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Backup Advanced Backup Manager (B247PRO) v9
Quick Start Guide for Windows

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Table of Contents

1 Overview	1
1.1 What is this software?	1
1.2 System Architecture	1
1.3 Mobile Backup Server	2
1.4 Two-Factor Authentication	6
2 Requirements for Backup247 Mobile (B247MOB) App	9
2.1 Backup Software Version Requirement.....	9
2.2 Network Connection.....	9
2.3 Android and iOS Version Requirement.....	9
3 Requirements for Advanced Client (B247PRO) on Windows	10
3.1 Hardware Requirements	10
3.2 Software Requirements.....	11
3.3 Antivirus Exclusion Requirement.....	15
3.4 Upgrade VMware Tools Requirement	16
3.5 Temporary Directory Requirements	16
3.6 Network Drive Requirements	16
3.7 Firewall Settings.....	16
3.8 Two-Factor Authentication Requirements	16
3.9 Mobile Backup Requirements	16
3.10 Network Bandwidth	16
3.11 Limitations.....	17
3.11.1 RDS User Profile Disks.....	17
3.11.2 Enhanced Network Drive Support	17
3.12 Best Practices and Recommendations.....	17
3.12.1 Periodic Backup Schedule	17
3.12.2 Set up of both Periodic and Continuous Backup Schedule	18
3.12.4 Temporary Directory Folder Location	18
4 Get Started with Advanced Client (B247PRO)	19
5 OpenDirect Restore.....	20
5.1 What is OpenDirect Restore?.....	20
5.2 How does OpenDirect Restore work?	21
5.3 Benefits of using OpenDirect Restore	21
5.4 Requirements.....	22
5.4.1 Supported Backup Modules	22
5.4.2 License Requirements	22

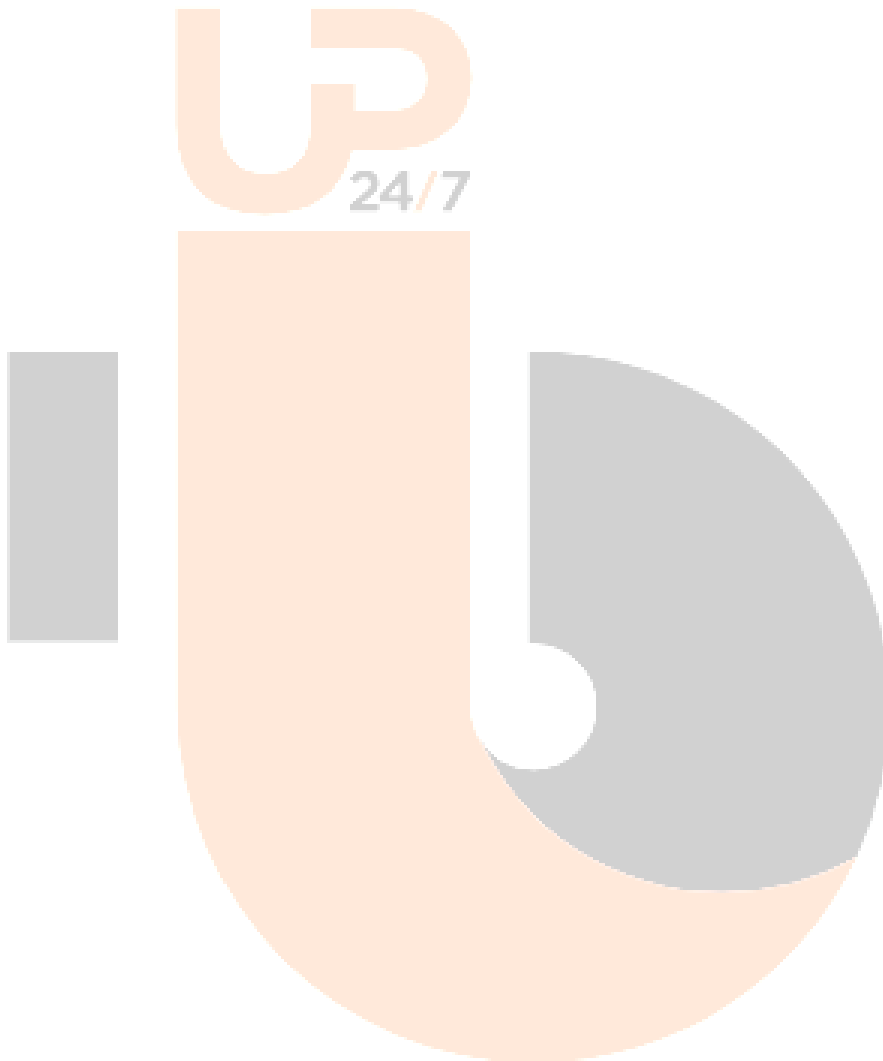
5.4.3	Backup Quota Storage.....	23
5.4.4	Windows Operating System.....	23
5.4.5	Available Spare Drive Letter	23
5.4.6	Network Requirements	23
5.4.7	Other Dependencies.....	24
5.4.8	Permissions	24
6	Download and Install Advanced Client (B247PRO).....	25
6.1	Download Advanced Client (B247PRO)	26
6.2	Install Advanced Client (B247PRO)	27
6.2.1	Online Installation using EXE online installer	27
6.2.2	Offline Installation using ZIP offline installer	32
6.3	Advanced Client (B247PRO) Services	33
6.4	Mobile Backup Server (MBS) Status Check and Backup247 Mobile (B247MOB) app Connection Check.....	35
7	Register device for 2FA in Advanced Client (B247PRO)	38
7.1	Using Backup247 Mobile (B247MOB) Authenticator	38
7.1.1	Without Mobile Add-on Module	38
	Phone number verification for account recovery	44
7.1.2	With Mobile Add-on Module	51
7.2	Using Microsoft Authenticator	57
7.3	Using Google Authenticator	66
8	Logging in to Advanced Client (B247PRO).....	74
8.1	Login to Advanced Client (B247PRO) without 2FA.....	74
8.2	Login to Advanced Client (B247PRO) with 2FA using Backup247 Mobile (B247MOB) Authenticator	75
8.3	Login to Advanced Client (B247PRO) with 2FA using Microsoft Authenticator	80
8.4	Login to Advanced Client (B247PRO) with 2FA using Google Authenticator	82
8.5	Login to Advanced Client (B247PRO) with 2FA using Twilio	85
9	Unable to log in to Advanced Client (B247PRO) with 2FA	88
10	Advanced Client (B247PRO) Overview.....	91
10.1	Profile.....	92
10.1.1	General.....	92
10.1.2	Contacts	94
10.1.3	Time Zone	96
10.1.4	Encryption Recovery.....	96
10.1.5	Password.....	97
10.1.6	Authentication.....	98

v

10.1.7	Security Settings.....	107
10.2	Language.....	108
10.3	Information.....	108
10.4	Backup.....	109
10.5	Backup Sets.....	109
	Backup Set Settings.....	110
	General	111
	Source.....	114
	Backup Schedule.....	127
	Continuous Backup	131
	Destination	133
	Deduplication.....	136
	Retention Policy.....	140
	Command Line Tool	151
	Reminder.....	156
	Bandwidth Control	158
	Others	160
10.6	Report.....	165
10.6.1	Backup	165
10.6.2	Restore.....	169
10.6.3	Usage.....	171
10.7	Restore	173
10.8	Settings.....	173
10.8.1	Proxy	174
10.8.2	Windows Event Log	176
10.8.3	Mobile Backup	177
10.9	Utilities	187
10.9.1	Data Integrity Check	187
	Data Integrity Check Result	201
	Test Mode confirmation	202
10.9.2	Space Freeing Up.....	204
10.9.3	Delete Backup Data.....	207
10.9.4	Decrypt Backup Data	212
10.10	Online Help	215
10.11	System Tray.....	216
11	Create a Backup Set.....	222

12 Overview on the Backup Process.....	234
12.1 Periodic Data Integrity Check (PDIC) Process	235
12.2 Backup Set Index Handling Process	237
12.2.1 Start Backup Job	237
12.2.2 Completed Backup Job.....	238
12.3 Data Validation Check Process.....	239
13 Run Backup Jobs.....	240
13.1 Login to Advanced Client (B247PRO)	240
13.2 Start a Manual Backup.....	240
14 Restore Data.....	244
14.1 Restore Method	244
14.1.1 Traditional Restore	244
14.1.2 OpenDirect Restore	252
14.2 Restore Filter	257
15 Mobile Backup and Restore to B247CBS and Predefined Destination	263
16 Contact Backup247.....	268
16.1 Technical Assistance	268
16.2 Documentation.....	268
Appendix.....	269
Appendix A: Uninstall Advanced Client (B247PRO).....	269
Appendix B: Example Scenarios for Restore Filter	272
Appendix C: Batch Files	281
RunCB.bat	281
RunConfigurator.bat.....	288
ListBackupSet.bat.....	292
RunBackupSet.bat.....	293
ListBackupJob.bat	299
Restore.bat	302
Decrypt.bat	308
RunDataIntegrityCheck.bat	314
Appendix D: Example Scenarios for the Reminder	319
Windows Log Off	319
Windows Restart.....	320
Windows Shutdown	321
Scenario 1 (Windows Log Off + Enabled Locking Workstation).....	322
Scenario 2 (Windows Log Off + Unselected Locking Workstation).....	323

Scenario 3 (Windows Restart + Enabled Locking Workstation)..... 324
Scenario 4 (Windows Restart + Unselected Locking Workstation) 325
Scenario 5 (Windows Shutdown + Enabled Locking Workstation) 326
Scenario 6 (Windows Shutdown + Unselected Locking Workstation)..... 327
Appendix E: Create Free Trial Account in Advanced Client (B247PRO) 328
Appendix F: How to Manage Network Drives which are not set in Windows 331



1 Overview

1.1 What is this software?

BACKUP247 brings you specialized client backup software, namely Advanced Client (B247PRO), to provide a comprehensive backup solution for protecting files/folders 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.

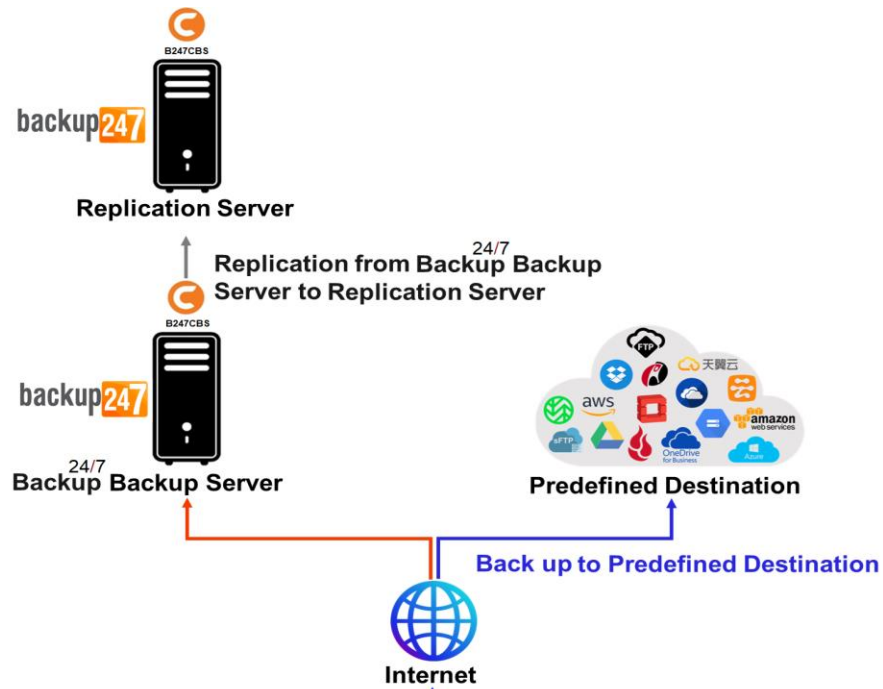
1.2 System Architecture

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

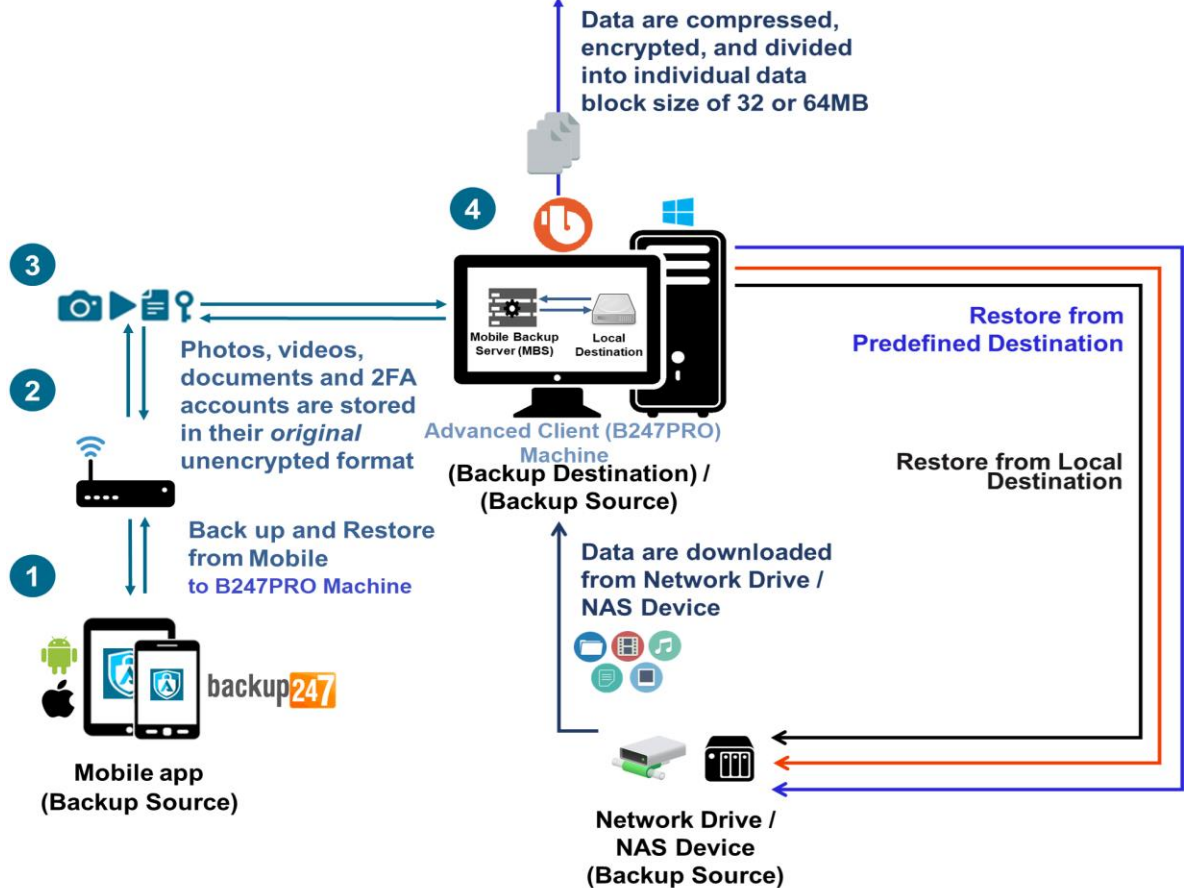
NOTE

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. For a first-time mobile backup, please do the following to prevent any interruption during the 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



2



1.3 Mobile Backup Server

The Mobile Backup Server (MBS) will be utilized to handle mobile backup and restore of Backup247 Mobile app (B247MOB). It is an integral part of 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 Advanced Client (B247PRO).

Afterwards, it will be automatically restarted whenever the Advanced Client (B247PRO) services is restarted or when the 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 Advanced Client (B247PRO) services are 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 (B247MOB)

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 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)

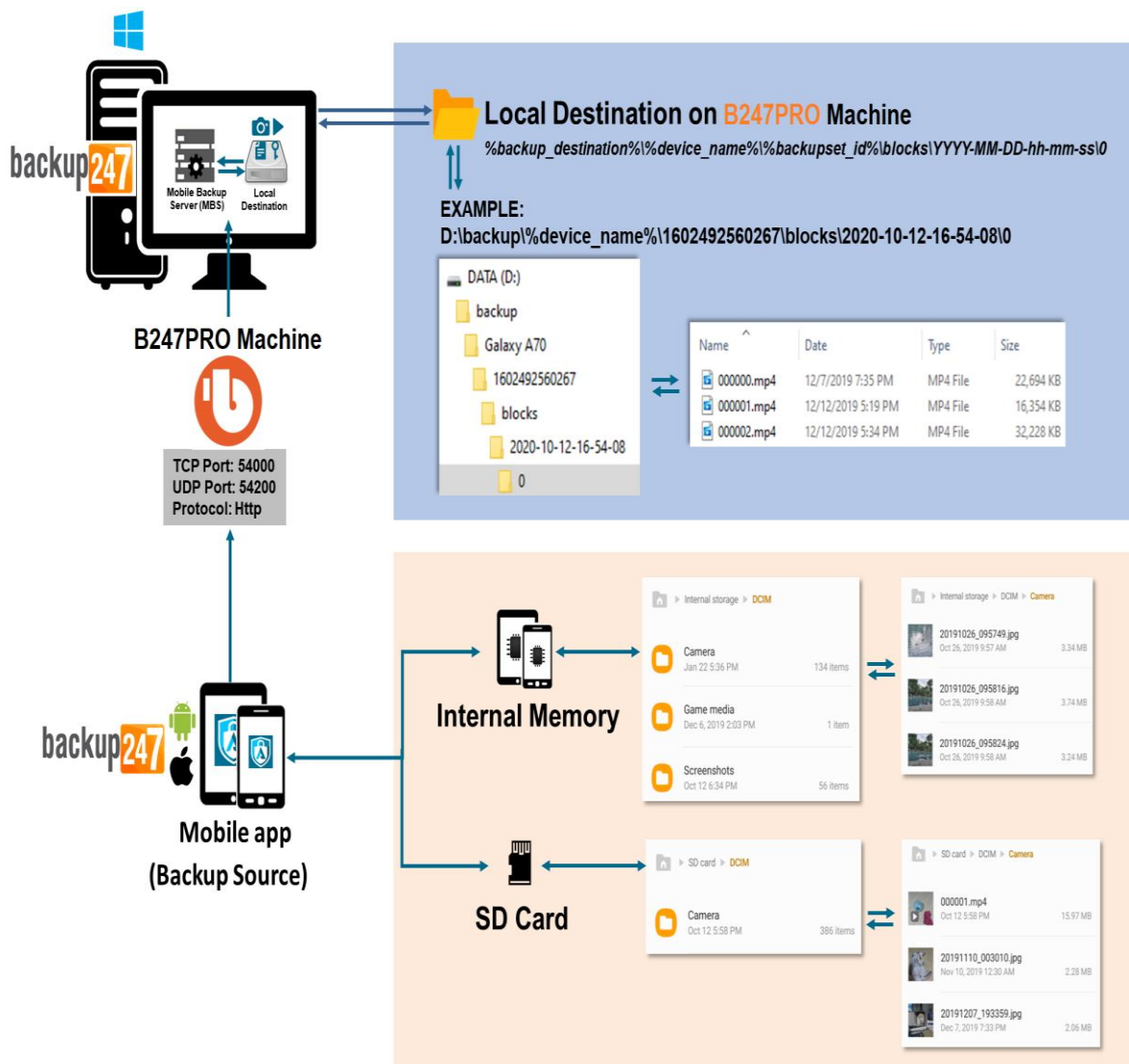
 Download on the App Store  GET IT ON Google Play



- Please make sure below 2 ports are not blocked by any Firewall settings
TCP Port: 54000
UDP Port: 54200

3

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 a 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.



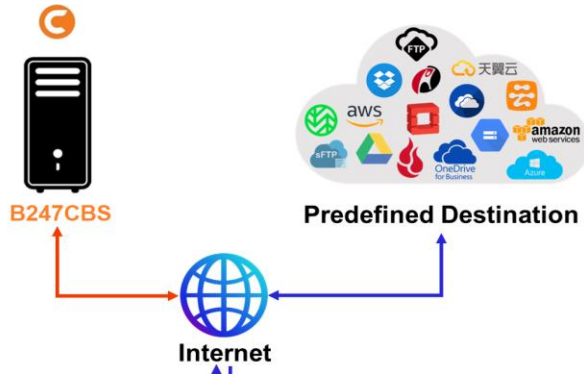
4

If storage of photos, videos, documents and 2FA accounts to B247CBS and/or Predefined Destination is required, then this can be done using 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 (B247MOB) to Advanced Client (B247PRO) then **B247CBS** and/or Predefined Destination is a two-step process.

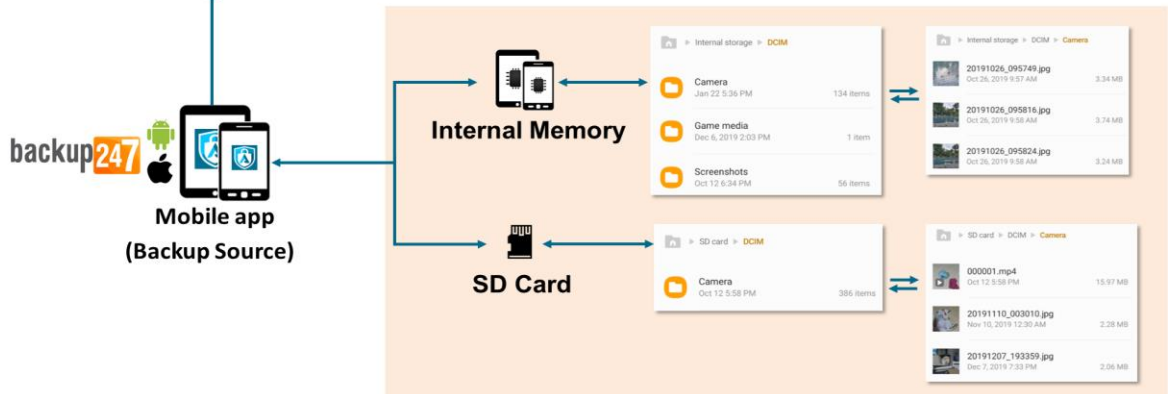
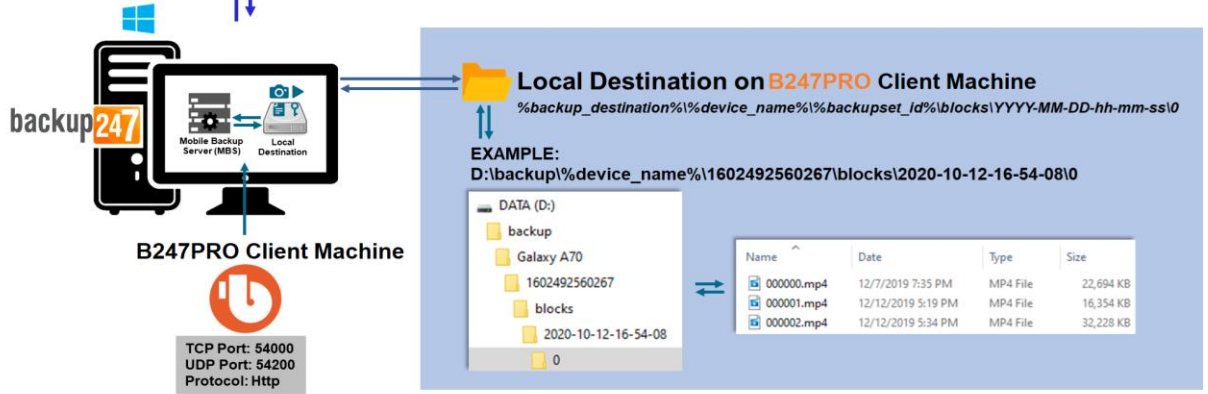
1st: Back up photos, videos, documents and 2FA accounts from B247MOB to Advanced Client (B247PRO) local destination.

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



Data are compressed, encrypted, and divided into individual data block size of 32 or 64MB

Back up and Restore from Advanced Client (Pro) Machine to CBS and/or Predefined Destination



5

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 (B247MOB) 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 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 (B247MOB) is used as the authenticator app:

- you will either accept the login request via push notification in the Backup247 Mobile (B247MOB) app; or
- enter the one-time password generated in the Backup247 Mobile (B247MOB) 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 accounts with Two-Factor Authentication enabled using either the Backup247 Mobile (B247MOB) app or a third-party authenticator app.



B247PRO Client

Login

Login name
user

Password

Save password

[Forgot password](#)

Advanced Client (B247PRO) 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)



OR



Accept Authorization Request

Mobile

backup247

Authorization Request

Proceed authorization request for user

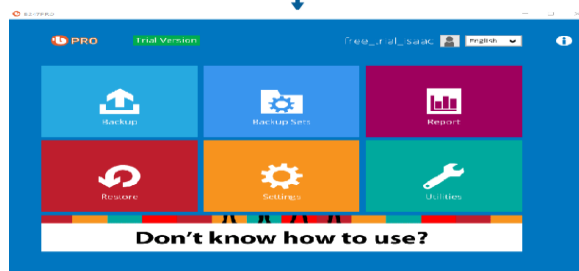
REJECT ACCEPT

Input one-time password

user

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

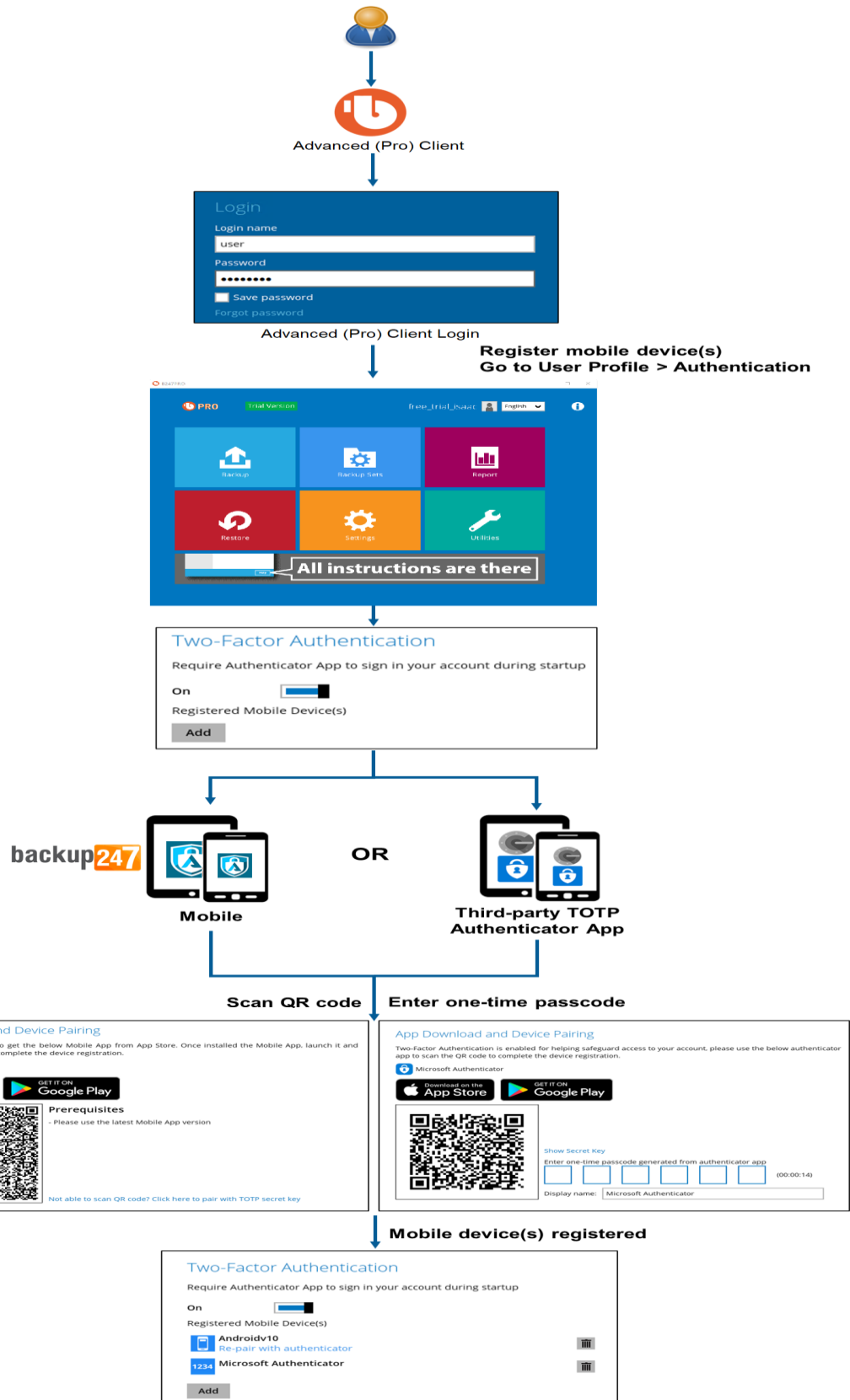
One-time password code
811 901



Advanced Client (B247PRO) Main Interface

7

This illustrates the registration of mobile device(s) for Two-Factor Authentication using either the Backup247 Mobile (B247MOB) app or a third-party authenticator app.



2 Requirements for Backup247 Mobile (B247MOB) App

2.1 Backup Software Version Requirement

- Download and install the latest version of Advanced Client (B247PRO) v9.0.0.0 or above.
- Download and install the latest version of Backup247 Mobile (B247MOB) 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 (B247MOB) app is connected to the same local network as the 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 Advanced Client (B247PRO) on Windows

3.1 Hardware Requirements

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

B247PRO  / B247LITE 
CPU:
Quad Core architecture or above ^[1]
<small>^[1] 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</small>
Memory (RAM):
Minimum: 4 GB (at least 50% free memory available) Recommended: 8 GB or more (at least 50% free memory available)
<small>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</small>
Installation Space:
Minimum: 500 MB
Network Protocol:
TCP/IP
Network Bandwidth:
10 Mbps or above connection speed ^[2]
<small>^[2] To ensure a stable and consistent backup/restore performance</small>
OpenJDK Version: (bundled)
OpenJDK 1.8.0u181 or above ^[3]
<small>^[3] Performance and stability is dependent on the operating system platforms and / or hardware architecture</small>

10

3.2 Software Requirements

Refer to the following article for the list of compatible operating systems and Hyper-V platforms:

Operating System	Supported Version	Support End Date (YYYY/MM/DD)
Windows platforms: ^[1]		
XP Home / Professional *	9.1.0.0 or above	EOS reached
2003 Web / Standard / Enterprise / Data Center *	9.1.0.0 or above	EOS reached
Vista Home Basic / Home Premium / Business / Enterprise / Ultimate *	9.1.0.0 or above	EOS reached
7 Home Basic / Home Premium / Professional / Enterprise / Ultimate	9.1.0.0 or above	EOS reached
8 Pro / Enterprise	9.1.0.0 or above	EOS reached
8.1 Pro / Enterprise	9.1.0.0 or above	2023/01/10
10 Home / Pro / Enterprise ^[2]	9.1.0.0 or above	2025/10/14
11 Home / Pro / Enterprise	9.1.0.0 or above	--
Server 2008 Standard / Enterprise / Datacenter	9.1.0.0 or above	EOS reached
Server 2008 R2 Standard / Enterprise / Datacenter	9.1.0.0 or above	EOS reached
Server 2012 Standard / Essentials / Datacenter	9.1.0.0 or above	2023/01/10
Server 2012 R2 Standard / Essentials / Datacenter	9.1.0.0 or above	2023/01/10
Server 2016 Standard / Essentials / Datacenter	9.1.0.0 or above	2027/01/12
Server 2019 Standard / Essentials / Datacenter	9.1.0.0 or above	2030/01/09
Server 2022 Standard / Essentials / Datacenter	9.1.0.0 or above	2031/10/14
Small Business Server 2003 Standard / Essentials / Datacenter *	9.1.0.0 or above	EOS reached
Small Business Server 2008 Standard / Essentials / Datacenter	9.1.0.0 or above	EOS reached
Small Business Server 2011 Standard / Essentials / Datacenter	9.1.0.0 or above	EOS reached
* EOS reached, Backup247 will provide best effort support. Web browser HTTPS SSL CA Certificate chains support based on OS.		
^[1] For B247LITE installation on Windows, you can only install it on a Windows desktop operating systems (non-Server OS)		
^[2] Windows 10 Home Edition is supported since version 8.1.0.50		

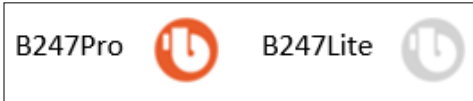
11






















Operating System	Supported Version	Support End Date (YYYY/MM/DD)
Linux platforms: ^[3]		
CentOS 7	9.1.0.0 or above	2024/06/30
CentOS 8	9.1.0.0 or above	2021/12/31
Debian 9	9.1.0.0 or above	2022/06/30
Debian 10	9.1.0.0 or above	2022/08/31 2024/06
Debian 11	9.1.0.0 or above	--
Red Hat Enterprise Linux 7	9.1.0.0 or above	2024/06/30
Red Hat Enterprise Linux 8	9.1.0.0 or above	2029/05/31
Rocky Linux 8.4	9.1.0.0 or above	2029/05/31
Ubuntu 14.04 LTS	9.1.0.0 or above	EOS reached
Ubuntu 16.04 LTS	9.1.0.0 or above	EOS reached
Ubuntu 17.04 *	9.1.0.0 or above	EOS reached
Ubuntu 18.04 LTS	9.1.0.0 or above	2023/04
Ubuntu 19.04 LTS	9.1.0.0 or above	EOS reached
Ubuntu 20.04 LTS	9.1.0.0 or above	2025/04
Ubuntu 21.04	9.1.0.0 or above	2022/01
* EOS reached, Backup247 will provide best effort support		
^[3] GNU GLIBC 2.14 or above Library is required for all Linux platforms		

12

Operating System	Supported Version	Support End Date (YYYY/MM/DD)
Unix platforms: ^[4,5]		
FreeBSD 12 ^[6]	9.1.0.0 or above	EOS reached
FreeBSD 13 ^[6]	9.1.0.0 or above	2026/01/31
Solaris 10 x64 *	9.1.0.0 or above	EOS reached
Solaris 11 Express x64	9.1.0.0 or above	-
Solaris 11 x64	9.1.0.0 or above	2024/11/30
* EOS reached, Backup247 will provide best effort support		
^[4] Support system with graphical environment only. GUI support for Gnome, but KDE should work		
^[5] Limited support, no intensive testing has been performed on this platform, but should work. Best effort support will be provided		
^[6] GNU GLIBC 2.14 or above Library is required for all FreeBSD platforms		
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
Backup247 Mobile (B247MOB):		
Android 8.0 or above	9.1.0.0 or above	-
iOS 12.0 or above	9.1.0.0 or above	-

Refer to the following article for the list of compatible operating system for OpenDirect and Granular Restore:



Operating System	File Backupset	MS Hyper-V Backupset	VMware Backupset
Windows 7 SP1 or above	 	-	
Windows 8	 		
Windows 8.1	 		
Windows 10	 		
Windows 11	 		
Windows Server 2008 R2 SP1 or above		-	
Windows Server 2012			
Windows Server 2012 R2			
Windows Server 2016			
Windows Server 2019			
Windows Server 2022			

- VMware ESXi / vCenter Backup Set only supports for 64-bit Windows operating system.
- Granular restore is only supported on guest VMs running on Windows operating system.
- The drive(s) of the Windows guest VMs are NOT encrypted with security software, i.e., BitLocker or other third-party security software

14

Other Dependencies The following dependencies need to be installed on the **B247PRO** / **B247LITE** restore machine for OpenDirect / Granular Restore to work:

- Microsoft Visual C++ 2015 Redistributable (x86) / (x64) (<https://www.microsoft.com/en-hk/download/confirmation.aspx?id=48145>)
- Microsoft Visual C++ 2015 Redistributable Update 3 RC (<https://www.microsoft.com/en-us/download/details.aspx?id=52685>)
- Update for Universal C Runtime in Windows (<https://support.microsoft.com/en-us/help/2999226/update-for-universal-c-runtime-in-windows>)
 - Prerequisites for **Windows 8.1** or **Windows Server 2012 R2**
 - Install KB2919442 (<https://support.microsoft.com/en-us/help/2919442/march-2014-servicing-stack-update-for-windows-8.1-and-windows-server-2012-r2>)
 - Install KB2919355 (<https://support.microsoft.com/en-us/help/2919355/windows-rt-8.1,-windows-8.1,-and-windows-server-2012-r2-update-april-2014>)
- Microsoft Security Advisory 3033929 for **Windows 7** and **Windows Server 2008 R2** <https://technet.microsoft.com/en-us/library/security/3033929.aspx>

3.3 Antivirus Exclusion Requirement

To optimize performance of Advanced Client (B247PRO) on Windows, and to avoid conflict with your antivirus software, refer to the following instructions that list processes and directory paths that should be added to all antivirus software whitelist / exclusion list:

B247LITE / B247PRO

The following Processes should be whitelisted:

For B247LITE/B247PRO on Windows - bJW.exe

Note: For B247LITE/B247PRO version 7.17 or above, the bJW.exe Process is automatically added to Windows Defender exclusion list for Windows 10 and 2016, during installation / upgrade via installer or upgrade via AUA.

- For B247LITE/B247PRO on x64 Windows - cbpsX64.exe
- For B247LITE/B247PRO on x86 Windows - cbpsX86.exe

CBT Cluster Services (for client with Hyper-V VM backup set)

- For B247PRO on Windows 2008 / R2 and 2012 / R2 - CBTClusterService.exe
- NFS Service (for client with VMware VM and Hyper-V VM Run Direct backup set)
 - For B247PRO on x64 Windows - nfsX64.exe
 - For B247PRO on x86 Windows - nfsX86.exe

The following directory path should be whitelisted:

B247LITE/B247PRO installation folder

- C:\Program Files\B247LITE
- C:\Program Files\B247PRO

B247PRO NFS service installation folder

- C:\Program Files\B247PRO NFS

B247LITE/B247PRO log folder

- %SystemDrive%\ProgramData\B247LITE
- %SystemDrive%\ProgramData\B247PRO

B247LITE/B247PRO configuration and log folder

- %UserProfile%\B247LITE
- %UserProfile%\B247PRO

NOTE

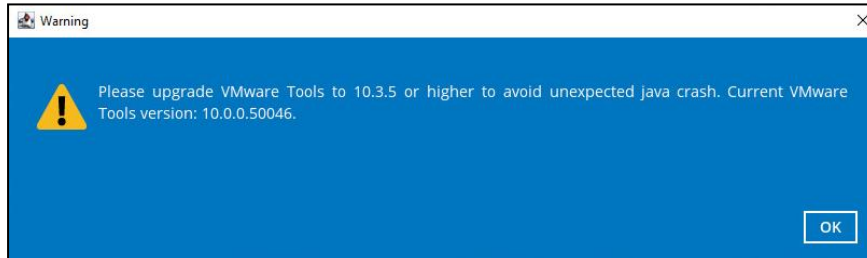
The bJW.exe process is automatically added to Windows Defender exclusion list for Windows 10 and 2016 / 2019, during installation / upgrade via installer or upgrade via AUA.

For mobile backups, the mobile backup destination must also be added to all antivirus software whitelist / exclusion list.

3.4 Upgrade VMware Tools Requirement

To avoid an unexpected java crash, if the Windows machine is a guest VM hosted on a VMware Host, it is highly recommended that the VMware tools version installed on the guest VM is 10.3.5 or higher.

Below is the warning message that will be displayed if the version of the VMware Tools is lower than 10.3.5.



3.5 Temporary Directory Requirements

The temporary directory is used for various purposes, such as storage of temporary spooled file (for database specific backup type in Advanced Client (B247PRO), remote file list, local file list, temporary delta file and other files of temporary nature.

It is strongly recommended to use a local drive instead of a network drive to ensure optimal backup/restore performance.

3.6 Network Drive Requirements

The login accounts for network drives must have read and write access permission to ensure that backup and restore would be successful.

3.7 Firewall Settings

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

- For Advanced Client (B247PRO) to function correctly must allow outbound connections to *.Backup247.com.au 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.

3.8 Two-Factor Authentication Requirements

Please refer to Backup247 2FA user guide for details of the minimum and recommended requirements for using Two-Factor Authentication on Backup247 Mobile (B247MOB) app.

3.9 Mobile Backup Requirements

Please refer to Backup247 Mobile (B247MOB) User Guide for details of the minimum and recommended requirements for installing the Backup247 Mobile (B247MOB) app.

3.10 Network Bandwidth

10 Mbps or above connection speed.

3.11 Limitations

3.11.1 RDS User Profile Disks

Advanced Client (B247PRO) running on Windows RDS server with User Profile Disk enabled is not supported. The Windows User Profile will be deleted every time the user logs off the machine. As the Advanced Client (B247PRO) configuration files are saved under the Windows User Profile, this will cause a failed backup.

3.11.2 Enhanced Network Drive Support

- For network drives which have not been already setup or mapped in Windows.
- Temporary folder location is not supported with individual login credentials but can still be setup separately using existing Windows User Authentication login.
- It also does not support Pre-Backup and Post-Backup Commands.
- Not supported on “Restore Raw file” and “Restore to local computer” options.
- Not supported for mobile backup destinations.

3.12 Best Practices and Recommendations

3.12.1 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 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 backup.

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.

3.12.2 Set up of both Periodic and Continuous Backup Schedule

On a Windows platform, although it is possible to setup both Periodic backup schedule and Continuous backup schedules on a File backup set, it is recommended to only use one schedule as only one schedule backup job can run at any one time.

For example, a backup job is started by the Periodic backup schedule and is running, if a Continuous backup is scheduled to run, the backup job will be skipped and vice versa.

Periodic Backup Schedule vs. Continuous Backup Schedule

The following table shows the comparison between a periodic and continuous backup schedule.

Features	Periodic Backup Schedule	Continuous Backup Schedule
Will run whether or not a change on the backup source is made	✓	✗
Run Retention Policy after backup	✓	✗
Exclude system files from the backup	✗	✓
Only apply to files smaller than (MB) size	✗	✓
Exclude Filter	✗	✓
Supported on all operating systems (i.e., Windows, MacOS, Linux, FreeBSD, QNAP, and Synology)	✓	Only supported on Windows operating system
Supports all backup set types	✓	Only supports File Backup Sets

18

3.12.4 Temporary Directory Folder Location

Temporary directory folder is used by Advanced Client (B247PRO) for storing backup set index files generated during a backup job and temporary restore files.

To ensure optimal backup/restoration performance, it is recommended that the temporary directory folder is set to a local drive with sufficient free disk space.

4 Get Started with Advanced Client (B247PRO)

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

Download and Install

Download and Install Advanced (B247PRO) Client on your Windows machine

Launch the App

Launch and log in to Advanced (B247PRO) 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 OpenDirect Restore

5.1 What is OpenDirect Restore?

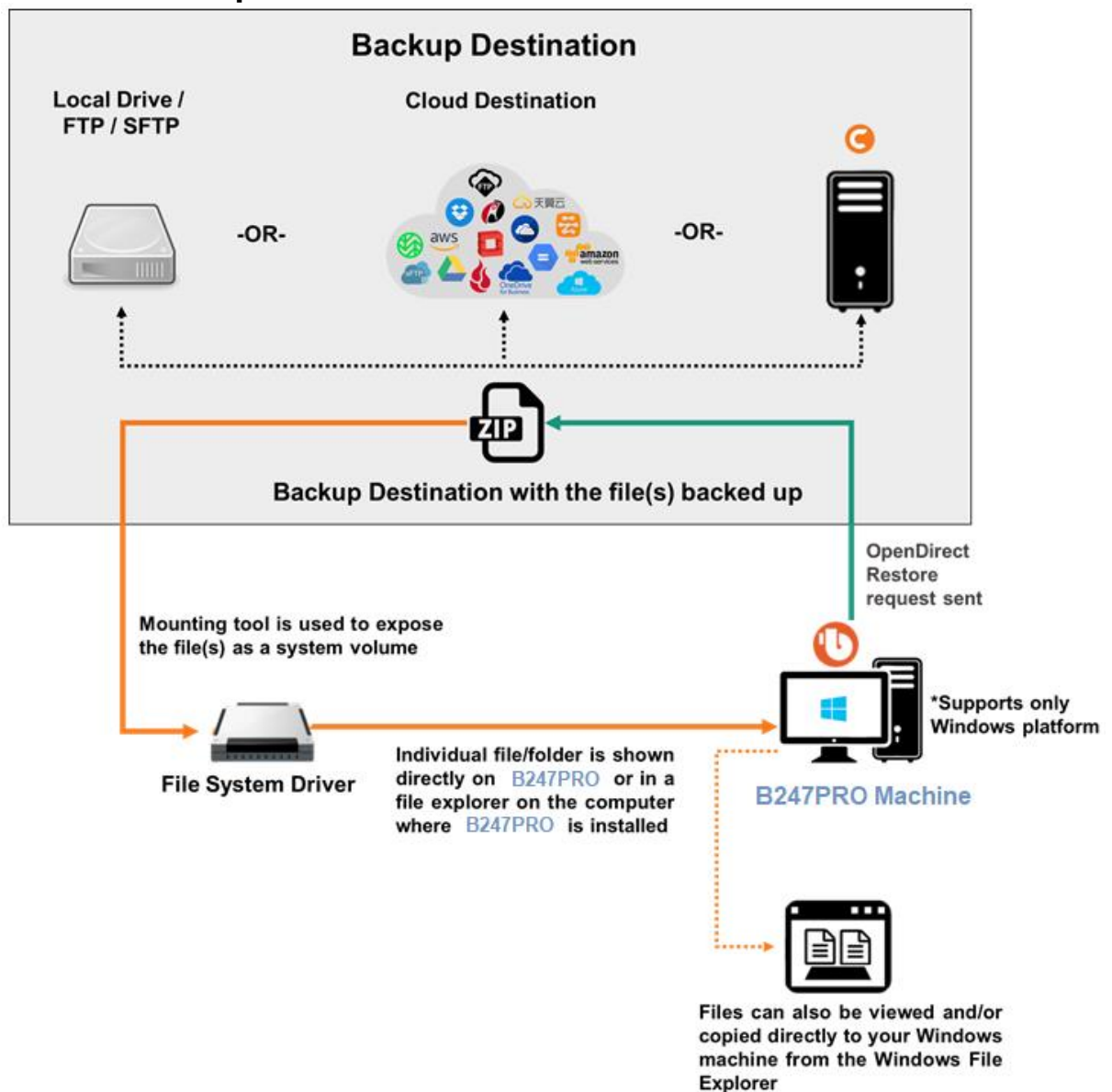
OpenDirect restore is an additional restore option for restoring files from a Windows File backup set. The OpenDirect restore method makes use of the granular restore technology to make selective restore of individual files from a large compressed or image file, for example zip, RAR, ISO files, without the need to restore the compressed or image file first, to give you a fast and convenient file restore solution.

During the OpenDirect restore process, the files/folder can be viewed and/or copied from the Windows File Explorer on the Windows machine you are performing the restore. OpenDirect restore is only supported on File backup sets created and backed up using Advanced Client (B247PRO) on Windows platform with OpenDirect restore feature enabled.

IMPORTANT

OpenDirect restore requires an additional OpenDirect / Granular Restore add-on module license to work. Contact Backup247 Technical Support Team for further details.

5.2 How does OpenDirect Restore work?



21

5.3 Benefits of using OpenDirect Restore

Comparison between OpenDirect File Restore and Traditional File Restore

OpenDirect Restore
Introduction
OpenDirect restore allows you to quickly access individual files from a large compressed or image file by viewing and/or copying files from the file explorer on the Windows you are performing the restore, without having to fully restore the whole compressed or image file first.
Pros

Restore of Entire Compressed File Not Required	As opposed to the traditional restore where you must restore the entire compressed or image file first before you can access any individual file in it, OpenDirect restore allows you to view and download individual files from a compressed or image file, without having to restore compressed file or image file first.
Ability to Restore Selected Files	When restoring a large compressed or image file, sometimes, you may only need to restore individual file(s) out of the entire file, therefore, OpenDirect restore gives you the flexibility to restore selective file(s) quickly, so it saves you time and effort to achieve your restore goal.
Cons	
No Encryption and Compression	To ensure optimal restore performance, the backup of the files in an OpenDirect file backup set will NOT be encrypted and compressed, therefore, you may have to take these factors in consideration when selecting this restore option.

Traditional Restore

Introduction

The traditional restore method restores the entire compressed file or image file. Backed up data can only be accessed when complete restore is performed.

Pros

Backup with Compression and Encryption	Backup file(s) are compressed, therefore in smaller file size, and encrypted before being uploaded to the backup destination.
---	---

Cons

Slower Recovery	As the entire compressed or image file must be restored before you can access any individual files, restore time could be long if the file size is large
------------------------	--

22

5.4 Requirements

5.4.1 Supported Backup Modules

OpenDirect restore is only supported on File backup sets created and backed up using Advanced Client (B247PRO) on Windows platform with OpenDirect restore feature enabled.

5.4.2 License Requirements

An OpenDirect / Granular restore add-on module license is required per backup set for this feature to work. Contact Backup247 Technical Support Team for more details

5.4.3 Backup Quota Storage

As compression is not enabled for OpenDirect file backup sets, to optimize restore performance the storage quota required will be higher than non-OpenDirect file backup sets. Contact Backup247 Technical Support Team for details

5.4.4 Windows Operating System

Advanced Client (B247PRO) must be installed on a 32-bit or 64-bit Windows Operating System, as libraries for OpenDirect only support Windows platform.

Refer Section 3.2 for the list of compatible operating systems for OpenDirect and Granular Restore.

5.4.5 Available Spare Drive Letter

One spare drive letter must be available on the Windows machine for the OpenDirect restore process, as the compressed file or image is mounted on Windows as a logical drive. Advanced Client (B247PRO) will automatically take the next available drive letter in alphabetical order for the compressed or image file.

NOTES

1. The Windows drive letters A, B, and C are not used by OpenDirect restore.
2. The OpenDirect restore assigned drive letter(s) will be released once you exit from Advanced Client (B247PRO) UI.

23

5.4.6 Network Requirements

Recommended minimum network speed is **at least 100Mbps download speed**.

The network bandwidth requirements will increase in proportion to the size of the compressed file/image and or the incremental delta chain length to ensure optimal performance. Working with limited network bandwidth may severely affect the granular restore performance.

You can use an online network speed test website (e.g., www.speedtest.net) to get an idea of the actual bandwidth of the machine.

5.4.7 Other Dependencies

The following dependencies are restore-related. Therefore, they will be checked by Advanced Client (B247PRO) only when an OpenDirect restore is performed. Absence of these elements will not affect the backup job but would cause the restore to fail.

- Microsoft Visual C++ 2015 Redistributable (x86) / (x64)
<https://www.microsoft.com/en-us/download/details.aspx?id=48145>
- Update for Universal C Runtime in Windows
<https://support.microsoft.com/en-us/help/2999226/update-for-universal-c-runtime-in-windows>
- **For Windows 7 and Windows Server 2008 R2 only**
Microsoft Security Advisory 3033929
<https://technet.microsoft.com/en-us/library/security/3033929.aspx>

5.4.8 Permissions

The Windows login account used for installation and operation of the Advanced Client (B247PRO) client machine requires Administrator privileges.

6 Download and Install Advanced Client (B247PRO)

There are two installation modes of 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.

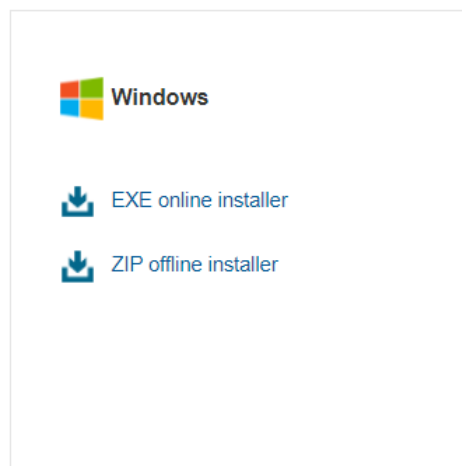
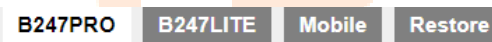
6.1 Download Advanced Client (B247PRO)

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



2. In the **Windows** section under the **Advanced Client (B247PRO)** tab of the download page, you can choose between two installation methods:

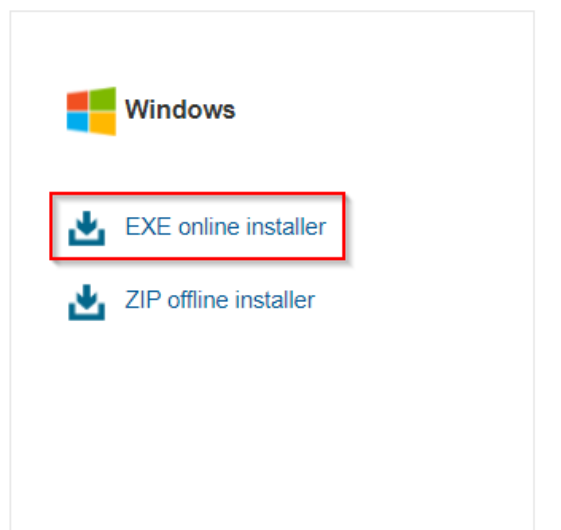
- Online installation using EXE online installer
- Offline installation using ZIP offline installer



6.2 Install Advanced Client (B247PRO)

6.2.1 Online Installation using EXE online installer

1. Go to the download page of Backup247 Technical Support Team 's website and download the Advanced Client (B247PRO) **EXE online installer**.



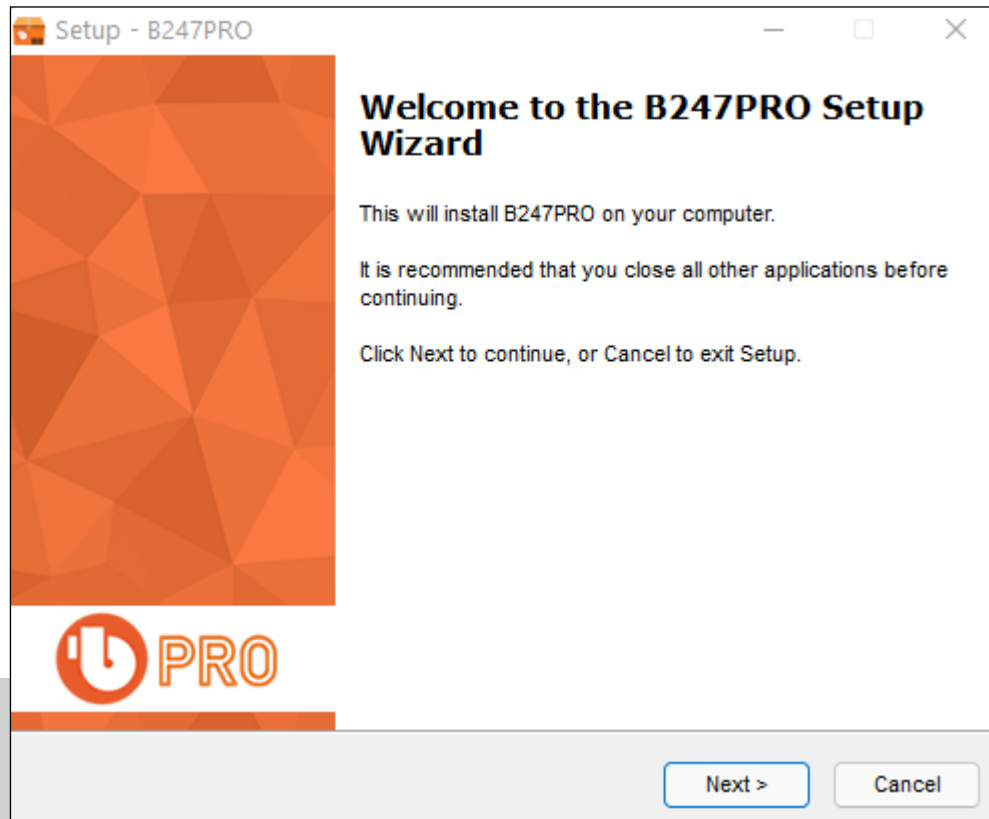
27

2. Double-click the icon of the Advanced Client (B247PRO) installation package **.exe** file you have downloaded.



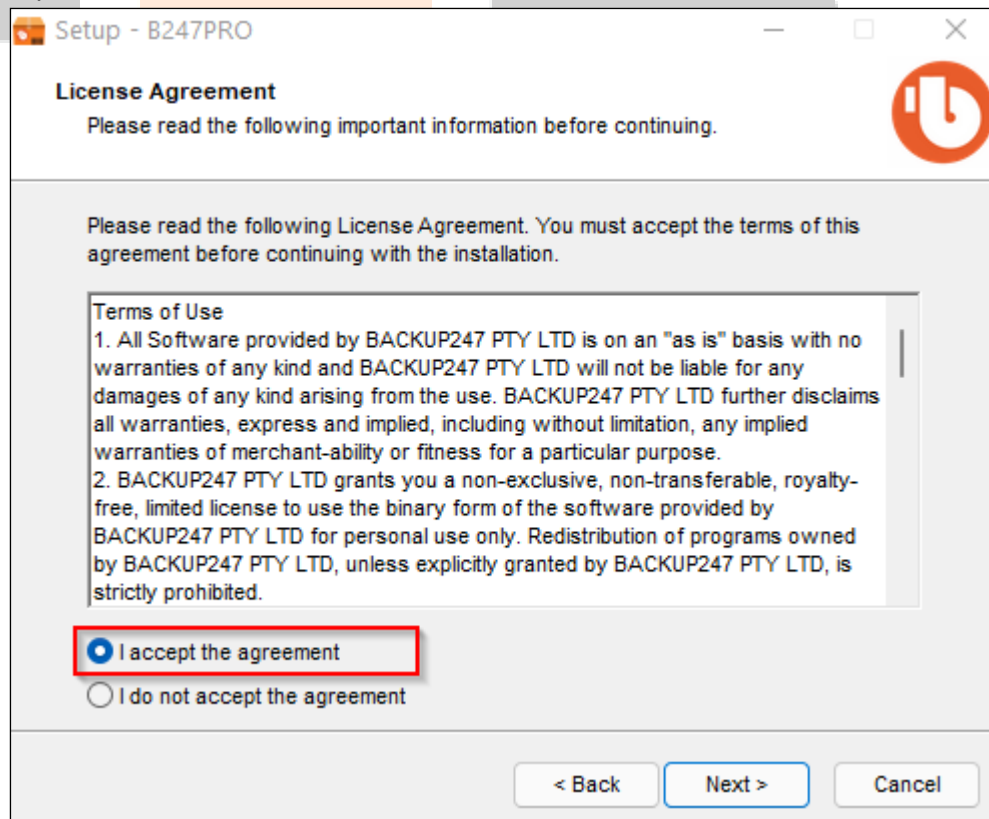
3. Click **Run**
4. Click **Continue** to start the installation if dialog box appears asking permission. Typically happens if User Account Control is enabled.

5. Click **Next** to continue.

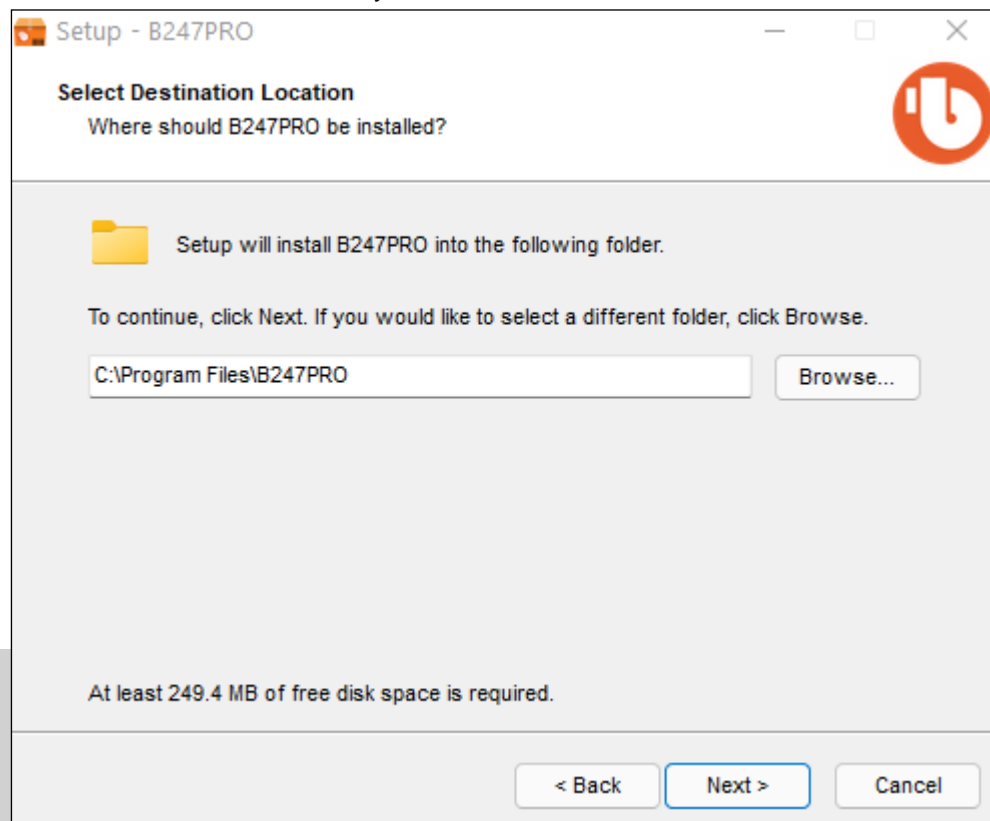


28

6. Select **I accept the agreement** after reading the license agreement, then click **Next** to proceed.



7. Choose the installation directory. Then, click **Next** to continue.



29

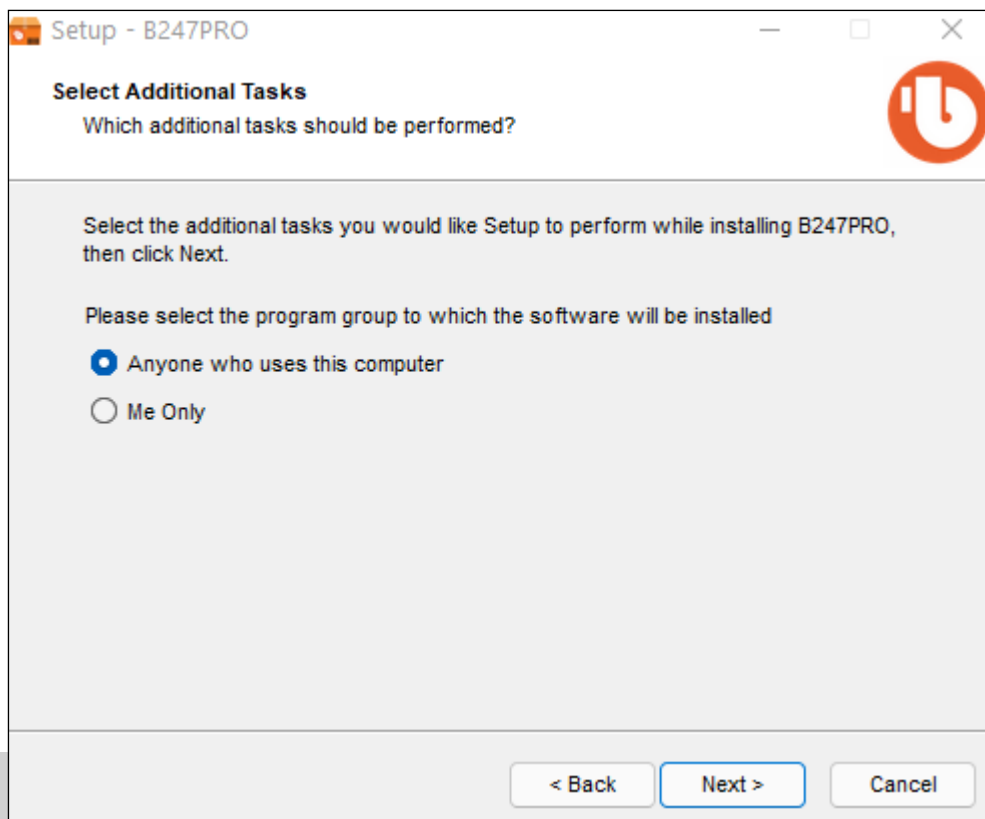
8. Select the program group to which the software will be installed. The default setting is “Anyone who uses this computer”. The following explains the difference between the two settings:

- **Anyone who uses this computer** – the Advanced Client (B247PRO) System Tray icon will be available to all Windows users and backup notifications will be displayed on the Windows System Tray. For more information, please refer to [Chapter 10.11 System Tray](#).
- **Me Only** – the Advanced Client (B247PRO) System Tray icon will not be available and backup notifications will not be displayed on the Windows System Tray.

NOTE

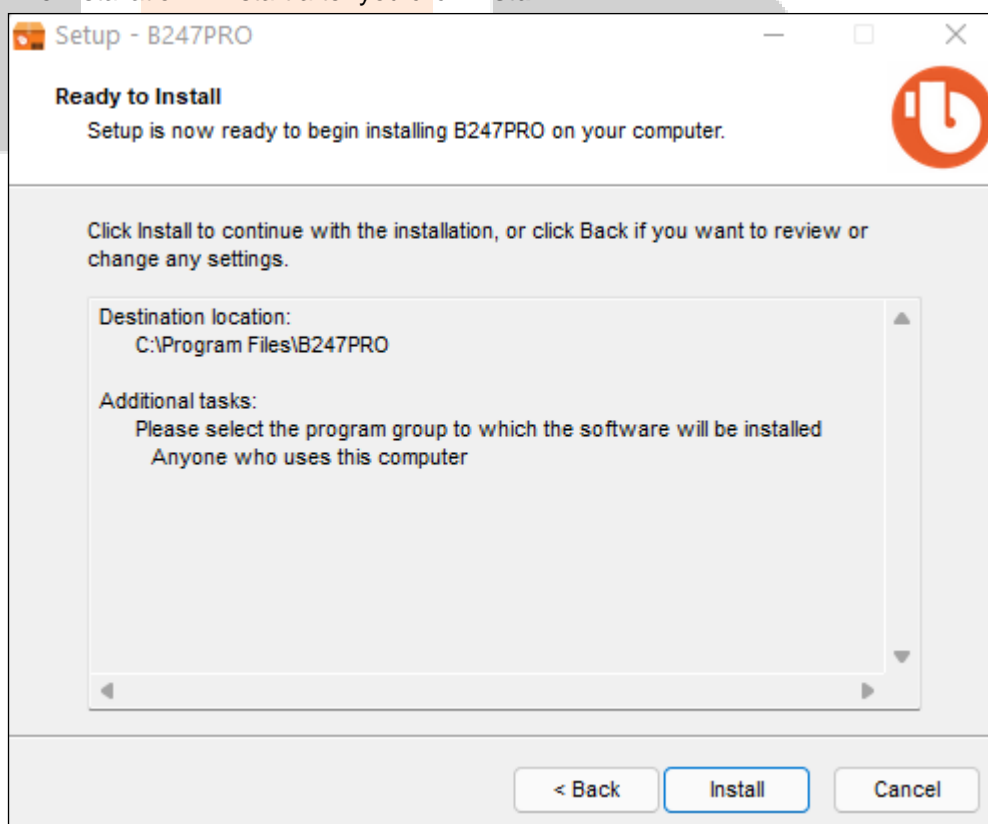
Once the program group setting has been chosen and the installation completed; if you need to change the setting, this will require uninstallation and re-installation of the application.

Click **Next** to proceed.

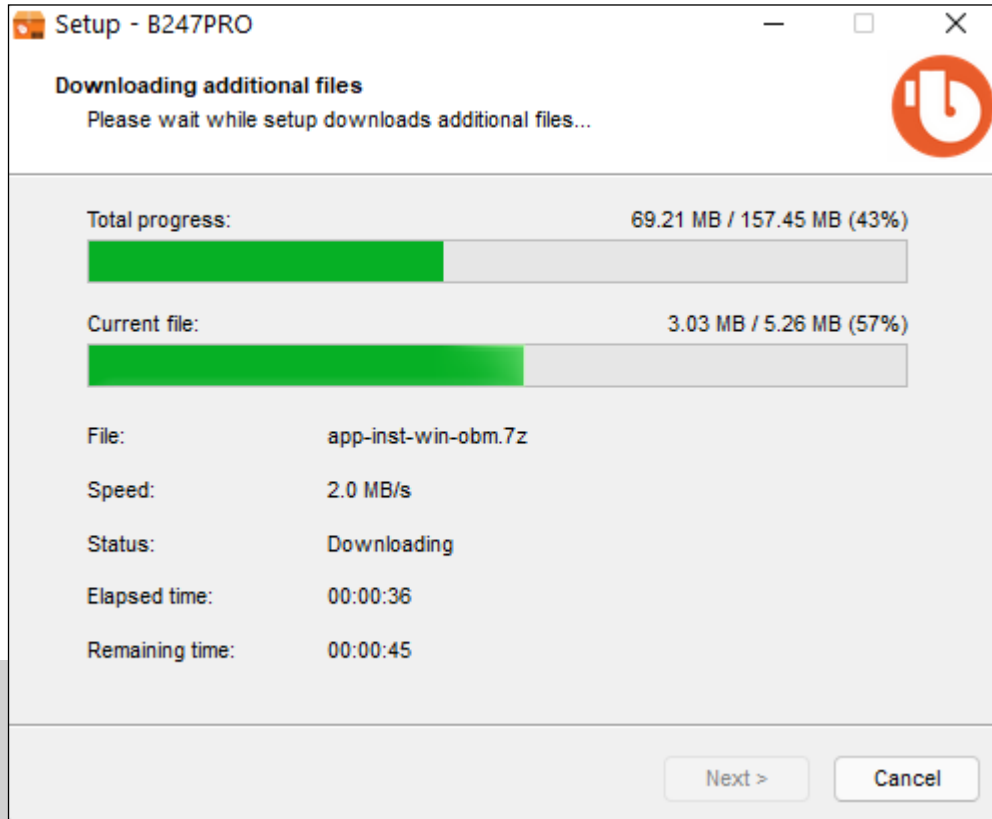


30

9. The installation will start after you click **Install**.

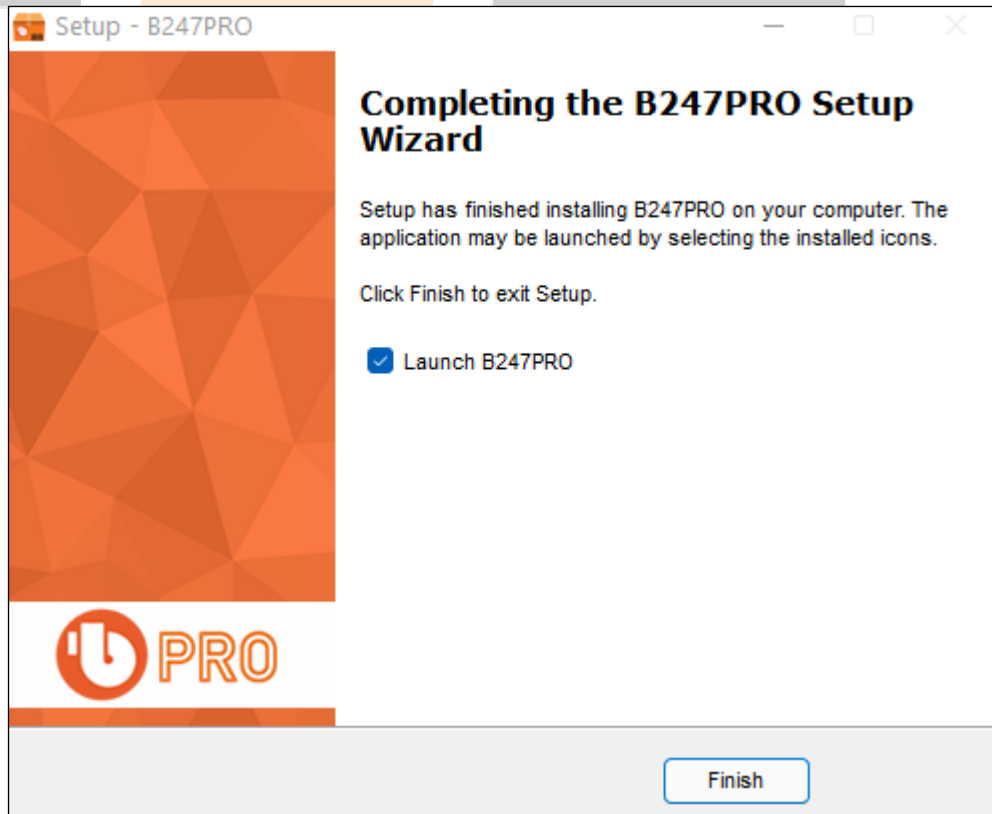


10. The component files will be downloaded first during installation.



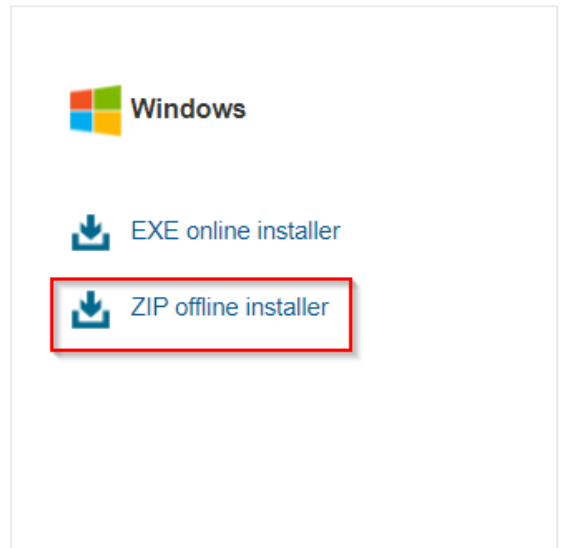
31

11. Click **Finish** to complete the installation.



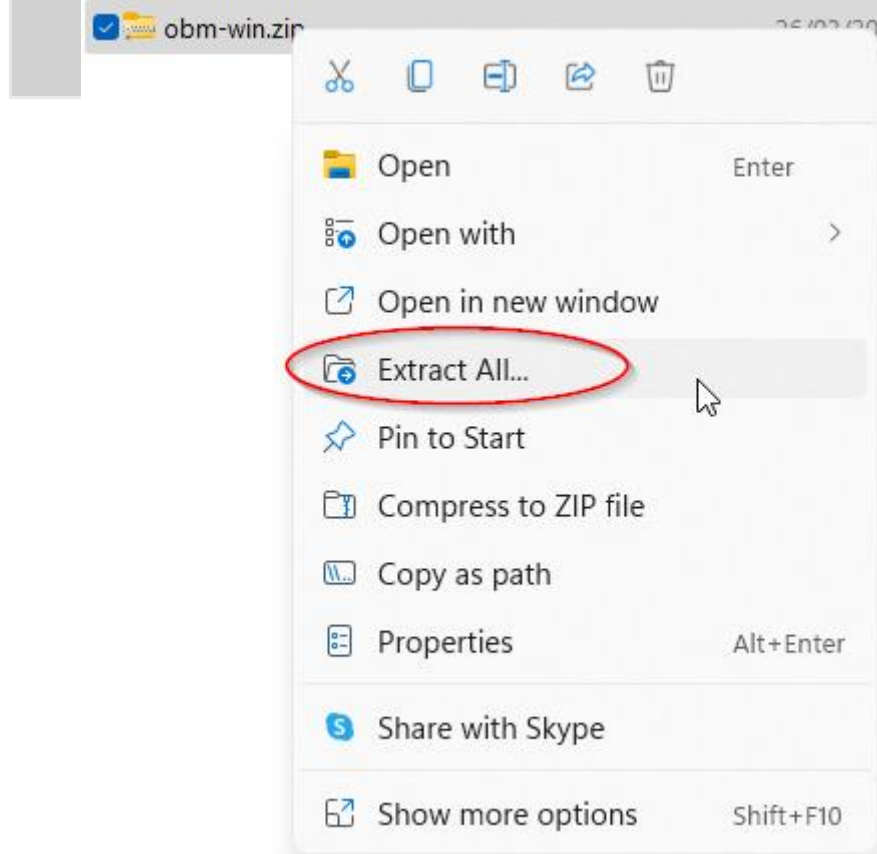
6.2.2 Offline Installation using ZIP offline installer

1. Go to the download page of Backup247 Technical Support Team 's website and download the Advanced Client (B247PRO) **ZIP offline installer**.

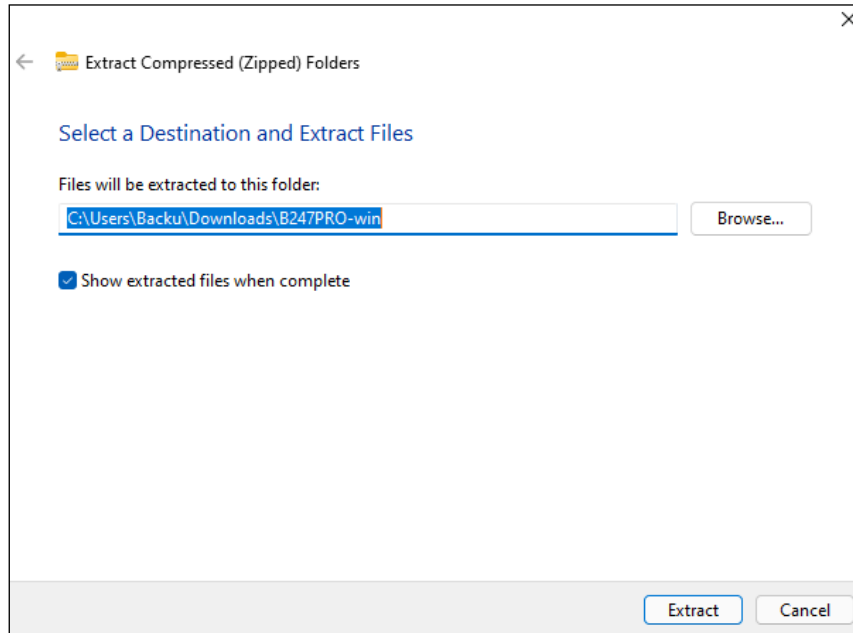


32

2. Extract the offline installation package file you have downloaded.



3. Select a destination then extract the files.



4. Launch the installer named obm-win.exe which you have extracted from the zip format file.

5. Click **Run** and remaining steps are exactly same as section 6.2.1

33

6.3 Advanced Client (B247PRO) Services

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

Function	Description
Scheduled Backups	Ensures that backup jobs which are setup to run at a certain date and/or time are started.
Continuous Backups (Windows platform only)	Ensures that Continuous backups are run according to the backup interval.
Mobile Backup Server (MBS)	<p>Ensures that registered mobile devices can perform backups to Advanced Client (B247PRO).</p> <p>The MBS will be activated when a mobile device is registered for mobile backup on Advanced Client (B247PRO).</p> <p>The MBS will be deactivated when all mobile devices have been deregistered from the mobile backup settings and the Advanced Client (B247PRO) services is restarted.</p>

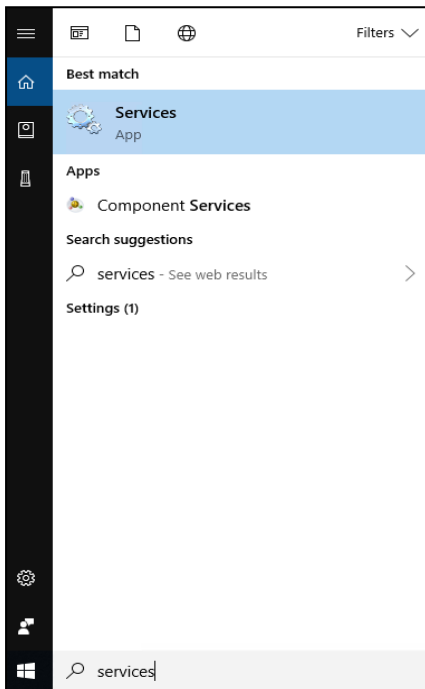
Therefore, it is very important to ensure the Advanced Client (B247PRO) Services are running after:

- a new Advanced Client (B247PRO) installation

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

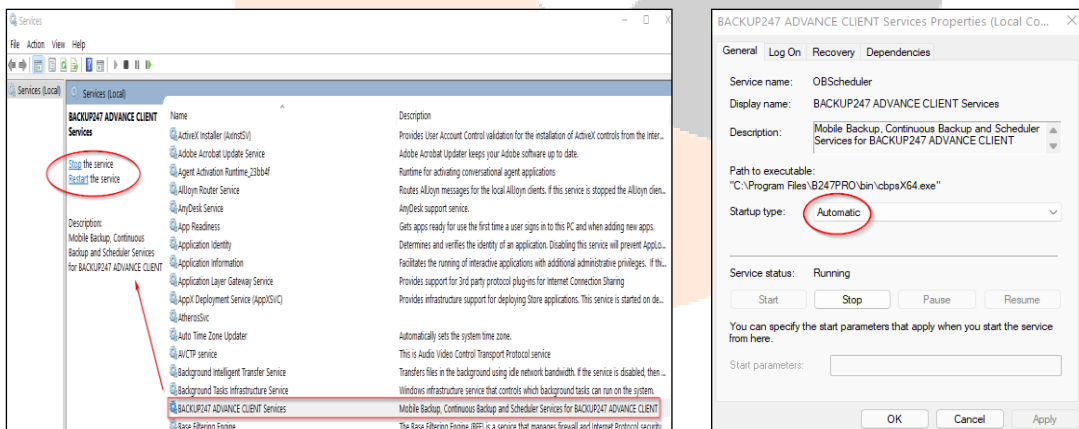
Otherwise, all of the functions above will stop working.

To check if the Advanced Client (B247PRO) Scheduler Service is running properly on the local machine, go to start menu and search for **Services**.



34

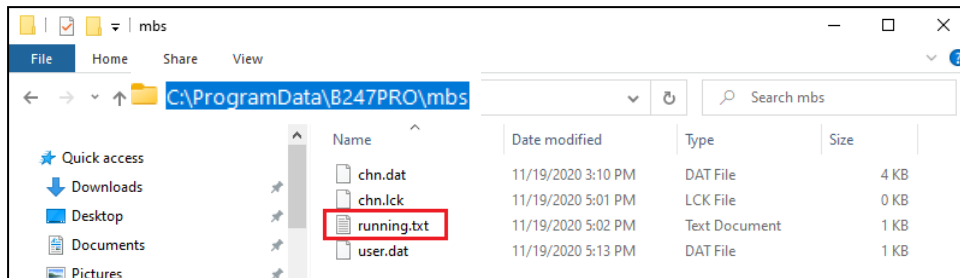
Look for the **Backup247 Online Backup Manager Services** on the list. The **status** should be “Running”, and the **Startup Type** should be “Automatic”.



