BackupAssist™ v8

# File Protection

## Whitepaper

backupassist.com

Cortex I.T.

# Contents

# 1. Introduction

File Protection

For historical versioning of files

Method: File Replication

Backup to Disk / iSCSI / NAS / Rsync

BackupAssist File Protection is a feature for administrators who want a powerful, yet simple, file backup solution out-of-the-box. File Protection can be configured in minutes to create scheduled backup jobs without the need for complex scripts or settings.

File Protection backups replicate data to backup media and can take advantage of technologies such as *data encryption*, *backup-with-history replication* and *single-instance store*. File Protection can be used with other BackupAssist technologies, such as System Protection and RecoverAssist, for a complete data protection and data recovery solution.

## Documentation

This whitepaper provides a comprehensive guide to BackupAssist File Protection and can be used in conjunction with other BackupAssist guides.

- For information on backing up files over the internet see the File Protection with Rsync Whitepaper
- For information on the BackupAssist Backup tab, see the BackupAssist Backup Tab Whitepaper.
- For information on the BackupAssist Restore tab, see the BackupAssist Restore Tab Whitepaper.
- For information on the BackupAssist Recover tab, see the BackupAssist Recover Tab Whitepaper.

## Licensing

File Protection is a standard feature included with the BackupAssist license. To back up data across the internet with Rsync requires the *Rsync Add-on* license, once the initial trial period has expired. Please contact your local BackupAssist reseller or distributor for pricing information, or visit www.BackupAssist.com.

For instructions on how to activate / deactivate license keys, visit our Licensing BackupAssist page.

## Modes of operation

File Protection offers two modes of operation: mirror and backup-with-history. For backups to removable media, the mode can be selected at the *Set up Destination* step when a backup job is created. For other media types, the mode is defined by the *schedule* selected in the *schedule* step.

### Mirror mode

The Mirror mode creates an exact replica of your files and folders (as the data appeared at the time of the backup). Only one backup will be stored at any one time, with no history available. This mode is useful for situations where a primary drive or a server needs to be replaced quickly.

### Backup-with-history mode

The *Backup-with-history* mode creates a new set of backup data in a uniquely named folder each time a backup job runs. Backups created using this mode are useful for maintaining version history over a long period of time.  For backup jobs to disk-based destinations, you can even configure backup storage options to make sure that disk space on the backup destination is properly utilized.

## Single-instance store

BackupAssist's File Protection includes a powerful replication technology called single-instance store. With single-instance store enabled, only one unique copy of each file is stored on your backup device. Single-instance store backups are similar to incremental backups, because only new or modified files are actually copied to your backup device each time a backup runs. This saves time and disk space.

The single-instance store process is completely transparent. If no previous backup exists on the backup device, BackupAssist will perform a full backup of the selected data. For subsequent backups, only new or modified files will be backed up, but a new and complete backup set will appear on your backup device. This backup takes no more space than the new and modified files that were copied there.

If you view the backup destination, it will look as if a full backup was performed – refer to the backup report to confirm if a single-instance store is working correctly.

**Important**: File Protection backups cannot use single-instance store when the backup is saved on a ReFS formatted destination. This means all of the data will be backed up each time the backup job runs.

## Advantages of File Protection

This section looks at the advantages of File Protection over traditional file replication methods.

**No scripting required:** Easily set up basic mirroring backups for important files, or comprehensive archival backups with hundreds of days of backup history to restore from.

**Fully automated scheduling:** Backup jobs are automated with BackupAssist's one-click scheduler. The scheduler provides a selection of pre-configured, customizable backup schemes to choose from.

**Fully automated monitoring:** You will receive an automated email report after each backup job to inform you of the backup's success or failure.

**Multiple restore points**: Create a series of mirror backups on your backup device, one for each day. To restore, simply copy the files back to the relevant folder or use the BackupAssist Restore Console.

**Independent encryption:** Encryption (via TrueCrypt) can be set on the backup destination without affecting the data source.

**Volume Shadow Copy Service support:** BackupAssist is a VSS-aware application, so File Protection backups can detect VSS applications such as Exchange, SQL, Hyper-V and SharePoint.

**Preserve certain NTFS attributes:** A File Protection backup is able to preserve certain NTFS file attributes, set on the original source files. If you want to maintain NTFS file attributes we recommend you choose a backup destination formatted in NTFS. Preservation of NTFS attributes is enabled by default on destinations that support it.

| File attributes at destination | Preserved? |
|---|---|
| Windows File Attributes | ✓ |
| Creation time | ✓ |
| Last modified time | ✓ |
| NTFS security (ACLs) | ✓* |
| NTFS alternate data streams (ADSs) | ✓* |

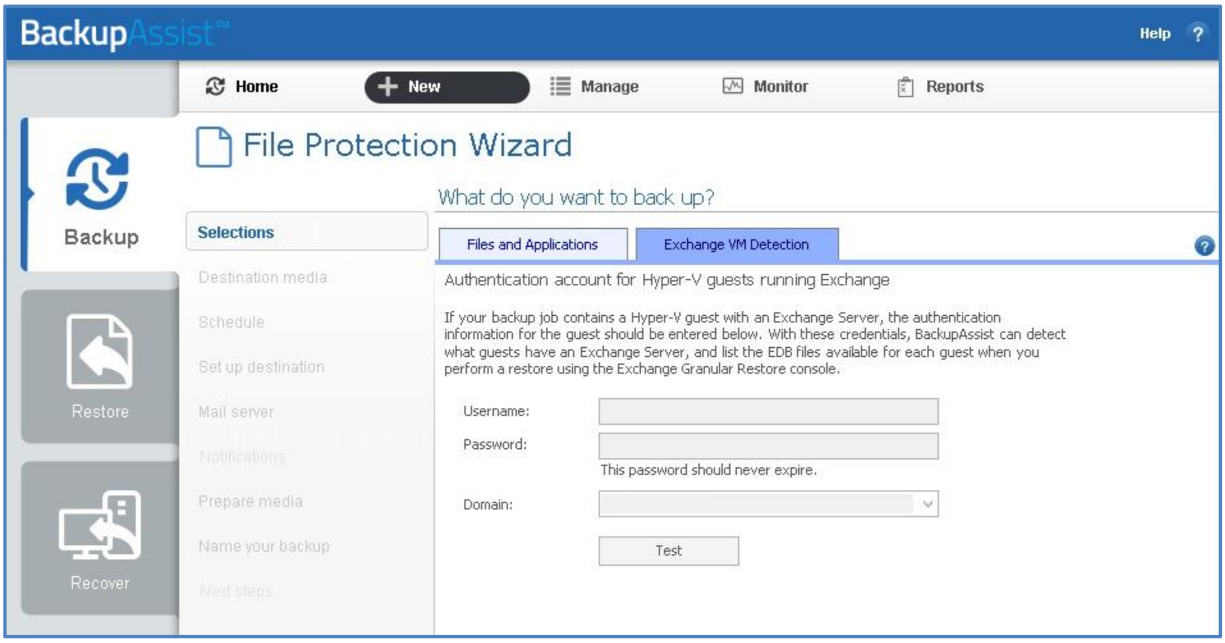
* Excludes Linux destinations

# 2. Backup considerations

Before creating a backup job, it is important to understand what backup and restore options are available. This section provides guidance on some key considerations.

