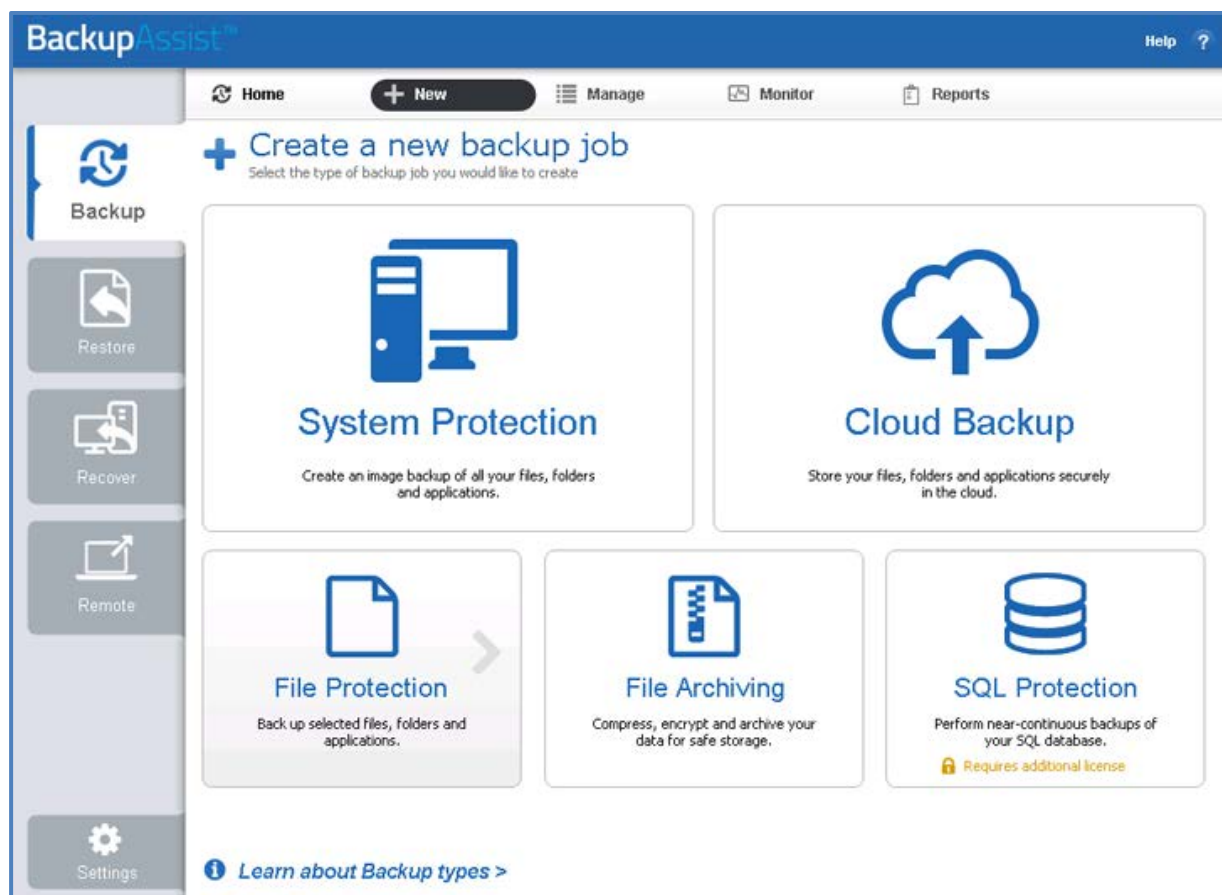# BackupAssist v10 beta - Cloud Backup

BackupAssist v10 introduces Cloud Backup, a new backup type that allows you to use Amazon AWS or Microsoft Azure for your backup destination. This user guide is for the **BackupAssist v10 beta** build and explains how to use the new Cloud Backup option.

The BackupAssist v10 beta builds

This beta build has been released so that users can test and try out the new Cloud Backup option. The feedback we get will help us improve this new feature and give users a chance to provide input.

