

# Scheduling backups

## Creating and Editing a Backup Plan

The screenshot shows the 'Disk Image' backup wizard interface. It is titled 'Edit the Plan for this Backup' and is divided into three main sections:

- 1. Select a Template for your Backup Plan:** A dropdown menu currently set to 'None'.
- 2. Add/Edit Schedules:** A table with two columns: 'Backup Type' and 'Schedule'. Below the table are three buttons: 'Add Schedule' (with a plus icon), 'Edit Schedule' (with a pencil icon), and 'Delete Schedule' (with a minus icon).
- 3. Define Retention Rules:** A section with a question mark icon and a dropdown menu set to 'Apply retention rules to matching backup sets in the target folder'. Below this are three rows of retention rules:
 

Backup Type	Keep	Count	Unit
<input checked="" type="checkbox"/> Full	Keep	12	Backups
<input checked="" type="checkbox"/> Differential	Keep	4	Backups
<input checked="" type="checkbox"/> Incremental	Keep	10	Backups

 There is also a checkbox for 'Create a Synthetic Full if possible' which is currently unchecked.

At the bottom of the wizard, there are additional options:
 

- Run the purge before backup.
- Delete the oldest backup set(s) if less than 5 GB on the target volume (minimum 1GB)

 The bottom bar contains an 'Advanced Options' link, a 'Help' button, and navigation buttons: '< Back', 'Next >', 'Cancel', and 'Finish'.

The wizard splits the task of scheduling backups and setting retention rules into 3 steps as follows:

### Select a Template for your Backup Plan

1. Click the drop down box and chose an applicable template.

A summary is given for each template to help you select the template you require.

**Grandfather, Father, Son.**  
 Daily Incremental ("Son"), weekly Differential ("Father"), and monthly Full ("Grandfather") backups.

**Differential Backup Set**  
 A Full backup is created periodically followed by daily Differential backups.

**Incremental Backup Set**  
 A Full backup is created periodically followed by daily Incremental backups.

**Incrementals Forever**  
 Incrementals forever optimizes backup space and time by only ever creating a single Full backup.  
  
 After this Incremental backups are created ad infinitum. The Full backup is consolidated with subsequent Incremental backups once the specified number of Incremental backups is reached.  
  
 This is also known as a Synthetic Full backup.

## Add/Edit Schedules

When you have selected the template you want to use you can view the planned schedule.

**1. Select a Template for your Backup Plan**  
 Grandfather, Father, Son.

**2. Add/Edit Schedules**

Backup Type	Schedule
Full	At 09:00 on the first Mon of every month, starting 02/03/2015
Differential	At 09:00 every Mon of every week, starting 02/03/2015
Incremental	At 09:00 every Mon, Tue, Wed, Thu, Fri of every week, starting 02/03/2015

Buttons: Add Schedule, Edit Schedule, Delete Schedule

**3. Define Retention Rules**

Apply retention rules to matching backup sets in the target folder

- Full Keep 26 Weeks
- Differential Keep 4 Weeks
- Incremental Keep 10 Days

Run the purge before backup.  
 Delete the oldest backup set(s) if less than 5 GB on the target volume (minimum 1GB)

Advanced Options | Help | < Back | Next > | Cancel | Finish

### Resolving Scheduling Conflicts

If multiple backup types are scheduled run at the same time on the same day then only one backup will run.. For example, when scheduling a **Full backup on the first Monday** of each month and scheduling a **Differential for every Monday**, on the first Monday a

Full and Differential are both scheduled to run at the same time. In this scenario **only the Full backup will run.**

- Full backups take precedence over Differentials and Incrementals
- Differential Backups take precedence over Incrementals.

**To add to this schedule:**

1. Click **Add Schedule** and select either Full, Differential or Incremental.
2. Set the frequency for the backup schedule.

**Full Backup Schedule**

Full Backup Schedule Settings

**Frequency**

- Monthly
- Weekly
- Daily
- One Time Only
- On Event

**Settings**

- Every
- Selected Day

First Monday

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Start Time: 09:00

Start Date: 02 March 2015

If missed then run at next start-up

OK Cancel

3. Click **OK**.

**To Edit the schedule:**

1. Select the schedule you want to edit and click **Edit Schedule**.
2. Change the schedule to meet your needs and click **OK**.

### Full Backup Schedule

#### Full Backup Schedule Settings

**Frequency**

Monthly

Weekly

Daily

One Time Only

On Event

**Settings**

Every

Selected Day

First ▼ Monday ▼

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Start Time: 09:00 ▼

Start Date: 02 March 2015 ▼

If missed then run at next start-up

OK Cancel

**To delete a schedule:**

1. Select the schedule you want to delete and click **Delete Schedule**.
2. A confirmation box appears, click **Yes**.

### Macrium Reflect

#### Confirm delete

Confirm deletion of the backup schedule(s):