6.4 Mobile Backup Server (MBS) Status Check and Backup247 Mobile (B247MOB) app Connection Check

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 *C:\Program Data\Advanced Client (B247PRO)\mbs*

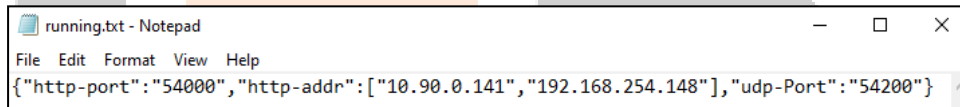


NOTE

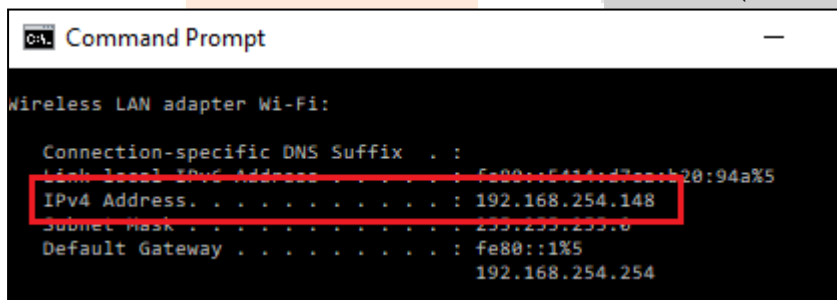
If the "running.txt" file does not exist, then the MBS is not running. Restart the Advanced Client (B247PRO) services.

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

35

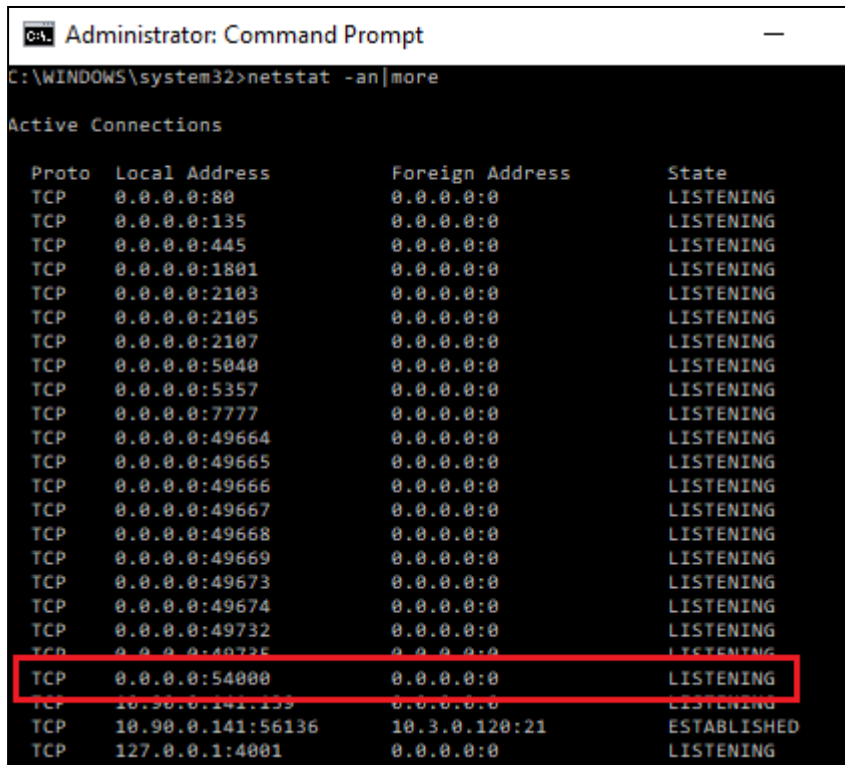


2. Open a command prompt and check if the IP address captured in the running.txt file is the correct IP address of the machine where Advanced Client (B247PRO) is installed.



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

```
C:\>netstat -an|more
```

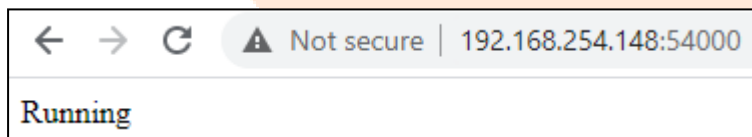


36

- 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 Advanced Client (B247PRO) machine and type the IP address, followed by the TCP port.

For example: If the HTTP port used is 54000, <http://192.168.254.148:54000>, you should get the following result which shows “Running” status. This means the MBS is running.

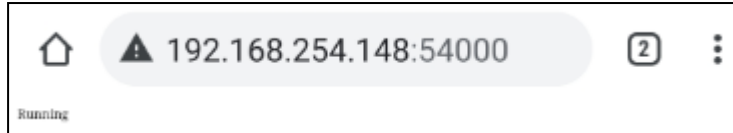
In the **Advanced Client (B247PRO)** machine



- 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 55000, <http://192.168.254.148:54000>, you should get the following result which shows “Running” status. This means the Backup247 Mobile (B247MOB) app can successfully connect to the MBS and both backup and restore can proceed on the mobile device.

In the mobile device



7 Register device for 2FA in Advanced Client (B247PRO)

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

- Backup247 Mobile (B247MOB) 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 authenticators will be discussed in this chapter.

- [Using Backup247 Mobile \(B247MOB\) Authenticator](#)
 - Supports two types of authentications:
 - 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](#)

38 7.1 Using Backup247 Mobile (B247MOB) Authenticator

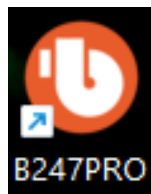
To register a device for 2FA in Advanced Client (B247PRO) using Backup247 Mobile (B247MOB), here are the two scenarios:

- [Without Mobile Add-on Module](#)
- [With Mobile Add-on Module](#)

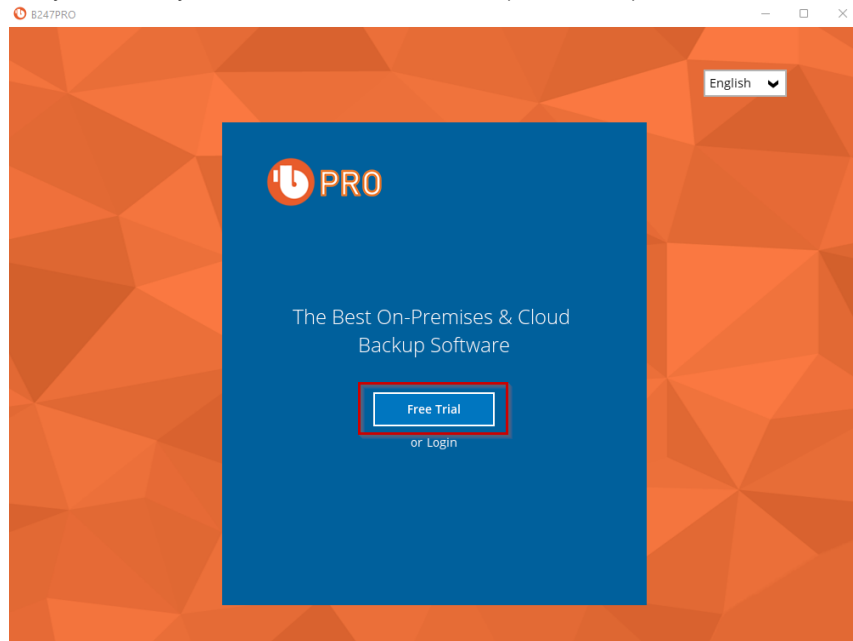
7.1.1 Without Mobile Add-on Module

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

1. A shortcut icon of 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, proceed to [Appendix E](#). Otherwise, click **Login** if you already have an Advanced Client (B247PRO) account.

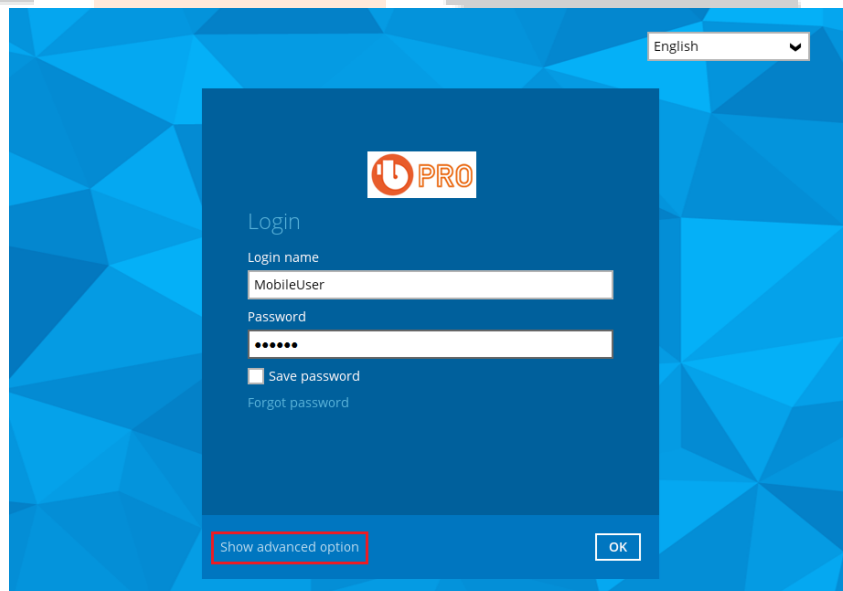


NOTE

The **Free Trial** registration option may not be available. This depends on how your account was created. Please contact us for more information.

39

- The **Show advanced option** may not be available if the backup server settings are already setup by support team. Please contact us for more information.



If **Show advanced option** is clicked, this will be displayed; Please note, IP address below isn't the production IP address, we decided to keep it hidden for security reason.

Backup Server

https 10.3.121.11

Proxy (HTTP)

Use proxy to access the Internet

off

4. Enter the login name and password of your Advanced Client (B247PRO) account provided by us or created during Free Trail Registration. Then, click **OK** to log in.

English

PRO

Login

Login name

MobileUser

Password

.....

Save password

[Forgot password](#)

Show advanced option

OK

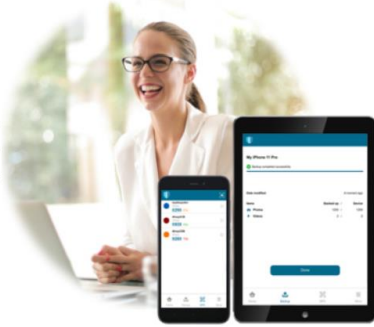
NOTE

The **Save password** option may vary in the context of vulnerability that it introduces. We may choose to disable this option. Please contact our support team if you have any concerns.

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.

41


 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 (B247MOB) 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.

 Ahsay Mobile



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 (B247MOB) supports two types of authentication method:

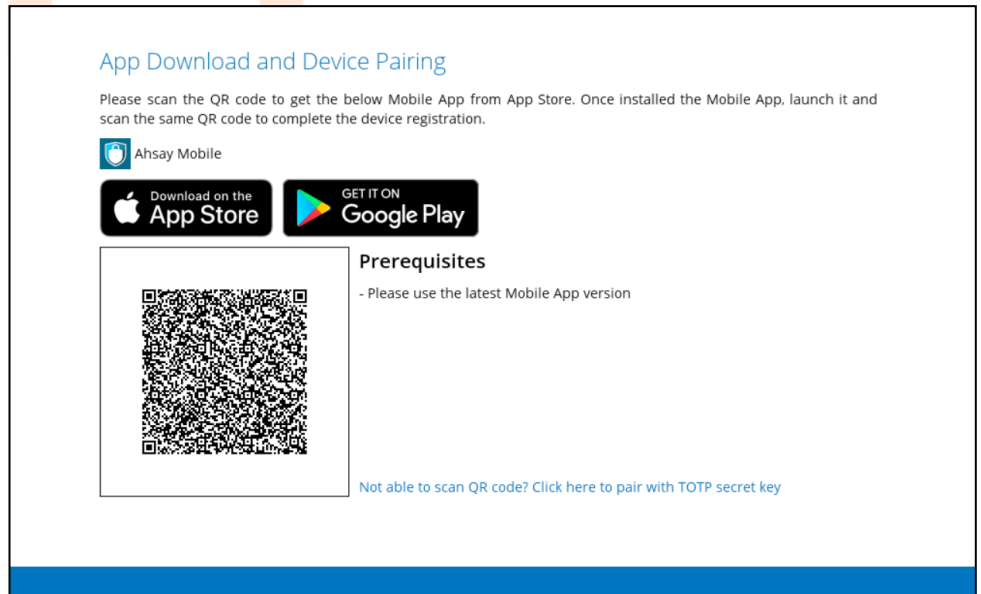
- Push Notification
- TOTP

Backup247 Mobile (B247MOB) can be configured to support two 2FA modes:

- [Push Notification and TOTP \(default mode\)](#)
- or
- [TOTP only](#)

Push Notification and TOTP (default mode)

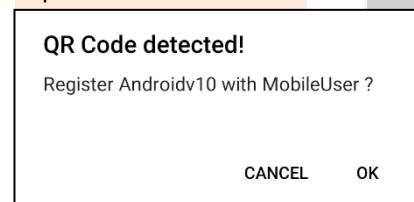
- i. To configure Push Notification and TOTP 2FA with Backup247 Mobile (B247MOB), simply scan the displayed QR code using the Backup247 Mobile (B247MOB) app.



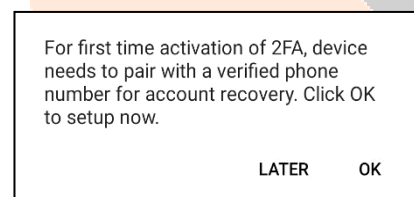
- ii. In this example, the Backup247 Mobile (B247MOB) app is installed on a mobile device named "Androidv10".



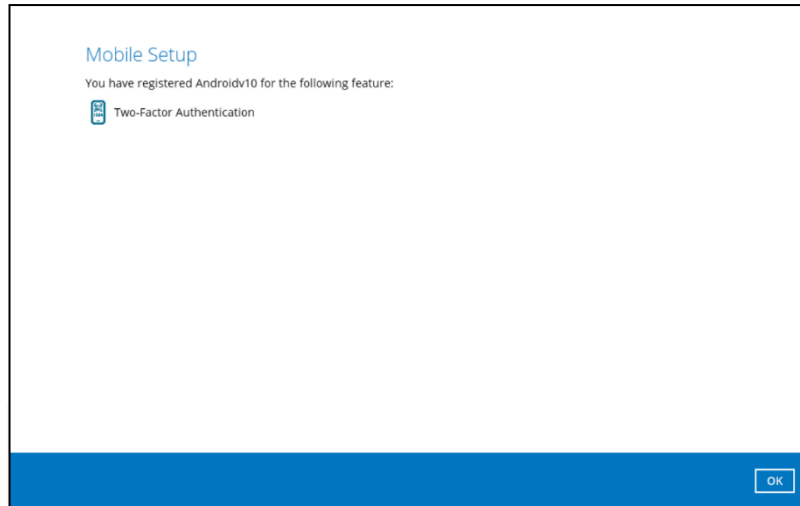
Tap **OK** to continue.



Once the device is successfully paired, the following message will be displayed in the Backup247 Mobile (B247MOB) 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 (B247MOB) for Push Notification and TOTP 2FA. Click **OK** to continue.



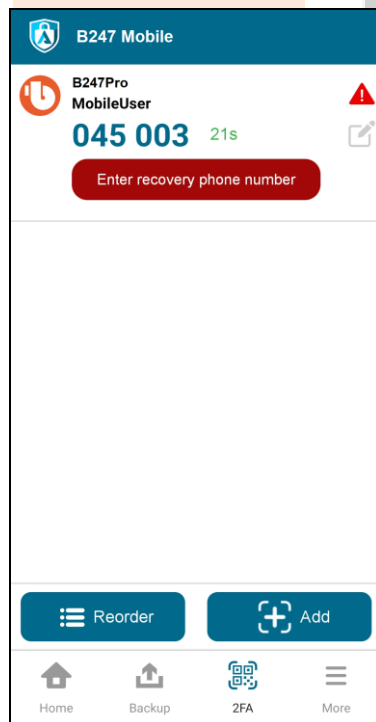
Phone number verification for account recovery

- iv. In the Backup247 Mobile (B247MOB) app, go to 2FA then enter the phone number for account recovery. Tap **Enter recovery phone number**.

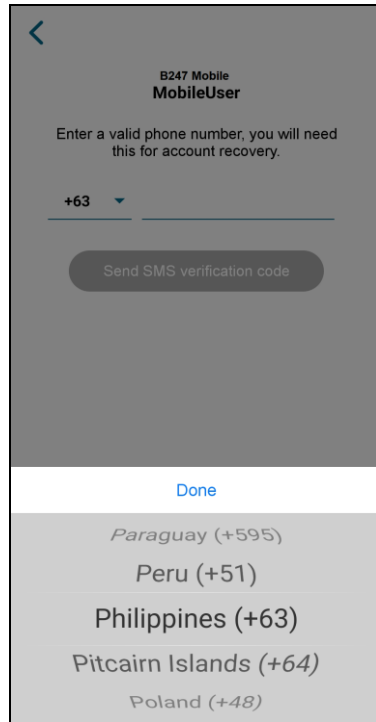
NOTE

Although push notification and TOTP will still work if the recovery phone number registration is not completed, it is still strongly recommended to complete **step iv** as you will not be able to access the Advanced Client (B247PRO) if you lose your mobile device which also means loss of access to backup data.

44

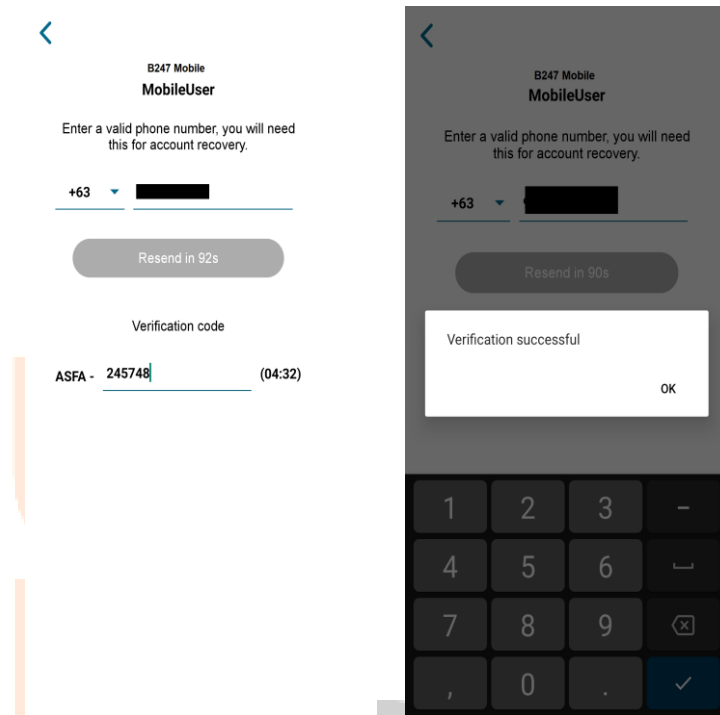


Select your country code and enter your phone number. Tap **Send SMS verification code**.

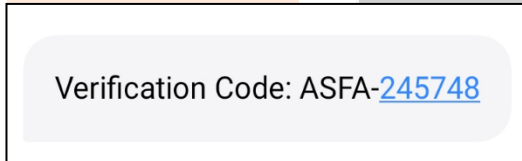


45

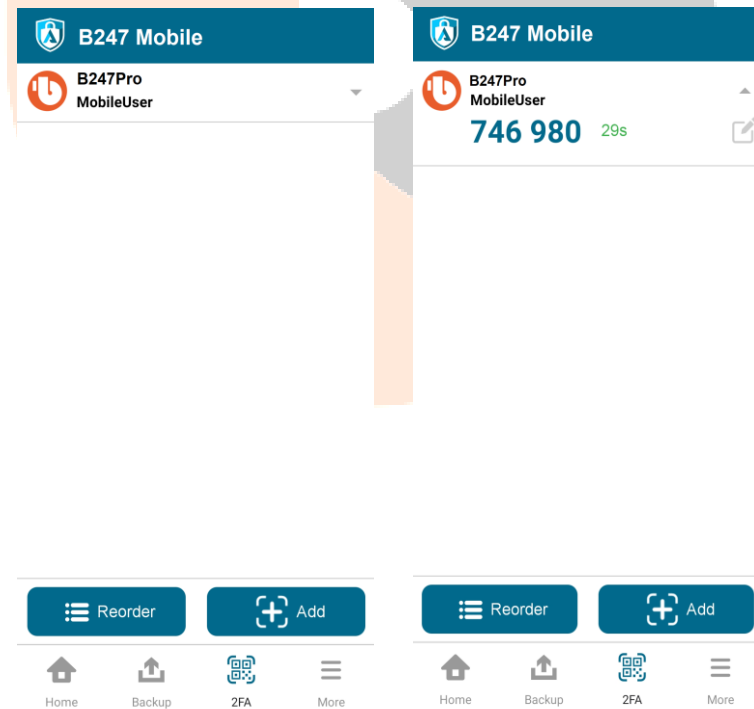
Enter the verification code sent to your mobile device.



Example of verification code:

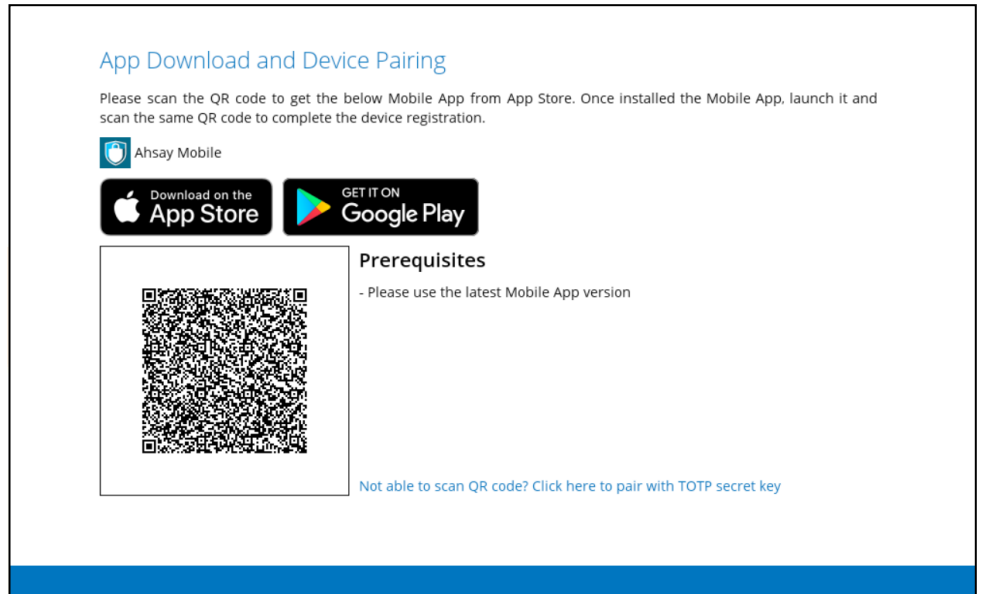


Your phone number for account recovery is successfully verified.



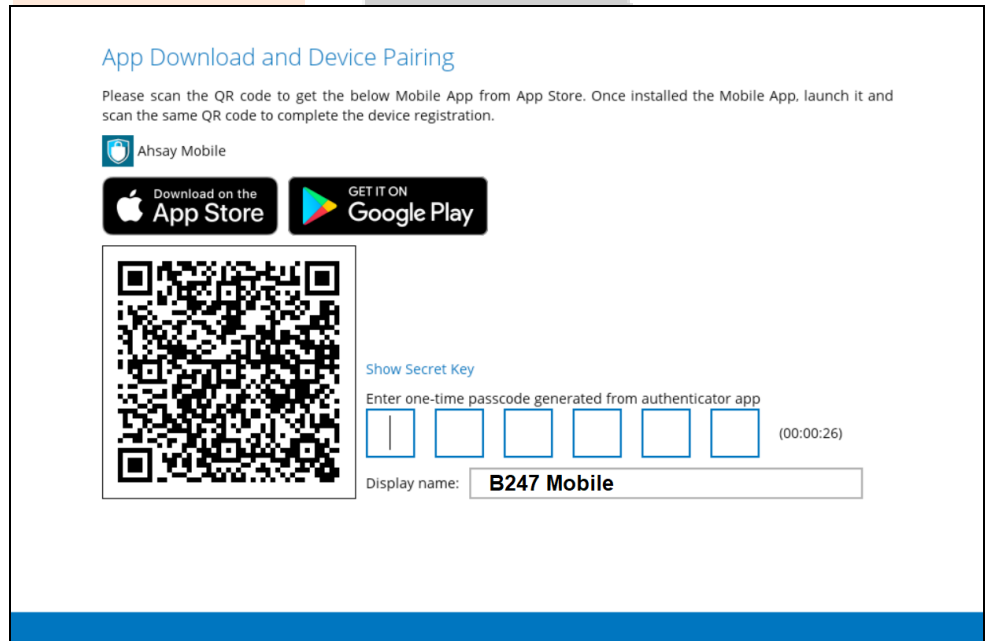
TOTP only

- i. To configure a TOTP only 2FA with Backup247 Mobile (B247MOB), click the **“Not able to scan QR code? Click here to pair with TOTP secret key”** link.

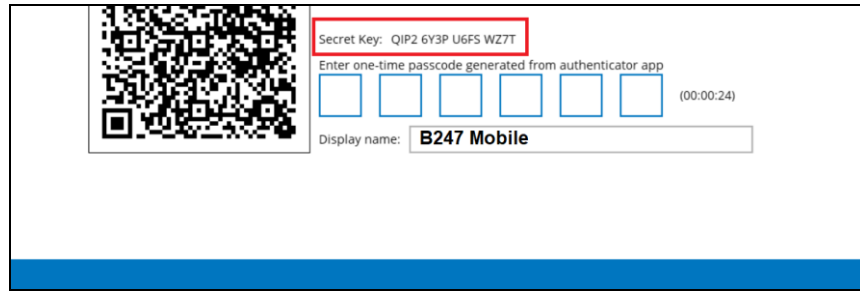


- ii. After clicking the **“Not able to scan QR code? Click here to pair with TOTP secret key”** link, the QR code for the TOTP only authenticator will be displayed.

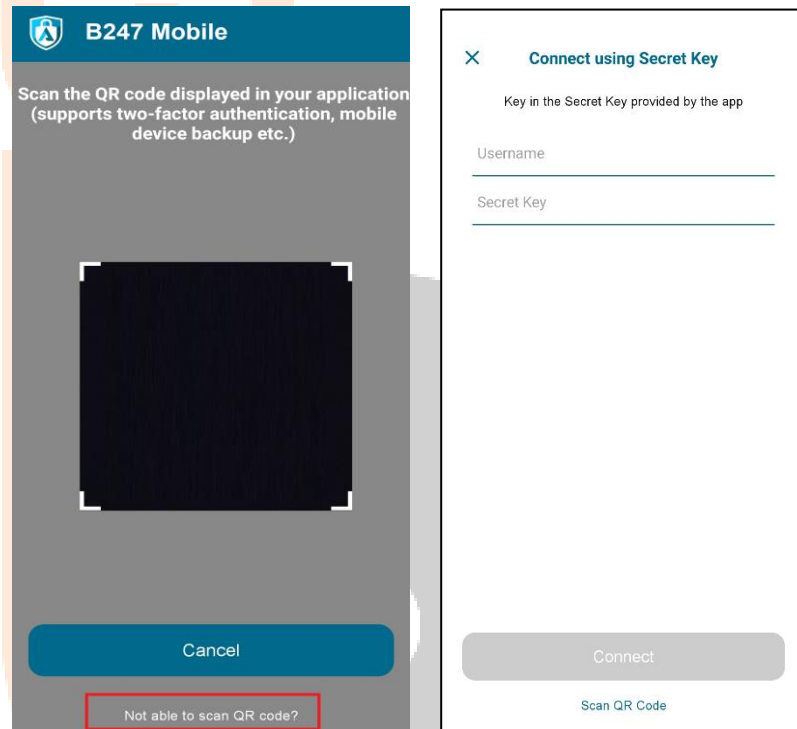
47



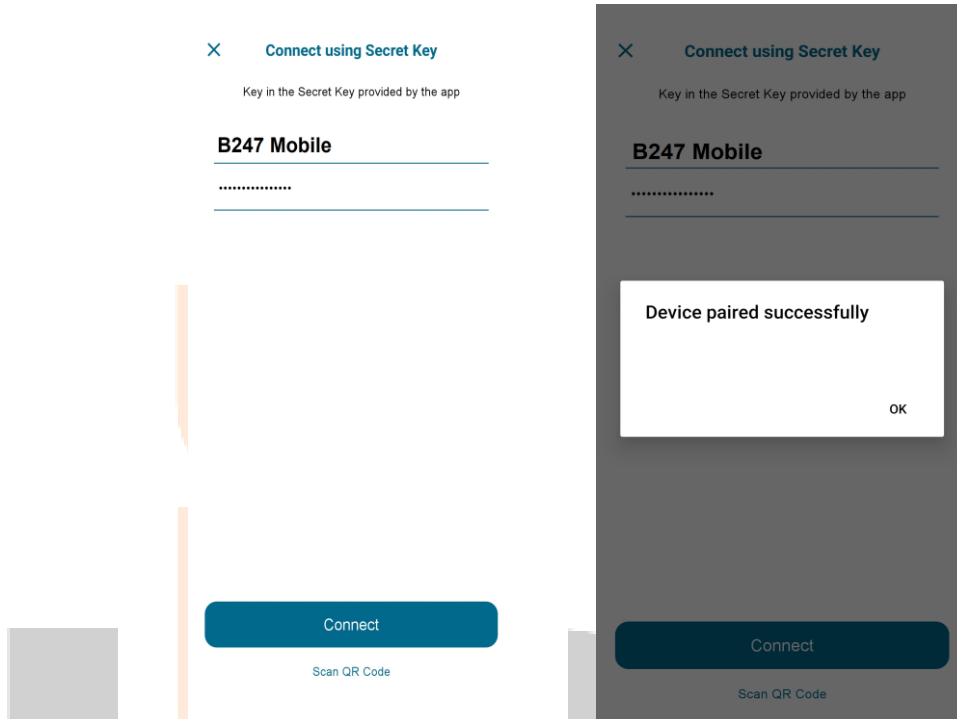
To show the secret key, click the **Show Secret Key** link to display the 16-character alphanumeric secret key. The display name will be “B247 Mobile” by default.



- iii. In the Backup247 Mobile (B247MOB) app, go to **2FA**. Tap the **Not able to scan QR code?** link.



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



49

- v. Enter the one-time passcode from the Backup247 Mobile (B247MOB) 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



Secret Key: QIP2 6Y3P U6FS WZ7T

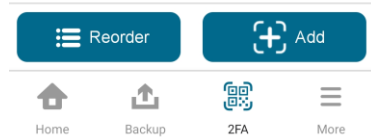
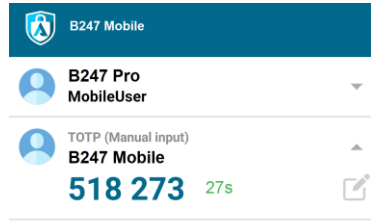
Enter one-time passcode generated from authenticator app

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

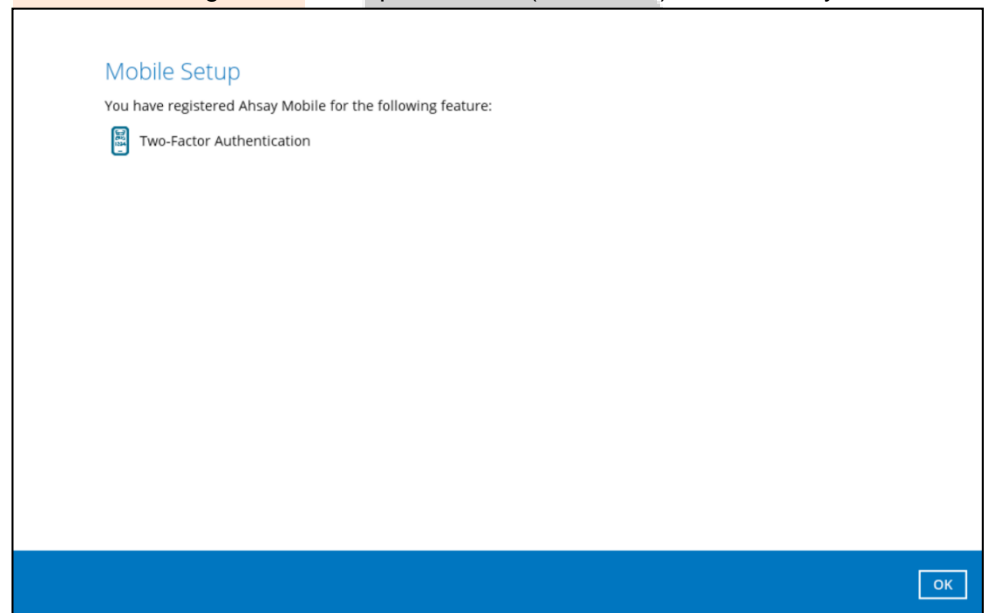
Display name: **B247 Mobile**

Cancel

Example of the one-time passcode generated by Backup247 Mobile (B247MOB):



- vi. Once the registration is successful, the following screen will be displayed. You have now registered Backup247 Mobile (B247MOB) for TOTP only 2FA.



50

NOTE

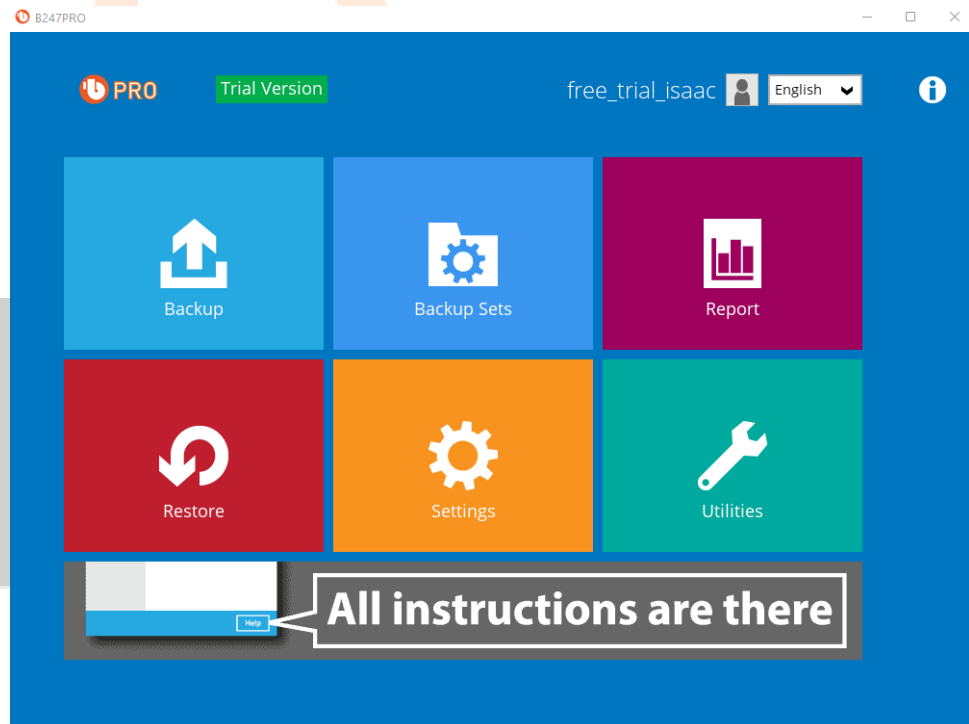
In case device pairing takes a while, session timeout message will be displayed. Just click **OK** to resume with the device pairing.

Mobile Setup

Due to session timeout, Two-Factor Authentication feature failed to be configured.

Click [OK] to configure the feature again.

- After successful pairing, the following screen will appear.

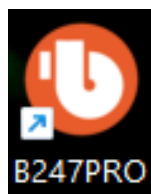


51

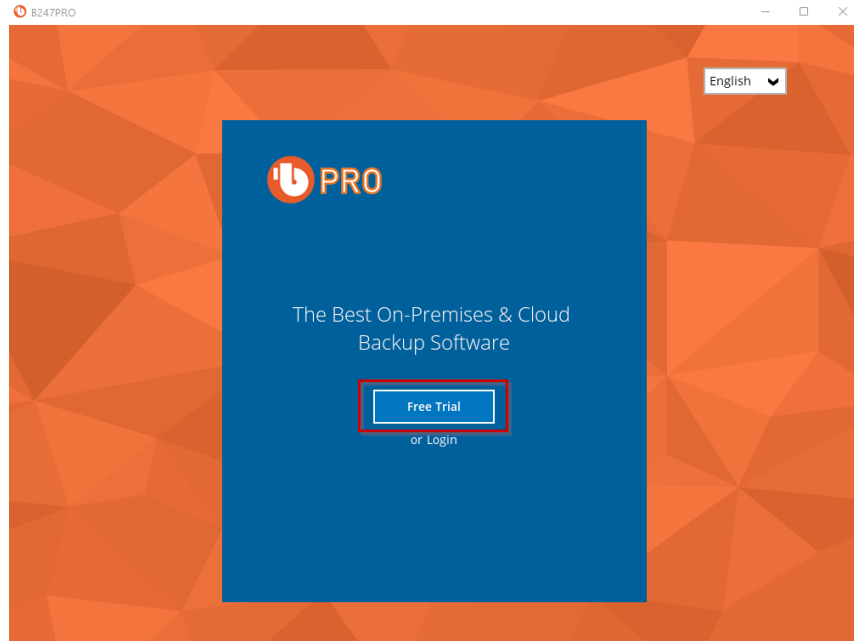
7.1.2 With Mobile Add-on Module

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

- A shortcut icon of 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 an Advanced Client (B247PRO) account.

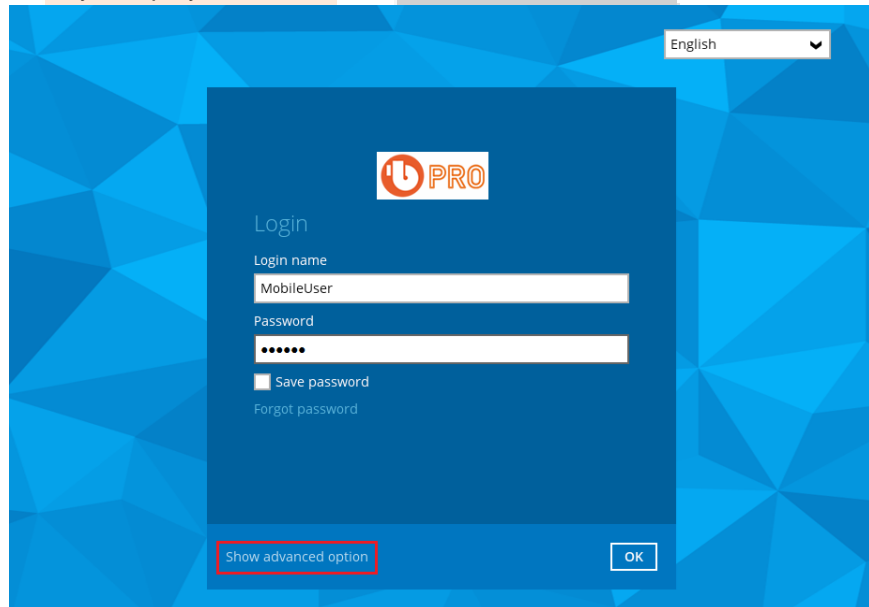


NOTE

The **Free Trial** registration option may not be available. This depends on how your account was created. Please contact us for more information.

3. The **Show advanced option** may not be available if the backup server settings are already setup by us. Please contact us for more information.

52



If **Show advanced option** is clicked, this will be displayed; Please note, IP address below isn't our production IP address, we decided to keep it hidden for security reason.

Backup Server

https 10.3.121.11

Proxy (HTTP)

Use proxy to access the Internet

off

4. Enter the login name and password of your Advanced Client (B247PRO) account provided by our support team. Then, click **OK** to log in.

English

PRO

Login

Login name

MobileUser

Password

•••••

Save password

[Forgot password](#)

Show advanced option

53

NOTE

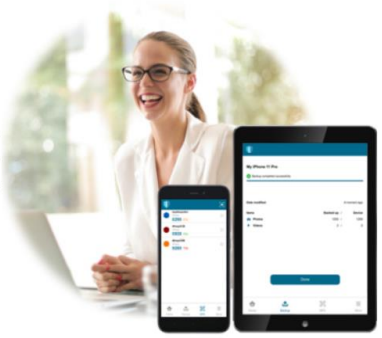
The **Save password** option may vary in the context of vulnerability that it introduces. We may choose to disable this option. Please contact our support team if you have any concerns.

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 (B247MOB) app from the App Store / Google Play Store. Ensure that the displayed Prerequisites are met.

54


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.

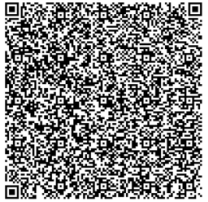

Ahsay Mobile



Download on the
App Store



GET IT ON
Google Play

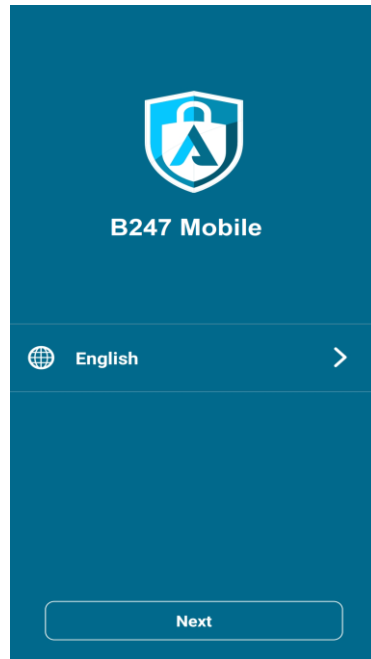


Prerequisites

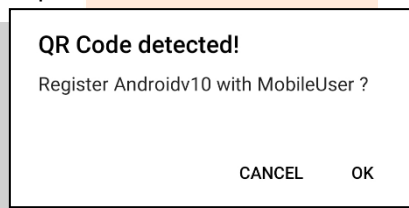
- Please use the latest Mobile App version
- Please make sure below 2 ports are not blocked by any Firewall settings
TCP Port: 54000
UDP Port: 54200

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

- By using the Backup247 Mobile (B247MOB) app, tap **Next** and scan the QR code displayed in Advanced Client (B247PRO).

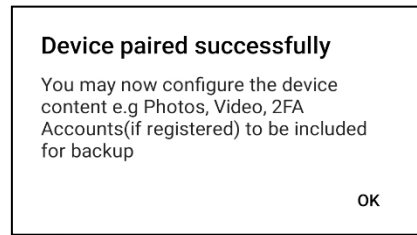


Tap **OK** to continue.

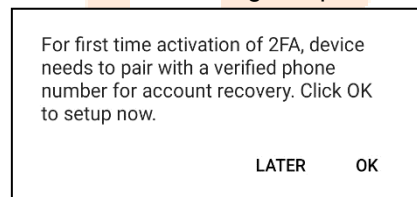


55

Once the device is successfully paired, the following message will be displayed in the Backup247 Mobile (B247MOB) app. Click **OK** to continue.

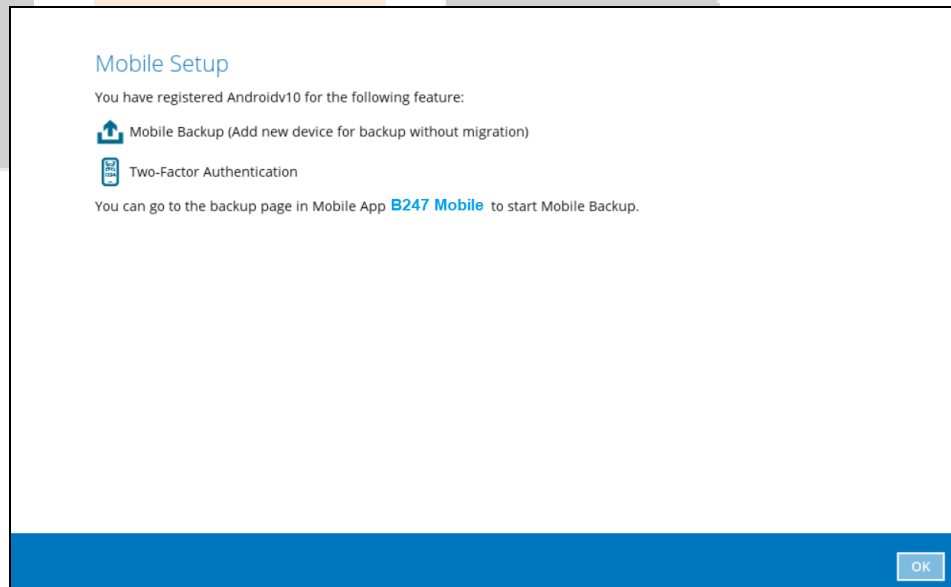


Once the device is successfully paired, the following message will be displayed in the Backup247 Mobile (B247MOB) app. You can set up a recovery number here that will be used in case of the “Authentication Recovery” procedure by tapping **OK**. You may refer to [Phone number verification for account recovery](#) in **Chapter 7.1.1** for the following setup. Otherwise, tap **LATER** to set it up later on.

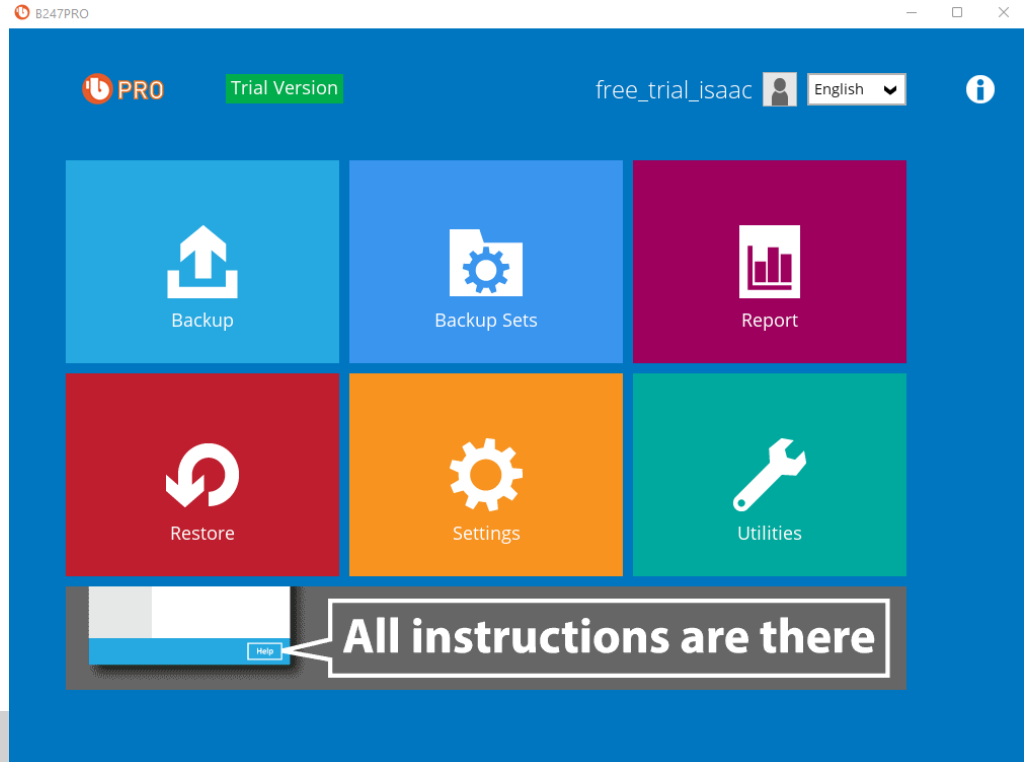


8. After successful scan of the QR code, you have now registered Backup247 Mobile (B247MOB) for 2FA (Push Notification and TOTP) and Mobile Backup. Click **OK** to continue.

56



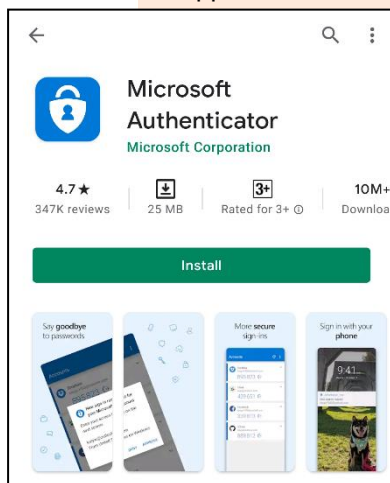
9. After successful pairing, the following screen will appear.



57 7.2 Using Microsoft Authenticator

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

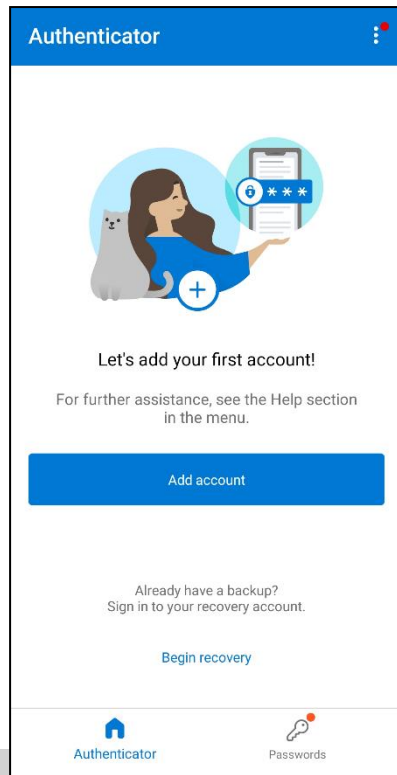
1. Download and install the Microsoft Authenticator from the Play Store for Android devices or the App Store for iOS devices.



2. Launch the Microsoft Authenticator app.

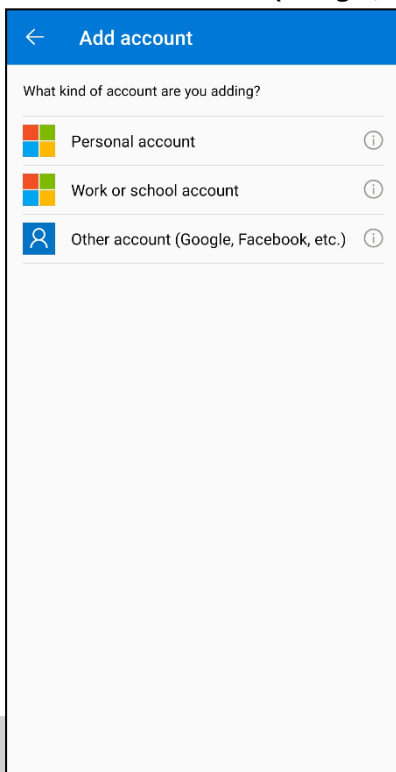


3. Tap **Add account**.



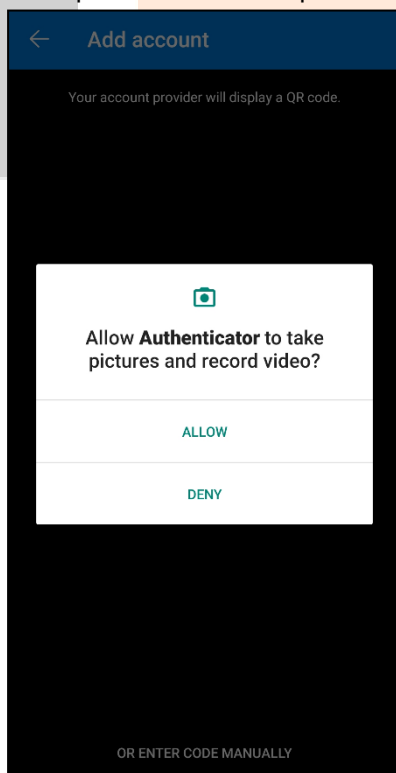
58

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



5. Allow permission to take pictures and record video.

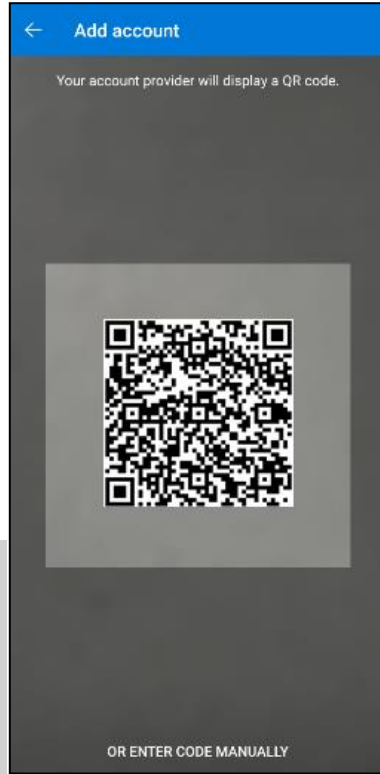
59



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

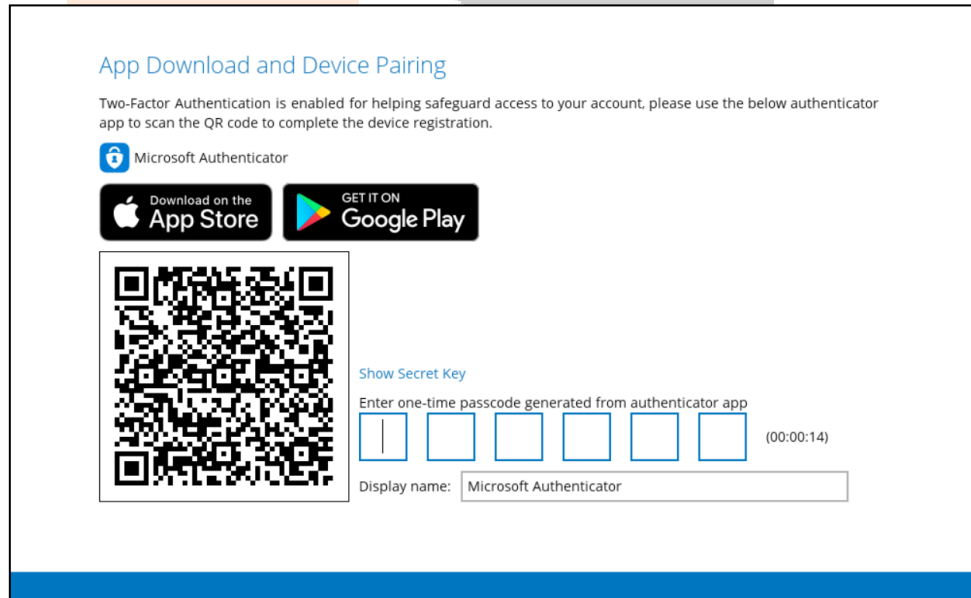
Method 1: Scan the QR code

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

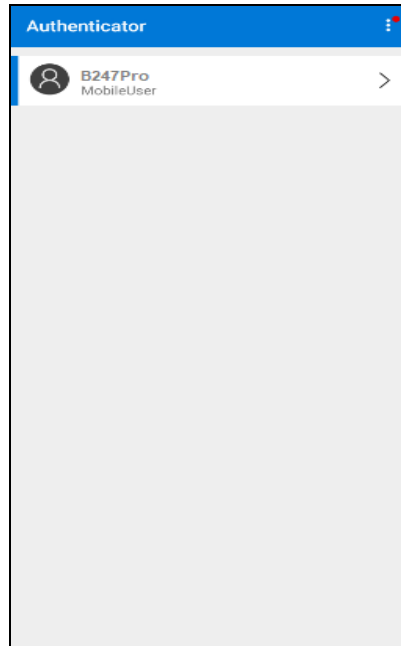


60

Example of the displayed QR code:

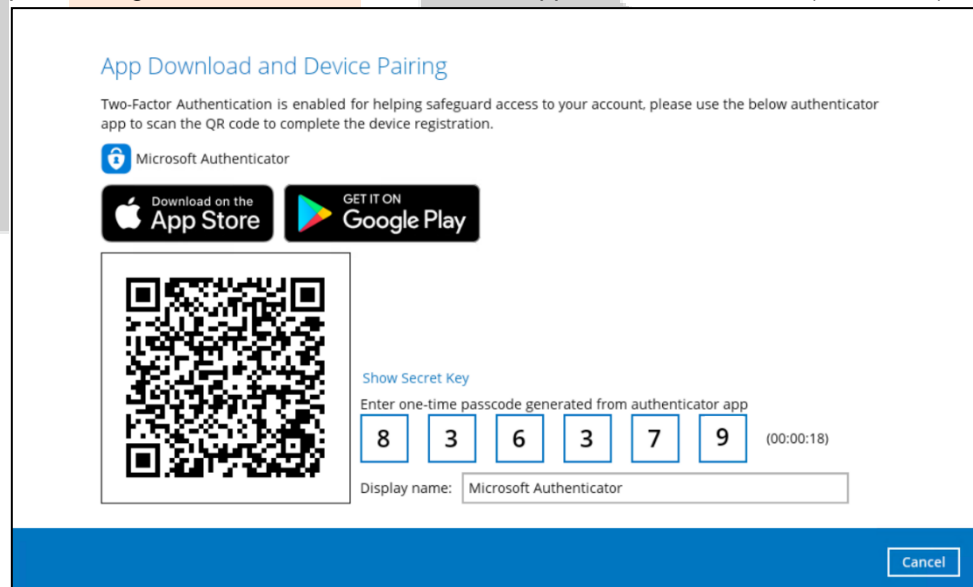


- ii. The Advanced Client (B247PRO) account is successfully added to Microsoft Authenticator and the mobile device is registered in Advanced Client (B247PRO).

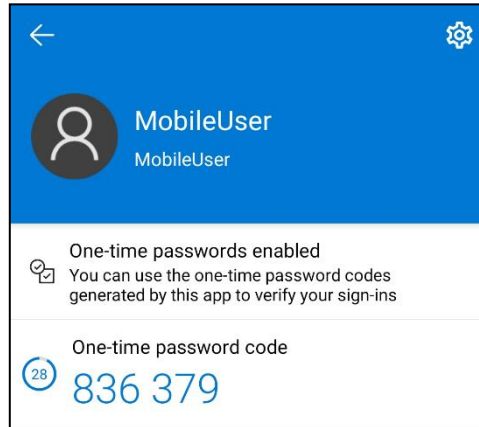


- iii. Once the account is added to Microsoft Authenticator, enter the one-time passcode generated from the authenticator app to Advanced Client (B247PRO).

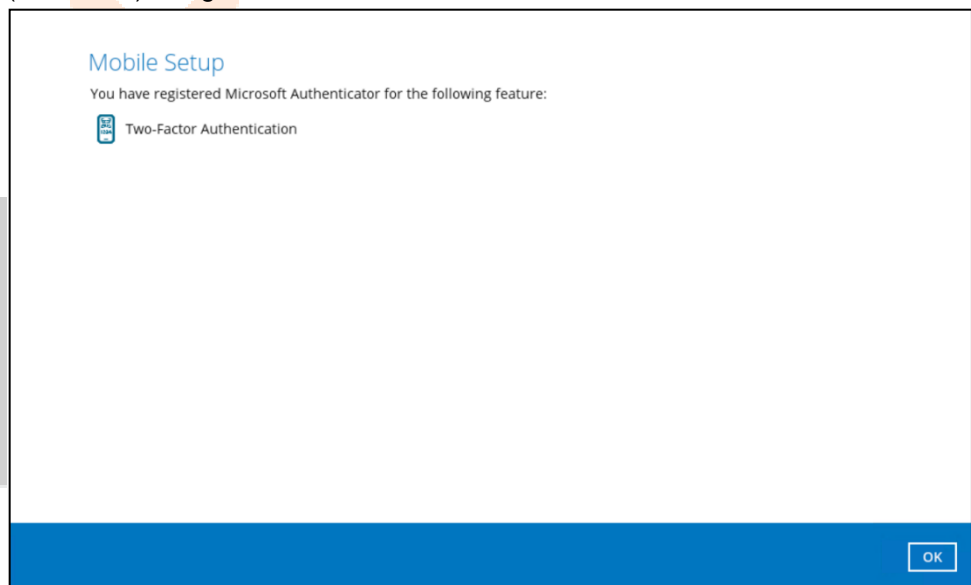
61



Example of the one-time passcode generated:



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



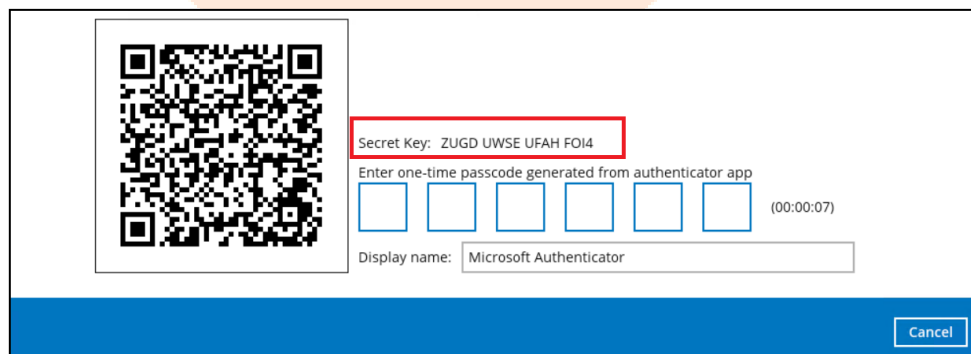
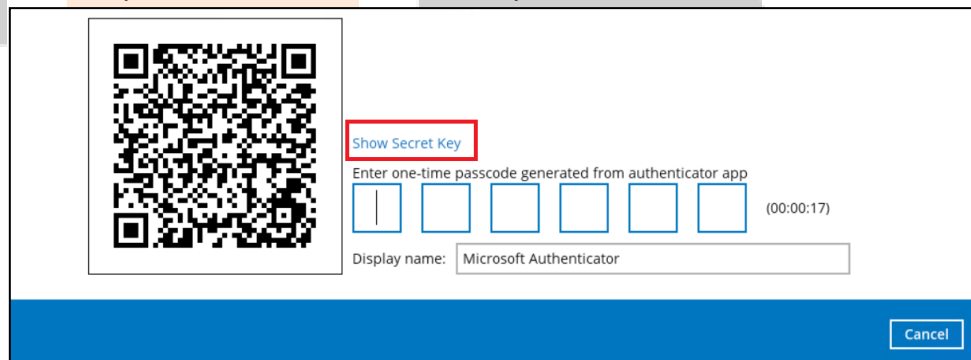
Method 2: Enter Code Manually

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

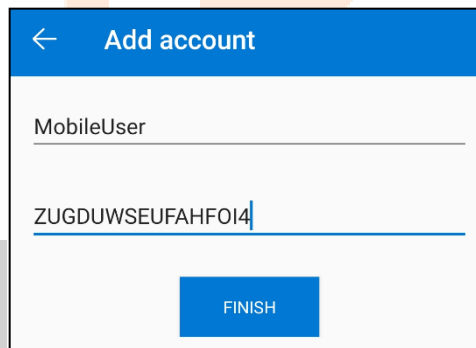
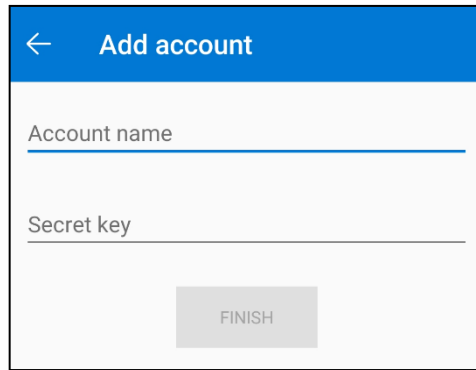


63

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

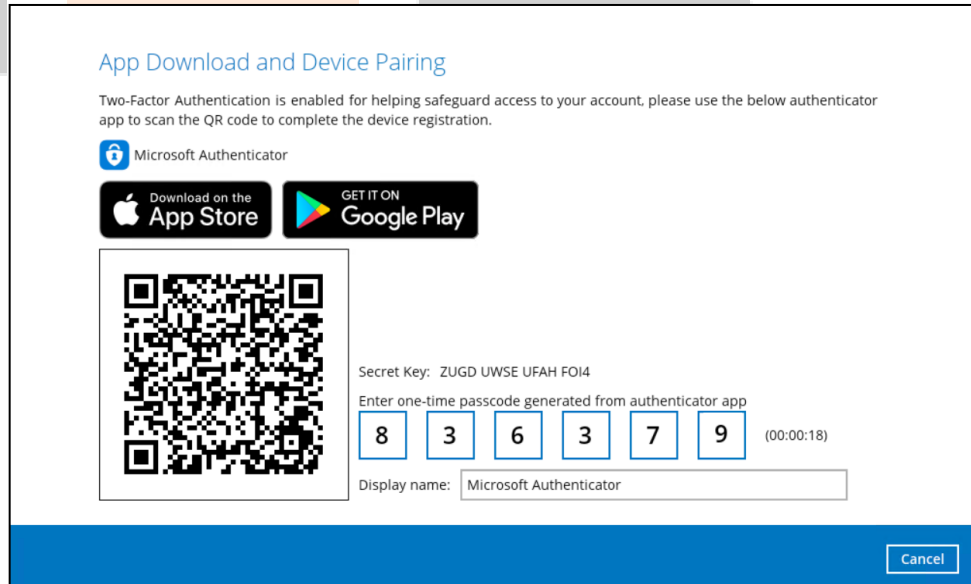


- iii. On the Microsoft Authenticator app, input an account name, then enter the displayed Secret Key in the Advanced Client (B247PRO). Tap **FINISH** to proceed.

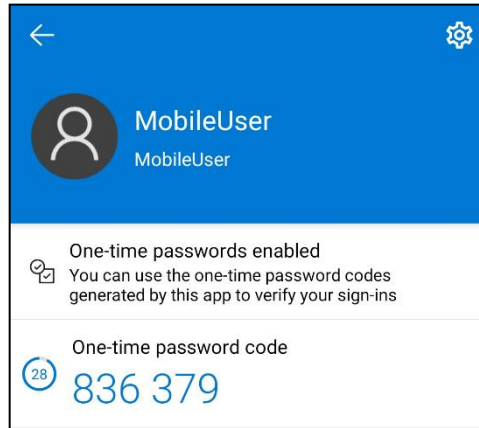


64

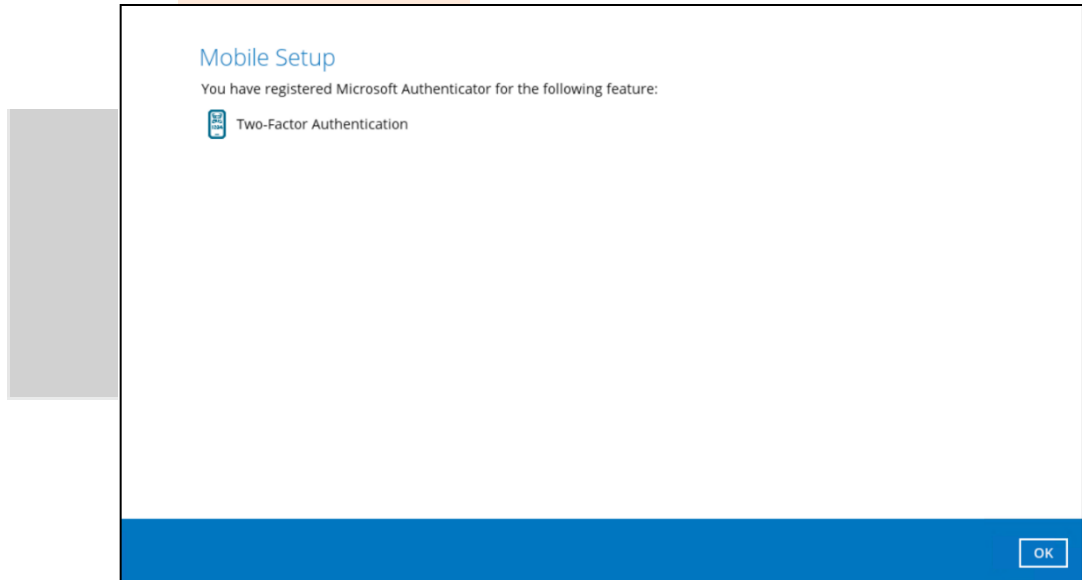
- iv. Once the account is added to Microsoft Authenticator, enter the one-time passcode generated from the authenticator app to Advanced Client (B247PRO).



Example of the one-time passcode generated:

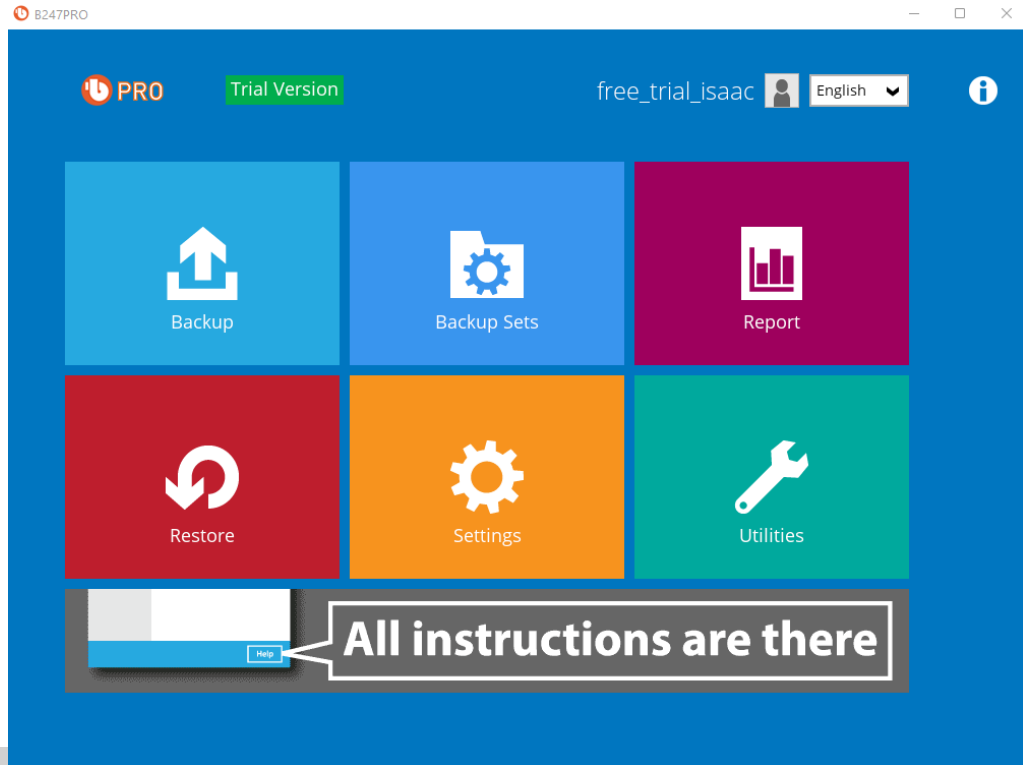


- v. The device is successfully registered for TOTP 2FA in Advanced Client (B247PRO) using Microsoft Authenticator. Click **OK** to continue.



65

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

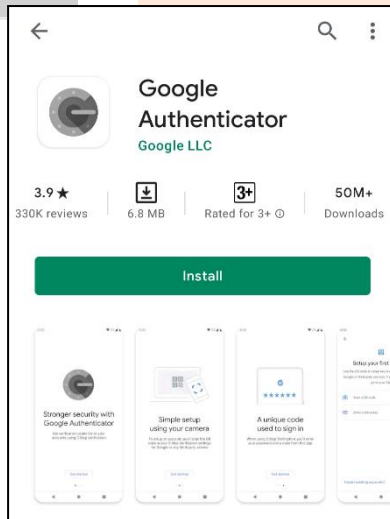


7.3 Using Google Authenticator

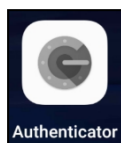
66

To register a device for TOTP 2FA in 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.



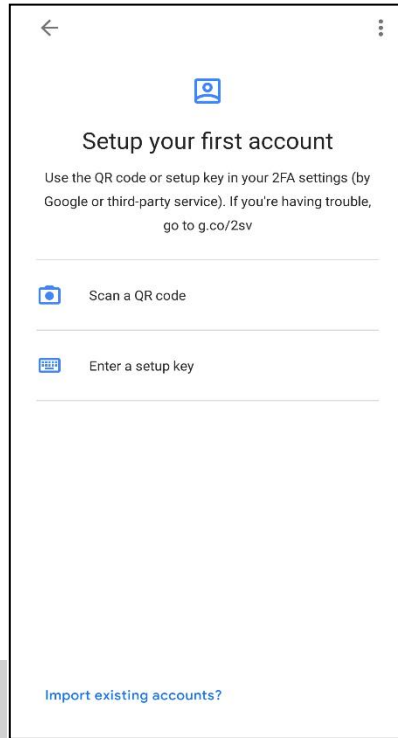
2. Launch the Google Authenticator app.



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

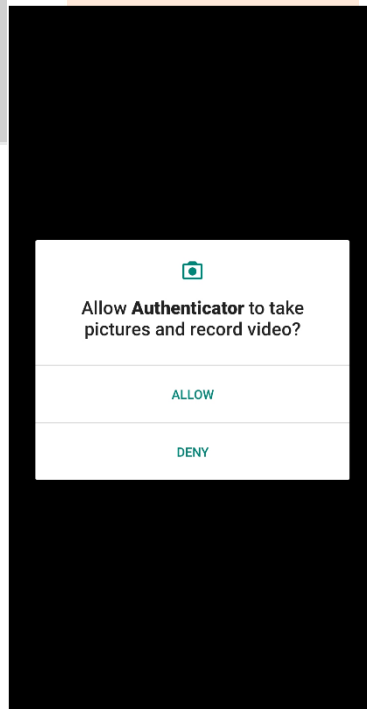
Method 1: Scan the QR code

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



67

- ii. Allow permission to take pictures and record video.

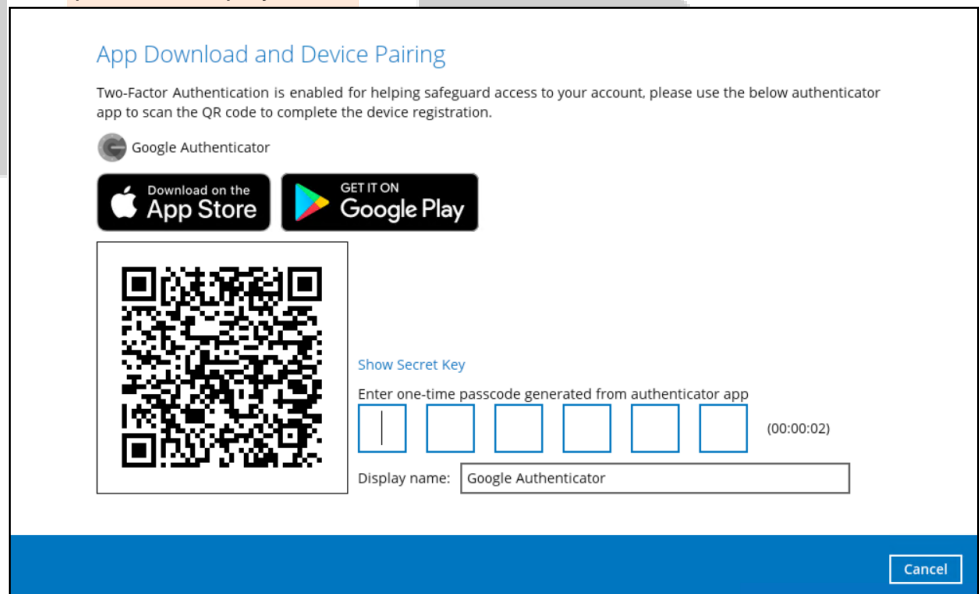


- iii. Scan the QR code on Advanced Client (B247PRO).

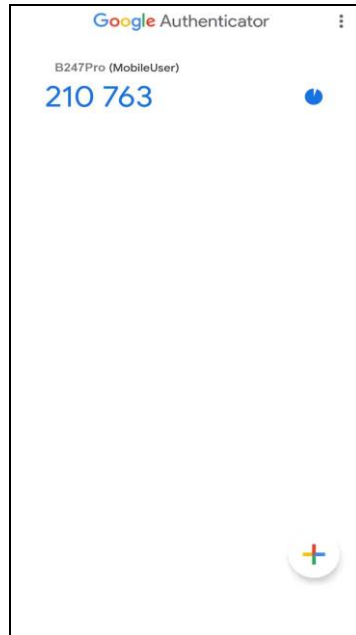


Example of the displayed QR code:

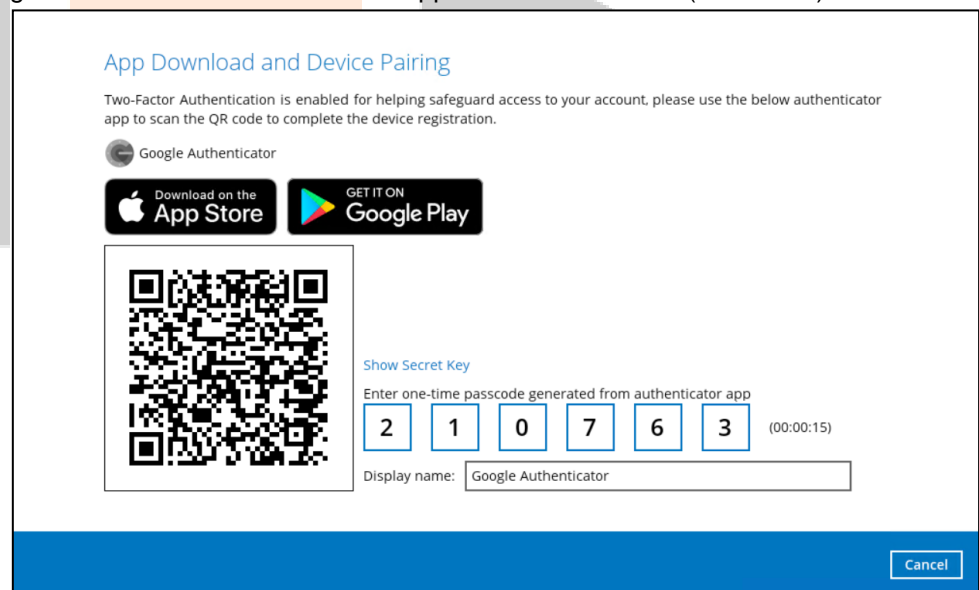
68



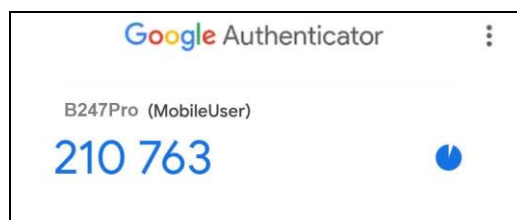
- iv. The Advanced Client (B247PRO) account is successfully added to Google Authenticator and the mobile device is registered in Advanced Client (B247PRO).



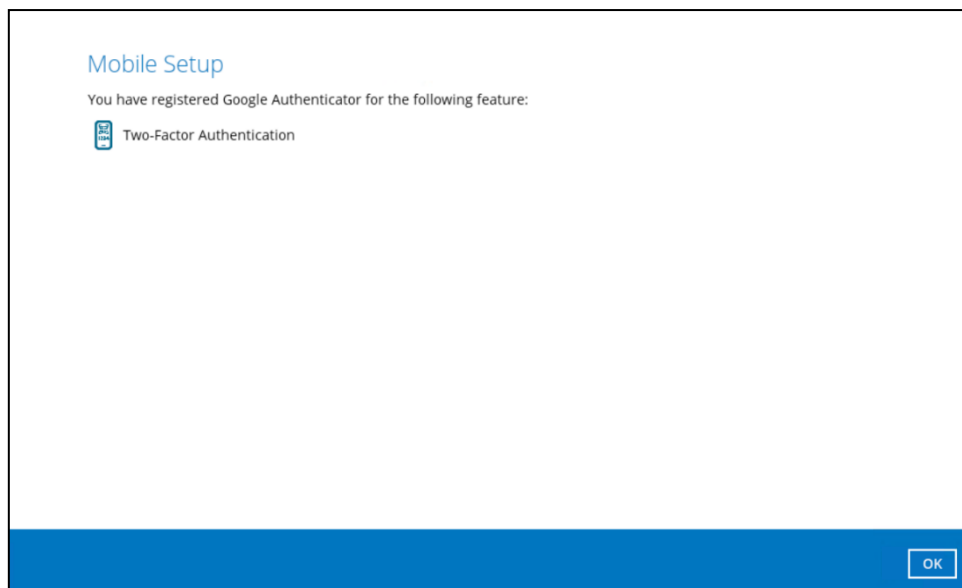
- v. Once the account is added to Google Authenticator, enter the one-time passcode generated from the authenticator app to Advanced Client (B247PRO).



Example of the one-time passcode generated:

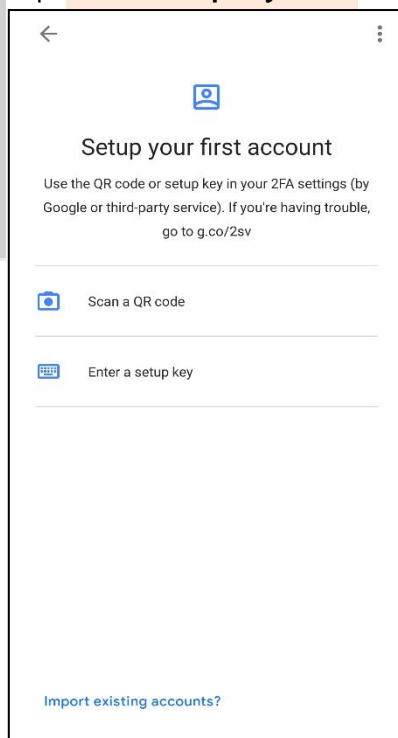


- vi. The device is successfully registered for TOTP 2FA in Advanced Client (B247PRO) using Google Authenticator. Click **OK** to continue.