The user interface and options are the same as BackupAssist v9, but when you create a backup job there will be a new option called Cloud Backup. The icons and buttons on the *Create a new backup job* screen have been redesigned for the new Cloud Backup option, as shown below.

Figure 1: The new backup selection screen

Using and testing the BackupAssist v10 beta is as simple as selecting Cloud Backup when you create a backup job. You will however need to create an account with your chosen cloud provider.

> **Note**: The BackupAssist v10 beta build should not be used to back up production servers.

What is cloud storage

Cloud storage allows you to store data in remote data centers across the internet. This remote storage is provided as a service and is configured using a web interface.

Advantages:

- Scalability – your storage will scale with your needs and the total storage available can be increased by updating your subscription package.
- Affordability – you do not need to purchase or maintain storage devices or storage servers.
- Security- your data is encrypted.
- Availability – cloud computing uses data centers that have a better level of availability than could be achieved with your own local servers.

How to create cloud storage

Before you can back up to a cloud destination, you will need create an account with Amazon AWS or Microsoft Azure and configure that account for cloud storage.

There are two steps to setting up cloud storage for BackupAssist.

Step 1 - Create an account

To do this, go to the website of your chosen cloud provider. Setting up an account involves providing business information and payment details.

To create an account:

- ❖ For Amazon AWS, start here https://aws.amazon.com/
- ❖ For Microsoft AZURE, start here https://azure.microsoft.com/

Information about free accounts:

- ❖ For Amazon AWS, start here https://aws.amazon.com/s3/
- ❖ For Microsoft AZURE, start here https://azure.microsoft.com/en-us/free/

Step 2 – Storage configuration

Once you have your accounts set up, you can configure the cloud storage.

- ❖ For AZURE, this will mean configuring a storage account.

  You can have multiple storage accounts and the process is documented by Microsoft. You can start here.

- ❖ For AWS, this will mean configuring a user.

  You can create multiple users and the process is documented by Amazon. You can start here.

> **Note**: Microsoft Azure uses containers and Amazon (AWS) uses buckets to store data. You do not need to create buckets or containers. BackupAssist will do this when it creates the backup.

Getting storage information for BackupAssist

Once you have the cloud storage set up, BackupAssist will need the access keys that the cloud service provider uses to allow access to your cloud storage. These keys are entered into BackupAssist when you create the Cloud Backup job. This section explains how to get these keys for AZURE and Amazon AWS.

AZURE storage keys

The Microsoft AZURE cloud service allows you to create storage accounts that can be used as backup destinations.

To get the storage keys:

1. Open the AZURE Dashboard.

   The Dashboard lists the storage accounts that you have created in the *All resources* section.

2. Select the **Storage Account** that you want to use.

   The Dashboard will reload for the selected Storage Account.

3. Select **Access Keys** from the *Settings* menu.

   The Dashboard will show the keys available for the storage account that you selected. Microsoft recommends regenerating new keys regularly and provides two key fields so that you can create a new key, while still having the old key active.

