BackupAssist v8 Beta – Quick start guide

BackupAssist v8 brings a set of new backup and restore features. This guide introduces these features and how they will work in BackupAssist v8.
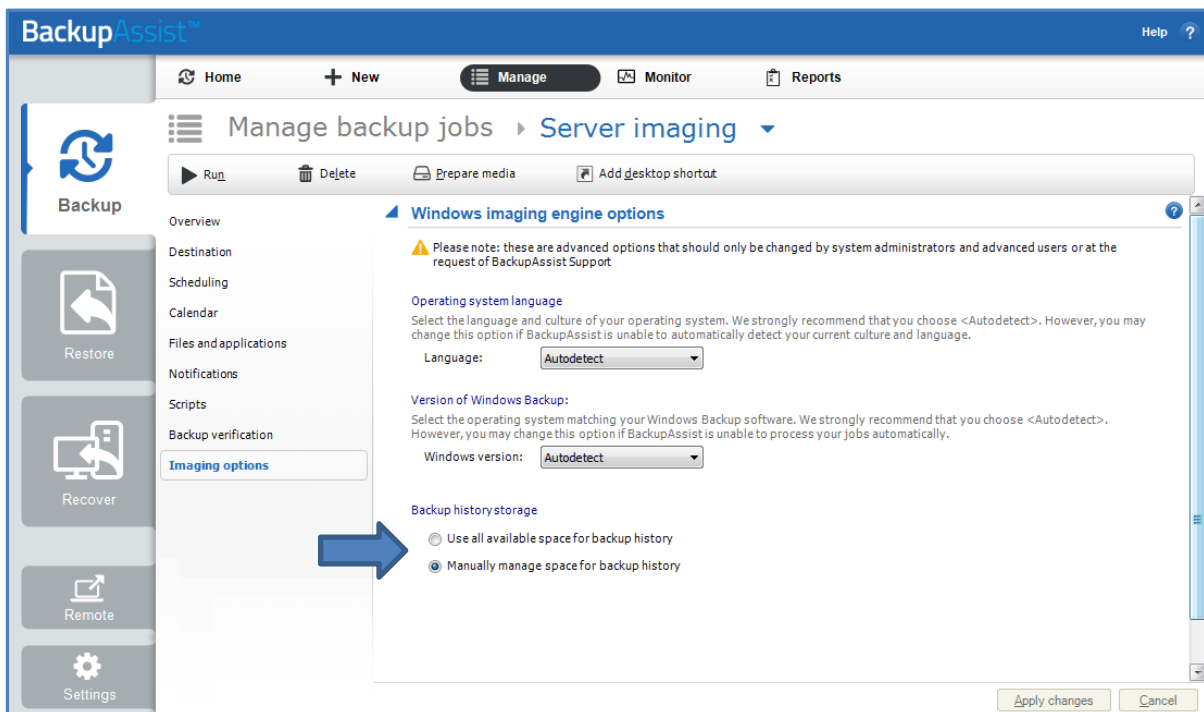
Warning: BackupAssist v8 beta should not be installed on production systems

> **Note:** How the new features are displayed may change in the final version of BackupAssist v8.

Improved System Protection destination management

A new **Backup history storage** feature, allows more control over how a System Protection backup's destination is allocated for shadow storage. To access **Backup history storage,** select a backup job from the Backup tab's **Manage** menu, select **Edit** and then select **Imaging options**.

Shadow storage is used by VSS to store historical backup data from previous backup jobs.

Figure 1: Imaging options - NEW Backup history storage

Backup history storage provides two options:

- **Use all available space for backup history**

  With this option, BackupAssist makes all free space on the backup destination available for storing historical backups. The exact amount of the space used changes with time, depending on the amount of space used by the latest backup and other data.

- **Manually manage space for backup history**

  With this option, Windows is used to determine the shadow storage size. You can allow Windows to automatically determine the size, or manually manage the size yourself using either the Windows Server settings or the vssadmin tool.

  Explanations of these tools and how to use them can be viewed by selecting the HTML Help icon in the **Imaging options** screen.

Improved System Protection reporting

System Protection backup reports will have new and improved sections to help you understand what backups you have, what restores are available and what space has been used.

