



# NovaStor® DataCenter 6



Quickstart

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# 1 Introduction

**What is in this chapter?** This chapter explains the initial steps you will need to take and recommendations for the best way of working with the program. The step-by-step instructions for your first backup will show you how to define and create your first backup immediately.

Overview of DataCenter 6 [→ 6]

Steps for initial backup [→ 16]

Best Practices [→ 62]

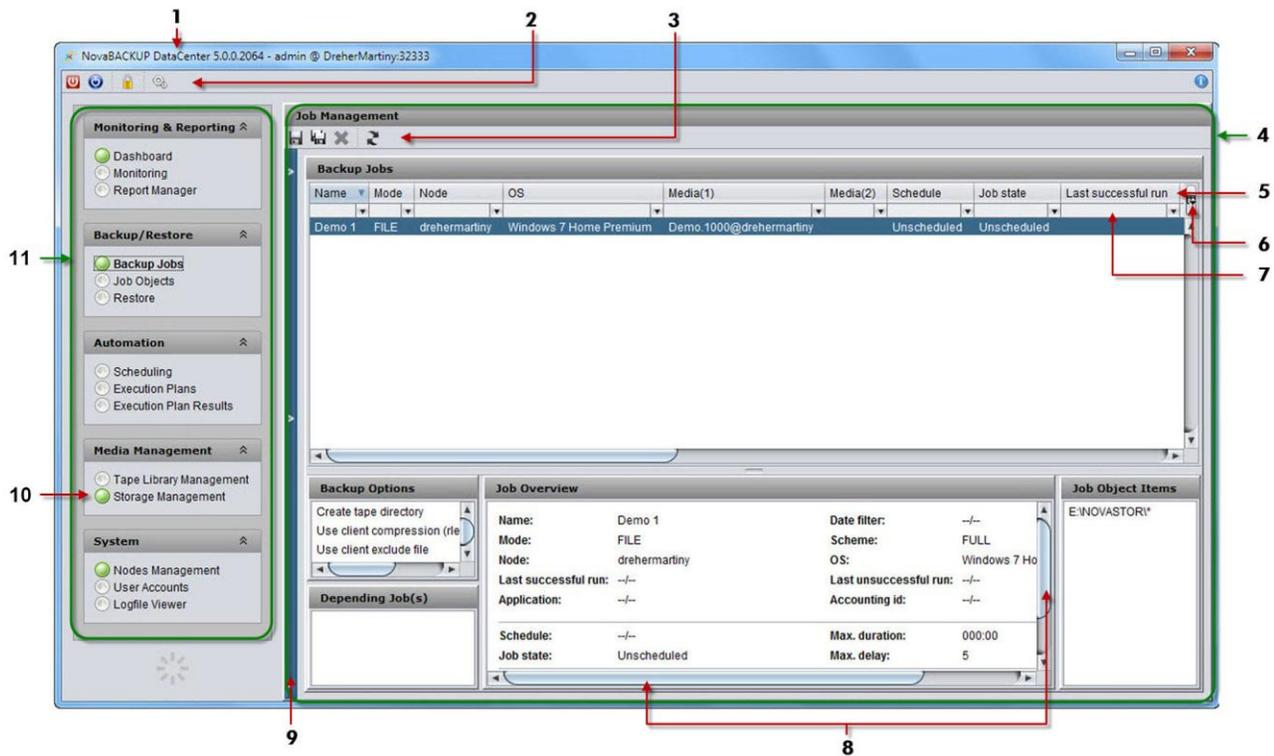
## 2 Overview of DataCenter 6

### 2.1 Display structure

Essentially, the screen is divided into two major panes (outlined in green in the illustration):

- Navigation pane (11)
- Work pane (4)

Depending on the function selected in the navigation pane, the related data are made available in the work pane.



No.	Designation & Explanations	
1	Title Bar	
	Shows the installed software release and the user currently logged on.	
2	Menu Bar	
		Close active panel, stops the enabled function.

No.	Designation & Explanations	
		<i>Restart active panel</i> , restarts the enabled function.
		<i>Lock application</i> , the display is blocked.
		<i>Configuration</i> , settings for dashboard, e-mail, licenses, and messages as defined by the user.
<b>3</b>	<b>Tool Bar</b>	
	<p>Various icons are available, depending on the function enabled in the navigation pane.</p> <p>Example <i>Backup Jobs</i></p>	
		<i>Save view</i> , saves the defined view.
		<i>Save view as</i> , saves the defined view under a name specified by the user.
		<i>Delete view</i> , deletes the user-specific view which has been saved.
		<i>Refresh</i> , refreshes the view.
<b>4</b>	<b>Work Pane</b>	
	<p>The layout of the work pane is dependent on the functions selected in the navigation pane.</p>	
<b>5</b>	<b>Attribute Columns</b>	
	<p>The enabled attributes are displayed in the attribute column. The text fields under the columns are used to create filters.</p>	
<b>6</b>	<b>Filter Bar</b>	
	<p>Entry of filter definitions for the lower-level records (e.g., backup jobs). The backup jobs corresponding to the filter conditions are displayed.</p> <p>Once a filter has been defined, it is displayed for selection in the selection menu (▼).</p>	

No.	Designation & Explanations
7	<b>Column Selection</b>
	Opens the list containing all of the available attributes. Attributes for the view are enabled or disabled in this list.
8	<b>Scroll Bars</b>
	Horizontal and vertical
9	<b>User-specific Views</b>
	User-specific views can be defined, saved, and selected in the drop-down window.
10	<b>Functions</b>
	<p>The functions are distributed among 5 navigation sections:</p> <ul style="list-style-type: none"> <li>▪ Monitoring &amp; Reporting</li> <li>▪ Backup/Restore</li> <li>▪ Automation</li> <li>▪ Media Management</li> <li>▪ System</li> </ul> <p>Each of the navigation sections contains the functions pertinent to the section.</p>
11	<b>Navigation Pane</b>
	 Function is disabled.
	 Function is enabled.

## 2.1.1 Definition of Conventions

### Symbols in text

- Lists are identified by a bullet point (●).
- Text marked with an arrow [→ 5] indicates references and hyperlinks leading to related subjects, Internet addresses, and additional information.
- The names of menus in the software are italicized.
- Text in [brackets] designates buttons.

### Instructions

Instructions are structured as described below:

#### Instruction header

1. First step
2. Next step
  - ⇒ Partial result after a step
3. Next step

**Result** Final result of an instruction

### Alerts/Instructions

Important or helpful alerts, information, and tips are structured as shown below:



#### Caution

This is a warning of possible loss of data.

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#### Alert, information

This alert provides information about possible problems.

---

**TIP**

#### Tip

Designates brief, helpful information.

---

## 2.2 Enable and stop functions

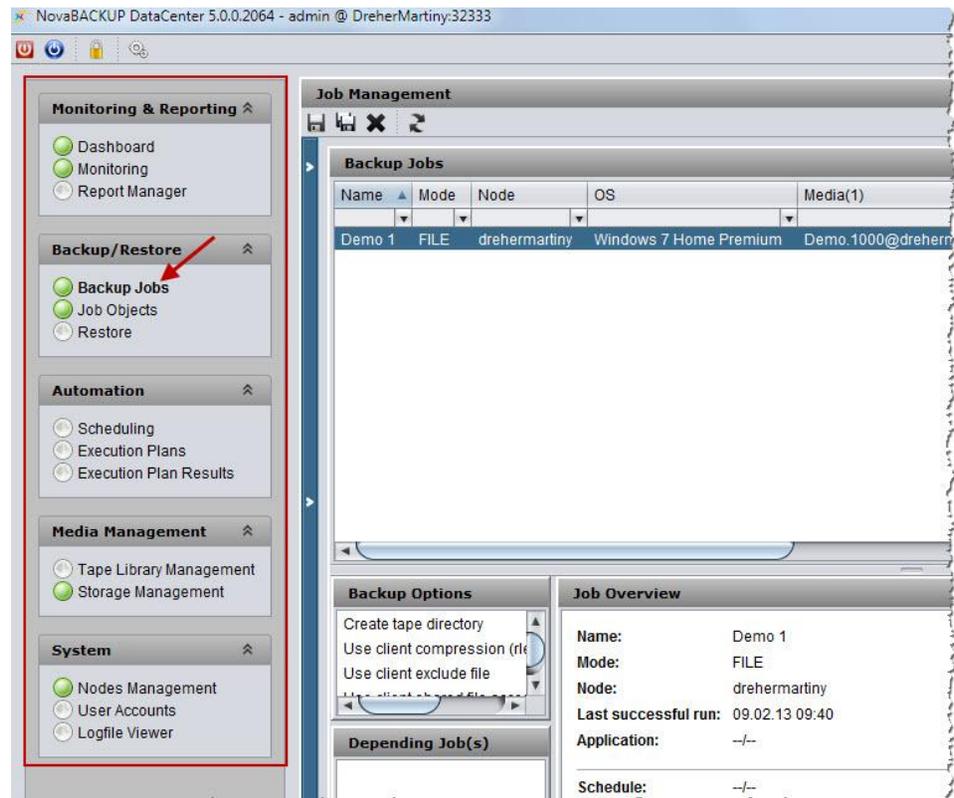
**General work procedures** Enabled and disabled functions in the navigation pane are indicated by the green or white point.



Function is disabled.



Function is enabled.



### How to proceed **Enable functions**

1. Click on the required function in the navigation bar.
  - ⇒ The function is enabled, and the corresponding panel is opened.
  - ⇒ The point turns green.

### **Stop functions**

1. Go to the menu bar and click on  (*Close active panel*)

or

1. Right-click on the enabled function in the navigation bar to open the context menu.

2. Left-click on *Close*.

⇒ The function is stopped, and the point turns white.

---



Once a backup job has been started, it cannot be stopped with the procedure described above!

---

**See also**  [Launch backup job \[→ 34\]](#)

 [Stop backup job \[→ 37\]](#)

## 2.3 Duplicate and remove functions

**General** All of the functions in the navigation bar can be duplicated and removed. Duplicating functions allows you to execute a number of restore operations simultaneously or view several reports which have been filtered in different ways, for example.

**How to proceed** **Duplicate function**

1. Right-click on the function you want to copy in the navigation bar.
2. Left-click on *Duplicate* in the context menu which is displayed.

The duplicated function is given the same name as the original function.

**Delete duplicate functions from the navigation bar**

1. Right-click on the function you want to duplicate.
2. Left-click on *Remove* in the context menu which is displayed.

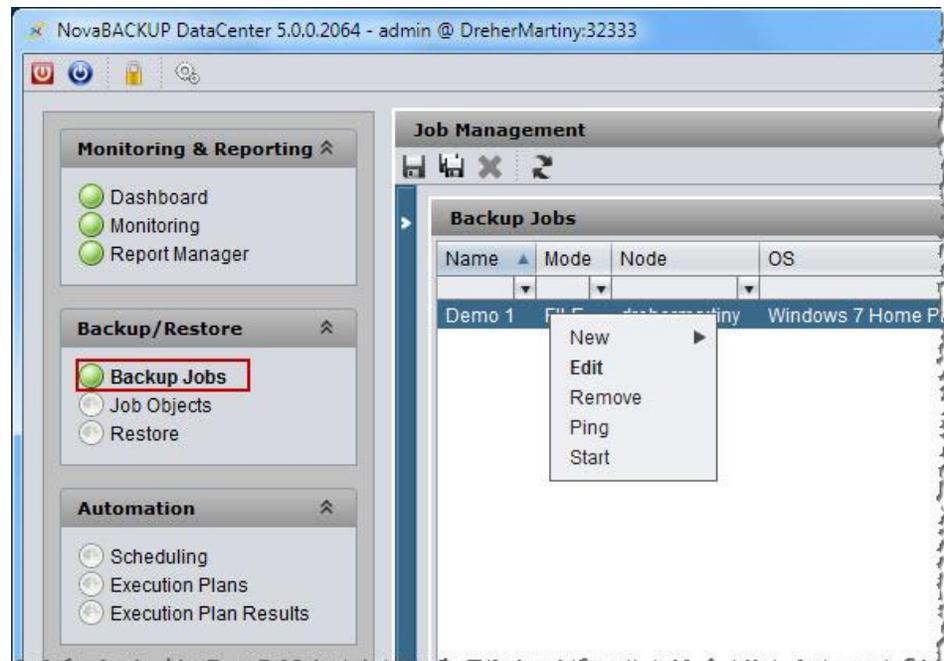
**Result** The function is stopped, and the point turns white.

## 2.4 Using context menus

**General** Context-related functions are provided in the navigation bar and the work pane. Context menus are opened using the right mouse button.

**How to proceed**

1. Go to *Backup/Restore > Backup Jobs*, for instance.
2. Right-click on the pertinent backup job.  
⇒ The relevant context menu is opened.



3. Left-click on the function you want to use (*Start*, for example).

**Result** The selected function is executed, i.e., the backup job is launched.

## 2.5 Define attribute bar

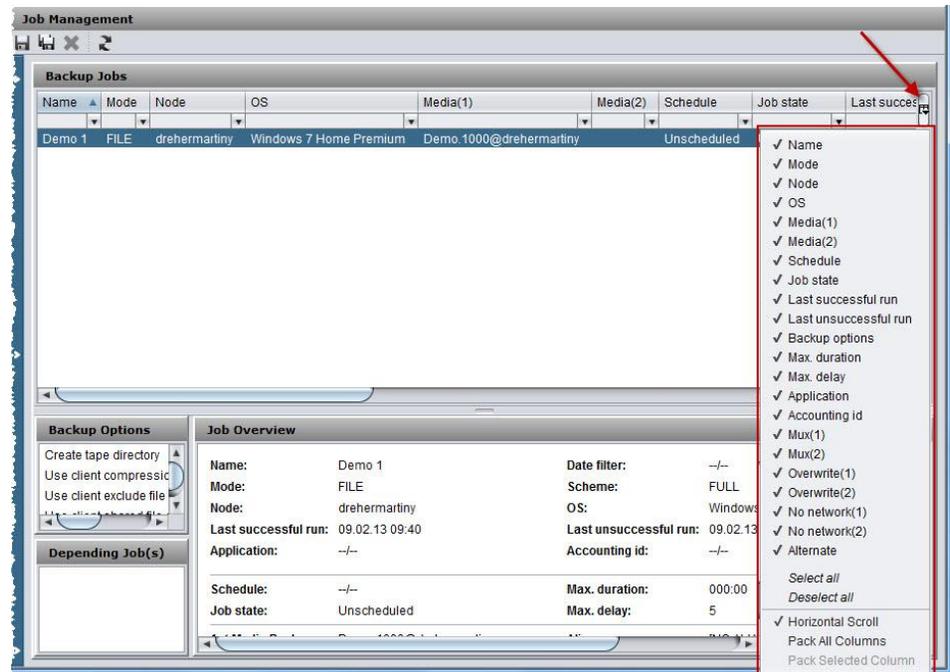
**General** All of the data records displayed in the work pane have an attribute bar.

All of the available attributes can be displayed or hidden for specific users. The order of the attributes in the bar can be freely changed using drag & drop.

**How to proceed** 1. Go to *Backup/Restore > Backup Jobs*, for instance.

2. Click on the icon on the far right of the attribute bar .

⇒ The selection box with all of the available attributes and display options opens.



3. Click on a particular attribute to display or hide the attributes.

✓ Attribute will be displayed.

- Attribute will be hidden.

4. Select the required attribute to set up the bar.

Horizontal Scroll ✓ All of the enabled attributes continue beyond the edge of the window, and a horizontal scroll bar is displayed.

- All of the enabled attributes are wrapped so that they are displayed in the window. No horizontal scroll bar is displayed.

Pack All Columns ✓ Column width adapts to the content.

- Column width can be varied as desired.

## 2.6 Filter functions

**General** All of the data records displayed in the work pane can be filtered.

If you have defined a filter, only the data records which meet the conditions of the filter will be displayed.

The filter is defined in the text fields below the attribute bar.

- How to proceed**
1. Go to *Backup/Restore > Backup Jobs*, for instance.
    - ⇒ The text fields for the filter definition are located in the work pane Backup Jobs below the attribute bar.

Backup Jobs								
Name ▲	Mode	Node	OS	Media(1)	Media(2)	Schedule	Job state	Last success
Demo 1	FILE	drehermartiny	Windows 7 Home Premium	Demo.1000@drehermartiny		Unscheduled	Unscheduled	2013-02-09

2. Enter the desired filter definition.

The following special characters can be used:

- \* Asterisk is a wild card for a succession of characters.
- <, >, = Can be used with numbers.

**Result** The data records corresponding to the entered filter conditions are displayed.

Once a filter has been defined, it is displayed for selection in the selection menu.

**See also**  [Filtering backup jobs using the filter bar \[→ 42\]](#)



## 3 Steps for initial backup

**What is in this chapter?** All of the steps you must execute for the initial backup are described in this section.

Start program and log in [→ 16]

Setting up backup server [→ 18]

Test network address [→ 21]

Set up disk pool for data storage [→ 23]

Create backup job [→ 26]

Define schedule for a backup job [→ 31]

Launch backup job [→ 34]

Monitor backup execution [→ 36]

Stop backup job [→ 37]

Define report from backup jobs [→ 38]

Messages und reports per e-mail [→ 50]

Retrieve details of a backup job [→ 56]

Run Restore [→ 57]

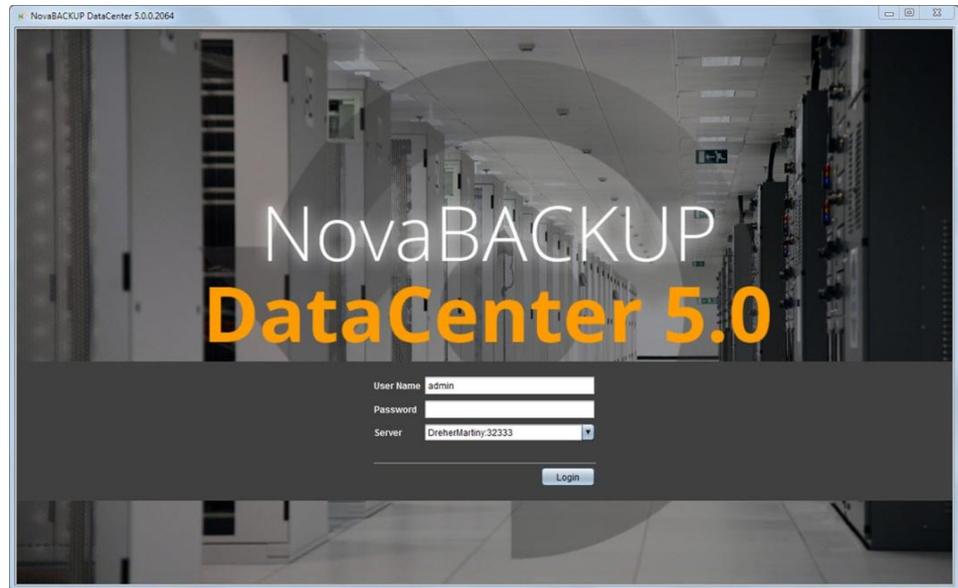
### 3.1 Start program and log in

**Objective** Once the program has been installed, it can be started immediately.

**How to proceed** 1. Click on [Start] > *All programs* > *NovaStor DataCenter* > *Launch NovaStor DataCenter* or on the desktop shortcut.



⇒ The DataCenter GUI is launched.



The default setting for the initial login is *User Name admin* and the field for the password is left blank. After you have logged in, you can define the password in User management.

The name of the server defined during the program installation is displayed in the field *Server*.