Method 2: Enter a setup key manually

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



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




[Show Secret Key](#)

Enter one-time passcode generated from authenticator app

(00:00:02)

Display name:

[Cancel](#)



Secret Key: ZUGJ KYFG CKI2 WGJY

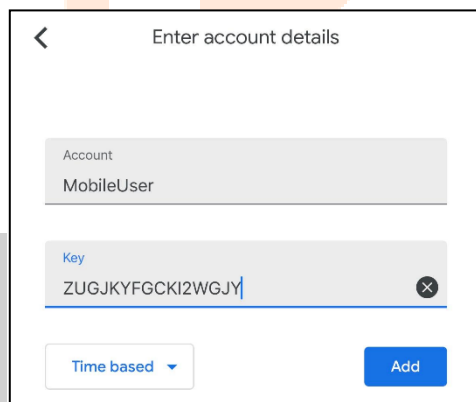
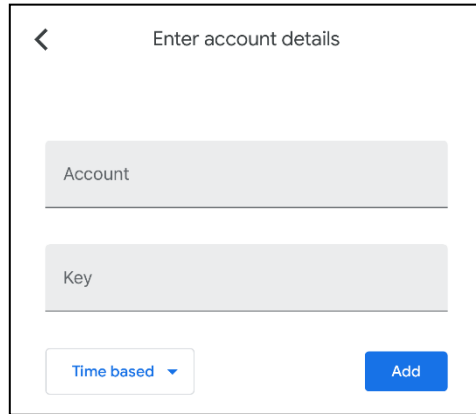
Enter one-time passcode generated from authenticator app

(00:00:07)

Display name:

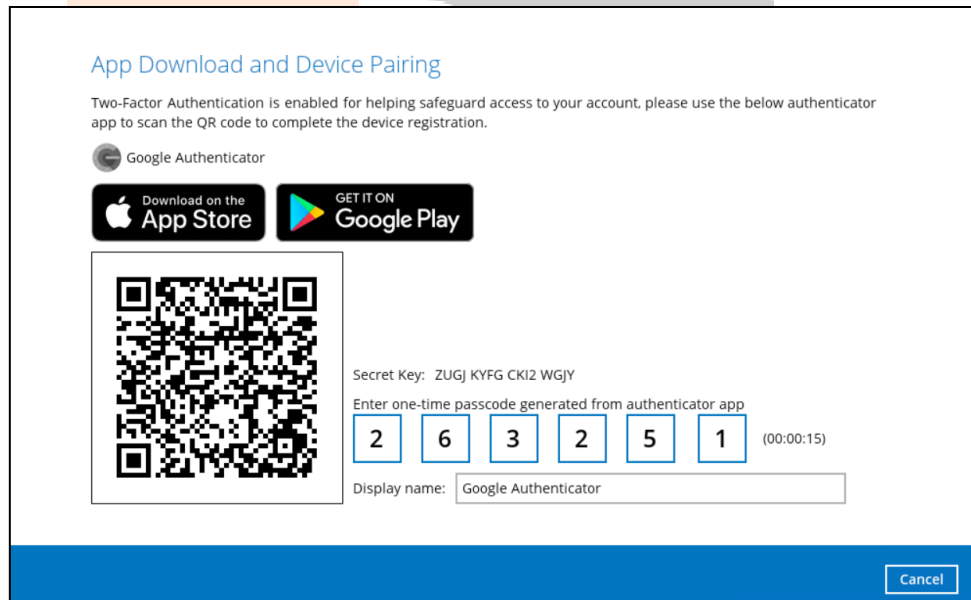
[Cancel](#)

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

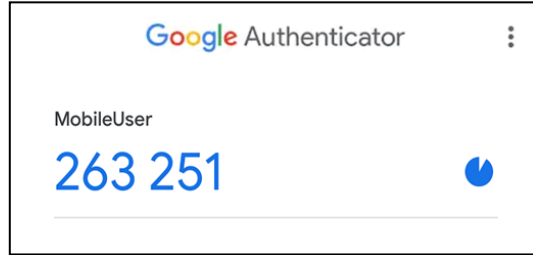


72

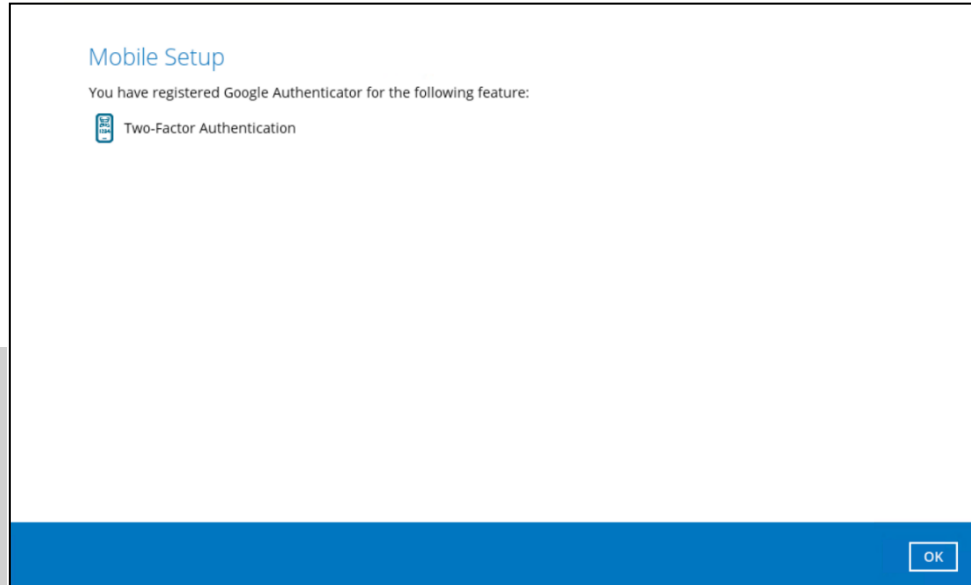
- iv. Once the account is added to Google Authenticator, enter the one-time passcode generated from the authenticator app to Advanced Client (B247PRO).



Example of the one-time passcode generated:

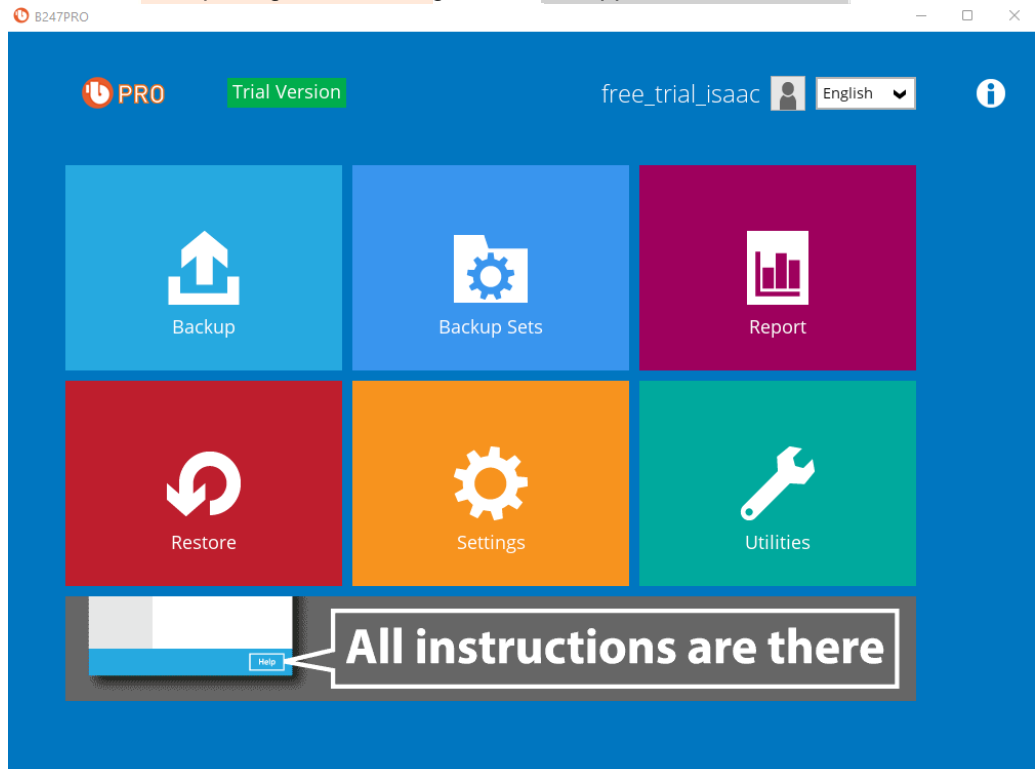


- v. The device is successfully registered for TOTP 2FA in Advanced Client (B247PRO) using Google Authenticator. Click **OK** to continue.



73

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



8 Logging in to Advanced Client (B247PRO)

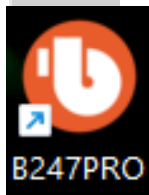
Login steps without 2FA and with 2FA using the different types of authenticators will be discussed in this chapter.

- [Login to Advanced Client \(B247PRO\) without 2FA](#)
- [Login to Advanced Client \(B247PRO\) with 2FA using Backup247 Mobile \(B247MOB\) Authenticator](#)
 - Push Notification and TOTP 2FA
 - TOTP only 2FA
- [Login to Advanced Client \(B247PRO\) with 2FA using Microsoft Authenticator](#)
- [Login to Advanced Client \(B247PRO\) with 2FA using Google Authenticator](#)
- [Login to Advanced Client \(B247PRO\) with 2FA using Twilio](#)

8.1 Login to Advanced Client (B247PRO) without 2FA

When logging in to Advanced Client (B247PRO) without Two-Factor Authentication, follow the steps below:

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

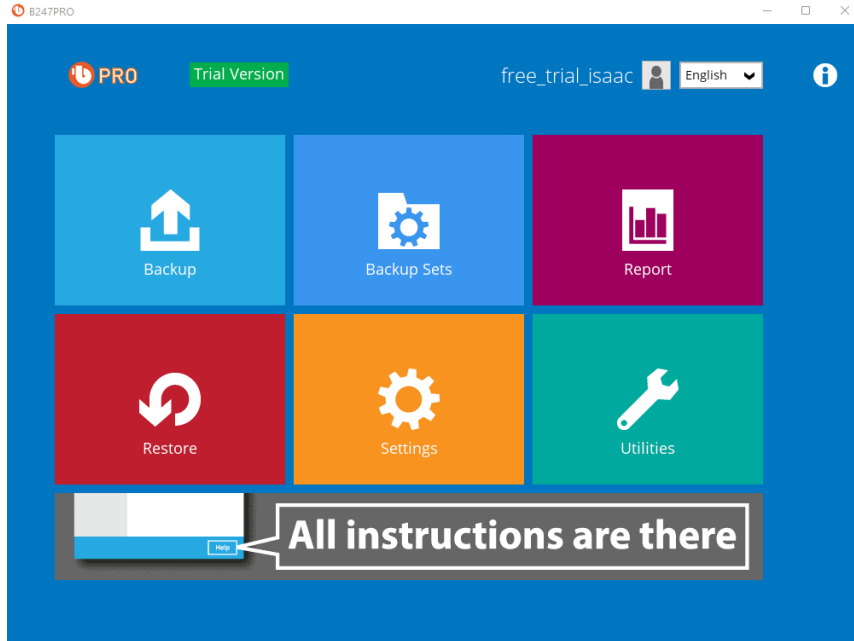


2. Enter the login name and password of your Advanced Client (B247PRO) account provided by Backup247 Technical Support Team . Then, click **OK** to log in.

NOTE

The **Save password** option may vary in the context of vulnerability that it introduces. We may choose to disable this option. Please contact our support team if you have any concerns.

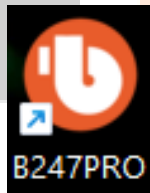
3. After successful login, the following screen will appear.



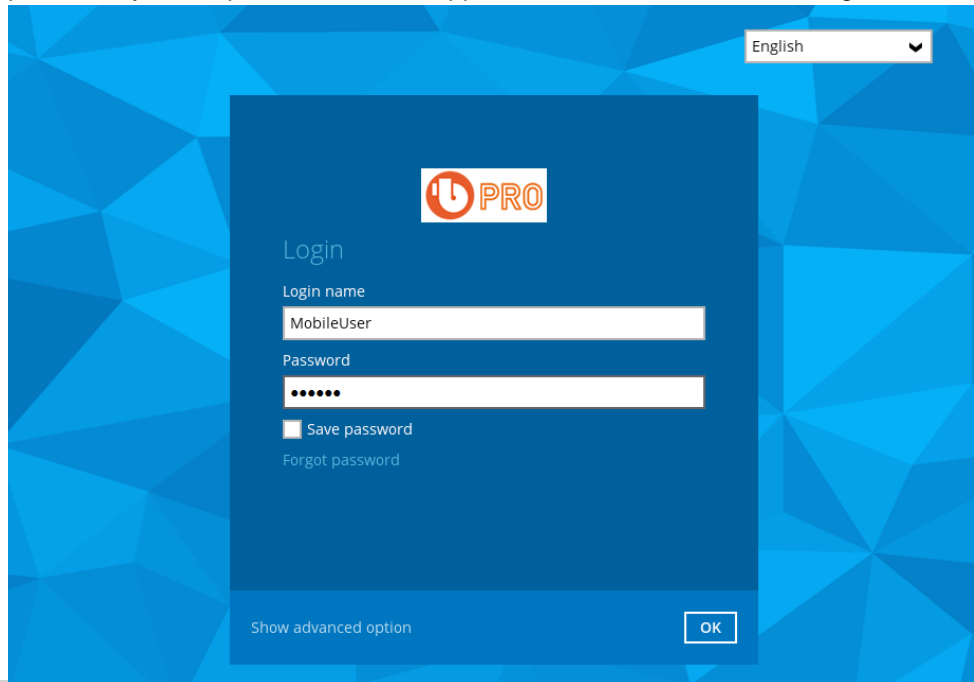
8.2 Login to Advanced Client (B247PRO) with 2FA using Backup247 Mobile (B247MOB) Authenticator

When logging in to Advanced Client (B247PRO) with Two-Factor Authentication using Backup247 Mobile (B247MOB) Authenticator, please follow the steps below:

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



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



76

NOTE

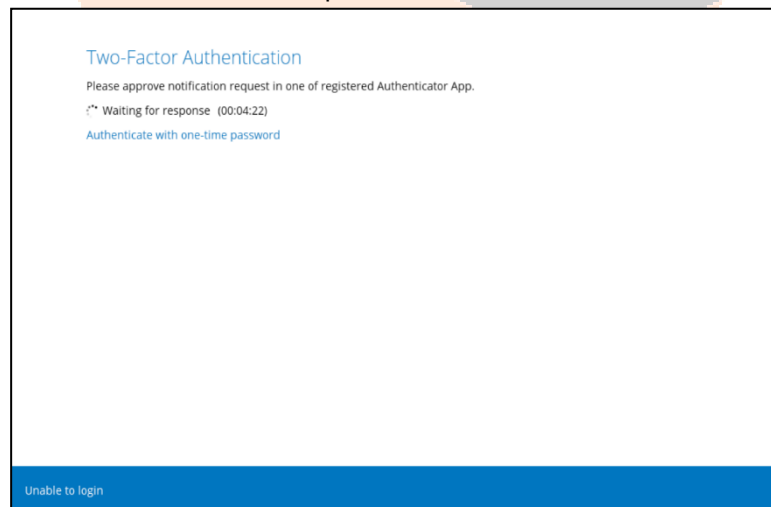
The **Save password** option may vary in the context of vulnerability that it introduces. We may choose to disable this option. Please contact our support team if you have any concerns.

Please refer to the **Appendix A: Troubleshooting Login** of the [Backup247 Mobile \(B247MOB\) User Guide for Android and iOS](#) if you are experiencing problems logging into Advanced Client (B247PRO) with Two-Factor Authentication using Backup247 Mobile (B247MOB) app.

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

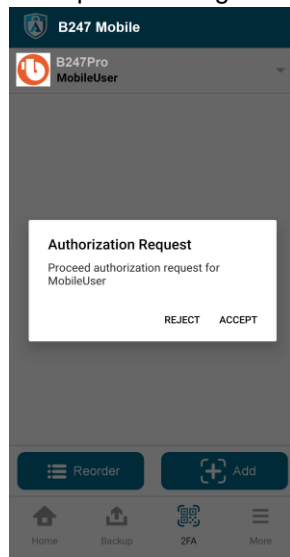
- **Push Notification and TOTP (default mode)**

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



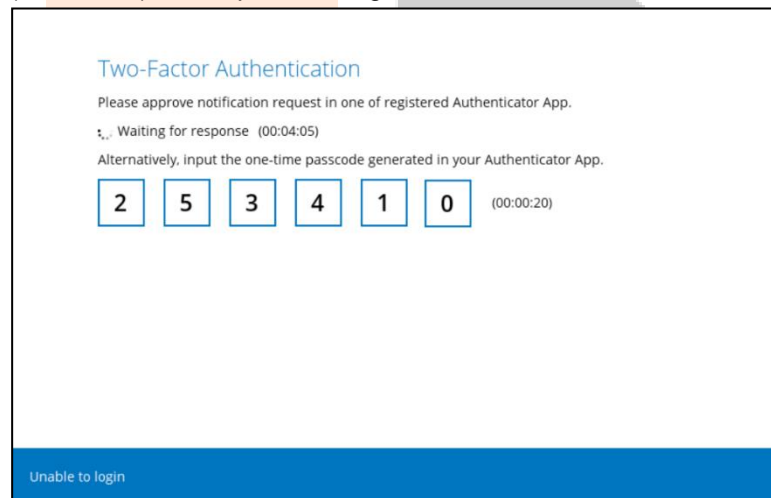
Push notification is the default 2FA mode. Accept the login request on the Backup247 Mobile (B247MOB) app to complete the login.

Example of the login request sent to the Backup247 Mobile (B247MOB):

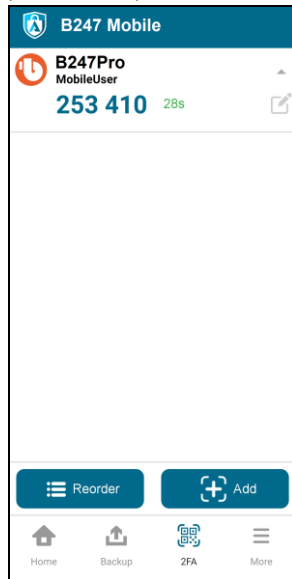


However, if push notification is not working or you prefer to use one-time password instead, click the **“Authenticate with one-time password”** link, then input the one-time password generated from Backup247 Mobile (B247MOB) to complete the login.

77



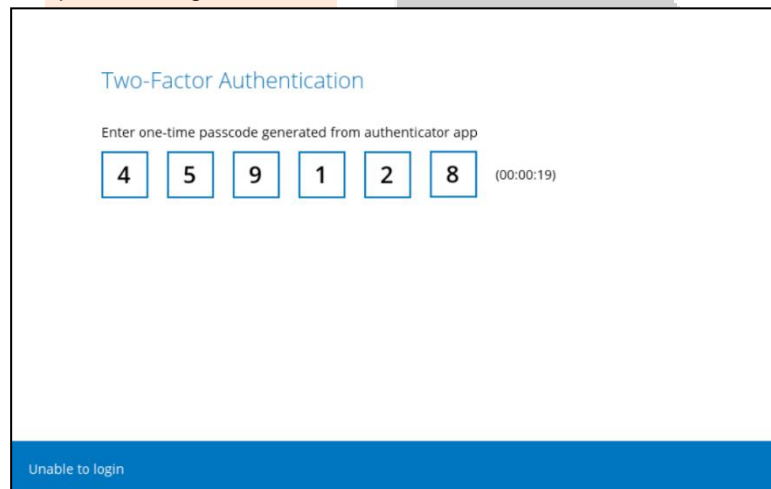
Example of the one-time password generated by Backup247 Mobile (B247MOB):



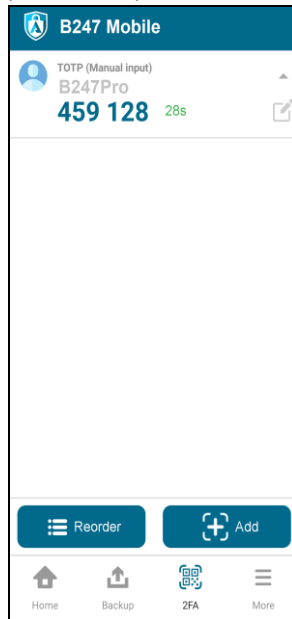
- **TOTP only**

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

Input the one-time password generated by Backup247 Mobile (B247MOB) to complete the login.



Example of the one-time password generated by Backup247 Mobile (B247MOB):

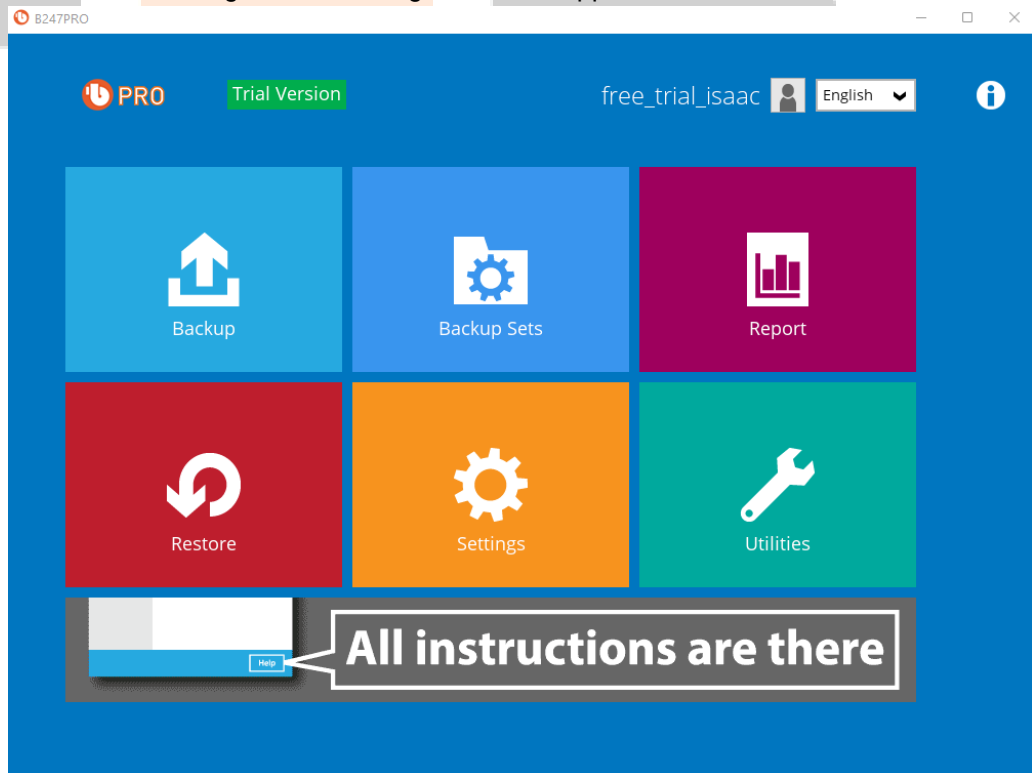


NOTE

If you are unable to log in using any of the authentication method, refer to [Chapter 9 Unable to log in to Advanced Client \(B247PRO\) with 2FA](#).

79

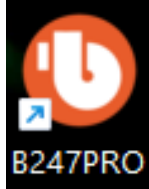
4. After successful login, the following screen will appear.



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

When logging in to 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 Advanced Client (B247PRO) account provided by Backup247 Technical Support Team . Then, click **OK** to log in.

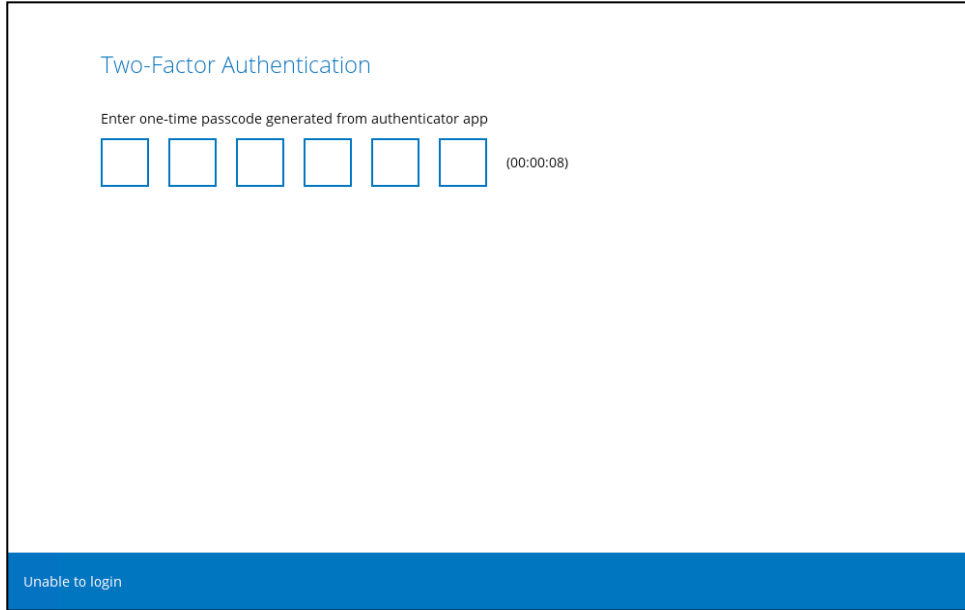
The screenshot shows the login interface for B247PRO. The background is a blue geometric pattern. In the top right corner, there is a language dropdown menu set to 'English'. The main login form is a dark blue rectangle with the B247PRO logo at the top. It contains the following elements: the word 'Login', a 'Login name' field with 'MobileUser' entered, a 'Password' field with masked characters, a 'Save password' checkbox which is unchecked, and a 'Forgot password' link. At the bottom of the form, there is a 'Show advanced option' link and an 'OK' button.

80

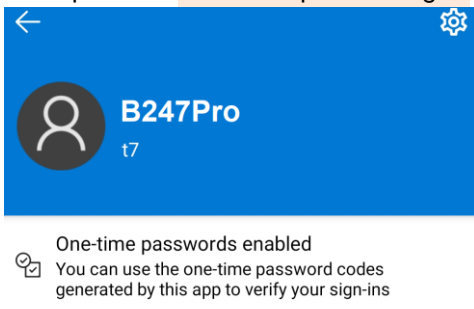
NOTE

The **Save password** option may vary in the context of vulnerability that it introduces. We may choose to disable this option. Please contact our support team if you have any concerns.

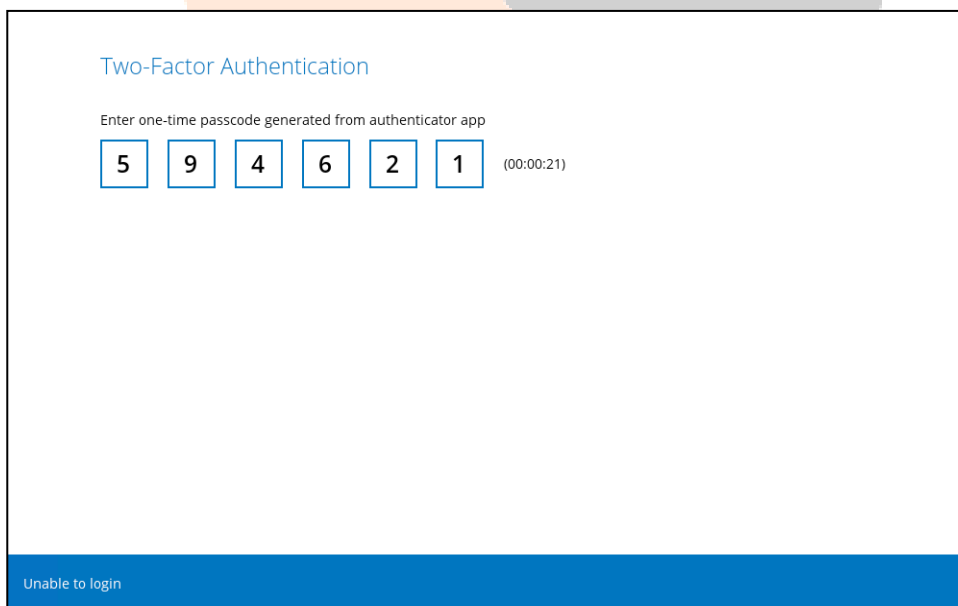
3. Enter the one-time passcode generated from the Microsoft Authenticator app.



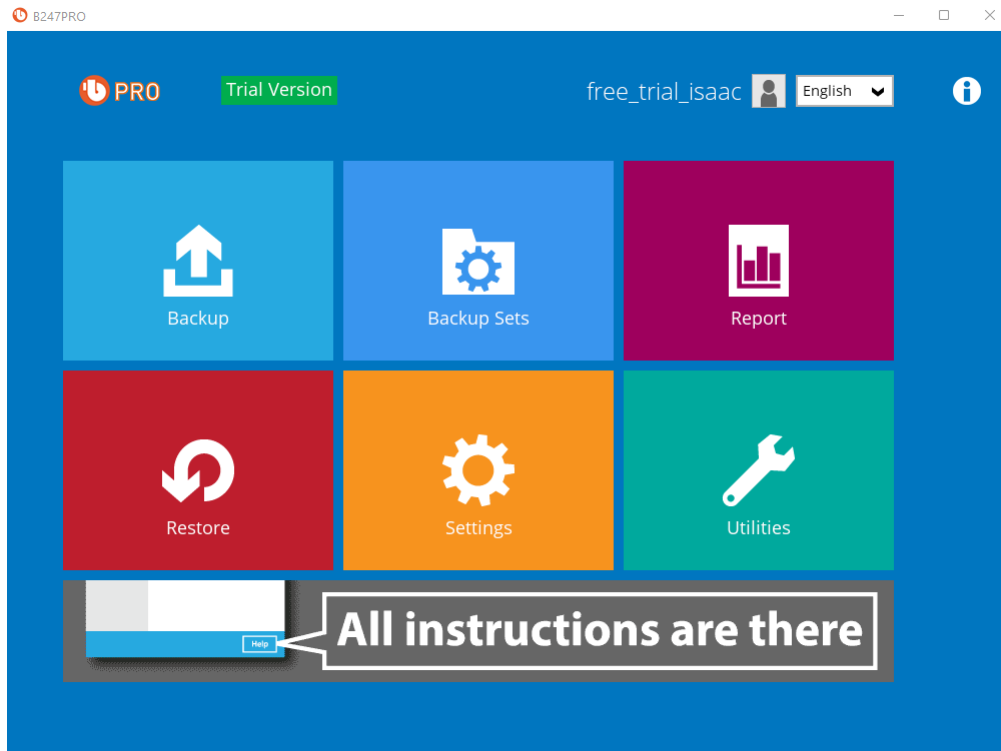
Example of the one-time passcode generated:



One-time password code
29 594 621



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

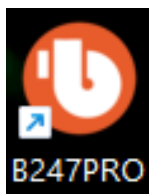


82

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

When logging in to 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 Advanced Client (B247PRO) account provided by Backup247 Technical Support Team . Then, click **OK** to log in.

English

Backup PRO

Login

Login name
MobileUser

Password
••••••

Save password

[Forgot password](#)

[Show advanced option](#)

83

NOTE

The **Save password** option may vary in the context of vulnerability that it introduces. We may choose to disable this option. Please contact our support team if you have any concerns.

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

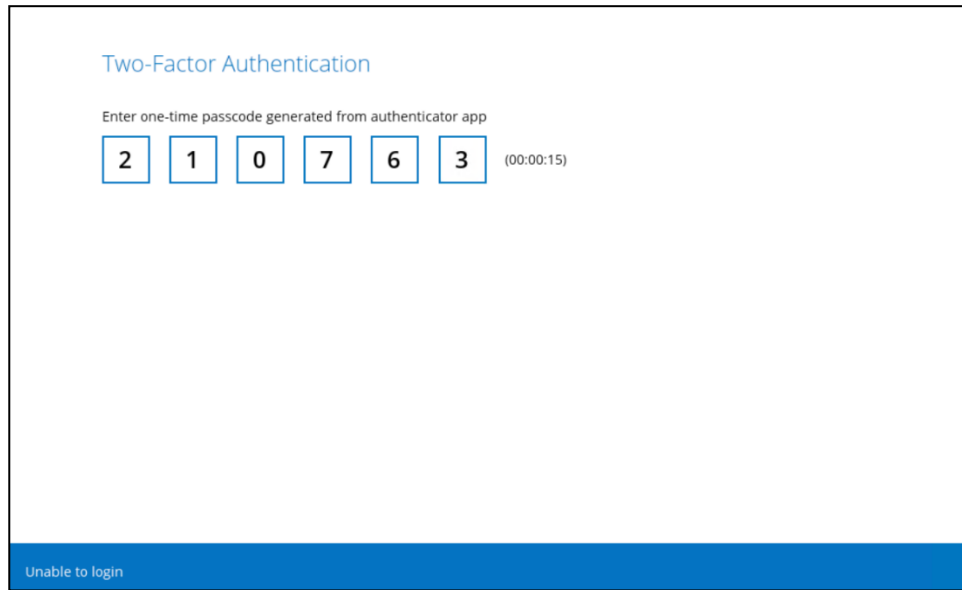
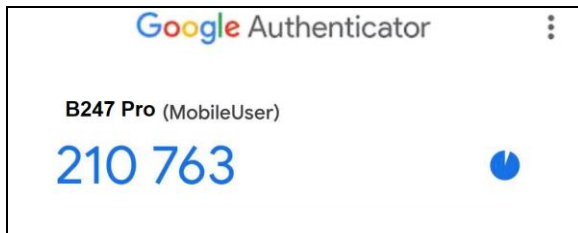
Two-Factor Authentication

Enter one-time passcode generated from authenticator app

(00:00:08)

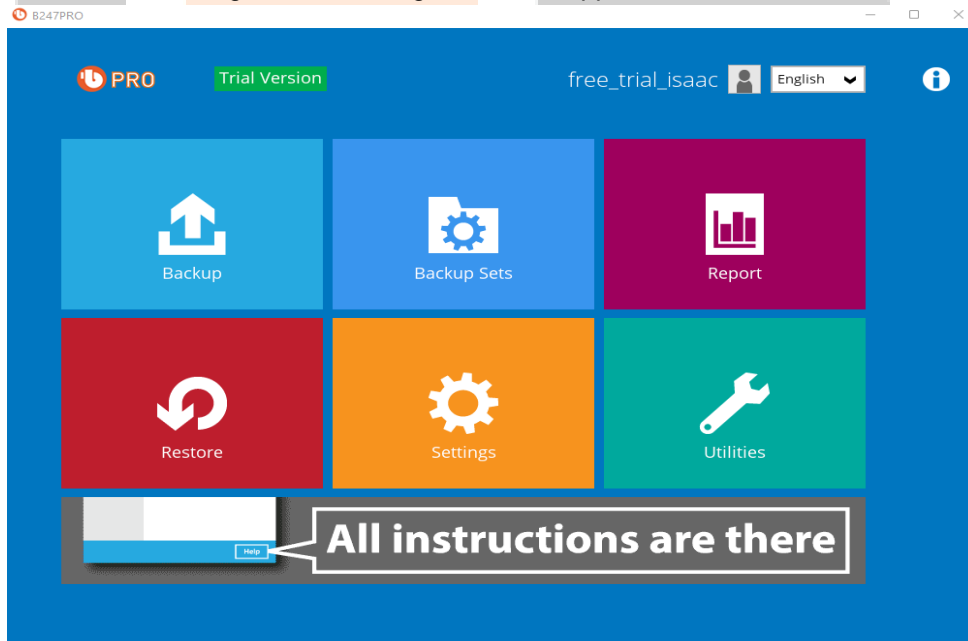
Unable to login

Example of the one-time passcode generated:



84

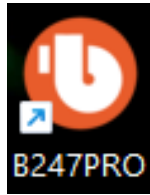
4. After successful login, the following screen will appear.



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

When logging in to 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 Advanced Client (B247PRO) account provided by Backup247 Technical Support Team . Then, click **OK** to log in.

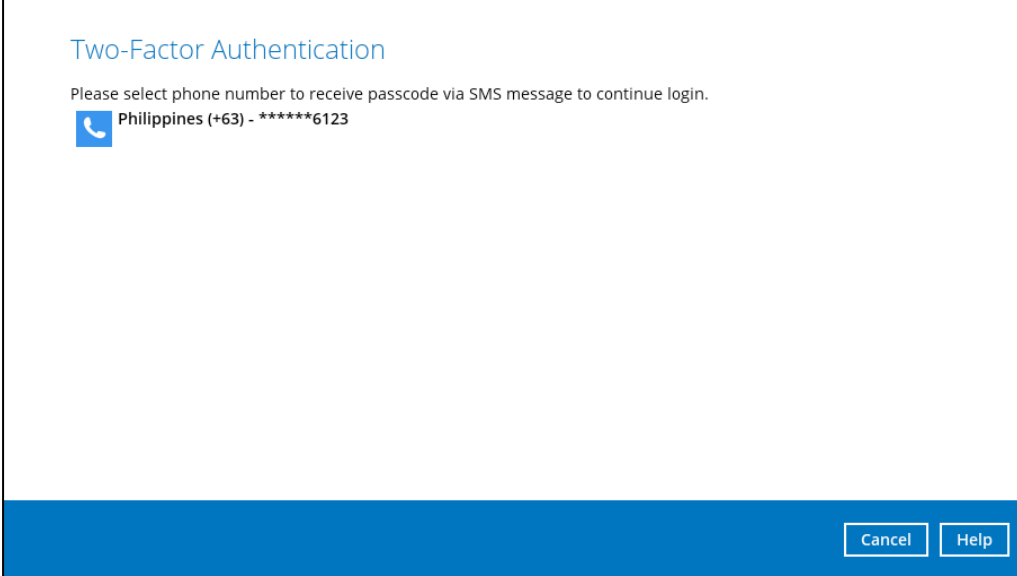
The screenshot shows the login interface for B247PRO. The background is a blue geometric pattern. In the top right corner, there is a language dropdown menu set to 'English'. The main login form is a dark blue rectangle with the 'B247PRO' logo at the top. It contains the following elements: the word 'Login', a 'Login name' field with 'MobileUser' entered, a 'Password' field with six dots, a 'Save password' checkbox, a 'Forgot password' link, a 'Show advanced option' link at the bottom left, and an 'OK' button at the bottom right.

85

NOTE


The **Save password** option may vary in the context of vulnerability that it introduces. We may choose to disable this option. Please contact our support team if you have any concerns.

3. Select your phone number to receive the passcode



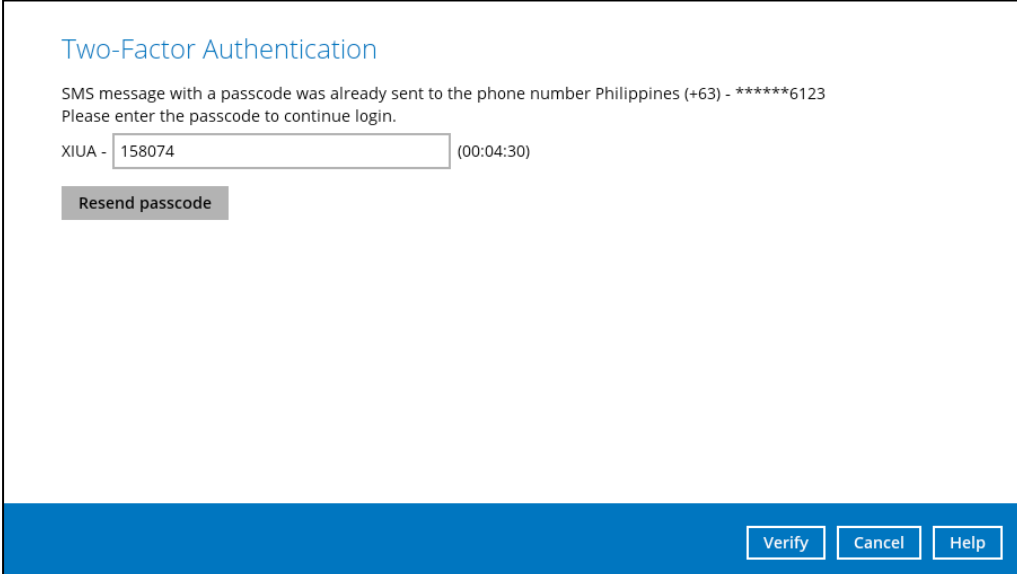
Two-Factor Authentication

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

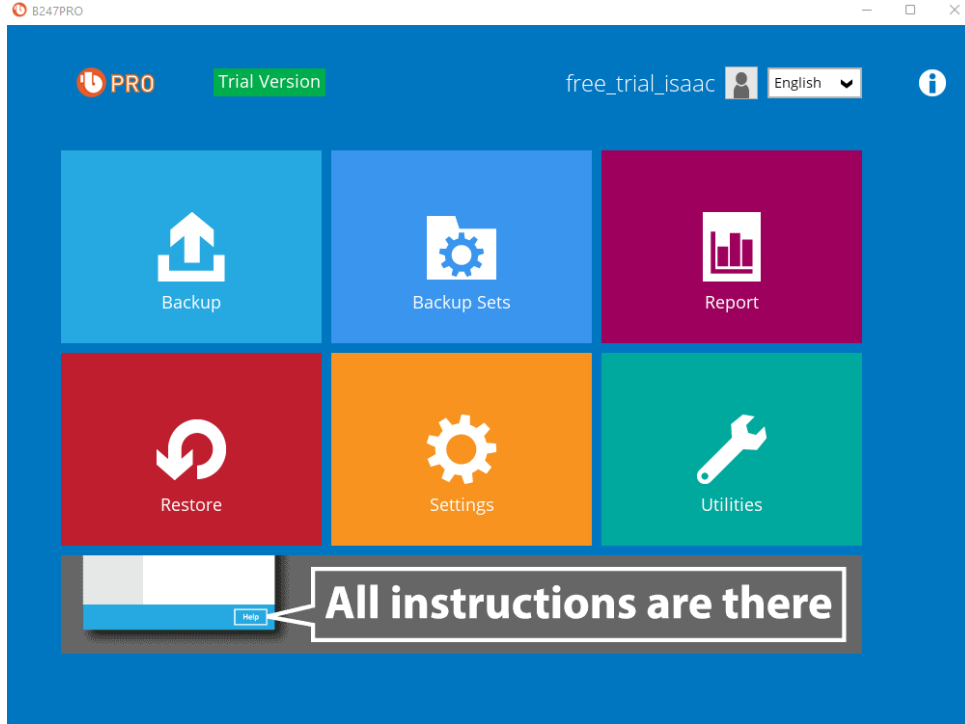
SMS message with a passcode was already sent to the phone number Philippines (+63) - *****6123
Please enter the passcode to continue login.

XIUA - (00:04:30)

Resend passcode

Verify Cancel Help

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

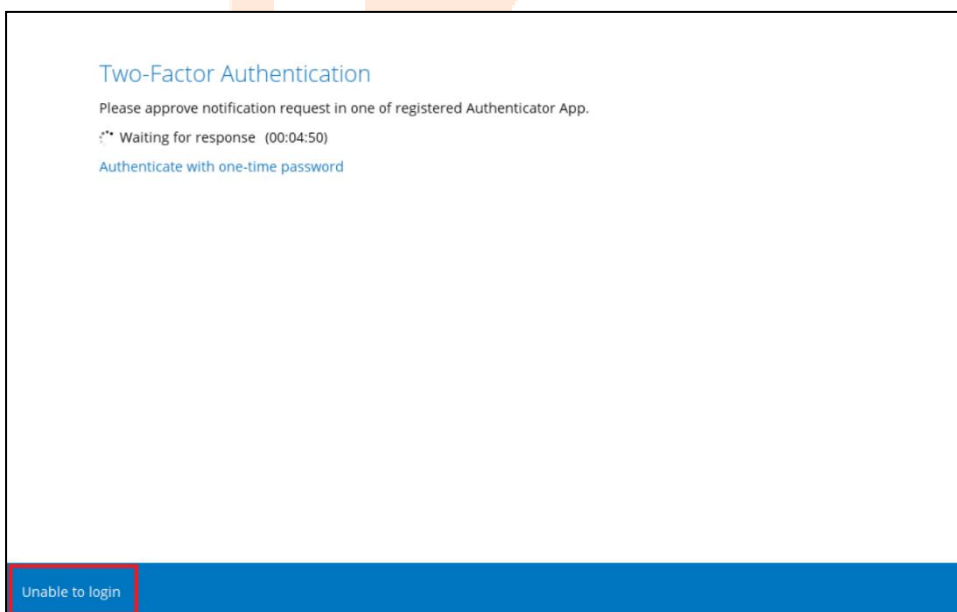


9 Unable to log in to Advanced Client (B247PRO) with 2FA

Advanced Client (B247PRO) supports **Unable to login** feature for users who were not able to accept the notification request from the Backup247 Mobile (B247MOB) app and/or cannot obtain the TOTP code from Backup247 Mobile (B247MOB) on the subsequent login to Advanced Client (B247PRO).

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

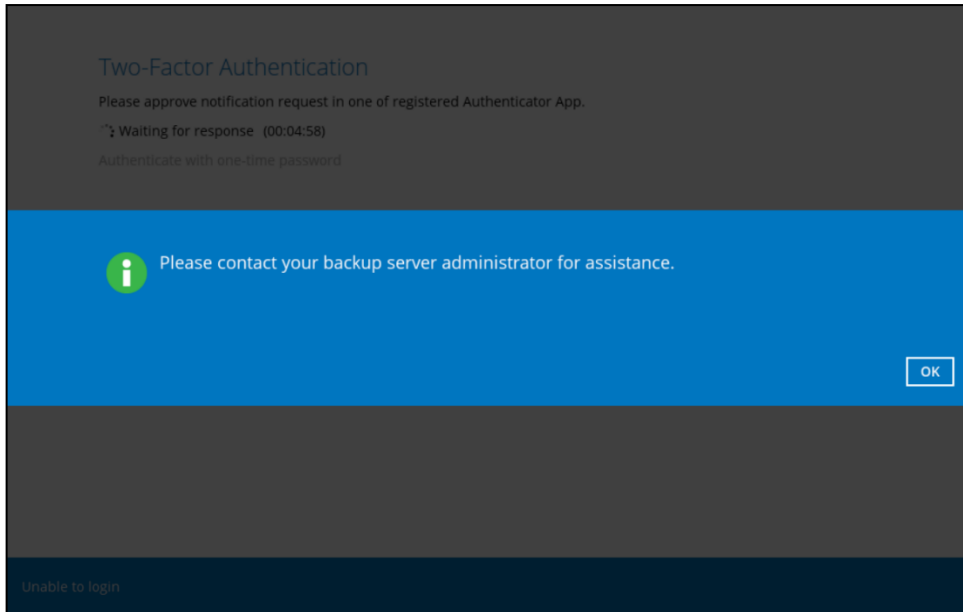
- No recovery number was registered on Backup247 Mobile (B247MOB) for the 2FA account
- "Authentication Recovery" procedure
- Unable to perform the "Authentication Recovery" procedure



88

1. No recovery number was registered on Backup247 Mobile (B247MOB) for the 2FA account

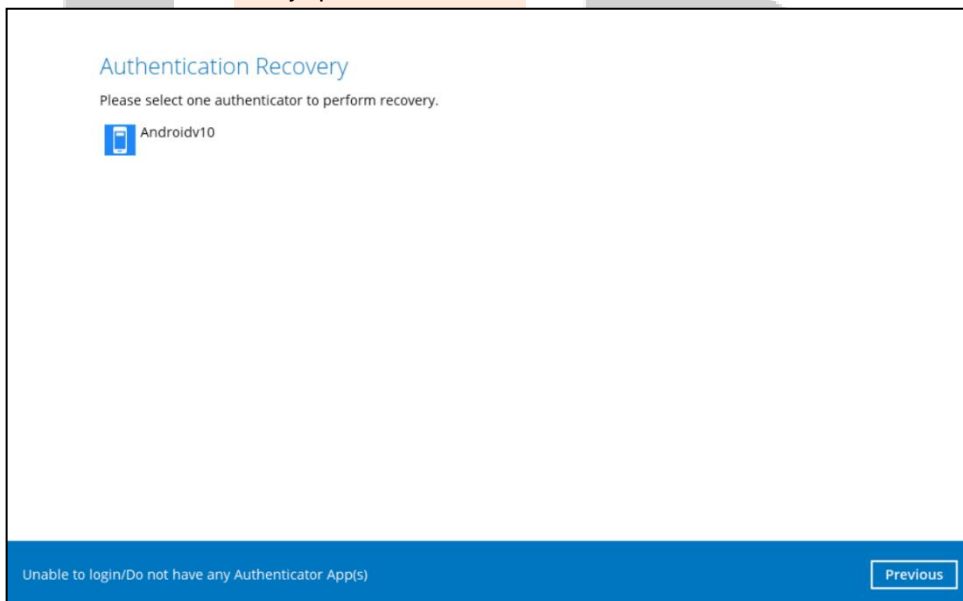
If no recovery number was registered on Backup247 Mobile (B247MOB) for the 2FA account, then the following message will be displayed "Please contact your backup server administrator for assistance" in gaining access to your Advanced Client (B247PRO) account.



2. "Authentication Recovery" procedure

If a recovery number was registered on Backup247 Mobile (B247MOB) for the 2FA account, then select the registered mobile device to perform the following "Authentication Recovery" procedure.

89

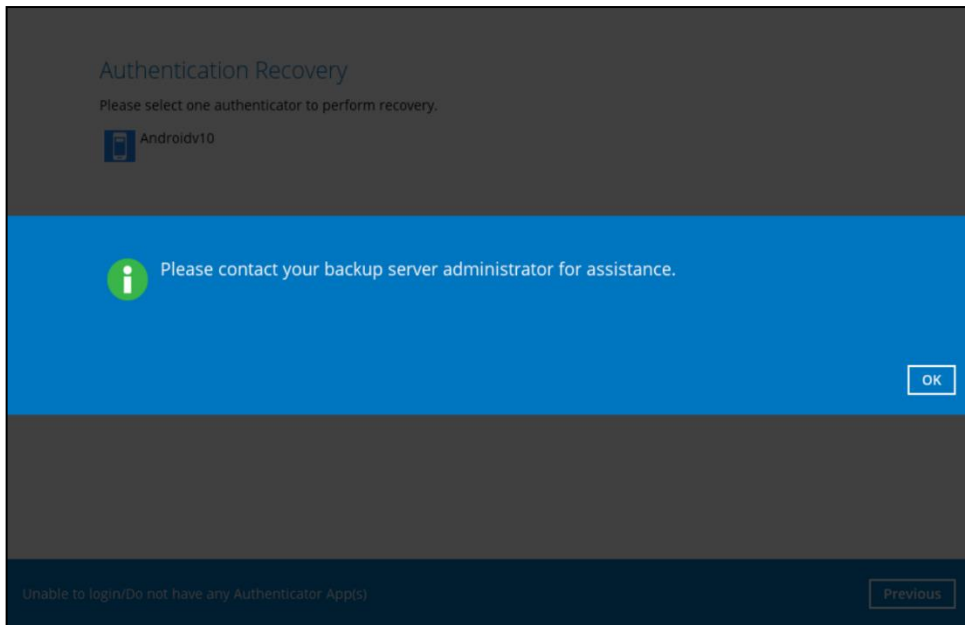


NOTE

For the detailed steps in performing Authentication Recovery, please refer to the **Appendix A: Troubleshooting Login** of the Backup247 Mobile (B247MOB) User Guide for Android and iOS.

3. Unable to perform the "Authentication Recovery" procedure

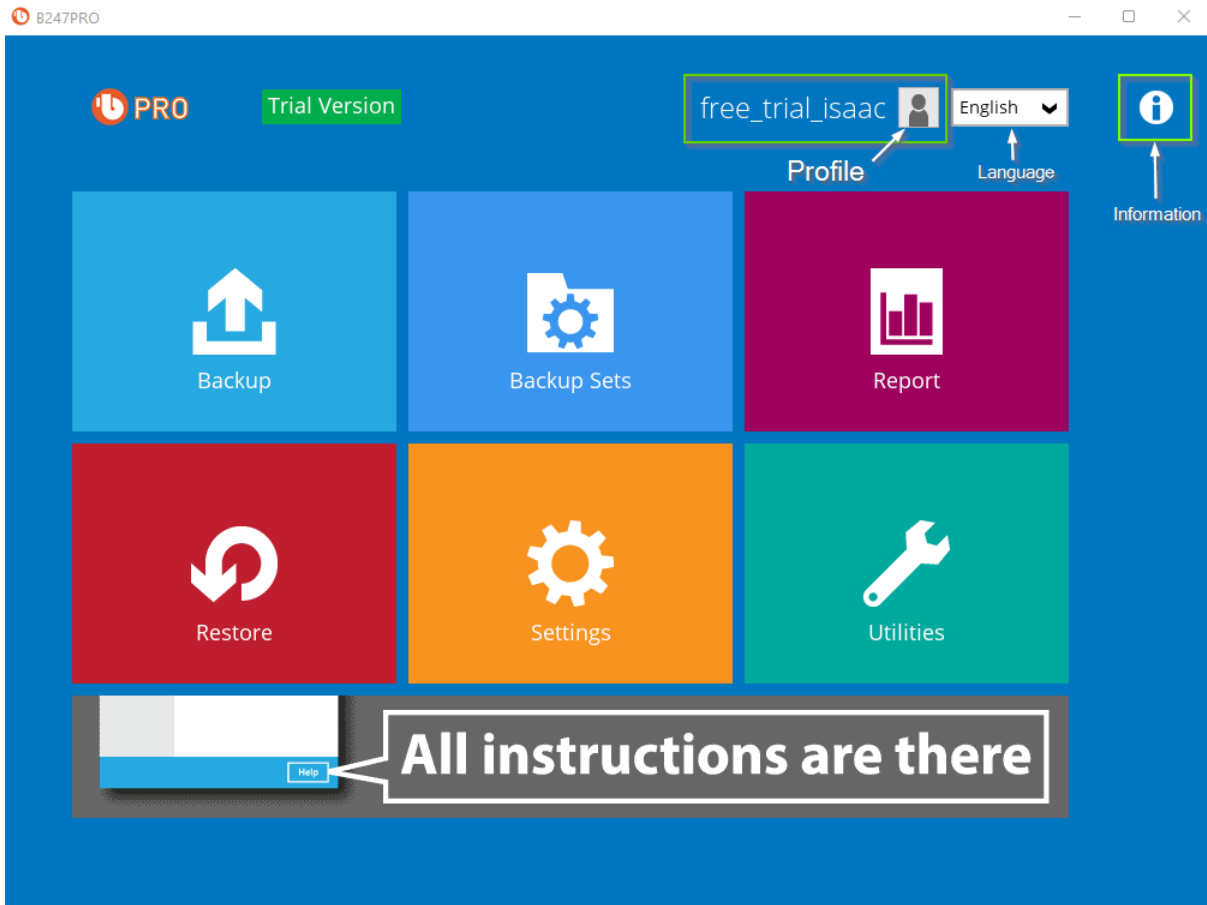
If you are not able to perform the "Authentication Recovery" procedure, click the **Unable to login/Do not have any Authenticator App(s)** link, then the following message will be displayed "Please contact your backup server administrator for assistance" in gaining access to your Advanced Client (B247PRO)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



90



10 Advanced Client (B247PRO) Overview



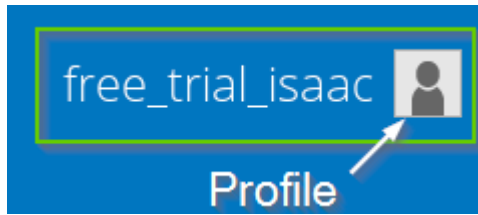
91

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](#)

10.1 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 were using Twilio Two-Factor Authentication in prior to upgrading to v8.5.0.0 or above and continues to use Twilio.



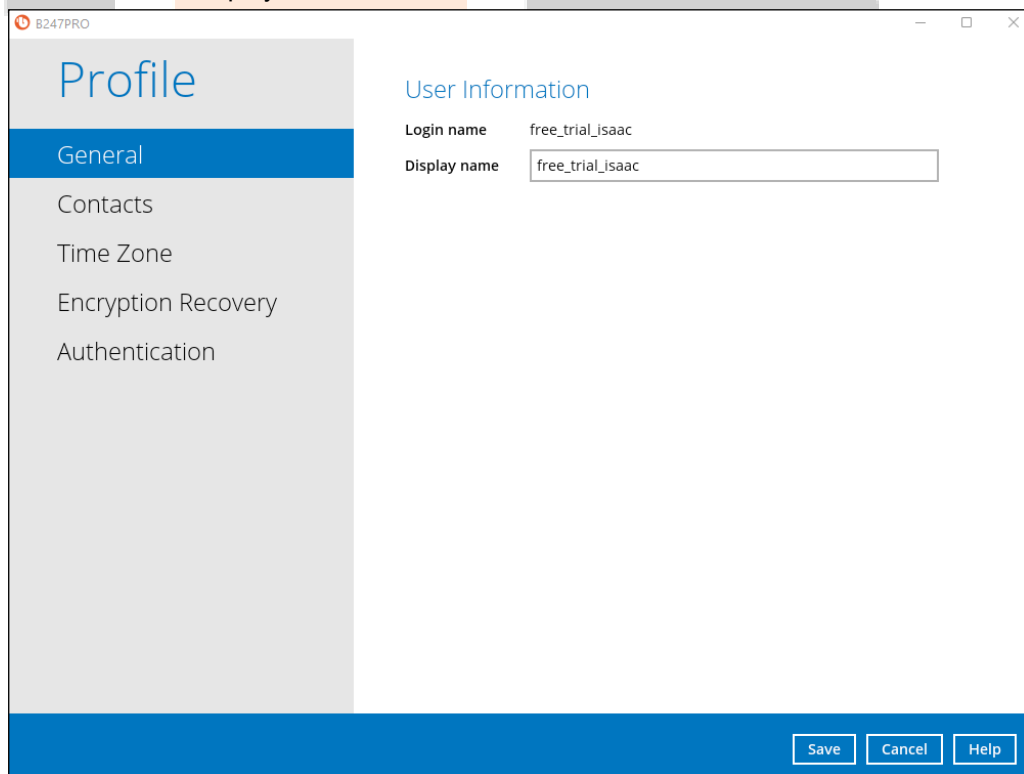
There are seven (7) available features:

- [General](#)
- [Contacts](#)
- [Time Zone](#)
- [Encryption Recovery](#)
- [Password](#) (Only shown for backup accounts created prior to 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 Advanced Client (B247PRO) v8.5.0.0 and using Twilio for Two-Factor Authentication.)

92

10.1.1 General

The General tab displays the user's information.



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.

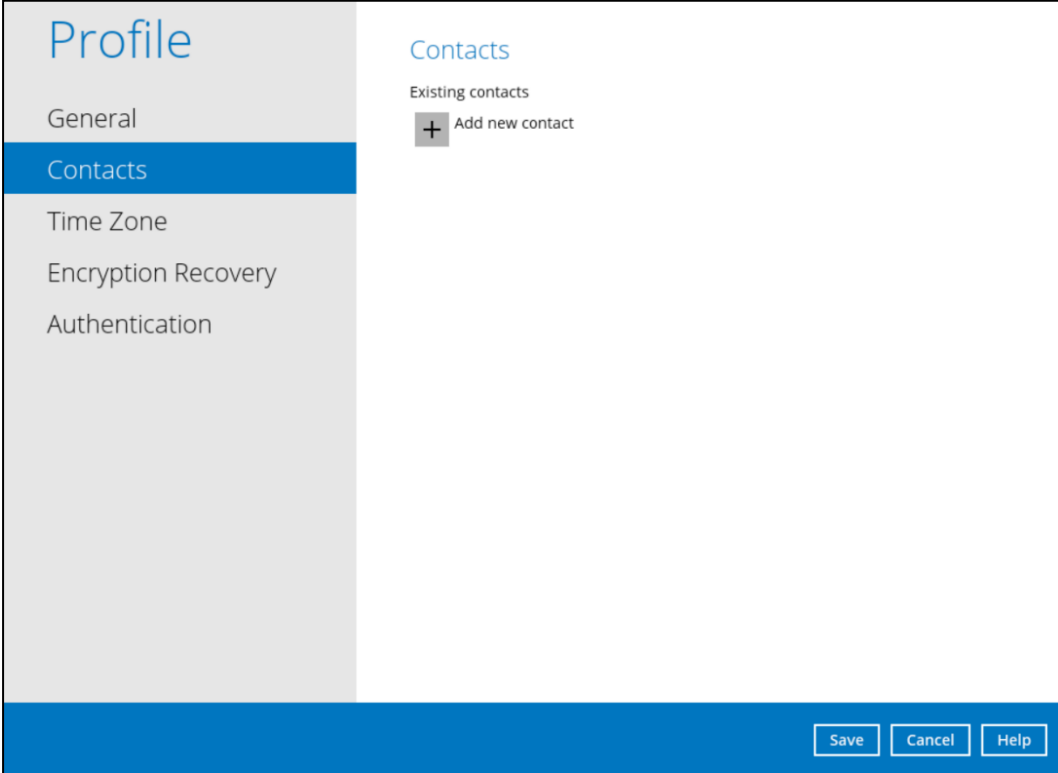
This will be the General tab for old backup accounts that are still using Twilio for Two-Factor Authentication.

93

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 log in in to B247CBS User Web Console or Advanced Client (B247PRO).

10.1.2 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 us in sending backup and daily reports and even recovered backup set encryption key in case it was forgotten or lost.

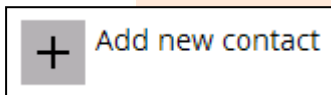


The screenshot shows a web interface for a user profile. On the left is a navigation menu with the following items: Profile, General, Contacts (highlighted in blue), Time Zone, Encryption Recovery, and Authentication. The main content area is titled 'Contacts' and contains the text 'Existing contacts' and a button with a plus sign and the text 'Add new contact'. At the bottom right of the page are three buttons: 'Save', 'Cancel', and 'Help'.

94

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 the **OK** button to return to the main screen.
 - Name
 - Email
 - Address
 - Company
 - Website
 - Phone 1
 - Phone 2

The screenshot shows a 'New Contact' form within a 'Profile' window. The form includes input fields for Name, Email, Address, Company, and Website. There is a checkbox labeled 'Send me encrypted email (S/MIME)'. At the bottom right, there are 'OK' and 'Cancel' buttons.

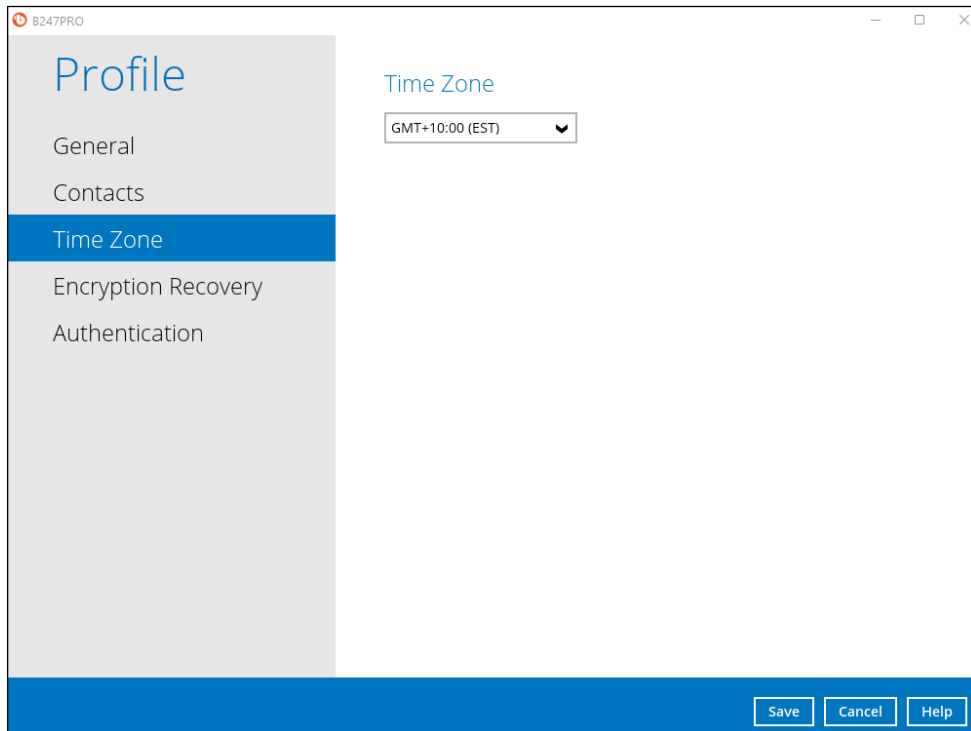
3. Click the **Save** button to store the contact information.

The screenshot shows the 'Profile' page with a sidebar on the left containing 'General', 'Contacts', 'Time Zone', 'Encryption Recovery', and 'Authentication'. The 'Contacts' section is active, showing 'Existing contacts' with one entry: 'samplename' with email 'sample_email@mail.com'. An 'Add' button is below the entry. At the bottom right, there are 'Save', 'Cancel', and 'Help' buttons.

95

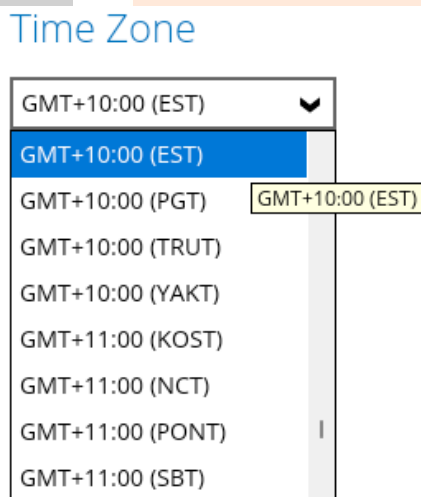
10.1.3 Time Zone

The time zone indicated.



To modify the time zone, follow the instructions below:

1. Select from the dropdown list.

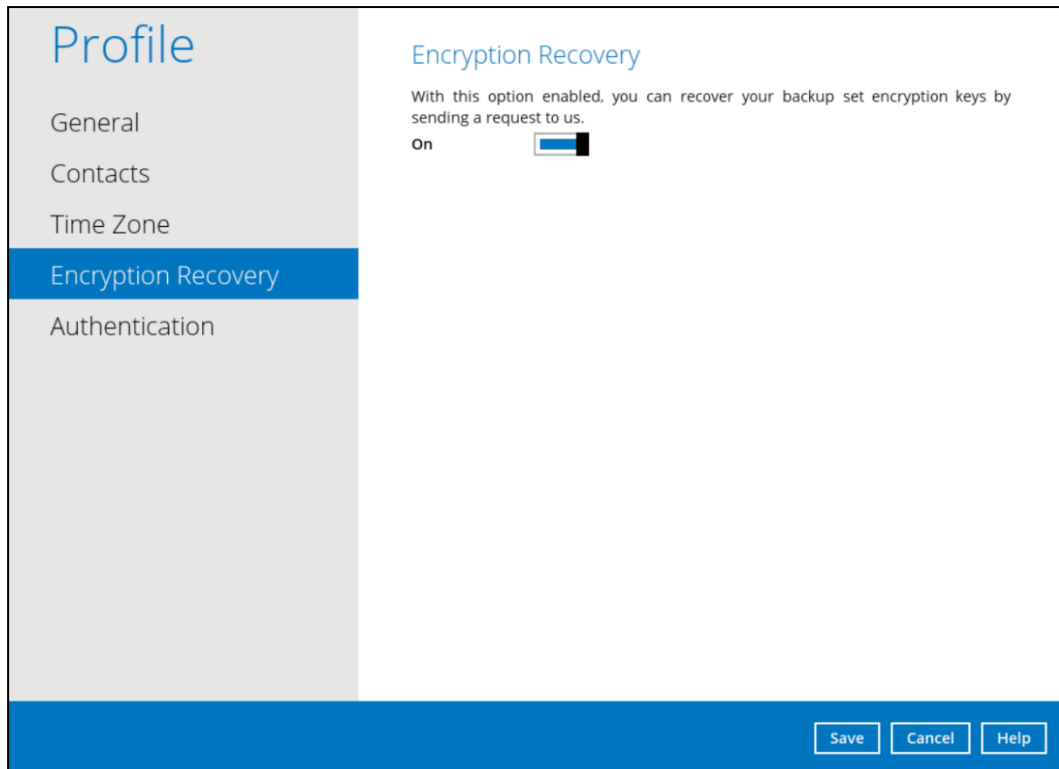


2. Click the **Save** button to save the updated time zone.

10.1.4 Encryption Recovery

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

NOTE: This option may vary depending on your subscription and how we configured varies user profiles and policies. Please contact us for more details.

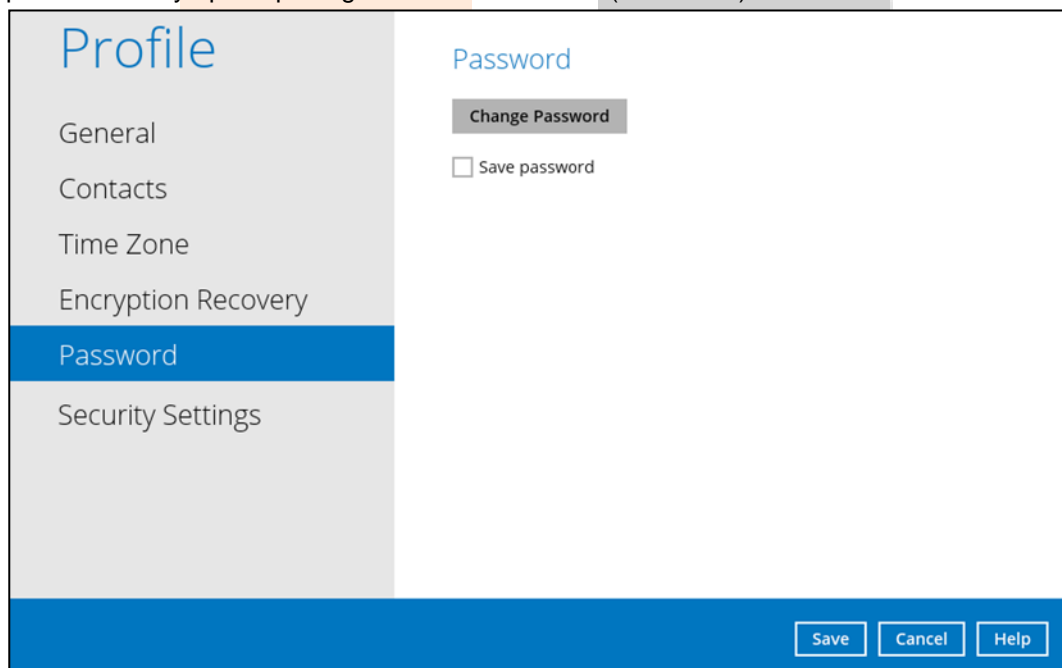


97

10.1.5 Password

The Password tab is for backward compatibility with Advanced Client (B247PRO) 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 Advanced Client (B247PRO) versions.

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



NOTE

The **Save password** option may vary in the context of vulnerability that it introduces. We may choose to disable this option. Please contact our support team if you have any concerns.

10.1.6 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).
- [Remove one or more device\(s\)](#) registered for Two-Factor Authentication (2FA).
- [Re-pair](#) mobile device with Advanced Client (B247PRO) account.
- View details of the [“Last Successful Login”](#).

NOTE

For Two-Factor Authentication (2FA), you can register your mobile device on both Backup247 Mobile (B247MOB) 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.).

98

The screenshot shows the 'Profile' page in the Backup247 application. On the left is a navigation menu with options: Profile, 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 currently unchecked).
- Two-Factor Authentication**: A toggle switch labeled 'Require Authenticator App to sign in your account during startup' which is currently set to 'off'.
- Last Successful Login**: A section indicating 'No login record'.

At the bottom right of the page, 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 Advanced Client (B247PRO).

The screenshot shows the 'Profile' page with the 'Authentication' tab selected. Under the 'Password' section, the 'Change Password' button is visible. The 'Save password' checkbox is checked. Below this, the 'Two-Factor Authentication' section is shown with a toggle switch set to 'off'. The 'Last Successful Login' section indicates 'No login record'. At the bottom right, there are 'Save', 'Cancel', and 'Help' buttons.

99

NOTE

The **Save password** option may vary in the context of vulnerability that it introduces. We may choose to disable this option. Please contact our support team if you have any concerns.

To change the password, follow the instructions below:

1. Click the **Change Password**.

This screenshot is identical to the one above, but the 'Change Password' button is highlighted with an orange circle, indicating the step to be taken.

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

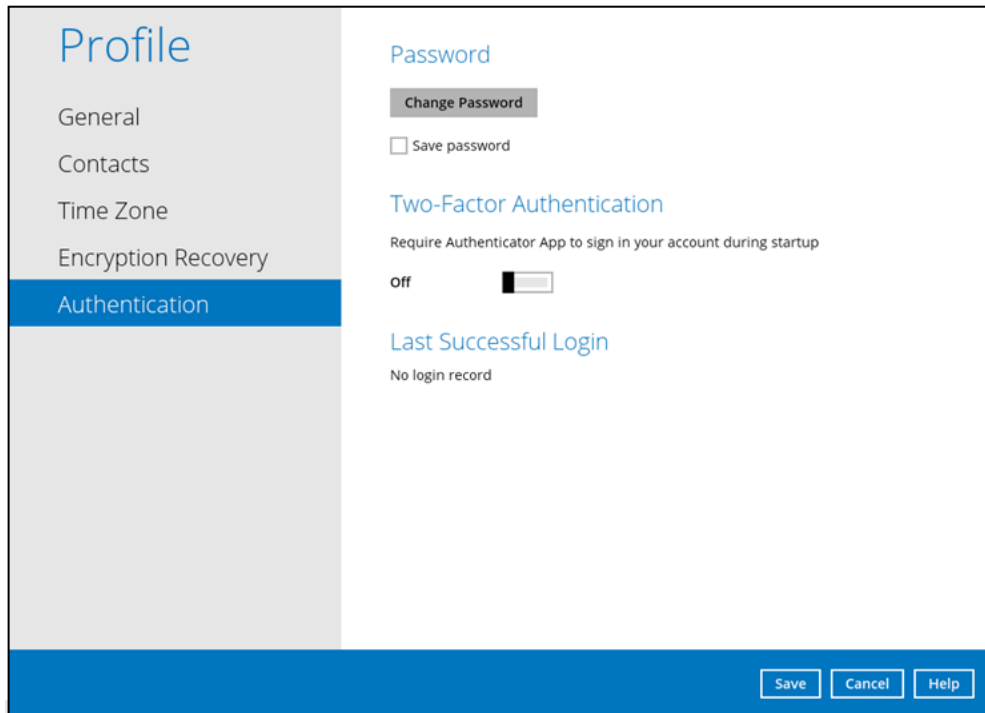
New Password

Re-enter password

OK Cancel

100

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



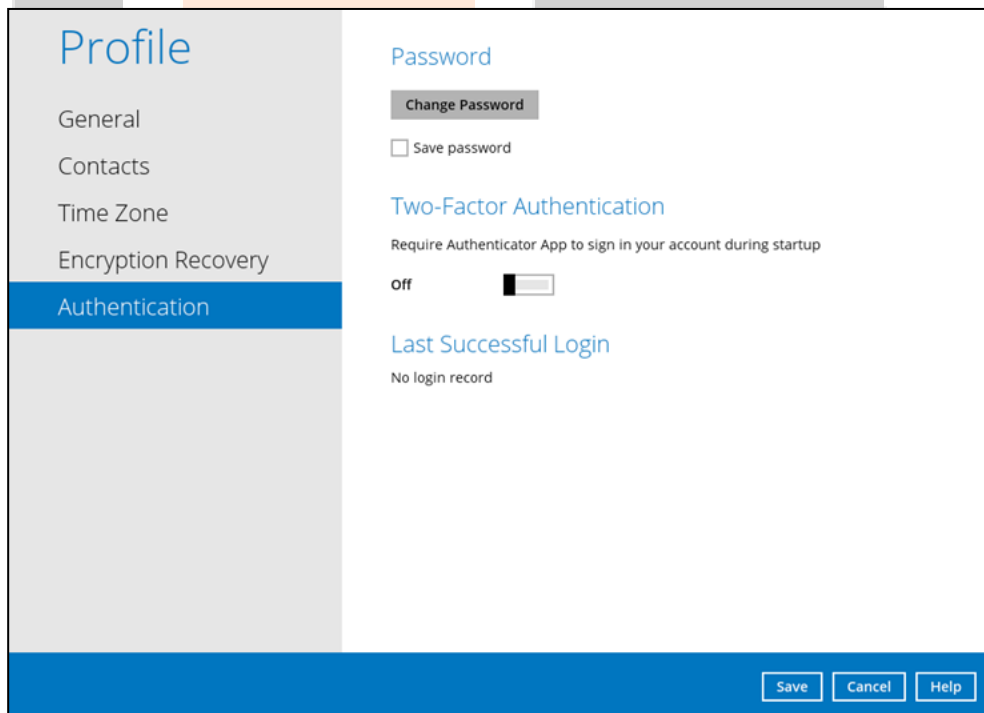
Two-Factor Authentication

To enable the Two-Factor Authentication feature, follow the instructions below:

101

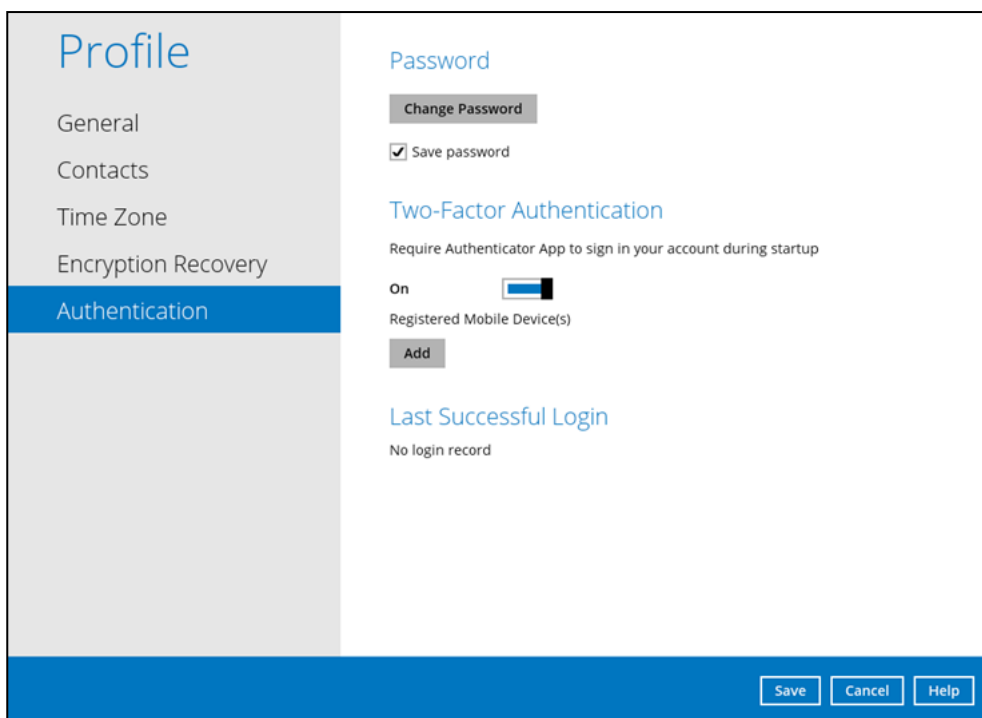
NOTE
 Backup247 Mobile (B247MOB) app or a third-party authenticator app is needed for 2FA.

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




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

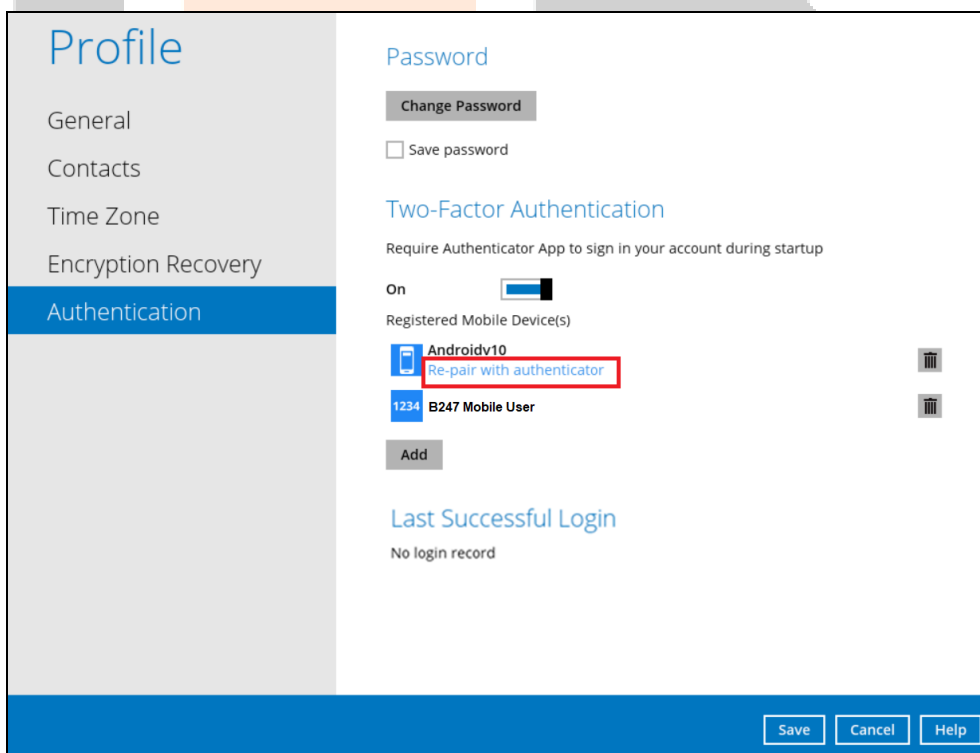
For the detailed step-by-step procedure on how to add a mobile device, please refer to **Chapter 6.3.1** of the Backup247 Mobile (B247MOB) User Guide for Android and iOS.



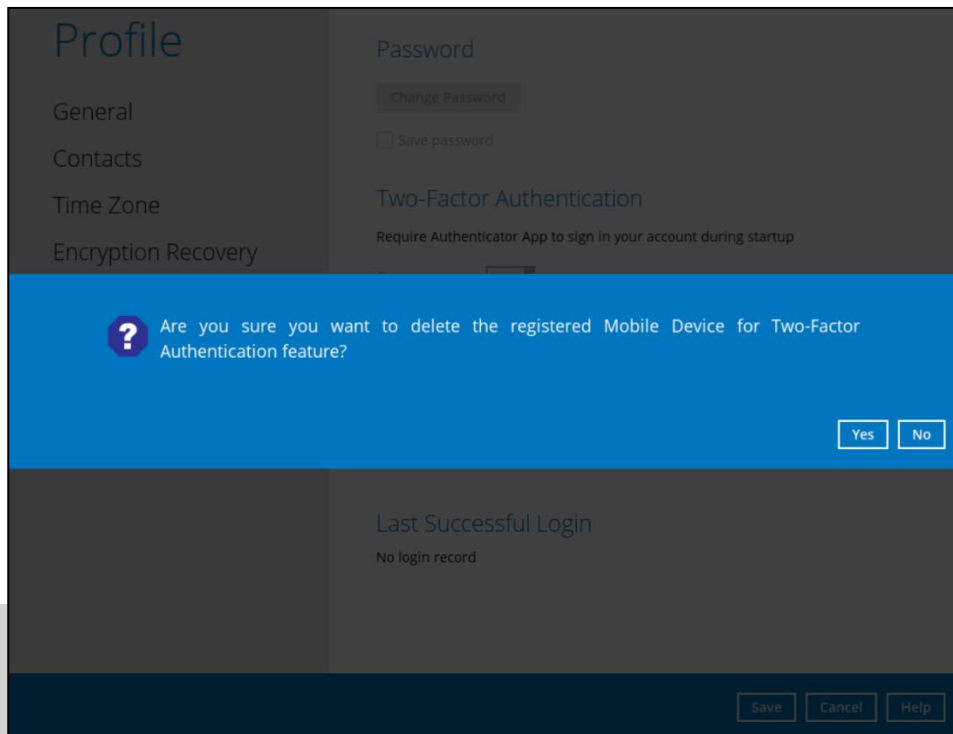
To remove a mobile device, follow the instructions below:

1. Click the  button on the right side of the registered mobile device. In this example, we are going to delete the mobile device named "Androidv10".

