10/8/2020 11:32:43 PM	10/9/2020 12:32:43 AM	●	2.18 GB		1 hour	<a href="#">View</a>
Sales	David	Daily	Backup	10/8/2020 11:32:42 PM	10/9/2020 12:32:42 AM	●	9.14 GB		1 hour	<a href="#">View</a>
Accounting	Ruth	Daily	Backup	10/8/2020 10:32:43 PM	10/8/2020 11:32:43 PM	●	879.73 MB		1 hour	<a href="#">View</a>
Human Resources	Nancy	Daily	Backup	10/8/2020 9:32:43 PM	10/8/2020 10:32:43 PM	●	3.18 GB		1 hour	<a href="#">View</a>

Sum: 16.82 GB | Page 1 of 1 | 10 items per page | 1 - 6 of 6 Items

© 2020 - NovaStor Corporation

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. You can create Groups here as well as print a Report of the contents of the Agents & Groups area.

Agents and Groups

+ Add new group

Name	Description	Connected	Last Activity Date	Last Backup Date	Last Backup Status	Last Backup Size	Last Backup Number of Files	Last Backup Duration	xSP Username	Last Note	Version	View
Example												View
Accounting												View
Ruth		●	10/9/2020 11:32:42 AM	10/8/2020 10:32:43 PM	●	879.73 MB		1 hour			19.0.1124.1	View
Human Resources												View
Nancy		●	10/9/2020 11:32:42 AM	10/8/2020 9:32:43 PM	●	3.18 GB		1 hour			19.0.1124.1	View
IT												View
Engineering												View
Robert		●	10/9/2020 11:32:42 AM	10/9/2020 4:32:43 AM	●	1.46 GB		1 hour			19.1.1406.1	View
Marketing												View
Kevin		●	10/9/2020 11:32:41 AM	10/9/2020 11:02:43 AM	●						19.0.1124.1	View
Sales												View
David		●	10/9/2020 11:32:40 AM	10/8/2020 11:32:42 PM	●	9.14 GB		1 hour			19.0.1124.1	View
Jeff		●	10/9/2020 11:32:41 AM	10/8/2020 11:32:43 PM	●	2.18 GB		1 hour			19.0.1124.1	View
Pending	Machines not assigned to groups											View

Page 1 of 1 10 Items per page 1 - 2 of 2 Items

## Agents and Groups - Add new group function example:

Adding a Group is performed by clicking the " **Add new group** " button as seen in this example.

## Create Group

Group Users Notes

**Name**  
Customer Support

**Description**  
The customer support department ×

**Parent**  
IT ▼

Save

**PERMISSIONS REQUIRED**

View Agents and Groups

Edit Groups

# Agent Details

## Agent Friendly Name

Agent [Devices](#) [Jobs](#) [Job History](#) [Notes](#)

<b>Name</b>	Agent Friendly Name
<b>Parent</b>	Pending
<b>Machine Name</b>	Agent Machine Name
<b>IP Address</b>	127.0.0.1
<b>Operating System Version</b>	10.0.19041.0
<b>Backup Client Type</b>	NovaStor NovaBACKUP
<b>Backup Client Version</b>	19.99.0.0
<b>Backup Client License Type</b>	NovaBACKUP

 Edit

 Delete

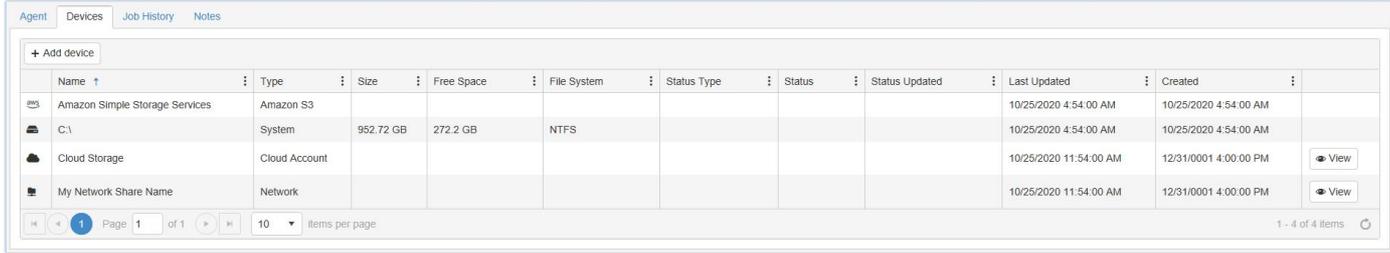
### PERMISSIONS REQUIRED

View Agents and Groups

# Agent Devices

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

Agent Machine Name



The screenshot shows a web interface for an agent's details. The 'Devices' tab is active, displaying a table of devices. The table has columns for Name, Type, Size, Free Space, File System, Status Type, Status, Status Updated, Last Updated, and Created. There are four rows of data, each with a 'View' button in the rightmost column. Below the table is a pagination control showing 'Page 1 of 1' and '10 items per page'. A 'Delete' button is visible at the bottom left of the interface.

Name	Type	Size	Free Space	File System	Status Type	Status	Status Updated	Last Updated	Created	
Amazon Simple Storage Services	Amazon S3							10/25/2020 4:54:00 AM	10/25/2020 4:54:00 AM	
C:\	System	952.72 GB	272.2 GB	NTFS				10/25/2020 4:54:00 AM	10/25/2020 4:54:00 AM	
Cloud Storage	Cloud Account							10/25/2020 11:54:00 AM	12/31/0001 4:00:00 PM	View
My Network Share Name	Network							10/25/2020 11:54:00 AM	12/31/0001 4:00:00 PM	View

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](#)

## **i** 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.

## Create Device

Select the device type

---

**Type**

Network ▼

Cloud

Network

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.

## Create Device

Select the device type

---

**Type**

Cloud ▼

**Cloud Device Type**

Cloud Device ▼

Cloud Device

Existing Cloud Storage Account

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

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

Related Topics

[Create Cloud Device From Existing Cloud Storage Account](#) [Create Cloud Device](#)

[Create Network Device](#)

### **i** PERMISSIONS REQUIRED

[Edit 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

The screenshot shows the 'Account' tab of a backup client interface. It features three sub-sections: 'Device Name', 'Backup storage server location', and 'Backup storage server authentication'. The 'Device Name' section has a text input field with 'Cloud Storage' and a clear button. The 'Backup storage server location' section has a 'Server address' text input field and a 'Server port' spinner control set to 308. The 'Backup storage server authentication' section has a checkbox for 'Use Windows login credentials', a 'User name' text input field, and a 'Password' text input field. At the bottom, there are two buttons: 'Test Connection' (blue) and 'Add Device' (green).

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

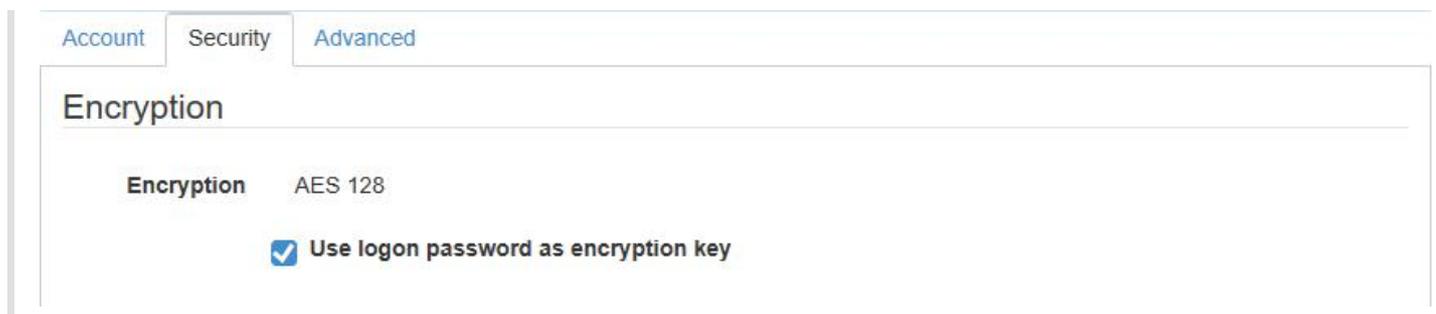
User name

- 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

## 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.*

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.

### Create Cloud Device

Select an existing cloud storage account

	Group	Username
<input checked="" type="radio"/>	Everyone	michael@example.com

Page 1 of 1 | 10 items per page | 1 - 1 of 1 items

[Next](#)

## Account

Account | Security | Advanced

### Device Name

Device name:

### Backup storage server location

Server address:

Server port:

### Backup storage server authentication

Use Windows login credentials

User name:

Password:

[Back](#) | [Test Connection](#) | [Add Device](#)

Device name

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

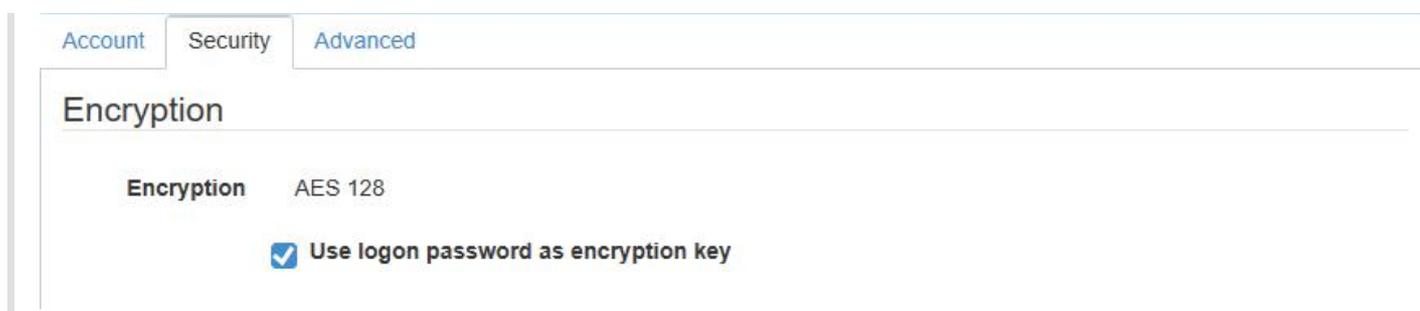
Use Windows login credentials

- 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

## 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.*

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

### Cloud Storage

Account Security Advanced Status

#### Device Name

Device name Cloud Storage

#### Backup storage server location

Server address localhost

Server port 308

#### Backup storage server authentication

Use Windows login credentials

User name michael@example.com

Test Connection

Edit

Delete

## Security

Account Security Advanced Status

#### Encryption

Encryption AES 128

Use logon password as encryption key

## 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)

Maximum CPU utilization (percentage)

### Temporary backup files

Temporary files 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**

<b>Status Type</b>	Add Device Pending
<b>Status</b>	New device added by admin
<b>Last Updated</b>	10/10/2020 2:52:54 AM
<b>Created</b>	10/10/2020 2:52:54 AM

