# Ahsay Online Backup Manager v7

Quick Start Guide for Synology NAS

Ahsay Systems Corporation Limited

**18 October 2018**

# Copyright Notice

# Trademarks

# Disclaimer

# Revision History

| Date | Descriptions | Type of modification |
|------|-------------|---------------------|
| 29 Jun 2016 | First Draft | New |
| 25 Nov 2016 | Modified Ch 3 Download AhsayOBM, Ch 3 Install AhsayOBM and Appendix: Uninstall AhsayOBM<br>Added Backup Set Options to Ch 5 Create a File Backup Set, Advanced Options to Ch 7 Start a Manual Backup, and Restore Options to Ch 8 Restore Data;<br>Combined "Technical Assistance" and "Documentation" as Ch 9 Contacting Ahsay | Modification |
| 16 Dec 2016 | Modified Ch 5 Create a Backup Set, Ch 7 Run Backup Jobs, Ch 8 Restore Data and Appendix Uninstall AhsayACB;<br>Corrected typo in Copyright Notice and Trademarks;<br>Removed "ing" verb form from all chapter titles for consistency | Modification |
| 3 Feb 2017 | Added instructions and screen shots for Encryption key handling in Ch. 5 | New |
| 7 Apr 2017 | Added Encryption Type option in Ch. 5 Create a Backup Set section | New |
| 7 Jul 2017 | Revised step in Create a Backup Set section | Modification |
| 16 Oct 2017 | Added Online Installation Step for Ch3.3 | New |
| 8 August 2018 | Added note of manually install Java 8 for Ch.3.1 Pre-install Requirement | New |
| 14 September 2018 | Updated Overview of backup process for Ch.6 | New/ Modification |
| 18 October 2018 | Added Requirement for Ch. 1.3, 1.4, 1.5; Move Java Requirement to Ch.1.6 | New/ Modification |

# Table of Contents

# 1 Requirements for AhsayOBM on Synology NAS

## Hardware Requirements

Refer to the following article for the list of Synology NAS models, DiskStation Manager (DSM) version and hardware requirement:

FAQ: Ahsay Hardware Compatibility List (HRL) for AhsayOBM on Synology NAS

## Software Requirements

Refer to the following article for the Ahsay Software Compatibility List:

FAQ: Ahsay Software Compatibility List (SCL) for version 7.3 or above

## AhsayOBM Installation

AhsayOBM v7.5.0.0 or above must be installed on the Synology NAS.

## NAS-Synology Add-on Module

Make sure the NAS-Synology feature has been enabled as an add-on module in your AhsayOBM user account to cover the backup of your Synology NAS.

Please contact your backup service provider for more details.

## Synology NAS User Account Permission

The Synology NAS user account used for the AhsayOBM installation and application must be a member of "**administrators**" user group.
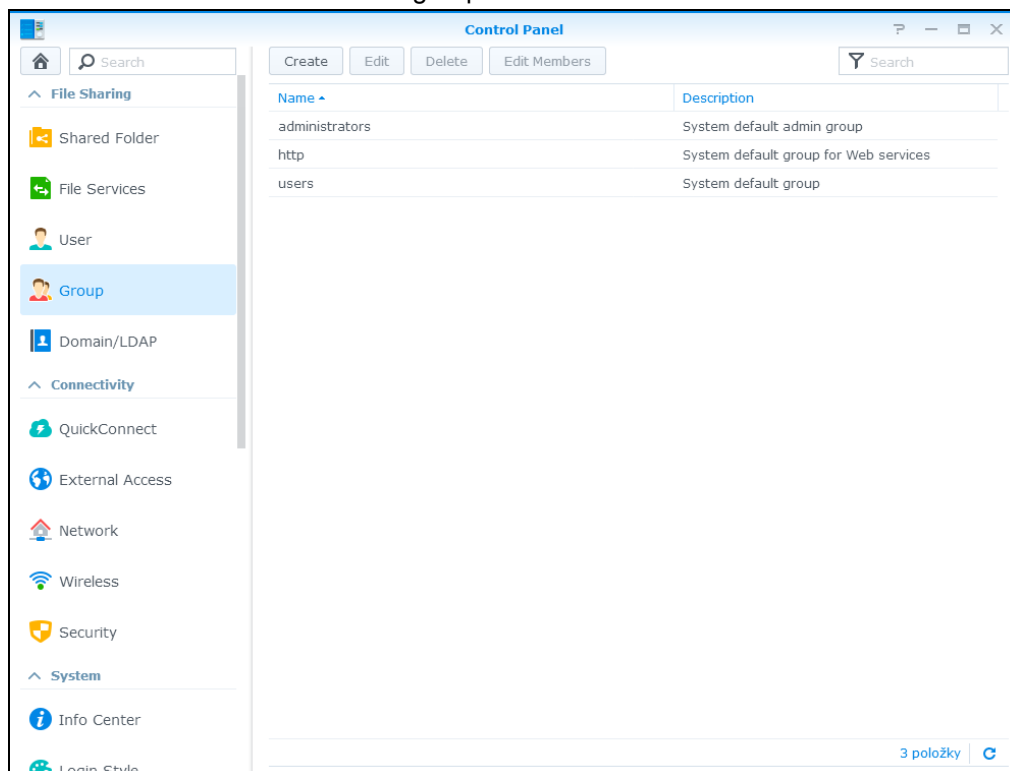


## Java Requirement

For Synology NAS model with non-Intel processor, OpenJDK is used by default.  To increase compatibility and performance, install or upgrade to Oracle JDK.

**If OpenJDK is not installed:**

1.  In Package Center, enter **Java7** in the search box.
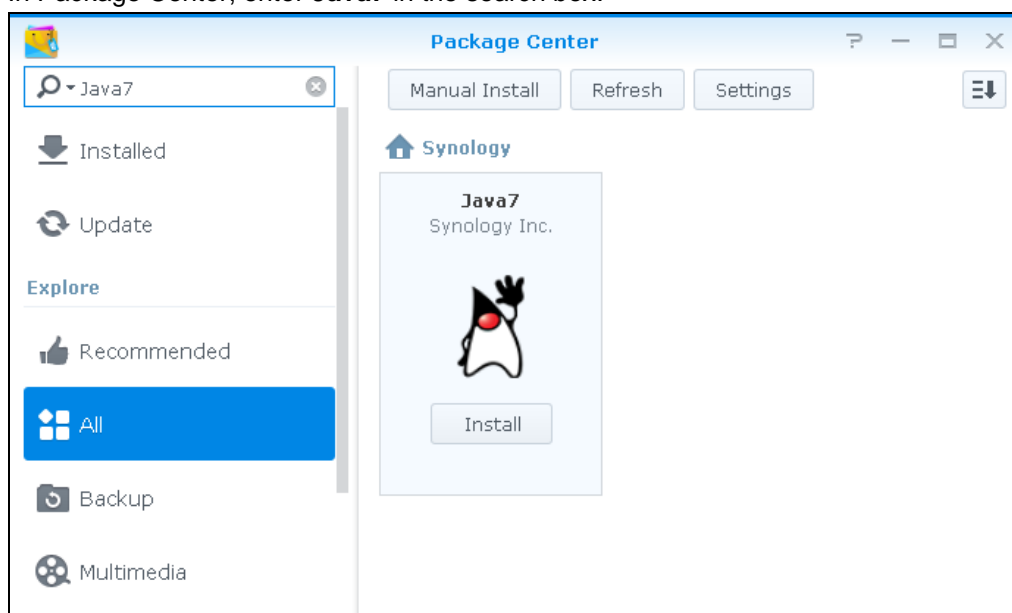
> **NOTE**
>
> Please kindly note that from v7.17.0.0 onwards, for Synology NAS with Realtek CPU processor, Java 8 must be manually installed before installing AhsayOBM. Please refer to the article FAQ: Ahsay Hardware Compatibility List (HRL) for AhsayOBM on Synology NAS for more details.

2. Click **Install** to install the Java package.

## After OpenJDK has been installed:

1. Open the Java package afterward, click **Upgrade Java**.
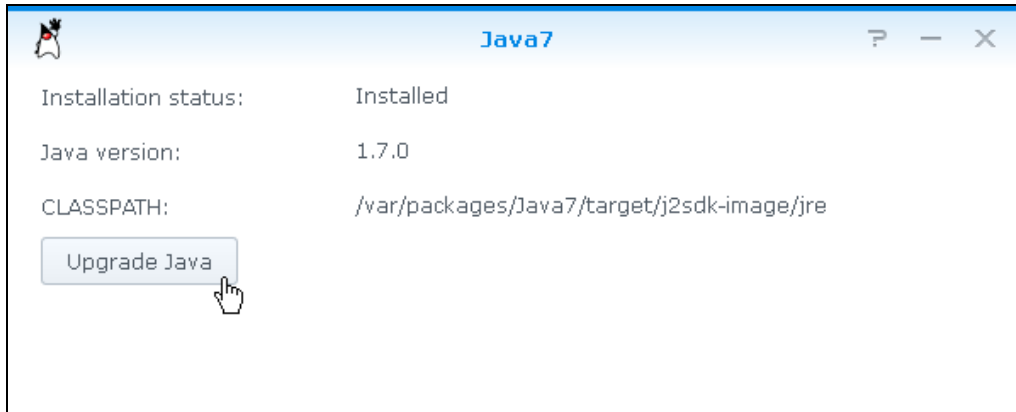


2. Refer to the on-screen instructions to download the corresponding package file from the Oracle website to install Oracle JDK.
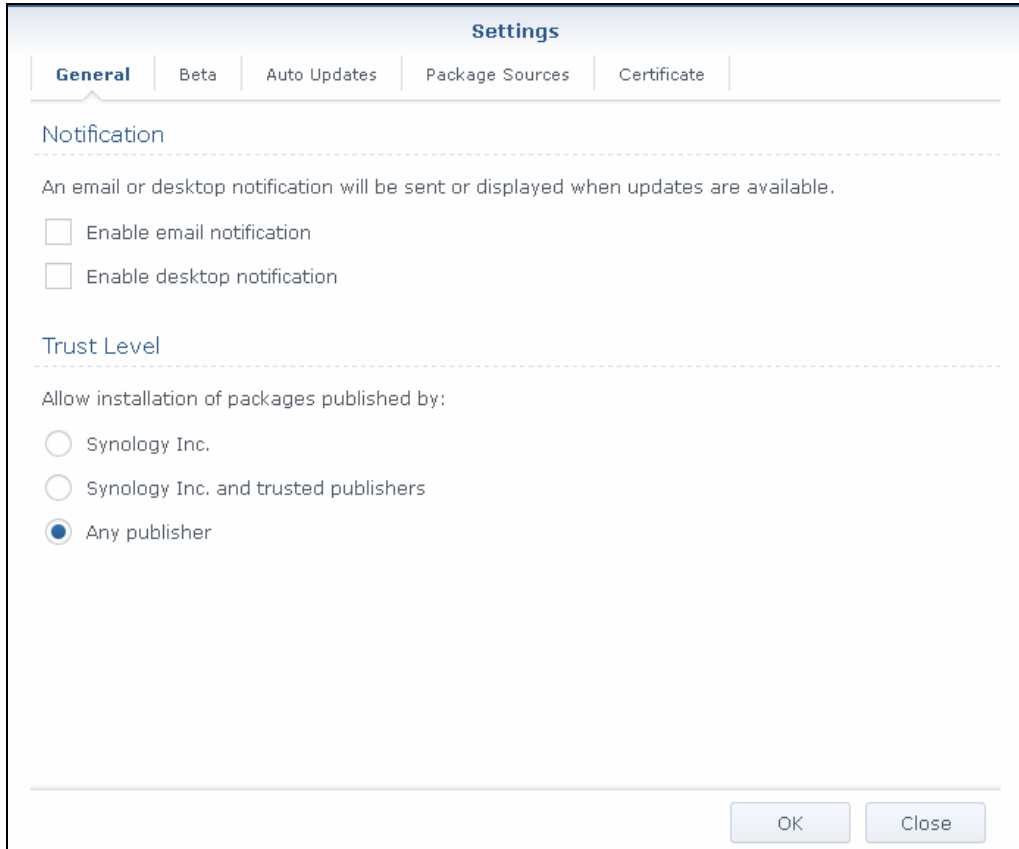
   *Further information can be found via the following Synology article:*
   *https://www.synology.com/en-us/knowledgebase/DSM/help/Java7/java7*

3. Modify the Trust Level setting temporarily to permit AhsayOBM to be installed. Open Package Center, select **Utilities** on the left panel. Then, select **Settings**.
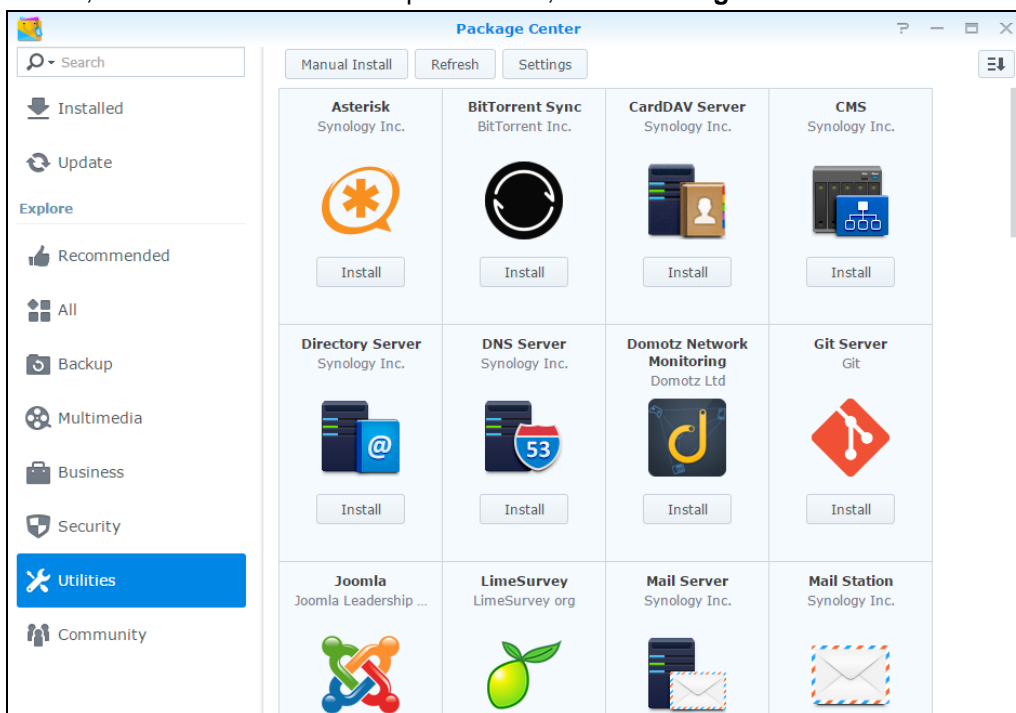
4. In the **General** tab, modify the Trust Level setting by choosing **Any publisher**.