## Exchange VM support

When backing up a Hyper-V guest with an Exchange Server, enter the authentication information for that guest into the **Exchange VM Detection** tab on the **Selection** screen when you create the job. With these credentials, BackupAssist can detect what guests have an Exchange Server, and list the EDB file available for each guest when you perform a restore using the Exchange Granular Restore console.



What do you want to back up?

Authentication account for Hyper-V guests running Exchange

If your backup job contains a Hyper-V guest with an Exchange Server, the authentication information for the guest should be entered below. With these credentials, BackupAssist can detect what guests have an Exchange Server, and list the EDB files available for each guest when you perform a restore using the Exchange Granular Restore console.

Username:

Password:

This password should never expire.

Domain:

**Figure 1: Selection screen - for an Exchange Server on a Hyper-V guest**

The Exchange VM Detection tab appears when the Hyper-V role is installed and running on the server. If you back up multiple guests, each one should have the same username and password. The Hyper-V process is automated but the restore requires both the *Exchange Granular Restore Add-on and the Hyper-V Granular Restore Add-on* licenses.

## Restore vs. Recovery

A restore is the process of accessing a backup and restoring it to the original (or a new) location, if your data is lost, corrupted or if you want an earlier version of that data. However, if your computer cannot start itself, you may need to perform a recovery.

A recovery is the process by which a computer is recovered after hardware has been replaced or an operating system failure has occurred, and your computer can no longer start itself. To perform a recovery you need a bootable media to start your computer, and an image backup that the bootable media can use to recover your operating system, data and applications.

For more information on data recovery, see the Recover tab & RecoverAssist Whitepaper.

# Windows SystemState

## Overview

In previous versions of BackupAssist, Windows SystemState was called System State and it was available during the creation of a backup job. The Windows SystemState option is now selected by editing a backup job after it has been created. There are exceptions, as shown in the table below.

A Windows SystemState backup contains some of the important files, registry values and settings that are used by the Windows operating system. It does NOT back up the operating system itself. This means a Windows SystemState backup can be used to restore the settings your computer had at an earlier point in time, but it will not allow you to recover your computer. A Windows SystemState backup can be helpful if your computer is encountering errors and you want to restore your settings to an earlier point in time, before the errors occurred.

Because Windows SystemState requires a functioning computer, and can only *restore* Windows settings, we recommend that a bare-metal backup is used. A bare-metal backup can restore Windows SystemState data, and it can ALSO be used to perform a *recovery* of your computer, when used with a Windows recovery environment, like RecoverAssist.

## Selecting Windows SystemState

Windows SystemState can be selected after a backup job has been created, if you have enabled the *Windows settings*. The exceptions, considerations and steps required are explained below:

This table shows what backup jobs can include Windows SystemState.

| | **File Archiving, File Protection and System Protection backup jobs** | **File Archiving zip-to–tape backup jobs** | **File Protection Rsync backup jobs** |
|---|---|---|---|
| During the creation of a new backup job | NO | NO | NO |
| By editing an existing backup job | YES, if enabled | YES | NO |

**To enable Windows SystemState**:

1. Select the BackupAssist *Settings tab*.
2. Select *Windows settings***.**
3. Tick *Enable v6 compatible Windows SystemState selection***.**

- ❖ Backup jobs created in earlier versions of BackupAssist (that included System State) will have the setting enabled by default in BackupAssist v7 and v8.
- ❖ Zip-to-tape backup jobs will not need to enable this setting, to select Windows SystemState.

**To select Windows SystemState**:

1. Select the BackupAssist *Backup tab*, and then select the *Manage* menu.
2. Select the *backup job* that you want to modify, and then select *Edit* from the menu.
3. Select *Files and applications* from the left pane.
4. Select *Windows SystemState* at the top of the data selection pane.

# 3. BackupAssist settings

When creating a backup job, there are some global settings that should be configured in BackupAssist. If they are not configured, you will be prompted to complete them during the creation of your first backup. It is recommended that this is done in advance.

BackupAssist's settings can be entered and modified using the selections available in the **Settings tab.** Clicking on the *Settings tab* will display the selections as icons. Four of these are used when creating new a backup job and each one is described below:

## Backup user identity

Backup jobs require an administrator account with read access to the data source, and full read-write access to the backup's destination. It is recommended that a dedicated backup account is created for this purpose. The account's details are entered here and your backup jobs will be launched using these credentials. The account's permissions will be validated both when the backup user identity is entered and when the job is executed. If no account is specified or the account has insufficient permissions, the backup job will fail and note the error in the backup report.

A video explaining the creation of a backup user identity can be found on our, Videos Webpage.

## Email server settings

This menu item is used to enter the details of the SMTP server used by BackupAssist to send email notifications. The SMTP server must be configured if you want to have an email *Notifications* step enabled when you create a backup job.

## Email address list

This menu item is used to define and store the email addresses of potential notification recipients. The list will be used to populate the recipient selection screen when configuring an email notification for a backup job. Any email addresses entered during the creation of a new notification are automatically added to the *Email address list*.

## Network paths

This option allows you to enter access credentials for networks, domains and drives that the default account (specified in the *Backup user identity)* does not have access to. Enter or browse to the location and add it to the *Path list*. The *Edit* option will allow you to enter an authentication account, specifically for that path. When you create a backup job to a remote location, that location will be automatically added here.

Having multiple connections to a resource using the same logon credentials can generate a Windows error, such as the BA260 NAS error. It is therefore recommended that you avoid having mapped shares on the computer running BackupAssist that are the same as the paths configured in BackupAssist.

