



^{24/7} Backup Advanced Backup Manager (B247PRO) v9

Quick Start Guide for MacOS

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Revision History

| Date | Descriptions | Version |
|-----------------|---|---------|
| 25 January 2022 | <ul style="list-style-type: none">▪ Ch. 9.5 – added Deduplication▪ Ch. 12.2 – added Migrate Data | 9.1.0.0 |

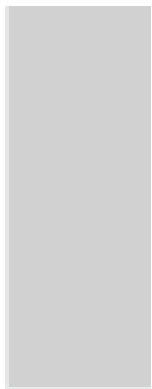
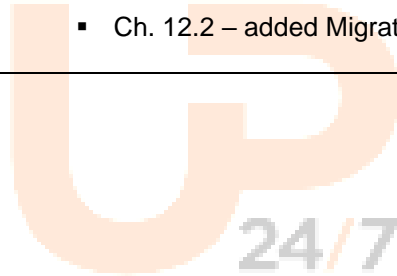


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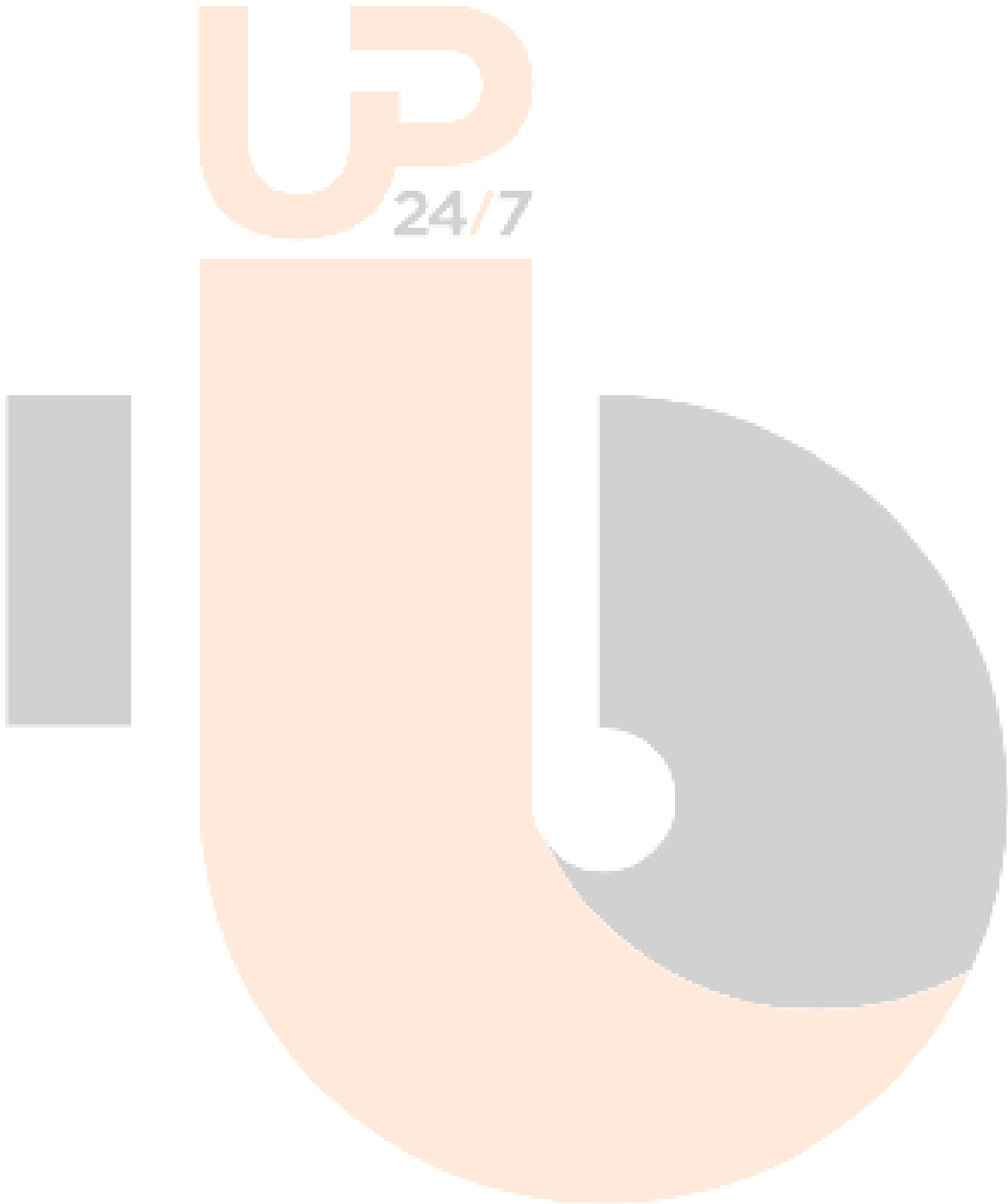
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1 Overview

1.1 What is this software?

Backup247 brings you specialized client backup software, namely Backup247 Advanced Client (B247PRO), to provide a comprehensive backup solution for protecting file(s) / folder(s) on your machine and extend protection to both Android and iOS mobile devices, with a wide variety of backup destinations (major cloud storage service providers, FTP/SFTP, local drive, etc.) of your choice.

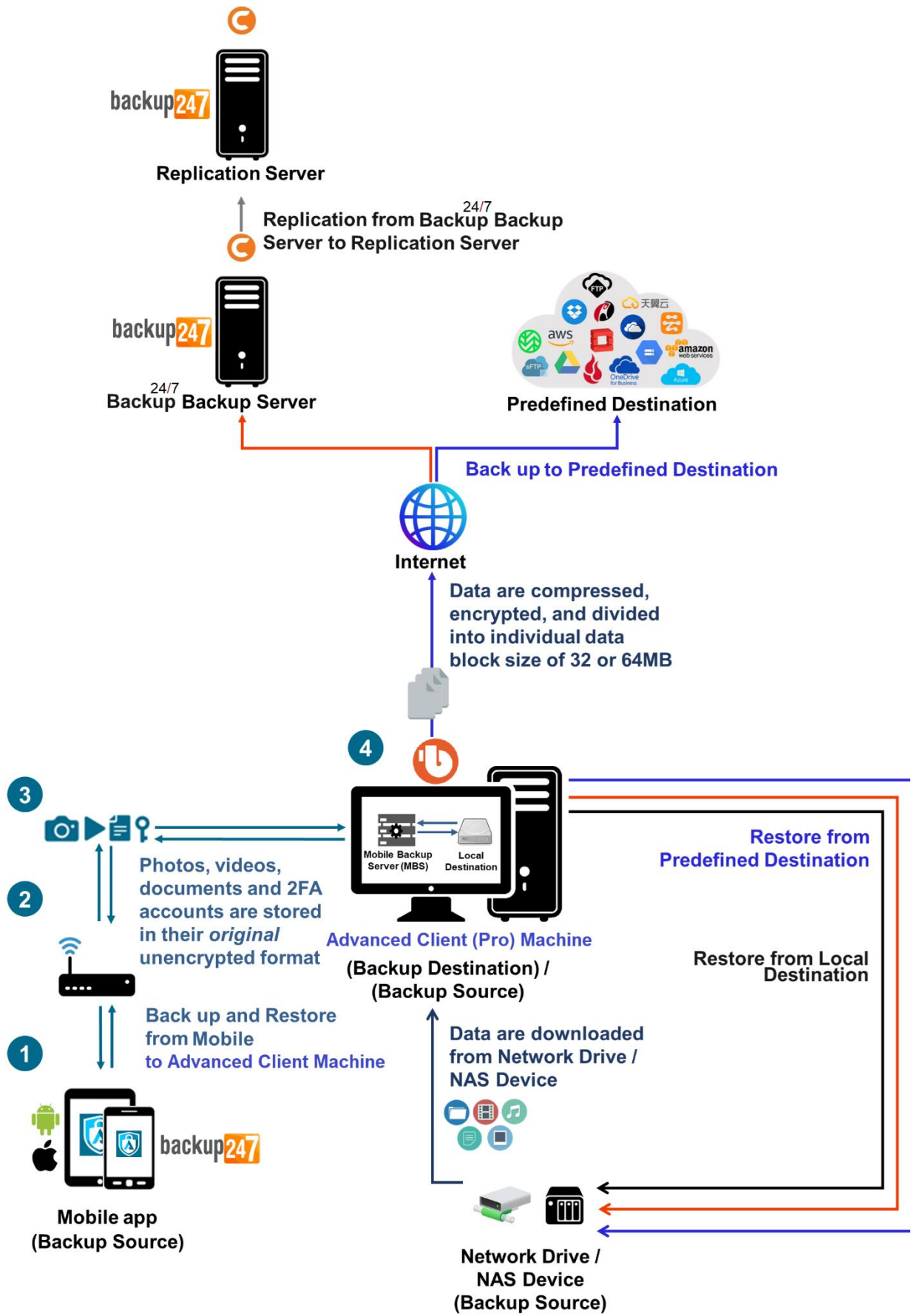
1.2 System Architecture

Below is the system architecture diagram illustrating the major elements involved in the backup process among the backup machine Backup247 Advanced Client (B247PRO), Backup247 Mobile app and B247CBS.

NOTE

The first mobile backup may take up a few hours to back up all photos, videos, documents and 2FA accounts from your device. Subsequent backups will take less time. Please do the following for the first mobile backup to prevent any interruption during backup process:

- For Android devices, disable screen lock or timeout
- For iOS devices, disable auto-lock
- Turn off all power saving modes
- Connect to power source



1.3 Mobile Backup Server

The Mobile Backup Server (MBS) will be utilized to handle mobile backup and restore of Backup247 Mobile app. It is an integral part of Backup247 Advanced Client (B247PRO).

The MBS will be activated automatically when a mobile device installed with the Backup247 Mobile app is successfully registered for mobile backup with Backup247 Advanced Client (B247PRO). Afterwards, it will be automatically restarted whenever the Backup247 Advanced Client (B247PRO) services is restarted or when the Backup247 Advanced Client (B247PRO) machine is rebooted or powered on. The MBS will be deactivated when all mobile devices have deregistered from the mobile backup settings and the Backup247 Advanced Client (B247PRO) services is restarted.

The MBS will use the following port ranges:


- **TCP Port:** 54000 to 54099
- **UDP Port:** 54200 to 54299
- **Protocol:** Http, for the request of Backup247 Mobile app



The default TCP and UDP ports are **54000** and **54200**, if these ports are already used by other applications or services, then the MBS will automatically acquire another port(s).


The actual TCP and UDP port can be seen on Backup247 Advanced Client (B247PRO) when pairing a mobile device for mobile backup.

Mobile Backup Setup

Please scan the QR code to get the below Mobile App from App Store. Once installed the Mobile App, launch it and scan the same QR code to complete the device registration.

 Mobile Backup (Add new device for backup without migration)

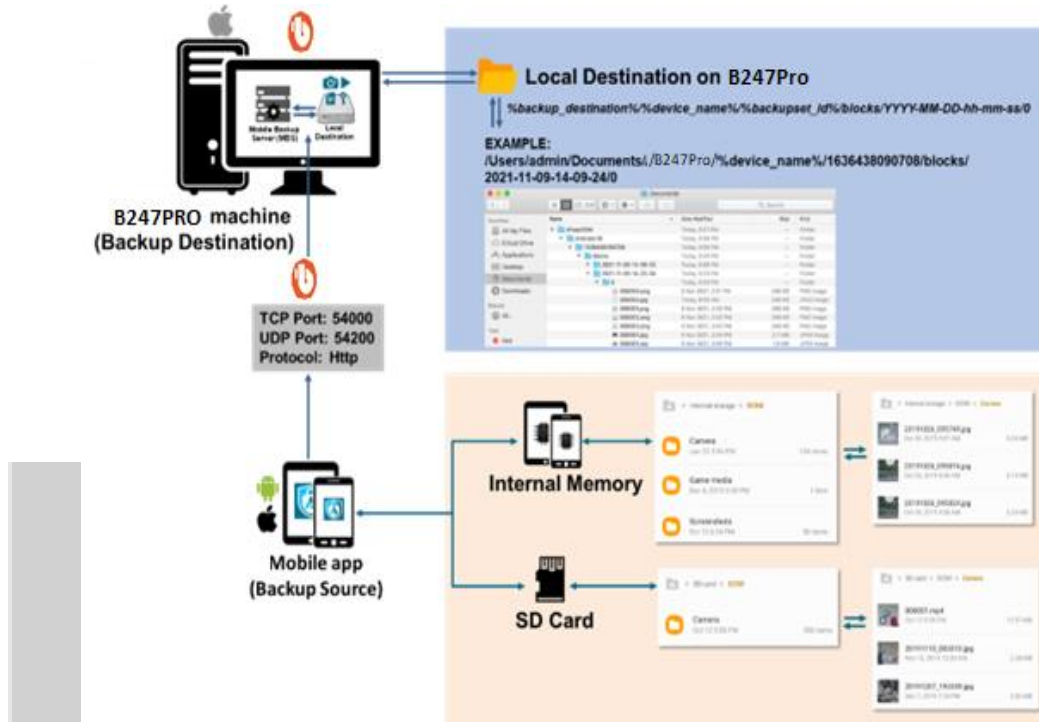
 



Prerequisites

- Please use the latest Mobile App version
- Please make sure below 2 ports are not blocked by any Firewall settings
TCP Port: 54000
UDP Port: 54200

Photos, videos, documents and 2FA accounts are stored either in mobile device's internal memory or SD Card. These are selected as backup source using the Backup247 Mobile app and will be backed up to the local destination of an Backup247 machine, that can be a Hard Drive, Flash Drive, and/or Network Drive in their *original* unencrypted format. For Android devices, photos and videos will retain all EXIF. While for iOS devices, photos and videos will retain most of the EXIF including, capture date, location, and lens.



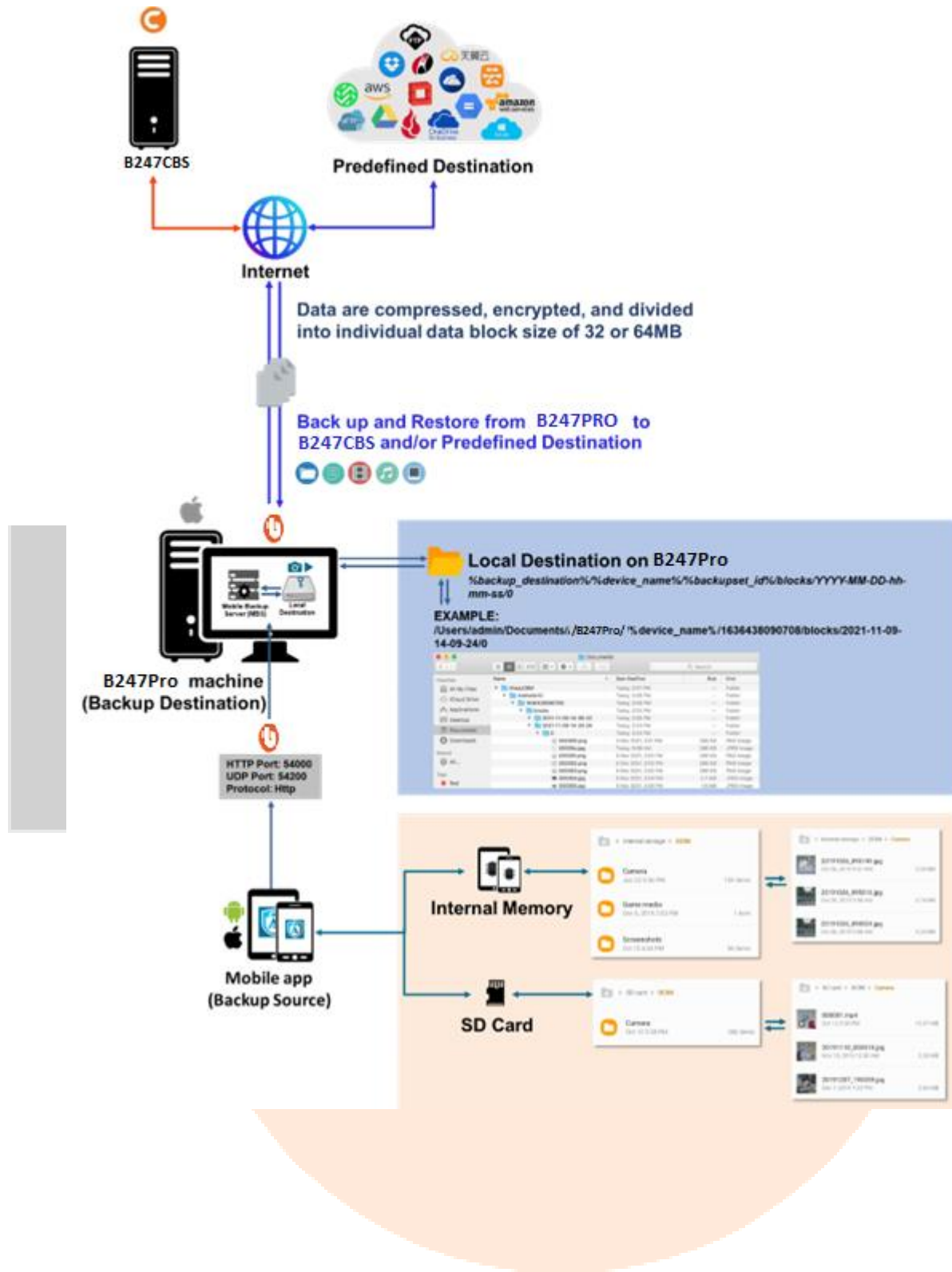
If storage of photos, videos, documents and 2FA accounts to B247CBS and/or Predefined Destination is required, then this can be done using Backup247 Advanced Client (B247PRO) to perform a secondary backup and restore of the photos, videos, documents and 2FA accounts on the local drive to B247CBS and/or Predefined Destination.

To back up and restore photos, videos, documents and 2FA accounts from Backup247 Mobile app to Backup247 Advanced Client (B247PRO) then B247CBS and/or Predefined Destination is a two-step process.

1st: Back up photos, videos, documents and 2FA accounts from Backup247 Mobile app to Backup247 Advanced Client (B247PRO) local destination.

2nd: Create a File backup set using Backup247 Advanced Client (B247PRO), using the local backup destination as the backup source. Then back up this backup set to B247CBS and/or Predefined Destination.





1.4 Two-Factor Authentication

Two-Factor Authentication (2FA) supports TOTP (Time-based One-time Password) and Push notification authentications using the Backup247 Mobile app to provide additional security for the user login process. Since aside from logging in with just a username and password, if the account has Two-Factor Authentication enabled, there will be an additional step necessary to login.

Upon initial login to Backup247 Advanced Client (B247PRO), you will have the option to set up Two-Factor Authentication, or you may skip the setup and do it later. If you proceed with the configuration of Two-Factor Authentication, it will be enabled for your account automatically. You may add more than one mobile device for authentication.

For logins with Two-Factor Authentication enabled, the authentication method that will be available will depend on the authenticator app registered during setup.

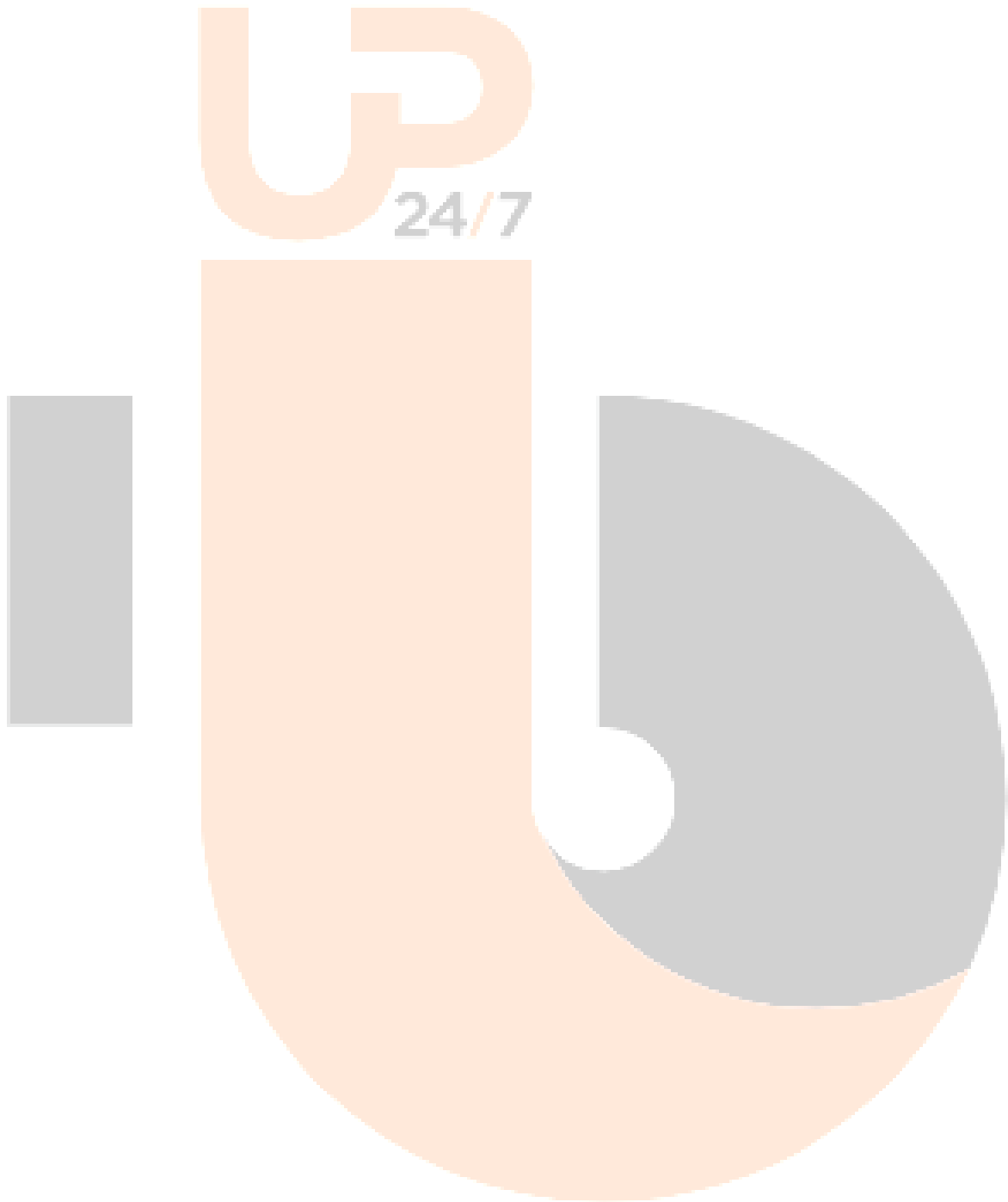
If Backup247 Mobile is used as the authenticator app:

- you will either accept the login request via push notification in the Backup247 Mobile app; or
- enter the one-time password generated in the Backup247 Mobile app

If a third-party authenticator app is used:

- you will enter the one-time password generated in the third-party authenticator (i.e., Authy, Duo, Google Authenticator, Microsoft Authenticator, LastPass Authenticator, iOS 15 Built-in Two-Factor Authenticator, etc.)

This illustrates the user login process for account with Two-Factor Authentication enabled using either the Backup247 Mobile app or a third-party authenticator app.





Advanced (Pro) Client

Login

Login name
user

Password

Save password

[Forgot password](#)

Advanced (Pro) Client Login

Two-Factor Authentication

Please approve notification request in one of registered Authenticator App.
⌚ Waiting for response (00:04:32)

Alternatively, input the one-time passcode generated in your Authenticator App.

(00:00:02)

Two-Factor Authentication (2FA)



CBS PNS



Public PNS

Send Push Notification

backup247



Mobile

OR



Third-party TOTP Authenticator App

Accept Authorization Request

Input one-time password

Mobile

backup247

Authorization Request

Proceed authorization request for user

REJECT ACCEPT

user

One-time passwords enabled
You can use the one-time password codes generated by this app to verify your sign-ins

One-time password code
811 901

PRO Trial Version

Backup

Backup Sets

Report

Restore

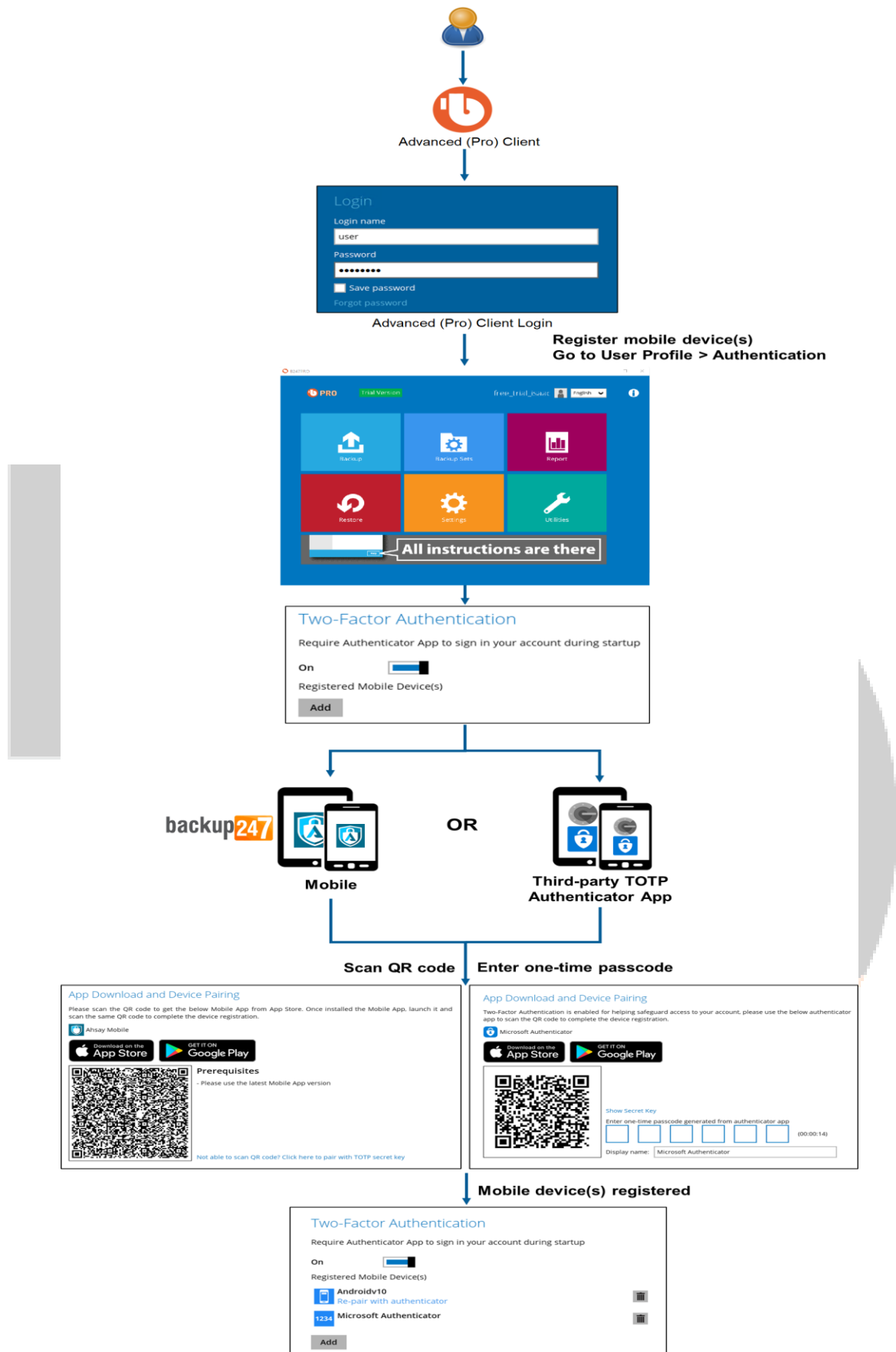
Settings

Utilities

Don't know how to use?

Advanced (Pro) Client Main Interface

This illustrates the registration of mobile device(s) for Two-Factor Authentication using either the Backup247 Mobile app or a third-party authenticator app.



2 Requirements for Backup247 Mobile

2.1 Backup Software Version Requirement

- Download and install the latest version of Backup247 Advanced Client (B247PRO) v9.0.0.0 or above.
- Download and install the latest version of Backup247 Mobile app on the Play Store for Android mobile devices and on the App Store for iOS mobile devices.

2.2 Network Connection

Ensure that the Backup247 Mobile app is connected to the same local network as the Backup247 Advanced Client (B247PRO) machine. Failure to do so will prevent you from performing backup and/or restore.



2.3 Android and iOS Version Requirement

- For Android devices, the Android version must be 8 or above.
- For iOS devices, the iOS version must be 12.0.0 or above.

3 Requirements for Backup247 Advanced Client (B247PRO) on macOS













3.1 Hardware Requirements

Refer to the link below for details of the minimum and recommended requirements for installing Backup247 Advanced Client (B247PRO):

| B247Pro  / B247Lite  | |
|--|--|
| <u>CPU:</u> | |
| Quad Core architecture or above ^[2] | |
| ^[1] For Run on Server (Agentless) Office 365 and Cloud File backup jobs, automatic weekly Periodic Data integrity check (PDIC), Post backup data validation checks and other application processes (e.g. retention policy job, Data Integrity Check (DIC) ... etc.) are performed on the B247CBS server, resulting in increased processing power requirement and memory usage. It is recommended the B247CBS backup server should be installed with multiple sockets. | |
| ^[2] Automatic weekly Periodic Data integrity check (PDIC), Post backup data validation checks and other application processes (e.g. retention policy job, Data Integrity Check (DIC) ... etc.) are now performed by the B247Pro/B247Lite client application, resulting in increased processing power requirement and memory usage. | |
| <u>Memory (RAM):</u> ^[3] | |
| Minimum: 16 GB (at least 50% free memory available) Recommended: 24 GB or more (at least 50% free memory available) | Minimum: 4 GB (at least 50% free memory available) Recommended: 8 GB or more (at least 50% free memory available) |
| ^[3] 24GB RAM or more is recommended for better performance, especially if hosting Run on Server (Agentless) Office 365 and Cloud File backup jobs. . The default maximum Java memory setting (Java Heap Size) for B247Pro; on Windows server grade operating system (Windows 2008/2012/2016/2019) is 4096MB or 4GB.. | |
| <u>Installation Space:</u> | |
| Minimum: 2 GB Recommended: 10 GB (for logs) | Minimum: 500 MB |
| <u>Network Protocol:</u> | |
| TCP/IP | TCP/IP |
| <u>Network Bandwidth:</u> | |
| --- | 10 Mbps or above connection speed ^[4] |
| ^[4] To ensure a stable and consistent backup/restore performance. | |
| <u>OpenJDK Version:</u> (bundled) | |
| OpenJDK 1.8.0u181 or above ^[5] | OpenJDK 1.8.0u181 or above ^[5] |
| ^[5] Performance and stability is dependent on the operating system platforms and / or hardware architecture. | |

3.2 Software Requirements

Refer to the following link for details of the operating systems, applications and databases supported by Backup247 Advanced Client (B247PRO):

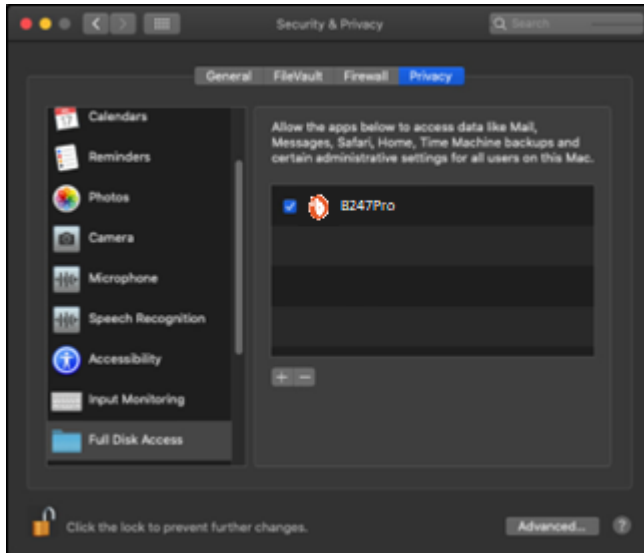
| Mac OS platforms: | | | |
|---------------------------|---|------------------|-------------|
| Mac OS X 10.7.3 or above |   | 9.1.0.0 or above | EOS reached |
| macOS 10.8 |   | 9.1.0.0 or above | EOS reached |
| macOS 10.9 |   | 9.1.0.0 or above | EOS reached |
| macOS 10.10 |   | 9.1.0.0 or above | EOS reached |
| macOS 10.11 |   | 9.1.0.0 or above | EOS reached |
| macOS 10.12 (Sierra) |   | 9.1.0.0 or above | EOS reached |
| macOS 10.13 (High Sierra) |   | 9.1.0.0 or above | EOS reached |
| macOS 10.14 (Mojave) |   | 9.1.0.0 or above | EOS reached |
| macOS 10.15 (Catalina) |   | 9.1.0.0 or above | Supported |
| macOS 11 (Big Sur) |   | 9.1.0.0 or above | Supported |
| macOS 12 (Monterey) |   | 9.1.0.0 or above | Supported |

3.3 Full Disk Access Permission

macOS 10.15 or higher "Full Disk Access" permission needs to be granted in:

System Preferences > Security & Privacy > Privacy tab to Backup247 Advanced Client (B247PRO)

Due to an upgrade in security on macOS 10.15 or higher, additional security settings are required to allow applications to access the machine. Backup247 Advanced Client (B247PRO) requires "Full Disk Access" permission to be able to access your files for selection and backup. Also, without "Full Disk Access" permission, the Backup247 Advanced Client (B247PRO) will not be able to restore files to the machine.



For more details on how to setup the Full Disk Access permission, please refer to Appendix C: Setting up Full Disk Access Permission.

3.4 Installation on Root Drive

Backup247 Advanced Client (B247PRO) must be installed on the root drive of a volume (e.g., /Applications/...).

3.5 Two-Factor Authentication Requirements

Please refer to **Chapter 2.4** of the Backup247 Mobile User Guide for Android and iOS for details of the minimum and recommended requirements for using Two-Factor Authentication on Backup247 Mobile app.

3.6 Mobile Backup Requirements

Please refer to **Chapter 2.5** of the Backup247 Mobile User Guide for Android and iOS for details of the minimum and recommended requirements for installing the Backup247 Mobile app.

3.7 Firewall Settings

Make sure that your firewall settings allow network traffic through the following domain and/or ports:

- For Backup247 Advanced Client (B247PRO) to function correctly must allow outbound connections to *.Backup247.com via port 80 and 443.
- For mobile backup inbound / outbound network traffic must be allowed through the following default ports: HTTP port: 54000 and UDP port: 54200.

The actual ports used may be different, please refer to Chapter 1.3: Mobile Backup Server (MBS) for more details.

3.8 Network Bandwidth

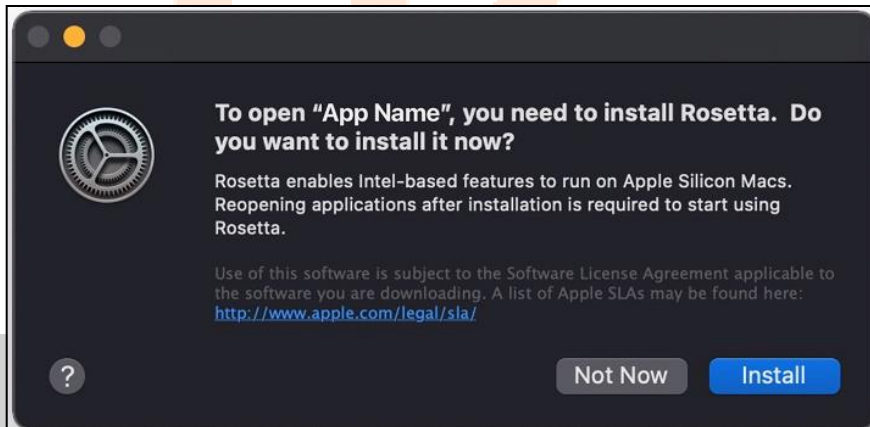
10 Mbps or above connection speed.

3.9 ARM (M1) CPU

For Backup247 Advanced Client (B247PRO) running on macOS 11 or above on ARM (M1) CPU machine, the installation of Rosetta 2 is required that enables applications built for Intel CPU to run on an ARM (M1) CPU machine:

<https://support.apple.com/en-hk/HT211861>

If Backup247 Advanced Client (B247PRO) is installed and run for the first time on macOS 11 or above on ARM (M1) CPU machine, there will be a pop-up message that requests installation of Rosetta. When the following window appears, click **Install** to proceed.



3.10 Limitations

- Resource Fork Files – Resource fork files cannot be restored with Backup247 Advanced Client (B247PRO) installation on macOS 10.8 above.
- Case-Insensitive File System – For volume with a case-insensitive file system, target file of a symbolic link will be backed up twice (in both upper case and in lower case), hence, doubling the backup quota storage requirement.

3.11 Best Practices and Recommendations

Periodic Backup Schedule

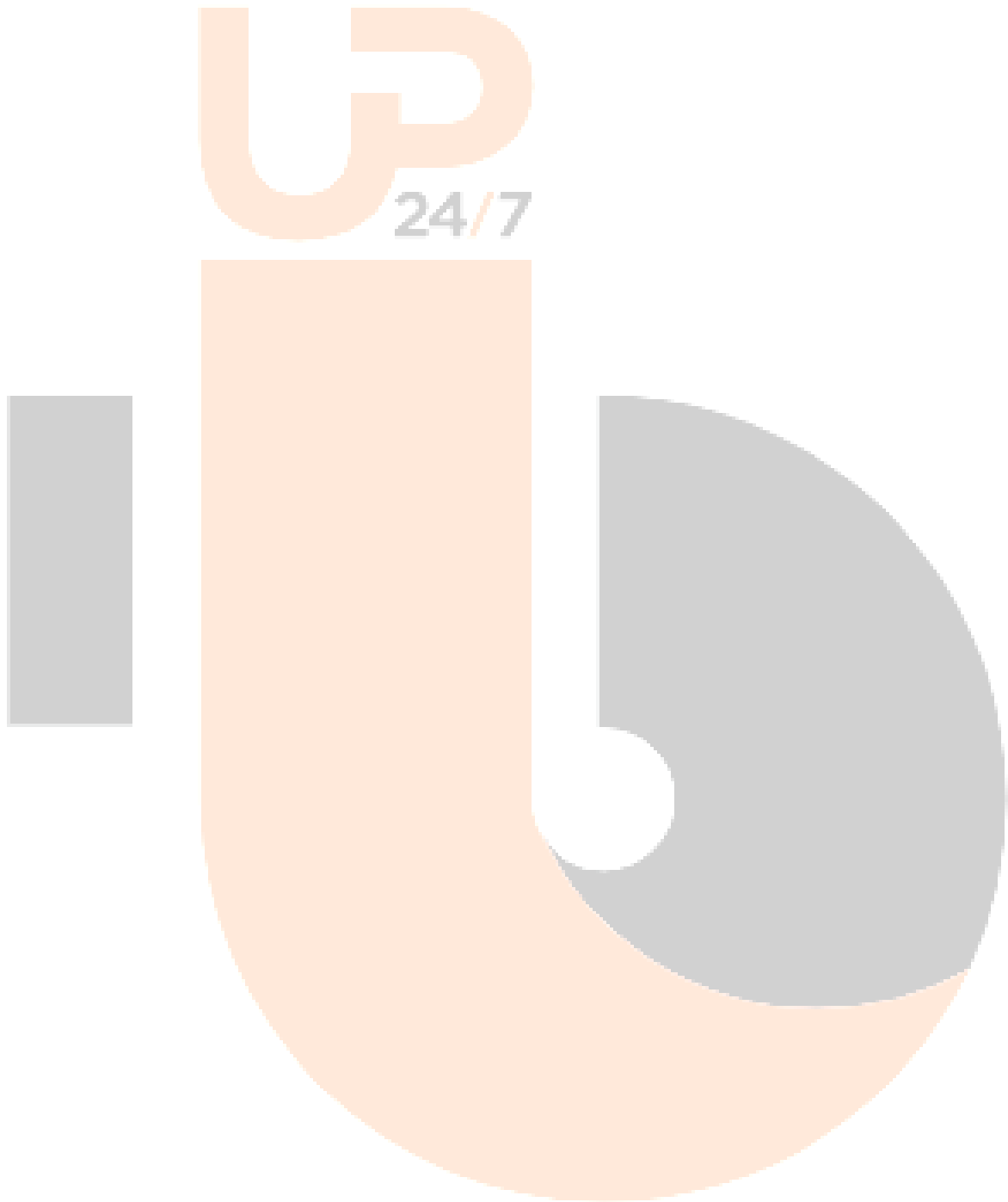
The periodic backup schedule should be reviewed regularly to ensure the interval is sufficient to handle the data volume on the machine. Over the time, data usage pattern may change on a production server, i.e., the number of new files created, the number of files which are updated/delete, new users may be added etc.

When using periodic backup schedules with small backup intervals such as backup every 1 minute, 2 minutes, 3 minutes etc. although the increased backup frequently does ensure that changes to files are captured regularly which allows greater flexibility in recovery to a point in time.

Consider the following key points to efficiently handle backup sets with periodic backup schedule.

- Hardware – to achieve optimal performance, compatible hardware requirements is a must. Ensure you have the backup machine's appropriate hardware specifications to accommodate frequency of backups,
 - so that the data is always backed up within the periodic backup interval
 - so that the backup frequency does not affect the performance of the production server

- Storage – ensure you have enough storage quota allocated based on the amount of new data and changed data you will back up.
- Retention Policy – also make sure to consider the Retention Policy settings and Retention Area storage management which can grow because of the changes in the backup data for each backup job.



4 Get Started with Backup247 Advanced Client (B247PRO)

This quick start guide will walk you through the following six (6) major parts to get you started with using Backup247 Advanced Client (B247PRO).

Download and Install

Download and Install [Advanced \(Pro\) Client](#) on your macOS machine

Launch the App

Launch and log in to [Advanced \(Pro\) Client](#)

Set up 2FA and/or Mobile Backup

Register mobile device for 2FA and/or mobile backup (optional)

Create a Backup Set

Create a backup set according to your preference

Run Backup Jobs

Run the backup job to back up data

Restore Data

Restore backed up data to your system

5 Download and Install Backup247 Advanced Client (B247PRO)

There are two installation modes of Backup247 Advanced Client (B247PRO), online installation and offline installation. Below is the table of comparison between online installation and offline installation.

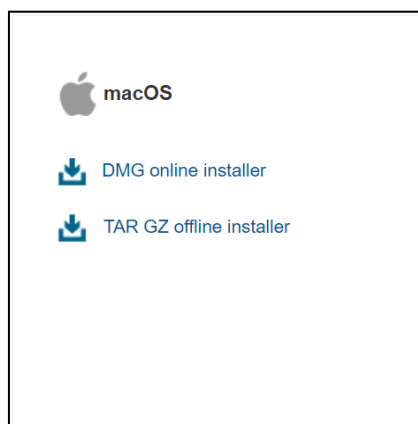
| | Online Installation | Offline Installation |
|--------------------------|--|--|
| Installation Time | <ul style="list-style-type: none"> ➤ Takes more time as it needs to download the binary and component files (80MB to 132MB depending on operating system) each time the installation is run. ➤ Online installer size is 6KB to 3.5MB depending on operating system as it contains only the initial installation package files. | <ul style="list-style-type: none"> ➤ Takes less time as all the necessary binary and component files are already available in the offline installer and offline installer can be downloaded once but reused many times. ➤ Offline installer size is 50MB to 195MB depending on operating system as it contains all the necessary binary and component files. |
| Deployments | <ul style="list-style-type: none"> ➤ Suitable for single or small amount of device installations. ➤ Suitable for sites with fast and stable internet connection as internet connection is needed each time when an installation is run. ➤ A slow internet connection will result in longer installation time and interrupted, or unstable internet connection may lead to unsuccessful installation. ➤ Ensures the latest version of the product is installed. | <ul style="list-style-type: none"> ➤ Suitable for multiple or mass device installations. ➤ Suitable for client sites with metered internet connections as once the offline installer is downloaded, internet connection is not needed each time when an installation is run. ➤ May need to update the product version after installation if an older offline installer is used. |

5.1 Download Backup247 Advanced Client (B247PRO)

1. In a web browser, click the blue icon on the top right corner to open the download page for the Backup247 Advanced Client (B247PRO) installation package file from your backup service provider's website.



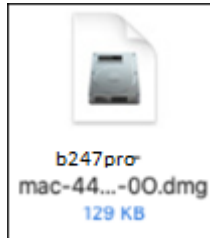
2. In the **macOS** section under the **Backup247 Advanced Client (B247PRO)** tab of the download page, you can choose between two installation methods:
 - Online installation using DMG online installer
 - Offline installation using TAR GZ offline installer



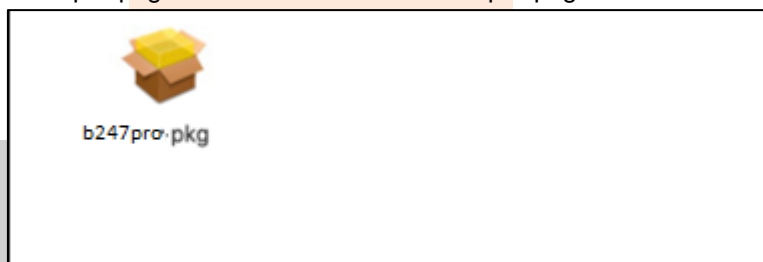
5.2 Install Backup247 Advanced Client (B247PRO)

5.2.1 Online Installation using DMG online installer

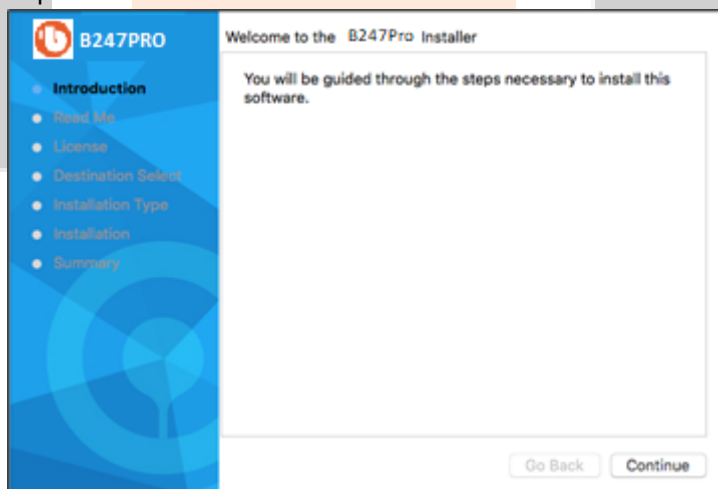
1. Launch the online installation package file you have downloaded from the download section above.



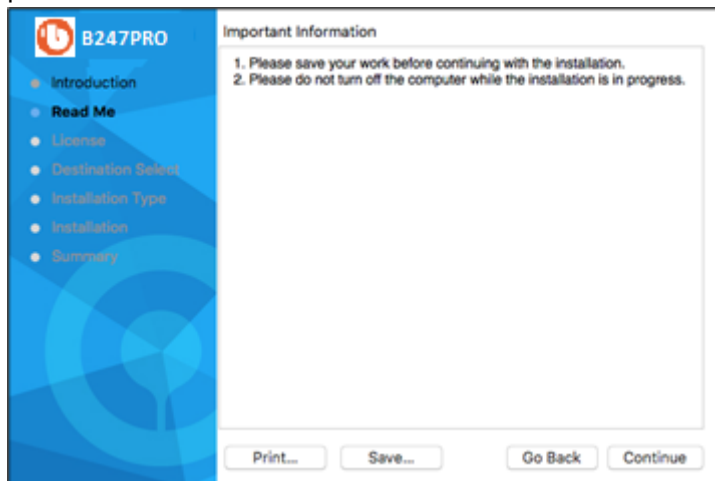
2. The Backup247 Online Backup Manager window will appear. You will see another file named "b247pro.pkg". Double-click on the "b247pro.pkg" file.




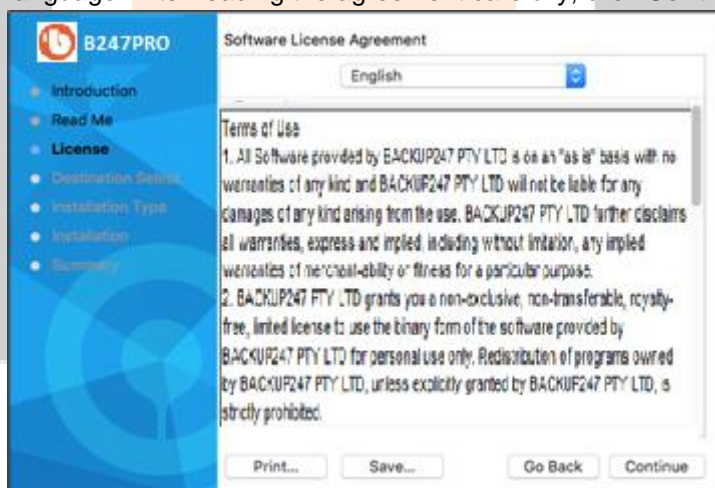
3. When the Backup247 Advanced Client (B247PRO) Installer wizard appears, click **Continue** to proceed.



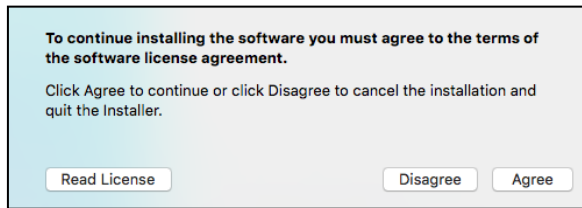
4. When the Important Information screen appears, read the information then click **Continue** to proceed.



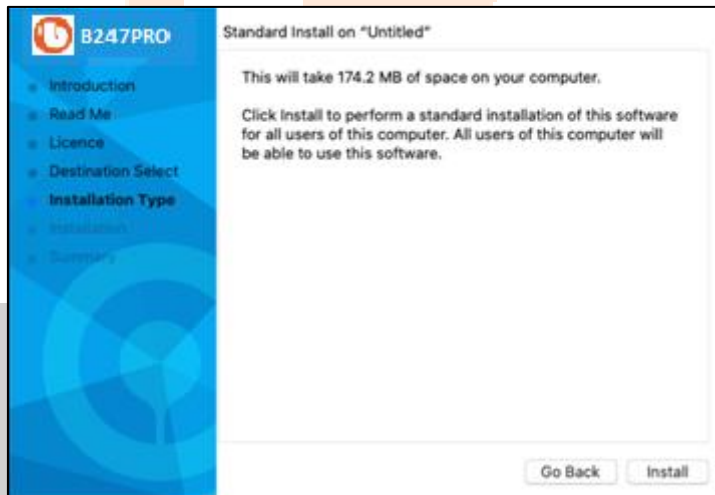
5. When the Software License Agreement appears, the agreement content will be displayed in English by default. If you prefer to read it in a different language, click  to change the language. After reading the agreement carefully, click **Continue** to proceed.



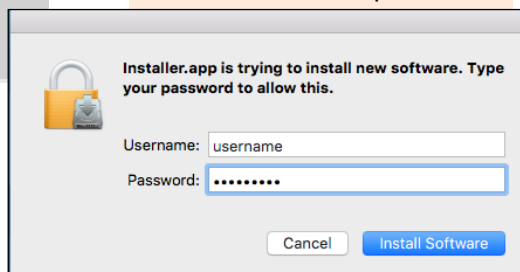
6. The following message will appear in a pop-up window. Click **Agree** to accept the software license agreement.



7. Click **Install** to start installing Backup247 Advanced Client (B247PRO) to the default location, i.e. "Untitled" in this example.



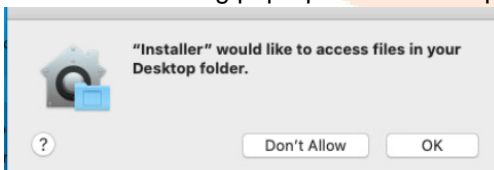
8. The following message will appear in a pop-up window. Enter your macOS login credentials. Then, click **Install Software** to proceed with the installation.



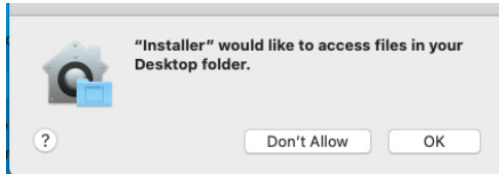
NOTE

The pop-up windows on **Steps 9, 10, and 11** are only applicable on macOS 10.15 or above. Otherwise, proceed to **Step 12**.

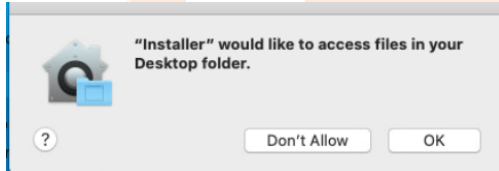
9. When the following pop-up window is displayed, click **OK** to proceed.



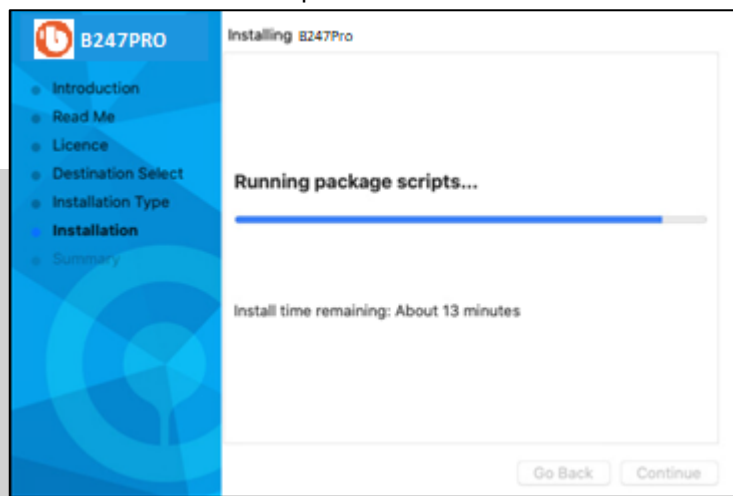
10. When the following pop-up window is displayed, click **OK** to proceed.



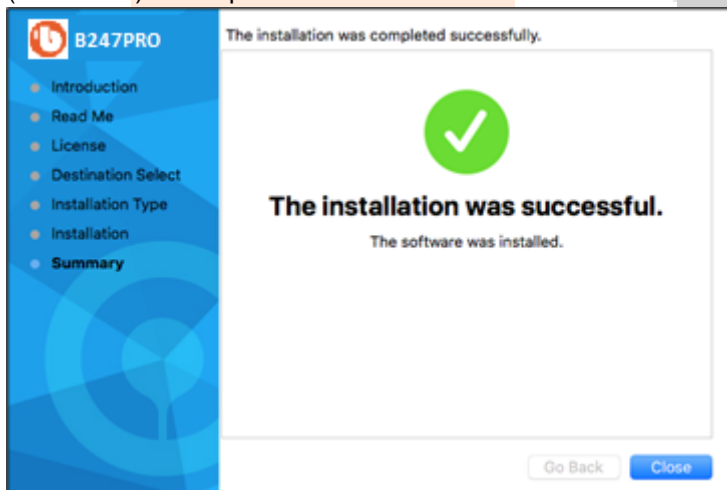
11. When the following pop-up window is displayed, click **OK** to continue with the installation.



12. Wait until the installation process is finished.

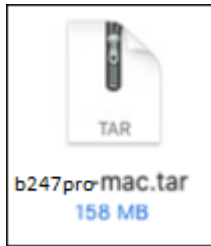


13. You will see the following screen when the installation of Backup247 Advanced Client (B247PRO) is completed.

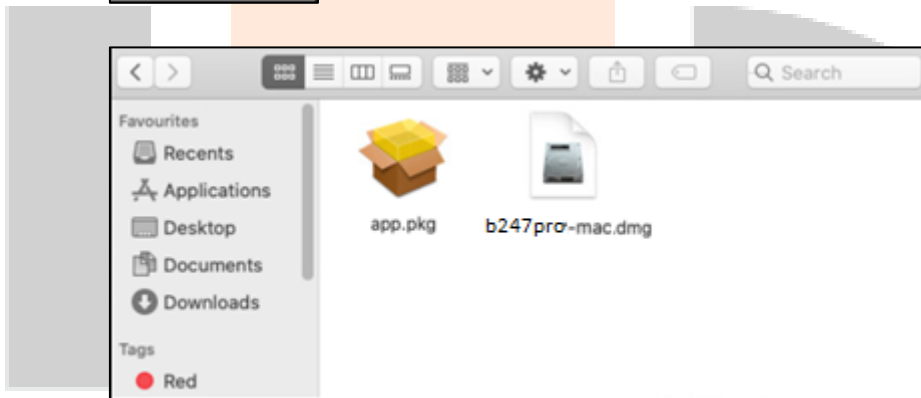
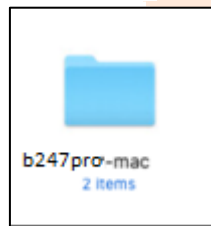


5.2.2 Offline Installation using TAR GZ offline installer

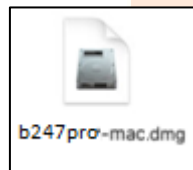
1. Double-click on the “b247pro-mac.tar” file you have downloaded to expand the installation package.



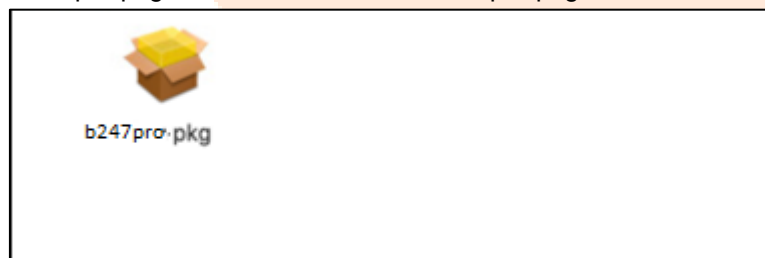
2. A new folder named “b247pro-mac” will be created. Open the folder to access the installation package file.



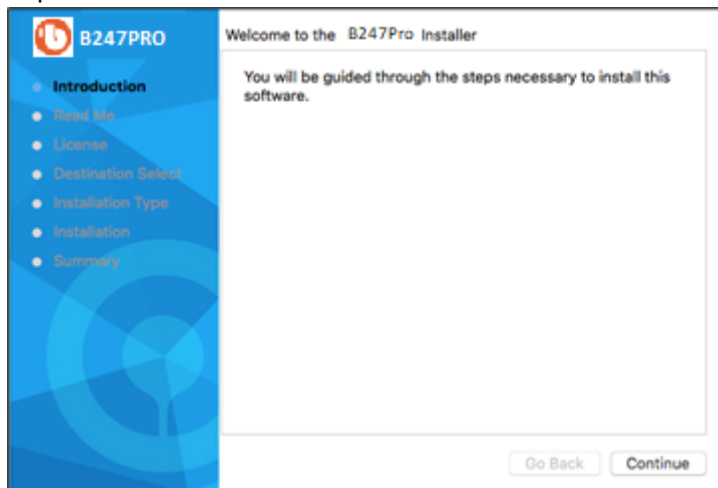
3. Double-click on the “b247pro-mac.dmg” file.



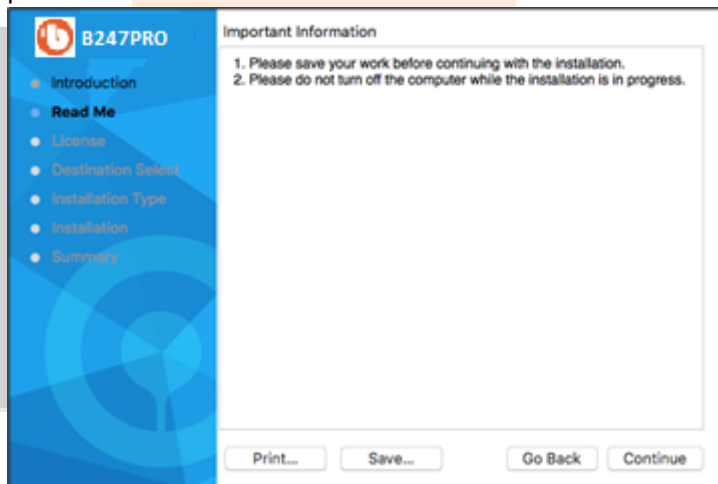
The Backup247 Online Backup Manager window will appear. You will see another file named “b247pro.pkg”. Double-click on the “b247pro.pkg” file




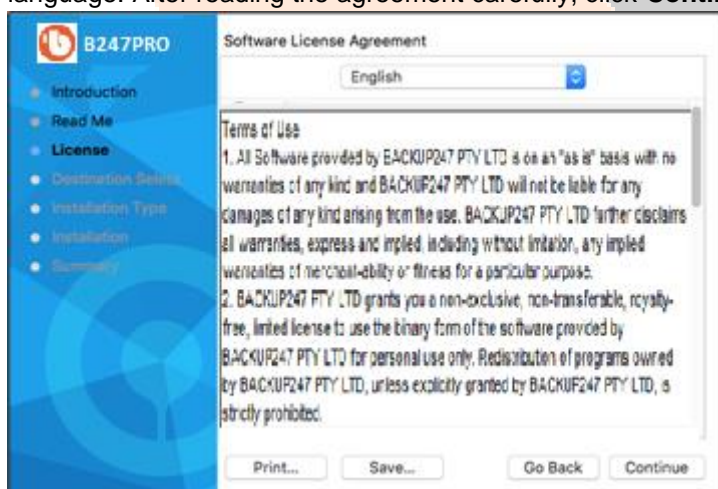
4. When the Backup247 Advanced Client (B247PRO) Installer wizard appears, click **Continue** to proceed.



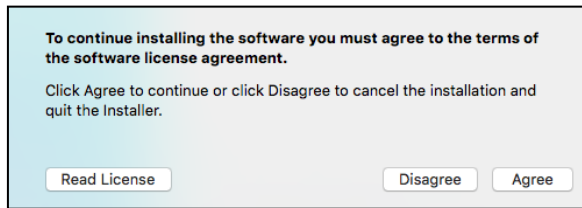
5. When the Important Information screen appears, read the information then click **Continue** to proceed.



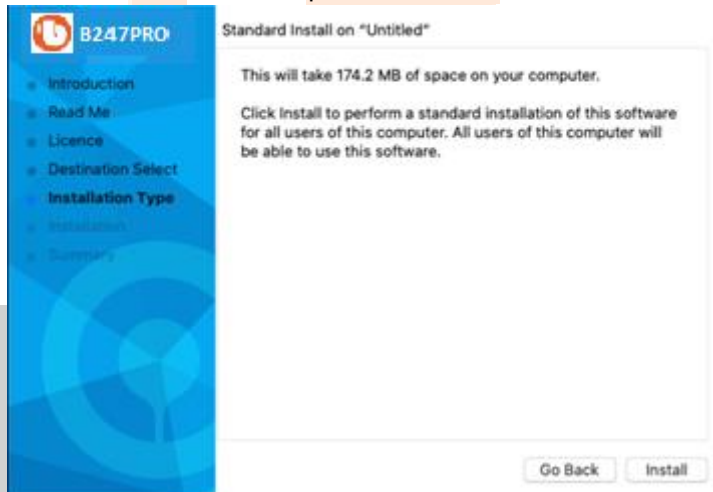
6. When the Software License Agreement appears, the agreement content will be displayed in English by default. If you prefer to read it in a different language, click  to change the language. After reading the agreement carefully, click **Continue** to proceed.



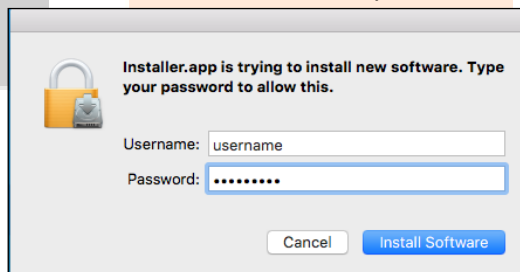
7. The following message will appear in a pop-up window. Click **Agree** to accept the software license agreement.



8. Click **Install** to start installing Backup247 Advanced Client (B247PRO) to the default location, i.e. "Untitled" in this example.



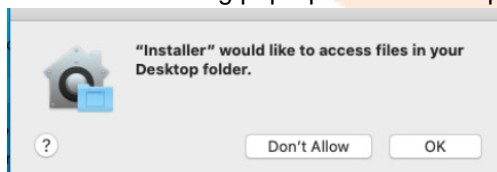
9. The following message will appear in a pop-up window. Enter your macOS login credentials. Then, click **Install Software** to proceed with the installation.



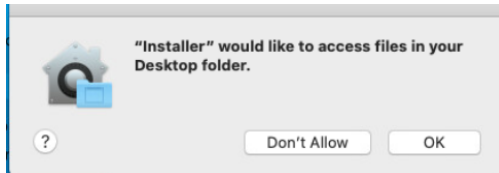
NOTE

The pop-up windows on **Steps 11, 12, and 13** are only applicable on macOS 10.15 or above. Otherwise, proceed to **Step 14**.

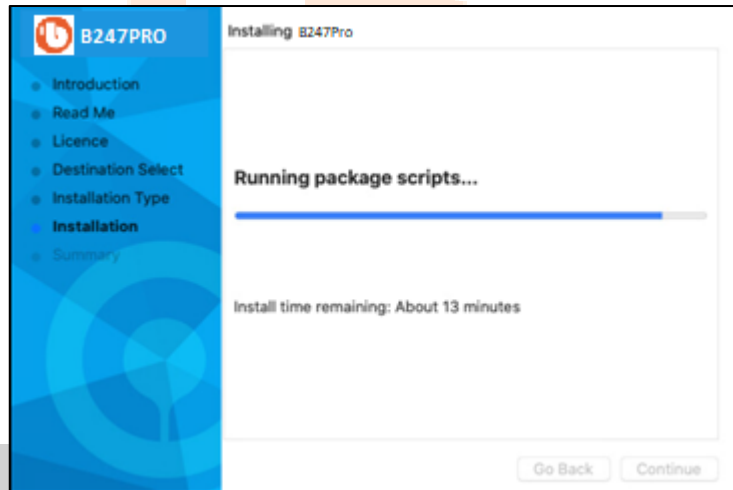
10. When the following pop-up window is displayed, click **OK** to proceed.



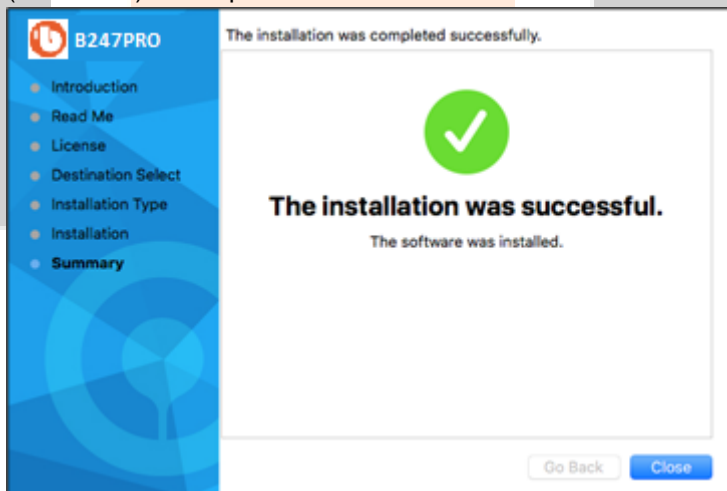
11. When the following pop-up window is displayed, click **OK** to proceed.



12. Wait until the installation process is finished.



13. You will see the following screen when the installation of Backup247 Advanced Client (B247PRO) is completed.



5.3 Backup247 Advanced Client (B247PRO) Services

The Backup247 Advanced Client (B247PRO) Services is a key component which regulates and controls several important functions on Backup247 Advanced Client (B247PRO).

| Function | Description |
|---|---|
| Continuous Backups (Windows platform only) | Ensures that Continuous backups are run according to the backup interval. |

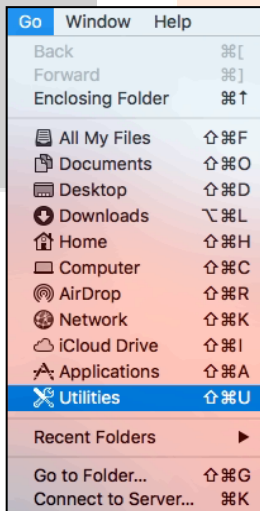
| | |
|---|--|
| Reminder (Windows platform only) | Ensures that a reminder popup is displayed when the last time a backup was run exceeded the tolerance period. |
| Mobile Backup Server (MBS) | <p>Ensures that registered mobile devices can perform backups to Backup247 Advanced Client (B247PRO).</p> <p>The MBS will be activated when a mobile device is registered for mobile backup on Backup247 Advanced Client (B247PRO).</p> <p>The MBS will be deactivated when all mobile devices have been deregistered from the mobile backup settings and the Backup247 Advanced Client (B247PRO) services is restarted.</p> |

Therefore, it is very important to ensure the Backup247 Advanced Client (B247PRO) Services are running after:

- a new Backup247 Advanced Client (B247PRO) installation
- an Backup247 Advanced Client (B247PRO) software update
- the machine was rebooted
- the machine is powered on
- the machine wakes up from hibernation or standby mode

Otherwise, all of the functions above will stop working.

To start, click **Go** at the top menu bar and select **Utilities**.



Open the **Terminal** application.



Use the command highlighted in **red** to enter the Backup247 Advanced Client (B247PRO) folder.

```
[admins-Mac:bin admin$ cd /Applications/Backup247 Advanced Client
(B247PRO).app/bin
[admins-Mac:bin admin$
```

To check if the scheduler service is running, use the **ps** command. You will see that the scheduler service is running, highlighted in **red**.

```
admins-Mac:~ admin$ ps -ef|grep java
0 5735 1 0 9:05PM ttys000 0:02.07 /Applications/Backup247 Advanced
Client (B247PRO).app/jvm/bin/java -Xms128m -Xmx768m -
Djava.library.path=. -cp ../cbs.jar cbs /Applications /Backup247
Advanced Client (B247PRO).app
501 5741 5705 0 9:05PM ttys000 0:00.00 grep java
```

There are two (2) options to **stop** and **start** the Backup247 Advanced Client (B247PRO) scheduler service.

5.3.1 Option 1: Stop and Start

- To **stop** the scheduler service, use the command highlighted in **red**. If you run this command for the first time, you will need to enter the login password of your local machine. To check if the scheduler service has stopped running, use the **ps** command.

```
admins-Mac:~ admin$ sudo /Applications/Backup247 Advanced Client
(B247PRO).app/bin/StopScheduler.sh
Password:
admins-Mac:~ admin$ ps -ef|grep java
501 5721 5705 0 9:02PM ttys000 0:00.00 grep java
```

- Use the command highlighted in **red** to **start** the scheduler service then use the **ps** command. You will see that the scheduler service is running, highlighted in **red**.

```
admins-Mac:~ admin$ sudo /Applications/Backup247 Advanced
Client (B247PRO).app/bin/Scheduler.sh
admins-Mac:~ admin$ ps -ef|grep java
0 5735 1 0 9:05PM ttys000 0:02.07 /Applications/Backup247
Advanced Client (B247PRO).app/jvm/bin
/java -Xms128m -Xmx768m - Djava.library.path=. -cp ../cbs.jar
cbs
/Applications/Backup247 Advanced Client (B247PRO).app
501 5741 5705 0 9:05PM ttys000 0:00.00 grep java
```

5.3.2 Option 2: Stop and Start

- To **stop** the scheduler service, use the command highlighted in **red**. Use the **ps** command to check if the scheduler service has stopped running.

```
admins-Mac:~ admin$ sudo launchctl unload -F
/Applications/Backup247 Advanced Client (B247PRO).app/
bin/com.cb.scheduler.plist
admins-Mac:~ admin$ ps -ef|grep java
501 5842 5793 0 9:23PM ttys000 0:00.01 grep java
admins-Mac:~ admin$
```


- Use the command highlighted in red to **start** the scheduler service then use the **ps** command. You will see that the scheduler service is running, highlighted in red.

```
admins-Mac:~ admin$ sudo launchctl load -F
/Applications/Backup247 Advanced Client (B247PRO).app/
bin/com.cb.scheduler.plist
admins-Mac:~ admin$ ps -ef|grep java
0 5805 1 0 9:21PM ?? 0:01.92 /Applications/Backup247 Advanced
Client (B247PRO).app/jvm/bin/java -
Xms128m -Xmx768m -Djava.class.path=/Applications/Backup247
Advanced Client (B247PRO).app
/bin:/Applications/Backup247 Advanced Client
(B247PRO).app/bin/cbs.jar -Djava.library.path=/Applica
tions/Backup247 Advanced Client (B247PRO).app/bin cbs
/Applications/Backup247 Advanced Client (B247PRO).app
501 5811 5793 0 9:21PM ttys000 0:00.00 grep java
```

5.4 RunLevel Symlink Check

During installation, the following symlinks will be created to the scheduler startup script:
/Applications/Backup247 Advanced Client (B247PRO).app/bin/com.cb.scheduler.plist

This will allow the Backup247 Advanced Client (B247PRO) Scheduler Service to automatically start each time the machine is rebooted or restarted.

To verify if the symlinks have been created correctly, use the **ls** command. You will see the symlink highlighted in **red**.

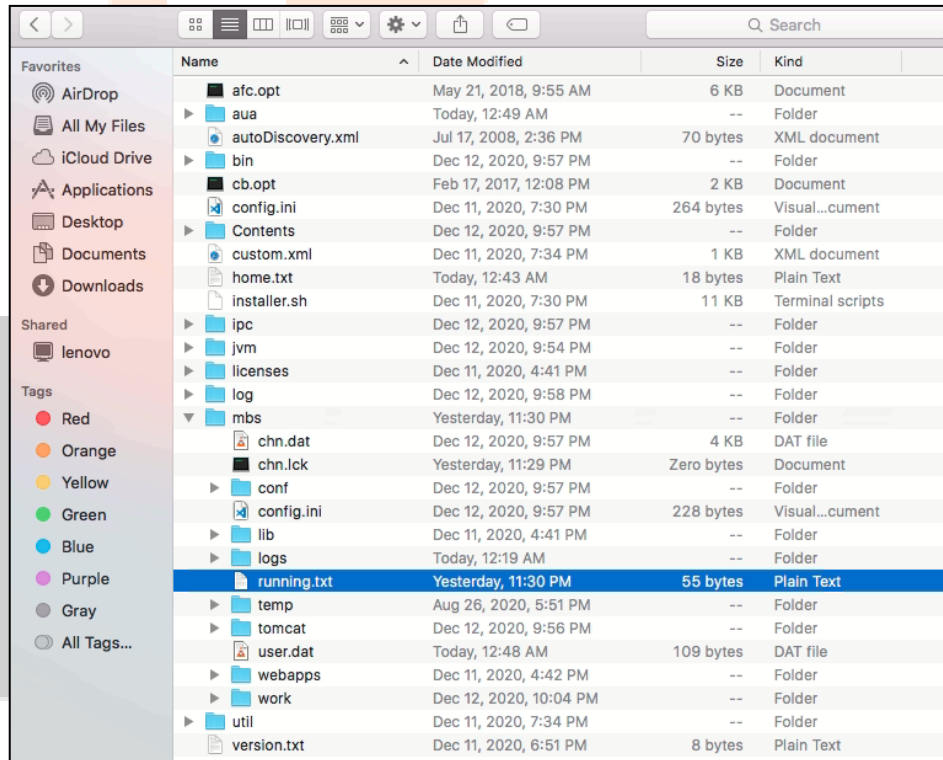
```
admins-Mac:~ admin$ ls -la /Library/LaunchDaemons/  
total 16  
drwxr-xr-x+ 62 root wheel 2108 Apr  5 01:56 ..  
lrwxr-xr-x  1 root wheel  53 May 15 03:07 com.Backup247 Advanced Client  
(B247PRO).scheduler.plist -> /Applications/Backup247 Advanced Client  
(B247PRO).app/bin/com.cb.scheduler.plist  
admins-Mac:~ admin$
```

5.5 Mobile Backup Server (MBS) Status Check and Backup247 Mobile app Connection Check

Although the Mobile Backup Server (MBS) will be activated automatically when a mobile device installed with the Backup247 Mobile app is successfully registered for mobile backup with Backup247 Advanced Client (B247PRO).

Before starting a backup on your mobile device, check the following first:

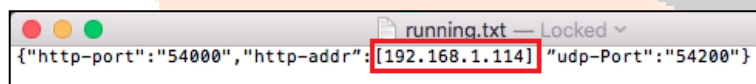
1. Check HTTP port, IP address and UDP port in the **running.txt** file. Go to mbs folder. Example: /Applications/Backup247 Advanced Client (B247PRO).app/mbs



NOTE

If the "running.txt" file does not exist, then the MBS is not running. Restart the Backup247 Advanced Client (B247PRO) services.

After opening the file, it will show the HTTP port, IP address and UDP port which are in actual use by the MBS.



- Open the Terminal and check if the IP address captured in the running.txt file is the correct IP address of the machine where Backup247 Advanced Client (B247PRO) is installed.

```

MacBook-Pro:~ admin$ ifconfig
lo0: flags=8049<UP,LOOPBACK,RUNNING,MULTICAST> mtu 16384
    options=3<RXCSUM,TXCSUM>
    inet6 ::1 prefixlen 128
    inet 127.0.0.1 netmask 0xff000000
    inet6 fe80::1%lo0 prefixlen 64 scopeid 0x1
    nd6 options=1<PERFORMNUD>
gif0: flags=8010<POINTOPOINT,MULTICAST> mtu 1280
stf0: flags=0<> mtu 1280
en0: flags=8863<UP,BROADCAST,SMART,RUNNING,SIMPLEX,MULTICAST> mtu 1500
    options=10b<RXCSUM,TXCSUM,VLAN_HWTAGGING,AV>
    ether 3c:07:54:54:86:c5
    nd6 options=1<PERFORMNUD>
    media: autoselect (none)
    status: inactive
en1: flags=8863<UP,BROADCAST,SMART,RUNNING,SIMPLEX,MULTICAST> mtu 1500
    ether 68:a8:6d:29:05:8e
    inet6 fe80::6aa0:6dff:fe29:58e%en1 prefixlen 64 duplicated scopeid 0x5
    inet 192.168.1.114 netmask 0xfffff00 broadcast 192.168.1.255
    nd6 options=9<PERFORMNUD,IFDISABLED>
    media: autoselect
    status: active
fw0: flags=8863<UP,BROADCAST,SMART,RUNNING,SIMPLEX,MULTICAST> mtu 4078
    lladdr a4:b1:97:ff:fe:eb:b7:48
    nd6 options=1<PERFORMNUD>
    media: autoselect <full-duplex>
    status: inactive
en2: flags=963<UP,BROADCAST,SMART,RUNNING,PROMISC,SIMPLEX> mtu 1500
    options=60<TS04,TS06>
    ether d2:00:1e:bb:74:80
    media: autoselect <full-duplex>
    status: inactive
p2p0: flags=8843<UP,BROADCAST,RUNNING,SIMPLEX,MULTICAST> mtu 2304
    ether 0a:a8:6d:29:05:8e
    media: autoselect
    status: inactive
  
```

- To verify the actual HTTP port used by MBS, type the command:

```
netstat -vanp tcp \| grep 54000
```

```

MacBook-Pro:~ admin$ netstat -vanp tcp \| grep 54000
Active Internet connections (including servers)
Proto Recv-Q Send-Q Local Address          Foreign Address        (state)      rhiwat shiwat  pid  epid
tcp4    0      0 192.168.1.114.49342    125.5.184.164.80      CLOSE_WAIT   131072 131072  66   0
tcp4    0      0 192.168.1.114.49342    *.*                   LISTEN       131072 131072  66   0
tcp46   0      0 *.54000                *.*                   LISTEN       131072 131072  66   0
tcp4    0      0 192.168.1.114.7070    192.168.1.111.50057   ESTABLISHED  262144 311296  84   0
tcp4    0      0 *.49192                *.*                   LISTEN       131072 131072  84   0
tcp4    0      0 192.168.1.114.49192    92.223.85.120.80     ESTABLISHED  131072 131860  84   0
tcp4    0      0 192.168.1.114.49191    17.57.145.68.5223    ESTABLISHED  131072 131860  91   0
tcp4    0      0 *.7070                 *.*                   LISTEN       131072 131072  84   0
  
```

- Make sure that your firewall setting allows network traffic through the following HTTP and UDP ports to ensure that the communication between your machine and mobile device is successful: HTTP Port: 54000 to 54099 and UDP Port: 54200 to 54299. Otherwise, mobile backup and restore will not work.
- To perform a status check on the MBS. Open a browser on the Backup247 Advanced Client (B247PRO) machine and type the IP address, followed by the TCP port.