## 2   Get started with AhsayOBM

This quick start guide will walk you through the following 5 major parts to get you started with using AhsayOBM.

**Download and Install**
Download and install AhsayOBM on your Synology NAS

**Launch the App**
Launch and log in to AhsayOBM

**Create a Backup Set**
Create a backup set according to your preferences

**Run Backup Jobs**
Run a backup job to back up your data

**Restore Data**
Restore your backed up data

# 3   Download and Install AhsayOBM

## Download AhsayOBM

1. In a web browser, click the blue icon on the top right corner to open the download page for the AhsayOBM installation package file from your backup service provider's website.



2. In the **AhsayOBM** tab of the download page, you can choose the AhsayOBM installer by operating system.
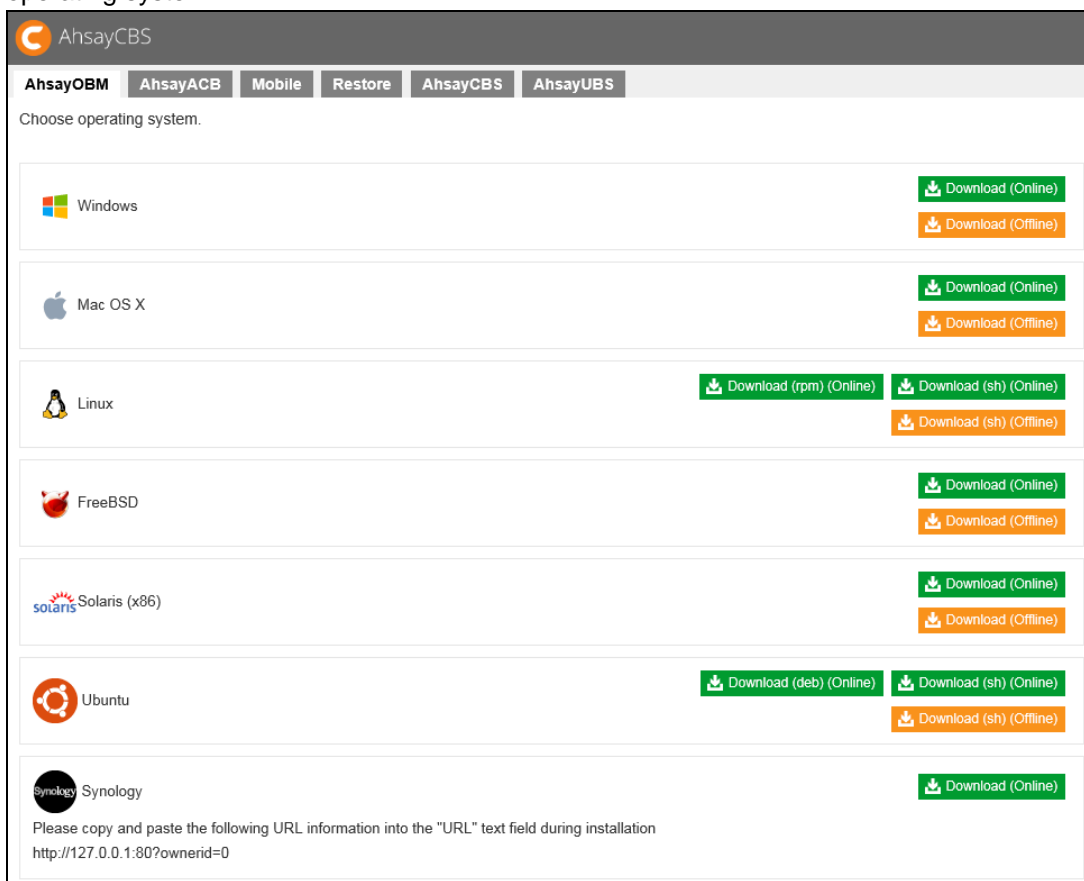


3. In the Synology section, click the **Download** icon to download the AhsayOBM installation package.

## Install AhsayOBM

1. Sign into DiskStation Manager (DSM) with the admin account. In a web browser, enter the Synology NAS device IP address, followed by :5000
https://nas_hostname:5000

   *Note: Refer to the following Synology KB article for information on how to sign into DSM:*
   *https://www.synology.com/en-us/knowledgebase/DSM/help/DSM/MainMenu/get_started*

2. To install AhsayOBM on Synology NAS, click the Package Center icon from the desktop.
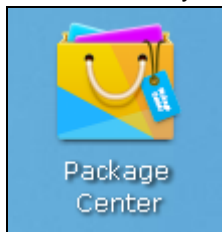
3. When the Package Center window appears, select **Manual Install**.
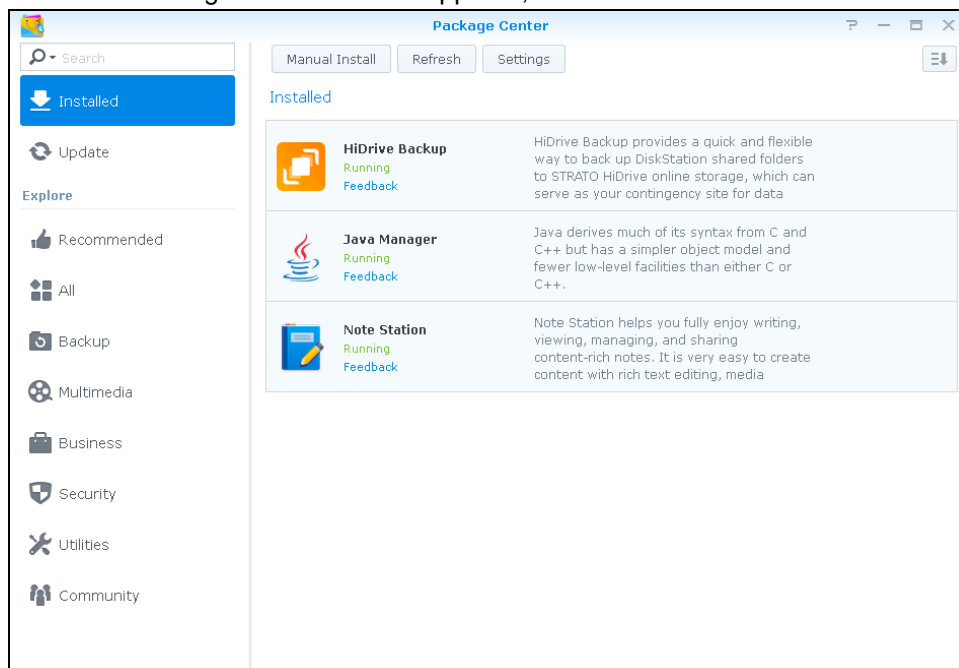
4. When the Manual Install window appears, click **Browse** to select the AhsayOBM package file which you have downloaded (e.g. obm-synology-443-backup service provider IP address-https-0O.spk). Then, click **Next** to proceed.
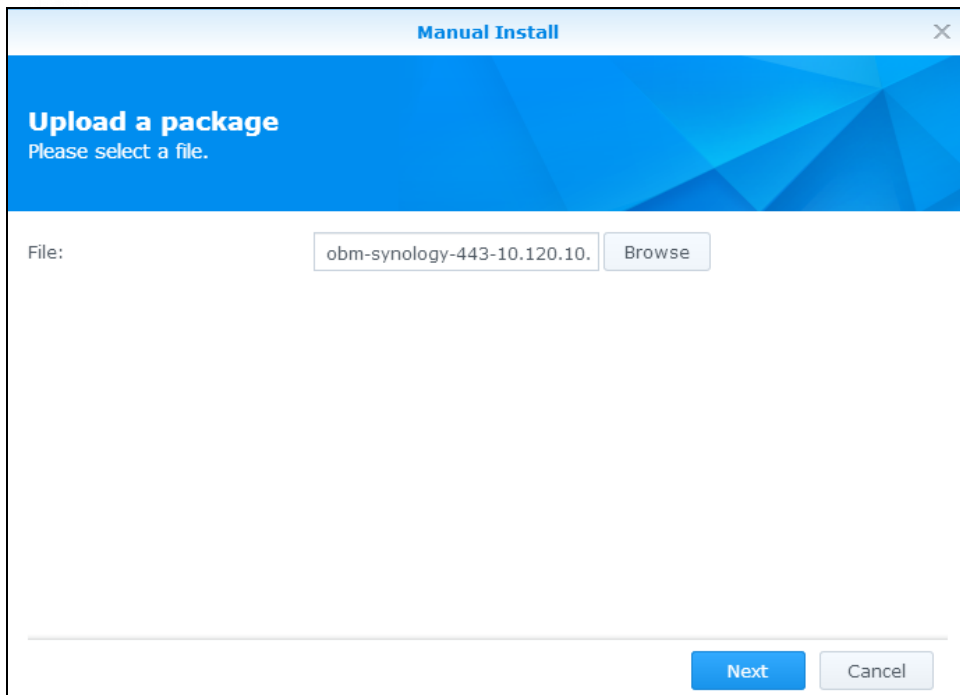
5. After reading the License Agreement carefully, tick the checkbox next to **I accept the terms of the license agreement**. Then, click **Next** to proceed.
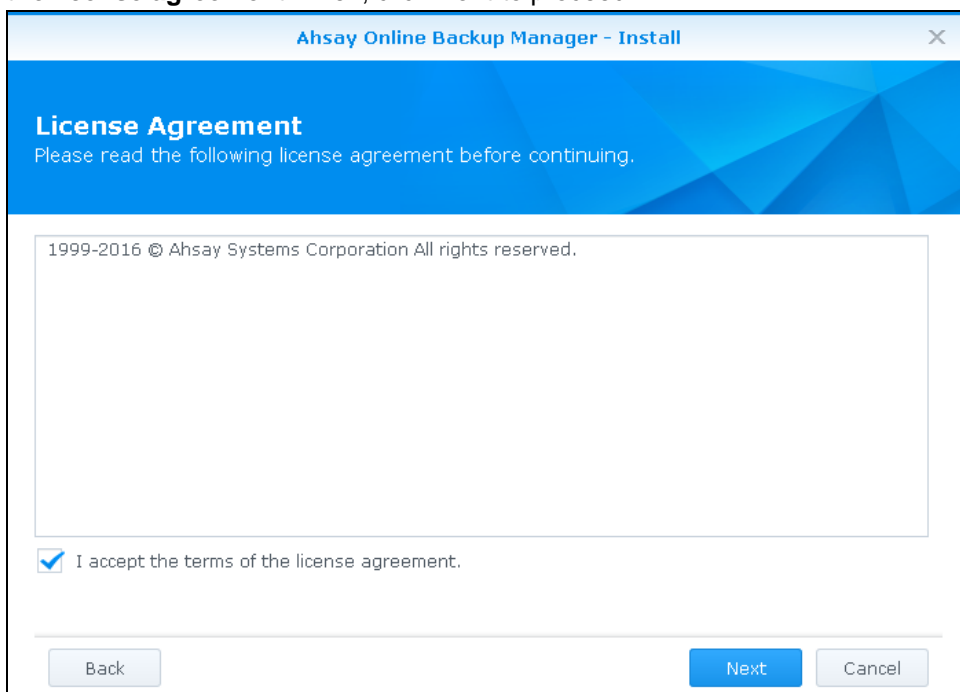


6. Copy and paste the URL information for installing on Synology shown in the download page. Then, click **Next** to proceed.