102

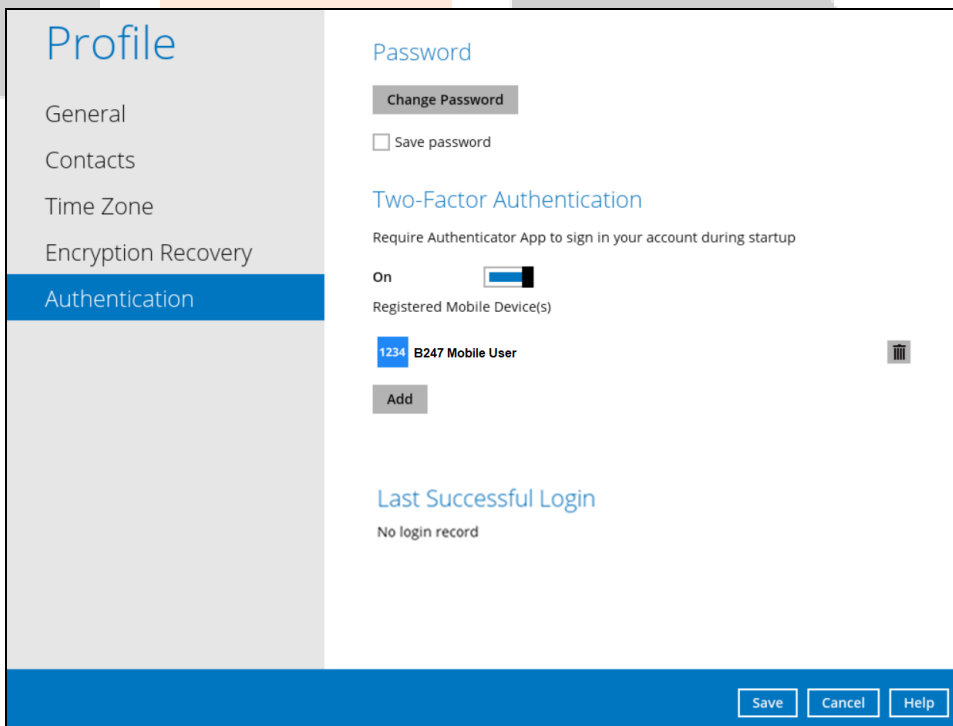


2. A confirmation message will appear, click **Yes** to proceed. Otherwise, click **No**.



103

3. Mobile device is successfully removed.

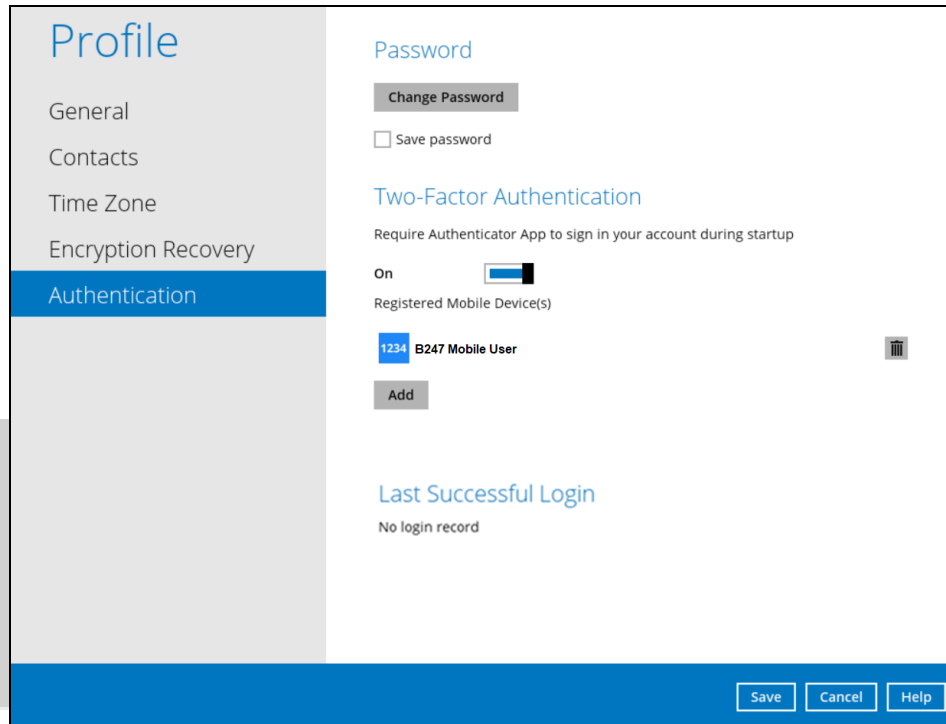


To disable the Two-Factor Authentication feature, follow the instructions below:

NOTE

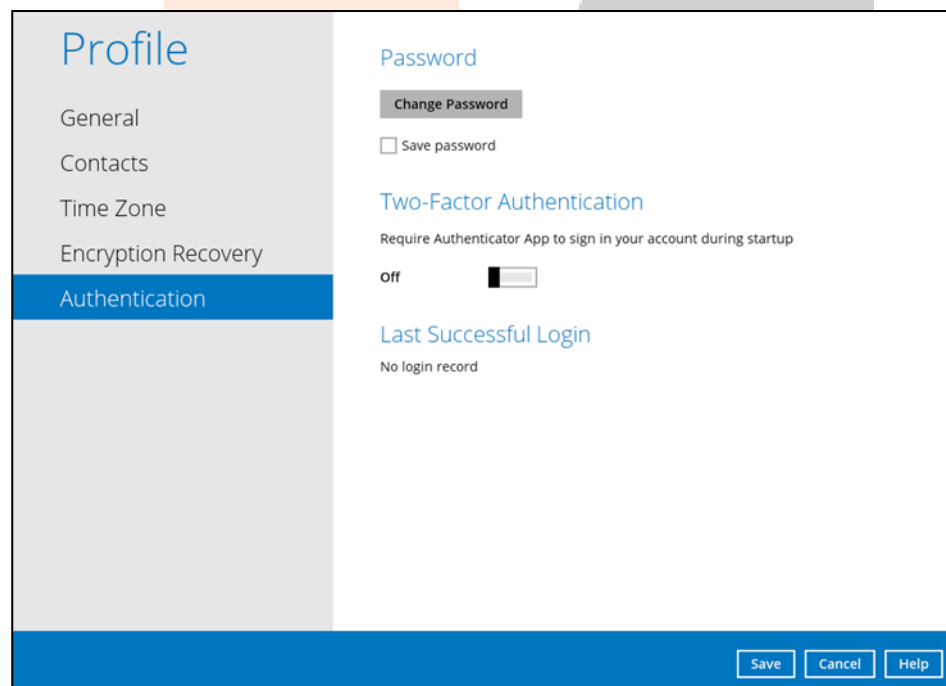
Sliding the switch to right hand side will only turn off the Two-Factor Authentication but it will not automatically delete the registered mobile device(s) for Two-Factor Authentication. If you need to delete the registered mobile device(s), this must be done manually first before disabling Two-Factor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

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



104

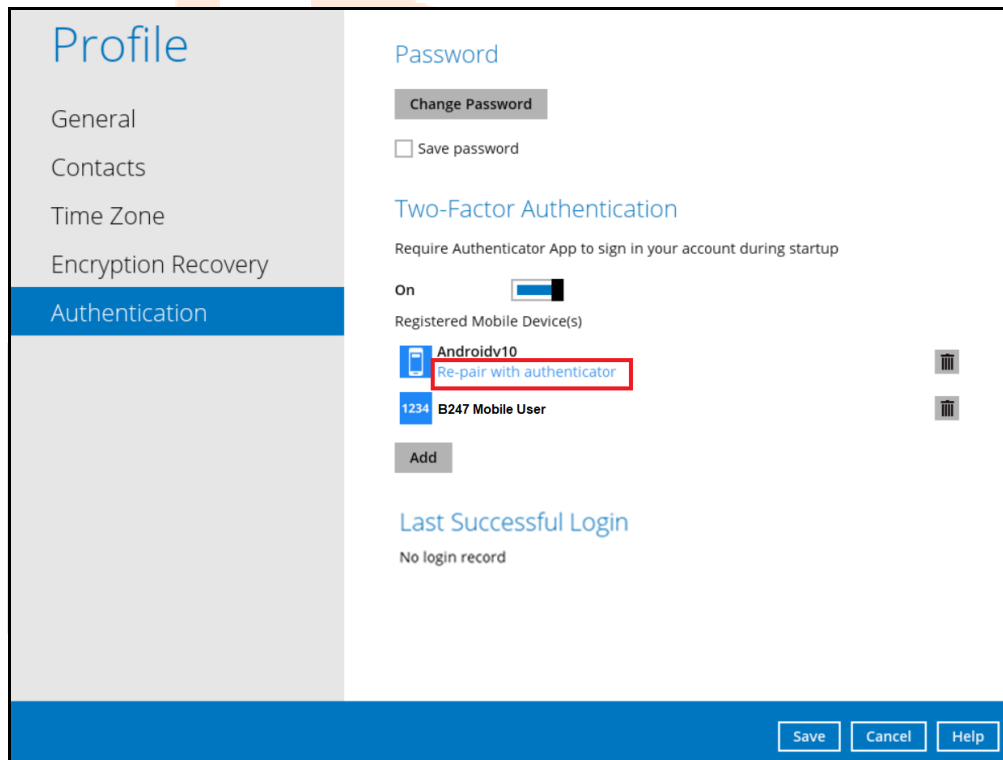
2. Click **Save** to save the settings.



Re-pair with authenticator

Advanced Client (B247PRO) supports “Re-pair with authenticator” feature that enables user to re-pair Advanced Client (B247PRO) account with Backup247 Mobile (B247MOB) Authenticator as long as the mobile device used for the 2FA is still registered in Advanced Client (B247PRO). This feature is used when:

1. The registered profile for the 2FA is removed from the Backup247 Mobile (B247MOB) app
2. The Backup247 Mobile (B247MOB) app is accidentally uninstalled from the mobile device

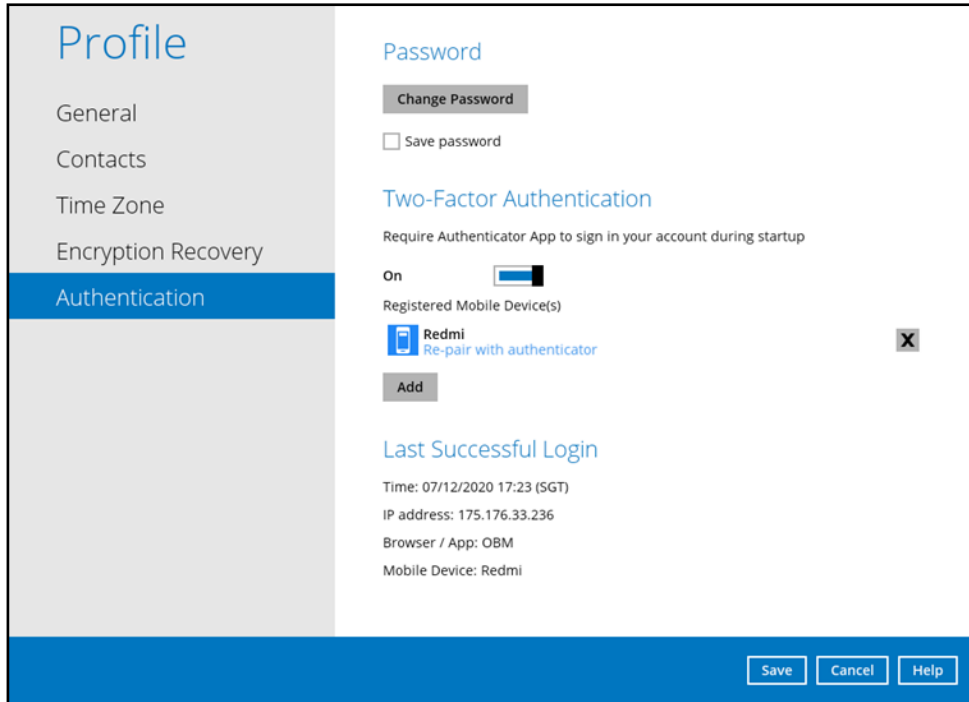


105

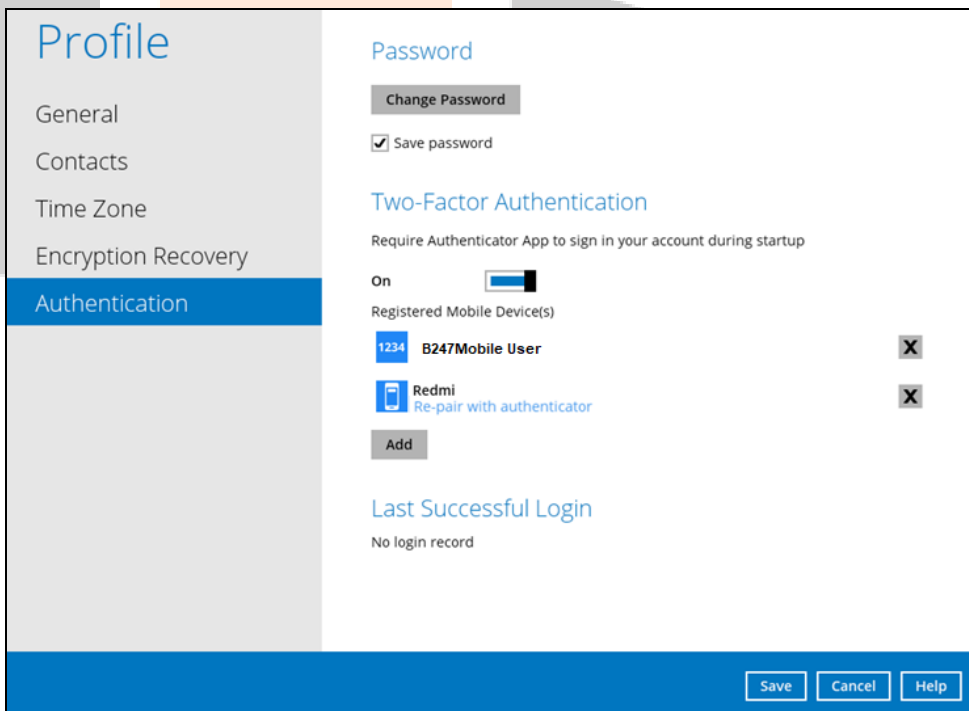
Last Successful Login

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 log in.
- Browser / App – the browser or app used to log in to B247CBS User Web Console or Advanced Client (B247PRO).
- Mobile Device – the name of the device used for authentication when 2FA is enabled.



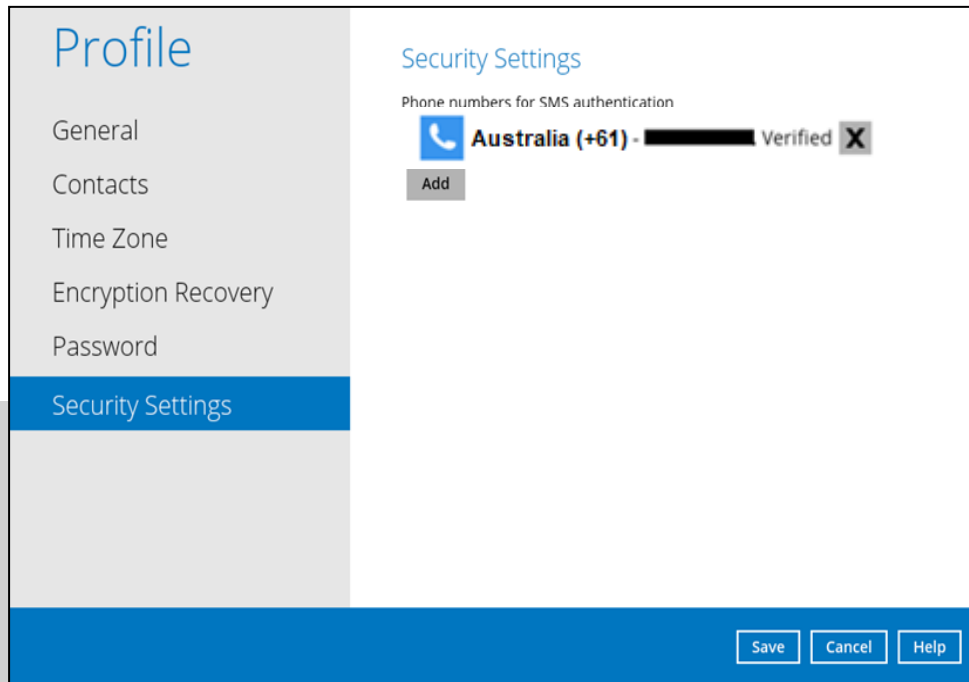
Below is the screenshot if there is no login record yet.



10.1.7 Security Settings

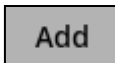
The Security Settings option is for backward compatibility with Twilio Two-Factor Authentication. It will only be visible if Twilio Two-Factor Authentication was enabled on the user account on pre-v8.5.0.0 Advanced Client (B247PRO) versions.

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.

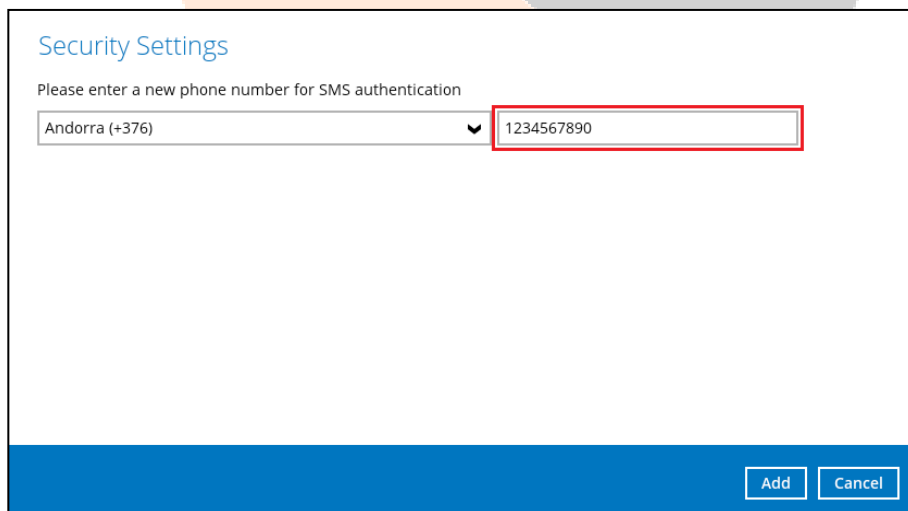


107

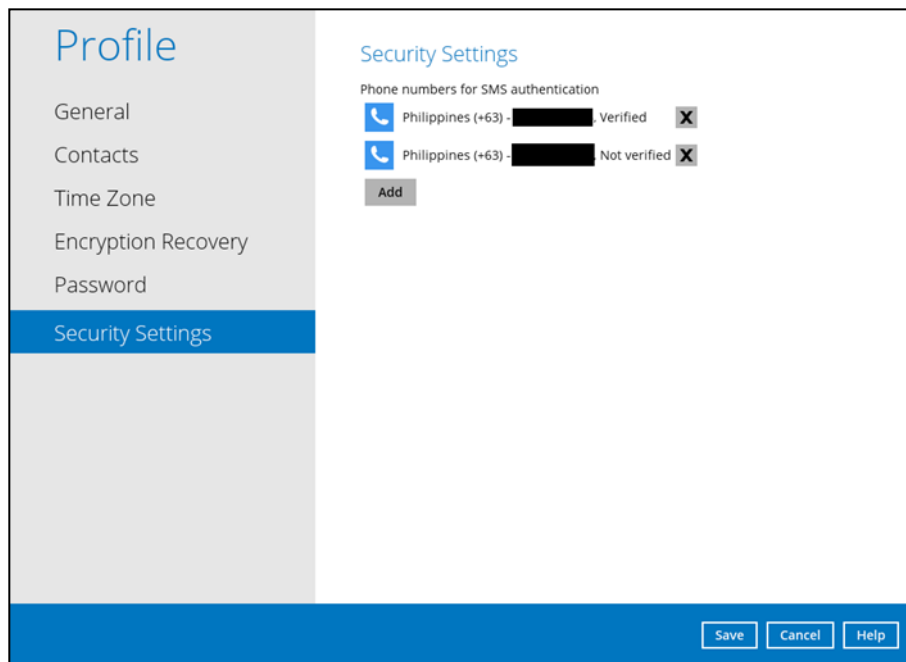
1. Click the **Add** button.



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



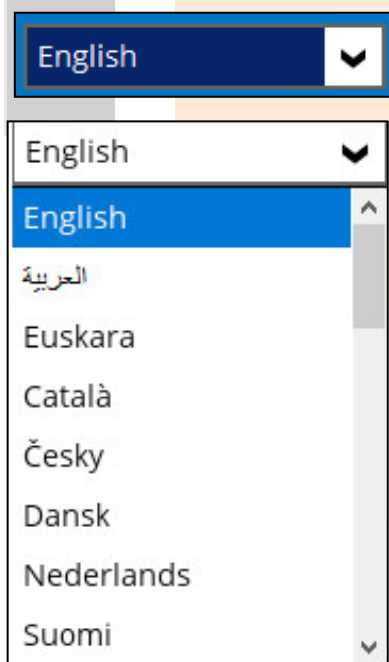
3. Click the **Save** button to save the phone number.



10.2 Language

The list of available languages depends on the backup service provider. Once the language is set, it will reflect on the Advanced Client (B247PRO) interface right away.

108



10.3 Information

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

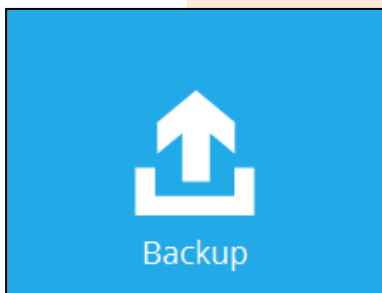


Version	9.1.0.0
Virtual Machine Vendor	OpenJDK 64-Bit Server VM Version 25.181-b13 Oracle Corporation
Live Threads	13 (Current) / 19 (Peak)
Daemon Threads	9
Total Threads Started	36
Heap Size	69,257 kbytes (Current) / 1,864,192 kbytes (Maximum)
Operating System Architecture	Windows 11 Version 10.0 amd64
Number of Processors	8
Committed Virtual Memory	369,704 kbytes
Physical Memory	7,829,812 kbytes (Free) / 16,614,756 kbytes (Total)
Swap Space	7,134,084 kbytes (Free) / 21,022,680 kbytes (Total)
VM Arguments	-Djava.library.path=.;\X64 -Dsun.java2d.noddraw -Dsun.nio.PageAlignDirectMemory=true -Xrs -Xms128m -Xmx2048m -XX:MaxDirectMemorySize=1024m
Class Path	.;cb.jar
Library Path	.;\X64
Boot Class Path	C:\Program Files\B247PRO\jvm\lib\resources.jar;C:\Program Files\B247PRO\jvm\lib\rt.jar;C:\Program Files\B247PRO\jvm\lib\sunrsrcsign.jar;C:\Program Files\B247PRO\jvm\lib\jsse.jar;C:\Program Files\B247PRO\jvm\lib\jce.jar;C:\Program Files\B247PRO\jvm\lib\charsets.jar;C:\Program Files\B247PRO\jvm\lib\jfr.jar;C:\Program Files\B247PRO\jvm\classes

109

10.4 Backup

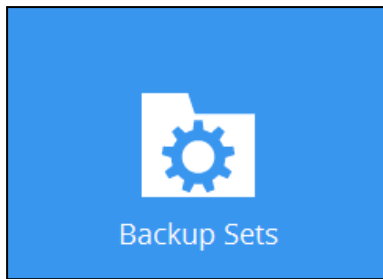
This feature is used to run the backup set(s).



For instructions on how to start a backup, refer to [Chapter 13 Run Backup Jobs](#).

10.5 Backup Sets

A backup set is a place for files and/or folders of your backed up data. This feature allows the user to select files individually or an entire folder to backup. It is also used to delete backup set(s).



To create or modify a backup set, follow the instructions on [Chapter 11 Create a Backup Set](#).

Backup Set Settings

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

- [General](#)
 - [Source](#)
 - [Backup Schedule](#)
 - [Continuous Backup](#)
 - [Destination](#)
- (Advanced settings)
- [Deduplication](#)
 - [Retention Policy](#)
 - [Command Line Tool](#)
 - [Reminder](#)
 - [Bandwidth Control](#)
 - [Others](#)

General

This feature allows the user to modify the backup set name and manage the Windows User Authentication login credentials in the backup set.

The screenshot shows a configuration window for 'BackupSet-1'. On the left is a sidebar with menu items: General (selected), Source, Backup Schedule, Continuous Backup, Destination, and a link for 'Show advanced settings'. The main area is titled 'General' and contains the following fields:

- Name:** BackupSet-1
- Owner:** w8-pro
- Windows User Authentication:**
 - Domain Name (e.g. Ahsay.com) / Host Name:** example.com
 - User name:** username
 - Password:** (empty field)

At the bottom of the window, there is a blue bar with a 'Delete this backup set' link on the left and 'Save', 'Cancel', and 'Help' buttons on the right.

111

Backup Set Name

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

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

This close-up shows the 'Name' field in the 'General' tab. The text input box is currently empty, and the cursor is positioned at the end of the field.

2. In this example, we are going to change the backup set name to "Data Backup". Click the **Save** button to store the new backup set name.

This close-up shows the 'Name' field after the change. The text 'Data Backup' has been entered into the text input box.

3. The backup set name is successfully updated.

The screenshot shows the 'Data Backup' configuration window. On the left is a sidebar with a 'Data Backup' icon and a list of tabs: 'General' (selected), 'Source', 'Backup Schedule', 'Continuous Backup', and 'Destination'. Below the tabs is a link for 'Show advanced settings'. The main area is titled 'General' and contains the following fields: 'Name' (containing 'Data Backup'), 'Owner' (containing 'w8-pro'), and a section for 'Windows User Authentication' with fields for 'Domain Name (e.g Ahsay.com) / Host Name' (containing 'example.com'), 'User name' (containing 'username'), and 'Password' (containing six dots). At the bottom of the window is a blue bar with the text 'Delete this backup set' on the left and 'Save', 'Cancel', and 'Help' buttons on the right.

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

112

Windows User Authentication

To successfully perform backup and restore operations, Advanced Client (B247PRO) requires both read and write permission to all the files/folders selected in the backup source.

The Windows User Authentication login credentials are used by the Advanced Client (B247PRO) to ensure it has sufficient permission to access files and/or folders selected in the Backup Source, the temporary folder location, and the backup destination if it is a network drive accessible from backup machine via LAN, especially when running scheduled backup jobs, as the default Windows account used by the Advanced Client (B247PRO) scheduler service is a local system account which does not have access to network resources.

Windows User Authentication

Domain Name (e.g Ahsay.com) / Host Name

User name

Password

o
r

Windows User Authentication

Domain Name (e.g Ahsay.com) / Host Name

User name

Password

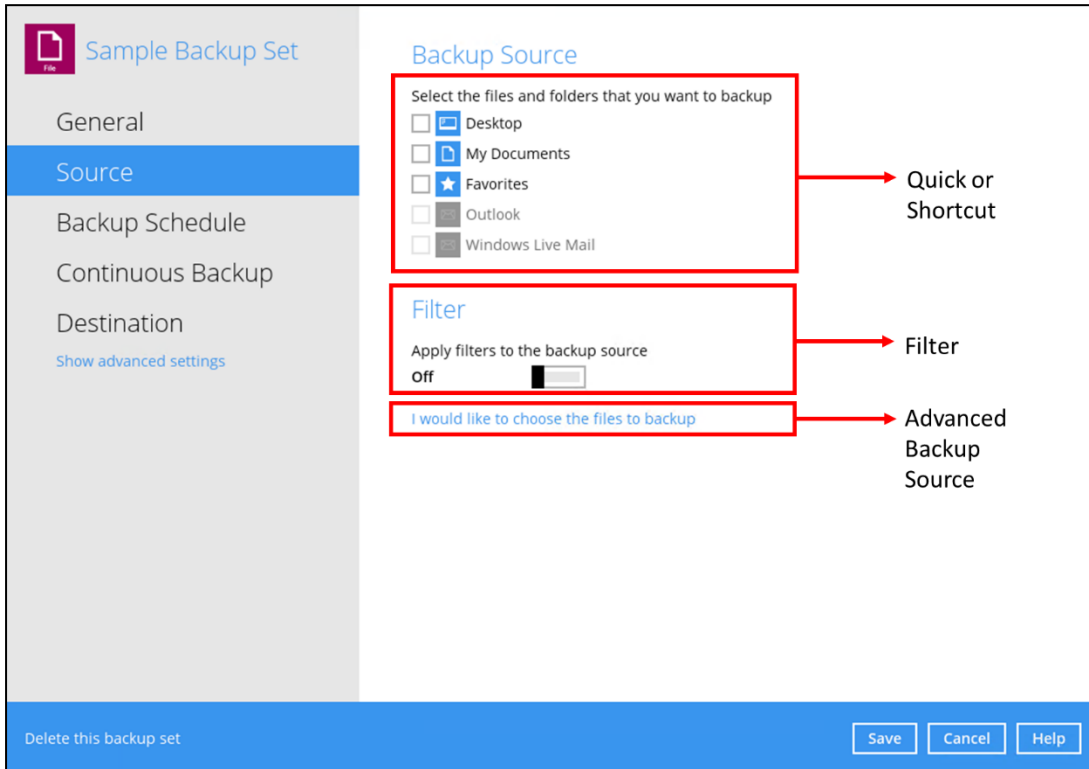
- If files and/or folders selected are located on network drive(s), the login credentials for the Windows User Authentication must have permission to access network resources, (e.g., an administrator account).
- If the machine is a file server shared by multiple users, then the Advanced Client (B247PRO) will require login credentials with read/write permissions to access all the selected files and/or folders in the backup source (e.g., an administrator account).
- For Advanced Client (B247PRO) installed on MS Windows version 8, 8.1, 10, and 11 using the Microsoft account for Windows User Authentication is supported, e.g., username@outlook.com.

Some users prefer to use a pin to log in to Windows, this cannot be used for the Windows User Authentication. The pin can only be used for logging in to Windows and is not applicable for the Windows User Authentication. The password of the account must be provided instead of the pin to access files and/or folders in the backup source.

Field	Description
Domain Name	The domain or host name of the machine.
Username	Login username used by the Advanced Client (B247PRO) to access files and/or folders selected in the backup source.
Password	Login password used by the Advanced Client (B247PRO) to access files and/or folders selected in the backup source.

Source

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



114

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 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






My Documents

Favorites

Outlook

Windows Live Mail

If any of the following backup source is selected and the [Backup Schedule](#) is enabled, the Windows User Authentication will prompt the user to enter the login password. To select a backup source without entering the login password, the backup schedule must be disabled.

Desktop	
My Documents	
Favorites	
Outlook	
Windows Live Mail	

Windows User Authentication

Domain Name (e.g Ahsay.com) / Host Name






User name

Password

NOTE

During the backup set creation, if this type of backup source (Quick or Shortcut) is selected and the Schedule is set to "on", then the Windows User Authentication screen will be displayed. You will need to enter the login password, otherwise, the creation of backup set will not continue.

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
Desktop		If Desktop is selected, all files and/or folders in the following location will be backed up: <i>%UserProfile%\Desktop</i>
My Documents		If Documents is selected, all files and/or folders located in the following location will be backed up: <i>%UserProfile%\Documents</i> If the Follow Link is enabled, all files and/or folders located in the following locations will also be backed up: <i>%UserProfile%\Music</i> <i>%UserProfile%\Pictures</i> <i>%UserProfile%\Videos</i> NOTE: The Follow link is enabled by default.
Favorites		If Favorites is selected, all files and/or folders located in the following location will be backed up: <i>%UserProfile%\Favorites</i>
Outlook		If Outlook is selected, all files and/or folders located in the following location will be backed up: <i>%UserProfile%\AppData\Local\Microsoft\Outlook</i>
Windows Live Mail		If Windows Live Mail is selected, all files and/or folders located in the following location will be backed up: <i>%UserProfile%\AppData\Local\Microsoft\Windows Live Mail</i>



To select files and/or folder 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
- My Documents
- Favorites
- Outlook
- Windows Live Mail

NOTE: The Outlook and Windows Live Mail will be disabled if they were not installed on the machine.

Backup Source

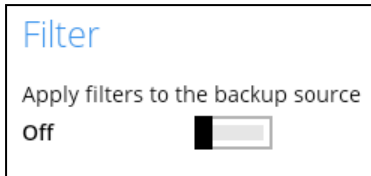
Select the files and folders that you want to backup

- Desktop
- My Documents
- Favorites
- Outlook
- Windows Live Mail

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

Option 2: Filter

The Filter Backup Source is an alternative way to select a backup source which does not require Windows User Authentication login password even if the backup schedule is enabled unless the filter backup source is located on a network drive.

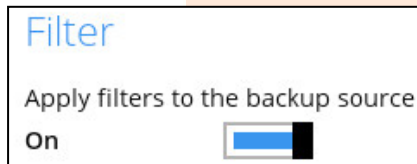


The following options in the filter backup source does not require Windows User Authentication login password:

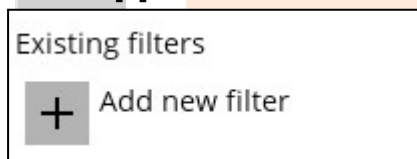
All hard disk drives	Apply this filter to all files/folders in <input type="radio"/> All hard disk drives
Specific folder	<input checked="" type="radio"/> This folder only (Input local / network address or click [Change]) <input type="text"/> <input type="button" value="Change"/> <input type="checkbox"/> This share requires access credentials

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

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



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



118

- Assign a desired name to the backup filter.

New Backup Filter

Name

Filter-1

- Select from the options below.

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

Regular expression (UNIX-style)

- 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

Add

- 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 select the specific folder or input the local / network address that you would like to apply the filter to.

Apply this filter to all files/folders in

All hard disk drives

This folder only (Input local / network address or click [Change])

Change

This share requires access credentials

Apply to

File Folder

- If 'This share requires access credentials' is checked, enter the Username and Password of the local or network drive. This checkbox will only be enabled if a local or network address is detected.

This share requires access credentials

User name (e.g. domain\username)

username


Password


●●●●●●

8. 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
C:\Users\Administrator\Desktop

 Filter-2
C:\Users\Administrator\Documents

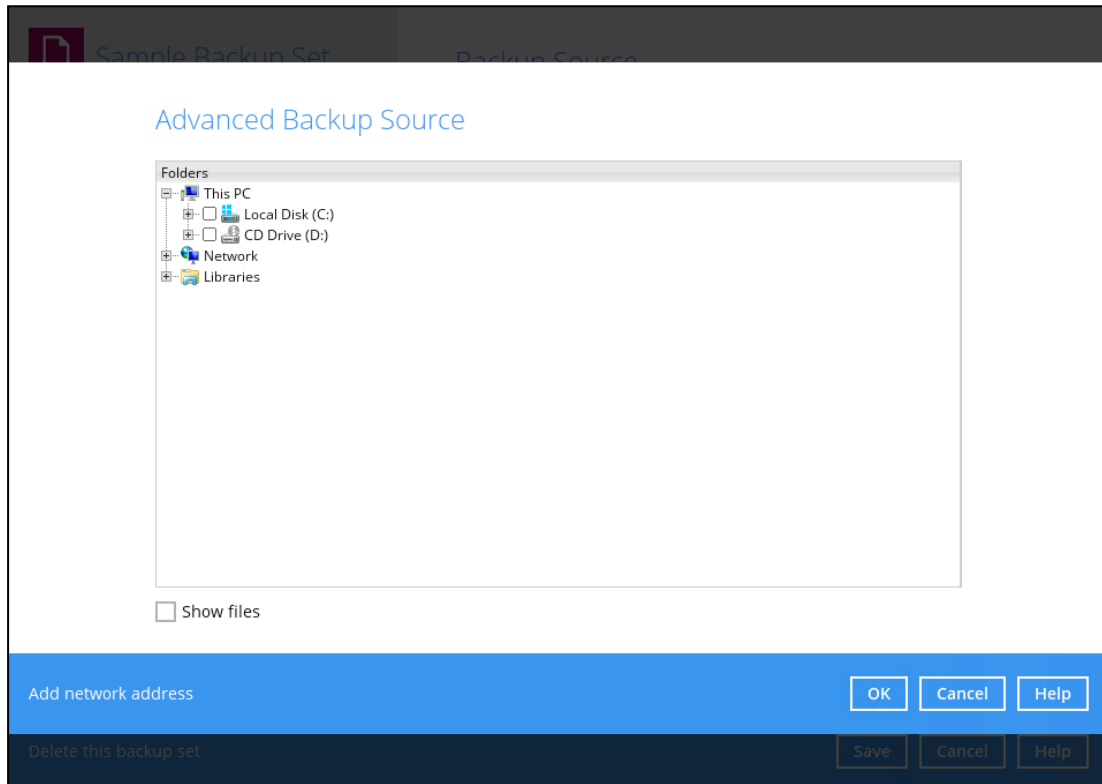
Add

NOTE

For more details about backup source file filtering, refer to **Chapter 4.1** of the [Backup247 Online Backup Manager v9 Backup Source File Filter Guide](#).




Option 3: Advanced Backup Source


The Advanced Backup Source is another way to select a backup source which does not require Windows User Authentication login password even if the backup schedule is enabled unless the advanced backup source is located on a network drive.



121

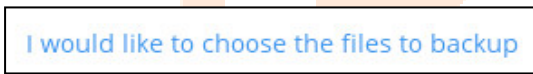
The following table shows the list of options in the Advanced Backup Source which require and does not require Windows User Authentication login password:

Advanced Backup Source		Description
Local Disk		Does not require Windows User Authentication login password.
Network drive		Requires Windows User Authentication login password. For network drive/s, you will need to enter the login credentials which has permission to access network resources to back up selected files and/or folders.
Libraries		Does not require Windows User Authentication login password. NOTE: This type of backup source may not be supported on other versions of Windows. This feature is not supported on: <ul style="list-style-type: none"> • Windows 11 • Windows 10 • Windows 8.1 • Windows 8 • Windows Server 2022

		<ul style="list-style-type: none"> • Windows Server 2019 and • Windows Server 2012 R2 <p>Supported on:</p> <ul style="list-style-type: none"> • Windows 7 • Windows Server 2016 and • Windows Server 2008 R2
Add network address		Requires Windows User Authentication login password. For network drive/s, you will need to enter the login credentials which has permission to access network resources to back up selected files and/or folders.

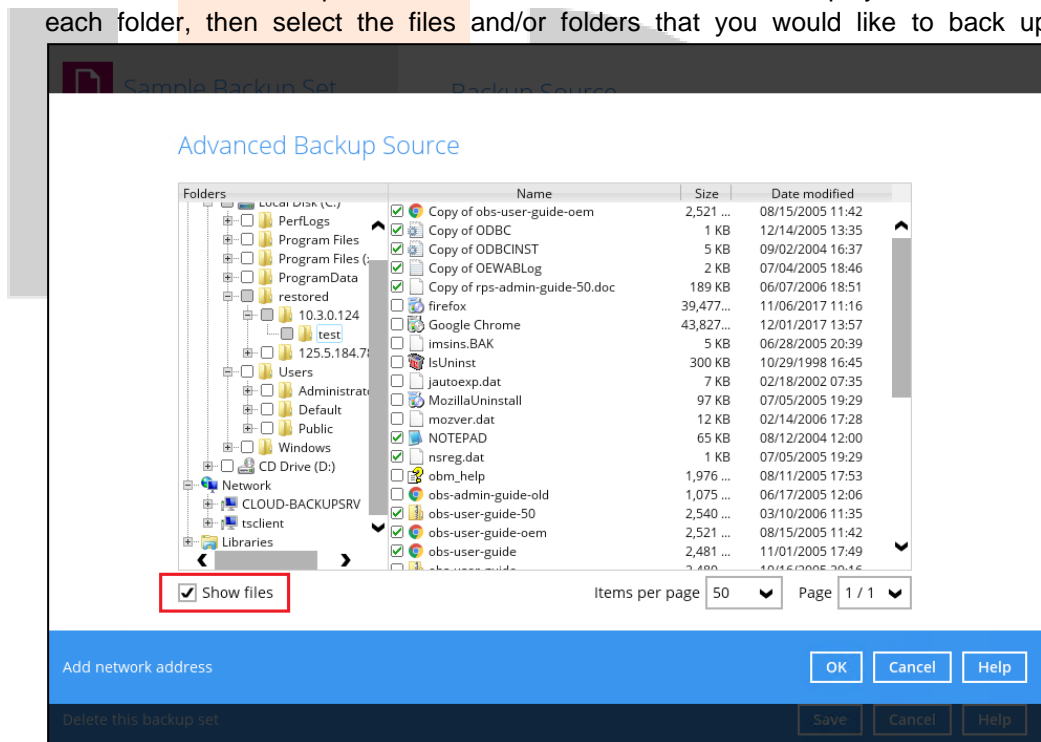
To select files and/or folders using the Advanced Backup Source, follow the steps below:

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



2. There are two (2) ways to select files and/or folders, one is when the files and/or folders are in the local machine and another way is when the files and/or folders are in the network.

- In the Advanced Backup Source window, select 'Show files' to display the files inside each folder, then select the files and/or folders that you would like to back up.



- If the files and/or folders are in a network drive, click the 'Add network address' link. Enter the network address.

Network Address

Input the details of network address, and click [OK] to proceed.

Network address (e.g. \\servername.domain\path)

This share requires access credentials

If access credentials are required to access the network, then check the "This share requires access credentials" checkbox. The checkbox will only be enabled once the network address is entered. Enter the Username and Password of the network drive and click the **OK** button.

This share requires access credentials

User name (e.g. domain\username)

Password

By default, all the files inside the folder in the network drive is selected for backup. But there is still an option to deselect files that you do not want to be included in the backup.

NOTE

- There must be a specific folder that is shared in the network drive that will be entered in the network address e.g., \\125.5.184.23\Share
- Temporary folder location are not supported for individual login credentials but can still be setup separately using existing Windows User Authentication login.

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.

Backup Source

Select the files and folders that you want to backup

Desktop

My Documents

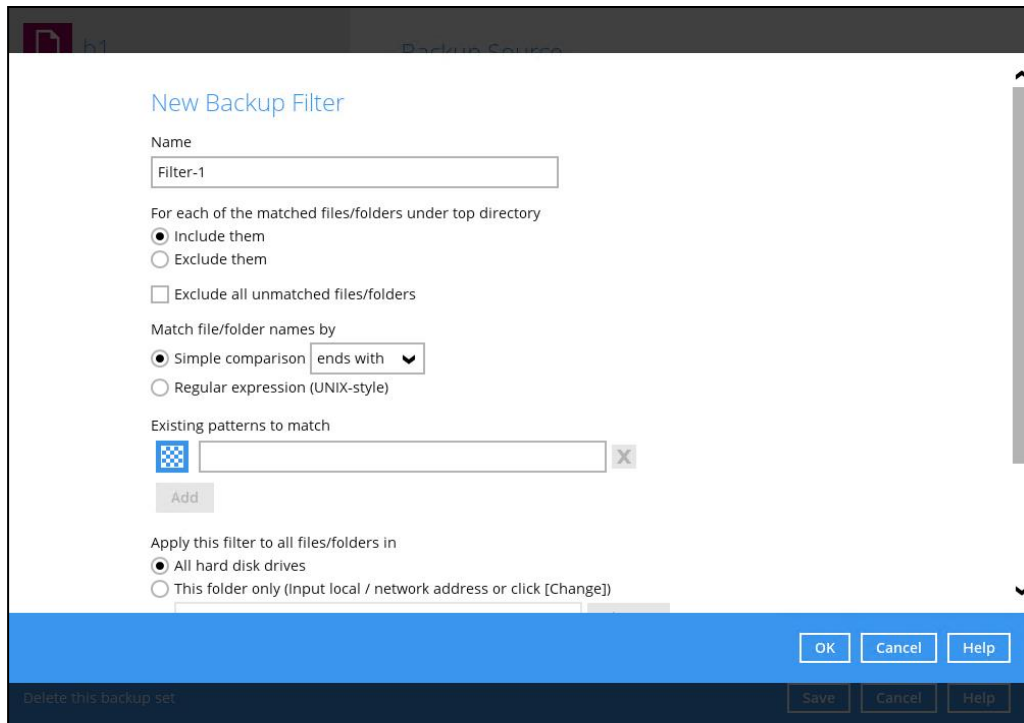
Favorites

Outlook

Windows Live Mail

123

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



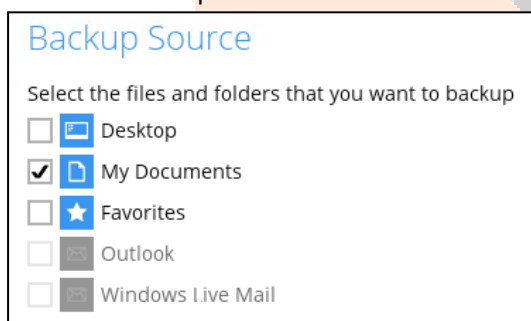
124

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

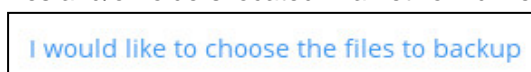
Scenario 2 (Quick or Shortcut + Advanced Backup Source)

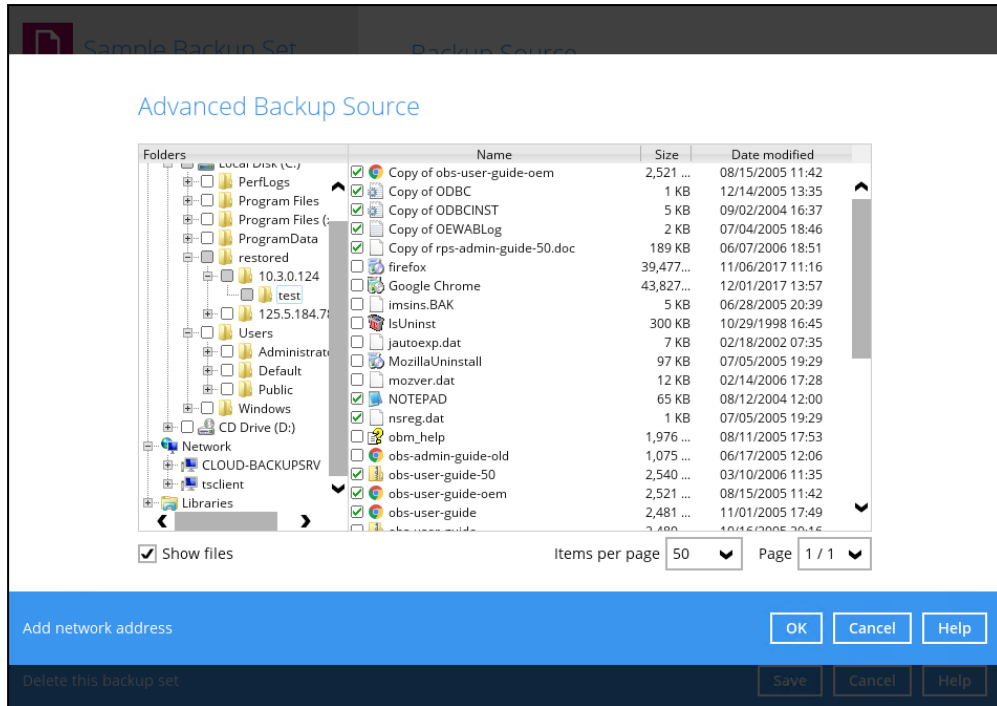
You can use the quick or shortcut option and select files and/or folders in the advanced backup source at the same time. To use this type of combination, follow the steps below:

1. Choose a backup source.



2. In the source window, click 'I would like to choose the files to backup' and select the files and/or folders that you would like to back up. Or click 'Add network address' to backup files and/or folders located in a network drive.



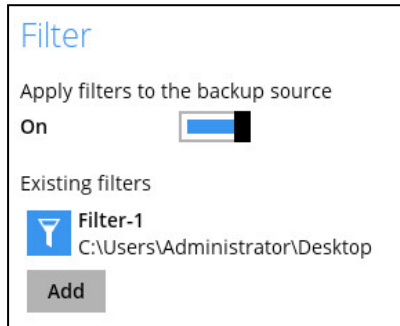


3. Click the **OK** button to save the selection, then click the **Save** button to save settings.

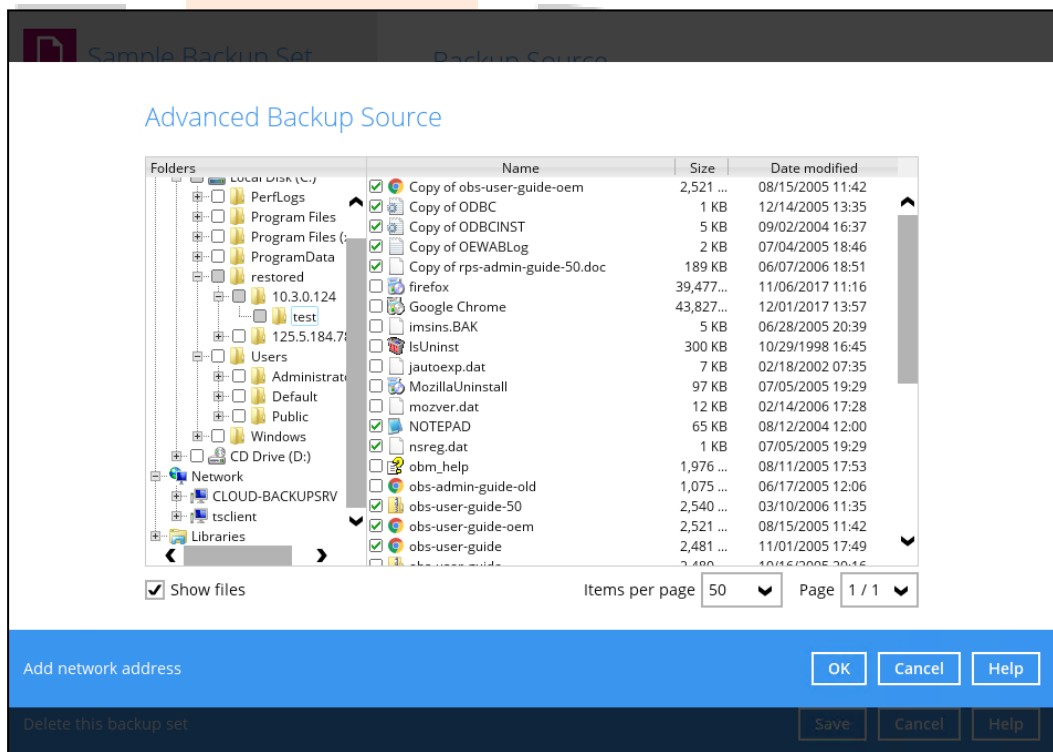
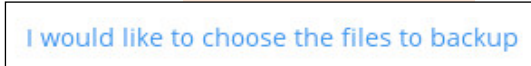
Scenario 3 (Filter + Advanced Backup Source)

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

1. Create a filter.



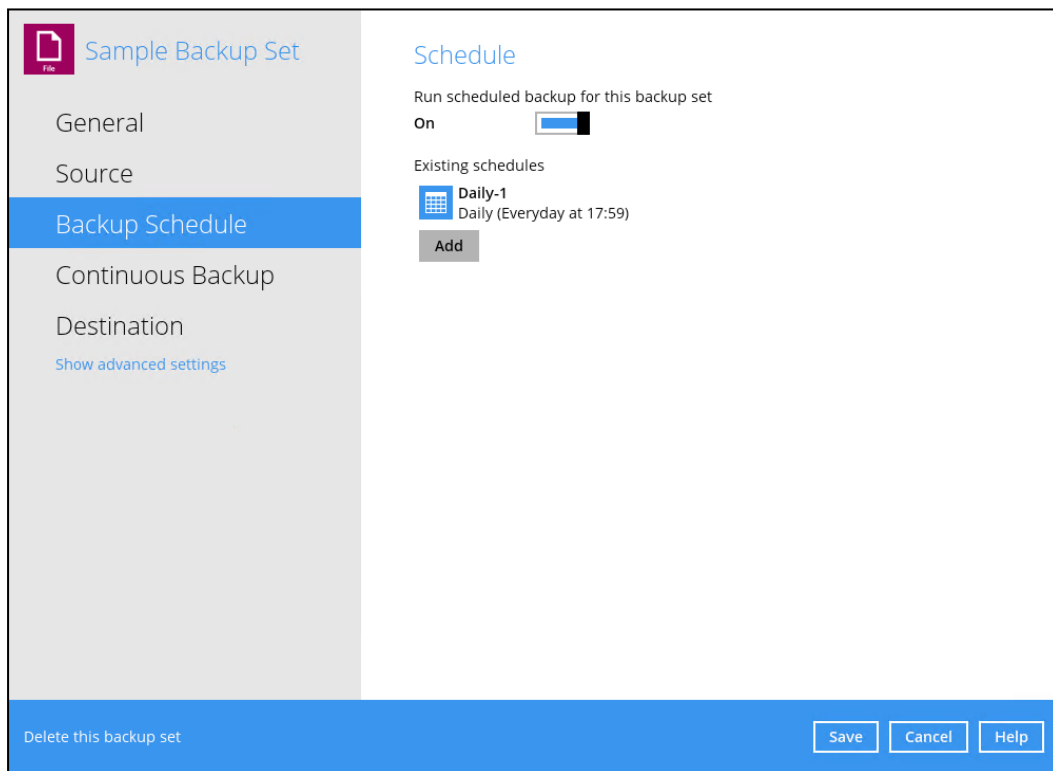
2. In the source window, click 'I would like to choose the files to backup' and select the files and/or folders that you would like to back up. Or click 'Add network address' to backup files and/or folders located in a network drive.



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

Backup Schedule

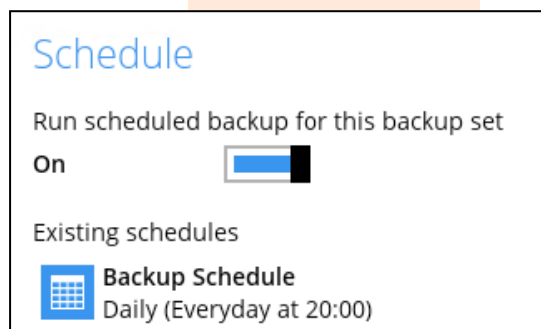
This feature allows the user to assign a backup schedule for the backup job to run automatically.



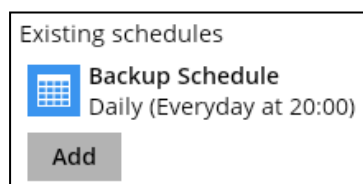
127

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 backup schedule. There are four (4) types of backup schedule: Daily, Weekly, Monthly and Custom.

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

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

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

New Backup Schedule

Name

Type

Backup on the following day once

Start backup at
 :

Stop

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

Stop

Run Retention Policy after backup

1 minute
 2 minutes
 3 minutes
 4 minutes
 5 minutes
 6 minutes
 10 minutes
 12 minutes

Start backup

Stop

Run Retention Policy after backup

30 minutes
 1 hour
 2 hours
 3 hours
 4 hours
 6 hours
 8 hours
 12 hours

Here is an example of a 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

Figure 1.1

New Backup Schedule

Name: Weekly-2

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 1.2

Figure 1.1 – Periodic backup schedule runs every 4 hours from Monday – Friday during business hours

Figure 1.2 – Normal backup schedule runs at 21:00 or 9:00 PM on Saturday and Sunday on 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.

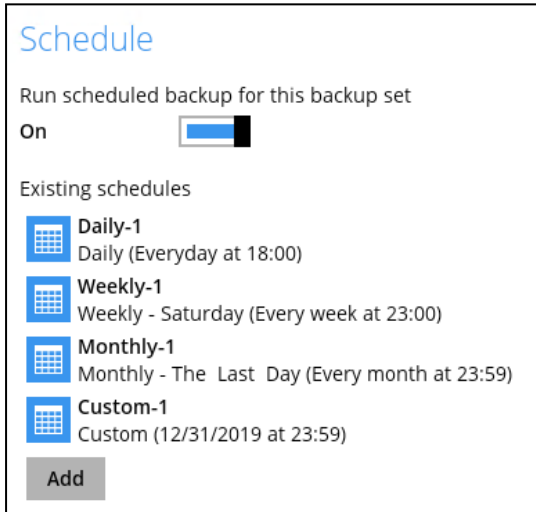
The partially backed up data will have to be removed by running the [Data Integrity Check](#).

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 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.

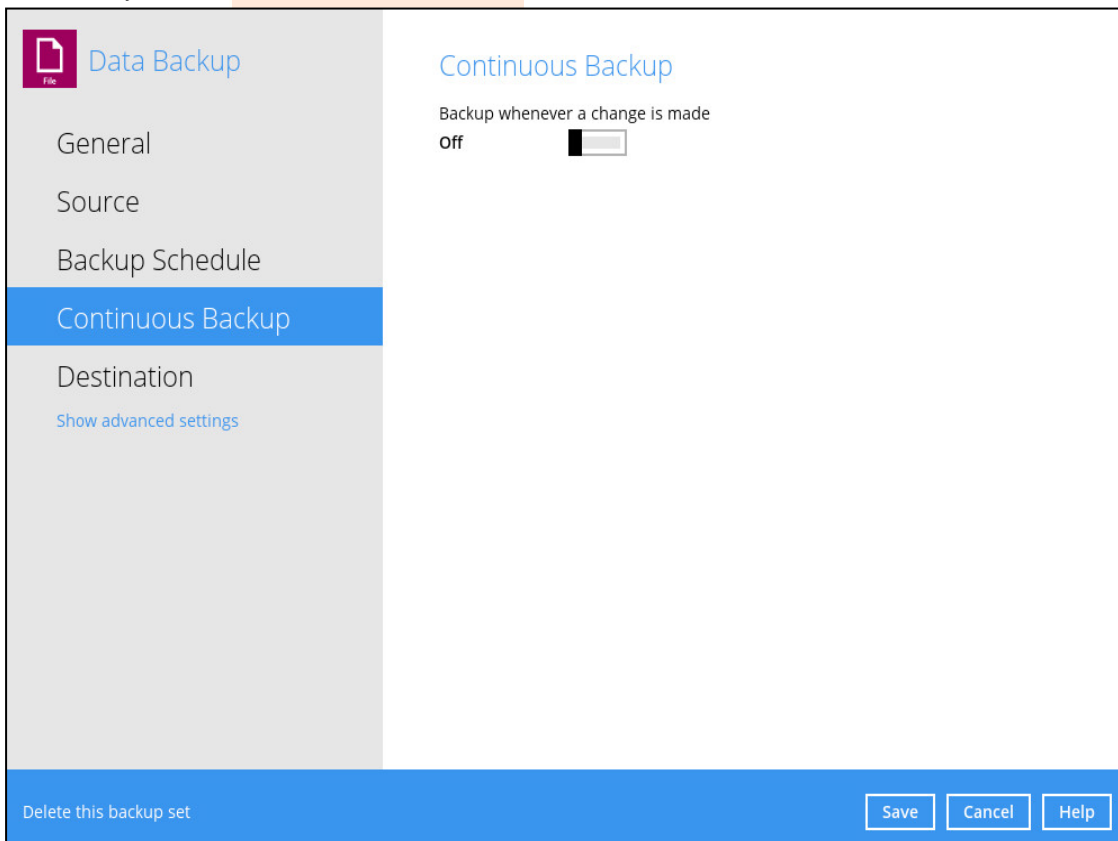
4. Click the **OK** button to save the configured backup schedule settings.
5. Click the **Save** button to save settings.

NOTE: Multiple backup schedules can be created.



Continuous Backup

This feature provides backup for selective data whenever a change is made. This feature is disabled by default.



131

To enable the continuous backup, follow the steps below:

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



- It is recommended to select this option to avoid backing up files that are marked as system files.

Backup set type
File

Do not backup files defined as system files

- Click the drop-down button to define how often the continuous backup job will run. The backup time interval can be set from 1 minute to 12 hours.

Define how often backup run

30 minutes ▼

- This option applies the continuous backup on small regular update files. The file size can range from 25MB to unlimited MB.

Only apply to files smaller than

Unlimited ▼ MB

- 25
- 50
- 100
- 500
- 1000
- Unlimited

NOTE

For large file size, the continuous backup may not run with a short time interval. You may need to adjust the continuous backup time interval (in step 3).

- This allows the user to create an exclude filter to exclude files and/or folders from the backup job. Click the **[+]** button to create an exclude filter.

Exclude Filter

Existing Exclude Filters

+ Add new exclude filter

- If an exclude filter is created, click the **OK** button to save the created exclude filter, then click the **Save** button to save the configured continuous backup settings.

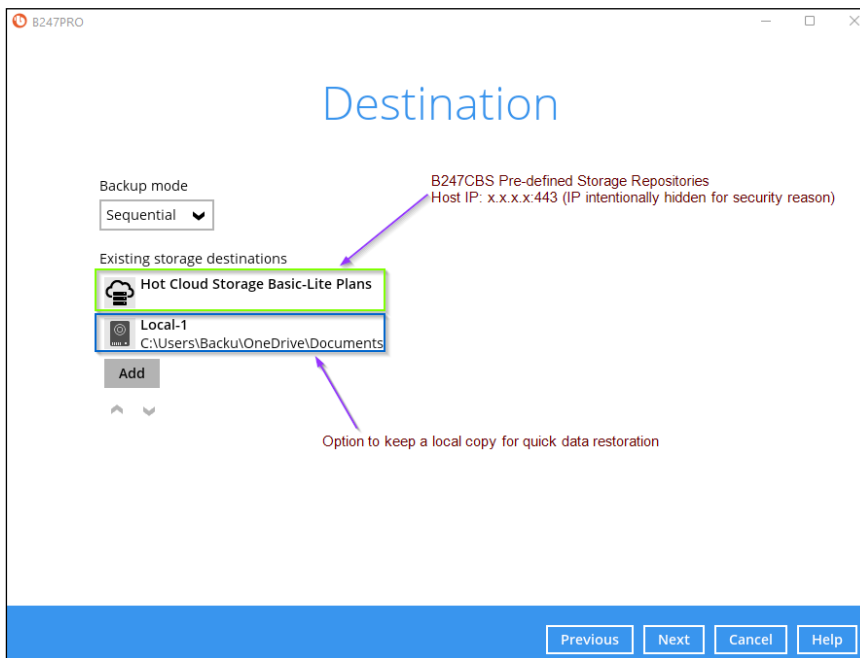
NOTE

Only File backup sets on Windows operating system will support Continuous Backup Schedule on v8.3.4.0 (or above).

All v7 and pre-v8.3.4.0 Windows non-File backup sets with Continuous Backup Schedules will be automatically converted to periodic backup schedules after upgrading to v8.3.4.0 (or above)

Destination

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



133

There are two (2) types of backup mode:

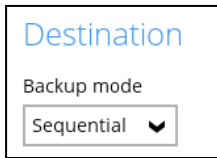
Backup mode	Description
Sequential	This is the configured backup mode by default. This backup mode will run a backup job to each backup destination one by one.
Concurrent	This backup mode will run a backup job to all backup destinations simultaneously.

Comparison between Sequential and Concurrent Backup mode

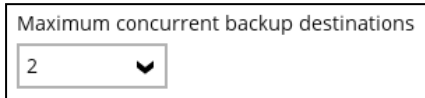
Backup mode	Pros	Cons
Sequential	<ul style="list-style-type: none"> ➤ Takes less resources in the local machine (e.g., memory, CPU, bandwidth, etc.) to complete a backup job. 	<ul style="list-style-type: none"> ➤ Backup job is slower than in concurrent mode since the backup job will upload the backup 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 modify the backup mode, follow the steps below:

1. Go to Backup Sets, then choose a backup set.
2. Select the **Destination** tab in the backup set settings.
3. Click the drop-down button to select a backup mode.



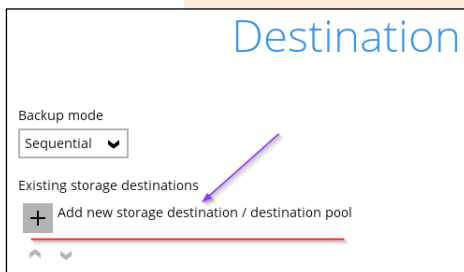
4. If "Concurrent" is selected, click the drop-down button to select the no. of maximum concurrent backup destination.



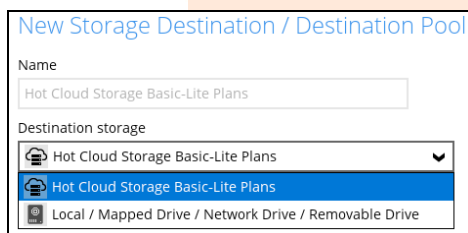
5. Click the **Save** button to save the selected backup mode.

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

1. Click the **Add** button.



2. Click the drop-down button to select a backup destination. For security reason, we don't publish B247CBS IP address that uses port 443 (SSL) to exchange data. Destination storage is pre-allocated and driven by plans chosen by our end users. During signup, there are options to choose Melbourne DC, Sydney DC, or our private Hot Cloud Storage.



3. If the Local / Mapped Drive / Network Drive / Removable Drive is selected, click the **Change** button to select a new storage destination or input the local or network address. Check 'This share requires access credentials' if required then click the **Test** button to validate access to it.

Destination storage

Local / Mapped Drive / Network Drive / Removable Drive

Path (Input local / network address or click [Change])

\\10.3.0.124\test

This share requires access credentials

User name (e.g. domain\username)

admin

Password

.....

Test

4. If there is an added storage destination, click the **OK** button to save the added one. Click the **Save** button to save the updated backup mode and the added storage destination.

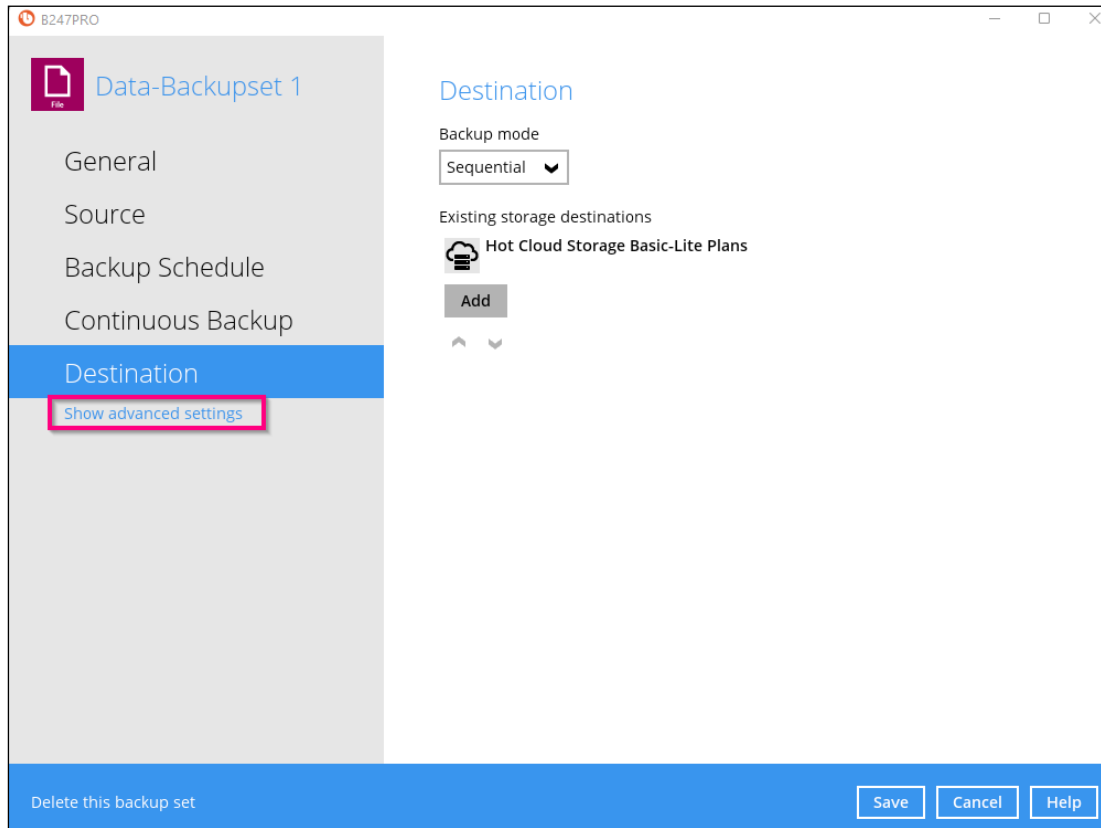
NOTE

The error below will appear if 'This share requires access credentials' is not checked and access credentials are setup in the storage destination.

[Exception] Access is denied due to invalid credentials

OK

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



136

Deduplication

Starting with 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

Deduplication

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

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
Save
Cancel
Help

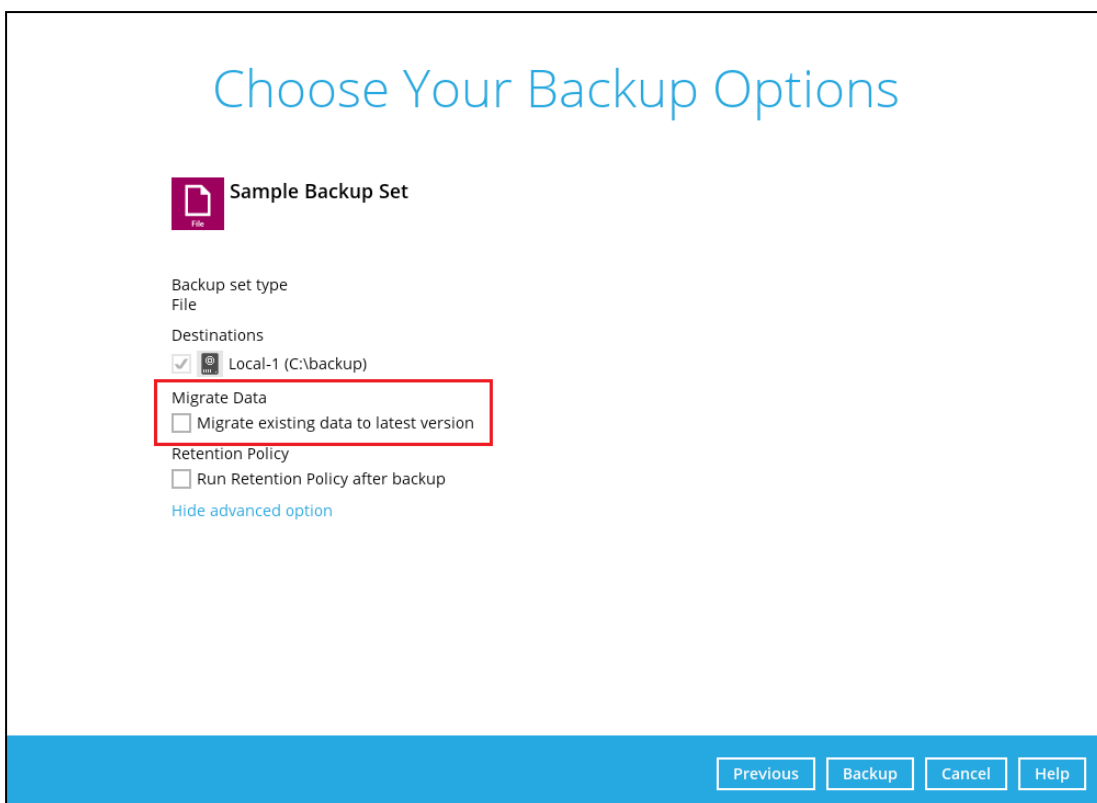
There are two (2) types of Deduplication scope:

137

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.

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.

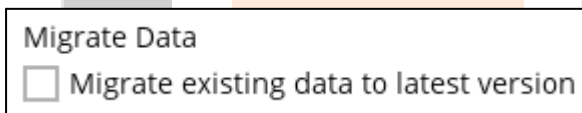
Below is an example of a backup set with Deduplication setting enabled.



Migrate Data

138

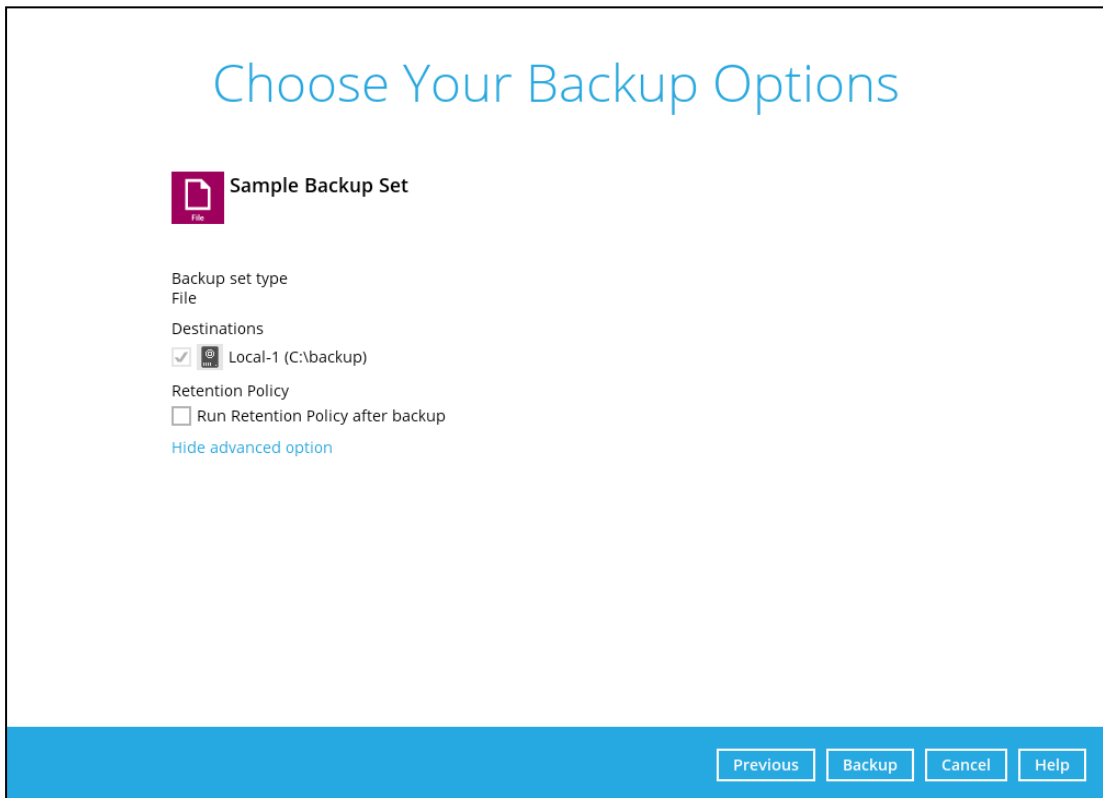
When this option is enabled, the existing data will be migrated to the latest version during a backup job. This option is disabled by default.



NOTE

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

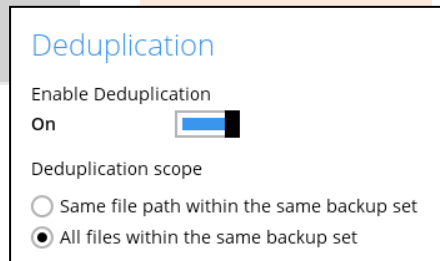
Below is an example of a backup set with Deduplication setting **Off (disabled)**.



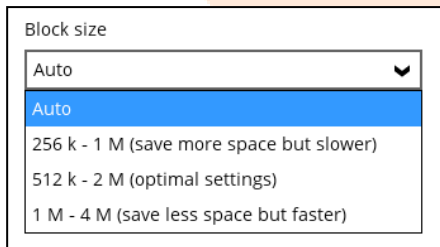
139

To configure the Deduplication settings, follow the steps below:

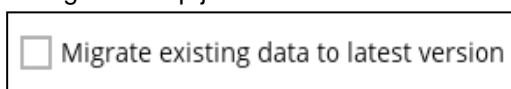
1. Select a type of Deduplication scope.



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 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.

The screenshot shows a software interface for configuring backup settings. On the left is a vertical sidebar menu with the following items: 'Data Backup' (with a file icon), 'General', 'Source', 'Backup Schedule', 'Continuous Backup', 'Destination', 'Deduplication', 'Retention Policy' (highlighted in blue), 'Command Line Tool', 'Reminder', 'Bandwidth Control', 'Others', and 'Hide advanced settings'. The main content area is titled 'Retention Policy' and contains the following text: 'How to retain the files in the backup set, which have been deleted in the backup source'. Below this are two radio buttons: 'Simple' (selected) and 'Advanced'. Underneath is the text 'Keep the deleted files for' followed by a text input field containing '7' and a dropdown menu set to 'Day(s)'. At the bottom of the window is a blue bar with a 'Delete this backup set' link on the left and 'Save', 'Cancel', and 'Help' buttons on the right.

140

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 are 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

Day(s)

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.

4. Assign the desired name to the Retention Policy.

5. Click the drop-down button to display the Retention Type, then select one.

6. Click the drop-down button to specify the period on which the deleted files will be kept in the backup set.

7. Click the **OK** button to save the configured advanced Retention Policy, then click **Save** 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 ▾
 First ▾

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

Type
 ▾

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

Months of quarter
 ▾

The number of quarters to repeat the above selection
 ▾

- **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

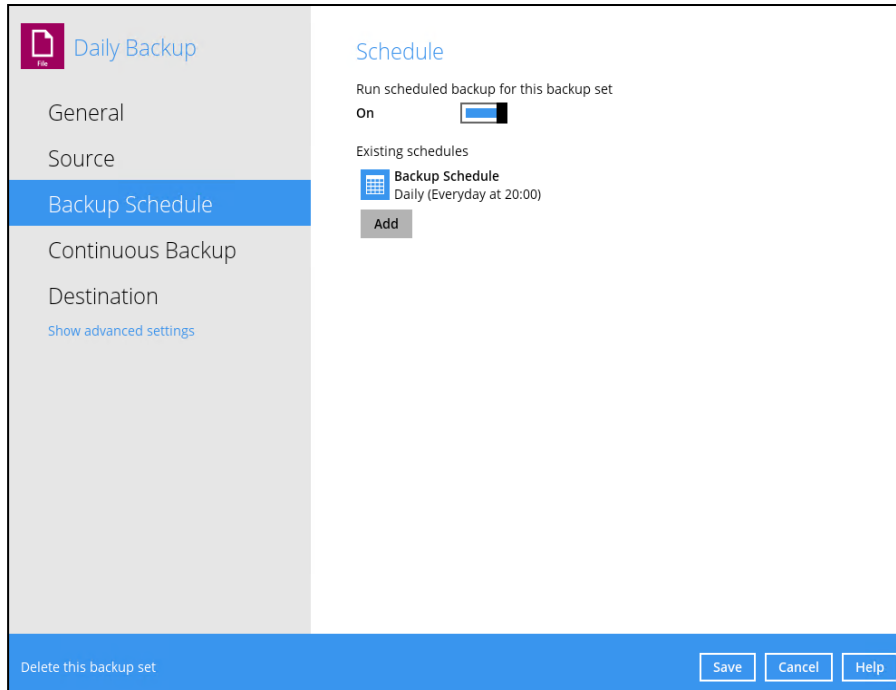
There are three (3) ways to run the Retention Policy:

- Backup Scheduler
- Manual Backup
- Space Freeing Up

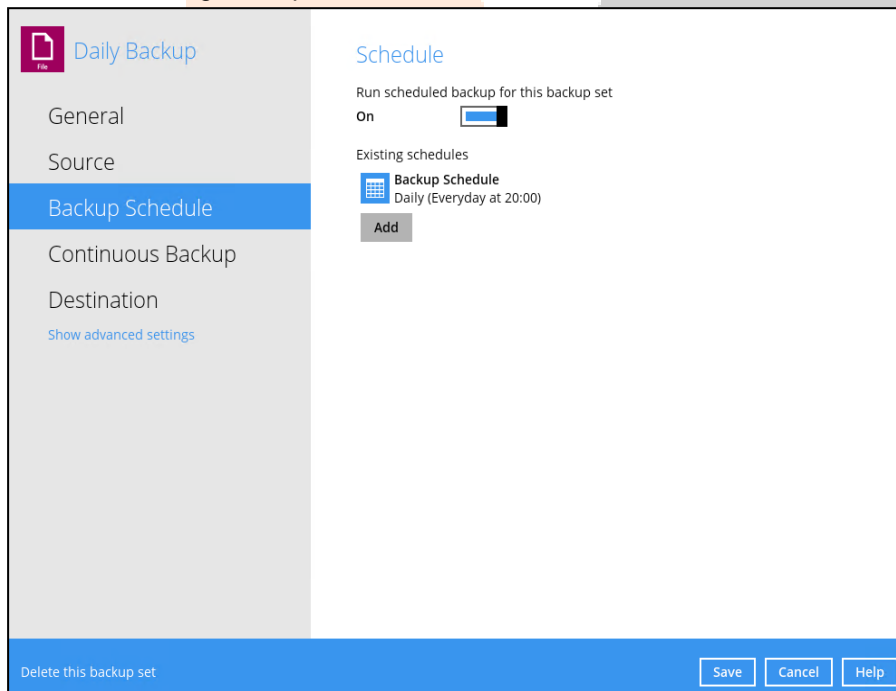
Backup Scheduler (Recommended)

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 add a new one.