# 4. Creating a File Protection backup

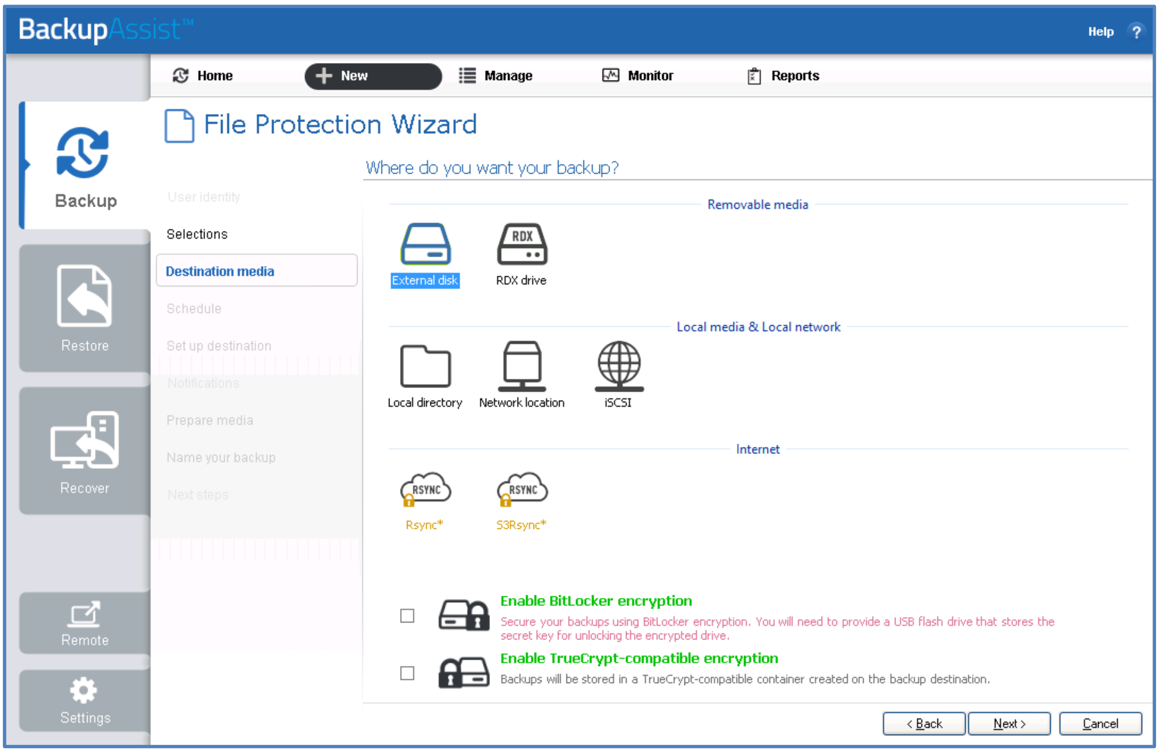
The following instructions describe how to create a backup job using BackupAssist File Protection.

Launch BackupAssist and follow the steps outlined below:

1. Select the **Backup** tab, and click **Create a new backup Job**
2. Select **File Protection:** If this is the first time you have created a backup job, you will be asked to provide a *Backup user identity*. See the section above, BackupAssist settings, for guidance.
3. **Selections:** The selections screen is used to select the data and applications that you would like to back up. Any VSS applications detected will be displayed here as application directory containers.

   An Exchange VM Detection tab will be available if you are backing up an Exchange VM guest.

   Select the volumes, folders, files and applications that you want to back up, and click **Next.**
4. **Destination media:** The destination screen is used to select the type of media that you want to back your data up to. This step's name will change to the media type selected, when you click next.
   a. **Select a device** for your backup destination.
   b. **Select an encryption type** if you want to encrypt your backup.
      - TrueCrypt encryption is available for all destinations. The first time you use this feature, TrueCrypt will install the encryption files.
      - BitLocker encryption is available for External disk or RDX drive destinations. BitLocker will encrypt the destination media. To learn about BitLocker, see our BitLocker resource page.
   c. Click **Next.**



Where do you want your backup?

□ **Enable BitLocker encryption**
Secure your backups using BitLocker encryption. You will need to provide a USB flash drive that stores the secret key for unlocking the encrypted drive.

□ **Enable TrueCrypt-compatible encryption**
Backups will be stored in a TrueCrypt-compatible container created on the backup destination.

**Figure 2: File Protection backup – Destination media selection screen**

To back up to an Rsync destination, refer to the File Protection using Rsync guide.

5. **Schedule:** This screen is used to select when and how you would like the backup job to run, and how long you would like the backup to be retained for. A selection of pre-configured schedules, called schemes, will be displayed.

   - The schemes available will depend on the type of destination media selected in step 4.
   - Clicking on a scheme will display information about the schedule used.

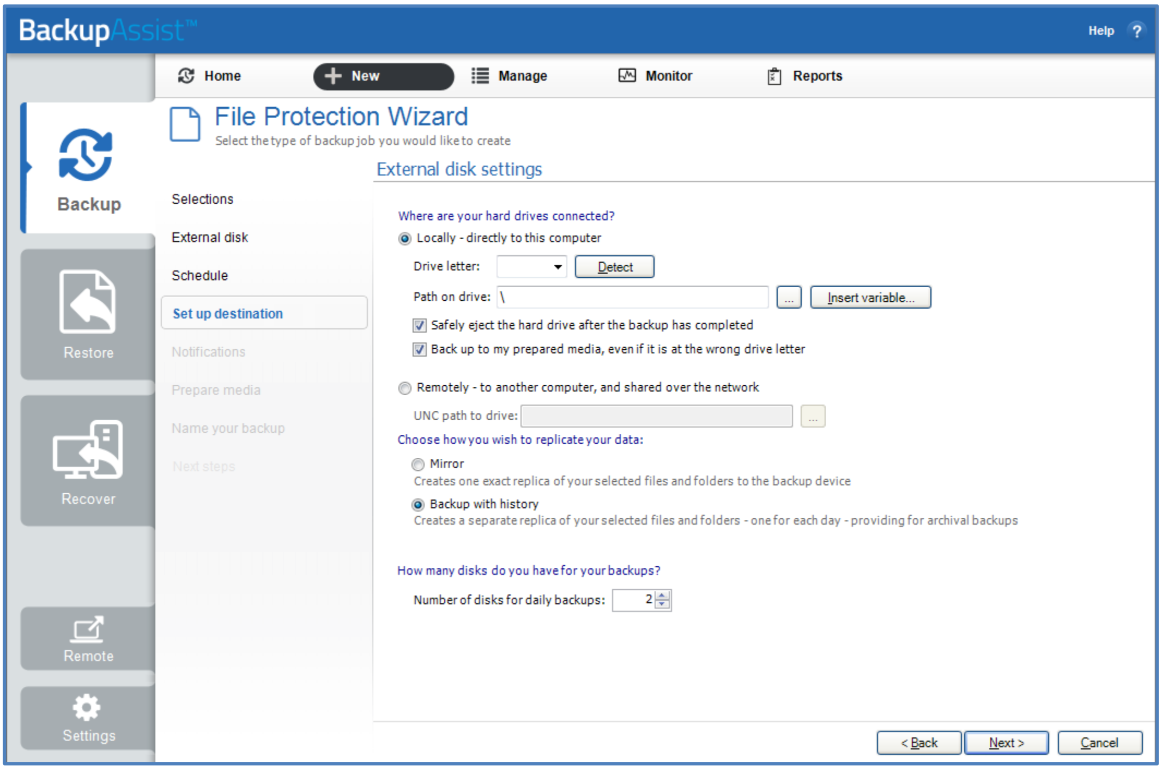
   Select an appropriate scheme, and click **Next**.