7. Review the information on screen. Then, click **Apply** to start the installation of AhsayOBM.

8. Upon successful installation, Ahsay Online Backup Manager will be listed in the Installed packages.
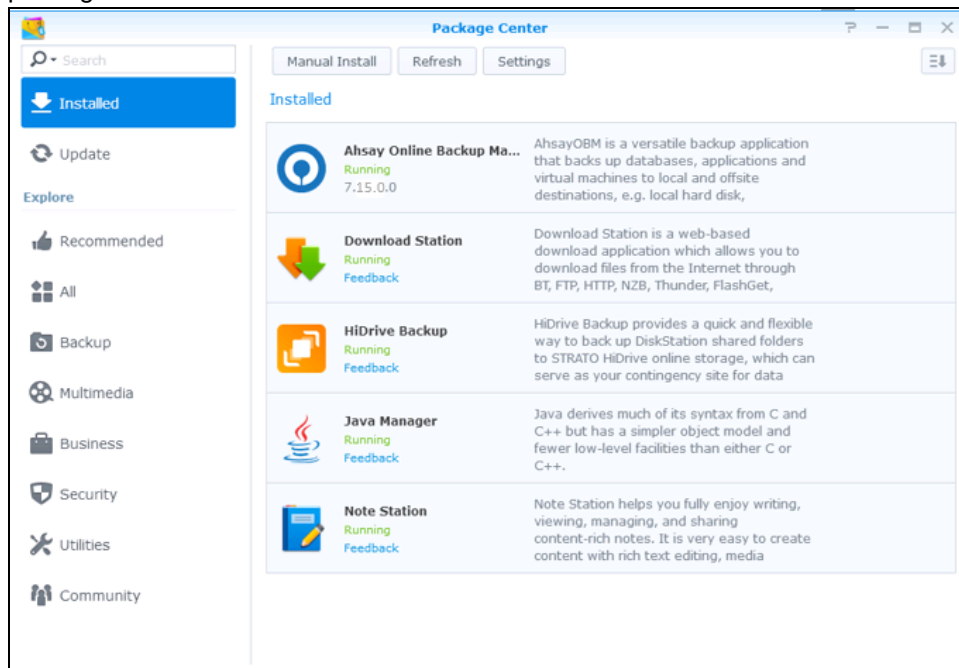


9. You can click the Main Menu icon on the top left corner of your desktop.



10. You can click the AhsayOBM icon to launch the application.



11. Revert the Trust Level to the previous setting in Package Center afterward.

12. Refer to Pre-install Requirement for instructions.

# 4 Start AhsayOBM

## Add an AhsayOBM Shortcut Icon to the Desktop

1. In the DiskStation Manager (DSM) console, click the **Main Menu** icon on the top left corner of the desktop to open it.



2. All application icons will be shown. Look for the **AhsayOBM** icon.
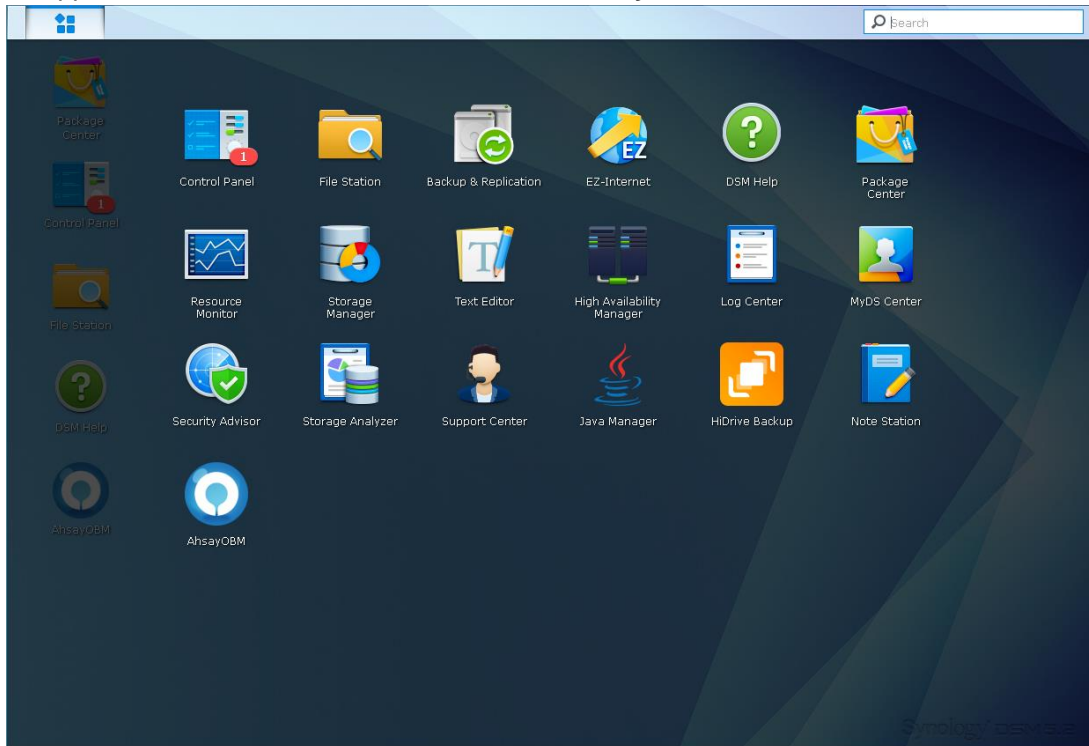


3. Right-click the **AhsayOBM** icon and select **Add to desktop**.
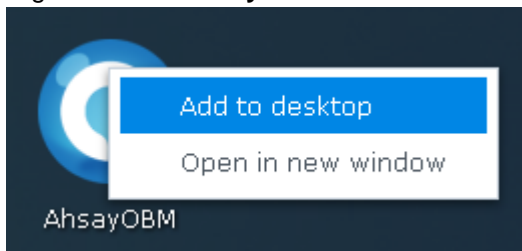
3. The AhsayOBM shortcut icon will be added to the desktop.
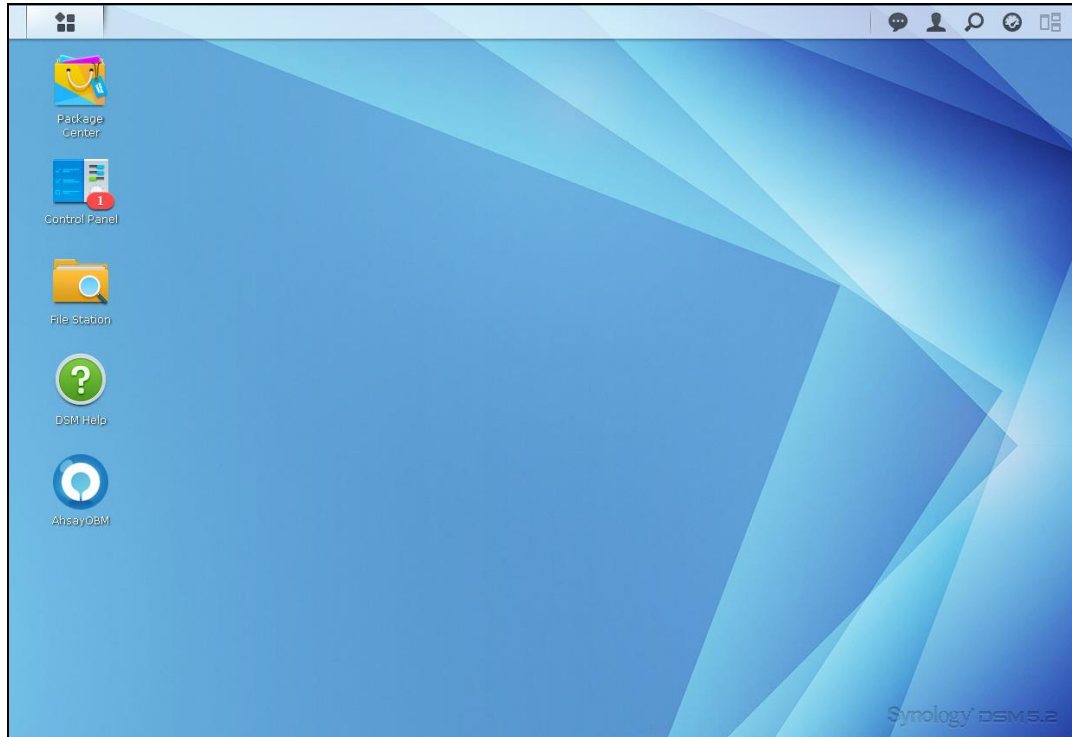
## Login to AhsayOBM

1.  Double-click the AhsayOBM icon on the desktop to launch the application.

2.  The Free Trial Registration menu may be displayed when you login for the first time. Click **Login** if you already have an AhsayOBM account, or click **Free Trial** to register for a trial backup account.
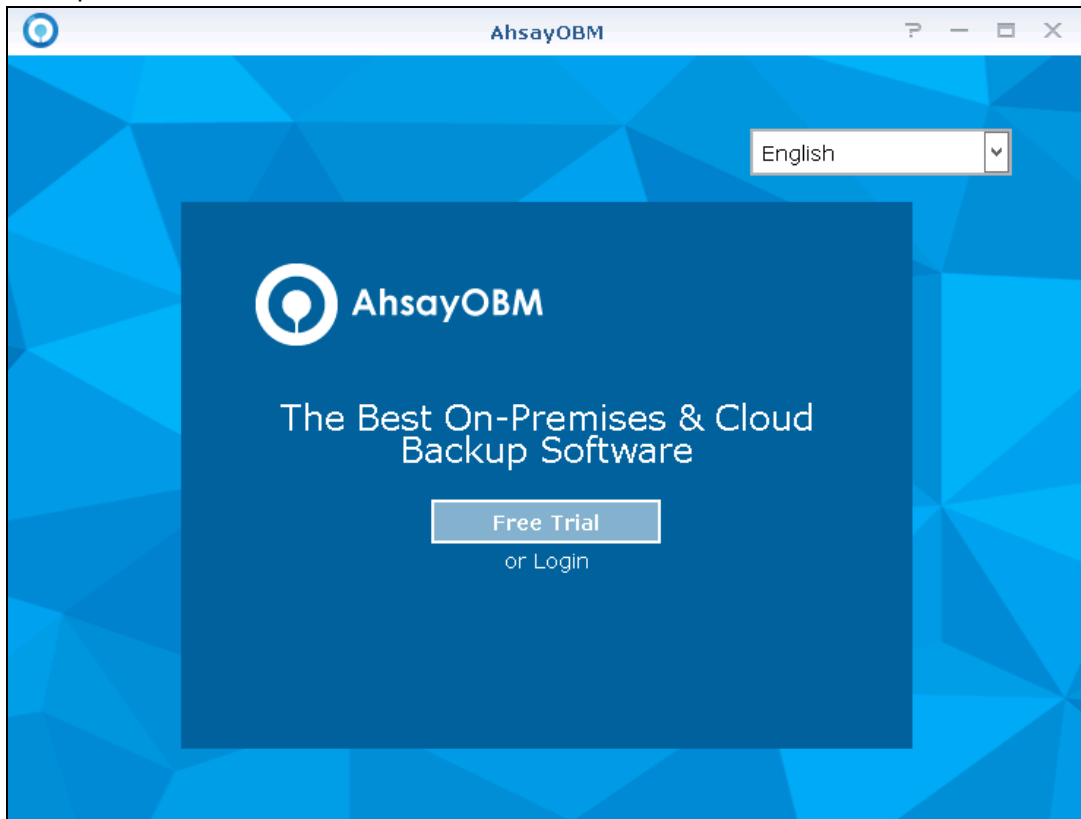


*Note: The free trial registration menu will be displayed if your service provider has enabled free trial registration on the backup server.*

3.  In case you want to enter the backup server setting provided by your backup service provider, click **Show advanced option**.
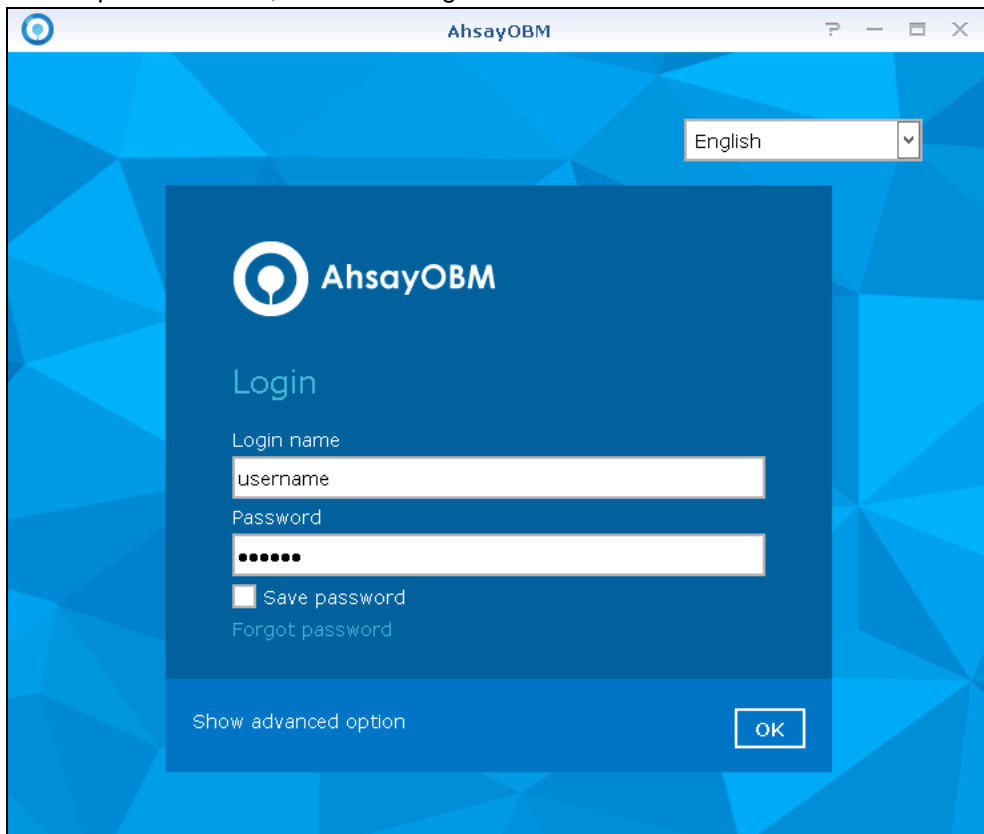
4.  Enter the Login Name and Password of your AhsayOBM account provided by your backup service provider. Then, click **OK** to login.