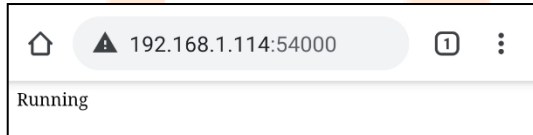
For example: If the HTTP port used is 54000, <http://192.168.1.114:54000>, you should get the following result which shows “Running” status. This means the MBS is running.

In the Backup247 Advanced Client (B247PRO) machine

6. To run a connection test between the mobile device and machine open a browser in your mobile device and type the IP address followed by the TCP port.

For example: If the HTTP port used is 54000, <http://192.168.1.114:54000>, you should get the following result which shows “Running” status. This means the Backup247 Mobile app can successfully connect to the MBS and both backup and restore can proceed on the mobile device.

In the mobile device



6 Register device for 2FA in Backup247 Advanced Client (B247PRO)

There are two types of Authenticator that can be used to register a device for 2FA in Backup247 Advanced Client (B247PRO):

- Backup247 Mobile Authenticator
- Third-party TOTP Authenticator (e.g., Microsoft Authenticator, Google Authenticator, Authy, Duo, LastPass Authenticator, iOS 15 Built-in Two-Factor Authenticator, etc.)

The 2FA registration steps using the different types of authenticator will be discussed in this chapter.

- **Using Backup247 Mobile Authenticator**

- Supports two types of authentication:

- i) Push Notification
- ii) TOTP

- Can be configured to support two 2FA modes:

- i) Push Notification and TOTP (default mode); or
- ii) TOTP only

- **Using Microsoft Authenticator**

- **Using Google Authenticator**

6.1 Using Backup247 Mobile Authenticator

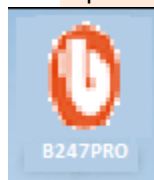
To register a device for 2FA in Backup247 Advanced Client (B247PRO) using Backup247 Mobile, here are the two scenarios:

- ▶ Without Mobile Add-on Module
- ▶ With Mobile Add-on Module

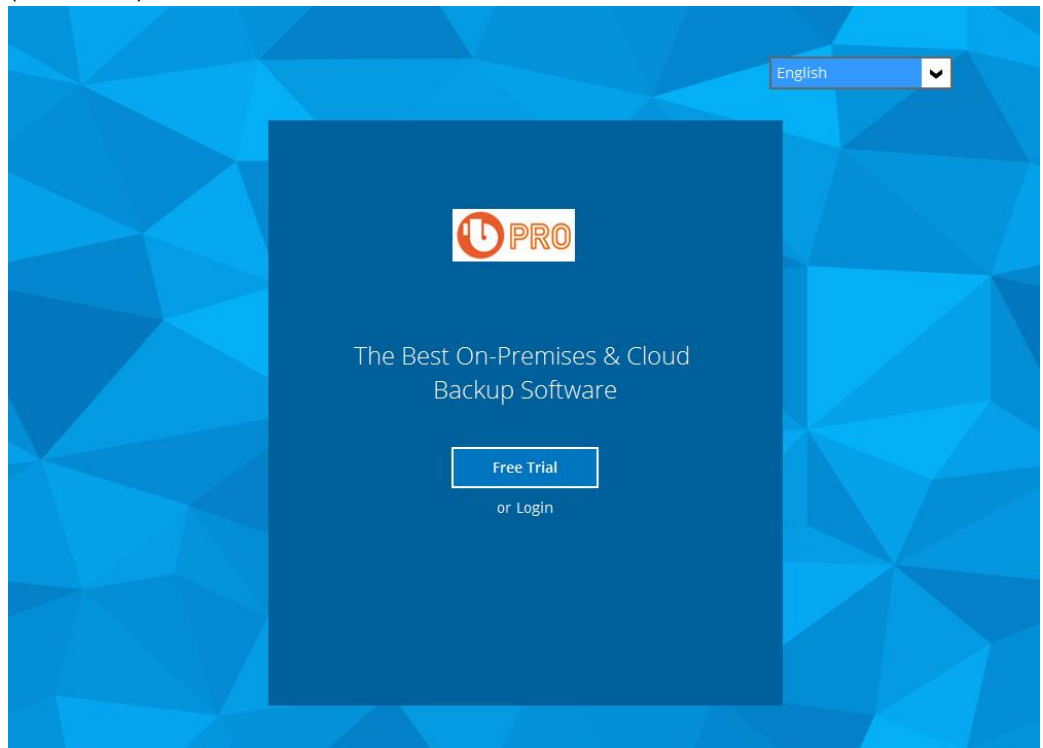
6.1.1 Without Mobile Add-on Module

To register a device for 2FA without Mobile Add-on Module, please follow the steps below:

1. A shortcut icon of Backup247 Advanced Client (B247PRO) will be available on your desktop after installation. Double-click the icon to launch the application.



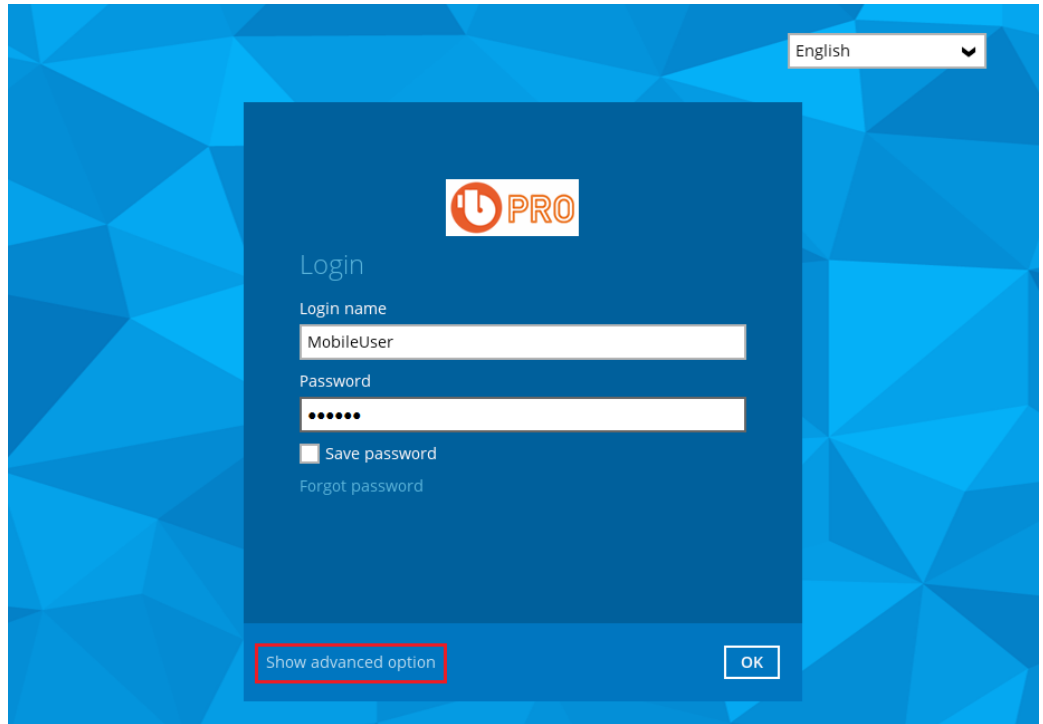
- The Free Trial Registration option may be displayed when you login for the first time. If you want to create a free trial account please proceed to Appendix E. Otherwise, click **Login** if you already have a Backup247 Advanced Client (B247PRO) account.



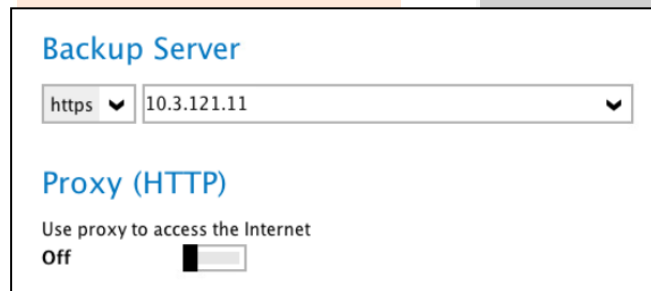
NOTE

The **Free Trial** registration option may not be available. This depends on the settings of your backup service provider. Please contact Backup247 Technical Support for more information.

- The **Show advanced option** may not be available if the backup server settings are already setup by your backup service provider. Please contact Backup247 Technical Support for more information.



If **Show advanced option** is clicked, this will be displayed. IP address used below is dummy for illustration purpose



4. Enter the login name and password of your Backup247 Advanced Client (B247PRO) account provided by your backup service provider. Then, click **OK** to log in.

English

Backup247 PRO

Login

Login name
MobileUser

Password
•••••

Save password

[Forgot password](#)

Show advanced option

OK

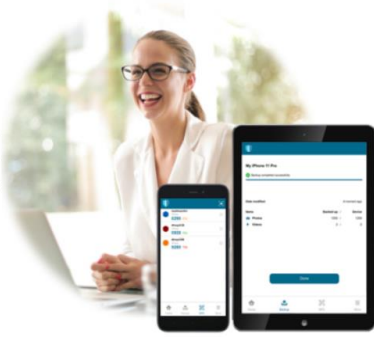
NOTE

The **Save password** option may not be available. This depends on the settings of your backup service provider. Please contact Backup247 Technical Support for more information.

5. You will have the option to set up your 2FA. Click **Setup Now**.


B247 Mobile App

Keep Hackers Off
All hackers delete backup data after compromising a machine. Use Two-Factor Authentication (2FA) to keep hackers off your backup data and turn ransomware harmless.



Skip Feature Setup Setup Now

If you do not want to set up the 2FA feature, click the **Skip Feature Setup** link. If you click **Yes** in the pop-up message that will be displayed, it will skip to **step 8**. Otherwise, click **No** to continue with the set-up of the 2FA feature.


 Are you sure you want to skip the setup for Mobile feature for now?
You can go to User Profile to configure Mobile feature at anytime.



Yes No


6. Download the Backup247 Mobile app from the App Store / Google Play Store.

App Download and Device Pairing

Please scan the QR code to get the below Mobile App from App Store. Once installed the Mobile App, launch it and scan the same QR code to complete the device registration.





Prerequisites
– Please use the latest Mobile App version

[Not able to scan QR code? Click here to pair with TOTP secret key](#)

7. Backup247 Mobile supports two types of authentication method:

- Push Notification
- TOTP

Backup247 Mobile can be configured to support two 2FA modes:

- Push Notification and TOTP (default mode)
- or
- TOTP only

Push Notification and TOTP (default mode)

- To configure Push Notification and TOTP 2FA with Backup247 Mobile, simply scan the displayed QR code using the Backup247 Mobile app.

App Download and Device Pairing

Please scan the QR code to get the below Mobile App from App Store. Once installed the Mobile App, launch it and scan the same QR code to complete the device registration.

Ahsay Mobile

Download on the App Store GET IT ON Google Play

Prerequisites

- Please use the latest Mobile App version

Not able to scan QR code? [Click here to pair with TOTP secret key](#)

- In this example, the Backup247 Mobile app is installed on a mobile device named "Androidv10".

B247 Mobile

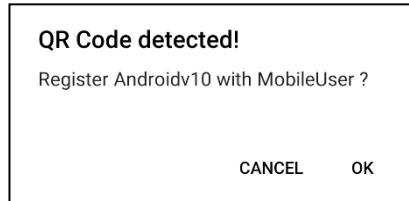
Scan the QR code displayed in your application
(supports two-factor authentication, mobile device backup etc.)

Loading...

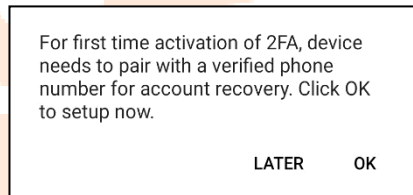
Cancel

Not able to scan QR code?

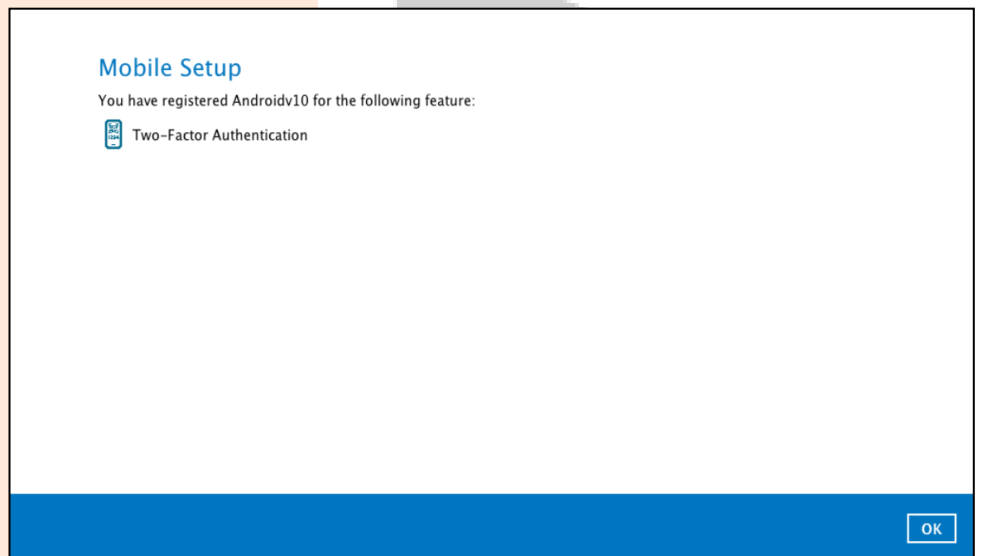
Tap **OK** to continue.



Once the device is successfully paired, the following message will be displayed in the Backup247 Mobile app. You can set up a recovery number here that will be used in case of "Authentication Recovery" procedure by tapping **OK**. Otherwise, tap **LATER** to set it up later on.

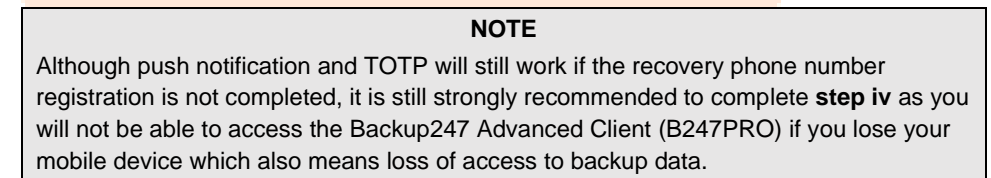


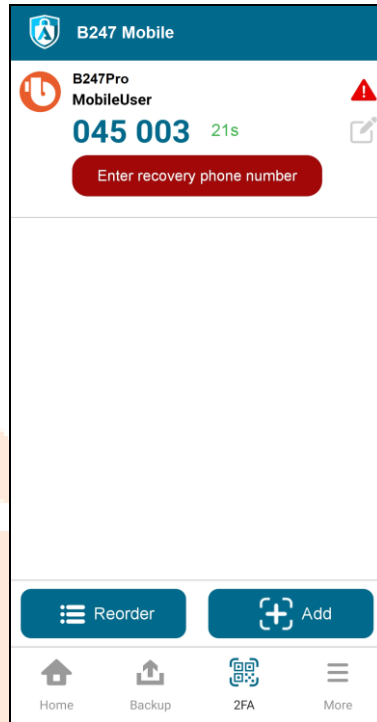
- iii. After successful scan of the QR code, you have now registered Backup247 Mobile for Push Notification and TOTP 2FA. Click **OK** to continue.



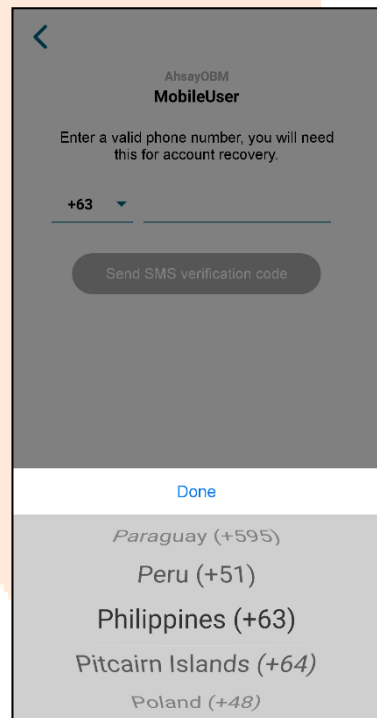
Phone number verification for account recovery

- iv. In the Backup247 Mobile app, go to 2FA then enter the phone number for account recovery. Tap **Enter recovery phone number**.

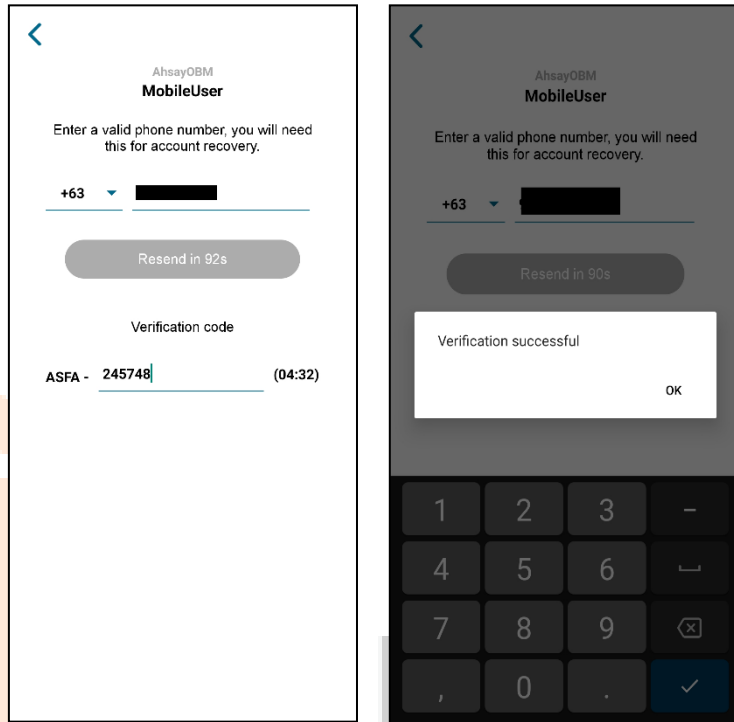




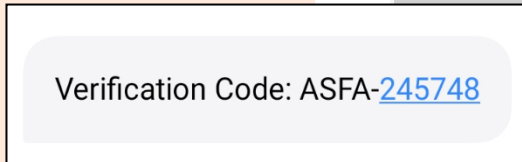
Select your country code and enter your phone number. Tap **Send SMS verification code**.



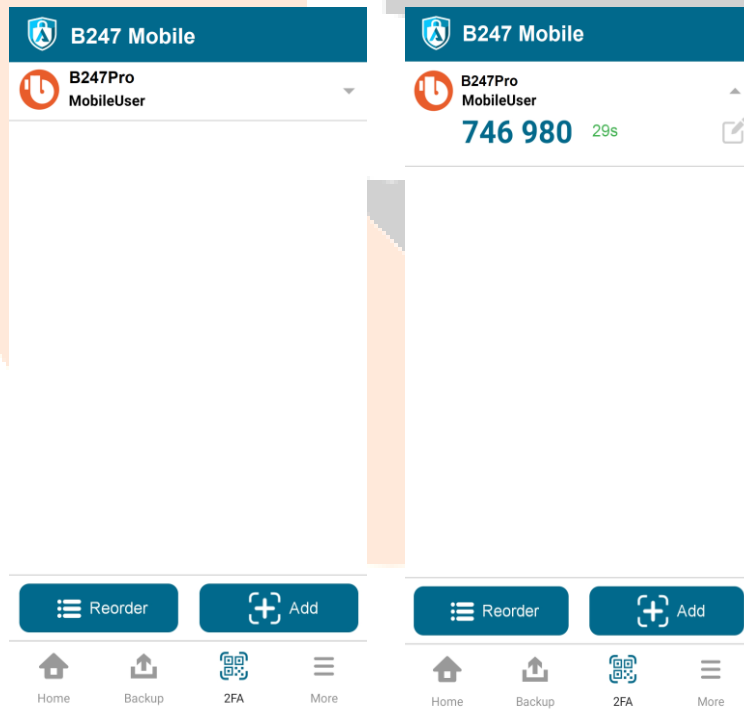
Enter the verification code sent to your mobile device.



Example of verification code:



Your phone number for account recovery is successfully verified.

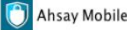




TOTP only

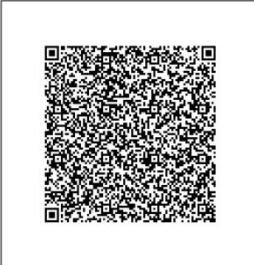
- i. To configure a TOTP only 2FA with Backup247 Mobile, click the **“Not able to scan QR code? Click here to pair with TOTP secret key”** link.

App Download and Device Pairing

Please scan the QR code to get the below Mobile App from App Store. Once installed the Mobile App, launch it and scan the same QR code to complete the device registration.

 Ahsay Mobile



Prerequisites

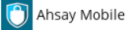
– Please use the latest Mobile App version



[Not able to scan QR code? Click here to pair with TOTP secret key](#)


- ii. After clicking the **“Not able to scan QR code? Click here to pair with TOTP secret key”** link, the QR code for the TOTP only authenticator will be displayed.

App Download and Device Pairing

Please scan the QR code to get the below Mobile App from App Store. Once installed the Mobile App, launch it and scan the same QR code to complete the device registration.

 Ahsay Mobile



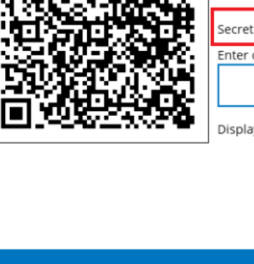
[Show Secret Key](#)

Enter one-time passcode generated from authenticator app

(00:00:26)

Display name:

To show the secret key, click the **Show Secret Key** link to display the 16-character alphanumeric secret key. The display name will be “Backup247 Mobile” by default.



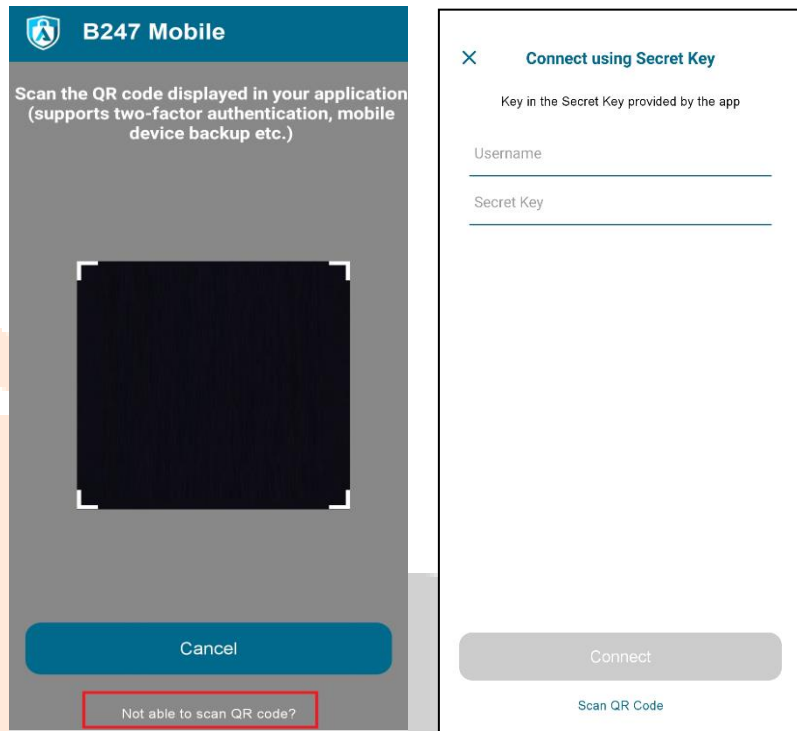
Secret Key: QIP2 6Y3P U6FS WZ7T

Enter one-time passcode generated from authenticator app

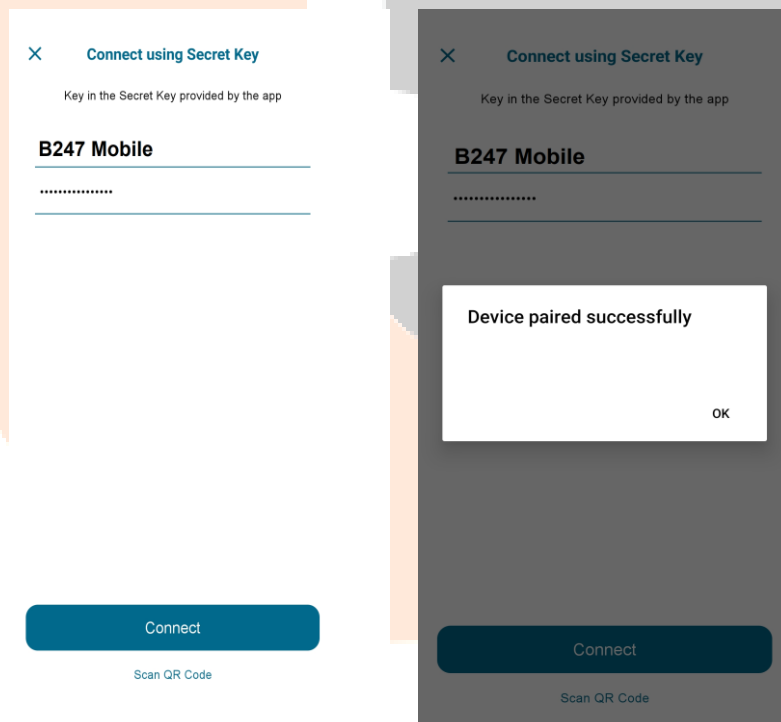
(00:00:24)

Display name:

- iii. In the Backup247 Mobile app, go to **2FA**. Tap the **Not able to scan QR code?** link.



- iv. Enter the Username and Secret Key shown in the Backup247 Advanced Client (B247PRO) then tap **Connect**. Once the device is paired successfully, click **OK** to continue.




- v. Enter the one-time passcode from the Backup247 Mobile app.

App Download and Device Pairing

Please scan the QR code to get the below Mobile App from App Store. Once installed the Mobile App, launch it and scan the same QR code to complete the device registration.

Ahsay Mobile

Download on the App Store | GET IT ON Google Play



Secret Key: QIP2 6Y3P U6FS WZ7T

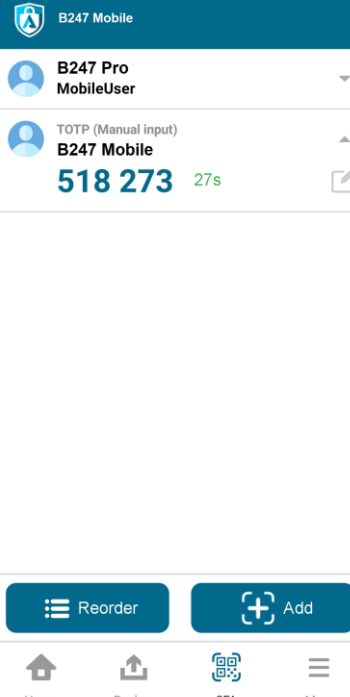
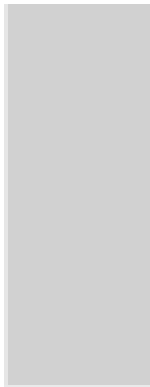
Enter one-time passcode generated from authenticator app

5 1 8 2 7 3 (00:00:15)

Display name: **B247 Mobile**



Example of the one-time passcode generated by Backup247 Mobile:



B247 Mobile

- B247 Pro MobileUser
- TOTP (Manual input) B247 Mobile

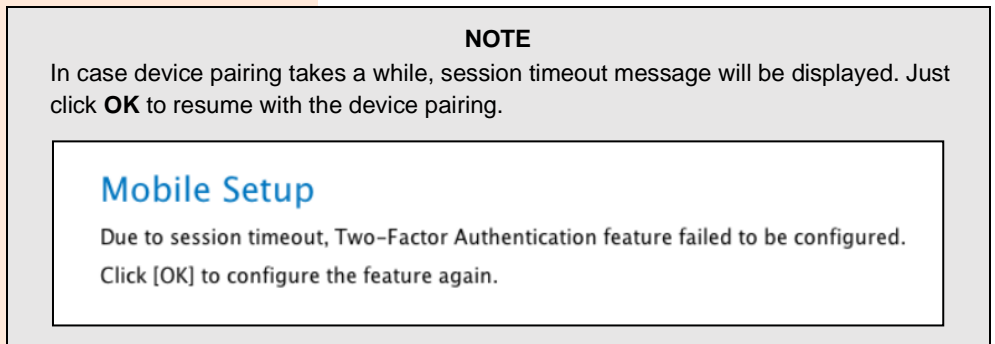
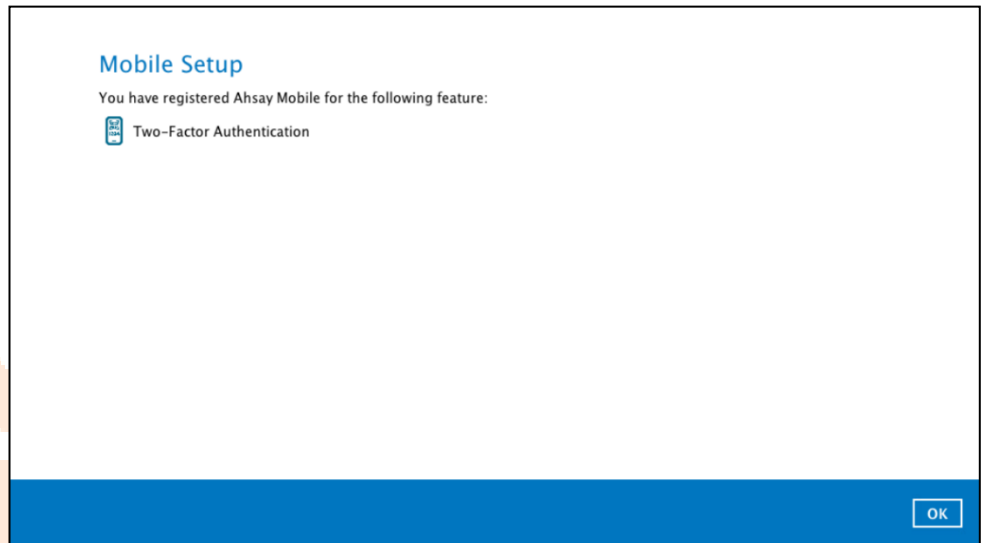
518 273 27s

Reorder Add

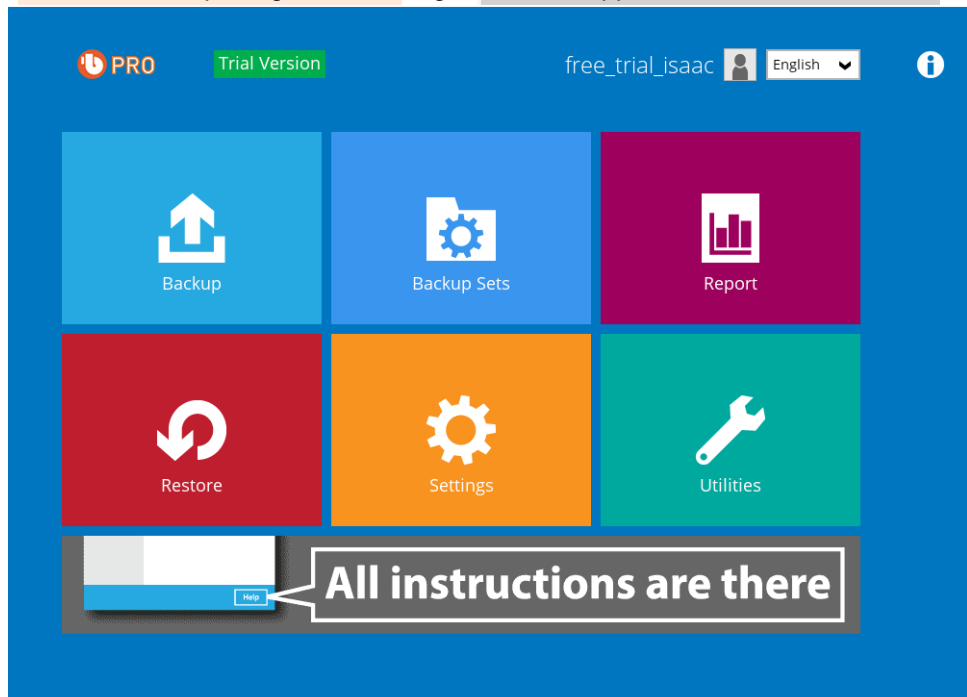
Home Backup 2FA More



- vi. Once the registration is successful, the following screen will be displayed. You have now registered Backup247 Mobile for TOTP only 2FA.



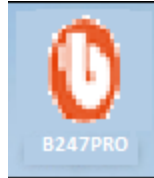
8. After successful pairing, the following screen will appear.



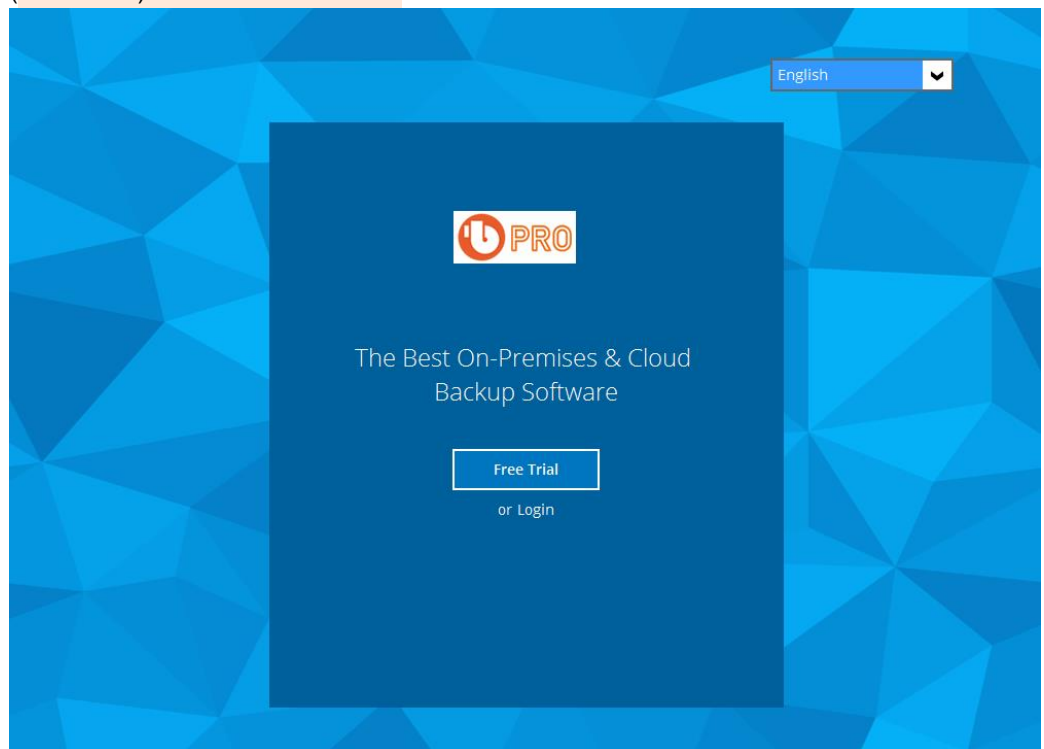
6.1.2 With Mobile Add-on Module

To register a device for 2FA with Mobile Add-on Module enabled, please follow the steps below:

1. A shortcut icon of Backup247 Advanced Client (B247PRO) will be available on your desktop after installation. Double-click the icon to launch the application.



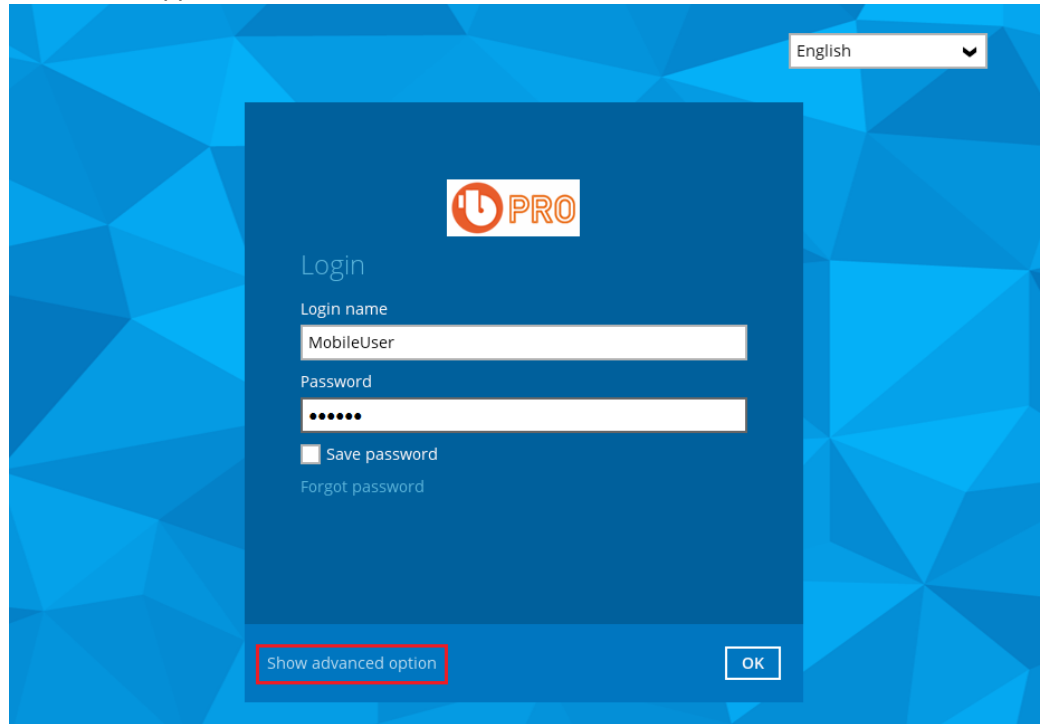
2. The Free Trial Registration option may be displayed when you login for the first time. If you want to create a free trial account please proceed to Appendix E. Otherwise, click **Login** if you already have a Backup247 Advanced Client (B247PRO) account.



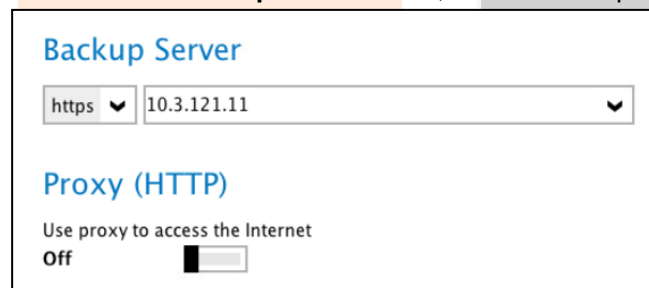
NOTE

The **Free Trial** registration option may not be available. This depends on the settings of your backup service provider. Please contact Backup247 Technical Support for more information.

- The **Show advanced option** may not be available if the backup server settings are already setup by your backup service provider. Please contact Backup247 Technical Support for more information.



If **Show advanced option** is clicked, this will be displayed.



- Enter the login name and password of your Backup247 Advanced Client (B247PRO) account provided by your backup service provider. Then, click **OK** to log in.

English

PRO

Login

Login name
MobileUser

Password
•••••

Save password

[Forgot password](#)

[Show advanced option](#) **OK**

NOTE

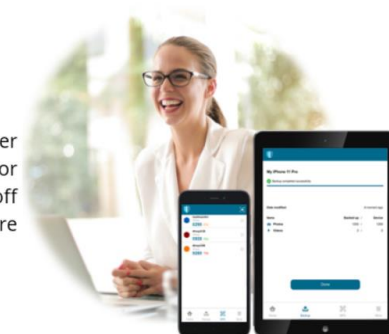
The **Save password** option may not be available. This depends on the settings of your backup service provider. Please contact Backup247 Technical Support for more information.

5. You will have the option to set up your 2FA and mobile backup if the **Mobile Add-on Module is enabled** in the backup account. Click **Setup Now**.

B247 Mobile App

Keep Hackers Off

All hackers delete backup data after compromising a machine. Use Two-Factor Authentication (2FA) to keep hackers off your backup data and turn ransomware harmless.




[Skip Feature Setup](#)



Setup Now


- Download the Backup247 Mobile app from the App Store / Google Play Store. Ensure that the displayed Prerequisites are met.

App Download and Device Pairing

Please scan the QR code to get the below Mobile App from App Store. Once installed the Mobile App, launch it and scan the same QR code to complete the device registration.

 Ahsay Mobile


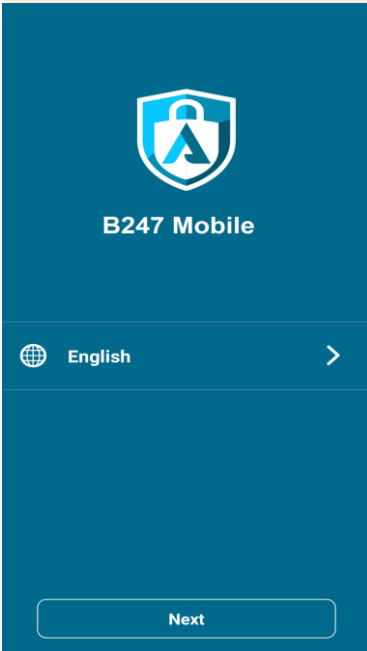


Prerequisites

- Please use the latest Mobile App version
- Please make sure below 2 ports are not blocked by any Firewall settings
TCP Port: 54000
UDP Port: 54200

[Not able to scan QR code? Click here to pair with TOTP secret key](#)

- By using the Backup247 Mobile app, tap **Next** and scan the QR code displayed in Backup247 Advanced Client (B247PRO).



The image shows two overlapping mobile app screens. The left screen is the B247 Mobile app home screen, featuring a blue header with the app logo and the text 'B247 Mobile'. Below the header, there is a language selection menu showing 'English' with a right-pointing arrow. At the bottom, there is a 'Next' button. The right screen is a QR code scanner overlay with a grey background. It has a blue header with the B247 Mobile logo and the text 'B247 Mobile'. Below the header, it says 'Scan the QR code displayed in your application (supports two-factor authentication, mobile device backup etc.)'. In the center, there is a QR code with a black border. At the bottom, there is a 'Cancel' button.

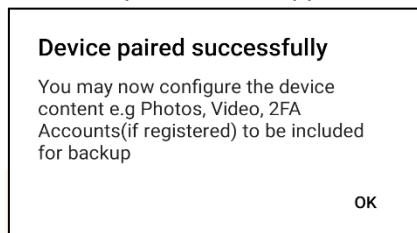
Tap **OK** to continue.

QR Code detected!

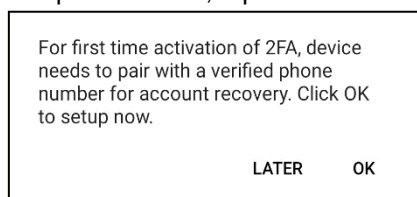
Register Androidv10 with MobileUser ?

CANCEL OK

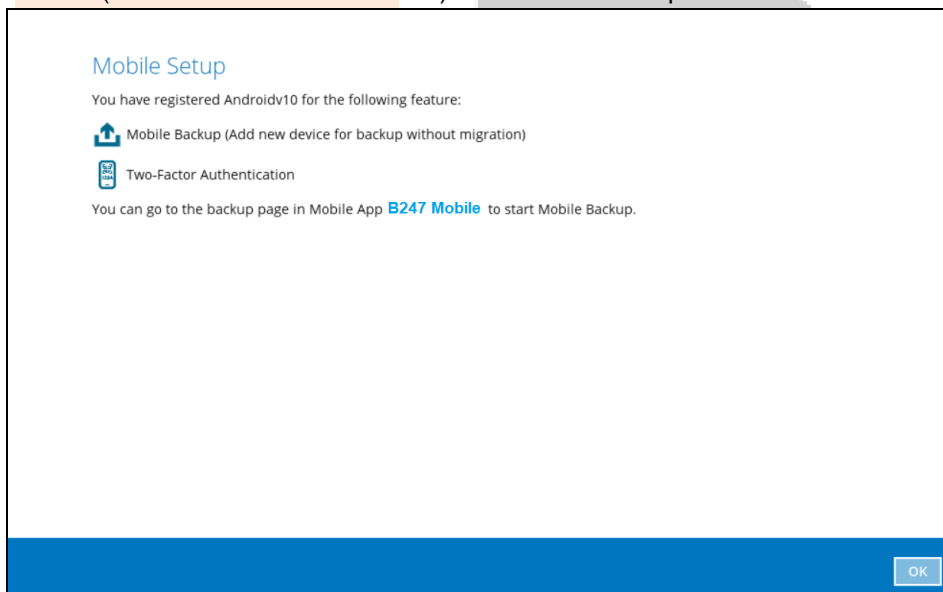
Once the device is successfully paired, the following message will be displayed in the Backup247 Mobile app. Click **OK** to continue.



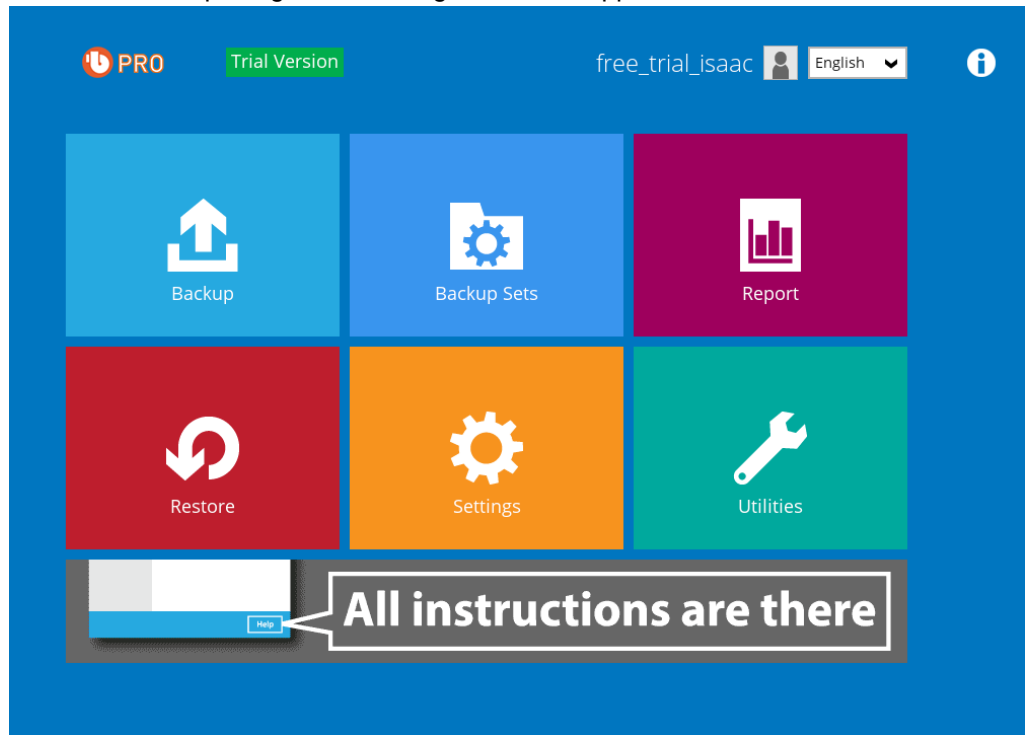
Once the device is successfully paired, the following message will be displayed in the Backup247 Mobile app. You can set up a recovery number here that will be used in case of the “Authentication Recovery” procedure by tapping **OK**. You may refer to Phone number verification for account recovery in **Chapter 6.1.1** for the following setup. Otherwise, tap **LATER** to set it up later on.



8. After successful scan of the QR code, you have now registered Backup247 Mobile for 2FA (Push Notification and TOTP) and Mobile Backup. Click **OK** to continue.



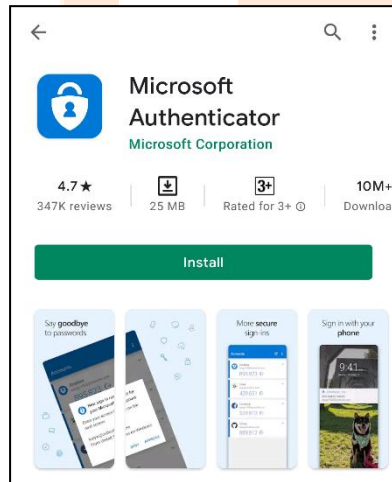
9. After successful pairing, the following screen will appear.



6.2 Using Microsoft Authenticator

To register a device for TOTP 2FA in Backup247 Advanced Client (B247PRO) using Microsoft Authenticator, please follow the steps below:

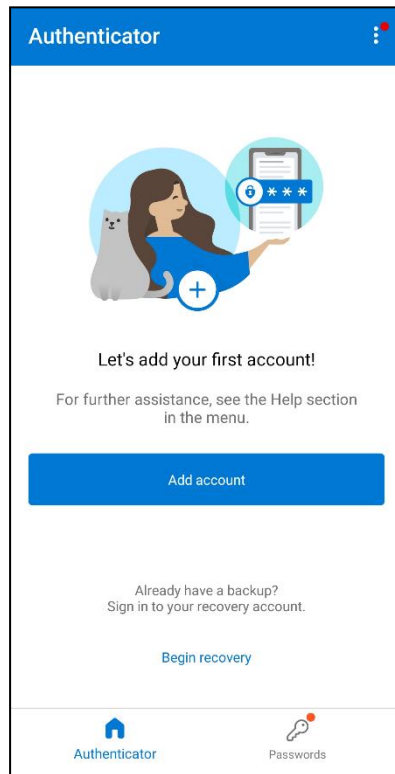
1. Download and install the Microsoft Authenticator from the Play Store for Android devices or the App Store for iOS devices.



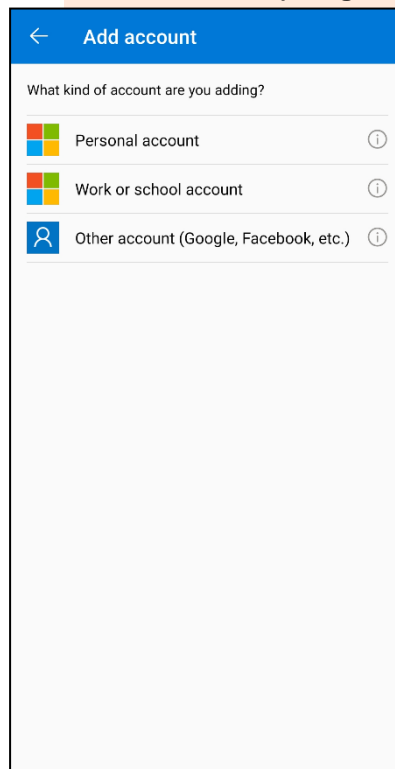
2. Launch the Microsoft Authenticator app.



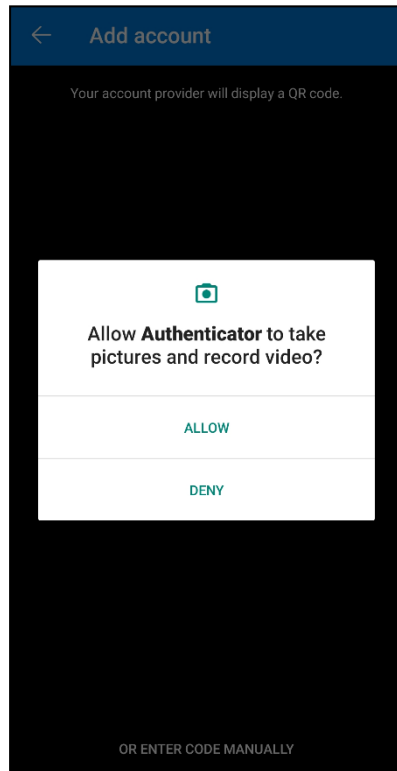
3. Tap **Add account**.



4. Select **Other account (Google, Facebook, etc.)**.



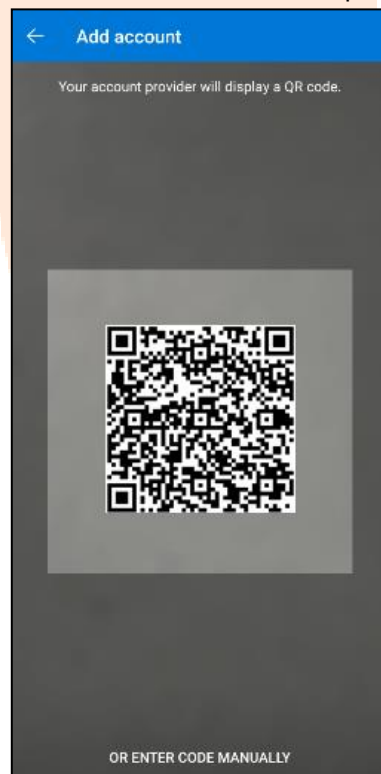
5. Allow permission to take pictures and record video.



6. Set up the account by selecting from the following methods: Scan the QR code or Enter code manually.

Method 1: Scan the QR code


- i. Scan the QR code on Backup247 Advanced Client (B247PRO).






Example of the displayed QR code:

App Download and Device Pairing

Two-Factor Authentication is enabled for helping safeguard access to your account, please use the below authenticator app to scan the QR code to complete the device registration.

 Microsoft Authenticator



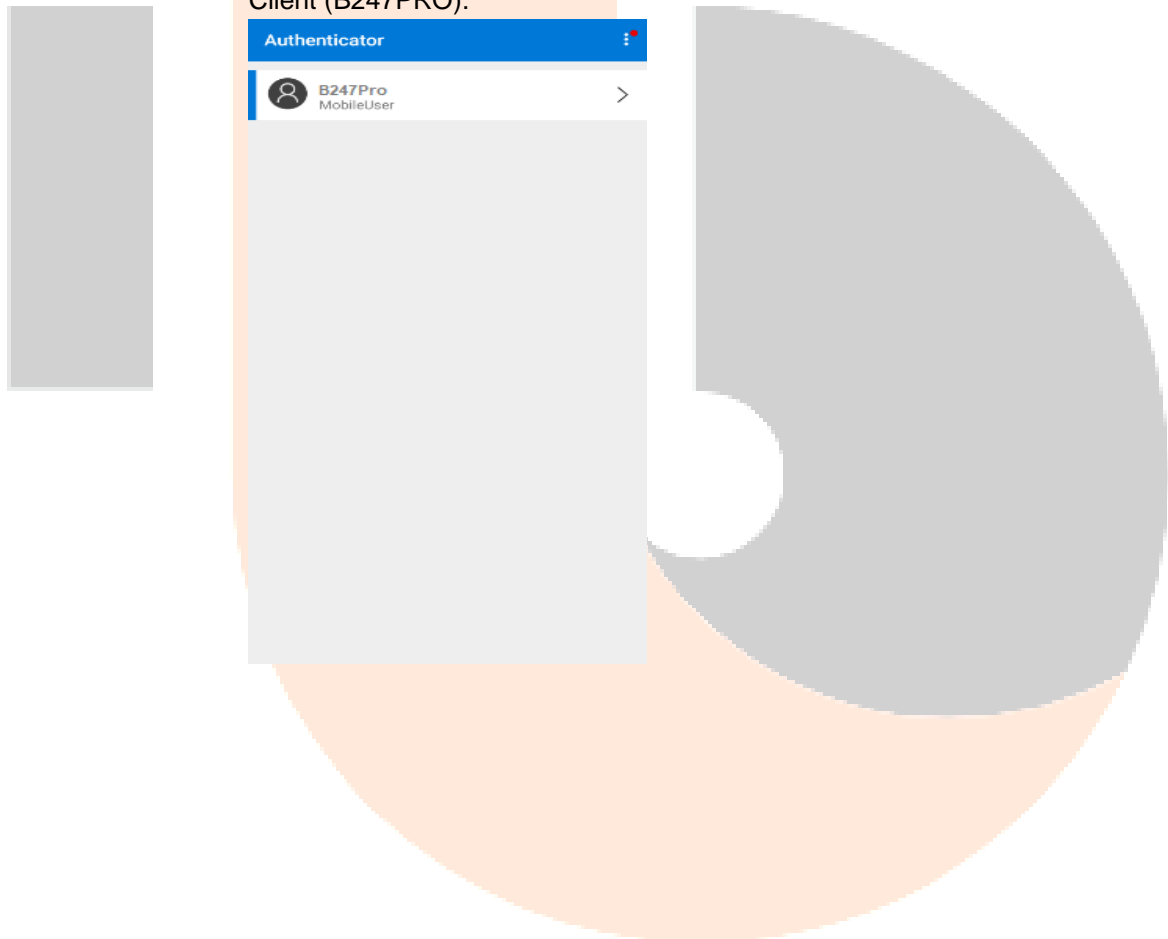
[Show Secret Key](#)

Enter one-time passcode generated from authenticator app

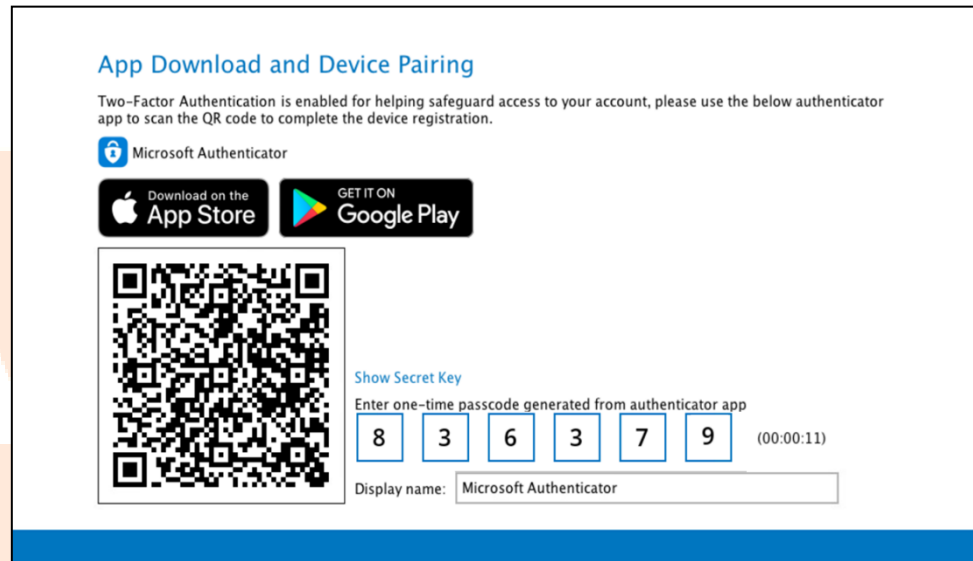
(00:00:11)

Display name:

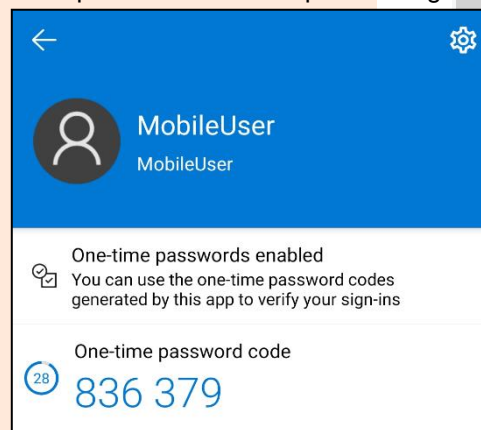
- ii. The Backup247 Advanced Client (B247PRO) account is successfully added to Microsoft Authenticator and the mobile device is registered in Backup247 Advanced Client (B247PRO).



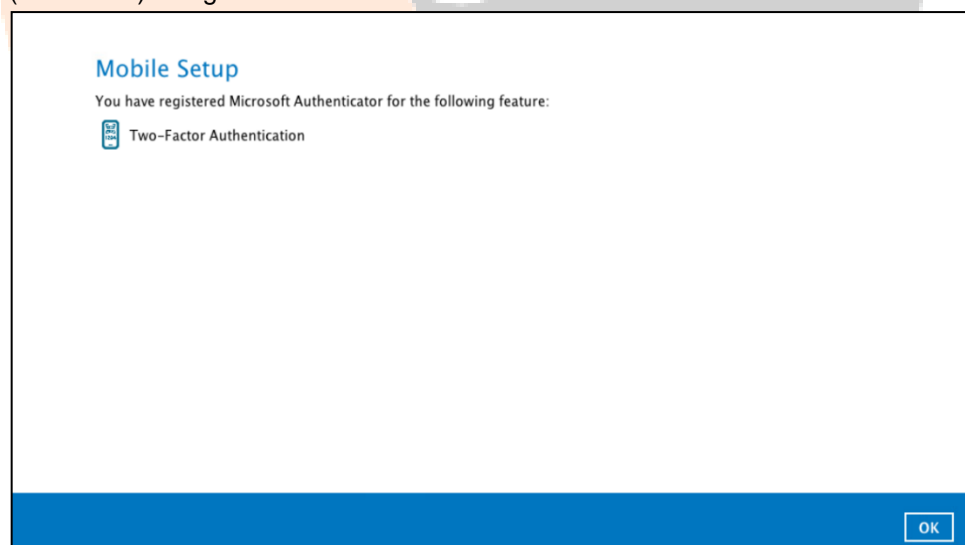
- iii. Once the account is added to Microsoft Authenticator, enter the one-time passcode generated from the authenticator app to Backup247 Advanced Client (B247PRO).



Example of the one-time passcode generated:



- iv. The device is successfully registered for TOTP 2FA in Backup247 Advanced Client (B247PRO) using Microsoft Authenticator. Click **OK** to continue.

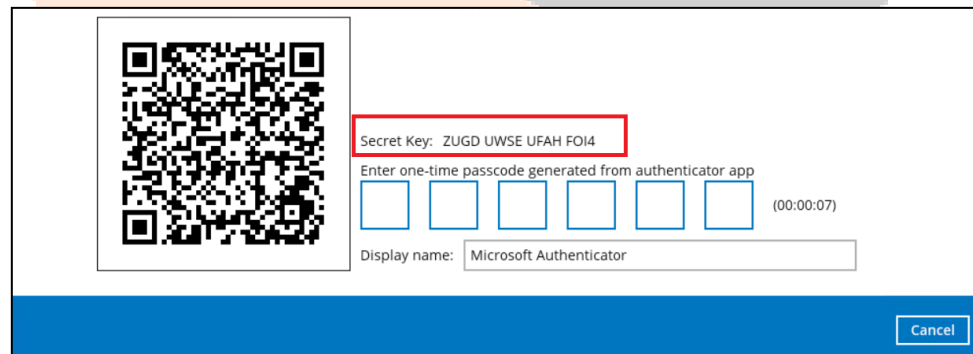
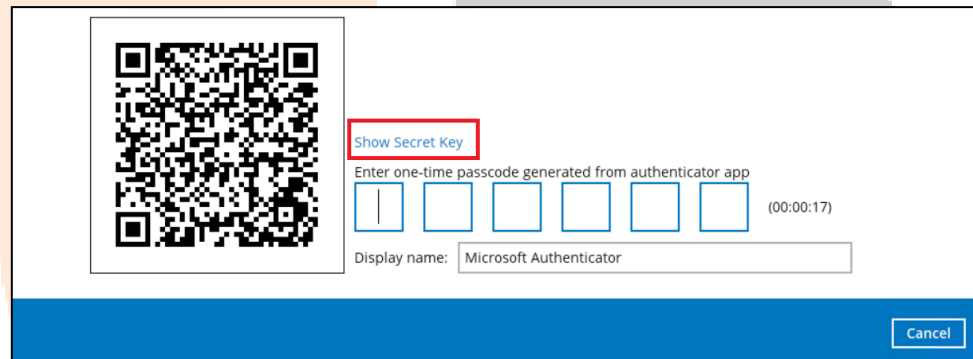


Method 2: Enter Code Manually

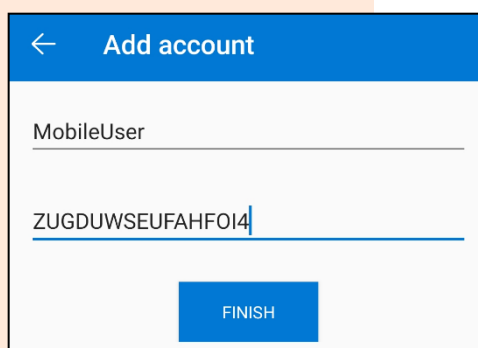
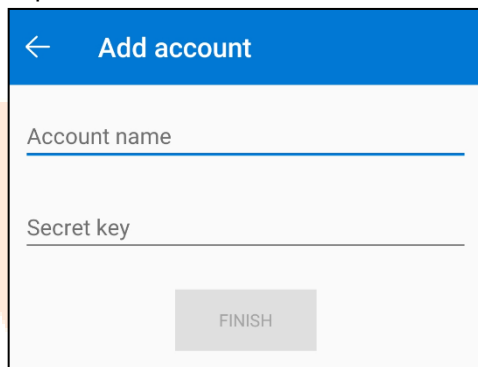
- i. Tap **OR ENTER CODE MANUALLY**.



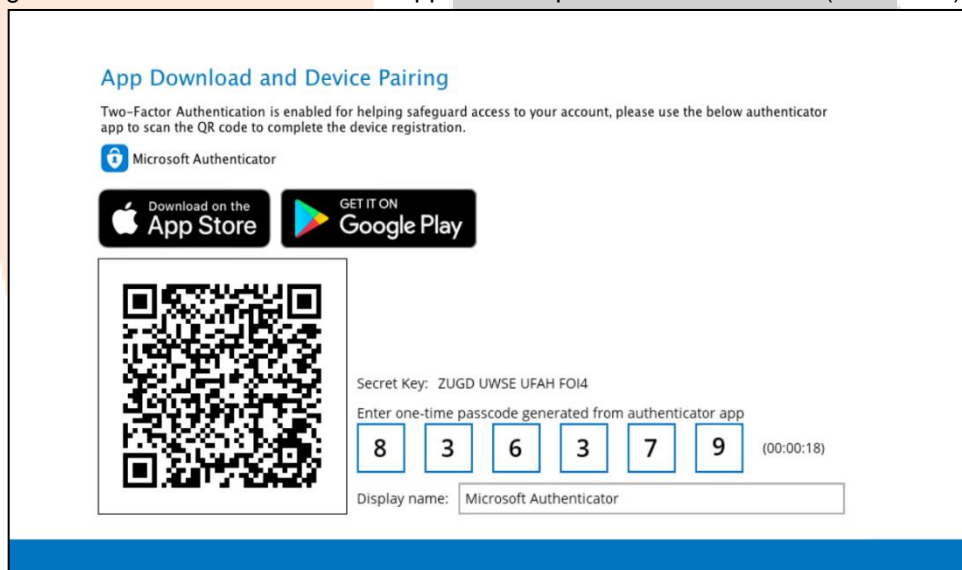
- ii. Click the **Show Secret Key** link in the Backup247 Advanced Client (B247PRO) to display the Secret Key which must be entered manually in the Microsoft Authenticator.



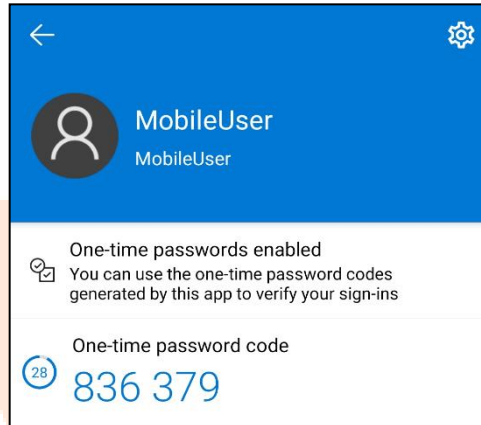
- iii. On the Microsoft Authenticator app, input an account name, then enter the displayed Secret Key in the Backup247 Advanced Client (B247PRO). Tap **FINISH** to proceed.



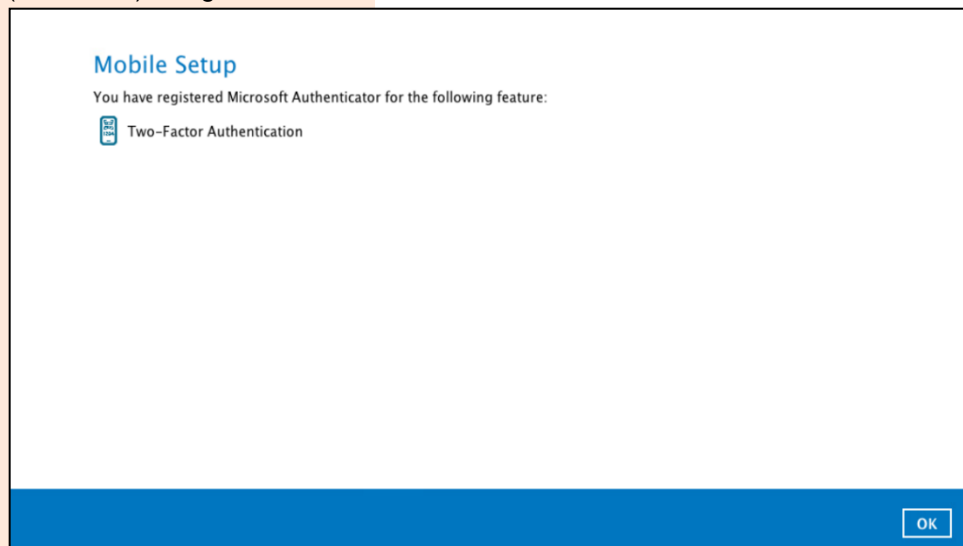
- iv. Once the account is added to Microsoft Authenticator, enter the one-time passcode generated from the authenticator app to Backup247 Advanced Client (B247PRO).



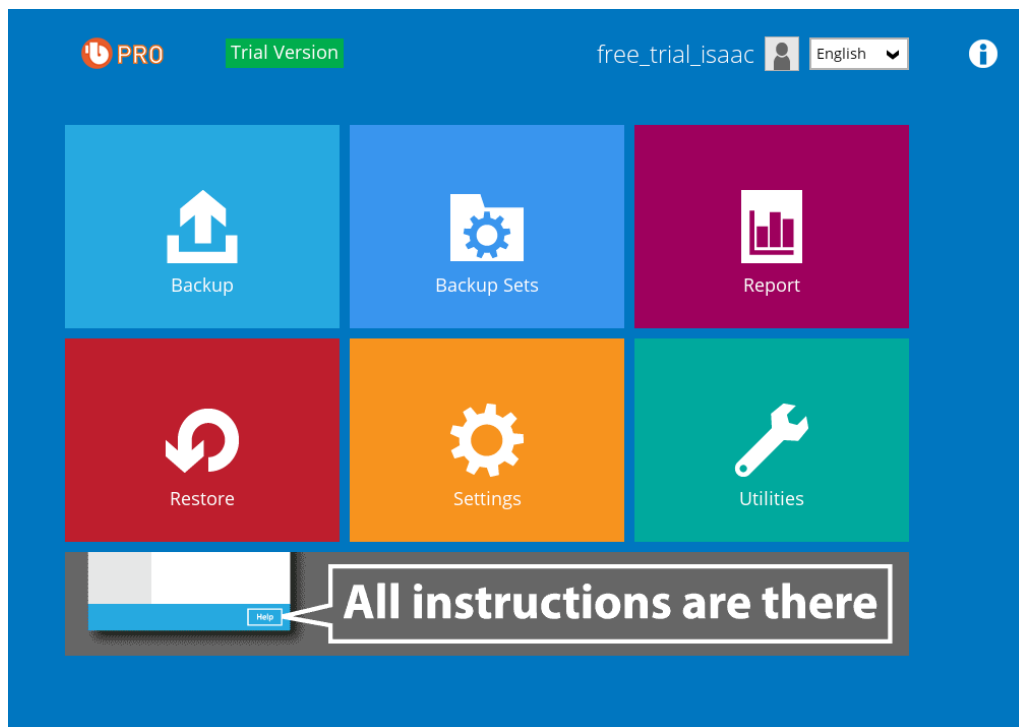
Example of the one-time passcode generated:



- v. The device is successfully registered for TOTP 2FA in Backup247 Advanced Client (B247PRO) using Microsoft Authenticator. Click **OK** to continue.



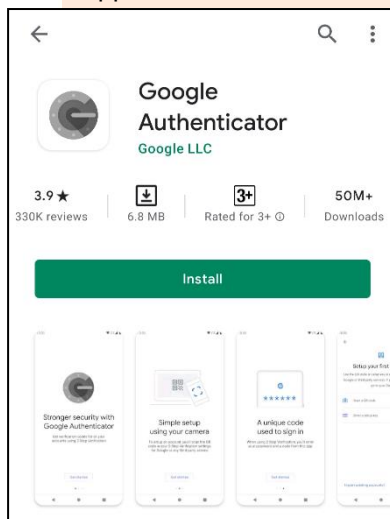
- 7. After successful pairing, the following screen will appear.



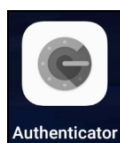
6.3 Using Google Authenticator

To register a device for TOTP 2FA in Backup247 Advanced Client (B247PRO) using Google Authenticator, please follow the steps below:

1. Download and install the Google Authenticator from the Play Store for Android devices or the App Store for iOS devices.



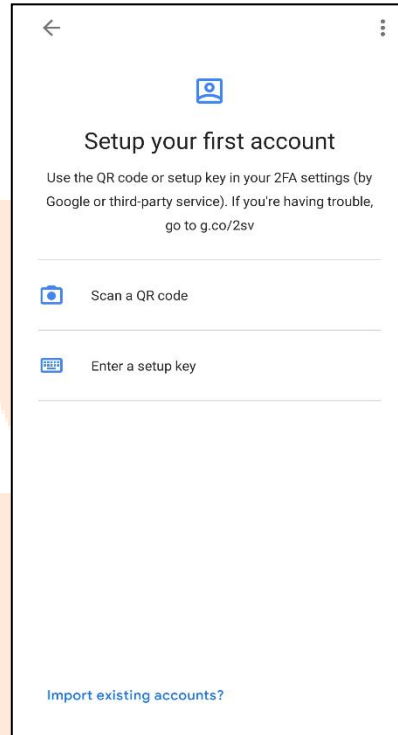
2. Launch the Google Authenticator app.



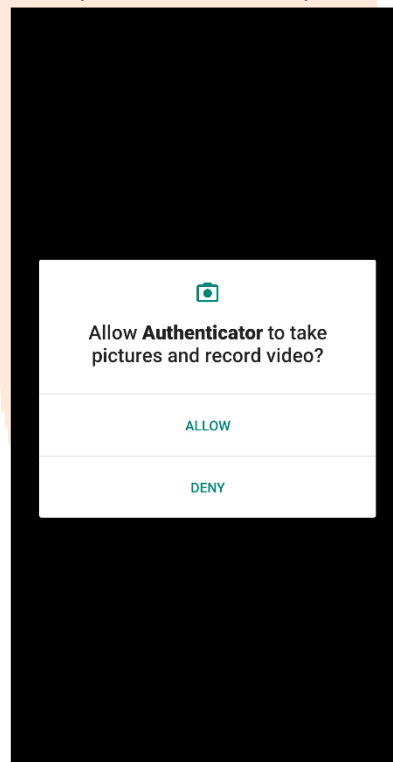
3. Set up the account by selecting from the following methods: Scan the QR code or Enter a setup key manually.

Method 1: Scan the QR code

i. Tap **Scan a QR code**.



ii. Allow permission to take pictures and record video.

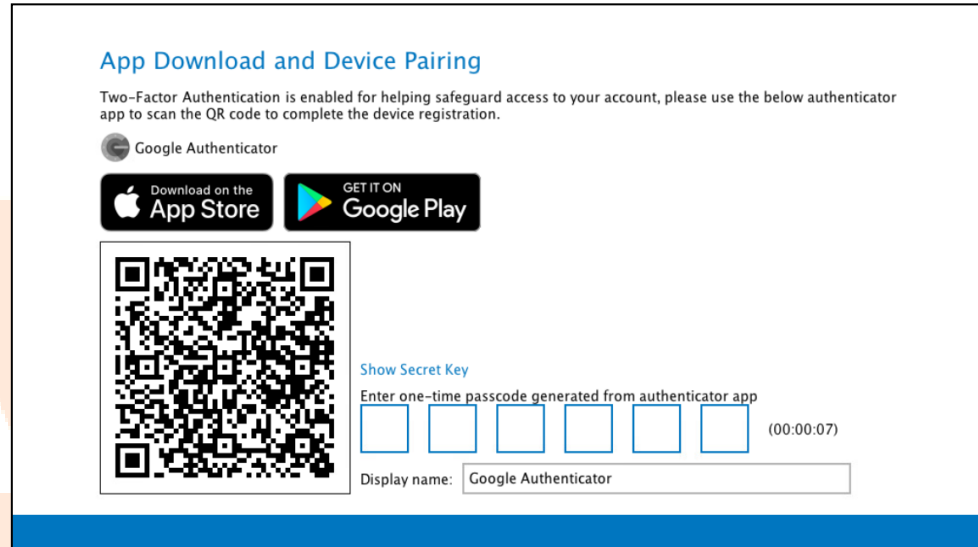


iii. Scan the QR code on Backup247 Advanced Client (B247PRO).

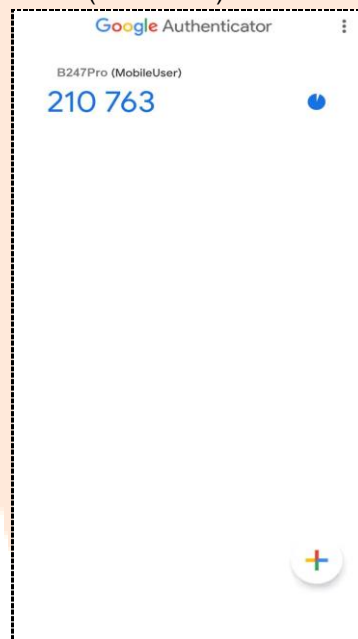


Place QR code within red lines

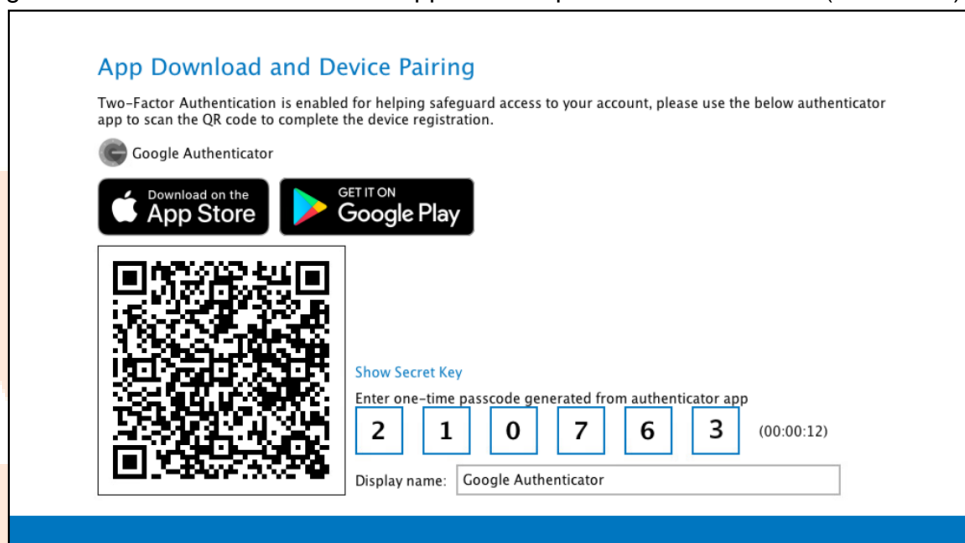
Example of the displayed QR code:



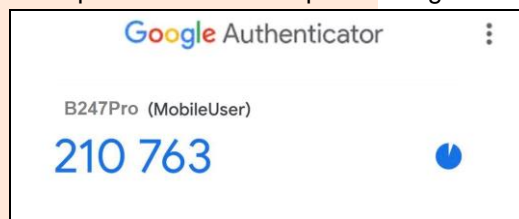
- iv. The Backup247 Advanced Client (B247PRO) account is successfully added to Google Authenticator and the mobile device is registered in Backup247 Advanced Client (B247PRO).