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

### Cloud Storage

---

Account **Security** Advanced

---

#### Device Name

Device name

---

#### Backup storage server location

Server address

Server port

---

#### Backup storage server authentication

Use Windows login credentials

User name

Password

---

### 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

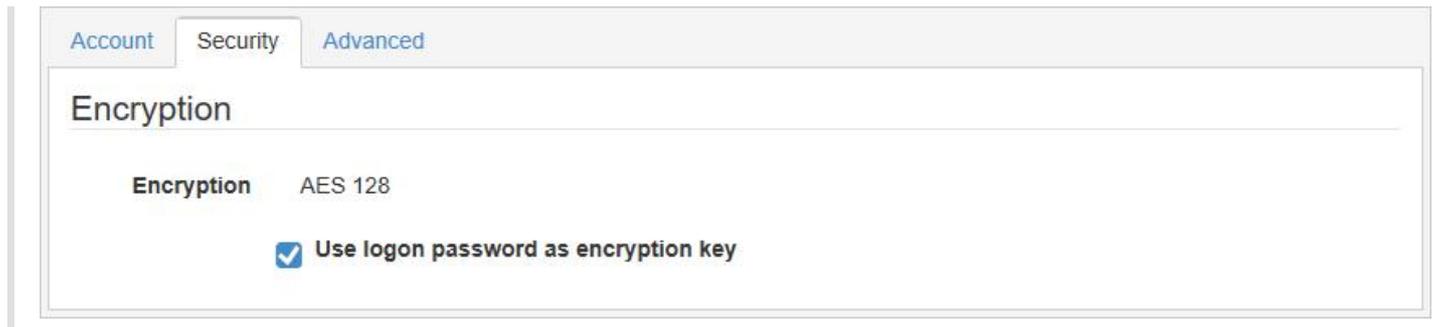
- Required if "Use Windows login credentials" is checked
- Maximum length is 64

### Password

- Required if "Use Windows login credentials" is checked

- Maximum length is 64

## Security



The screenshot shows a configuration window with three tabs: "Account", "Security", and "Advanced". The "Security" tab is selected. Under the "Encryption" section, the "Encryption" dropdown is set to "AES 128". Below this, there is a checked checkbox labeled "Use logon password as encryption key".

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

## 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.*

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

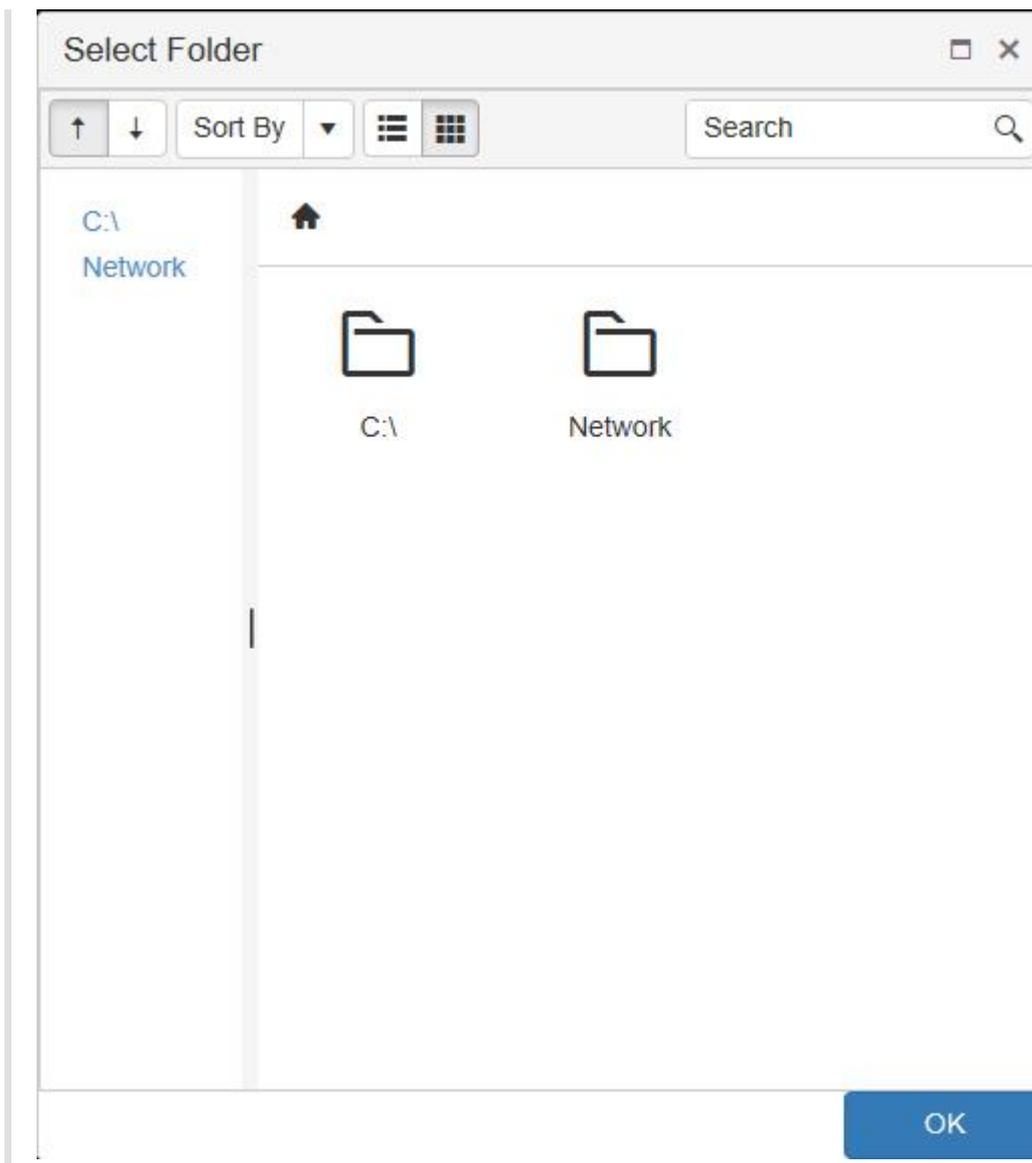
Maximum CPU utilization (percentage)

- 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.

### **i** PERMISSIONS REQUIRED

Edit Agents

# Create Agent Network Device

To add a new network device, enter the appropriate values in the required fields marked in **bold** and click the **Save** button.

## Create Network Device

Add a network device

<b>Device name</b>	<input type="text" value="My Network Share Name"/>
<b>Path</b>	<input type="text" value="\\BackupStorage\MyShareName"/>
Domain	<input type="text" value="my corporate domain"/>
User name	<input type="text" value="user name"/>
Password	<input type="password" value="••••••••"/>

Device name

- Required
- Must be unique
- Must not equal "Network"
- Maximum length is 99

Path

- Required
- Must begin with a double back slash
- Maximum length is 259

Domain

- Maximum length is 127

User name

- Maximum length is 127

Password

- Maximum length is 127

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

Agent Machine Name

Agent Devices Job History Notes

+ Add device

Name	Type	Size	Free Space	File System	Status Type	Status	Status Updated	Last Updated	Created	
C:\	System	952.72 GB	272.2 GB	NTFS				10/9/2020 4:15:53 AM	10/9/2020 4:15:53 AM	
My Network Share Name	Network				Add Device Pending	New device added by admin		10/9/2020 11:16:06 AM	12/31/0001 4:00:00 PM	<a href="#">View</a>

Page 1 of 1 10 items per page 1 - 2 of 2 items

Delete

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

Agent Machine Name

Agent Devices Job History Notes

+ Add device

Name	Type	Size	Free Space	File System	Status Type	Status	Status Updated	Last Updated	Created	
C:\	System	952.72 GB	272.2 GB	NTFS				10/9/2020 4:15:53 AM	10/9/2020 4:15:53 AM	
My Network Share Name	Network				Success	Successfully added by agent.	10/9/2020 11:16:11 AM	10/9/2020 11:16:11 AM	12/31/0001 4:00:00 PM	<a href="#">View</a>

Page 1 of 1 10 items per page 1 - 2 of 2 items

Delete

The network connection must be available at the time the device is added to the agent.

## **i** PERMISSIONS REQUIRED

Edit Agents

# Network Device Details

## My Network Share Name

<b>Path</b>	\\BackupStorage\MyShareName
<b>Domain</b>	my corporate domain
<b>User name</b>	user name
<b>Status Type</b>	Success
<b>Status</b>	Successfully added by agent.
<b>Status Updated</b>	8/19/2020 7:07:12 PM
<b>Last Updated</b>	8/19/2020 7:07:12 PM
<b>Created</b>	8/19/2020 7:07:05 PM

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 Network 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.

## Edit Network Device

**Device name** My Network Share Name

**Path**

**Domain**

**User name**

**Password**

### **i** PERMISSIONS REQUIRED

Edit 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.

**Agent Machine Name**

Agent Devices **Jobs** Job History Notes

+ Add Job

Name ↑	Type	
My File Backup Job	File Backup	View  Delete
My Image Backup Job	Image Backup	Delete
My Virtual Machine Backup Job	Virtual Machine File-Level Backup	Delete
My Virtual Machine Replication Job	Virtual Machine Replication	Delete

1 - 4 of 4 items

Delete

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.

## New Job

Job type: File Backup

OK

Cancel

## 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.

Delete

Are you sure you want to delete this record?

OK

Cancel

### **i** PERMISSIONS

One of the following permissions are required:

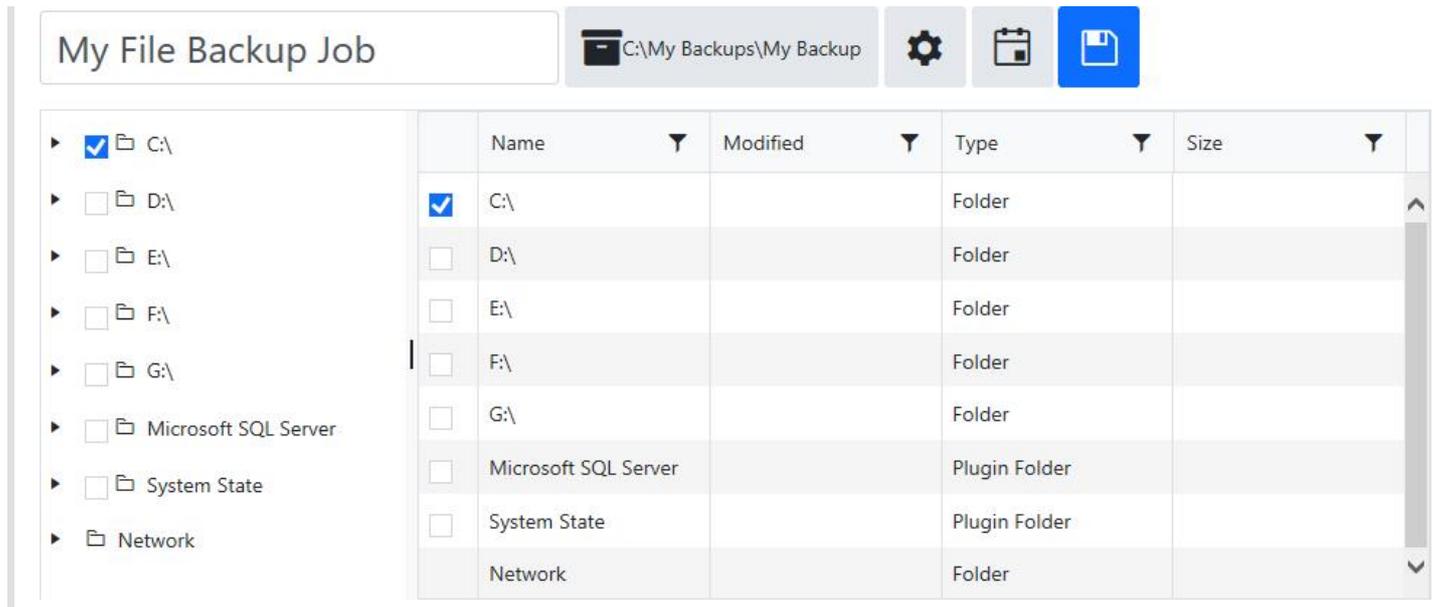
View Jobs and Job History

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.