5.  Upon successful login, the following screen will appear.
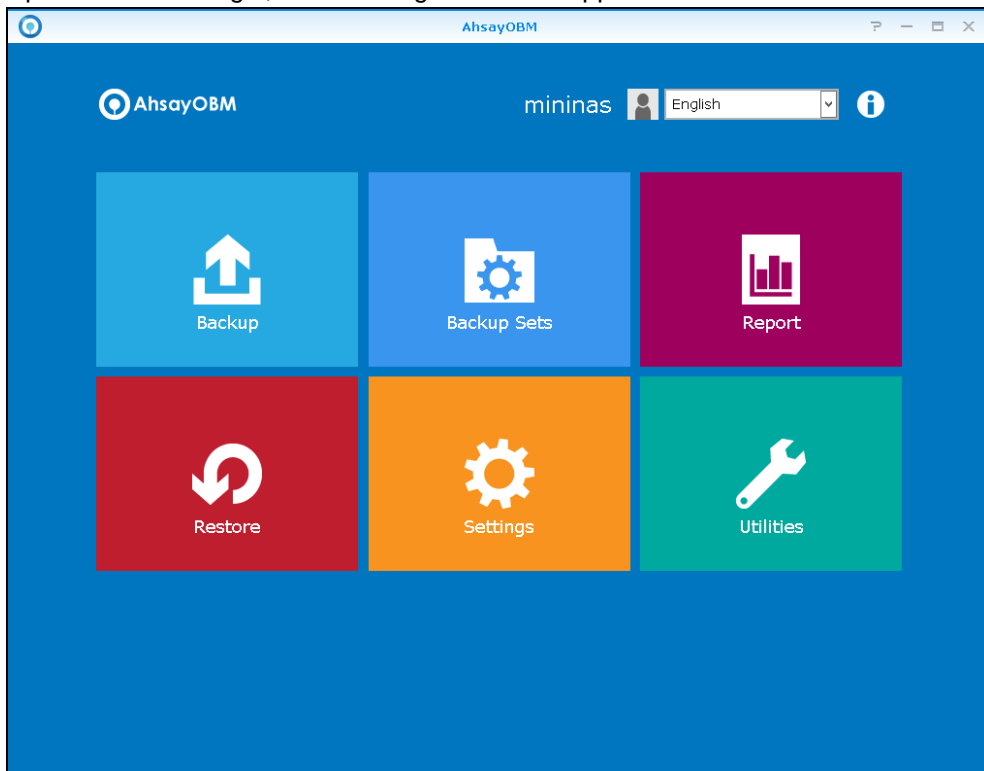
## 5   Create a Backup Set

1.  Click the **Backup Sets** icon on the main interface of AhsayOBM.
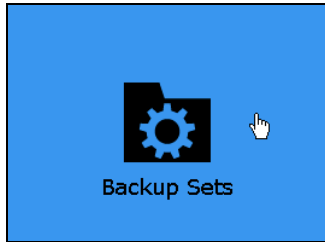


2.  Create a backup set by clicking "**+ Add new backup set**".
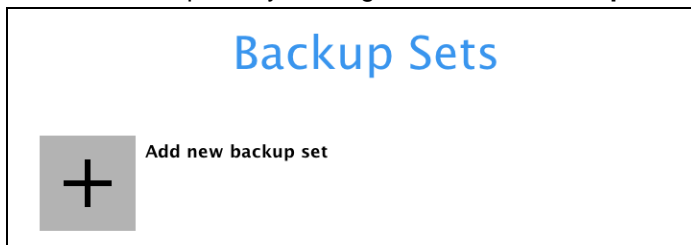


3.  When the Create Backup Set window appears, name your new backup set, then click **Next** to proceed.



4.  In the Backup Source window, you can select the source files and folders for backup.
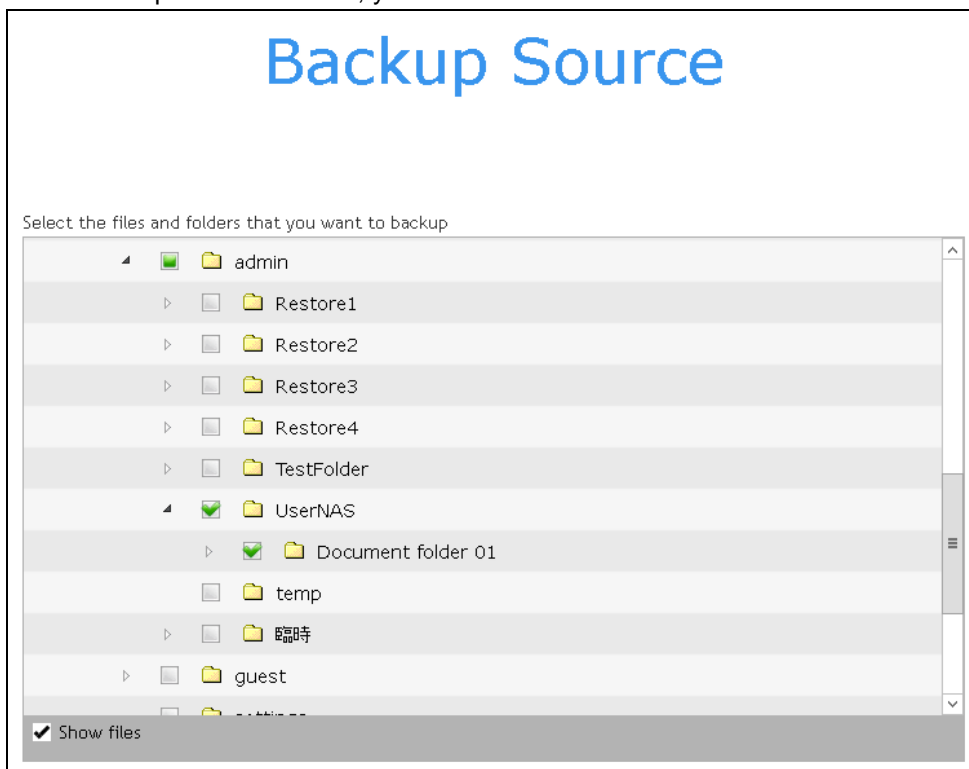
5. Click the **Show files** checkbox if you want to select individual file(s) for backup.
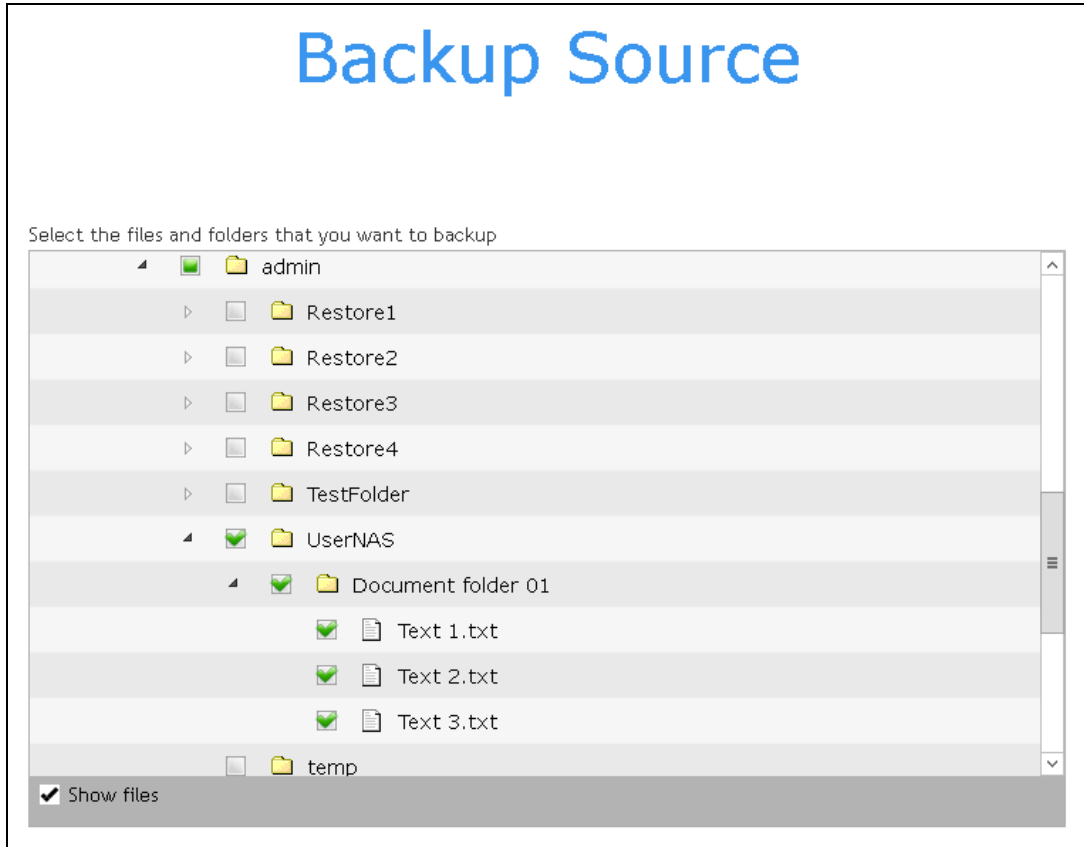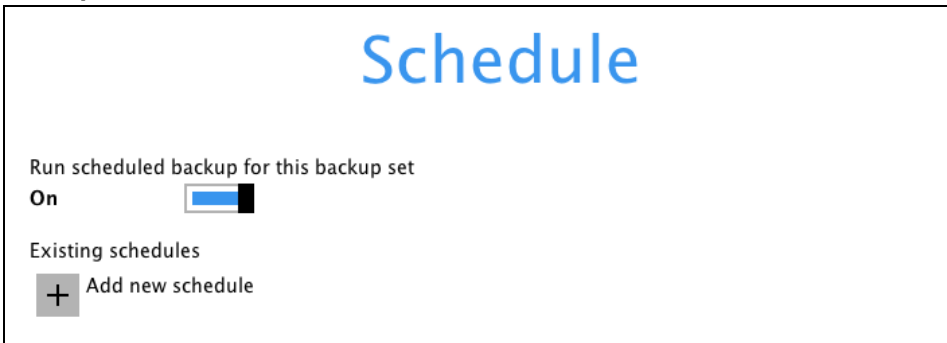


*Note: AhsayOBM can only back up files or folders displayed under the File Station on the DiskStation Manager. For more details, refer to the following KB article:*
*http://wiki.ahsay.com/doku.php?id=public:5047_faq_about_ahsayobm_installation_on_synology _nas_devices*

6. In the Backup Source window, click **Next** to proceed.

7. When the Schedule window appears, you can configure a backup schedule to automatically run a backup job at your specified time interval.

   ⦿ In the Schedule window, the Run scheduled backup for this backup set is **Off** by default.
   You can leave it as is if you want to add a schedule later.
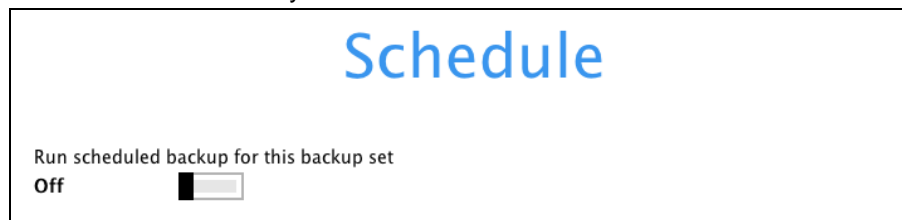
If you want to add a schedule now, switch on **Run scheduled backup for this backup set**. Then, click "**+**" next to Add New schedule.
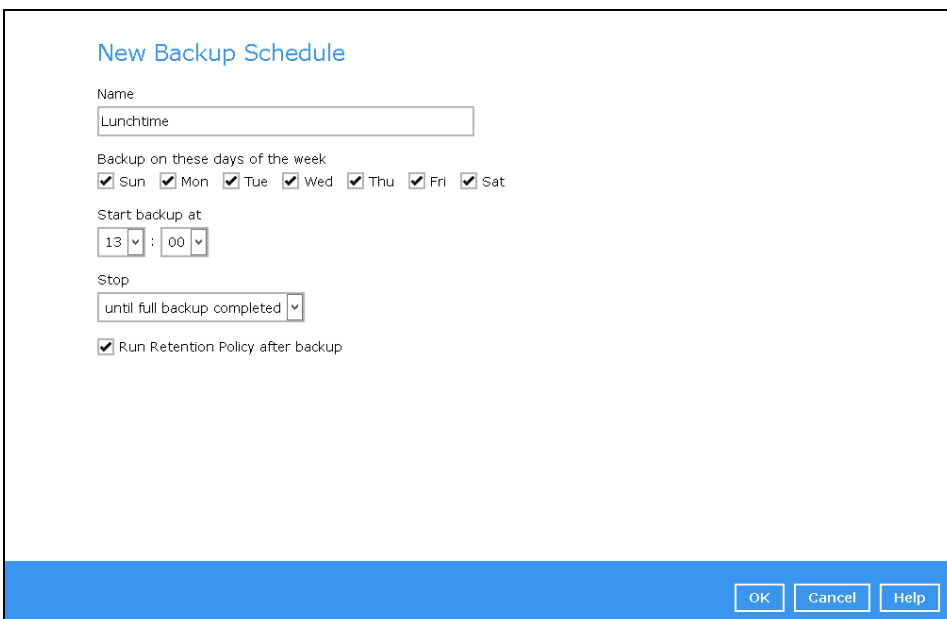


When the **New Backup Schedule** window appears, specify your backup schedule. Then, click **OK** to save your changes and close the New Backup Schedule window.
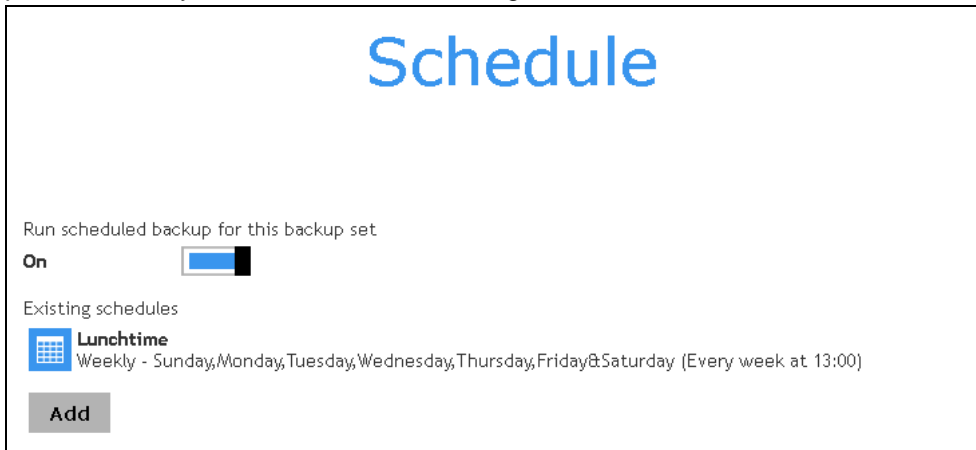


*Note:* For details about the options from the dropdown menus, please refer to Configure Backup Schedule for Automated Backup.