Backups (Restore points)

This new section will list all of the backups you have on the backup destination. This will make it easy to see what restore options are available, and how far back you can restore from.
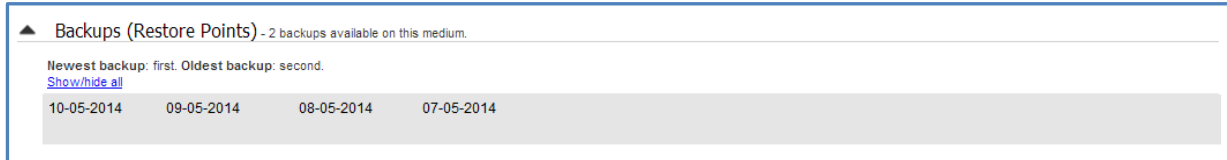

Figure 2: System Protection report - NEW Backup (Restore points)

Media usage

This section breaks down the space available at the backup destination for both the disk space and shadow storage. Shadow storage is used by VSS to store historical backup data from previous backup jobs.

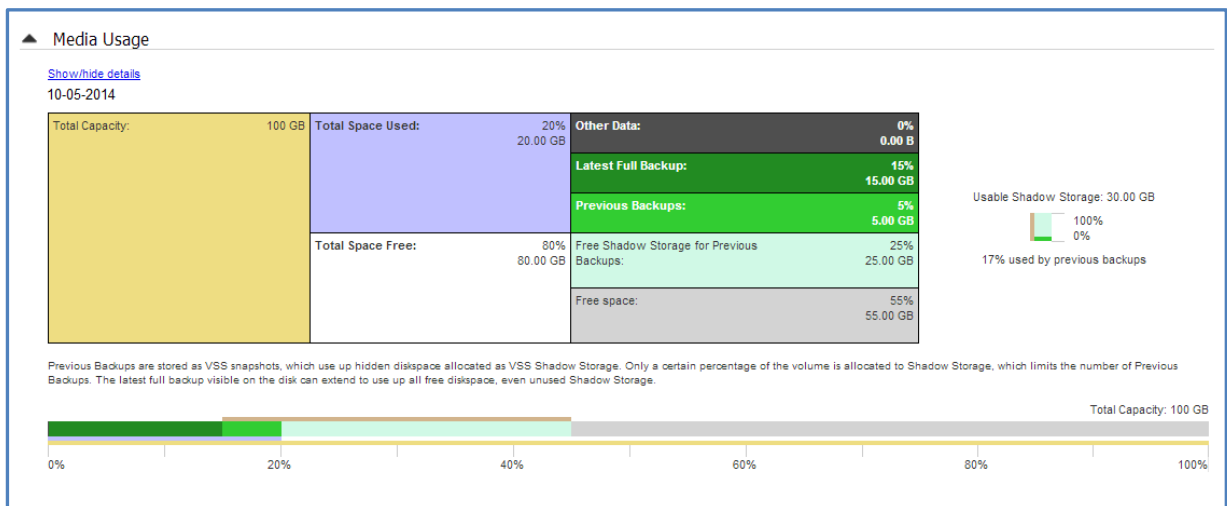The example below shows the media usage report section for a Data container.

Figure 3: System Protection report – NEW Media usage section

Total Capacity of the backup destination is shown on the left. The usage graph breaks this amount down into **Used** and **Free** space, and then into more detailed allocations, such as shadow storage.

Fast incremental backups for System Protection

Performance improvements means BackupAssist v8 will have fast incremental image backups enabled by default. These backups use snapshots to determine what data has changed, and can reduce a 20-minute incremental backup job to 2 minutes. This not only means that backups are faster, but that multiple backups per day are possible.

If you have upgraded from an earlier version of BackupAssist, **Fast incremental backups** will be enabled when the next System Protection backup job runs. A note will also be added to the report.

Backup verification

After each File Protection, File Archiving or System Protection backup job has run, BackupAssist v8 will verify the backup. This backup verification is implemented by default for standard data backups.

The backup verification will perform the following steps to simulate a restore:

- Access the backup destination.
- Check the backup catalogue's integrity.
- Open and read a sample of the backup files.