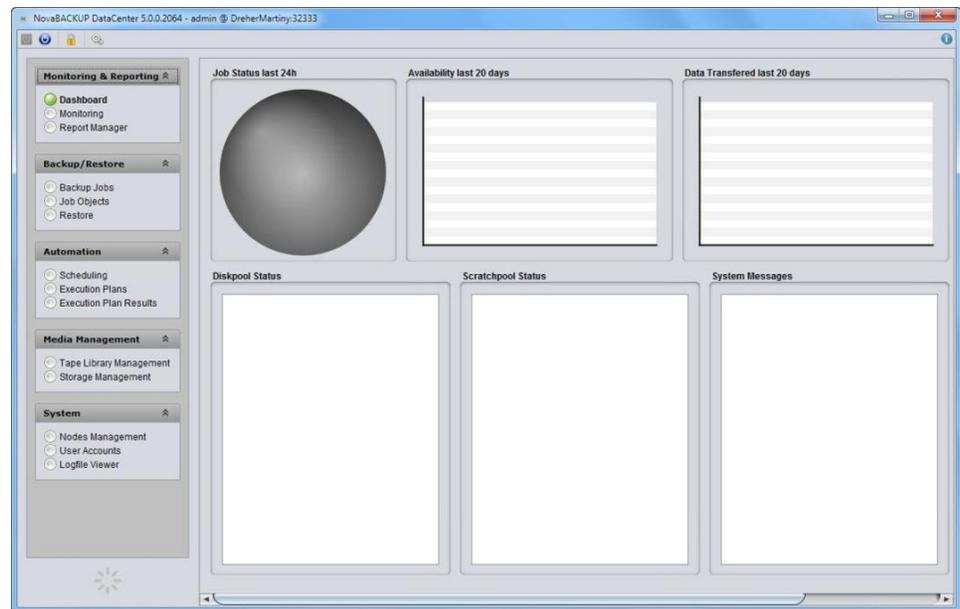
1. Click on [Login].



We recommend setting up a password as soon as possible after the initial login. Passwords and additional users are defined in *System > User account*.

**Result** The program checks the entered information. If it is correct, the client is launched.

The *Dashboard* window opens.



The dashboard shows an overview of the backup actions, displays messages such as error messages and warnings, and indicates the capacity of the storage medium being used.

The information pane remains empty until a backup job has been run.

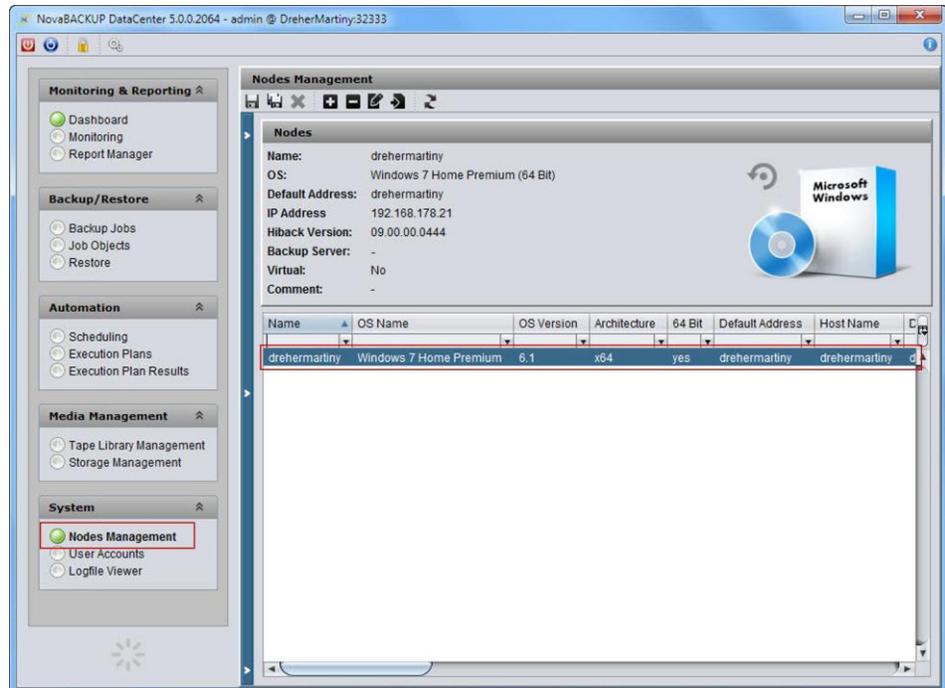
## 3.2 Setting up backup server

**Objective** The first step is to set up the backup server. A backup server accepts data from backup clients and writes the data in disk or tape media pools.

**Prerequisites** The system you want to use for the backup server must be listed as a node. Systems cannot be listed unless they have a NovaStor DataCenter client installation.

**How to proceed**

1. Go to *System > Nodes Management*.
  - ⇒ The *Nodes Management* window opens.

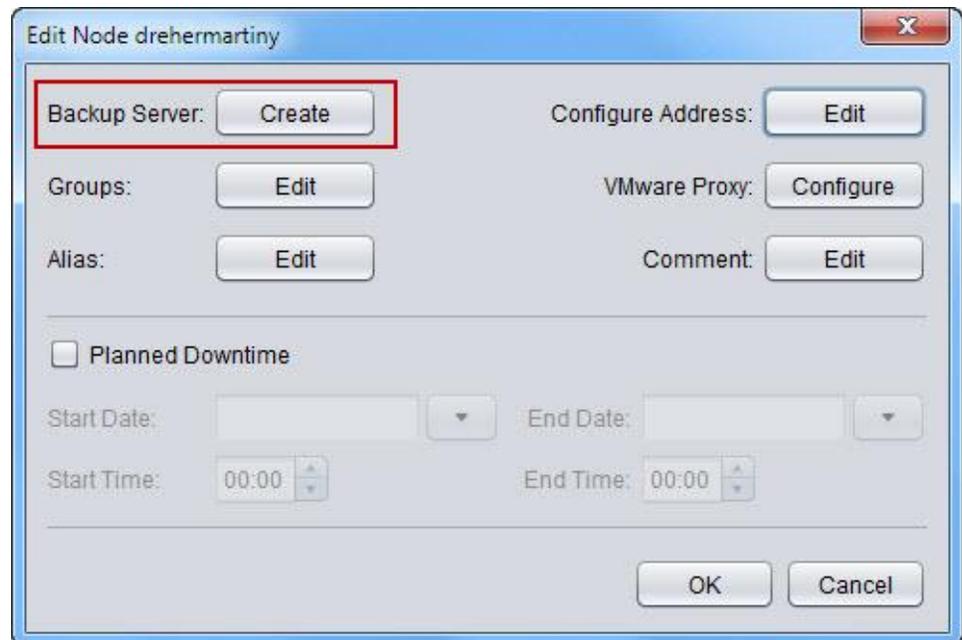


After the first initialization of the program, only the command server itself is displayed in the work pane. The relevant data from the selected system are displayed in the upper window. If multiple clients have been installed, they will automatically be listed here.

1. Double-click on the node you want to use as backup server.

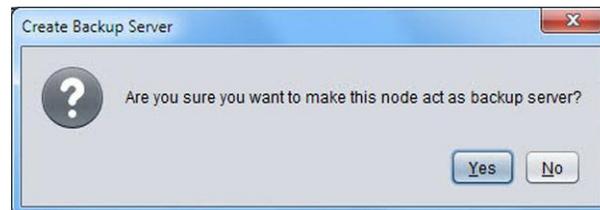
or

1. Right-click on the node and left-click on *> Edit Node* in the context menu.
  - ⇒ The dialog box *Edit Node xxxx* for setting up the server opens.



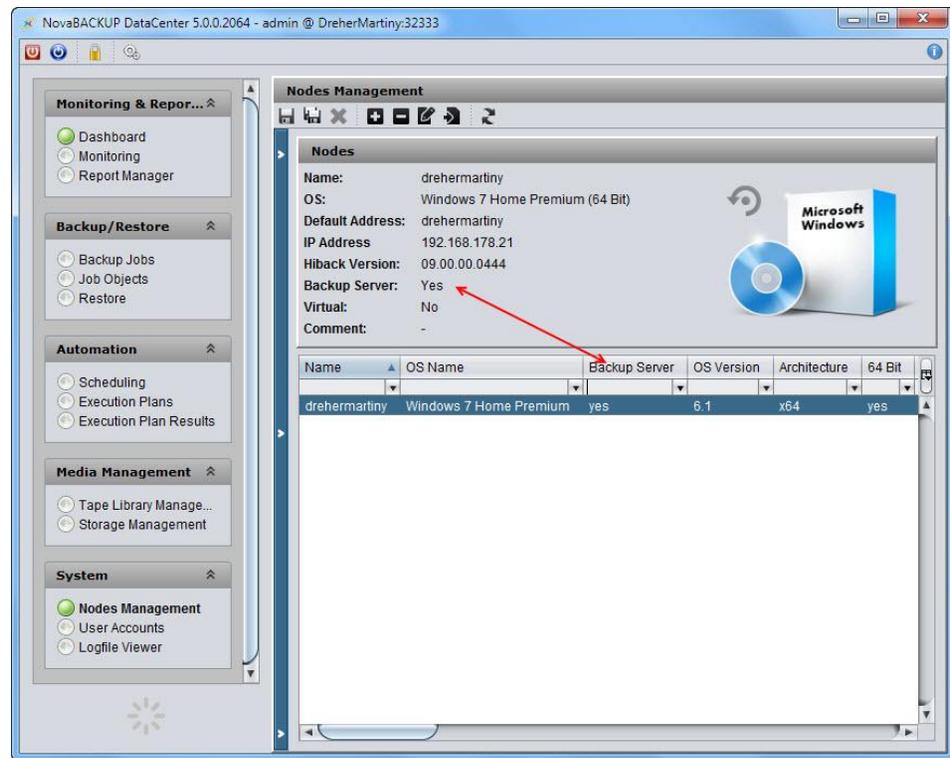
2. To set up a backup server, click on *Backup Server* > [Create].

⇒ The confirmation prompt appears:



3. Do you want to use the selected node as backup server? Click on [Yes] and then on [OK] to close the window.

**Result** The backup server has been created. The node attribute *Backup Server* is set on *Yes*.



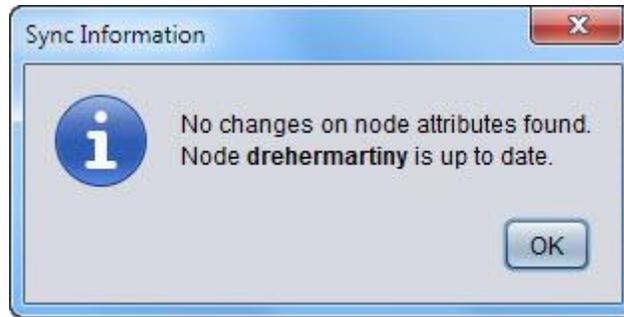
### 3.3 Test network address

**Objective** When the backup server has been created, the network address (IP address) must be tested to ensure that it is correct. The network address is determined from the node itself and can be the IP of an iSCSI connection, for example. The IP address must be the network address of the node so that other systems can access this system.

**How to proceed** **Test IP address**

Test the IP address as described below to make sure it is correct.

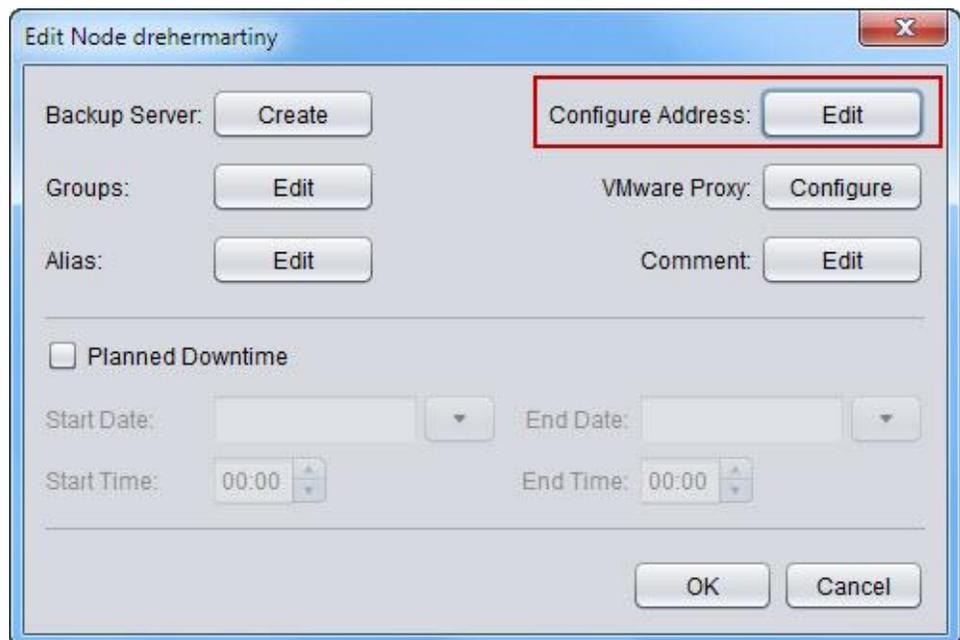
1. Go to *System > Nodes Management*.
2. Right-click on the node line and left-click on *Update > SyncNodeInfo*.
  - ⇒ This function contacts the client which in turn tests the connection and indicates whether the connection is problem-free or not.



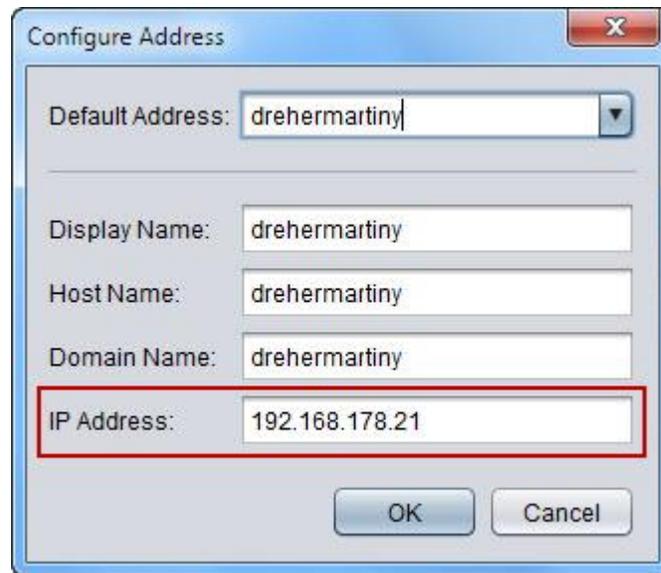
### Change IP address

If the address is not correct, change the IP address as described below:

1. Go to *System > Nodes Management*.
2. Right-click on the node line and left-click on *Edit Node*.  
⇒ The dialog box *Edit Node xxx* opens.



3. Click on [Edit] under *Configure Address*.  
⇒ The *Configure Address* window with the IP address opens.



4. Change the IP address as needed.
5. Click on [OK] to accept the entry.
6. Click on [OK] again to close all of the previous windows.

**Result** The corrected IP address has been assigned to the node and will be used from now on for communication with the system.

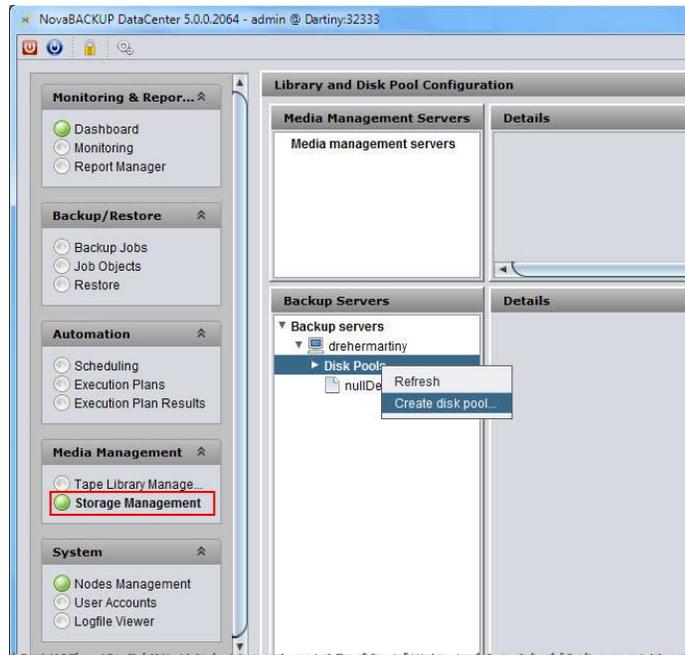
### 3.4 Set up disk pool for data storage

**Objective** After the backup server has been set up, a disk pool for data storage is created.

**Prerequisites** The disk pool must have sufficient capacity (IDE, SCSI, FC, iSCSI) or the backup server must be able to access NAS volumes (network hard drive).

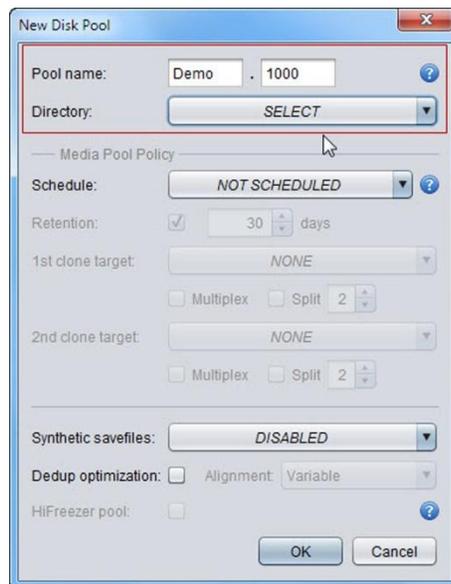
**How to proceed**

1. Go to *Media Management > Storage Management*.
  - ⇒ The *Nodes Management* window opens. The backup server created previously is displayed in the *Backup Servers* window.



2. Right-click on *Backup Servers > Disk Pool* and select *> Create disk pool*.

⇒ The dialog box *New Disk Pool* opens.



**Enter a name for the disk pool**

1. Enter the name of the disk pool under *Pool name*.  
 Prefix: alphanumeric, max. 4 characters (a – Z, 0 – 9).  
 Suffix: numerical, max. 4 characters (0 – 9).

### Select directory to use as storage location for the backups

1. Select the desired drive and directory for the data storage in the section *Directory > Browse....*

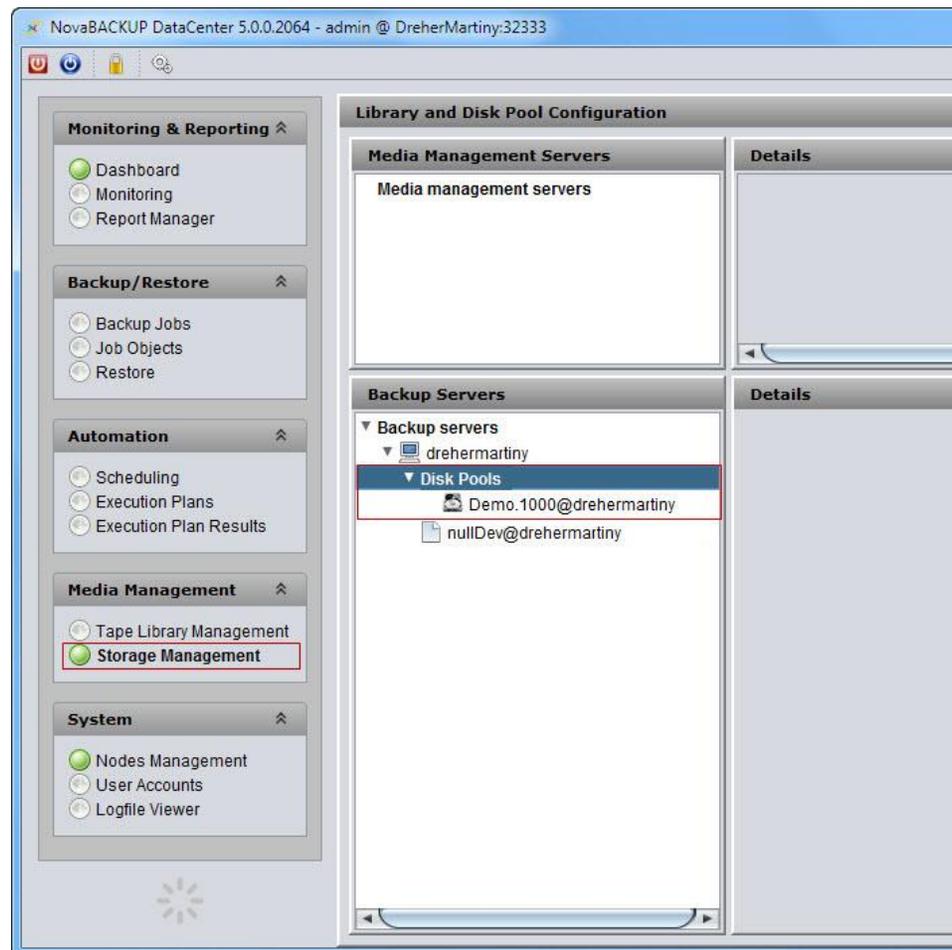


You can also enter the UNC path to a network drive or the path to an NFS Mount.