   To learn more about File Protection schedules, refer to the Backup management section below.
   For detailed information on scheduling options and customizations, see the Backup tab user guide.

6. **Set up destination:** This screen is used to configure the location of the media selected in step 4.

   The options presented will change with the type of media selected.

   Configure your backup destination, and click **Next**.



File Protection Wizard
Select the type of backup job you would like to create

External disk settings

Where are your hard drives connected?

● Locally - directly to this computer

Drive letter:

Path on drive: \

☑ Safely eject the hard drive after the backup has completed

☑ Back up to my prepared media, even if it is at the wrong drive letter

○ Remotely - to another computer, and shared over the network

UNC path to drive:

Choose how you wish to replicate your data:

○ Mirror
Creates one exact replica of your selected files and folders to the backup device

● Backup with history
Creates a separate replica of your selected files and folders - one for each day - providing for archival backups

How many disks do you have for your backups?

Number of disks for daily backups: 2

**Figure 3: BackupAssist File Protection – Set up destination screen**

- If your media is removable, you can set the media to eject after the backup job has finished.
- If your media is a removable drive, you can select either *Mirror* or *Backup-with-history* for the replication mode. For non-removable media, the mode is determined by the scheme in step 5.
- If you selected *TrueCrypt* or *BitLocker* encryption, enter a password and any requested encryption information into the fields provided.

> **Note:** It is important that you keep a copy of your password in a safe place, as we cannot retrieve passwords if they are lost or forgotten.

7. **Notifications:** Once a backup job has completed, BackupAssist can send an email to inform selected recipients of the result. This email notification can be enabled during the creation of a backup job, if the mail server has been configured.

   To send email notifications, you will need to configure an SMTP mail server for BackupAssist. See the BackupAssist settings section to learn more or the Backup tab user guide for instructions.

   To enable email notifications:

   a. Select, **Add an email report notification.**

   b. Enter recipients into the **Send reports to this email address** field.

   c. Enter recipients into the **Also send reports to this email address** field. You can then select the condition under which the email should be sent, using the drop-down box.

   After the backup job has been created, you can modify the notifications by adding and removing recipients, setting additional notification conditions and including print and file notification types.

   To learn more about notification options, see the BackupAssist Backup tab user guide.

8. **Prepare media:** If you selected a portable media device as your backup destination (such as an external HDD or a RDX drive) you will be given the option to prepare the media for BackupAssist. BackupAssist will write a label onto the media so that it can recognise what media has been attached, and determine if it is the correct media for your backup schedule.

   To enable media detection:

   a. Select, **Let BackupAssist keep track of your media.**

   b. Select what you would like BackupAssist to do, *if the wrong media is inserted*.

   c. Select what you would like BackupAssist to do, *if new or unrecognized media is inserted*.

   BackupAssist will display all removable media that are currently attached, along with a text field and drive designation drop-down box, which can be used to provide a label for the media.

   To prepare your media:

   a. Enter the name and drive designation to be used for each media device listed.

   b. Select **Prepare** for each media device listed.

   BackupAssist will write the label to the media so it can recognize the media and ensure that it is used on the correct day. For example, if you put an RDX drive in on Tuesday but it was labeled Wednesday, BackupAssist will warn you that the incorrect media has been detected.

   If you are using BitLocker, refer to the BitLocker resource page for disk preparation guidance.

9. **Name your backup:** Provide a name for your backup job, and click **Finish**.

▶ **Your File Protection backup job has now been created.**

**Important:** Once a **backup job** has been created, it should be reviewed and run using the *Manage* menu. This menu provides additional options to configure your backup. See the section, File Protection backup management, for more information.

**Important**: Once the *backup* has been created, it should be checked. You can check the backup by performing a manual test restore, or using the Backup Verification feature.

**Please note** that a manual restore is the only way to fully test a backup, and regular manual restores should be part of your backup solution.

# 5. Restoring from a File Protection backup

This section provides instructions on how to restore data that was backed up using BackupAssist's File Protection.

To restore data from a **File Protection** backup, start BackupAssist and follow these steps:

1. Select the **Restore tab**

   The *Restore tab* has a *Home page* and a *Tools menu*. The *Home page* is the default screen and the recommended starting point for performing a restore. The *Tools menu* should only be used by experienced administrators or users being assisted by technical support.

2. From the **Home page**, select the type of restore you want to perform.

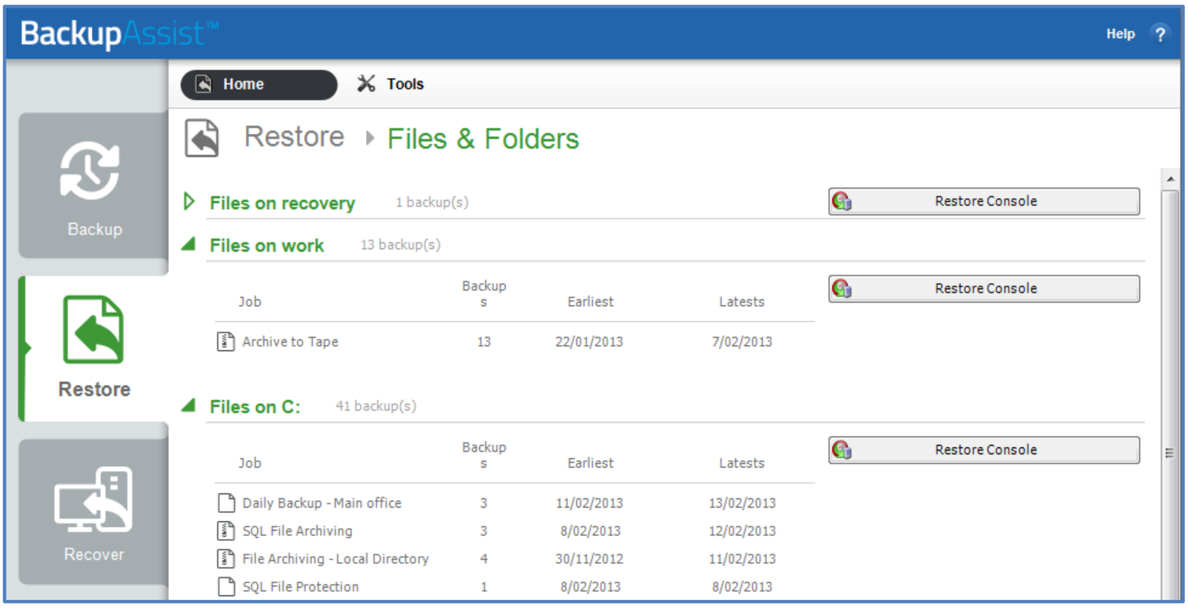
   - *Files and folders* will display all data backups and all VSS application backups.
   - *Applications* will display backups that contain VSS applications, and exclude data only backups.
   - *Exchange*, *SQL* or *Hyper-V*, will display all backups that contain the selected application. Selecting an application type will display application specific restore tools (e.g. Hyper-V Granular Restore and SQL Restore) as well as the Restore Console.