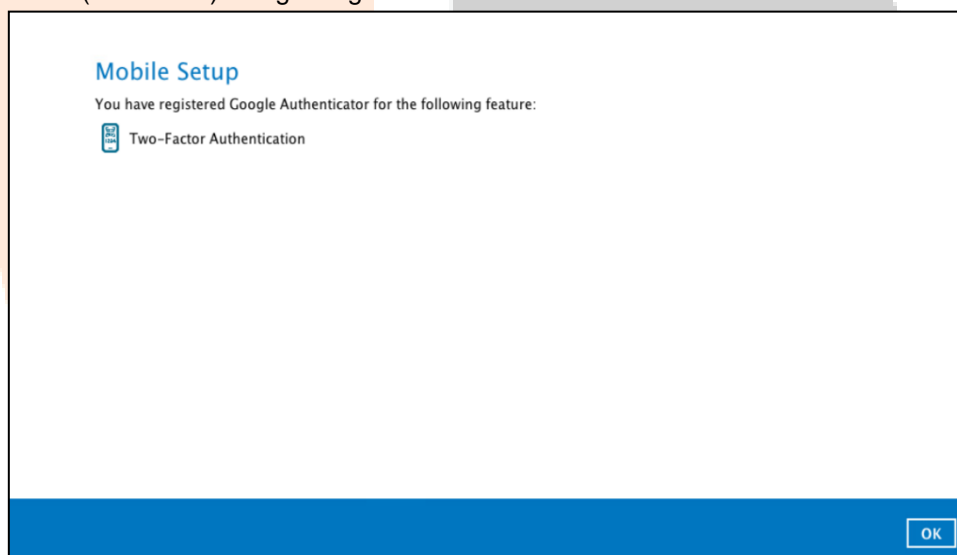
- v. Once the account is added to Google Authenticator, enter the one-time passcode generated from the authenticator app to Backup247 Advanced Client (B247PRO).



Example of the one-time passcode generated:

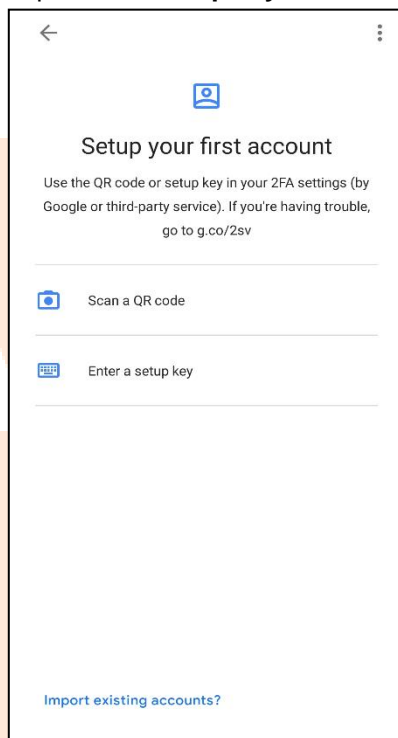


- vi. The device is successfully registered for TOTP 2FA in Backup247 Advanced Client (B247PRO) using Google Authenticator. Click **OK** to continue.

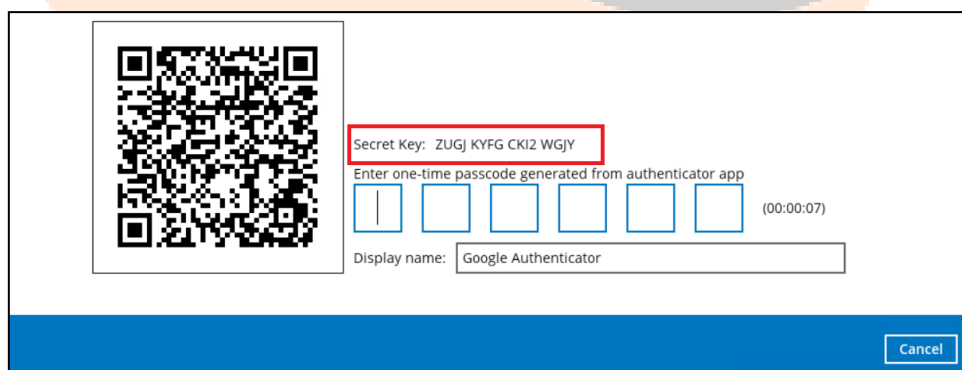


Method 2: Enter a setup key manually

- i. Tap **Enter a setup key**.



- ii. Click the **Show Secret Key** link in the Backup247 Advanced Client (B247PRO) to display the Secret Key which must be entered manually on Google Authenticator.



- iii. On the Google Authenticator app, input an account name, then enter the displayed Secret Key in the Backup247 Advanced Client (B247PRO). Tap **Add** to proceed.

Enter account details

Account

Key

Time based

Add

Enter account details

Account
MobileUser

Key
ZUGJKYFGCKI2WGJY

Time based

Add

- iv. Once the account is added to Google Authenticator, enter the one-time passcode generated from the authenticator app to Backup247 Advanced Client (B247PRO).

App Download and Device Pairing

Two-Factor Authentication is enabled for helping safeguard access to your account, please use the below authenticator app to scan the QR code to complete the device registration.

Google Authenticator

Download on the App Store

GET IT ON Google Play

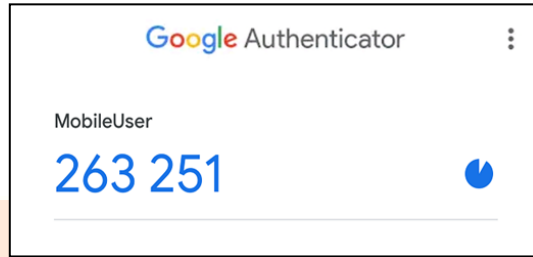
Secret Key: ZUGJ KYFG CKI2 WGJY

Enter one-time passcode generated from authenticator app

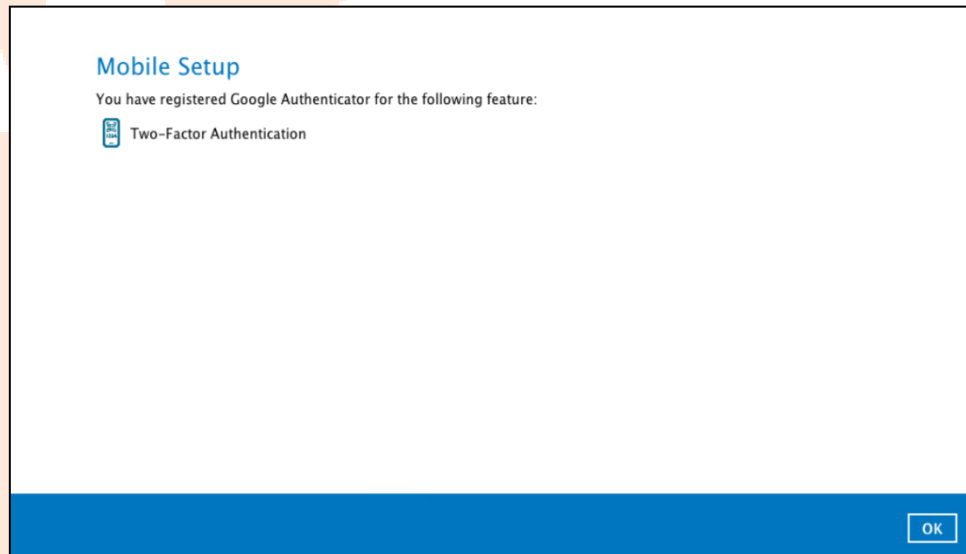
2 6 3 2 5 1 (00:00:15)

Display name: Google Authenticator

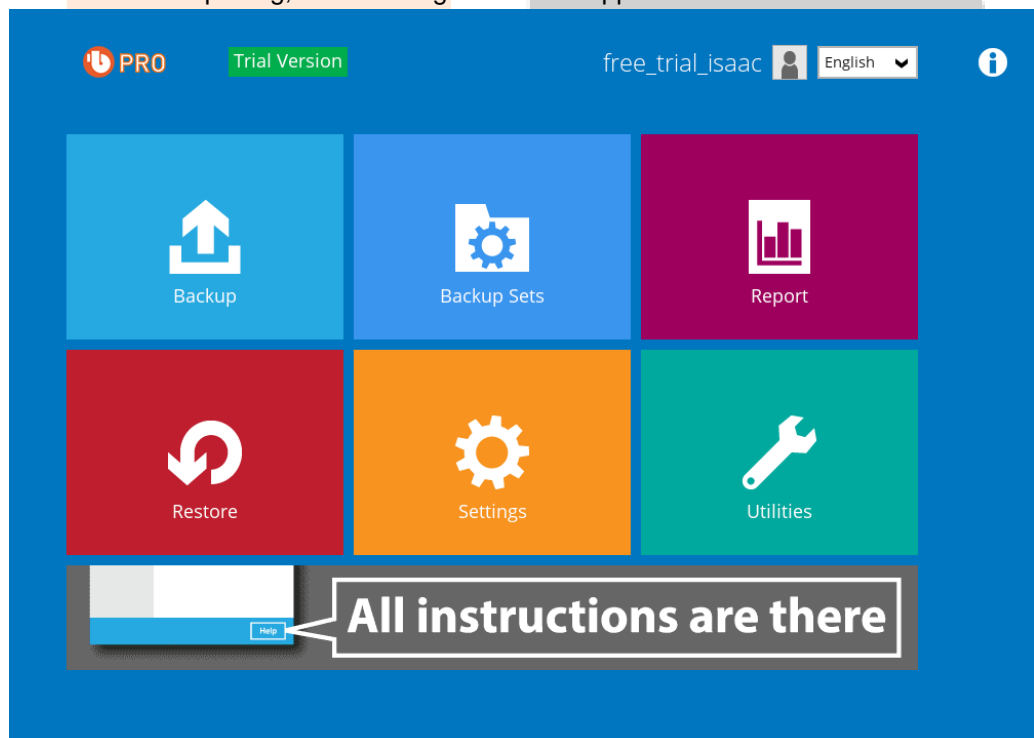
Example of the one-time passcode generated:



- v. The device is successfully registered for TOTP 2FA in Backup247 Advanced Client (B247PRO) using Google Authenticator. Click **OK** to continue.



- 4. After successful pairing, the following screen will appear.



7 Logging in to Backup247 Advanced Client (B247PRO)

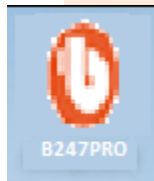
Login steps without 2FA and with 2FA using the different types of authenticator will be discussed in this chapter.

- **Login to Backup247 Advanced Client (B247PRO) without 2FA**
- **Login to Backup247 Advanced Client (B247PRO) with 2FA using Backup247 Mobile Authenticator**
 - Push Notification and TOTP 2FA
 - TOTP only 2FA
- **Login to Backup247 Advanced Client (B247PRO) with 2FA using Microsoft Authenticator**
- **Login to Backup247 Advanced Client (B247PRO) with 2FA using Google Authenticator**
- **Login to Backup247 Advanced Client (B247PRO) with 2FA using Twilio**

7.1 Login to Backup247 Advanced Client (B247PRO) without 2FA

When logging in to Backup247 Advanced Client (B247PRO) without two-factor authentication, please follow the steps below:

1. Double-click the icon to launch the application.



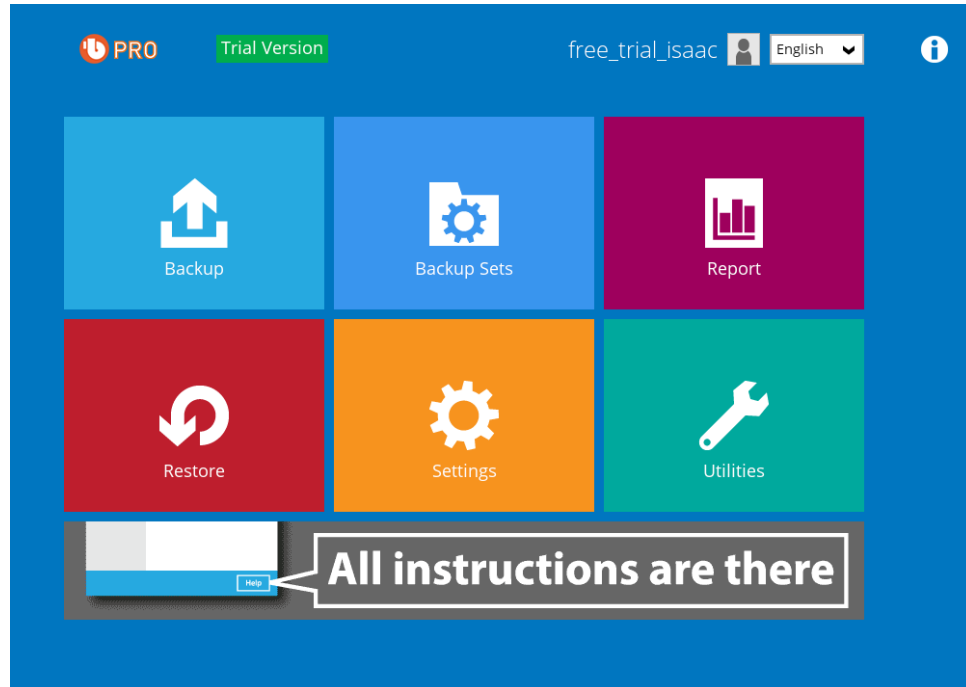
2. Enter the login name and password of your Backup247 Advanced Client (B247PRO) account provided by your backup service provider. Then, click **OK** to log in.

The image shows a login dialog box for Backup247PRO. The dialog has a dark blue background with a lighter blue geometric pattern. At the top right, there is a language dropdown menu set to 'English'. The main content area contains the 'b PRO' logo, the word 'Login', and two input fields: 'Login name' (containing 'MobileUser') and 'Password' (containing six dots). Below the password field is a 'Save password' checkbox and a 'Forgot password' link. At the bottom left, there is a 'Show advanced option' link, and at the bottom right, there is an 'OK' button.

NOTE

The **Save password** option may not be available. This depends on the settings of your backup service provider. Please contact Backup247 Technical Support for more information.

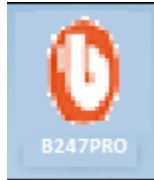
3. After successful login, the following screen will appear.



7.2 Login to Backup247 Advanced Client (B247PRO) with 2FA using Backup247 Mobile Authenticator

When logging in to Backup247 Advanced Client (B247PRO) with two-factor authentication using Backup247 Mobile Authenticator, please follow the steps below:

1. Double-click the icon to launch the application.



2. Enter the login name and password of your Backup247 Advanced Client (B247PRO) account provided by your backup service provider. Then, click **OK** to log in.

The screenshot shows the login interface of the Backup247 PRO application. The background is a blue geometric pattern. In the top right corner, there is a language dropdown menu set to 'English'. The main content area is a dark blue rectangle with the 'B247 PRO' logo at the top. Below the logo, the word 'Login' is displayed. There are two input fields: 'Login name' with the text 'MobileUser' and 'Password' with masked characters '*****'. Below the password field, there is a checkbox labeled 'Save password' and a link for 'Forgot password'. At the bottom left of the login box, there is a link 'Show advanced option'. At the bottom right, there is an 'OK' button.

NOTE

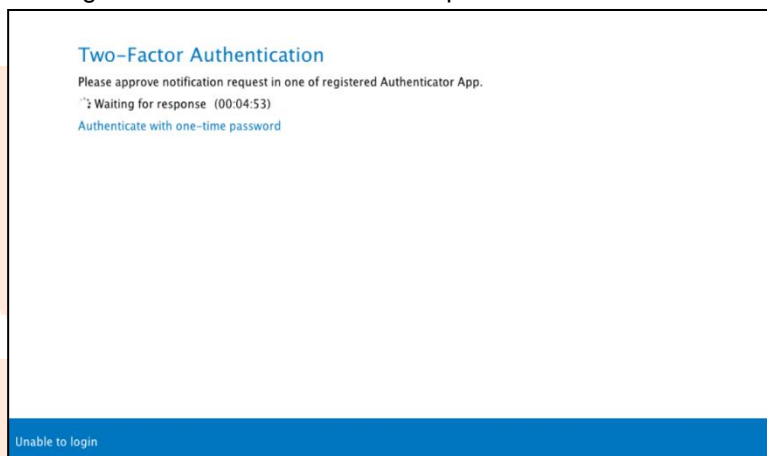
The **Save password** option may not be available. This depends on the settings of your backup service provider. Please contact Backup247 Technical Support for more information.

Please refer to the **Appendix A: Troubleshooting Login** of the Backup247 Mobile User Guide for Android and iOS if you are experiencing problems logging into Backup247 Advanced Client (B247PRO) with Two-Factor Authentication using Backup247 Mobile app.

3. Select the authentication method to continue with the login.

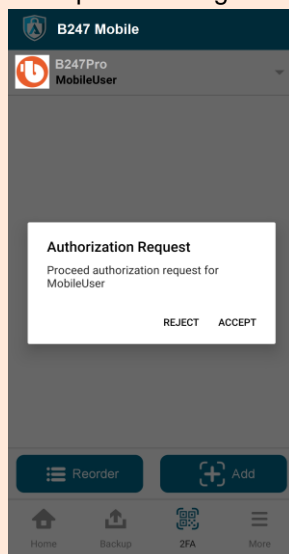
- **Push Notification and TOTP (default mode)**

Example of the 2FA alert screen on Backup247 Advanced Client (B247PRO) after login with correct username and password:

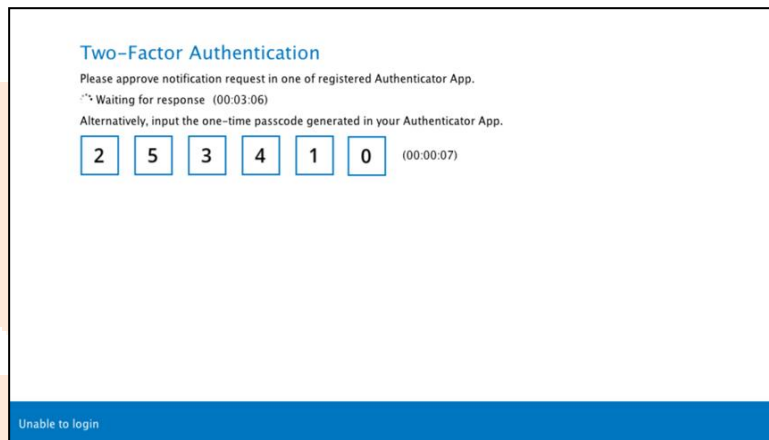


Push notification is the default 2FA mode. Accept the login request on the Backup247 Mobile app to complete the login.

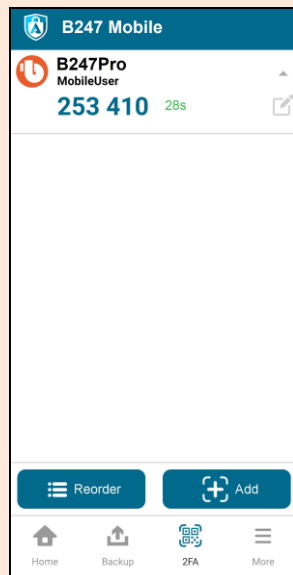
Example of the login request sent to the Backup247 Mobile:



However, if push notification is not working or you prefer to use one-time password instead, click the **“Authenticate with one-time password”** link, then input the one-time password generated from Backup247 Mobile to complete the login.



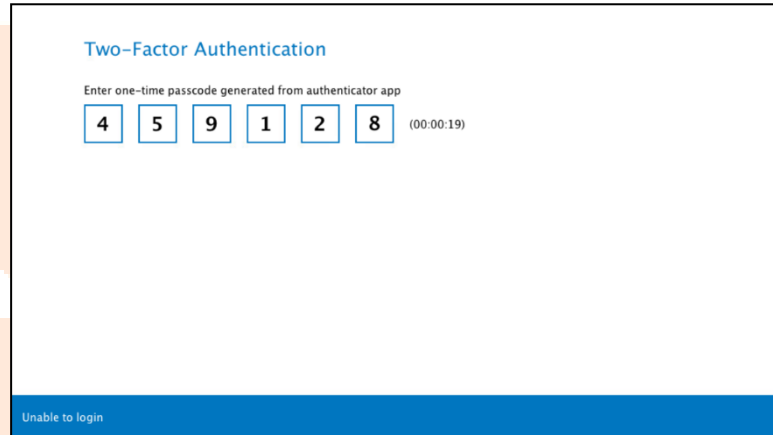
Example of the one-time password generated by Backup247 Mobile:



- **TOTP only**

Example of the 2FA alert screen on Backup247 Advanced Client (B247PRO) after login with correct username and password.

Input the one-time password generated by Backup247 Mobile to complete the login.



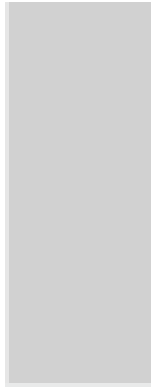
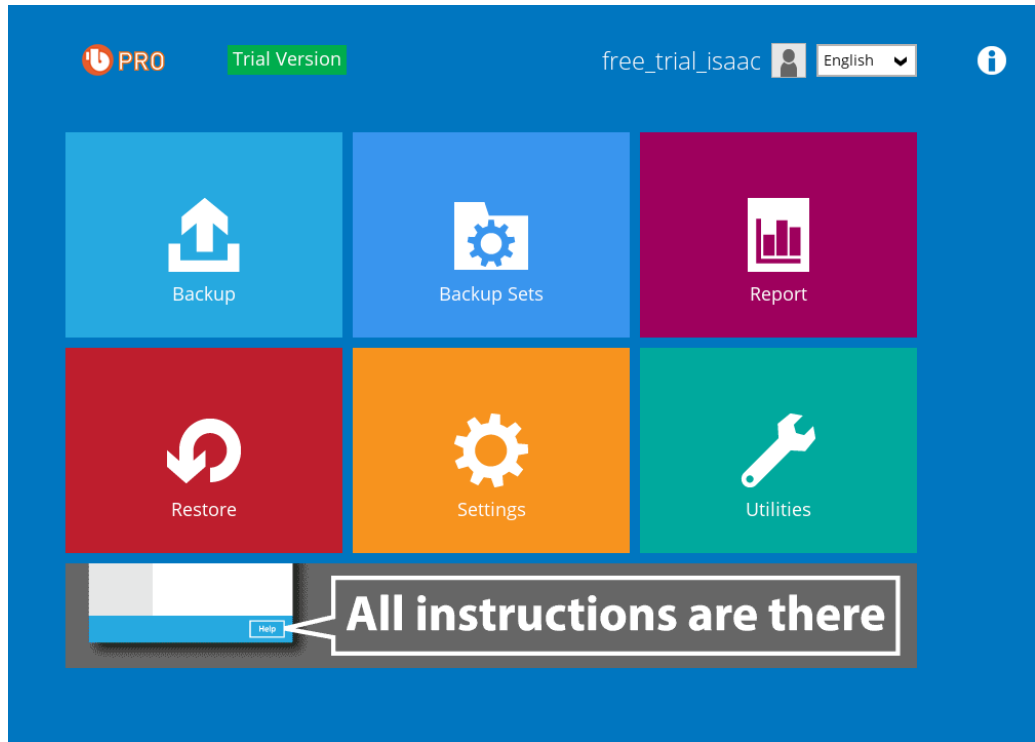
Example of the one-time password generated by Backup247 Mobile:



NOTE

If you are unable to log in using any of the authentication method, please refer to Chapter 8 Unable to log in to Backup247 Advanced Client (B247PRO) with 2FA.

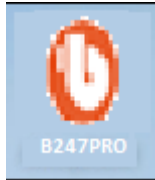
4. After successful login, the following screen will appear.



7.3 Login to Backup247 Advanced Client (B247PRO) with 2FA using Microsoft Authenticator

When logging in to Backup247 Advanced Client (B247PRO) with two-factor authentication using Microsoft Authenticator, please follow the steps below:

1. Double-click the icon to launch the application.



2. Enter the login name and password of your Backup247 Advanced Client (B247PRO) account provided by your backup service provider. Then, click **OK** to log in.

A screenshot of the B247PRO login window. The window has a blue background with a geometric pattern. In the top right corner, there is a language dropdown menu set to 'English'. The main content area is a dark blue rectangle with the 'B247PRO' logo at the top. Below the logo, the word 'Login' is displayed. There are two input fields: 'Login name' with the text 'MobileUser' and 'Password' with masked characters '•••••'. Below the password field is a checkbox labeled 'Save password' and a link 'Forgot password'. At the bottom left of the login area is a link 'Show advanced option' and at the bottom right is an 'OK' button.

NOTE

The **Save password** option may not be available. This depends on the settings of your backup service provider. Please contact Backup247 Technical Support for more information.

3. Enter the one-time passcode generated from the Microsoft Authenticator app.

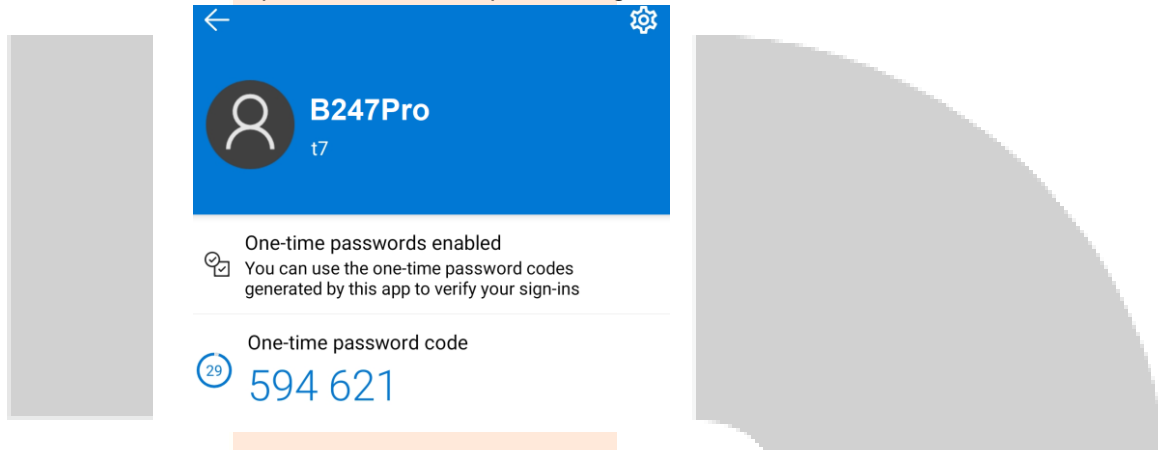
Two-Factor Authentication

Enter one-time passcode generated from authenticator app

(00:00:00)

Unable to login

Example of the one-time passcode generated:



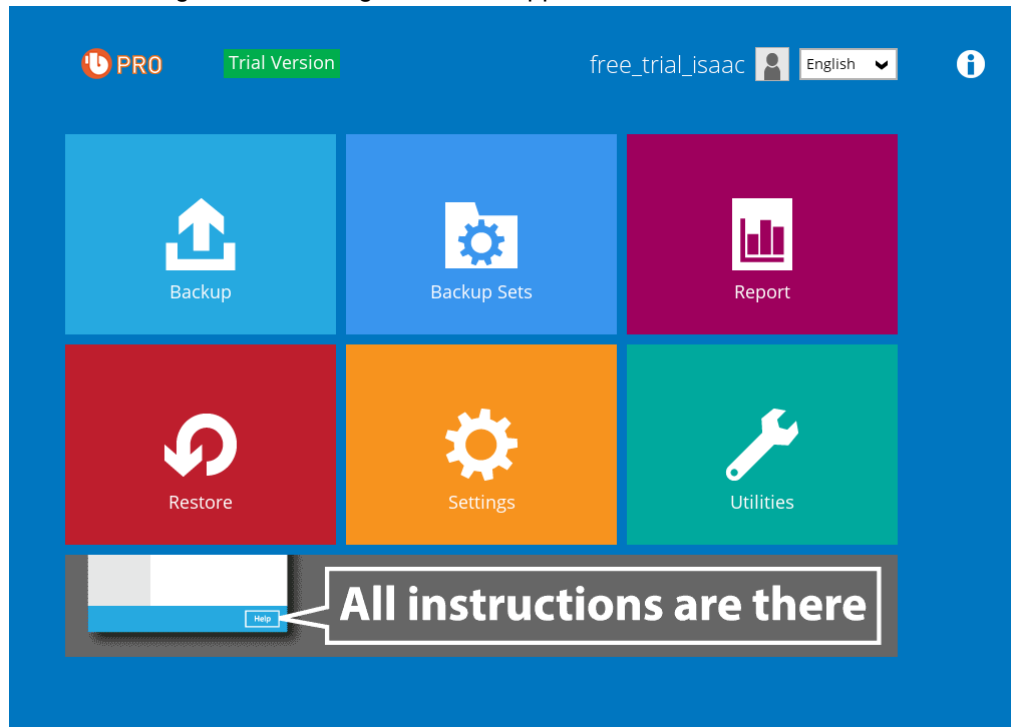
Two-Factor Authentication

Enter one-time passcode generated from authenticator app

5 9 4 6 2 1 (00:00:21)

Unable to login

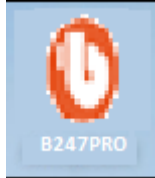
4. After successful login, the following screen will appear.



7.4 Login to Backup247 Advanced Client (B247PRO) with 2FA using Google Authenticator

When logging in to Backup247 Advanced Client (B247PRO) with two-factor authentication using Google Authenticator, please follow the steps below:

1. Double-click the icon to launch the application.



2. Enter the login name and password of your Backup247 Advanced Client (B247PRO) account provided by your backup service provider. Then, click **OK** to log in.

A screenshot of the B247PRO login window. The window has a blue background with a geometric pattern. At the top right, there is a language dropdown menu set to 'English'. In the center, there is a dark blue login panel with the B247PRO logo at the top. Below the logo, the word 'Login' is displayed. There are two input fields: 'Login name' with the text 'MobileUser' and 'Password' with masked characters '•••••'. Below the password field is a checkbox labeled 'Save password' which is currently unchecked, and a link for 'Forgot password'. At the bottom of the login panel, there is a 'Show advanced option' link and an 'OK' button.

NOTE

The **Save password** option may not be available. This depends on the settings of your backup service provider. Please contact Backup247 Technical Support for more information.

3. Enter the one-time passcode generated from the Google Authenticator app.

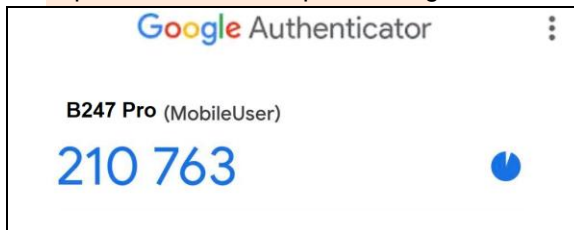
Two-Factor Authentication

Enter one-time passcode generated from authenticator app

| (00:00:00)

Unable to login

Example of the one-time passcode generated:



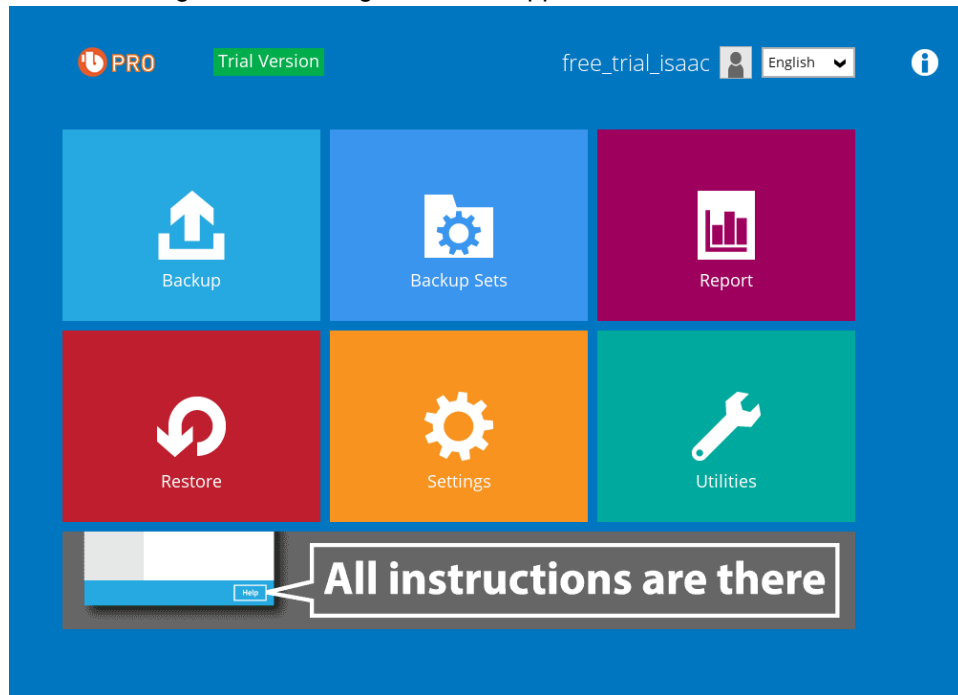
Two-Factor Authentication

Enter one-time passcode generated from authenticator app

(00:00:24)

Unable to login

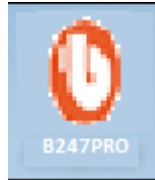
4. After successful login, the following screen will appear.



7.5 Login to Backup247 Advanced Client (B247PRO) with 2FA using Twilio

When logging in to Backup247 Advanced Client (B247PRO) for user accounts using Twilio, please follow the steps below:

1. Double-click the icon to launch the application.



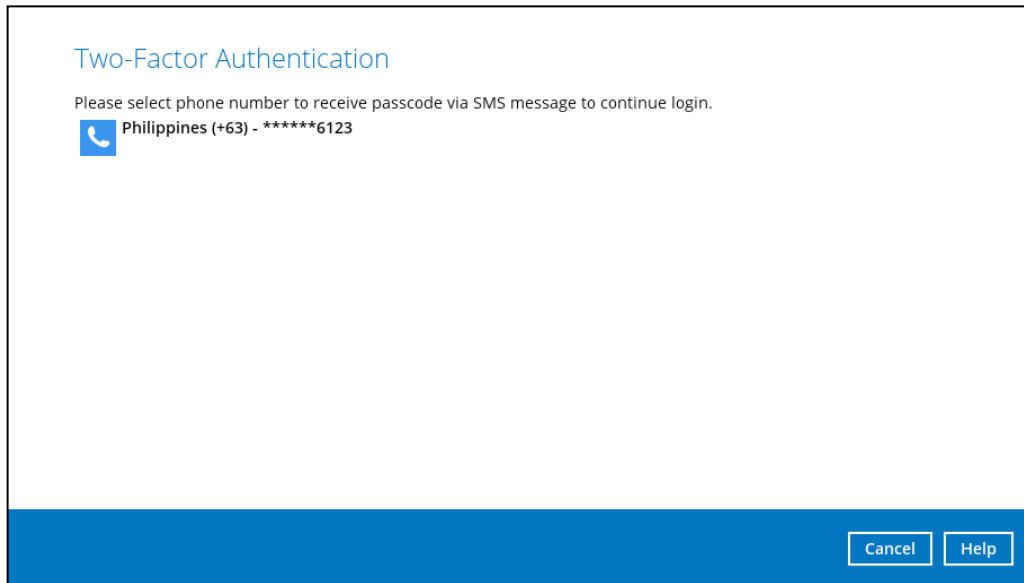
2. Enter the login name and password of your Backup247 Advanced Client (B247PRO) account provided by your backup service provider. Then, click **OK** to log in.

A screenshot of the B247PRO login dialog box. The dialog has a dark blue background with a lighter blue geometric pattern. At the top right, there is a language dropdown menu set to 'English'. The main content area features the B247PRO logo at the top, followed by the word 'Login'. Below this are two input fields: 'Login name' with the text 'MobileUser' and 'Password' with masked characters. There is a 'Save password' checkbox which is currently unchecked, and a 'Forgot password' link. At the bottom left, there is a link 'Show advanced option', and at the bottom right, there is an 'OK' button.

NOTE


The **Save password** option may not be available. This depends on the settings of your backup service provider. Please contact Backup247 Technical Support for more information.

3. Select your phone number to receive the passcode.



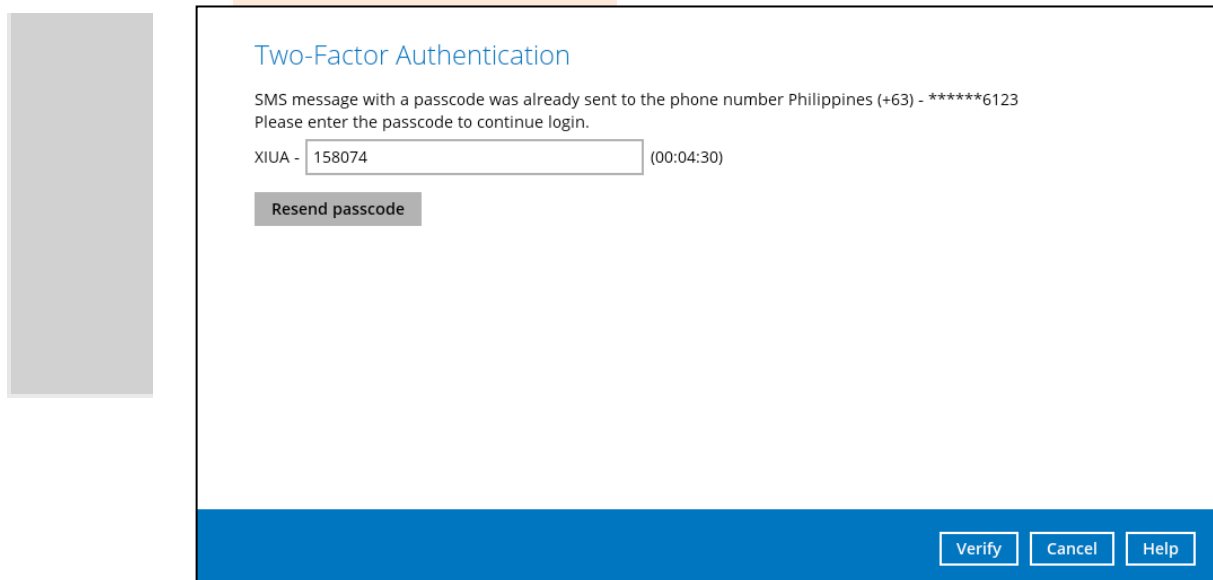
Two-Factor Authentication

Please select phone number to receive passcode via SMS message to continue login.

 Philippines (+63) - *****6123

Cancel Help

4. Enter the passcode and click **Verify** to log in.



Two-Factor Authentication

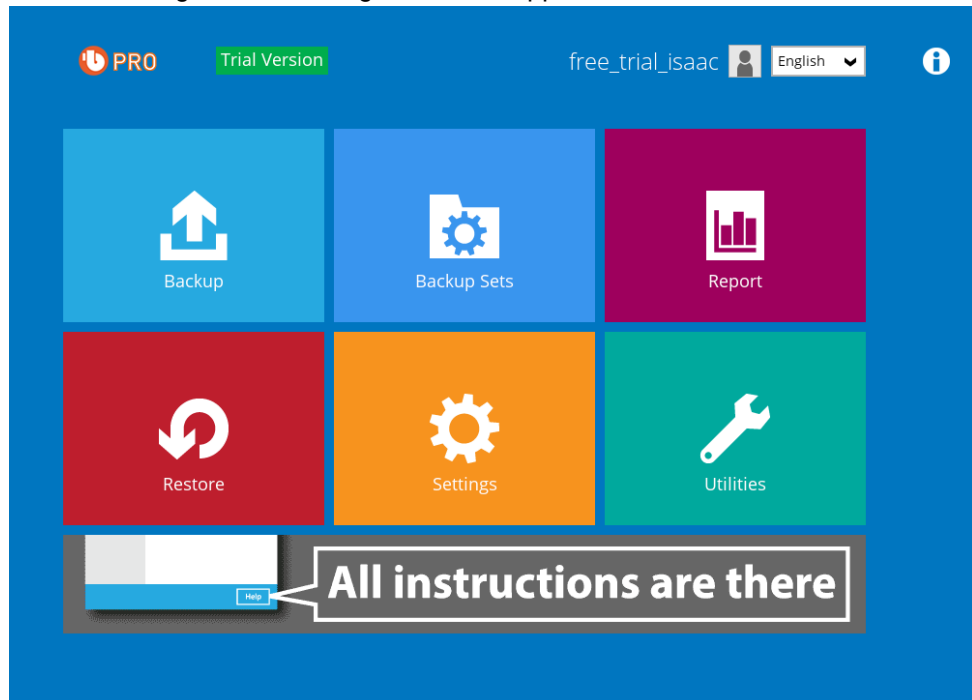
SMS message with a passcode was already sent to the phone number Philippines (+63) - *****6123
Please enter the passcode to continue login.

XIUA - (00:04:30)

Resend passcode

Verify Cancel Help

5. After successful login, the following screen will appear.

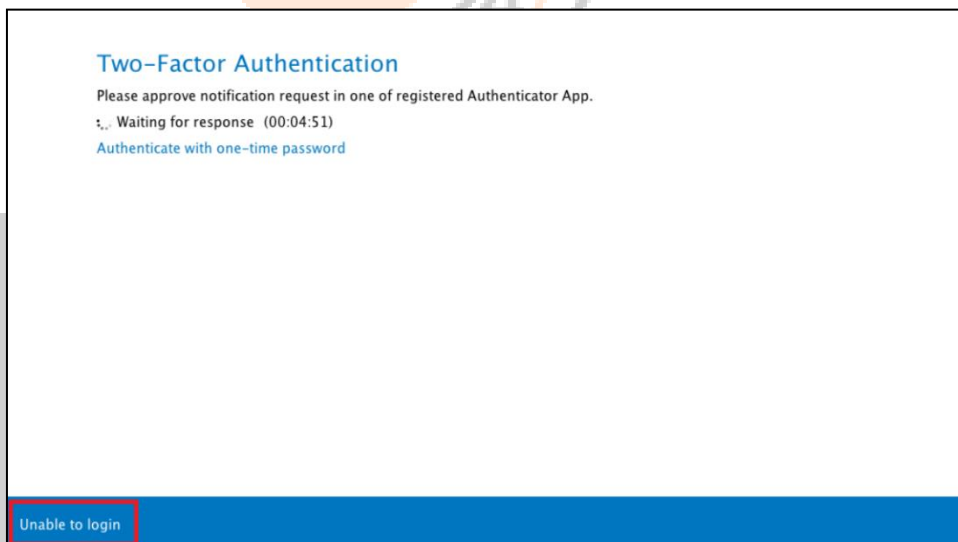


8 Unable to log in to Backup247 Advanced Client (B247PRO) with 2FA

Backup247 Advanced Client (B247PRO) supports **Unable to login** feature for users who were not able to accept the notification request from the Backup247 Mobile app and/or cannot obtain the TOTP code from Backup247 Mobile on the subsequent login to Backup247 Advanced Client (B247PRO).

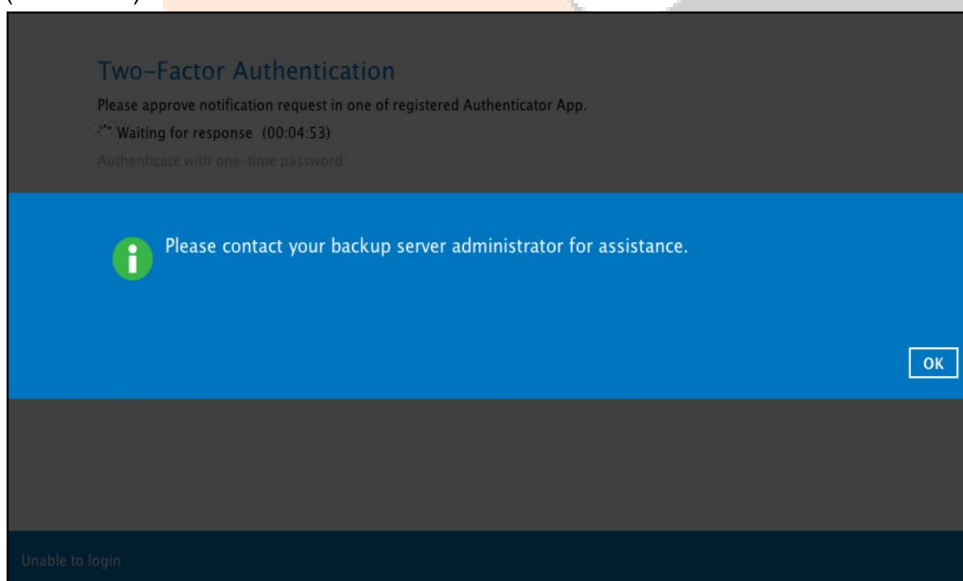
Here are the three scenarios after clicking the **Unable to login** link:

- No recovery number was registered on Backup247 Mobile for the 2FA account
- "Authentication Recovery" procedure
- Unable to perform the "Authentication Recovery" procedure



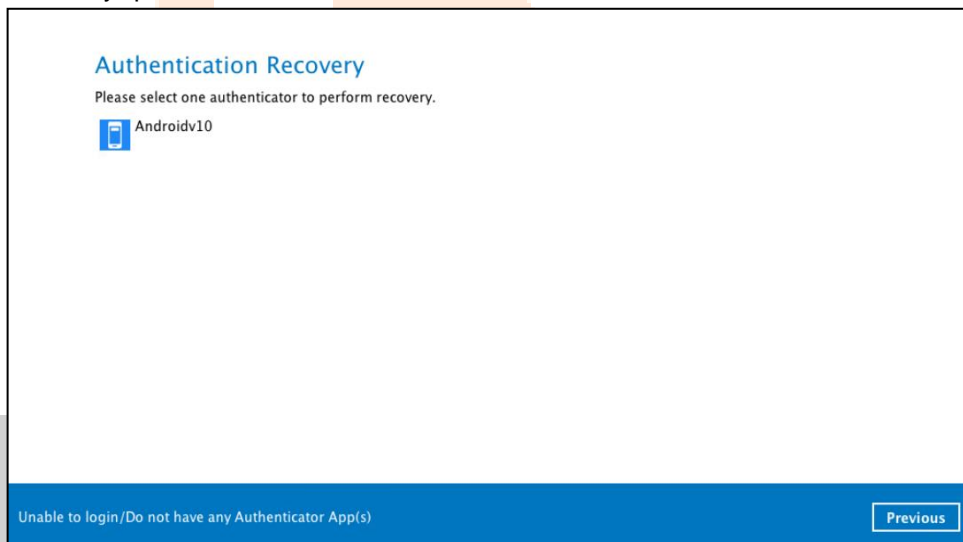
1. No recovery number was registered on Backup247 Mobile for the 2FA account

If no recovery number was registered on Backup247 Mobile for the 2FA account, then the following message will be displayed "Please contact your backup server administrator for assistance" in gaining access to your Backup247 Advanced Client (B247PRO) account.



2. "Authentication Recovery" procedure

If a recovery number was registered on Backup247 Mobile for the 2FA account, then select the registered mobile device to perform the following "Authentication Recovery" procedure.

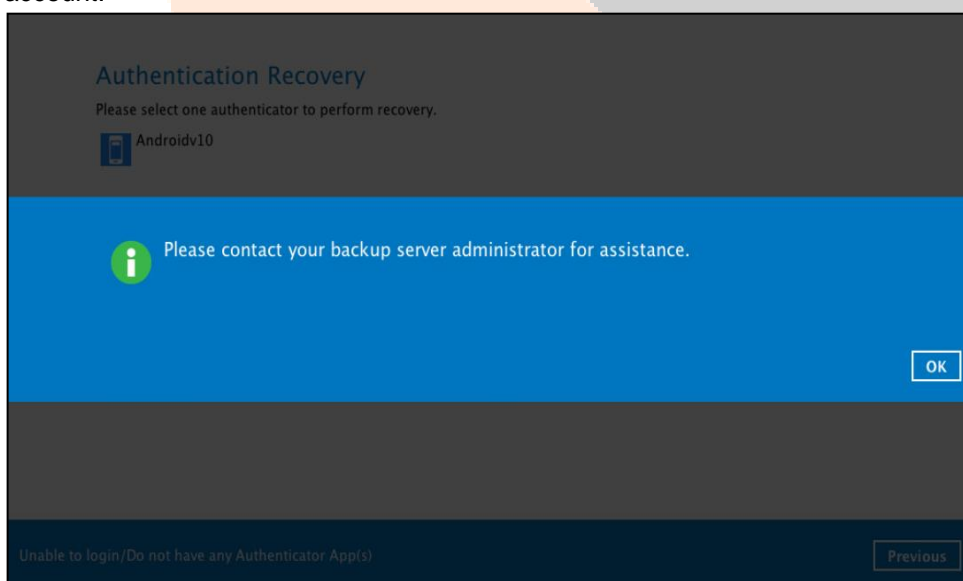


NOTE

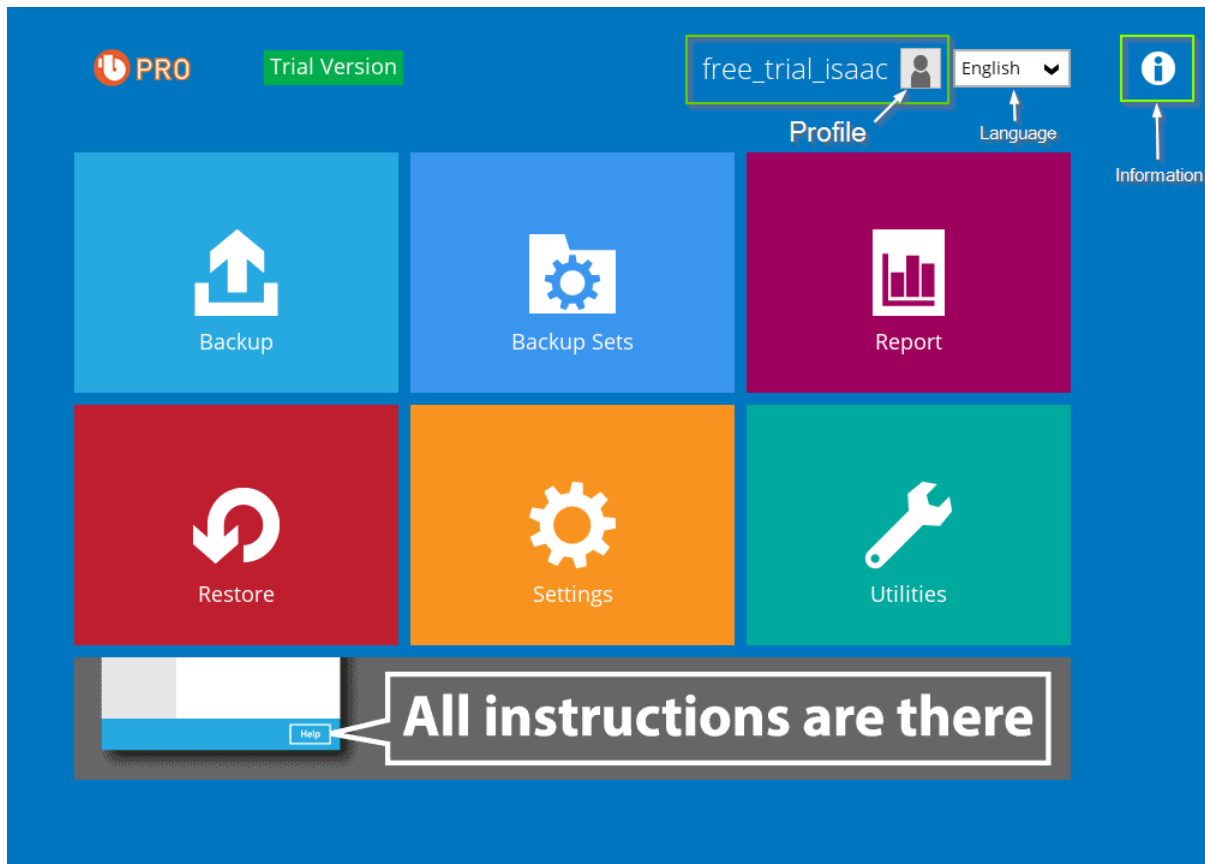
For the detailed steps in performing Authentication Recovery, please refer to the **Appendix A: Troubleshooting Login** of the Backup247 Mobile User Guide for Android and iOS.

3. Unable to perform the "Authentication Recovery" procedure

If you are not able to perform the "Authentication Recovery" procedure, click the **Unable to login/Do not have any Authenticator App(s)** link, then the following message will be displayed "Please contact your backup server administrator for assistance" in gaining access to your Backup247 Advanced Client (B247PRO) account.



9 Backup247 Advanced Client (B247PRO) Overview

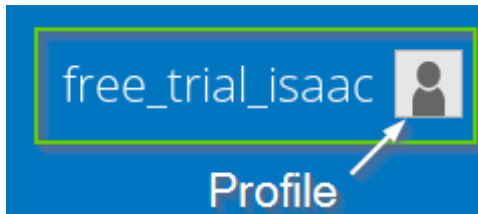


Backup247 Advanced Client (B247PRO) main interface has nine (9) icons that can be accessed by the user:

- Profile
- Language
- Information
- Backup
- Backup Sets
- Report
- Restore
- Settings
- Utilities

9.1 Profile

The **Profile** icon shows the settings that can be modified by the user. The features that will be shown will depend on if the user accounts was using Twilio Two-Factor Authentication in prior to upgrading to v8.5.0.0 or above and continues to use Twilio.



There are seven (7) available features:

- General
- Contacts
- Time Zone
- Encryption Recovery
- Password (Only shown for backup accounts created prior to Backup247 Advanced Client (B247PRO) v8.5.0.0 and using Twilio for two-factor authentication.)
- Authentication
- Security Settings (Only shown for backup accounts created prior to Backup247 Advanced Client (B247PRO) v8.5.0.0 and using Twilio for two-factor authentication.)

9.1.1 General

The General tab displays the user's information.

Profile

- General
- Contacts
- Time Zone
- Encryption Recovery
- Authentication

User Information

Login name MobileUser1

Display name

| Control | Description |
|---------------------|---|
| Login name | Name of the backup account. |
| Display name | Display name of the backup account upon logging in to the B247CBS User Web Console. |

This will be the General tab for old backup account using Twilio for two-factor authentication.

Profile

General

Contacts

Time Zone

Encryption Recovery

Password

Security Settings

User Information

Login name MobileUser1

Display name

Last Successful Login

Time: 12/14/2020 19:57 (PHT)

IP address: 175.176.32.185

Phone number (MFA): 63-██████████

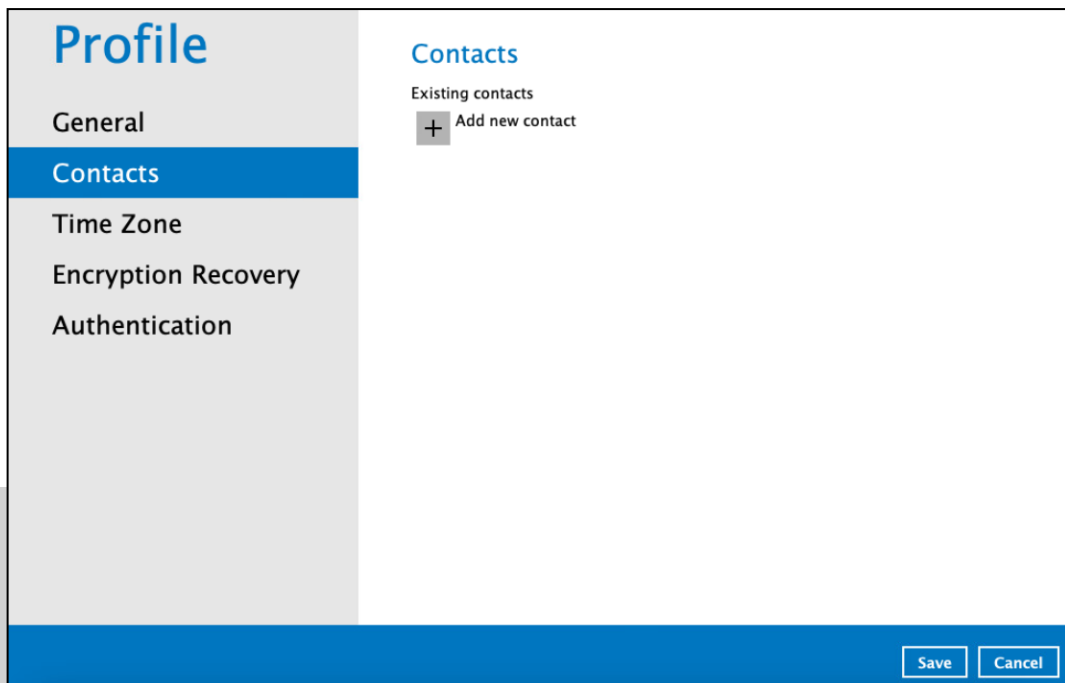
Browser / App: OBM

Save
Cancel
Help

| Control | Description |
|---------------------------|---|
| Login name | Name of the backup account. |
| Display name | Display name of the backup account upon logging in to the B247CBS User Web Console. |
| Time | The date and time the user last logged in. |
| IP address | The IP address used to log in. |
| Phone number (MFA) | The phone number where sms authentication will be sent when 2FA is enabled. |
| Browser / App | The browser or app used to login in to B247CBS User Web Console or Backup247 Advanced Client (B247PRO). |

9.1.2 Contacts

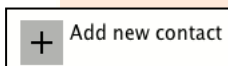
This refers to the contact information of the user. You can also add multiple contacts or modify existing contact information. Having this filled in will help in sending backup and daily reports and even recovered backup set encryption key in case it was forgotten or lost.



The screenshot shows a web interface for a user profile. On the left is a sidebar menu with the title "Profile" and several options: "General", "Contacts" (which is highlighted in blue), "Time Zone", "Encryption Recovery", and "Authentication". The main content area is titled "Contacts" and shows "Existing contacts" with a "+ Add new contact" button. At the bottom right of the main content area, there are "Save" and "Cancel" buttons.

To add a new contact, follow the instructions below:

1. Click the **[+]** button to add a new contact.



2. Complete the following fields then click **OK** to return to the main screen.
 - Name
 - Email
 - Address
 - Company
 - Website
 - Phone 1
 - Phone 2

New Contact

Name

Email

Send me encrypted email (S/MIME)

Address

Company

Website

Phone 1

Phone 2

OK Cancel

3. Click **Save** to store the contact information.

Profile

General

Contacts


Time Zone

Encryption Recovery

Authentication

Contacts

Existing contacts

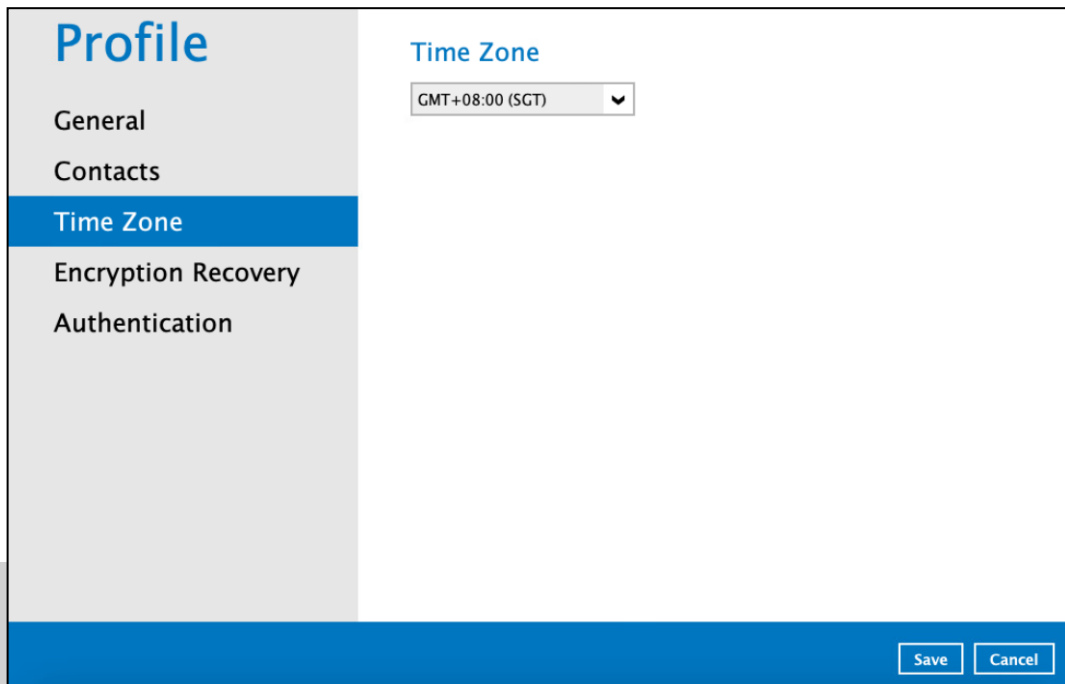
 samplename
sample_email@mail.com

Add

Save Cancel

9.1.3 Time Zone

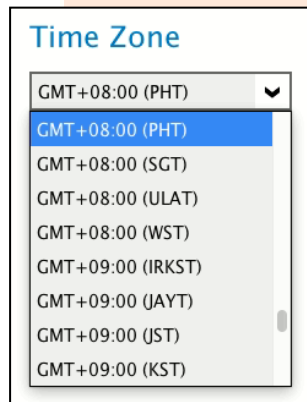
The time zone indicated.



The screenshot shows a web interface for profile settings. On the left is a navigation menu with the following items: Profile, General, Contacts, Time Zone (highlighted in blue), Encryption Recovery, and Authentication. The main content area is titled 'Time Zone' and contains a dropdown menu currently set to 'GMT+08:00 (SGT)'. At the bottom right of the main content area are two buttons: 'Save' and 'Cancel'.

To modify the time zone, follow the instructions below:

1. Select from the dropdown list.



This is a close-up of the 'Time Zone' dropdown menu. The menu is open, showing a list of time zone options. The current selection is 'GMT+08:00 (PHT)', which is highlighted in blue. The other options in the list are: GMT+08:00 (SGT), GMT+08:00 (ULAT), GMT+08:00 (WST), GMT+09:00 (IRKST), GMT+09:00 (JAYT), GMT+09:00 (JST), and GMT+09:00 (KST).

2. Click **Save** to save the updated time zone

9.1.4 Encryption Recovery

Backup set encryption key can be recovered by turning this feature on.

NOTE
This option may not be available. Please contact your backup service provider for more details.

Profile

- General
- Contacts
- Time Zone
- Encryption Recovery**
- Authentication

Encryption Recovery

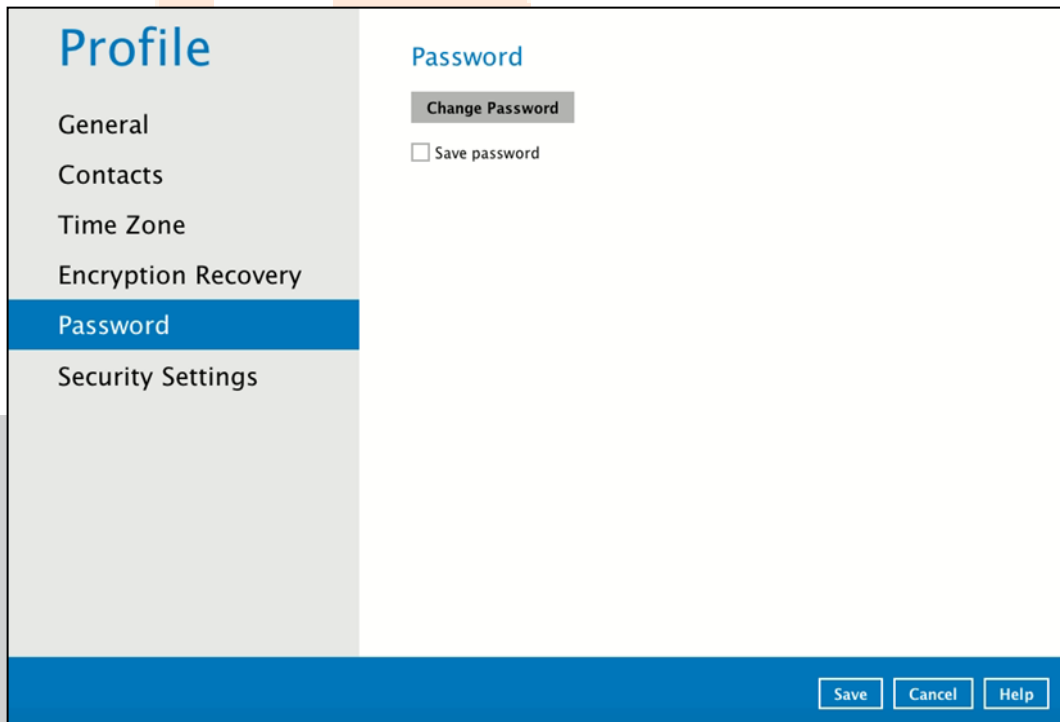
With this option enabled, you can recover your backup set encryption keys by sending a request to us.

On

9.1.5 Password

The **Password** option is for backward compatibility with Twilio Two-Factor Authentication. It will only be visible if Twilio Two-Factor Authentication was enabled on the user account on pre-v8.5.0.0 Backup247 Advanced Client (B247PRO) versions.

Login password can be modified anytime. Tick the **Save Password** box to bypass the password entry upon opening the Backup247 Advanced Client (B247PRO).



The screenshot shows the 'Profile' settings page with the 'Password' section selected. The left sidebar lists 'General', 'Contacts', 'Time Zone', 'Encryption Recovery', 'Password', and 'Security Settings'. The 'Password' section contains a 'Change Password' button and a 'Save password' checkbox. At the bottom right, there are 'Save', 'Cancel', and 'Help' buttons.

NOTE

The **Save password** option may not be available. This depends on the settings of your backup service provider. Please contact Backup247 Technical Support for more information.

9.1.6 Authentication

You can use the Authentication function to:

- ◉ Change the “Password”.
- ◉ Enable or disable the “Two-Factor Authentication”.
- ◉ Add one or more device(s) registered for Two-Factor Authentication (2FA).

NOTE

Please refer to **Chapter 6.3.1** of the Backup247 Mobile User Guide for Android and iOS for the detailed step-by-step procedure.

- ◉ Remove one or more device(s) registered for Two-Factor Authentication (2FA).
- ◉ Re-pair mobile device with Backup247 Advanced Client (B247PRO) account.
- ◉ View details of the “Last Successful Login” for Password Lock and Two-Factor Authentication (2FA).

NOTE

For Two-Factor Authentication (2FA), you can register your mobile device on both Backup247 Mobile app and a third-party authenticator apps (e.g., Authy, Duo, Google Authenticator, Microsoft Authenticator, LastPass Authenticator, iOS 15 Built-in Two-Factor Authenticator, etc.).

The screenshot shows the 'Profile' page in the Backup247 mobile app. The left sidebar contains navigation options: General, Contacts, Time Zone, Encryption Recovery, and Authentication (which is highlighted in blue). The main content area is titled 'Authentication' and includes the following sections:

- Password**: A 'Change Password' button and a 'Save password' checkbox (which is unchecked).
- Two-Factor Authentication**: A heading followed by the text 'Require Authenticator App to sign in your account during startup'. Below this is a toggle switch currently set to 'Off'.
- Last Successful Login**: A heading followed by the text 'No login record'.

At the bottom right of the screen, there are three buttons: 'Save', 'Cancel', and 'Help'.

Password

Login password can be modified anytime. Tick the **Save Password** box to bypass the password entry upon opening the Backup247 Advanced Client (B247PRO).

The screenshot shows the 'Profile' settings page. On the left is a navigation menu with 'Authentication' selected. The main content area has a 'Password' section with a 'Change Password' button and a checked 'Save password' checkbox. Below it is the 'Two-Factor Authentication' section, which is currently 'Off'. At the bottom right are 'Save', 'Cancel', and 'Help' buttons.

NOTE

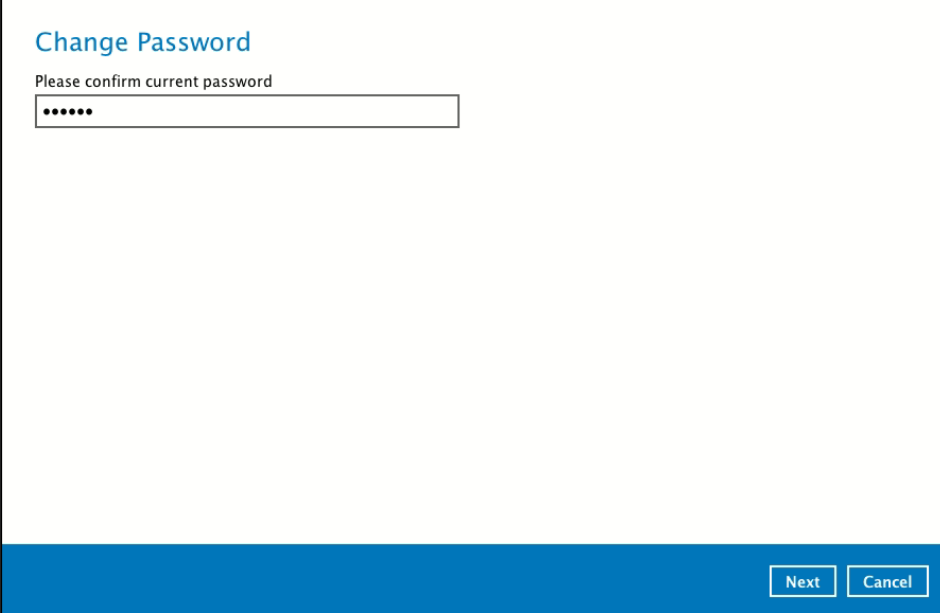
The **Save password** option may not be available. This depends on the settings of your backup service provider. Please contact Backup247 Technical Support for more information.

To change the password, follow the instructions below:

1. Click the **Change Password**.

This screenshot is identical to the one above, but the 'Save password' checkbox is now unchecked. The rest of the interface, including the navigation menu and buttons, remains the same.

2. Enter the current password.

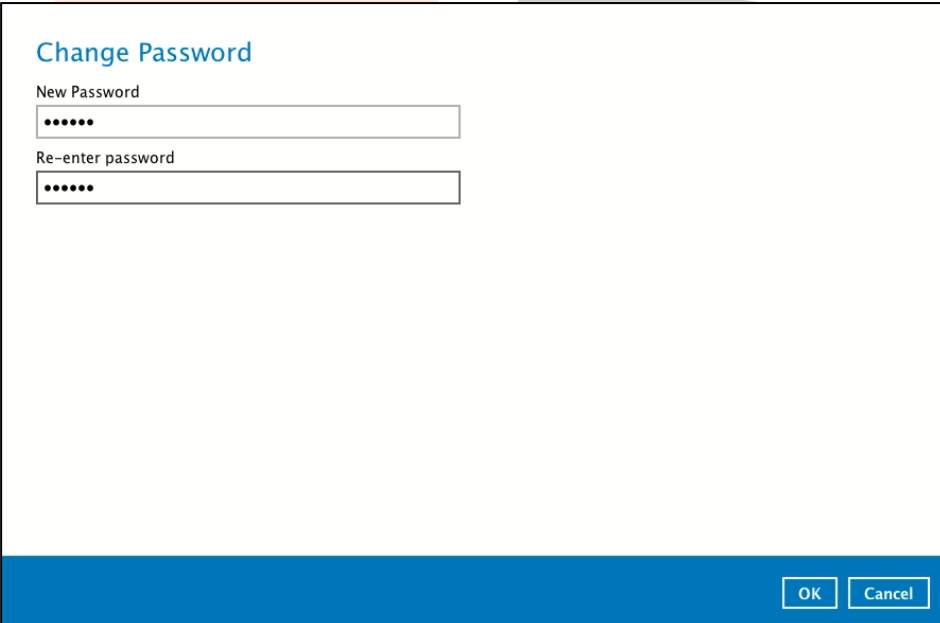


Change Password

Please confirm current password

Next Cancel

3. Enter the new password and re-enter it for authentication purposes. Click **OK** to return to main screen.



Change Password

New Password

Re-enter password

OK Cancel

4. Click **Save** to store the settings.

Profile

- General
- Contacts
- Time Zone
- Encryption Recovery
- Authentication**

Password

[Change Password](#)

Save password

Two-Factor Authentication

Require Authenticator App to sign in your account during startup

off

Last Successful Login

No login record

[Save](#) [Cancel](#) [Help](#)

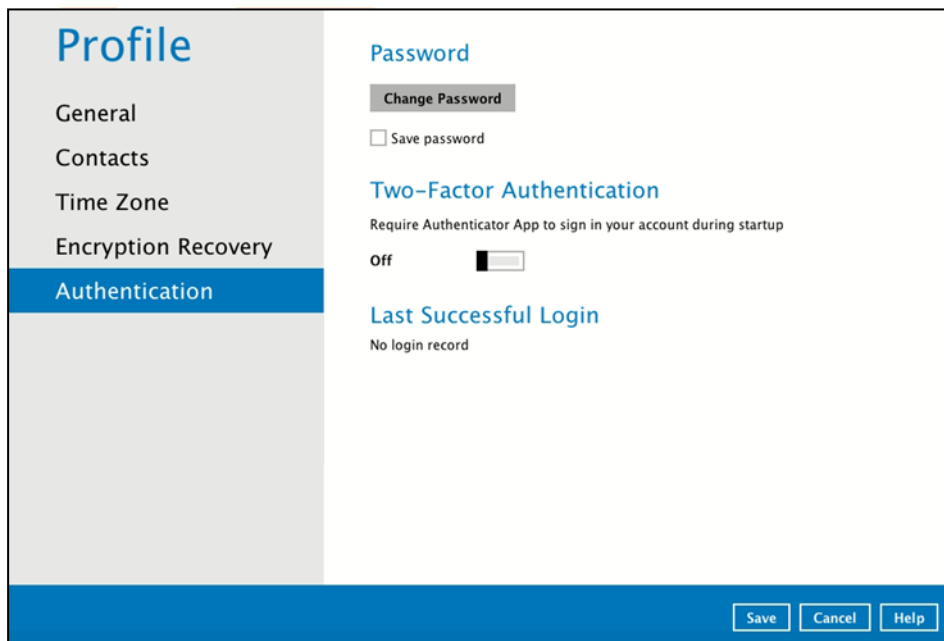
Two-Factor Authentication

To enable the two-factor authentication feature, follow the instructions below:

NOTE

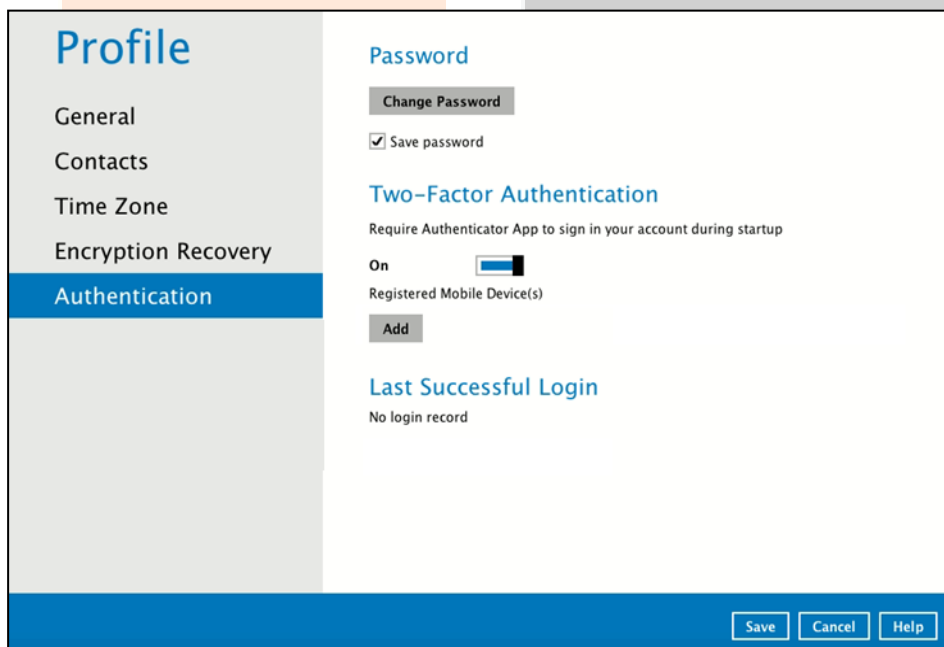
The Backup247 Mobile app or a third-party authenticator apps is needed for 2FA.

1. Go to **Profile > Authentication > Two-Factor Authentication**.




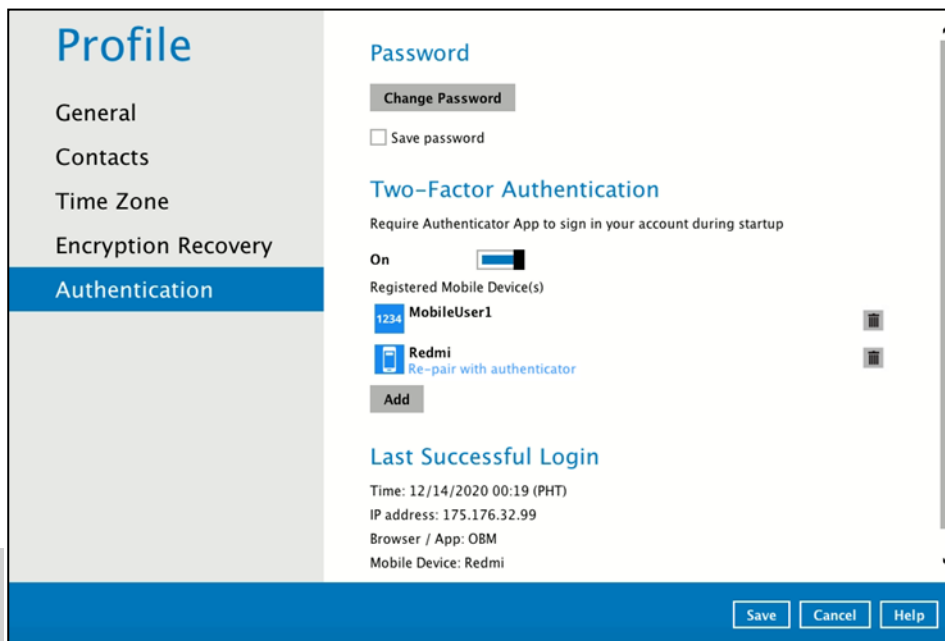
2. Swipe lever to the right to turn it on.

For the detailed step-by-step procedure on how to add a mobile device, please refer to **Chapter 6.3.1** of the Backup247 Mobile User Guide for Android and iOS.

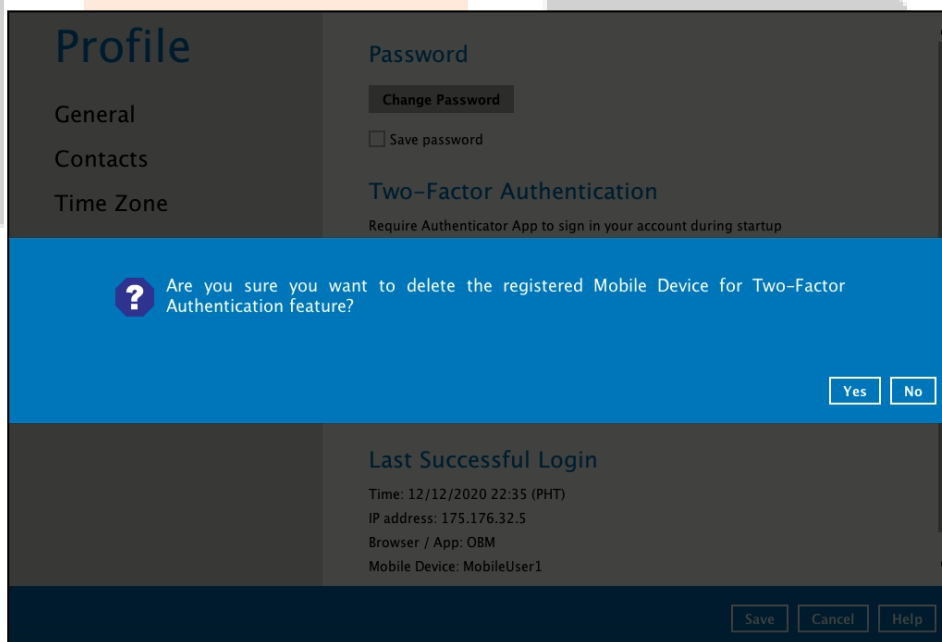


To remove a mobile device, follow the instructions below:

1. Click the  button on the left side of the registered mobile device. In this example, we are going to delete the mobile device named "MobileUser1".