The screenshot shows the 'My File Backup Job' configuration interface. At the top, there's a title 'My File Backup Job' and a breadcrumb path 'C:\My Backups\My Backup'. Below the title is a navigation bar with icons for settings, a calendar, and a save button. The main area is divided into two parts: a tree view on the left and a table on the right. The tree view shows a hierarchy of folders: C:\ (checked), D:\, E:\, F:\, G:\, Microsoft SQL Server, System State, and Network. The table on the right lists these folders with columns for Name, Modified, Type, and Size. The C:\ folder is selected, and its details are shown in the table row.

	Name	Modified	Type	Size
<input checked="" type="checkbox"/>	C:\		Folder	
<input type="checkbox"/>	D:\		Folder	
<input type="checkbox"/>	E:\		Folder	
<input type="checkbox"/>	F:\		Folder	
<input type="checkbox"/>	G:\		Folder	
<input type="checkbox"/>	Microsoft SQL Server		Plugin Folder	
<input type="checkbox"/>	System State		Plugin Folder	
<input type="checkbox"/>	Network		Folder	

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](#) 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.

The screenshot shows the 'My File Backup Job' interface. At the top, there's a title bar with the job name 'My File Backup Job' and several icons: a folder icon with the path 'C:\My Backups\My Backup', a gear icon for settings, a calendar icon, and a blue save icon. Below the title bar is a toolbar with a '+ Add' button. The main area is a tree list with columns for 'Name' and actions. The tree list contains the following items:

- C:\ (expanded)
- Documents (expanded)
- excluded file.zip
- Microsoft SQL Server (expanded)
- Computer\_Name (expanded)
- SQL\_Server\_Instance\_Name
- System State
- Network (expanded)
- Computer\_Name (expanded)
- Network\_Share

At the bottom, there's a pagination bar with navigation arrows, a page number '1', a dropdown menu set to 'All', the text 'items per page', and '1 - 10 of 10 items'.

Click on the  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**

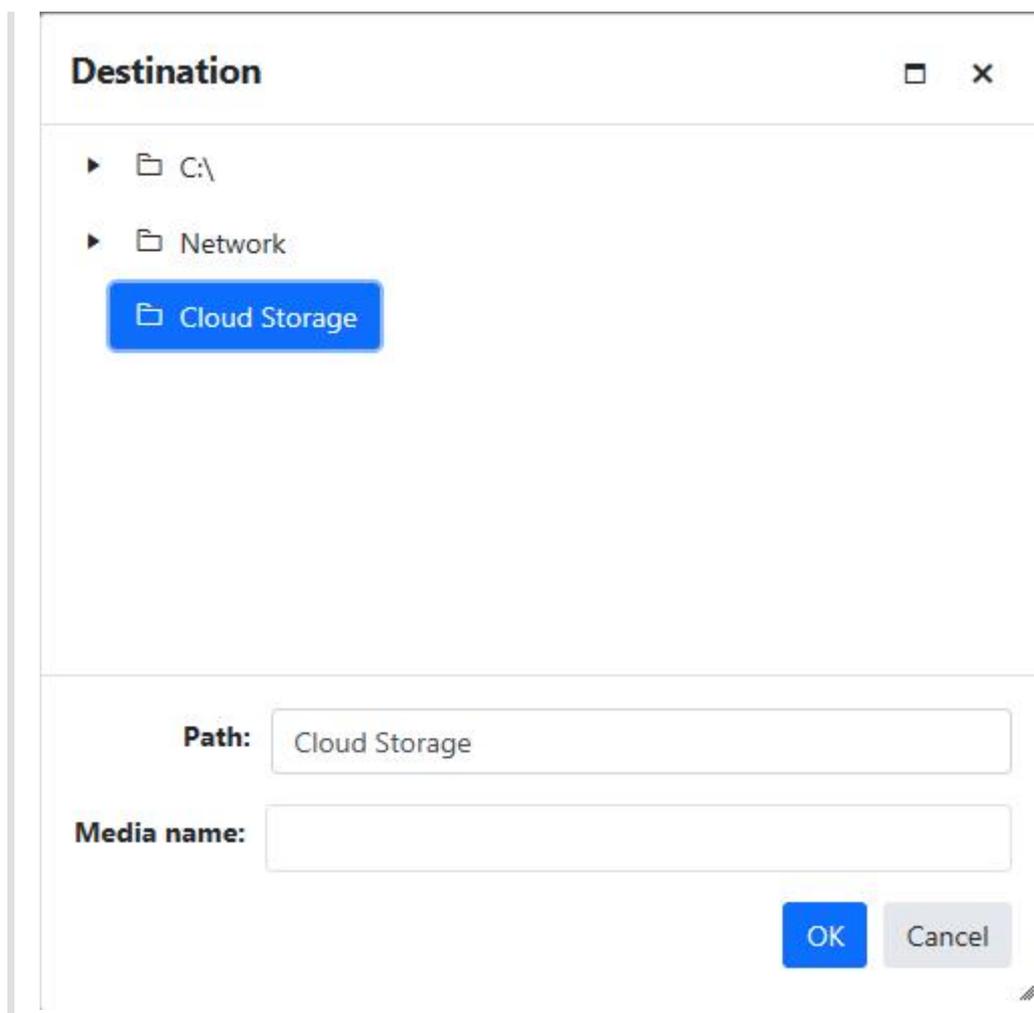
One of the following permissions are required:

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

## Unmanaged jobs

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

## Managed jobs

The  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  field.

## Disconnected agents

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

**Destination** □ ×

**Path:** C:\My Backups\  
**Media name:** My Backup

OK Cancel

Related Topics

[Network](#)

[Network Credentials](#)

### **PERMISSIONS**

One of the following permissions are required:

View Jobs and Job History

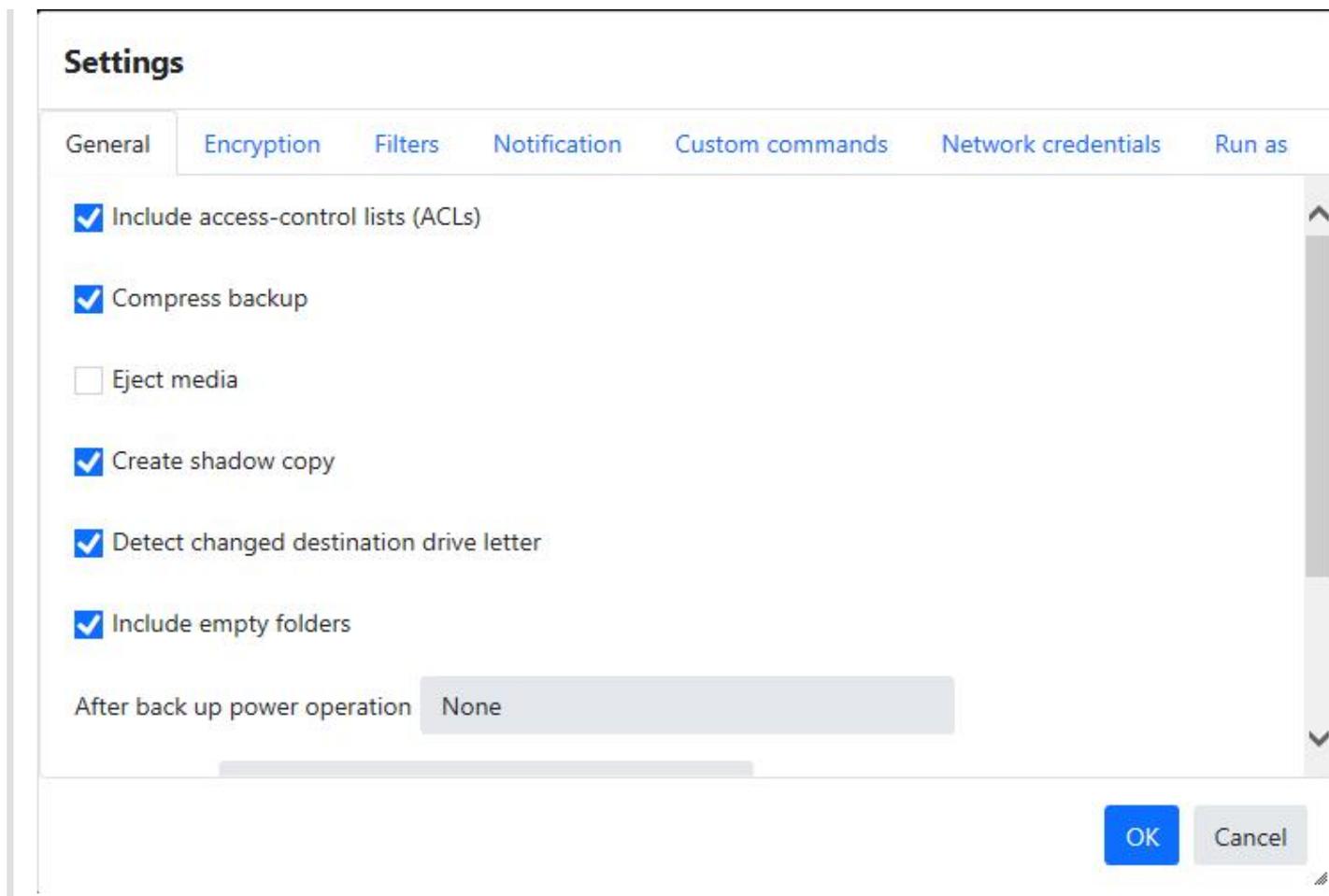
View Jobs Logs

Edit Jobs

# Settings

The input fields and the  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.

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.

The **Compress backup** check box is check-marked and disabled when the target destination is a cloud storage device.

#### 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.

The **Automatically eject media at the end of job** check box should not be check-marked and disabled when the target destination is a cloud storage device, S3 and network.

#### Create shadow copy

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

#### 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.

The **Detect changed destination drive letter** check box should not be check-marked and disabled when the target destination is a cloud storage device, S3 and network.

#### Include empty folders

Check-mark this check box to backup empty folders.

The **Include empty folders** check box should not be check-marked and disabled when the target destination is a cloud storage device.

#### 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.

This can only be set to `None` when the target destination is a cloud storage device.

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.

Write mode

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

This can only be set to `Append` when the target destination is a cloud storage device.