2. Click on [OK] to accept the selection.

The two attributes *Name* and *Directory* are adequate to create a disk pool. However, additional options such as Schedule and Retention Periods can also be defined.

**Result** The new disk pool *Demo.1000* has been created and entered in the area *Backup Servers > Disk Pools*.



**Troubleshooting** Difficulties accessing network drives generally occur because the user does not have the required authorization. Access is managed via the accounts which the

services/processes access. Services are the "Hiback Service" and the "NBK DC rcmd-executor".

### 3.5 Create backup job

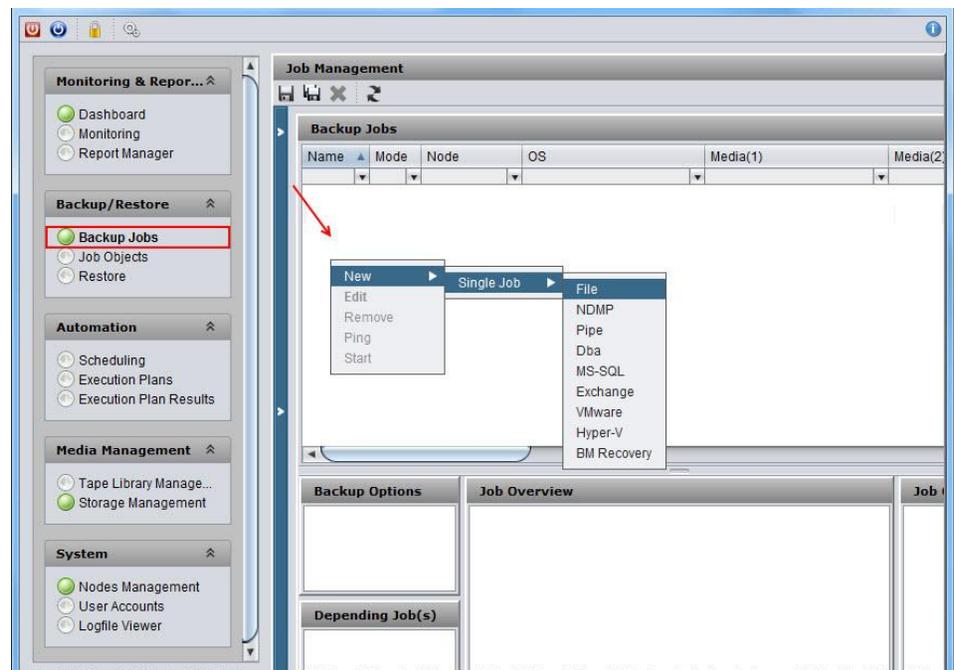
**Objective** A backup job must be created before a backup can be initiated.

The backup job contains these specifications:

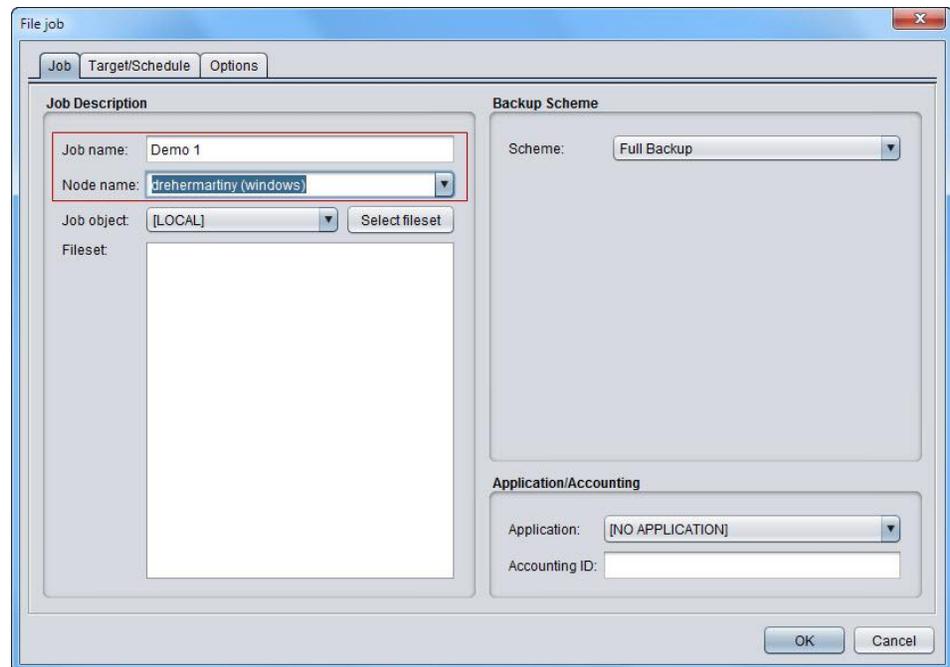
- What will be backed up
- The location of the backup
- The schedule for the backup

**Prerequisites** Backup server and disk pool for data storage must have been designated.

- How to proceed**
1. Go to *Backup/Restore > Backup Jobs*.
  2. The *Job Management* window opens.



3. Right-click on the white field in the pane *Backup Jobs*.
4. Left-click on *> New > Single Job > File* in the context menu.
  - ⇒ The dialog box for the definition of the backup job opens.

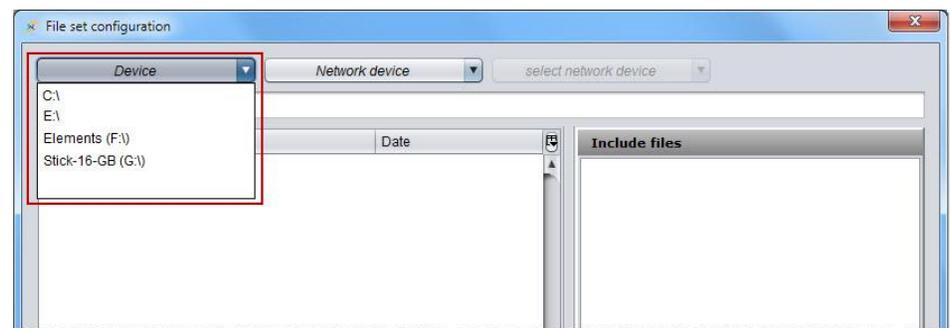


### Define job name and node name

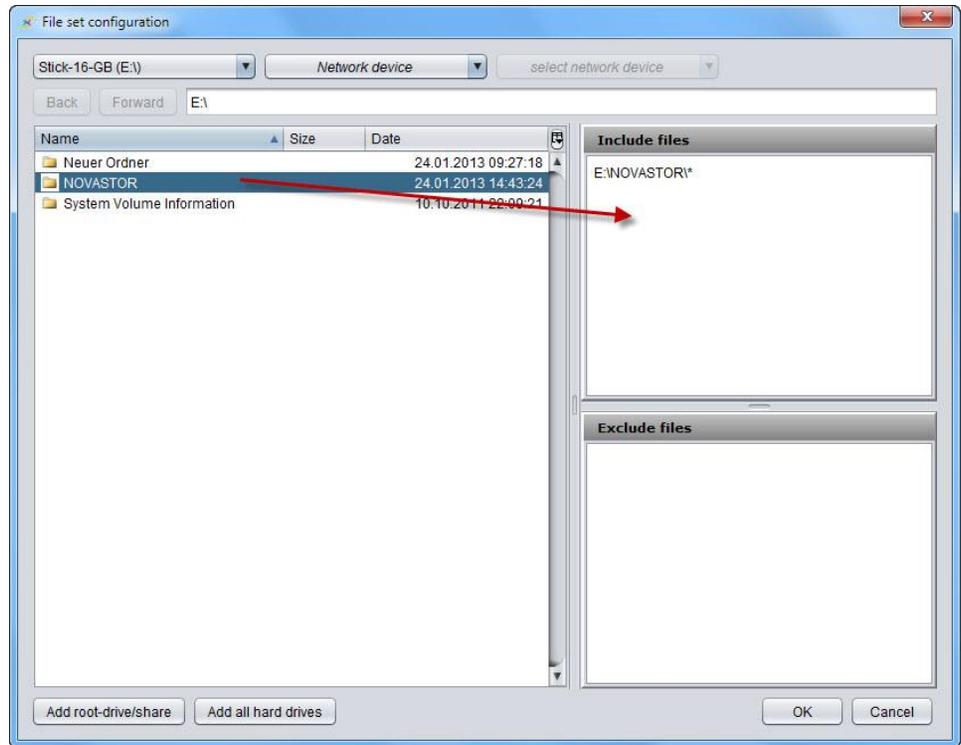
1. Enter the job name you want to use in the field *Job name*.
2. Select the backup client under *Node name*.

### Select the directory to be stored

1. Click on [Select fileset] under *Job option*.  
 ⇒ The dialog box *File set configuration* opens.

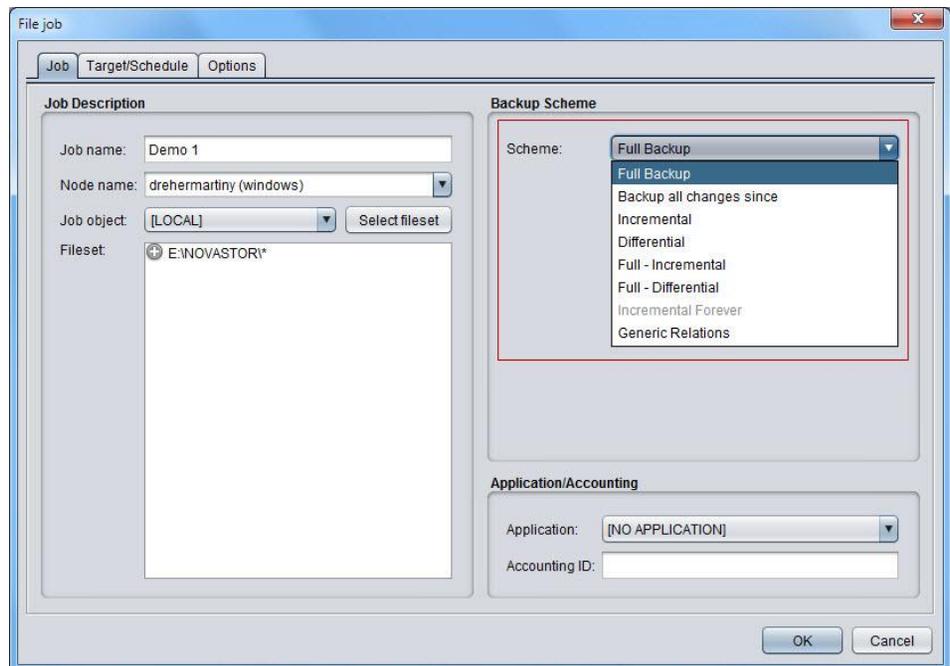


2. Select the drive under *Device*.
3. Select the directory to be stored and, while holding down the left mouse button, drag the directory into the pane *Include Files*.



4. Click on [OK] to accept selection of the directory for storage.

⇒ The dialog box *File Job* with the tab *Job* for selection of the type of backup opens.



### Select type of backup

1. Select the type of backup in the pane *Backup Scheme*.
- 



The first backup is always a *Full Backup*.

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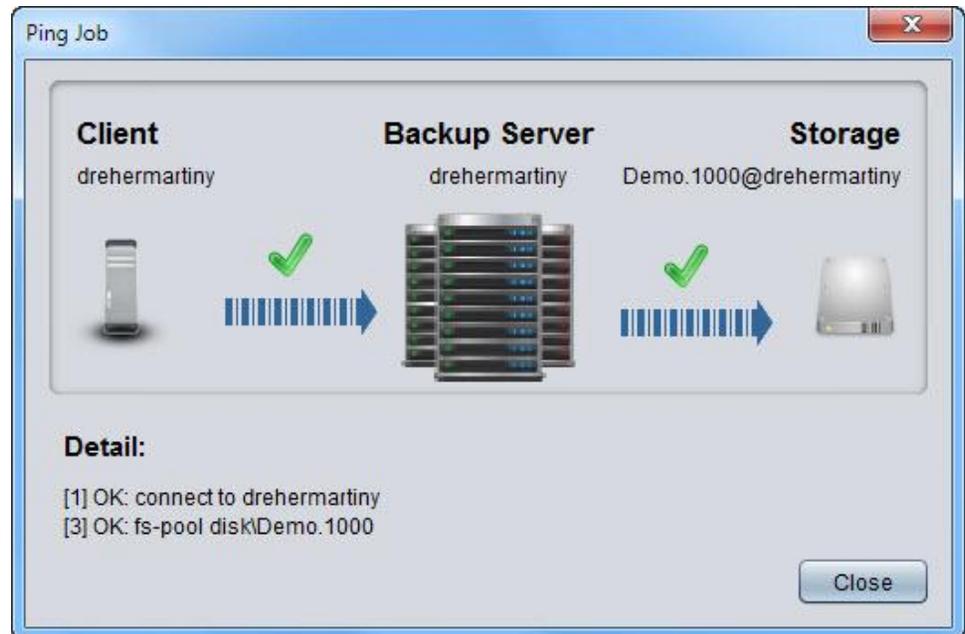
Backup type	Descriptions
<i>Full Backup</i>	All of the data for the backup are backed up completely.
<i>Full Backup all changes since</i>	Enter date from when all changes are to be backed up. Only files with a change time stamp later than the date entered here will be backed up. The entry is also called a date filter.
<i>Incremental</i>	Only the changes since the most recent incremental backup are backed up.
<i>Differential</i>	All of the data which have been changed since the most recent complete backup or which have been added since then are backed up.
<i>Full - Incremental</i>	Two backup jobs linked to each other (Full Backup and Incremental) are created, whereby the Full Backup job changes the date filter of the Incremental backup.
<i>Full - Differential</i>	Two backup jobs linked to each other (Full Backup and Differential) are created, whereby the Full Backup job changes the date filter of the Differential backup.
<i>Incremental Forever</i>	A backup job which sets its date filter itself every time it runs is created; only the modified files are backed up during every successive backup.
<i>Generic Relations</i>	

1. Click on [OK] to accept the settings.
  - ⇒ The dialog box closes.

### Test backup job

After defining the backup job, you can use Hiback ping to test whether the client, the backup server, and the storage medium are accessible.

1. Right-click on the backup job and select > *Ping* in the context menu.

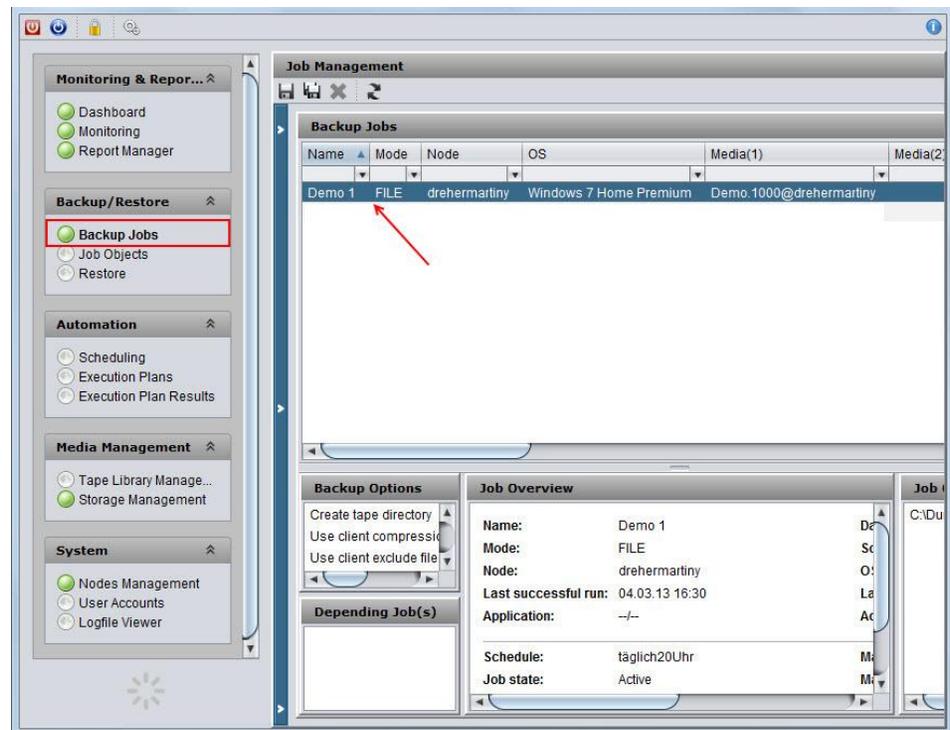


- ⇒ If all of the settings are correct and all of the selected systems can be accessed, two green checkmarks will be displayed. Failed connections are marked by a red cross.

2. Click on [Close] to close the window.

**Result** The backup job has been completely defined and the settings for the connections are correct.

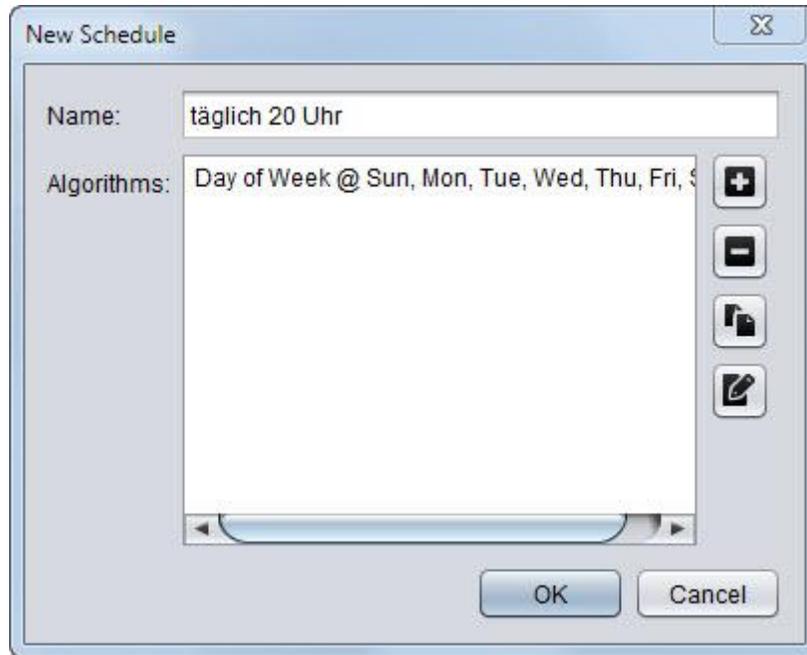
The new backup job has been added to the list of *Backup Jobs*. The pertinent data are displayed in the *Job Overview* window.