2. A confirmation message will appear, click **Yes** to proceed. Otherwise, click **No**.



3. Mobile device is successfully removed.

The screenshot shows the 'Profile' page with the 'Authentication' section selected. The 'Two-Factor Authentication' section is turned 'On'. Under 'Registered Mobile Device(s)', the 'Redmi' device has been removed, leaving a trash icon. The 'Last Successful Login' information is displayed below.

Profile

- General
- Contacts
- Time Zone
- Encryption Recovery
- Authentication**

Password

[Change Password](#)

Save password

Two-Factor Authentication

Require Authenticator App to sign in your account during startup

On

Registered Mobile Device(s)

- Redmi**
Re-pair with authenticator

[Add](#)

Last Successful Login

Time: 12/14/2020 00:19 (PHT)
IP address: 175.176.32.99
Browser / App: OBM
Mobile Device: Redmi

[Save](#) [Cancel](#) [Help](#)

To disable the two-factor authentication feature, follow the instructions below:

NOTE

Sliding the switch to right hand side will only turn off the two-factor authentication but it will not automatically delete the registered mobile device(s) for Two-Factor Authentication. If you need to delete the registered mobile device(s), this must be done manually first before disabling Two-Factor Authentication

1. Swipe the lever to the left to turn it off.

The screenshot shows the 'Authentication' section of a user profile. The 'Two-Factor Authentication' toggle is currently turned 'On', indicated by a blue switch. Below the toggle, there is a list of registered mobile devices: '1234 MobileUser1' and 'Redmi'. The 'Last Successful Login' information is also visible, including the time, IP address, browser/app, and mobile device.

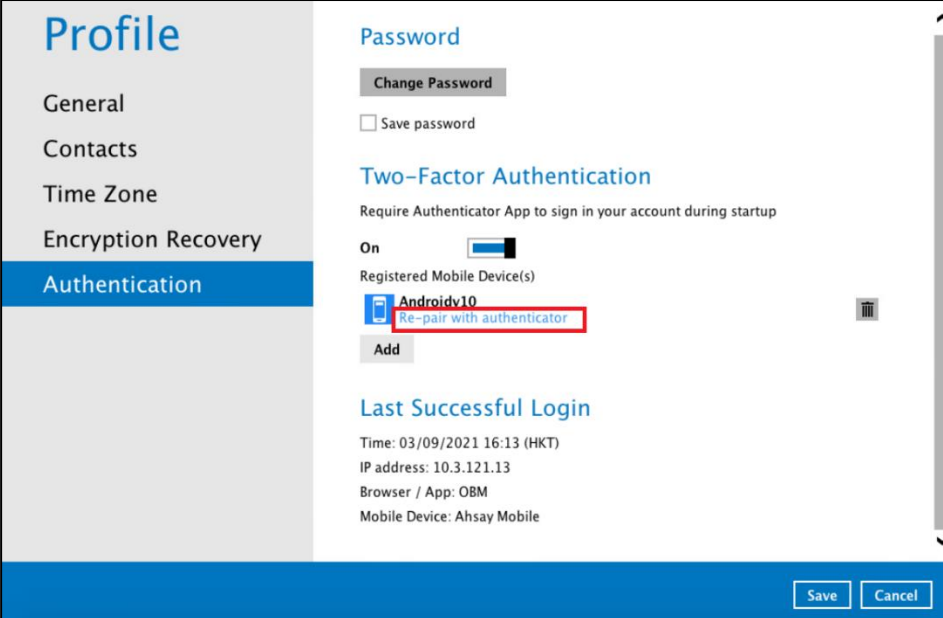
2. Click **Save** to save the settings.

The screenshot shows the same 'Authentication' section, but the 'Two-Factor Authentication' toggle is now turned 'Off', indicated by a grey switch. The rest of the page content, including the registered mobile devices and login information, remains the same.

Re-pair with authenticator

Backup247 Advanced Client (B247PRO) supports “Re-pair with authenticator” feature that enables user to re-pair their Backup247 Advanced Client (B247PRO) account with Backup247 Mobile Authenticator as long as the mobile device used for the 2FA is still registered in the Backup247 Advanced Client (B247PRO). This feature is used when:

1. The registered profile for the 2FA is removed from the Backup247 Mobile app
2. The Backup247 Mobile app is accidentally uninstalled from the mobile device



The screenshot displays the 'Profile' settings page. The left sidebar contains navigation options: General, Contacts, Time Zone, Encryption Recovery, and Authentication (which is currently selected). The main content area is divided into sections: 'Password' with a 'Change Password' button and a 'Save password' checkbox; 'Two-Factor Authentication' with a toggle set to 'On' and a list of registered mobile devices. One device, 'Androidy10', is listed with a 'Re-pair with authenticator' link highlighted by a red box. Below this is an 'Add' button. The 'Last Successful Login' section shows the time (03/09/2021 16:13 (HKT)), IP address (10.3.121.13), browser/app (OBM), and mobile device (Ahsay Mobile). At the bottom right, there are 'Save' and 'Cancel' buttons.

Last Successful Login

Displays the Date, Time, IP address, and Browser / App the user last logged in and the registered Mobile Device.

- Time – the date and time the user last logged in.
- IP address – the IP address used to login.
- Browser / App – the browser or app used to login to B247CBS User Web Console or Backup247 Advanced Client (B247PRO).
- Mobile Device – the name of the device used for authentication when 2FA is enabled.

The screenshot shows a user profile page with a sidebar on the left containing menu items: Profile, General, Contacts, Time Zone, Encryption Recovery, and Authentication (highlighted in blue). The main content area is divided into sections: Password (with a 'Change Password' button and a 'Save password' checkbox), Two-Factor Authentication (with a toggle set to 'On' and a list of registered mobile devices including 'MobileUser1' and 'Redmi'), and Last Successful Login. The 'Last Successful Login' section displays the following details: Time: 12/14/2020 00:19 (PHT), IP address: 175.176.32.99, Browser / App: OBM, and Mobile Device: Redmi. At the bottom right, there are 'Save', 'Cancel', and 'Help' buttons.

Below is the screenshot If there is no login record yet.

This screenshot is identical to the one above, but the 'Two-Factor Authentication' toggle is set to 'Off'. The 'Last Successful Login' section now displays 'No login record'. The 'Save', 'Cancel', and 'Help' buttons remain at the bottom right.

9.1.7 Security Settings

The **Security Settings** option is for backward compatibility with Twilio Two-Factor Authentication. It will only be visible if Twilio Two-Factor Authentication was enabled on the user account on pre-v8.5.0.0 Backup247 Advanced Client (B247PRO) versions.

Phone numbers that will be used for sending sms authentication will be listed here and will show the status if it is verified or not. You can also add phone numbers here that can be used for sending the sms authentication.

Profile

- General
- Contacts
- Time Zone
- Encryption Recovery
- Password
- Security Settings**

Security Settings

Phone numbers for SMS authentication

- Philippines (+63) - [REDACTED], Verified X

Add

Save Cancel Help

1. Click the **Add** button.



2. Select the country and enter the phone number, click **Add**.

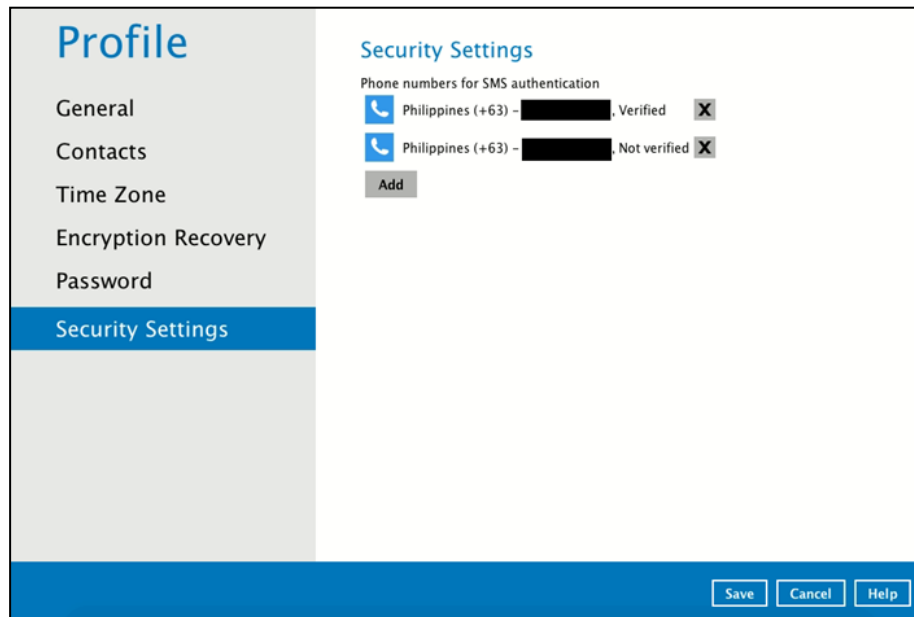
Security Settings

Please enter a new phone number for SMS authentication

Philippines (+63) [REDACTED]

Add Cancel

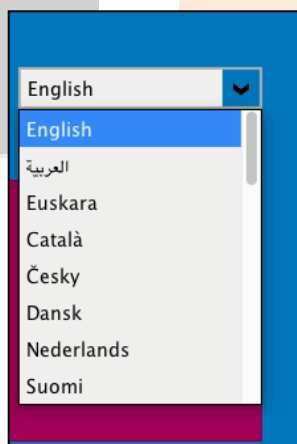
3. Click the **Save** button to save the phone number.



9.2 Language

This option is used to change the language of the Backup247 Advanced Client (B247PRO) interface. The list of the available languages depends on the backup service provider.


Once the language is set, it will reflect on the Backup247 Advanced Client (B247PRO) interface right away.



9.3 Information

The **information** icon displays the product version and system information of the machine where the Backup247 Advanced Client (B247PRO) is installed.





| | |
|---------------------------------|---|
| Version | 9.0.0.0 |
| Virtual Machine Vendor | OpenJDK 64-Bit Server VM Version 25.181-b13 Oracle Corporation |
| Live Threads | 13 (Current) / 20 (Peak) |
| Daemon Threads | 9 |
| Total Threads Started | 55 |
| Heap Size | 98,560 kbytes (Current) / 1,864,192 kbytes (Maximum) |
| Operating System | Mac OS X Version 10.12 |
| Architecture | x86_64 |
| Number of Processors | 4 |
| Committed Virtual Memory | 7,099,840 kbytes |
| Physical Memory | 9,066,516 kbytes (Free) / 16,777,216 kbytes (Total) |
| Swap Space | 0 kbyte (Free) / 0 kbyte (Total) |

9.4 Backup

This feature is used to run your backup set(s).



For instructions on how to start a backup, refer to Chapter 12 Run Backup Jobs.

9.5 Backup Sets

A **backup set** is a place for files and/or folders of your backed-up data. This feature allows user to select files individually or entirely in a selected folder to back up. It is also used to delete backup set(s).



To create or modify a backup set, follow the instructions on Chapter 10 Create a Backup Set.

Backup Set Settings

Below is the list of configurable settings under a Backup Set:

- General
- Source
- Backup Schedule
- Destination
- (Advanced settings)
- Deduplication
- Retention Policy
- Command Line Tool
- Bandwidth Control
- Others

General

This feature allows the user to modify the current name of the backup set.

The screenshot shows a web interface for managing backup sets. On the left is a sidebar with a 'Data Backup' header and a list of settings: 'General' (highlighted in blue), 'Source', 'Backup Schedule', and 'Destination'. Below 'Destination' is a link for 'Show advanced settings'. The main content area is titled 'General' and contains a 'Name' field with the value 'Data Backup' and an 'Owner' field with the value 'admins-Mac-5'. At the bottom of the interface is a blue bar with the text 'Delete this backup set' on the left and 'Save' and 'Cancel' buttons on the right.

To modify the name of a backup set, follow the steps below:

1. In the **Name** field, enter a new backup set name.

A close-up of the 'General' settings form. The 'Name' field is highlighted with a blue border and is currently empty. The 'Owner' field below it contains the text 'admins-Mac-5'.

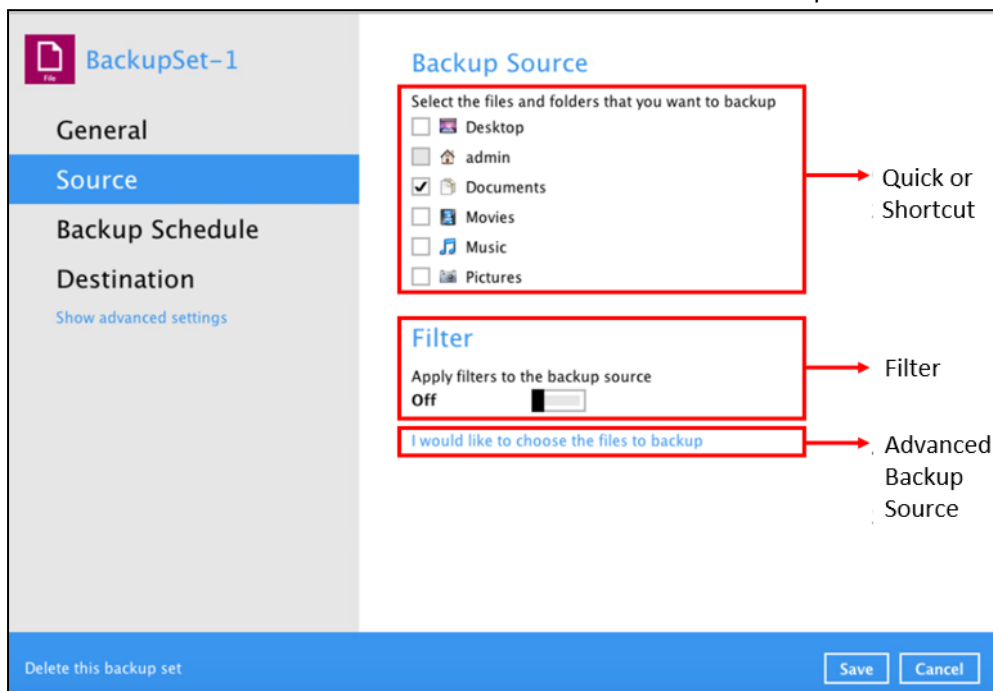
2. Click the **Save** button to save the updated backup set name.

NOTE

In assigning a backup set name, make sure that it does not have an identical name.

Source

This feature allows the user to select files and/or folders in the backup source to back up.



There are three (3) ways to select files and/or folders to back up:

| Option | Description |
|-------------------------------|--|
| Quick or Shortcut | This allows the user to back up files and/or folders in the selected backup source entirely. |
| Filter | This allows the user to select or exclude files and/or folders from the backup job. |
| Advanced Backup Source | This allows the user to select files and/or folders individually to back up. |

Option no. 1: Quick or Shortcut

This option allows the user to quickly select a backup source to be backed up.

Backup Source

Select the files and folders that you want to backup

Desktop

admin





Documents



Movies

Music

Pictures

To know the locations of the folder(s) that will be backed up for each selected backup source, refer to the following table:

| Backup Source | Description |
|---|---|
| <p>Desktop</p>  | <p>If Desktop is selected, all files and/or folders in the following location will be backed up:</p> <p><i>%UserProfile%/admin/Desktop</i></p> |
| <p>admin</p>  | <p>If admin is selected, all files and/or folders located in the following locations will be backed up:</p> <p><i>%UserProfile%/admin</i></p> <p><i>%UserProfile%/Library</i></p> <p>If the Follow Link is enabled, the following locations will also be included to the backup job:</p> <p><i>%UserProfile%/LocalStorage</i></p> <p><i>%UserProfile%/Applications</i></p> <p><i>%UserProfile%/admin/Downloads</i></p> <p><i>%UserProfile%/admin/Library</i></p> <p><i>%UserProfile%/admin/temp</i></p> <p>The Follow Link is configured as enabled by default.</p> <p>Note: If you select admin during the creation of backup set, the entire Backup Source in the Quick or Shortcut option will also be selected (e.g., Desktop, Documents, Movies, Music, Pictures), but you may choose to unselect any of each.</p> |
| <p>Documents</p>  | <p>If Documents is selected, all files and/or folders located in the following location will be backed up:</p> <p><i>%UserProfile%/admin/Documents</i></p> |
| <p>Movies</p>  | <p>If Movies is selected, all files and/or folders located in the following location will be backed up:</p> <p><i>%UserProfile%/admin/Movies</i></p> |

| | | |
|------------------------|---|--|
| <p>Music</p> |  | <p>If Music is selected, all files and/or folders located in the following location will be backed up: <i>%UserProfile%/admin/Music</i></p> |
| <p>Pictures</p> |  | <p>If Pictures is selected, all files and/or folders located in the following location will be backed up: <i>%UserProfile%/admin/Pictures</i></p> |

To select files and/or folders to back up using the Quick or Shortcut option, follow the steps below:

1. Select a backup source.

Backup Source

Select the files and folders that you want to backup

Desktop

admin

Documents

Movies

Music

Pictures

2. Click the **Save** button to save the selected backup source.

Option no. 2: Filter

This option allows the user to manually select files and/or folders in the selected location(s) to back up.

Filter

Apply filters to the backup source

Off

To select files and/or folders to back up using the Filter Backup Source, follow the steps below:

1. Slide the lever to the right to turn on the filter setting.

Filter

Apply filters to the backup source

On

2. Click the **[+]** button to create a filter.

Existing filters

Add new filter

3. Assign a desired name to the backup filter.

New Backup Filter

Name

4. Configure the following options.

For each of the matched files/folders under top directory

Include them

Exclude them

Exclude all unmatched files/folders

Match file/folder names by

Simple comparison ends with ▼

Regular expression (UNIX-style)

5. In this example, all files and/or folders that end with the letter 'X' will be included to the backup job. You can add multiple patterns here.

Existing patterns to match

x

X

Add

6. Select whether you would like to apply the filter to all files and/or folders in all hard disk drives or to a specific folder only. If 'This folder only' is selected, click the **Change** button to specify the folder where you would like to apply the filter to.

Apply this filter to all files/folders in

All hard disk drives

This folder only

Change

Apply to

File Folder

7. Click the **OK** button to save the created filter, then click the **Save** button to save the settings. Once you run a backup, all files and/or folders that match the applied filter will be backed up.

NOTE: Multiple backup filters can be created by clicking the **Add** button.

Existing filters

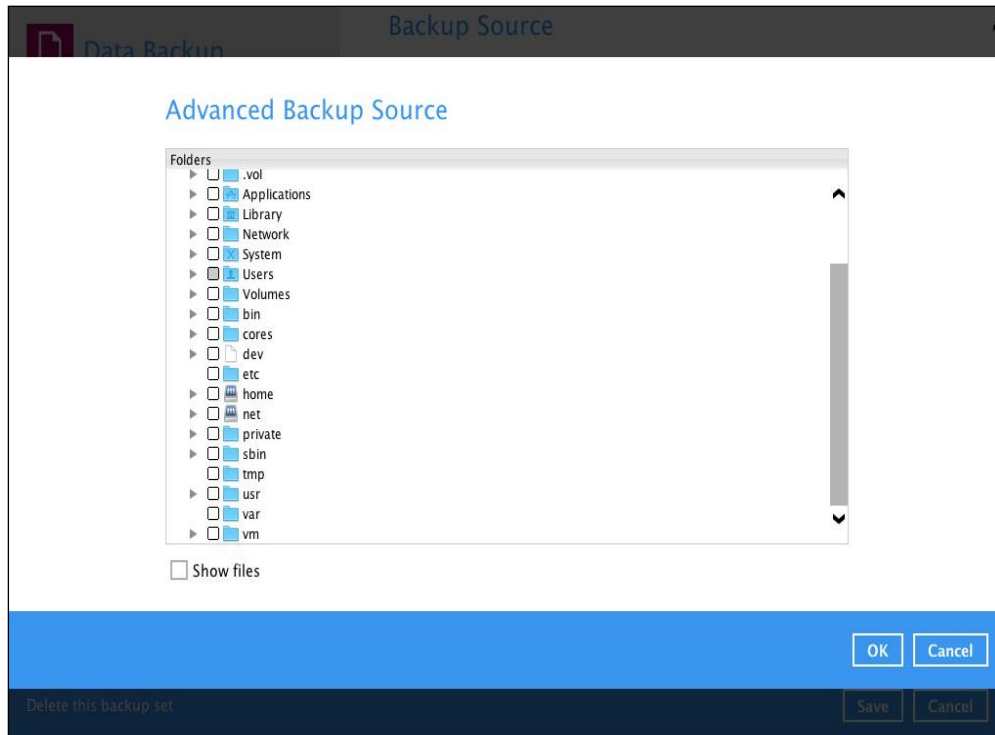
Filter-1
/Users/admin/Desktop

Filter-2
/Users/admin/Documents

Add

Option no. 3: Advanced Backup Source

This option allows the user to display the locations in the backup source to select files and/or folders to back up.

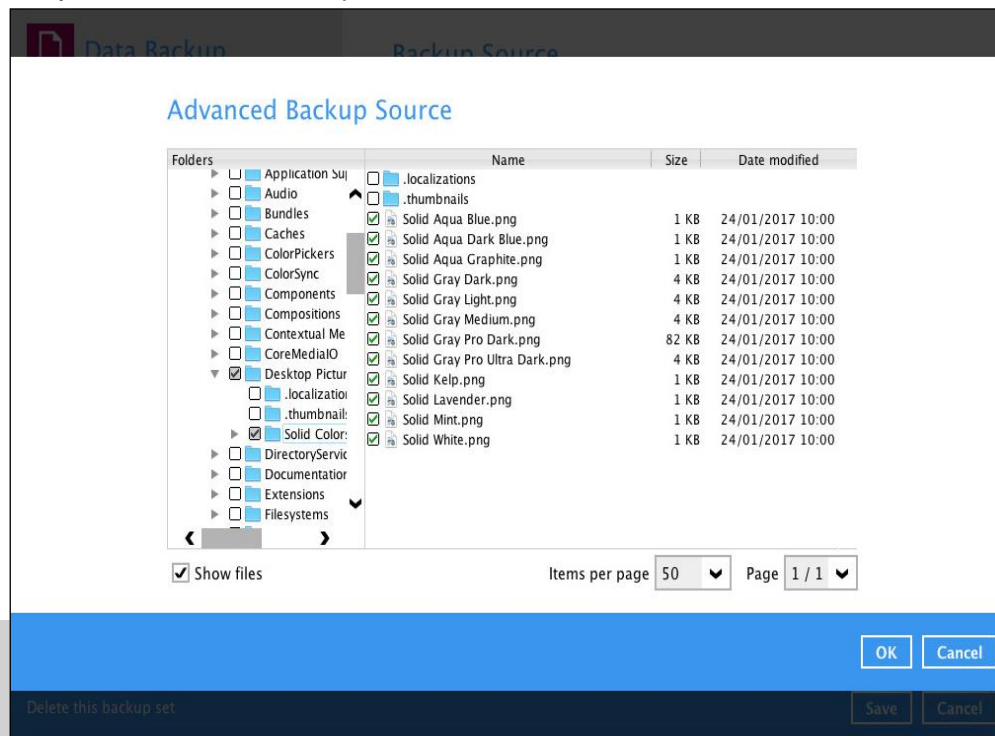


To select files and/or folders using the Advanced Backup Source, follow the steps below:

1. In the Source window, select 'I would like to choose the files to backup'.

I would like to choose the files to backup

2. Select 'Show files' to display the files inside each folder, then select the files and/or folders that you would like to back up.



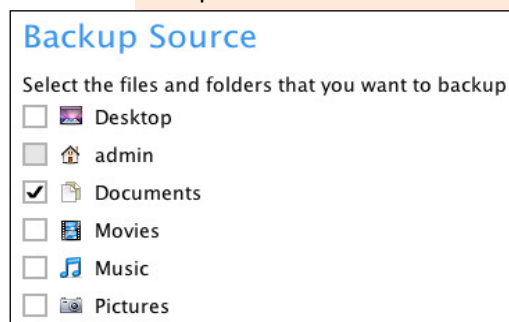
3. Click the **OK** button to save the selection, then click the **Save** button to store settings.

In selecting files and/or folders to back up, the three (3) options can be used simultaneously. For more details, please refer to the example scenarios below:

Scenario 1 (Quick or Shortcut + Filter)

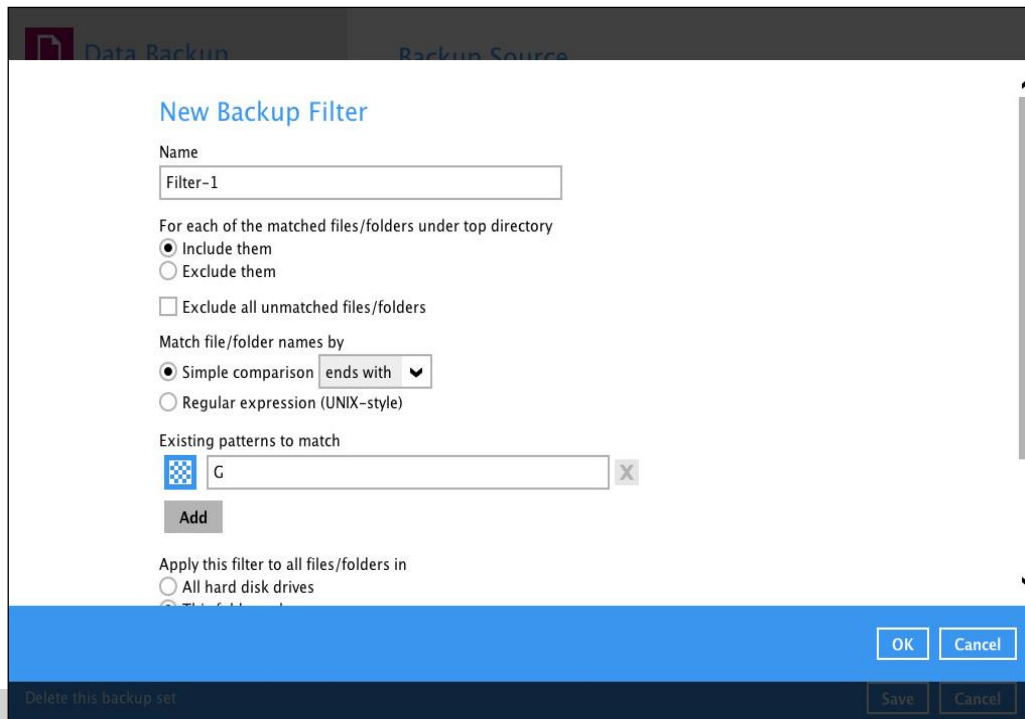
You can use the Quick or Shortcut option and apply filter to the selected backup source at the same time. To use this type of combination, follow the steps below:

1. Choose a backup source.



2. Create a filter that will be applied to the backup source.



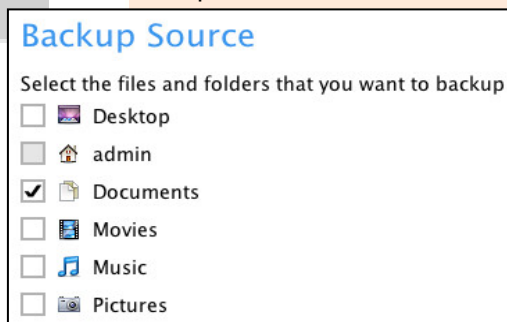


3. Click the **OK** button to save the created filter, then click the **Save** button to store settings.

Scenario 2 (Quick or Shortcut + Advanced Backup Source)

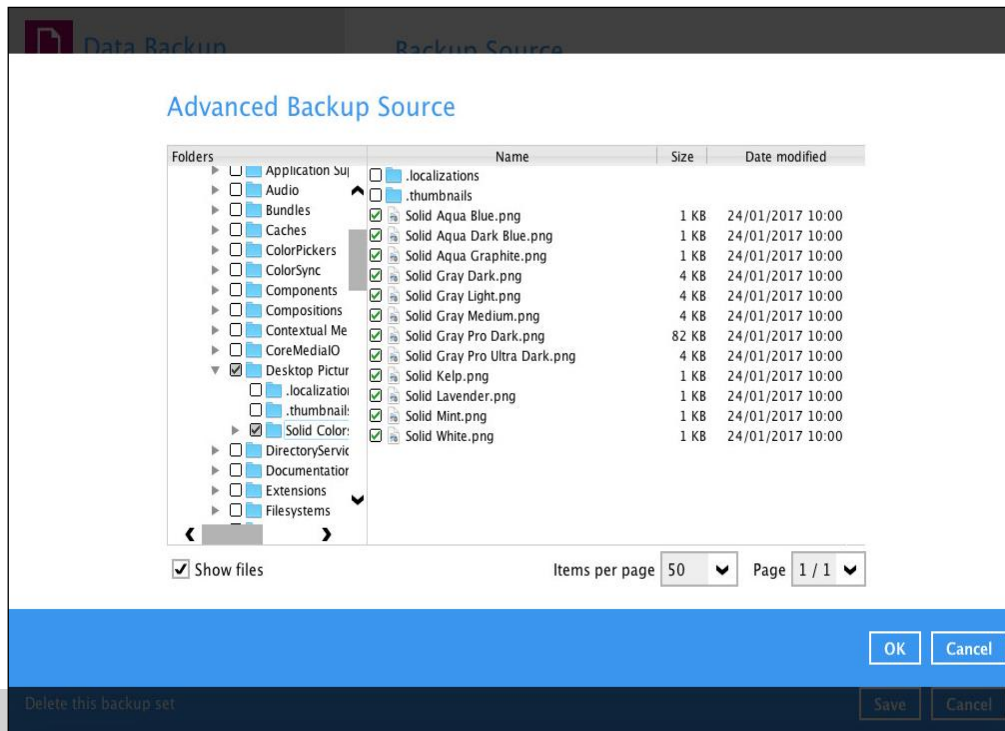
You can use the Quick or Shortcut option and select files and/or folders in the advanced backup source at the same time. To use this type of combination, follow the steps below:

1. Choose a backup source.



2. In the Source window, click 'I would like to choose the files to backup', then select the files and/or folders that you would like to back up.

I would like to choose the files to backup

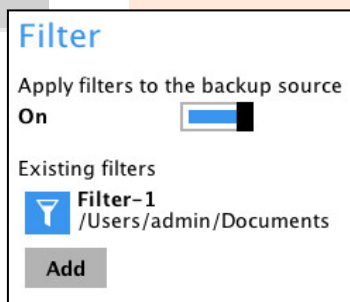


3. Click the **OK** button to save the selection, then click the **Save** button to save settings.

Scenario 3 (Filter + Advanced Backup Source)

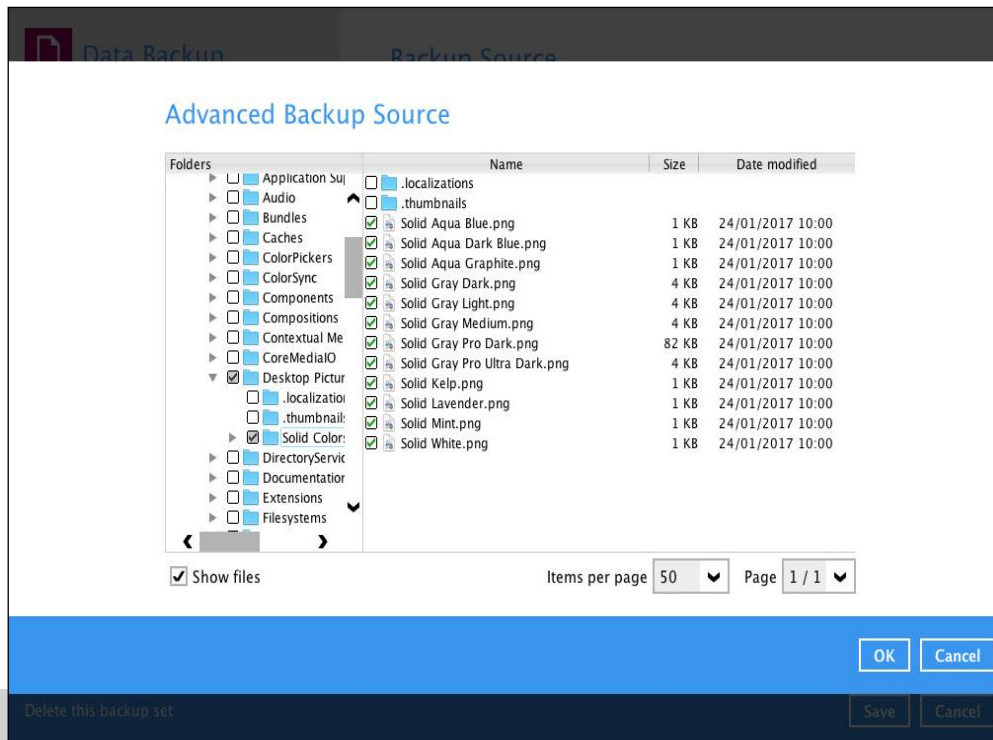
You can use the filter backup source and select files and/or folders in the advanced backup source at the same time. To use this type of combination, follow the steps below:

1. Create a filter.



2. In the source window, click 'I would like to choose the files to backup', then select the files and/or folders that you would like to back up.

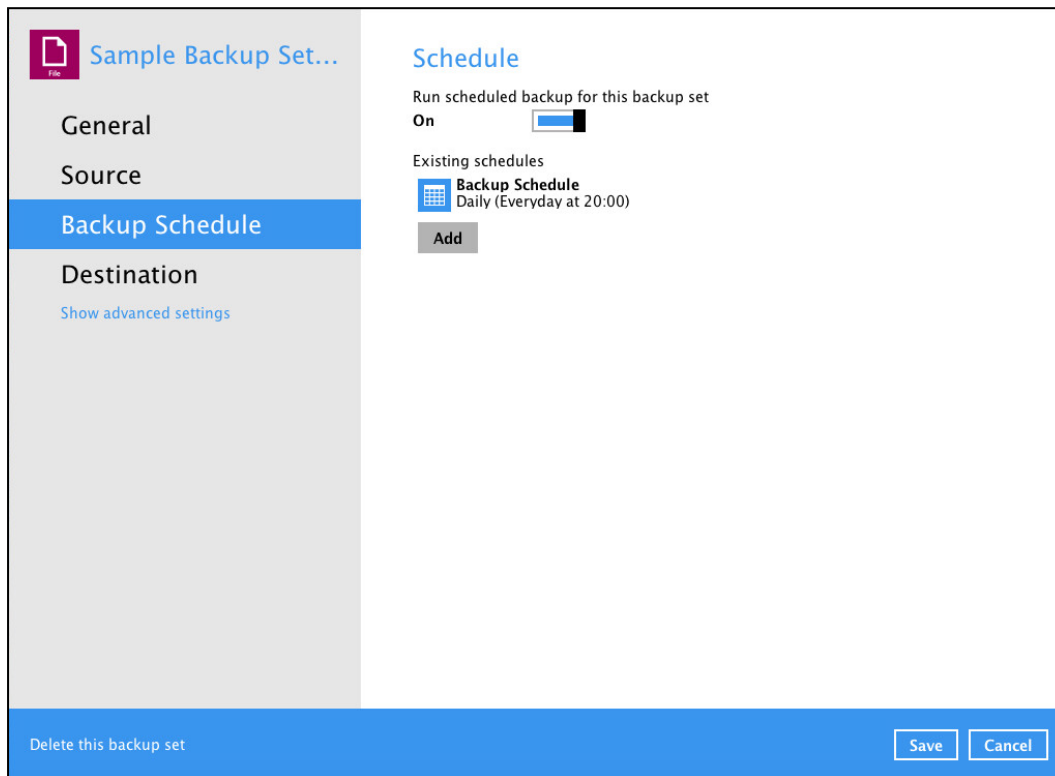
I would like to choose the files to backup



3. Click the **OK** button to save the selection, then click the **Save** button to save settings.

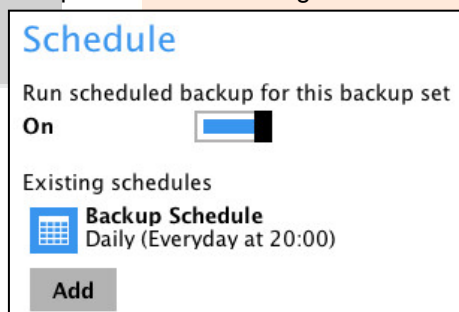
Backup Schedule

This allows the user to assign a backup schedule for the backup job to run automatically.

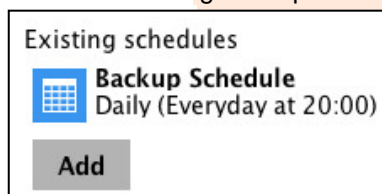


To configure a backup schedule, follow the steps below:

1. Swipe the lever to the right to turn on the backup schedule setting.



2. Select an existing backup schedule to modify or click the **Add** button to create a new one.



3. In the New Backup Schedule window, configure the following backup schedule settings.

- **Name – the name of the backup schedule.**
- **Type – the type of the backup schedule.** There are four (4) different types of backup schedule: Daily, Weekly, Monthly and Custom.

- ⦿ **Daily** – the time of the day or intervals in minutes/hours when the backup job will run.

New Backup Schedule

Name

Type
 ▾

Start backup
 at ▾ ▾ : ▾

Stop
 ▾

Run Retention Policy after backup

- ⦿ **Weekly** – the day of the week and the time of the day or intervals in minutes/hours when the backup job will run.

New Backup Schedule

Name

Type
 ▾

Backup on these days of the week
 Sun Mon Tue Wed Thu Fri Sat

Start backup
 at ▾ ▾ : ▾

Stop
 ▾

Run Retention Policy after backup

- ⦿ **Monthly** – the day of the month and the time of the day when the backup job will run.

New Backup Schedule

Name

Type
 ▾

Backup on the following day every month
 Day ▾
 First ▾ ▾

Start backup at
 ▾ : ▾ on the selected days

Stop
 ▾

Run Retention Policy after backup

- **Custom** – a specific date and the time when the backup job will run.

New Backup Schedule

Name: Custom-1

Type: Custom

Backup on the following day once: 2020 December 31

Start backup at: 00:00

Stop: until full backup completed

Run Retention Policy after backup

- **Start backup** – the start time of the backup job.

- **at** – this option will start a backup job at a specific time.
- **every** – this option will start a backup job in intervals of minutes or hours.

Start backup: every 1 minute

Stop: until full backup completed

Run Retention Policy after backup

Dropdown options: 1 minute, 2 minutes, 3 minutes, 4 minutes, 5 minutes, 6 minutes, 10 minutes, 12 minutes

Start backup: every 1 minute

Stop: until full backup completed

Run Retention Policy after backup

Dropdown options: 30 minutes, 1 hour, 2 hours, 3 hours, 4 hours, 6 hours, 8 hours, 12 hours

Here is an example of backup set that has a periodic and normal backup schedule.

New Backup Schedule

Name: Weekly-1

Type: Weekly

Backup on these days of the week: Sun Mon Tue Wed Thu Fri Sat

Start backup: every 4 hours

Stop: until full backup completed

Run Retention Policy after backup

New Backup Schedule

Name: Weekly-1

Type: Weekly

Backup on these days of the week: Sun Mon Tue Wed Thu Fri Sat

Start backup: at 21:00

Stop: until full backup completed

Run Retention Policy after backup

Figure 1.1

Figure 1.2

Figure 1.1 – Periodic scheduled every 4 hours Monday - Friday for business hours

Figure 1.2 – Normal schedule run at 21:00 or 9:00 PM daily on Saturday and Sunday for weekend non-business hours

- **Stop** – the stop **time** of the backup job. This only applies to schedules with start backup “at” and is not supported for periodic backup schedule (start backup “every”)
 - **until full backup completed** – this option will stop a backup job once it is complete. This is the configured stop time of the backup job by default.
 - **after (defined no. of hrs.)** – this option will stop a backup job after a certain number of hours regardless of whether the backup job has completed or not. This can range from 1 to 24 hrs.

The number of hours must be enough to complete a backup of all files in the backup set. For small files in a backup, if the number of hours is not enough to back up all files, then the outstanding files will be backed up in the next backup job. However, if the backup set contains large files, this may result in partially backed up files.

For example, if a backup has 100GB file size which will take approximately 15 hours to complete on your environment, but you set the “stop” after 10 hours, the file will be partially backed up and cannot be restored. The next backup will upload the files from scratch again.

The partially backed up data will have to be removed by running the Data Integrity Check.

As a general rule, it is recommended to review this setting regularly as the data size on the backup machine may grow over time.

- **Run Retention Policy after backup** – if enabled, the Backup247 Advanced Client (B247PRO) will run a Retention Policy job to remove files from the backup destination(s) which have exceeded the Retention Policy after performing a backup job.
4. Click the **OK** button to save the configured backup schedule settings.
 5. Click the **Save** button to save settings.

NOTE: Multiple backup schedules can be created.

Schedule

Run scheduled backup for this backup set

On

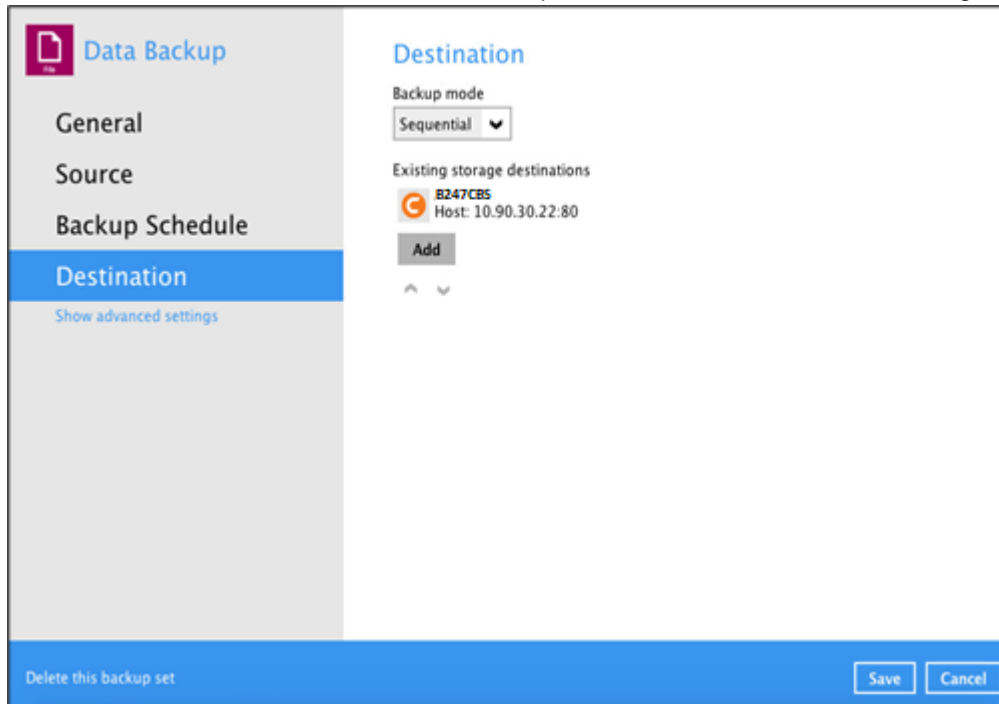
Existing schedules

- Daily-1**
Daily (Everyday at 19:00)
- Weekly-1**
Weekly - Saturday (Every week at 19:00)
- Monthly-1**
Monthly - The Last Day (Every month at 20:00)
- Custom-1**
Custom (31/03/2020 at 21:00)

Add

Destination

This feature allows the user to select a backup mode and add an additional storage destination.



There are two (2) types of backup mode:

| Backup mode | Description |
|-------------------|--|
| Sequential | This is the configured backup mode by default. This backup mode will run a backup job to each backup destination one by one. |
| Concurrent | This backup mode will run a backup job to all backup destinations simultaneously. |

Comparison between Sequential and Concurrent Backup mode

| Backup mode | Pros | Cons |
|-------------------|--|--|
| Sequential | <ul style="list-style-type: none"> ➤ Takes less resources in the local machine (e.g., memory, CPU, bandwidth, etc.) to complete a backup job. | <ul style="list-style-type: none"> ➤ Backup job is slower than in concurrent mode since the backup job will upload the backup data to the selected backup destinations one at a time. |
| Concurrent | <ul style="list-style-type: none"> ➤ Backup job is faster than in Sequential mode. ➤ Maximum number of concurrent backup destinations can be configured. | <ul style="list-style-type: none"> ➤ Requires more resources in the local machine (e.g. memory, CPU, bandwidth, etc.) to complete a backup job. |

To add a new storage destination, follow the steps below:

1. Click the **Add** button.

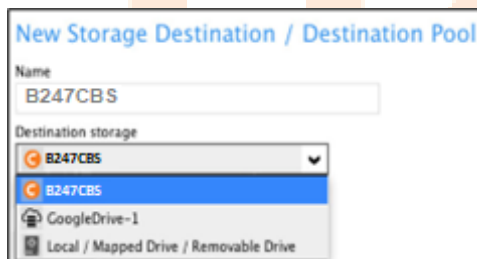


Existing storage destinations

 B247CBS
Host: 10.90.30.22:80

Add


2. Click the drop-down button to select a backup destination.





New Storage Destination / Destination Pool


Name
B247CBS

Destination storage

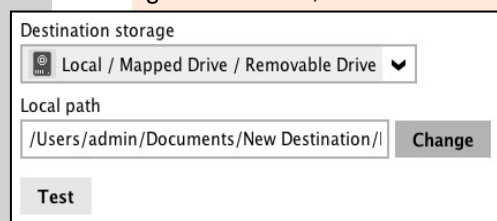
 B247CBS

 B247CBS


 GoogleDrive-1

 Local / Mapped Drive / Removable Drive

3. If the Local / Mapped Drive / Removable Drive is selected, click the **Change** button to select a new storage destination, then click the **Test** button to validate access to it.



Destination storage

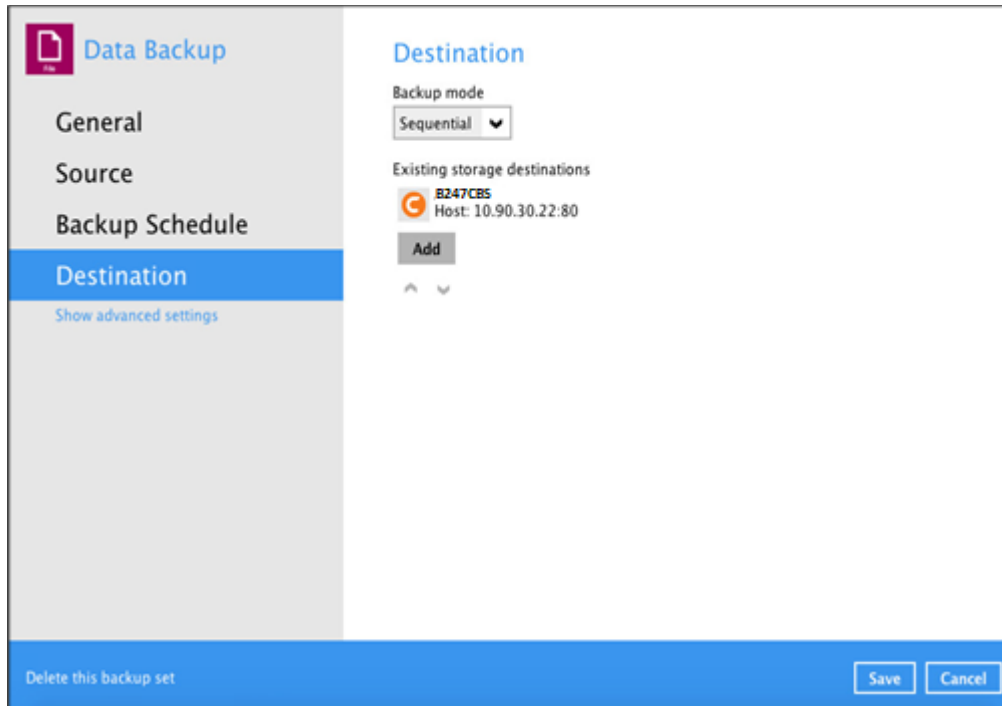
 Local / Mapped Drive / Removable Drive

Local path
/Users/admin/Documents/New Destination/| **Change**

Test

4. Click the **OK** button to save the added storage destination, then click the **Save** button to save the updated backup mode and the added storage destination.

To continue on with the menu, click the **Show advanced settings** link to modify the **Deduplication**, **Retention Policy**, **Command Line Tool**, **Bandwidth Control**, and other configurable items under the **Others** tab.




Deduplication

Starting with Backup247 Advanced Client (B247PRO) v9.0.0.0 or above, the In-File Delta feature (i.e., Incremental, Differential and Full) will be replaced with Deduplication. This feature is **On (enabled)** by default.

When this feature is **On (enabled)** for the backup set, a checksum verification of each backup file which was split into several blocks of varying size will be performed to compare its content and identify which block is duplicated, thus will perform deduplication of data.

When this feature is **Off (disabled)** for the backup set, a checksum verification of each backup file will not be performed, thus the duplicated data will NOT be removed or deduplicated during a backup job.

 **Sample Backup Set**

- General
- Source
- Backup Schedule
- Destination
- Deduplication**
- Retention Policy
- Command Line Tool
- Bandwidth Control
- Others

[Hide advanced settings](#)

Deduplication

Enable Deduplication
On

Deduplication scope

- Same file path within the same backup set
- All files within the same backup set

Block size

Auto Bytes

Migrate existing data to latest version

Delete this backup set

There are two (2) types of Deduplication scope:

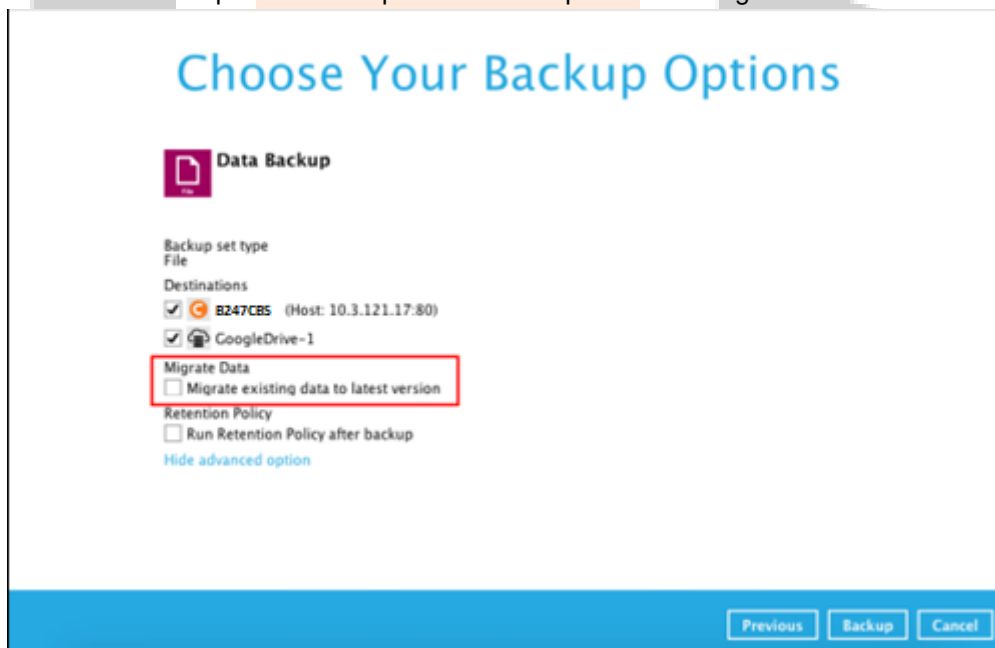
| Deduplication Scope | Description |
|--|--|
| Same file path within the same backup set | Deduplication will be applied to the duplicated contents within a file during the current backup job |
| All files within the same backup set | Deduplication will be applied across different files in the backup set. |

NOTE

For more details about the **Deduplication** feature, refer to the B247CBS v9 New Features Supplemental document.

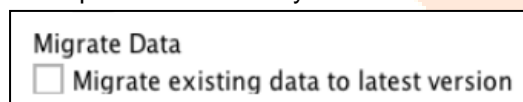
When the Deduplication feature is enabled for the backup set, a **Migrate Data** option will be available in the advanced backup options which can be configured before starting a backup job.

Below is an example of a backup set with Deduplication setting enabled.



Migrate Data

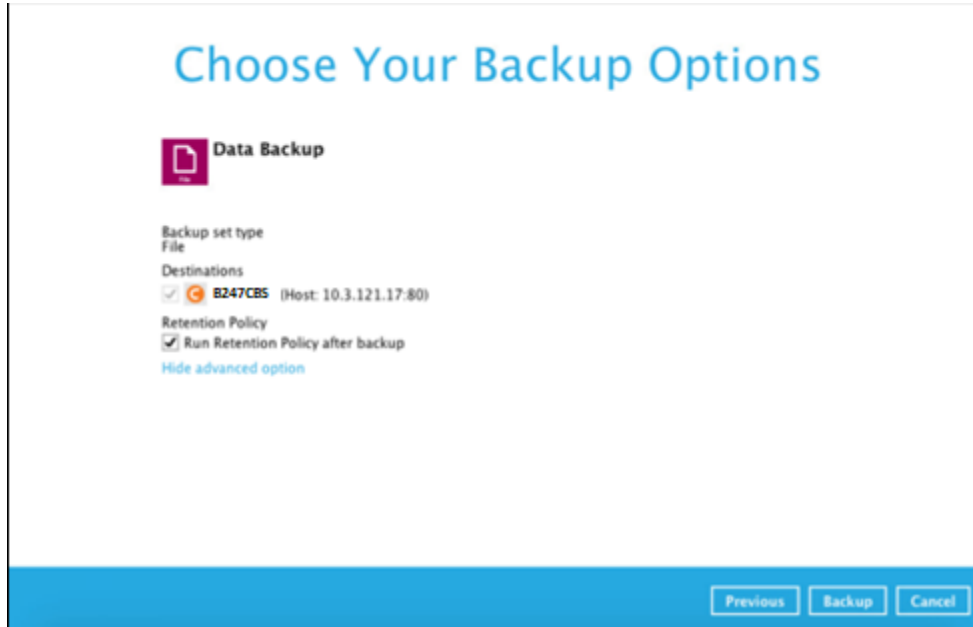
When this option is enabled, the existing data will be migrated to the latest version during a backup job. This option is disabled by default.



NOTE

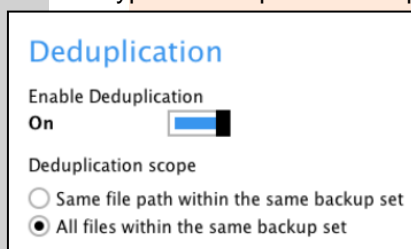
In case the Deduplication setting is **Off (disabled)** for the backup set, the Migrate Data option will not be displayed.

Below is an example of a backup set with Deduplication setting **Off (disabled)**.

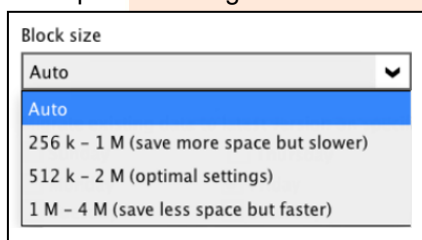


To configure the Deduplication settings, follow the steps below:

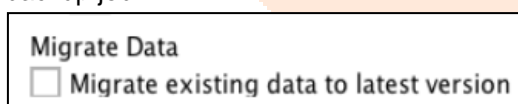
1. Select a type of Deduplication scope.



2. Click the drop-down button to select the block size that will be used for the deduplicated data. This option is configured to use "Auto" by default.



3. Tick the checkbox if you want the existing data to be migrated to the latest version during a backup job.



4. Click the **Save** button to store the modified Deduplication settings.

Retention Policy

When the Backup247 Advanced Client (B247PRO) identifies files and/or folders that are deleted, updated, or with updated permission/attributes during a backup job, these files and/or folders will then be moved from the data area to the Retention Area.

Retention Area is a place used as a temporary destination to store these files (deleted, updated, or with updated permission/attributes during a backup job). Files and/or folders in the Retention Area can still be restored.

The **Retention Policy** is used to control how long these files remain in the Retention Area before they are removed which can be specified in the number of days, weeks, months, or backup jobs. Retained data within all backup destinations (e.g., B247CBS, local drive, SFTP/FTP, and cloud storage) are cleared by the Retention policy job.

The default Retention Policy setting for a File Backup Set is 7 days, but the appropriate Retention Policy setting depends on individual, contractual, or regulatory requirements.

BackupSet-2

- General
- Source
- Backup Schedule
- Destination
- Deduplication
- Retention Policy**
- Command Line Tool
- Bandwidth Control
- Others
- [Hide advanced settings](#)

Retention Policy

How to retain the files in the backup set, which have been deleted in the backup source

Simple
 Advanced

Keep the deleted files for

7 Day(s)

Delete this backup set Save Cancel

NOTE

There is a trade-off between the Retention Policy and backup destination storage usage. The higher the Retention Policy setting, the more storage is used, which translates into higher storage costs.

There are two (2) types of Retention Policy:

| Type | Description |
|-----------------|---|
| Simple | A simple Retention Policy is a basic policy where the retained files (in the Retention Area) are removed automatically after the user specifies the number of days or backup jobs. |
| Advanced | An advanced Retention Policy defines a more advanced and flexible policy where the retained files (in the Retention Area) are removed automatically after a combination of user defined policy. |

Comparison between Simple and Advanced Retention Policy

| Control | Simple | Advanced |
|--------------------------|--|---|
| Backup Jobs | Can keep the deleted files within 1 to 365 backup job(s) | Not applicable |
| Days | Can keep the deleted files within 1 to 365 day(s) | Can keep the deleted files within 1 to 365 day(s) |
| Type | Not applicable | <ul style="list-style-type: none"> ➤ Daily ➤ Weekly ➤ Monthly ➤ Quarterly ➤ Yearly ➤ Custom |
| User-defined name | Not applicable | Applicable |

WARNING

When files and/or folders in the Retention Area exceed the Retention Policy setting, they will be permanently removed from the backup set and cannot be restored.

To configure a **Simple Retention Policy**, follow the steps below:

1. Go to Backup Sets, then select a backup set.
2. Click the **Retention Policy** tab in the Backup Set Settings.
3. Select **Simple** from the options, then click the drop-down button to define the number of day(s) or job(s) which the deleted files will be retained. This is configured as seven (7) days by default.

Retention Policy

How to retain the files in the backup set, which have been deleted in the backup source

Simple
 Advanced

Keep the deleted files for

▼
 ▼

4. Click the **Save** button to save the configured Retention Policy settings.

To configure an **Advanced Retention Policy**, follow the steps below:

1. Go to Backup Sets, then select a backup set.
2. Click the **Retention Policy** tab in the Backup Set Settings.
3. Select **Advanced** from the options, then click the **[+]** button to create.

Retention Policy

How to retain the files in the backup set, which have been deleted in the backup source

Simple

Advanced

Existing advanced retention policies

Add new advanced retention policy

4. Assign a desired name to the Retention Policy.

New Retention Policy

Name

5. Click the drop-down button to choose a Retention Type (e.g., Daily, Weekly, Monthly, Quarterly...).

Type

Daily

Daily

Weekly

Monthly

Quarterly

Yearly

Custom

6. Click the drop-down button to specify the period on which the Retention Area will keep the deleted files in the backup set.

The past number of days on which different versions of your files are retained

1

1

2

3

4

5

6

7

8

- Click the **OK** button to store the configured advanced Retention Policy, then click the **Save** button to store the settings.

For further details about how to configure an advanced Retention Policy for each type (i.e., Daily, Weekly, Monthly, Quarterly, Yearly), refer to the examples below:

- Example no. 1:** To keep the retention files for the last seven (7) days:

Name

Type

The past number of days on which different versions of your files are retained

- Example no. 2:** To keep the retention files for the last four (4) Saturdays:

Name

Type

The days within a week on which different versions of your files are retained
 Sun Mon Tue Wed Thu Fri Sat

The number of weeks to repeat the above selection

- Example no. 3:** To keep the retention files for the 1st day of each month for the last three (3) months:

Name

Type

The day within a month on which different versions of your files are retained
 Day

The number of months to repeat the above selection

- **Example no. 4:** To keep the retention files for the 1st day of each quarter for the last four (4) quarters:

Name
 Quarterly-1

Type
 Quarterly

The day within a quarter on which different versions of your files are retained

Day 1

First Sunday

Months of quarter
 January, April, July, October

The number of quarters to repeat the above selection
 4

- **Example no. 5:** To keep the retention files for the 1st day of each year for the last seven (7) years:

Name
 Yearly-1

Type
 Yearly

The day within a year on which different versions of your files are retained

January

Day 1

First Sunday

Sunday of Week 1

The number of years to repeat the above selection
 7

NOTE: Multiple Advanced Retention Policy can be created.

Retention Policy

How to retain the files in the backup set, which have been deleted in the backup source

Simple

Advanced

Existing advanced retention policies

- Daily-1**
Daily
- Weekly-1**
Weekly
- Monthly-1**
Monthly
- Quarterly-1**
Quarterly
- Yearly-1**
Yearly

Add

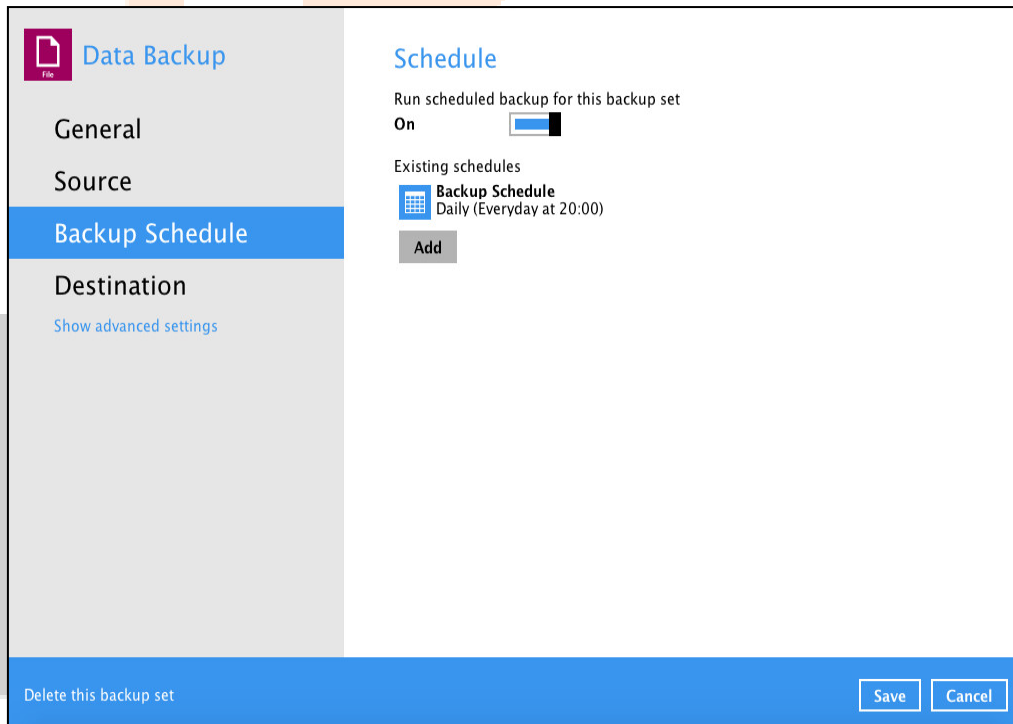
There are three (3) ways to run the Retention Policy job:

- Backup Scheduler
- Manual Backup
- Space Freeing Up

Backup Scheduler (Recommended)

To run a Retention Policy job after a scheduled backup job, follow the steps below:

1. Click the **Backup Schedule** tab in the backup set settings.



2. Select an existing backup schedule or click the **Add** button to add a new one.

The screenshot shows the 'Data Backup' configuration window with the 'Backup Schedule' tab selected. The left sidebar contains 'General', 'Source', 'Backup Schedule', and 'Destination'. The 'Backup Schedule' section is active, showing a 'Schedule' header and a toggle for 'Run scheduled backup for this backup set' which is currently 'On'. Below this, there is a section for 'Existing schedules' with one entry: 'Backup Schedule' (Daily (Everyday at 20:00)). An 'Add' button is visible below the existing schedules. At the bottom of the window, there is a blue bar with the text 'Delete this backup set' and 'Save' and 'Cancel' buttons.

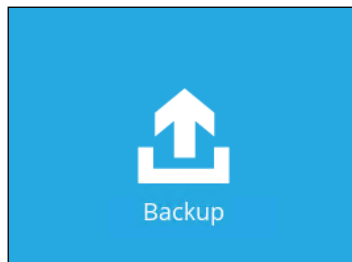
3. In the Backup Schedule window, select 'Run Retention Policy after backup' to run a Retention Policy job after a scheduled backup job.

This screenshot shows the 'Backup Schedule' configuration window with advanced settings. The 'Name' field contains 'Backup Schedule'. The 'Type' is set to 'Daily'. The 'Start backup at' is set to '20:00'. The 'Stop' condition is set to 'until full backup completed'. The checkbox 'Run Retention Policy after backup' is checked. At the bottom, there is a blue bar with 'Delete this backup schedule' and 'OK' and 'Cancel' buttons. Below this bar, there is another bar with 'Delete this backup set' and 'Save' and 'Cancel' buttons.

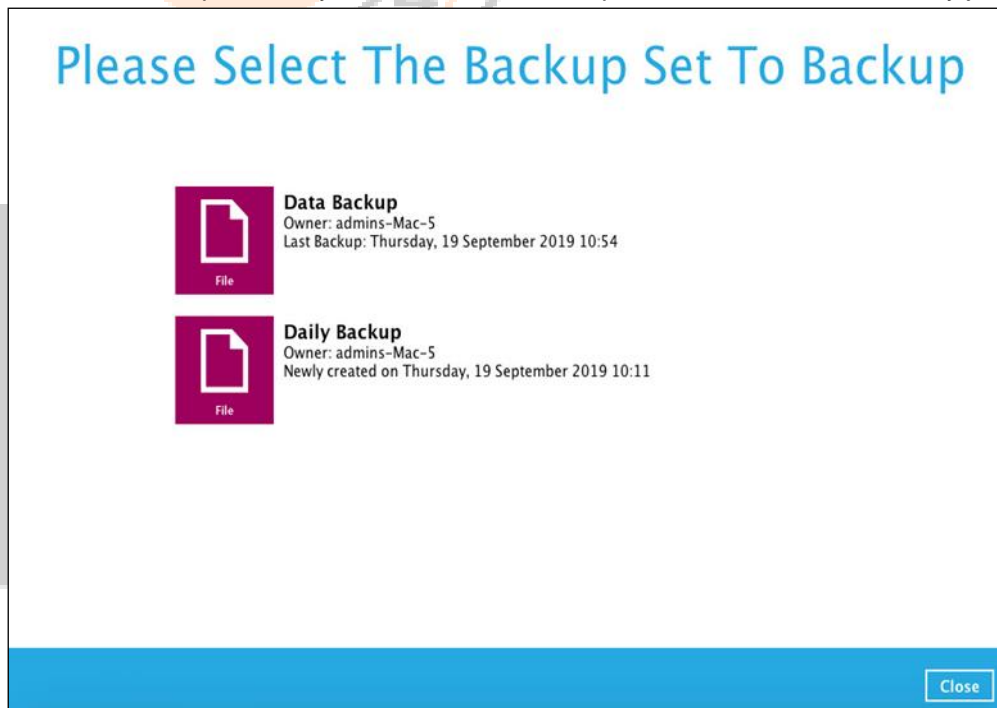
Manual Backup

To run a Retention Policy job after a manual backup, follow the steps below:

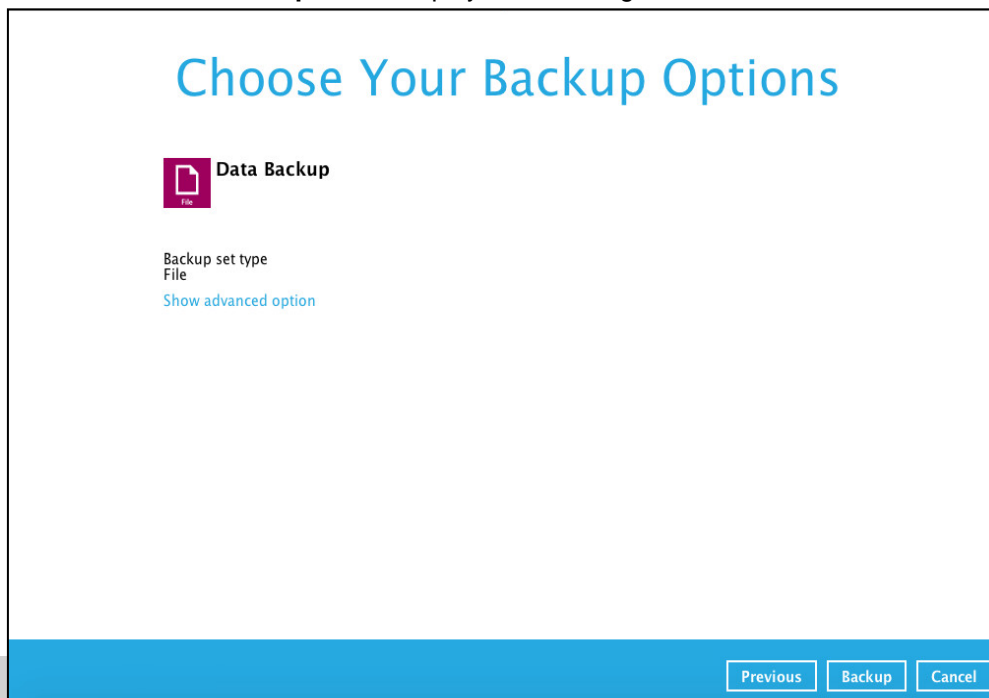
1. Click the **Backup** icon in the Backup247 Advanced Client (B247PRO) main interface.




2. Select the backup set that you would like to back up and run the Retention Policy job on.



3. Click **Show advanced option** to display other settings.



Choose Your Backup Options

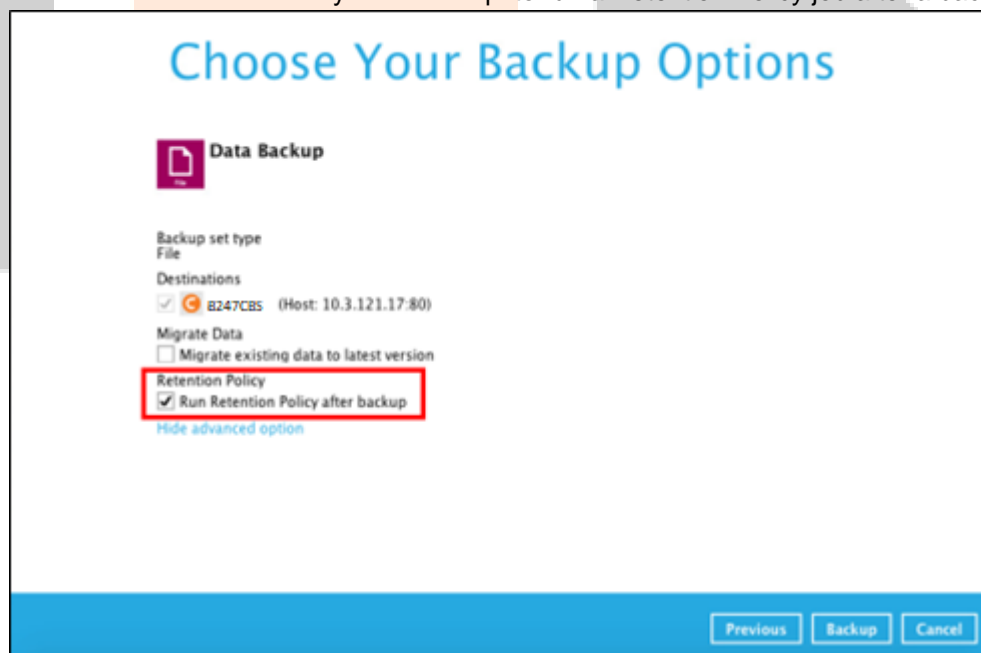
 **Data Backup**

Backup set type
File


[Show advanced option](#)

[Previous](#) [Backup](#) [Cancel](#)

4. Select 'Run Retention Policy after backup' to run a Retention Policy job after a backup job.




Choose Your Backup Options

 **Data Backup**

Backup set type
File

Destinations

 E247CBS (Host: 10.3.121.17:80)

Migrate Data

Migrate existing data to latest version

Retention Policy

Run Retention Policy after backup

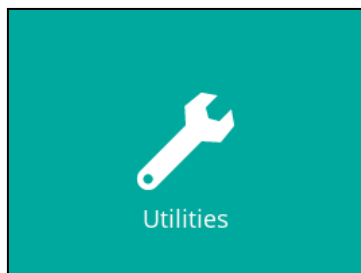
[Hide advanced option](#)

[Previous](#) [Backup](#) [Cancel](#)

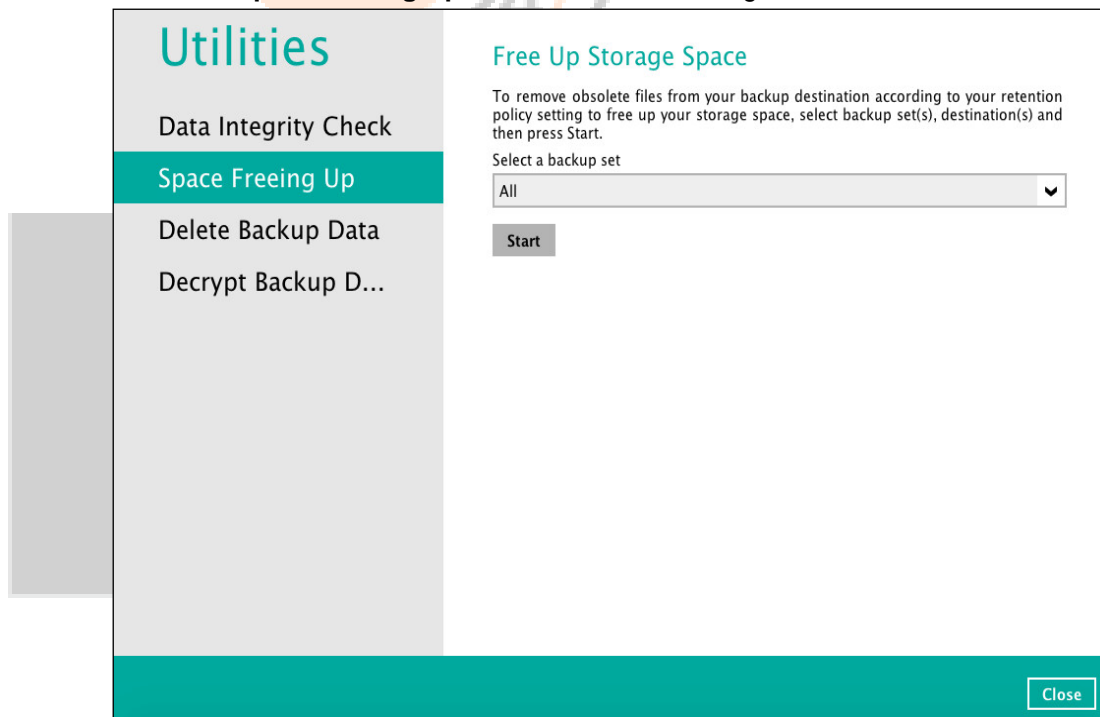
Space Freeing Up

To run a Retention Policy job manually via backup client interface, follow the steps below:

1. Click the **Utilities** icon in the Backup247 Advanced Client (B247PRO) interface.



2. Select the **Space Freeing Up** tab in the Utilities settings.



3. Select the corresponding backup set and destination (e.g., B247CBS, local drive, cloud storage) where you want the Retention Policy job to run on, then click the **Start** button to run the Retention Policy.

Utilities

- Data Integrity Check
- Space Freeing Up**
- Delete Backup Data
- Decrypt Backup D...

Free Up Storage Space

To remove obsolete files from your backup destination according to your retention policy setting to free up your storage space, select backup set(s), destination(s) and then press Start.

Select a backup set

Data Backup

Select a destination

All

Start

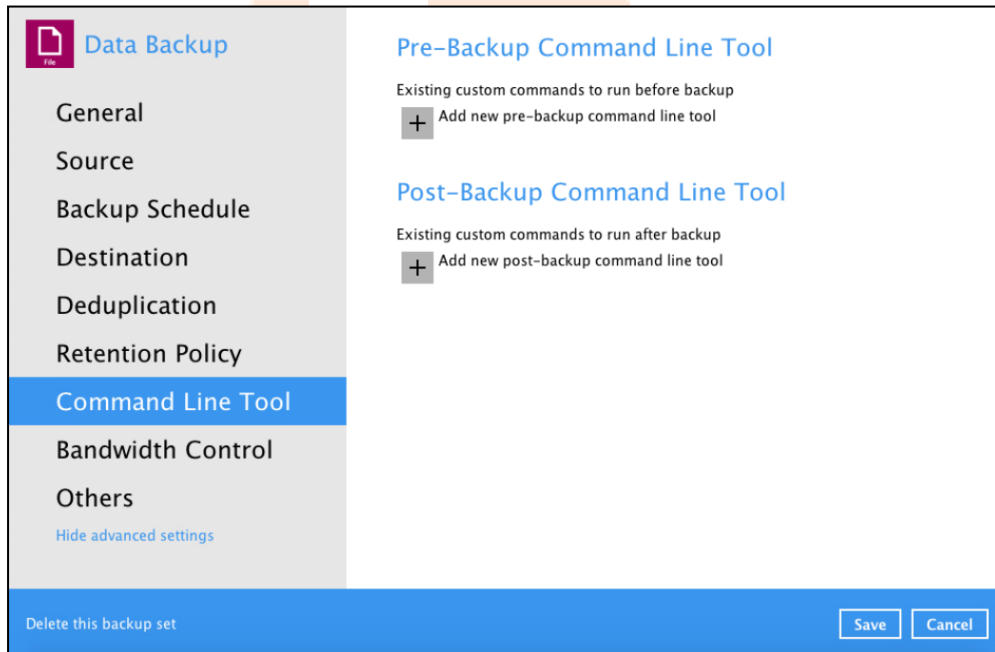
Close

NOTE
For more details about Space Freeing Up, refer to Chapter 9.9.2 Space Freeing Up.

Command Line Tool

This feature allows the user to configure a pre-backup or post backup command which can be an operating system level command, a script or batch file, or third-party utilities to run before and/or after a backup job.

e.g., Connecting to a network drive and disconnecting a network drive, stopping a third-party database (not officially supported by Backup247) to perform a cold backup, and restarting a third-party database after a backup.



Requirements and Best Practices

Error and Exception Handling

Each pre-backup command or batch file should have an error and exception handling. If a pre-backup command contains an error, although an unhandled error may not hinder the backup job process, and the backup job is successful, it will result to a status indicating completed backup with warning(s). For more details about backup report status, please refer to Chapter 9.6 Report.

Command or Batch File Compatibility

Make sure that each command (pre-backup and post-backup) are tested thoroughly before including them to the backup job.

Scheduled Backup

If the scheduled backup job is set to stop after x no. of hours, make sure that the duration of the running backup job will not be affected. You may need to adjust the number of hours in the backup schedule configuration. Please refer to Backup Schedule for more details.

Pre-backup Command Limitation

A reboot or shutdown must not be used in the pre-backup command. Otherwise, the machine will shut down immediately that will result to a status indicating “Backup not yet finished”, which can be viewed in the B247CBS User Web Console. Please refer to B247CBS Backup Reports for more details.

| Backup Set | Destination | Start Time | End Time | Status |
|----------------------------|-------------|-------------------|----------|-------------------------|
| Sample-2(1567504589206) | B247CBS | 04-Sep-2019 16:20 | -- | Backup not yet finished |
| Only Backup(1967570333851) | B247CBS | 04-Sep-2019 14:43 | -- | Backup not yet finished |

Post-backup Command Recommendation

It is recommended to include a timeout for a post-backup command to shut down the machine.

This is to ensure that the Backup247 Advanced Client (B247PRO) has enough time to complete the backup process in order to send the backup job status to the B247CBS before the machine shuts down.