3. Once you have selected the type of restore you want to perform, the *Home page* will display all catalogued backups that match your selection. The backups displayed will be for active backup jobs, and grouped by the source data's location and the restore tool that can be used.

   - If a backup can be used by two restore tools, it will appear in two groupings.
   - If a backup contains data from multiple locations, it will appear in a grouping for each location.

   If your backup included both data and VSS applications, both will be available to restore once the backup has been loaded in step 4, regardless of the restore type selected.

   Select the **Restore Console.**



Files on recovery 1 backup(s)

Files on work 13 backup(s)

| Job | Backups | Earliest | Latests |
|---|---|---|---|
| Archive to Tape | 13 | 22/01/2013 | 7/02/2013 |

Files on C: 41 backup(s)

| Job | Backups | Earliest | Latests |
|---|---|---|---|
| Daily Backup - Main office | 3 | 11/02/2013 | 13/02/2013 |
| SQL File Archiving | 3 | 8/02/2013 | 12/02/2013 |
| File Archiving - Local Directory | 4 | 30/11/2012 | 11/02/2013 |
| SQL File Protection | 1 | 8/02/2013 | 8/02/2013 |

**Figure 4: BackupAssist Restore Home page – selection results**

4. **Restore Console – backup and data selection**

The BackupAssist *Restore Console* will open and load all of the backups that were listed on the *Home page*. The next step is to locate the data you want to restore, from the loaded backups.

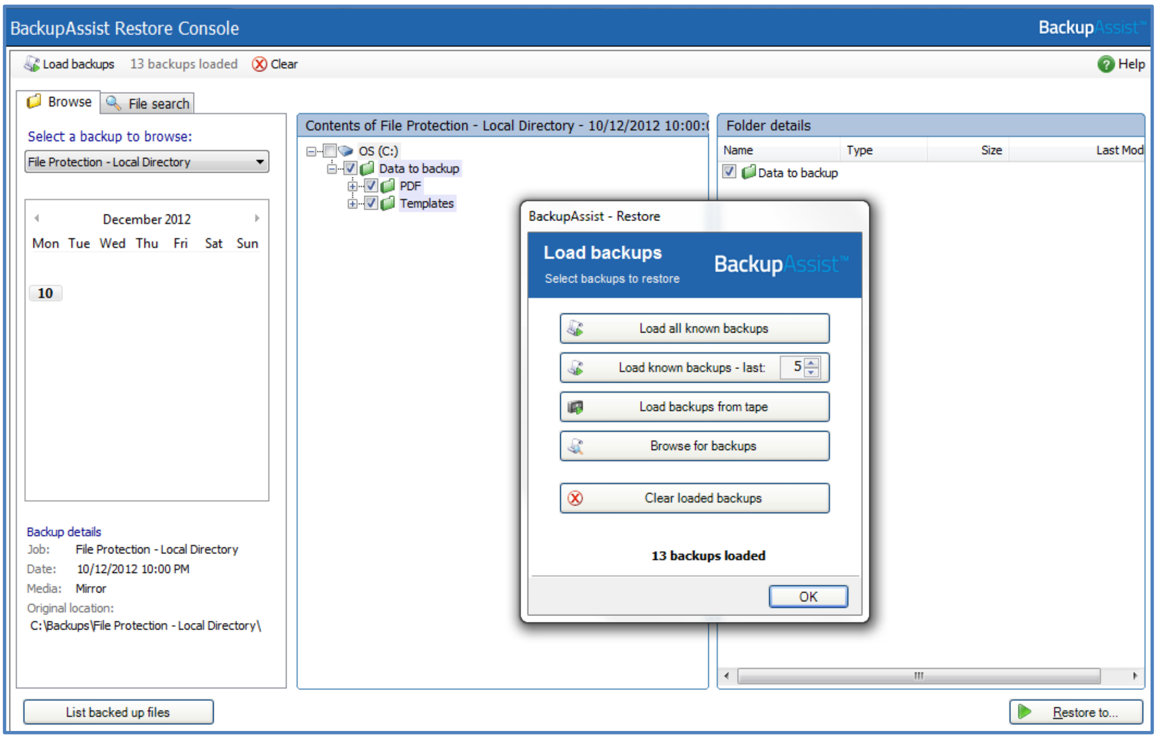
The Restore Console provides two tools to locate your data:

- The **Browse** tab. Select this tab if you know the backup and date you wish to restore from, or if you need to restore an entire backup set.

  a. Use the drop-down menu to choose the backup that you want to restore from.
  b. Use the calendar to select the date you want to restore from.
  c. Use the middle panes to expand the backup set.
  d. Select the data to restore.
  e. Click **Restore to** at the bottom right of the window.

- The **Search** tab. Select this tab to search all of the loaded backups for the data you want to restore. You can display data filtered by name, date, size and type, for all backups. The results can be compared (e.g. the dates of two files) to identify the correct data selection.

  a. Enter your search term (The search accepts wild card searches, such as **.log* or **.doc*).
  b. Select a filter/s if required.
  c. Click the *Search* button.
  d. Select the data to restore.
  e. Click **Restore to** at the bottom right of the window.