This can only be set to `Overwrite` when the target destination is a Amazon S3 device.

VALUE	DESCRIPTION
Append	Appends to recognized media. Automatically formats blank or unrecognized media.
Overwrite	Overwrites all recognized media. Automatically formats blank or unrecognized media.

Backup type

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

VALUE	DESCRIPTION
Full	The full
Incremental	The incremental
Differential	The differential
Snapshot	The Snapshot

## Encryption

Encryption type

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

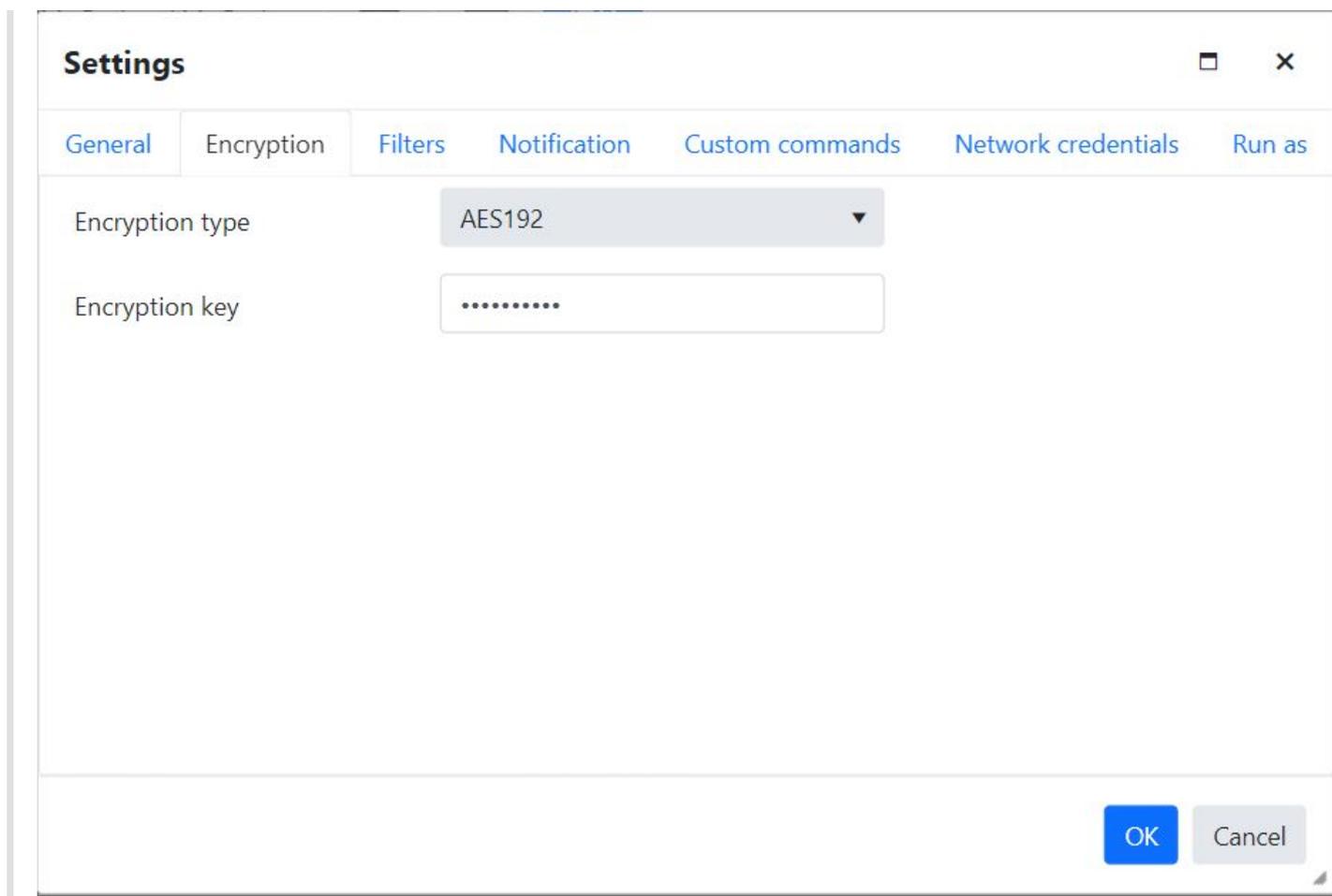
**Encryption type** must match the device's encryption type when the target destination is a cloud storage device.

VALUE	DESCRIPTION
None	No encryption
Blowfish	Blowfish encryption
AES128	AES-128 encryption
AES192	AES-192 encryption
AES256	AES-256 encryption

Encryption key

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

**Encryption key** must be empty when the target destination is a cloud storage device.



The screenshot shows a 'Settings' dialog box with the 'Encryption' tab selected. The 'Encryption type' dropdown menu is set to 'AES192'. The 'Encryption key' text input field is empty, containing only a series of dots. At the bottom right, there are 'OK' and 'Cancel' buttons.

# Filters

The screenshot shows a 'Settings' dialog box with the 'Filters' tab selected. The dialog has a title bar with a maximize button and a close button. Below the title bar are several tabs: 'General', 'Encryption', 'Filters', 'Notification', 'Custom commands', 'Network credentials', and 'Run as'. The 'Filters' tab contains the following settings:

- 'Include wildcard' and 'Exclude wildcard' are both set to 'File Mask (separated by comma)'.
- Under the 'Include files' section, there are four rows of date range settings:
  - 'Created': 'From' and 'To' are both 'M/d/yyyy'.
  - 'Modified': 'From' and 'To' are both 'M/d/yyyy'.
  - 'Accessed': 'From' and 'To' are both 'M/d/yyyy'.
  - 'Size (in kilobytes)': 'From' is '20' and 'To' is '575', both with up/down arrows.

At the bottom right of the dialog are 'OK' and 'Cancel' buttons.

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



The screenshot shows a configuration dialog box for email notifications. It features a checked checkbox for 'Send e-mail notifications'. Below this is a dropdown menu for 'Email Server Type' with 'Custom Email Server' selected. There are input fields for 'To' (noreply@novabackup.com), 'Cc' (noreply@novabackup.com), and 'Subject' (My Email Subject). A checked checkbox for 'Attach Log Files' is also present. At the bottom, there is a 'Sender Name' field and 'OK' and 'Cancel' buttons.

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

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.

The screenshot shows a 'Settings' dialog box with the 'Custom commands' tab selected. The dialog has a title bar with 'Settings' and window control icons. Below the title bar are several tabs: 'General', 'Encryption', 'Filters', 'Notification', 'Custom commands', 'Network credentials', and 'Run as'. The 'Custom commands' tab is active and contains two text input fields. The first field is labeled 'Run before backup' and the second is labeled 'Run after backup'. At the bottom right of the dialog are 'OK' and 'Cancel' buttons.

# Network credentials

User name

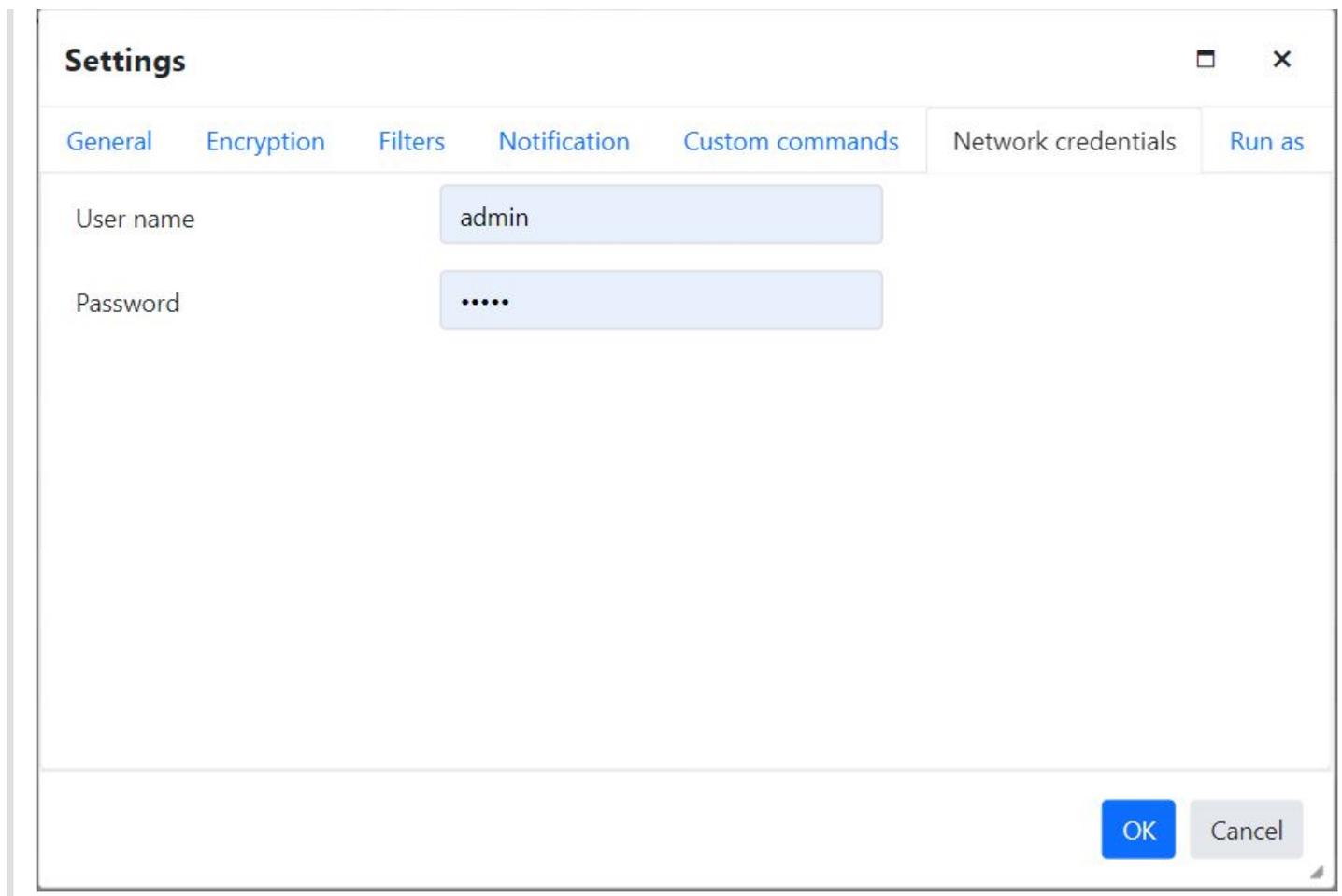
User name for connecting to network location such as NAS device or network share with a specific username and password. User name can be given in `domain\username` format.

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.



The image shows a screenshot of a 'Settings' dialog box with the 'Network credentials' tab selected. The dialog has a title bar with 'Settings' and window control icons. Below the title bar are several tabs: 'General', 'Encryption', 'Filters', 'Notification', 'Custom commands', 'Network credentials', and 'Run as'. The 'Network credentials' tab is active and contains two input fields. The first field is labeled 'User name' and contains the text 'admin'. The second field is labeled 'Password' and contains five dots, indicating a masked password. At the bottom right of the dialog are two buttons: 'OK' (highlighted in blue) and 'Cancel' (disabled).