4. Use the **copy** button to take a copy of key that you want to use.

   These keys will be needed when you create the backup job. You can perform these steps when creating the backup job, or copy the keys to a file so they can be used later.
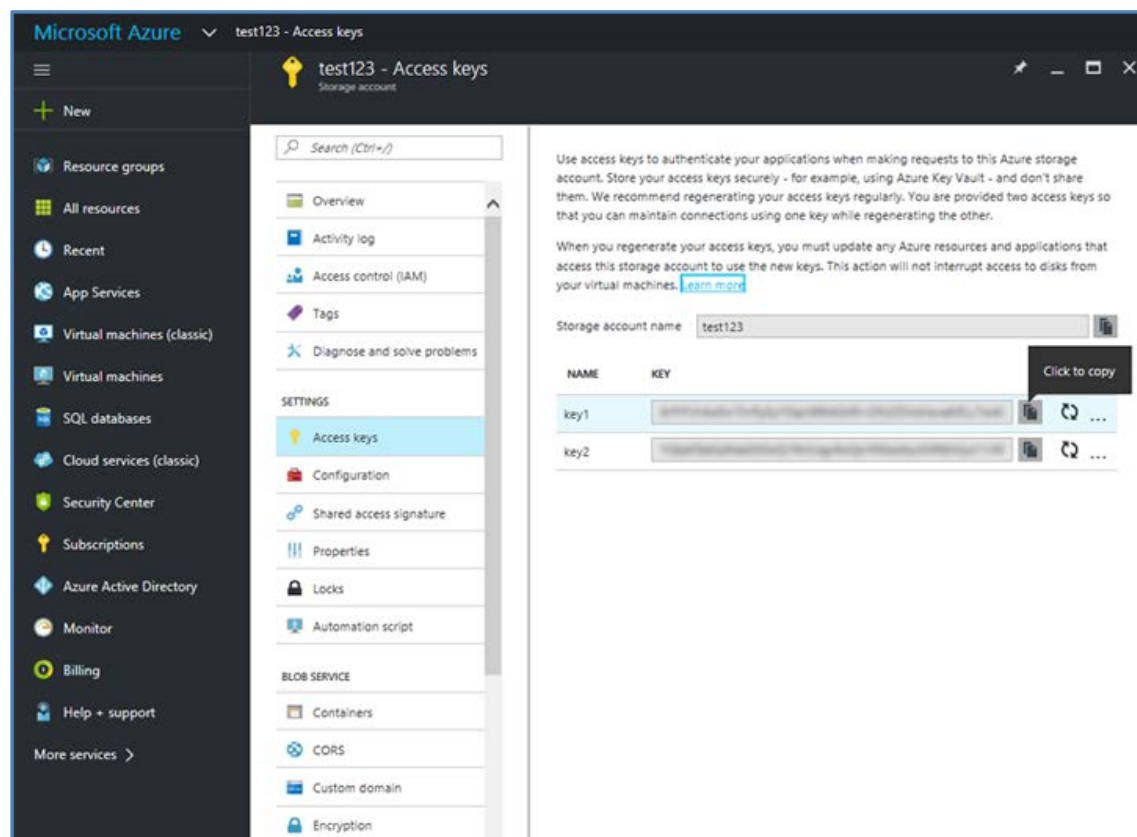

Figure 2: AZURE dashboard - getting storage keys

Amazon Web Services (AWS) S3 storage keys

Amazon AWS provides cloud storage solutions, one of which is S3. S3 is an easy to use storage solution that can be used as a backup destination. Access to AWS S3 storage is managed using keys, which must be entered into BackupAssist when you create a backup job that uses AWS as a destination.

Amazon has an excellent guide that can be followed to get a copy of the access key here.

To get the access keys:

1. Open the AWS Management Console.

2. Select the **Services** drop down menu from the top navigation bar.

3. Select **IAM** (Identity & Access Manager).

4. Under IAM Resources, select **Users** from the left menu.

   These are the users you created for your S3 storage. You could create a user just for BackupAssist.

   Note: This user must have at least **PowerUserAccess** permission. This is a Policy assigned under the Permissions tab in the AWS web console.

5. Select the user's **Security Credentials** tab.

   This will show you the user's Access Key ID, but a secret access key is also required.

6. Select **Create Access Key.**

   This will generate a pop up with the Access Key ID and the Secret Access Key. The Secret key is unique and will not be saved in the console.