Enabling and disabling Backup verification

To enable or disable Backup verification, select the backup job from the **Manage** menu, select **Edit** and then select **Backup verification**. This will display the Backup verification screen. The configurations made in the Backup verification screen will only apply to the selected backup job.

The verification options available will depend on the backup. E.g. If you are backing up a Hyper-V Server, the Hyper-V backup options will be available. The same applies to Exchange Server backups.
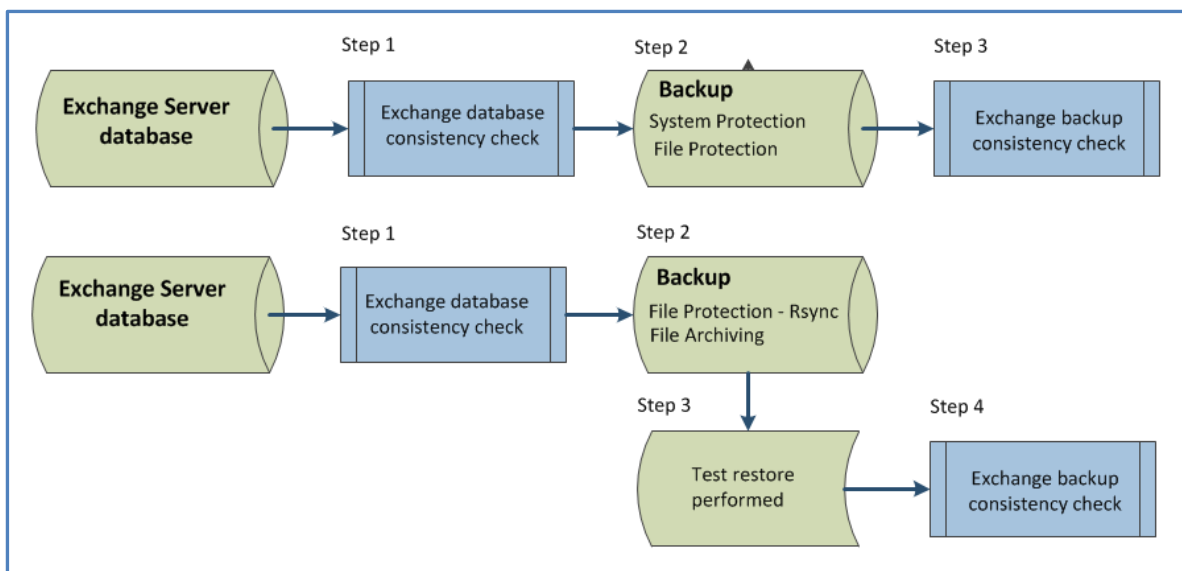
Backup verification for server applications

Server applications use large files and databases, and require a specialized verification process.

The server application backup verifications available are:

- **Exchange Server** backup verification: An Exchange Server backup verification will access the backup destination, open the Exchange EDB file and perform a consistency check.
- **Hyper-V Server** backup verification: A Hyper-V backup verification will access the backup destination and mount a guest.

The diagram below shows the processes used to verify Exchange data for each backup type.

Figure 4: NEW Backup verification steps

The verification process takes longer for File Archiving and Rsync backups, because large application files must be restored to a temporary folder. For this reason, verification is implemented as follows:

- Enabled by default for File Protection and System Protection backups.
- Must be manually enabled for File Archiving and File Protection with Rsync backups.

Custom Scheme

In previous versions of BackupAssist, you were limited to a set of pre-configured backup schemes. BackupAssist v8 removes this limitation with the introduction of the **Custom Scheme**.

The Custom scheme allows you to plan a daily, weekly, monthly, quarterly and yearly backup rotation.

➢ For daily backups, you can select the days the backups are to run on and specify the backup media's *Daily pool*. For example, select a pool of 4 media and the daily backups will use those media in successive backups, with the 5th backup re-using the 1st media as the pool is rotated.

➢ For weekly backups, you can select a weekly archive backup. This overrides the scheduled daily backup and uses a *Weekly pool* of media, which is rotated by the weekly backups.