## 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

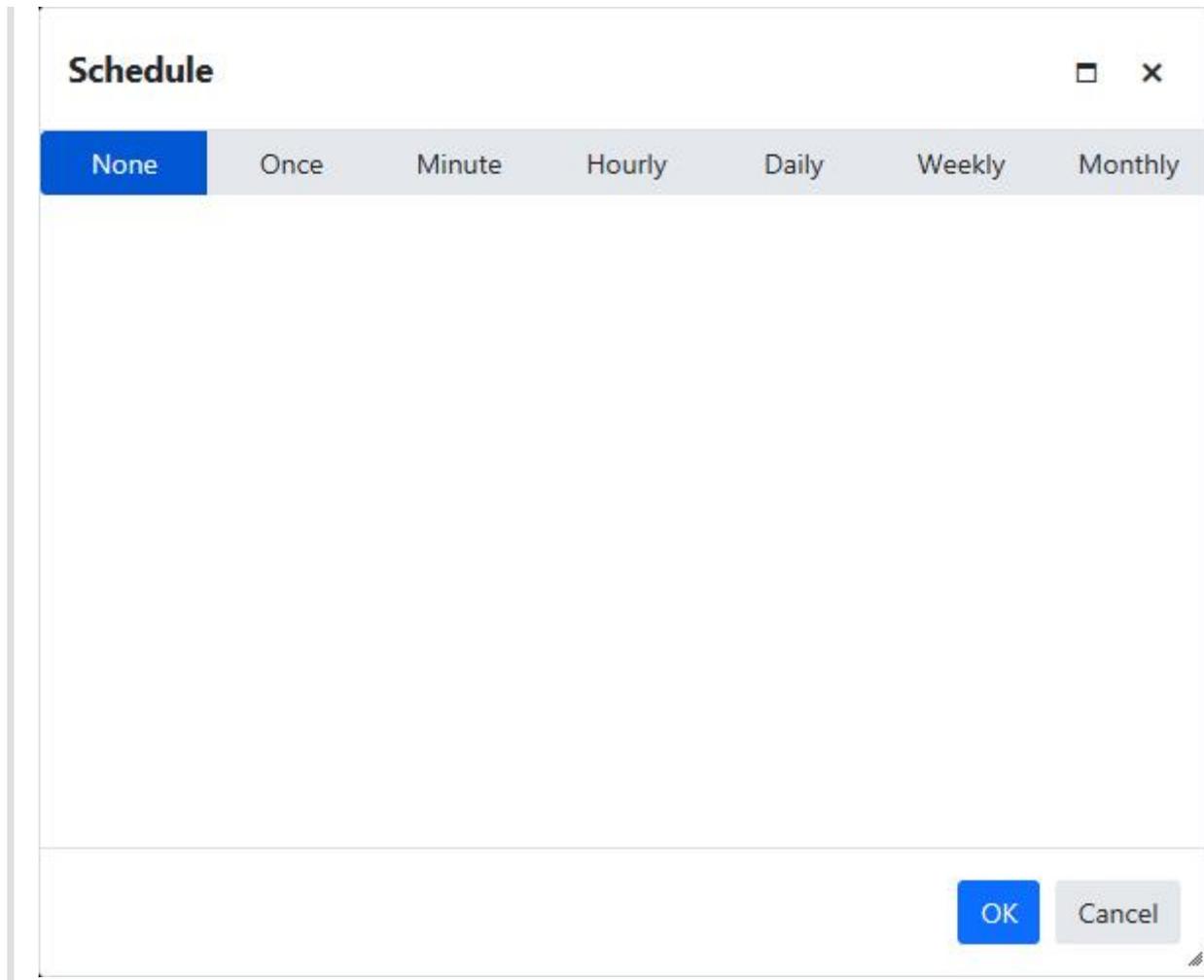
Click `Check credentials` to verify the credentials.

The screenshot shows a 'Settings' dialog box with a 'Run as' tab. The 'Specific user' option is selected. The 'User name' field is filled with 'domain\user' and the 'Password' field is filled with '\*\*\*\*\*'. A blue 'Check Credentials' button is positioned below the password field. At the bottom right, there are 'OK' and 'Cancel' buttons.

# Schedule

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

## None



The image shows a dialog box titled "Schedule" with a close button (X) in the top right corner. Below the title bar is a horizontal menu with seven options: "None", "Once", "Minute", "Hourly", "Daily", "Weekly", and "Monthly". The "None" option is currently selected, indicated by a blue background. The main area of the dialog is empty. At the bottom right, there are two buttons: "OK" (blue) and "Cancel" (gray).

## Once

**Schedule** [Close] [Maximize]

None **Once** Minute Hourly Daily Weekly Monthly

**Start time**

11/22/2021 3:00:00 AM [Calendar]

**Maximum run time**

2 hours [Clock]

OK Cancel

### 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

**Schedule** ☐ ✕

None   Once   **Minute**   Hourly   Daily   Weekly   Monthly

**Start time**

11/22/2021 3:00:00 AM 📅

**Repeat**

5 minutes 🕒

**Maximum run time**

2 hours 🕒

**OK**   **Cancel**

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

**Schedule** ☐ ✕

None   Once   Minute   **Hourly**   Daily   Weekly   Monthly

**Start time**  
11/22/2021 3:00:00 AM 📅

**Repeat**  
1 ⬆️ ⬆️ Hours

**Maximum run time**  
2 hours 🕒

OK Cancel

The Hours field must be between 1 and 23.

## Daily

**Schedule** ☐ ✕

None   Once   Minute   Hourly   **Daily**   Weekly   Monthly

**Start time**  
11/22/2021 3:00:00 AM 📅

**Repeat**  
1 ▲▼ Days

**Repeat on**  
**Sunday**   **Monday**   **Tuesday**   **Wednesday**   **Thursday**   **Friday**   **Saturday**

**Maximum run time**  
2 hours 🕒

**OK**   **Cancel**

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

At least one day of the week must be selected.

## Weekly

**Schedule** ☐ ✕

None   Once   Minute   Hourly   Daily   **Weekly**   Monthly

**Start time**  
11/22/2021 3:00:00 AM 📅

**Repeat**  
1 ▲▼ Weeks

**Maximum run time**  
2 hours 🕒

OK Cancel

The weeks field must be between 1 and 52.

## Monthly

### Schedule □ ×

None   Once   Minute   Hourly   Daily   Weekly   **Monthly**

**Start time**  
11/22/2021 3:00:00 AM 

**Repeat**  
1   Months

**Repeat on**  
1   Day of the month

**Maximum run time**  
2 hours 

**OK**   Cancel

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

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

# 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

<b>Started</b>	10/8/2020 11:32:42 PM
<b>Ended</b>	10/9/2020 12:32:42 AM
<b>Duration</b>	1 hour
<b>Files Selected</b>	65
	9 GB
<b>Files Completed</b>	65
	9 GB
<b>Media</b>	Media Name
<b>Device</b>	C:\
<b>Backup Location</b>	C:\backup

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

## Messages

Type	Message	Timestamp
No messages were logged.		

Navigation: 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

<b>Started</b>	10/8/2020 11:32:43 PM
<b>Ended</b>	10/9/2020 12:32:43 AM
<b>Duration</b>	1 hour
<b>Files Selected</b>	65
	2 GB
<b>Files Completed</b>	65
	2 GB
<b>Media</b>	Media Name
<b>Device</b>	C:\
<b>Backup Location</b>	C:\backup

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

## Messages

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

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, Customer Support	David, Jeff, Kevin, Nancy, Robert, Ruth	Started, Successful, Failed, Stopped, Warning	10/9/2020 11:34:02 AM	<a href="#">View</a> <a href="#">Delete</a>

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 Add button.

Add Trigger
— □ ×

**Groups**

Accounting ×
Customer Support ×
Engineering ×
Example ×

Human Resources ×
IT ×
Marketing ×
Pending ×
Sales ×

Select All Groups
Deselect All Groups

**Agents**

David ×
Jeff ×
Kevin ×
Nancy ×
Robert ×
Ruth ×

Select All Agents
Deselect All Agents

**Job Status**

Failed ×
Started ×
Stopped ×
Successful ×
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 \$job:

**Enable HTML**

Send message as HTML

**Body**

**B** *I* U abc
☰ ☱ ☲ ☳
☴ ☵ ☶ ☷
☸ ☹ ☺ ☻
☼ ☽ ☿ ♀ ♂ ♁ ♃ ♄ ♅ ♆ ♇ ♈ ♉ ♊ ♋ ♌ ♍ ♎ ♏ ♐ ♑ ♒ ♓
↶ ↷ ↸ ↹ ↺ ↻
🔗 🔁 🖼️ 📎
x<sub>2</sub> x<sup>2</sup> 🏠

</> Format ▾
✖ (inherited font) ▾
(inherited size) ▾

A ▾
🌊 ▾

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

+ Add
Cancel

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 <i>hh:mm:ss tt</i> 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:

**Groups**

Pending × Example × Accounting × Human Resources × IT × Engineering ×  
Marketing × Sales × Customer Support ×

**Agents**

David × Jeff × Kevin × Nancy × Robert × Ruth ×

**Job Status**

Started × Successful × Failed × Stopped × Warning ×

**Interval**

Immediate ▾

**Recipients**

admin@example.com

*Separate multiple email addresses with a semicolon (;)*

**Subject**

\$agentName \$jobName \$jobType Job \$job:

**Enable HTML**

Send message as HTML

**Body**

**B** *I* U abc  $x_2$   $x^2$

</> Format ▾ (inherited font) ▾ (inherited size) ▾

**A** ▾ ▾

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

**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](#)

# 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.

## Set password

Set your password.

---

<b>User name</b>	<input type="text" value="michael@example.com"/>
<b>Password</b>	<input type="password"/>
<b>Confirm password</b>	<input type="password"/>

Remember me?

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.

## Change Password

---

**Current password**

**New password**

**Confirm new password**

Change password

# Time Zone

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

## Time Zone

**Automatically detect my time zone**

**Country**

United States



**TimeZone**

Pacific Time



**Time Zone Identifier**

America/Los\_Angeles

**Current Time**

10/9/2020 11:36:16 AM

Save Changes

# 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.

## Language and Culture

**Automatic**  Automatically detect my language and culture

**Language**

English (United States) 

**Culture**

en-US

**Calendar**

Gregorian

**Date Time Pattern**

M/d/yyyy h:mm:ss tt

**Curent Time**

4/23/2019 11:28:39 PM

**Number Decimal Separator**

.

**Number Group Separator**

,

Save Changes

# 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.

Cloud Storage Accounts

+ Add new cloud storage account   Export to CSV

Username ↑	Last Backup Date	Used Space	Total Storage Space	Quota Status	Quota Percent	Backup Client License Key	Expiration Date	
michael@example.com		1 GB	5 GB	Below Quota	<div style="width: 20%;"></div> 20%	license key	11/23/2020 10:36:27 AM	<a href="#">Connect</a> <a href="#">View</a>

Page 1 of 1   10 items per page   1 - 1 of 1 items

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

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

The "Free Space" column is 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.