7. Select **Download Credentials**.

   These keys will be needed when you create the backup job. You can perform these steps when creating the backup job, or copy the keys to a file so they can be used later.
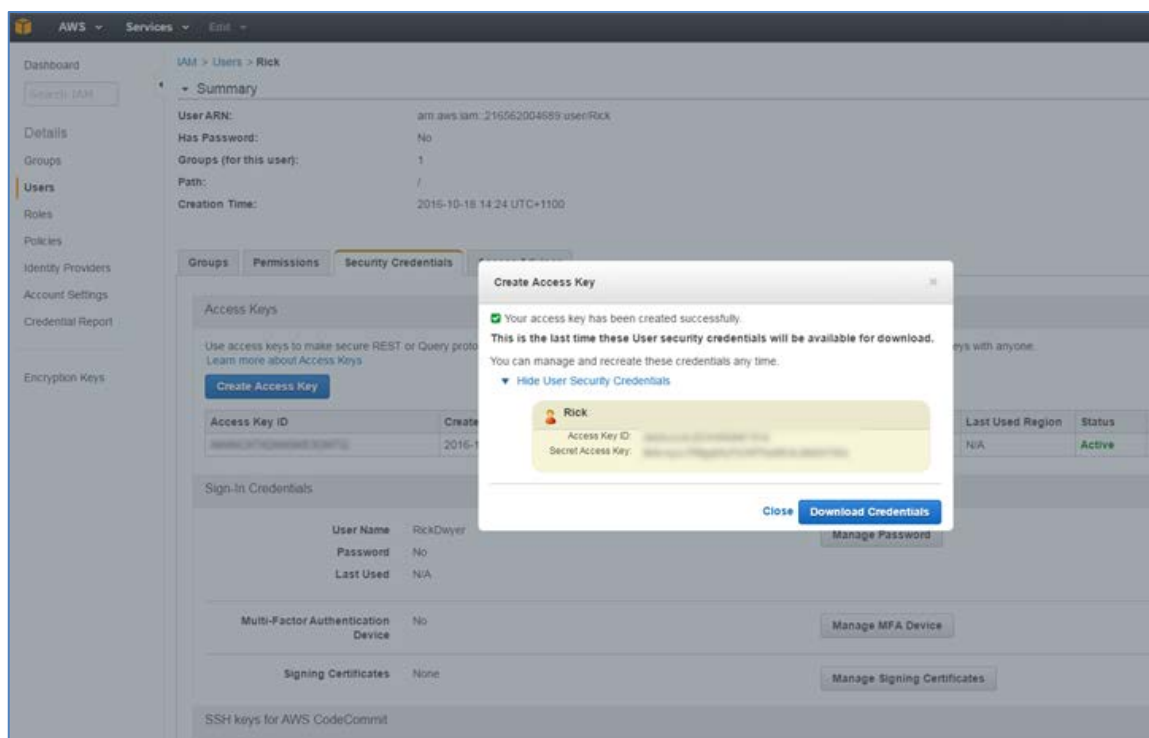

Figure 3: Amazon AWS Console - getting access keys

Creating a cloud backup job

Many of these steps are the same as those for other backup types. BackupAssist's v9 documentation can be referred to for configuration options such as Backup User Identify and the Settings tab options.

Launch BackupAssist and follow the steps outlined below:

1. Select the **Backup** tab

2. Select **Create a new backup Job**

3. Select **Cloud Backup**

   If this is the first time you have created a backup job, you will be asked to provide a *Backup user identity* if one has not been defined.
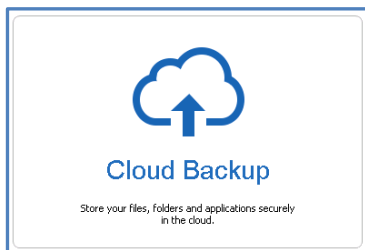
4. **Selections**