13 backups loaded

Select a backup to browse: File Protection - Local Directory

December 2012
Mon Tue Wed Thu Fri Sat Sun
10

Backup details
Job: File Protection - Local Directory
Date: 10/12/2012 10:00 PM
Media: Mirror
Original location:
C:\Backups\File Protection - Local Directory\

Contents of File Protection - Local Directory - 10/12/2012 10:00:(
□ OS (C:)
☑ Data to backup
☑ PDF
☑ Templates

☑ Data to backup

13 backups loaded

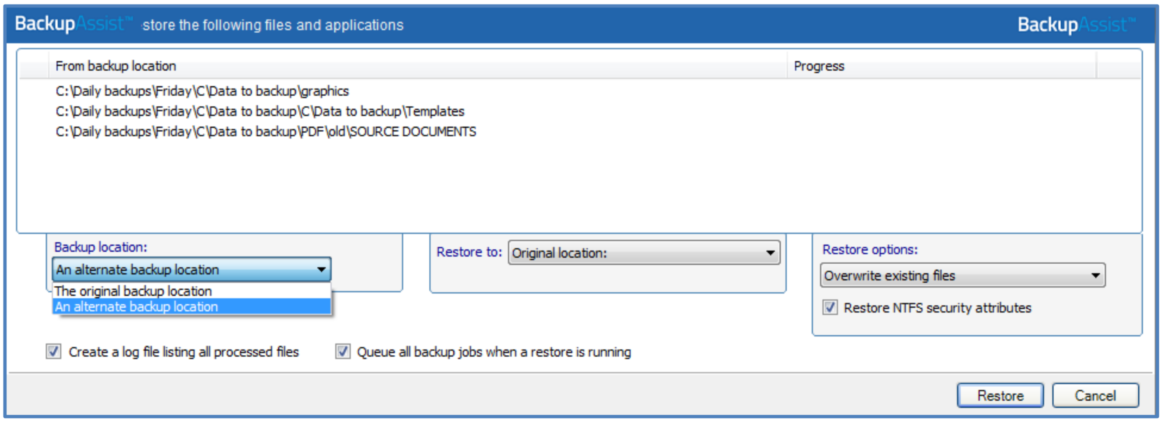
**Figure 5: BackupAssist Restore Console – backup and data selection**

If you wish to load backups for deleted backup jobs and for other backup groupings on the Home page, select *Load backups* and then *Load all known backups*.

For more information about data selection, refer to the Restore tab whitepaper.

5. **Restore Console – restore destination selection**

When you select *Restore to,* a window will open showing the *Backup location,* the *Restore to* destination and the *Restore options*.



BackupAssist™ store the following files and applications

From backup location | Progress

C:\Daily backups\Friday\C\Data to backup\graphics
C:\Daily backups\Friday\C\Data to backup\C\Data to backup\Templates
C:\Daily backups\Friday\C\Data to backup\PDF\old\SOURCE DOCUMENTS

Backup location: An alternate backup location

Restore to: Original location:

Restore options: Overwrite existing files

☑ Restore NTFS security attributes

☑ Create a log file listing all processed files

☑ Queue all backup jobs when a restore is running

**Figure 6: BackupAssist Restore Console – restore destination**

a. Review **Backup location:** Change the selection if the backup was moved after it was created.

b. Review **Restore to:** Leave the *Original location* selected or chose an *Alternative path*.

Restoring to an alternate location will use a minimal path. For example, restoring a single file to an alternate location will copy the file to the location without re-creating the original folder structure.

c. Review the **Restore options:**

- Select *Overwrite all existing files*, *Do not overwrite existing files* or *Only overwrite older files*.
- The option, *Restore NTFS security attributes* will be selected by default.

  See the File Protection Advantages section for information on NTFS attributes.

d. Selecting *Create a log file listing all processed files*, will create a file that lists the success or failure of each file. The log is opened by selecting the log file's link in the backup report.

e. *Queue all backup jobs when a restore is running*, is selected by default.

f. Click the **Restore** button to restore your data.

- If BackupAssist cannot access the backup location you will be prompted to either connect the appropriate media or specify an alternate location where the backup can be found.
- The restore will run from the destination window and a **Report** link will appear once the restore has finished.

g. Select **Done**.

▶ **Your File Protection restore has now been completed.**

**Important:** Only backups made with BackupAssist v5.3 or later will show up in the Restore Console.

**Important:** The Restore Console can restore encrypted files, but you will need to supply the password. It is important that you keep a copy of your password in a safe place, as we cannot assist you with opening password encrypted files if your password is lost or forgotten.

**Helpful hint:** These instructions explain how to restore data using the *BackupAssist Restore console*. If you do not have BackupAssist installed and need to restore a *File Protection* backup, you can browse to the location of your backup using Windows Explorer and copy the required files to any location.

# 6. File Protection backup management

Once you have created a backup job, you can modify the settings and access advanced configuration options using the *Manage* menu.

To access the backup management screen:

1. Select the BackupAssist, **Backup tab.**
2. Select **Manage** from the top menu. A list of all backup jobs will be displayed.
3. Select the backup job you want to modify, and select **Edit.**
4. Select the required configuration item on the left. Key configurations are described below.

## Manually running a backup job

All new and modified backup jobs should be manually run to ensure they work as intended.

1. Select the backup job, and select *Run*.
2. You will be prompted to *Rerun a past backup* or to *Run a future backup now.*
3. When the backup job starts, the screen will change to the *Monitor* view.
4. Once the backup has been completed, select the *Report* button and review the results.

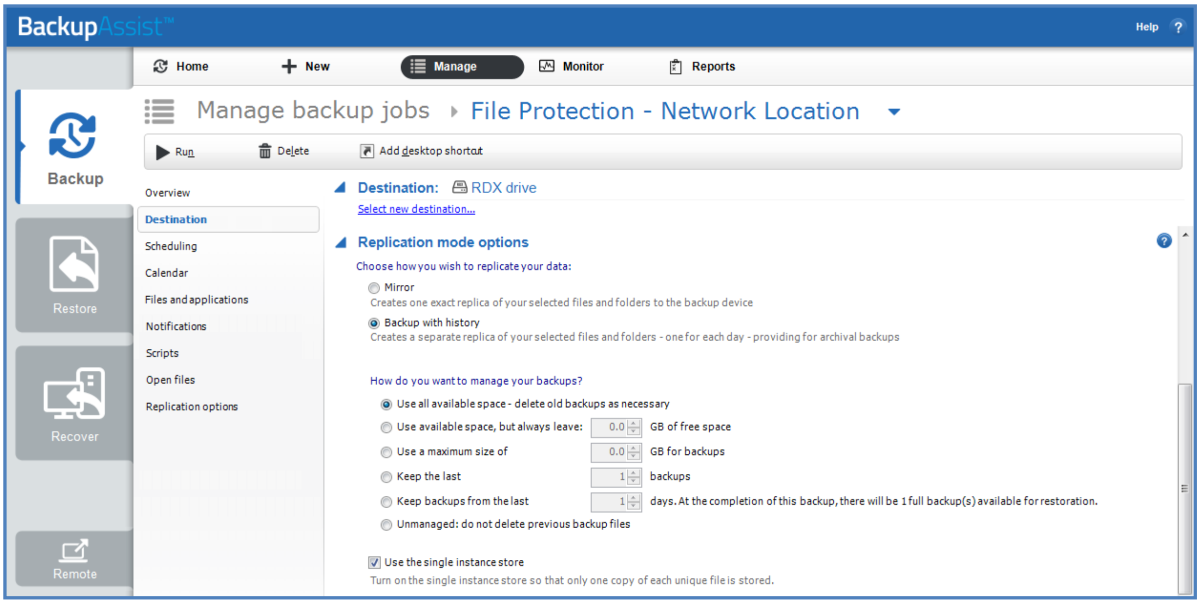
## Destination: Enabling single-instance store

*Removable media backups* created with the *Backup-with-history* mode selected can be configured to use *single-instance store*, so that only one unique copy of each file is stored on the backup destination. Single-instance store is enabled by default. Backups cannot use single-instance store when the backup is saved on a ReFS formatted destination (e.g. Windows Server 2012).