8. In case you have added a schedule, it will be shown in the Schedule window. Click **Next** to proceed when you are done with the settings.



9. The Destination window will appear.
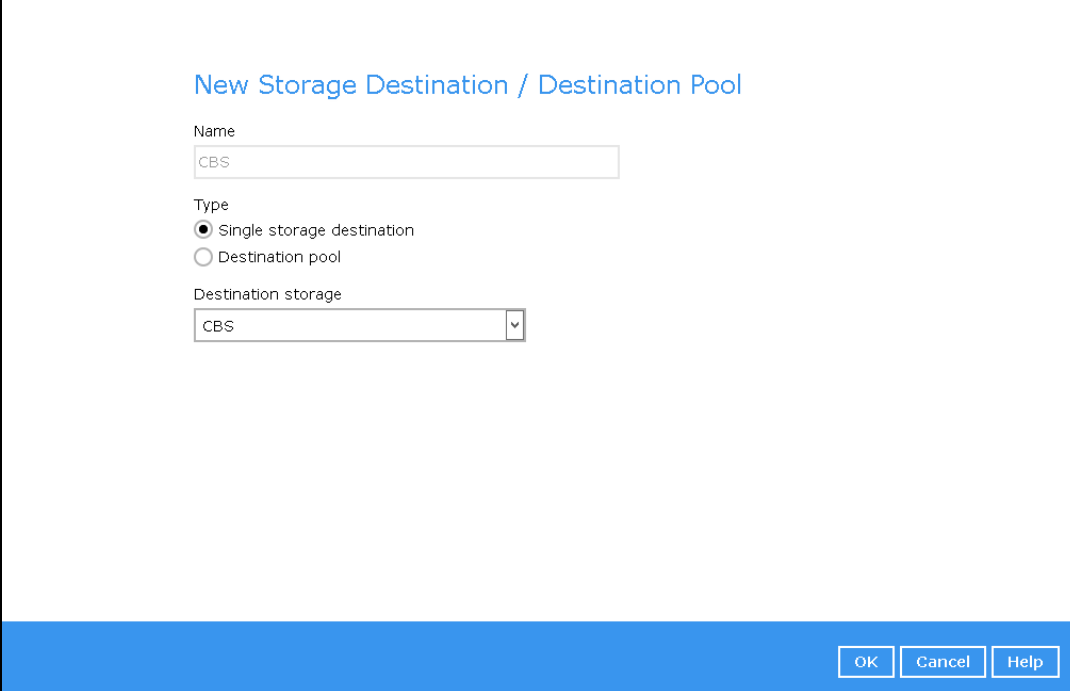


Select the appropriate option from the **Backup mode** drop down menu.

- ◉ **Sequential** (default value) – run backup jobs to each backup destination one by one

- ◉ **Concurrent** – run backup jobs to all backup destinations at the same time

To select a backup destination for the backup data storage, click the "**+**" icon next to Add new storage destination / destination pool.

10. In the New Storage Destination / Destination Pool window, select the destination type and destination storage. Then, click **OK** to confirm your selection.

New Storage Destination / Destination Pool

Name
CBS

Type
◉ Single storage destination
○ Destination pool

Destination storage
CBS

OK    Cancel    Help

*Note: For more details on configuration of cloud storage as backup destination, refer to Appendix A in this guide.*

11. In the Destination window, your selected storage destination will be shown. Click **Next** to proceed.

Destination

Backup mode
Sequential

Existing storage destinations
CBS
Host: 10.3.1.8:443

Add
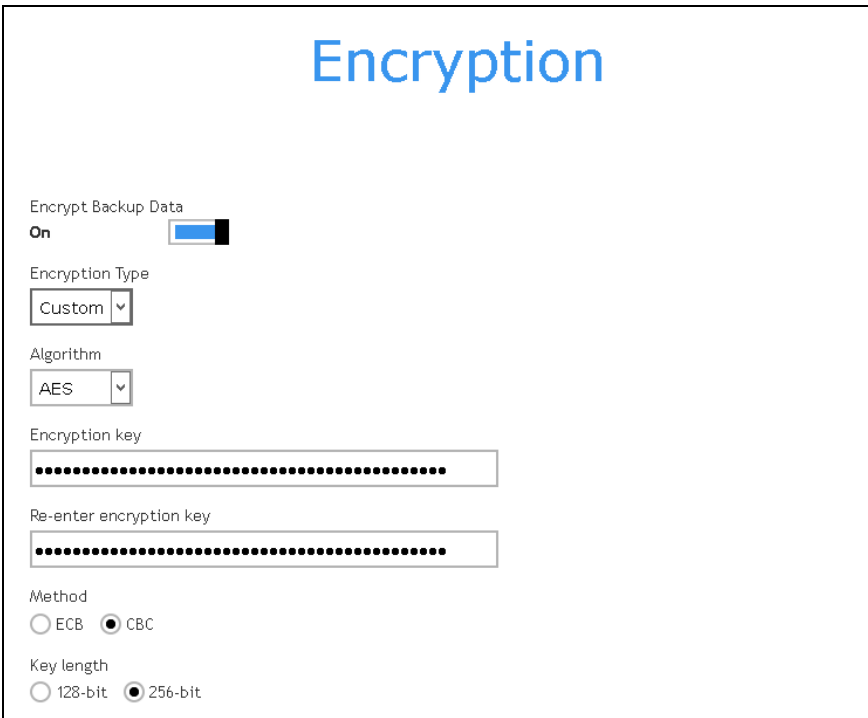
12. In the Encryption window, the default **Encrypt Backup Data** option is enabled with an encryption key preset by the system which provides the most secure protection.



You can choose from one of the following three Encryption Type options:

➢ **Default** – an encryption key with 44 alpha numeric characters will be randomly generated by the system.

➢ **User password** – the encryption key will be the same as the login password of your AhsayOBM at the time when this backup is created. Please be reminded that if you change the AhsayOBM login password later, the encryption keys of the backup sets previously created with this encryption type will remain unchanged.

➢ **Custom** – you can customize your encryption key, where you can set your own algorithm, encryption key, method and key length.



*Note: For best practice on managing your encryption key, refer to the following KB article.*
*https://forum.ahsay.com/viewtopic.php?f=169&t=14090*

Click **Save** when you are done with the settings.

13. If you have enabled the Encryption Key feature in the previous step, the following pop-up window shows, no matter which encryption key you have selected.
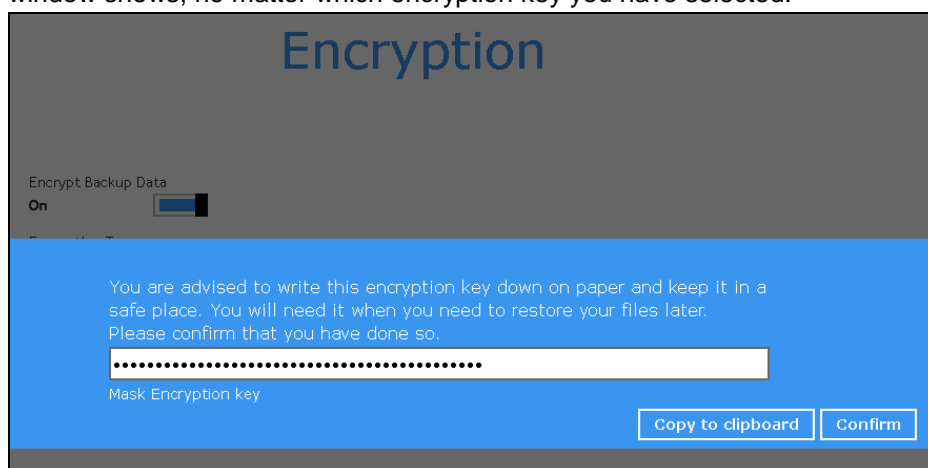


The pop-up window has the following three options to choose from:

➢ **Unmask encryption key** – The encryption key is masked by default. Click this option to show the encryption key.
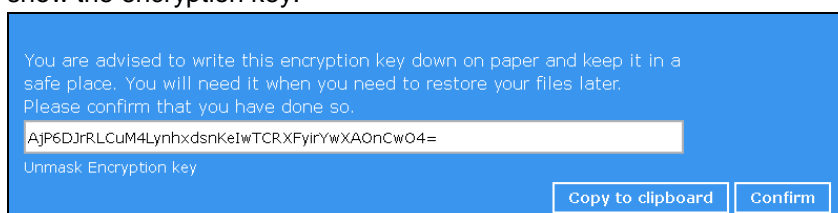


➢ **Copy to clipboard** – Click to copy the encryption key, then you can paste it in another location of your choice.

➢ **Confirm** – Click to exit this pop-up window and proceed to the next step.

14. Upon successful creation of the backup set, the following screen will appear. You can click **Backup now** to back up your data or click **Close** to exit.
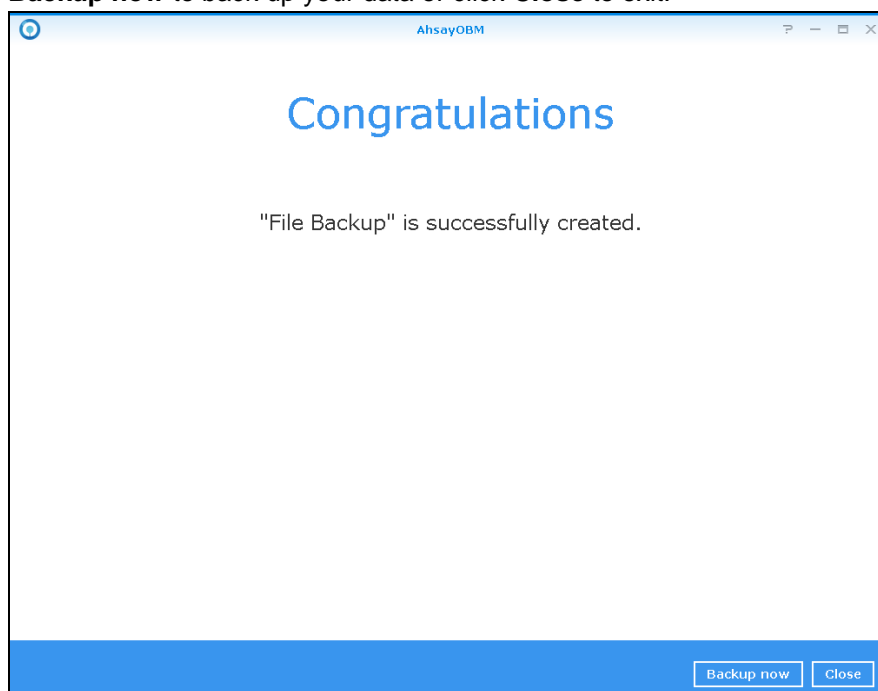
# 6   Overview on Backup Process

The following steps are performed during a backup job.

**1 Establishing connection**
Connection from the backup client to the backup server is established.

**2 Uploading encryption key**
Encryption key is uploaded to the backup server (if enabled).

**3 Running Progressive DIC**
Progressive DIC is run (if enabled).

**4 Running pre-backup command**
Pre-backup command is run (if configured).

**8 Generating delta files**
Delta files are generated for modified files (if required).

**7 Comparing files**
Local and remote file lists are compared to identify new, updated, or deleted mail items since the last backup job.

**6 Downloading files**
Remote file list and checksum files are downloaded from the backup destination.

**5 Compiling file list**
Local file list is compiled according to the backup source setting.

**9 Uploading files**
Data are compressed, encrypted, divided into individual data block of size 16 MB, and then uploaded to the backup destination(s).