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

The exported CSV file will contain the following columns:

COLUMN NAME	DESCRIPTION
GroupName	The name of the storage server group.
Username	The username in the storage server.
BackupClientLicenseKey	The backup client license key.
LastBackupDate	The date and time of the last backup in UTC.
UsedBytes	The amount of storage space used in bytes.
FreeBytes	The amount of storage space remaining in bytes.

COLUMN NAME	DESCRIPTION
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](#)

# 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.

## Create new cloud storage account

---

**Username**

**Password**

**Confirm Password**

I accept the [Terms and Conditions](#)

The username must be unique.

A new "Cloud Storage" device will automatically be added to the backup client when the user signs up inside the embedded web browser of 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.

# Create new cloud storage account

**Username**

**Password**

**Confirm Password**

**Backup Client License Key**

I accept the [Terms and Conditions](#)

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 inside the embedded web browser of the backup client.

## PERMISSIONS REQUIRED

[Edit Cloud Storage Accounts](#)

## 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).

## Terms and Conditions

 Export As ▾

### Sample Terms and Conditions ("Terms")

Last updated: October 25, 2019

Please read these Terms and Conditions ("Terms", "Terms and Conditions") carefully before using the "Service" operated by your Service Provider ("us", "we", or "our").

Your access to and use of the Service is conditioned on your acceptance of and compliance with these Terms. These Terms apply to all visitors, users and others who access or use the Service.

By accessing or using the Service you agree to be bound by these Terms. If you disagree with any part of the terms then you may not access the Service.

Close

## Related topics:

[Add a storage server](#)

[User registration and creating a cloud storage account in one step](#)

# Connect to an account

The embedded web browser dialog from within the backup client must be used in order to successfully connect to a cloud storage account.

The embedded web browser dialog can be launched from either the "Home" or the "Device" tabs.

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.

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

## 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.

## Cloud device

[Connect](#) [Refresh](#) [Edit](#) [View computers](#) [Delete](#)

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

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

# Cloud device

[Connect](#) [Refresh](#) [Edit](#) [View computers](#) [Delete](#)

<b>Username</b>	michael@example.com
<b>Backup client license key</b>	license key <a href="#">✎</a>
<b>Expiration date</b>	9/28/2020 6:34:35 PM
<b>Days until expiration</b>	45
<b>Status</b>	Active
<b>Enabled</b>	Yes
<b>License</b>	Normal
<b>Used space</b>	1 GB
<b>Free space</b>	4 GB
<b>Total storage space</b>	5 GB
<b>Quota status</b>	Below Quota
<b>Quota</b>	20%
<b>Maximum number of computers</b>	1
<b>Group</b>	michael@example.com
<b>Quota type</b>	Custom
<b>Near quota</b>	90%
<b>Near quota action</b>	Report Warning
<b>At quota action</b>	Warning Window
<b>Over quota</b>	110%
<b>Over quota action</b>	Disable Backup
<b>Restore window</b>	1 month
<b>Allow data access using master key</b>	Yes

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

# Cloud device

[Connect](#) [Refresh](#) [Edit](#) [View computers](#) [Delete](#)

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

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

## **i** 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.

## Cloud Storage Account Computers

Computer Name	Created	Modified	
WINDOWS-PC	10/9/2020 11:37:34 AM	10/9/2020 11:37:34 AM	Delete
WINDOWS-LAPTOP	10/9/2020 11:37:35 AM	10/9/2020 11:37:35 AM	Delete

Page 0 of 0 10 items per page No items to display

### **i 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.

### Edit cloud storage account

---

<b>Username</b>	michael@example.com
<b>License Key</b>	license key 
<b>Status</b>	Active
<b>Enabled</b>	Yes
<b>License</b>	Normal
<b>Number of computers</b>	1
<b>Group</b>	michael@example.com
<b>Restore window length</b>	<input type="text" value="1"/>  
<b>Restore window type</b>	<input type="text" value="Months"/> 
<b>Computers</b>	 <a href="#">Manage computers</a>
<b>Password</b>	 <a href="#">Change password</a>

[Save](#)

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.

# Edit cloud storage account

<b>Username</b>	michael@example.com
<b>License Key</b>	license key 
<b>Status</b>	Active
<b>Enabled</b>	Yes
<b>License</b>	<input type="text" value="Normal"/>
<b>Number of computers</b>	1
<b>Group</b>	<input type="text" value="michael@example...."/>
<b>Restore window length</b>	<input type="text" value="1"/>  
<b>Restore window type</b>	<input type="text" value="Months"/>
	<input checked="" type="checkbox"/> <b>Allow data access using master key</b>
<b>Primary storage</b>	<input type="text" value="C:\UserData"/>
	<input checked="" type="checkbox"/> <b>Restrict backups to primary storage</b>
<b>User data directory name</b>	<input type="text" value="michael@example.com"/>
<b>Computers</b>	 <input type="text" value="Manage computers"/>
<b>Password</b>	 <input type="text" value="Change password"/>
	<input type="button" value="Save"/>

## 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

<b>Username</b>	melissa@example.com
<b>Status</b>	Active
<b>Enabled</b>	Yes
<b>License</b>	Normal
<b>Number of computers</b>	<input type="text" value="1"/> <input type="button" value="▲"/> <input type="button" value="▼"/>
<b>Group</b>	melissa@example.com
<b>Quota type</b>	<input type="text" value="Custom"/> ▼
<b>Quota (megabytes)</b>	<input type="text" value="200"/> <input type="button" value="▲"/> <input type="button" value="▼"/>
<b>Near quota percent</b>	<input type="text" value="90"/> <input type="button" value="▲"/> <input type="button" value="▼"/>
<b>Near quota action</b>	<input type="text" value="Report Warning"/> ▼
<b>At quota action</b>	<input type="text" value="Warning Window"/> ▼
<b>Over quota percent</b>	<input type="text" value="110"/> <input type="button" value="▲"/> <input type="button" value="▼"/>
<b>Over quota action</b>	<input type="text" value="Disable Backup"/> ▼
<b>Restore window length</b>	<input type="text" value="1"/> <input type="button" value="▲"/> <input type="button" value="▼"/>
<b>Restore window type</b>	<input type="text" value="Months"/> ▼
<b>Computers</b>	<input type="button" value="🖥️ Manage computers"/>
<b>Password</b>	<input type="button" value="🔒 Change password"/>
	<input type="button" value="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

<b>Username</b>	melissa@example.com
<b>Status</b>	Active ▼
	<input checked="" type="checkbox"/> <b>Enabled</b>
<b>License</b>	Normal ▼
<b>Number of computers</b>	1 ▲▼
<b>Group</b>	melissa@example.... ▼
<b>Quota type</b>	Custom ▼
<b>Quota (megabytes)</b>	200 ▲▼
<b>Near quota percent</b>	90 ▲▼
<b>Near quota action</b>	Report Warning ▼
<b>At quota action</b>	Warning Window ▼
<b>Over quota percent</b>	110 ▲▼
<b>Over quota action</b>	Disable Backup ▼
<b>Restore window length</b>	1 ▲▼
<b>Restore window type</b>	Months ▼
	<input checked="" type="checkbox"/> <b>Allow data access using master key</b>
<b>Primary storage</b>	C:\UserData ▼
	<input checked="" type="checkbox"/> <b>Restrict backups to primary storage</b>
<b>User data directory name</b>	melissa@example.com
<b>Computers</b>	 Manage computers
<b>Password</b>	 Change password
	<input type="button" value="Save"/>

**PERMISSIONS REQUIRED**

Edit Cloud Storage Accounts

# Change the password

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

## Edit cloud storage account

<b>Username</b>	michael@example.com
<b>License Key</b>	license key 
<b>Status</b>	Active
<b>Enabled</b>	Yes
<b>License</b>	Normal
<b>Number of computers</b>	1
<b>Group</b>	michael@example.com
<b>Restore window length</b>	<input type="text" value="1"/>  
<b>Restore window type</b>	<input type="text" value="Months"/> 
<b>Computers</b>	 <input type="button" value="Manage computers"/>
<b>Password</b>	 <input type="button" value="Change password"/>
<input type="button" value="Save"/>	

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.

## Change cloud storage account password

<b>Current Password</b>	<input type="password" value="••••••••"/>
<b>New Password</b>	<input type="password" value="••••••••••"/>
<b>Confirm Password</b>	<input type="password" value="••••••••••"/> 
<input type="button" value="Save"/>	

 **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.

## Edit cloud storage account

<b>Username</b>	michael@example.com
<b>License Key</b>	license key 
<b>Status</b>	Active
<b>Enabled</b>	Yes
<b>License</b>	Normal
<b>Number of computers</b>	1
<b>Group</b>	michael@example.com
<b>Restore window length</b>	<input type="text" value="1"/>  
<b>Restore window type</b>	<input type="text" value="Months"/> 
<b>Computers</b>	 Manage computers
<b>Password</b>	 Change password
	<input type="button" value="Save"/>

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.

# Change license key

**Username**

michael@example.com

**Backup Client License Key**

new license key



Save

## 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?

<b>Username</b>	michael@example.com
<b>Backup Client License Key</b>	license key



### PERMISSIONS REQUIRED

Edit Cloud Storage Accounts

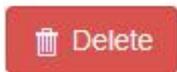
# Delete a computer

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



### **i PERMISSIONS REQUIRED**

[Edit Cloud Storage Accounts](#)

# 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](#).

Name	Description	Number Of Computers	Used Space	
Accounting	Accounting Department	1	829.85 MB	<a href="#">View</a>
Administrators	Administrators	1	0 B	<a href="#">View</a>
Engineering	Engineering Department	0	0 B	<a href="#">View</a>
Everyone	All Users	0	0 B	<a href="#">View</a>
Human Resources	Human Resources Department	1	3.73 GB	<a href="#">View</a>
IT	IT Department	1	8.75 GB	<a href="#">View</a>
Marketing	Marketing Department	1	6.91 GB	<a href="#">View</a>
Sales	Sales Department	2	9.17 GB	<a href="#">View</a>

User Name	Number Of Computers	Used Space
David	1	6.9 GB
Jeff	1	2.27 GB

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

# Settings

[Security](#)

[Agent](#)

[Notification](#)

[Users](#)

[User Registration Settings](#)

[Roles](#)

[Storage Servers](#)

[Web Hook](#)

[Update](#)

[Application](#)

# 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.

## Agent Settings

### Agent Connections

Agent connection timeout (minutes)

30

Agent connection ping interval (minutes)

15

### Agent Logs

Delete logs that exceed the maximum number per agent

100

Delete logs that exceed the maximum number of days

60

### Agent Logs Read Buffer

The size of the buffer to use when reading job log data streams (bytes)

4096

Save Changes

#### **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.

## Security Settings

**Ignore SSL Certificate Errors**

Save

### **i** 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.

## Notification Settings

### Email Server

Type	NovaBACKUP Alerts ▾
Server Address	<input type="text"/>
Server Port	587 ▲▼
Enable SSL	<input type="checkbox"/>
Enable Authentication	<input type="checkbox"/>
User Name	<input type="text"/>
Password	<input type="password"/>
Retry Count	5 ▲▼
Timeout (Seconds)	30 ▲▼
Sender Name	NovaBACKUP Alerts
Sender Email Address	noreply@novabackup.com
	<input type="button" value="Save Changes"/>

### Test Email Address Recipients

To	<input type="text"/>
	<i>Separate multiple email addresses with a semicolon (;).</i>
	<input type="button" value="Send Test Email"/>

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.