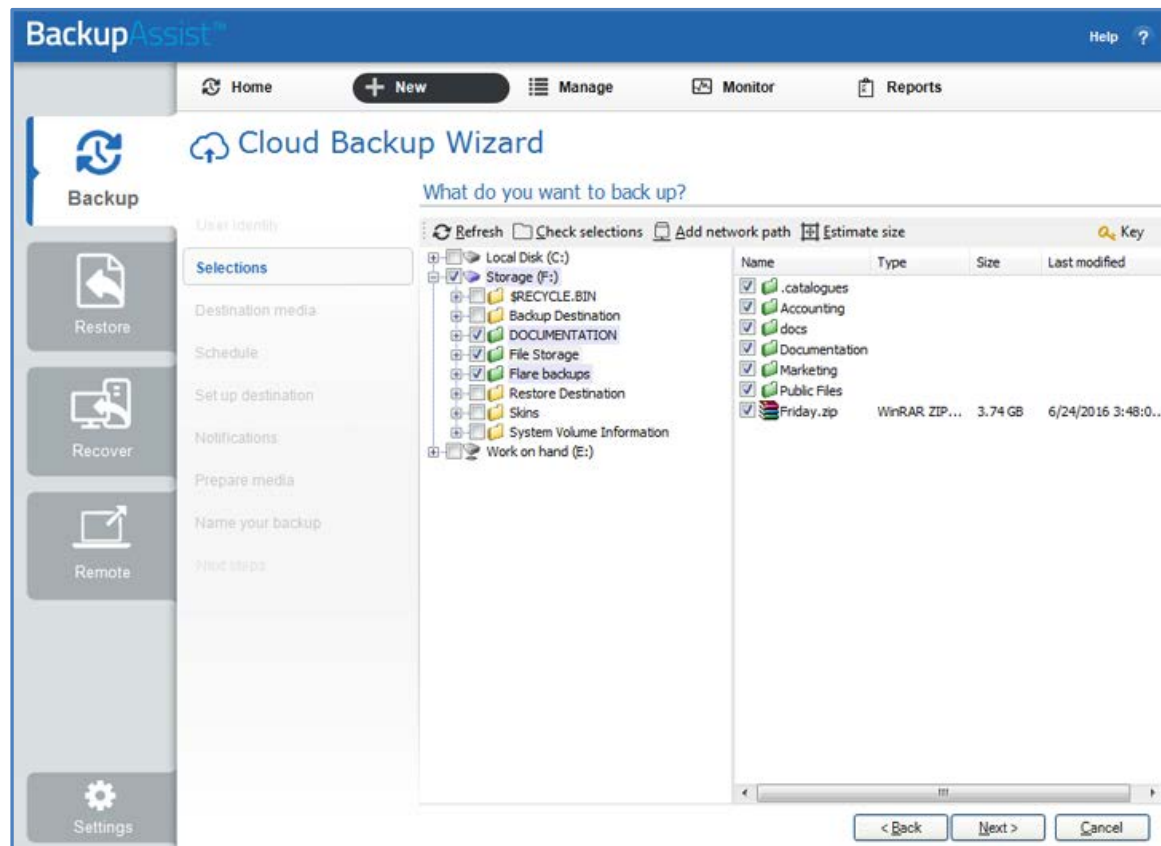   Select the data and applications that you would like to back up.

Figure 4: Cloud backup – data selection screen

5. **Destination media**

Use this step to select the cloud destination that you want to back your data up to. This step's name will change to the cloud service selected, when you click Next.