**10 Running retention policy job**
Retention policy job is run (if enabled).

**11 Saving files**
Latest index files on client computer are saved to the backup destination(s) and client log files are saved to the backup server.
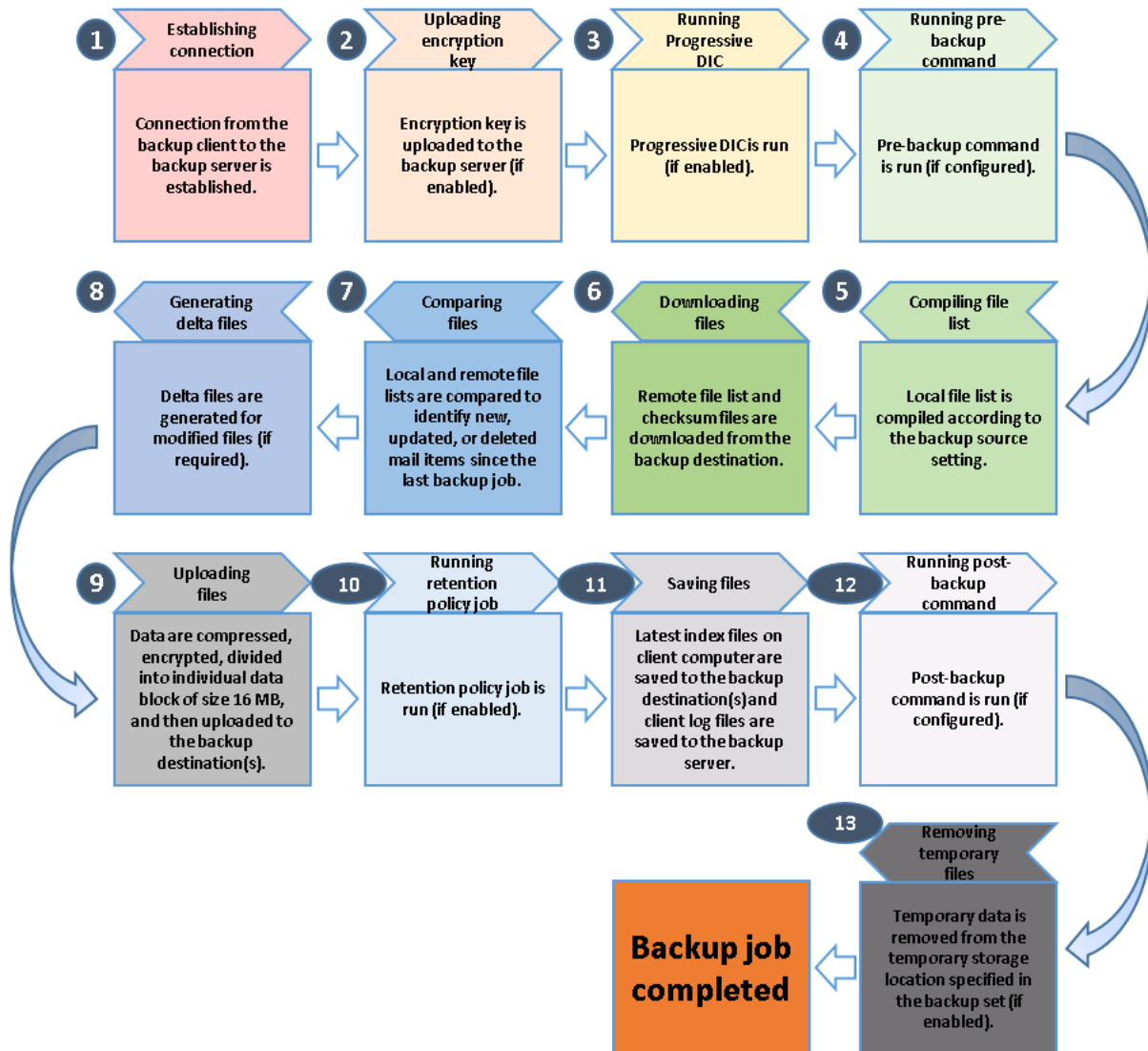
**12 Running post-backup command**
Post-backup command is run (if configured).

**13 Removing temporary files**
Temporary data is removed from the temporary storage location specified in the backup set (if enabled).

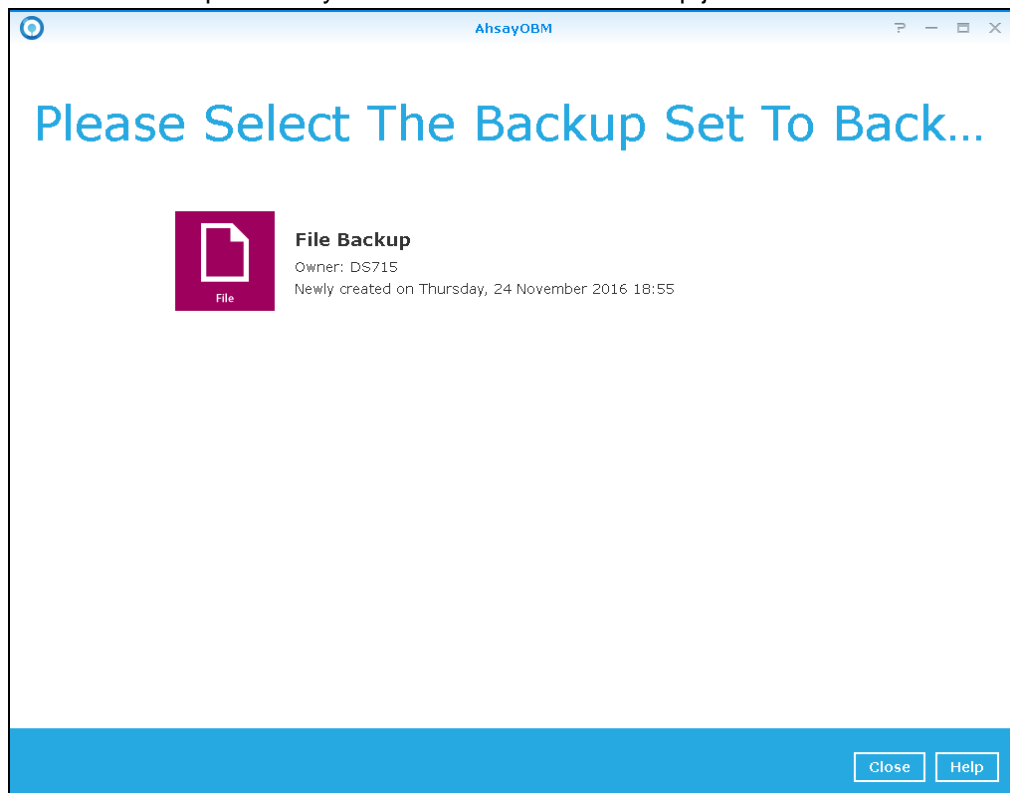**Backup job completed**

# 7 Run Backup Jobs

## Login to AhsayOBM

Login to the AhsayOBM application with the instructions provided in Login to AhsayOBM.

## Start a Manual Backup

1. Click **Backup** on the main interface of AhsayOBM.



2. Select the backup set that you would like to start a backup job with.

3. When the following options are shown, it is recommended that you tick the checkbox next to **Run Retention Policy after backup** in the Retention Policy section at the bottom. This will help you save hard disk quota in the long run. In the In-File Delta type section, the following three options are available:



- ⊙ **Full** – A full backup captures all the data that you want to protect. When you run a backup job for the first time, AhsayOBM will run a full backup regardless of the in-file delta setting.

- ⊙ **Differential** – A differential backup captures only the changes made as compared with the last uploaded full file only (i.e. changes since the last full backup, not since the last differential backup).

- ⊙ **Incremental** – An incremental backup captures only the changes made as compared with the last uploaded full or delta file (i.e. changes since the last incremental backup).

4. Click **Backup** to start the backup job. The status will be shown.



5. When the backup is completed, the progress bar will be green in color and the message "Backup Completed Successfully will appear.

6. You can click the ⌕ **View** icon on the right hand side to check the log. A window will pop up to show the log. Click **Close** to exit the pop-up window.

## Configure Backup Schedule for Automated Backup

1. Click **Backup Sets** on the AhsayOBM main interface.
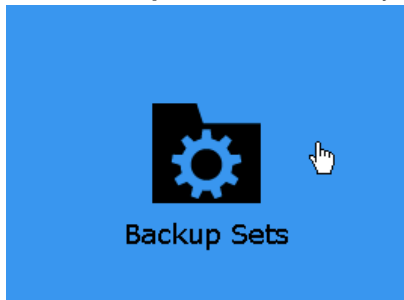


2. All backup sets will be listed. Select the backup set that you would like to create a backup schedule for. A screen will pop up, showing the General tab.
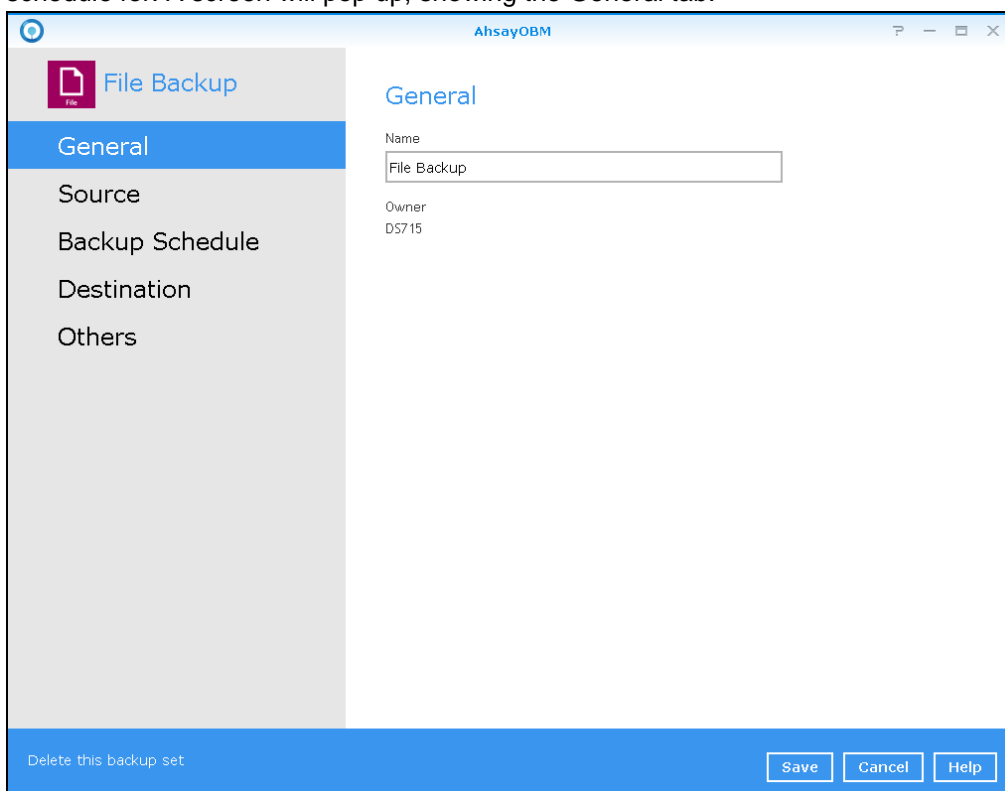


3. Go to the **Backup Schedule** tab. In case Run scheduled backup for this backup set is off, switch it **On**. Existing schedules will be listed at the bottom if any.
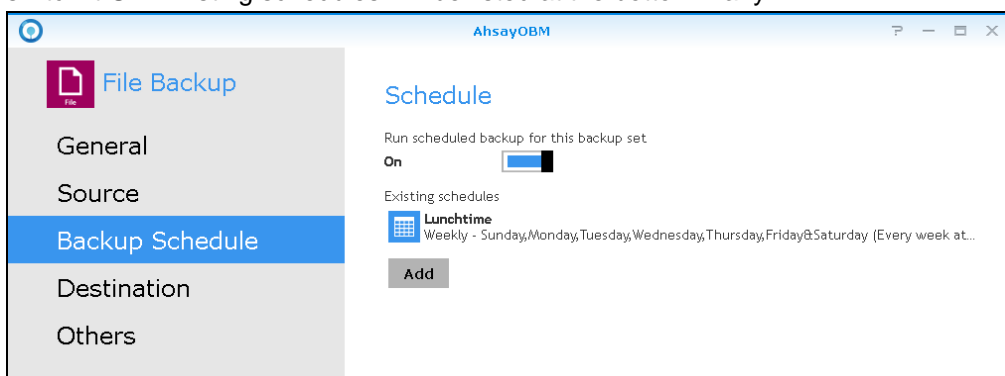
4.  Click **Add** to add a backup schedule. The New Backup Schedule window will appear.



5.  You can configure your backup schedule settings.



The **Stop** dropdown menu offers two options:

- ◉  **until full backup completed** – in case you prefer a complete backup



- ◉  **after** [how many] **hr** – in case you prefer the backup job to stop after a certain number of hours regardless of whether or not the backup job is complete

As an example, the four types of backup schedules may look like the following.



6. Click **Save** to confirm your settings. Then, click **Close** to exit Backup Sets.

## 8 Restore Data

### Login to AhsayOBM

Login to the AhsayOBM application with the instructions provided in Login to AhsayOBM.