There are three (3) fields in the command line tool:

| Field | Description |
|--------------------------|--|
| Name | The user-defined name of the pre-backup or post-backup command. |
| Working Directory | The location in the local machine which the pre-backup or post-backup command will run at, or the location of the command or created batch file. |
| Command | The pre-backup or post-backup command which can be defined as a native command or batch file. |

Pre-backup Command

A pre-backup command is used to execute an action or process before the start of a backup job. To create a pre-backup command, follow the steps below:

1. Click the **[+]** button.

Pre-Backup Command Line Tool

Existing custom commands to run before backup

+ Add new pre-backup command line tool

2. Assign a desired name to the pre-backup command.

New Pre-Backup Command Line Tool

Name

Pre-Backup-1

3. Click the **Change** button to locate the working directory of the command.


Working Directory

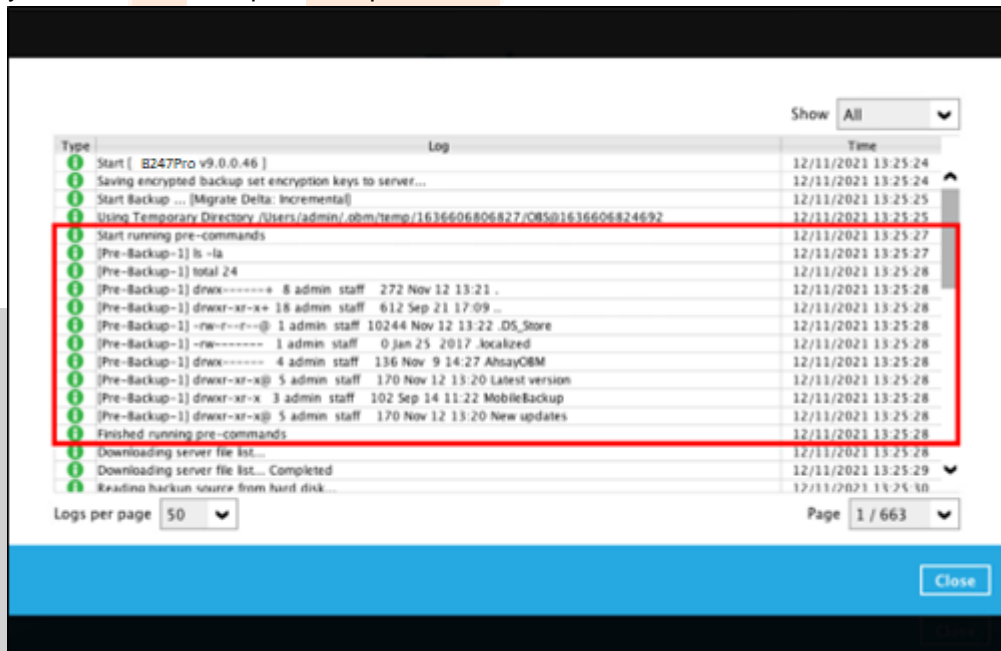
Change

- Input a command to be run before a backup job. In this example, the pre-backup command will display the list of the directories.

| |
|---------|
| Command |
| ls -la |

- Click the **OK** button to save the created pre-backup command, then click the **Save** button to save settings.

- Once the backup job is complete, click the  button to display the backup report log where you can check if the pre-backup command is successful.



The screenshot shows a log window with a table of entries. A red box highlights the pre-backup command execution details.

| Type | Log | Time |
|--|-----|---------------------|
| Start [E247Pro v9.0.0.46] | | 12/11/2021 13:25:24 |
| Saving encrypted backup set encryption keys to server... | | 12/11/2021 13:25:24 |
| Start Backup ... [Migrate Delta: Incremental] | | 12/11/2021 13:25:25 |
| Using Temporary Directory /Users/admin/.ohm/temp/1636606806827/CBS@1636606824692 | | 12/11/2021 13:25:25 |
| Start running pre-commands | | 12/11/2021 13:25:27 |
| [Pre-Backup-1] ls -la | | 12/11/2021 13:25:27 |
| [Pre-Backup-1] total 24 | | 12/11/2021 13:25:28 |
| [Pre-Backup-1] drwx-----+ 8 admin staff 272 Nov 12 13:21 . | | 12/11/2021 13:25:28 |
| [Pre-Backup-1] drwxr-xr-x+ 18 admin staff 612 Sep 21 17:09 .. | | 12/11/2021 13:25:28 |
| [Pre-Backup-1] -rw-r--r--@ 1 admin staff 10244 Nov 12 13:22 .DS_Store | | 12/11/2021 13:25:28 |
| [Pre-Backup-1] -rw----- 1 admin staff 0 Jan 25 2017 .localized | | 12/11/2021 13:25:28 |
| [Pre-Backup-1] drwx----- 4 admin staff 136 Nov 9 14:27 AhsayOBM | | 12/11/2021 13:25:28 |
| [Pre-Backup-1] drwxr-xr-x@ 5 admin staff 170 Nov 12 15:20 Latest version | | 12/11/2021 13:25:28 |
| [Pre-Backup-1] drwxr-xr-x 3 admin staff 102 Sep 14 11:22 MobileBackup | | 12/11/2021 13:25:28 |
| [Pre-Backup-1] drwxr-xr-x@ 5 admin staff 170 Nov 12 15:20 New updates | | 12/11/2021 13:25:28 |
| Finished running pre-commands | | 12/11/2021 13:25:28 |
| Downloading server file list... | | 12/11/2021 13:25:28 |
| Downloading server file list... Completed | | 12/11/2021 13:25:29 |
| Reading backup source from hard disk... | | 12/11/2021 13:25:30 |

At the bottom of the log window, there is a 'Close' button and a 'Page 1 / 663' indicator.

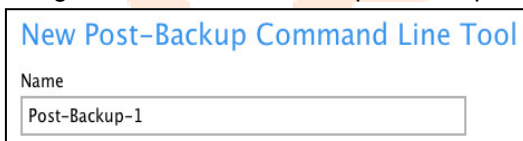
Post-backup Command

A post-backup command is used to execute an action or process after a backup job. To create a post-backup command, follow the steps below:

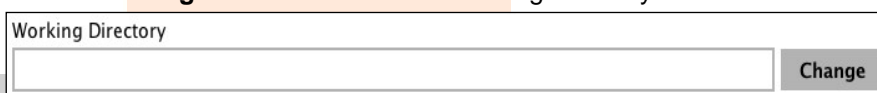
1. Click the **[+]** button.



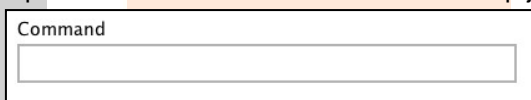
2. Assign a desired name to the pre-backup command.




3. Click the **Change** button to locate the working directory of the command.

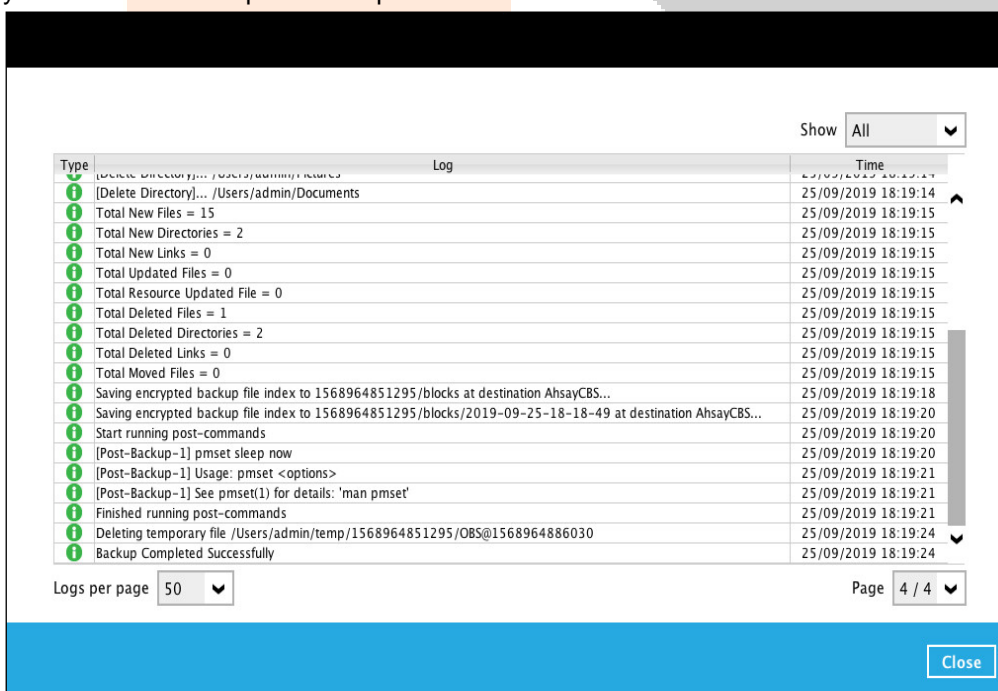


4. Input a command to be run before a backup job.



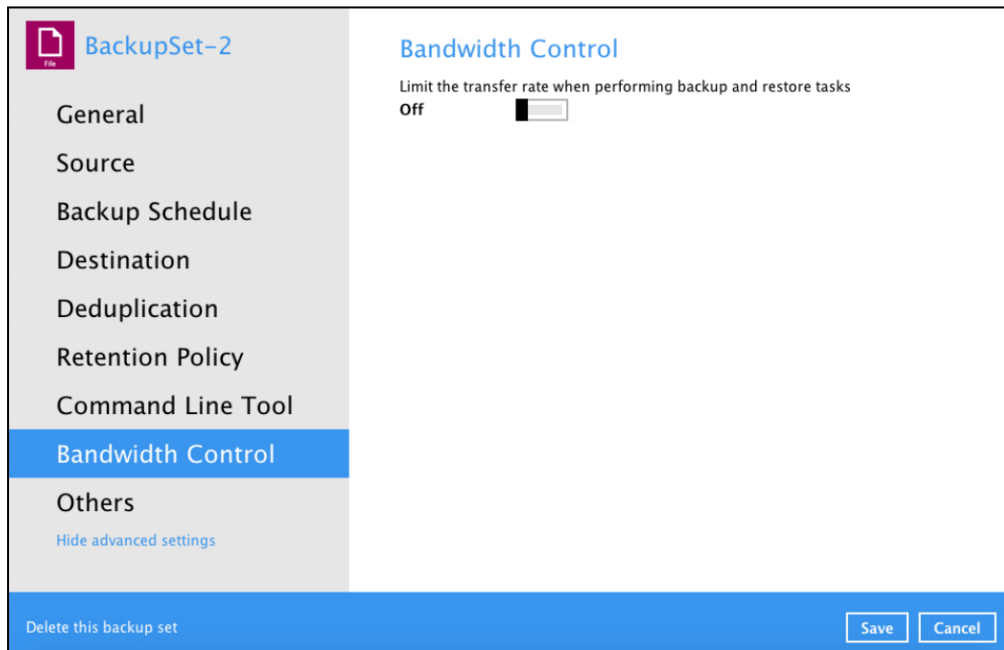
5. Click the **OK** button to save the created pre-backup command, then click the **Save** button to store settings.

6. Once the backup job is complete, click the  button to display the backup report log where you can check if the post-backup command is successful.



Bandwidth Control

This option allows the user to limit the amount of bandwidth used by backup traffic between specified times. This feature is configured to be disabled by default.



There are two (2) types of bandwidth control:

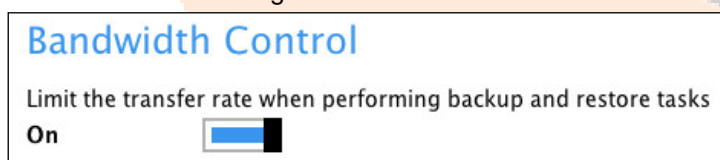
| Bandwidth Control Type | Description |
|------------------------|--|
| Independent | Each backup and restore has its assigned bandwidth. |
| Share | All backup and restore operations are sharing the same assigned bandwidth. |

NOTE

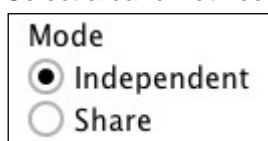
Share mode does not support performing backup job on multiple destinations concurrently.

To enable the bandwidth control setting, follow the steps below:

1. Slide the lever to the right to turn on the bandwidth control.



2. Select a bandwidth control mode.



3. Click the **[+]** button to create a modified bandwidth control.

Existing bandwidth controls

+ Add new bandwidth control

4. Complete the following fields:

- **Name** - the name of the bandwidth control set.
- **Type** - the type of enforced bandwidth control period.
- **Maximum transfer rate** - the maximum bandwidth used.

The screenshot shows a dialog box titled "New Bandwidth Control" with the following fields and options:

- Name:** A text input field containing "Bandwidth Control-1".
- Type:** Two radio button options: "Always" (selected) and "Only within this period".
- Maximum transfer rate:** A dropdown menu set to "100" and a unit dropdown menu set to "Kibit/s".

At the bottom right of the dialog box, there are "OK" and "Cancel" buttons. Below the dialog box, there are "Save" and "Cancel" buttons on the main interface.

5. Click the **OK** button to save the created bandwidth control set, then click the **Save** button to save settings.

Others

Below is the list of other configurable options under the advanced backup set settings:

- Temporary Directory
- Follow Link
- OpenDirect (Not supported on macOS platform)
- Compressions
- Encryption

Temporary Directory

The Backup247 Advanced Client (B247PRO) uses the temporary directory for both backup and restore



operations.

For a **backup job**, it is used to temporarily store backup set index files. An updated set of index files is generated after each backup job. The index files are synchronized to each individual backup destination at the end of each backup job.

For a **restore job**, it is used to temporarily store temporary restore files.

NOTES

1. For best practice, the temporary directory should be located on:

- A local drive for optimal backup and restore performance.

And should not be located on:

- System drive, as the System drive is used by Mac and other applications. There will be frequent disk I/O activity which may affect both backup and restore performance.
- A network drive, as it could affect both backup and restore performance.

It is recommended to select the 'Remove temporary files after backup' option on the backup set to keep the temporary drive clear.

To change the temporary directory, follow the steps below:

1. Click the **Change** button to select a directory path for storing temporary data.



2. Locate the directory that you would like to use, then click **OK** to select the folder. Click the **Save** button to apply the settings.

Follow Link

This feature allows the user to enable or disable the follow link which defines the NTFS junction or symbolic link during a backup job. This feature is configured as enabled by default.

Follow Link

Follow link of the backup files

On

NOTE

This feature is only applicable for File Backup Sets.

OpenDirect

This feature is not supported on macOS platform.

OpenDirect

Support of opening backup data directly without restoration

Off

Compressions

When this feature is enabled, the Backup247 Advanced Client (B247PRO) will compress all files before it is backed up to the backup destination(s).

For newly created backup set(s), "Fast with optimization for local" is selected by default.

Compressions

Select compression type

Fast with optimization for local

The following are the four (4) compression types:

- No Compression
- Normal
- Fast (Compressed size larger than normal)
- Fast with optimization for local

NOTE

The Compression type can be changes anytime even after a backup job. The modified compression type will be applied on the next run of a backup.

Encryption

This feature allows the user to view the current encryption settings. The encryption settings can only be enabled or disabled during the creation of backup set.

| Encryption | |
|---------------------------------------|----------|
| Encryption key | ••••• |
| Unmask encryption key | |
| Algorithm | AES |
| Method | CBC |
| Key length | 256 bits |

To view the Encryption key of the backup set, follow the steps below:

1. Go to Backup Sets, then select a backup set.
2. Click the **Others** tab in the backup set settings.
3. In the Encryption, click the 'Unmask encryption key' link to display the encryption key of the backup set.

| Encryption | |
|---------------------------------------|----------|
| Encryption key | ••••• |
| Unmask encryption key | |
| Algorithm | AES |
| Method | CBC |
| Key length | 256 bits |

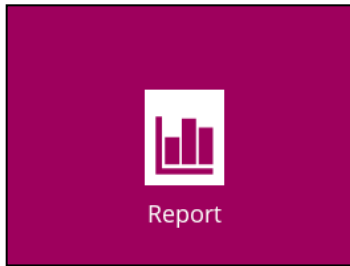
| Encryption | |
|-------------------------------------|--|
| Encryption key | EqP4A5d/FJl3MzuL0xbQ9LoCbnu09H6GiNenBmjQmyA= |
| Mask encryption key | |
| Algorithm | AES |
| Method | CBC |
| Key length | 256 bits |

NOTE

The encryption setting can only be configured during the creation of backup set. For more details about encryption settings, please refer to step no. **13** in Chapter 10 Create a Backup Set.

9.6 Report

This feature allows user to run and view backup and restore reports.



There are two (2) options available for this feature:

- Backup
- Restore

9.6.1 Backup

This feature displays the backup report logs for each backup set. There are four (4) filters that can be applied on this feature:

- Date
- Backup set
- Destination
- Status

Report

Backup

Restore

Backup Report

From: 07 May 2019 To: 14 May 2019 Go

| Backup set | Destination | Completion | Status |
|--------------|-------------|-------------|-------------|
| Files Backup | B247CBS | Today 23:59 | Completed |
| Daily Backup | B247CBS | Today 23:57 | Interrupted |
| Files Backup | B247CBS | Today 23:56 | Interrupted |
| Files Backup | B247CBS | Today 23:55 | Completed |
| Daily Backup | B247CBS | Today 23:47 | Interrupted |

No. of records per page: 50 Page: 1 / 1

Close

Date

Use this filter to display all the available backup report(s) within a date range.

Backup Report

From: 08 May 2019 To: 15 May 2019

| Backup set | Destination | Completion | Status |
|--------------|---------------|------------------|-------------|
| Files Backup | Local-1 | Today 00:16 | Completed |
| Files Backup | GoogleDrive-1 | Today 00:16 | Completed |
| Files Backup | B247CBS | Today 00:13 | Completed |
| Files Backup | B247CBS | 14/05/2019 23:59 | Completed |
| Daily Backup | B247CBS | 14/05/2019 23:57 | Interrupted |
| Files Backup | B247CBS | 14/05/2019 23:56 | Interrupted |
| Files Backup | B247CBS | 14/05/2019 23:55 | Completed |
| Daily Backup | B247CBS | 14/05/2019 23:47 | Interrupted |

Backup set

Use this filter to display all the available backup set(s) with a backup report. Then select which backup set with backup report that you would like to view.

Backup Report

From: 08 May 2019 To: 15 May 2019

| Backup set | Destination | Completion | Status |
|----------------|---------------|------------------|-------------|
| Backup set | B247CBS | Today 00:25 | Completed |
| B247Pro Backup | Local-1 | Today 00:16 | Completed |
| Files Backup | GoogleDrive-1 | Today 00:16 | Completed |
| Daily Backup | B247CBS | Today 00:13 | Completed |
| Files Backup | B247CBS | 14/05/2019 23:59 | Completed |
| Daily Backup | B247CBS | 14/05/2019 23:57 | Interrupted |
| Files Backup | B247CBS | 14/05/2019 23:56 | Interrupted |
| Files Backup | B247CBS | 14/05/2019 23:55 | Completed |
| Daily Backup | B247CBS | 14/05/2019 23:47 | Interrupted |

No. of records per page: 50 Page: 1 / 1

Destination

Use this filter to view the backup report for the selected storage location.

Backup Report

From: 08 May 2019 To: 15 May 2019

| Backup set | Destination | Completion | Status |
|----------------|-------------|-------------|-----------|
| B247Pro Bac... | Destination | Today 00:25 | Completed |

Status

Use this filter to view all the backup report(s) with the same status (i.e., Completed, Warning, Interrupted, Interrupted with error(s), Failed and In progress).

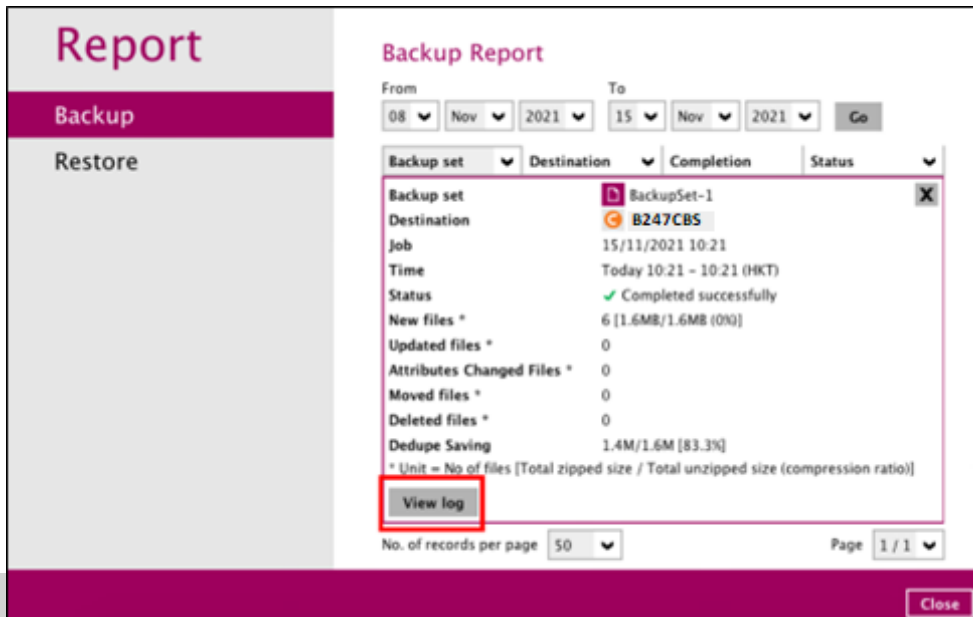
Backup Report

From: 08 May 2019 To: 15 May 2019

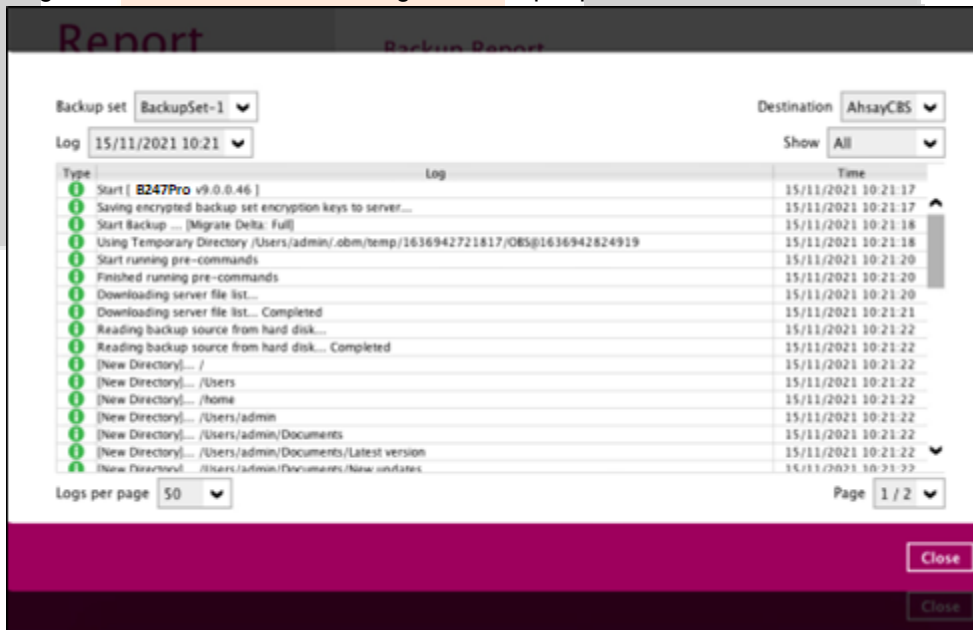
| Backup set | Destination | Completion | Status |
|--------------|---------------|-------------|-----------|
| Files Backup | Local-1 | Today 01:11 | Status |
| Files Backup | GoogleDrive-1 | Today 01:10 | Completed |

To view the backup log, follow the instructions below:

1. Select and click the backup report, then click the **View log** button.



2. The Backup set, Destination, Log Date and Time, Status, the number of Logs per page, and Page can be filtered when viewing the backup report.



9.6.2 Restore

This feature displays the restore report logs for each backup set. Similar to the **Backup** tab, this feature also consists of the following filters:

- Date
- Backup Set
- Destination
- Status

The screenshot shows the 'Report' sidebar with 'Restore' selected. The main area displays the 'Restore Report' with filters for 'From' (08 Nov 2021) and 'To' (15 Nov 2021). A table lists backup sets:

| Backup set | Destination | Job | Status |
|-------------|-------------|-------------|-------------|
| BackupSet-1 | B247CBS | Today 10:30 | Completed |
| Data Backup | B247CBS | Today 10:29 | Interrupted |
| Data Backup | B247CBS | Today 10:27 | Completed |

At the bottom, there are controls for 'No. of records per page' (set to 50) and 'Page' (1 / 1), along with a 'Close' button.

To view the restore log, follow the instructions below:

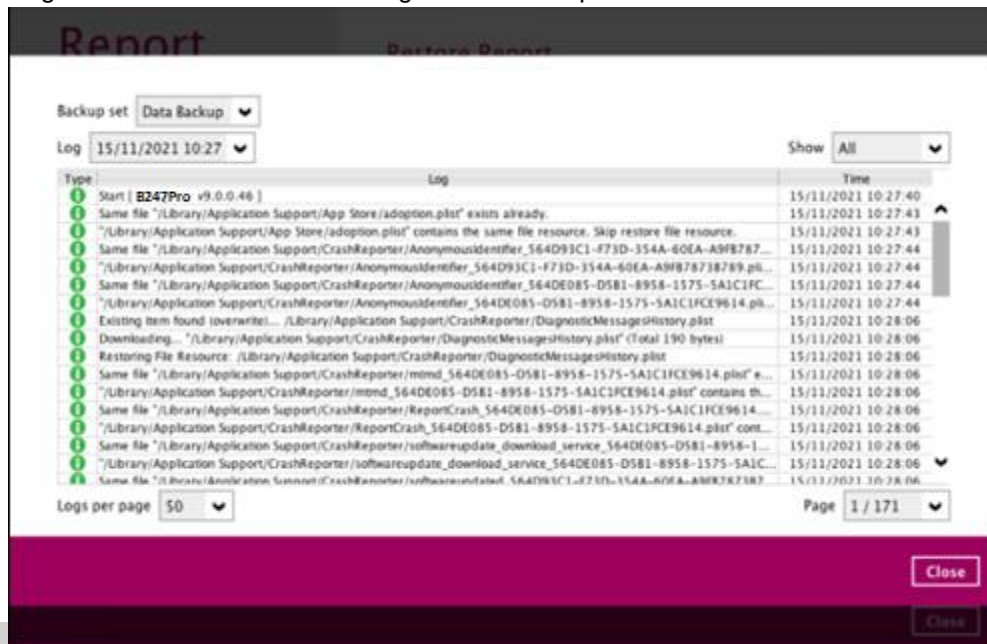
1. Select and click the restore report, then click the **View log** button.

This screenshot shows the same 'Restore Report' interface, but with a modal window open for the 'Data Backup' job. The modal displays details for the selected backup set:

- Backup set: Data Backup
- Destination: B247CBS
- Job: 15/11/2021 10:27
- Time: Today 10:27 - 10:28 (HKT)
- Status: Completed successfully
- Downloaded files*: 1 (191MB)
- * Unit = No of files (Download size)

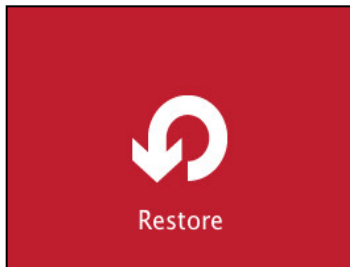
The 'View log' button at the bottom of the modal is highlighted with a red box. The background report table and filters remain visible but slightly dimmed.

- The Backup set, Destination, Log Date and Time, Status, the number of Logs per page, and Page can be filtered when viewing the restore report.



9.7 Restore

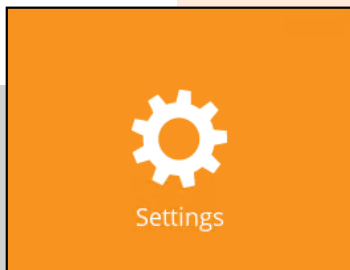
This feature is used to restore backed up files to its original or alternate location.



To restore backed up files, follow the instructions on Chapter 13 Restore Data.

9.8 Settings

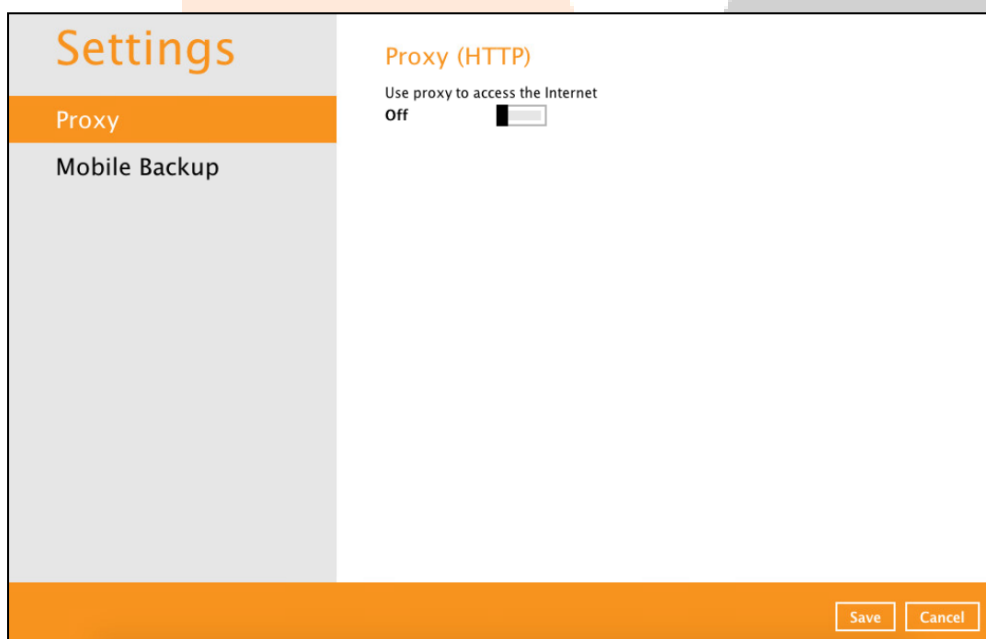
This feature allows user to enable the **Proxy Settings**.



There are two (2) functions available for this feature:

- Proxy
- Mobile Backup

NOTE: The Mobile Backup tab will only be available if the mobile add-on module is enabled on the user profile. Please contact your backup service provider for details.

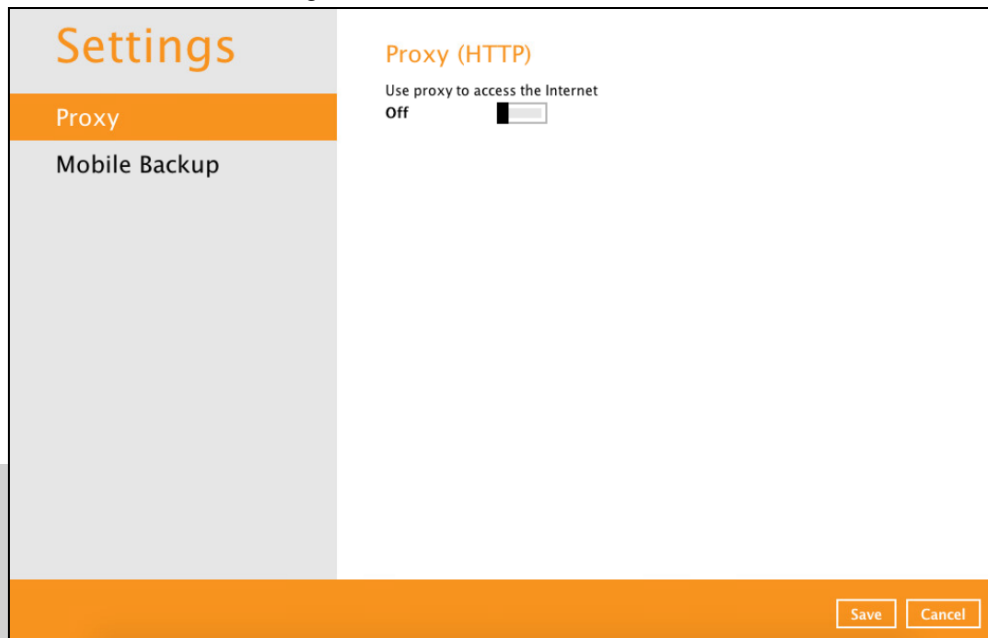


9.8.1 Proxy

When this feature is on, the Backup247 Advanced Client (B247PRO) will gain access to the internet.

To enable the Proxy Settings, follow the instructions below:

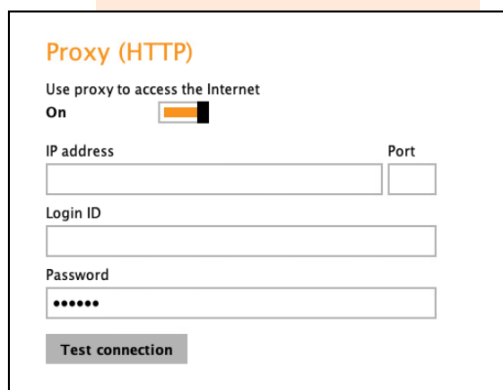
1. Slide the lever to the right to turn it on.



The screenshot shows the 'Settings' application with the 'Proxy' section selected. Under 'Proxy (HTTP)', there is a toggle switch for 'Use proxy to access the Internet' which is currently set to 'Off'. At the bottom right of the settings card, there are 'Save' and 'Cancel' buttons.

2. Complete the following fields:

- IP address
- Port
- Login ID
- Password



This screenshot shows the 'Proxy (HTTP)' settings form with the toggle switch turned 'On'. It includes input fields for 'IP address', 'Port', 'Login ID', and 'Password' (masked with dots). A 'Test connection' button is located at the bottom of the form.

3. Click the **Test Connection** button to validate the connection.
4. Click the **Save** button to apply the settings.

9.8.2 Mobile Backup

The Mobile Backup tab is only available if the mobile add-on module is enabled on the user profile. Please contact your backup service provider for details.

You can use the Mobile backup function to:

- Add one or more device(s) registered for mobile backup.

NOTE

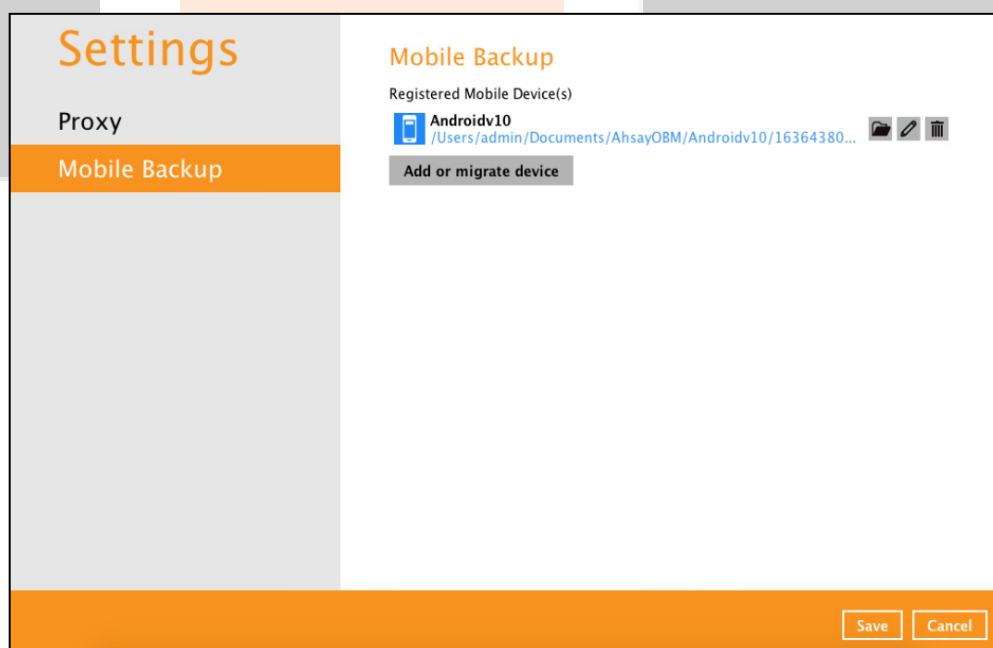
Please refer to **Chapter 7** of the Backup247 Mobile User Guide for Android and iOS for the detailed step-by-step procedure.

- View backed up photos, videos and documents saved in the mobile backup destination.
- Change the mobile backup destination to:
 - new location in the same machine
 - new machine
- Remove one or more device(s) registered for mobile backup.

NOTE

For the restore of photos, videos, documents and 2FA accounts to an alternate mobile device, the other mobile devices must be registered first for mobile backup on Backup247 Advanced Client (B247PRO).

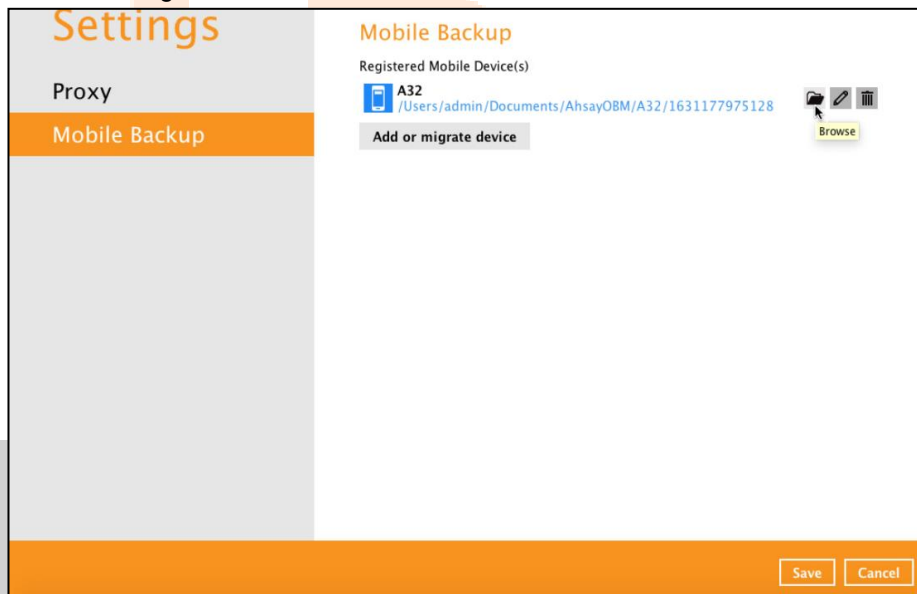
- Restore to a different mobile device on the same operating system.
- Restore to a different mobile device on another operating system, i.e., Android to iOS or iOS to Android.



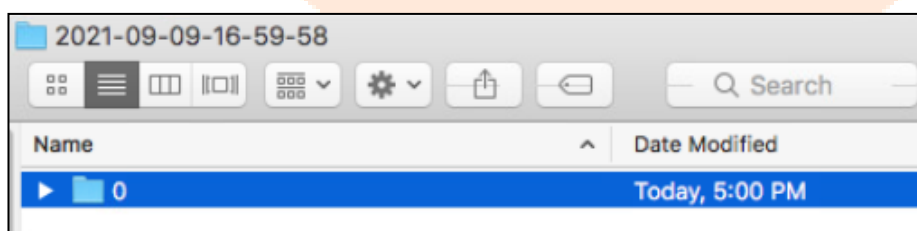
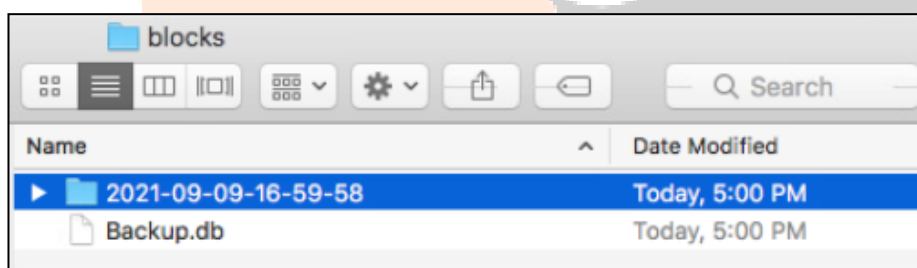
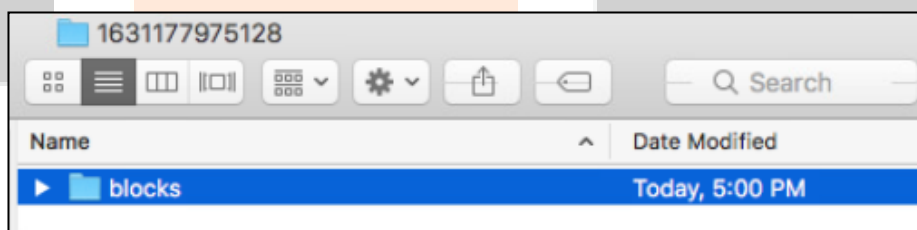
View backed up photos, videos and documents saved in the mobile backup destination

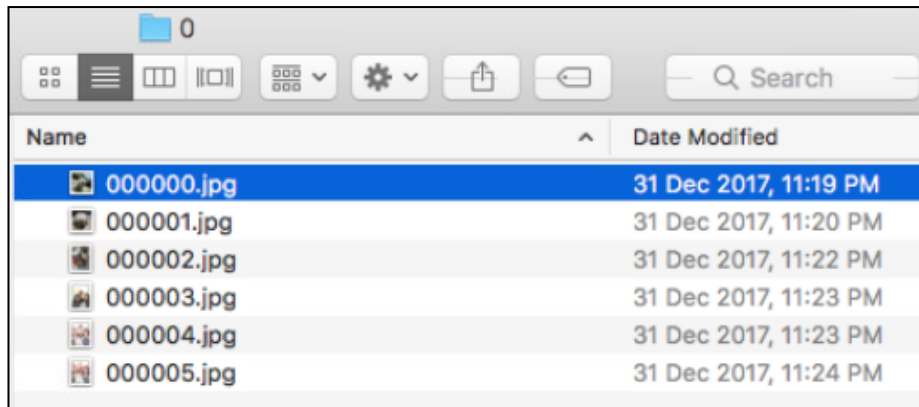
To view backed up photos, videos and documents saved in the mobile backup destination, follow the instructions below:

1. Either click the link under the registered mobile device or click the **Browse** icon on the right side of the registered mobile device.



2. A new window will be displayed, double-click the **blocks** folder. Double-click the folder named in this format “YYYY-MM-DD-hh-mm-ss” which is the date and time of the backup, this contains the folders where the photos and videos are saved.





3. Once done, click the [X] button to exit.

Change mobile backup destination location to new location in the same machine

These are scenarios upon changing the mobile backup destination to a new location in the same local machine:

- Move to a new location in the same machine with enabled Free up space.**

If Free up space is enabled on the Backup247 Mobile app, it is strongly recommended to copy the previously backed up photos, videos, documents and 2FA accounts to the new location to prevent missing data. As some of the backed-up photos, videos, documents and 2FA accounts have already been removed from the mobile device.

In case the previously backed up photos, videos and 2FA accounts were not copied to the new location, even though the backup will re-upload all the photos, videos, documents and 2FA accounts again from the mobile device, this will not include the photos, videos, documents and 2FA accounts removed by the Free up space feature.

- Move to a new location in the same machine with disabled Free up space**

If Free up space is disabled on the Backup247 Mobile app, there are two (2) options available, copy the previously backed up photos, videos, documents and 2FA accounts to the new location or continue to back up in the new location.

In case the previously backed up photos, videos, documents and 2FA accounts were not copied to the new location, the backup will re-upload all the photos, videos, documents and 2FA accounts again from the mobile device.

To change the mobile backup destination to another drive or folder on the Backup247 Advanced Client (B247PRO) machine, follow the instructions below:

Example: Change backup destination

from

/Users/admin/Documents/Backup247 Advanced Client (B247PRO)/%registered_mobile_device%/%backupsetID%

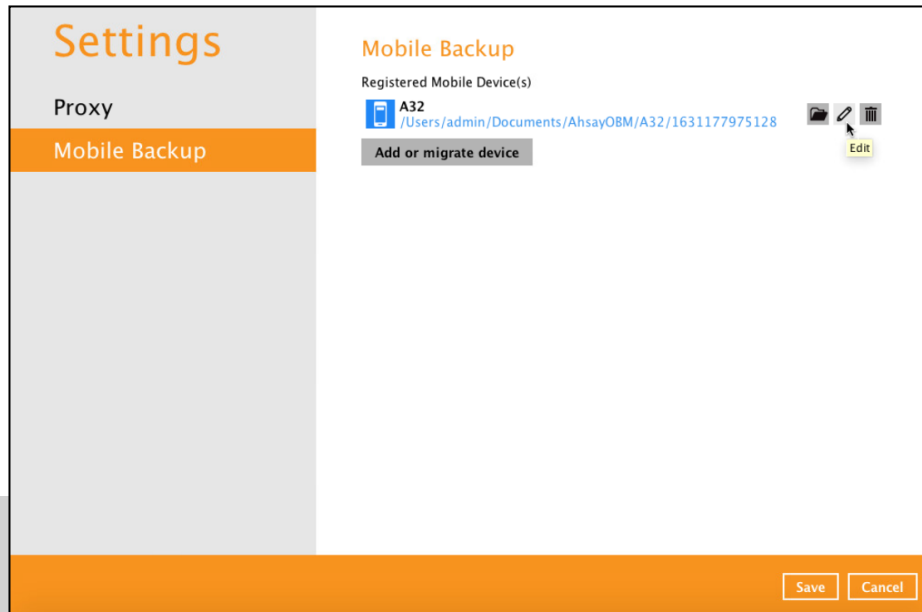
to

/Users/admin/Documents/MobileBackup

1. From the old location, secure a copy of the previously backed up photos, videos, documents and 2FA accounts.
2. Copy the previously backed up photos, videos, documents and 2FA accounts from the original location to the new mobile backup destination (if applicable).

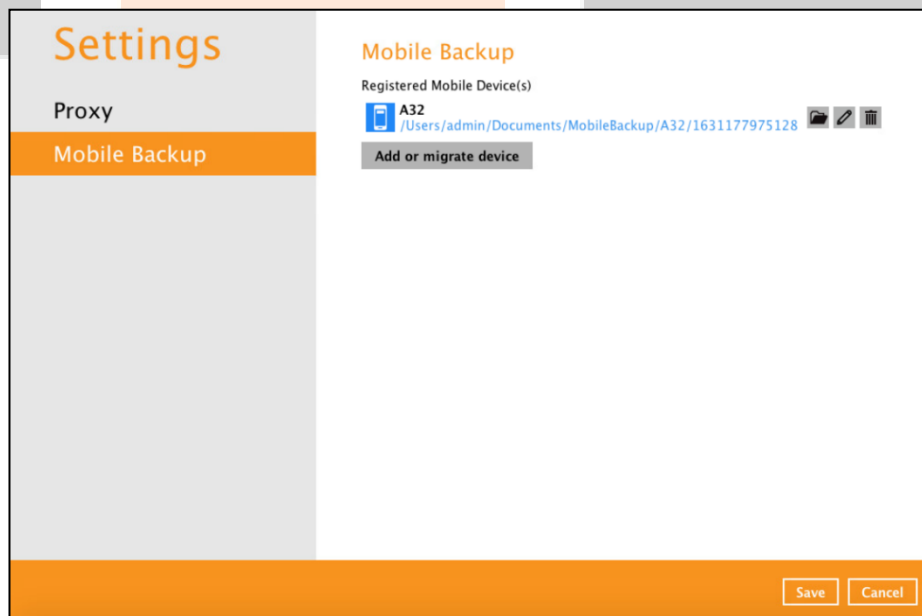
3. Go to **Settings > Mobile Backup**. Click the **Edit** icon on the right-side of the registered mobile device.

In this example, the old mobile backup destination is **/Users/admin/Documents/Backup247 Advanced Client (B247PRO)/%registered_mobile_device%/%backupsetID%**.



4. A new screen will be displayed. Select the new mobile backup destination then click **Open**.
5. Click **Save** to store the change made.

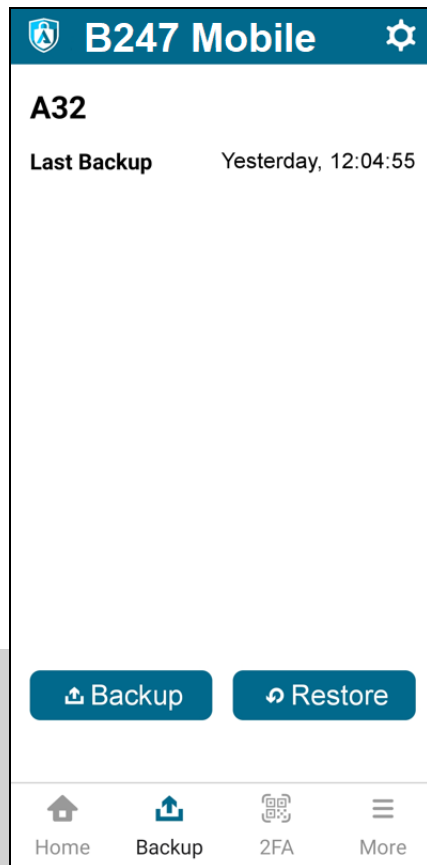
Mobile backup destination is successfully changed to **/Users/admin/Documents/MobileBackup**. All mobile backups will now be saved to this destination.



NOTE

The %registered_mobile_device% and %backupsetID% will be appended automatically to the new mobile backup destination.

6. Resume the backup job.



Change mobile backup destination location to new machine

Move to a new machine with enabled or disabled Free up space due to upgrade.

If the machine needs upgrading, the previously backed up photos, videos, documents and 2FA accounts are still available.

If Free up space is enabled on the Backup247 Mobile app, it is strongly recommended to copy the previously backed up photos, videos and 2FA accounts to the new machine to prevent missing data. As some of the backed-up photos, videos, documents and 2FA accounts have already been removed from the mobile device.

Even if Free up space is disabled, it is recommended to copy the previously backed up photos, videos, documents and 2FA accounts to the new machine. Otherwise, the backed-up photos, videos, documents and 2FA accounts on the mobile device will be backed up again from scratch.

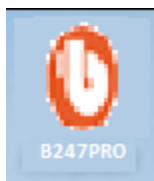
NOTE

- ⦿ If the machine is lost/stolen, changing the mobile destination is not supported as it is required to re-register your mobile devices on Backup247 Advanced Client (B247PRO) and perform backup of backed up photos, videos, documents and 2FA accounts.
- ⦿ Changing the mobile backup destination to a new machine with a different operating system is supported, e.g., from a macOS machine to Window machine or Linux machine to macOS machine etc.

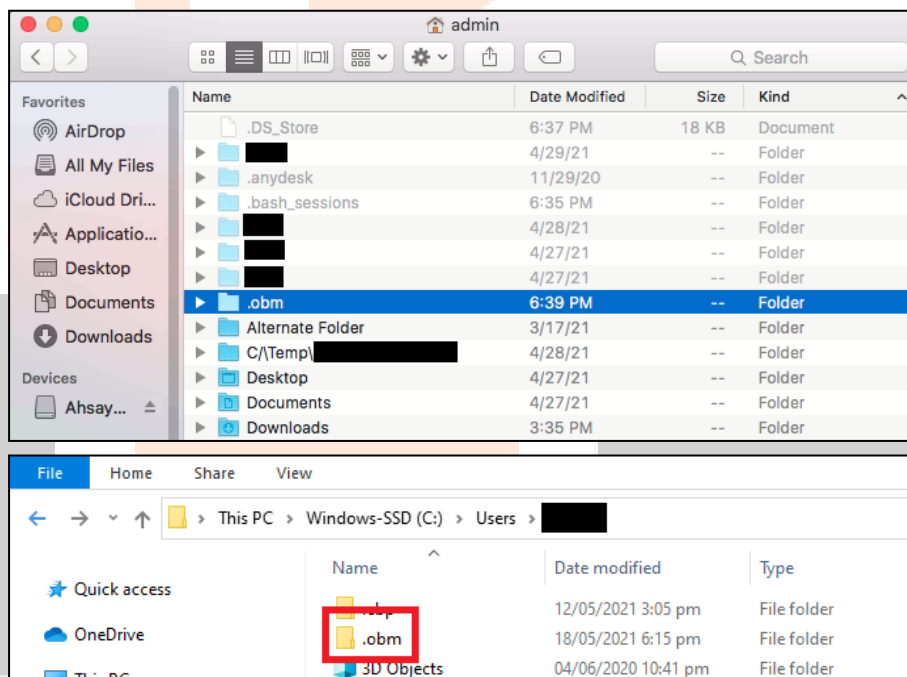
To change the mobile backup destination to a new machine, follow the instructions below:

Example: Changing the mobile backup destination from an old macOS machine to a new Windows machine.

1. On the new machine, install **Backup247 Advanced Client (B247PRO)**.



2. Copy the **.obm** folder from the old macOS machine to the new Windows machine.

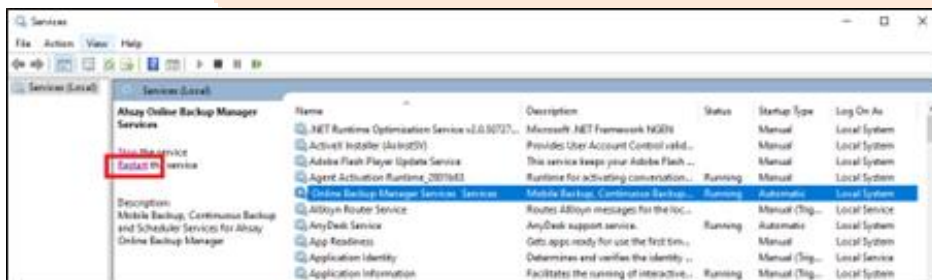


3. Copy the previously backed up photos, videos, documents and 2FA accounts from the old machine to the new mobile backup destination.

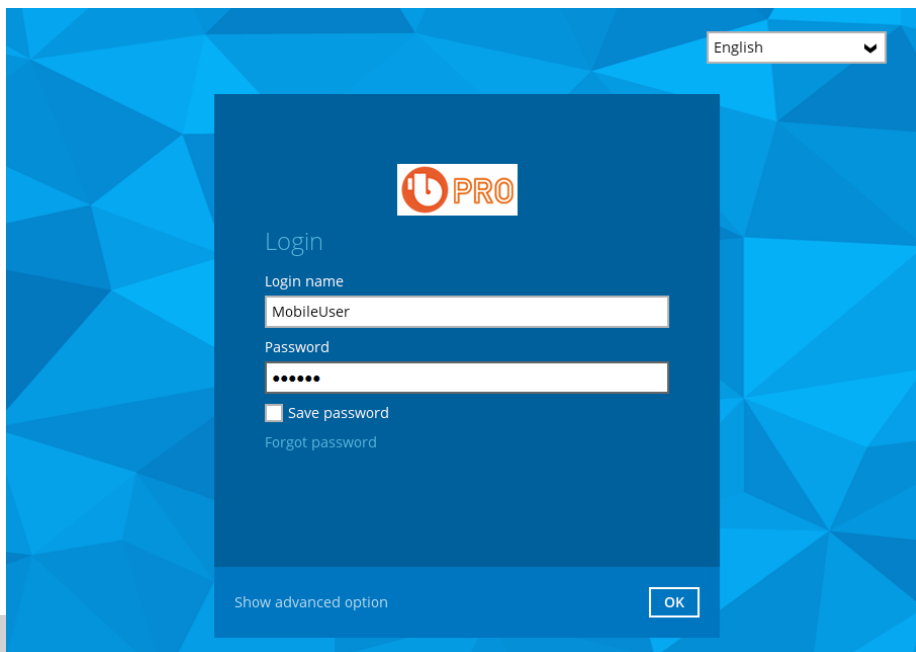
NOTE

During machine upgrade, make sure to uninstall the Backup247 Advanced Client (B247PRO) from the old machine to avoid any interruptions while backing up on the new machine.

4. Restart the **Backup247 Advanced Client (B247PRO) Services** because copying the **.obm** folder on a newly installed Backup247 Advanced Client (B247PRO) will not trigger the MBS.

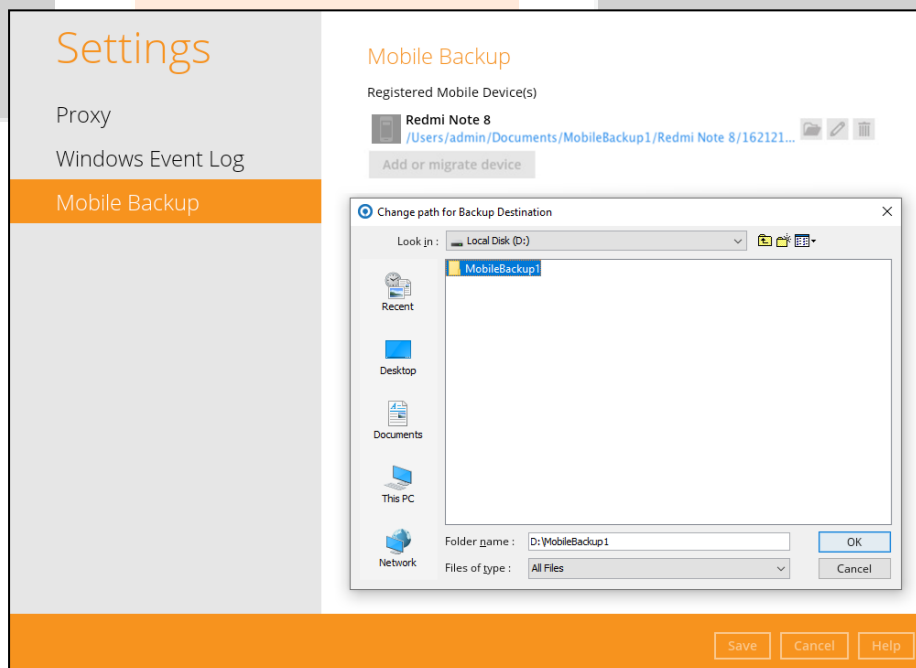


5. Login to **Backup247 Advanced Client (B247PRO)**. Enter the login name and password of your Backup247 Advanced Client (B247PRO) account. Then, click **OK** to login



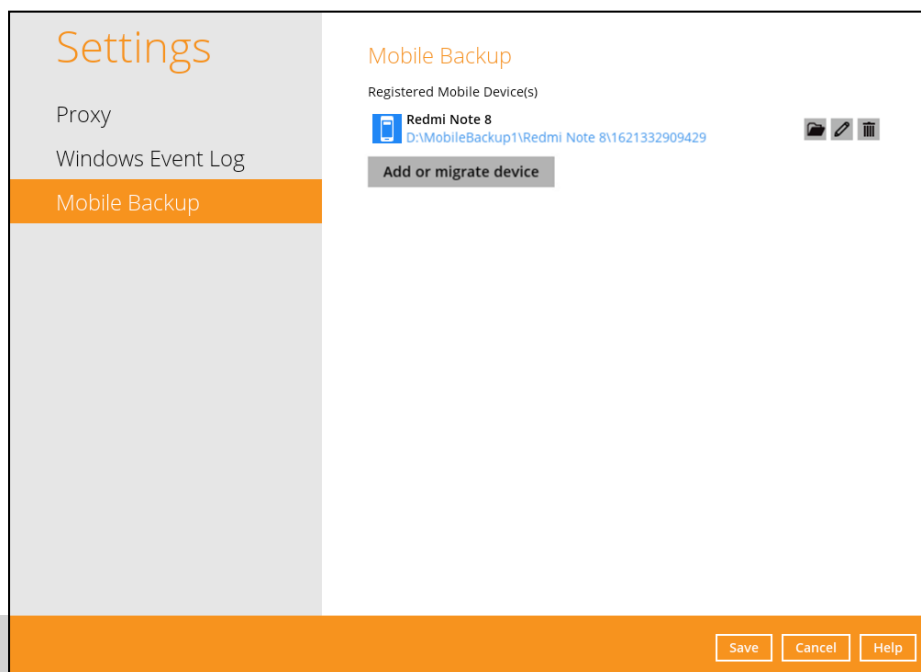
6. Go to **Settings > Mobile Backup**. Click the **Edit** icon on the right side of the registered mobile device.
7. **Change path for Backup Destination** screen will be displayed. Select the new mobile backup destination then click **OK**.

In this example, the new mobile backup destination will be **D:\MobileBackup1**.



8. Click **Save** to store the change made.

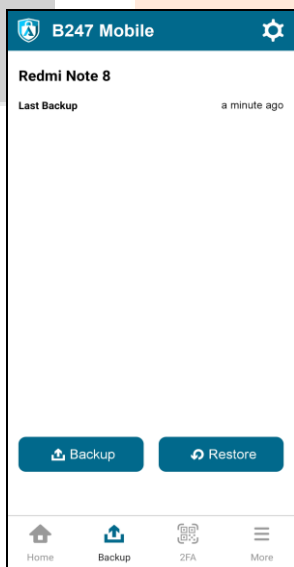
Mobile backup destination is successfully changed to **D:\MobileBackup1**. All mobile backups will now be saved to this destination.



NOTE

The %registered_mobile_device% and %backupsetID% will be appended automatically to the new mobile backup destination.

9. Resume the backup job.



NOTE

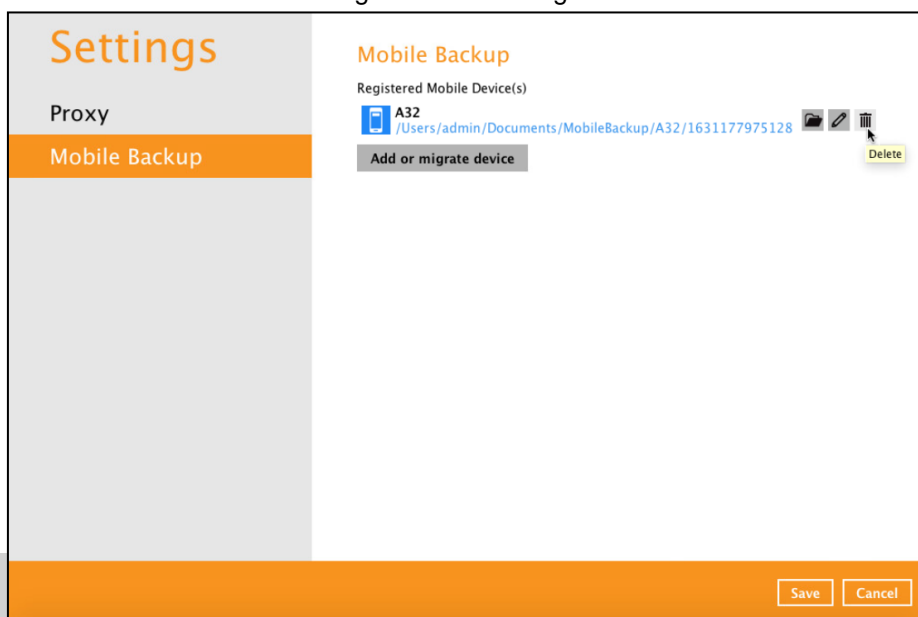
For instructions on changing the mobile backup destination of:

- a Windows machine to a macOS machine, please refer to **Chapter 10.8.3** of the Backup247 Advanced Client (B247PRO) v8 Quick Start Guide for Windows.

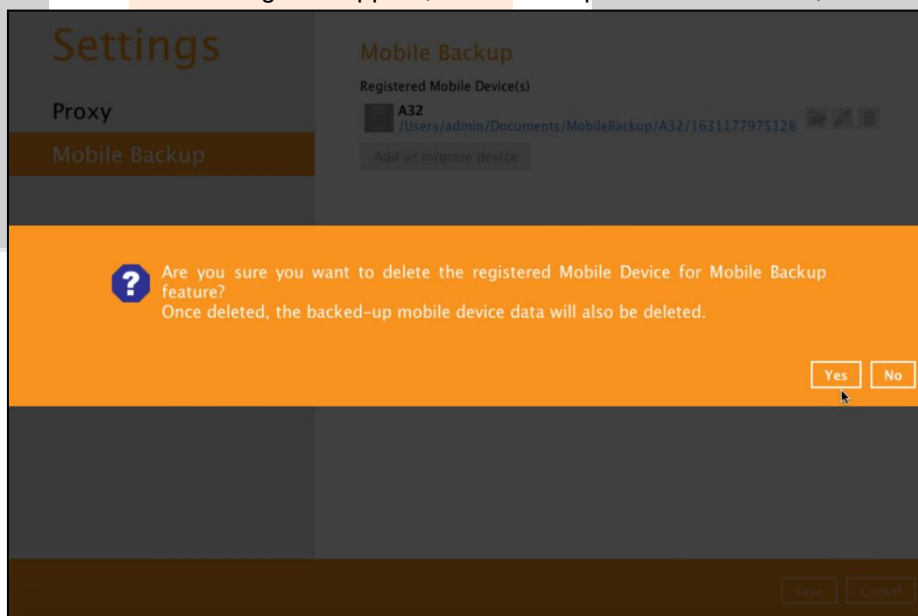
Remove one or more device(s) registered for Mobile Backup

To remove a mobile device, follow the instructions below:

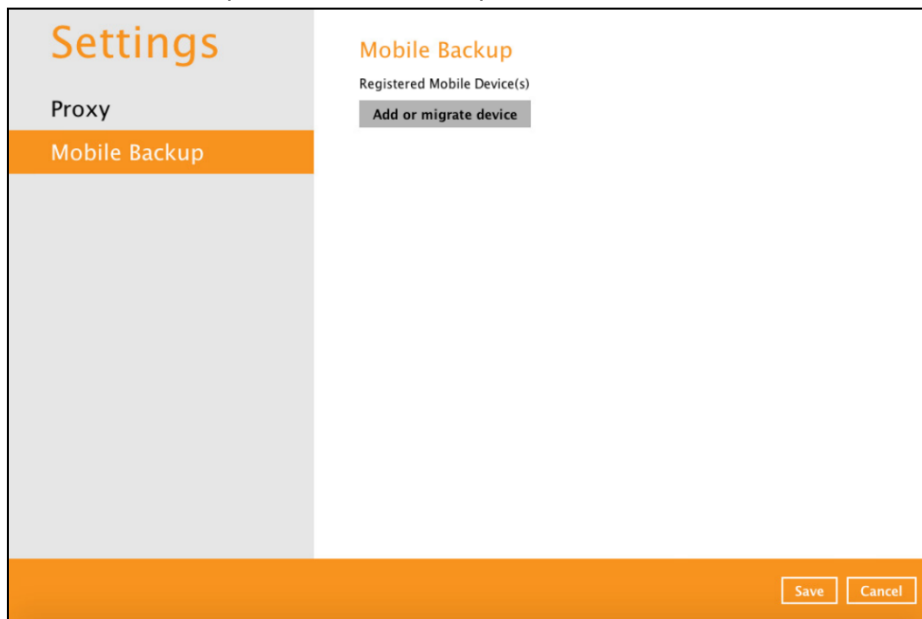
1. Click the **Delete** icon on the right side of the registered mobile device.



2. A confirmation message will appear, click **Yes** to proceed. Otherwise, click **No**.

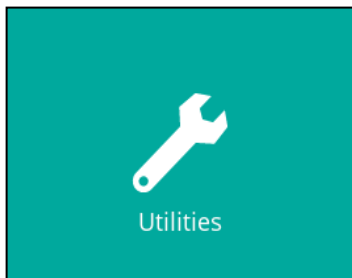


3. Mobile device is successfully removed along with any photos, videos, documents and 2FA accounts backed up in the mobile backup destination.



9.9 Utilities

This feature allows user to perform quality check on the backed up data, free up storage from obsolete files, delete, and decrypt backed up data.



There are four (4) options available for this feature:

- **Data Integrity Check**
- **Space Freeing Up**
- **Delete Backup Data**
- **Decrypt Backup Data**

9.9.1 Data Integrity Check

The Data Integrity Check (DIC) is used to identify the data in the backup set that has index-related issues, remove any corrupted file(s) from the backup destination(s) to ensure the integrity of the backup data and its restorability, and update the storage statistics.

For an efficient management of overall storage size of the backup destination(s), the Data Integrity Check job will perform check for the backup destination(s) to remove old index files that are more than ninety (90) days old in the backup job folder(s).

There are four (4) options in performing the Data Integrity Check:

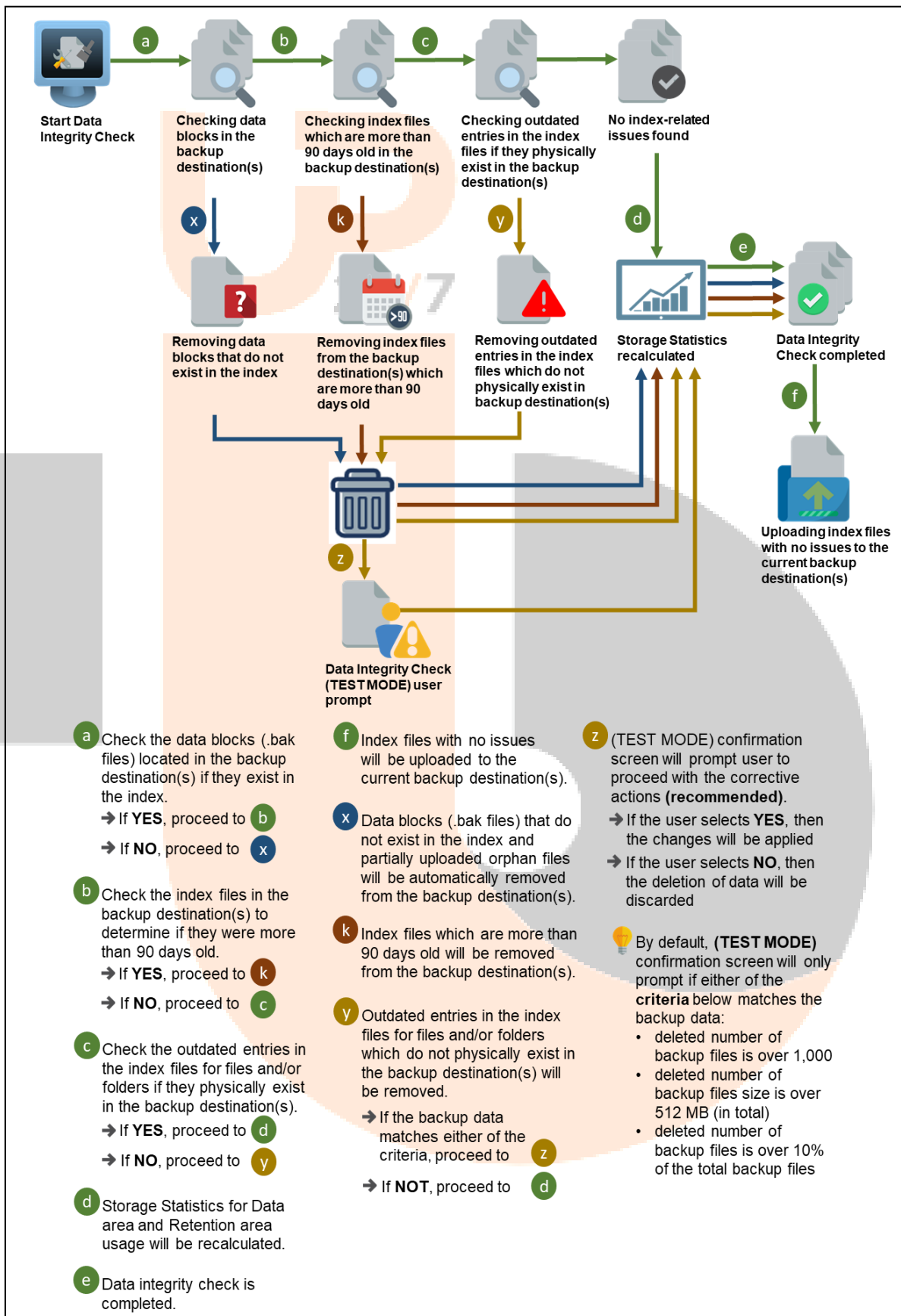
| Settings | Function |
|--|---|
| Option 1 <input type="checkbox"/> Run Cyclic Redundancy Check (CRC) during data integrity check <input type="checkbox"/> Rebuild index <input type="button" value="Start"/> | For checking of index and data. |
| Option 2 <input checked="" type="checkbox"/> Run Cyclic Redundancy Check (CRC) during data integrity check <input type="checkbox"/> Rebuild index <input type="button" value="Start"/> | For checking of index and integrity of files against the checksum file generated at the time of the backup job. |
| Option 3 <input type="checkbox"/> Run Cyclic Redundancy Check (CRC) during data integrity check <input checked="" type="checkbox"/> Rebuild index <input type="button" value="Start"/> | For checking and rebuilding of index. |

| | |
|---|--|
| Option 4 <input checked="" type="checkbox"/> Run Cyclic Redundancy Check (CRC) during data integrity check <input checked="" type="checkbox"/> Rebuild index <input type="button" value="Start"/> | For checking of index, integrity of files against the checksum file generated at the time of the backup job and rebuilding of index. |
|---|--|

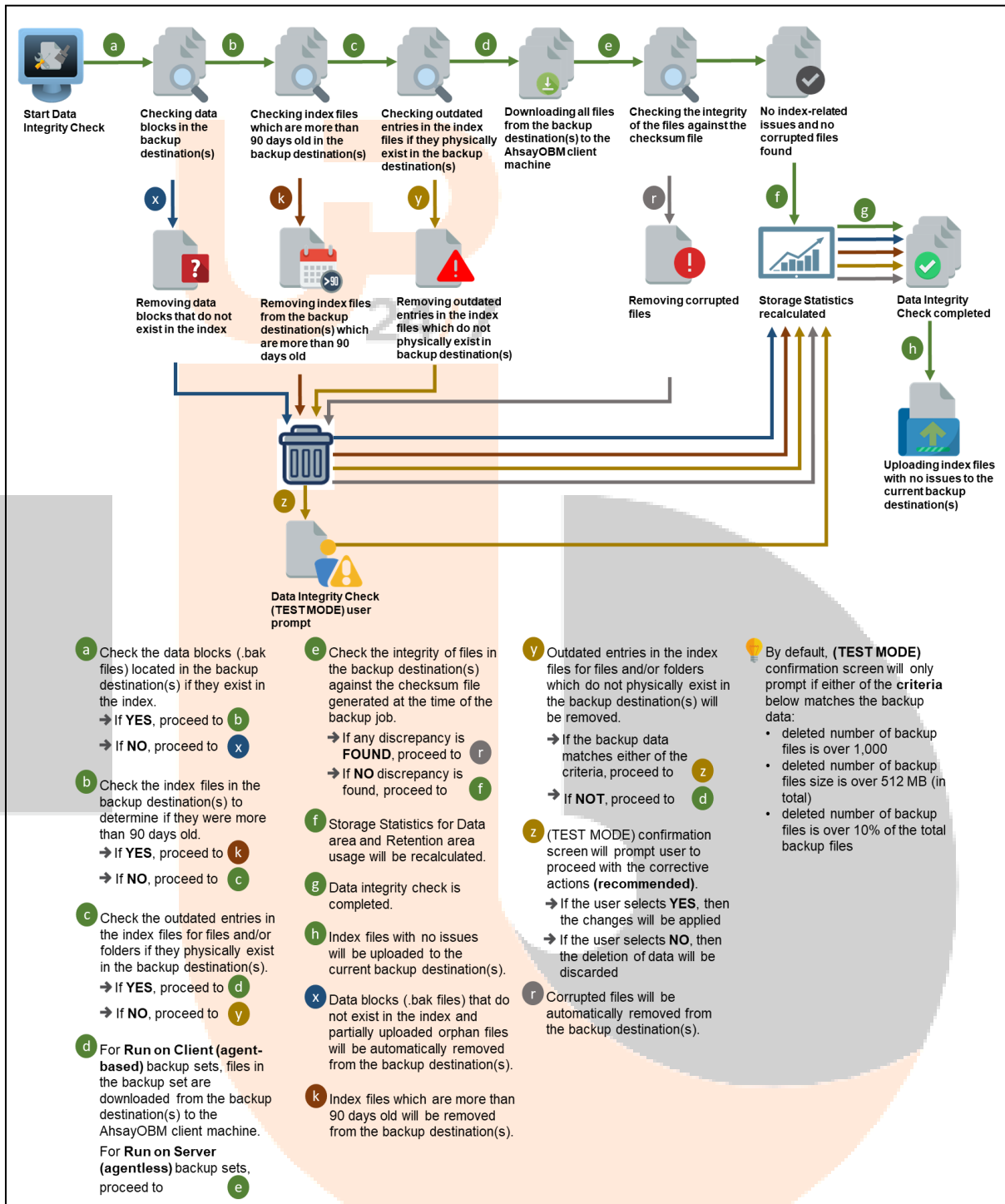
The following diagrams show the detailed process of the Data Integrity Check (DIC) in four (4) modes:

- **Option 1**
Disabled Run Cyclic Redundancy Check (CRC) and Rebuild index - **(Default mode)**
- **Option 2**
Enabled Run Cyclic Redundancy Check (CRC) and **Disabled** Rebuild index
- **Option 3**
Disabled Run Cyclic Redundancy Check (CRC) and **Enabled** Rebuild index
- **Option 4**
Enabled Run Cyclic Redundancy Check (CRC) and Rebuild index

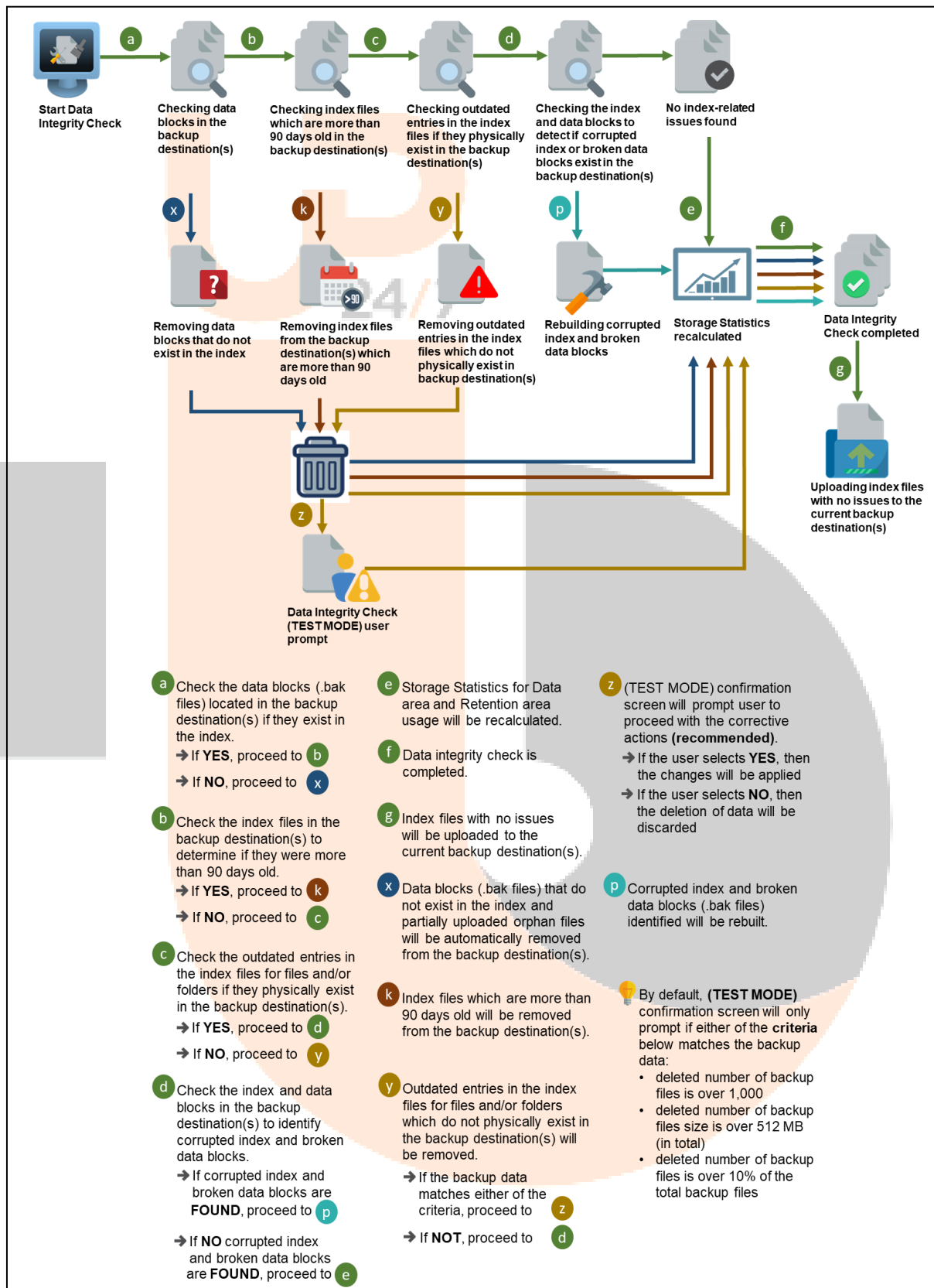
Option 1 - Data Integrity Check (DIC) Process with Run Cyclic Redundancy Check (CRC) and Rebuild index **DISABLED** (Default mode)



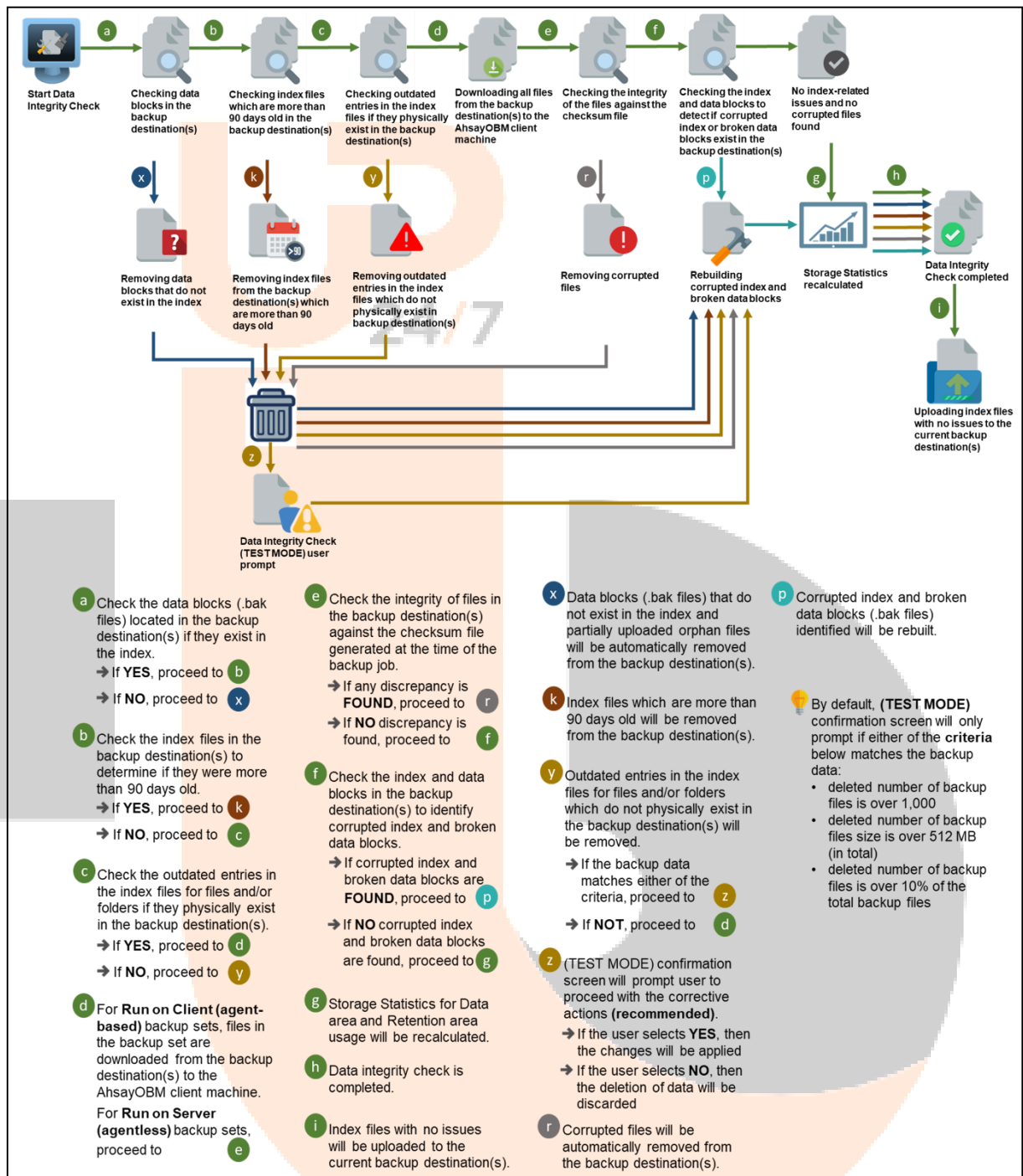
Option 2 - Data Integrity Check (DIC) Process with Run Cyclic Redundancy Check (CRC) **ENABLED** and Rebuild index **DISABLED**



Option 3 - Data Integrity Check (DIC) Process with Run Cyclic Redundancy Check (CRC) **DISABLED** and Rebuild index **ENABLED**



Option 4 - Data Integrity Check (DIC) Process with Run Cyclic Redundancy Check (CRC) and Rebuild index **ENABLED**



Utilities

- Data Integrity Check
- Space Freeing Up
- Delete Backup Data
- Decrypt Backup D...