To modify this setting:

a. Select **Destination** from the left menu and expand **Replication Mode Options**.

b. Check the option, **Use the single-instance store**.



Destination: RDX drive

Select new destination...

Replication mode options

Choose how you wish to replicate your data:

○ Mirror
Creates one exact replica of your selected files and folders to the backup device

● Backup with history
Creates a separate replica of your selected files and folders - one for each day - providing for archival backups

How do you want to manage your backups?

● Use all available space - delete old backups as necessary
○ Use available space, but always leave: 0.0 GB of free space
○ Use a maximum size of 0.0 GB for backups
○ Keep the last 1 backups
○ Keep backups from the last 1 days. At the completion of this backup, there will be 1 full backup(s) available for restoration.
○ Unmanaged: do not delete previous backup files

☑ Use the single instance store
Turn on the single instance store so that only one copy of each unique file is stored.

**Figure 7: Manage backup – Removable media, destination screen**

## Scheduling

Selecting *Scheduling* will display the **Scheduling options.** You can use this screen to change the default time and days of your scheme's daily backups. If you selected a scheme with archive backups (e.g. weekly, monthly), you can specify when each archive backup will run.  The current scheme is shown, along with two pop-up menus: *Select a new schedule* and *Customize schedule*.

**Select a new Schedule:** This will display the pre-configured backup schemes that you chose from during the creation of your backup job. The selections available will depend on the type of destination media you have selected. You can select a different scheme using this option.

**Customize schedule:** This selection can be used to modify each backup within your current schedule. The customizations available will depend on the type of backup media used. For File Protection backups, the *Method* field can only be set to *Automatic*. This is because single-instance store provides the benefit of incremental backups in a full backup format. This technology is managed by BackupAssist and does not require further modification.

For additional information on the *Scheduling* screen, please refer to the Backup tab whitepaper.

## Files and applications

If your backup job contains a Hyper-V guest with an Exchange Server, the authentication information for the guest should be entered into the **Exchange VM Detection** tab. Select the **File and applications** > **Exchange VM Detection** tab.

With these credentials, BackupAssist can detect what guests have an Exchange Server, and list the EDB file available for each guest when you perform a restore using the Exchange Granular Restore console

The Hyper-V process is automated but the restore requires both the *Exchange Granular Restore Add-on and the Hyper-V Granular Restore Add-on* licenses.