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

Backup Schedule

Name
Backup Schedule

Type
Daily

Start backup at
20 : 00

Stop
until full backup completed

Run Retention Policy after backup

Delete this backup schedule

Delete this backup set

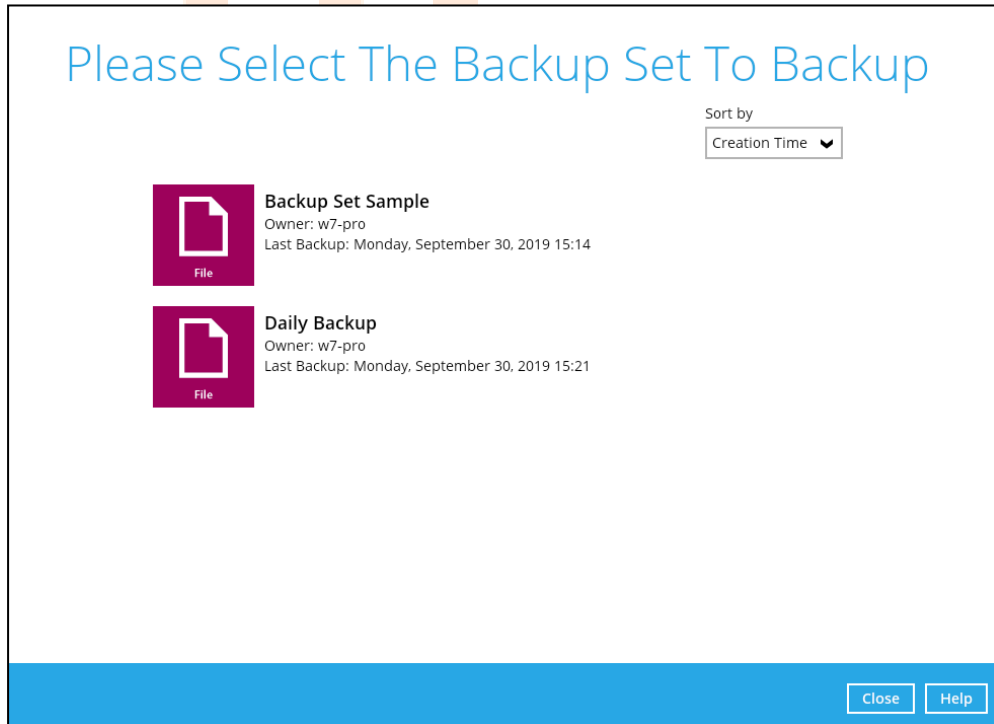
Manual Backup

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

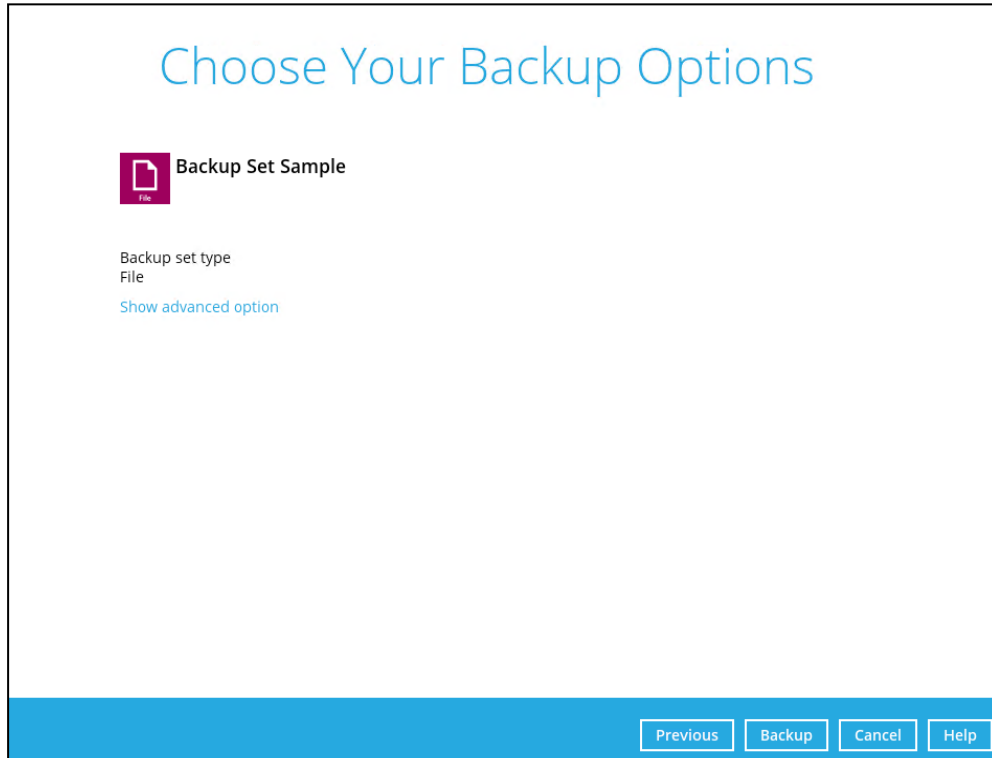
1. Click the **Backup** icon in the Advanced Client (B247PRO) main interface.



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

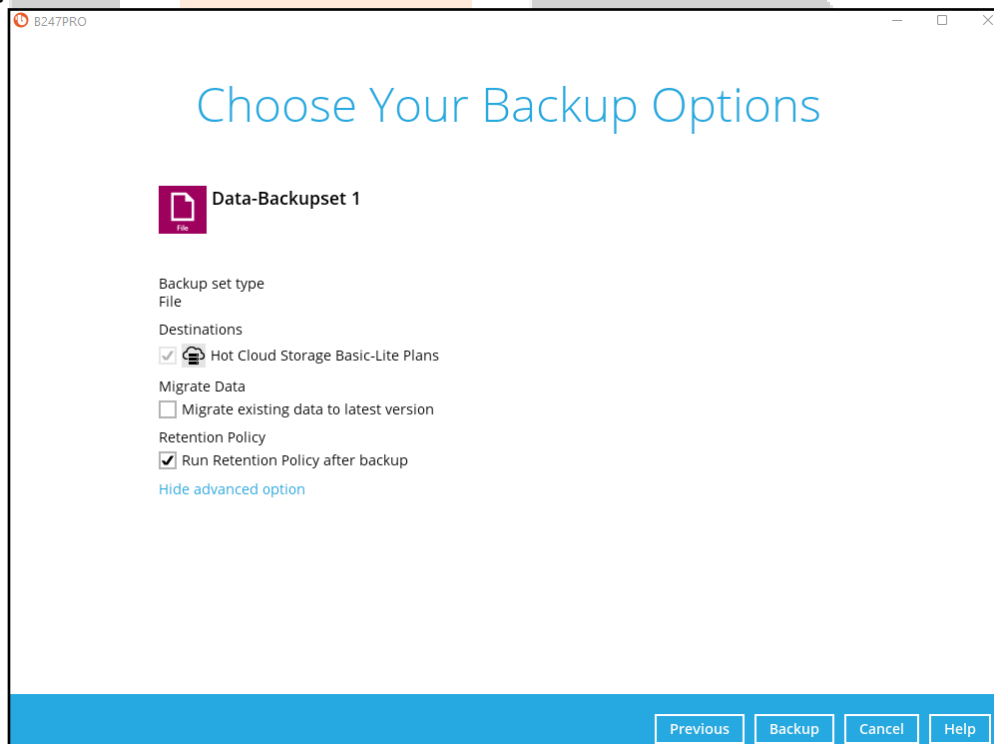


3. Click **Show advanced option** to display other settings.



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

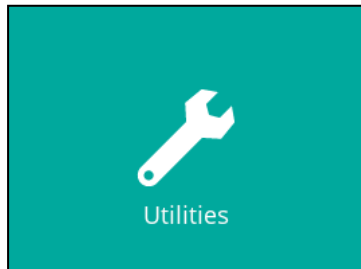
148



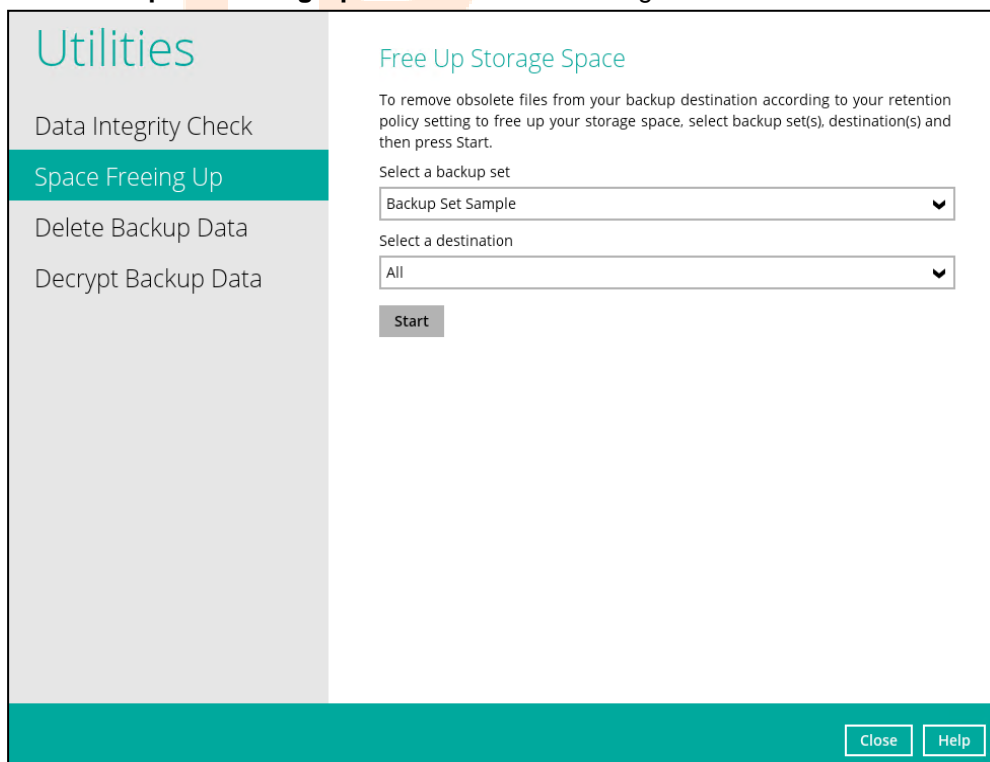
Space Freeing Up

To run a Retention Policy job manually using the Space Freeing Up feature, follow the steps below:

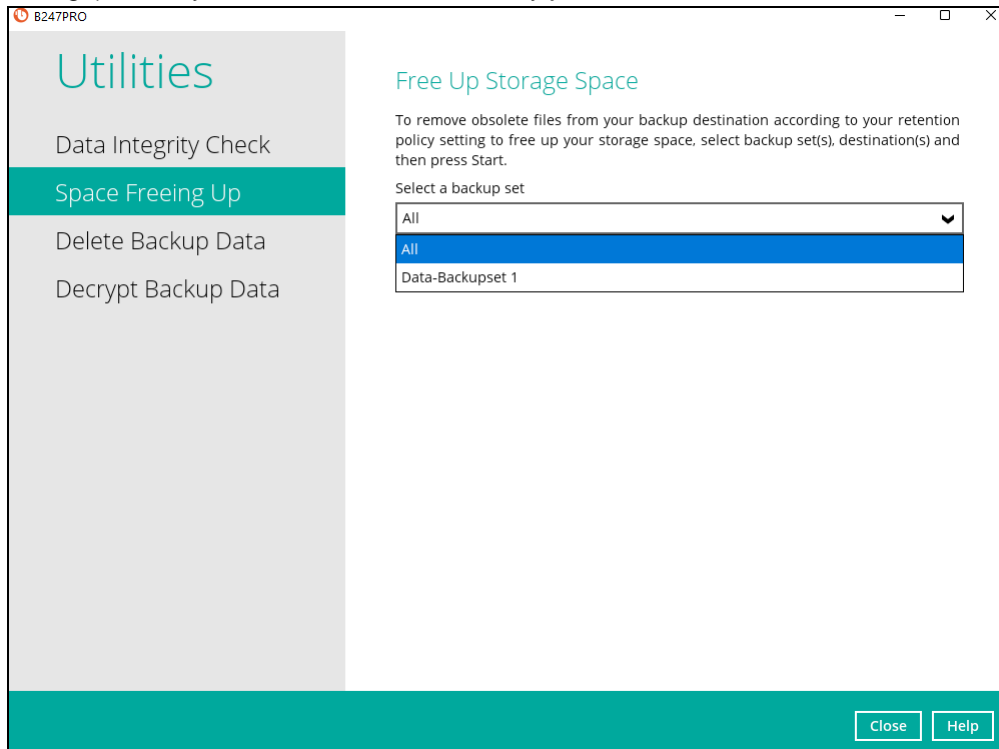
1. Click the **Utilities** icon on the Advanced Client (B247PRO) interface.



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

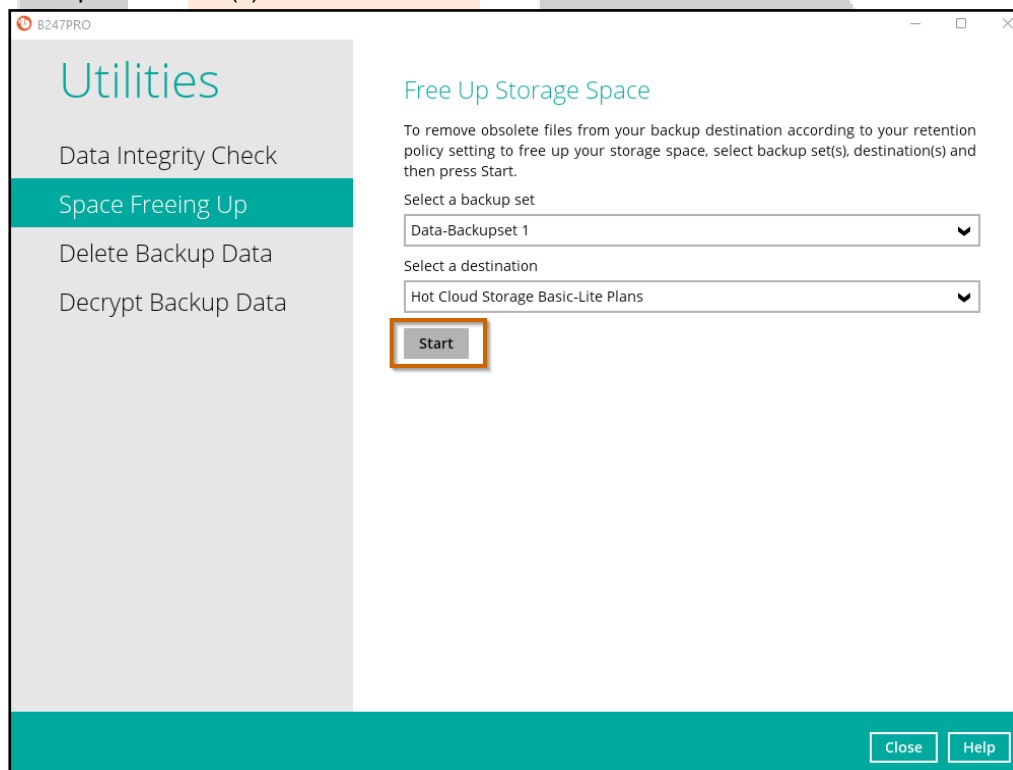


3. Select the corresponding backup set and destination (e.g., B247CBS, local drive, cloud storage) where you want the Retention Policy job to run on.



150

4. Click the **Start** button to run the Retention Policy job on the selected backup set(s) and backup destination(s).



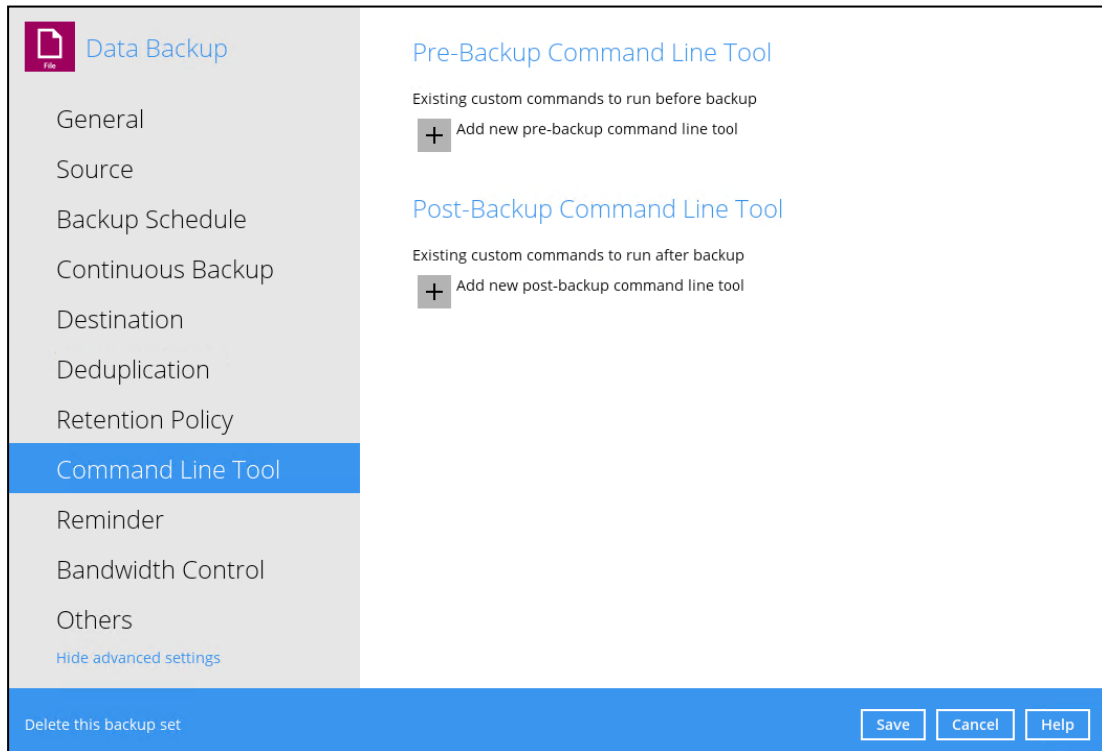
NOTE

For more details about Space Freeing Up, refer to [Chapter 10.9.2 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.



151

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, refer to [Chapter 10.6 Reports](#).

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 Windows 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
Data-Backupset 1(1646398208096)	Hot Cloud Storage Basic-Lite Plans	13-Mar-2022 13:23 AEDT	13-Mar-2022 13:24 AEDT	OK
Data-Backupset 1(1646398208096)		12-Mar-2022 20:00 AEDT	--	Missed Backup

Post-backup Command Recommendation

It is recommended to include a timeout for a post-backup command to shut down the machine. The timeout must be adjusted until when the Advanced Client (B247PRO) sends the backup job status to the B247CBS.

In this example, the configured post-backup command is to shut down the machine that has a timeout set to ninety (90) seconds. The machine will shut down automatically after the specified time.

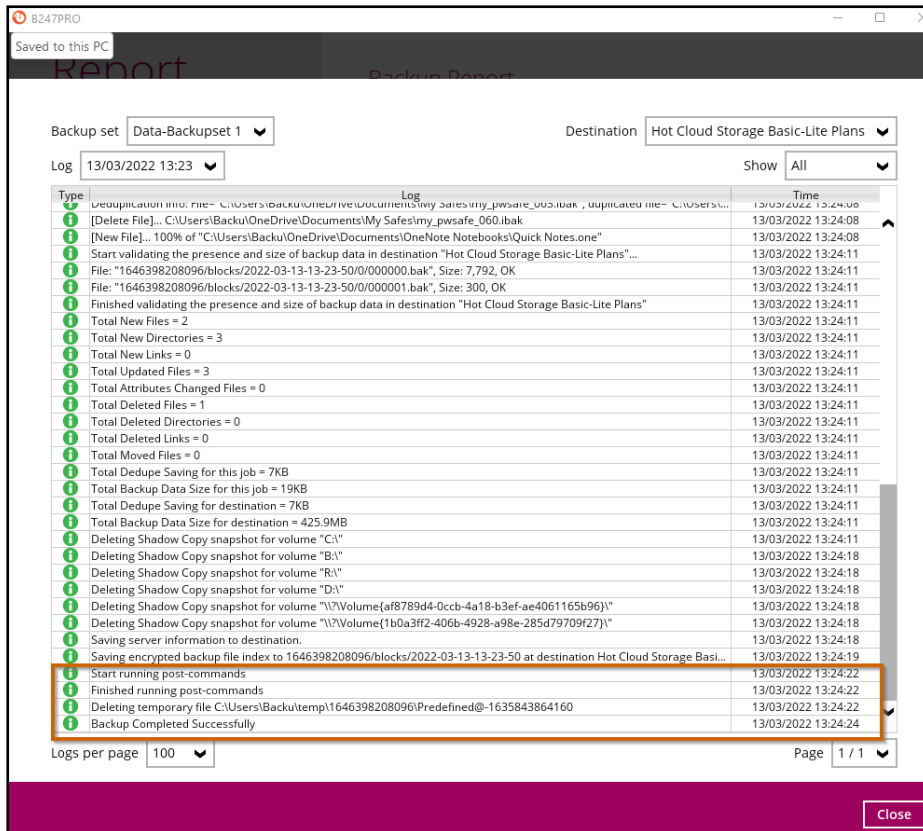
Post-Backup Command Line Tool

Name:

Working Directory: Change

Command:

This is to ensure that the 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. See screenshot below:



153

NOTE
For more details about detailed backup report, refer to [Chapter 10.6 Reports](#).

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 command to execute a batch file, command, or a VBScript (exclusively for Windows).

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

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






















Working Directory

4. Input a command to be run before a backup job. In this example, the pre-backup command will connect to a network drive before the backup process.

Command

5. 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 has run successfully.

Type	Log	Time
	Saving encrypted backup set encryption keys to server...	11/03/2021 10:03:32
	Start Backup ... [In-File Delta: Full]	11/03/2021 10:03:33
	Using Temporary Directory C:\Users\Administrator\obm\temp\1635904484100\OBS@1635904548871	11/03/2021 10:03:33
	Start running pre-commands	11/03/2021 10:03:33
	[Pre-Backup-1] net use \\W8-PRO\share	11/03/2021 10:03:33
	[Pre-Backup-1] Local name	11/03/2021 10:03:33
	[Pre-Backup-1] Remote name \\W8-PRO\share	11/03/2021 10:03:33
	[Pre-Backup-1] Resource type Disk	11/03/2021 10:03:33
	[Pre-Backup-1] Status OK	11/03/2021 10:03:33
	[Pre-Backup-1] # Opens 2	11/03/2021 10:03:33
	[Pre-Backup-1] # Connections 1	11/03/2021 10:03:33
	[Pre-Backup-1] The command completed successfully.	11/03/2021 10:03:33
	[Pre-Backup-1]	11/03/2021 10:03:33
	Finished running pre-commands	11/03/2021 10:03:33
	Downloading server file list...	11/03/2021 10:03:33
	Download valid index files from backup job "Current" to "C:\Users\Administrator\obm\temp\1635904484100\OBS@1635...	11/03/2021 10:03:33
	Downloading server file list... Completed	11/03/2021 10:03:33
	Reading backup source from hard disk...	11/03/2021 10:03:34
	Getting all files which have been moved...	11/03/2021 10:03:35
	Getting all files which have been moved... Completed	11/03/2021 10:03:36
	Reading backup source from hard disk... Completed	11/03/2021 10:03:36

Logs per page 50 Page 1 / 1

Close

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:

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

Post-Backup Command Line Tool

Existing custom commands to run after backup

 Add new post-backup command line tool


- Assign a desired name to the post-backup command.

New Post-Backup Command Line Tool

Name

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


Working Directory















- Input a command to be run after a backup job. In this example, the post-backup command will disconnect a network drive after the backup process.

Command

- Click the **OK** button to save the created post-backup command, then click the **Save** button to save the 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 has run successfully.

	Start running post-commands	11/03/2021 10:03:37
	[Post-Backup-1] net use * /delete /yes	11/03/2021 10:03:37
	[Post-Backup-1] You have these remote connections:	11/03/2021 10:03:37
	[Post-Backup-1]	11/03/2021 10:03:37
	[Post-Backup-1] \\W8-PRO\share	11/03/2021 10:03:37
	[Post-Backup-1] Continuing will cancel the connections.	11/03/2021 10:03:37
	[Post-Backup-1]	11/03/2021 10:03:37
	[Post-Backup-1] The command completed successfully.	11/03/2021 10:03:37
	[Post-Backup-1]	11/03/2021 10:03:37
	Finished running post-commands	11/03/2021 10:03:37
	Deleting temporary file C:\Users\Administrator\l.obm\temp\1635904484100\OBS@1635904548871	11/03/2021 10:03:37
	Backup Completed Successfully	11/03/2021 10:03:37

Logs per page Page

[Close](#)

NOTE


Multiple pre-backup and post-backup commands can be created in the Command Line Tool.

Reminder

There are two types of Reminders that can be configured:

- During Windows log off or shutdown - **On (enabled)** by default
- When the last backup is over the set tolerance period - **Off (disabled)** by default

When either of the options are enabled, a backup confirmation dialog box will prompt the user to start a backup during Windows log off shutdown or when the latest backup job is over the configured tolerance period.

 BackupSet-1

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

Reminder

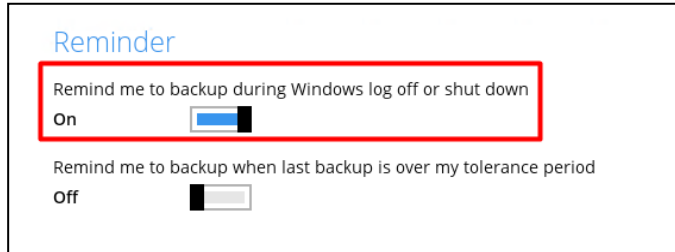
Remind me to backup during Windows log off or shut down

off

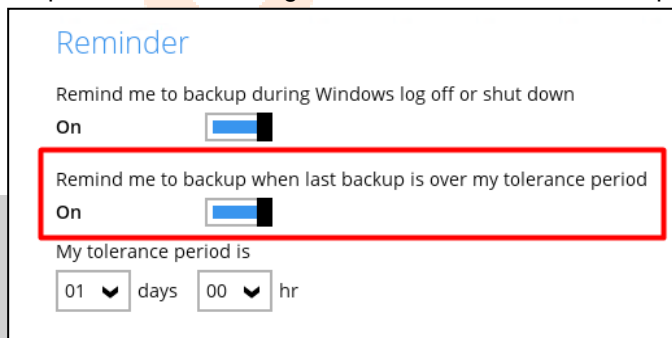
Delete this backup set

To configure the Reminder settings, follow the steps below:

1. Go to **Backup Sets**, then select a backup set that you would like to enable the Reminder option for.
2. Click the **Reminder** tab in the backup set settings.
3. Swipe the lever to the right enable the reminder to start a backup during Windows log off or shutdown.

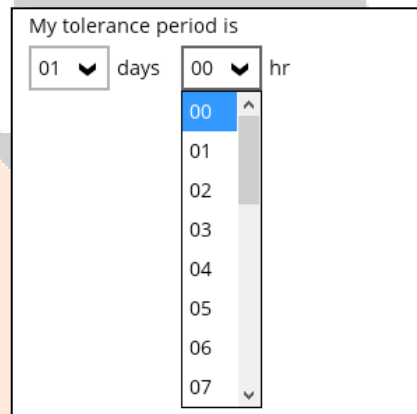
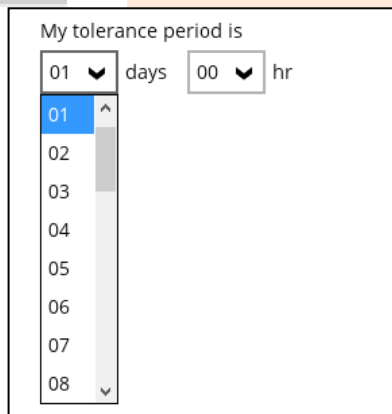


4. Swipe the lever to the right enable the other reminder option.

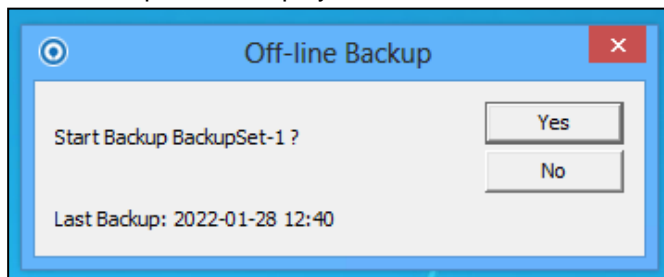


157

This will allow you to set the tolerance period by selecting the number of day(s) or hour(s). You may select from 1 – 31 days or 0 – 23 hours. When this option is enabled, the default tolerance period is 1 day.



When the latest backup is over the configured tolerance period, the following prompt to run a backup will be displayed.



5. Click **Save** to button to apply the Reminder settings.

NOTES

1. This feature is only supported on Windows 8.1 (and older) and Windows Server 2012 (and older).
2. The dialog box will only appear if there is a backup set with **On (enabled)** Reminder setting.
3. During Windows log off or shutdown, the confirmation prompt will only be displayed for four (4) seconds.
4. If there are multiple backup sets displayed, you cannot select one (1) backup set to back up. It is recommended to only enable the Reminder setting for the backup sets you regularly back up.

For more detailed examples of the Reminder feature for Windows log off, restart, and shutdown, please refer to [Appendix D: Example Scenarios for the Reminder](#).

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.

158

There are two (2) different modes in assigning a bandwidth control:

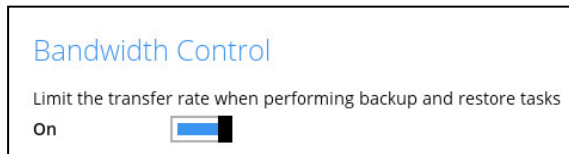
Bandwidth Control Type	Description
Independent	Each backup and restore has its assigned bandwidth.
Share	All backup and restore operations are sharing the same assigned bandwidth.

NOTE

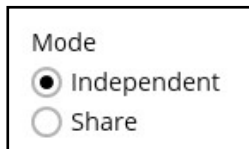
Share mode does not support performing backup job on multiple destinations concurrently.

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

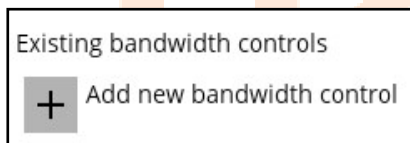
1. Swipe the lever to the right to turn on the bandwidth control.



2. Select a bandwidth control mode.

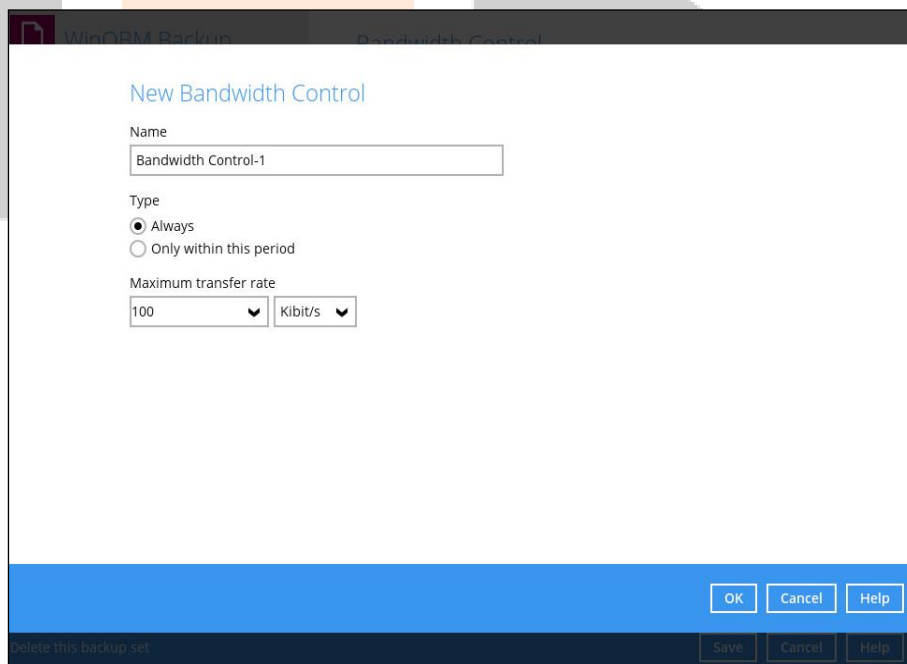


3. If you want to add a modified bandwidth control, click the **[+]** button.



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.

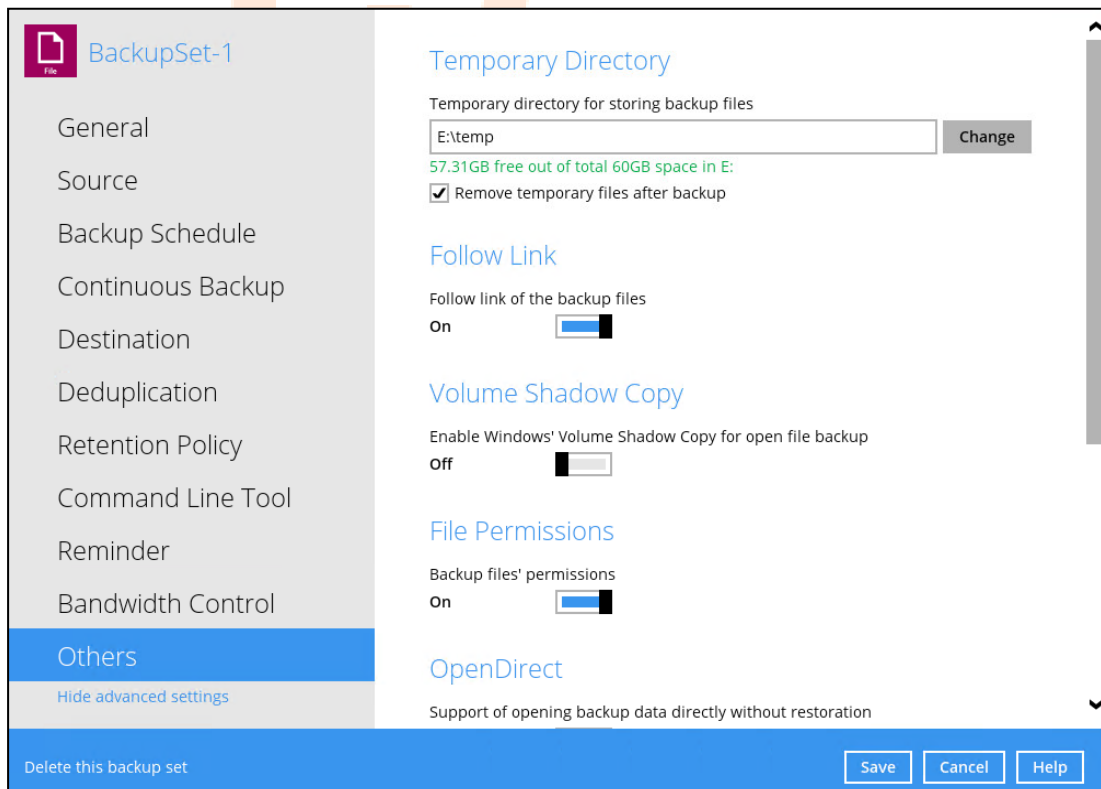


4. Click the **OK** button to save the created bandwidth control set, then click the **Save** button to save settings.

Others

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

- [Temporary Directory](#)
- [Follow Link](#)
- [Volume Shadow Copy](#)
- [File Permissions](#)
- [OpenDirect](#)
- [Compressions](#)
- [Encryption](#)



160

Temporary Directory

Temporary Directory is used 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.

NOTE

For best practice, the temporary directory should be located on a local drive for optimal backup and restore performance.

It should NOT be located on:

- Windows System C:\ drive, as the C:\ drive is used by Windows 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.

Temporary Directory

Temporary directory for storing backup files

E:\temp Change

57.31GB free out of total 60GB space in E:

Remove temporary files after backup

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.

161

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 option is enabled by default.

Follow Link

Follow link of the backup files

On

NOTE

This feature is only applicable for File Backup Sets.

Volume Shadow Copy

This feature allows the Advanced Client (B247PRO) to use the Windows Volume Shadow Copy service to create a snapshot of the selected files and/or folders on the local drive(s) of the machine, so that the Advanced Client (B247PRO) can continue to back up files even if they are opened and/or have been updated by the user. This feature is enabled by default.

Volume Shadow Copy

Enable Windows' Volume Shadow Copy for open file backup

On

WARNING

1. To use the Volume Shadow Copy, the license module must first be enabled on your backup user account. Otherwise, just enabling this setting on the Advanced Client (B247PRO) will not activate this feature and can result in possible backup errors if the backup job encounters an open file. Please contact Backup247 Technical Support Team for more details.
2. Volume Shadow Copy does not support open file backups on network drives.

File Permissions

This option defines whether to back up operating system file permission of the data selected as backup source. This option is enabled by default.

File Permissions

Backup files' permissions

On

NOTE

This feature is only applicable for File Backup Sets.

OpenDirect

This feature is used to add additional restore options in restoring files from a File Backup Set. This feature can only be enabled during the creation of backup set. For more details about OpenDirect Restore, please refer to [Chapter 5 OpenDirect Restore](#).

OpenDirect

Support of opening backup data directly without restoration

off

WARNING

1. To use this feature, the OpenDirect license module must first be enabled with the correct number of modules on your user account. If you enable this setting on the Advanced Client (B247PRO) without an OpenDirect license, or your account does not have enough OpenDirect licenses, then your backup job will not run. Please contact Backup247 Technical Support Team for more details.
2. When OpenDirect is enabled, to optimize restore performance, both compression and encryption will be disabled for this backup set. Therefore, it is not recommended to assign your backup destination on a cloud or on an offsite location.
3. Once the OpenDirect is enabled and the setting is saved, it cannot be disabled without re-creating the backup set.

Compressions

When this feature is enabled, the 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 changed 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

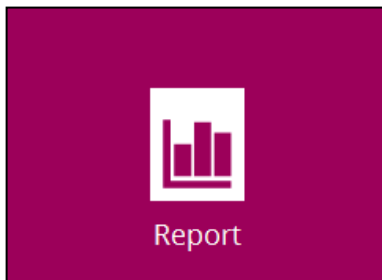
Encryption	
Encryption key	AbcDefGhI1234
	Mask encryption key
Algorithm	AES
Method	CBC
Key length	256 bits

NOTE

For more details about encryption settings, please refer to step no. 13 in [Chapter 11 Create a Backup Set](#).

10.6 Report

This feature allows the user to view the backup and restore reports and generate backup usage report in a graphical view.



There are three (3) functions available for this feature:

- Backup
- Restore
- Usage

10.6.1 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

165

The screenshot shows the 'Report' section of the application. The 'Backup' sub-section is active. The 'Backup Report' page includes a date range selector (From: 06 Mar 2021, To: 13 Mar 2022) and a 'Go' button. Below is a table with the following data:

Backup set	Destination	Completion	Status
Data-Backupset 1	Hot Cloud Storage Basic-Lite Plans	Today 13:24	Completed
Data-Backupset 1	Hot Cloud Storage Basic-Lite Plans	04/03/2022 23:55	Completed

At the bottom, there is a 'No. of records per page' dropdown set to 50, a 'Page' dropdown set to 1/1, and 'Close' and 'Help' buttons.

Date

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

The screenshot shows the 'Report' section of the backup software. A sidebar on the left contains 'Backup', 'Restore', and 'Usage'. The main area is titled 'Backup Report' and features a date filter at the top. The filter is highlighted with a red box and includes 'From' (06 Mar 2021) and 'To' (13 Mar 2022) dropdowns, along with a 'Go' button. Below the filter is a table with columns: Backup set, Destination, Completion, and Status. Two rows are visible, both showing 'Data-Backupset 1' and 'Hot Cloud Storage Basic-Lite Plans' with a 'Completed' status. At the bottom, there are controls for 'No. of records per page' (set to 50) and 'Page' (1 / 1), along with 'Close' and 'Help' buttons.

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.

166

This screenshot is similar to the previous one, but the 'Backup set' dropdown in the filter is highlighted with a red box. The dropdown menu is open, showing 'Backup set' (highlighted in blue) and 'Data-Backupset 1'. The rest of the interface, including the table and bottom controls, remains the same as in the previous screenshot.

Destination

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

The screenshot shows the 'Backup Report' window. On the left is a navigation menu with 'Report', 'Backup', 'Restore', and 'Usage'. The main area is titled 'Backup Report' and includes date filters (From: 06 Mar 2021, To: 13 Mar 2022) and a 'Go' button. Below this is a table with columns: 'Backup set', 'Destination', 'Completion', and 'Status'. The 'Destination' dropdown menu is open, showing 'Destination' and 'Hot Cloud Storage Basic-Lite Plans'. The table contains two rows, both with a status of 'Completed'. At the bottom, there are 'Close' and 'Help' buttons, and a footer with 'No. of records per page: 50' and 'Page: 1 / 1'.

Backup set	Destination	Completion	Status
Data-Backupset 1	Hot Cloud Storage Basic-Lite Plans	Today 13:24	Completed
Data-Backupset 1	Hot Cloud Storage Basic-Lite Plans	04/03/2022 23:55	Completed

167

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).

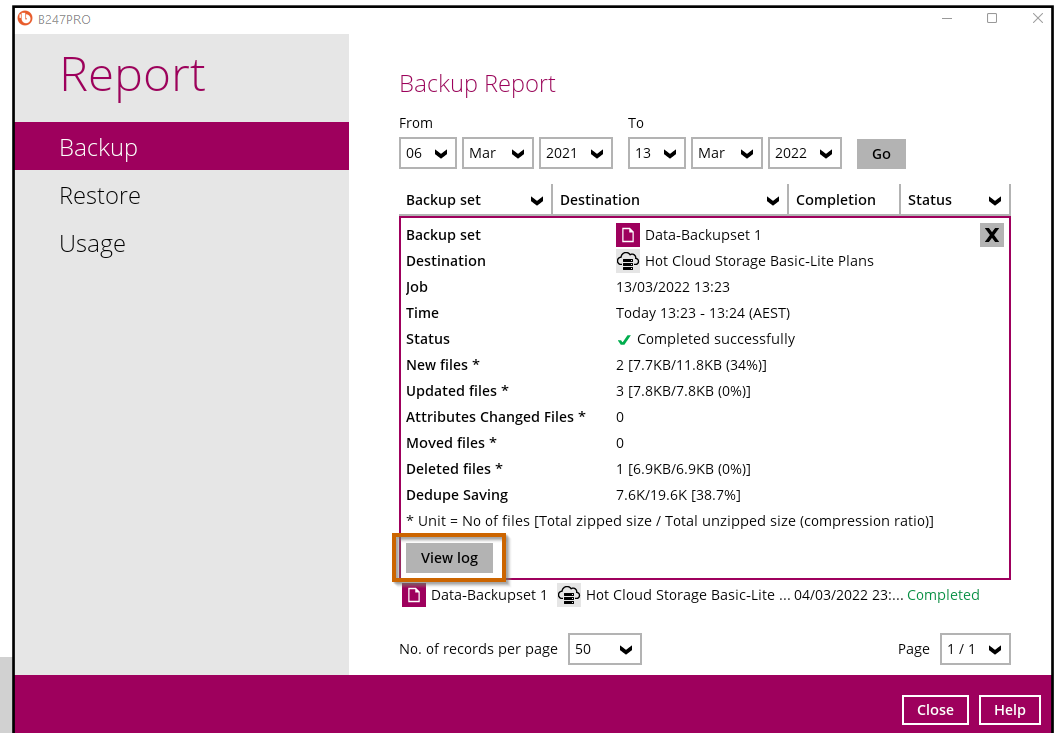
This screenshot is identical to the one above, showing the 'Backup Report' window. However, the 'Status' dropdown menu is open, showing 'Status' and 'Completed'. The table content remains the same, with two rows of 'Completed' status.

Backup set	Destination	Completion	Status
Data-Backupset 1	Hot Cloud Storage Basic-Lite Plans	Today 13:24	Status
Data-Backupset 1	Hot Cloud Storage Basic-Lite Plans	04/03/2022 23:55	Completed

To view the backup log, follow the instructions below:

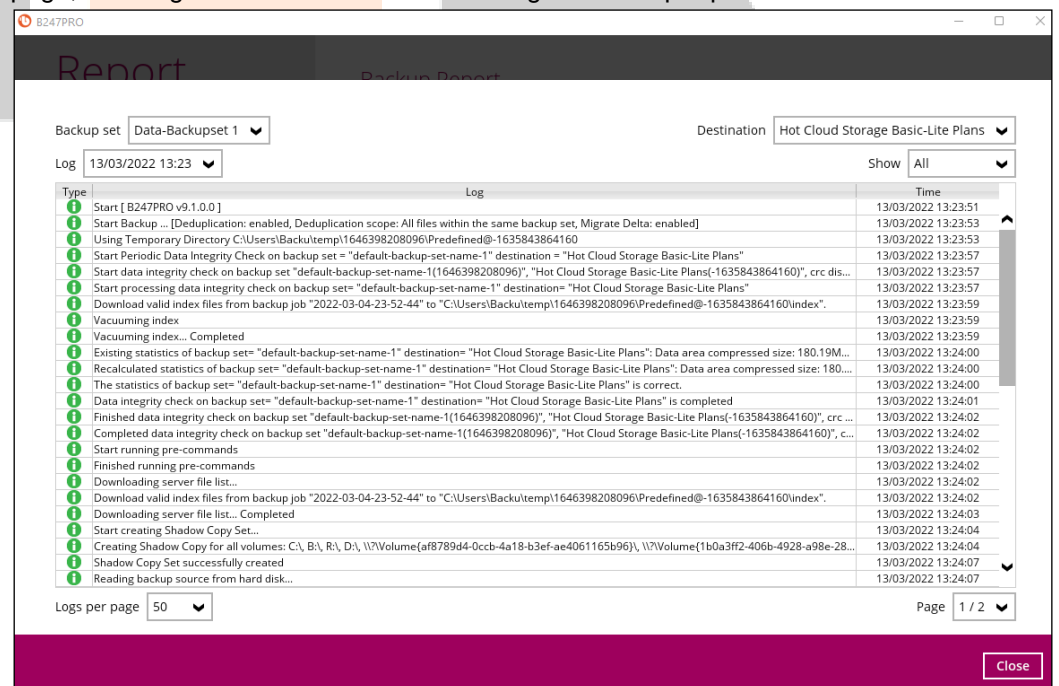
1.

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



168

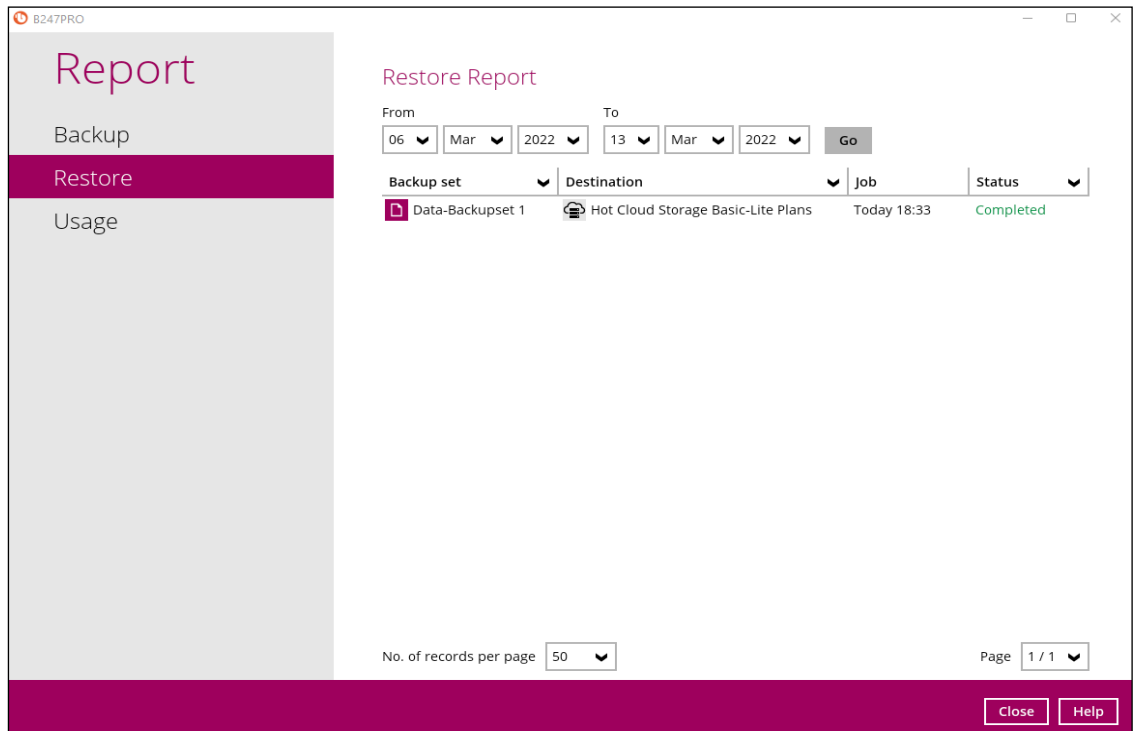
2. The Backup set, Destination, Log Date and Time, Status, the number of Logs per page, and Page can be filtered when viewing the backup report.



10.6.2 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:

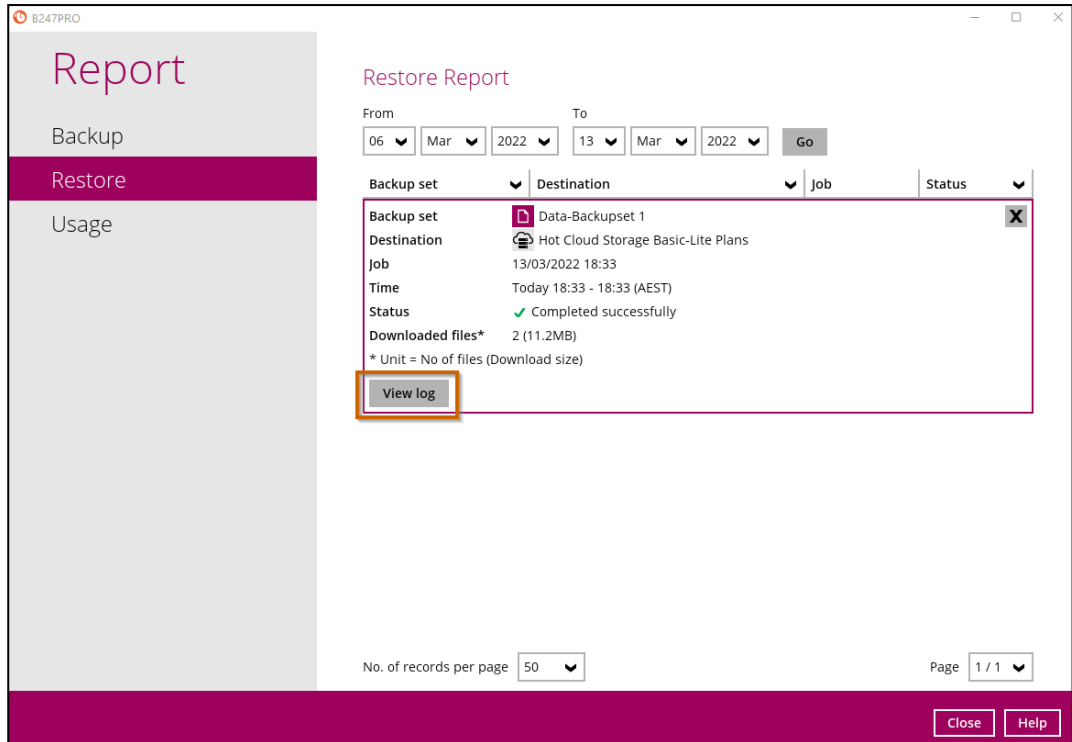
- Date
- Backup Set
- Destination
- Status



169

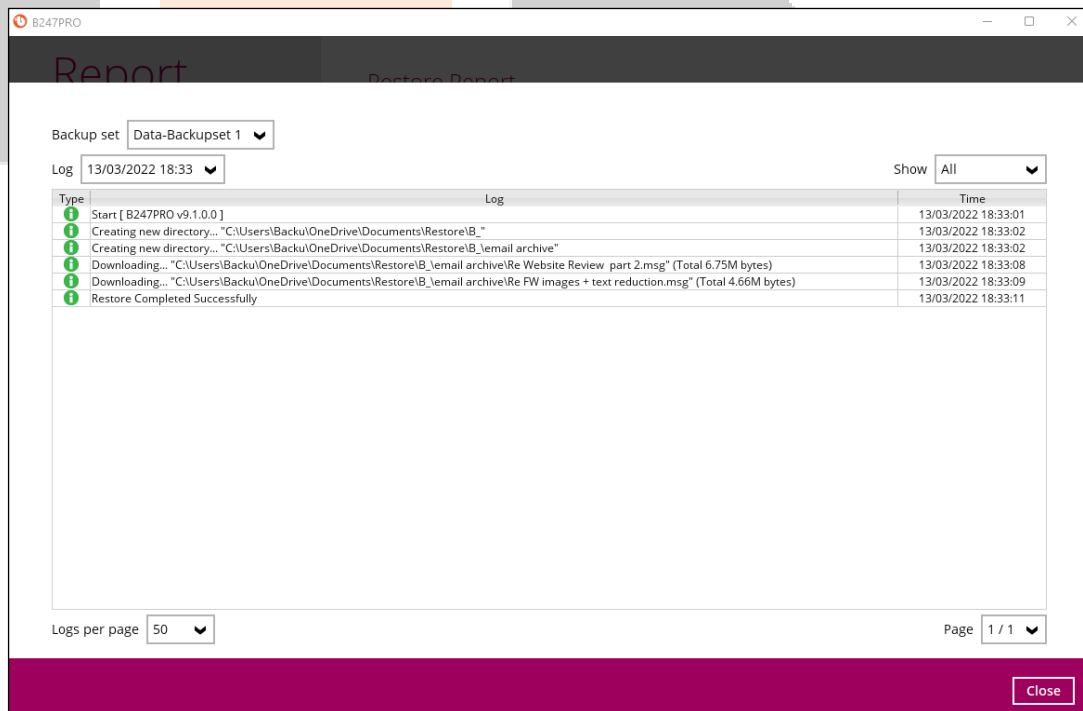
To view the restore log, follow the instructions below:

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



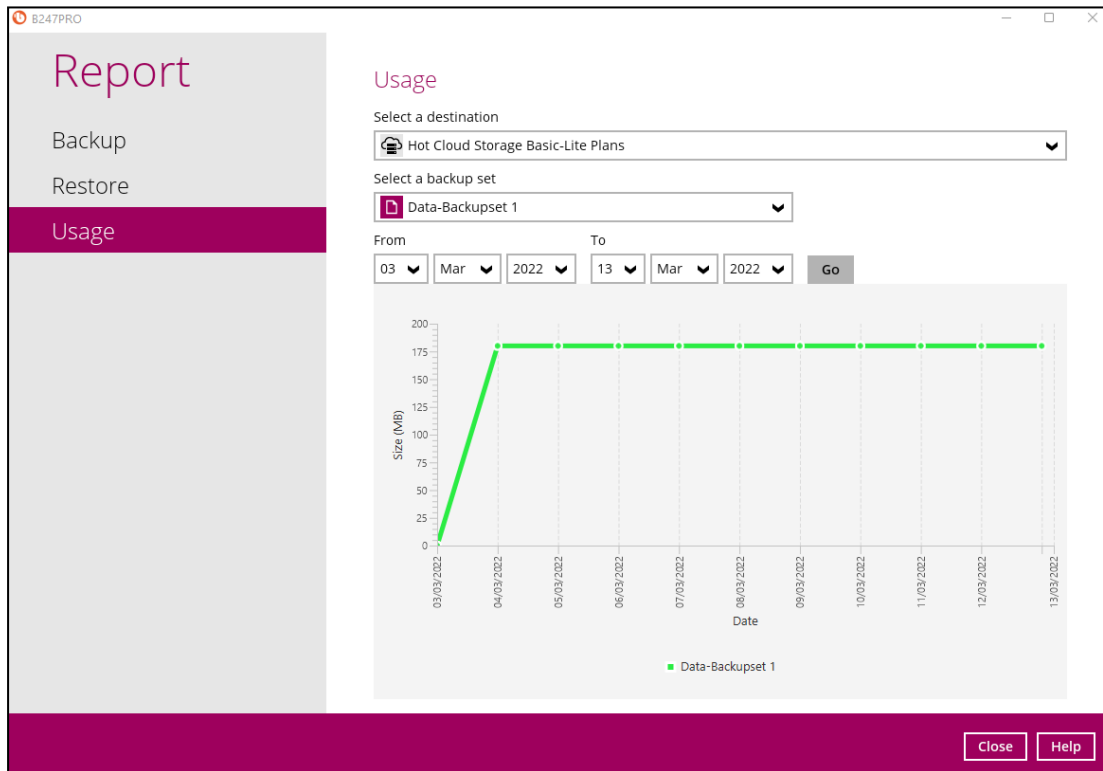
- The Backup set, Destination, Log Date and Time, Status, the number of Logs per page, and Page can be filtered when viewing the restore report.

170



10.6.3 Usage

This feature allows the user to display the storage and usage information in a graphical view for the selected backup set and backup destination within the specific date range.



171

- Storage statistics

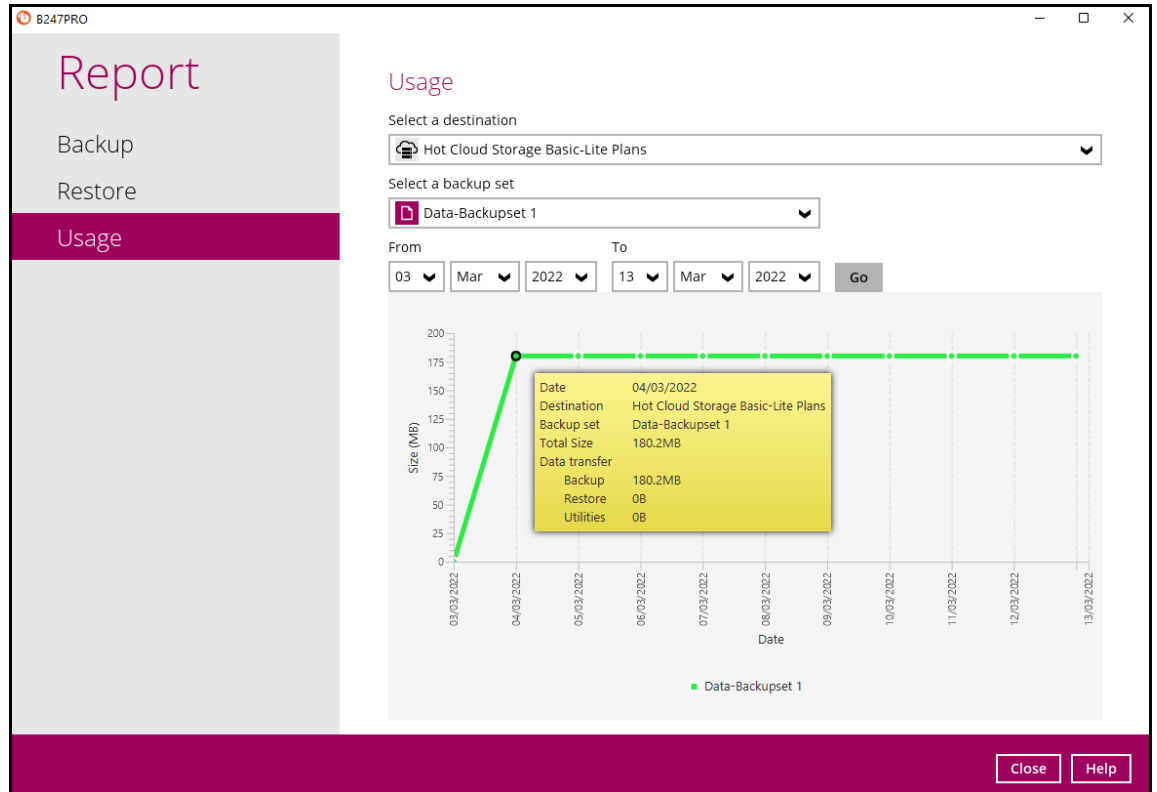
Total Size: displays the total amount of backed up data on the backup destination

The storage statistics of a backup set is updated every time the following functions are run:

1. Backup job
2. [Periodic Data Integrity Check \(PDIC\)](#)
3. [Data Integrity Check \(DIC\)](#)
4. [Space Freeing Up](#)
5. [Delete Backup Data](#)

Example:

The data transfer statistics will pop up when you click over a specific date from the graph.



172

- Data Transfer statistics:
 - **Backup:** displays the amount of data transferred to the backup destination for backups
 - **Restore:** displays the amount of data transferred from the backup destination for restores
 - **Utilities:** displays the amount of data transferred from the backup destination, when a Data Integrity Check (DIC) is run with the "Run Cyclic Redundancy Check (CRC) during data integrity check" option selected

10.7 Restore

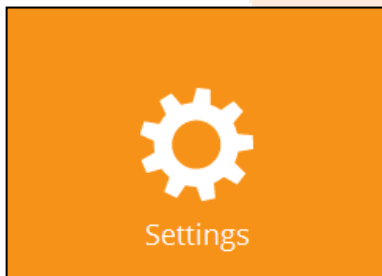
This feature is used to restore backed up files to its original or alternate location.



To restore backed up files, follow the instructions on [Chapter 14 Restore Data](#).

10.8 Settings

This feature allows the user to enable the **Proxy Settings** and **Windows Event Log**.

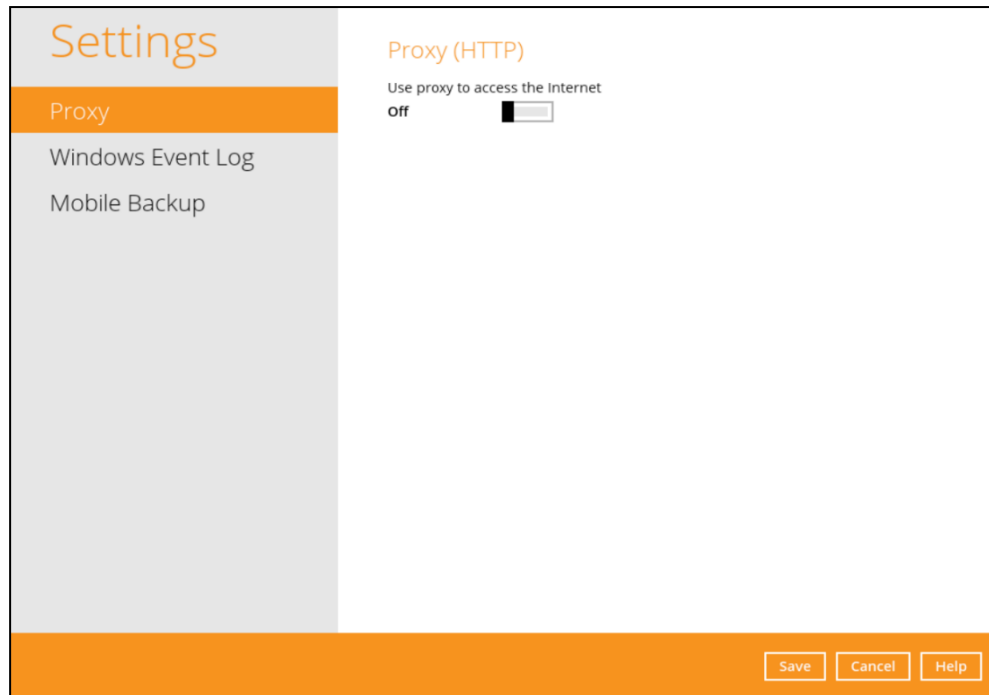


173

There are three (3) functions available for this feature:

- Proxy
- Windows Event Log
- Mobile Backup

NOTE: The Mobile Backup tab will only be available if the mobile add-on module is enabled on the Advanced Client (B247PRO) account. Please contact Backup247 Technical Support Team for details.



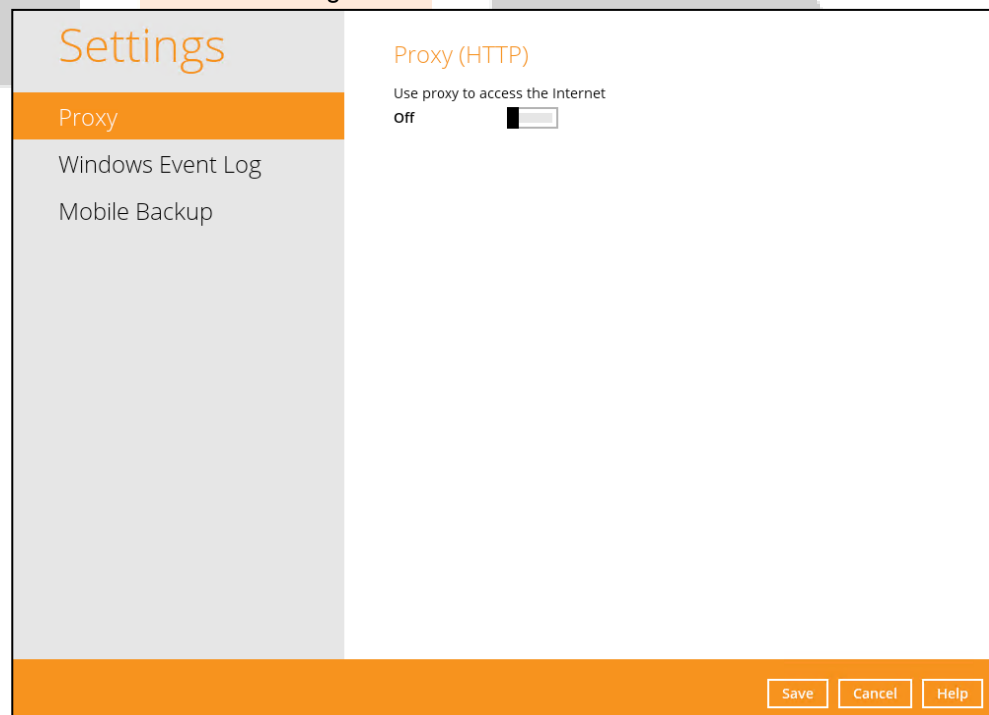
10.8.1 Proxy

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

174

To enable the Proxy Settings, follow the instructions below:

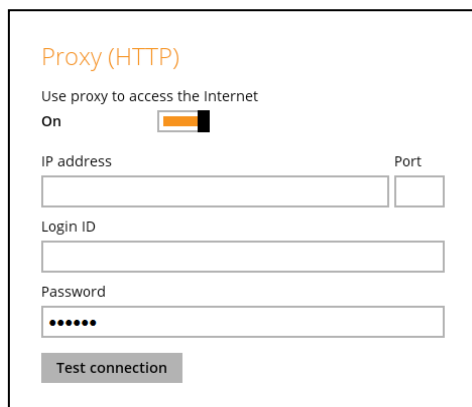
1. Slide the lever to the right to turn on this feature.



2. Complete the following fields:

- IP address
- Port

- Login ID
- Password



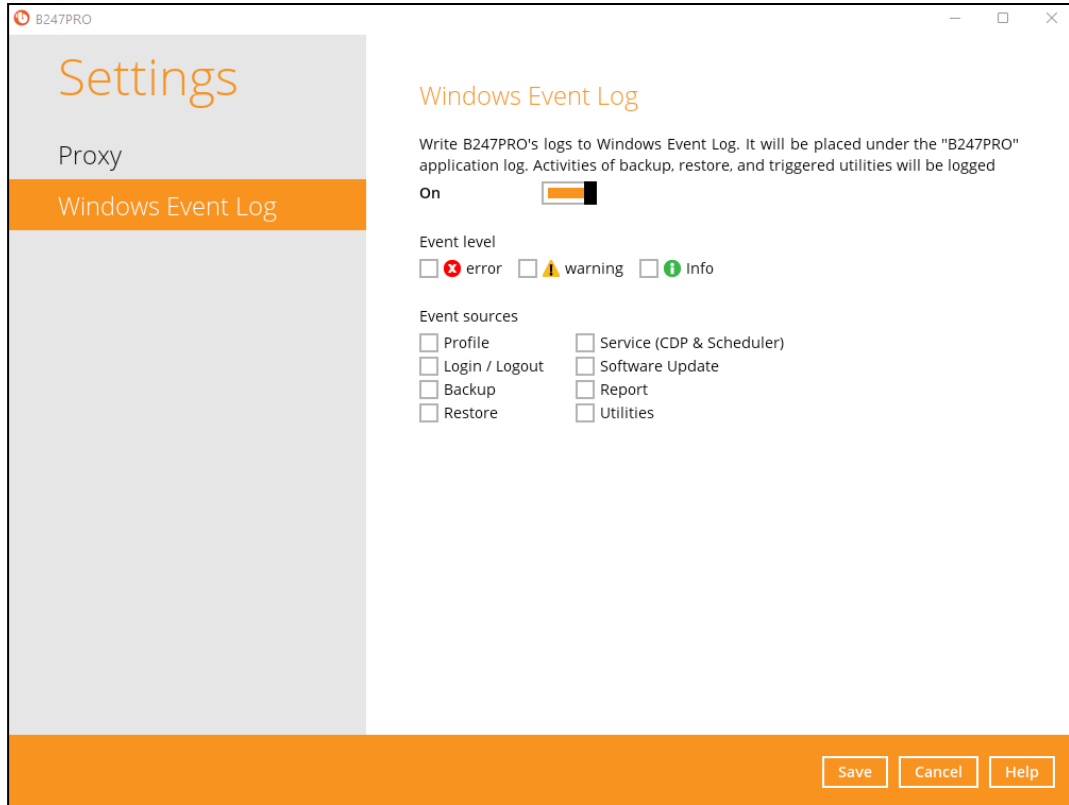
The screenshot shows a web form titled "Proxy (HTTP)". It includes a checkbox labeled "Use proxy to access the Internet" which is currently checked. Below this are input fields for "IP address" and "Port". There are also input fields for "Login ID" and "Password" (the password field contains six dots). 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.

10.8.2 Windows Event Log

When this feature is enabled, all Advanced Client (B247PRO) system log information will be written under **Applications and Services Logs**. The user may access them through **Windows event viewer** in the local machine.

NOTE: This feature is only applicable for Windows OS.



10.8.3 Mobile Backup

The Mobile Backup tab is only available if the mobile add-on module is enabled on the user profile. Please contact Backup247 Technical Support Team 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 \(B247MOB\) User Guide for Android and iOS](#) for the detailed step-by-step procedure.

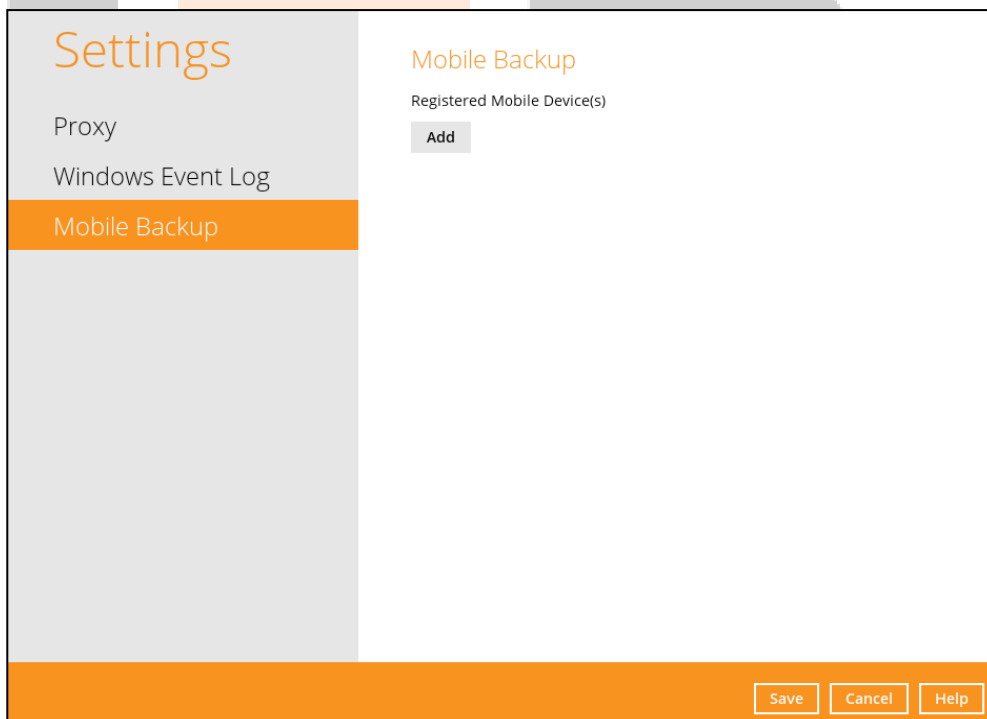
- [View backed up photos, videos and documents saved in the mobile backup destination.](#)
- Change the mobile backup destination to:
 - [new location in the same machine](#)
 - [new machine](#)
- [Remove one or more device\(s\) registered for mobile backup.](#)

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 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.

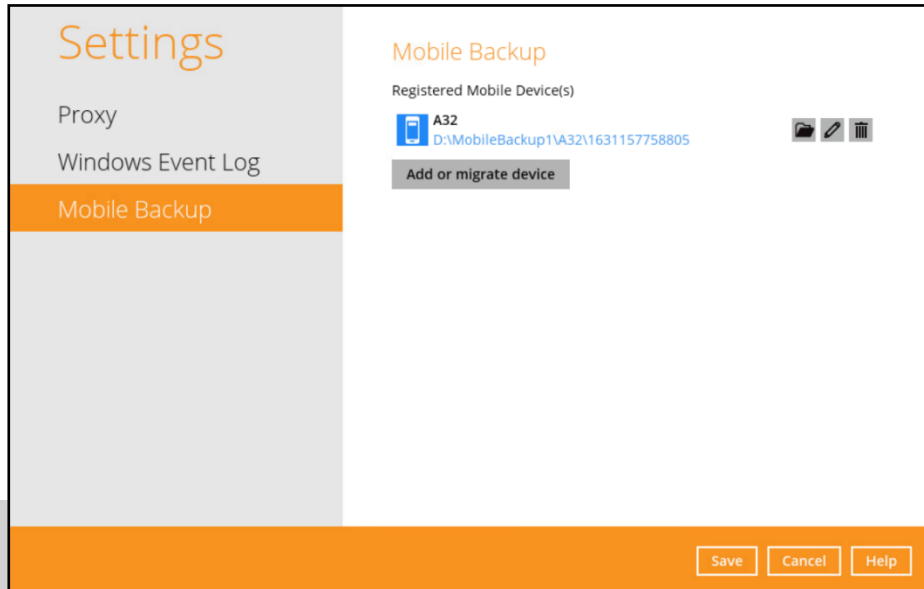
177



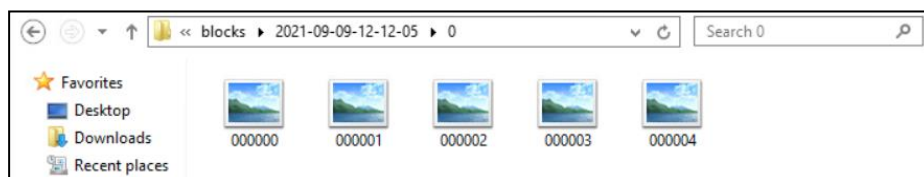
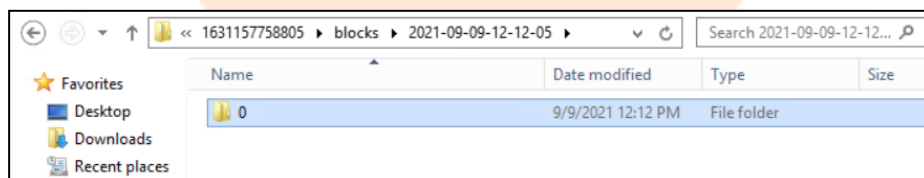
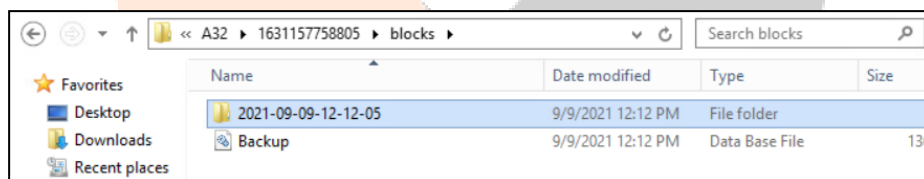
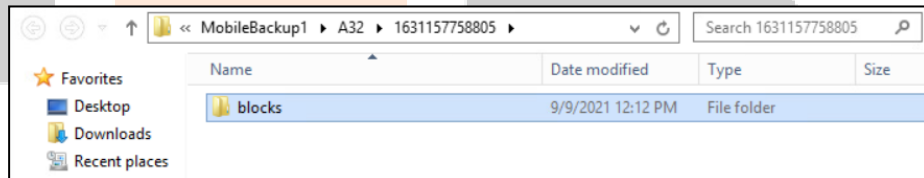
View backed up photos, videos and documents saved in the mobile backup destination

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, then open the folder with the filename "YYYY-MM-DD-hh-mm-ss", which is the date and time of the backup. This contains the folders where the photos, videos and documents 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:

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

If Free up space is enabled on the Backup247 Mobile (B247MOB) 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, documents 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.

2. Move to a new location in the same machine with disabled Free up space.

If Free up space is disabled on the Backup247 Mobile (B247MOB) app, there are two (2) options available, copy the previously backed up photos, videos and 2FA accounts to the new location or continue to back up in the new location.

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

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


Example: Change backup destination

from

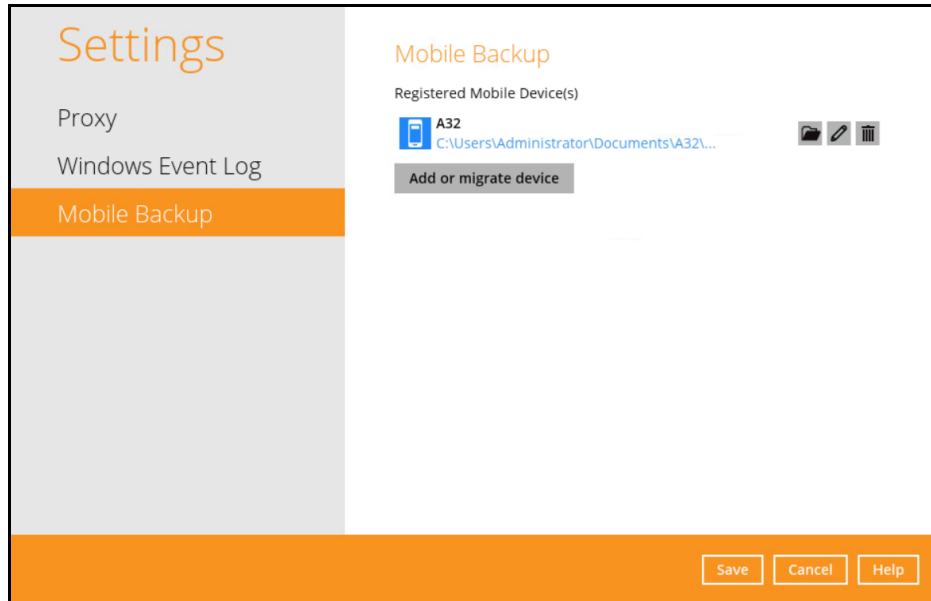
C:\Users\Administrator\Documents\Advanced Client (B247PRO)\%registered_mobile_device%\%backupsetID%

to

D:\MobileBackup1

1. From the old location, secure a copy of the previously backed up photos, videos and 2FA accounts.
2. Copy the previously backed up photos, videos 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.

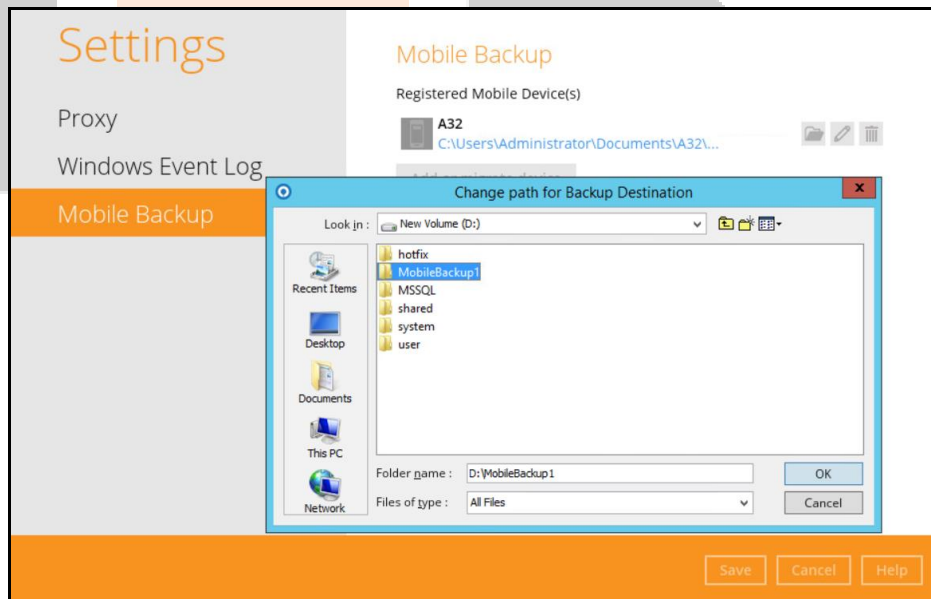
In this example, the old mobile backup destination is **C:\Users\Administrator\Documents\Advanced Client (B247PRO)\%registered_mobile_device%\ %backupsetID%**



4. **Change path for Backup Destination** screen will be displayed. Select a new mobile backup destination then click **OK**.

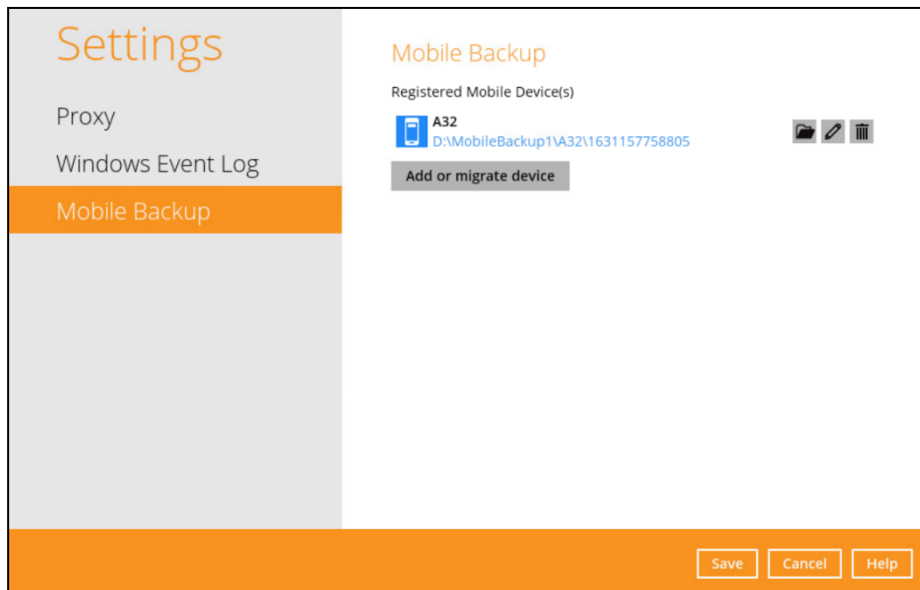
In this example, the new mobile backup destination will be **D:\MobileBackup1**.