### Restore Data

1.  Click the **Restore** icon on the main interface of AhsayOBM.
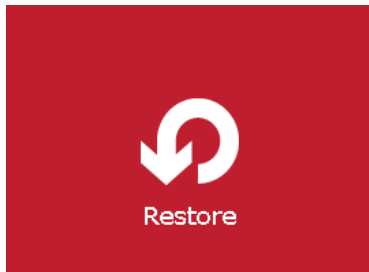


2.  All the available backup sets for restore will be listed. Select the backup set that you would like to restore data from.
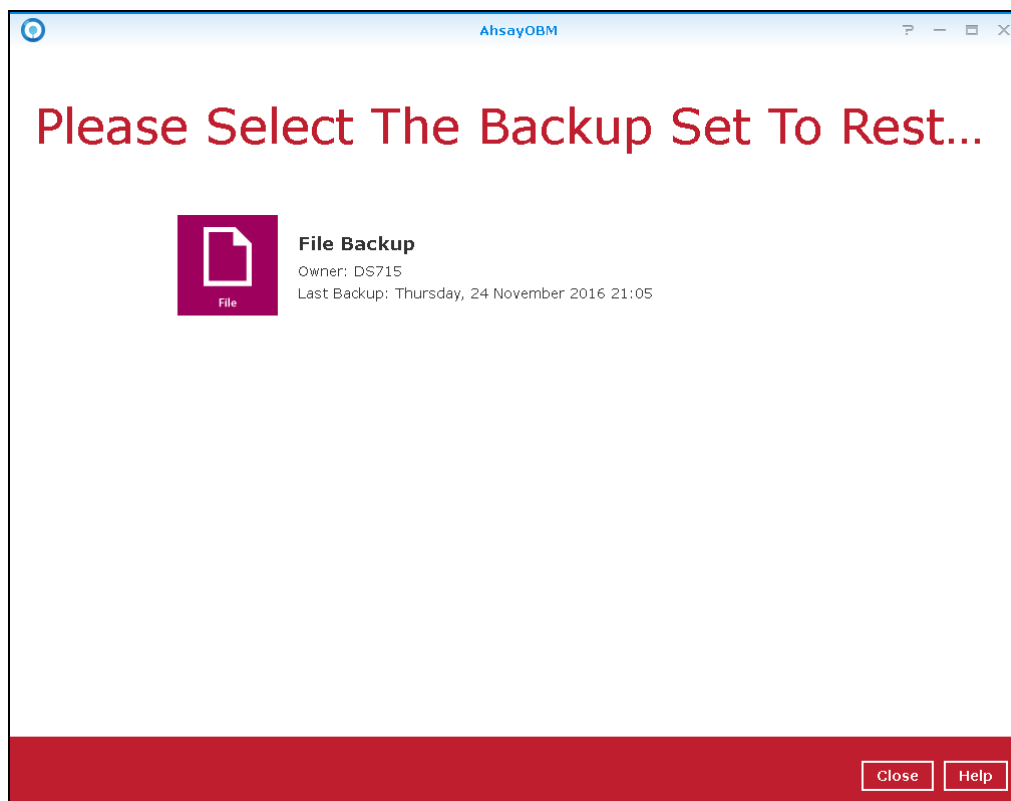


3.  Select where you would like to restore your data from.
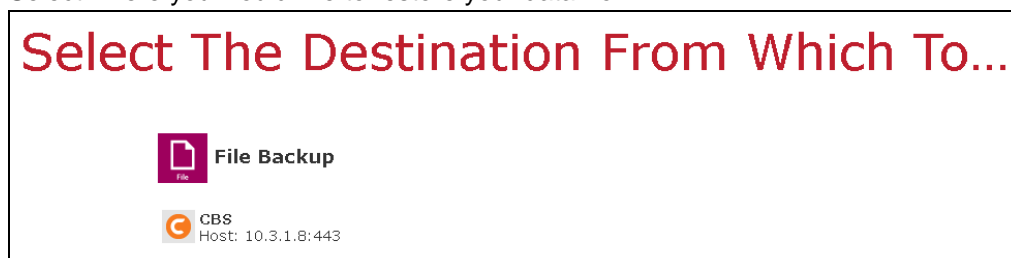
4. Select to restore files from a specific backup job, or from all files available. Then, select the files or folders that you would like to restore.

There are two options from the **Select what to restore** drop-down menu:

⊙ Choose **from files as of job** – This option allows you to select a backup version from a specific date and time to restore.



⊙ **Choose from ALL files** – This option allows you to restore all the available backup versions for this backup set. Among all the available backup versions, you can even select only some of the backup versions of a file to restore.
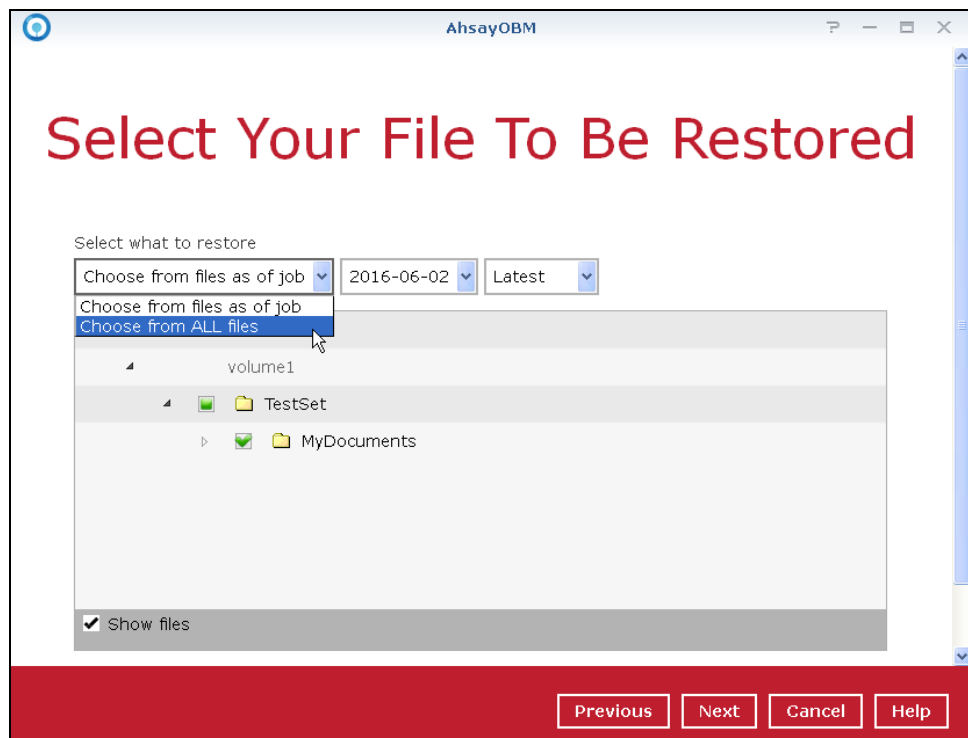




Below is an example showing all the available backup versions of the file **File snapshot testing.txt**. The latest version is shown in solid black color and all the previous versions are shown in grey color. You can identify the file version from the **Date modified** column.

When the restore is done, you will see all the selected backup versions in the restore destination. The latest backup version has the file name as the original file, while the previous versions have the time stamps added to their file names for easy identification.



5.  Click the **Show files** checkbox to select individual files for restoration. Click **Next** to proceed when you are done with the selections.

6.  Select to restore the files to their **Original location**, or to an **Alternate location**. Then click **Next** to proceed.

- ⦿  **Original location** – the backed up data will be restored to the computer running the AhsayOBM under the same directory path as on the machine storing the backup source. For example, if the backup source files are stored under **Users/[User's Name]/Downloads** folder, the data will be restored to **Users/[User's Name]/Downloads** as well on the computer running the AhsayOBM.

- **Alternate location** – you can choose to restore the data to a location of your choice on the computer where AhsayOBM is running.

7. Click **Show advanced option** to configure other restore settings:
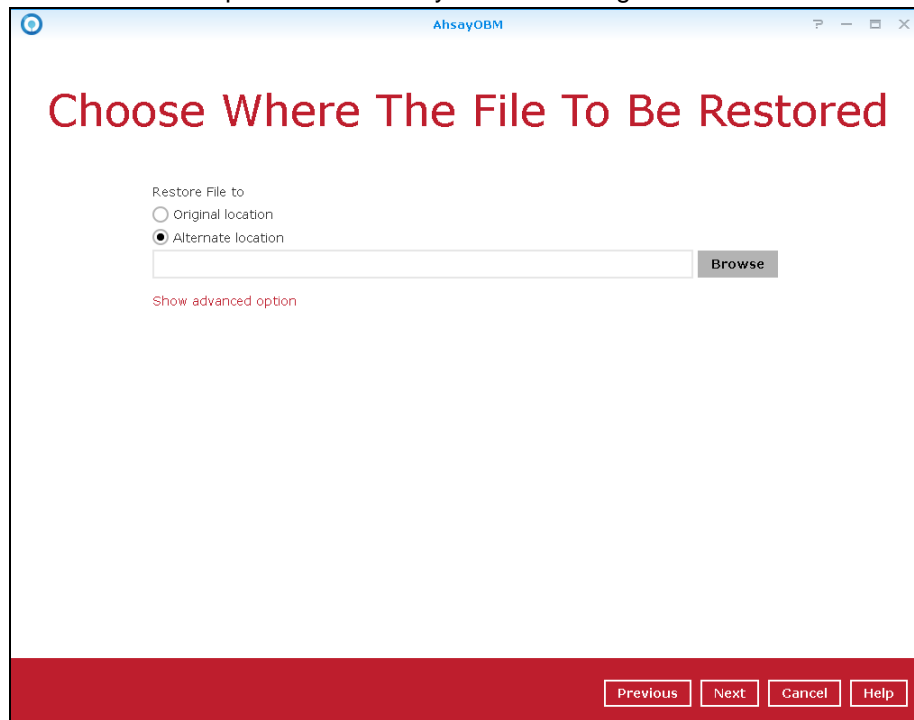
Restore File to
- ◉ Original location
- ○ Alternate location

Show advanced option

Overwrite mode during restoration:
- ◉ Skip All
- ○ Overwrite all

- ☐ Restore file permissions
- ☐ Delete extra files
- ☑ Follow Link

Hide advanced option

⊙ **Overwrite mode during restoration**
When there are file name conflicts during restoration, you can choose to skip them all or overwrite all existing files in the restore destination.

⊙ **Restore file permissions**
Restore file permissions are disabled by default. When you perform a file restore on a shared computer, it is recommended that you enable Restore file permissions by ticking the checkbox so that the files restored will not be fully accessible to everyone using the shared computer.

⊙ **Delete extra files**
Synchronize the selected restore source with the restore destination.
By enabling this option, the restore process will attempt to synchronize the selected restore source with the restore destination, making sure the data in the restore destination is exactly the same as the restore source. Any data created after backup will be treated as "extra files" and will be deleted from the restore source if this feature is enabled.

**Example:**

i) Two files are created under the **Document folder 01**, namely doc 1 & doc 2.

| Document folder 01 | |
| --- | --- |
| Name | ^ |
| 📄 doc 1.docx | — Files created initially |
| 📄 doc 2.docx | |
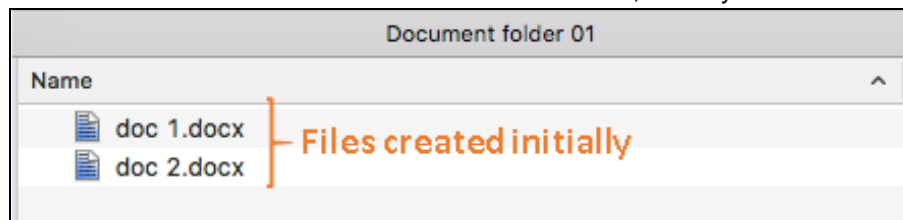
ii) A backup is performed for folder **Document folder 01**.

iii) Two new files are created, namely doc 3 & doc 4.



iv) A restore is performed for the **Document folder 01**, with **Delete extra files** option enabled.

v) Since doc 3 & doc 4 have never been backed up, therefore they will be deleted from **Document folder 01**, leaving only the two files that have been backed up.



| WARNING |
|---|
| Please exercise extra caution when enabling this feature. Consider what data in the restore source has not been backed up and what impact it would cause if those data is deleted. |
| Prior to the data restore and synchronization, a warning message shows as the one shown below. Only clicking **Yes** will the "extra file" be deleted. You can click **Apply to all** to confirm deleting all the "extra files" at a time. |

◉ **Follow Link (Enabled by default)**
When this option is enabled, not only the symbolic link or junction point will be restored, the directories and files that the symbolic link or junction point links to will also be restored.

The table below summarizes the behaviors when a restore is performed with different settings.

| Follow Link | Restore to | Behavior |
|---|---|---|
| **Enabled** | **Original location** | Symbolic link or junction point is restored to the original backup location. |
| | | Target directories or files are also restored to the original backup location. |
| | **Alternate location** | Symbolic link or junction point is restored to the location specified. |
| | | Target directories or files are also restored to the alternate location specified. |

| | | |
|---|---|---|
| **Disabled** | **Original location** | Symbolic link or junction point is restored to the original backup location. |
| | | Target directories or files are NOT restored to the original backup location. |
| | **Alternate location** | Symbolic link or junction point is restored to the location specified. |
| | | Target directories or files are NOT restored to the alternate location specified. |

7. Click **Next** to proceed when you are done with the settings.

8. Select the temporary directory for storing temporary files, such as delta files when they are being merged.



9. Click **Restore** to start the restore. The status will be shown.



10. When the restore is completed, the progress bar will be green in color and the message **Restore Completed Successfully** will appear.



You can click the  **View** icon on the right hand side to check the log. A window will pop up to show the log. Click **Close** to exit the pop-up window.

| Type | Log | Time |
|---|---|---|
| ℹ | Start [ DSM 5.2-5592 (DS715), AhsayOBM v7.9.0.0 ] | 25/11/2016 05:21:44 |
| ℹ | Initializing decrypt action... | 25/11/2016 05:21:44 |
| ℹ | Initializing decrypt action... Completed | 25/11/2016 05:21:45 |
| ℹ | Creating new directory... "/volume1/homes/admin/UserNAS/Document folder 01/volume1" | 25/11/2016 05:21:45 |
| ℹ | Creating new directory... "/volume1/homes/admin/UserNAS/Document folder 01/volume1/homes" | 25/11/2016 05:21:45 |
| ℹ | Creating new directory... "/volume1/homes/admin/UserNAS/Document folder 01/volume1/homes/admin" | 25/11/2016 05:21:45 |
| ℹ | Creating new directory... "/volume1/homes/admin/UserNAS/Document folder 01/volume1/homes/admin/UserNAS" | 25/11/2016 05:21:45 |
| ℹ | Creating new directory... "/volume1/homes/admin/UserNAS/Document folder 01/volume1/homes/admin/UserNAS/Document folder 01" | 25/11/2016 05:21:45 |
| ℹ | Downloading... "/volume1/homes/admin/UserNAS/Document folder 01/volume1/homes/admin/UserNAS/Document folder 01/Text 3.txt" (Total 2k bytes) | 25/11/2016 05:21:45 |
| ℹ | Downloading... "/volume1/homes/admin/UserNAS/Document folder 01/volume1/homes/admin/UserNAS/Document folder 01/Text 4.txt" (Total 5k bytes) | 25/11/2016 05:21:45 |
| ℹ | Downloading... "/volume1/homes/admin/UserNAS/Document folder 01/volume1/homes/admin/UserNAS/Document folder 01/doc 3.docx" (Total 1.06M bytes) | 25/11/2016 05:21:46 |
| ℹ | Creating new directory... "/volume1/homes/admin/UserNAS/Document folder 01/volume1/homes/admin/UserNAS/Templates" | 25/11/2016 05:21:47 |
| ℹ | Downloading... "/volume1/homes/admin/UserNAS/Document folder 01/volume1/homes/admin/UserNAS/Templates/Template_v0.1.docx" (Total 11k bytes) | 25/11/2016 05:21:47 |
| ℹ | Restoring File Permission:... /volume1/homes/admin/UserNAS/Document folder 01/volume1/homes/admin/UserNAS/Document folder 01/Text 4.txt | 25/11/2016 05:21:48 |

11. In the Restore window, click **Close** to close the Restore window.

12. To exit AhsayOBM, click the red "x" on the top right corner. If you wish to use the AhsayOBM again, you will then have to launch it again.