Data Integrity Check

Perform health check for your backed up data to ensure the data integrity and restorability

Select a backup set

All

Run Cyclic Redundancy Check (CRC) during data integrity check

Rebuild index

Start

Close

NOTES

1. Data Integrity Check CANNOT fix or repair files that are already corrupted.
2. Data Integrity Check can only be started if there is NO active backup or restore job(s) running on the backup set selected for the DIC job. As the **backup**, **restore** and **data integrity check** are using the same index for read and write operations. Otherwise, an error message will be displayed in the post-DIC to indicate the Data Integrity Check is completed with error(s) and that the Data Integrity Check had skipped a backup set with an active backup job.

The following screenshot is an example of a Data Integrity Check completed with error(s). A Data Integrity Check is run on a backup set with an active backup job running which resulted the Data Integrity Check to stop with error(s).

Clicking the **View log** button will display the details of the Data Integrity Check job error(s).

Utilities

- Data Integrity Check
- Space Freeing Up
- Delete Backup Data
- Decrypt Backup D...

Data Integrity Check

Perform health check for your backed up data to ensure the data integrity and restorability

Select a backup set

Data Backup

Select a destination

All

Run Cyclic Redundancy Check (CRC) during data integrity check

Rebuild index

✘ Data Integrity Check is completed with error(s)

View log

Close

Utilities

Data Integrity Check

Log 15/11/2021 16:59 Show All

| Type | Log | Time |
|------|--|---------------------|
| ✔ | Start (B247Pro v9.0.0.46) | 15/11/2021 16:59:51 |
| ✔ | Start data integrity check on backup set "Data Backup(1636606806827)" all destination, crc disabled, rebuild index disa... | 15/11/2021 16:59:51 |
| ✘ | Skipped Backup Set = "Data Backup". Reason = "Scheduled backup set "Data Backup" is still running." | 15/11/2021 16:59:57 |
| ✘ | Finished data integrity check with error on backup set "Data Backup(1636606806827)" all destination, crc disabled, rebu... | 15/11/2021 16:59:57 |
| ✔ | Completed data integrity check on backup set "Data Backup(1636606806827)" all destination, crc disabled, rebuild inde... | 15/11/2021 16:59:57 |

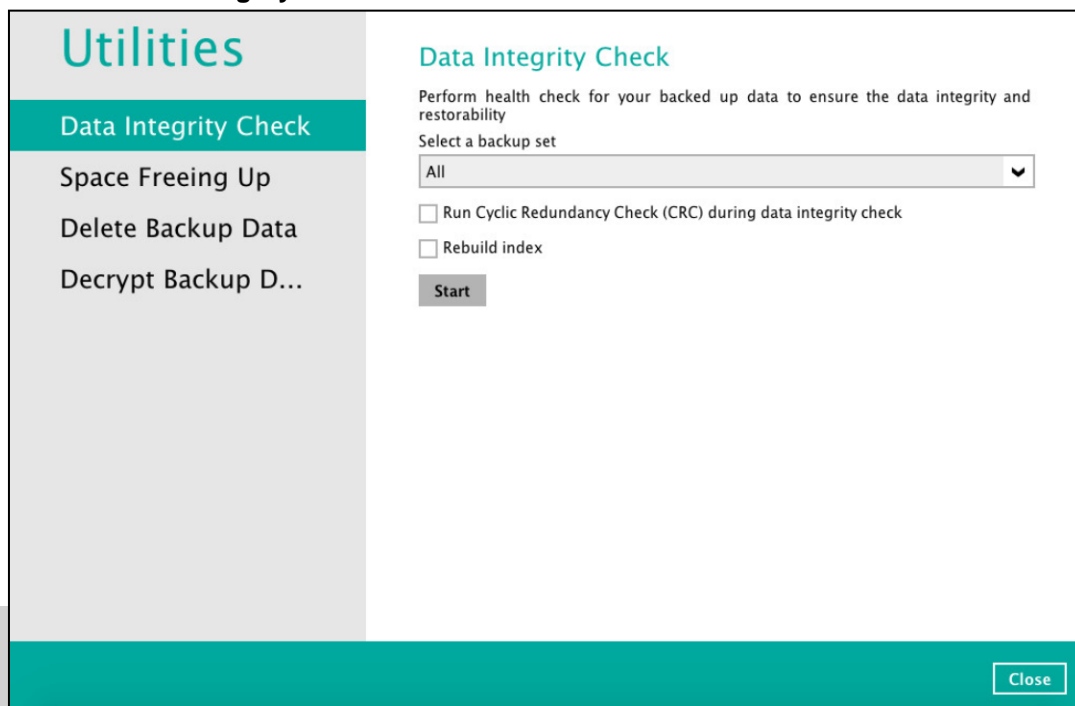
Logs per page 50 Page 1 / 1

Close

Close

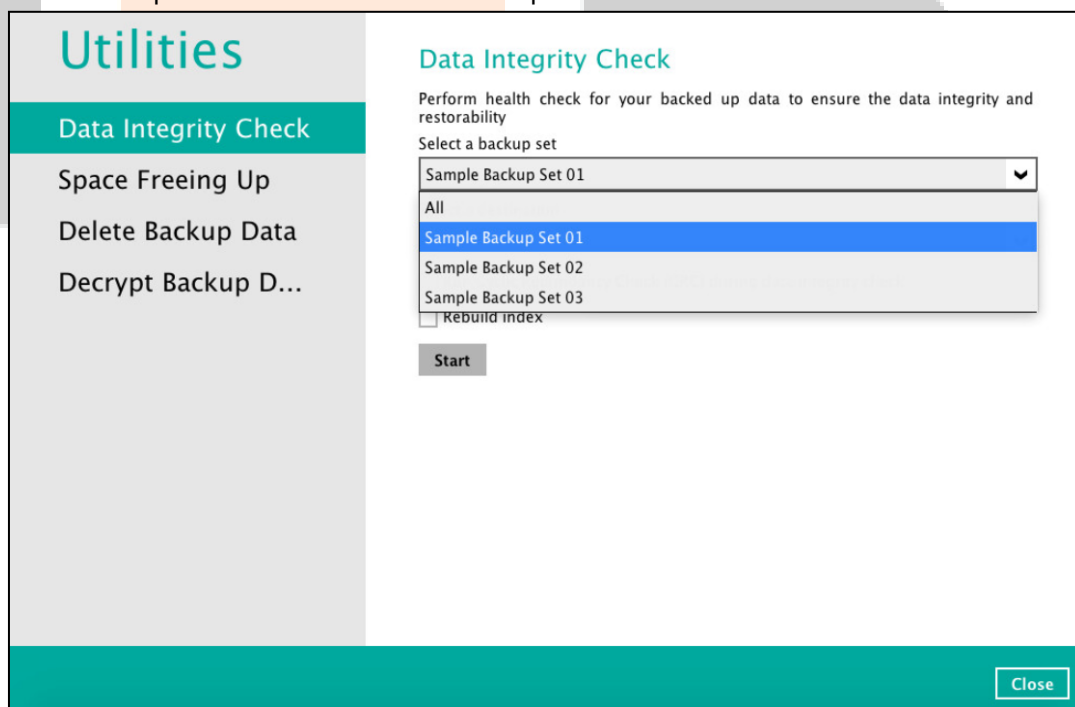
To perform a Data Integrity Check, follow the instructions below:

1. Go to the **Data Integrity Check** tab in the Utilities menu.



The screenshot shows the 'Utilities' menu on the left with 'Data Integrity Check' selected. The main panel is titled 'Data Integrity Check' and contains the following text: 'Perform health check for your backed up data to ensure the data integrity and restorability'. Below this is a 'Select a backup set' dropdown menu currently showing 'All'. There are two checkboxes: 'Run Cyclic Redundancy Check (CRC) during data integrity check' and 'Rebuild index', both of which are unchecked. A 'Start' button is located below the checkboxes. A 'Close' button is in the bottom right corner of the panel.

2. Click the drop-down button to select a backup set.



This screenshot is identical to the previous one, but the 'Select a backup set' dropdown menu is open, showing a list of options: 'All', 'Sample Backup Set 01', 'Sample Backup Set 02', and 'Sample Backup Set 03'. The 'Sample Backup Set 01' option is highlighted in blue. The 'Rebuild index' checkbox is visible below the list. The 'Start' and 'Close' buttons remain in their respective positions.

3. Click the drop-down button to select a backup destination.

Utilities

- Data Integrity Check
- Space Freeing Up
- Delete Backup Data
- Decrypt Backup D...

Data Integrity Check

Perform health check for your backed up data to ensure the data integrity and restorability

Select a backup set
Sample Backup Set 03

Select a destination
All
B247CBS

Start

Close

Unchecked Run Cyclic Redundancy Check (CRC) and Rebuild index options is the default setting of Data Integrity Check.

Utilities

- Data Integrity Check
- Space Freeing Up
- Delete Backup Data
- Decrypt Backup D...

Data Integrity Check

Perform health check for your backed up data to ensure the data integrity and restorability

Select a backup set
Sample Backup Set 03

Select a destination
B247CBS

Run Cyclic Redundancy Check (CRC) during data integrity check

Rebuild index

Start

Close

Run Cyclic Redundancy Check (CRC)

When this option is enabled, the DIC will perform check on the integrity of the files on the backup destination(s) against the checksum file generated at the time of the backup job.

If there is a discrepancy, this indicates that the files on the backup destination(s) are corrupted and will be removed from the backup destination(s). If these files still exist on the client machine on the next backup job, the Backup247 Advanced Client (B247PRO) will upload the latest copy of the files.

However, if the corrupted files are in the Retention Area, they will not be backed up again as the source file has already been deleted from the client machine.

The time required to complete a Data Integrity Check depends on the number of factors such as:

- number of files and/or folders in the backup set(s)
- bandwidth available on the client computer
- hardware specifications of the client computer such as, the disk I/O and CPU performance

NOTE

For user(s) with metered internet connection, additional data charges may be incurred if the Cyclic Redundancy Check (CRC) is enabled. As CRC data involves downloading the data from the backup destination(s) to the client machine in order to perform this check.

Rebuild index

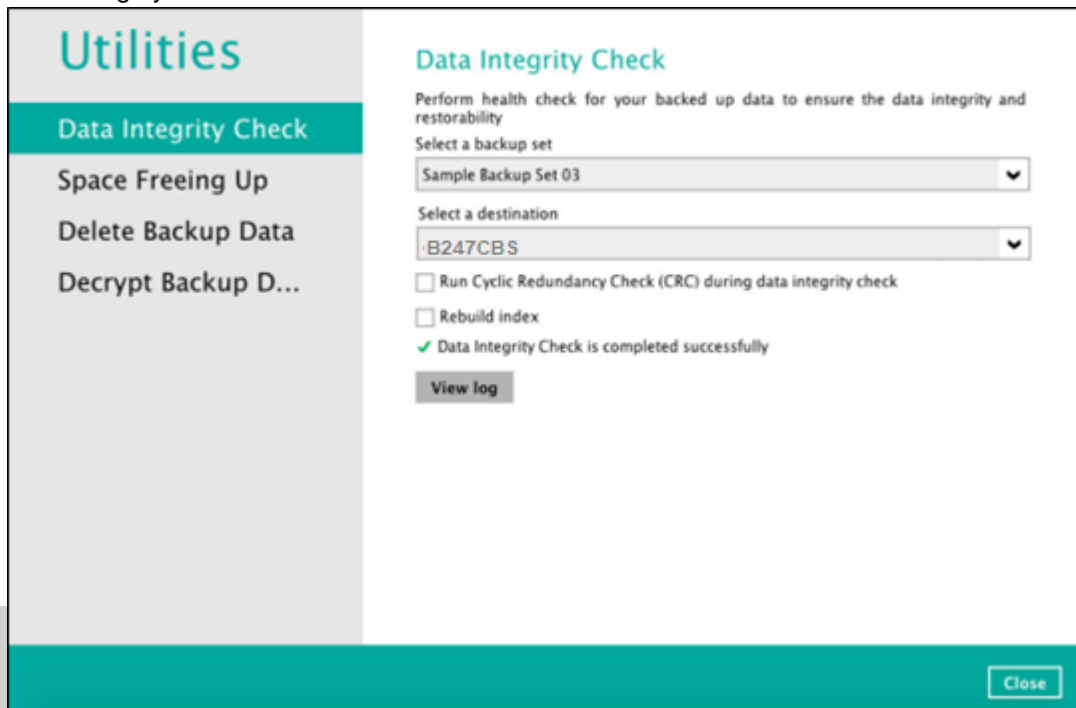
When this option is enabled, the Data Integrity Check will start rebuilding corrupted index and/or broken data blocks if there are any.

4. Click the **Start** button to begin the Data Integrity Check.
5. The Data Integrity Check will start running on the selected backup set(s) and backup destination(s).

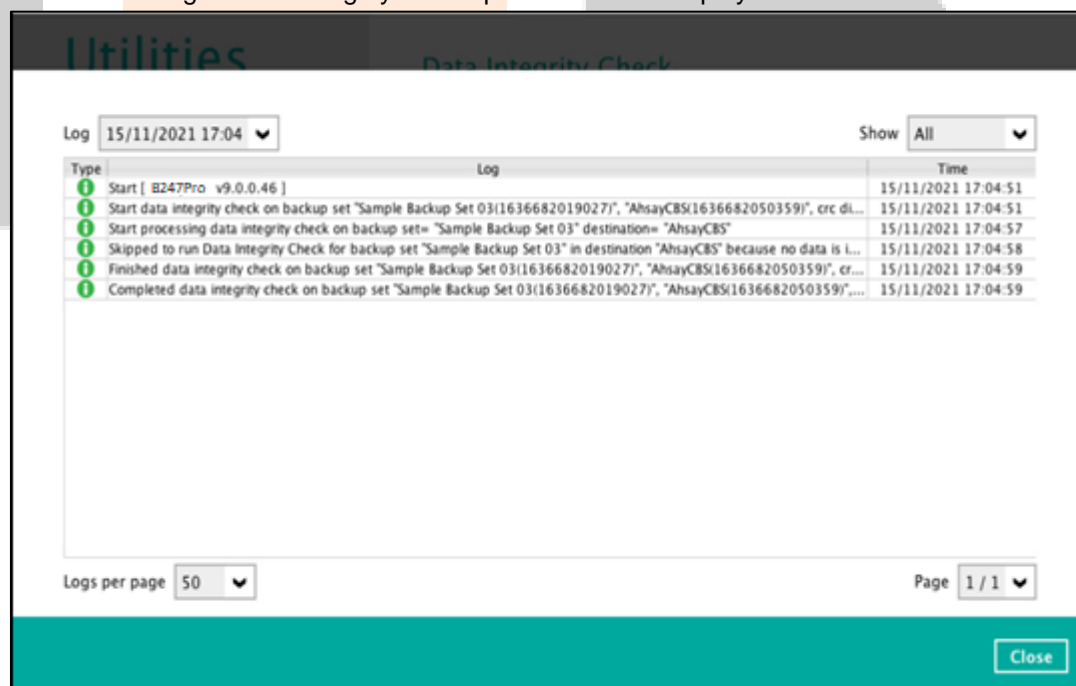
The screenshot shows the 'Data Integrity Check' utility window. On the left is a 'Utilities' sidebar with options: 'Data Integrity Check' (selected), 'Space Freeing Up', 'Delete Backup Data', and 'Decrypt Backup D...'. The main panel is titled 'Data Integrity Check' and contains the following elements:

- Instruction: 'Perform health check for your backed up data to ensure the data integrity and restorability'
- 'Select a backup set' dropdown menu with 'Sample Backup Set 03' selected.
- 'Select a destination' dropdown menu with 'B247CBS' selected.
- Two checkboxes: 'Run Cyclic Redundancy Check (CRC) during data integrity check' and 'Rebuild index', both currently unchecked.
- A status indicator: 'Start processing data integrity check on backup set= "Sample Backup Set 03" de...'
- A 'Stop' button.
- A 'Close' button in the bottom right corner.

- Once the DIC is completed, click the **View log** button to check the detailed process of the Data Integrity Check.

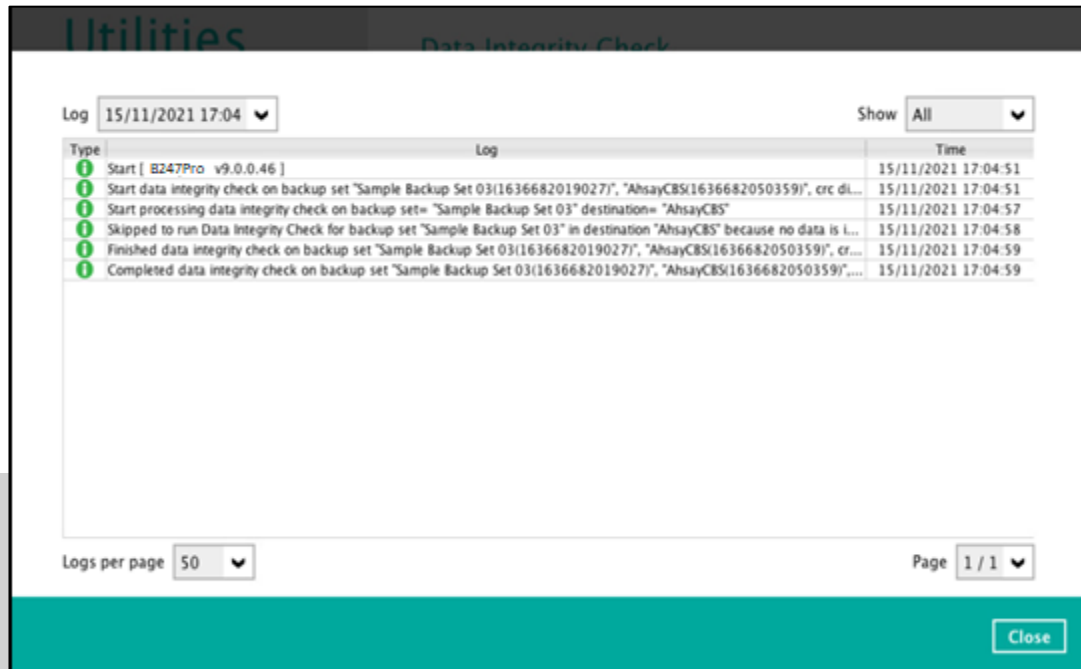


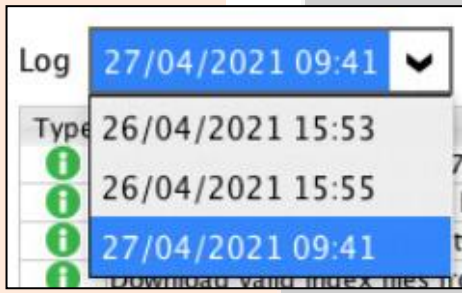
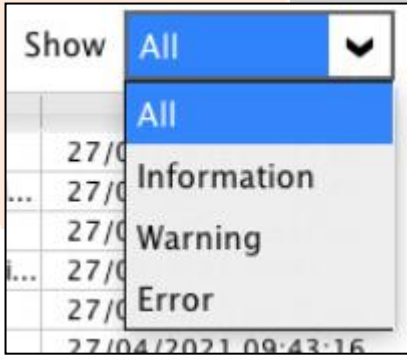
- The detailed log of Data Integrity Check process will be displayed.

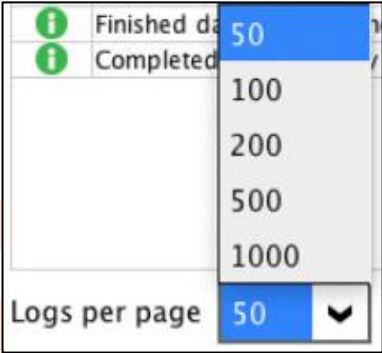
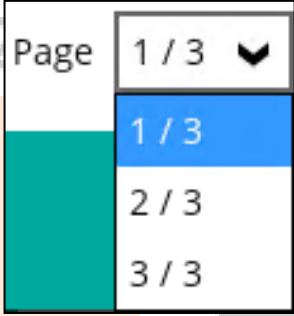


The following options can be used for further viewing of the detailed DIC log:

- Log filter
- Show filter
- Logs per page
- Page



| Option | Screenshot | Function |
|--------------------|--|--|
| Log Filter |  | This option is used to display the available logs of the Data Integrity Check jobs. |
| Show filter |  | This option is used to sort the Data Integrity Check log by its status (i.e., All, Information, Warning, and Error). |

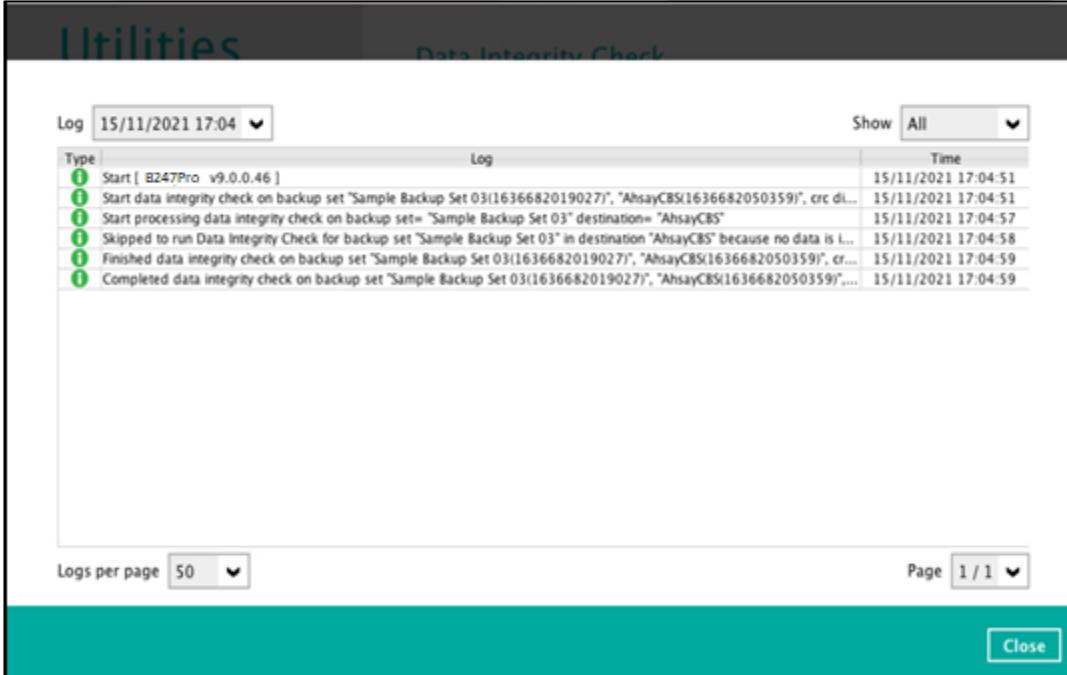
| | | |
|-----------------------------|--|---|
| <p>Logs per page</p> |  | <p>This option allows user to choose the displayed number of logs per page.</p> |
| <p>Page</p> |  | <p>This option allows user to navigate the logs to the next page(s).</p> |

Data Integrity Check Result

There are two possible outcomes after the completion of a Data Integrity Check:

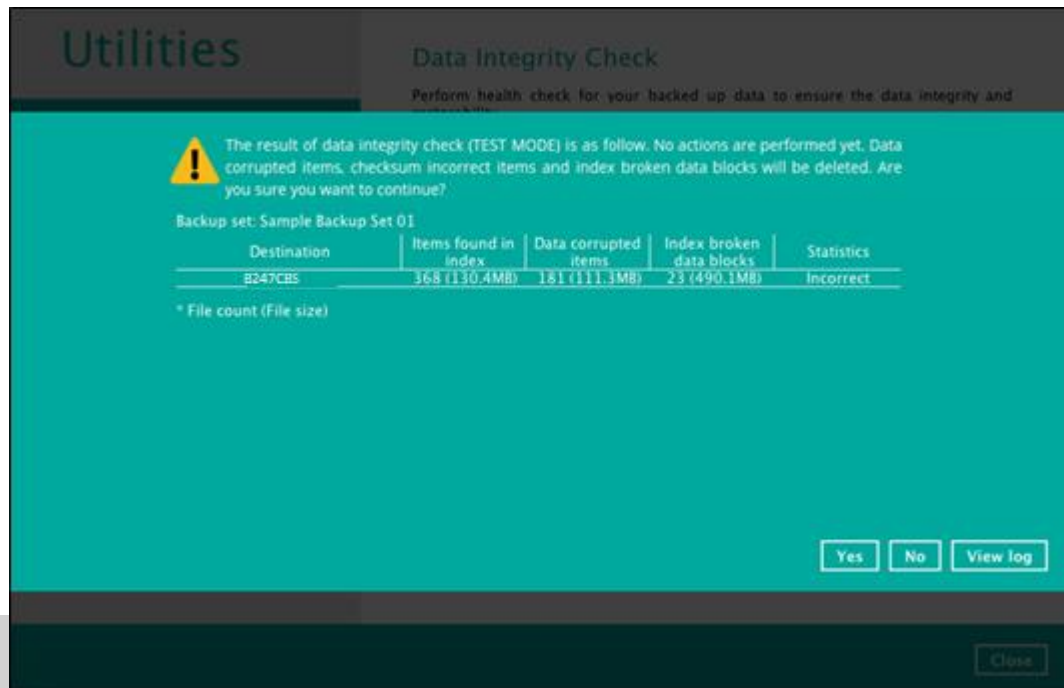
- Data Integrity Check is completed successfully with no data corruption or index-related issues detected;
- Corrupted data (e.g., index files, checksum files and/or broken data blocks) has been detected

The screenshot below shows an example of a Data Integrity Check log with NO data corruption or index-related issues detected.



| Type | Log | Time |
|---|-----|---------------------|
| Start [B247Pro v9.0.0.46] | | 15/11/2021 17:04:51 |
| Start data integrity check on backup set "Sample Backup Set 03(1636682019027)", "AhsayCBS(1636682050359)", crc d... | | 15/11/2021 17:04:51 |
| Start processing data integrity check on backup set= "Sample Backup Set 03" destination= "AhsayCBS" | | 15/11/2021 17:04:57 |
| Skipped to run Data Integrity Check for backup set "Sample Backup Set 03" in destination "AhsayCBS" because no data is l... | | 15/11/2021 17:04:58 |
| Finished data integrity check on backup set "Sample Backup Set 03(1636682019027)", "AhsayCBS(1636682050359)", cr... | | 15/11/2021 17:04:59 |
| Completed data integrity check on backup set "Sample Backup Set 03(1636682019027)", "AhsayCBS(1636682050359)", | | 15/11/2021 17:04:59 |

If any index-related error(s) or data corrupted item(s) is found, the **(TEST MODE)** confirmation screen will be displayed.



This is to inform the user of the following details:

- Backup set that contains an error
- Backup Destination
- Items found in index
- Data corrupted items
- Index broken data blocks
- Statistics (i.e. Correct or Incorrect)


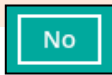
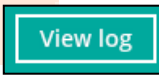
Test Mode Confirmation

The (TEST MODE) confirmation screen will **ONLY** appear if either of the **criteria** below matches the backup data during the Data Integrity Check process:

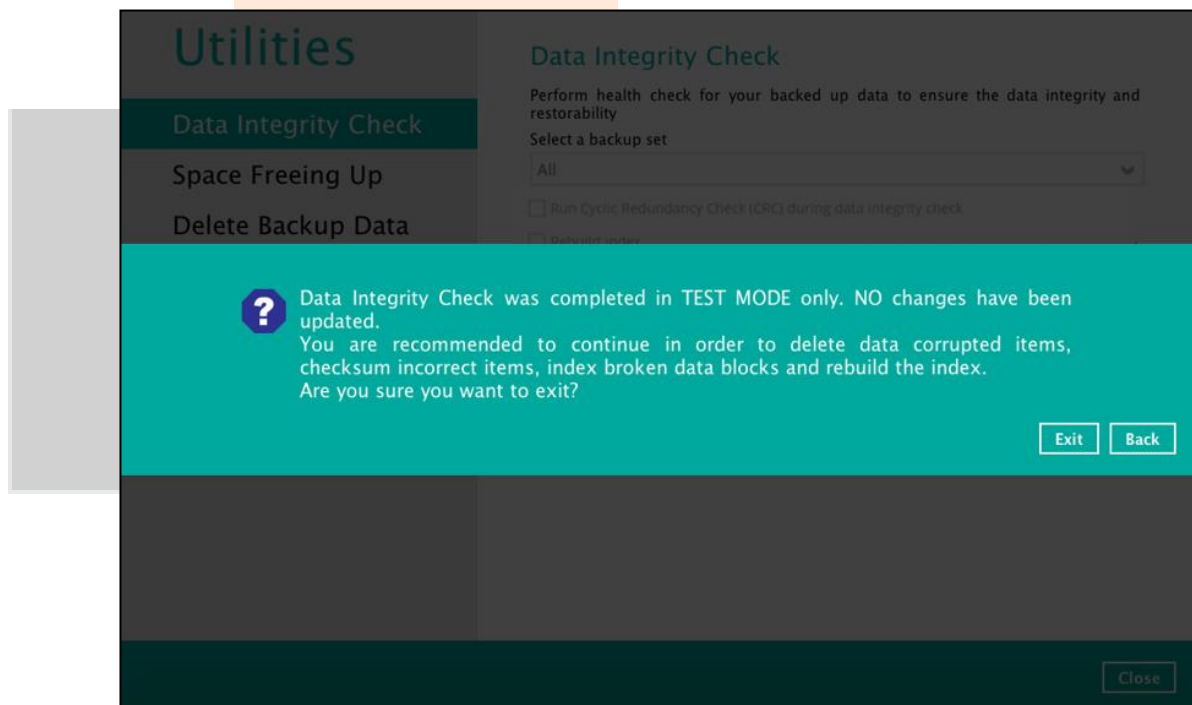
- deleted number of backup files is over 1,000
- deleted number of backup file size is over 512 MB (in total)
- deleted number of backup files is over 10% of the total backup files

Otherwise, the Data Integrity Check job will **automatically** take corrective actions.

There are three (3) options on the (TEST MODE) confirmation screen:

| Option | Screenshot | Function |
|-----------------|---|---|
| Yes |  | Corrupted data (e.g. index files, checksum files and/or broken data blocks) will be deleted and storage statistics will be updated. |
| No |  | No action(s) will be taken and a message will prompt. |
| View log |  | The detailed log of the Data Integrity Check process will be displayed. |

Clicking **No** will display the following screen:



If the **Exit** button is clicked, the Data Integrity Check result will be discarded.

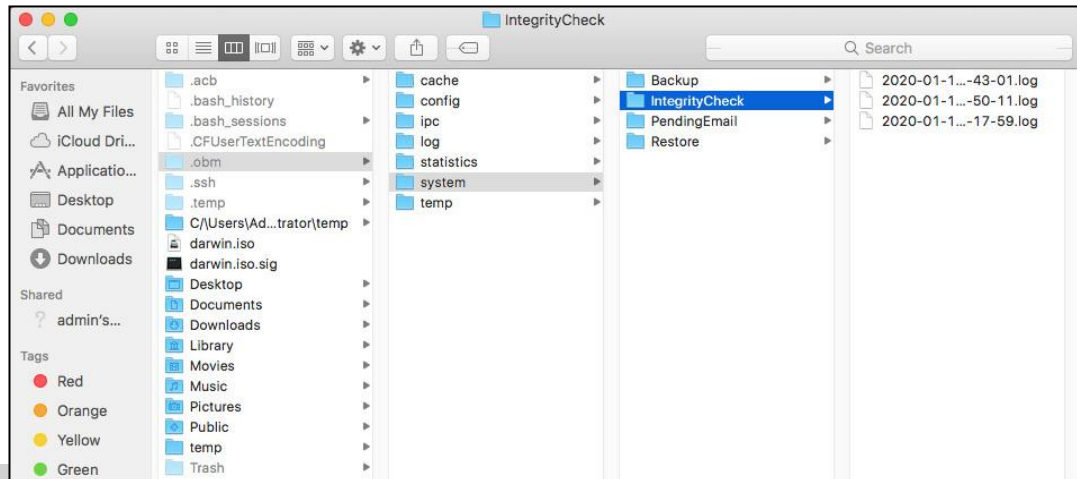
If the **Back** button is clicked, it will go back to the (TEST MODE) confirmation screen.

NOTES

1. It is strongly recommended to apply corrective actions when the (TEST MODE) confirmation screen pops up (clicking the **Yes** button). This is to ensure that the remaining corrupted file(s) will be removed from the backup destination(s), therefore on the next backup job, these files are backed up again if they are still present on the client machine. However, if the corrupted files are in Retention Area, then they will not be backed up again as the source file has already been deleted from the client machine.
2. If the DIC detects data blocks (.bak files) in the backup destination(s) that do not have related index entries, then these physical data blocks will be **automatically** removed from the backup destination(s) without the (TEST MODE) prompt.

Aside from viewing the Data Integrity Check logs directly on Backup247 Advanced Client (B247PRO) client, they can also be viewed on the file system of the Backup247 Advanced Client (B247PRO) client machine. For Backup247 Advanced Client (B247PRO) on macOS, the DIC logs are located in the following directory:

%UserProfile%\lobm\system\IntegrityCheck

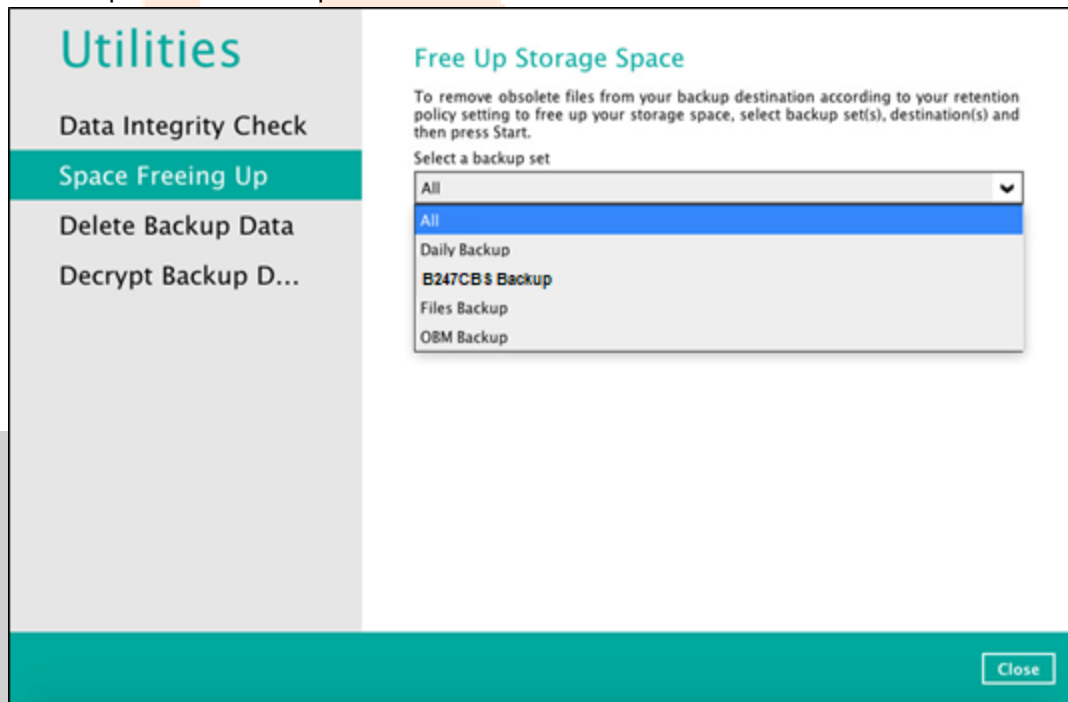


9.9.2 Space Freeing Up

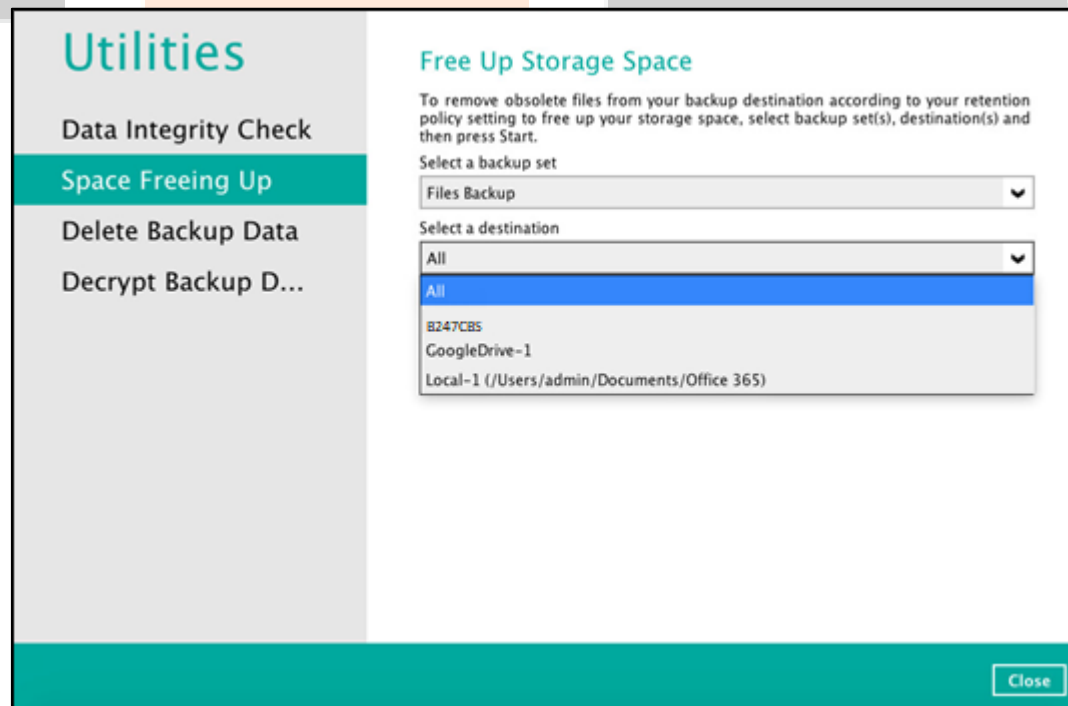
This feature is used to remove obsolete file(s) from your backup set and destination (manually start Retention Policy). After the Space Freeing Up job is completed, the storage statistics of the backup set(s) are updated.

To perform Space Freeing Up, follow the instructions below:

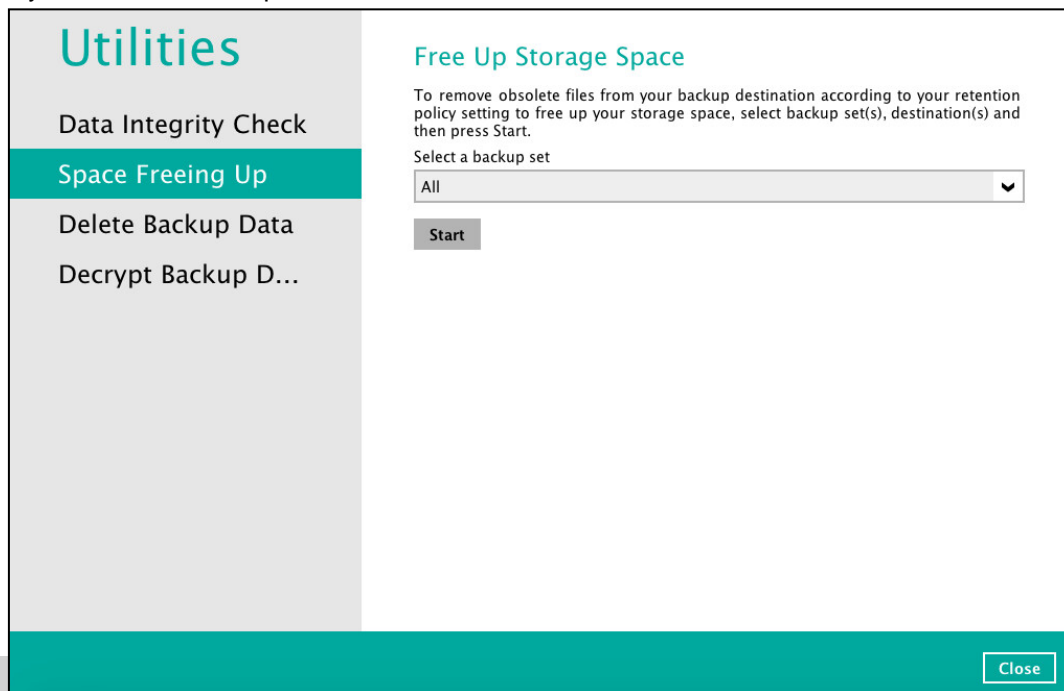
1. Select a backup set from the drop-down list.



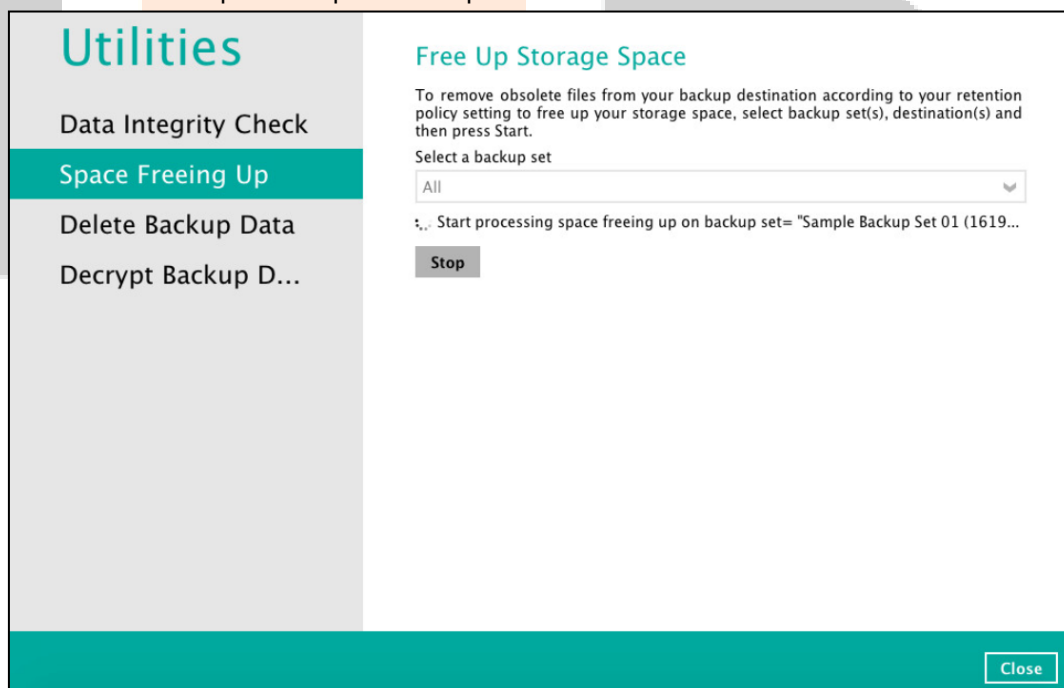
If you select a specific backup set, then you will also have to select a specific destination or all destinations.



If you select All backup sets, then there is no need to select a destination.



2. Click the **Start** button to perform space free up.



3. The status will be shown once completed. Click the **View log** button to see the detailed report of the space freeing up job.

Utilities

Data Integrity Check

Space Freeing Up

Delete Backup Data

Decrypt Backup D...

Free Up Storage Space

To remove obsolete files from your backup destination according to your retention policy setting to free up your storage space, select backup set(s), destination(s) and then press Start.

Select a backup set

All

✓ Space freeing up is completed successfully

View log

Close

Utilities

Free Up Storage Space

Log 16/11/2021 10:32

Show All

| Type | Log | Time |
|--|-----|---------------------|
| Start [B247Pro v9.0.0.46] | | 16/11/2021 10:32:14 |
| Start space freeing up on all backup sets | | 16/11/2021 10:32:14 |
| Start processing space freeing up on backup set= "Data Backup (1636606806827)" destination= "AhsayCBS (16366068..." | | 16/11/2021 10:32:20 |
| Download valid index files from backup job "Current" to "/Users/admin/.obm/temp/1636606806827/OBS@163660682... | | 16/11/2021 10:32:22 |
| Space freeing up on backup set= "Data Backup (1636606806827)" destination= "AhsayCBS (1636606824692)" is compl... | | 16/11/2021 10:32:24 |
| Start processing space freeing up on backup set= "Sample Backup Set 03 (1636682019027)" destination= "AhsayCBS (1... | | 16/11/2021 10:32:30 |
| Space freeing up on backup set= "Sample Backup Set 03 (1636682019027)" destination= "AhsayCBS (1636682050359)..." | | 16/11/2021 10:32:33 |
| Start processing space freeing up on backup set= "BackupSet-1 (1636942721817)" destination= "AhsayCBS (16369428..." | | 16/11/2021 10:32:39 |
| Download valid index files from backup job "Current" to "/Users/admin/.obm/temp/1636942721817/OBS@163694282..." | | 16/11/2021 10:32:40 |
| Space freeing up on backup set= "BackupSet-1 (1636942721817)" destination= "AhsayCBS (1636942824919)" is compl... | | 16/11/2021 10:32:41 |
| Start processing space freeing up on backup set= "BackupSet-3 (1636957528711)" destination= "AhsayCBS (16369577..." | | 16/11/2021 10:32:47 |
| Download valid index files from backup job "Current" to "/Users/admin/.obm/temp/1636957528711/OBS@163695777..." | | 16/11/2021 10:32:48 |
| Space freeing up on backup set= "BackupSet-3 (1636957528711)" destination= "AhsayCBS (1636957774752)" is compl... | | 16/11/2021 10:32:49 |
| Start processing space freeing up on backup set= "BackupSet-4 (1636957911131)" destination= "AhsayCBS (16369579..." | | 16/11/2021 10:32:55 |
| Download valid index files from backup job "Current" to "/Users/admin/.obm/temp/1636957911131/OBS@163695793..." | | 16/11/2021 10:32:56 |
| Space freeing up on backup set= "BackupSet-4 (1636957911131)" destination= "AhsayCBS (1636957930924)" is compl... | | 16/11/2021 10:32:57 |
| Finished space freeing up on all backup sets | | 16/11/2021 10:32:57 |

Logs per page 50

Page 1 / 1

Close

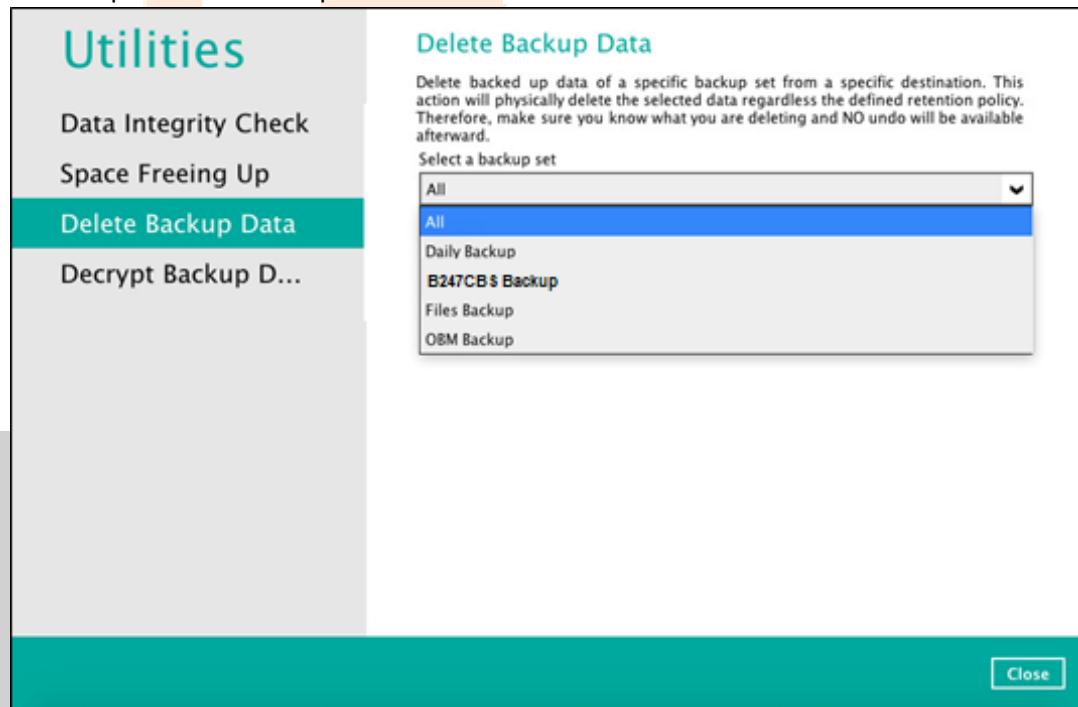
Close

9.9.3 Delete Backup Data

This feature is used to permanently delete backed up data from a backup set(s), destination(s), backup job, or delete all backed-up data. After the data is deleted, the storage statistics of the backup set(s) are updated.

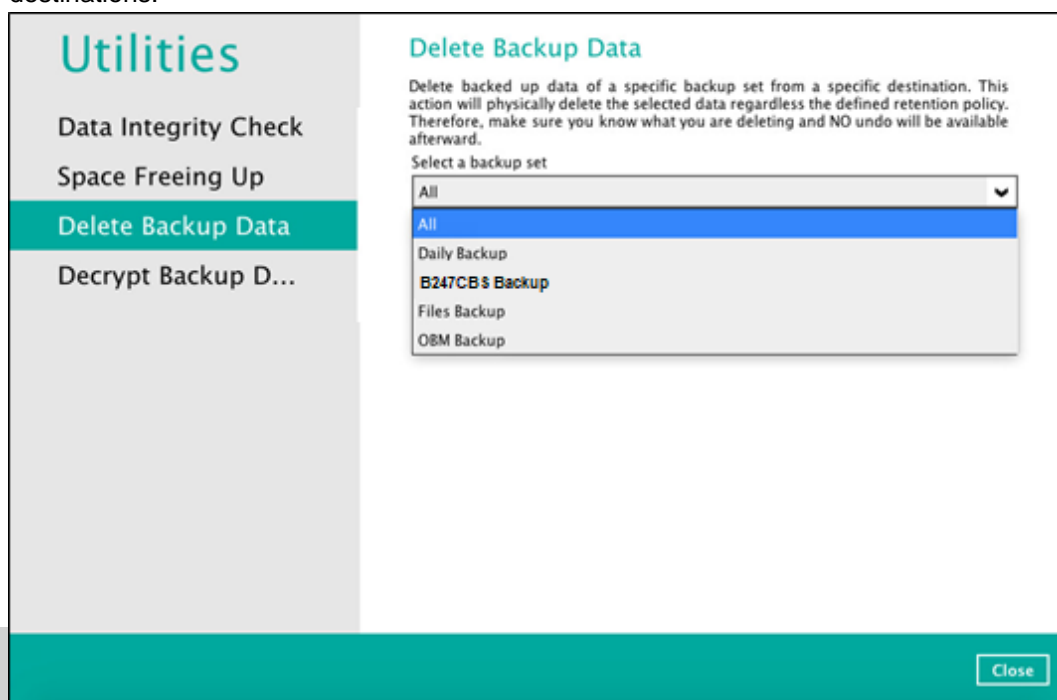
To perform deletion of backup data, follow the instructions below:

1. Select a backup set from the drop-down list.



NOTE: This will only delete the backed up files in a backup set(s) and destination(s), but the backup set and destination will remain.

If you select a specific backup set, then you will also have to select a specific destination or all destinations.



Utilities

- Data Integrity Check
- Space Freeing Up
- Delete Backup Data**
- Decrypt Backup D...

Delete Backup Data

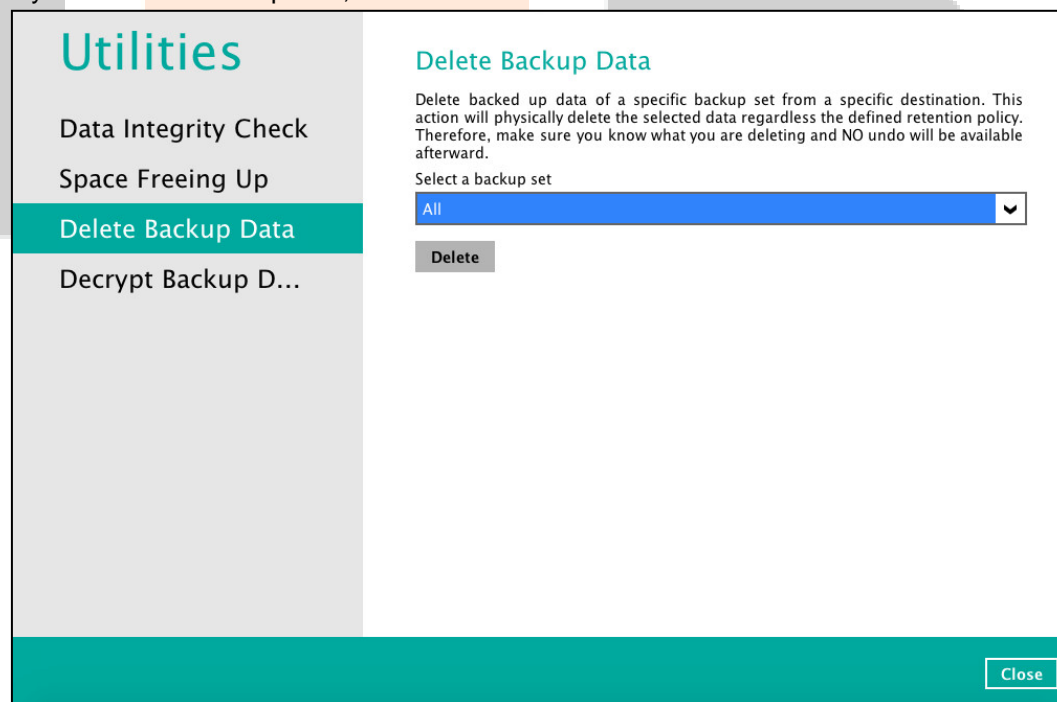
Delete backed up data of a specific backup set from a specific destination. This action will physically delete the selected data regardless the defined retention policy. Therefore, make sure you know what you are deleting and NO undo will be available afterward.

Select a backup set

- All
- All
- Daily Backup
- B247CB8 Backup**
- Files Backup
- OBM Backup

Close

If you select **All** backup sets, then there is no need to select a destination.



Utilities

- Data Integrity Check
- Space Freeing Up
- Delete Backup Data**
- Decrypt Backup D...

Delete Backup Data

Delete backed up data of a specific backup set from a specific destination. This action will physically delete the selected data regardless the defined retention policy. Therefore, make sure you know what you are deleting and NO undo will be available afterward.

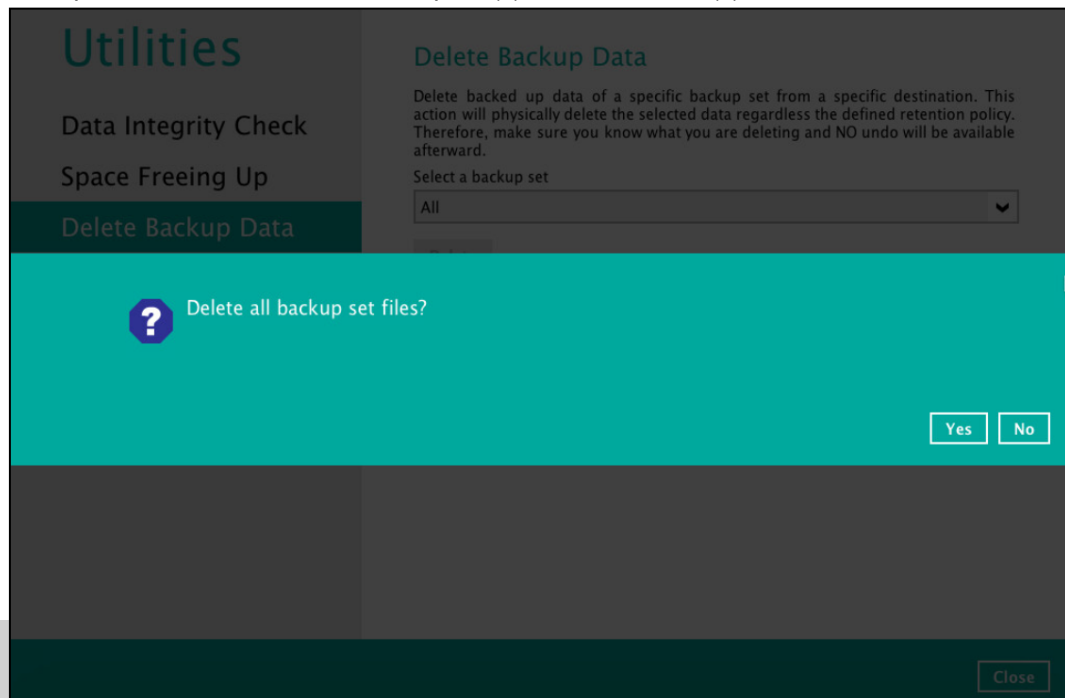
Select a backup set

- All

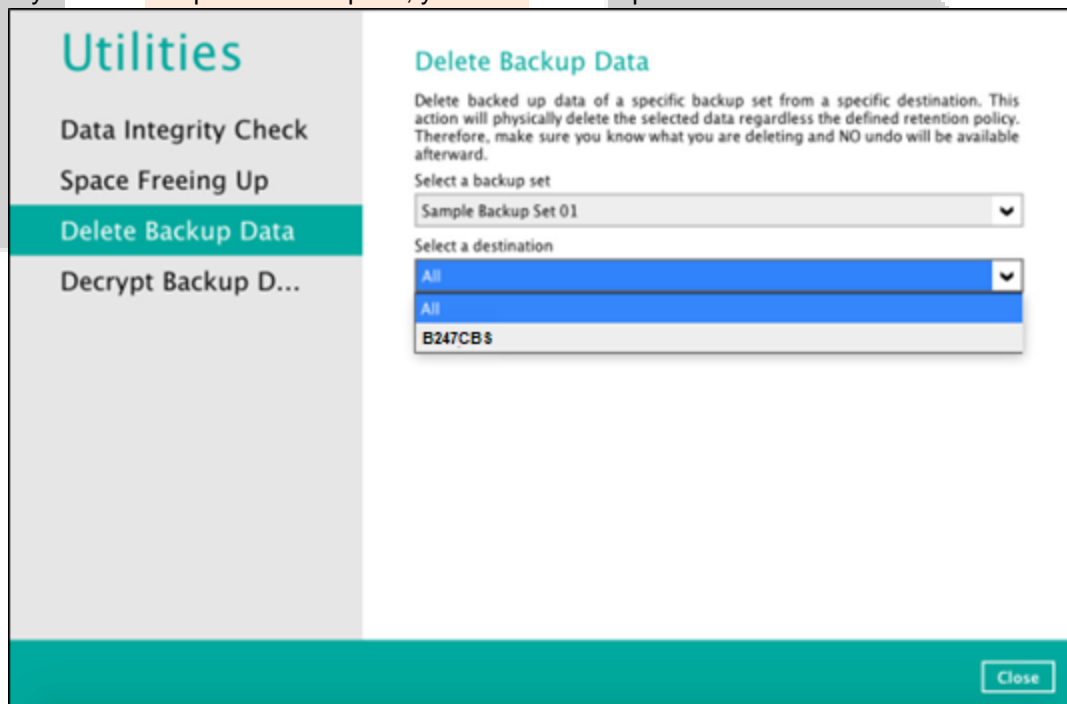
Delete

Close

2. If you choose to delete **All** backup set(s), the following message will be displayed. By clicking **Yes**, all backed up files from the selected backup set(s) and destination(s) will be deleted.

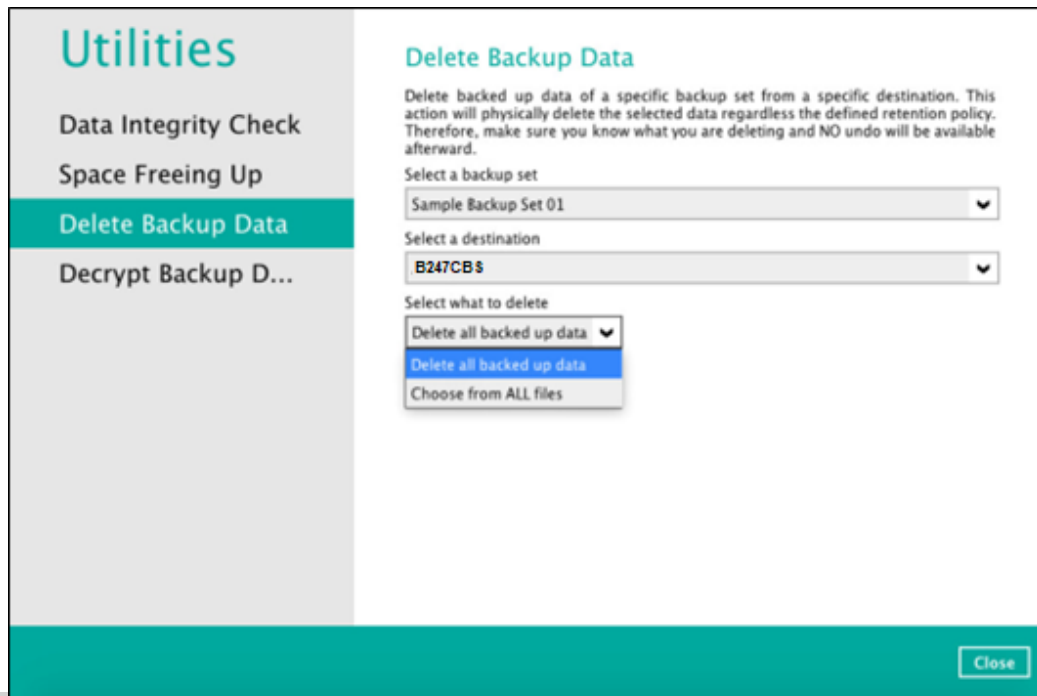


If you select a specific backup set, you will have an option to choose a destination.



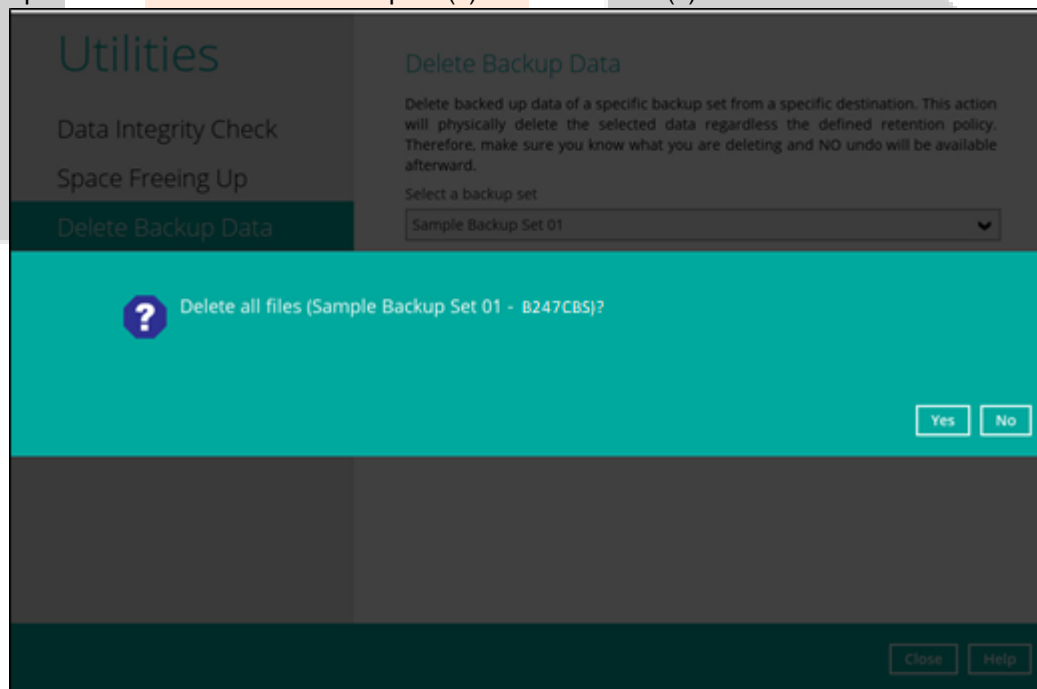
If you select a specific destination, there are two (2) available options for the type of files you wish to delete.

- Delete all backed up data
- Choose from ALL files



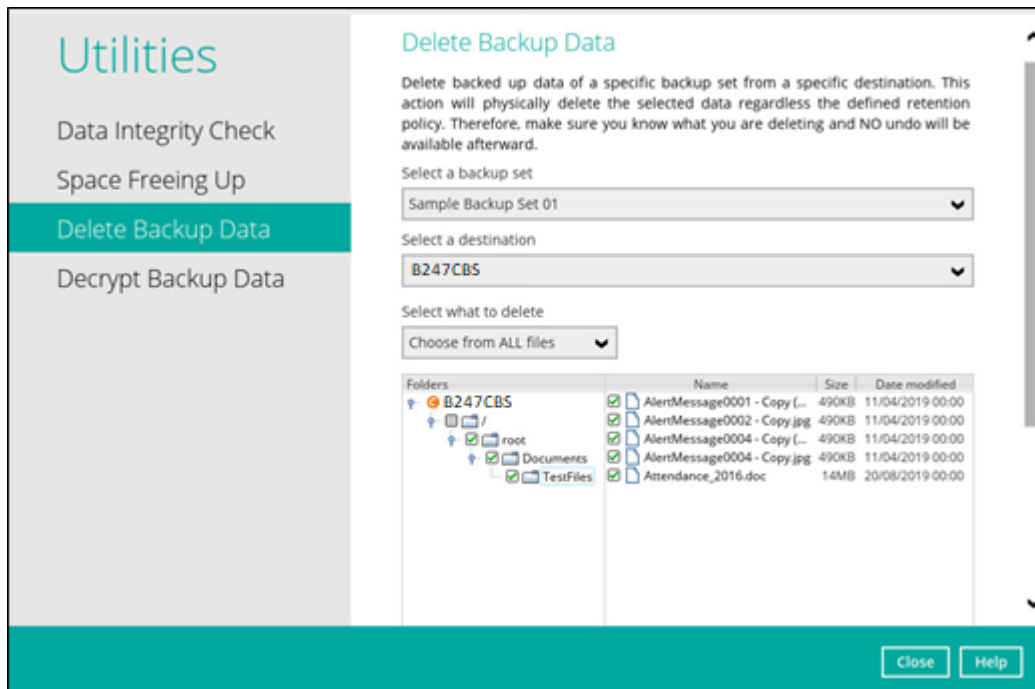
Delete all backed up data

If you choose this option, the following message will be displayed. By clicking **Yes**, all backed up data from the selected backup set(s) and destination(s) will be deleted.

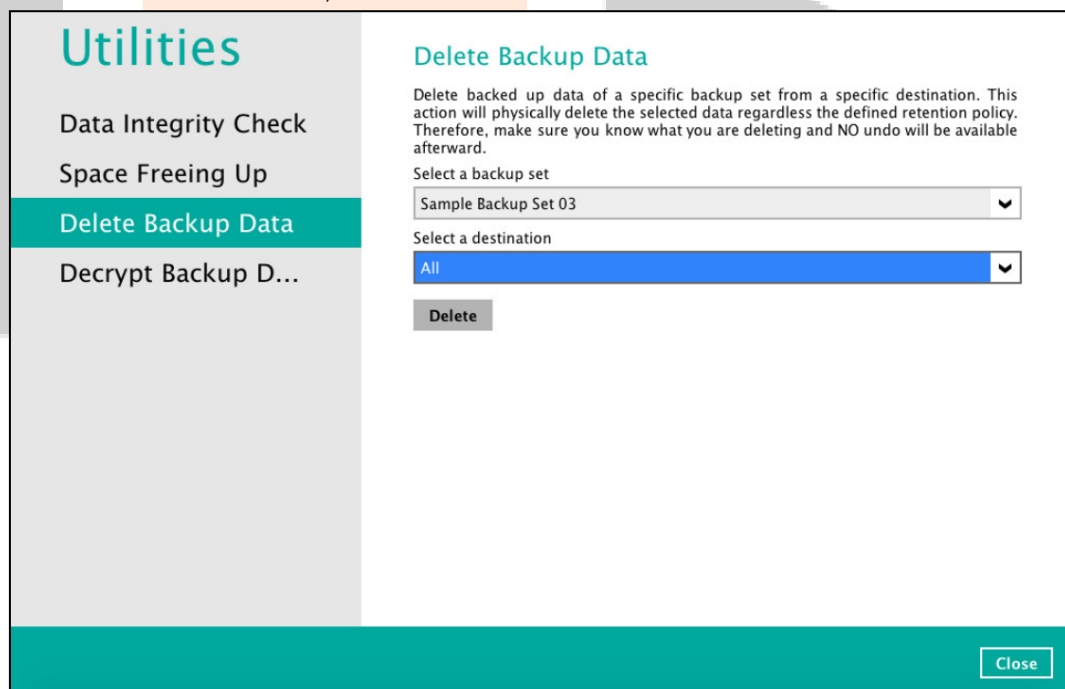


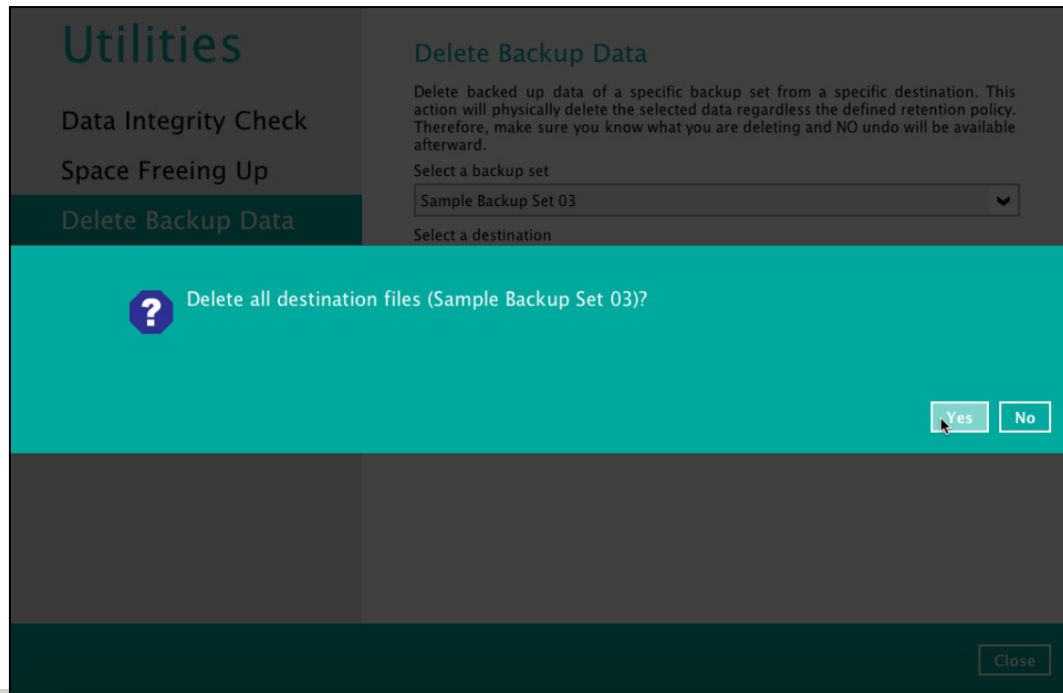
Choose from ALL files

If you choose this option, you can select to delete any file(s) in the backup set.

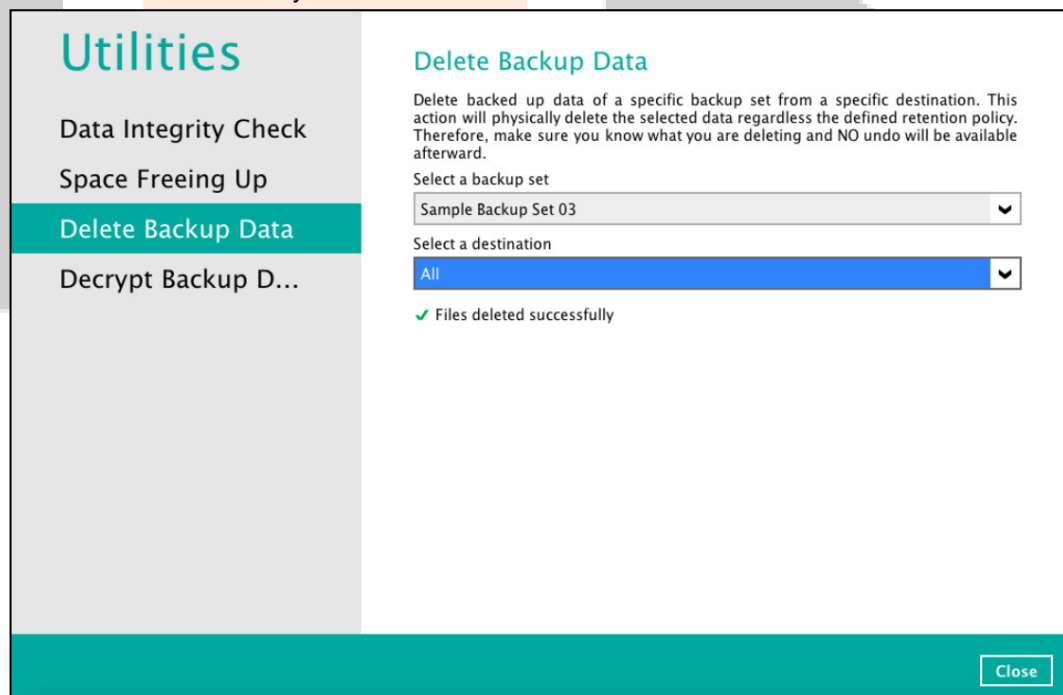


3. Click the **Delete** button, then click **Yes** to start the deletion of files.





4. Files are successfully deleted.



9.9.4 Decrypt Backup Data

This feature is used to restore raw data by using the **data encryption key** that was set for the backup set.

To perform decryption of backup data, follow the instructions below:

1. Click the **Browse** button to locate the path of the backup set ID / blocks folder.

Utilities

- Data Integrity Check
- Space Freeing Up
- Delete Backup Data
- Decrypt Backup D...**

Decrypt Backup Data

Please enter the path to the [<backup set ID>/blocks] folder which contains the backup files that you want to decrypt.

Temporary directory for storing restore files

2. Enter the path of the folder which contains the backup files you want to decrypt. Click **Decrypt** to start decrypting backup data.

Utilities

- Data Integrity Check
- Space Freeing Up
- Delete Backup Data
- Decrypt Backup D...**

Decrypt Backup Data

Please enter the path to the [<backup set ID>/blocks] folder which contains the backup files that you want to decrypt.