### 3.6 Define schedule for a backup job

**Objective** You want a job to run automatically at a specific time.

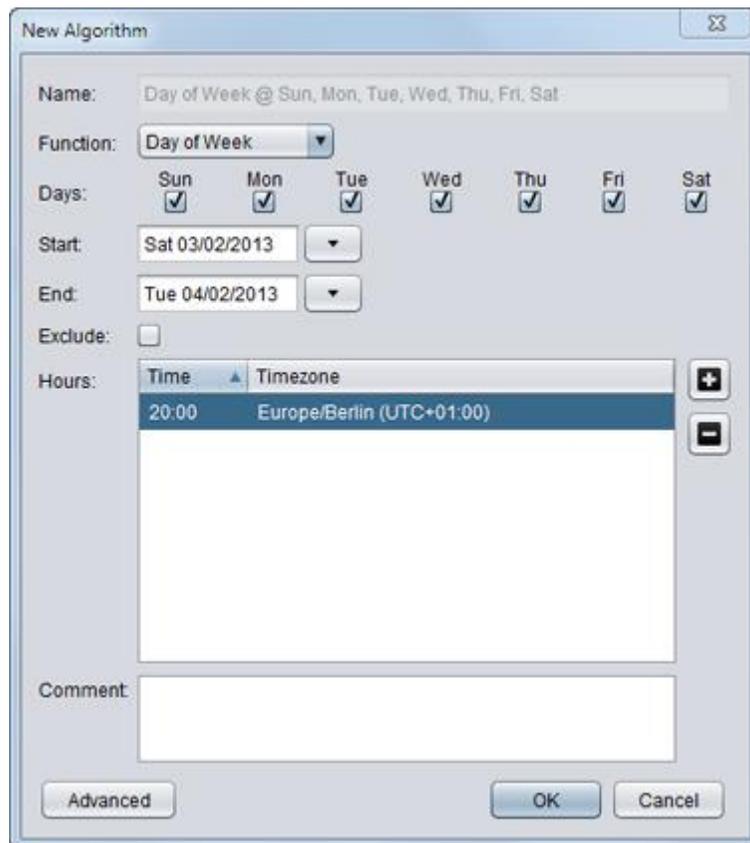
- How to proceed**
1. Go to *Automation > Scheduling*.
    - ⇒ The dialog box *Schedule* containing previously defined schedules opens.
  2. To create a new schedule, go to the tool bar and click on  (*New Schedule*).
    - ⇒ The dialog box *New Schedule* opens.



3. Enter the name you want to give the schedule under *Name*.

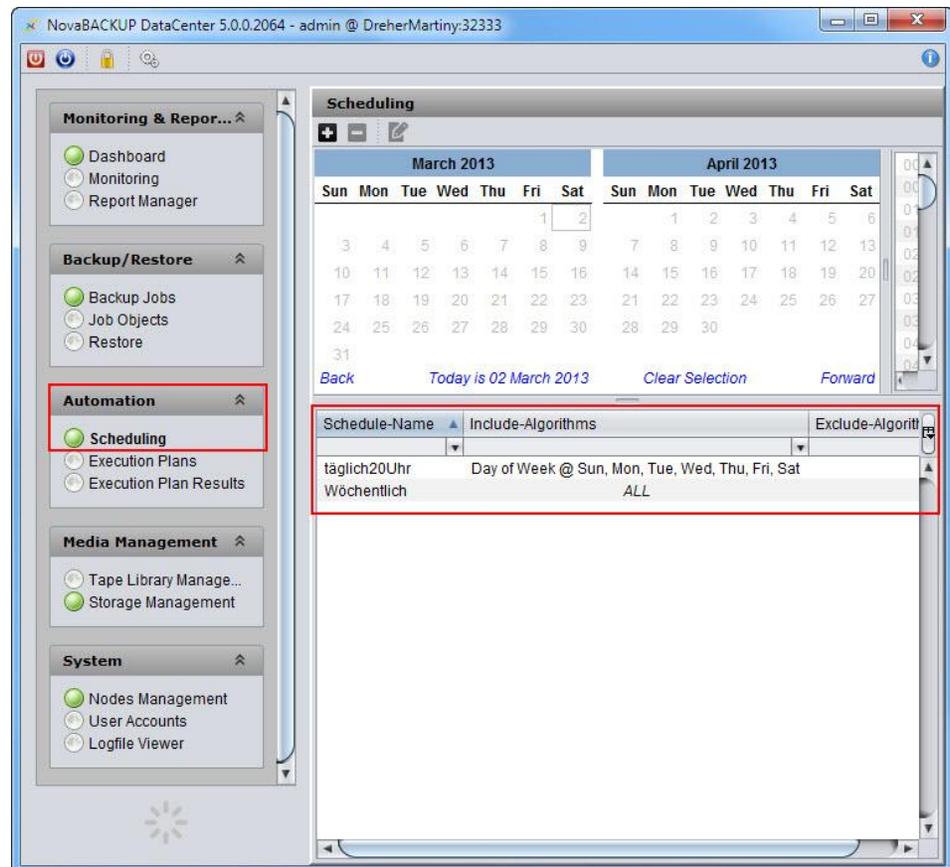
4. To define an algorithm, click on **+** (*New algorithm*).

⇒ The dialog box *New Algorithm* opens.



5. If, for example, you want to receive a report **daily**, select *Day of Week* and enable all of the days of the week.
6. Enter the starting date at *Start* and, if desired, the final date under *End*.
7. To define a time for the launch of the backup, double-click in the field under *Time* and enter a time.
8. If you want to change the time zone, double-click in the field under *Timezone*.
9. Click on [OK] to save the settings.

**Result** The schedule has been created and can be applied to relevant functions.

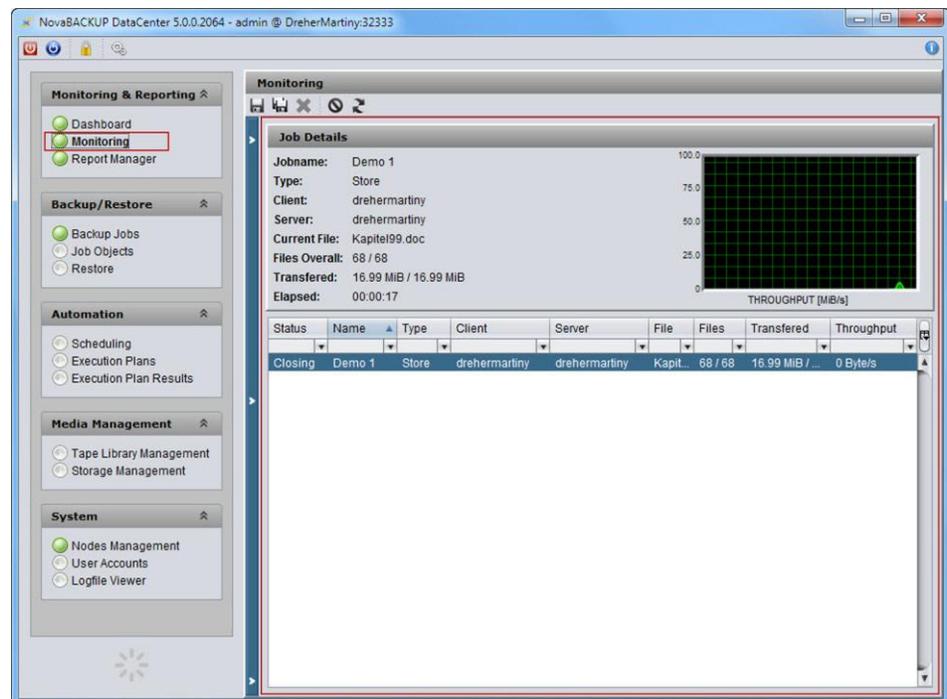


### 3.7 Launch backup job

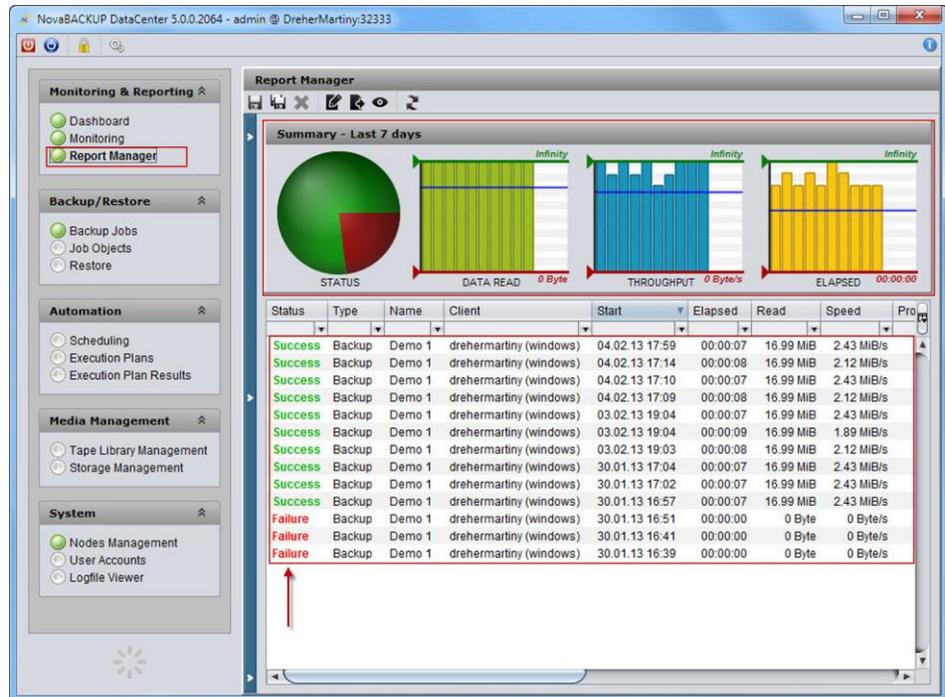
**Objective** When the backup job has been defined and the connections have been tested, the backup job can be launched interactively.

- How to proceed**
1. Go to *Backup/Restore > Backup Jobs*.
  2. Right-click on the *Backup Job* and left-click on *> Start* in the context menu.
    - ⇒ The backup job is launched.

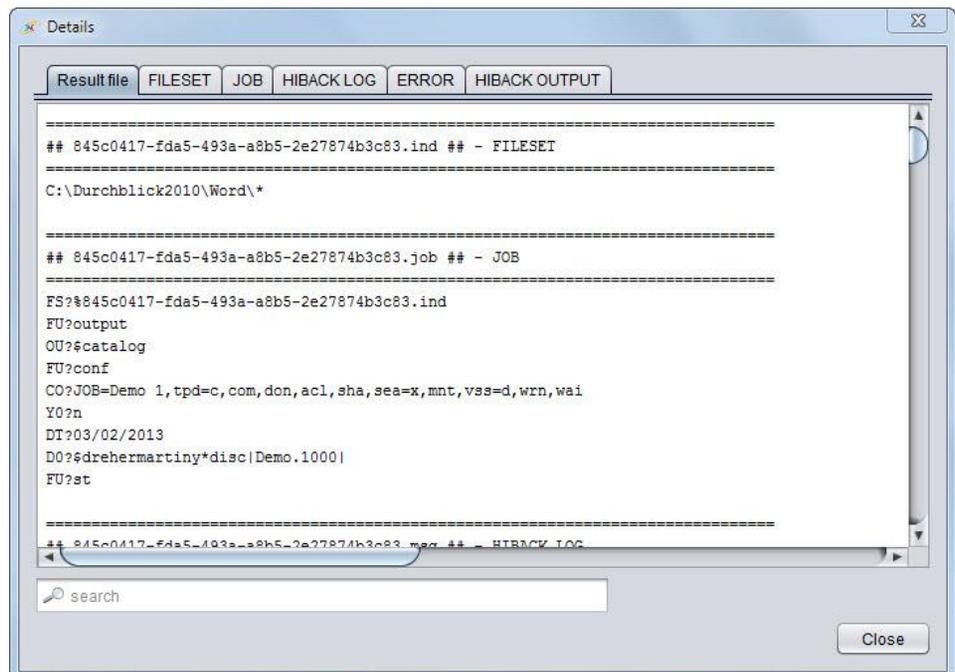
As long as the backup job is running, you can track its progress at *Monitoring & Reporting > Monitoring*.



**Result** When the backup job is finished, the status is displayed in *Monitoring & Reporting > Report Manager*.



A double-click on the backup job opens the protocol containing all of the details of the job execution. This can be helpful for clarification of errors, for instance.

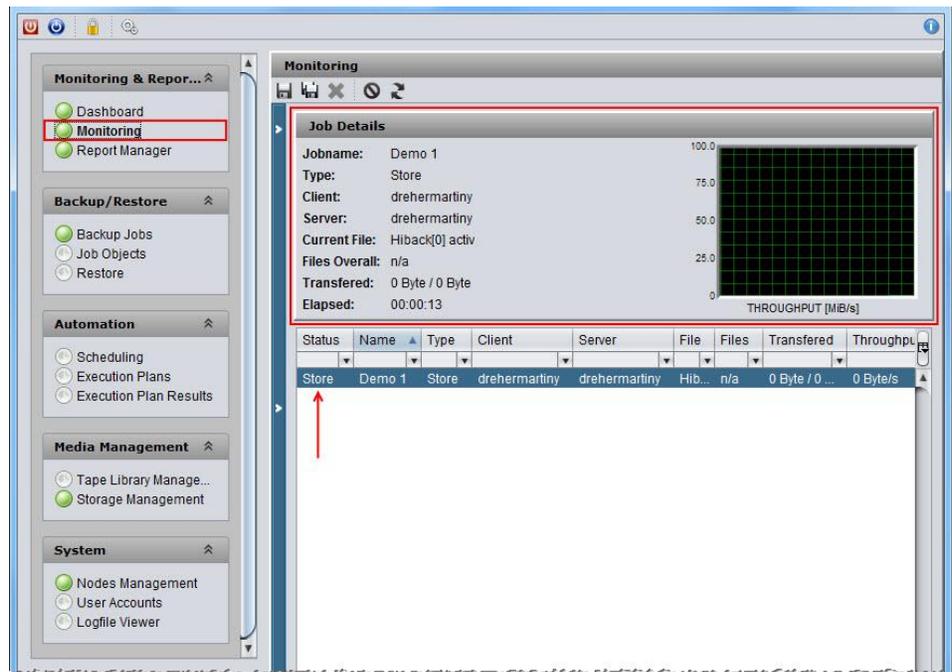


### 3.8 Monitor backup execution

**Objective** The progress of the backup job can be tracked during its execution in the monitoring function.

**Prerequisites** Backup progress is visible only as long as the backup is running.

**How to proceed** 1. Go to *Monitoring & Reporting > Monitoring*.  
 ⇒ The *Monitoring* window opens.



**Result** The details of the job which has been launched, along with the current performance rate, are displayed in the work pane *Job Details*. The process currently running is shown in the attribute column *Status*.

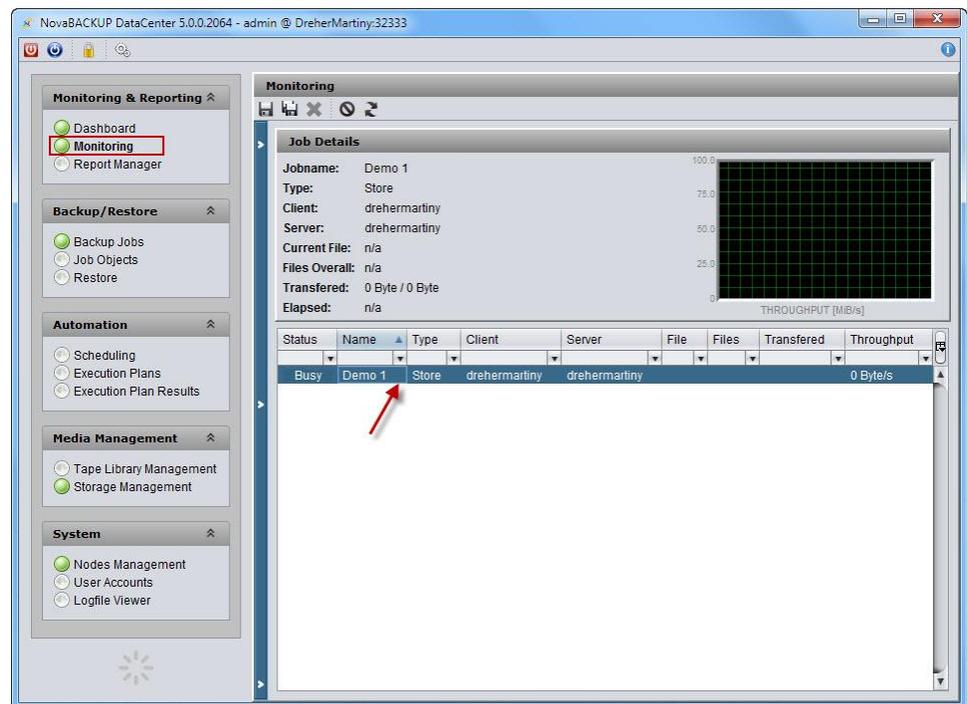
Status	Process
<i>Find</i>	Looking for the data to be backed up.
<i>Select</i>	Selecting the data to be backed up according to the settings.
<i>Busy</i>	Backing up the selected data.

Status	Process
<i>Store</i>	Storing the selected data.
<i>Closing</i>	Closing the backup process.
<i>Finish</i>	The process has been completed.

### 3.9 Stop backup job

**Objective** You can cancel the backup job in the *Monitoring* window after it has been launched.

**How to proceed** 1. Go to *Monitoring & Reporting > Monitoring*.  
 ⇒ The *Monitoring* window opens.



2. Right-click on the backup job and select > *Cancel job* in the context menu.

**Result** The backup job is cancelled. The cancellation is displayed in *Monitoring & Reporting > Report Manager* with the status **Aborted** (blue) or **Failed** (red) and in *Monitoring & Reporting > Dashboard* in the window *System Messages*.

### 3.10 Define report from backup jobs

**General** You have the option of creating reports with varying contents from your backup jobs.

The contents are essentially controlled by the attributes.

You define which attributes in the data records are to be displayed specifically for each user.

Filters determine what data records are displayed in the list. The filters are defined in terms of the attributes.

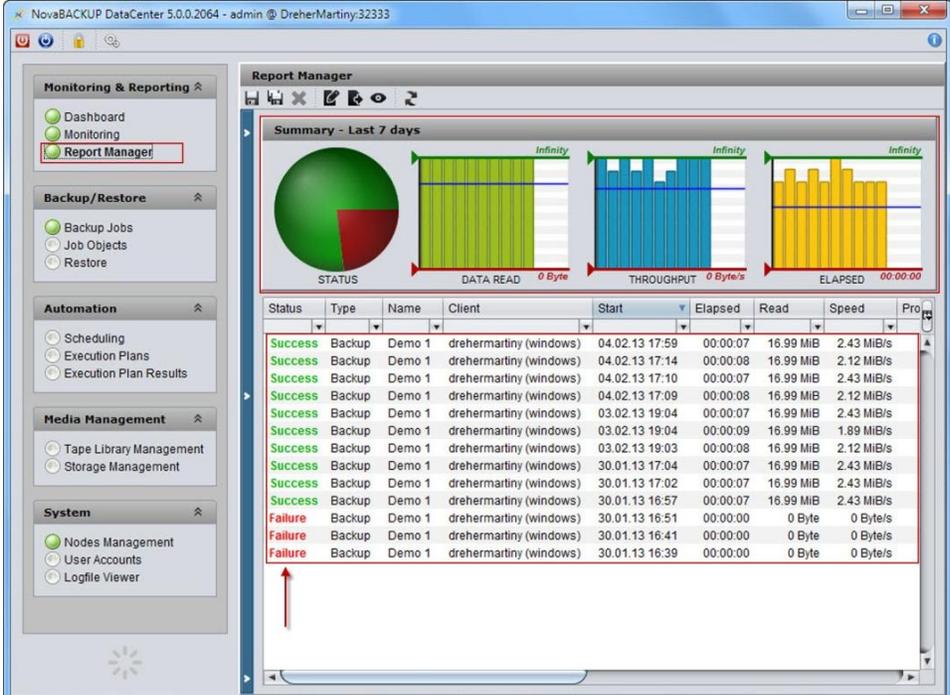
The filters are defined in the text field in the filter line under the attribute bar. In addition, there is the option of using the graphics as an aid to defining the filters for *Status*, *Data Read*, *Throughput*, and *Elapsed* in the *Report Manager*.

If you have defined a filter, only the backup jobs which meet the conditions of the filter will be displayed.



A defined report can be saved and retrieved at any time under a user-specific name by means of the function *Save report as*.

- How to proceed**
1. Go to *Monitoring & Reporting > Report Manager*.  
⇒ The *Report Manager* window opens.