180



5. 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.

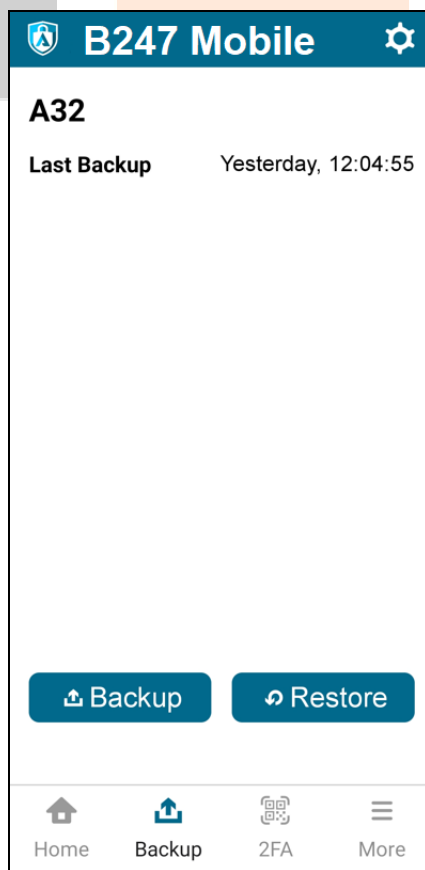


NOTE

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

181

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 and 2FA accounts are still available.

If Free up space is enabled on the Backup247 Mobile (B247MOB) app, it is strongly recommended to copy the previously backed up photos, videos, documents 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 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.

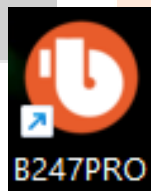
NOTE

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

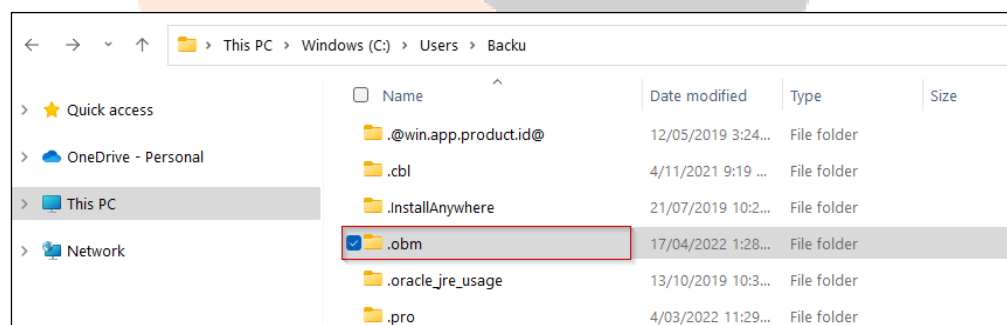
To change the mobile backup destination to a new machine, follow the instructions below:

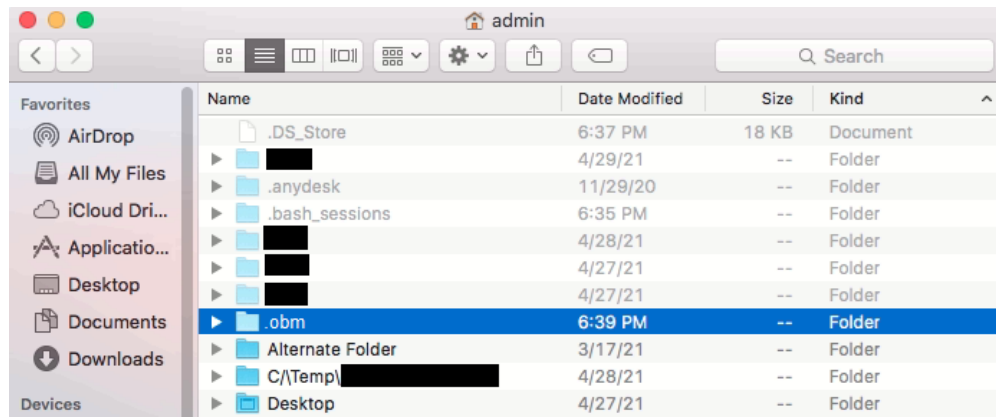
Example: Changing the mobile backup destination from an old Windows machine to a new macOS machine.

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



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





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

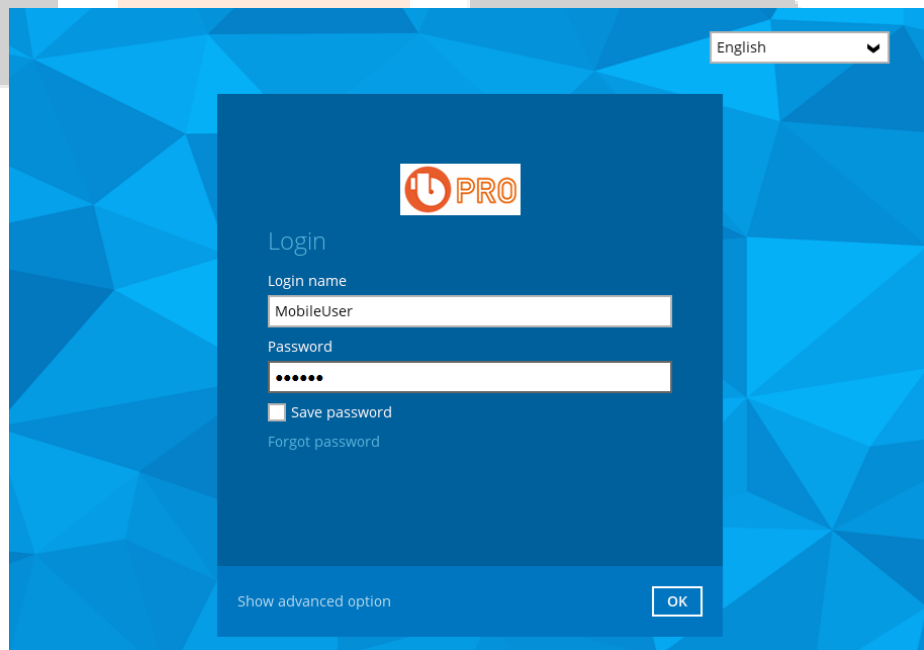
NOTE

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

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

```
#cd /Applications/Advanced Client (B247PRO).app/bin
#sh StopScheduler.sh
#sh Scheduler.sh
```

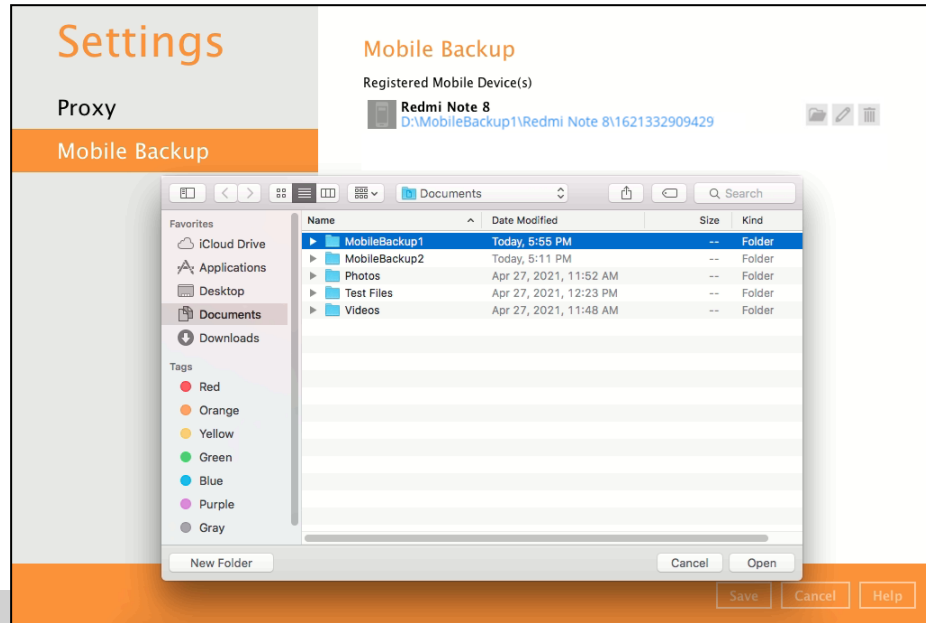
- Login to **Advanced Client (B247PRO)**. Enter the login name and password of your Advanced Client (B247PRO) account. Then, click **OK** to log in



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

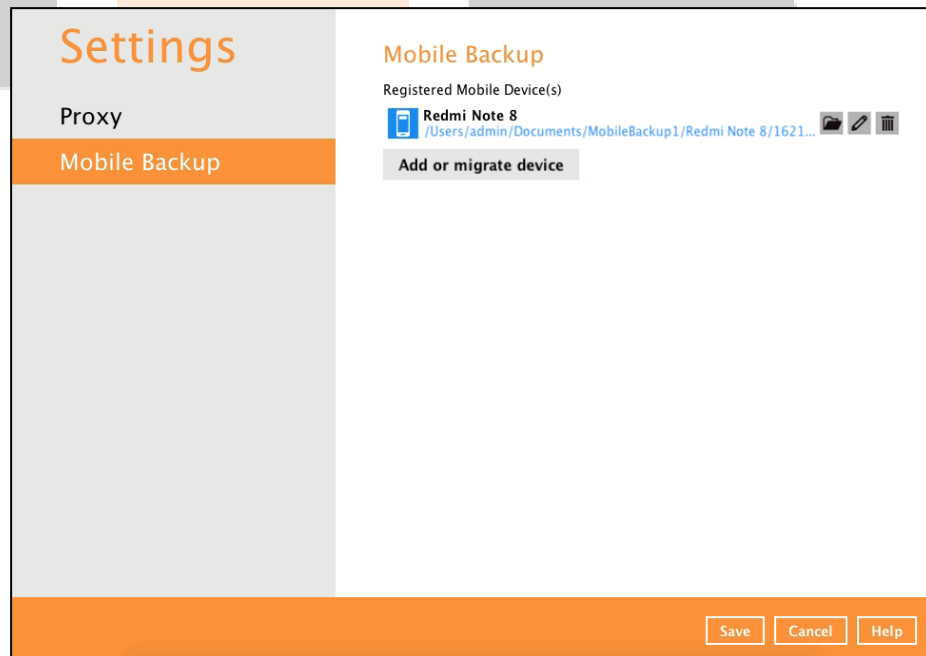
- A new screen will be displayed, select the new mobile backup destination then click **Open**.

In this example, the new mobile backup destination will be **/Users/admin/Documents/MobileBackup1**.



- Click **Save** to store the changes made.

Mobile backup destination is successfully changed to **/Users/admin/Documents/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:

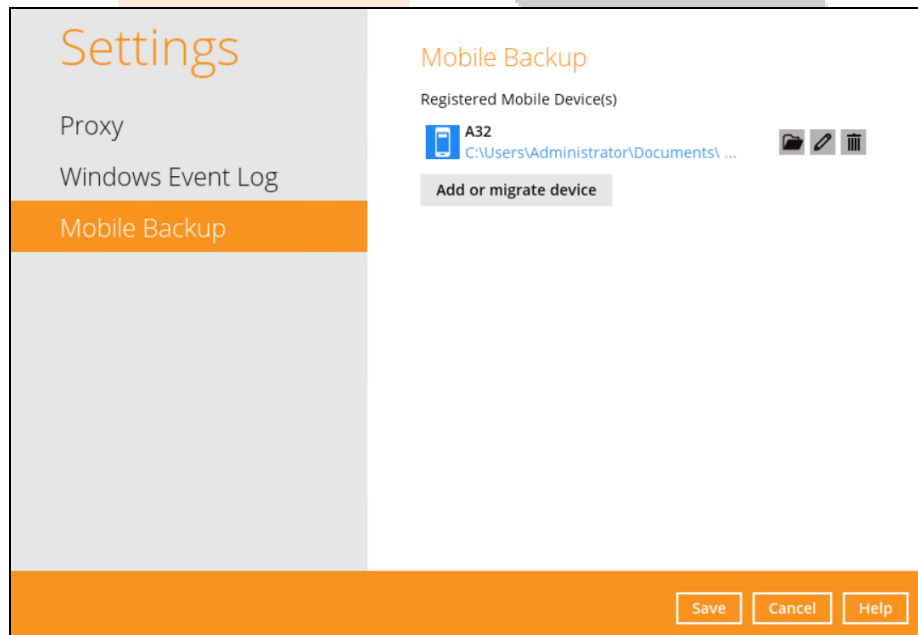
- a macOS machine to a Windows machine, refer to **Chapter 9.8.2** of the [Advanced Client \(B247PRO\) v8 Quick Start Guide for Mac.](#)
- a Linux machine to a Windows machine please refer to **Chapter 9.8.2** of the [Advanced Client \(B247PRO\) v8 Quick Start Guide for Linux \(GUI\).](#)

185

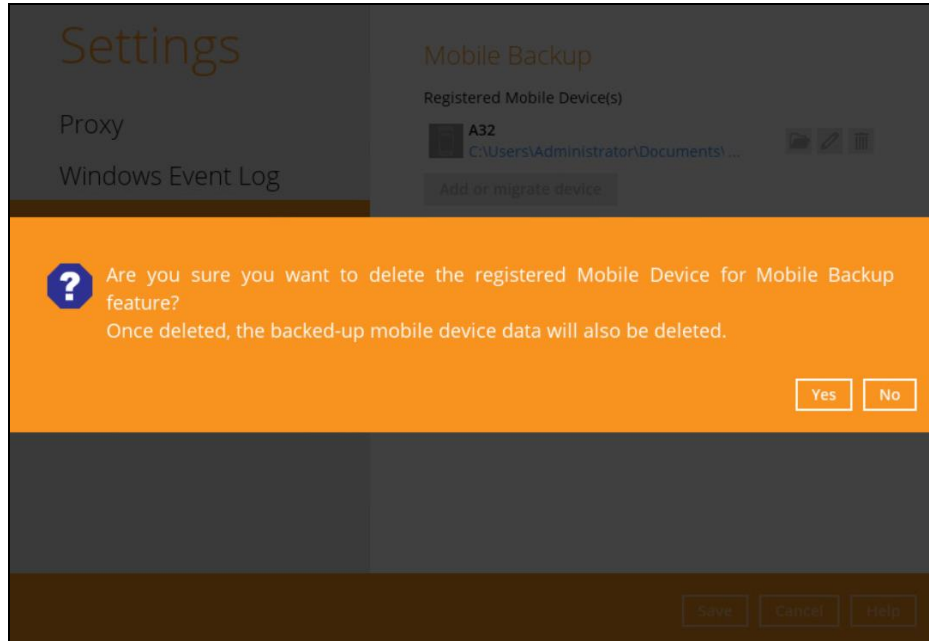
Remove one or more device(s) registered for Mobile Backup

To remove a mobile device, follow the instructions below:

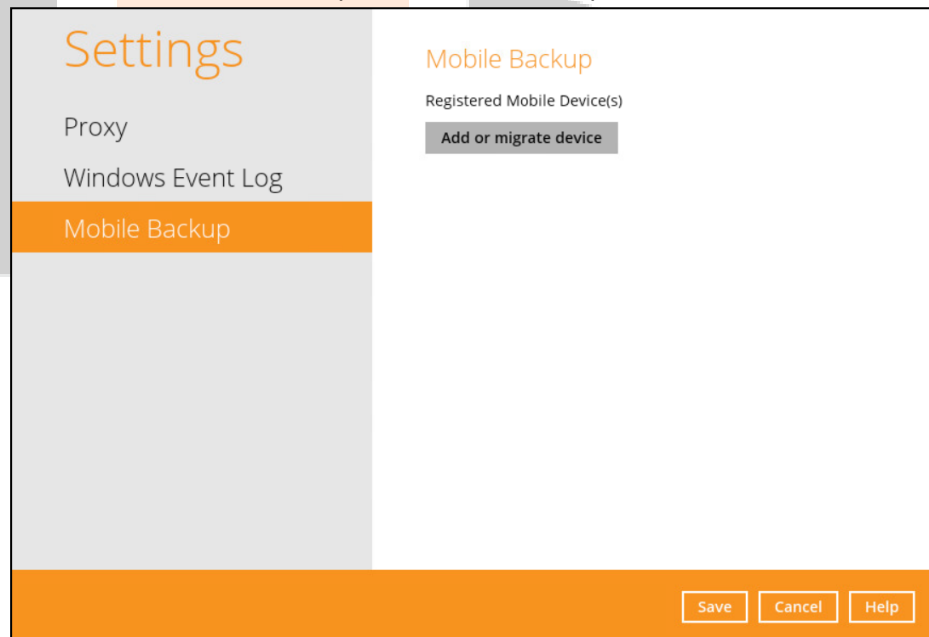
1. Click the **Delete**  icon on the right side of the registered mobile device.



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



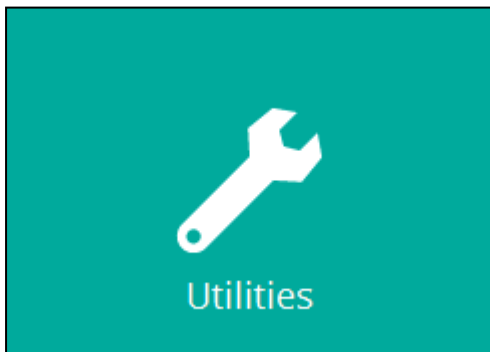
3. Mobile device is successfully removed along with any photos, videos, documents and 2FA accounts backed up in the mobile backup destination.



186

10.9 Utilities

This allows the 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

10.9.1 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:

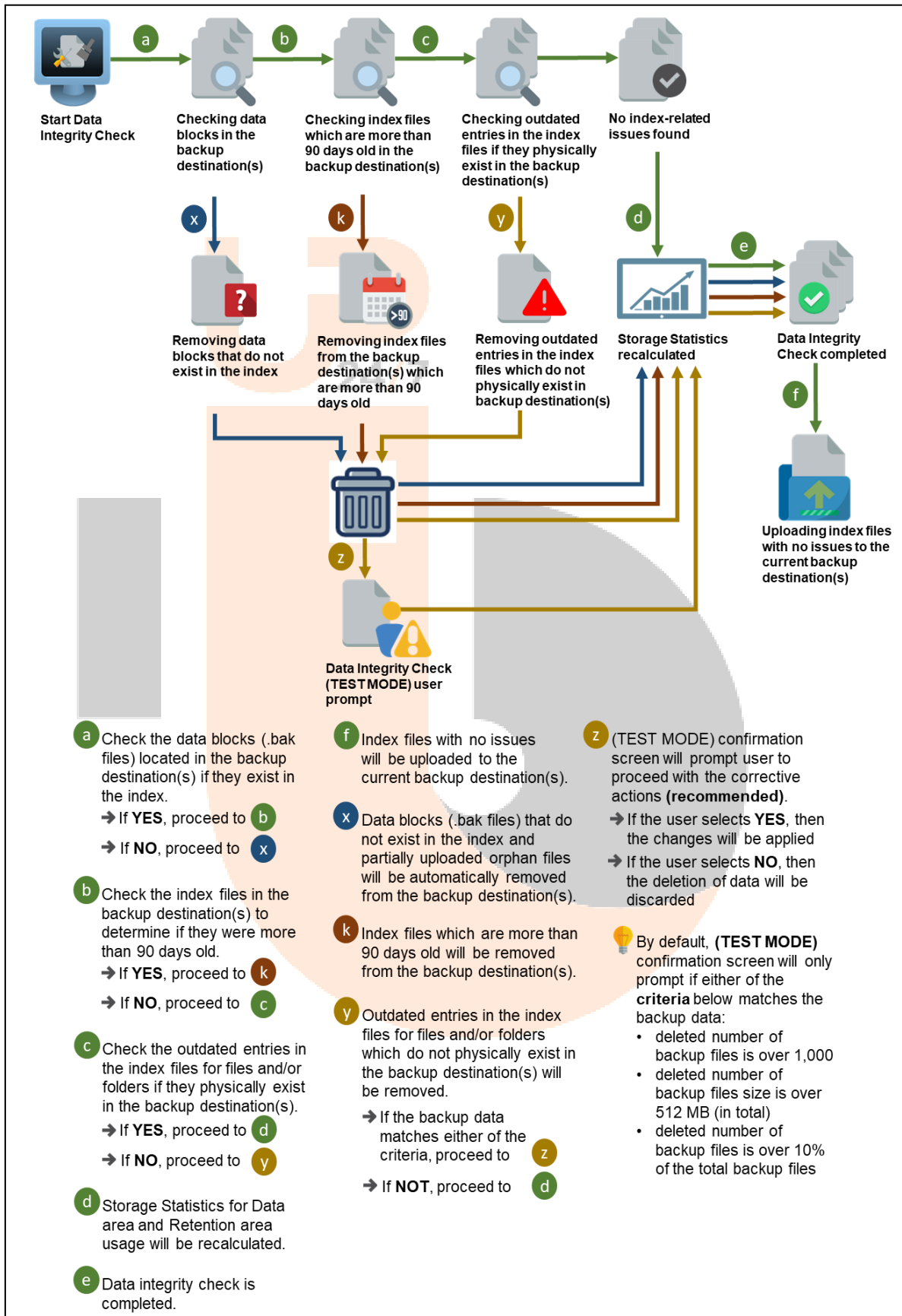
Settings	Function
<p>Option 1</p> <div style="border: 1px solid black; padding: 5px;"> <input type="checkbox"/> Run Cyclic Redundancy Check (CRC) during data integrity check <input type="checkbox"/> Rebuild index <div style="text-align: center; margin-top: 5px;">Start</div> </div>	<p>For checking of index and data.</p>
<p>Option 2</p> <div style="border: 1px solid black; padding: 5px;"> <input checked="" type="checkbox"/> Run Cyclic Redundancy Check (CRC) during data integrity check <input type="checkbox"/> Rebuild index <div style="text-align: center; margin-top: 5px;">Start</div> </div>	<p>For checking of index and integrity of files against the checksum file generated at the time of the backup job.</p>

<p>Option 3</p> <div style="border: 1px solid black; padding: 5px;"> <input type="checkbox"/> Run Cyclic Redundancy Check (CRC) during data integrity check <input checked="" type="checkbox"/> Rebuild index <input type="button" value="Start"/> </div>	<p>For checking and rebuilding of index.</p>
<p>Option 4</p> <div style="border: 1px solid black; padding: 5px;"> <input checked="" type="checkbox"/> Run Cyclic Redundancy Check (CRC) during data integrity check <input checked="" type="checkbox"/> Rebuild index <input type="button" value="Start"/> </div>	<p>For checking of index, integrity of files against the checksum file generated at the time of the backup job and rebuilding of index.</p>

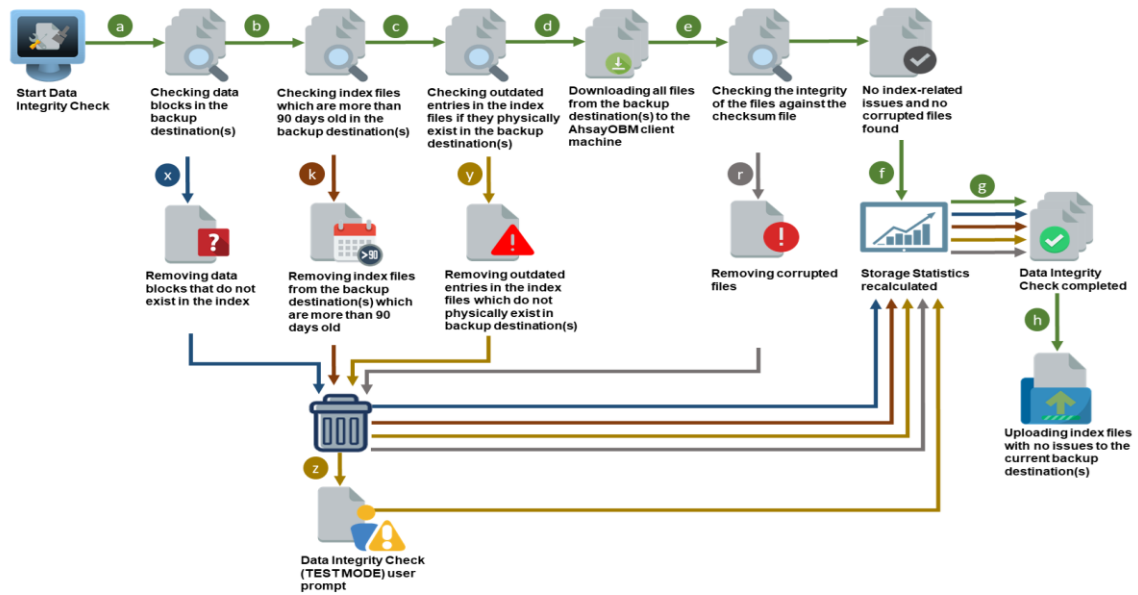
The following diagrams show the detailed process of the Data Integrity Check (DIC) in four (4) modes:

- **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**



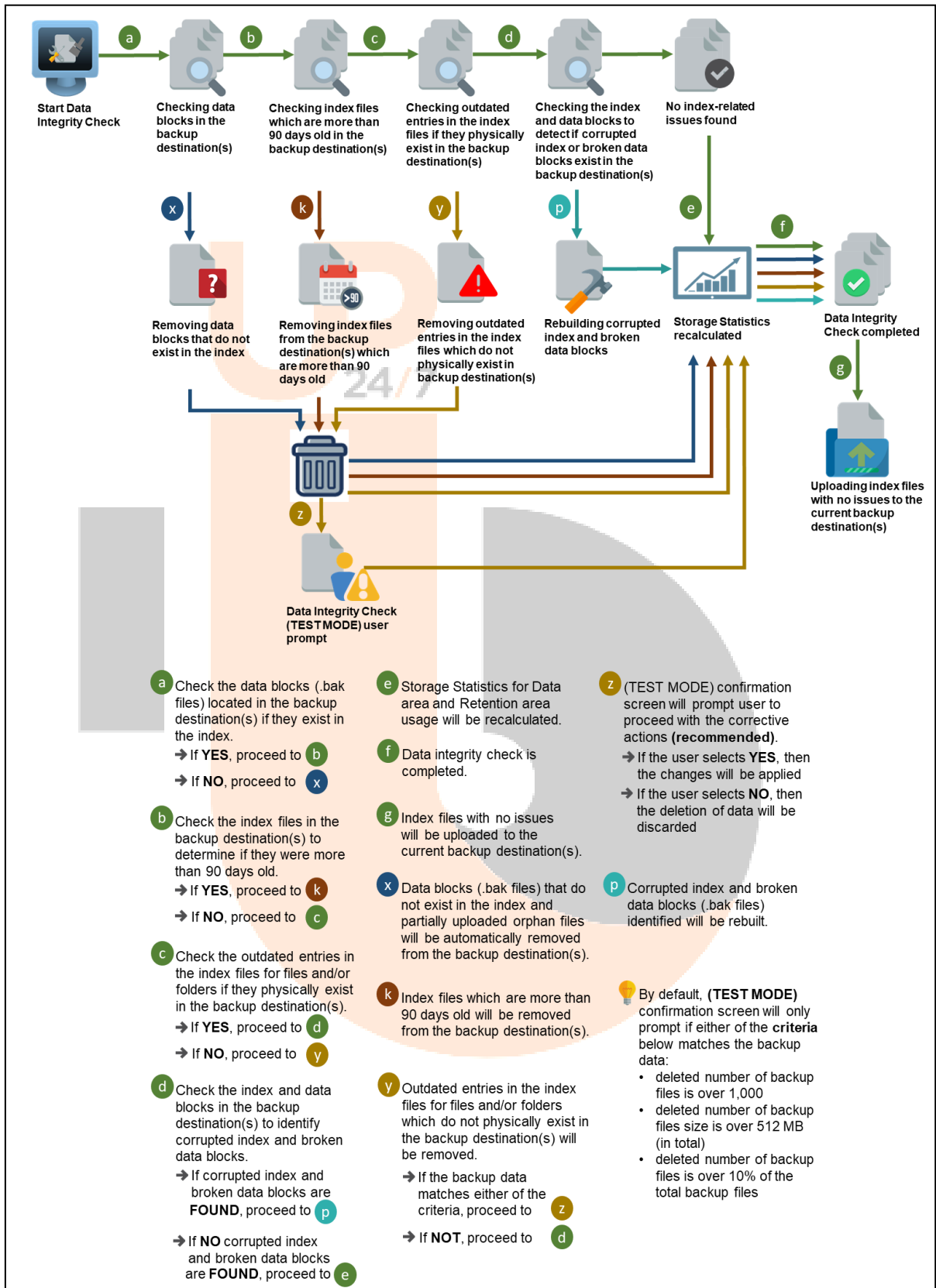
- a** Check the data blocks (.bak files) located in the backup destination(s) if they exist in the index.
→ If **YES**, proceed to **b**
→ If **NO**, proceed to **x**
- b** Check the index files in the backup destination(s) to determine if they were more than 90 days old.
→ If **YES**, proceed to **k**
→ If **NO**, proceed to **c**
- c** Check the outdated entries in the index files for files and/or folders if they physically exist in the backup destination(s).
→ If **YES**, proceed to **d**
→ If **NO**, proceed to **y**
- d** For **Run on Client (agent-based)** backup sets, files in the backup set are downloaded from the backup destination(s) to the **B247Pro** client machine.
For **Run on Server (agentless)** backup sets, proceed to **e**

- e** Check the integrity of files in the backup destination(s) against the checksum file generated at the time of the backup job.
→ If any discrepancy is **FOUND**, proceed to **r**
→ If **NO** discrepancy is found, proceed to **f**
- f** Storage Statistics for Data area and Retention area usage will be recalculated.
- g** Data integrity check is completed.
- h** Index files with no issues will be uploaded to the current backup destination(s).
- x** Data blocks (.bak files) that do not exist in the index and partially uploaded orphan files will be automatically removed from the backup destination(s).
- k** Index files which are more than 90 days old will be removed from the backup destination(s).

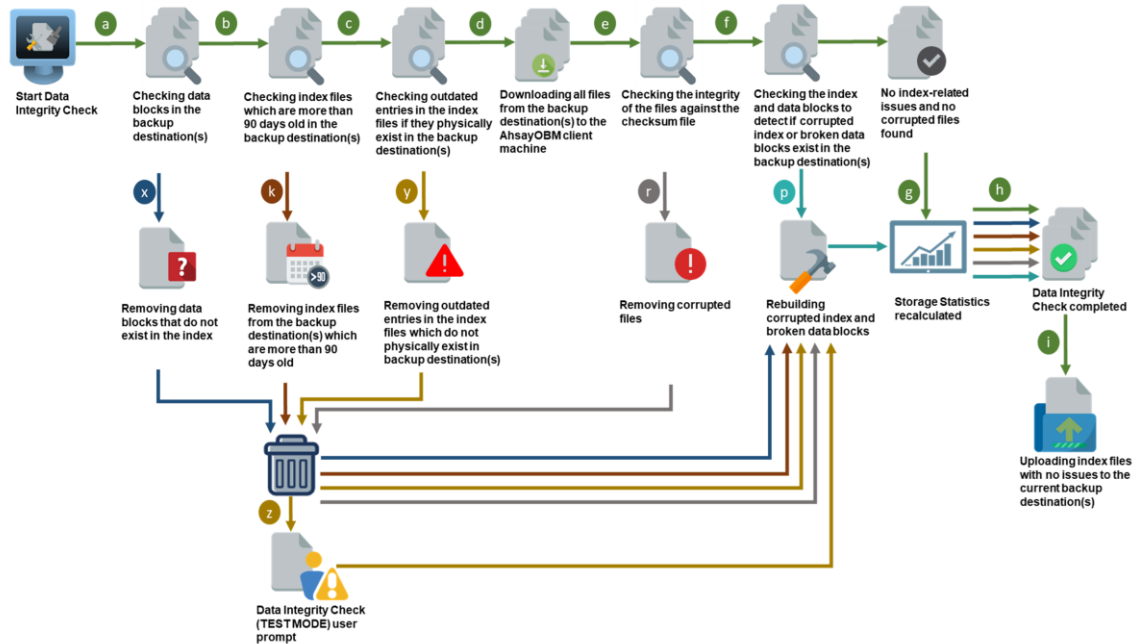
- y** Outdated entries in the index files for files and/or folders which do not physically exist in the backup destination(s) will be removed.
→ If the backup data matches either of the criteria, proceed to **z**
→ If **NOT**, proceed to **d**
- z** (TEST MODE) confirmation screen will prompt user to proceed with the corrective actions (**recommended**).
→ If the user selects **YES**, then the changes will be applied
→ If the user selects **NO**, then the deletion of data will be discarded
- r** Corrupted files will be automatically removed from the backup destination(s).

- !** By default, (TEST MODE) confirmation screen will only prompt if either of the criteria below matches the backup data:
 - deleted number of backup files is over 1,000
 - deleted number of backup files size is over 512 MB (in total)
 - deleted number of backup files is over 10% of the total backup files

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**



a Check the data blocks (.bak files) located in the backup destination(s) if they exist in the index.
→ If **YES**, proceed to **b**
→ If **NO**, proceed to **x**

b Check the index files in the backup destination(s) to determine if they were more than 90 days old.
→ If **YES**, proceed to **k**
→ If **NO**, proceed to **c**

c Check the outdated entries in the index files for files and/or folders if they physically exist in the backup destination(s).
→ If **YES**, proceed to **d**
→ If **NO**, proceed to **y**

d For **Run on Client (agent-based)** backup sets, files in the backup set are downloaded from the backup destination(s) to the B247Pro client machine.
For **Run on Server (agentless)** backup sets, proceed to **e**

e Check the integrity of files in the backup destination(s) against the checksum file generated at the time of the backup job.
→ If any discrepancy is **FOUND**, proceed to **r**
→ If **NO** discrepancy is found, proceed to **f**

f Check the index and data blocks in the backup destination(s) to identify corrupted index and broken data blocks.
→ If corrupted index and broken data blocks are **FOUND**, proceed to **p**
→ If **NO** corrupted index and broken data blocks are found, proceed to **g**

g Storage Statistics for Data area and Retention area usage will be recalculated.

h Data integrity check is completed.

i Index files with no issues will be uploaded to the current backup destination(s).

x Data blocks (.bak files) that do not exist in the index and partially uploaded orphan files will be automatically removed from the backup destination(s).

k Index files which are more than 90 days old will be removed from the backup destination(s).

y Outdated entries in the index files for files and/or folders which do not physically exist in the backup destination(s) will be removed.
→ If the backup data matches either of the criteria, proceed to **z**
→ If **NOT**, proceed to **d**

z (TEST MODE) confirmation screen will prompt user to proceed with the corrective actions (**recommended**).
→ If the user selects **YES**, then the changes will be applied
→ If the user selects **NO**, then the deletion of data will be discarded

r Corrupted files will be automatically removed from the backup destination(s).

p Corrupted index and broken data blocks (.bak files) identified will be rebuilt.

By default, (TEST MODE) confirmation screen will only prompt if either of the **criteria** below matches the backup data:

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

Utilities

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

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 Help

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 that the data integrity check is completed with error(s) and had skipped a backup set with an active backup job.

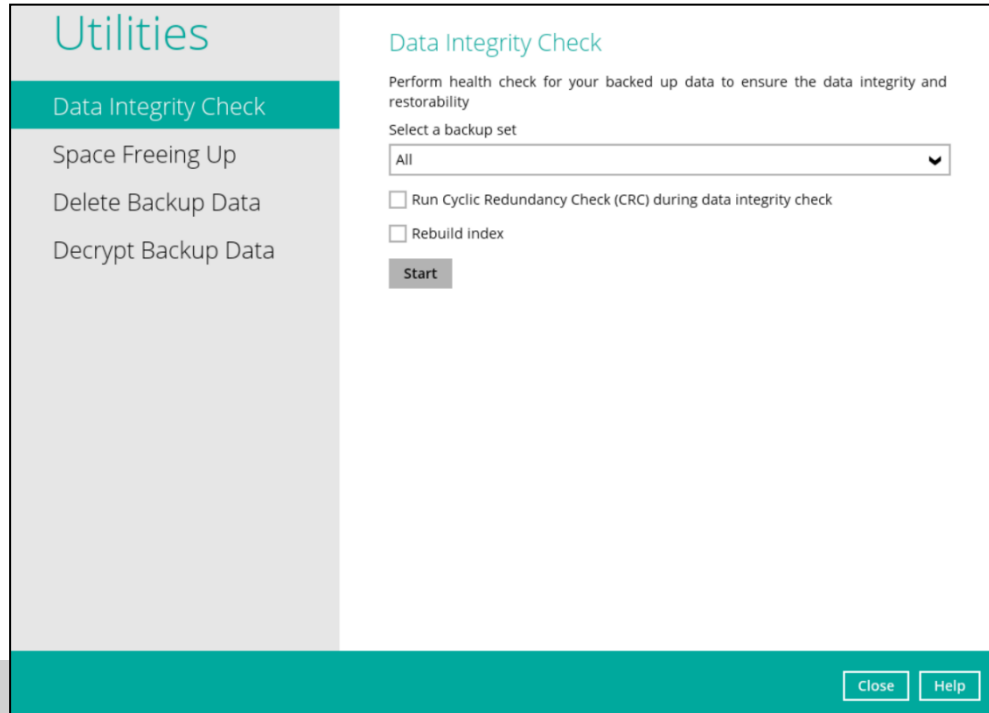
The following screenshot is an example of a Data Integrity Check completed with error(s). A Data Integrity Check is run on a backup set with an active backup job running which resulted the Data Integrity Check to stop with error(s). Clicking the **View log** button will display the details of the Data Integrity Check job error(s).

194

Type	Log	Time
i	Start [B247PRO v9.1.0.0]	11/03/2021 17:23:02
i	Start data integrity check on backup set "BackupSet-8(1635931304079)" all destination, crc disabled, rebuild index disabled	11/03/2021 17:23:02
x	Skipped Backup Set = "BackupSet-8". Reason = "Backup job "BackupSet-8" is still running."	11/03/2021 17:23:02
x	Finished data integrity check with error on backup set "BackupSet-8(1635931304079)" all destination, crc disabled, rebuild index disabled	11/03/2021 17:23:02
i	Completed data integrity check on backup set "BackupSet-8(1635931304079)" all destination, crc disabled, rebuild index disabled	11/03/2021 17:23:02

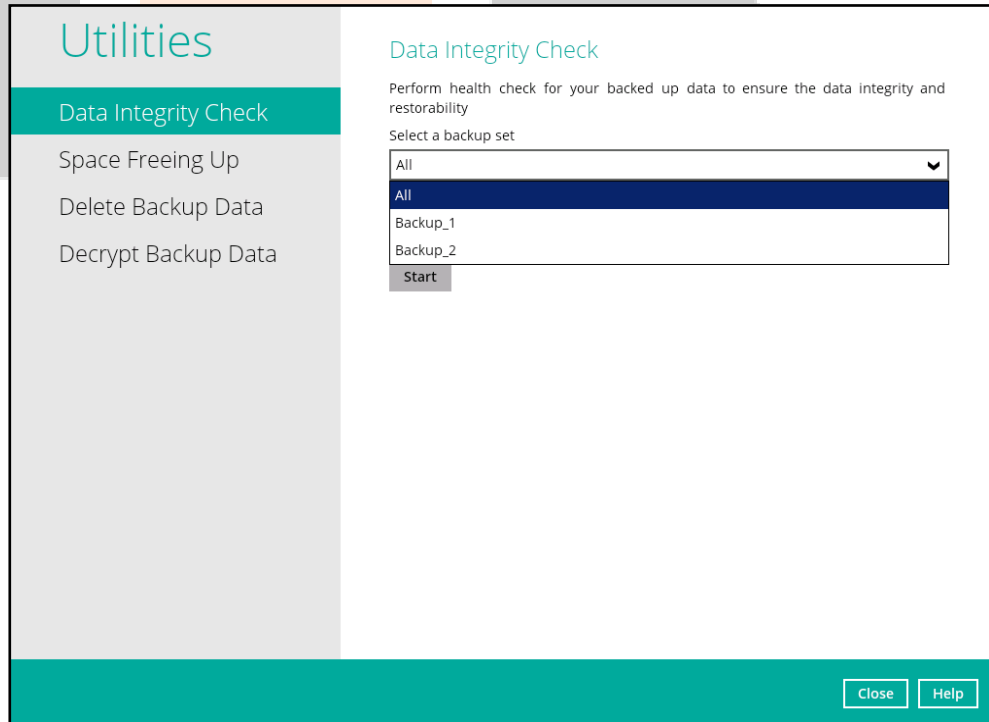
To perform a Data Integrity Check, follow the instructions below:

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

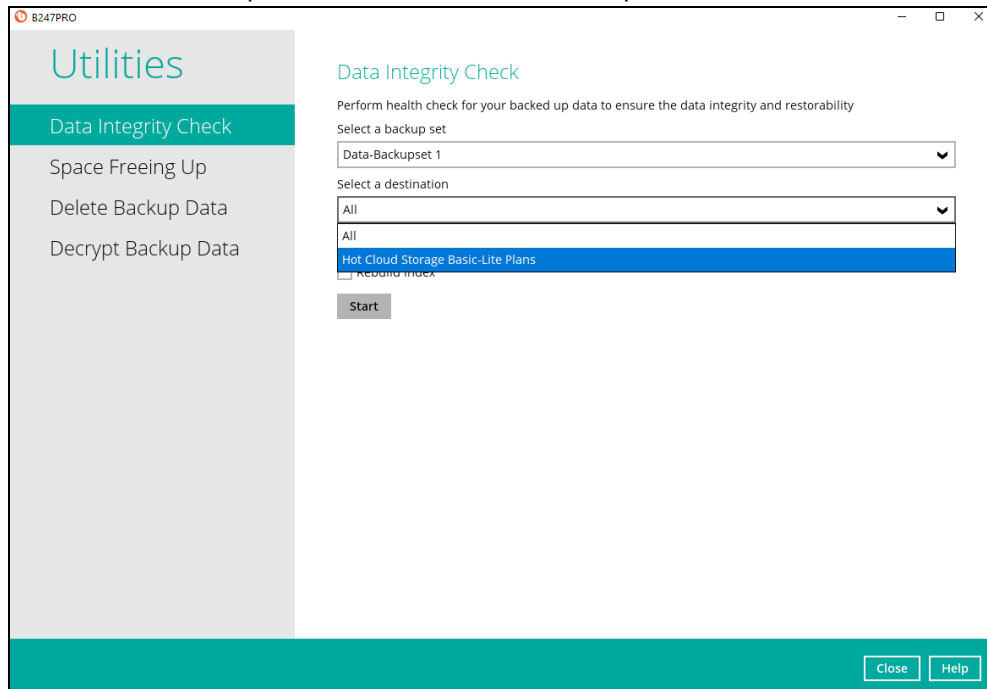


2. Click the drop-down button to select a backup set.

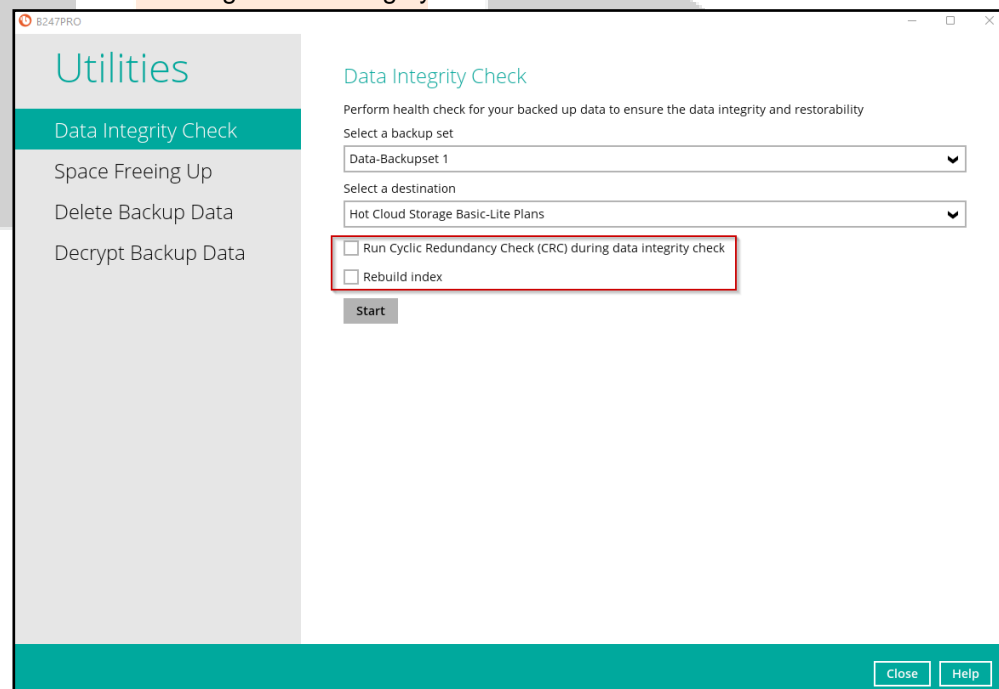
195



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



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



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 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

NOTES

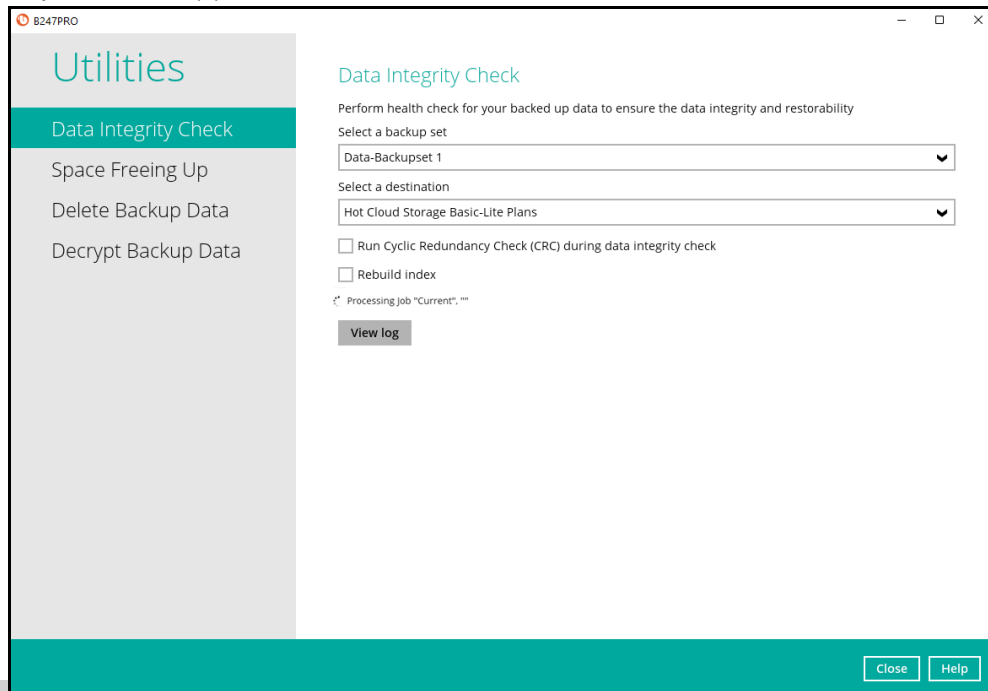
1. For user(s) with metered internet connection, additional data charges may be incurred if the Cyclic Redundancy Check (CRC) is enabled. As CRC data involves downloading the data from the backup destination(s) to the client machine to perform this check.
2. To find out how much data is downloaded from the backup destination(s) for the CRC check, please refer the value for **Utilities** in the [Data Transfer statistics](#) in Chapter 10.6.3.

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.

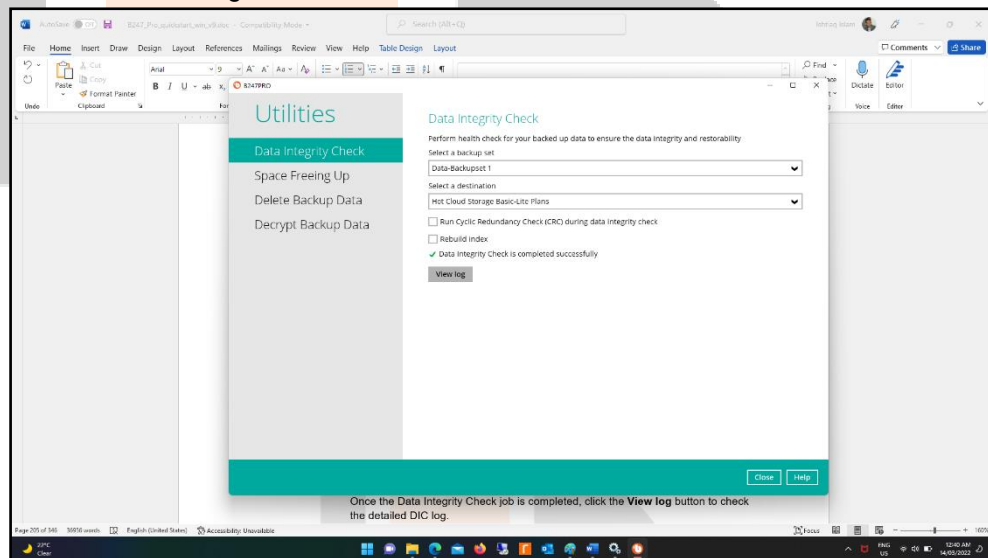
5. Click the **Start** button to begin the Data Integrity Check.

6. The Data Integrity Check will start running on the selected backup set(s) and backup destination(s).

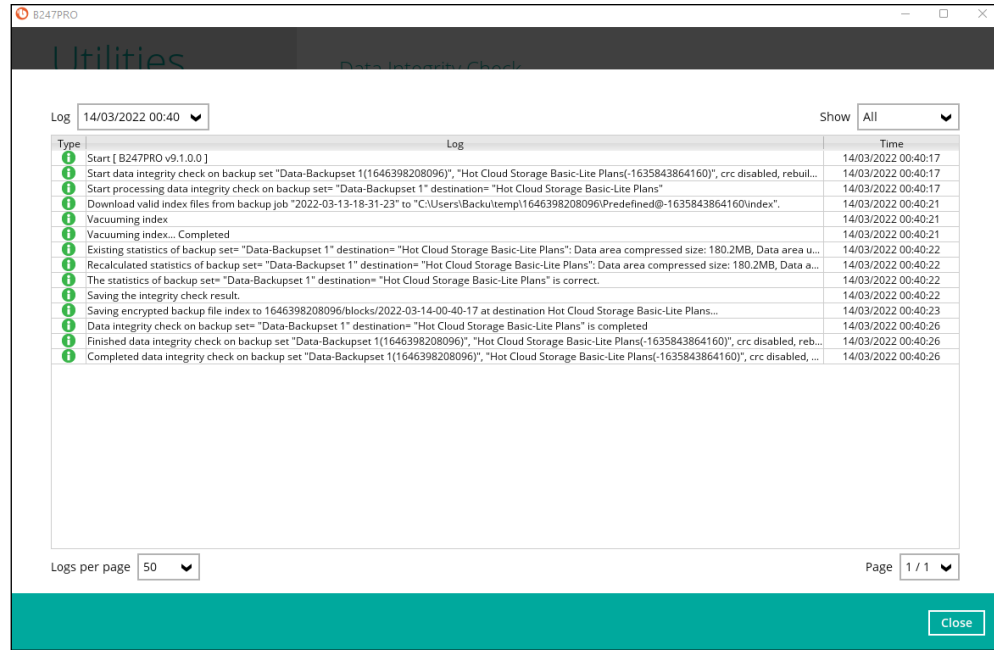


Once the Data Integrity Check job is completed, click the **View log** button to check the detailed DIC log.

198



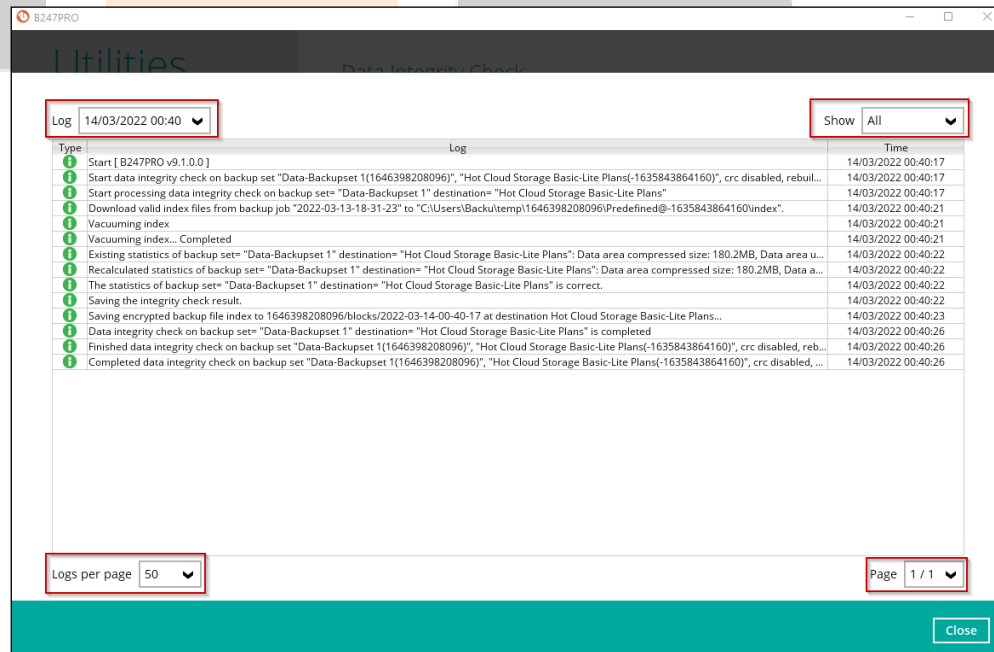
The detailed log of Data Integrity Check process will be displayed.

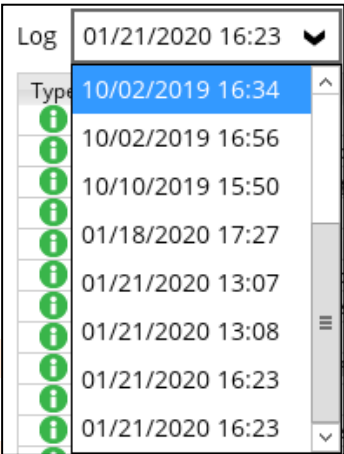
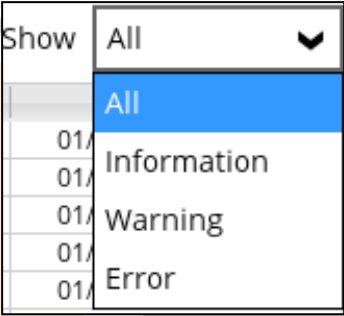
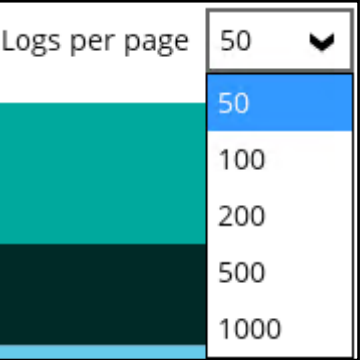
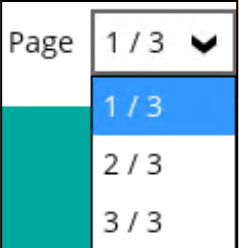


The following options can be used for further viewing of the detailed DIC log:

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

199



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).
Logs per page		This option allows user to choose the displayed number of logs per page.
Page		This option allows user to navigate the logs to the next page(s).

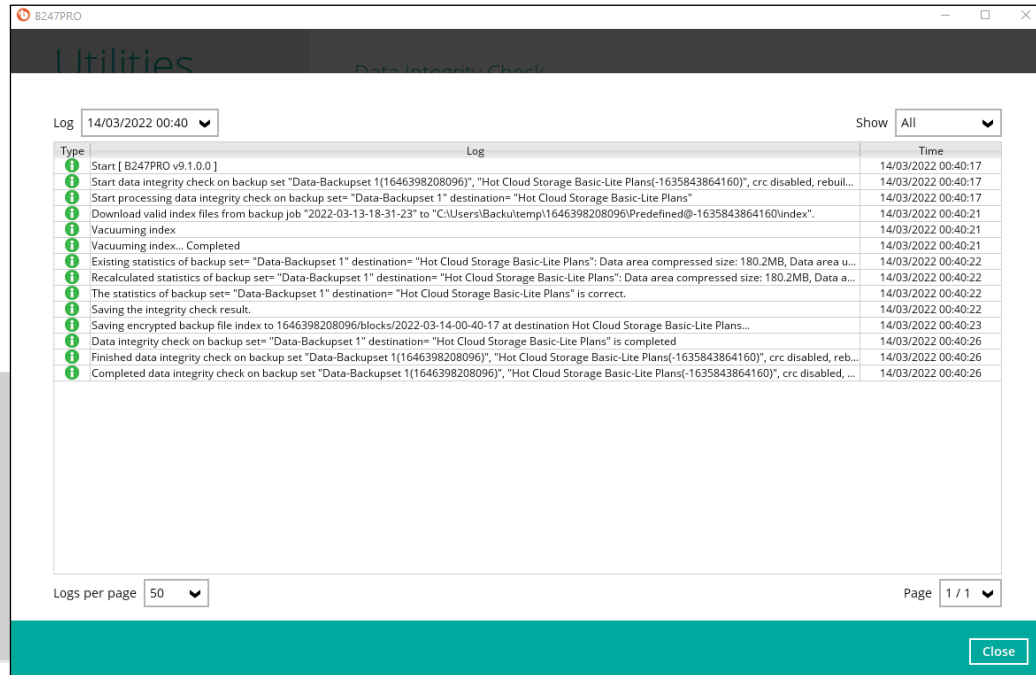
200

Data Integrity Check Result

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

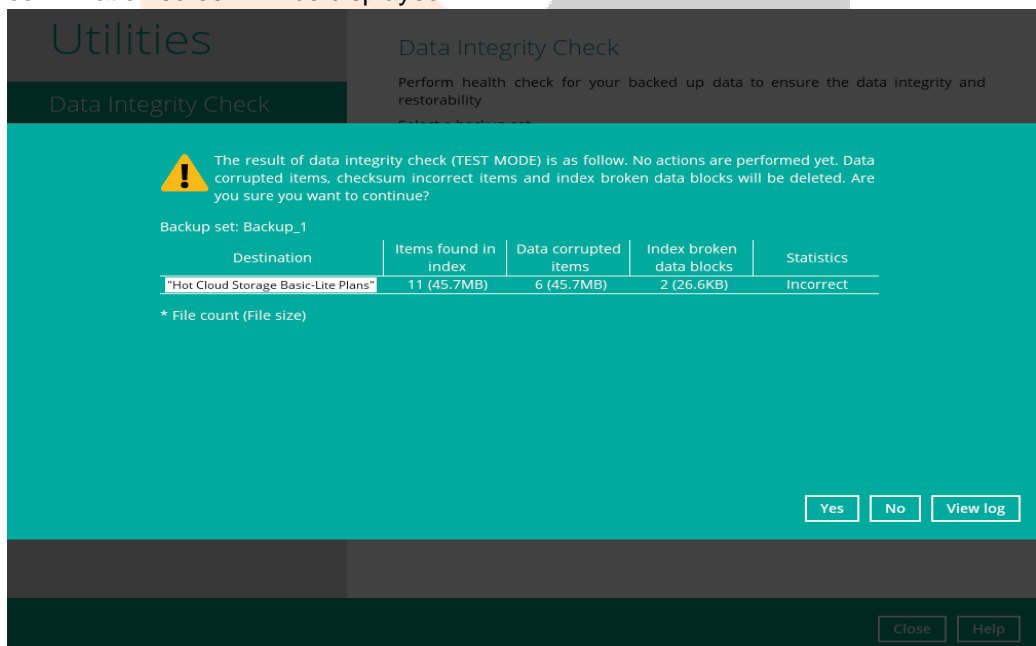
- Data Integrity Check is completed successfully with no data corruption or index-related issues detected;
- Corrupted data (e.g., index files, checksum files and/or broken data blocks) has been detected

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



201

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)

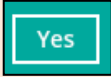
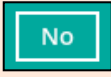

Test Mode confirmation

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

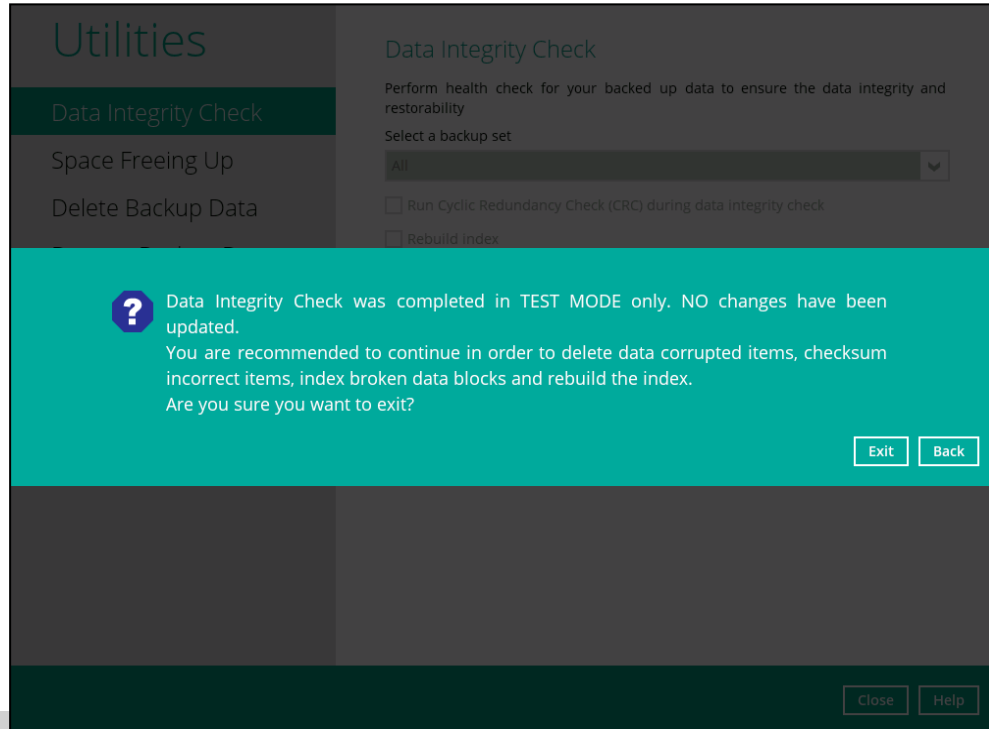
- deleted number of backup files is over 1,000
- deleted number of backup file size is over 512 MB (in total)
- deleted number of backup files is over 10% of the total backup files

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.

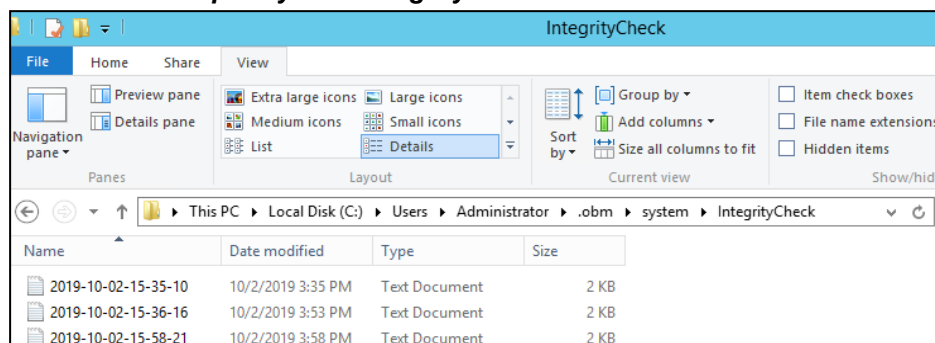
If the **Back** button is clicked, it will go back to the (TEST MODE) confirmation screen.

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 Advanced Client (B247PRO) client, they can also be viewed on the file system of the Advanced Client (B247PRO) client machine. For Advanced Client (B247PRO) on Windows, the DIC logs are in the following directory:

%UserProfile%\pro\system\IntegrityCheck

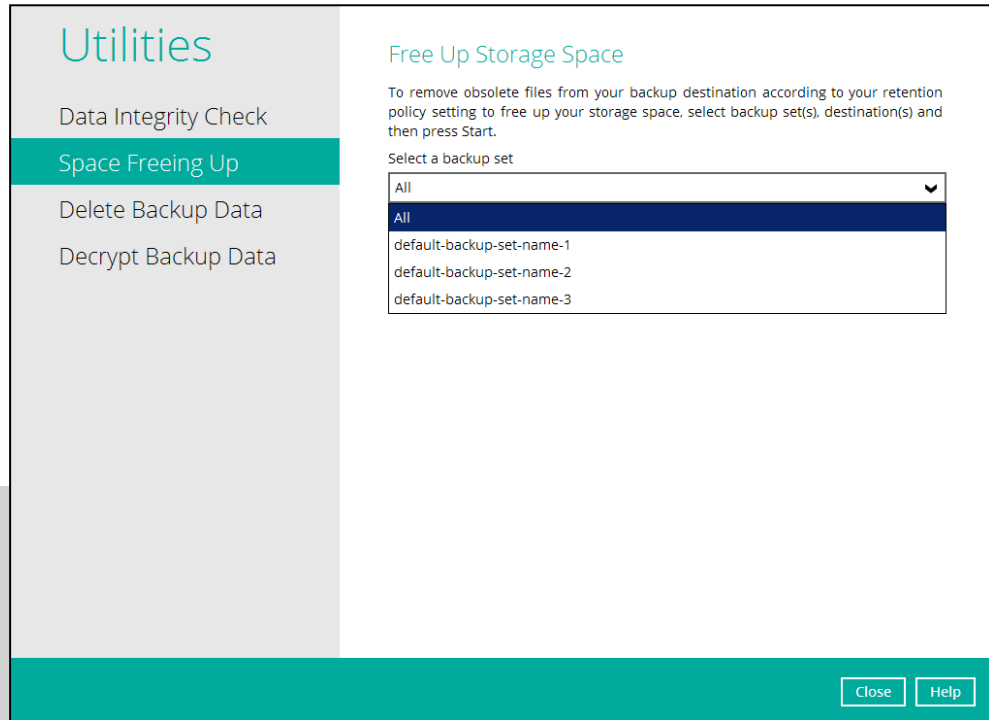


10.9.2 Space Freeing Up

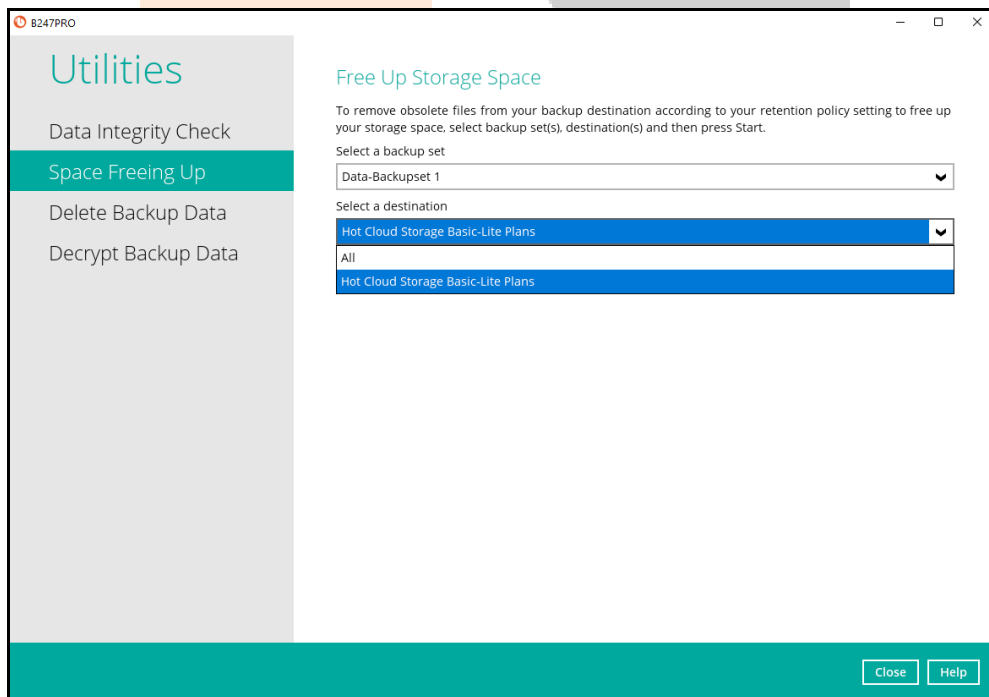
This feature is used to remove obsolete file(s) from your backup set and destination (manually start Retention Policy). After the Space Freeing Up job is completed, the storage statistics of the backup set(s) are updated.

To perform Space Freeing Up, follow the instructions below:

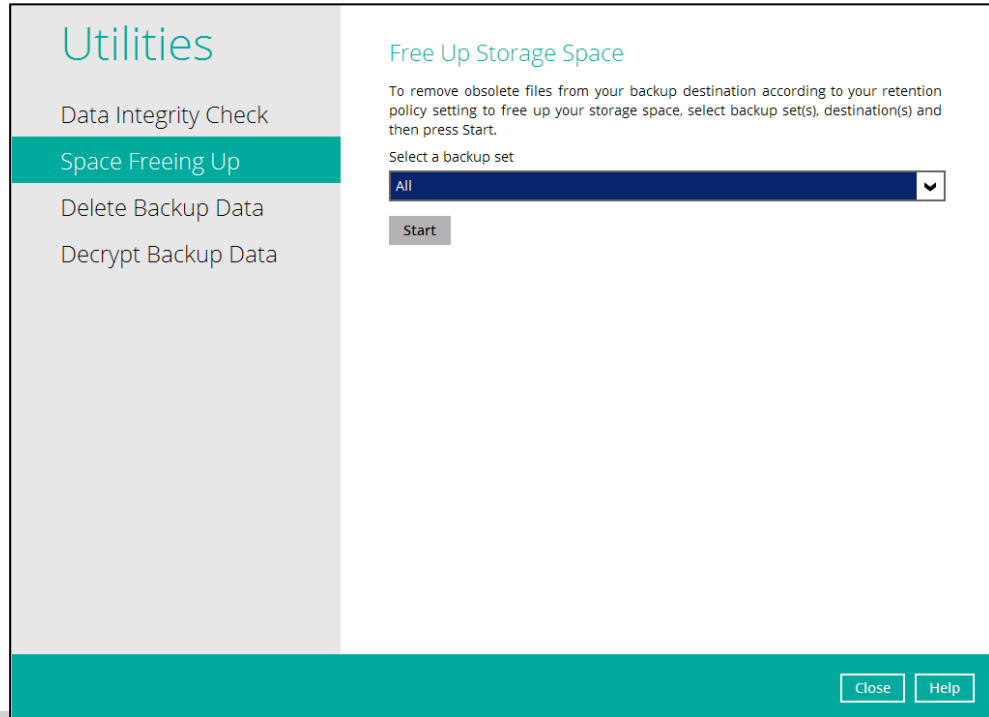
1. Select a backup set from the drop-down list.



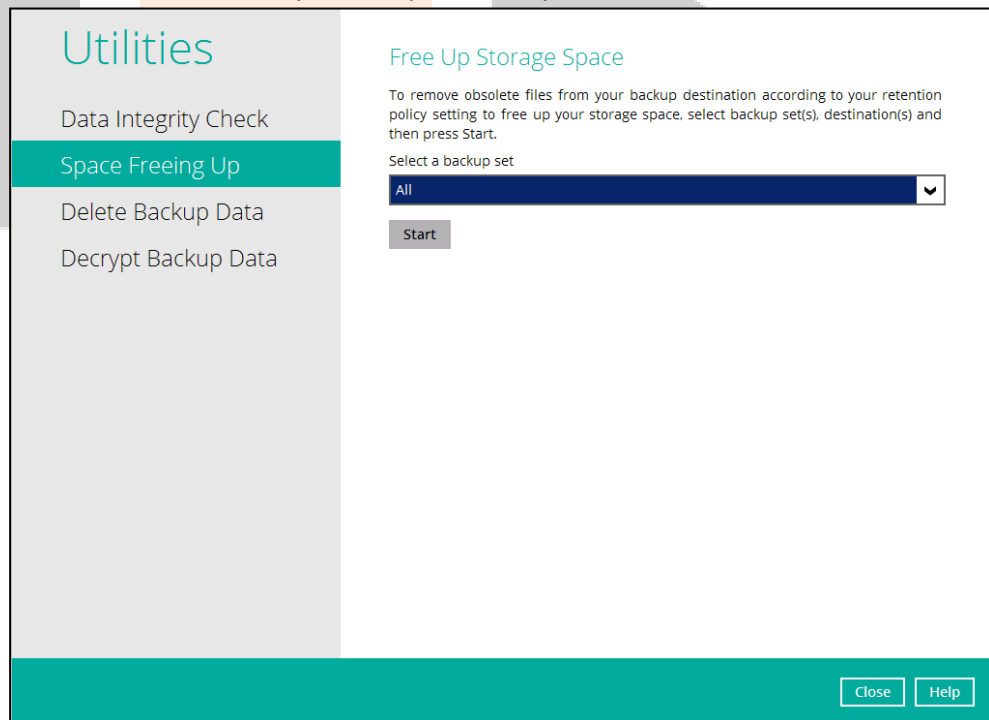
If you select a specific backup set, then you will also have to select a specific destination or all destinations.



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.



205

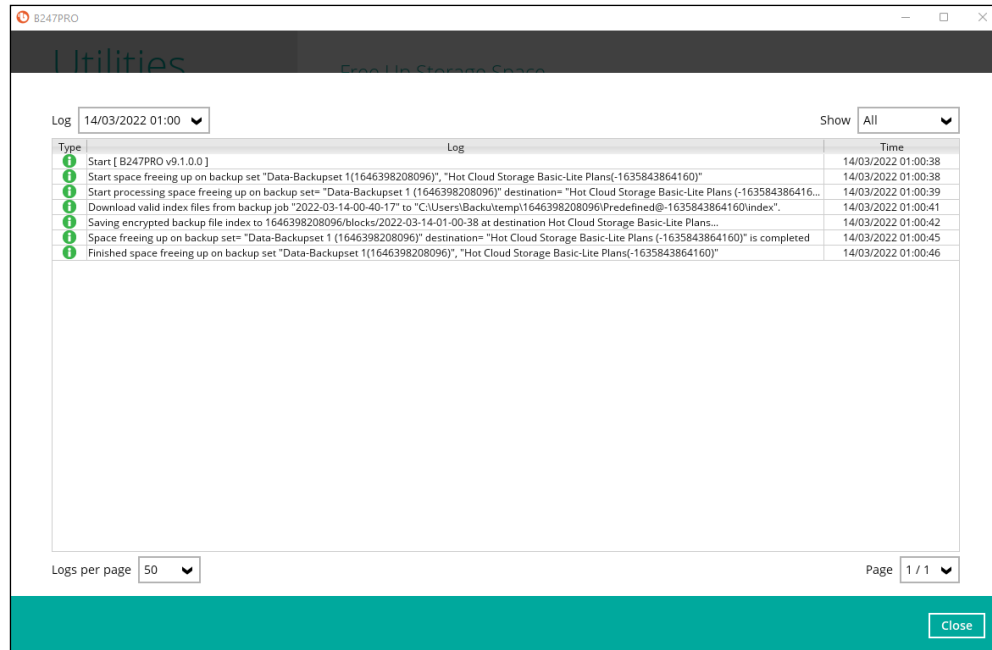
- Space freeing job will start running on the selected backup set(s) and backup destination(s).

The screenshot shows the 'Utilities' sidebar on the left with 'Space Freeing Up' selected. The main panel is titled 'Free Up Storage Space' and contains the following text: '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.' Below this are two dropdown menus: 'Select a backup set' with 'default-backup-set-name-1' selected, and 'Select a destination' with 'All' selected. A status message reads: 'Start processing space freeing up on backup set= "default-backup-set-name-1 (1...'. A 'Stop' button is visible below the message. At the bottom right of the panel are 'Close' and 'Help' buttons.

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

206

The screenshot shows the same 'Utilities' sidebar. The main panel is titled 'Free Up Storage Space' and contains the following text: '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.' Below this are two dropdown menus: 'Select a backup set' with 'default-backup-set-name-1' selected, and 'Select a destination' with 'All' selected. A status message with a green checkmark reads: 'Space freeing up is completed successfully'. A 'View log' button is visible below the message. At the bottom right of the panel are 'Close' and 'Help' buttons.

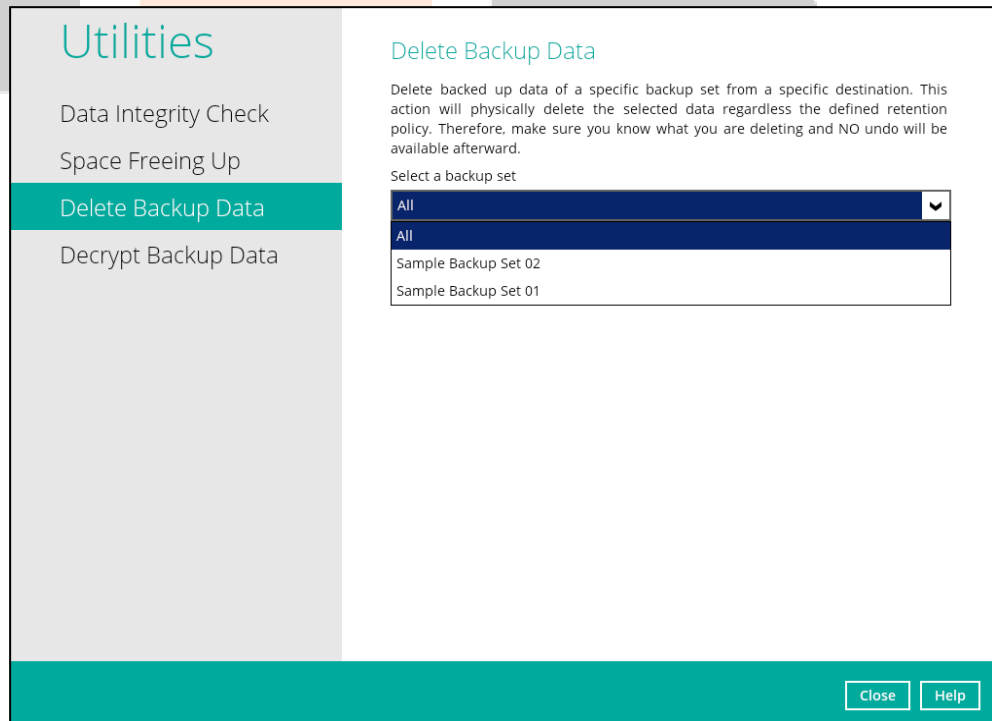


10.9.3 Delete Backup Data

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.

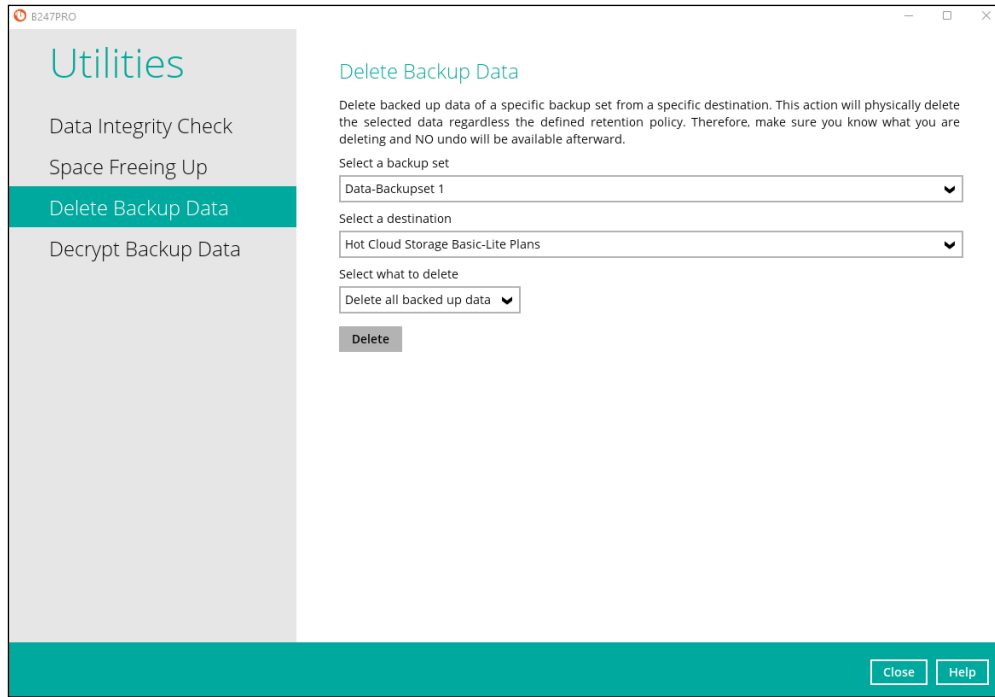
To perform deletion of backup data, follow the instructions below:

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

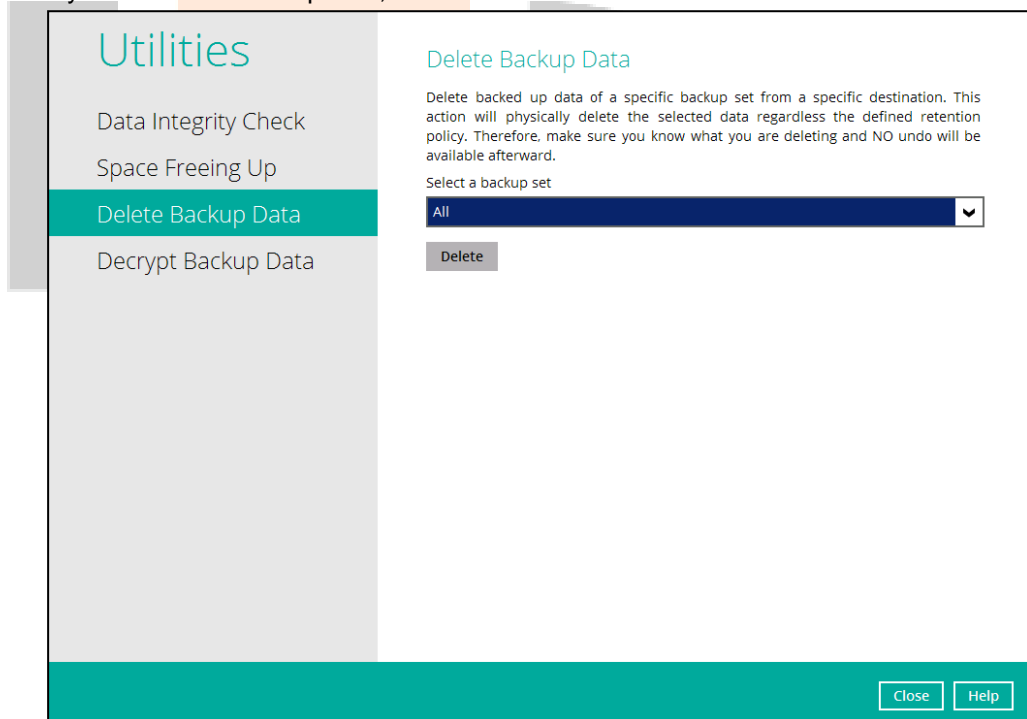


NOTE: This will only delete the backed-up files in a backup set(s) and destination(s), but the backup set and destination will remain.