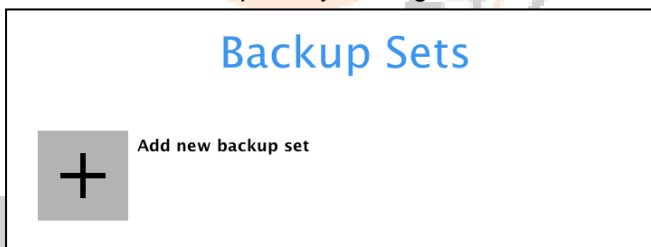
Temporary directory for storing restore files

10 Create a Backup Set

1. Click the **Backup Sets** icon on the main interface of Backup247 Advanced Client (B247PRO).



2. Create a new backup set by clicking  next to **Add new backup set**.



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

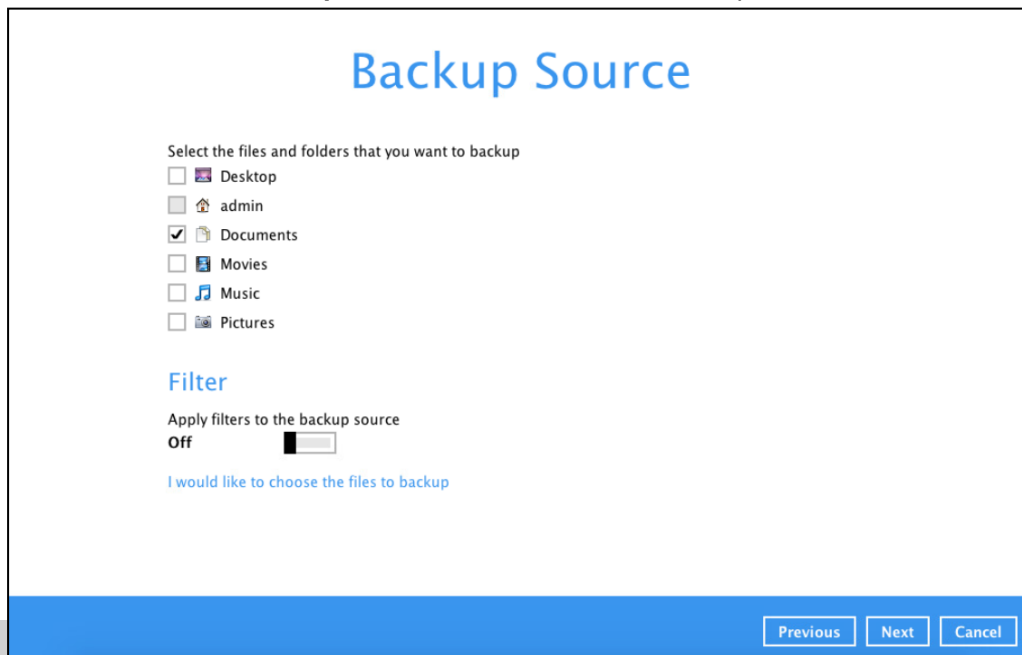
A dialog box titled "Create Backup Set" with a text input field for "Name" containing "BackupSet-1", a dropdown menu for "Backup set type" set to "File Backup", and "Next" and "Cancel" buttons at the bottom right.

Name
BackupSet-1

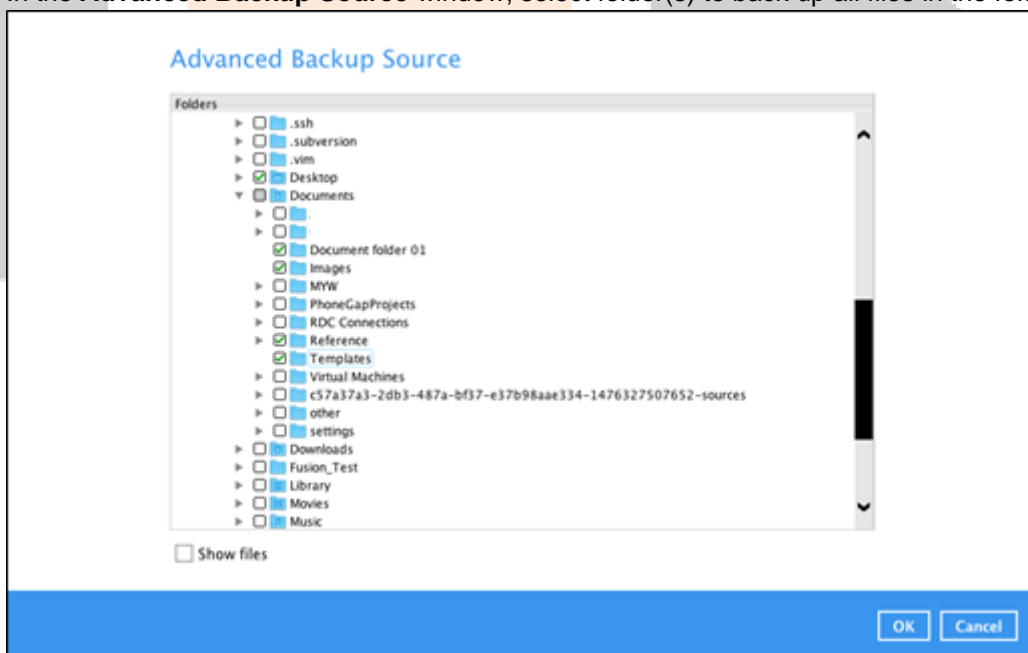
Backup set type
File Backup

Next Cancel

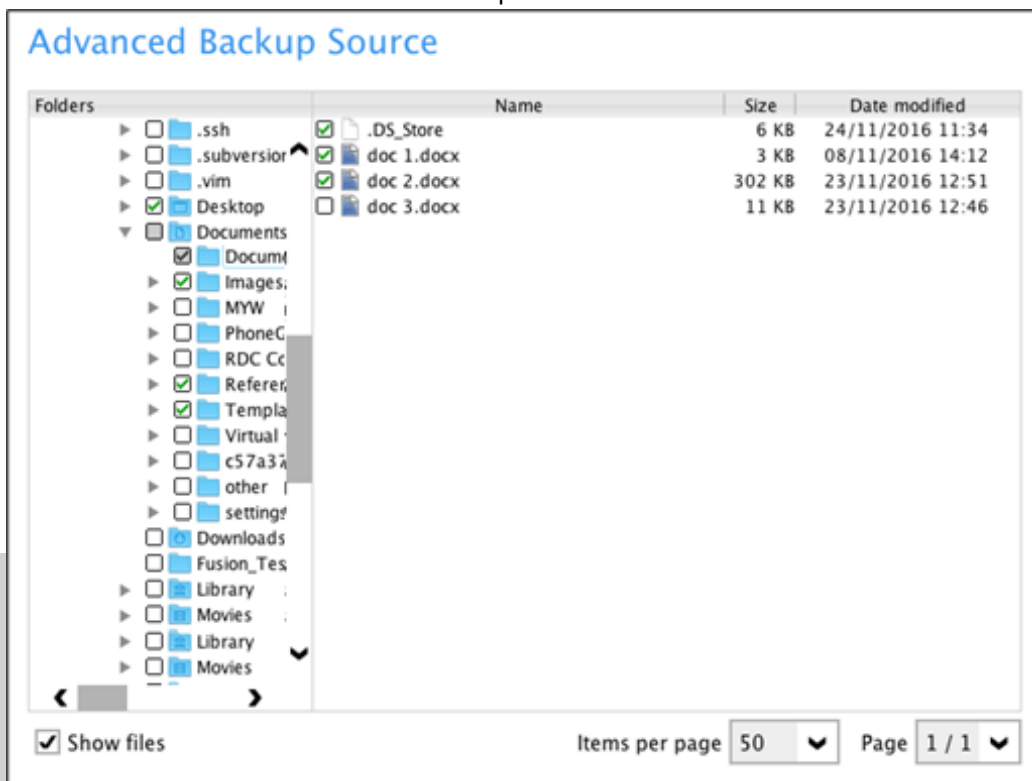
4. In the Backup Source window, select the source files and folders for backup. Click **I would like to choose the files to backup** to select individual files for backup.



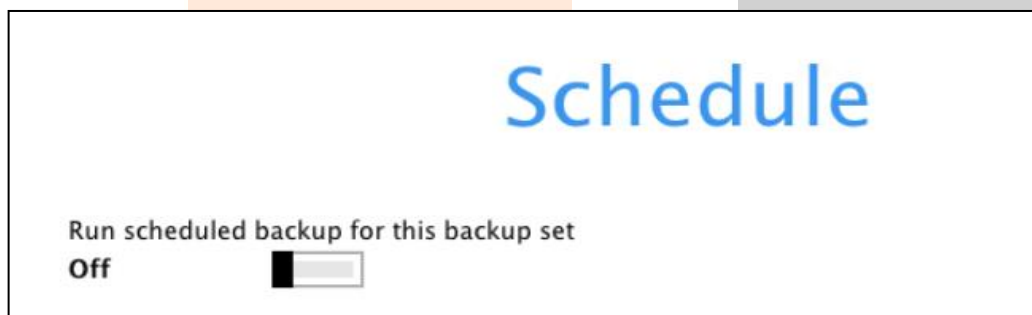
5. In the **Advanced Backup Source** window, select folder(s) to back up all files in the folder(s).



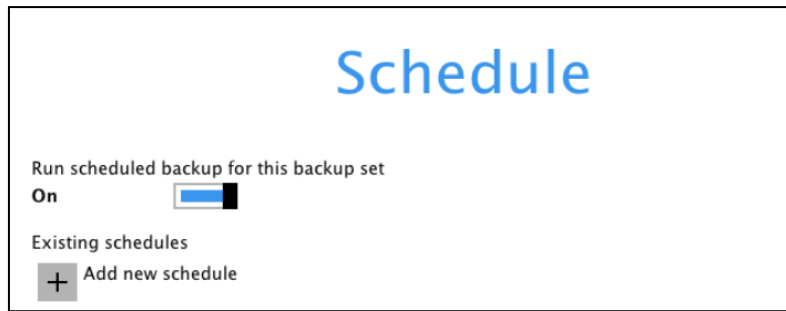
- Alternatively, if you want to back up only specific files instead of all files in your selected folder(s), select the **Show files** checkbox at the bottom of the screen. A list of files will appear on the right-hand side. Select the checkbox(es) next to the file(s) to back up. Then, click **OK** to save your selections and close the Advanced Backup Source window.



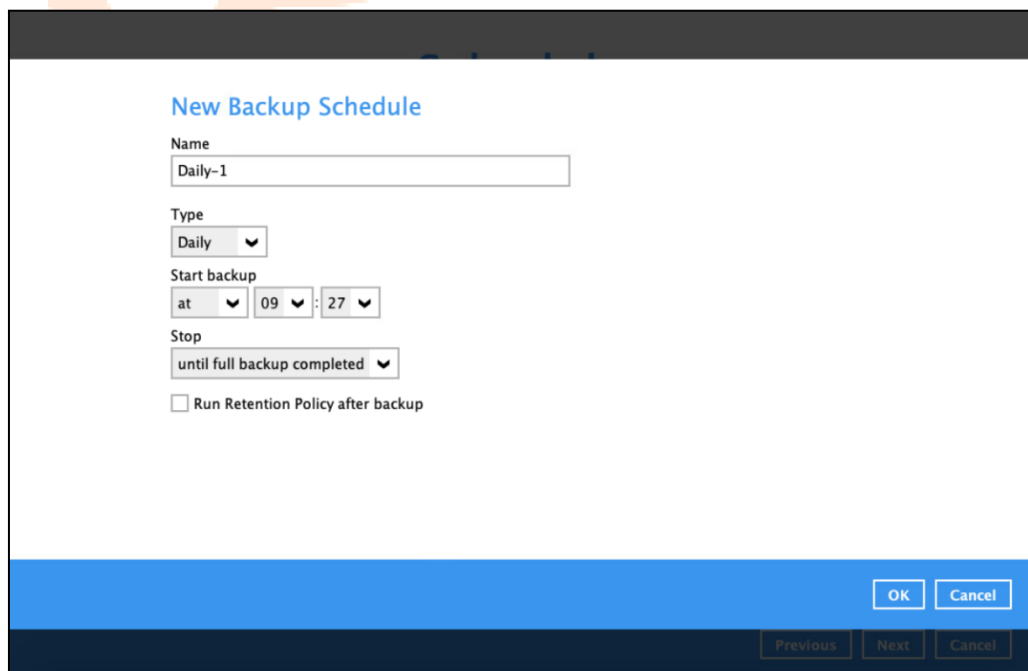
- In the Backup Source window, click **Next** to proceed.
- In the Schedule window, you can configure a backup schedule to automatically run a backup job at your specified time interval. In the Schedule window, the Run scheduled backup for this backup set is **Off** by default.



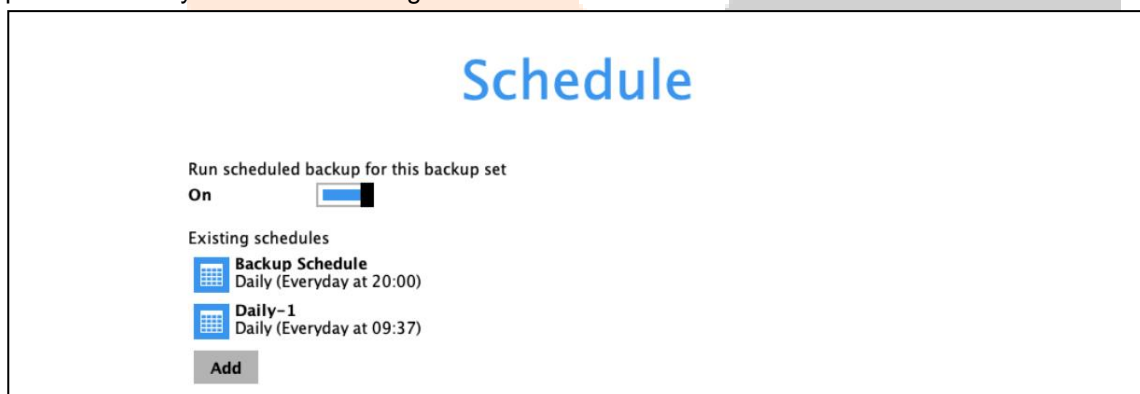
- If you want to add a schedule now, click next to **Add New schedule**.



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.



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



10. The **Destination** window will appear.

Destination


Backup mode
Sequential

Existing storage destinations
+ Add new storage destination / destination pool

Previous Next Cancel

Select the appropriate option from the **Backup mode** dropdown 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  next to **Add new storage destination / destination pool**.

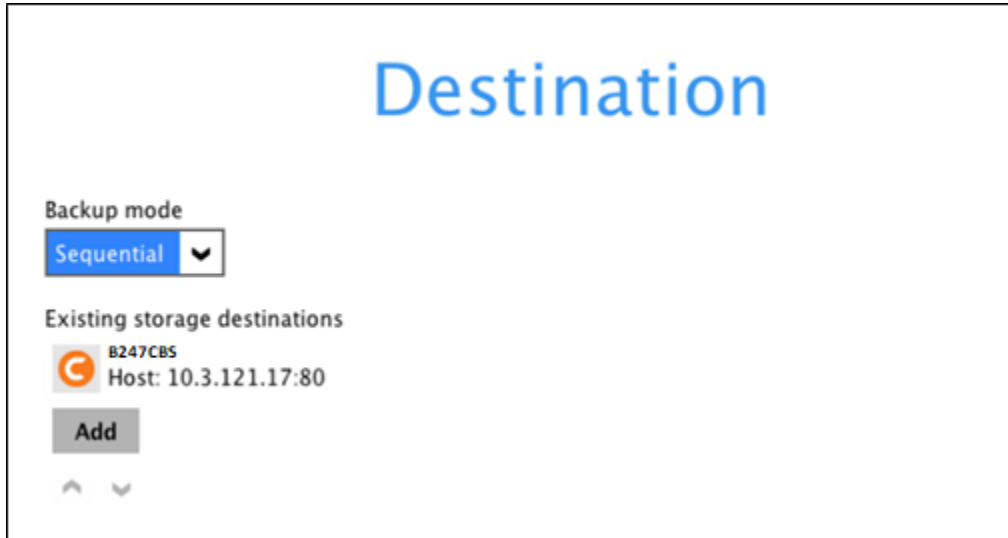
11. In the New Storage Destination / Destination Pool window, select the destination type and destination storage. Then, click **OK** to confirm your selection.

New Storage Destination / Destination Pool

Name
B247CB5

Destination storage
+ B247CB5

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



Destination

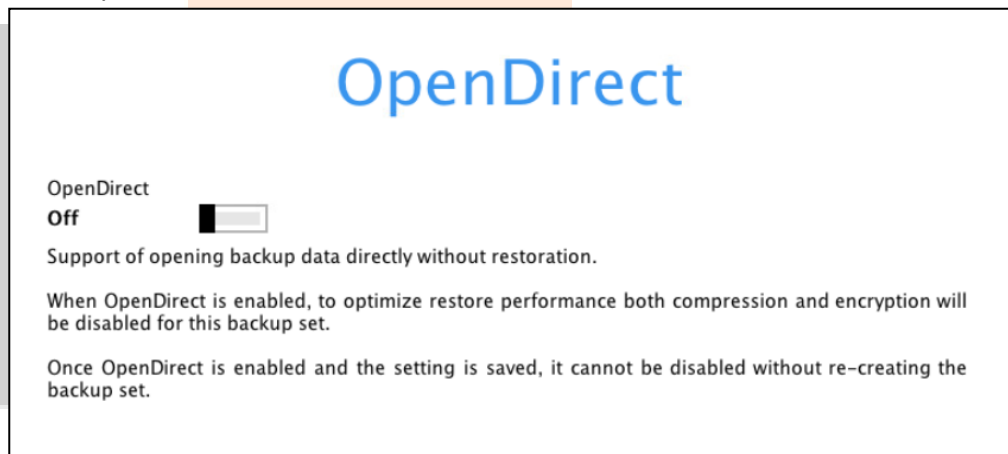
Backup mode
Sequential

Existing storage destinations

B247CBS
Host: 10.3.121.17:80

Add

13. Keep the **OpenDirect** feature disabled as this feature is not supported on macOS platform. Click **Next** to proceed.



OpenDirect

Off

Support of opening backup data directly without restoration.

When OpenDirect is enabled, to optimize restore performance both compression and encryption will be disabled for this backup set.

Once OpenDirect is enabled and the setting is saved, it cannot be disabled without re-creating the backup set.

14. 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.



Encryption

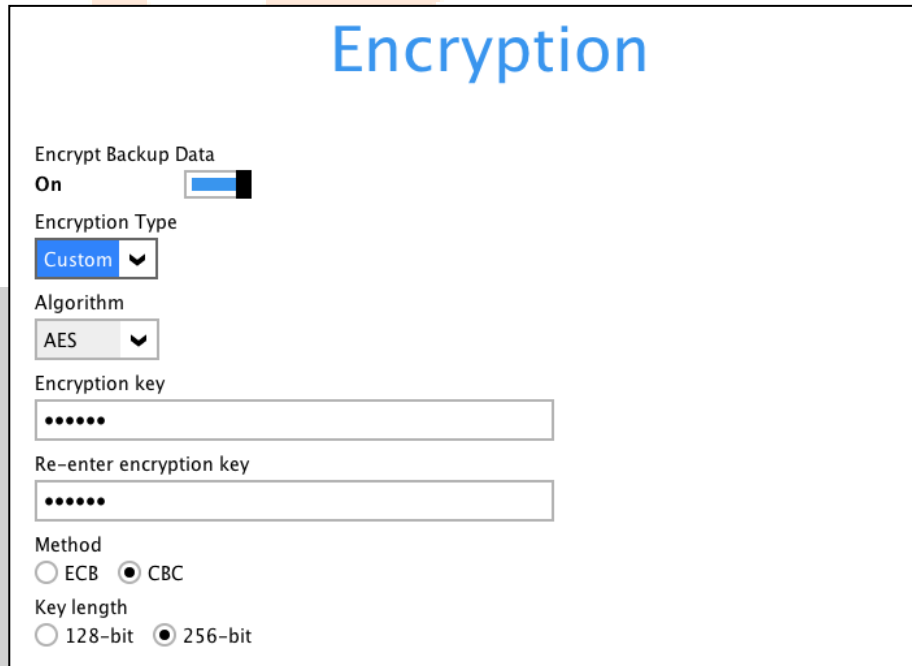
Encrypt Backup Data
On

Encryption Type
Default

Default
User password
Custom

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

- **Default** – an encryption key with 44 alphanumeric characters will be randomly generated by the system
- **User password** – the encryption key will be the same as the login password of your Backup247 Advanced Client (B247PRO) at the time when this backup set is created. Please be reminded that if you change the Backup247 Advanced Client (B247PRO) 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.



The screenshot shows the 'Encryption' settings window. At the top, the title 'Encryption' is displayed in blue. Below the title, there are several settings:

- Encrypt Backup Data:** A toggle switch is set to 'On'.
- Encryption Type:** A dropdown menu is set to 'Custom'.
- Algorithm:** A dropdown menu is set to 'AES'.
- Encryption key:** A text input field containing six dots (••••••).
- Re-enter encryption key:** A text input field containing six dots (••••••).
- Method:** Two radio buttons are present: 'ECB' (unselected) and 'CBC' (selected).
- Key length:** Two radio buttons are present: '128-bit' (unselected) and '256-bit' (selected).

NOTE: For best practice on managing your encryption key, refer to the following KB article.
FAQ: Best practices for managing encryption key on Backup247 Advanced Client (B247PRO) or Backup247 Standard Backup Suite (B247LITE)

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

15. If you have enabled the Encryption Key feature in the previous step, the following pop-up window will be displayed regardless of the selected encryption type.

Encryption

Encrypt Backup Data
On

Encryption Type
Default ▾

You are advised to write this encryption key down on paper and keep it in a safe place. You will need it when you need to restore your files later. Please confirm that you have done so.

••••••

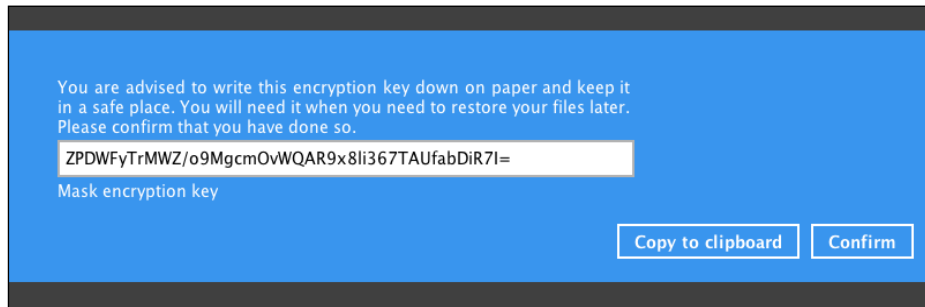
Unmask encryption key

Copy to clipboard Confirm



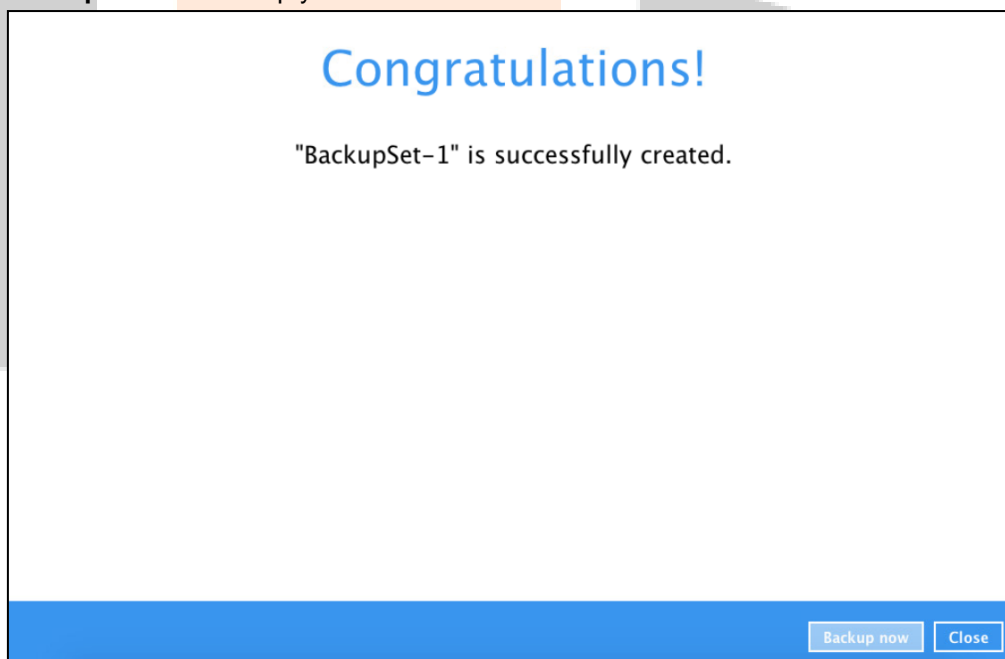
The pop-up window has the following three options to choose from:

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



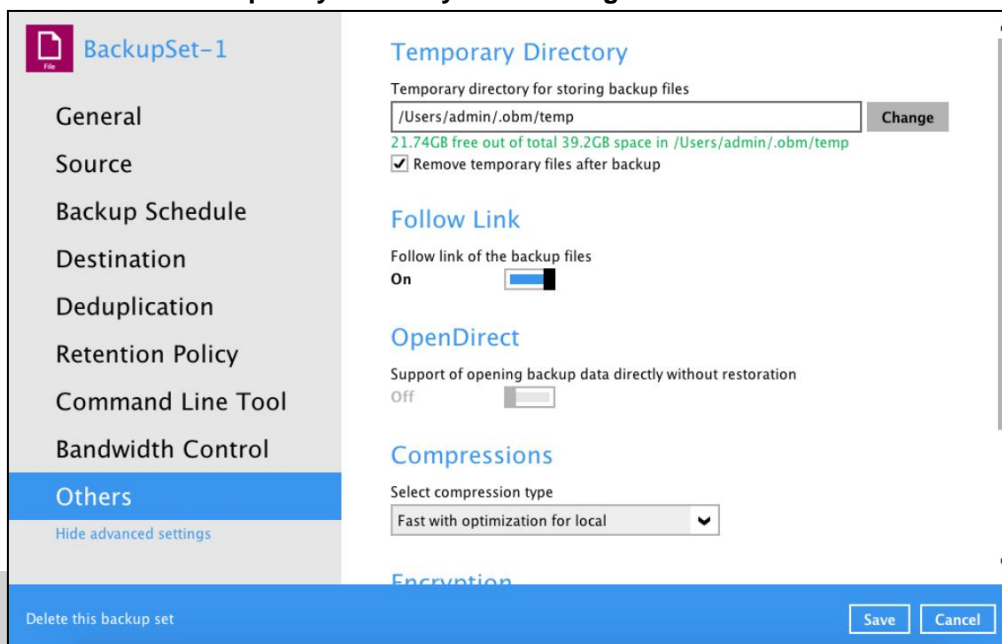
- **Copy to clipboard** – Click to copy the encryption key, then you can paste it in another location of your choice.
- **Confirm** – Click to exit this pop-up window and proceed to the next step.

16. 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.



- It is highly recommended to change the Temporary Directory and select another location with sufficient free disk space other than /Users/admin/.obm/temp.

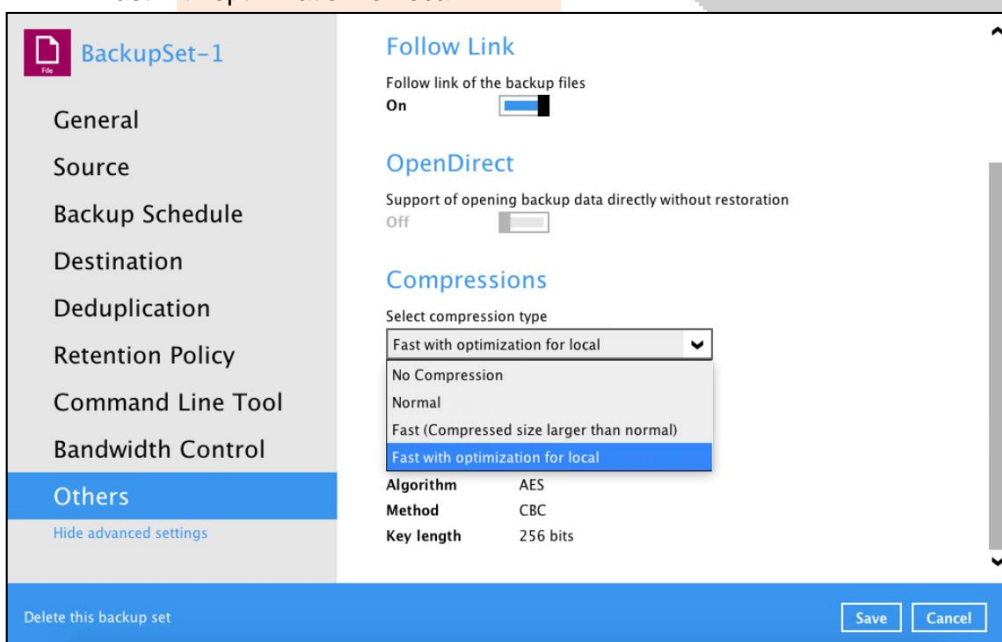
Go to **Others > Temporary Directory**. Click **Change** to browse for another location.



- Optional: Select your preferred **Compression** type. For newly created backup set(s), “Fast with optimization for local” is selected by default.

Go to **Others > Compressions**. Click the drop-down button then select from the following list:

- No Compression
- Normal
- Fast (Compressed size larger than normal)
- Fast with optimization for local



11 Overview on Backup Process

The following steps are performed during a backup job. For an overview of the detailed process for Steps 3, 5, 10, and 12, please refer to the following chapters.

- Periodic Data Integrity Check (PDIC) Process (**Step 3**)
- Backup Set Index Handling Process
 - Start Backup Job (**Step 5**)
 - Completed Backup Job (**Step 12**)
- Data Validation Check Process (**Step 10**)



11.1 Periodic Data Integrity Check Process

For Backup247 Advanced Client (B247PRO) v8.3.6.0 (or above), the PDIC will run on the first backup job that falls on the corresponding day of the week from **Monday to Friday**.

To minimize the impact of the potential load of large number of PDIC jobs running at the same time on the B247CBS server, the schedule of a PDIC job for each backup set is automatically determined by the result of the following formula:

PDIC schedule = %BackupSetID% modulo 5
 or
%BackupSetID% mod 5

The calculated **result** will map to the corresponding day of the week (i.e., from Monday to Friday).

| | |
|----------|------------------|
| 0 | Monday |
| 1 | Tuesday |
| 2 | Wednesday |
| 3 | Thursday |
| 4 | Friday |

NOTE: The PDIC schedule cannot be changed.

Example:

Backup set ID: 1594627447932

Calculation: $1594627447932 \text{ mod } 5 = 2$

| | |
|----------|------------------|
| 2 | Wednesday |
|----------|------------------|

In this example:

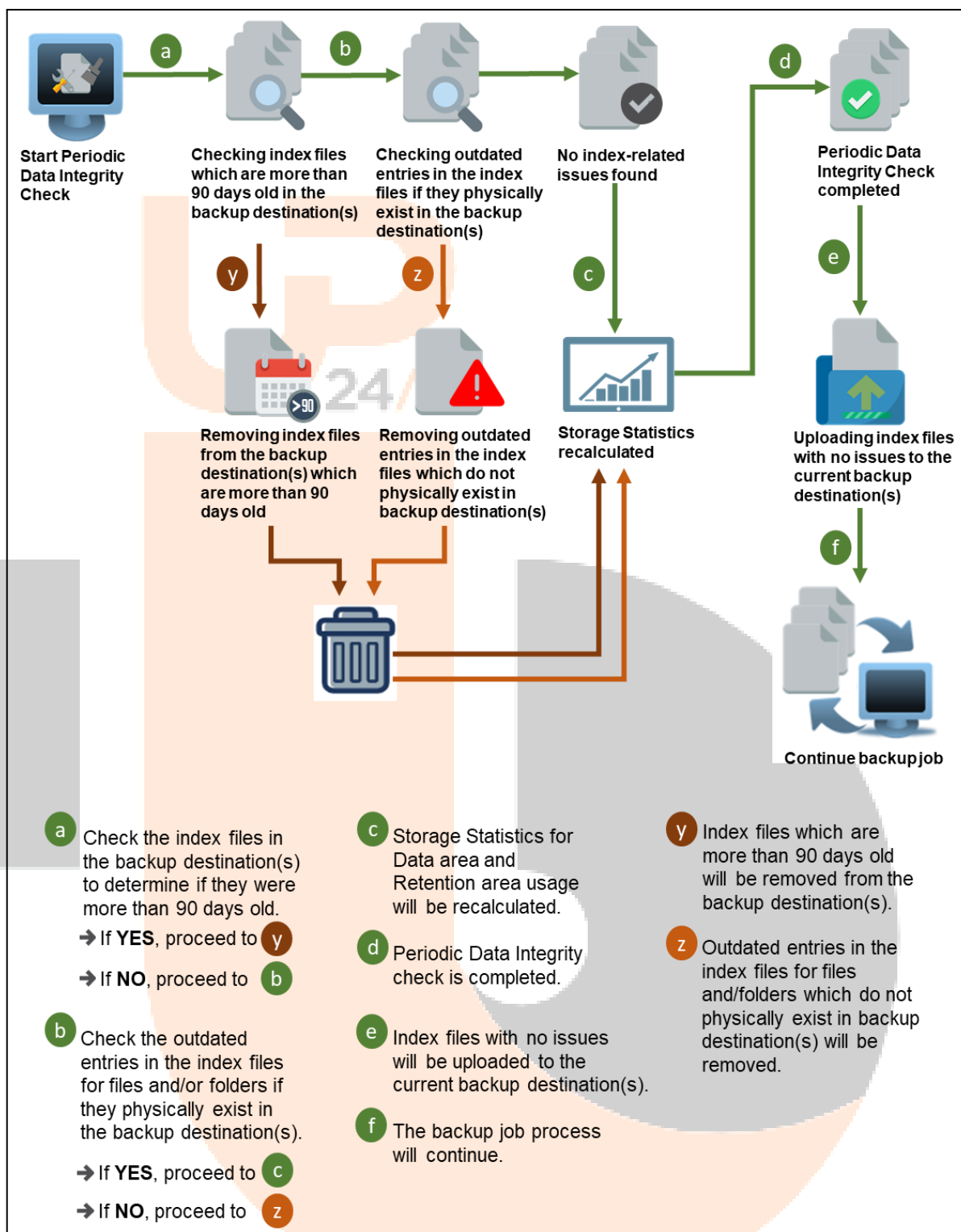
- the PDIC will run on the first backup job that falls on Wednesday; or
- if there is no active backup job(s) running from Monday to Friday, then the PDIC will run on the next available backup job.

NOTES

Although according to the PDIC formula for determining the schedule is ***%BackupSetID% mod 5***, this schedule only applies if the previous PDIC job was actually run more than 7 days prior.

Under certain conditions, the PDIC may not run strictly according to this formula. For example:

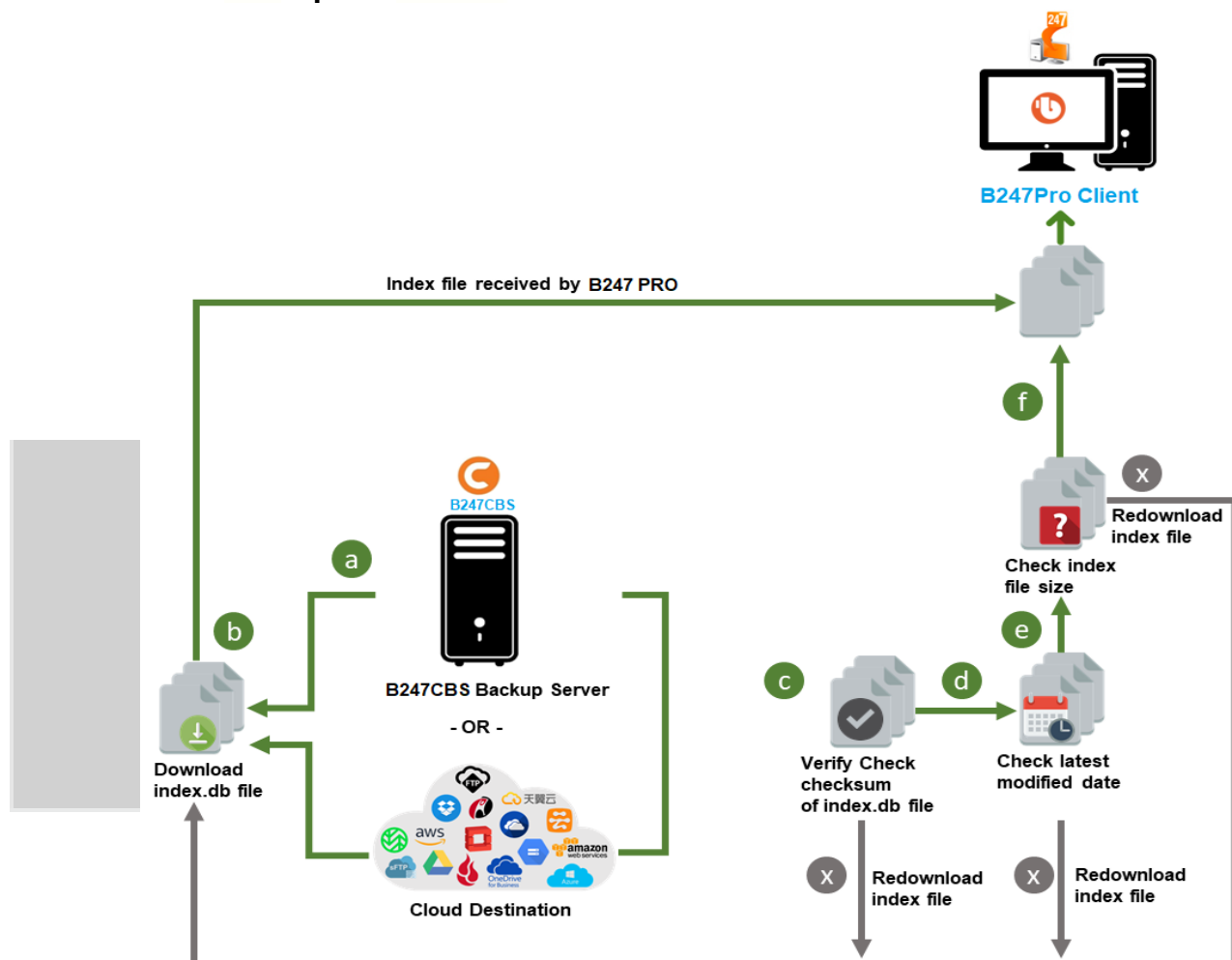
1. The PDIC job will run on the first backup job after upgrade to the latest client version from Backup247 Advanced Client (B247PRO) v6, v7, or pre-8.3.6.0 version.
2. If backup jobs for a backup set are not run on a regular daily backup schedule (for example: on a weekly or monthly schedule), then the PDIC job will run if it detects that the previous PDIC job was run more than 7 days ago.
3. Every time a Data Integrity Check (DIC) is run, the latest PDIC run date is reset, the next PDIC job will run after 7 days.
4. The PDIC job will not run if there are no files in both the Data and Retention Areas. For example: a newly created backup set with no backup job history or a backup set where all the data has been deleted using the Delete Backup Data feature.
5. The PDIC job will not run on a backup set that contains any data which still in v6 format. It will only run if all v6 data format on a backup set has undergone data migration to v9 block format.



11.2 Backup Set Index Handling Process

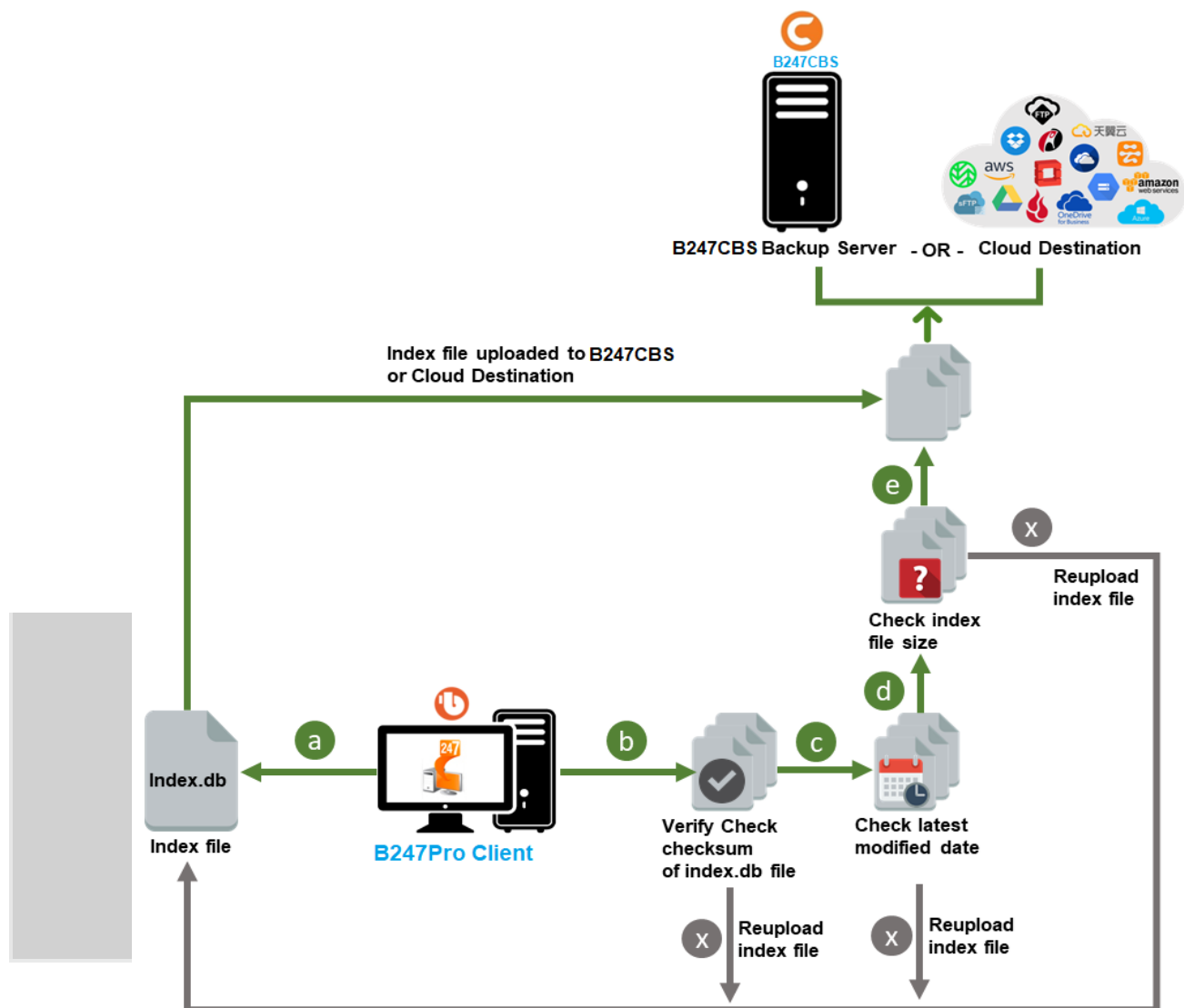
To minimize the possibility of index related issues affecting backups, each time index files are downloaded from and uploaded to backup destination(s); the file size, last modified date, and checksum is verified to ensure index file integrity.

11.2.1 Start Backup Job



- a** Index file is retrieved from the current directory (i.e., B247CBS, Cloud Destination, FTP or SFTP).
- b** Index file will be downloaded.
- c** Verify Check checksum of index.db file.
 - If checksum is correct, proceed to **d**
 - If **NOT**, proceed to **X**
- d** Check modified date.
 - If latest modified date is correct, proceed to **e**
 - If **NOT**, proceed to **X**
- e** Check index file size.
 - If index file size is correct, proceed to **f**
 - If **NOT**, proceed to **X**
- f** If index is valid, use the index.db file to compile file list for backup.
- X** Index file will be redownloaded. Proceed to **b**

11.2.2 Completed Backup Job



a Index file from B247PRO is uploaded to B247CBS, Cloud Destination, FTP or SFTP.

b Verify Check checksum of index.db file.
 → If checksum is correct, proceed to **c**
 → If **NOT**, proceed to **x**

c Check modified date.
 → If latest modified date is correct, proceed to **d**
 → If **NOT**, proceed to **x**

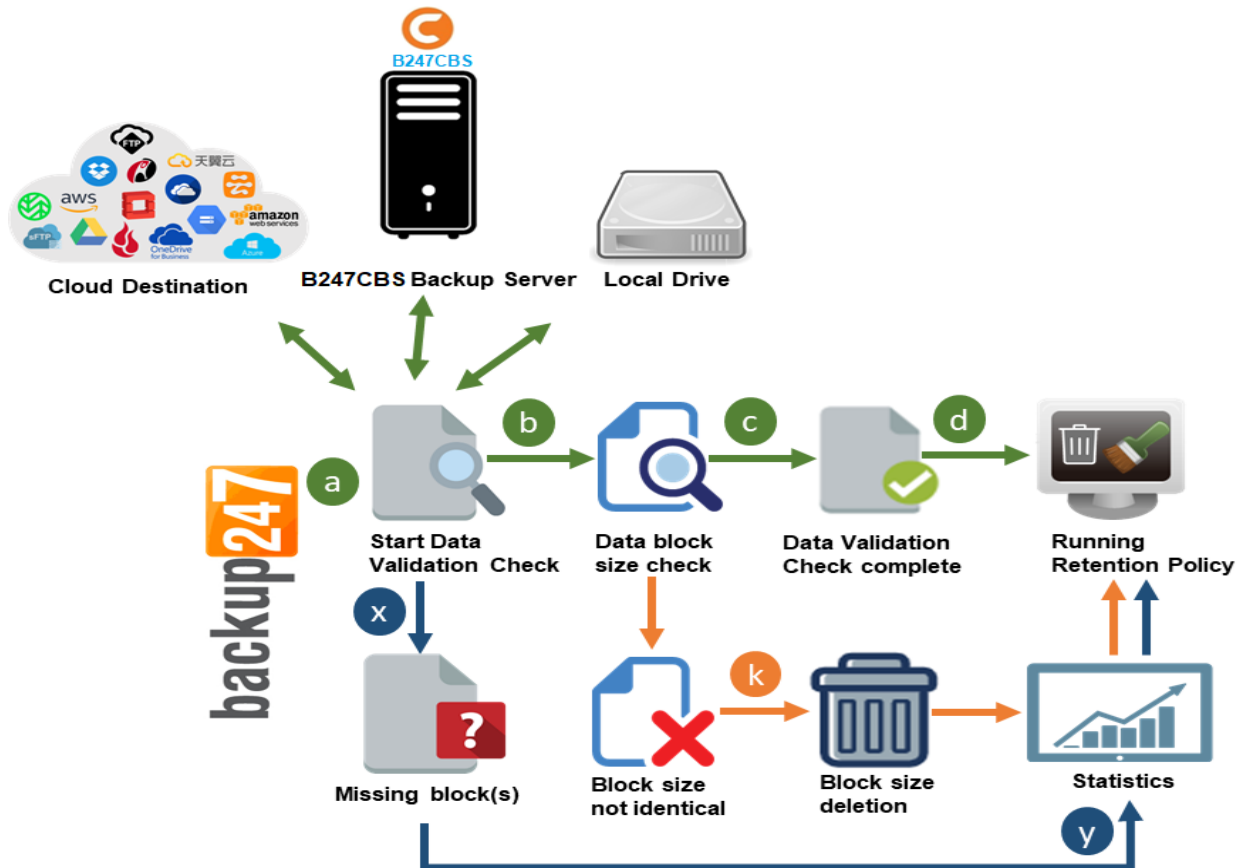
d Check index file size.
 → If index file size is correct, proceed to **e**
 → If **NOT**, proceed to **x**

e Index file is uploaded correctly to AhsayCBS or Cloud Destination.

x Index file will be reuploaded. Proceed to **a**

11.3 Data Validation Check Process

As an additional measure to ensure that all files transferred to the backup destination(s) are received and saved correctly, both the number of 32 or 64MB data block files and the size of each block file are checked again after the files are transferred.



- a** Check the number of 32 or 64MB data blocks in the backup destination(s) is identical to the number of blocks transferred.
 - If YES, proceed to **b**
 - If NO, proceed to **x**
- b** Check the individual sizes of each data block in the backup destination(s) is identical to the sizes of each block transferred.
 - If YES, proceed to **c**
 - If NO, proceed to **k**
- c** Data validation check is complete.
- d** Retention policy will run (if enabled).
- x** Files in the missing block(s) will be removed from the index.db file.
- y** Statistics will be updated according to the files removed. Proceed to **d**
- k** Block size that are not identical will be removed from the backup destination(s). Proceed to **y** then Proceed to **d**

12 Run Backup Jobs

12.1 Login to Backup247 Advanced Client (B247PRO)

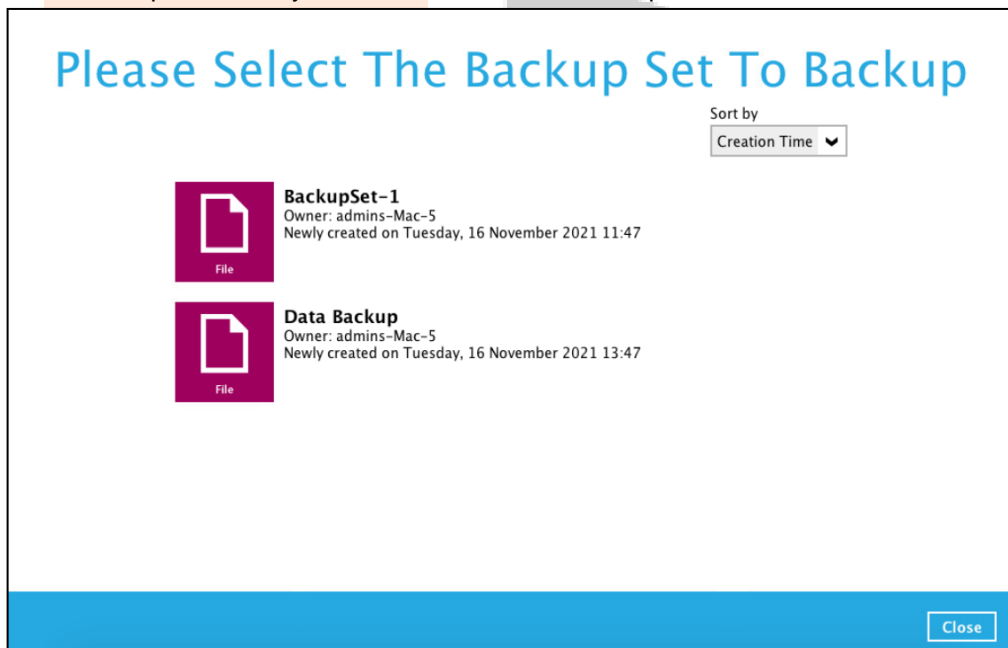
Login to the Backup247 Advanced Client (B247PRO) application according to the instructions in Chapter 7 Login to Backup247 Advanced Client (B247PRO).

12.2 Start a Manual Backup

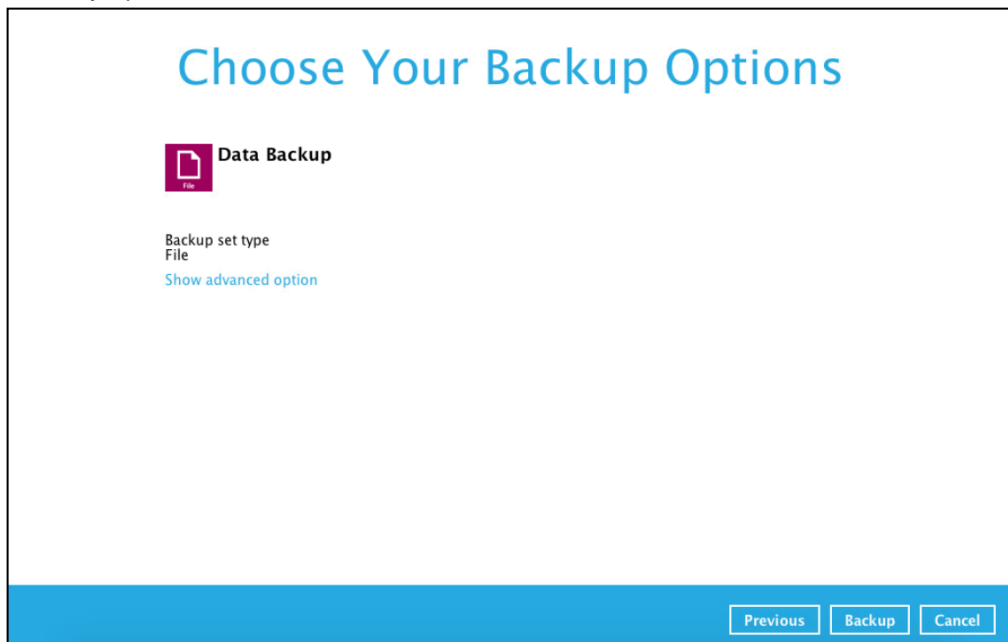
1. Click the **Backup** icon on the main interface of Backup247 Advanced Client (B247PRO).



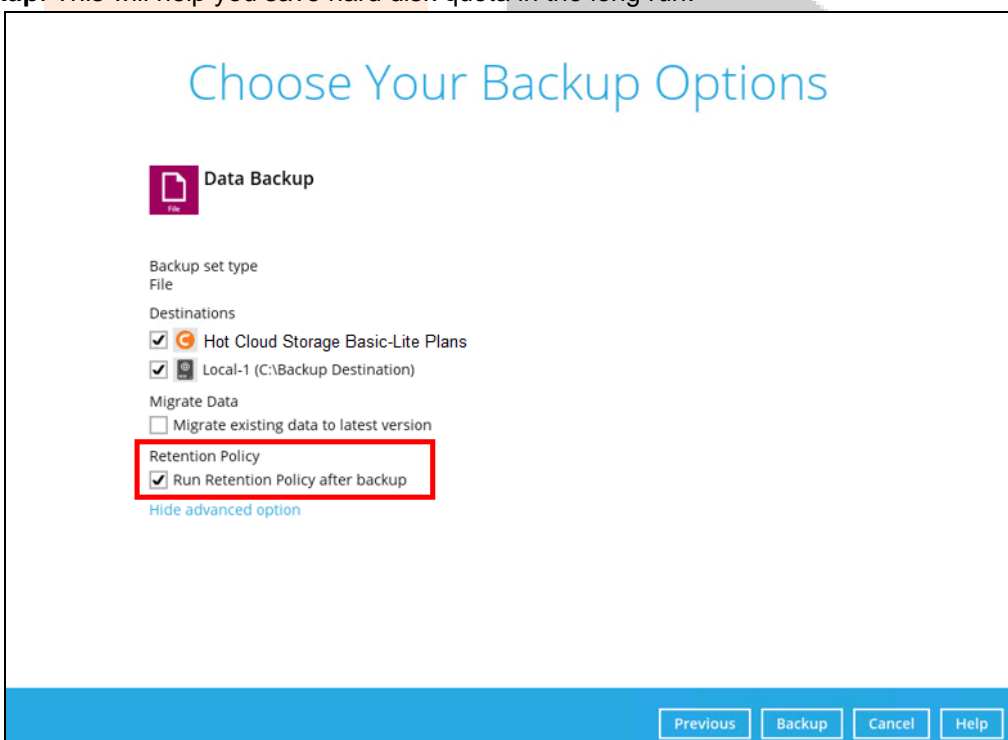
2. Select the backup set which you would like to start a backup for.



3. Click the **Show advanced option** in case you want to modify the Destinations, Migrate Data and Retention Policy options.



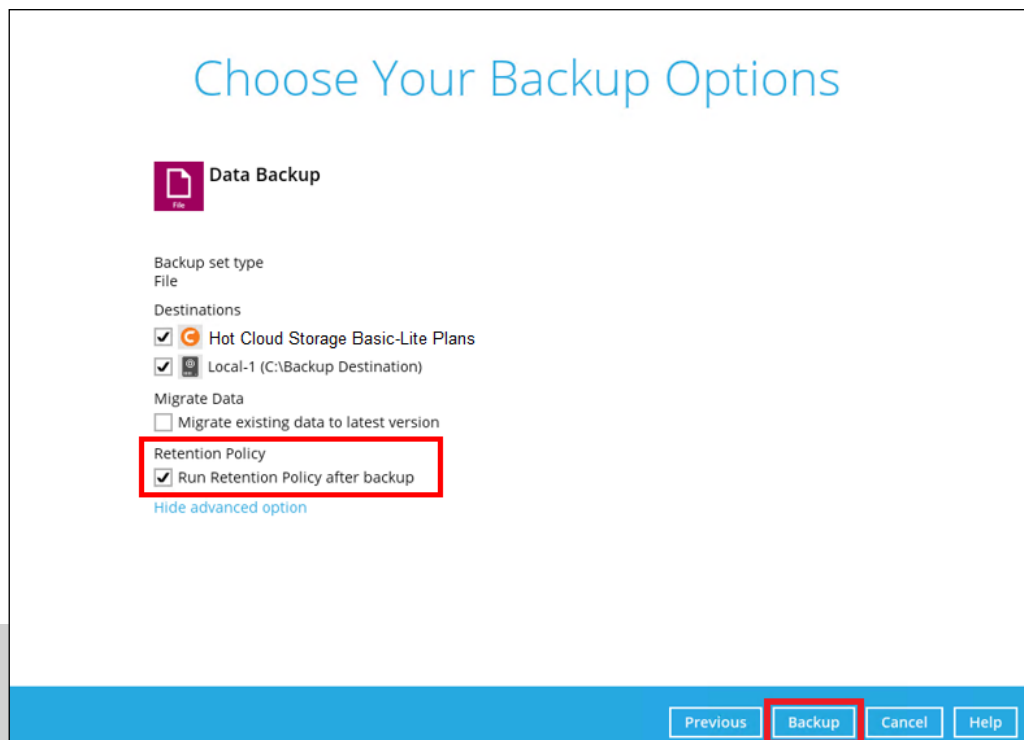
4. When the advanced options are shown, it is recommended to enable the **Run Retention Policy after backup**. This will help you save hard disk quota in the long run.




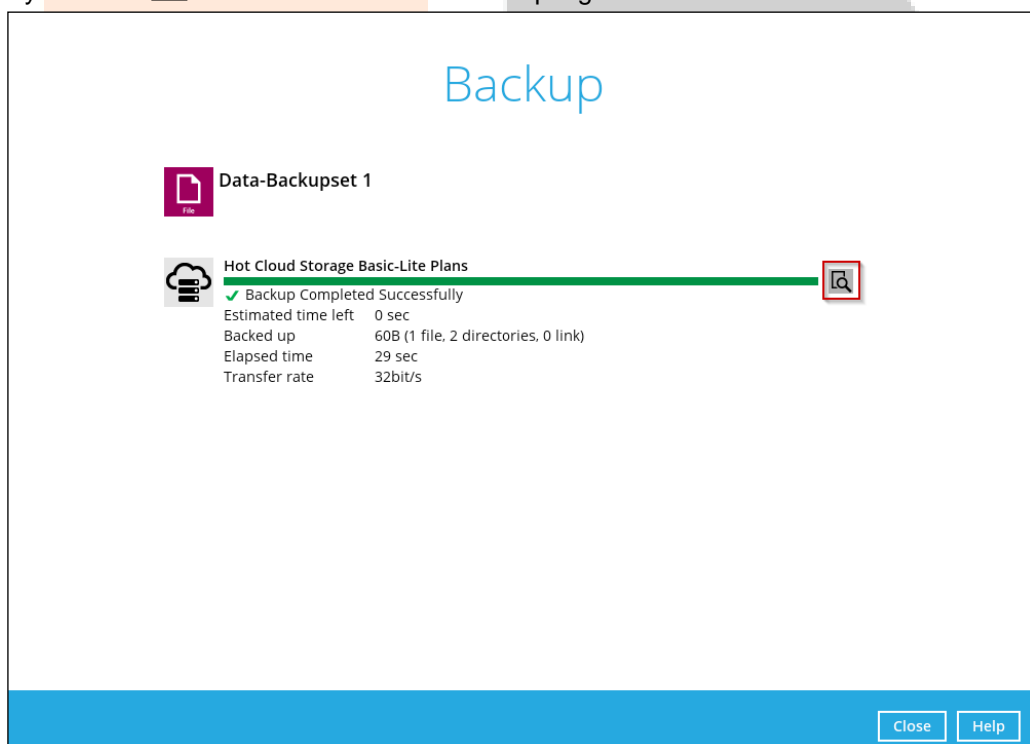
NOTE

When the **Migrate Data** option is enabled, the existing data will be migrated to the latest version during a backup job. This option is disabled by default. Backup job(s) for backup sets with Migrate Data enabled may take longer to finish. For more information about this feature, refer to B247CBS v9 New Features Supplemental document.

5. Once done with the settings, click the **Backup** button to start the backup job.



6. The following screen will be displayed to indicate that the backup job is successfully completed. You may click the  button to check for the backup log.



7. Once you are done with checking the backup log, click the **Close** button to return to the previous screen.

Show All ▼

| Type | Log | Time |
|------|--|---------------------|
| 🟢 | Start [B247PRO v9.1.0.0] | 20/03/2022 17:53:58 |
| 🟢 | Start Backup ... [Deduplication: enabled, Deduplication scope: All files within the same backup set, Migrate Delta: enabled] | 20/03/2022 17:53:59 |
| 🟢 | Using Temporary Directory C:\Users\Backu\temp\1646398208096\Predefined@-1635843864160 | 20/03/2022 17:53:59 |
| 🟢 | Start Periodic Data Integrity Check on backup set = "Data-Backupset 1" destination = "Hot Cloud Storage Basic-Lite Plans" | 20/03/2022 17:54:03 |
| 🟢 | Start data integrity check on backup set "Data-Backupset 1(1646398208096)", "Hot Cloud Storage Basic-Lite Plans(-16358..." | 20/03/2022 17:54:03 |
| 🟢 | Start processing data integrity check on backup set= "Data-Backupset 1" destination= "Hot Cloud Storage Basic-Lite Plans" | 20/03/2022 17:54:03 |
| 🟢 | Download valid index files from backup job "2022-03-20-09-16-44" to "C:\Users\Backu\temp\1646398208096\Predefined..." | 20/03/2022 17:54:05 |
| 🟢 | Vacuuming index | 20/03/2022 17:54:05 |
| 🟢 | Vacuuming index... Completed | 20/03/2022 17:54:05 |
| 🟢 | Existing statistics of backup set= "Data-Backupset 1" destination= "Hot Cloud Storage Basic-Lite Plans": Data area compre... | 20/03/2022 17:54:07 |
| 🟢 | Recalculated statistics of backup set= "Data-Backupset 1" destination= "Hot Cloud Storage Basic-Lite Plans": Data area co... | 20/03/2022 17:54:07 |
| 🟢 | The statistics of backup set= "Data-Backupset 1" destination= "Hot Cloud Storage Basic-Lite Plans" is correct. | 20/03/2022 17:54:07 |
| 🟢 | Data integrity check on backup set= "Data-Backupset 1" destination= "Hot Cloud Storage Basic-Lite Plans" is completed | 20/03/2022 17:54:07 |
| 🟢 | Finished data integrity check on backup set "Data-Backupset 1(1646398208096)", "Hot Cloud Storage Basic-Lite Plans(-16..." | 20/03/2022 17:54:08 |
| 🟢 | Completed data integrity check on backup set "Data-Backupset 1(1646398208096)", "Hot Cloud Storage Basic-Lite Plans(-..." | 20/03/2022 17:54:08 |
| 🟢 | Start running pre-commands | 20/03/2022 17:54:08 |
| 🟢 | Finished running pre-commands | 20/03/2022 17:54:08 |
| 🟢 | Downloading server file list... | 20/03/2022 17:54:08 |
| 🟢 | Download valid index files from backup job "2022-03-20-09-16-44" to "C:\Users\Backu\temp\1646398208096\Predefined..." | 20/03/2022 17:54:08 |
| 🟢 | Downloading server file list... Completed | 20/03/2022 17:54:09 |
| 🟢 | Start creating Shadow Copy Set... | 20/03/2022 17:54:10 |
| 🟢 | Creating Shadow Copy for all volumes: C:\, B:\, R:\, D:\, \\?\Volume{af8789d4-0ccb-4a18-b3ef-ae4061165b96}\, \\?\Volume{... | 20/03/2022 17:54:10 |
| 🟢 | Shadow Copy Set successfully created | 20/03/2022 17:54:12 |

Logs per page 50 ▼
Page 1 / 2 ▼

Close

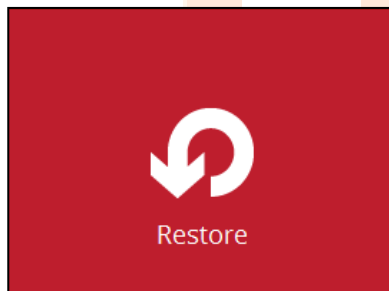
13 Restore Data

13.1 Login to Backup247 Advanced Client (B247PRO)

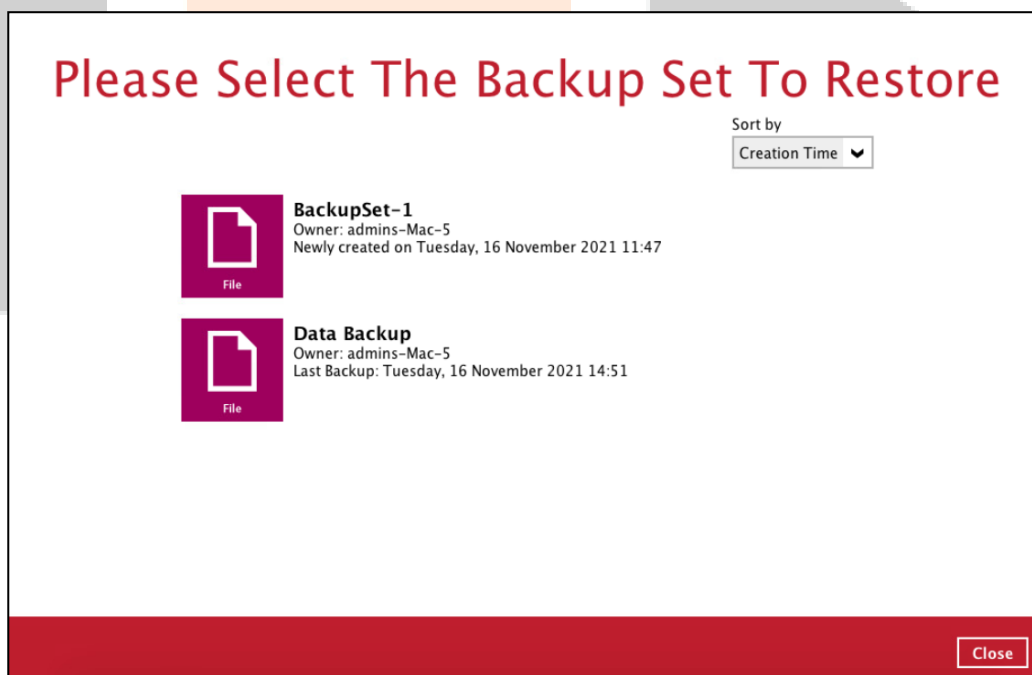
Login to the Backup247 Advanced Client (B247PRO) application according to the instructions in Chapter 7 Login to Backup247 Advanced Client (B247PRO).

13.2 Restore Data

1. Click the **Restore** icon on the main interface of Backup247 Advanced Client (B247PRO).



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



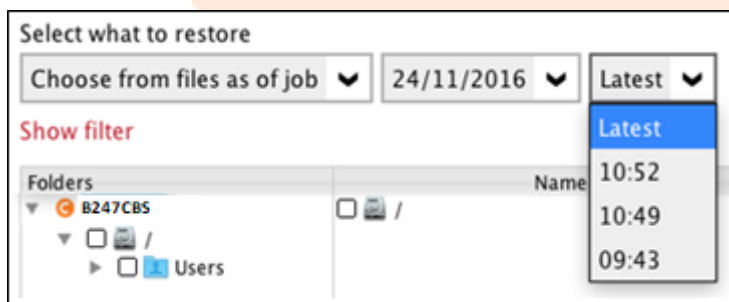
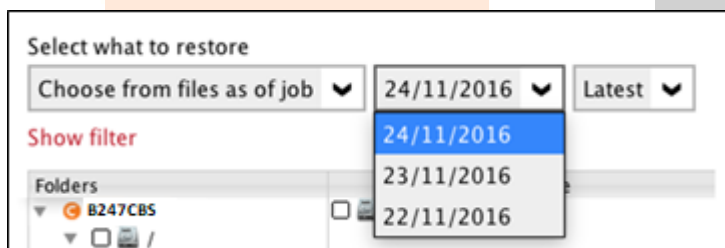
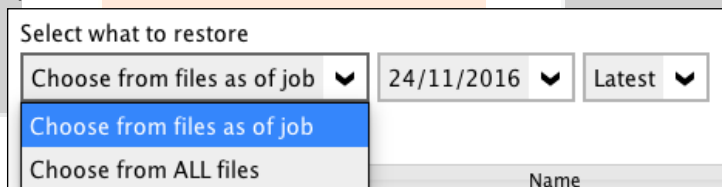
3. Select the destination where you would like to restore your data from.



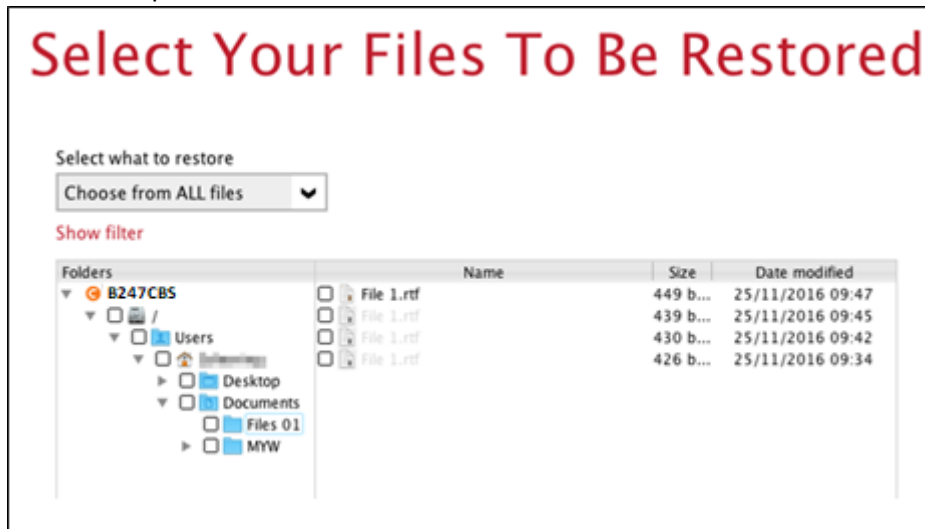
4. Select to restore files from a specific backup job, or from all files available, then select the files or folders that you would like to restore.

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.



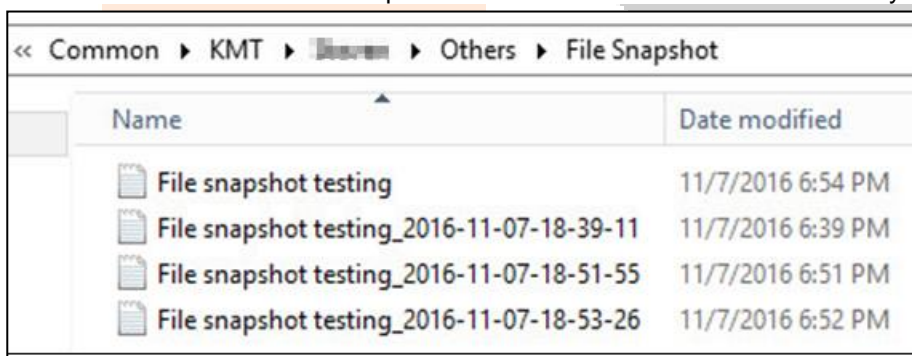
- **Choose from ALL files** – This option allows you to restore all the available backup versions for this backup set. Among all the available backup versions, you can even select only some of the backup versions of a file to restore.



The following is an example showing all the available backup versions of the file **1.rtf**. 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.

| | Name | Size | Date modified |
|--------------------------|------------|----------|------------------|
| <input type="checkbox"/> | File 1.rtf | 449 b... | 25/11/2016 09:47 |
| <input type="checkbox"/> | File 1.rtf | 439 b... | 25/11/2016 09:45 |
| <input type="checkbox"/> | File 1.rtf | 430 b... | 25/11/2016 09:42 |
| <input type="checkbox"/> | File 1.rtf | 426 b... | 25/11/2016 09:34 |

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.

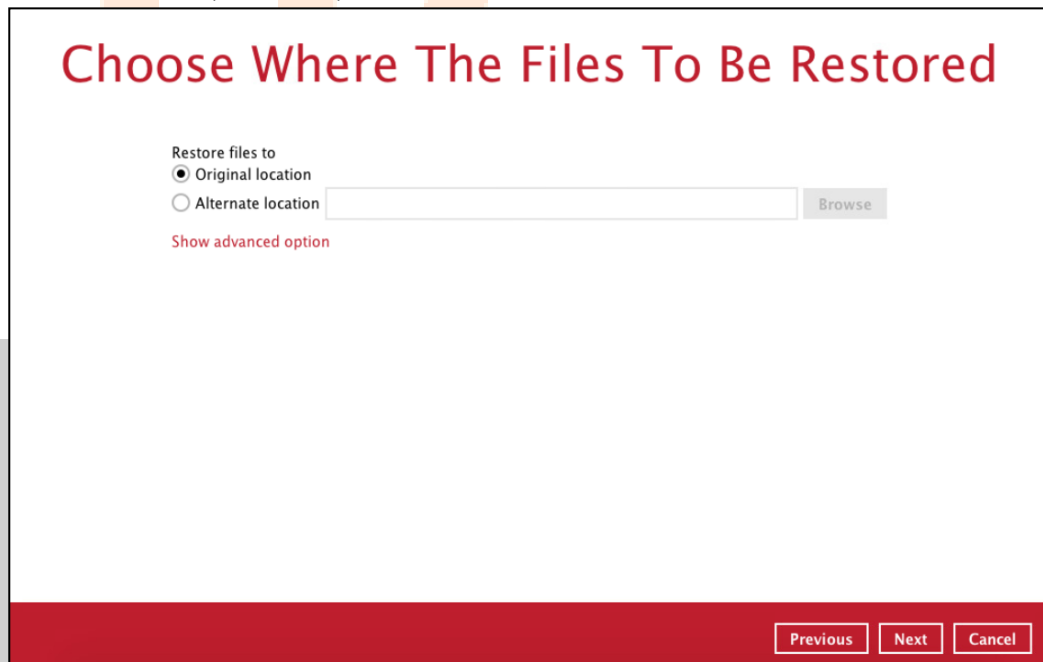


5. Click the **Show files** checkbox to select individual files for restoration. Click **Next** to proceed when you are done with the selections.

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 Backup247 Advanced Client (B247PRO) under the same directory path as on the machine storing the backup source.

For example, if the backup source files are stored under the **Users/[User's Name]/Downloads** folder, the data will be restored to the **Users/[User's Name]/Downloads** as well on the computer running the Backup247 Advanced Client (B247PRO).



- **Alternate location** – you can choose to restore the data to a location of your choice on the computer where Backup247 Advanced Client (B247PRO) is running.



7. Click **Show advanced option** to configure other restore settings:

Restore files to

Original location

Alternate location

Show advanced option

Delete unmatched data in restore location

Verify checksum of in-file delta files during restore

Hide advanced option

☉ Delete unmatched data in restore location

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 the same as the restore source. Any data created after backup will be treated as “unmatched data” 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.

| Document folder 01 | |
|--------------------|-------------------------------|
| Name | |
| doc 1.docx | } Files created BEFORE backup |
| doc 2.docx | |
| doc 3.docx | } Files created AFTER backup |
| doc 4.docx | |

iv) A restore is performed for the **Document folder 01**, with **Delete unmatched data in restore location** 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.

| Document folder 01 | |
|--|------------------------------|
| Name | |
|  doc 1.docx | } Files remain after restore |
|  doc 2.docx | |

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 were deleted. Prior to the data restore and synchronization, a warning message shows as the one shown below. Only clicking **Yes** will the “unmatched data” be deleted. You can click **Apply to all** to confirm deleting all the “unmatched data” at a time.

○ Verify checksum of in-file delta files during restore

Verify checksum of in-file delta files during restore is disabled by default. When you perform restore for non-RunDirect backup set, you can enable the feature by ticking the checkbox so that the checksum of in-file delta files will be verified. As the feature will make the restore process time longer, it is recommended to enable the feature only if you want to verify if the merged file were correct.

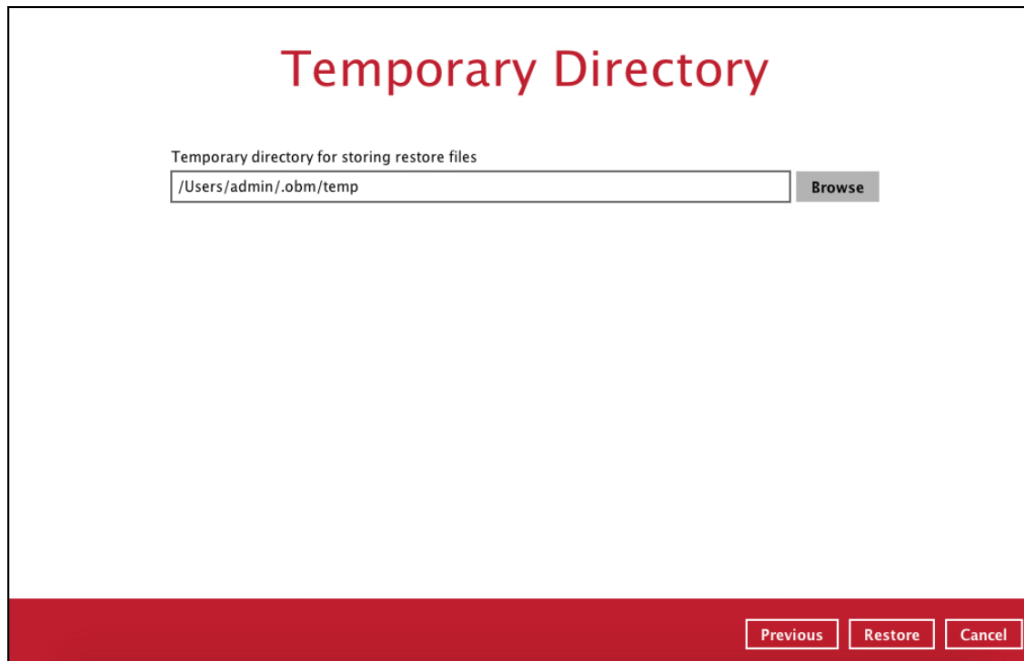
8. Click **Next** to proceed when you are done with the settings.
9. Select the temporary directory for storing temporary restore files.


By default, the temporary files are stored under the temp directory of the user profile directory. In case the same directory path does not exist in the computer you are running Backup247 Advanced Client (B247PRO), you have to click **Browse** to define a new location for storing the temporary files. Otherwise, you will not be able to perform a restore.

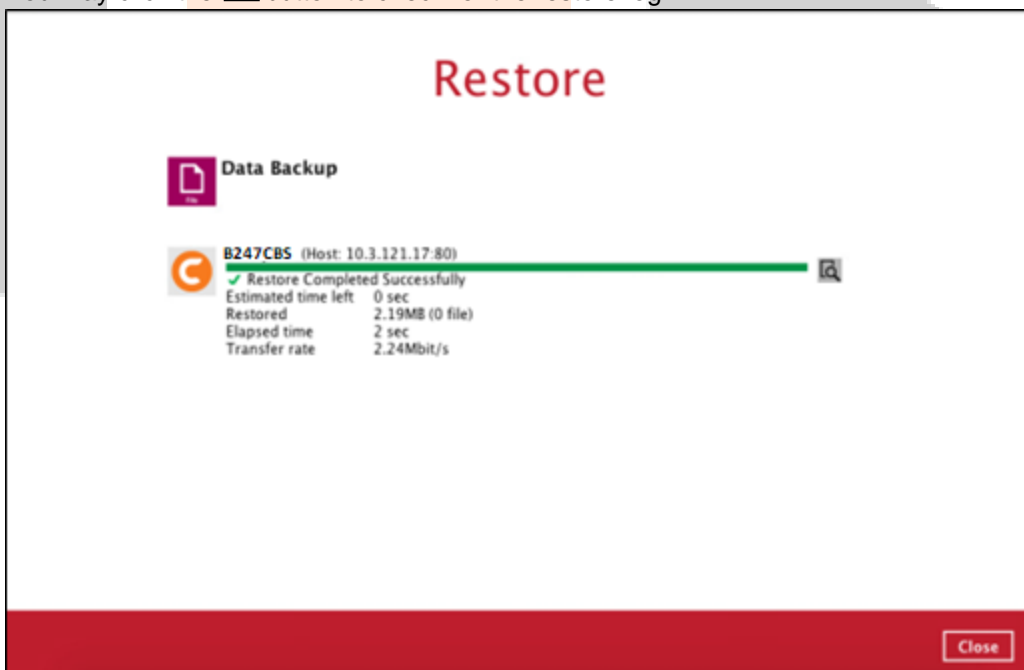
Temporary Directory

Temporary directory for storing restore files

10. Once done with the settings, click the **Restore** button to start the restore job.



11. The following screen will be displayed to indicate that the restore job is successfully completed. You may click the  button to check for the restore log.