## Email Server

Type	<input type="text" value="Custom SMTP"/>
Server Address	<input type="text" value="smtp.example.com"/>
Server Port	<input type="text" value="587"/>
Enable SSL	<input checked="" type="checkbox"/>
Enable Authentication	<input checked="" type="checkbox"/>
User Name	<input type="text" value="backup@example.com"/>
Password	<input type="password" value="••••••••"/>
Retry Count	<input type="text" value="5"/>
Timeout (Seconds)	<input type="text" value="30"/>
Sender Name	<input type="text" value="NovaBACKUP Alerts"/>
Sender Email Address	<input type="text" value="backup@example.com"/>

## Test Email Address Recipients

To

*Separate multiple email addresses with a semicolon (;).*

### PERMISSIONS REQUIRED

[View Settings](#)

[Edit Settings](#)

# Users

The "**Users**" page is where you can set up CMon to work with more than just the single built-in "admin" account. Once on the "**Users**" page you have the ability to add users by clicking on the "**Add new user**" button. Custom Roles can be created for users via the "**Roles**" page.

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

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

## Users

+ Add new user						
User Name ↑	Email Address	Description	Role	Enabled		
admin		Built-in Administrator	Administrator	true		<a href="#">View</a>

◀ ◁ 1 Page 1 of 1 ▷ ▶ 10 items per page 1 - 1 of 1 items ↻

### **i** PERMISSIONS REQUIRED

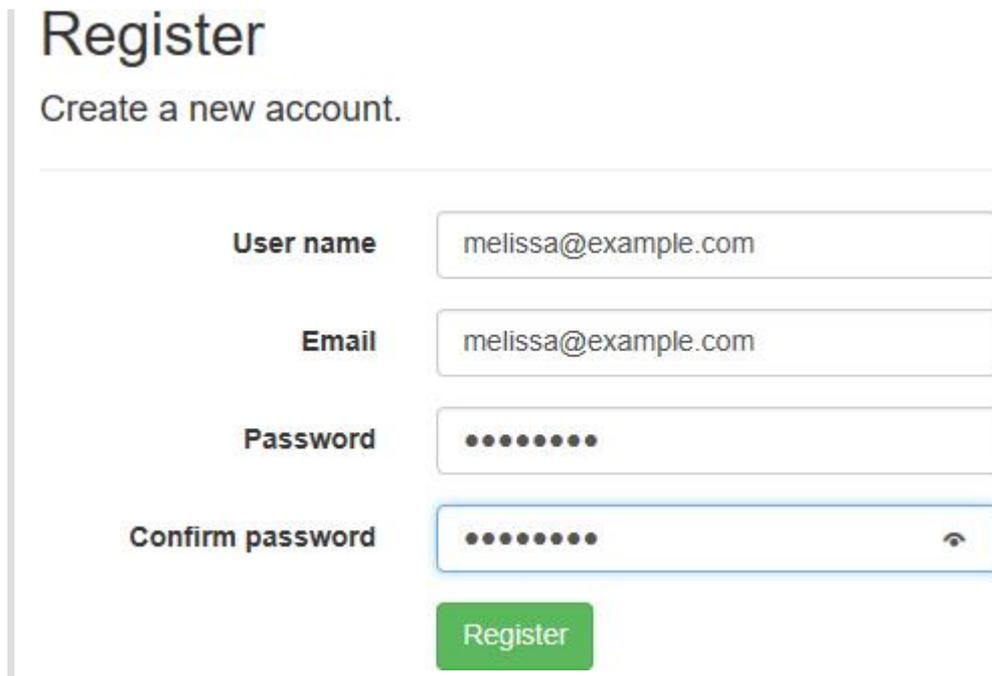
View Users

Edit Users

# 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.



**Register**  
Create a new account.

---

**User name**

**Email**

**Password**

**Confirm password**  

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 using the embedded web browser dialog 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.

## Register

Create a new account.

---

<b>User name</b>	<input type="text" value="melissa@example.com"/>
<b>Email</b>	<input type="text" value="melissa@example.com"/>
<b>Password</b>	<input type="password" value="••••••••"/>
<b>Confirm Password</b>	<input type="password" value="••••••••"/>
<b>Backup Client License Key</b>	<input style="border: 1px solid #0070C0;" type="text" value="license key"/>
	<input checked="" type="checkbox"/> <b>I accept the <a href="#">Terms and Conditions</a></b>
	<input type="button" value="Register"/>

## Related topics:

[User registration settings](#)

[User registration](#)

[Add a storage server](#)

[Create a cloud storage account](#)

# Create a user

From the "Users" view, click on the "Add new user" button to create a new user.

Enter a username, password, email address, select the user's role, and click the "Next" button to continue.

The username must be unique.

If a password is not specified, then the "User must set or change password at first login" and "Send registration email" check boxes must be checked.

If a password is not specified, the user registration email will contain a link to the [Set Password](#) page, by default, to allow them to set their password.

The set password link contains a randomly generated token that expires after 30 days.

If a [Storage Server](#) was added by the administrator, the option to create a storage server group when creating a user will be displayed.

If the "Create Storage Server Group for this user" check box is checked in the storage server settings, a storage server group is created when this user is created.

The storage server group name, derived from the username, must be unique.

## Create new user

User Name

**User must set or change password at first login**  
*A password is optional if it must be set at first login.*

Password

Confirm Password

Email Address

**Send registration email now** 

Role

**Create storage server group for this user**

Storage Server Group

Select the groups the user is authorized to manage.

## Create new user

Select the groups the user is authorized to manage

<input type="checkbox"/>	Name ↑	▼
<input type="checkbox"/>	Accounting	
<input type="checkbox"/>	Customer Support	
<input type="checkbox"/>	Engineering	
<input type="checkbox"/>	Example	
<input type="checkbox"/>	Human Resources	
<input type="checkbox"/>	IT	
<input type="checkbox"/>	Marketing	
<input type="checkbox"/>	Pending	
<input type="checkbox"/>	Sales	

◀ ◁ 1 Page 1 of 1 ▷ ▶ 10 items per page ↻

[Back](#) [Next](#) [Save](#)

If a storage server is configured, you can select the storage server groups the user is authorized to manage.

## Create new user

Select the storage server groups the user is authorized to manage

<input type="checkbox"/>	Name ↑	▼
<input type="checkbox"/>	Administrators	
<input type="checkbox"/>	Everyone	

◀ ◁ 1 Page 1 of 1 ▷ ▶ 10 items per page ↻

[Back](#) [Save](#)

Click the "Save" button to create the user.

 **PERMISSIONS REQUIRED**

Edit Users

# View a user

From the "Users" view, click on the "View" button to view the details of a user.

## michael@example.com

User	Groups	Storage Server Groups
<b>User Name</b> michael@example.com		
<b>Email Address</b> michael@example.com		
<b>Role</b> User		
<input checked="" type="checkbox"/> Enabled		
<input type="checkbox"/> Locked Out		
<b>Storage Server Group</b> michael@example.com		



### PERMISSIONS REQUIRED

View Users

# Edit a user

From the "User Details" view, click on the "Edit" button to edit the user.

## Edit User

User Groups Storage Server Groups

**User Name**

**Password**

**Email Address**

**Role**

**Description**

**Enabled**

**Locked Out**

**Storage Server Group**

Save

Click on the Groups tab to modify the groups the user is authorized to manage.

# Edit User

User Groups Storage Server Groups

Select the groups the user is authorized to manage.

<input type="checkbox"/>	Name ↑	
<input type="checkbox"/>	Accounting	
<input type="checkbox"/>	Customer Support	
<input type="checkbox"/>	Engineering	
<input type="checkbox"/>	Example	
<input type="checkbox"/>	Human Resources	
<input type="checkbox"/>	IT	
<input type="checkbox"/>	Marketing	
<input type="checkbox"/>	Pending	
<input type="checkbox"/>	Sales	

Page 1 of 1 10 items per page

Save

Click on the "Storage Server Groups" tab to modify the storage server groups the user is authorized to manage.

# Edit User

User Groups Storage Server Groups

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

<input type="checkbox"/>	Name ↑	
<input type="checkbox"/>	Administrators	
<input type="checkbox"/>	Everyone	
<input type="checkbox"/>	michael@example.com	

Page 1 of 1 10 items per page

Save

Click on the "Save" button to save the changes made to the user.

 **PERMISSIONS REQUIRED**

Edit Users

# Delete a user

From the "User Details" view, click on the "Delete" button to delete the user.

## Are you sure you want to delete this user?

<b>User Name</b>	michael@example.com
<b>Email Address</b>	michael@example.com
<b>Role</b>	User
<b>Storage Server Group</b>	michael@example.com
	<input type="checkbox"/> <b>Delete Storage Server Group</b>

 Delete

Check mark the "Delete Storage Server Group" check box to delete the storage server group associated with the user when deleting the user.

Click on the "Delete" button again to confirm deleting the user.

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.

### PERMISSIONS REQUIRED

[Edit 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.

## User Registration Settings

Allow User Registration

Notification Sender Name

NovaStor NovaBACKUP CMon

Notification Sender Email Address

noreply@novabackup.com

Notification Subject

{% if (user.Password != "") %}Get started with NovaBACKUP CMon.{% else %}Cc



Notification Body

Rich text editor toolbar with buttons for Bold (B), Italic (I), Underline (U), text color (abc), bulleted list, numbered list, indent, outdent, link, unlink, image, and table. Below the toolbar are buttons for subscript (x<sub>2</sub>), superscript (x<sup>2</sup>), table, code (</>), a Format dropdown menu, and a font color (A) dropdown menu. Font and size are currently set to "(inherited font)" and "(inherited size)".

{% if (user.Password != "") %}[Click here to login.](#){% else %}[Click here to complete your registration.](#){% endif %}



Save

## Test User Properties

Name

UserName

Password

P@ssw0rd

Email

noreply@novabackup.com

Send Test Email

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.
elseif / 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.