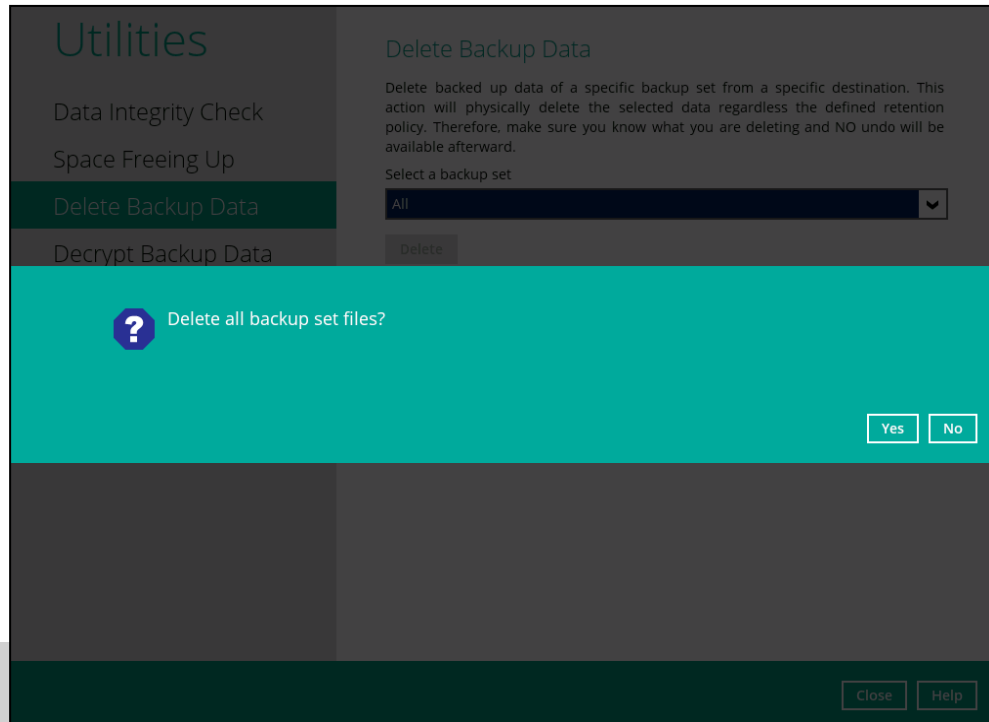
If you select a specific backup set, then you will also have to select a specific destination or all destinations.



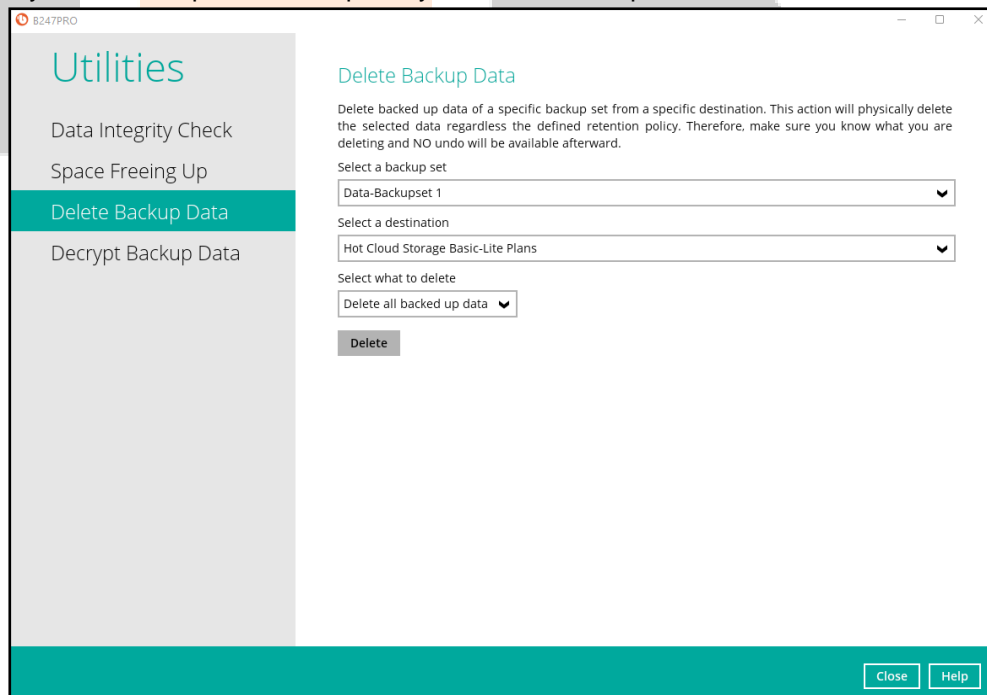
If you select **All** backup sets, then there is no need to select a destination.



- 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.

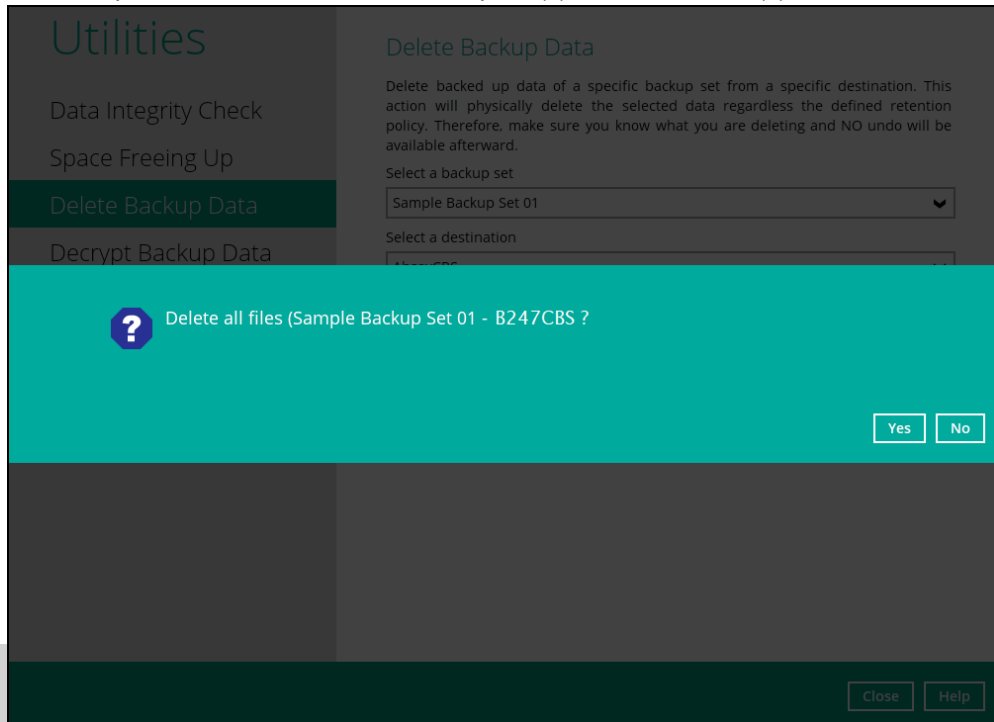


If you select a specific destination, there are two (2) available options for the type of files you wish to delete.

- Delete all backed-up data
- Choose from ALL files

Delete all backed-up data

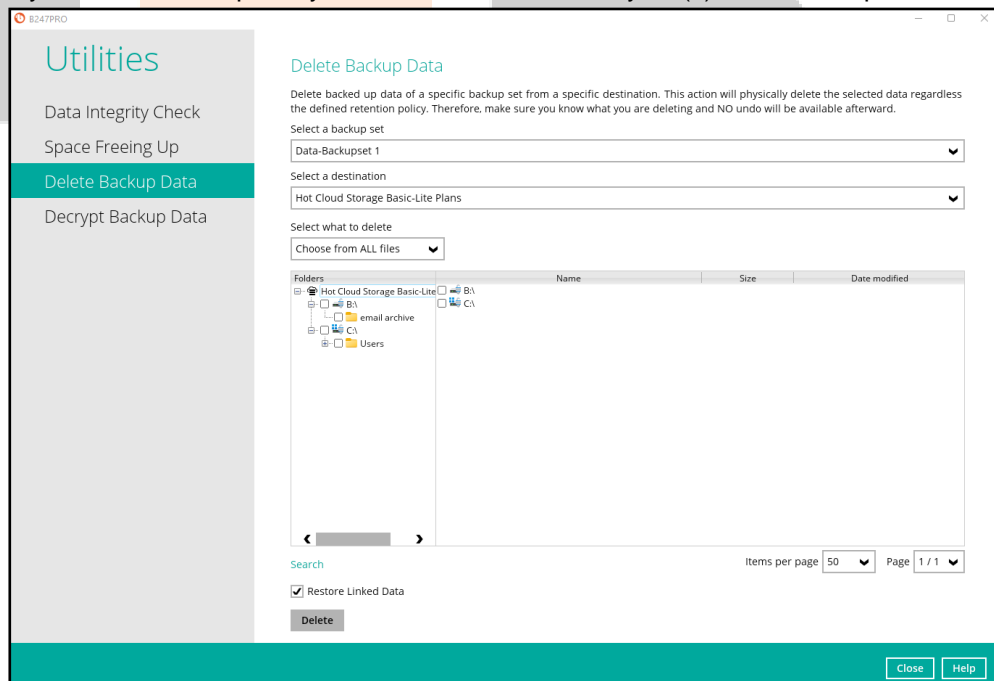
If you choose this option, the following message will be displayed. By clicking **Yes**, all backed up data from the selected backup set(s) and destination(s) will be deleted.



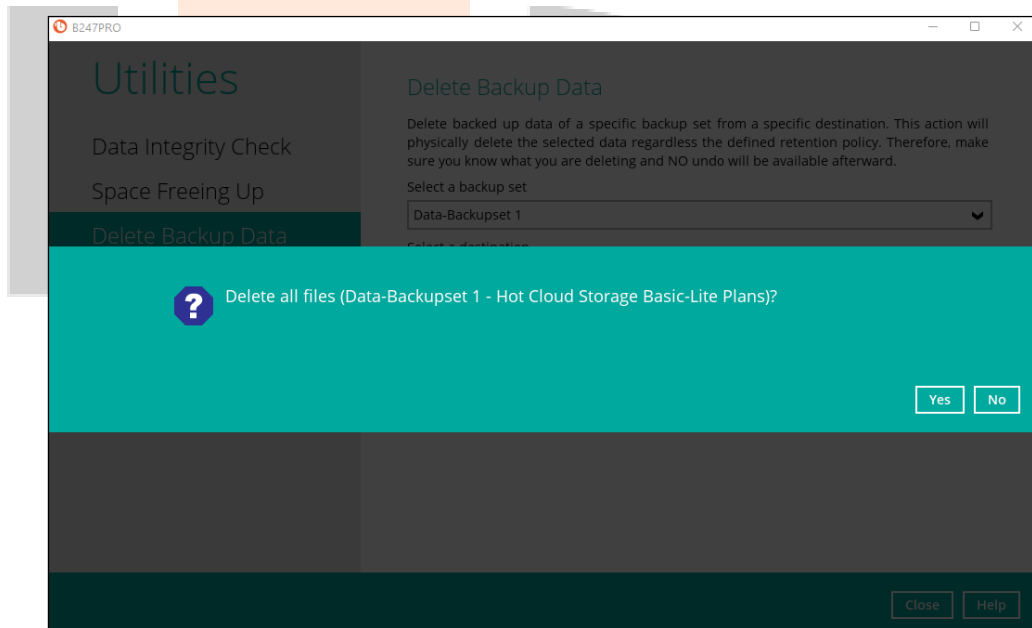
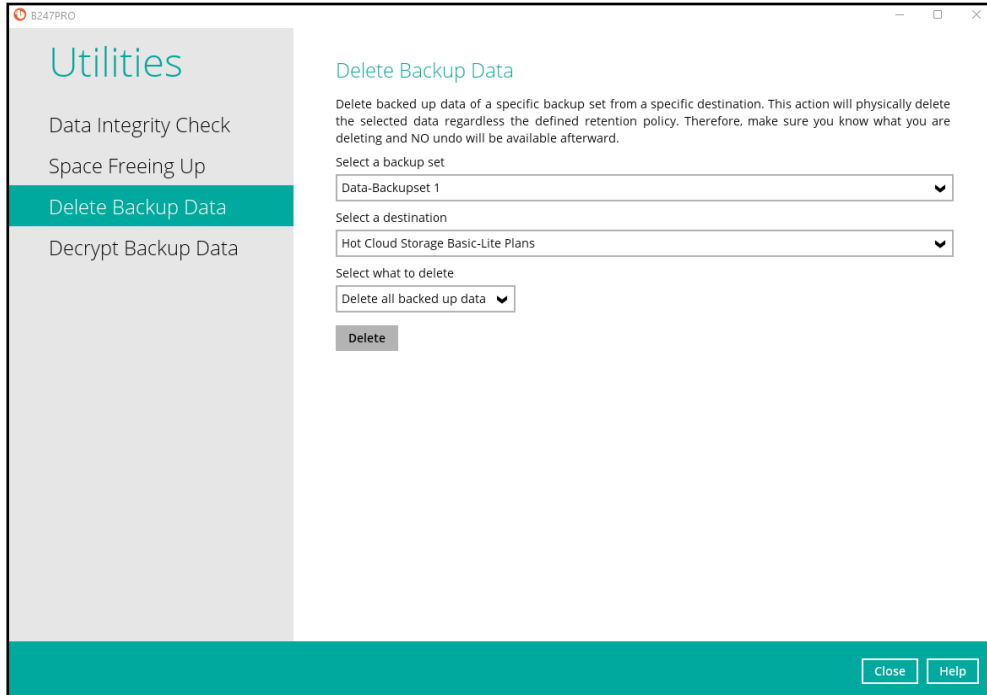
210

Choose from ALL files

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

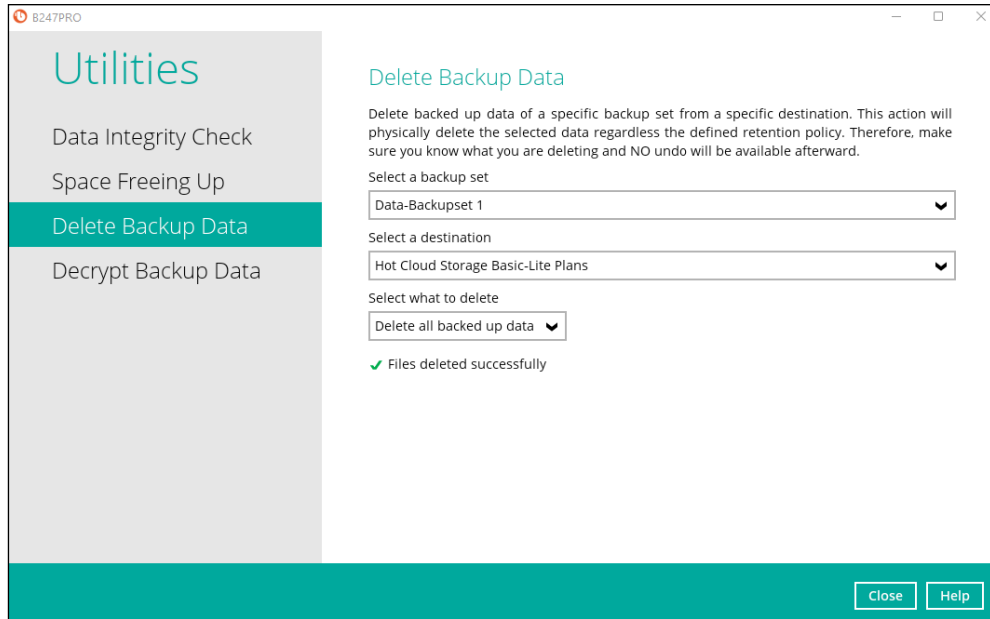


3. Click the **Delete** button, then click **Yes** to start the deletion of files.



211

4. Files are successfully deleted.

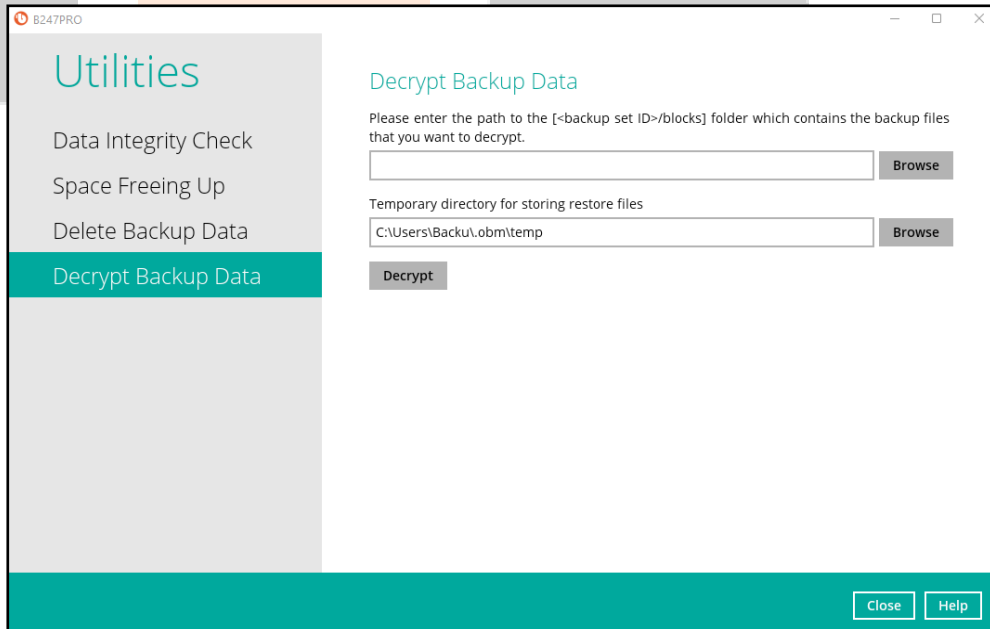


10.9.4 Decrypt Backup Data

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

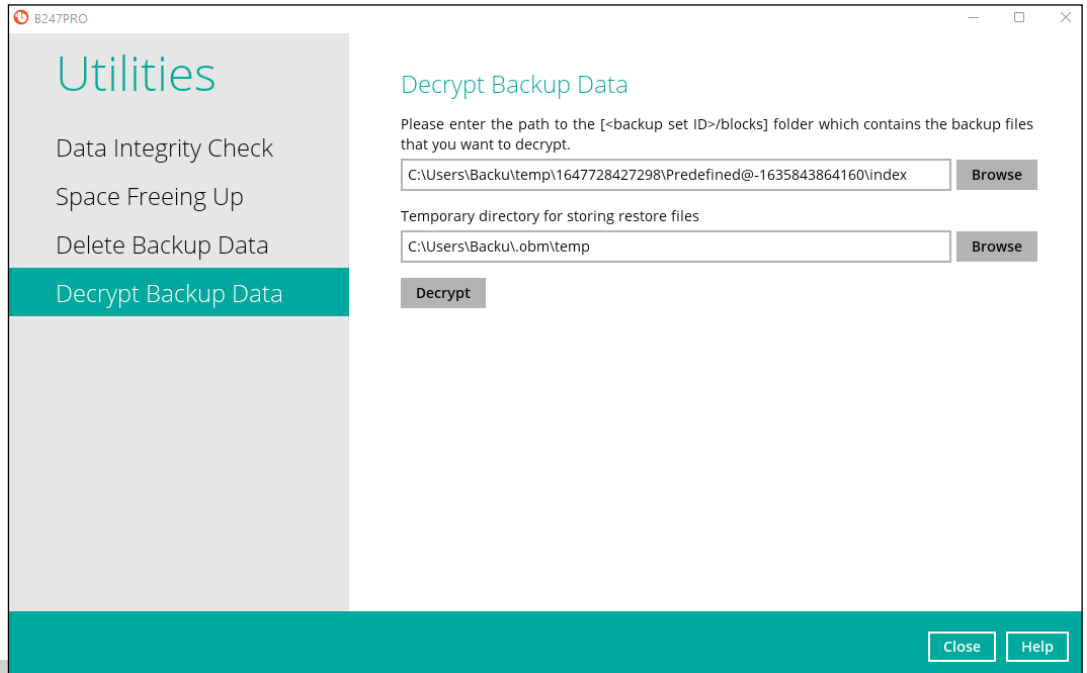
To perform decryption of backup data, follow the instructions below:

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



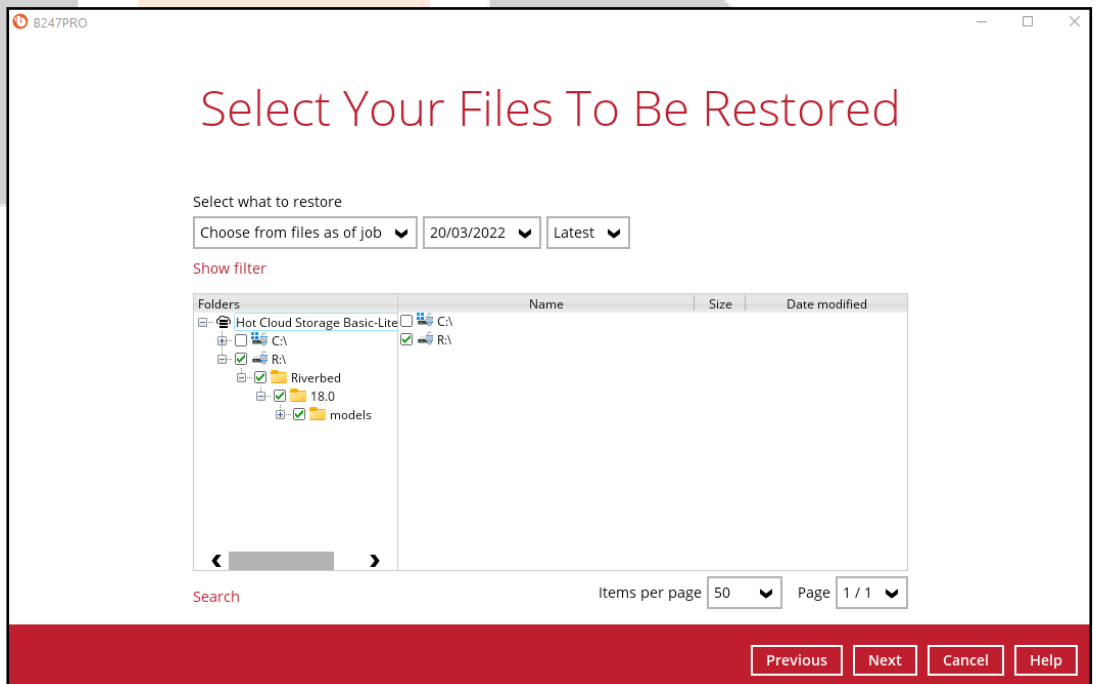
212

2. Click the **Browse** button to re-select the temporary folder for the decrypt process. Then click the **Decrypt** button to begin.

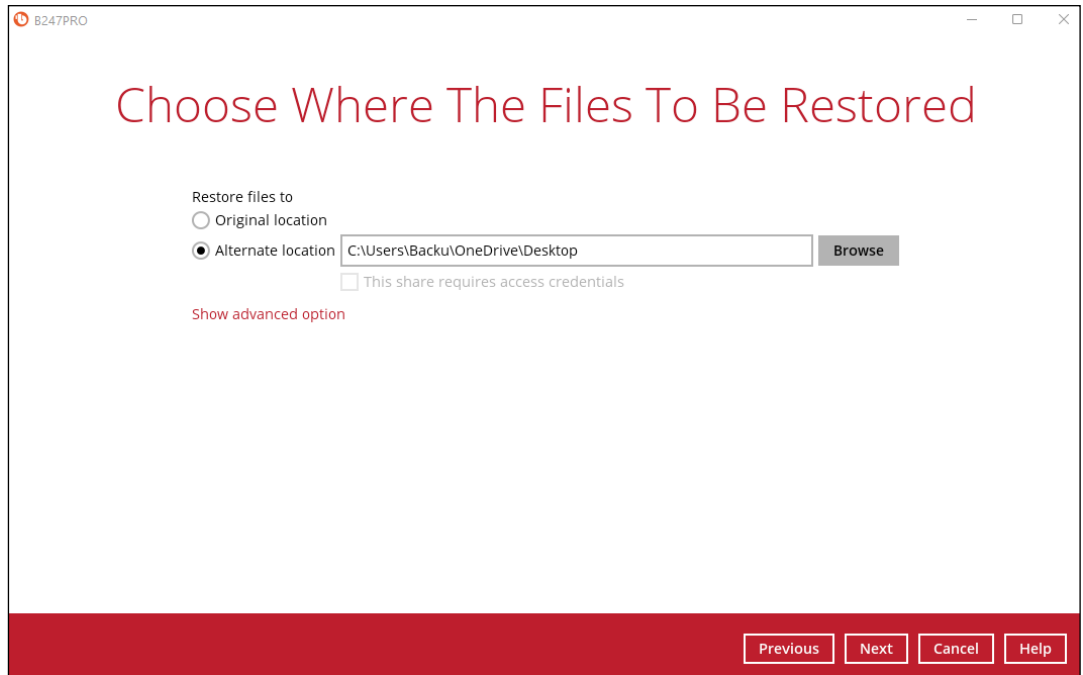


3. Select files to be decrypted.

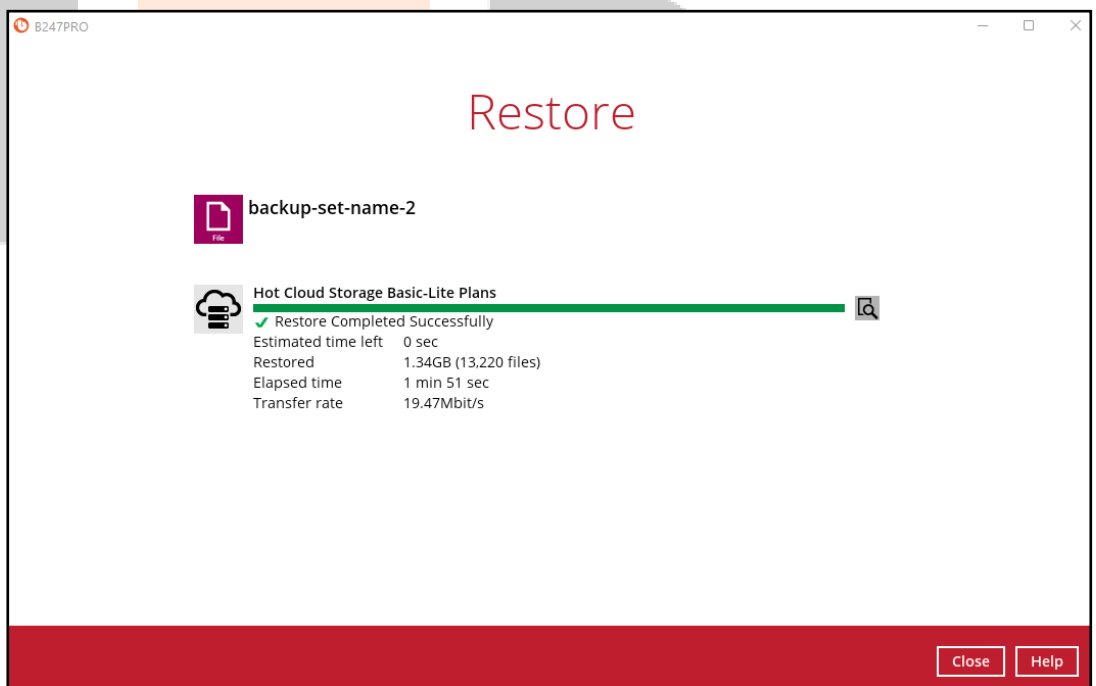
213



4. Choose the location where the decrypted files will be restored to.

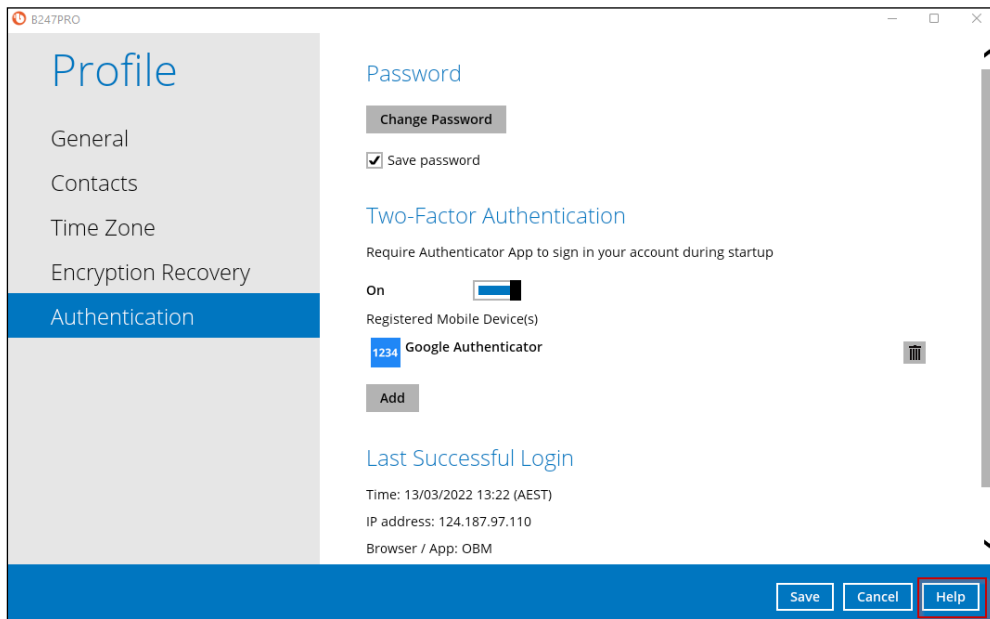


5. The status will be shown once completed.

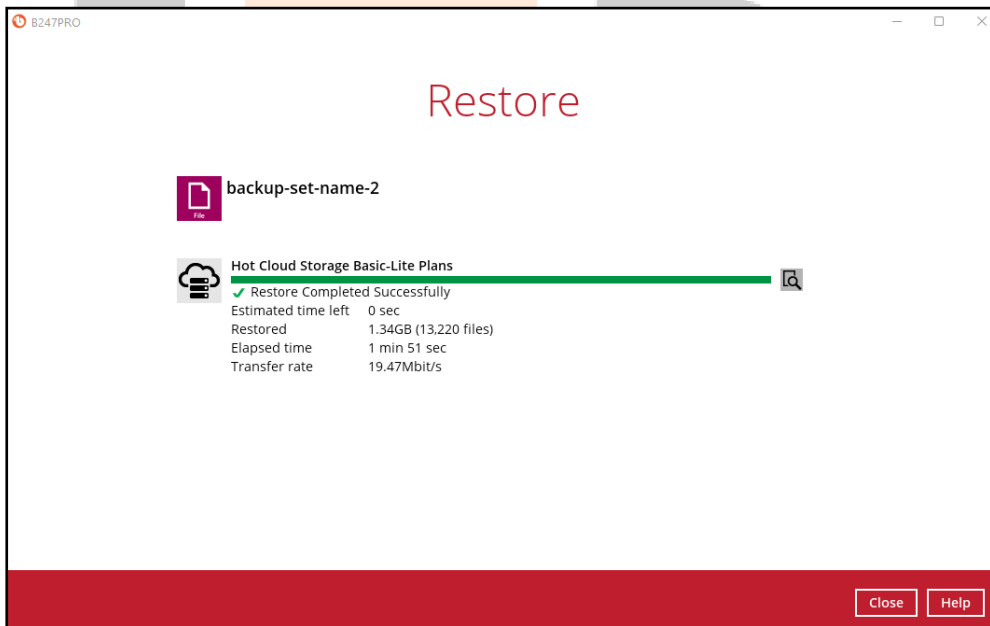


10.10 Online Help

This allows the user to view the summary of information and instructions of each available features in Advanced Client (B247PRO).

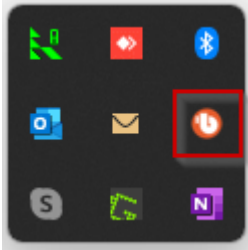


215

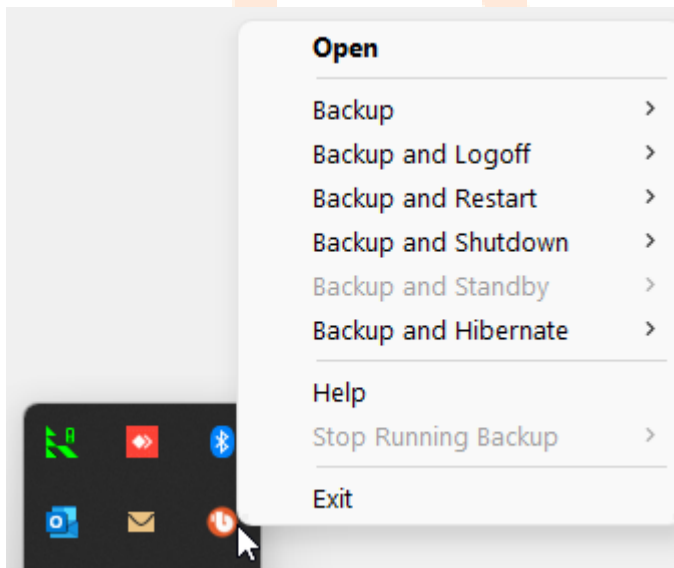


10.11 System Tray

If Advanced Client (B247PRO) is installed on the computer, you will see an Advanced Client (B247PRO) icon in the taskbar at the lower right corner of the screen.



When you right-click the Advanced Client (B247PRO) icon, a control menu will pop-up.



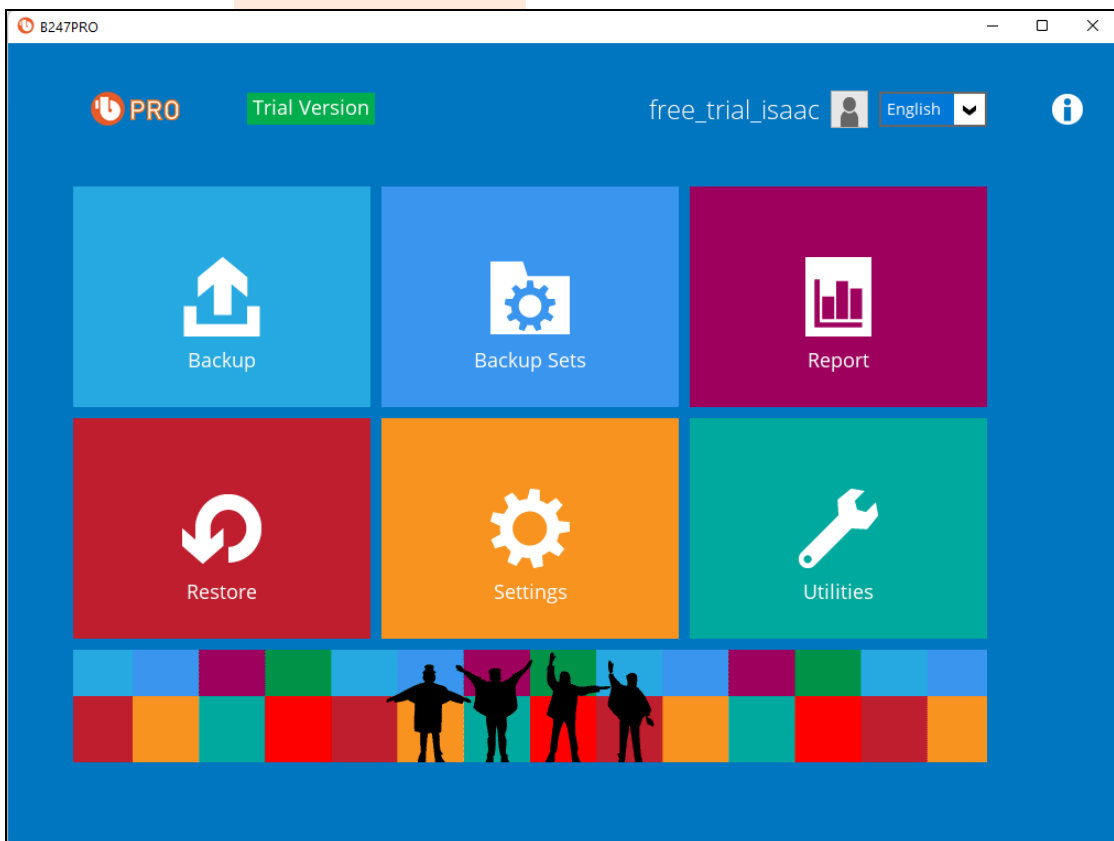
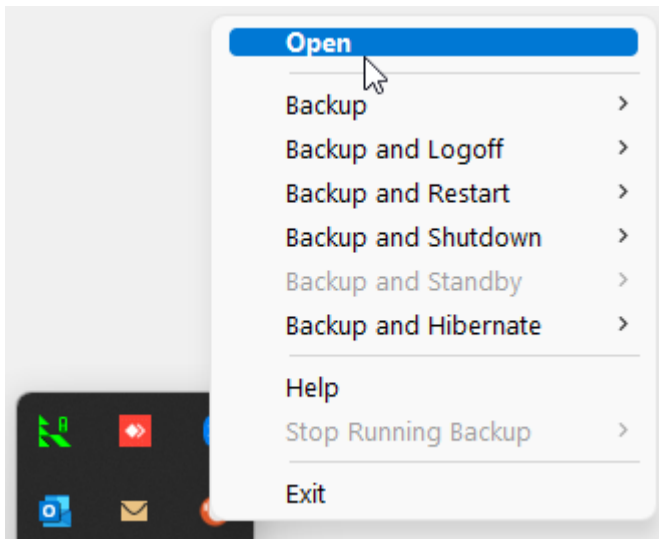
216

Backup247 OBM system tray has ten (10) controls:

- Open
- Backup
- Backup and Logoff
- Backup and Restart
- Backup and Shutdown
- Backup and Standby
- Backup and Hibernate
- Help
- Stop Running Backup
- Exit

Open

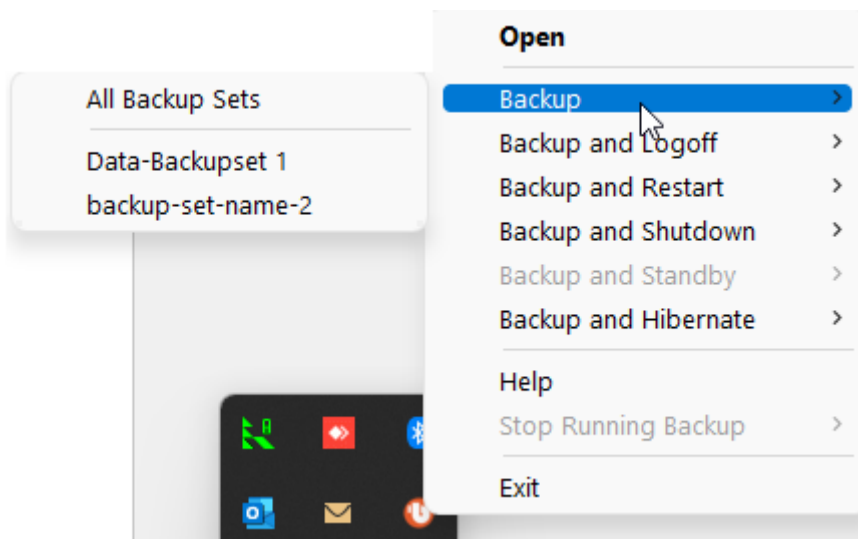
Select this option to open the Advanced Client (B247PRO) login screen.



217

Backup

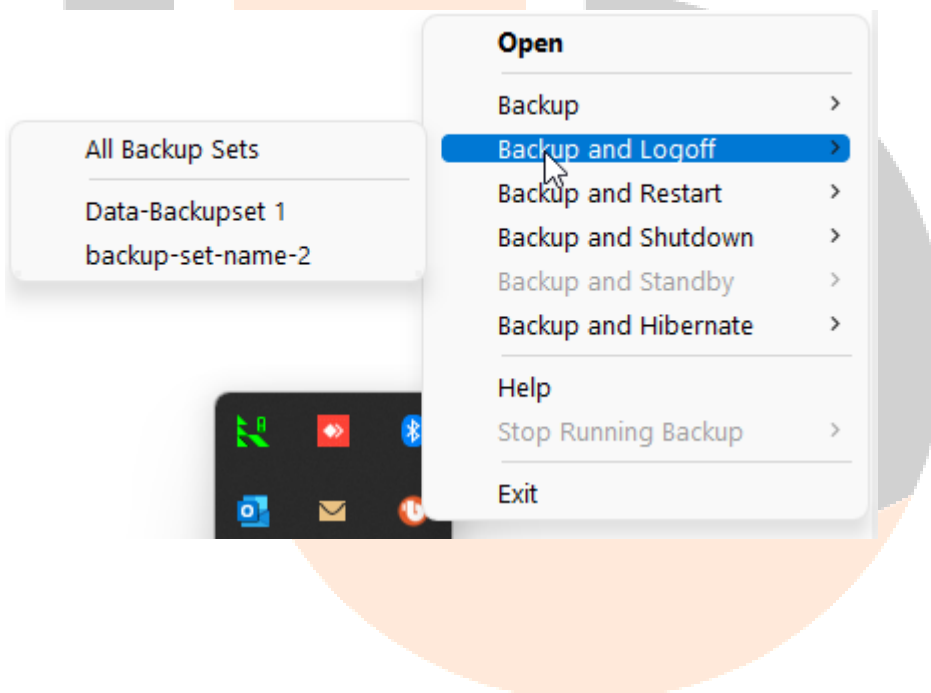
If you want to perform a backup without going to the interface, hover the mouse to this option and select the backup set you want to back up.



Backup and Logoff

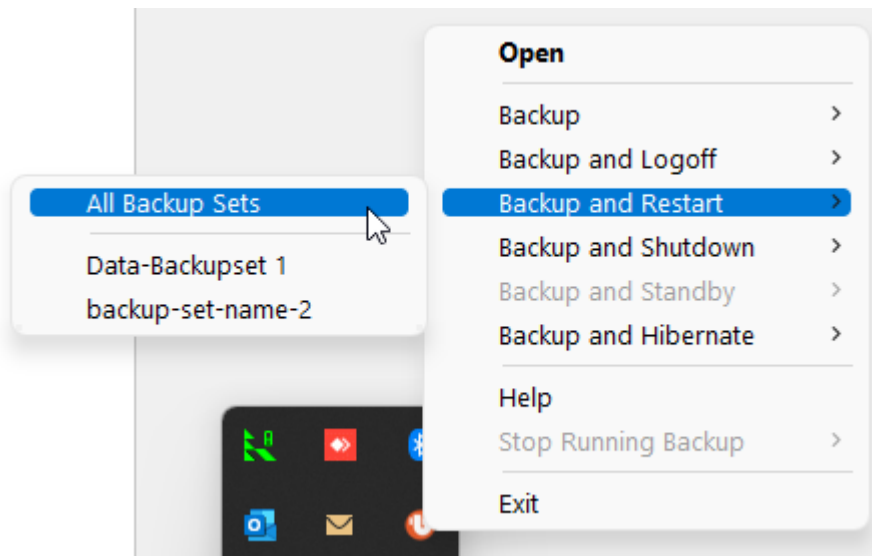
Select this option if you want to logoff Windows after a manual backup job is done.

218



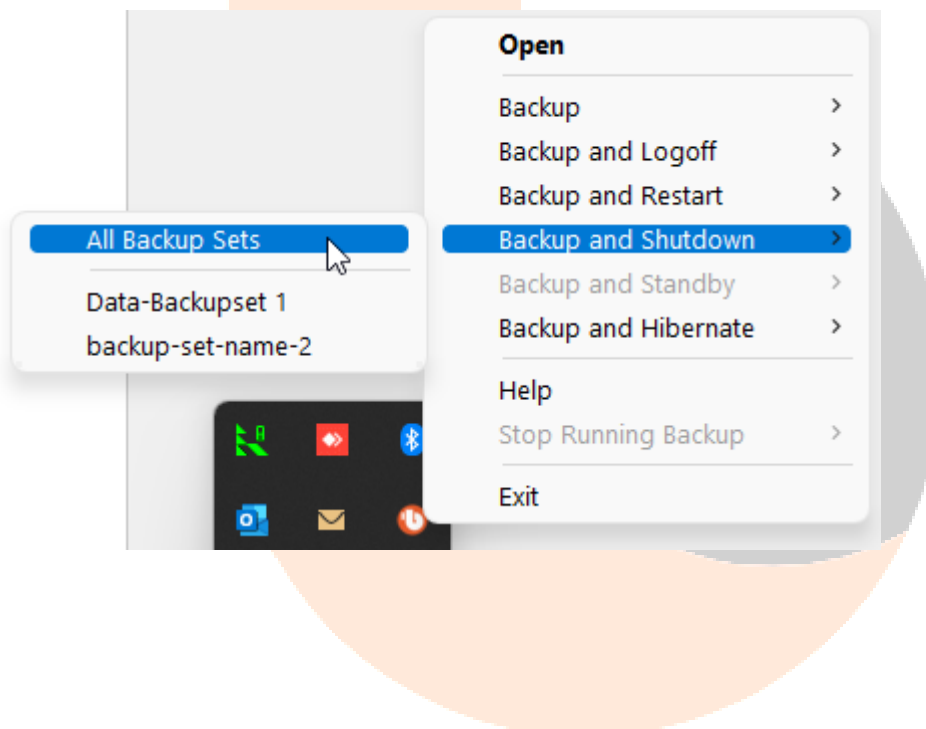
Backup and Restart

Choose this option if you want the machine to restart after a manual backup job is done.



Backup and Shutdown

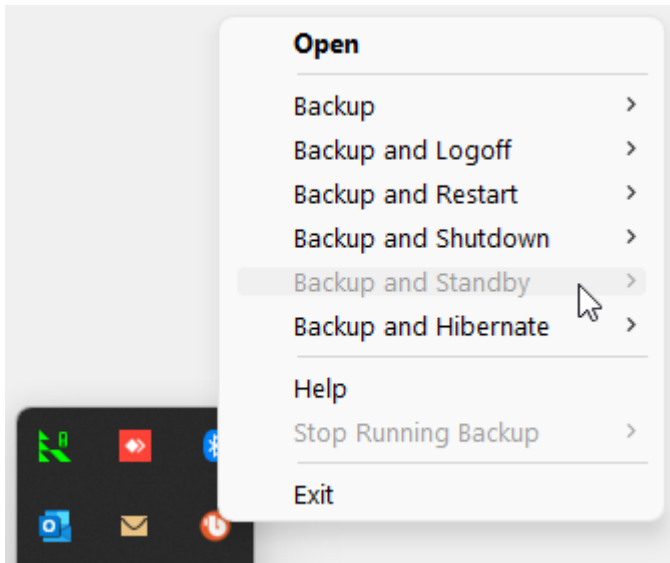
Choose this option if you want the machine to shut down after a manual backup job is done.



219

Backup and Standby

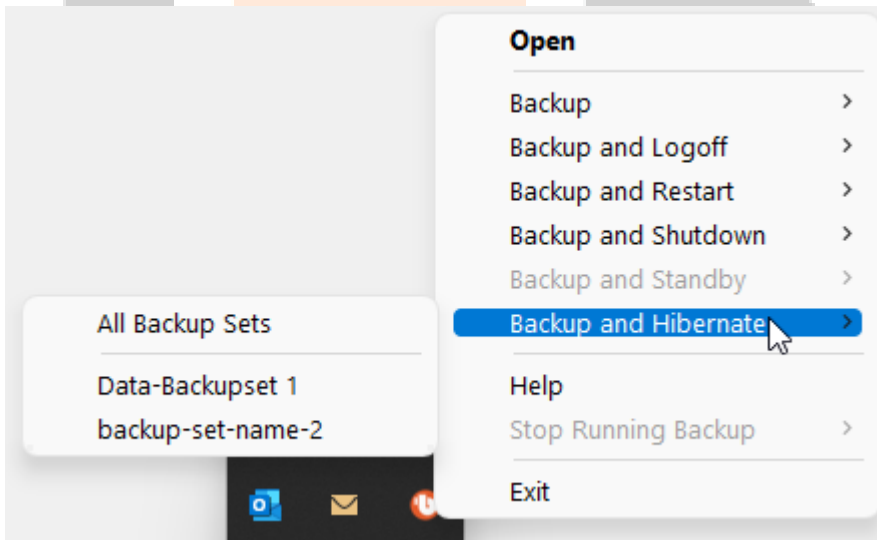
Choose this option if you want the machine to go on standby after a manual backup job is done.



Backup and Hibernate

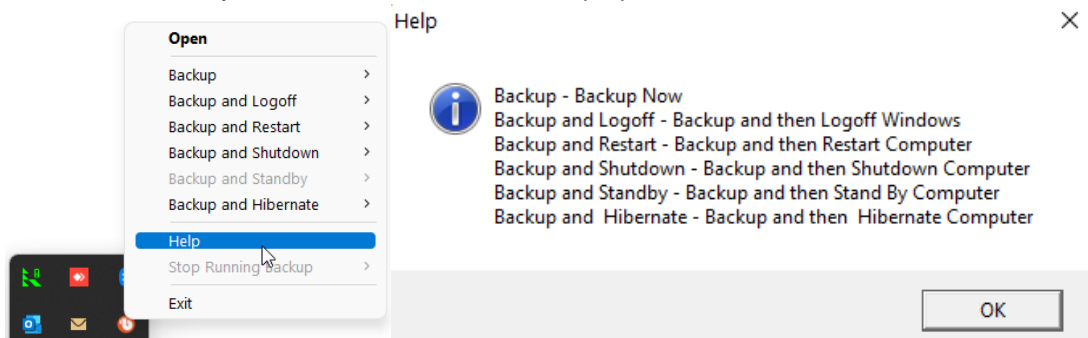
Choose this option if you want the machine to hibernate after a manual backup job is done. This will be disabled if hibernate mode is not available on the Windows version you are using.

220



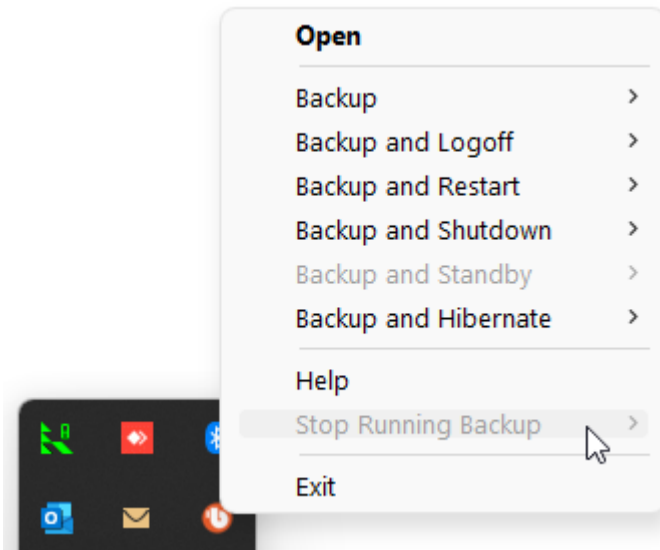
Help

This tab will show you the function of each backup option.



Stop Running Backup

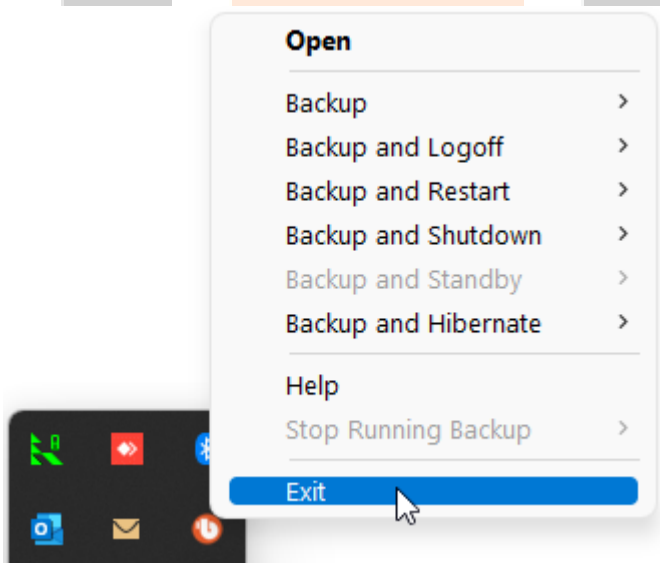
Use this option if you wish to stop a running manual, continuous or scheduled backup.



This option will be disabled if there is no backup job running.

Exit

Select this option if you want to close the application including the Advanced Client (B247PRO) icon at the taskbar.

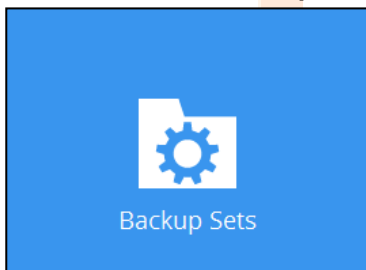


11 Create a Backup Set

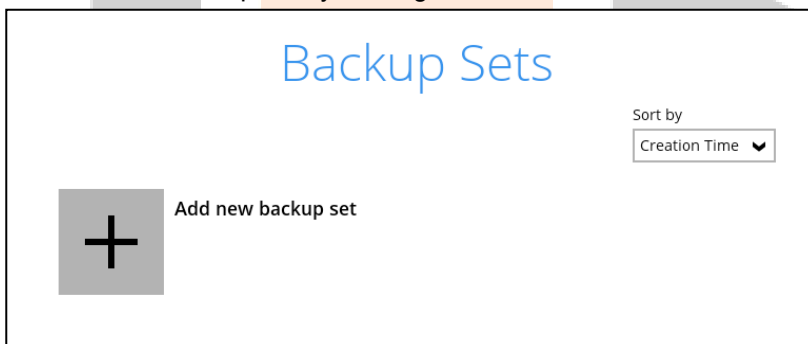
The network drive support allows users to access different network drives not limited to Windows-based backup source. The following are supported:

- Network drives with different login credentials instead of limited to Windows User Authentication login or network drives without login credentials.
- Network drives without the need for them to be set up first on Windows.
- Network drives as Backup Source (including filter), Backup Destination and Restore Location (Original or Alternate).

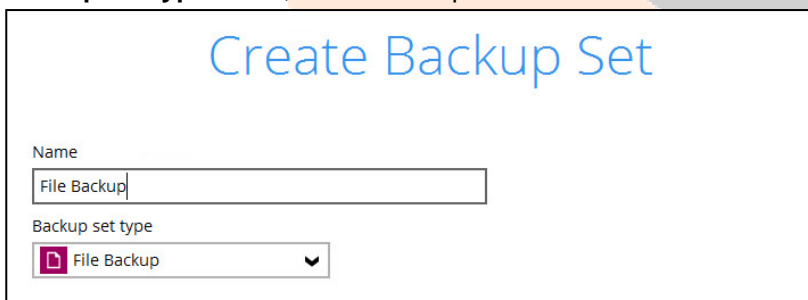
1. Network Click the **Backup Sets** icon on the Advanced Client (B247PRO) main interface.



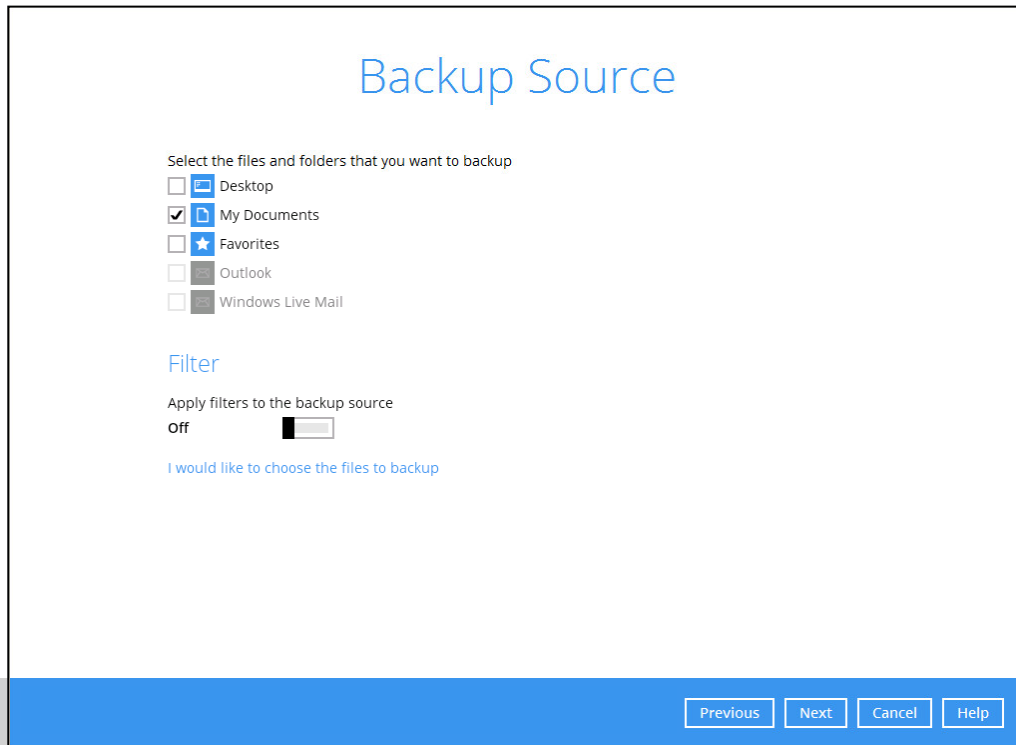
2. Create a new backup set by clicking the “+” icon next to **Add new backup set**.



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

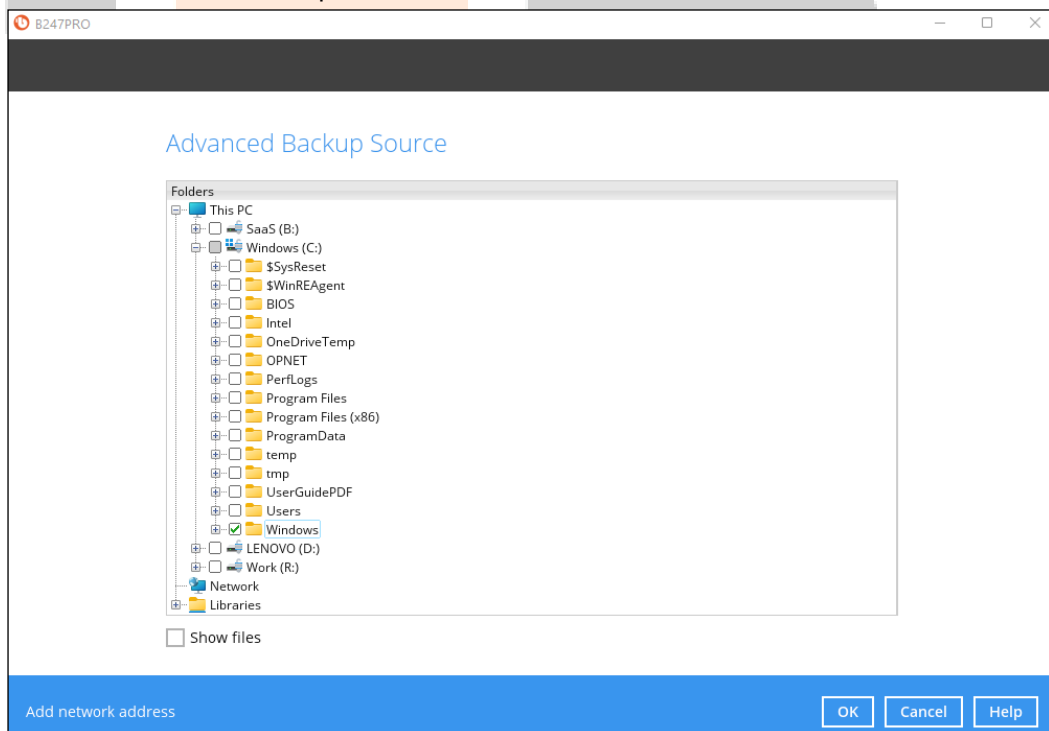


- a. In the Backup Source window, select the files and folders for backup. Click **I would like to choose the files to backup** to select individual files for backup.

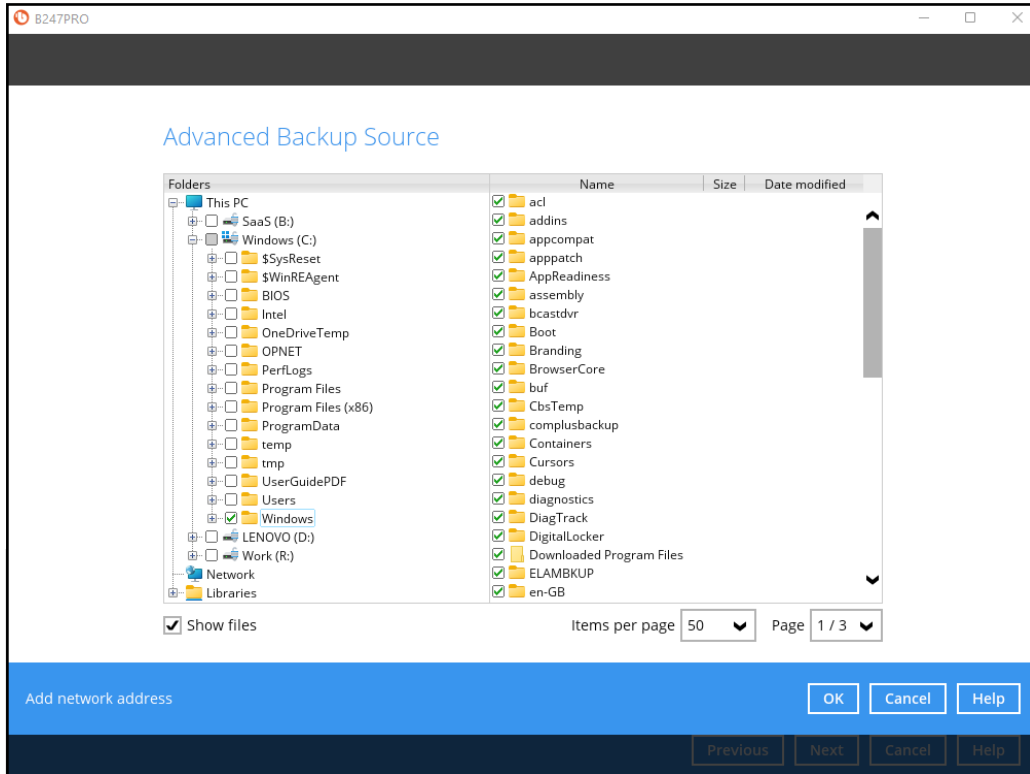


223

4. In the Advanced Backup Source window, there are three (3) ways to select file(s) and/or folder(s) for back up:
 - i. Select folder(s) to back up all files in the folder(s). Click **OK** to save the selection and close the Advanced Backup Source window.

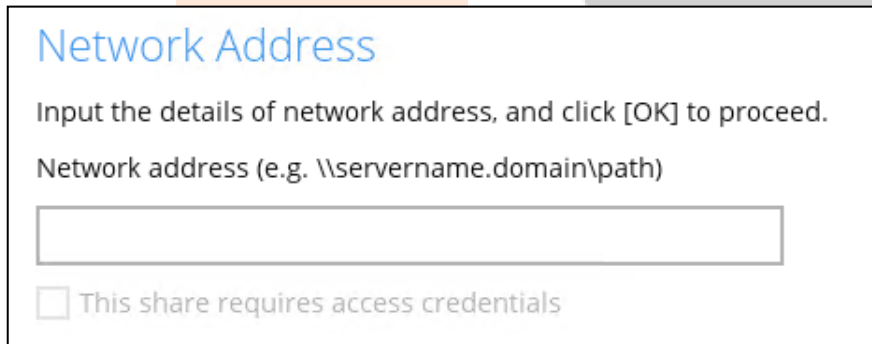


- ii. Back up only individual file(s) instead of all files in the selected folder(s). Check the **Show files** checkbox at the bottom of the screen. A list of files will appear on the right-hand side. Select the checkbox(es) next to the file(s) to back up. Then, click **OK** to save your selections and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



224

- iii. Back up file(s) and/or folder(s) located in a network drive. Click the **Add network address** link at the bottom of the screen. In the Network Address window, enter the network address.



Once a network address is entered, **This share requires access credentials** will be enabled. Check the box beside it if access credentials are required to backup and enter the User name and Password. Otherwise leave it unchecked and click **OK**.

This share requires access credentials

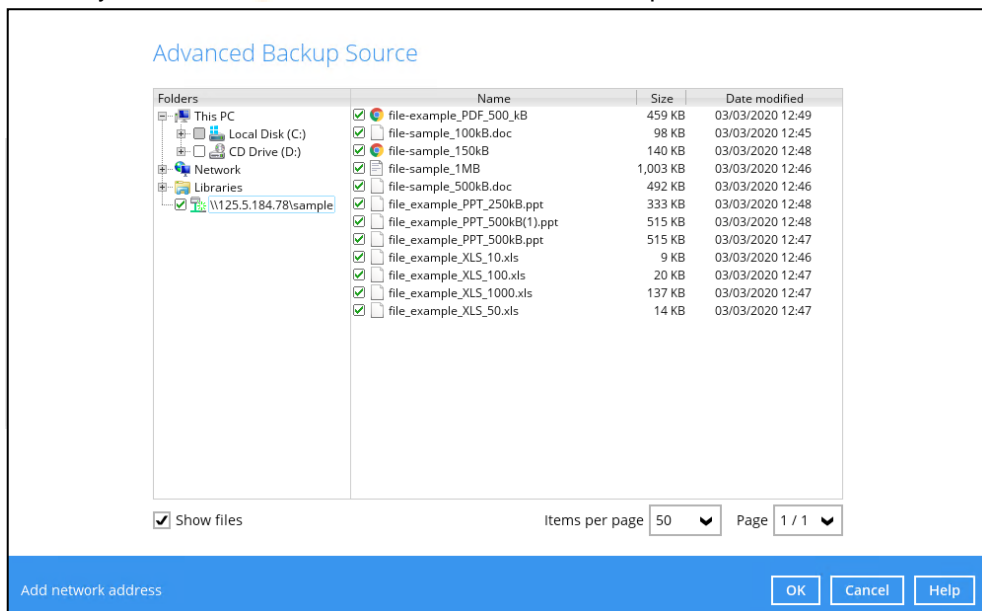
User name (e.g. domain\username)

username

Password

•••••

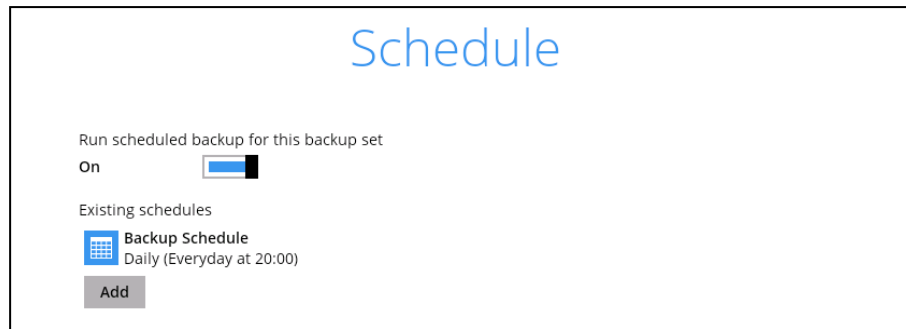
The network drive will now be added and automatically selected. There is also an option to select only specific file(s) to back up by checking the **Show files** checkbox. Click **OK** to save your selections and close the Advanced Backup Source window.



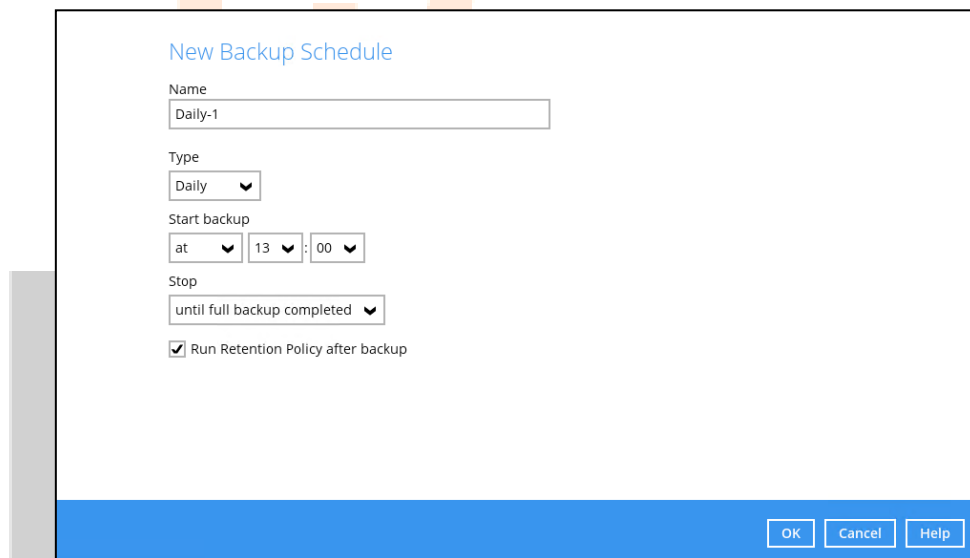
NOTE

Once a network drive is added, its network credentials may still be edited. For instructions on how to do this please refer to [Appendix F: How to Manage non-Windows based Network Drives](#).

5. In the Backup Source window, click **Next** to proceed.
6. When the **Schedule** window appears, you can configure a backup schedule to automatically run a backup job at your specified time interval. In the Schedule window, the Run scheduled backup for this backup set is **On** by default.
 - In the default backup schedule, there will be a scheduled backup that will be performed daily at 8pm. You can leave it as is or you can modify it by clicking on the existing backup schedule.

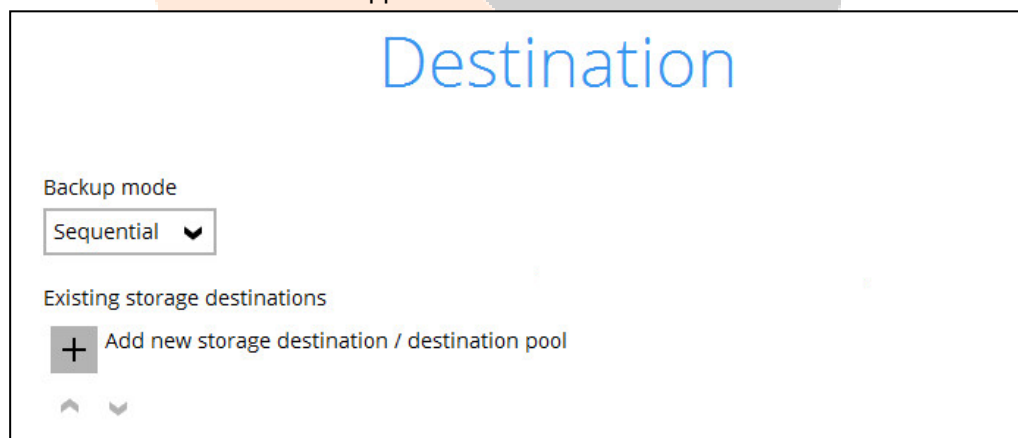


If you want to add another schedule, click the **Add** button. When the New Backup Schedule window appears, specify your backup schedule. Then, click **OK** to save your changes and close the New Backup Schedule window.



226

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

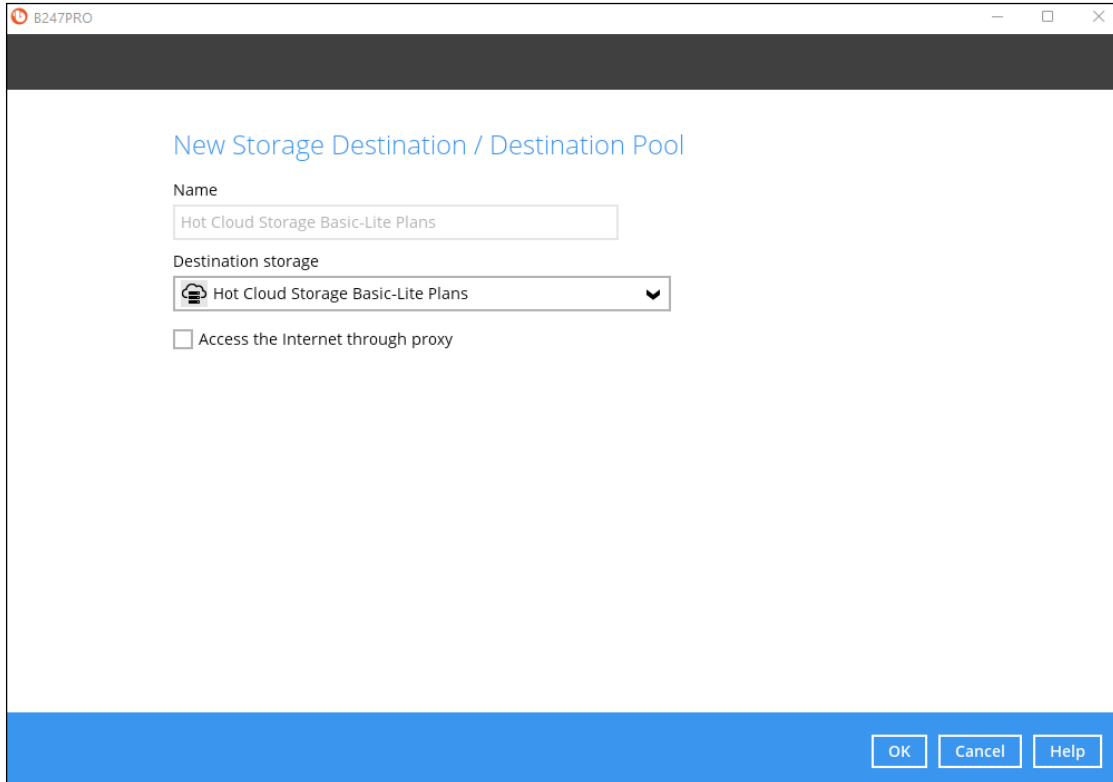


Select the appropriate option from the **Backup mode** dropdown menu.

- **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**.

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



B247PRO

New Storage Destination / Destination Pool

Name
Hot Cloud Storage Basic-Lite Plans

Destination storage
Hot Cloud Storage Basic-Lite Plans

Access the Internet through proxy

OK Cancel Help

227

If **Local / Mapped Drive / Network Drive / Removable Drive** is selected, you need to specify the path by clicking **Change** to select the path or you can manually enter it. Once a network address is entered, **This share requires access credentials** check box will be enabled. Check the box beside it if access credentials are required to connect to the storage destination and enter the User name and Password. Otherwise, leave it unchecked and click **Test** to check the connection. Click **OK** to add the storage destination.

New Storage Destination / Destination Pool

Name

Destination storage

Path (Input local / network address or click [Change])

This share requires access credentials

User name (e.g. domain\username)

Password

228

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

Destination

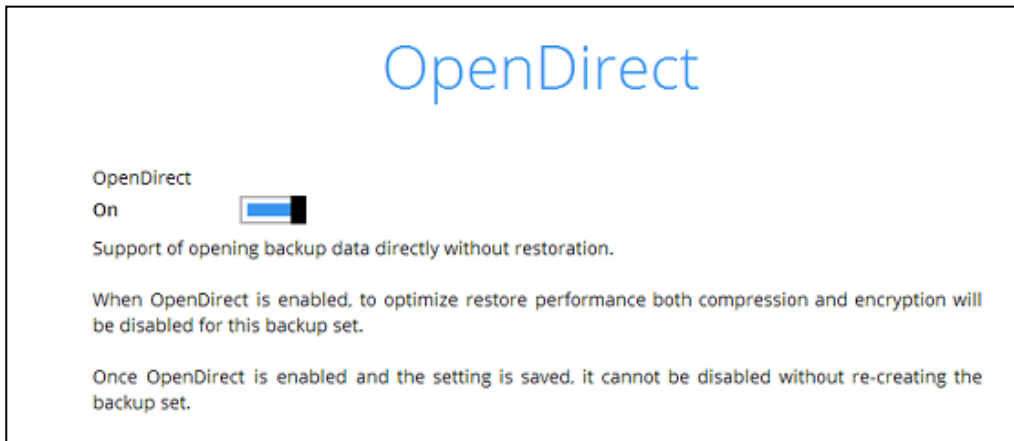
Backup mode

Existing storage destinations

-
-

^ v

10. If you wish to enable the **OpenDirect Restore** feature, make sure you turn on the OpenDirect restore switch in this menu. Click **Next** to proceed.



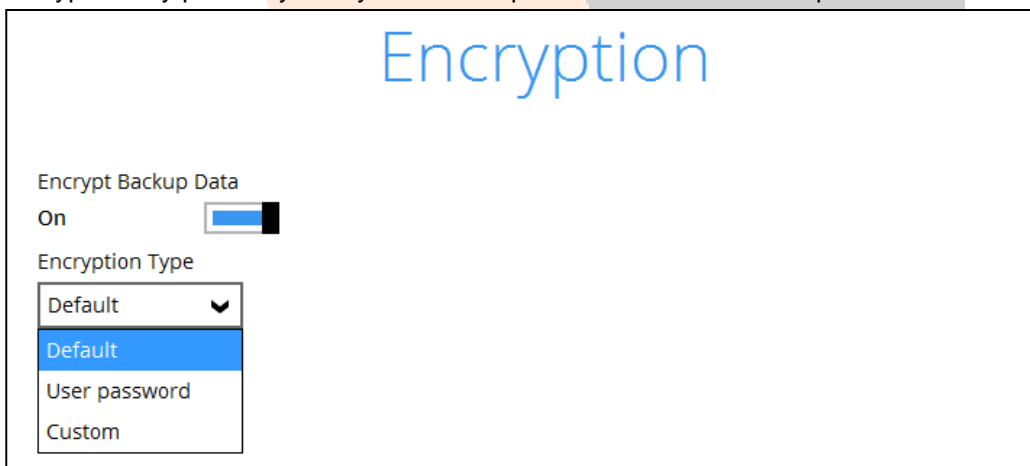
NOTES

1. Once the OpenDirect Restore feature is enabled and the backup set is saved, it is **NOT** possible to disable it afterwards, and vice versa. A new backup set will have to be created again if you wish to do so.
2. It is possible to enable both OpenDirect restore and Run Direct restore at the same time. However, Advanced Client (B247PRO) restore job will only allow either OpenDirect or Run Direct to run, but not to run concurrently.
3. OpenDirect restore requires an additional OpenDirect restore module license to work. Contact Backup247 Technical Support Team for further details.
4. OpenDirect restore might not be available, this depends on settings preconfigured by us. Contact Backup247 Technical Support Team for more information.

229

11. **IMPORTANT:** If you have enabled the OpenDirect Restore, backup data will not be compressed and encrypted to optimize restore performance, therefore you can skip to step 16.

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



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

- **Default** – an encryption key with 44 alphanumeric characters will be randomly generated by the system

- **User password** – the encryption key will be the same as the login password of your Advanced Client (B247PRO) at the time when this backup set is created. Please be reminded that if you change the 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.

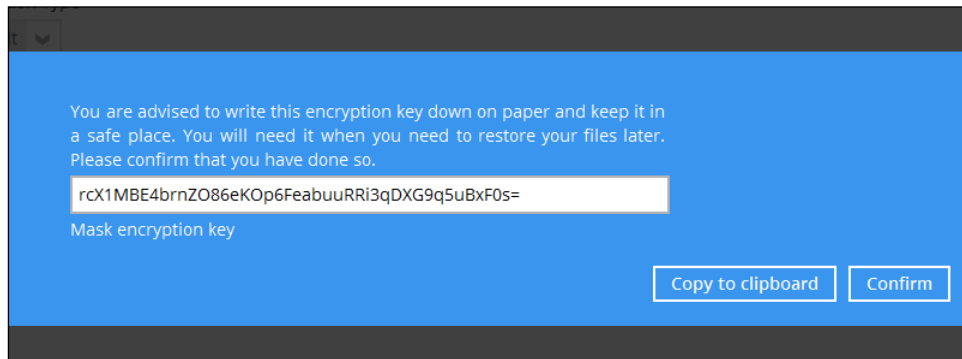
230

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

12. 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.

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.

13. The following screen prompts you to enter the Windows login credentials for user authentication if you have enabled the Schedule Backup feature in step 8.