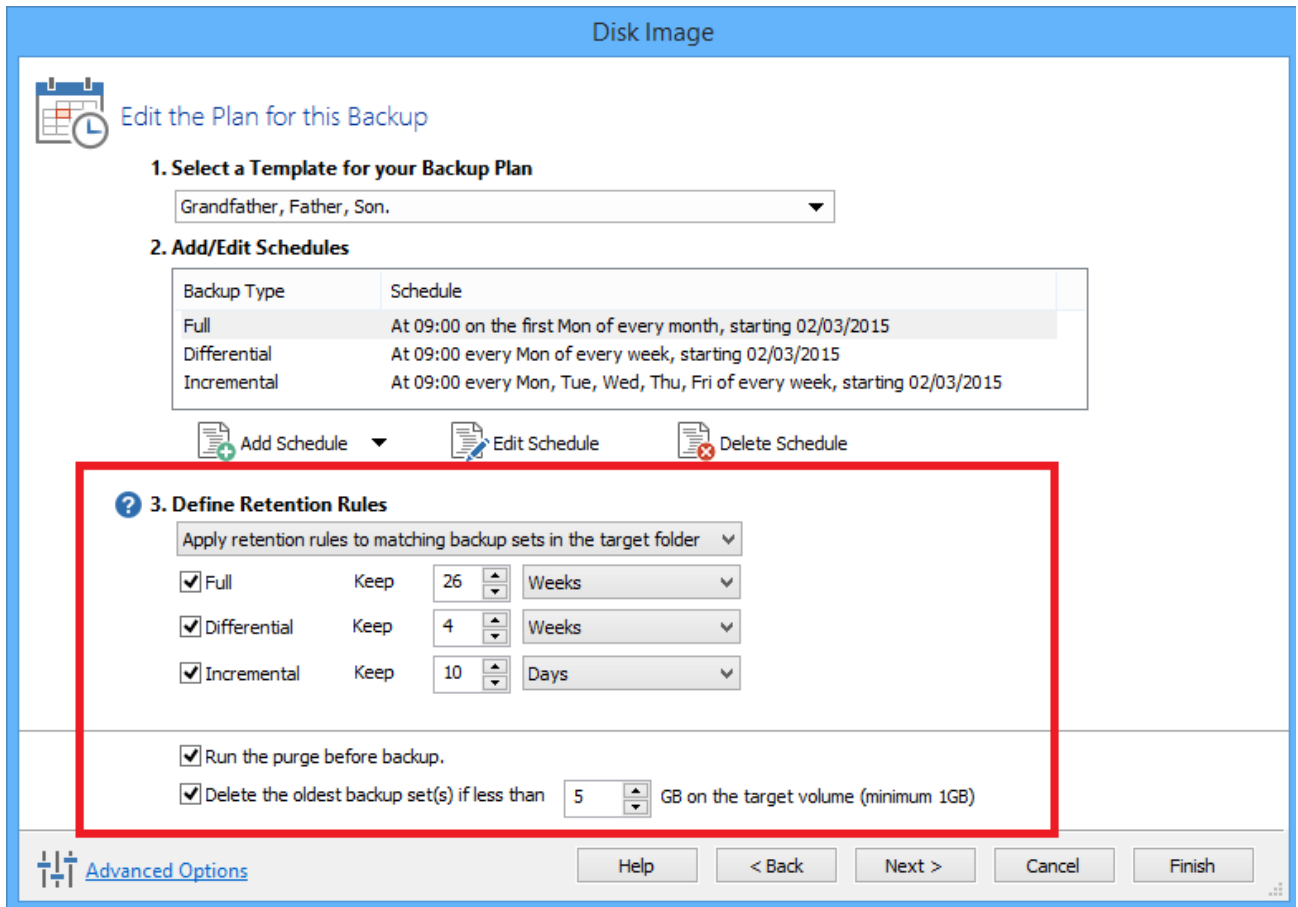
At 09:00 on the first Mon of every month, starting 02/03/2015

Yes
No

? Click Yes to delete or No to cancel

**Define Retention Rules**

1. Establish how long each type of backup in the schedule should be kept. It is advisable to keep backups for the recommended period, however you can de-select the backup type if you do not want to retain it.

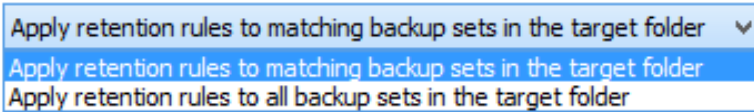


The new Macrium Reflect retention rules provide a powerful and flexible way to manage the lifetime and storage space used by your backups.

**Choose how backups are matched and retention rules are applied to the target folder**

Retention rules are applied to the target folder of the backup by selecting one of two options:

**3. Define Retention Rules**



**a. Apply retention rules to matching backup sets in the target folder.**

**Disk Images** are purged if they contain **exactly the same Partitions** as the current Image. Partitions are identified using the unique **Disk ID** stored in sector 0 of the disk and the **Partition sector offset**.

**Note:** For GPT disks the unique GPT disk GUID is used instead of the Disk ID

For **File and Folder** backups retention rules are applied according to the '**Backup Set Matching**' option select in the '**Advanced Properties**' for this backup.

**b. Apply retention rules to all backup sets in the target folder.** All backup sets in the target folder of the same type (Disk Image or File and Folder) are purged according the retention rules.

**Note:** This option uses the same logic as Macrium Reflect v5

**Select the age or number of backup types that you wish to keep**



- **Note:** This can add a significant amount of time to the backup process.
- **Comments** to set comments for the image or backup.
- **Shutdown** to set whether the computer should be shutdown after a backup task has completed.