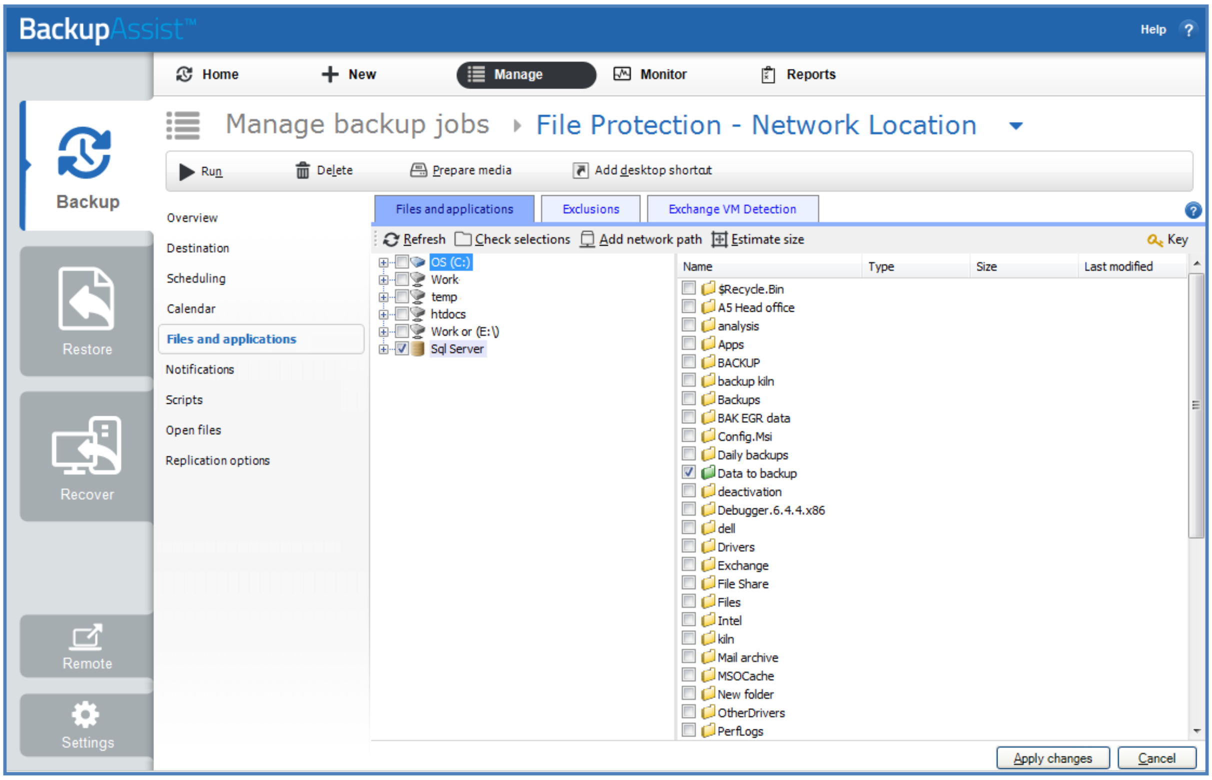


**Figure 8: Manage backup jobs screen – File and applications option**

# 7. File Protection backup report

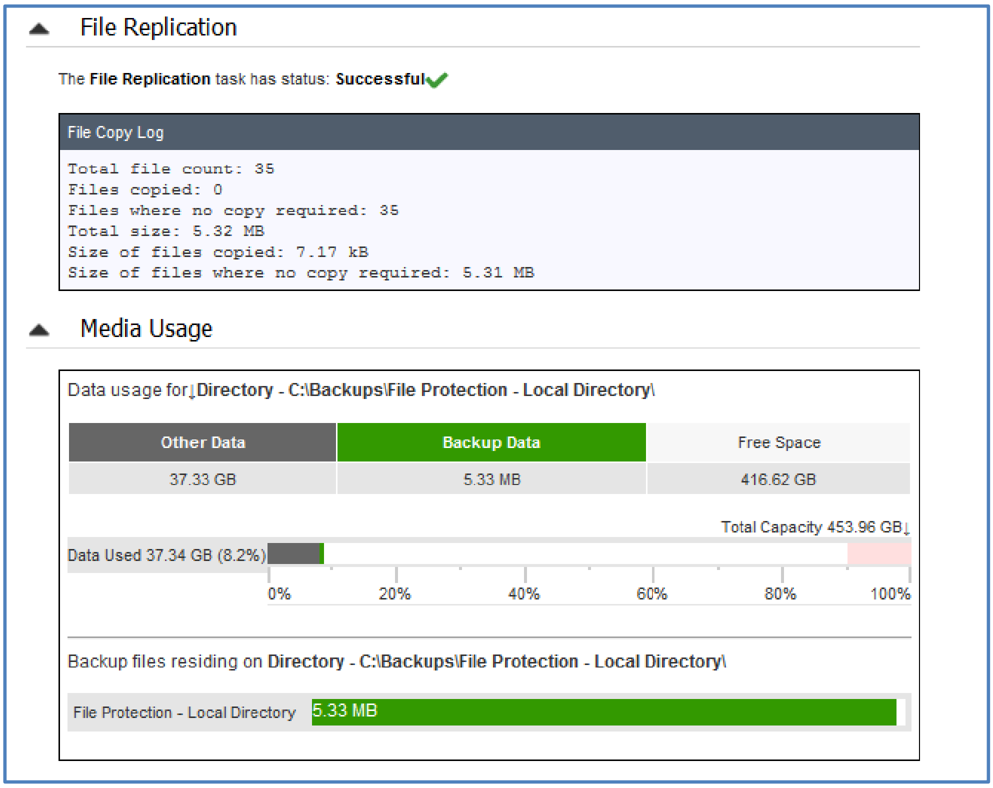
BackupAssist File Protection reports are very similar to those created from other backup engines. Some sections, however, are unique to File Protection and explained in greater detail below.

The **File Replication** section of the backup report, outlines how much data was backed up, how many files were backed up and includes details about single-instance store (if enabled).

The details outlined in the File Replication section include:

- **Total file count**: The total number of files that were selected for backup.
- **Files copied**: The actual number of files copied during the backup. If no files have been modified or no new files have been added since the last backup, BackupAssist will not copy them to your backup destination.
- **Files where no copy required**: If single-instance store is enabled, files that have not been changed since the last successful backup do not need to be copied to your backup destination.
- **Total size**: The total size of a full backup (i.e. all files selected for backup).
- **Size of files copied**: The amount of data that actually needed to be copied for this backup (i.e. new or modified data not already present at the backup destination).
- **Size of files where no copy required**: The total size of the files that did not need to be backed up due to single-instance store.

**The Media Usage section** of the backup report provides a list of File Protection backups stored at the backup's destination. This list can help you determine the number of backups stored on a device that you can restore from, and monitor the amount of free space available.



File Replication

The **File Replication** task has status: **Successful** ✓

File Copy Log

```
Total file count: 35
Files copied: 0
Files where no copy required: 35
Total size: 5.32 MB
Size of files copied: 7.17 kB
Size of files where no copy required: 5.31 MB
```

Media Usage

Data usage for **Directory - C:\Backups\File Protection - Local Directory**

| Other Data | Backup Data | Free Space |
|---|---|---|
| 37.33 GB | 5.33 MB | 416.62 GB |

Backup files residing on **Directory - C:\Backups\File Protection - Local Directory**

File Protection - Local Directory 5.33 MB

**Figure 9: File Protection backup report**

# 8. Support and Resources

## Contacting Technical Support

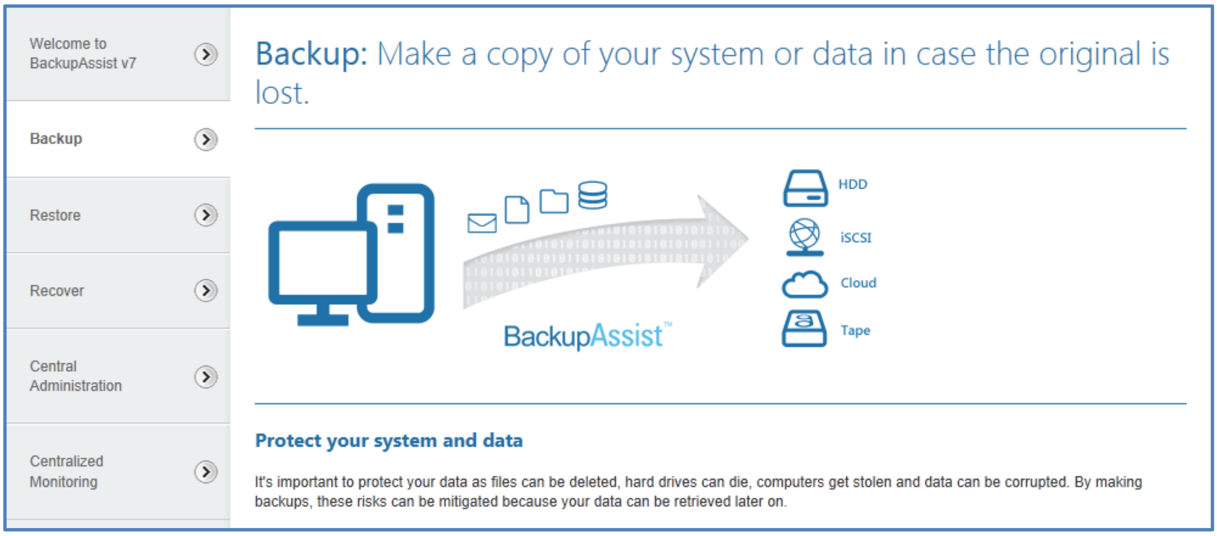
Should you have any questions regarding either BackupAssist or File Protection, please email support@backupassist.com and we will respond to you as soon as possible.

Similarly, if you have any suggestions for additional functionality in BackupAssist, or new products or add-ons, please also forward your feedback to support@backupassist.com

## Learn more – The Welcome Screen

Each tab in BackupAssist includes a "Learn More" link on the tab's **Home** page.

For example, selecting the ***Learn more about Backup*** link will open the **Welcome Screen** with the Backup introduction selected. This screen provides an overview of the tab's functions and features, and links to documentation and resources.



Backup: Make a copy of your system or data in case the original is lost.

Protect your system and data

It's important to protect your data as files can be deleted, hard drives can die, computers get stolen and data can be corrupted. By making backups, these risks can be mitigated because your data can be retrieved later on.

**Figure 10: Backup tab – Welcome Screen**