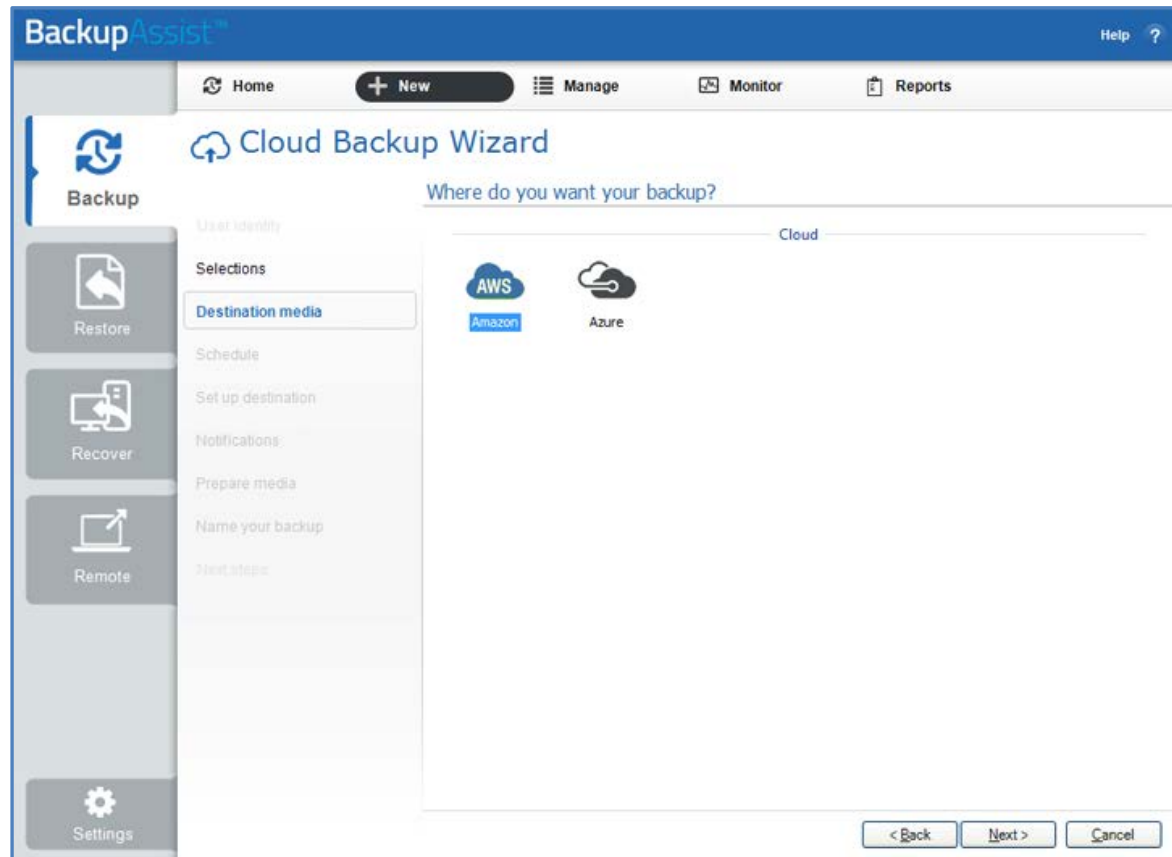Select **Amazon** or **Azure**, and click **Next**.

Figure 5: System Protection – Destination media

6. **Schedule**

Use this step to select when you would like the backup job to run and how long you would like the backup to be retained for.

There are two schemes to choose from:

- **Basic** – a daily backup from Monday to Friday. Each day, the backup will write over the previous week's backup for that day.

- **Grandfather-father-son** – daily backups with weekly, monthly and annual archive backups. The weekly backups are retained for a month and the monthly backups for a year.

To set up the schedule:

1. Select a scheme

2. Select the time you would like the backup job to run

3. Select **Next**.

To learn more about scheduling options and customizations, see the Backup tab user guide.

7. **Set up destination**

This step configures the cloud backup service selected in step 5. There are different settings for Amazon S3 and Microsoft Azure.

Amazon S3 bucket settings

- **Amazon S3 bucket**

    Enter a name for your S3 bucket. BackupAssist will use this name to create the bucket. Provide a different name for each job, because a different bucket must be used by each backup job. This name must follow the conventions explained here

- **Amazon S3 Region**

    Select the region for the data centre where you want your cloud storage to be based.

- **Access Key ID**

    Enter the Access Key ID provided, as explained on page 4 of this guide.

- **Secret Access Key**

    Enter the Secret Access Key ID provided, as explained on page 4 of this guide.

- **Encryption Password**

    Cloud Backup uses encryption to protect your data. Enter and confirm an encryption password. This password will be needed if you perform a restore.

    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.

- **Check destination**

    Use the Test connection button to check that the information supplied allows BackupAssist to connect to the cloud storage.