Status	Type	Name	Client	Start	Elapsed	Read	Speed	Pro
Success	Backup	Demo 1	drehermartiny (windows)	04.02.13 17:59	00:00:07	16.99 MiB	2.43 MiB/s	
Success	Backup	Demo 1	drehermartiny (windows)	04.02.13 17:14	00:00:08	16.99 MiB	2.12 MiB/s	
Success	Backup	Demo 1	drehermartiny (windows)	04.02.13 17:10	00:00:07	16.99 MiB	2.43 MiB/s	
Success	Backup	Demo 1	drehermartiny (windows)	04.02.13 17:09	00:00:08	16.99 MiB	2.12 MiB/s	
Success	Backup	Demo 1	drehermartiny (windows)	03.02.13 19:04	00:00:07	16.99 MiB	2.43 MiB/s	
Success	Backup	Demo 1	drehermartiny (windows)	03.02.13 19:04	00:00:09	16.99 MiB	1.89 MiB/s	
Success	Backup	Demo 1	drehermartiny (windows)	03.02.13 19:03	00:00:08	16.99 MiB	2.12 MiB/s	
Success	Backup	Demo 1	drehermartiny (windows)	30.01.13 17:04	00:00:07	16.99 MiB	2.43 MiB/s	
Success	Backup	Demo 1	drehermartiny (windows)	30.01.13 17:02	00:00:07	16.99 MiB	2.43 MiB/s	
Success	Backup	Demo 1	drehermartiny (windows)	30.01.13 16:57	00:00:07	16.99 MiB	2.43 MiB/s	
Failure	Backup	Demo 1	drehermartiny (windows)	30.01.13 16:51	00:00:00	0 Byte	0 Byte/s	
Failure	Backup	Demo 1	drehermartiny (windows)	30.01.13 16:41	00:00:00	0 Byte	0 Byte/s	
Failure	Backup	Demo 1	drehermartiny (windows)	30.01.13 16:39	00:00:00	0 Byte	0 Byte/s	

The **data records** of the executed backup jobs and their attributes are displayed in a list in the lower work pane.

The **following** attributes of the executed and displayed backup jobs are shown in graphic form in the upper work pane.

- Status
- Data Read
- Throughput
- Elapsed

Different colors in the circle graphically show the status. The other attributes are shown in a bar chart. Each bar corresponds to one backup job. If you hover the mouse briefly over a bar, the exact content of the attribute will be displayed in a tool tip.

### 3.10.1 Define attribute bar

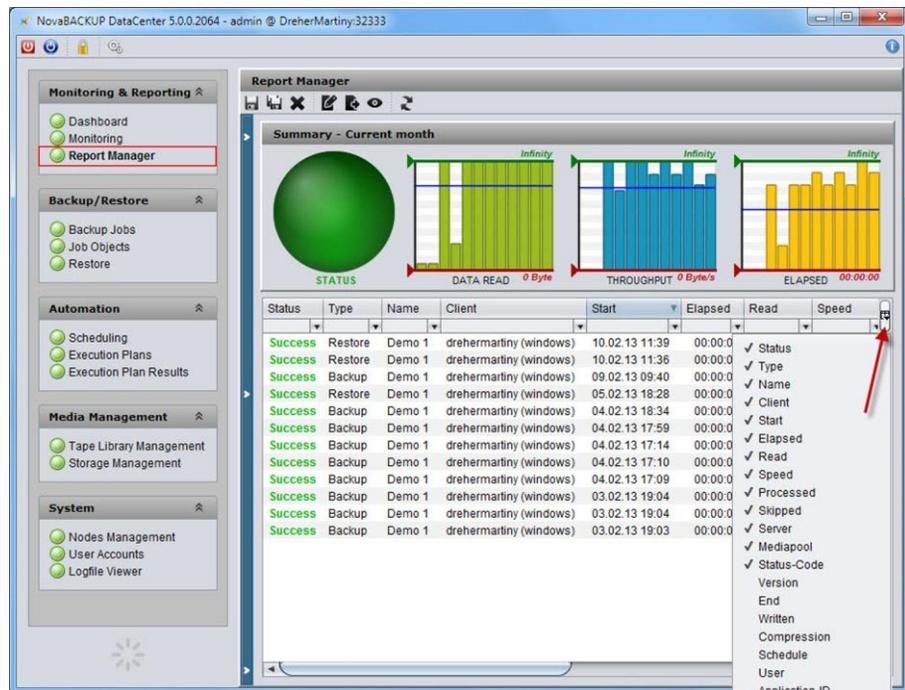
**Objective** You want to restrict the attributes in your report. The order of the attributes in the bar can be freely changed using drag & drop.

**How to proceed** 1. Go to *Monitoring & Reporting > Report Manager*.

⇒ The *Report Manager* window opens.

2. Click on the icon on the far right of the attribute bar .

⇒ The selection box with all of the available attributes and display options opens.



3. Enable ✓ or disable the desired attributes.

**Result** All of the enabled attributes are displayed in the attribute bar.

### 3.10.2 Filter backup jobs according to status

**Objective** You can filter your backup jobs according to status.

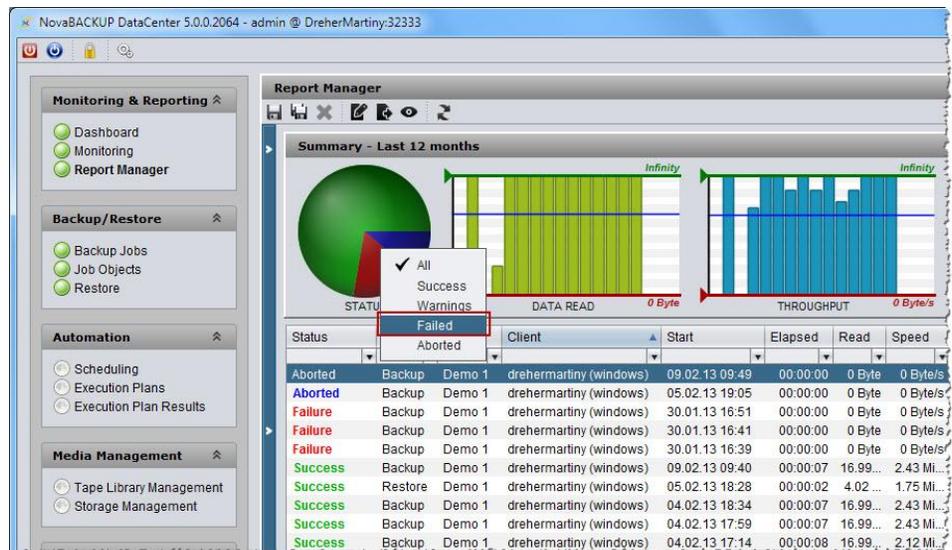
The status provides information about the execution of the backup job.

Status	Descriptions
<i>Success</i>	The backup was successful (green).
<i>Warning</i>	The backup was partially successful; one or more files were not backed up (yellow).
<i>Failure</i>	The backup failed (red).
<i>Aborted</i>	The backup was cancelled (blue)

**How to proceed** The filter *Status* can be created using the graphics or the filter bar.

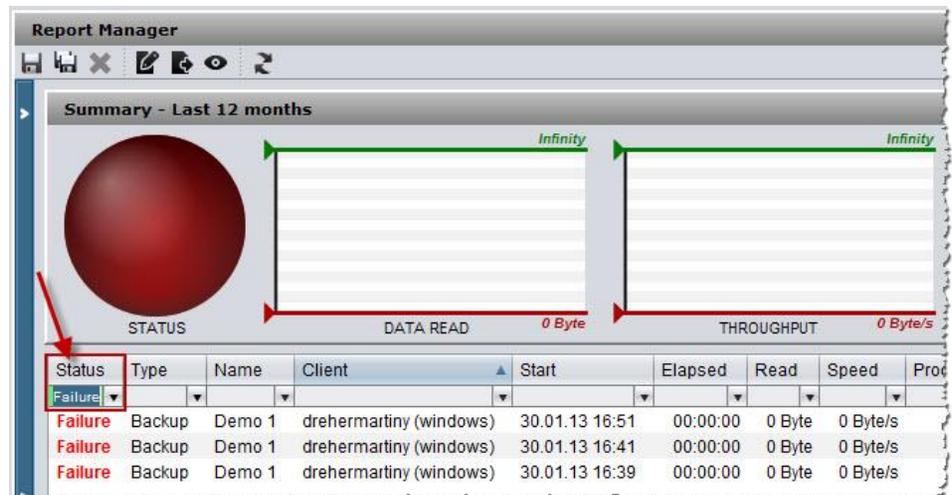
For example, you want to display only the failed backup jobs.

1. Right-click on the circle and select the status *Failed* in the context menu.

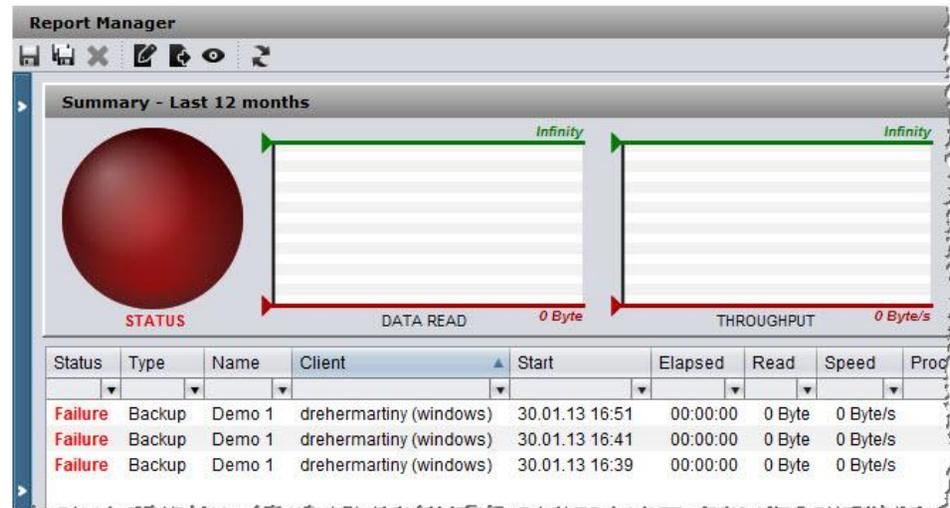


or

1. Enter *Failure* in the text field *Status* of the filter bar and accept it by pressing [Enter] on the keyboard.



**Result** Only the failed backup jobs are displayed.

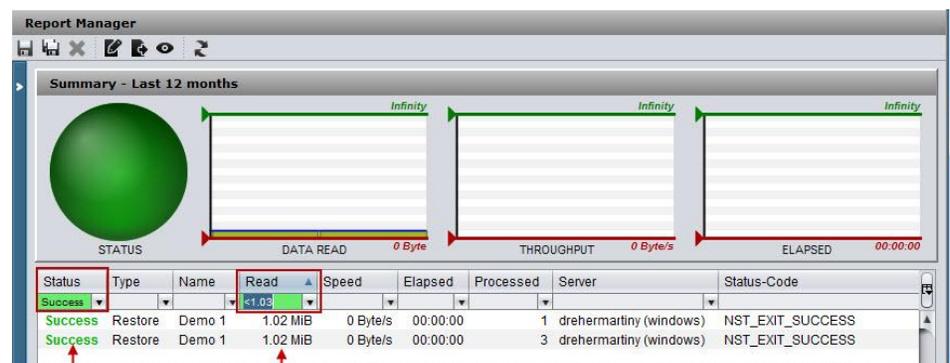


### 3.10.3 Filtering backup jobs using the filter bar

**Objective** You want to display only the successfully executed backup jobs for data quantities (*Data Read/Read*) less than 1.03 MiB.

- How to proceed**
1. Go to *Monitoring & Reporting > Report Manager*.
  2. Enter *Success* in the text field *Status* of the filter bar and press [Enter] on the keyboard.
    - ⇒ All of the backup jobs which have run successfully will be displayed.
  3. Enter *< 1.03* in the text field *Read* and press [Enter] on the keyboard.

**Result** All of the backup jobs with a data quantity lower than 1.03 MiB which have run successfully will be displayed.

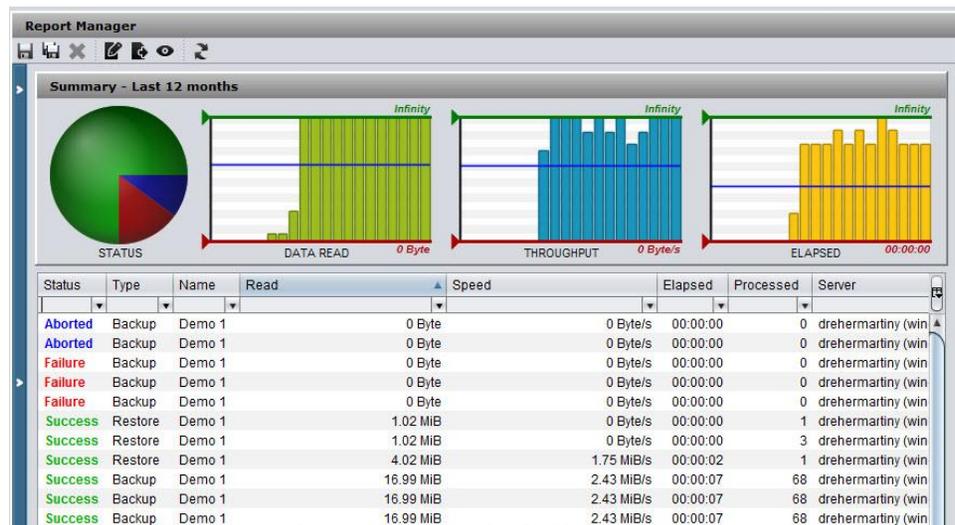


### 3.10.4 Filtering backup jobs with the aid of the graphics

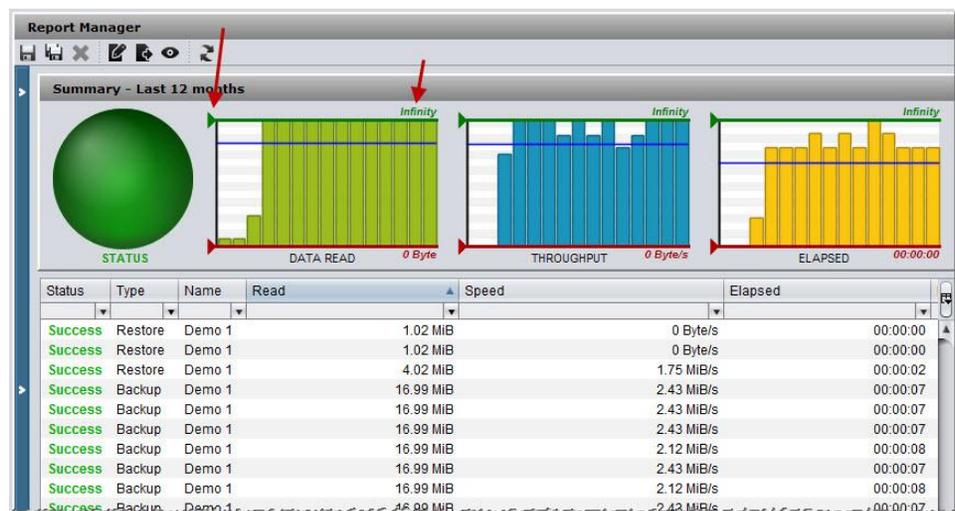
**Objective** You want to display only the successfully executed backup jobs for data quantities (*Data Read*) less than 1.03 MiB.

The filter is to be created with the aid of the graphics.

**How to proceed** 1. Go to *Monitoring & Reporting > Report Manager*.  
 ⇒ The *Report Manager* window opens.

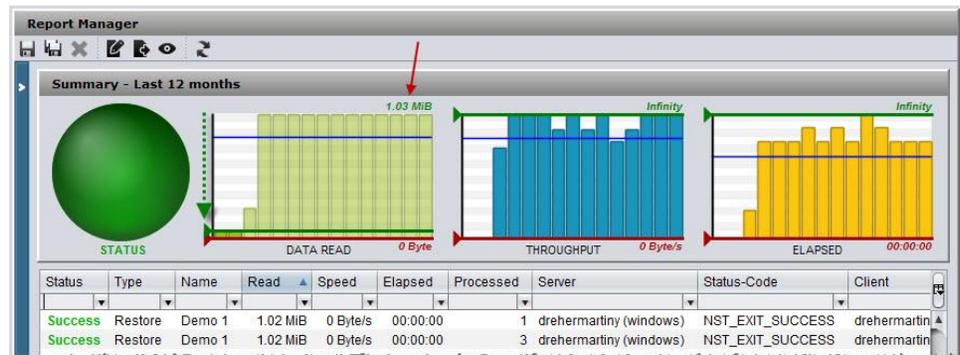


2. Right-click on the circle and left-click on *Success* in the context menu.  
 ⇒ Only the successful backup jobs are displayed.



3. Drag the green arrow down until the value 1.03 is displayed in the graphics above.

**Result** All of the backup jobs with a data quantity lower than 1.03 MiB which have run successfully will be displayed.



### 3.10.5 Resetting the filter using the graphics.

**Objective** If the filter was created using the graphics, it must also be reset using the graphics.

**How to proceed**

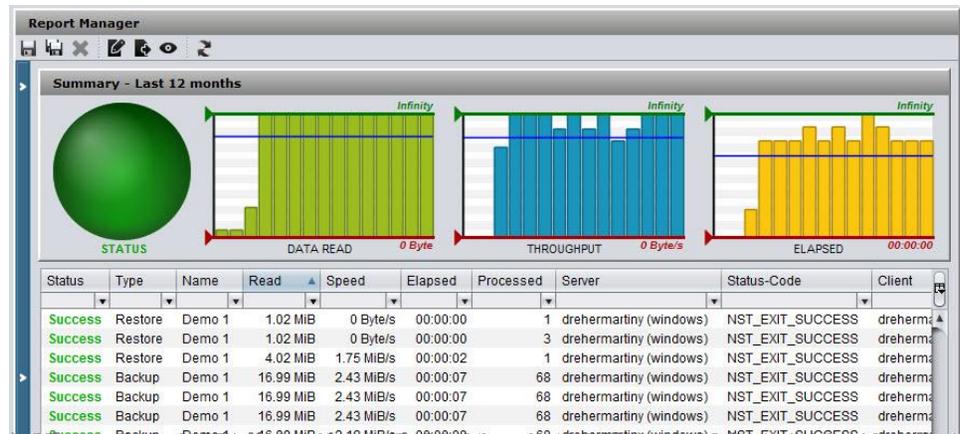
1. Go to *Monitoring & Reporting > Report Manager*.  
⇒ The *Report Manager* window with the enabled filter opens.



2. Right-click on the graphics with the created filter and select *Reset to defaults* in the context menu.

3. Go to the tool bar and click on  (Refresh).

**Result** The filter has been reset.

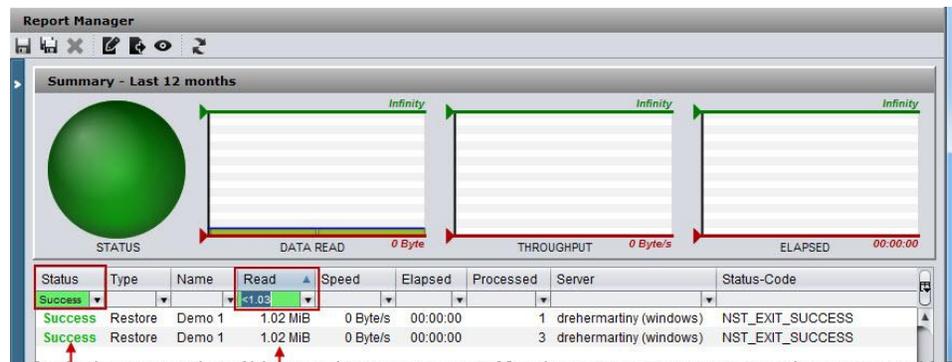


### 3.10.6 Resetting the filter in the filter bar

**Objective** If the filter was created in the filter bar, it must also be reset in the filter bar.

**How to proceed** 1. Go to *Monitoring & Reporting > Report Manager*.

⇒ The *Report Manager* window with the enabled filter opens.