➢ For monthly backups, you can specify the day of the month that the monthly backups are run on. This backup overrides the daily and weekly backups, and uses its own pool of rotated media.

➢ Quarterly backups follow the same format. Yearly backups are not included in the v8 beta.

Once a backup job with a **Custom Scheme** has been created, the resulting schedule can be viewed by selecting the backup job from the **Manage** menu, selecting **Edit** and then the **Calendar** option.
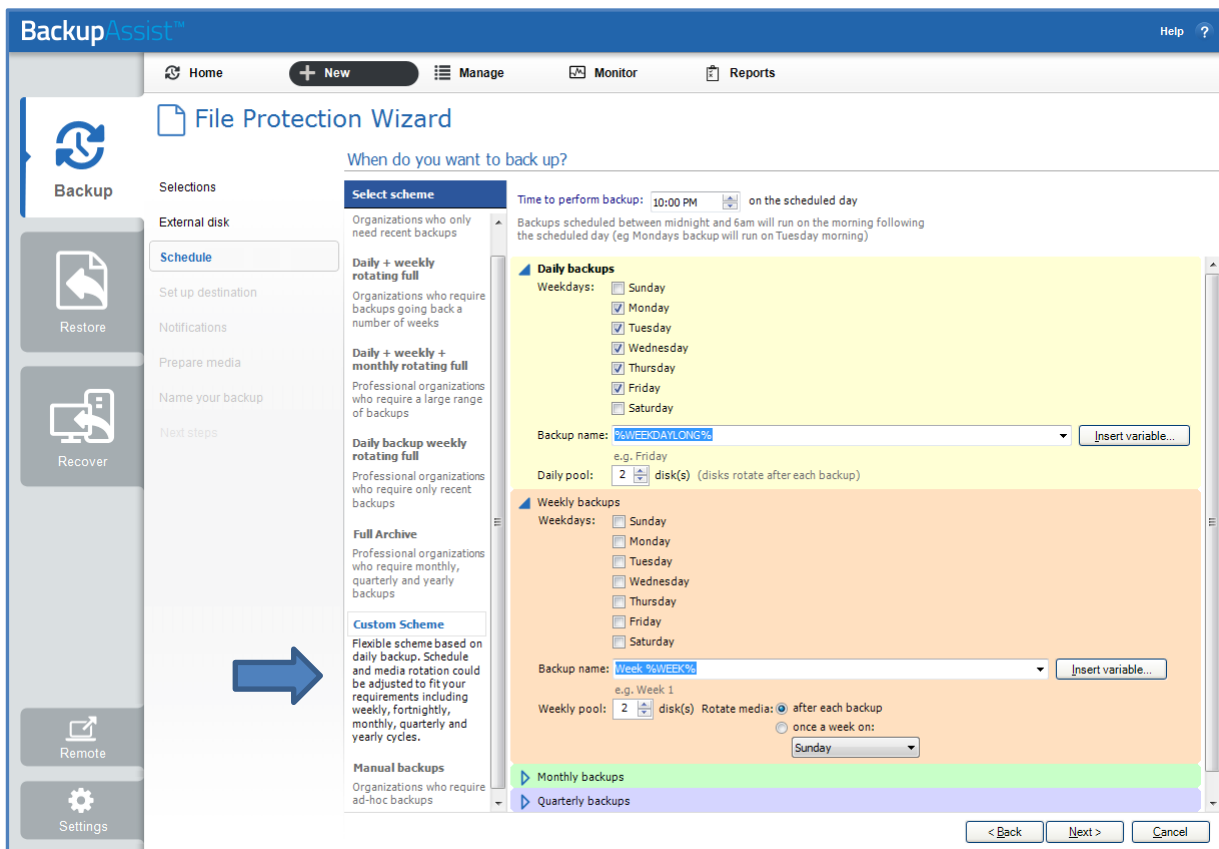

Figure 5: Schedule - NEW Custom schemes

The customizations possible with this powerful scheduling option include:

• The ability to configure layered archive backups, with individual planning options.

• The option to modify the **Backup name** using variables.

• A flexible media pool, based on the media type selected in the **Set up destination** screen.