12. Once you are done with checking the restore log, click the **Close** button to return to the previous screen.

Log

| Type | Log | Time |
|-------|---|---------------------|
| Start | [B247Pro v9.0.0.46] | 16/11/2021 17:46:55 |
| Info | Same file "/Library/ColorSync/Profiles/Black & White.icc" exists already. | 16/11/2021 17:46:56 |
| Info | "/Library/ColorSync/Profiles/Black & White.icc" contains the same file resource. Skip restore file resource. | 16/11/2021 17:46:56 |
| Info | Same file "/Library/ColorSync/Profiles/Blue Tone.icc" exists already. | 16/11/2021 17:46:56 |
| Info | "/Library/ColorSync/Profiles/Blue Tone.icc" contains the same file resource. Skip restore file resource. | 16/11/2021 17:46:56 |
| Info | Same file "/Library/ColorSync/Profiles/Gray Tone.icc" exists already. | 16/11/2021 17:46:56 |
| Info | "/Library/ColorSync/Profiles/Gray Tone.icc" contains the same file resource. Skip restore file resource. | 16/11/2021 17:46:56 |
| Info | Same file "/Library/ColorSync/Profiles/Lightness Decrease.icc" exists already. | 16/11/2021 17:46:56 |
| Info | "/Library/ColorSync/Profiles/Lightness Decrease.icc" contains the same file resource. Skip restore file resource. | 16/11/2021 17:46:56 |
| Info | Same file "/Library/ColorSync/Profiles/Lightness Increase.icc" exists already. | 16/11/2021 17:46:56 |
| Info | "/Library/ColorSync/Profiles/Lightness Increase.icc" contains the same file resource. Skip restore file resource. | 16/11/2021 17:46:56 |
| Info | Same file "/Library/ColorSync/Profiles/Sepia Tone.icc" exists already. | 16/11/2021 17:46:56 |
| Info | "/Library/ColorSync/Profiles/Sepia Tone.icc" contains the same file resource. Skip restore file resource. | 16/11/2021 17:46:56 |
| Info | Same file "/Library/ColorSync/Profiles/WebSafeColors.icc" exists already. | 16/11/2021 17:46:56 |
| Info | "/Library/ColorSync/Profiles/WebSafeColors.icc" contains the same file resource. Skip restore file resource. | 16/11/2021 17:46:56 |
| Info | Same file "/Library/Bundles/OSXNotification.bundle/Contents/Info.plist" exists already. | 16/11/2021 17:46:56 |
| Info | "/Library/Bundles/OSXNotification.bundle/Contents/Info.plist" exists already. | 16/11/2021 17:46:56 |
| Info | Same file "/Library/Bundles/OSXNotification.bundle/Contents/version.plist" exists already. | 16/11/2021 17:46:56 |
| Info | "/Library/Bundles/OSXNotification.bundle/Contents/version.plist" exists already. | 16/11/2021 17:46:56 |

Logs per page 50 Page 1 / 10

Close

13.3 Restore Filter

This search feature allows you to search directories, files, and folders.

To make it more flexible, the search feature offers filtering. You can add additional patterns upon searching. Pattern includes the following criteria:

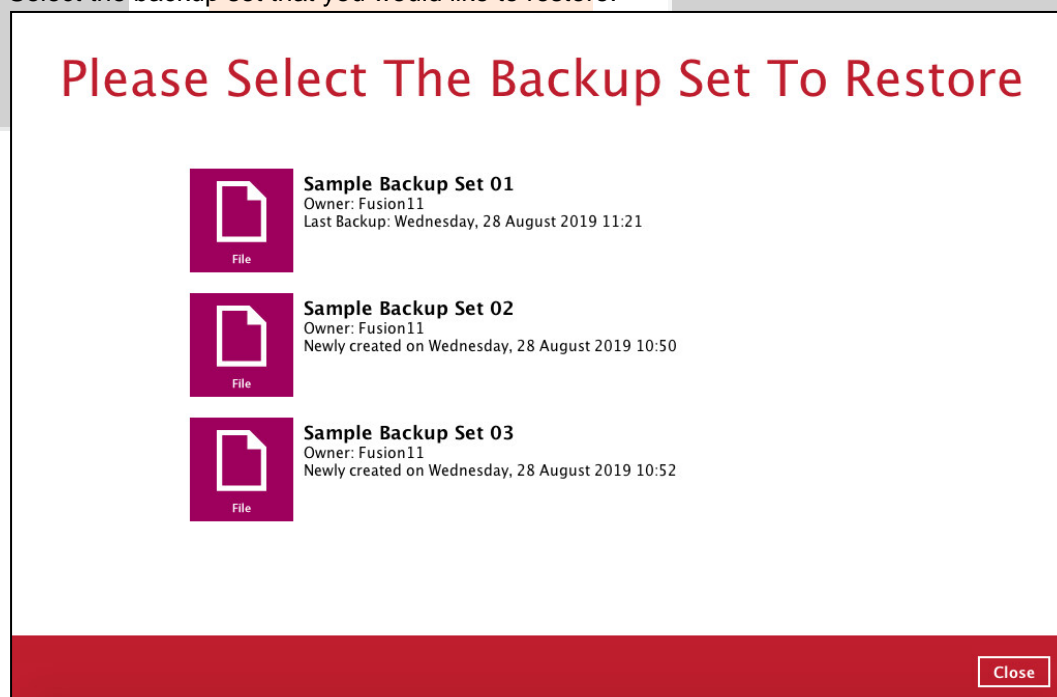
- **Contains**
These are Directories, Files, and Folders with the name **containing** the specific letter or word.
- **Exact**
These are Directories, Files, and Folders with the **exact** or **accurate** name.
- **Start With**
These are Directories, Files, and Folders with the name **starting** with a specific letter or word.
- **Ends With**
These are Directories, Files, and Folders with the name **ending** with a specific letter or word.

It also has the **Match Case** function, which serves as an additional accuracy when searching for any specific directories, files, folders, and mails.

For more detailed examples using the restore filter on Backup247 Advanced Client (B247PRO), refer to Appendix B: Example Scenarios for Restore Filter.

Follow the steps below to use the search feature:

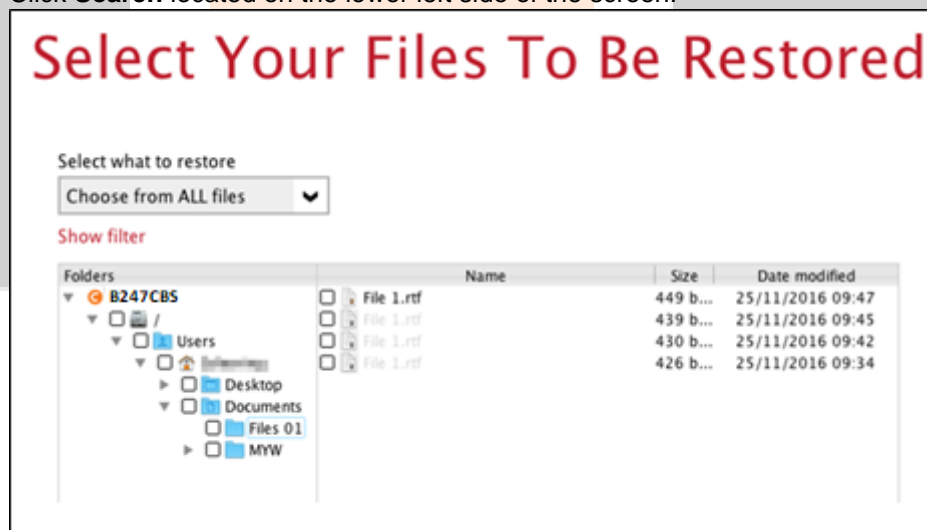
1. Login to Backup247 Advanced Client (B247PRO) according to the instructions in Chapter 7 Logging in to Backup247 Advanced Client (B247PRO).
2. Click the **Restore** icon on the main interface of Backup247 Advanced Client (B247PRO).
3. Select the backup set that you would like to restore.



4. Select the backup destination that you would like to restore backed-up items to.



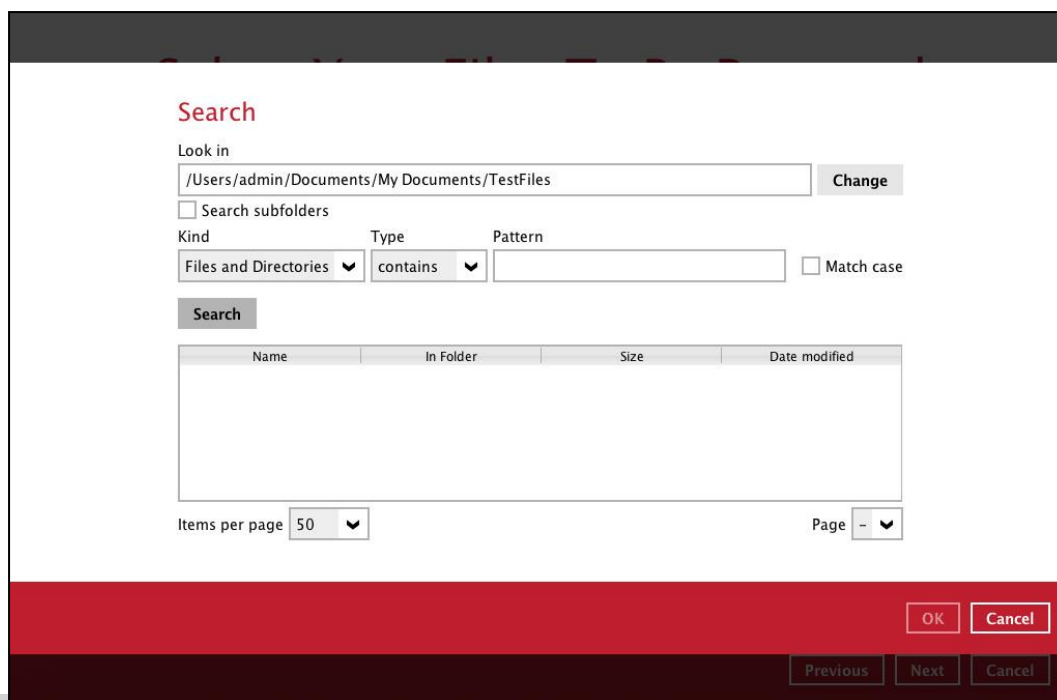
5. Click **Search** located on the lower left side of the screen.



6. Click the **Change** button to change the path of the restore items from other location.

The screenshot shows a 'Search' dialog box. At the top, there is a 'Look in' text box with a 'Change' button to its right. Below this is a checked checkbox for 'Search subfolders'. Underneath, there are three columns: 'Kind' with a dropdown menu set to 'Files and Directories', 'Type' with a dropdown menu set to 'contains', and 'Pattern' with an empty text box. To the right of the 'Pattern' box is a 'Match case' checkbox. Below these fields is a 'Search' button. Underneath the search fields is a table with four columns: 'Name', 'In Folder', 'Size', and 'Date modified'. The table is currently empty. At the bottom left of the dialog, there is an 'Items per page' dropdown set to '50'. At the bottom right, there is a 'Page' dropdown. A red bar at the bottom of the dialog contains 'OK' and 'Cancel' buttons. Below the dialog, a dark bar contains 'Previous', 'Next', and 'Cancel' buttons.

The screenshot shows a 'Change Path' dialog box. It features a tree view of a file system. The root is 'Backup Server', which contains a folder 'Users'. Inside 'Users' is a folder 'admin', which contains a folder 'Documents'. Inside 'Documents' is a folder 'My Documents', which contains a folder 'TestFiles'. A red bar at the bottom of the dialog contains 'OK' and 'Cancel' buttons. Below the dialog, a dark bar contains 'Previous', 'Next', and 'Cancel' buttons.



7. Tick the **Search subfolders** to include available subfolders upon searching.

Search subfolders

Search subfolders

8. Select from the following Kind of files you want to search.

- Files and Directories
- Files only
- Directories

9. Select from the following Type of filtering you want to search.

- Contains
- Exact
- Starts With
- Ends With

10. Enter a pattern you want and tick the [Match case] box if you want to accurately search for a specific file.

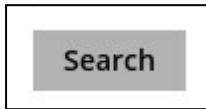
Pattern

Match case

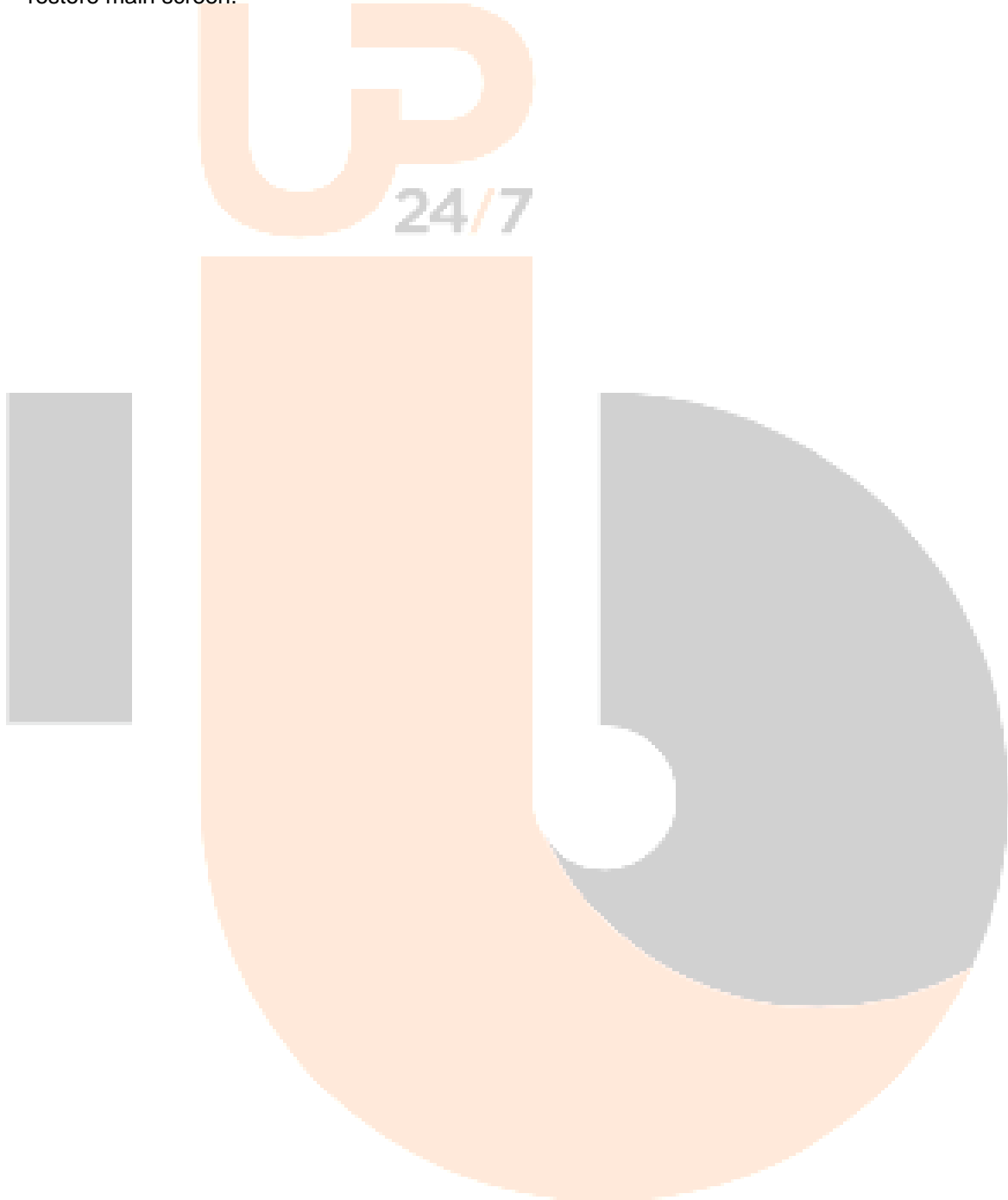
Pattern

Match case

11. Click the **Search** button and the result will be displayed.



12. Check all the items or check a specific item, then click the **OK** button to proceed and return to the restore main screen.

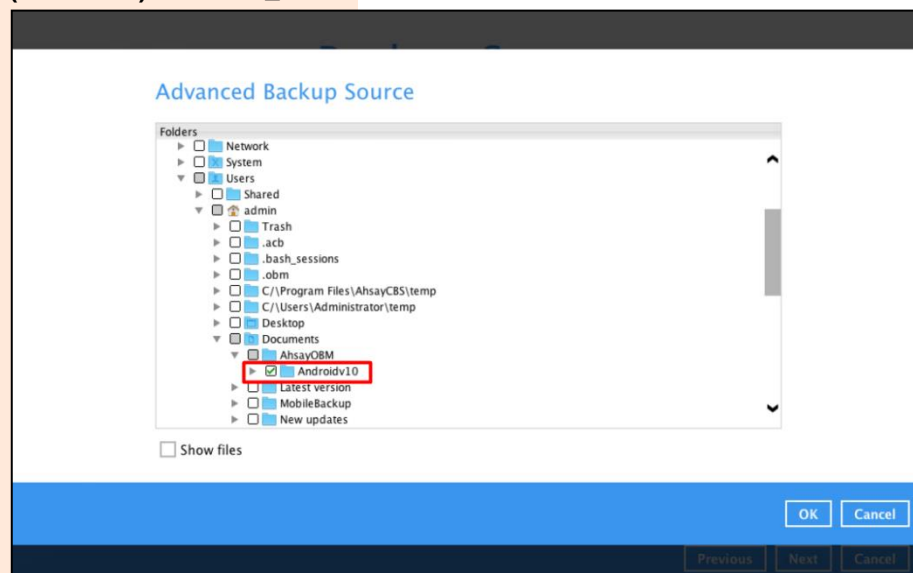


14 Mobile Backup and Restore to B247CBS and Predefined Destination

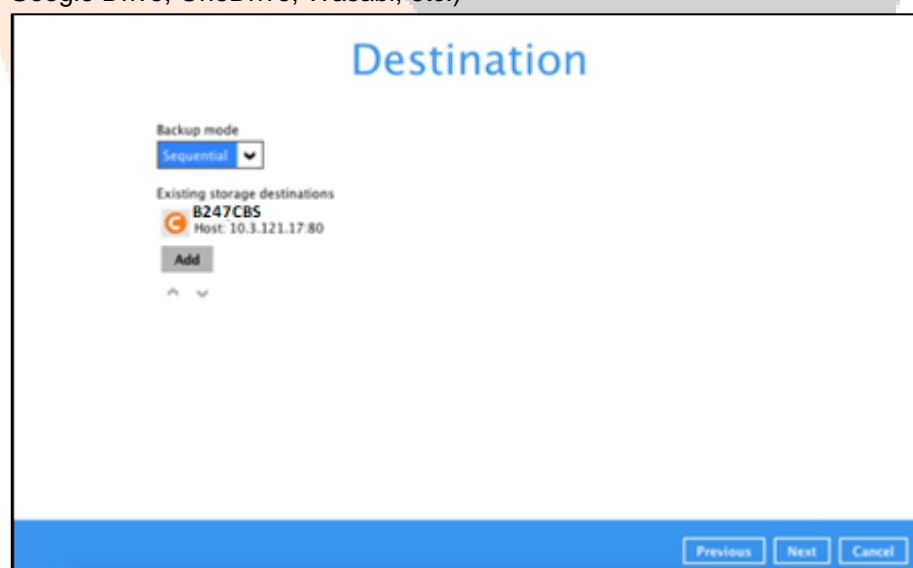
To perform a mobile backup and restore to B247CBS and/or Predefined Destination, follow the instructions below:

1. Back up photos, videos, documents and 2FA accounts from Backup247 Mobile app to Backup247 Advanced Client (B247PRO) local destination. For more detailed information, refer to **Chapter 10** of the Backup247 Mobile User Guide for Android and iOS.
2. Create a File backup set according to the instructions in Chapter 10 Create Backup Set with the following setup:
 - The backup source should be the photos, videos, documents and/or 2FA account(s) backed up in the Backup247 Advanced Client (B247PRO) local destination. In this example, the backup source is located in:

/Users/admin/Documents/Backup247 Advanced Client (B247PRO)/%mobile_device%



- The backup destination must be B247CBS and/or Predefined Destination (i.e., Google Drive, OneDrive, Wasabi, etc.)



- After creating the backup set, run a backup job according to the instructions in Chapter 12.2 Start Manual Backup. Below is an example of a backup report for mobile backup data.



- Restore data according to the instructions in Chapter 13.2 Restore Data.

There are two (2) options to restore data from B247CBS and/or Predefined Destination to the mobile device, Original location, and Alternate location.

- Original location** - data will be restored on the original location which is the **backup destination for your mobile device**.

Using this option, you can perform seamless restore to your mobile device as the location is the same with the mobile backup destination.

- Alternate location** - data will be restored on an alternate location which can be setup anywhere in the Backup247 Advanced Client (B247PRO) local machine. If you choose this option, then restoring to your mobile device will have to be manually done. There are two (2) options available.

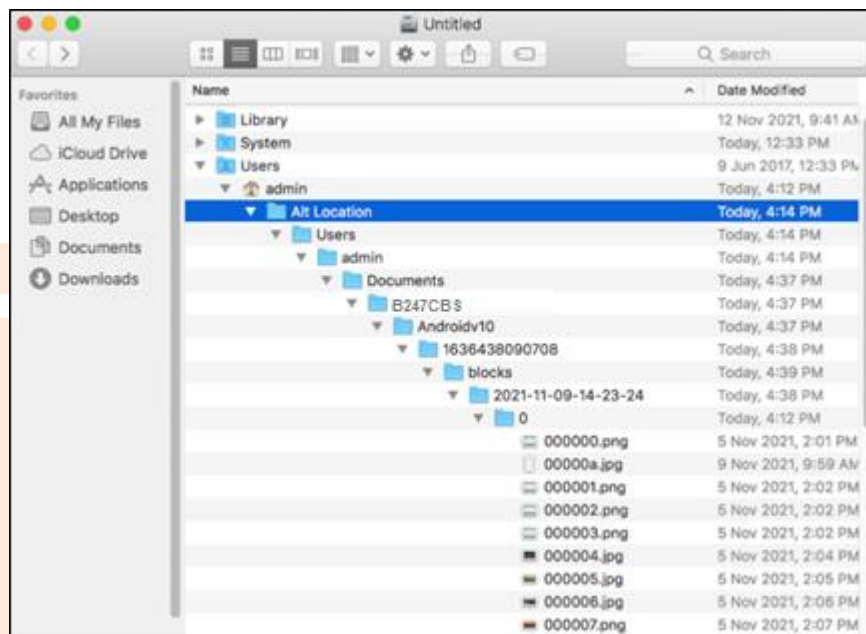
NOTE: Restore to alternate location is not supported on another Backup247 Advanced Client (B247PRO) machine. Options 1 and 2 must be on the original machine where the backups were performed.

In case the original machine is no longer available, Backup247 Advanced Client (B247PRO) will be able to restore the photos, videos and 2FA accounts from B247CBS or Predefined Destination to the mobile backup destination folder. However, as the mobile devices were not originally paired with the new installation or machine, the mobile devices will not be able to restore the photos, videos and 2FA accounts from the Backup247 Advanced Client (B247PRO).

- **Option 1:** Copy the restored data from the alternate location to the original location which is the **backup destination for your mobile device**.

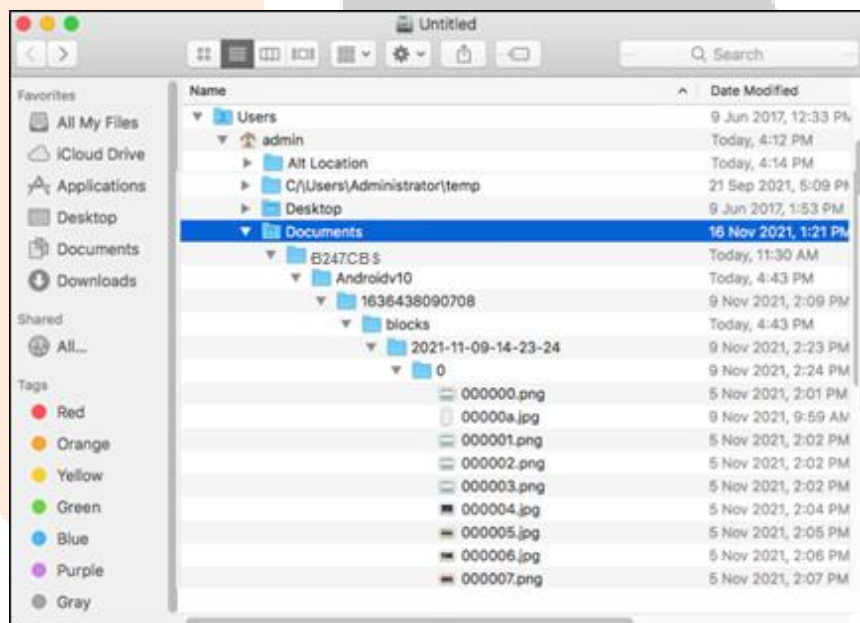
Example of the Alternate location:

/Users/admin/Alt Location



Example of the Original location:

/Users/admin/Documents



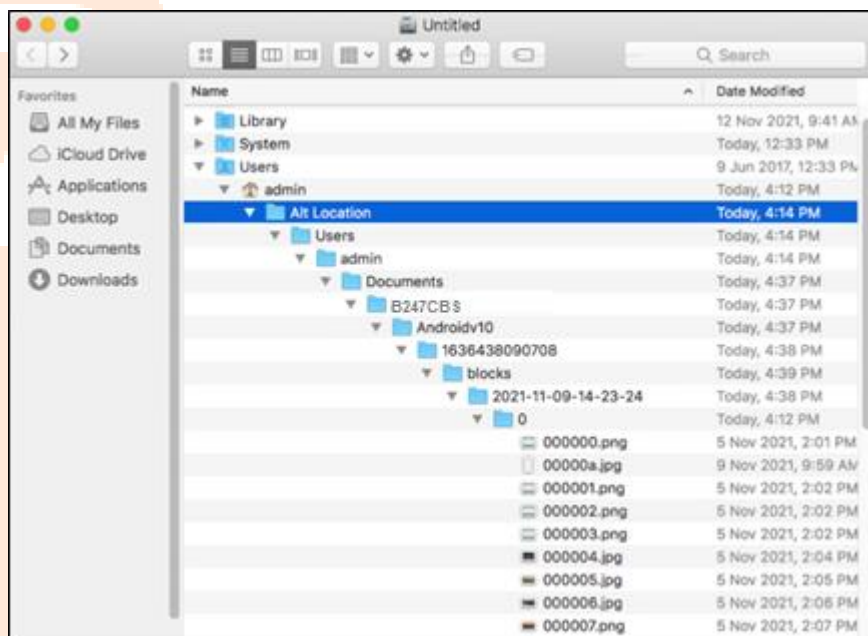
You can now use the Backup247 Mobile app to restore the photos, videos, documents and 2FA accounts back to your mobile device.

- **Option 2:** Copy the restored data from the alternate location to your Android or iOS mobile device.

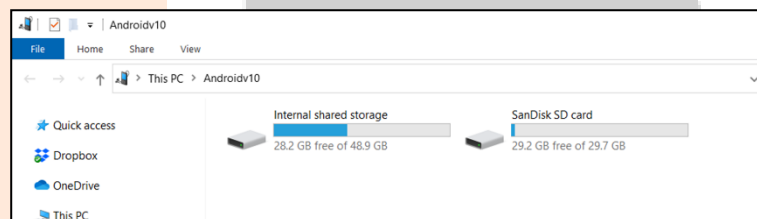
Instructions:

- For an Android device, you need to plug your cable and transfer the restored data from the alternate location to your mobile device storage.

Example of the Alternate location: **/Users/admin/Alt Location**

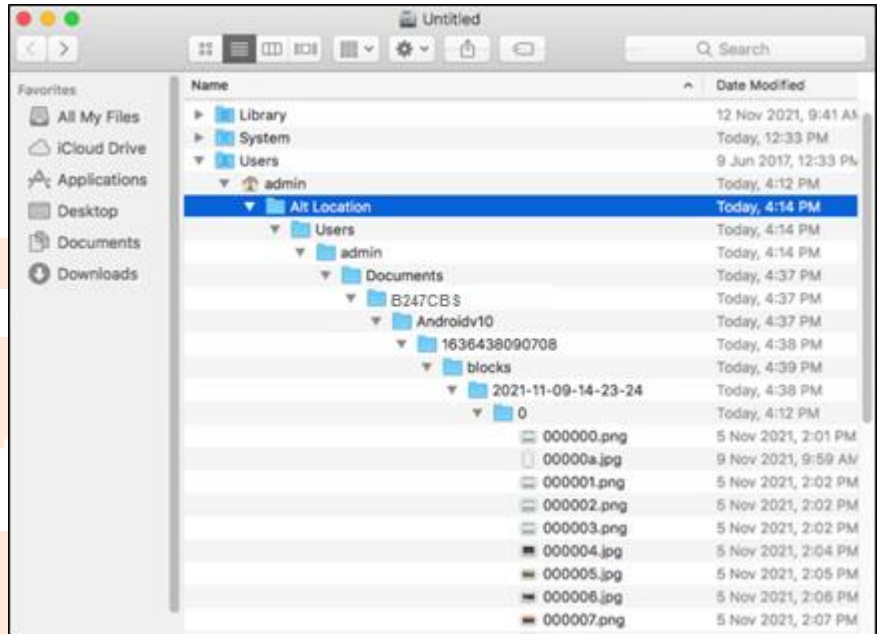


Mobile device storage: Android device Internal storage and SD card

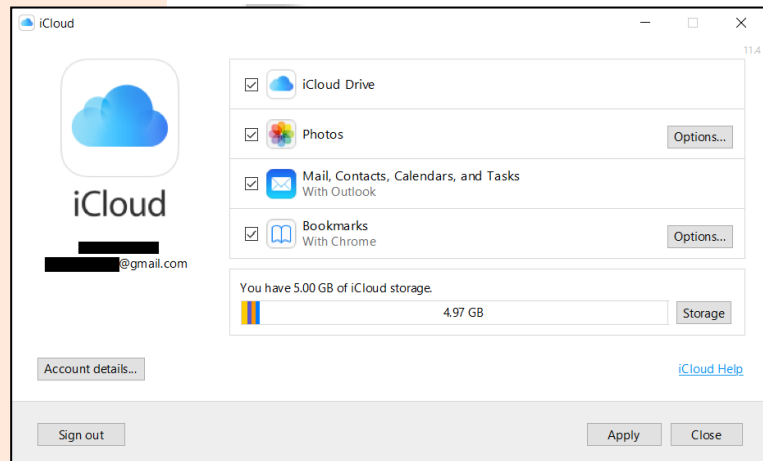


- For an iOS device, you need to transfer the restored data from the alternate location to iCloud.

Example of the Alternate location: **/Users/admin/Alt Location**



Upload to iCloud using the iCloud app



15 Contact Backup247

15.1 Technical Assistance

To contact Backup247 support representatives for technical assistance, visit our website <https://backup247.com.au/Support.php>

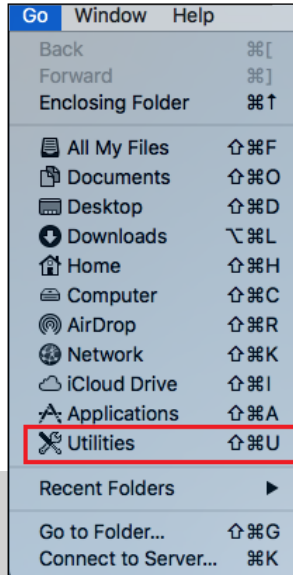
15.2 Documentation

Documentations for all Backup247 modules, user guide and QuickStart are available on our website. Alternatively, email us on support@backup247.com.au for technical demo.

Appendix

Appendix A: Uninstall Backup247 Advanced Client (B247PRO)

1. Click **Go** at the top menu bar, then select **Utilities**.



2. Double click the Terminal.app icon.



Terminal.app

3. Use the command highlighted in **red** to enter the Applications folder.

```
#cd /Applications
#[user]-Mac-mini:Applications [user]$
```

4. Use the command highlighted in **red** to enter the Backup247 Advanced Client (B247PRO) folder.

```
#[user]-Mac-mini:Applications [user]$ cd Backup247 Advanced Client
(B247PRO).app/bin
#[user]-Mac-mini:bin [user]$
```

5. Use the command highlighted in **red** to execute the uninstallation. Enter the password for logging in to your Mac when prompted.

```
#[user]-Mac-mini:bin [user]$sudo sh uninstall.sh
#Password:
```

6. The following scripts show when the uninstallation is completed.

```
#Shutdown Scheduler for Backup247 Online Backup Manager
#Wait 5 seconds before Scheduler exits
```

```
#Kill Process by Image Name:/Applications/Backup247 Advanced  
Client (B247PRO).app/jvm/bin/bJW  
  
#Ignore Process by Image Name:  
  
#Kill Process by Image Name: /Applications/Backup247 Advanced  
Client (B247PRO).app/jvm/bin/bschJW  
  
#Ignore Process by Image Name:  
  
#Kill Process by Image Name: /Applications/Backup247 Advanced  
Client (B247PRO).app/jvm/bin/java  
  
#Ignore Process by Image Name:  
  
#Remove LaunchDaemons for com.Backup247 Advanced Client  
(B247PRO).scheduler from service  
  
#Remove Backup247 Advanced Client (B247PRO) from Your Mac OS  
  
#[user]-Mac-mini:bin [user]$
```

Appendix B: Example Scenarios for Restore Filter

Example No.1: Restore filter setting from /Users/admin/Documents/My Documents/TestFiles with filter type Contains

| | |
|---------------------------|---|
| Location: | /Users/admin/Documents/My Documents/TestFiles |
| Search subfolders: | True |
| Kind: | Files and Directories |
| Type: | Contains |
| Pattern: | Set |
| Match Case: | True |

Follow the step-by-step procedure indicated on Restore Filter.

Search

Look in
 Change

Search subfolders

Kind Type Pattern
 Match case

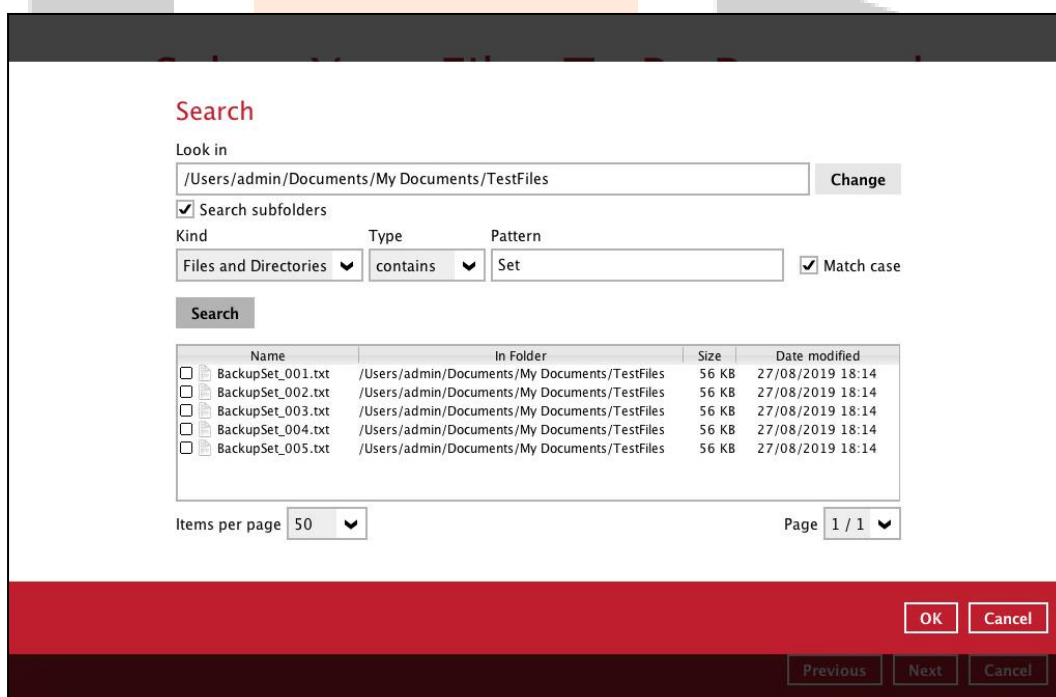
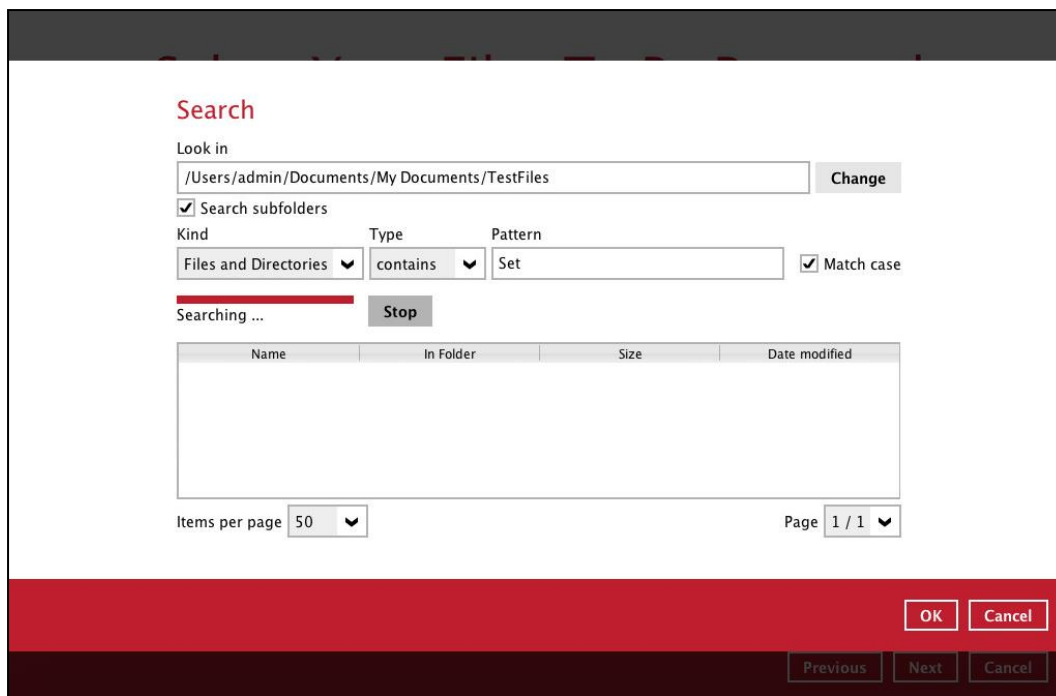
Search

| Name | In Folder | Size | Date modified |
|------|-----------|------|---------------|
| | | | |

Items per page Page

OK Cancel

Previous Next Cancel



Explanation:

All files and directories under /Users/admin/Documents/My Documents/TestFiles that has the pattern that contains with 'Set' with match case set to true will be included upon performing search.

As you can see on the screen shot above, the result panel contains the Name of the file or directory, Directory which are indicated In-Folder column, Size, and Date Modified.

The restore filter setting includes the Search subfolder and Match case set to true. This means that the filter will include all available subfolders in /TestFiles upon searching. And it will strictly search only the specified pattern and case which starts with 'Set'.

Example No.2: Restore filter setting from /Users/admin/Documents/My Documents/TestFiles with filter type Starts With

| | |
|---------------------------|---|
| Location: | /Users/admin/Documents/My Documents/TestFiles |
| Search subfolders: | True |
| Kind: | Files |
| Type: | Starts With |
| Pattern: | A |
| Match Case: | True |

Follow the step-by-step procedure indicated on Restore Filter.

Search

Look in
 Change

Search subfolders

Kind Type Pattern
 Match case

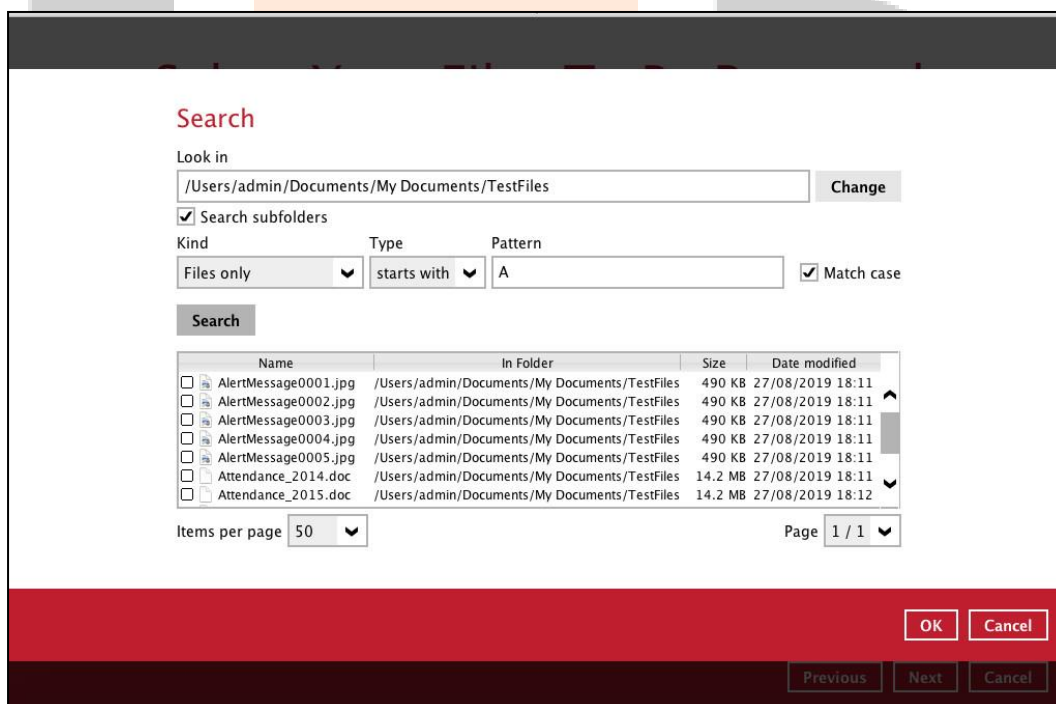
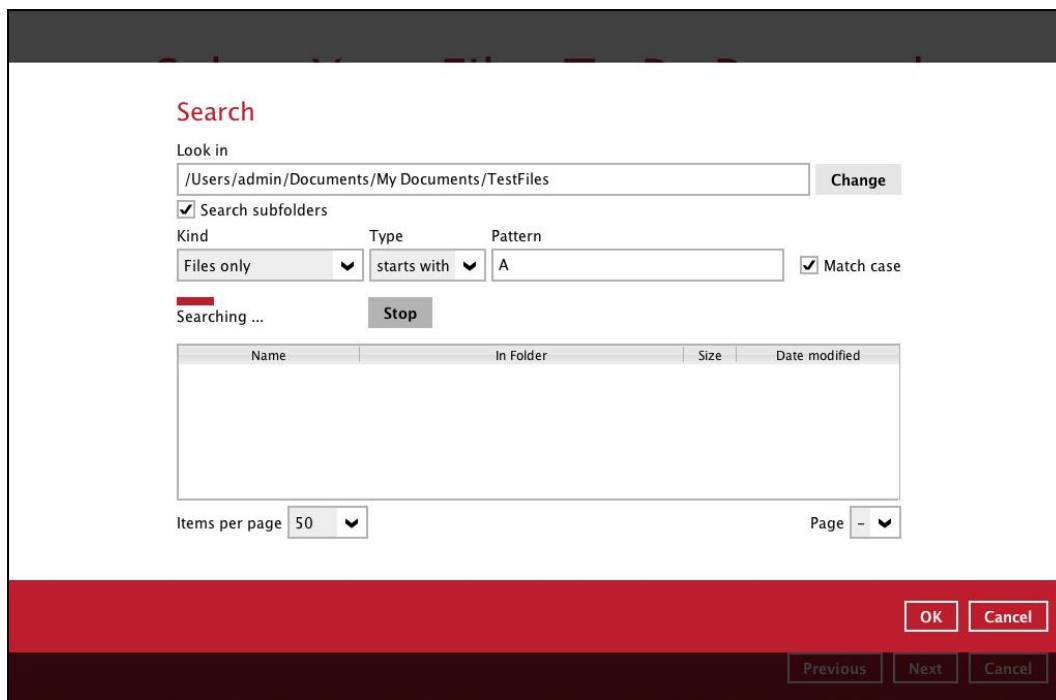
Search

| Name | In Folder | Size | Date modified |
|------|-----------|------|---------------|
| | | | |

Items per page Page

OK Cancel

Previous Next Cancel



Explanation:

All files and directories under /Users/admin/Documents/My Documents/TestFiles that has the pattern that starts with 'A' with match case set to true will be included upon performing search.

As you can see on the screen shot above, the result panel contains the Name of the file, Directory which are indicated In-Folder column, Size, and Date Modified.

The restore filter setting includes the Search subfolder and Match case set to true. This means that the filter will include all available subfolders in /TestFiles upon searching. And it will strictly search only the specified pattern and case which starts with 'A'.

Example No.3: Restore filter setting from /Users/admin/Documents/My Documents/TestFiles with filter type Ends With

| | |
|---------------------------|---|
| Location: | /Users/admin/Documents/My Documents/TestFiles |
| Search subfolders: | True |
| Kind: | Files and Directories |
| Type: | Ends With |
| Pattern: | g |
| Match Case: | True |

Follow the step-by-step procedure indicated on Restore Filter.

Search

Look in
 Change

Search subfolders

Kind: Files and Directories | Type: ends with | Pattern: g | Match case

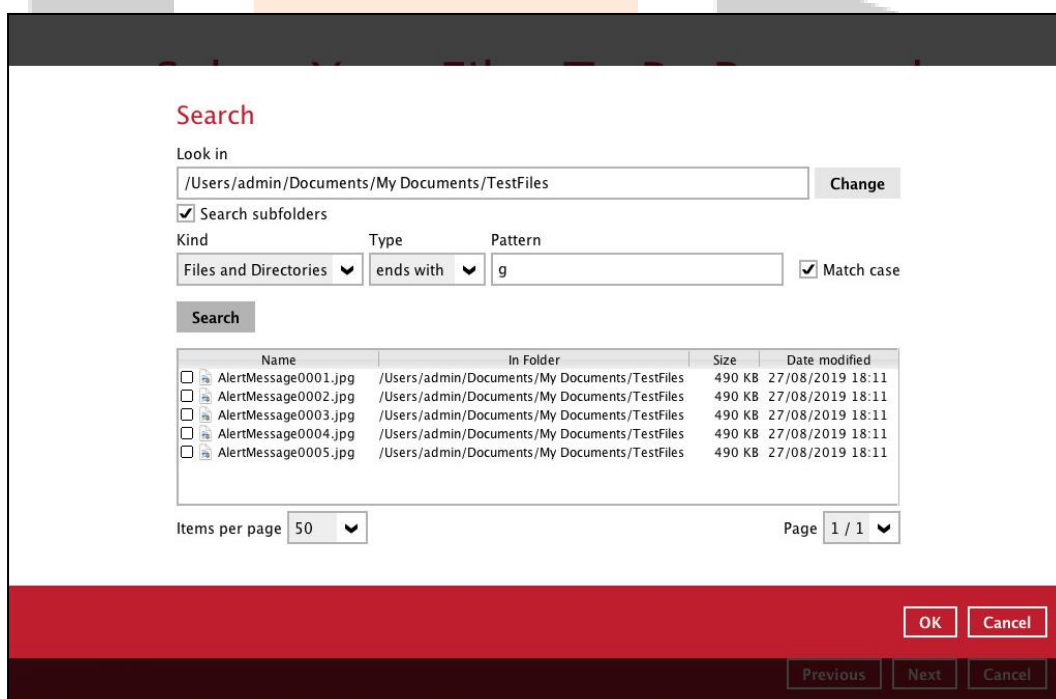
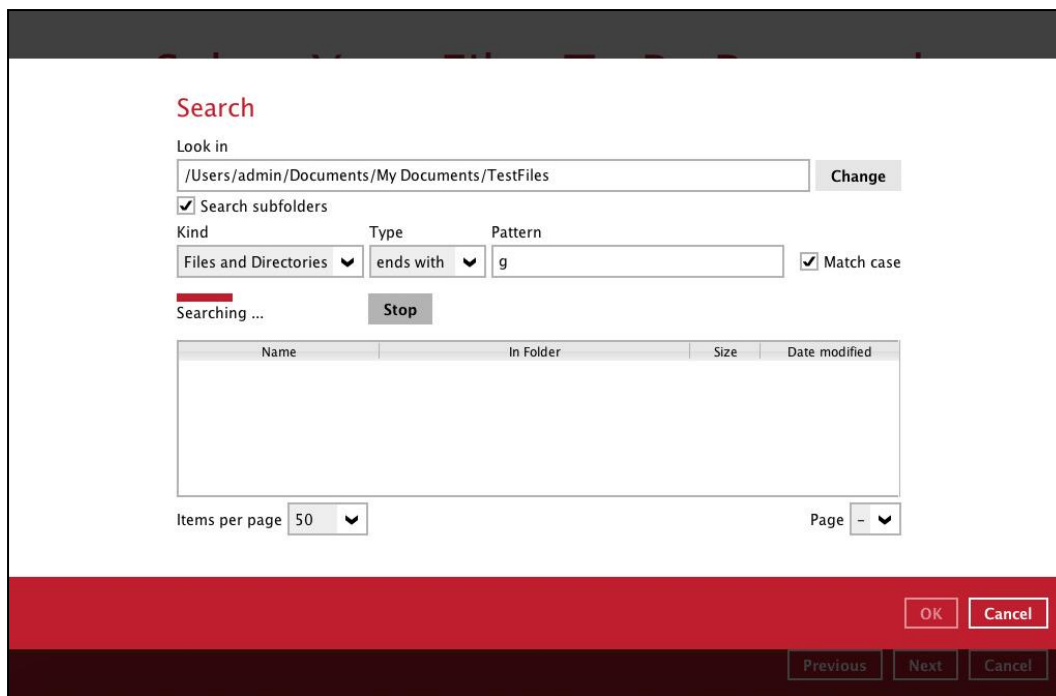
Search

| Name | In Folder | Size | Date modified |
|------|-----------|------|---------------|
| | | | |

Items per page: 50 | Page: -

OK Cancel

Previous Next Cancel



Explanation:

All files and directories under /Users/admin/Documents/My Documents/TestFiles that has the pattern that ends with 'g' with match case set to true will be included upon performing search.

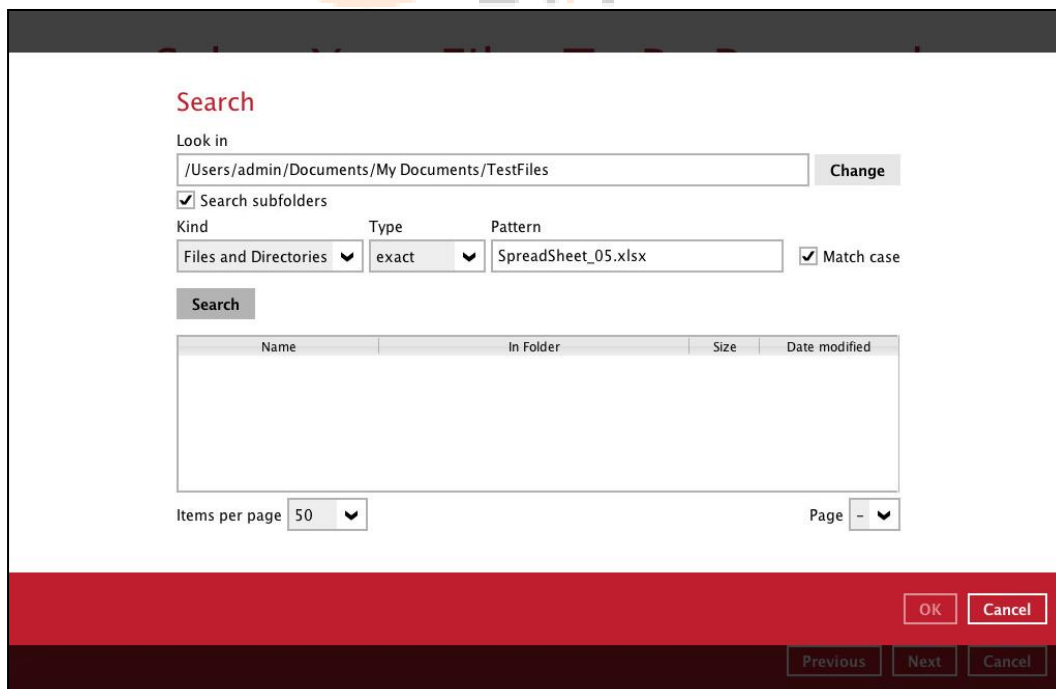
As you can see on the screen shot above, the result panel contains the Name of the files and directories, Directory which are indicated In-Folder column, Size, and Date Modified.

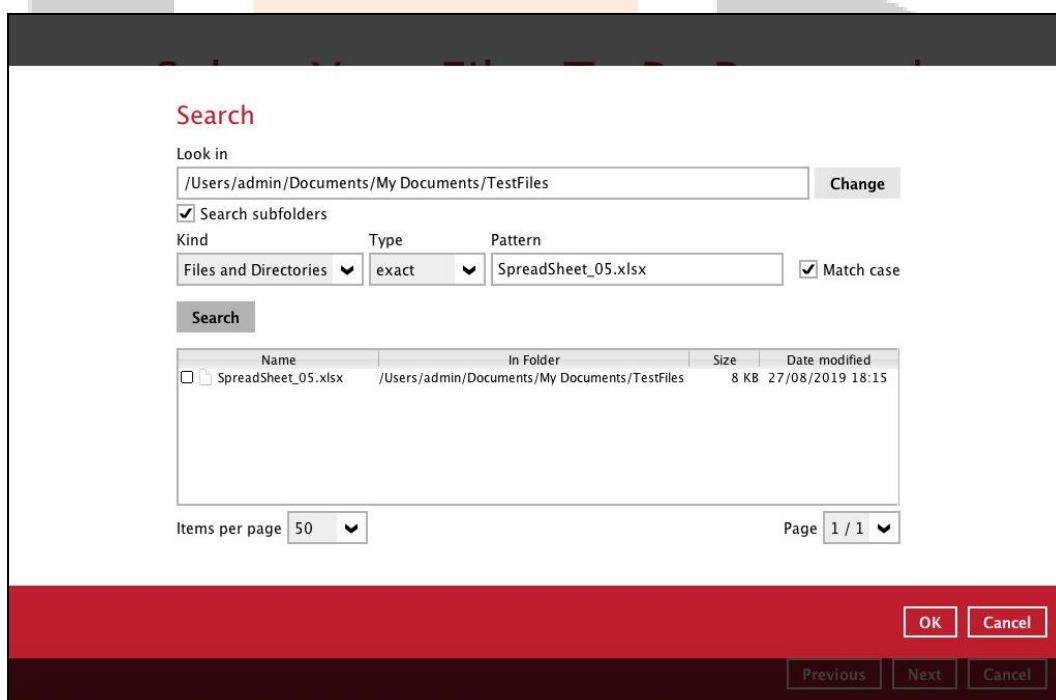
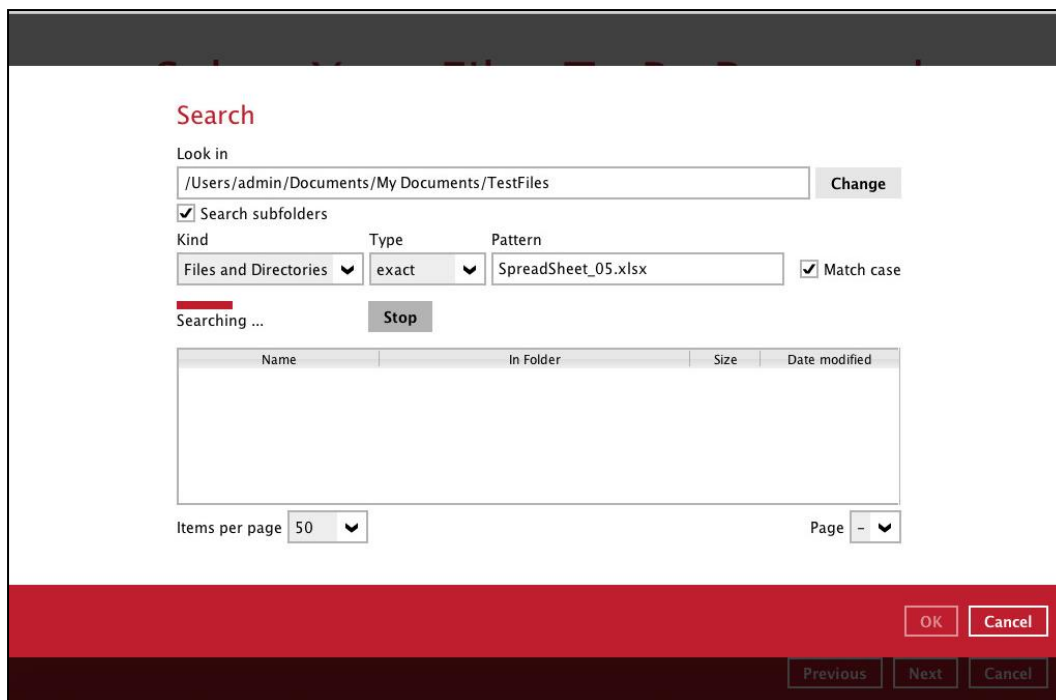
The restore filter setting includes the Search subfolder and Match case set to true. This means that the filter will include all available subfolders in /TestFiles upon searching. And it will strictly search only the specified pattern and case which starts with 'g'.

Example No.4: Restore filter setting from /Users/admin/Documents/My Documents/TestFiles with filter type Exact

| | |
|---------------------------|---|
| Location: | /Users/admin/Documents/My Documents/TestFiles |
| Search subfolders: | True |
| Kind: | Files and Directories |
| Type: | Exact |
| Pattern: | SpreadSheet_05.xlsx |
| Match Case: | True |

Follow the step-by-step procedure indicated on Restore Filter.





Explanation:

All files and directories under /Users/admin/Documents/My Documents/TestFiles that has the pattern that has the exact pattern 'SpreadSheet_05.xlsx' with match case set to true will be included upon performing search.

As you can see on the screen shot above, the result panel contains the Name of the files and directories, Directory which are indicated In-Folder column, Size, and Date Modified.

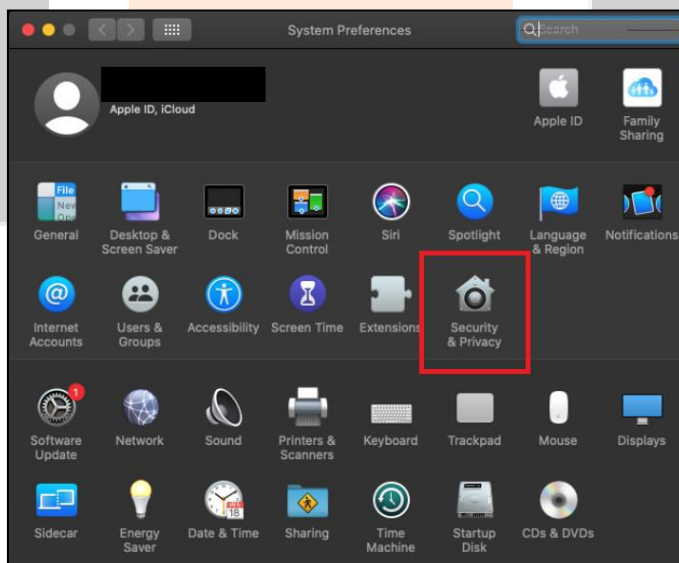
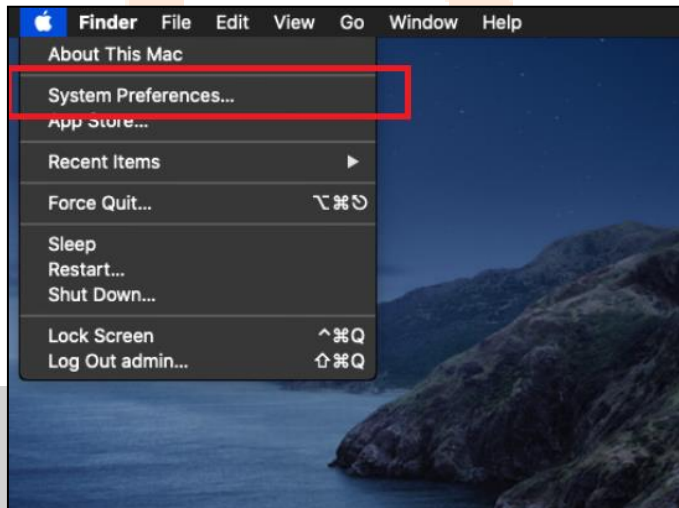
The restore filter setting includes the Search subfolder and Match case set to true. This means that the filter will include all available subfolders in /TestFiles upon searching. And it will strictly search only the specified pattern and case which starts with 'SpreadSheet_05.xlsx'.

Appendix C: Setting up Full Disk Access Permission

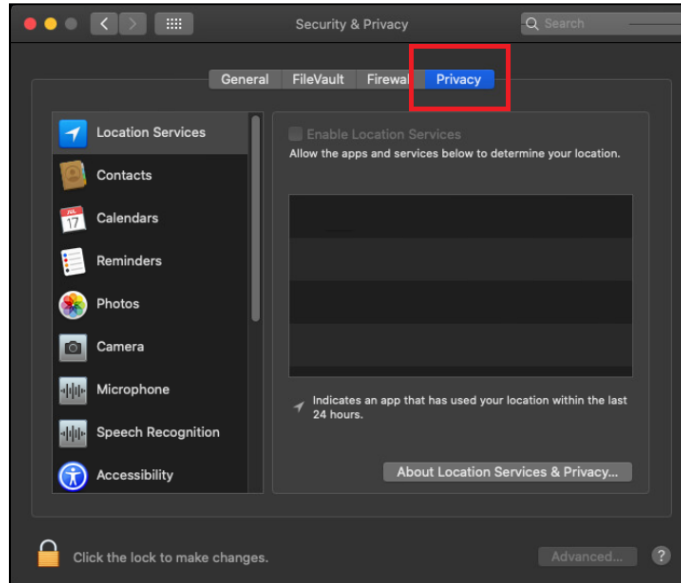
What is Full Disk Access? Full Disk Access is a new security feature in macOS 10.15 or higher that requires some applications to be given full permission to access your protected files and have certain administrative settings available.

Here are the steps on how to setup and grant Backup247 Advanced Client (B247PRO) a Full Disk Access:

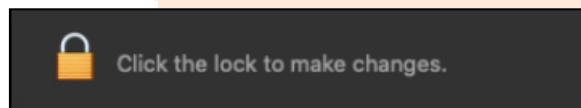
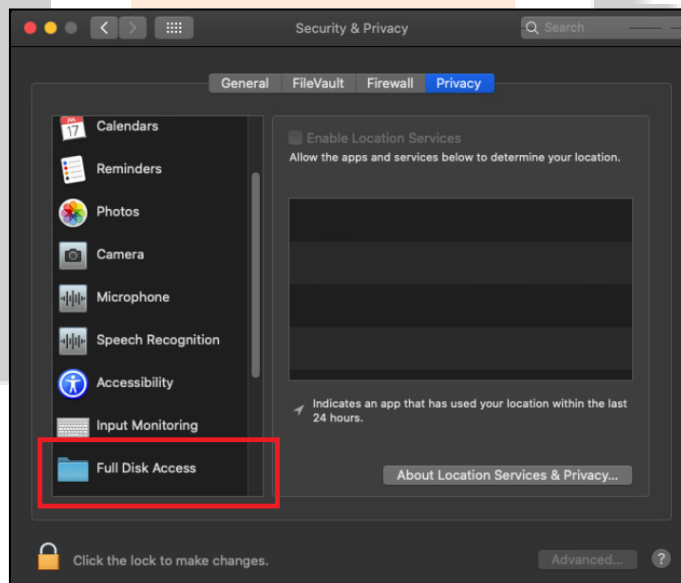
1. Open **System Preferences > Security & Privacy**.



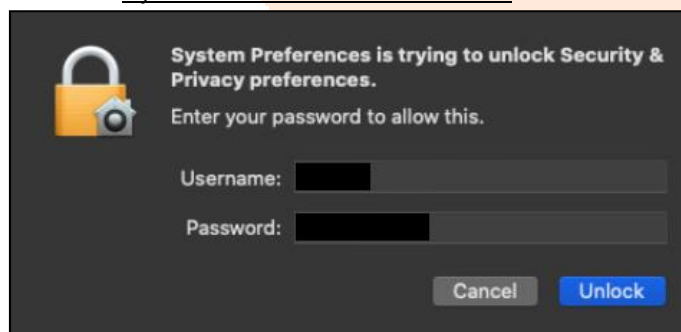
2. Select the **Privacy** tab.



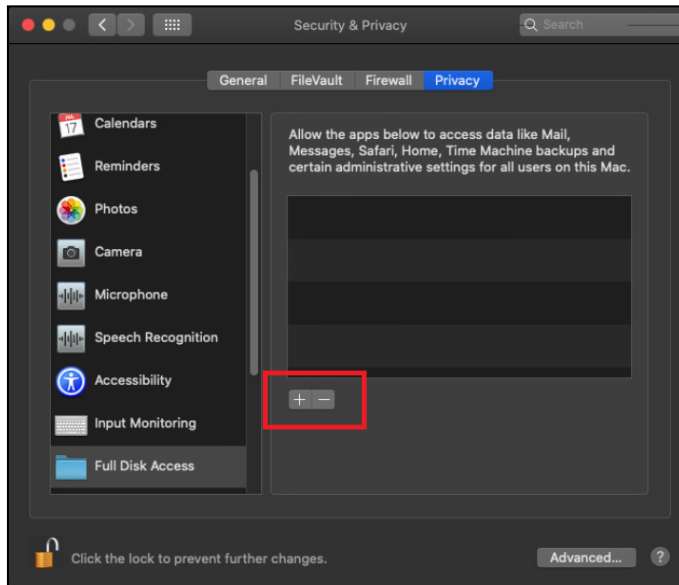
3. Select **Full Disk Access**, then click the lock icon.



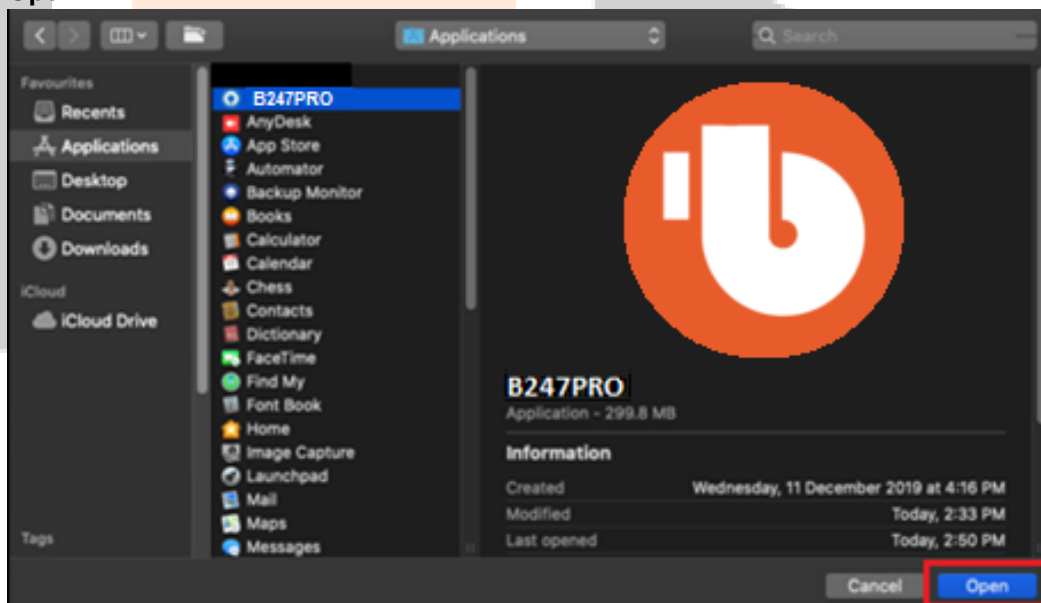
4. Enter the System Administrator credentials and click the **Unlock**.



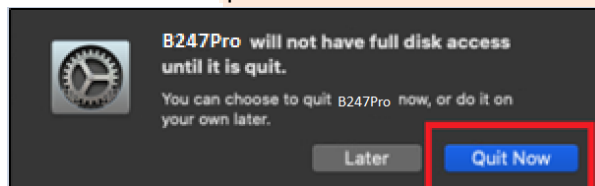
5. Click the plus icon.



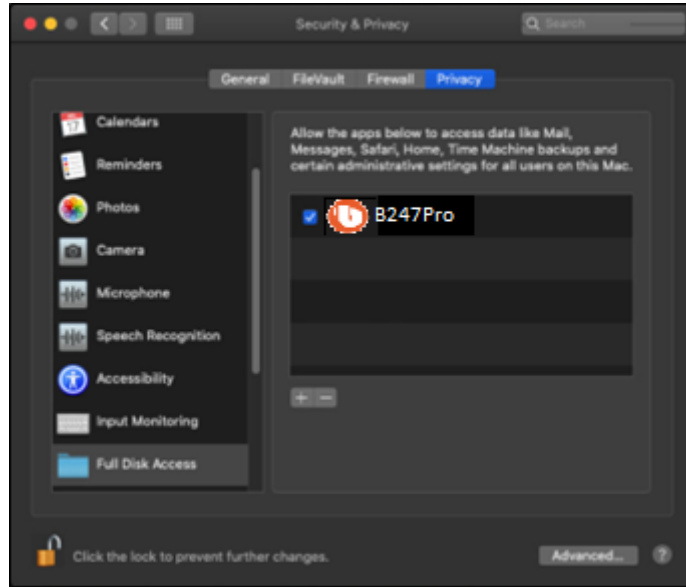
6. Click the **Applications**, then select **Backup247 Advanced Client (B247PRO)**, and click **Open**.



This message will appear if you have the Backup247 Advanced Client (B247PRO) open. Click **Quit Now** to proceed.



7. Backup247 Advanced Client (B247PRO) has now Full Disk Access.



Appendix D: Create Free Trial Account in Backup247 Advanced Client (B247PRO)

Users can create a free trial account when they login to Backup247 Advanced Client (B247PRO) for the first time. Please ensure that the following requirements are met before creating your trial account:

- A valid email address which will be used for receiving notices. A welcome message will also be sent upon creation of the account which specifies the User Setting and Quota set for backup in B247CBS.

While here are the limitations of a trial account:

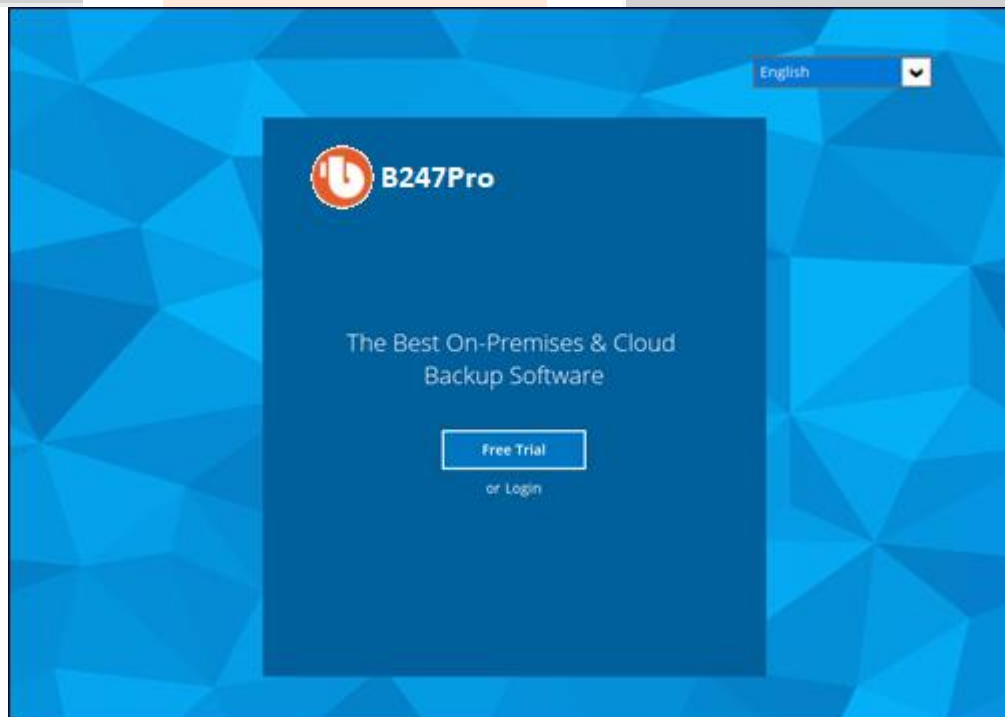
- The Free Trial button will only be displayed once when the user login for the first time. If you cannot create a free trial account kindly contact your backup service provider.
- Only alphanumeric characters and selected special characters, A to Z, 0 to 9, @, - and _ , are allowed to be used for the Login name. While there may be some limitations on password complexity and age which is determined by the backup service provider. Please contact your backup service provider for further details.
- The add-on modules available and quota size are determined by your backup service provider.
- The trial account period is determined by your backup service provider. Please contact your backup service provider for details.

NOTE

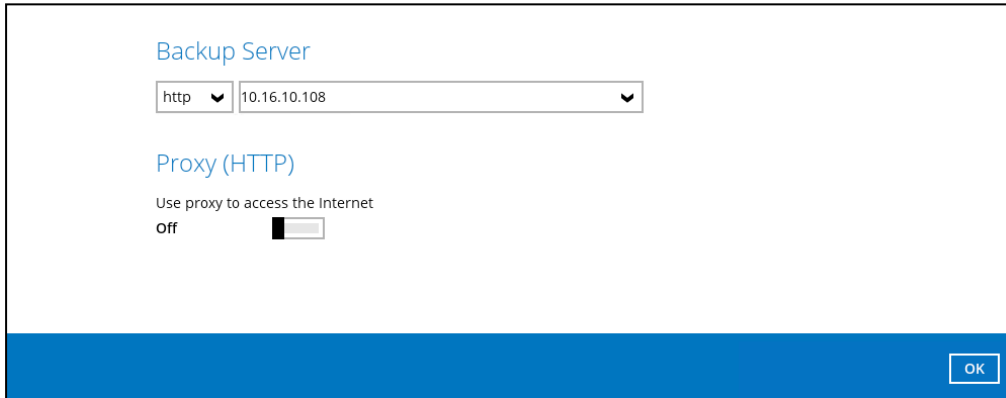
The Free Trial Registration option may not be available. This depends on the settings of your backup service provider. Please contact Backup247 Technical Support for more information.

Follow the steps below to create a Free Trial backup account in Backup247 Advanced Client (B247PRO).

1. Click on **Free Trial**.

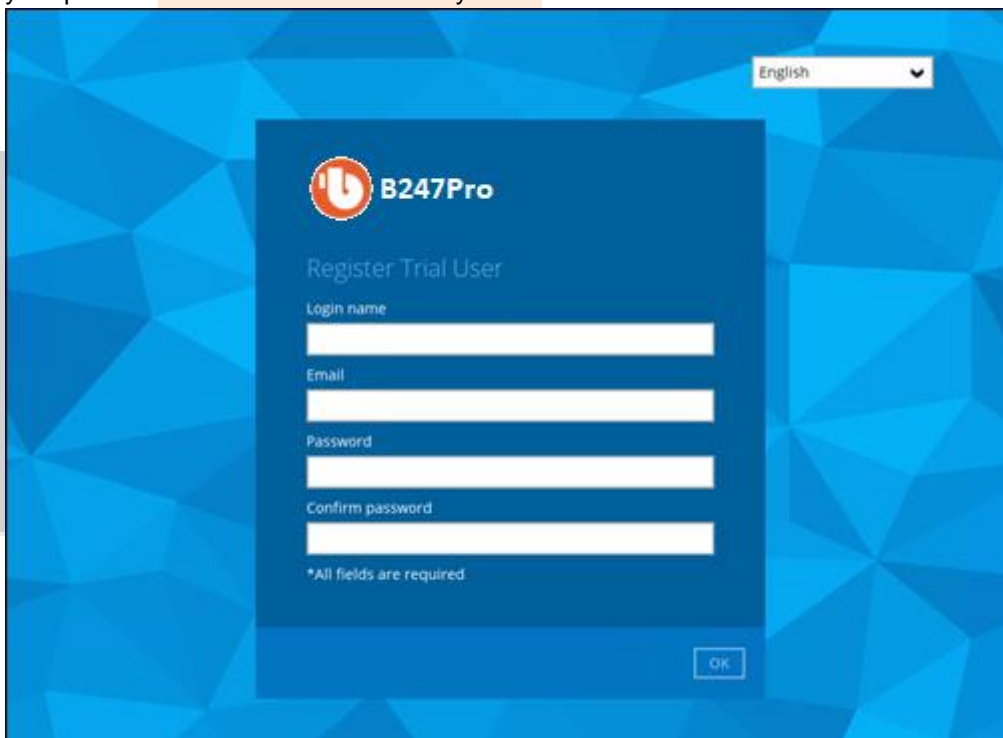


2. Configure your Backup Server settings.



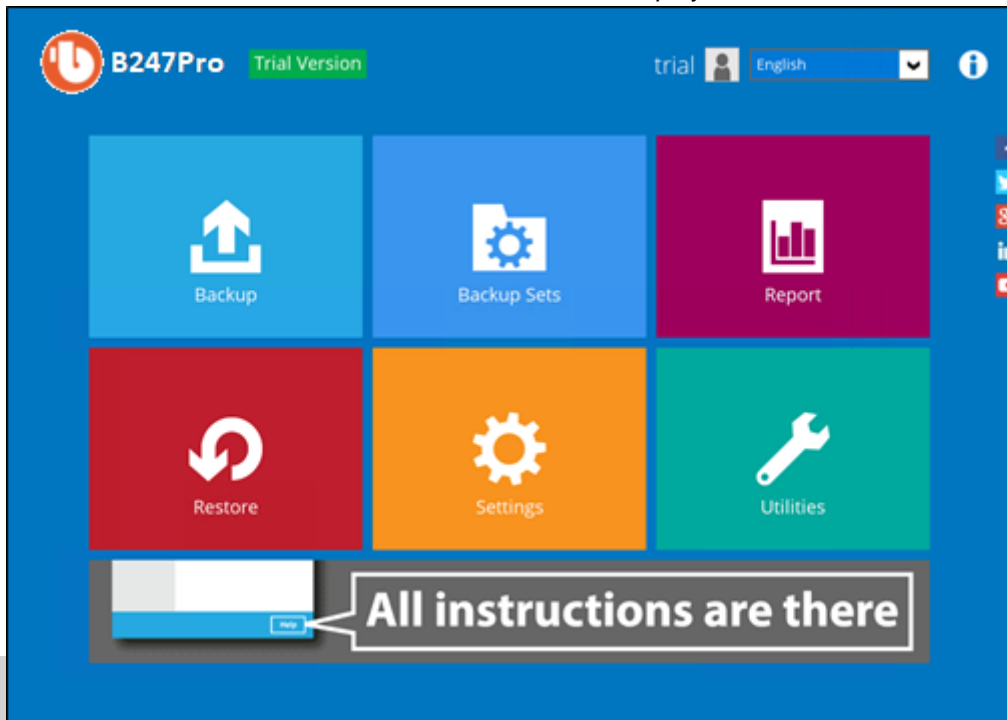
The screenshot shows a dialog box titled "Backup Server". It contains two input fields: the first is a dropdown menu set to "http" and the second is a text box containing "10.16.10.108". Below these is a section titled "Proxy (HTTP)" with the text "Use proxy to access the Internet" and a toggle switch labeled "off". An "OK" button is located in the bottom right corner of the dialog box.

3. Enter the Login name that you want. Also provide your email address and password. Confirm your password and click **OK** to create your trial account.



The screenshot shows a "Register Trial User" dialog box for B247Pro. The dialog has a blue background with a geometric pattern. It features a language dropdown menu set to "English" in the top right. The main content area includes the B247Pro logo and the title "Register Trial User". Below the title are four input fields labeled "Login name", "Email", "Password", and "Confirm password". A note at the bottom states "*All fields are required". An "OK" button is positioned in the bottom right corner.

4. Once the trial account is created, this screen will be displayed.



5. If the user has input their email at **Step 3**, they will periodically receive an email notification(s) about the changes to their trial account such as backup report(s), or when the expiration date of their trial period is approaching in less than 10 days.

Below is an example of the trial expiration email.