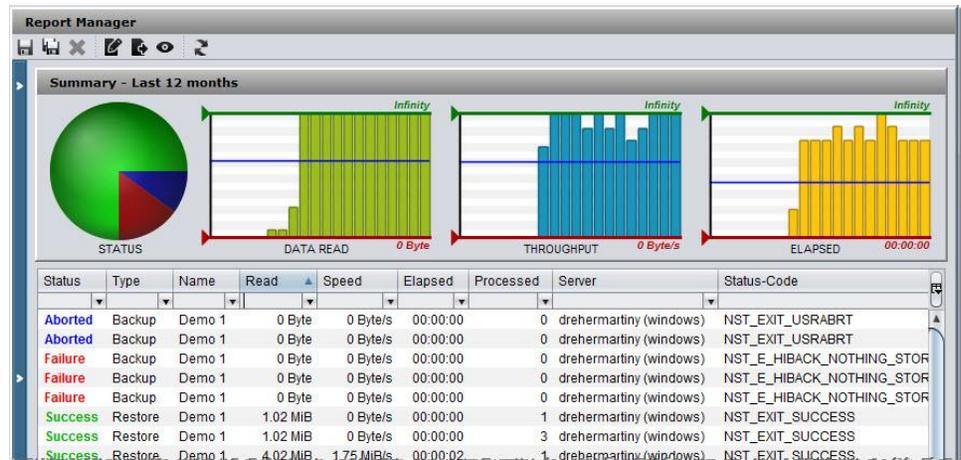


2. Delete the data entered in the text field *Status* and in the text field *Read*.

If appropriate, select *All* in the circle.

3. Go to the tool bar and click on  (*Refresh*).

**Result** The filter has been reset.

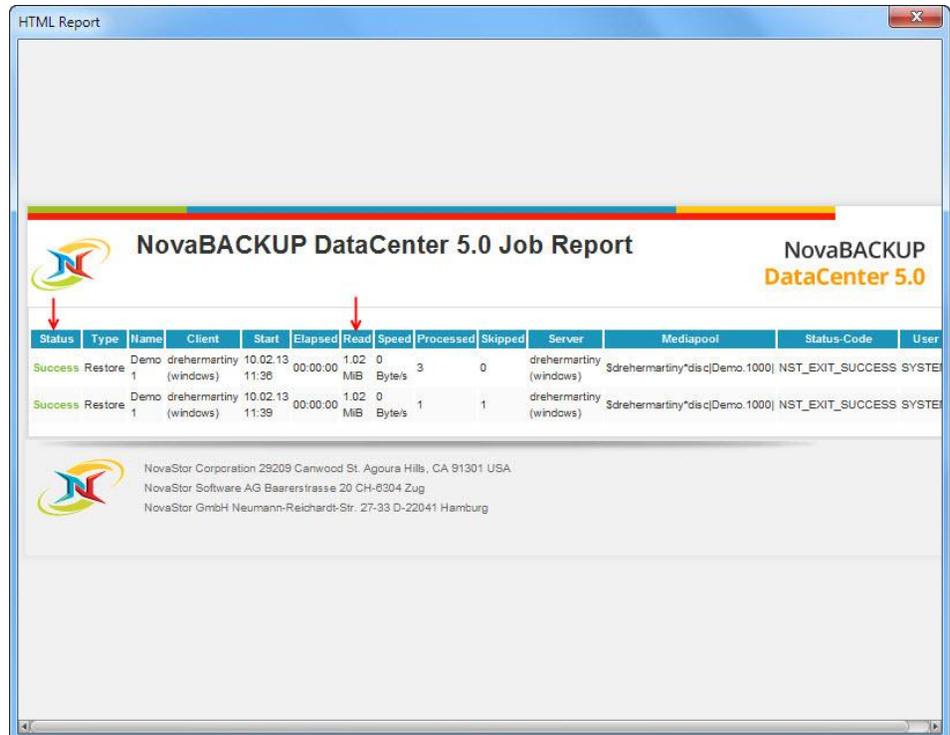


### 3.10.7 Preview of report view

**Objective** After filtering the desired data and defining the attribute bar, you can view the report in the preview window.

- How to proceed**
- Go to *Monitoring & Reporting > Report Manager*.  
⇒ The *Report Manager* window opens.
  - Go to the tool bar and click on (*View Report*)

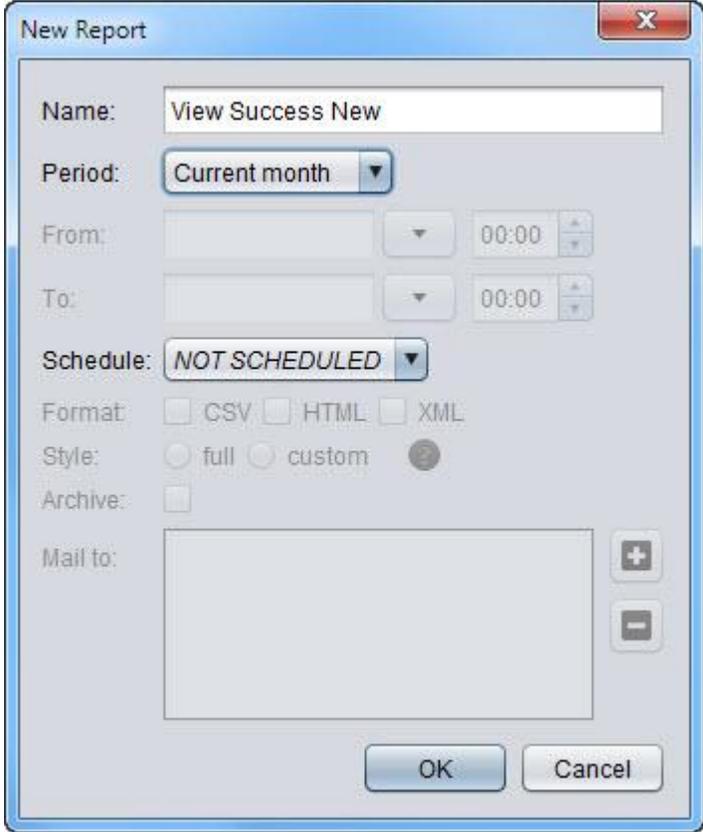
**Result** The defined report is displayed. The arrows indicate the applied filters.



### 3.10.8 Save report view for specific users

**Objective** After filtering the desired data and defining the attribute bar, you can save the report under a name of your choosing in a selected time period.

- How to proceed**
1. Go to *Monitoring & Reporting > Report Manager*.  
⇒ The *Report Manager* is displayed.
  2. Go to the tool bar and click on  (*Save view as*).  
⇒ The dialog box *New Report* opens.



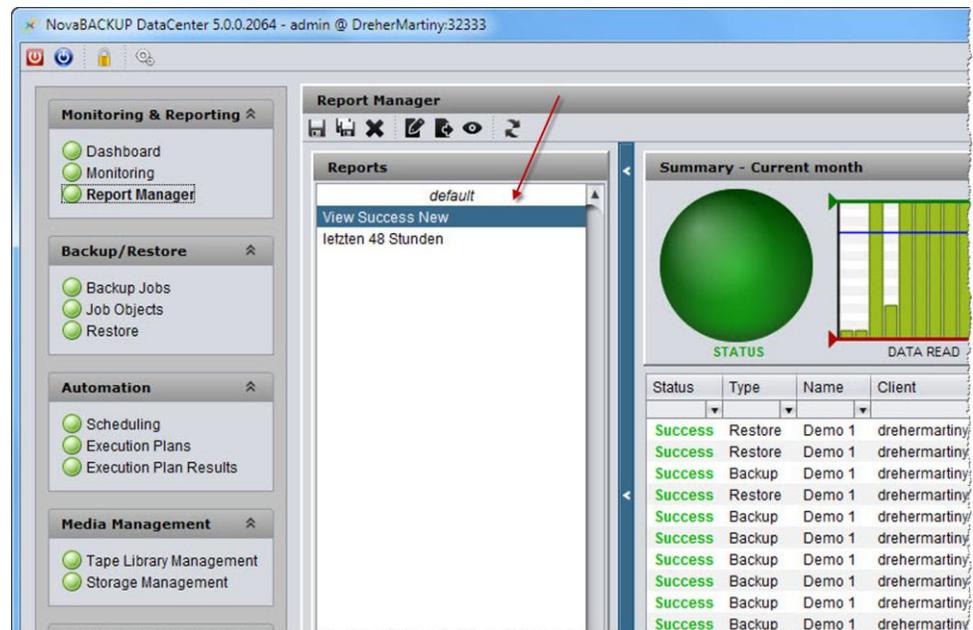
3. Enter the name and desired time period (*Period*) for the report view.
4. Click on [OK] to save the entries.



You  can change the name and time period at any time using (*Edit Report*).

---

**Result** The defined report has been saved under the entered name and can be reselected at any time.



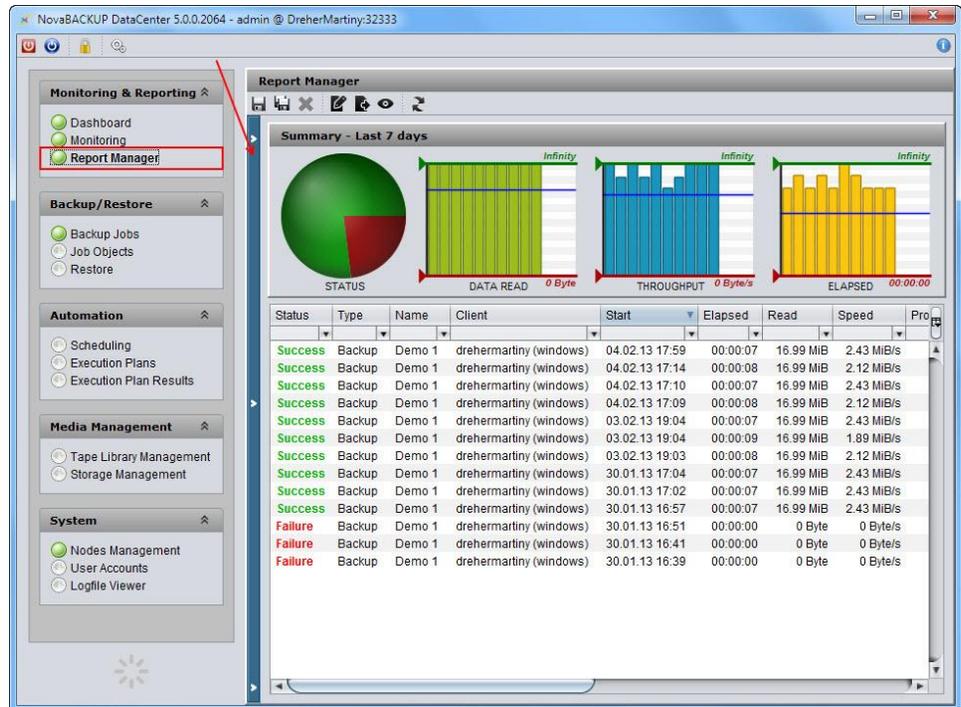
Moreover, you have the option of selecting for the report backup jobs which are automatically launched at a specific time in accordance with a defined schedule, then archiving or e-mailing the reports.

See also  Messages und reports per e-mail [→ 50]

### 3.10.9 Retrieving a user-specific report

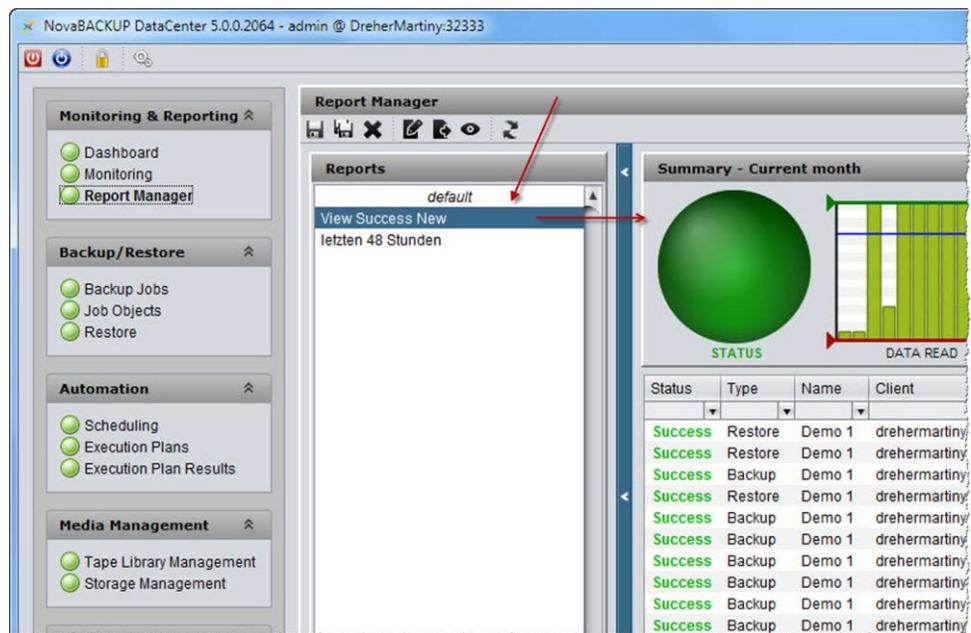
**Objective** You want to retrieve a report you have created and saved.

- How to proceed**
1. Go to *Monitoring & Reporting > Report Manager*.  
⇒ The Report Manager opens.



2. Click on the blue bar.

⇒ A window showing user-specific reports which have been saved drops down.



3. Click on the desired report.

**Result** The selected report is displayed immediately in the Summary window on the right.

## 3.11 Messages und reports per e-mail

**General** You have the option of e-mailing backup server messages and reports from executed backup jobs.

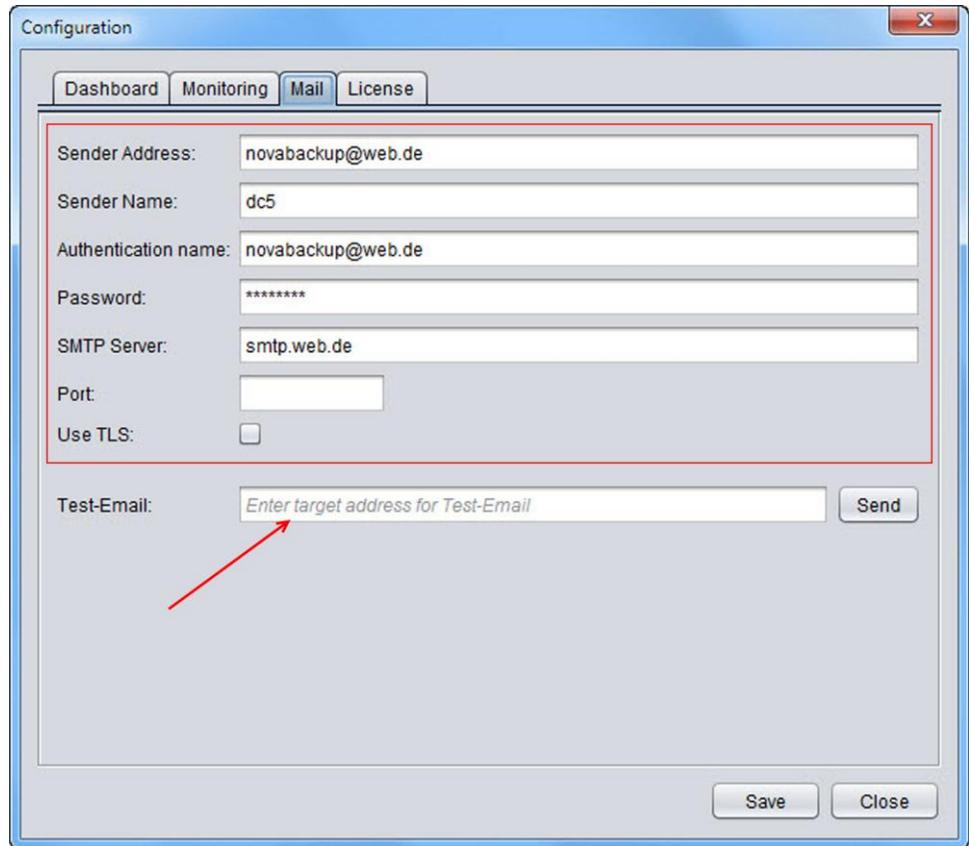
This requires the following settings:

- Define e-mail server for sending e-mails.
- Define e-mail address to which the messages and report are to be sent.
- Define user-specific backup report and configure for e-mailing.
- Select messages which are to trigger the notification.

### 3.11.1 Define e-mail server for sending e-mails.

**Objective** Before you can dispatch an e-mail, the e-mail server for sending e-mails must be configured.

- How to proceed**
1. Go to the menu bar and click on  *Configuration*.
    - ⇒ The dialog box *Configuration* opens.
  2. Click on the tab *Mail*.
    - ⇒ The dialog box for the configuration of the e-mail server opens.



3. Enter the data for the e-mail server in the upper pane.

You can have a test e-mail sent to your address to test the settings.

1. Enter your e-mail address in the text field *Test-Email* and click on [Send].

If the settings are correct, you will receive a test e-mail from your Nova backup server.

1. Click on [Save] to save the settings.

**Result** The e-mail server has been defined.

### 3.11.2 E-mailing backup reports

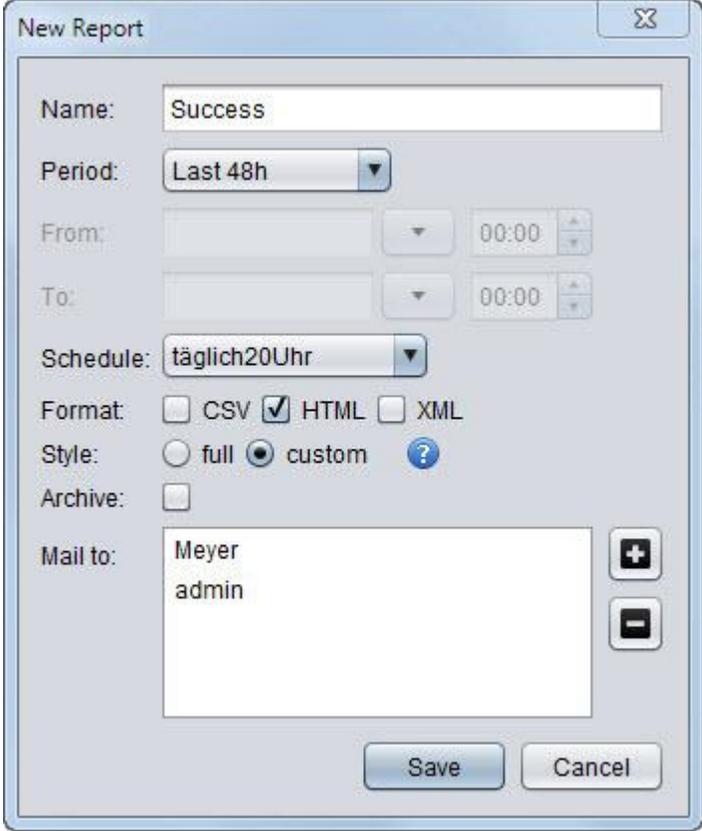
**Objective** You would like to e-mail a backup report to your address at a specific time every day, for example.

**Prerequisite** A schedule to which the related backup job and the report can be attributed must have been defined under *Automation > Scheduling*.

**How to proceed**

1. Go to *Monitoring & Reporting > Report Manager*.
2. Filter the data you want in the report.

3. Go to the tool bar and click on  *Save view as*.  
 ⇒ The dialog box *New Report* opens.



4. Enter the name you want to give the report in the text field *Name*.  
 5. Select the time period to be shown in the report in *Period*.  
 6. Select the time for launching the backup in the selection box *Schedule*.  
 7. Choose the *Format* and the *Style*.



The user-specific attribute selection in the attribute bar will be displayed only if **HTML and Custom** have been selected. Selecting **Full** will show all of the attributes in the attribute bar.