Improved Hyper-V backups

Backing up Microsoft Hyper-V hosts and guests is made easier in BackupAssist v8. When you create a **System Protection** backup on a Hyper-V Server, the data selection screen will zoom in on the Hyper-V guests and allow Hyper-V guest selection by default, rather than a generic bare-metal backup.

The backup job's **Selections** screen, now allows you to select Full VSS Mode or Copy VSS Mode.

- *Full VSS Mode* is enabled by default and will allow a VSS log cleanup. If you select one guest, Full VSS Mode will back up all guests on the same volume.
- *Copy VSS Mode* can be used to select individual guests and save backup space, but should only be used for a secondary backup.

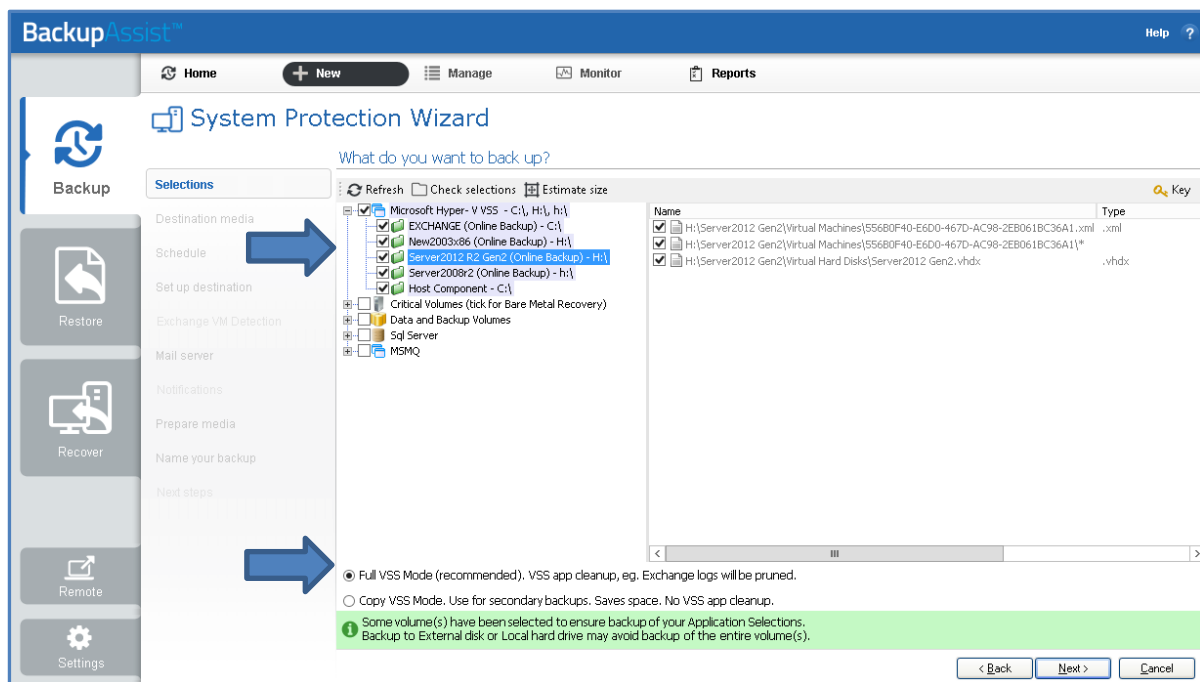**Note**: The Full and Copy VSS modes do not affect full or incremental backups.

Figure 6: System Protection Selections – NEW Hyper-V backup display

CSV Staging area selection

When you create a backup job for a Hyper-V environment, there will be a dedicated step for Cluster Shared Volumes. This step will begin with a defined backup destination, which takes the guesswork out of your staging area selections.

Exchange VM detection

System Protection Hyper-V backups now have a dedicated step to provide Exchange authentication information. This step allows BackupAssist to detect what guests have an Exchange Server, and list the EDB files available for each guest when you perform an Exchange Granular Restore.

Operating System Support

BackupAssist v8 and its Add-ons do NOT support:

- Windows XP and Vista
- Windows Server 2003 and Small Business Server 2003 (includes NTBackup and RSM)
- Exchange Server 2003 and Outlook 2003.