# 9   Contact Ahsay

## Technical Assistance

To contact Ahsay support representatives for technical assistance, visit the following website:
https://www.ahsay.com/jsp/en/contact/kbQuestion.jsp

Also use the Ahsay Knowledge Base for resource such as Hardware Compatibility List, Software Compatibility List, and other product information:
https://forum.ahsay.com

## Documentation

Documentations for all Ahsay products are available at:
https://www.ahsay.com/jsp/en/home/index.jsp?pageContentKey=ahsay_downloads_documentation_guides

You can send us suggestions for improvements or report on issues in the documentation, by contacting us at:
https://www.ahsay.com/jsp/en/contact/kbQuestion.jsp

The specific document title as well as the change required/suggestion when contacting us.

# Appendix

## Cloud Storage as Backup Destination

For most cloud storage providers (e.g. Dropbox, Google Drive, etc.), you need to enable access of AhsayOBM on your cloud destination. Click **OK** / **Test**, you will be prompted to login to the corresponding cloud service.
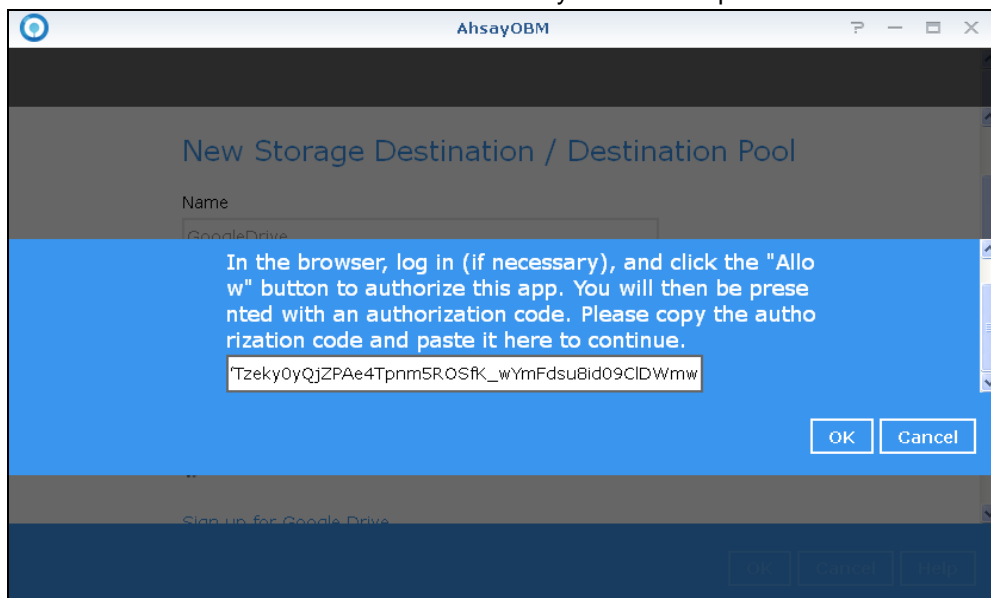
> **Important**
>
> The authentication request will be opened in a new tab / window on the browser, ensure that the pop-up tab / window is not blocked.

1. Click **Allow** to permit AhsayOBM to access the cloud storage.
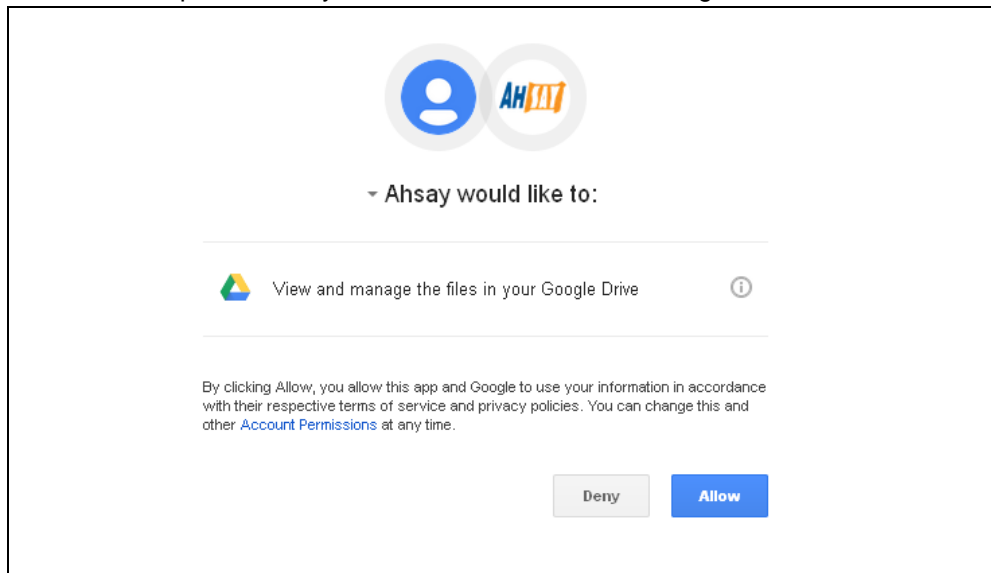


2. Enter the authentication code returned in AhsayOBM to complete the destination setup.

*Note: A backup destination can be set to a supported cloud storage, backup server, FTP / SFTP server, network storage, or local / removable drive on your computer.*

*Multiple backup destinations can be configured for a single backup set.  In fact it is recommended for you to set up at least 2 backup destinations for your backup set.*

*For more details on backup destination, for example which cloud service providers are supported, destination type, or limitation, you can refer to the following KB article: https://forum.ahsay.com/viewtopic.php?f=169&t=14049*

## Uninstall AhsayOBM

Refer to the following steps to uninstall AhsayOBM.

1.  Sign into DiskStation Manager (DSM) with the admin account. In a web browser, enter the Synology NAS device IP address, followed by :5000
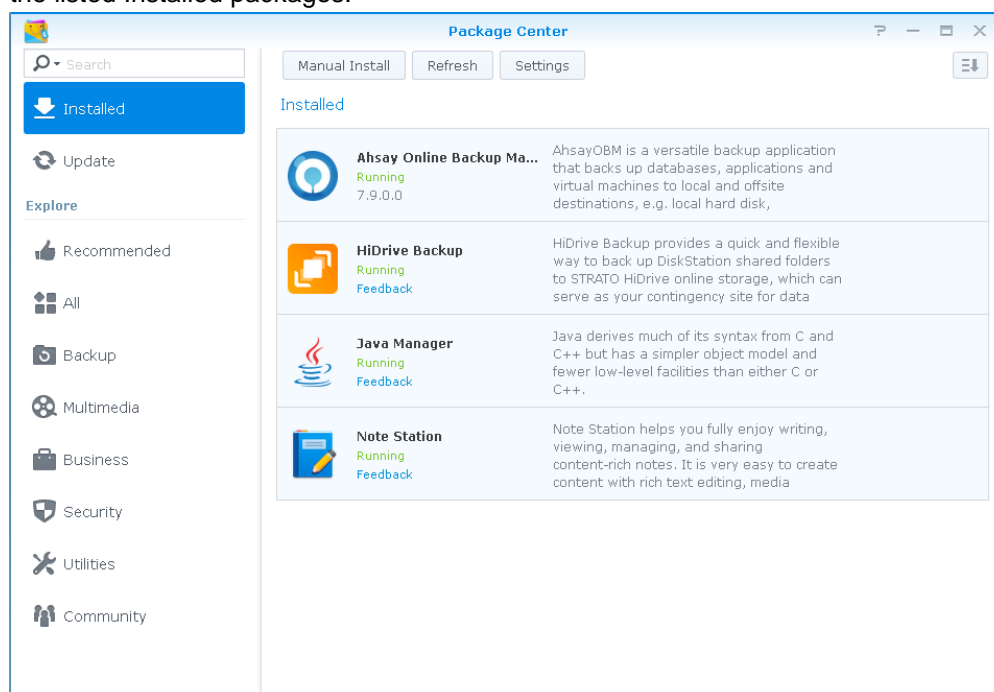    https://nas_hostname:5000

    *Note: Refer to the following Synology KB article for information on how to sign into DSM:*
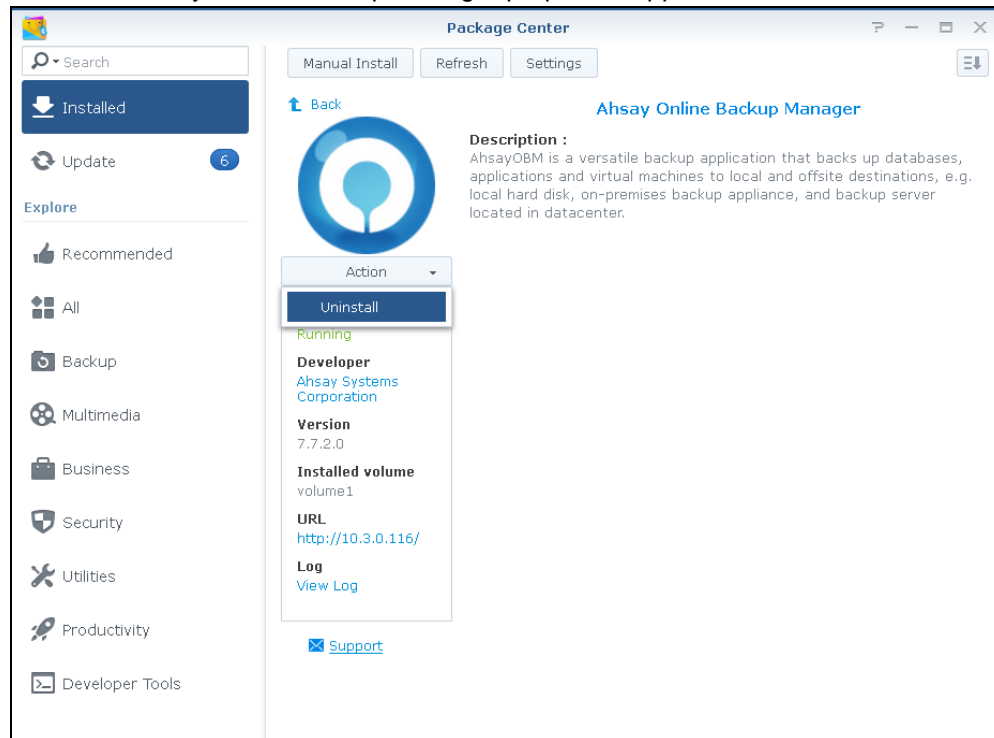    *https://www.synology.com/en-us/knowledgebase/DSM/help/DSM/MainMenu/get_started*

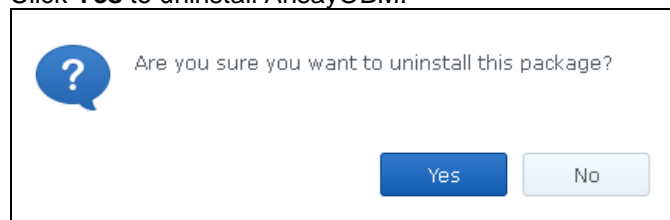2.  Double-click the Package Center icon on the desktop.
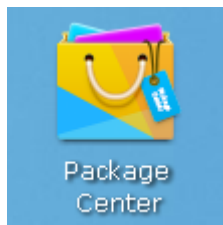
3.  When the Package Center window appears, select **Ahsay Online Backup Manager** from the listed Installed packages.

4. When the Ahsay Online Backup Manager properties appears, select **Action** > **Uninstall**.
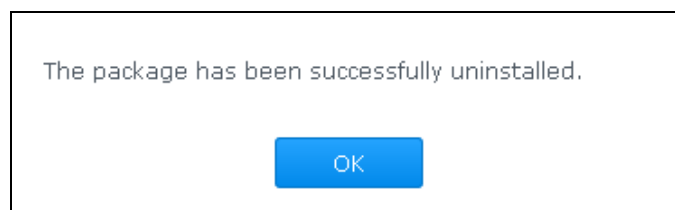


5. Click **Yes** to uninstall AhsayOBM.



*Note: If you select Yes, both AhsayOBM program files and user settings will be removed from the NAS drive.*

6. When the uninstallation is completed, the following message will appear.



*Note: Ahsay Online Backup Manager will no longer appear in the list of Installed packages. The uninstaller will also remove the .obm folder and all binary files from the following paths respectively:*
*/volume1/@appstore/AhsayOBM/.obm*
*/volume1/@appstore/AhsayOBM/*