8. Click on  and enter the e-mail addresses where the report is to be sent.

**Result** The user-specific report will be generated and e-mailed at the scheduled time (example: 8:00 p.m. daily).

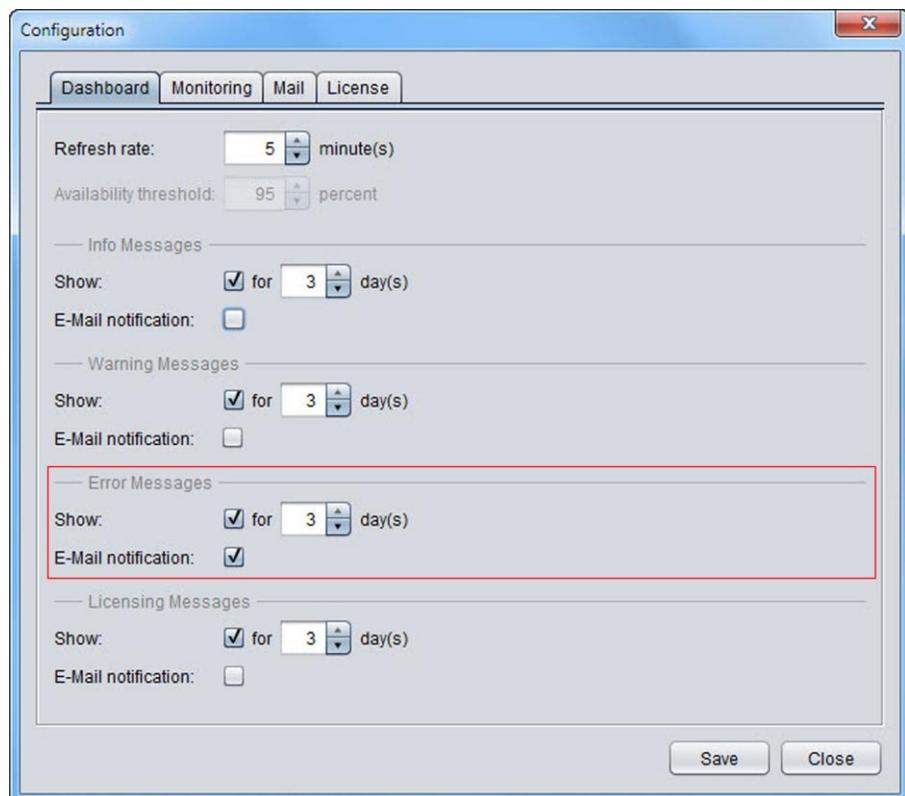
### 3.11.3 E-mailing messages

**Objective** You want to receive an e-mail notification as soon as a message (e.g., warning or error in the backup job) is issued.

- Prerequisites**
- The e-mail server must be configured before e-mails can be sent from the backup server (Define e-mail server for sending e-mails. [→ 50]).
  - A schedule must have been set up for the backup job (Define schedule for a backup job [→ 31]).

**How to proceed** **Enable message requests**

1. Go to the menu bar and click on  *Configuration*.
  - ⇒ The dialog box *Configuration* with the tab *Dashboard* opens. This dialog box is where you enable the notifications (*Messages*) which will be displayed on the dashboard in the event of an incident and, as needed, should be sent to an e-mail address.



2. Enable the display in the dashboard by placing a checkmark ✓ at *Show* and select the time period you want to display.
3. Enable *E-mail Notification* by placing a checkmark ✓ next to the message types you want to receive notifications for, e.g., *Error messages*:

---

<i>Info Messages</i>	General information during the execution of the backup job.
<i>Warning Messages</i>	Warning messages during the execution of the backup job.
<i>Error Messages</i>	Error messages during the execution of the backup job.

1. Click on [Save] to save the settings.  
⇒ The messages to be displayed on the dashboard and the messages to be sent by e-mail have been defined.



These settings apply to all jobs.

---

The next step is to communicate to the system the e-mail address to which the message should be sent when the incidents occur.

#### **Enter e-mail address**

The e-mail address is user-specific.

1. Go to *System > User account*.



2. If not yet defined, enter the user name and password and enable the user.
3. Go to the menu item *Groups* and, using [Edit], select the group the user will be assigned to:
4. Enter the e-mail address where you want messages and reports to be sent in the entry field *Email* in the section *Additional*.
5. Click on [OK] to save the settings.

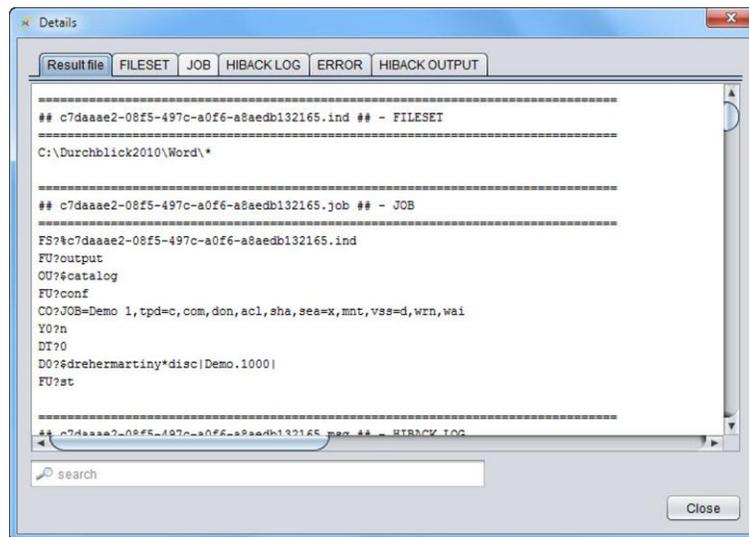
**Result** If the enabled message appears during the execution of a backup job, the message will immediately be sent to the e-mail address entered above.

## 3.12 Retrieve details of a backup job

**Objective** You would like to view the details of your completed backup job.

- How to proceed**
1. Go to *Monitoring & Reporting > Report Manager*.  
⇒ The Report Manager opens.
  2. Double-click in the list on the backup job you want to view to see the details of the backup job.

**Result** The details of the selected backup job are displayed

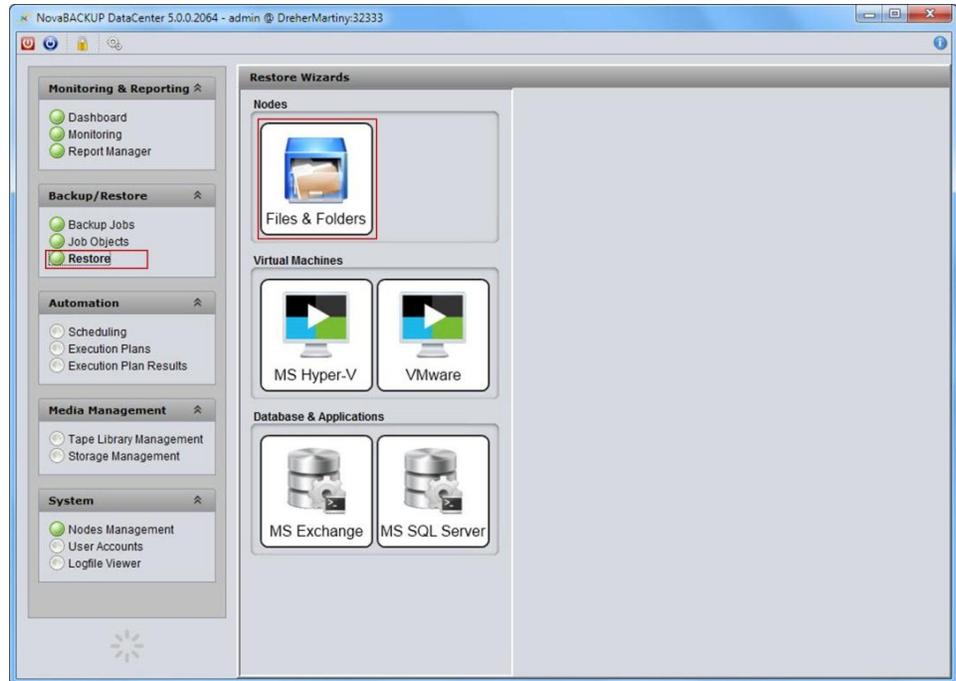


Tab	Protocol/Protocol section
<i>Result file</i>	Full protocol
<i>File set</i>	List of backup files.
<i>Job</i>	Backup job.
<i>Hiback log</i>	Database entry
<i>Error</i>	Backup error.
<i>Hiback output</i>	Backup client log file.

### 3.13 Run Restore

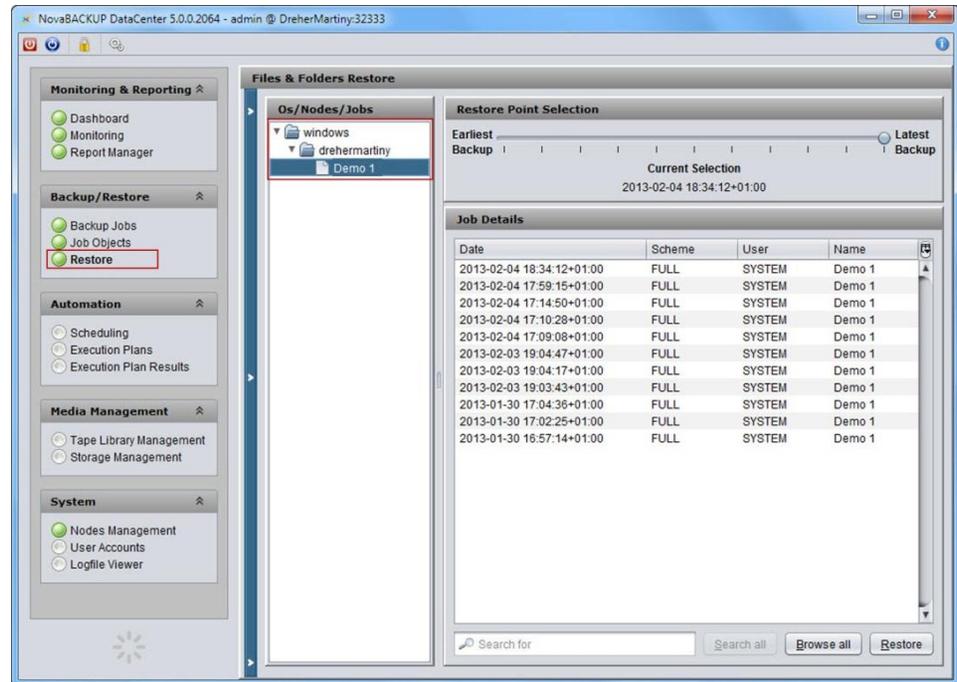
**Objective** You want to restore backed-up data.

- How to proceed**
1. Go to *Backup/Restore > Restore*.  
 ⇒ The *Restore (Wizards)* window is displayed.



#### Select the files you want to restore

1. Click in the work pane on the storage medium (e.g., *Files & Folders*) where the files you want to restore are located.  
 ⇒ The *Files & Folders Restore* window opens.



2. Open the path to the backup job under *Os/Nodes/Jobs*.

⇒ The backup jobs that have been executed are listed in the work pane *Job Details*.

### Select backup jobs

1. Start by selecting the backup jobs where the system will search for the files you want to restore.

### Search for the files you want to restore

There are two methods for finding the files you want to use in the restore operation:

1. Enter in the search window *Search for* the search parameters, e.g., to filter all of the files with the extension .log. Enter *\*/\*.log*. Click on [Search].

⇒ The search will find all of the files with the extension .log.

or

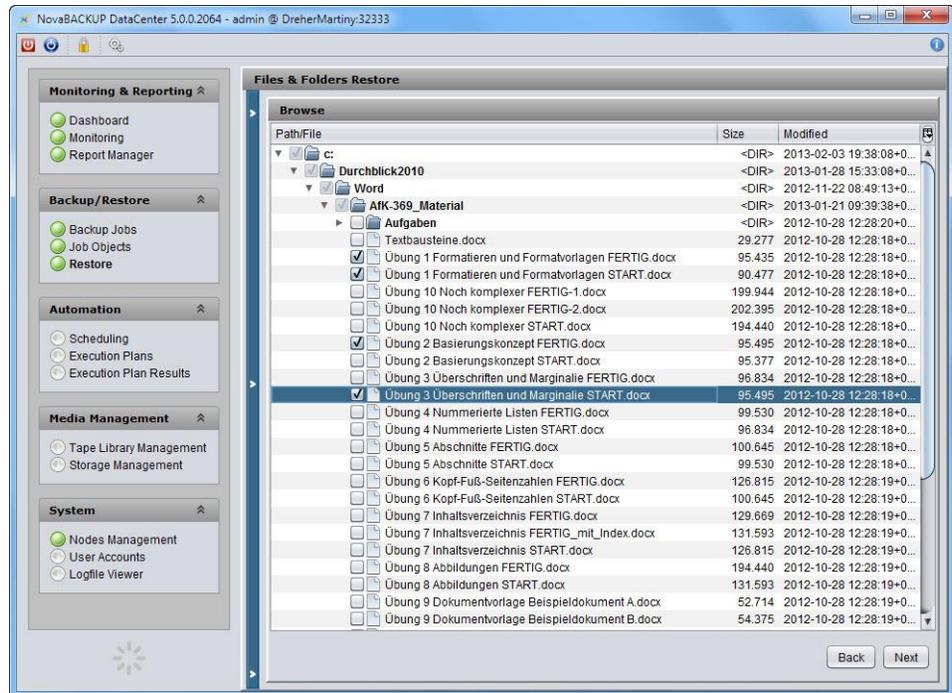
1. Click on Browse.

⇒ The drop-down file tree for the selection of the files opens.

### Select the files you want to restore

1. Put a checkmark ✓ next to the files you want to restore.

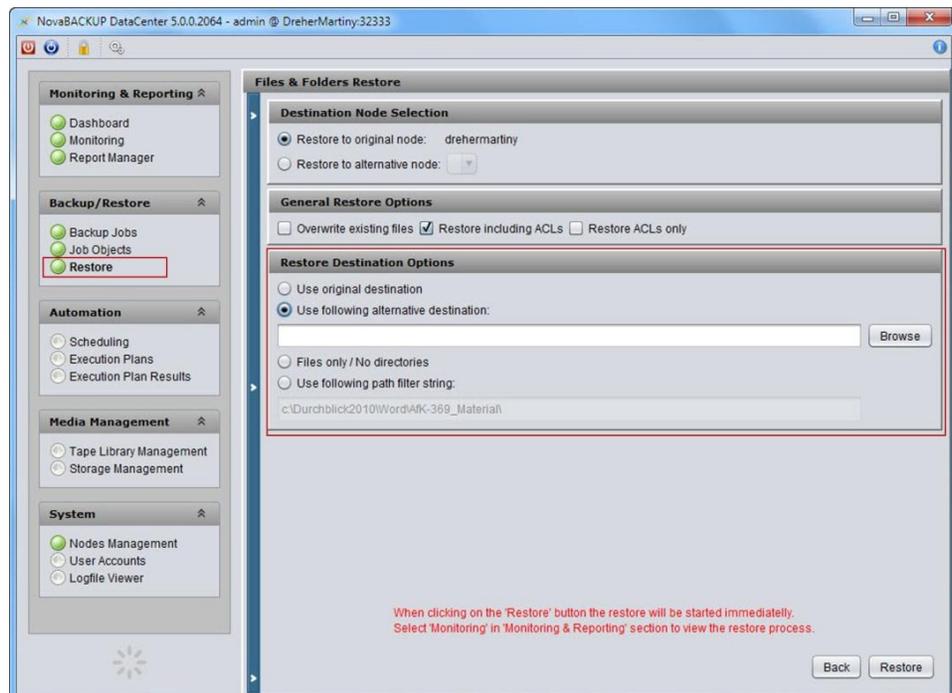
⇒ The *Browse/Search Results* window opens.



Select the drive and folder where the restored data are to be stored

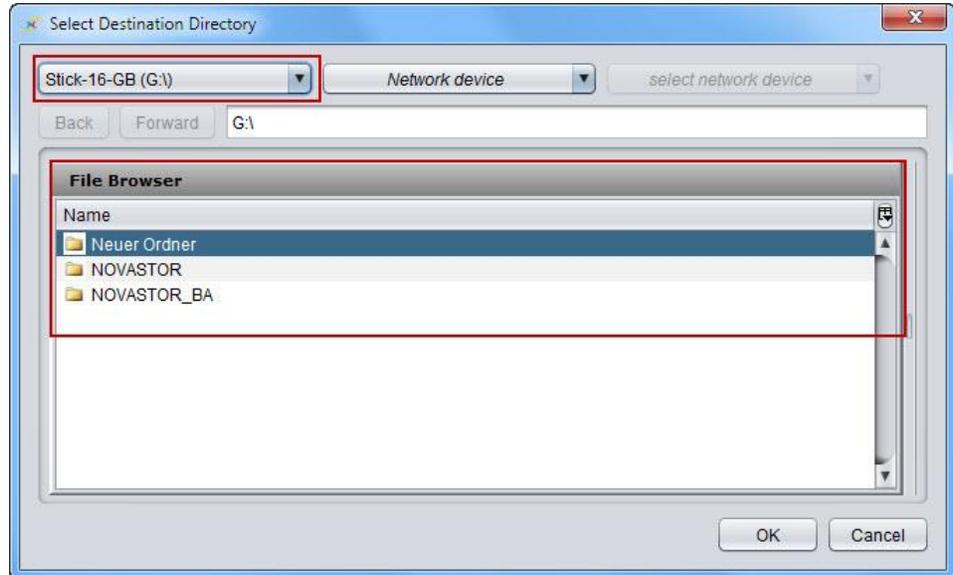
1. Click on [Next].

⇒ The *Files & Folders Restore* window opens.



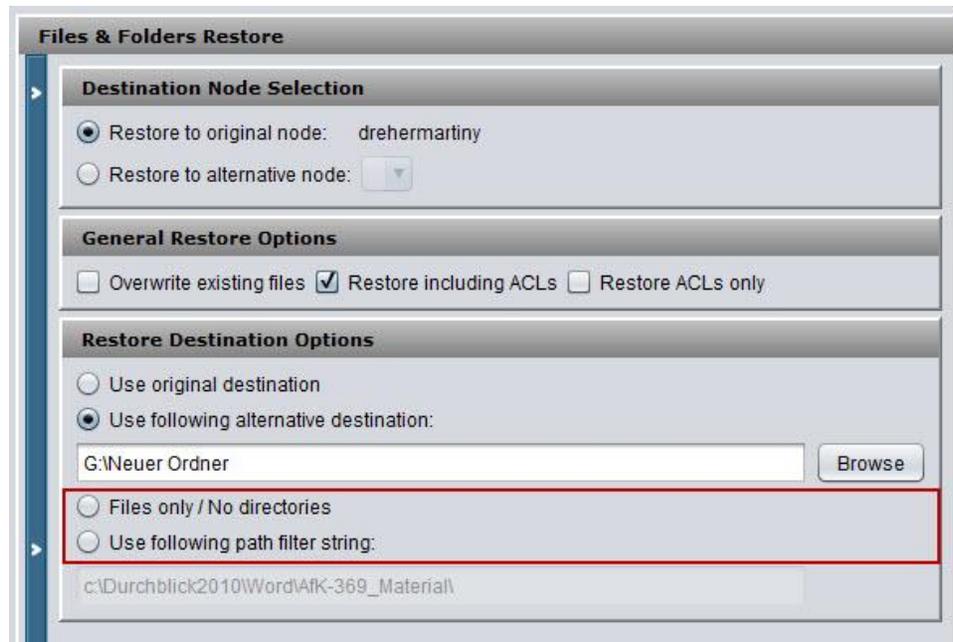
If you want to use an alternative destination, open the *Restore Destination Options* window and select > *Use following alternative destination*.

1. Click on [Browse] to select the destination (drive and directory) for the files you want to restore.
  - ⇒ The *Select Destination Directory* window opens.
2. Select the drive under [Device] and the desired directory in the file browser.



3. Click on [OK] to accept the selection.

After selecting the storage location, you have the option of restoring only the files or the files with the complete path.



*Files only / No  
directories*

Only the file name is entered in destination during restore.

*Use following path  
filter string*

During the restore operation, part of the original path will be replaced by the path entered under *Use following alternate destination*.