## Roles

<a href="#">+ Add new role</a>			
Name  	Default 	Description 	
Administrator	false	Administrator	<a href="#">View</a>
Backup Auditor	false	Monitors backup and restore operation status	<a href="#">View</a>
Backup Operator	false	Creates/Schedules/Performs backup and restore operations	<a href="#">View</a>
Backup Support	false	Assists with backup and restore operations	<a href="#">View</a>
User	true	The default user role	<a href="#">View</a>

  **1** Page  of 1    items per page 1 - 5 of 5 items 

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

## Administrator

 [View users in this role](#)

- Description** Administrator
- Default**  
*The default role for new user registrations.*
  - View Dashboard**  
*View the dashboard for authorized agents and groups.*
  - View Agents and Groups**  
*View authorized agents and groups, and associated devices and notes.*
  - View Notifications**  
*View triggers, notification history, and notification settings.*
  - View Jobs and Job History**  
*View jobs and job histories for agents in authorized groups.*
  - View Jobs Logs**  
*View jobs, job history, and logs for agents in authorized groups.*
  - View Settings**  
*View global application settings.*
  - View Cloud Storage Accounts**  
*View cloud storage accounts.*

**View Storage Servers**

*View storage servers.*

**View Storage Server Groups**

*View storage server groups.*

**View Users**

*View all users.*

**View Roles**

*View all roles.*

**Edit All Agents and Groups**

*Authorization to view, create, edit, and delete all agents and groups.*

**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 Notifications**

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

**Edit Jobs**

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

**Edit Settings**

*View, edit, and delete global application settings.*

**Edit Cloud Storage Accounts**

*View, edit, and delete cloud storage accounts.*

**Edit Storage Servers**

*View, edit, and delete storage servers.*

**Edit Storage Server Groups**

*View and edit storage server groups.*

**Edit Users**

*View, create, edit, and delete all users.*

**Edit Roles**

*View, create, edit, and delete all roles.*

**Edit All Storage Server Groups**

*Authorization to view, create, edit, and delete all storage server groups.*



**ⓘ PERMISSIONS REQUIRED**

View Roles

Edit Roles

# Storage Servers

The "Storage Servers" view allows an administrator to manage NovaBACKUP Storage Servers.

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

## PERMISSIONS REQUIRED

[View Storage Servers](#)

# Add a storage server

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

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.

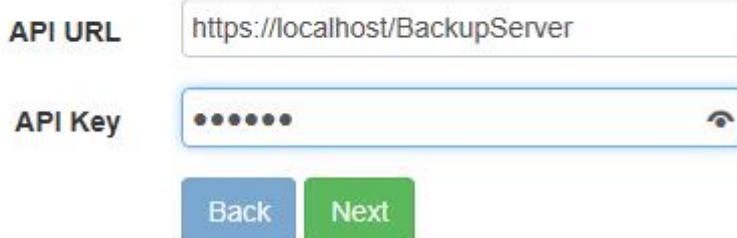
If a secure connection could not be established because of SSL certificate errors, the errors can be ignored in [Security Settings](#), but this is not recommended.

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.

## Create new storage server

Enter the storage server API connection settings.



The screenshot shows a form with two input fields. The first field is labeled "API URL" and contains the text "https://localhost/BackupServer". The second field is labeled "API Key" and contains a series of dots, with a small eye icon to its right. Below the fields are two buttons: "Back" (blue) and "Next" (green).

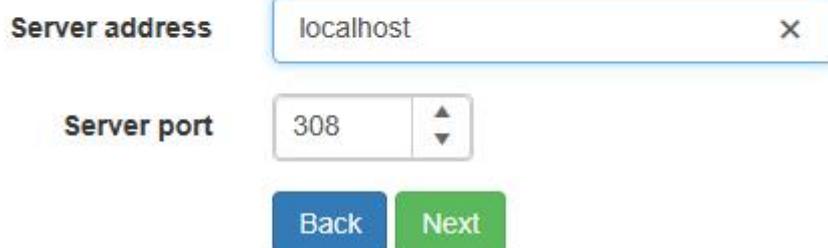
Enter the storage server address and port and click the "Next" button to continue.

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.

## Create new storage server

Enter the storage server address and port.



The screenshot shows a form with two input fields. The first field is labeled "Server address" and contains the text "localhost". The second field is labeled "Server port" and contains the number "308". Below the fields are two buttons: "Back" (blue) and "Next" (green).

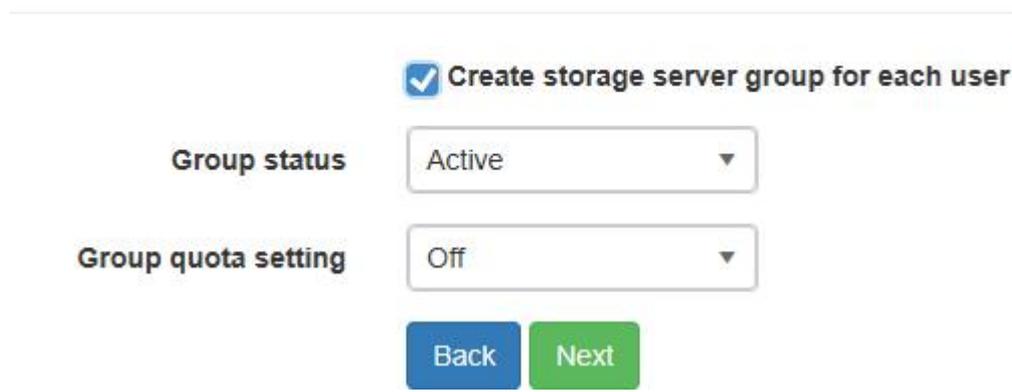
Enter the storage server group settings and click the "Next" button to continue.

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.

## Create new storage server

Enter the storage server group settings.



The screenshot shows a form titled "Create new storage server" with the instruction "Enter the storage server group settings." Below this, there is a checked checkbox labeled "Create storage server group for each user". Underneath, there are two dropdown menus: "Group status" is set to "Active" and "Group quota setting" is set to "Off". At the bottom of the form are two buttons: a blue "Back" button and a green "Next" button.

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.

# Create new storage server

Enter the storage server account settings.

---

	<input checked="" type="checkbox"/> Enabled
	<input checked="" type="checkbox"/> User is required to enter a backup client license key
Account status	Active ▼
Account license	Normal ▼
Account quota setting	Custom ▼
Account near quota percent	90 ▲▼
Account near quota action	Report Warning ▼
Account at quota action	Warning Window ▼
Account over quota percent	110 ▲▼
Account over quota action	Disable Backup ▼
	<input type="button" value="Back"/> <input type="button" value="Next"/>

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.

# Create new storage server

Enter the storage server account data storage and retention policy settings.

---

**Allow data access using master key**

**Primary storage**

**Restrict backups to primary storage**

**Restore window length**

**Restore window type**

**Delete account after a grace period since the account was disabled**

**Grace period (in days) before account is deleted**

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](#).

# Create new storage server

Enter the storage server account data storage and retention policy settings.

Display terms and conditions

Terms and conditions

Rich text editor toolbar with options: Bold (B), Italic (I), Underline (U), abc, bulleted list, numbered list, indent, outdent, link, unlink, image, table, code, Format dropdown, and a text color icon.

Font settings: (inherited font) dropdown, (inherited size) dropdown, and A dropdown.

**Sample Terms and Conditions ("Terms")**

Last updated: October 25, 2019

Please read these Terms and Conditions ("Terms", "Terms and Conditions") carefully before using the "Service" operated by your Service Provider ("us",

[Back](#) [Save](#)

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

## Storage Servers

[+ Add new storage server](#)

Address ↑	Port	API URL	
localhost	308	https://localhost/BackupServer	<a href="#">View</a>

Page 1 of 1 | 10 items per page | 1 - 1 of 1 items

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](#)

# 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.

## Web Hook Settings

*Changing these settings will not take affect until the web application is restarted.  
You can restart the web application [on this page](#).*

**Enable Web Hook Receiver**

**Web Hook Receiver Secret Key**

**Web Hook URL** <https://localhost/ManagementServer.Web/api/webhooks/incoming/webhook>

[Save](#)

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.

## Update Settings

---

**Automatically Check For Updates**

[Save](#)

### **i** PERMISSIONS REQUIRED

[View Settings](#)

[Edit Settings](#)

# Application Settings

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

## Application Settings

---

**i** *Restarting the web application will expire all user sessions, and connected users may be logged off.*

Restart web application now

### **i** PERMISSIONS REQUIRED

[Edit Settings](#)

# 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\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\appsettings.json.
```

64-bit Operating System

```
C:\Program Files (x86)\NovaStor\NovaBACKUP Central Management Console\WebRoot\Web\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 entity 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

[Documentation](#)

[About](#)

[Known Issues](#)

[Troubleshooting Tips](#)

[Windows Service Logging](#)

[Standalone Web Server Logging](#)

[Web Site Logging](#)

[Scheduled Task Logging](#)

# 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



NovaStor NovaBACKUP CMon

Product Version: 19.99.0.0

Last Modified Date: 4/13/2020 10:51:43 AM

Database Schema Version: 19.5.1414.0

Client Browser: Mozilla/5.0 (Windows NT 10.0; WOW64; Trident/7.0; Touch; .NET4.0C; .NET4.0E; .NET CLR 2.0.50727; .NET CLR 3.0.30729; .NET CLR 3.5.30729; Tablet PC 2.0; rv:11.0) like Gecko

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

A green rectangular button with a white magnifying glass icon and the text "Check For Updates".

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.

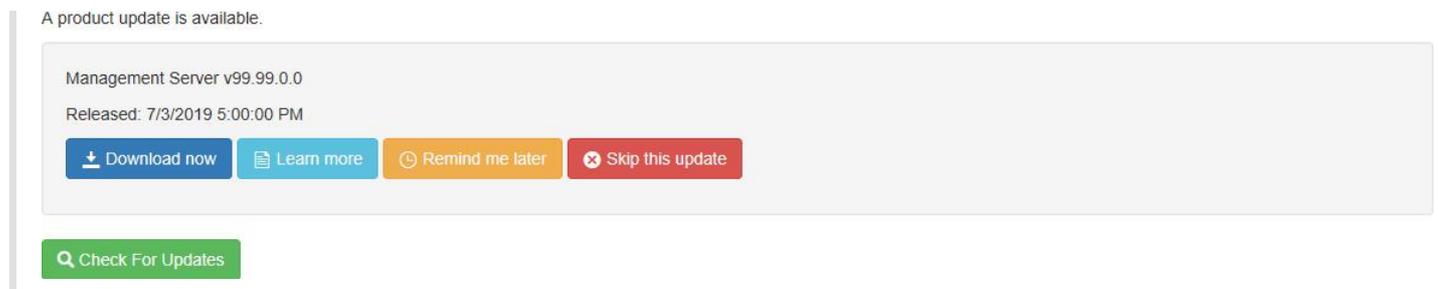
A light blue notification bar with a white information icon, the text "An update is available.", a blue button with a white document icon and the text "More information", and a white close icon (X) on the right.

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 previously 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**

```
<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" logKnownPii="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"

## 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" for example.

### Enable Log Listeners

---

Enable logging to a Flat File.

Change this: **XML**

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

to: **XML**

```
<configuration>
...
<loggingConfiguration ...>
...
<categorySources>
...
  <add name="Info" switchValue="All" >
    <listeners>
```

```
<add name="Flat File Destination" />
```

```
</listeners>
```

```
</add>
```

```
</categorySources>
```

```
...
```

# Web Site Logging

## Web Site Configuration File

The "Management Server" Web Site configuration file with a default installation is located here:  
"C:\Program Files\NovaStor\NovaBACKUP Central Management Console\WebRoot\Web\web.config"

## Log File Location

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

## 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 web.log file in "C:\Program Files\NovaStor\NovaBACKUP Central Management Console\WebRoot" for example.

# 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.