Azure container settings

Fill in the following fields for the Azure container:

- **Container**

  Enter a name for your Azure container. BackupAssist will use this name to create the container. Provide a different name for each job, as a different container must be used by each backup job. This name must follow the conventions explained here

- **Account Name**

  Enter the name of the Storage Account that you are backing up to.

- **Access Key**

  Enter the Access Key ID provided, as explained on page 3 of this guide.

- **Encryption Password**

  Cloud Backup uses encryption to protect your data. Enter and confirm an encryption password. This password will be needed if you perform a restore.

  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.

- **Check destination**

  Use the Test connection button to check that the information supplied allows BackupAssist to connect to the cloud storage.

8. **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 learn more, see the Backup tab user guide.

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.

9. **Name your backup**

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

Restoring from a cloud backup

Performing restores is easy and an important part of trying out the new Cloud Backup solution. To perform a restore, simply select the Restore tab and proceed as you would for a BackupAssist v9 restore.
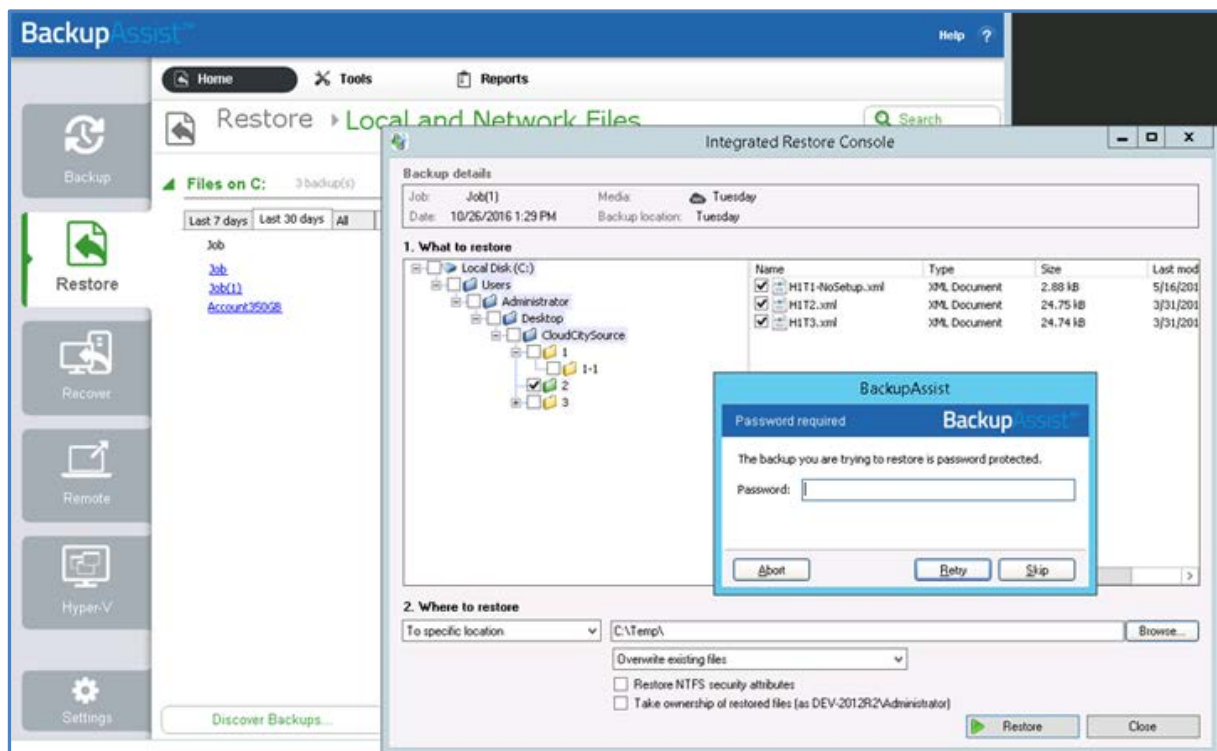
Figure 6: Cloud Backup restore

When you start the restore process, you will be prompted to enter the password used to encrypt the cloud backup.