1. Select the specifics for the path you want to use.
2. Click on [Restore].

**Result** The selected files for restoration are stored in the selected destination directory.

## 4 Best Practices

**General** This chapter describes tried and proven procedures which will help you to make optimal use of the program.

- Backup jobs under control
- Retention periods for backups
- Addressing backup clients on the network

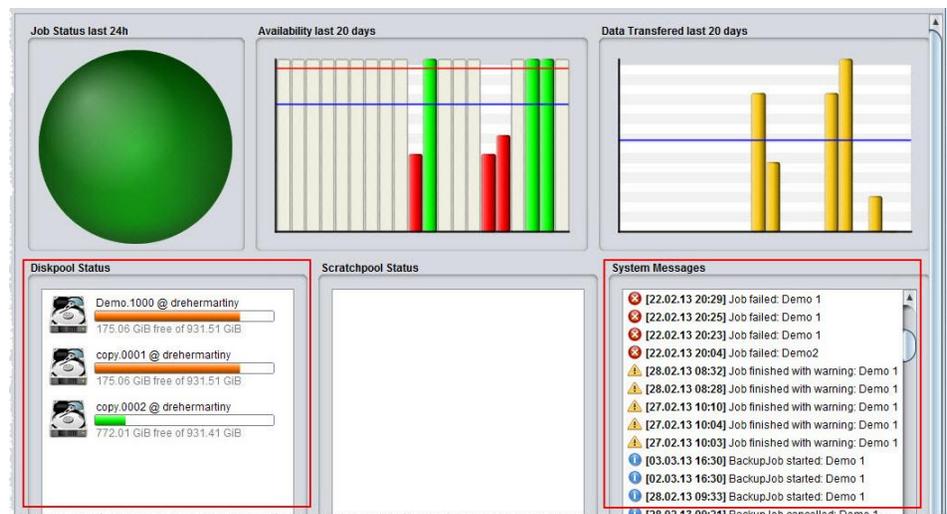
### 4.1 Backup jobs under control

**Objective** You want to have the backup jobs you have run under control. You want to know if the backup jobs ran without any errors, and you want to know if there are any errors in a backup job.

**How to proceed** You can always check the *Dashboard* to find out about the execution of backup jobs and messages.

1. Go to *Monitoring & Reporting > Dashboard*.

- ⇒ The dashboard opens and shows messages about the executed backup jobs, for instance, in the *System Messages* window and the storage capacity of the disk pools in use in the *Diskpool Status*.



You can also choose the option of receiving information about the execution by e-mail.

We recommend two functions, which should be run parallel, so that you truly have the backup jobs under control:

1. Set up the system to send you an e-mail immediately whenever there are errors in backup jobs.
2. Set up the system to send backup reports by e-mail according to a regular schedule.

The notification of errors in backup jobs by e-mail provides immediate alerts about the failure of the job.

But if the backup system is malfunctioning or if e-mails do not arrive because the e-mail system is malfunctioning, you cannot determine if the jobs have all been executed properly or if the system is malfunctioning. This is why we recommend setting up the system to send you e-mail reports according to a regular schedule.

**Result** If you receive a report, but no e-mails about failures in backup jobs, you can be certain that the backup system is functioning properly and that there were no errors in the backup job.

If you do not receive a report, there could be a problem with the e-mail system.

**See also**  Messages und reports per e-mail [→ 50]

## 4.2 Retention periods for backups

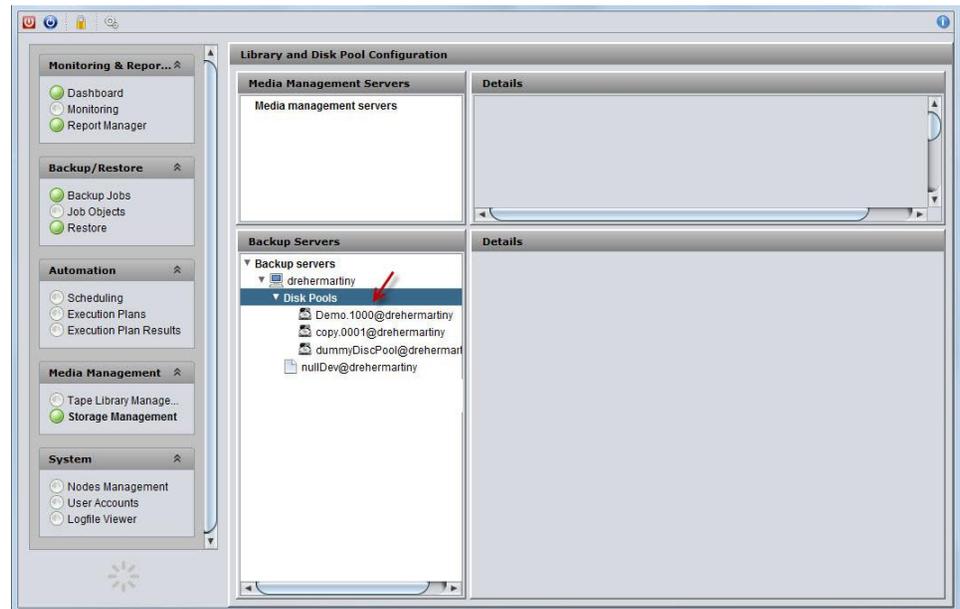
**General** This chapter discusses the retention periods for backups. The retention periods in DataCenter 6 are defined in the media pools (disk or tape) rather than in the backup job. This has the advantage that a media pool contains only backups which have the same retention periods. This is especially advantageous when backups are put on tape. Since data are written sequentially onto tapes, backups cannot be selectively released if the retention periods are defined in the job itself. The longest retention period for the backups would block the tape for that period. But since the retention periods in one media pool are the same, only the retention period of the most recent backup is checked. If the latest backup is older than the defined retention period, the entire medium is released.

These are your options:

- You can define varying retention periods for each of the media pools.
- If you do not want the backups to be deleted after expiration of the retention period, your backups can be copied from one media pool to another media pool which can be assigned a different retention period.

How to proceed 1. Go to *Media Management > Storage Management*.

⇒ All of the disk pools which have been defined are displayed under *Disk Pools* in the *Backup Servers* window.

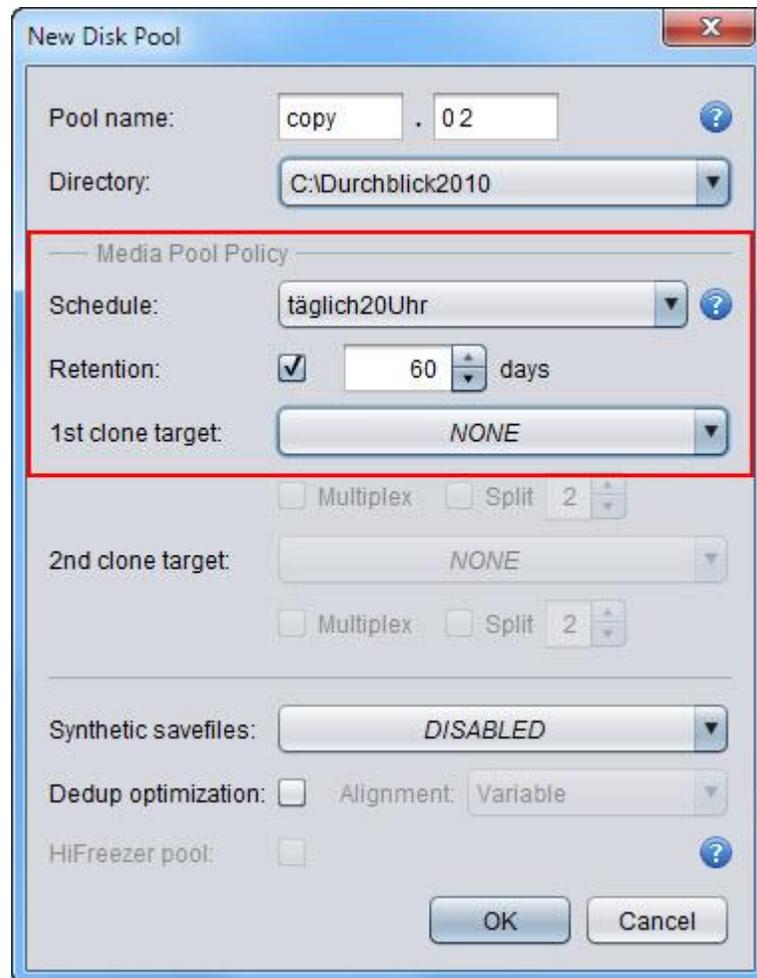


In our example, the selected disk pool *Demo.0001* has a retention period of 30 days. After release of the backups in disk pool *Demo.0001*, the backups are copied to the disk pool *Copy.0001* and can be retrieved from that location, e.g., for a restore operation.

### Define new disk pool

1. To define a new storage medium with a retention period, right-click on *Disk Pools* and select *Create disk pool* in the context menu.

⇒ The window for the definition of a new disk pool opens.

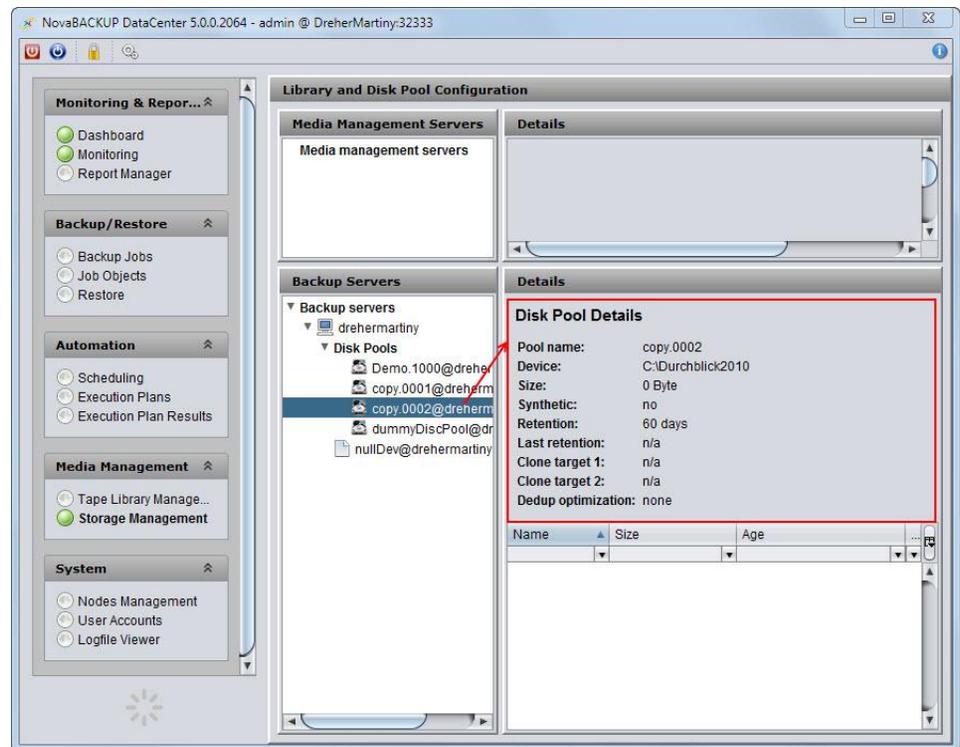


2. Enter a name and select the directory for the storage.

### Define rules for the disk pool

1. Go to *Schedule* to select a time schedule for the backups. The schedule in the job or in the disk pool.
2. To define the retention period, enable *Retention* and enter the desired retention period, e.g., 60 days.
3. If you want the backup to be copied and stored on a different medium after the expiration of the retention period, select the destination disk pool under *1st clone target*.
4. Click on [OK] to save the settings.

**Result** The new disk pool has been created.



Since copies of the backups after the expiration of the retention period will not be made, the backups in this disk pool will be irretrievably deleted after 60 days.

### 4.3 Addressing backup clients on the network

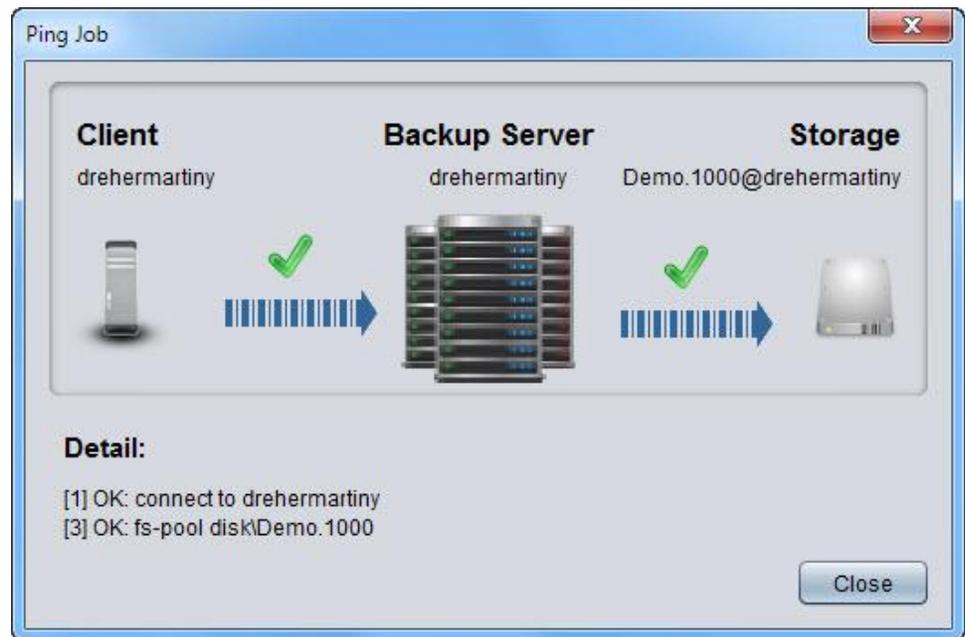
**General** This chapter describes how you can test communications between the client and the backup server. The test is conducted using the "Ping" function.

The "Ping" function tests:

- Whether the central management recognizes the client name.
- Whether the central management is connected to the client.
- Whether the client data transfer is working.
- Whether the client recognizes the backup server name.
- Whether the client is connected to the backup server.
- Configuration of the backup server media pool and availability.

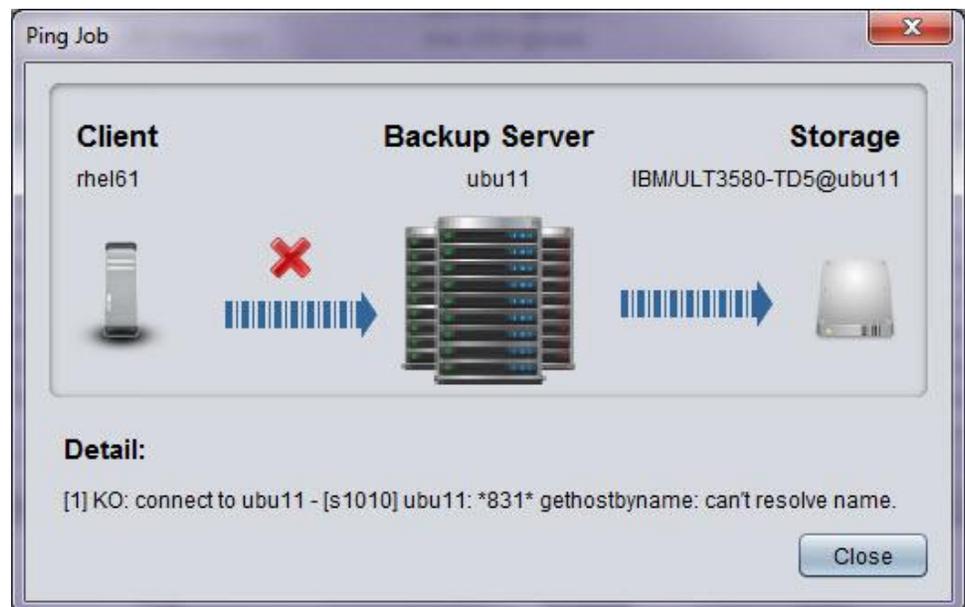
- How to proceed**
1. Go to *Backup/Restore > Backup Jobs*.
    - ⇒ The window containing the list of the current backup jobs is displayed.
  2. Right-click on any backup job and left-click on *> Ping* in the context menu.
    - ⇒ The "Ping" function is launched and tests the connections.

**Result** If all of the settings are correct and all of the selected systems are accessible, the functioning connections are displayed with a green checkmark in the *Ping Job* window.



### Results containing errors

If a connection is not correct, it will be marked with a red checkmark in the *Ping Job* window.

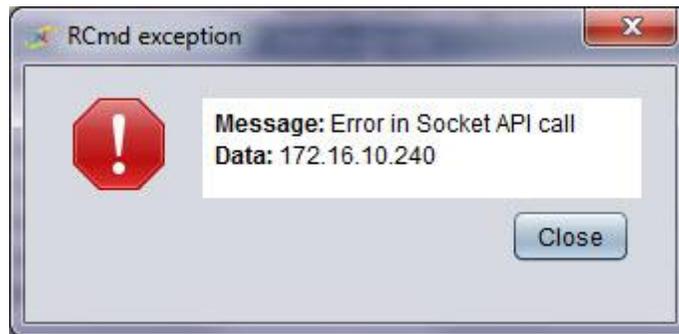


**Troubleshooting** Reasons for errors in the results:

- Central management cannot recognize the client name.
- The client port is blocked by a firewall.
- The client cannot recognize the backup server name.

**Central management cannot recognize the client name.**

If the central management did not recognize the client name, an error message and the client's default ID address will be issued in a window after the "Ping" function test.



The error message *Error in Socket API call* means that this ID address could not be connected with the TCP connection (stream socket).

Possible causes:

Possible causes	Remedy
Client IP address has been changed.	Correct the IP address in Nodes Management.
A firewall (including the Windows Firewall) is blocking the client port from central management to the client.	Disable the firewall on the client side or create a rule for connections to the client at port 32334.
The client service is not running.	Initiate NBK DC Remote Executor Service/service on the client.

**The Remote Executor port/the client is blocked by a firewall**

If the client port is blocked by a firewall, a DOS window containing a command and the results is briefly displayed after the "Ping" function test:

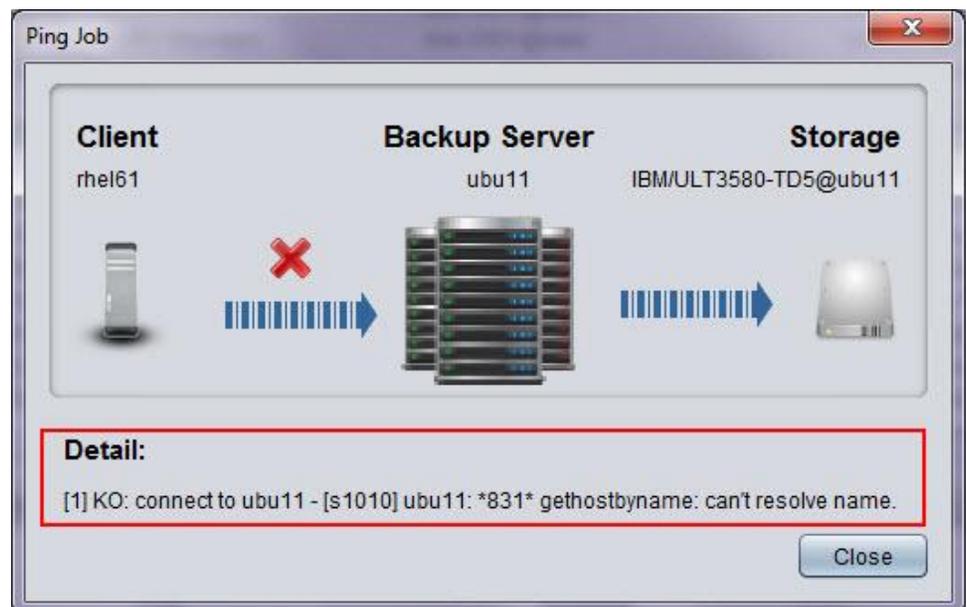
**Command:** netstat -ano | findstr SYN

**Results:** TCP | 172.16.10.65:57963 | 172.16.0.180:32334 | SYN\_SENT | 2904

TCP	Protocol.	
172.16.10.65:57963	Sender port (Sender ID).	
172.16.0.180:32334	Client Port (Receive ID)	
SYN_SENT	TCP Status	SYN_SENT is the typical indicator for the existence of a firewall on the client side blocking the client port.
2904	Start ID for the connection to the client.	

**The client cannot recognize the backup server name.**

The failure of the client to recognize the backup server name is displayed in the test window after the conclusion of the "Ping" function test.



See also  Test network address [→ 21]