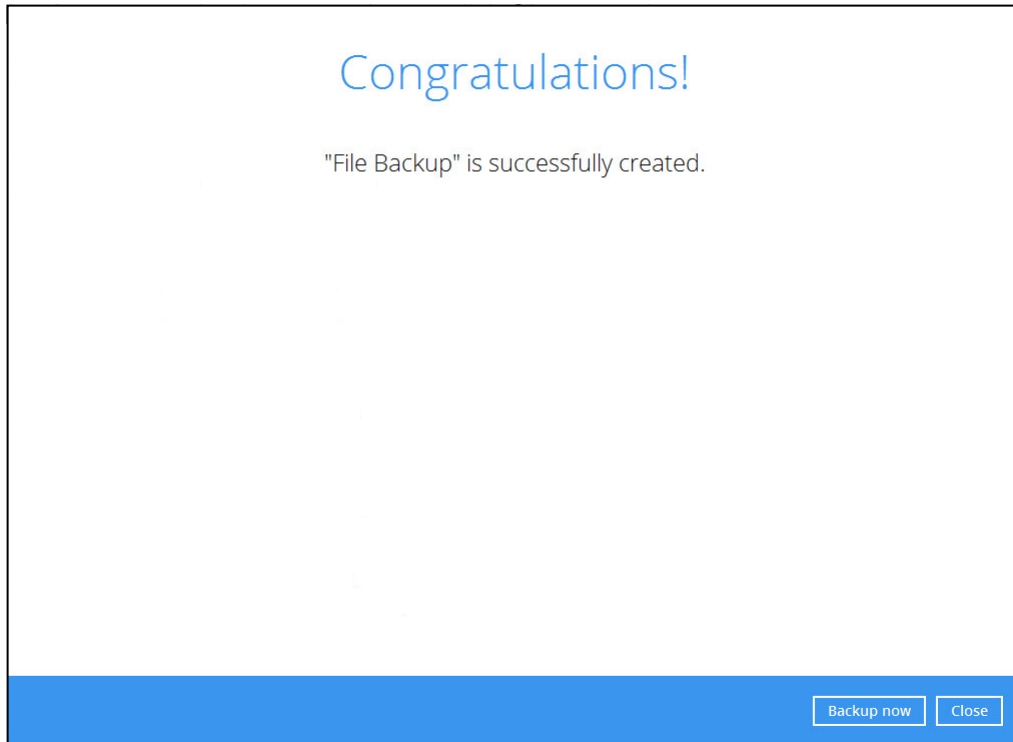
A screenshot of a white dialog box with a blue title "Windows User Authentication". Below the title are three input fields. The first is labeled "Domain Name (e.g Ahsay.com) / Host Name" and contains "example.com". The second is labeled "User name" and contains "username". The third is labeled "Password" and contains a series of dots representing a masked password.

NOTE

If you have selected to back up individual file(s) and/or folder(s) on your local computer's drive in step 5, the Windows User Authentication request will be bypassed and therefore the screen shown above will not display even though the Schedule Backup feature has been turned on.

It is recommended to enter the information of user with Administrator privilege to support backup of network drives.

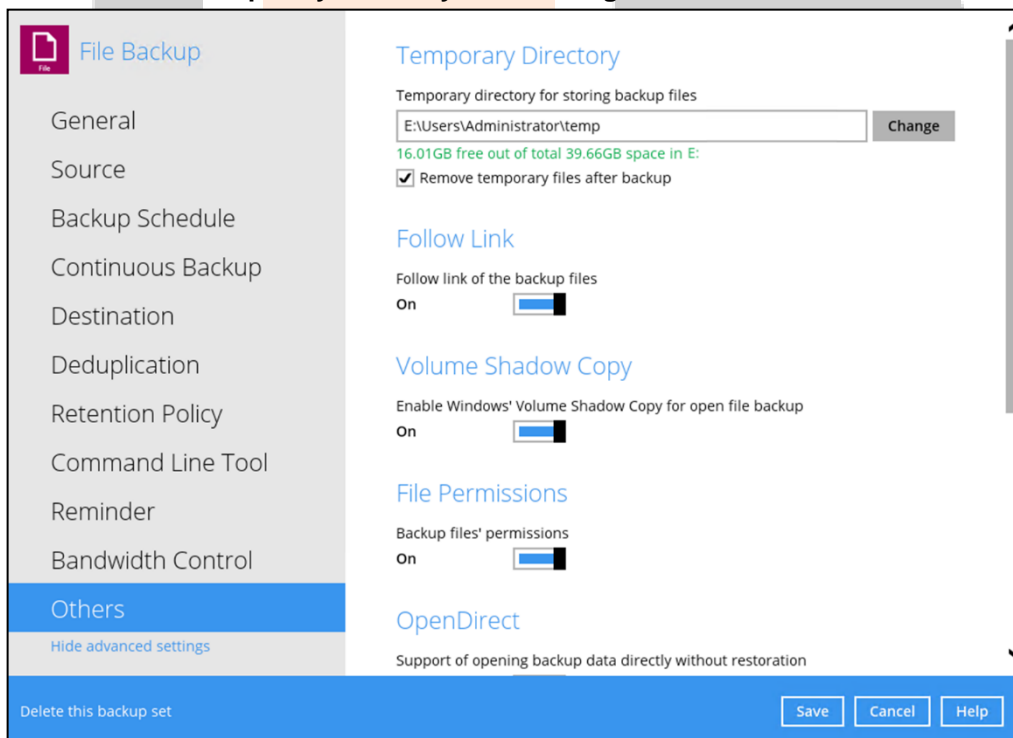
14. Upon successful creation of the backup set, the following screen will appear. You can click



232

15. Based on **Best Practices and Recommendations**, it is highly recommended to change the **Temporary Directory**. Select another location with sufficient free disk space other than C:\ drive.

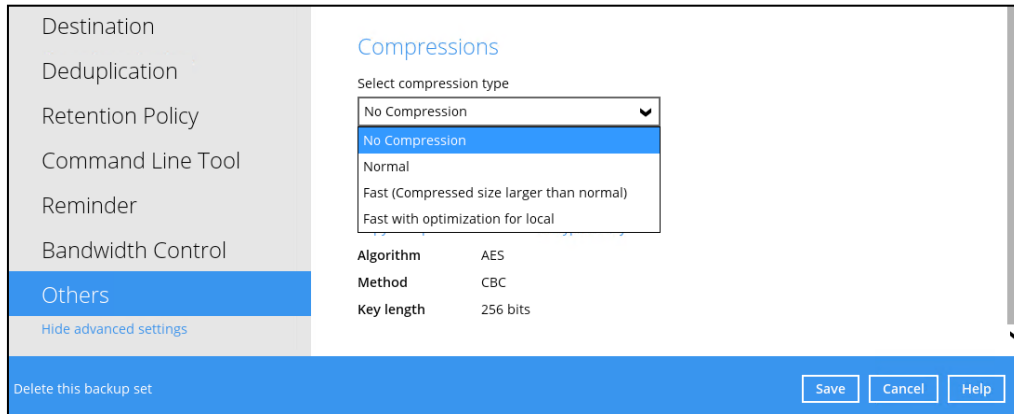
Go to **Others > Temporary Directory**. Click **Change** to browse for another location.



16. Optional: Select your preferred **Compression** type. For newly created backup set(s), “No Compression” is selected by default.

Go to **Others > Compressions**, then select from the following:

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



233

12 Overview on the 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 \(Step 10\)](#)



12.1 Periodic Data Integrity Check (PDIC) Process

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:

$PDIC\ schedule = \%BackupSetID\% \bmod 5$
 or
 $\%BackupSetID\% \bmod 5$

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: $1594627447932 \bmod 5 = 2$

2	Wednesday
----------	------------------

In this example:

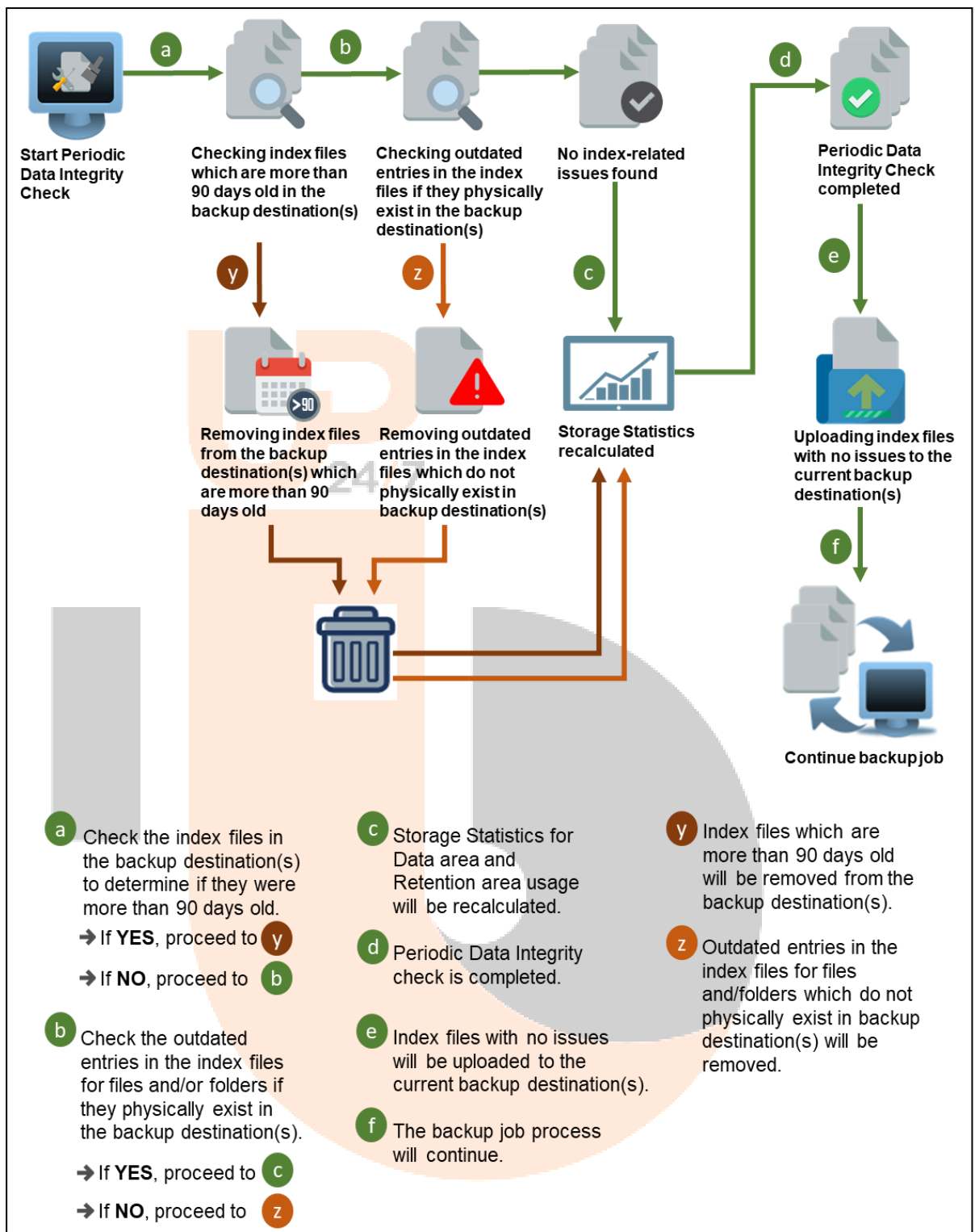
- the PDIC will run on the first backup job that falls on Wednesday; or
- if there is no active backup job(s) running from Monday to Friday, then the PDIC will run on the next available backup job.

NOTES

Although according to the PDIC formula for determining the schedule is **$\%BackupSetID\% \bmod 5$** , 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:

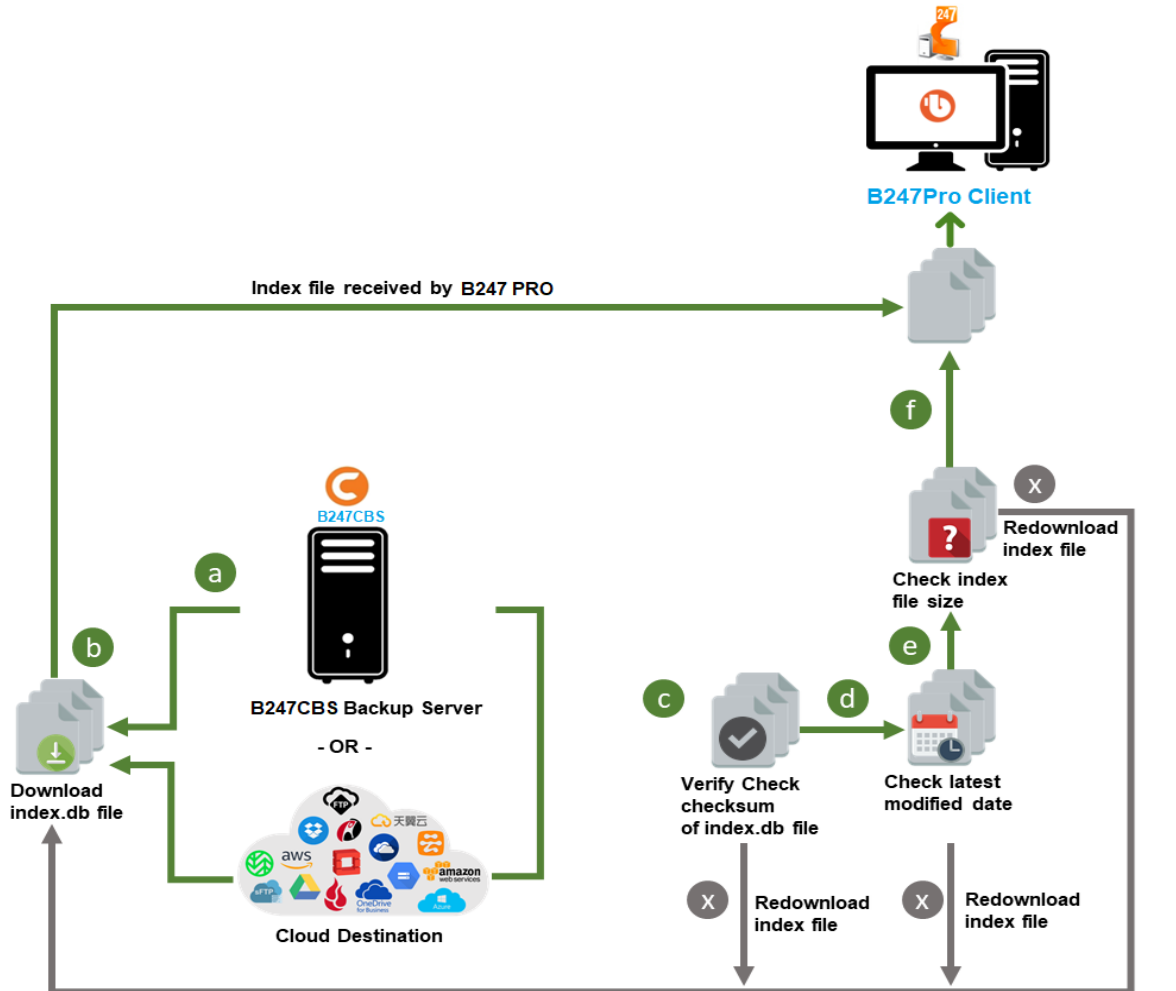
1. The PDIC job will run on the first backup job after upgrade to the latest client version from Advanced Client (B247PRO) v6, v7, or pre-8.3.6.0 version.
2. If backup jobs for a backup set are not run on a regular daily backup schedule (for example: on a weekly or monthly schedule), then the PDIC job 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 is 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.



12.2 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.

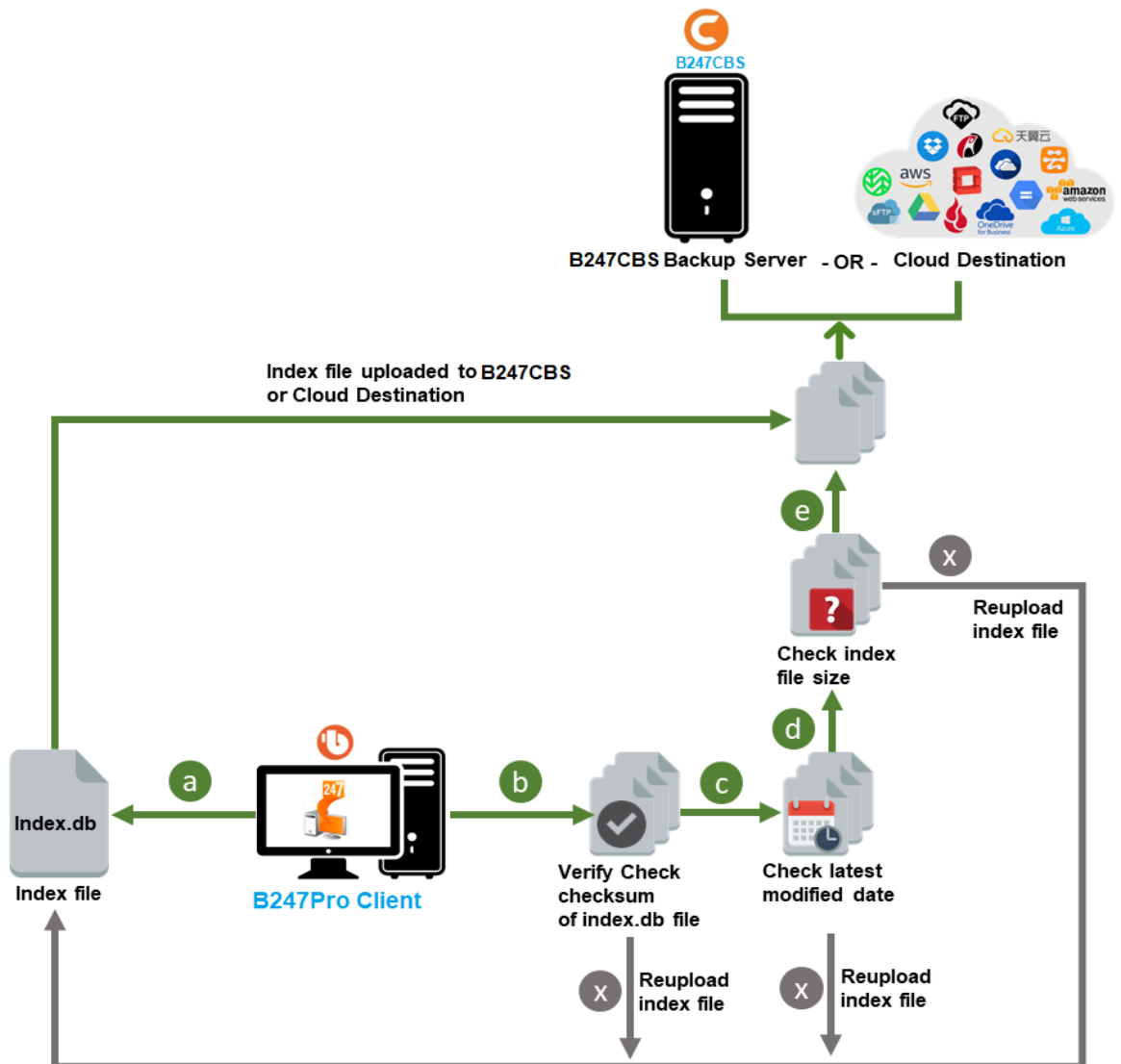
12.2.1 Start Backup Job



237

- 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**

12.2.2 Completed Backup Job

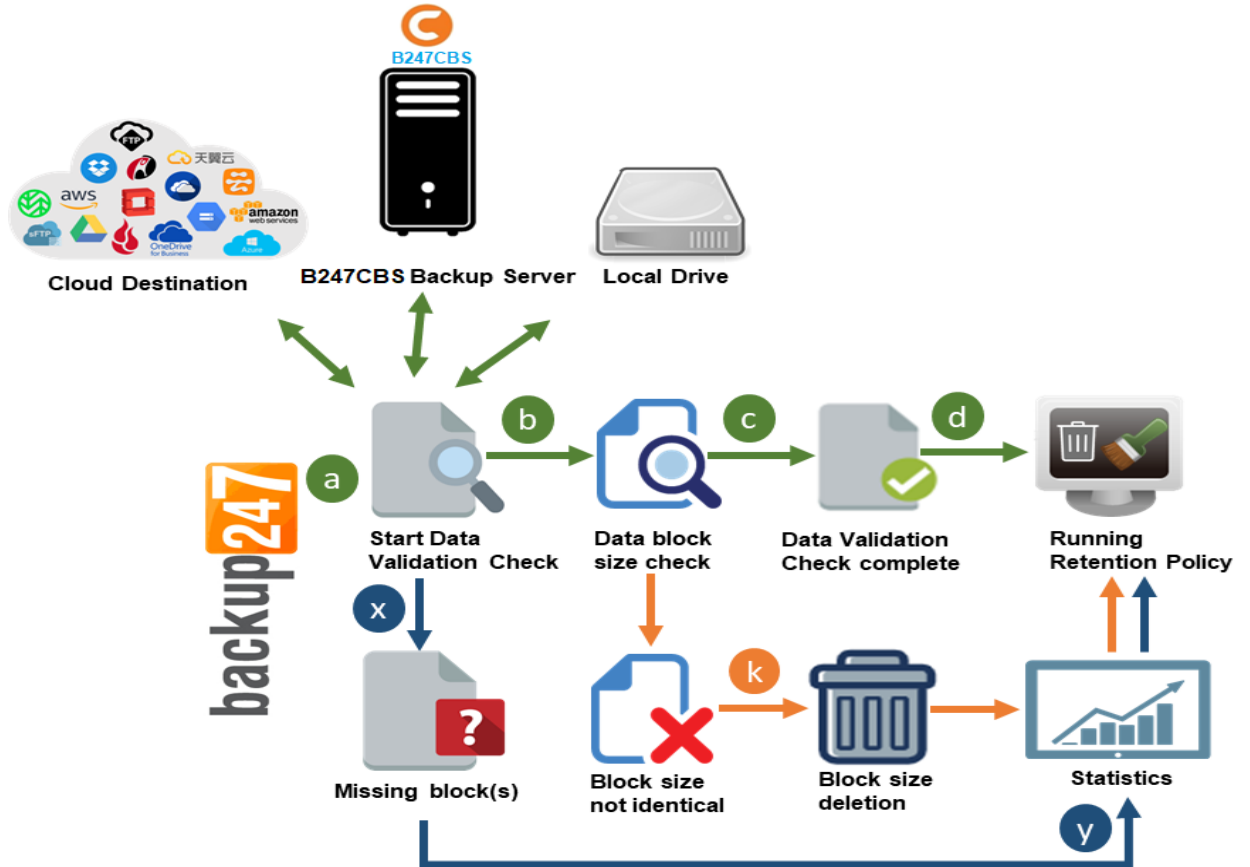


238

- 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**

12.3 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 64 MB 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**

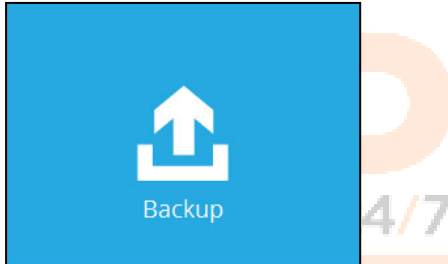
13 Run Backup Jobs

13.1 Login to Advanced Client (B247PRO)

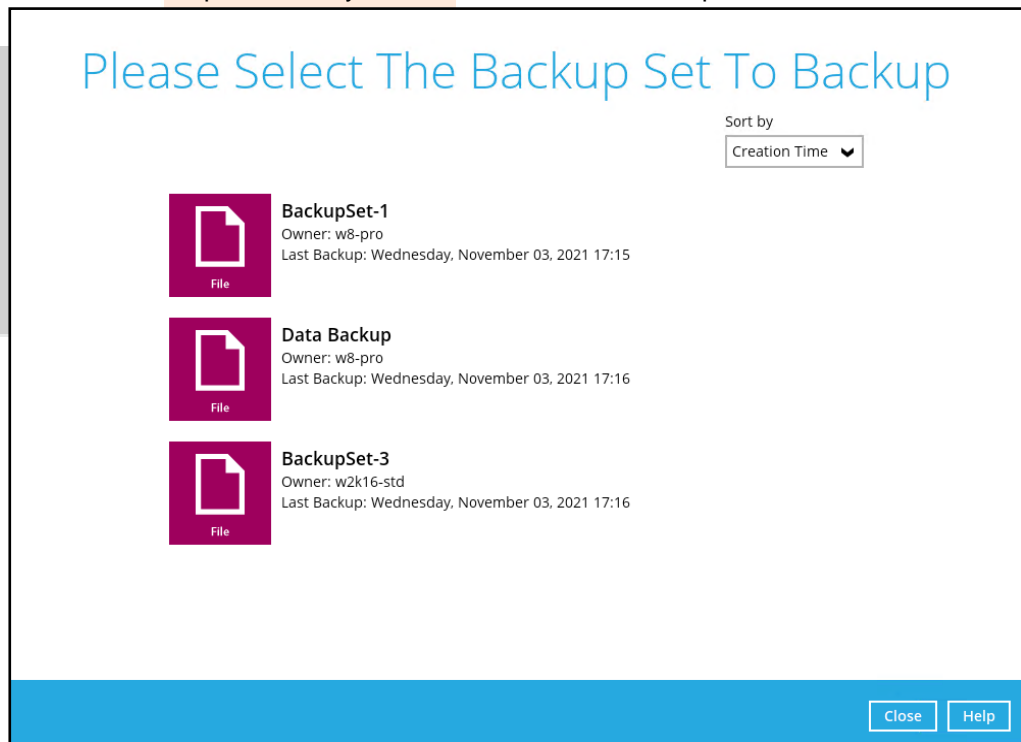
Log in to the Advanced Client (B247PRO) application according to the instructions in [Chapter 8 Logging in to Advanced Client \(B247PRO\)](#).

13.2 Start a Manual Backup

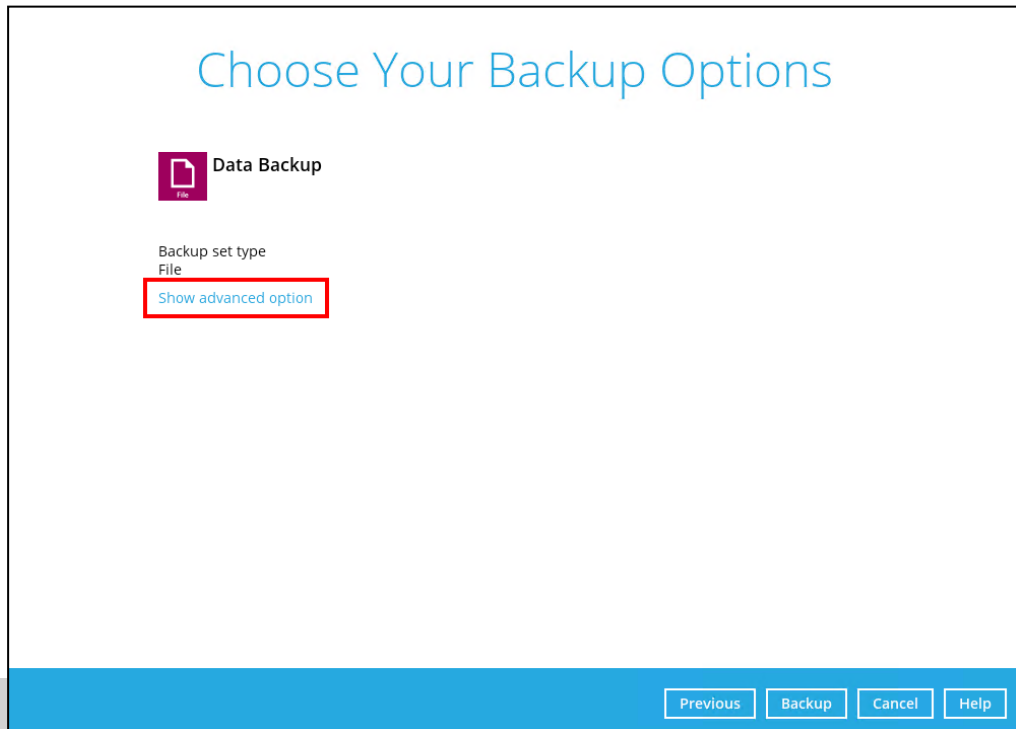
1. Click the **Backup** icon on the main interface of Advanced Client (B247PRO).



2. Select the backup set which you would like to start a backup for.

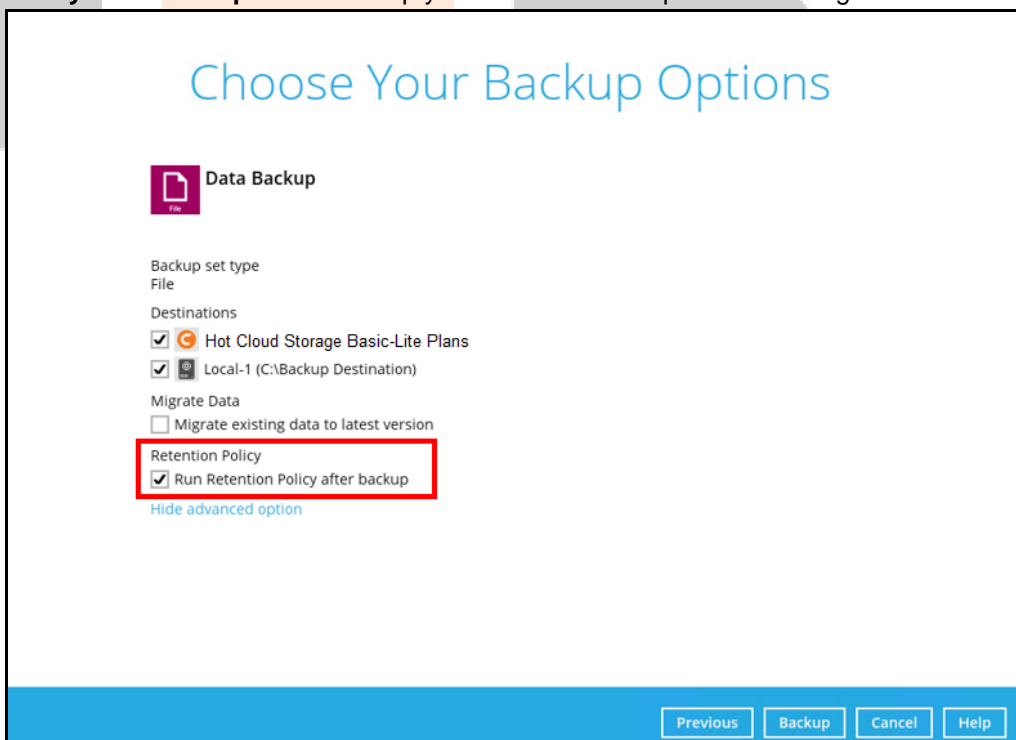


3. Click the **Show advanced option** in case you want to modify the Destinations, Migrate Data, and Retention Policy options.



4. When the advanced options are shown, it is recommended to enable **Run Retention Policy after backup**. This will help you save hard disk quota in the long run.

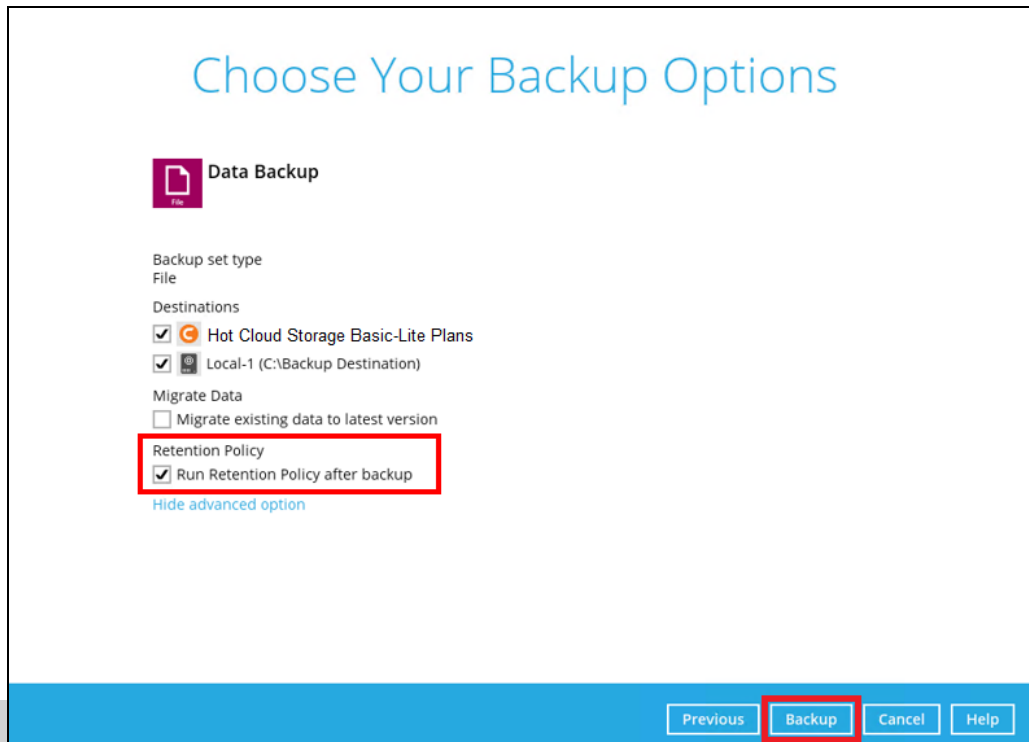
241




NOTE

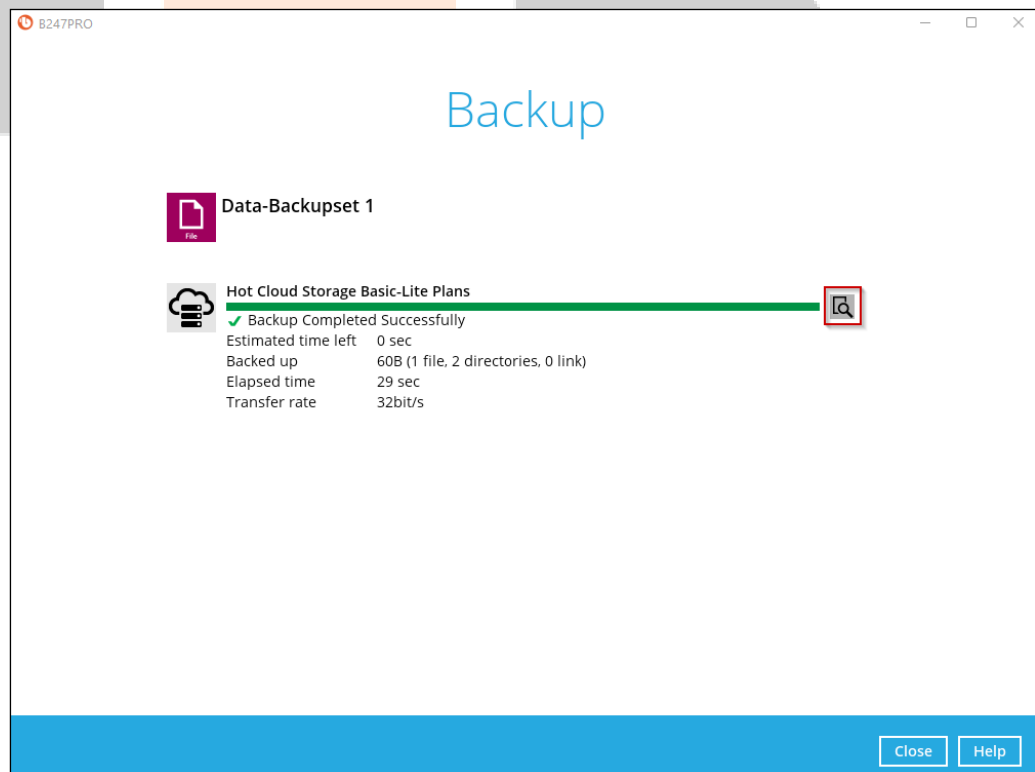
When the **Migrate Data** option is enabled, the existing data will be migrated to the latest version during a backup job. This option is disabled by default. Backup job(s) for backup sets with Migrate Data enabled may take longer to finish. For more information about this feature, refer to [B247CBS 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.

242



- Once you are done with checking the backup log, click the **Close** button to return to the previous screen.

The screenshot shows a window titled 'B247PRO' displaying a log of backup operations. The log is presented as a table with columns for 'Type', 'Log', and 'Time'. The operations listed include starting the backup, using a temporary directory, performing data integrity checks, downloading index files, vacuuming the index, and creating a shadow copy set. The 'Close' button is located in the bottom right corner of the window.

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(-1635843864160)"		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 compr...		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(-1635843864160)"		20/03/2022 17:54:08
Completed data integrity check on backup set "Data-Backupset 1(1646398208096)", "Hot Cloud Storage Basic-Lite Plans(-1635843864160)"		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

14 Restore Data

14.1 Restore Method

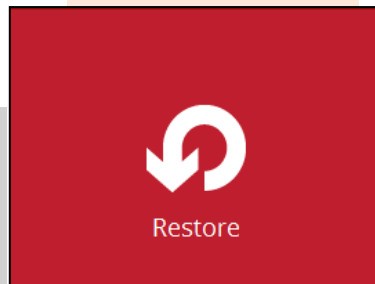
Advanced Client (B247PRO) supports two restore methods:

- Traditional Restore
- OpenDirect Restore - applies only to File backup sets with OpenDirect feature enabled

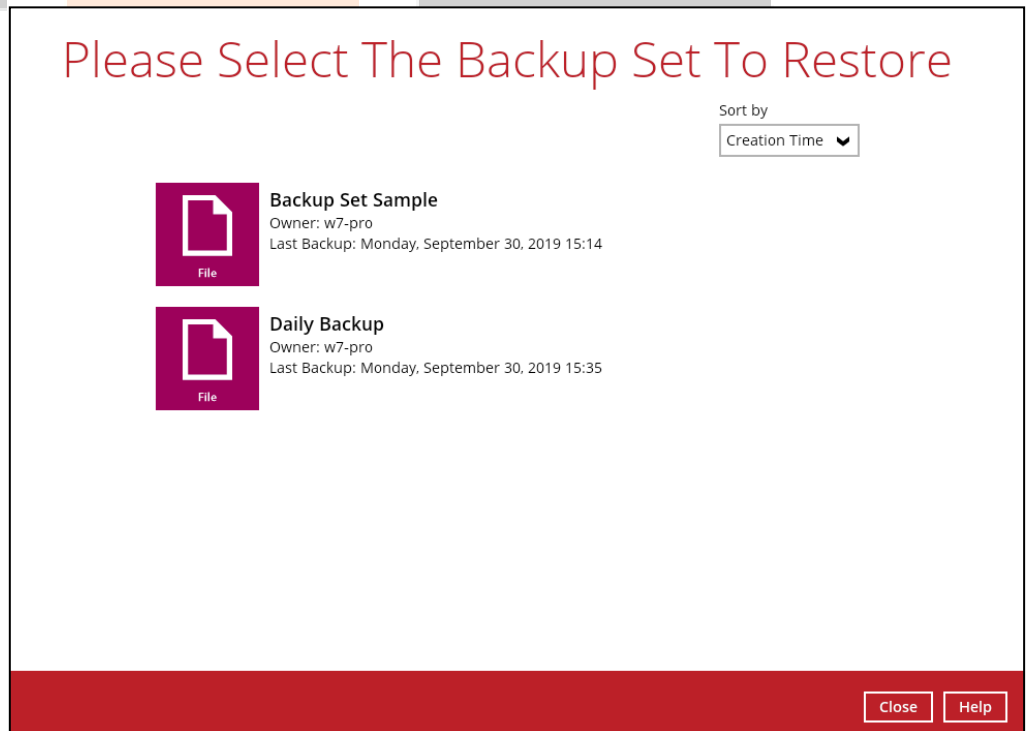
For more details on the differences of the two restore methods, refer to the [Benefits of using OpenDirect Restore](#).

14.1.1 Traditional Restore

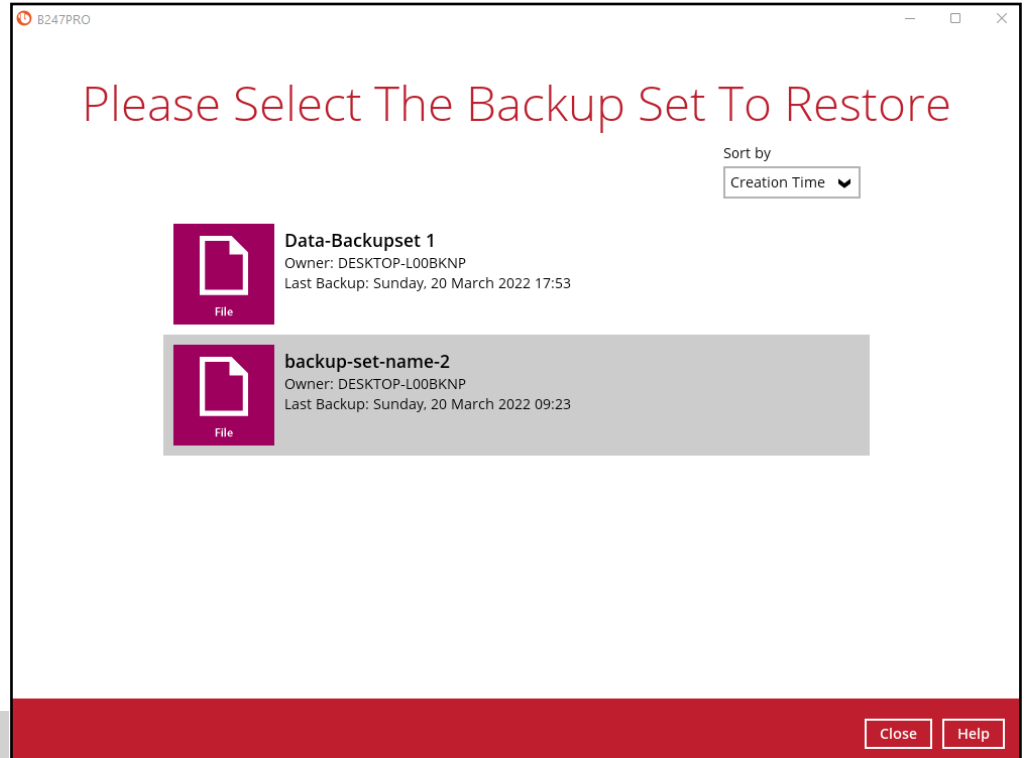
1. Log in to the Advanced Client (B247PRO) application according to the instructions in section [Chapter 8 Logging in to Advanced Client \(B247PRO\)](#).
2. Click the **Restore** icon on the Advanced Client (B247PRO) main interface.



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



4. Select the destination where you would like to restore your data from.



5. Select **Normal restore**.



6. 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** dropdown menu:

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

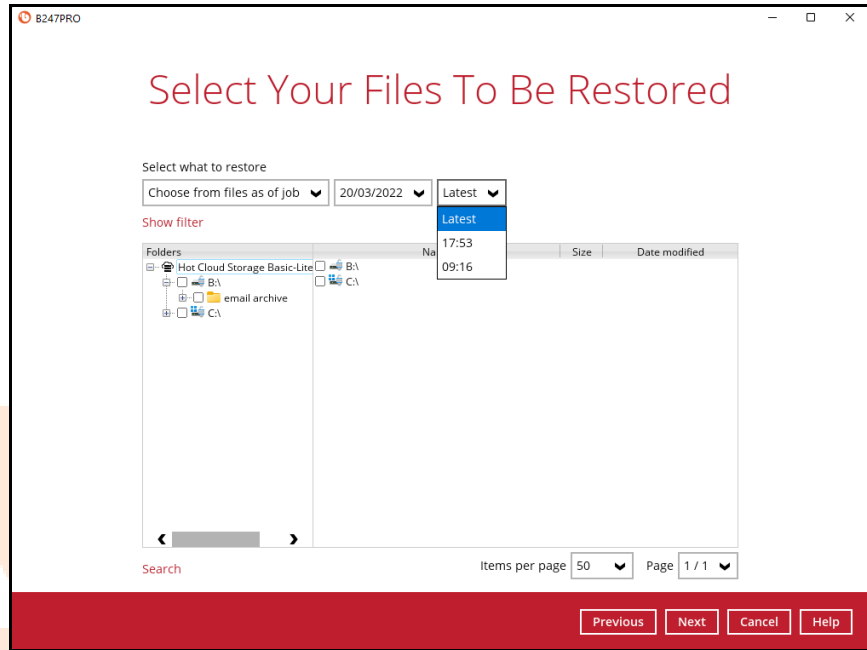
Select what to restore

Choose from files as of job ▼	09/30/2019 ▼	Latest ▼
Choose from files as of job		
Choose from ALL files		

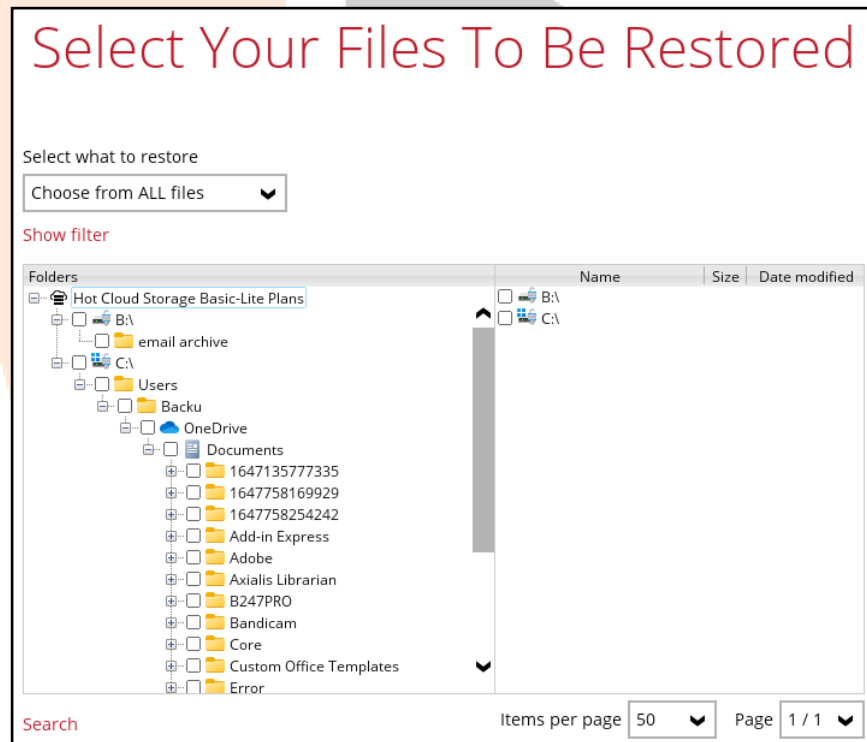
Name

Select what to restore

Choose from files as of job ▼	09/30/2019 ▼	Latest ▼
Show filter	09/30/2019	



➤ **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 **Test files.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 checked="" type="checkbox"/>	Test files.rtf	1 KB	09/30/2019 15:57
<input checked="" type="checkbox"/>	Test files.rtf	1 KB	09/30/2019 15:55
<input checked="" type="checkbox"/>	Test files.rtf	1 KB	08/01/2019 13:40
<input checked="" type="checkbox"/>	Test files_2.rtf	1 KB	09/30/2019 15:57
<input checked="" type="checkbox"/>	Test files_2.rtf	1 KB	09/30/2019 15:55
<input checked="" type="checkbox"/>	Test files_2.rtf	1 KB	08/01/2019 13:40
<input checked="" type="checkbox"/>	Text files.txt	2 KB	09/30/2019 15:57
<input checked="" type="checkbox"/>	Text files.txt	1 KB	09/30/2019 15:55
<input checked="" type="checkbox"/>	Text files.txt	0 KB	08/01/2019 12:02

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.

Name	Date modified	Type	Size
Test files	9/30/2019 3:57 PM	Rich Text Docu...	1 KB
Test files_2	9/30/2019 3:57 PM	Rich Text Docu...	1 KB
Test files_2_2019-09-30-15-43-06	8/1/2019 1:40 PM	Rich Text Docu...	1 KB
Test files_2_2019-09-30-15-56-12	9/30/2019 3:55 PM	Rich Text Docu...	1 KB
Test files_2019-09-30-15-43-06	8/1/2019 1:40 PM	Rich Text Docu...	1 KB
Test files_2019-09-30-15-56-12	9/30/2019 3:56 PM	Rich Text Docu...	1 KB
Text files	9/30/2019 3:57 PM	Text Document	2 KB
Text files_2019-09-30-15-43-06	8/1/2019 12:02 PM	Text Document	0 KB
Text files_2019-09-30-15-56-12	9/30/2019 3:55 PM	Text Document	1 KB

247

7. Click the **Show files** checkbox to select individual files for restoration. Click **Next** to proceed when you are done with the selections.
8. 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 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** folder as well on the computer running Advanced Client (B247PRO).

Choose Where The Files To Be Restored

Restore files to

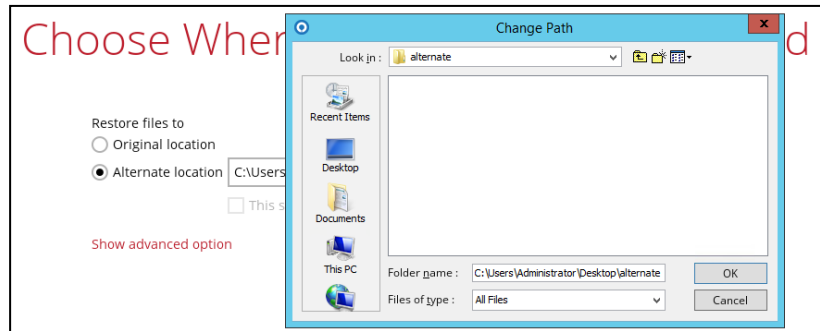
Original location
 Alternate location

This share requires access credentials

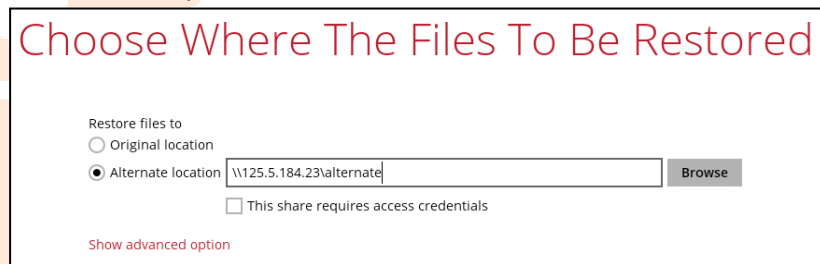
[Show advanced option](#)

- **Alternate location** – You can choose to restore the data to a location of your choice on the computer where Advanced Client (B247PRO) is running or to a network drive.

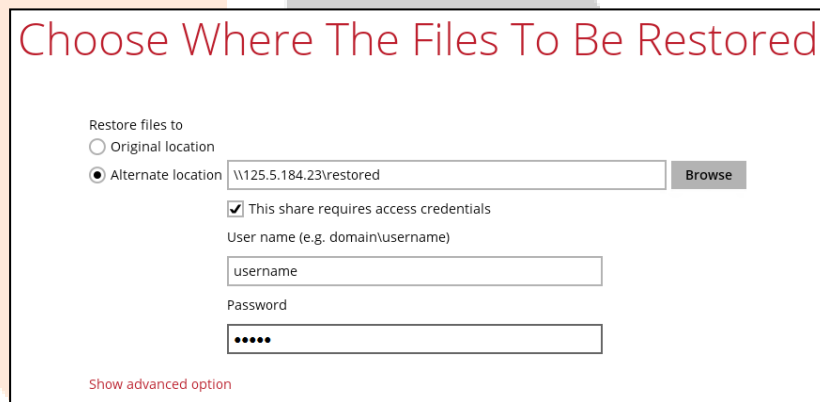
- i. To restore to a location of your choice on the computer where Advanced Client (B247PRO) is running, click Browse. Select the location and click **OK**.



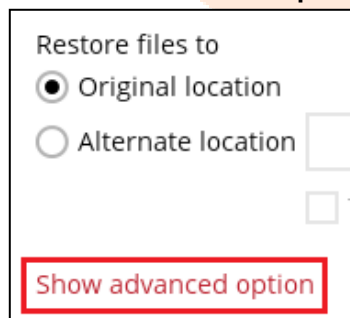
- ii. To restore to a network drive, enter the network address where you want the backup files to be restored.

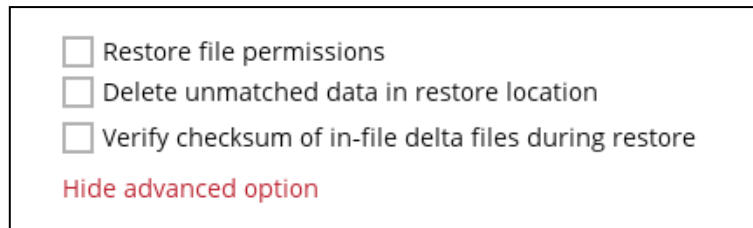


Check the box beside **This share requires access credentials** if the network drive was set up with password. Enter the User name and Password.



- 9. Click **Show advanced option** to configure other restore settings:





➤ **Restore file permissions**

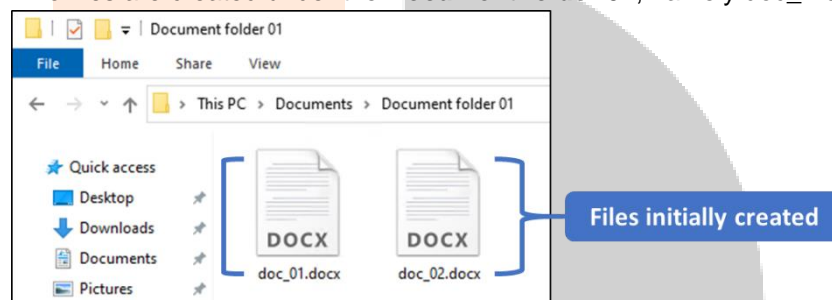
Restore file permissions are disabled by default. When you perform a file restore on shared files or folders using a shared computer, it is recommended that you enable Restore file permissions by ticking the checkbox so that the files restored will not be fully accessible to everyone using the shared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

➤ **Delete 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.

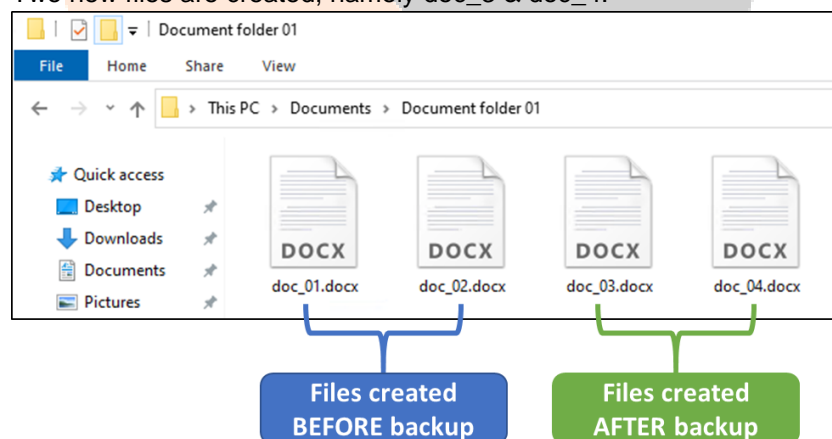
Example:

- i) Two files are created under the **Document folder 01**, namely doc_1 & doc_2.



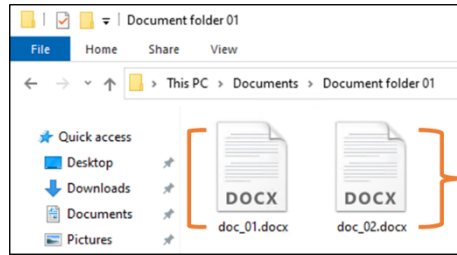
- ii) A backup is performed for folder **Document folder 01**.

- iii) Two new files are created, namely doc_3 & doc_4.



- iv) A restore is performed for the **Document folder 01**, with **Delete 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.



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.

10. Click **Next** to proceed when you are done with the settings.
11. 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 where Advanced Client (B247PRO) is running, 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.

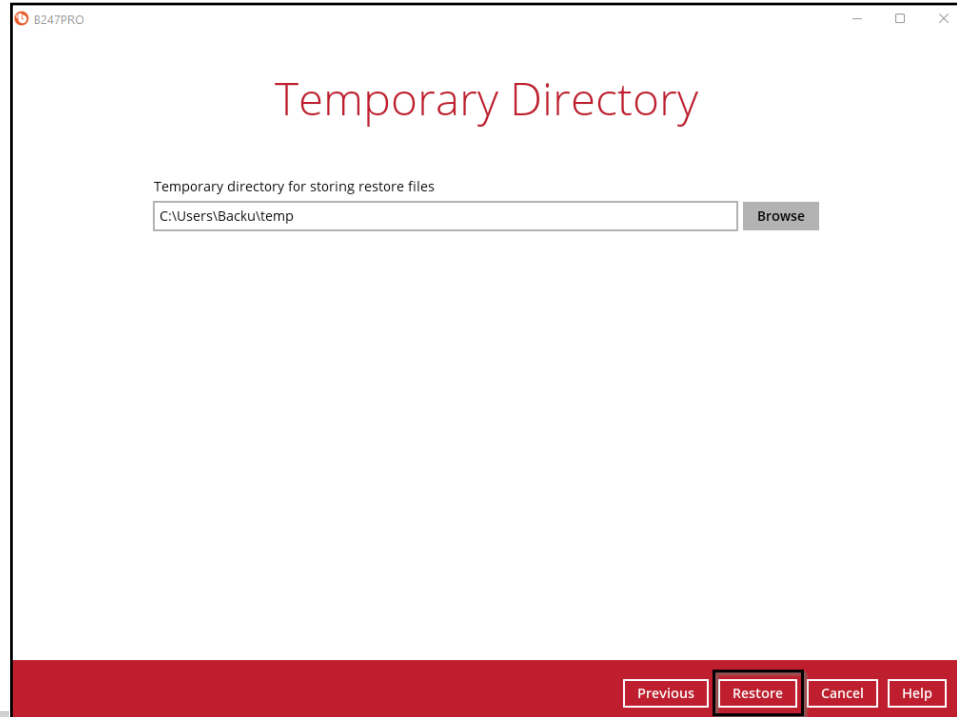
Temporary Directory


Temporary directory for storing restore files

C:\Users\Backu\temp

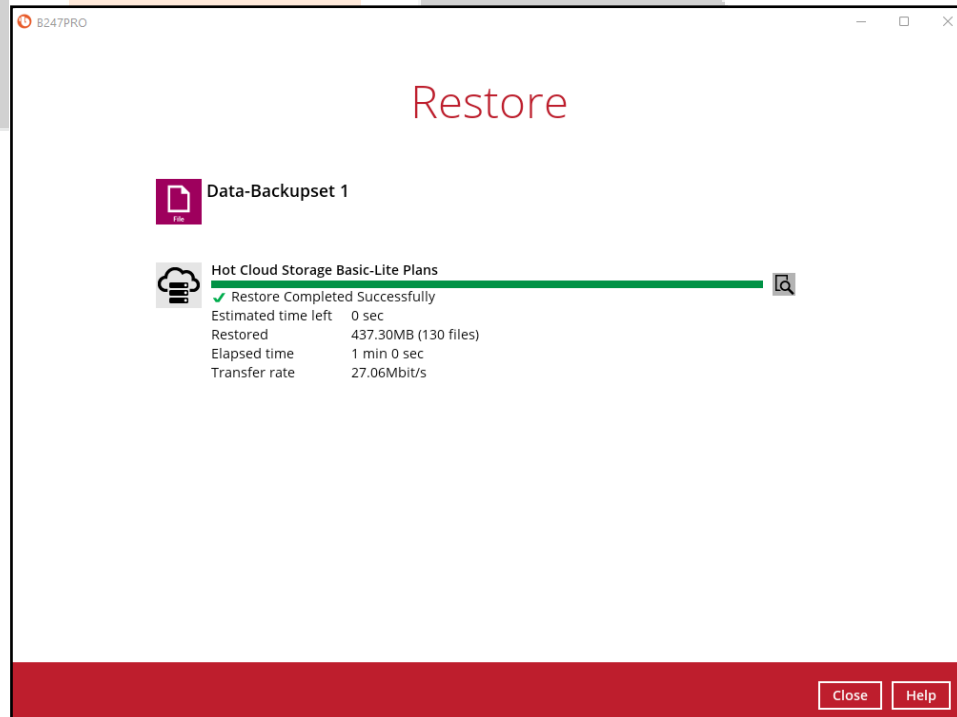
Browse

12. Click the **Restore** button to start the restore job.

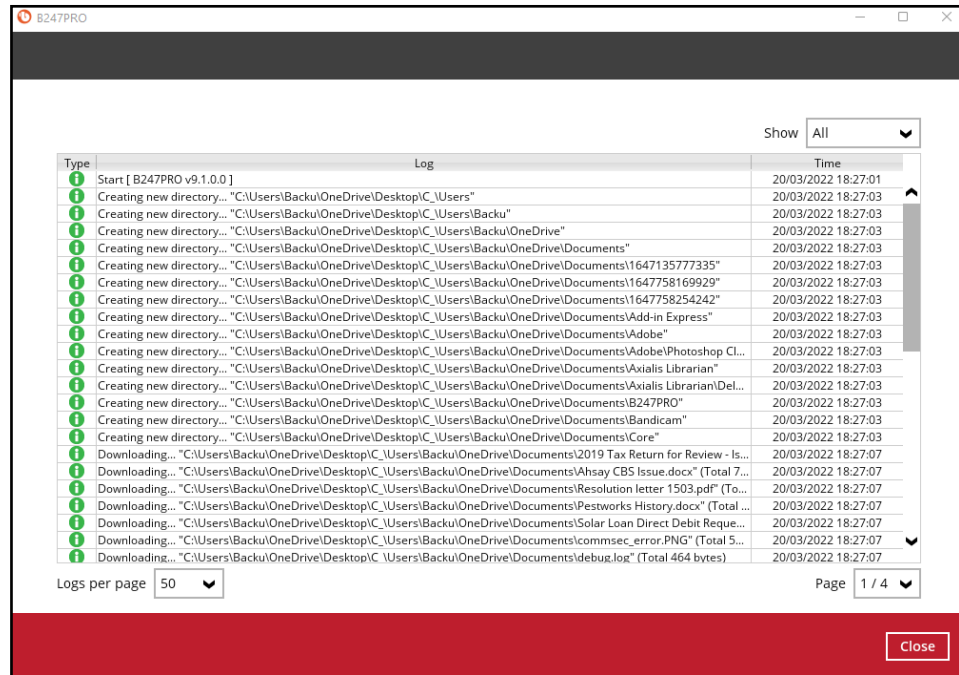


13. The following screen will be displayed to indicate that the restore job is successfully completed. You may click the  button to check for the restore log.

251



14. Once you are done with checking the restore log, click the **Close** button to return to the previous screen.






14.1.2 OpenDirect Restore

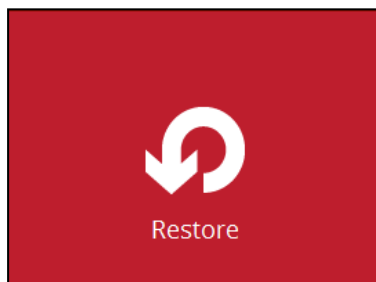
This restore method applies to backup sets created with OpenDirect restore enabled only.

IMPORTANT

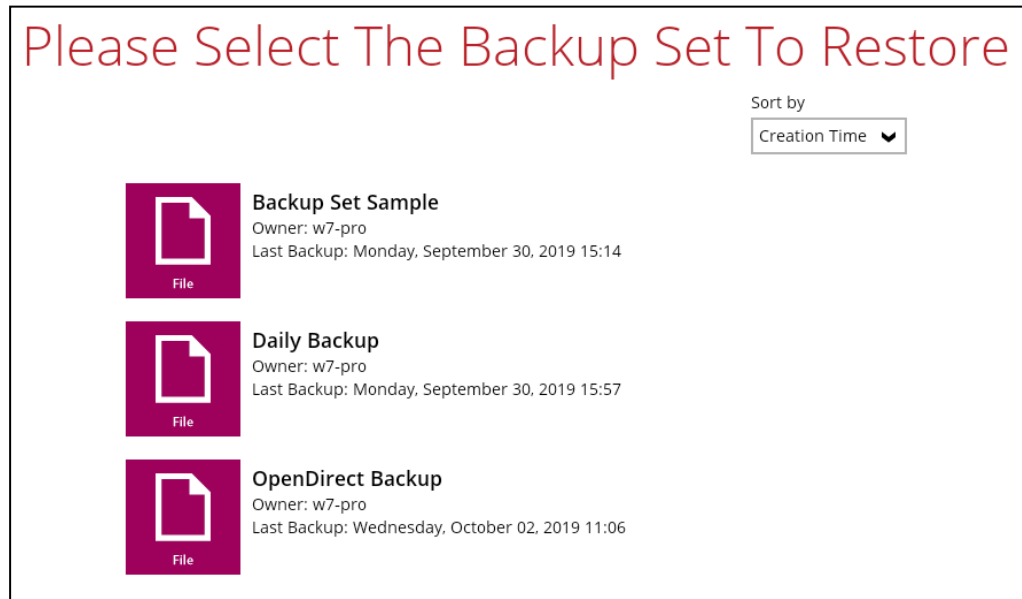
Before you proceed with the OpenDirect Restore, make sure the following dependencies are fulfilled. Failure to do so may cause the restore to fail.

-  Microsoft Visual C++ 2015 Redistributable (x86) / (x64)
<https://www.microsoft.com/en-us/download/details.aspx?id=48145>
-  Update for Universal C Runtime in Windows
<https://support.microsoft.com/en-us/help/2999226/update-for-universal-c-runtime-in-windows>
-  Microsoft Security Advisory 3033929 (for Windows 7 and Windows Server 2008 R2)
<https://technet.microsoft.com/en-us/library/security/3033929.aspx>

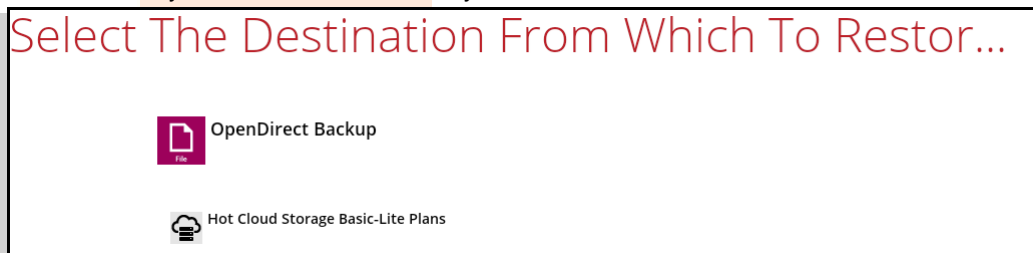
- Log in to the Advanced Client (B247PRO) application according to the instructions in section [Chapter 8 Logging in to Advanced Client \(B247PRO\)](#).
- Click the **Restore** icon on the Advanced Client (B247PRO) main interface.



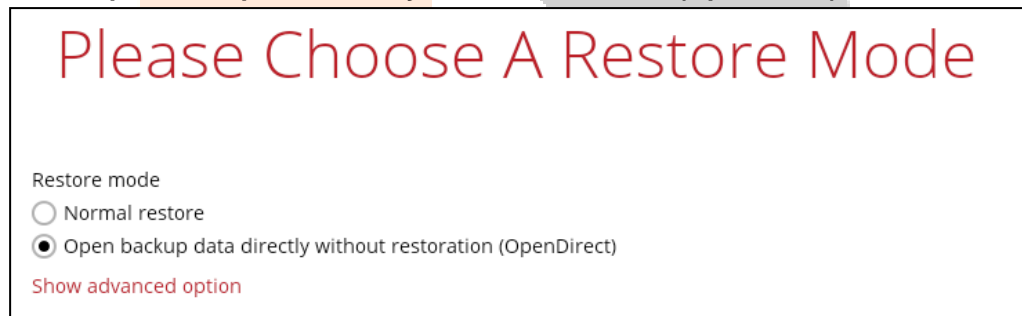
3. All the available backup sets for restore will be listed. Select the backup set that you would like to restore data from.



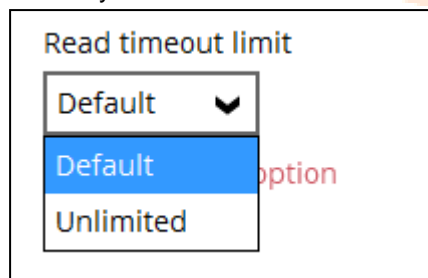
4. Select where you would like to restore your data from.



5. Select **Open backup data directly without restoration (OpenDirect)**.



You may select the **Read timeout limit** by clicking Show advanced option.



This selection defines the duration when the OpenDirect restore session will be disconnected if there is no response from the mounted compressed or image file.

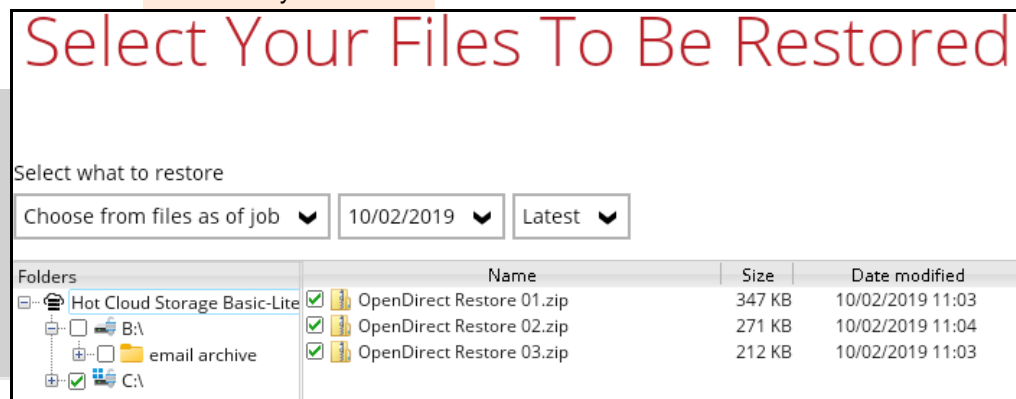
- **Default** – This setting should be suitable for compressed or image file located on a local, removable, or network drive. The time out value is 15 seconds.
- **Unlimited** – the connection will not be time out when this is selected. This selection is recommended under the following usage:
 - Backup destination is a cloud storage.
 - B247CBS over the Internet.
 - A large compressed or image file with large incremental delta chain.

NOTE

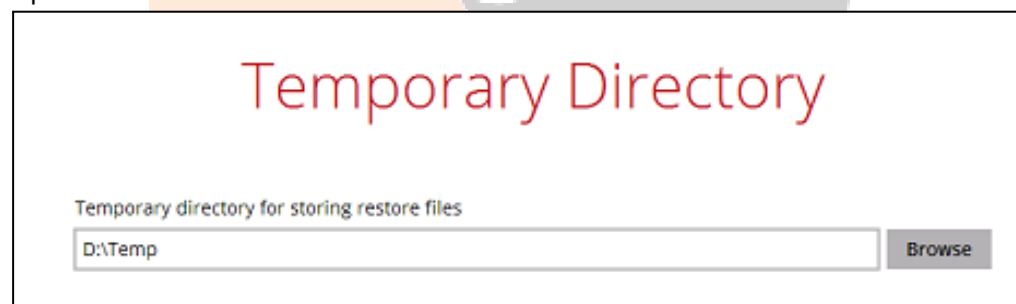
If in doubt or unsure about the compressed or image file size or network stability, it is recommended to use **Unlimited**.

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

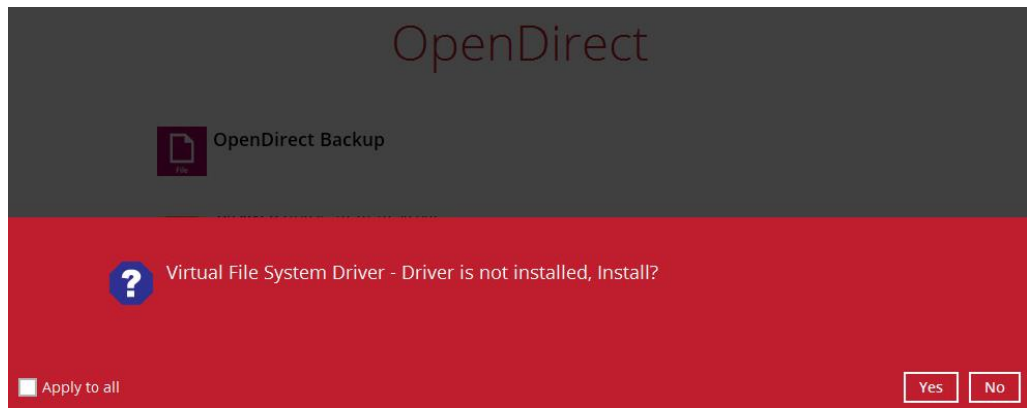
6. Select to restore files from a specific backup job, or from all files available, then select the files or folders that you would like to restore.



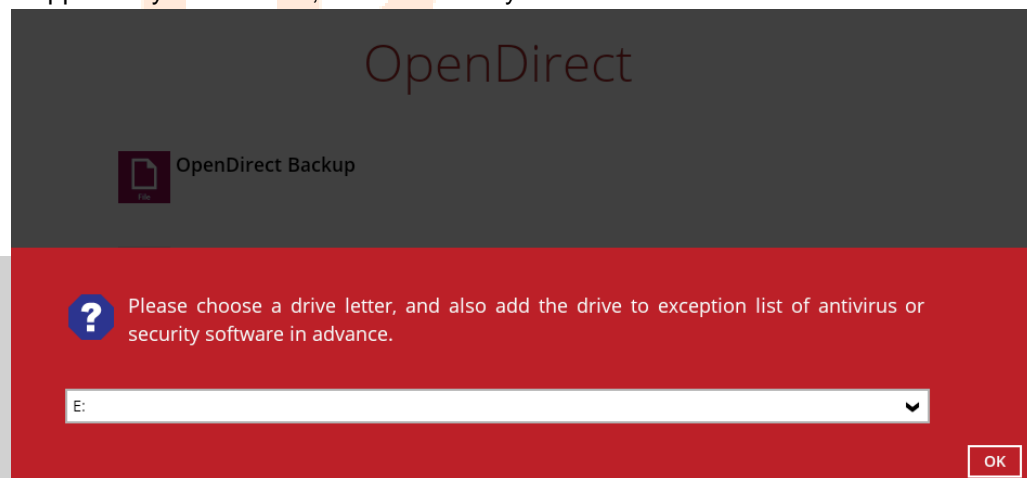
7. Select a temporary directory for storing restore files, then click Restore to start the OpenDirect restore.



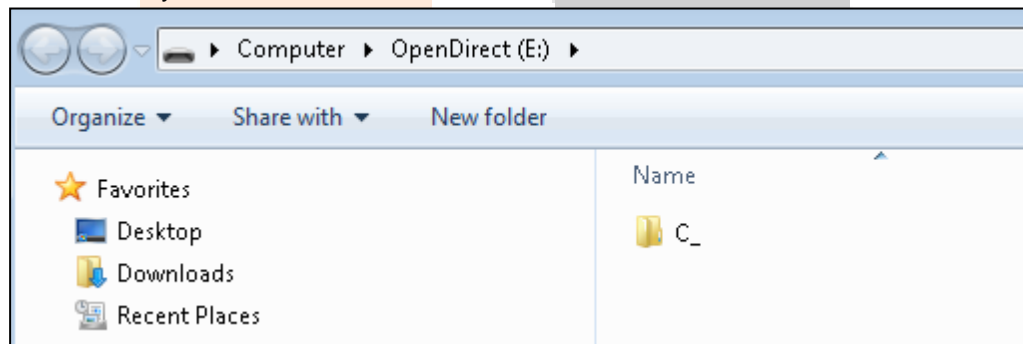
8. Click **Restore** to start the restore. The status will be shown.
9. The following screen shows when you perform OpenDirect restore for this backup set on this machine for the first time only. Make sure you click **Yes** to confirm mounting the file(s) on this machine. Clicking **No** will exit the restore process.



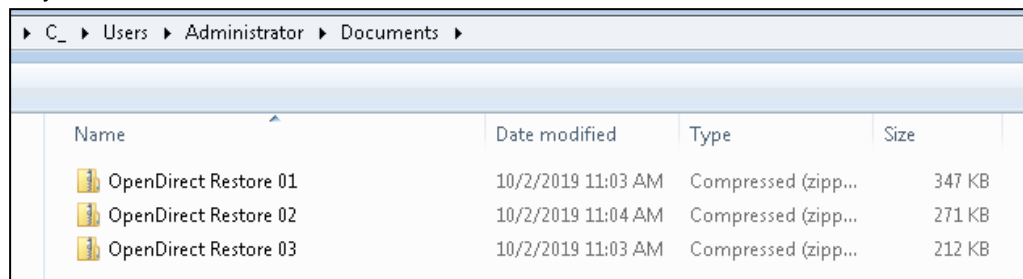
10. You will be prompted to select drive letter where you wish the mounted files to be mapped on your machine, click **OK** when you have finished selection.



11. The selected drive letter will be mapped and prompted in the Windows Files Explorer with the files you wish to restore shown.



12. You can now click on the files to view them directly from here, which will be in read-only mode.



If it is a zipped file, you can directly click on it to see all the individual files inside.

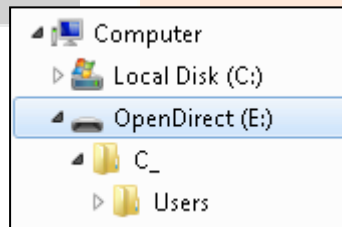
Name	Type	Compressed size	Password ...
box image	PNG image	2 KB	No
box image_2	PNG image	2 KB	No
Copy of the Sample image	Bitmap image	0 KB	No
Data	Text Document	0 KB	No
Diagram	PNG image	74 KB	No
Excel file.xlsx	XLSX File	6 KB	No

You may also copy individual file(s) you wish to restore to your local machine.

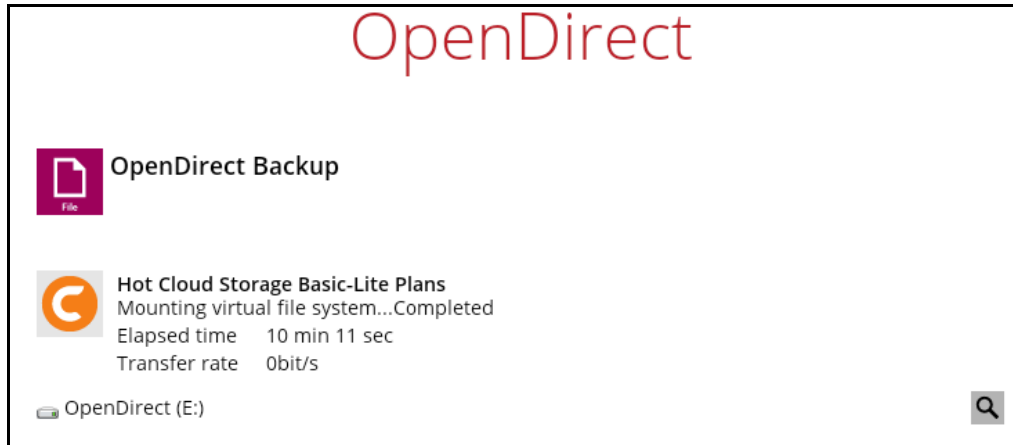
Name	Type	Compressed size	Password ...
box image	PNG image	2 KB	No
box image_2	PNG image	2 KB	No
Copy of the Sample image	Bitmap image	0 KB	No
Data	Text Document	0 KB	No
Diagram	PNG image	74 KB	No
Excel file.xlsx	XLSX File	6 KB	No
File_1.pptx	Presentation	0 KB	No
File_2.pptx	Presentation	0 KB	No

256

13. The mounted drive letter cannot be ejected from the Windows File Explorer, it will only be closed when you exit Advanced Client (B247PRO).



14. When you have finished restoring the necessary files, you can go back to Advanced Client (B247PRO) and click **Cancel** to exit the OpenDirect Restore.



IMPORTANT

1. As a result of the limitation of the virtual file system library, the mapped drive will only be unmounted from your machine when you exit Advanced Client (B247PRO). In other words, each OpenDirect restore session on Advanced Client (B247PRO) can only mount and unmount once.
2. **OpenDirect restore** of file backup sets:
 - Will not show up on the **Restore Status** tab in **Live Activities** of the backup service provider B247CBS. **Restore Status** tab in **Live Activities** only applies to the restore performed directly through Advanced Client (B247PRO).
 - Will not generate restore reports or report email on backup service provider B247CBS.
 - Will not generate restore log on Advanced Client (B247PRO).

14.2 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 pattern 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**

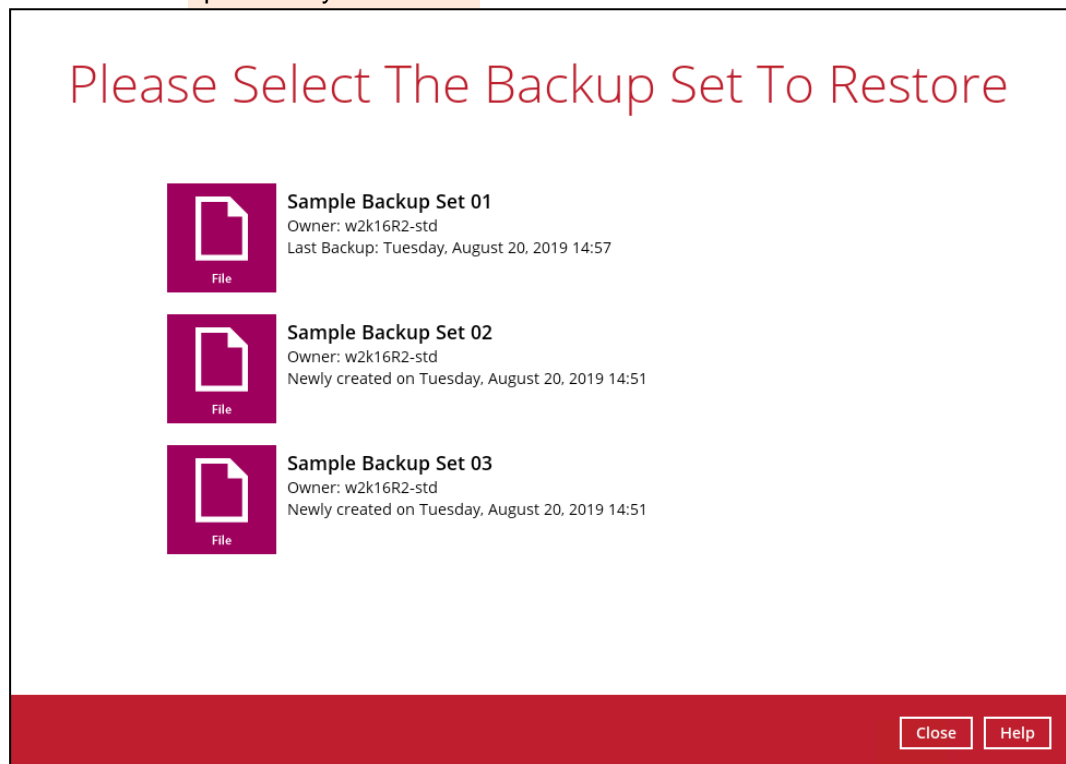
These are Directories, Files, and Folders with the name **ending** with a specific letter or word.

It also has the **Match Case** function, which serves as an additional accuracy when searching for any specific directories, files, folders, and mails.

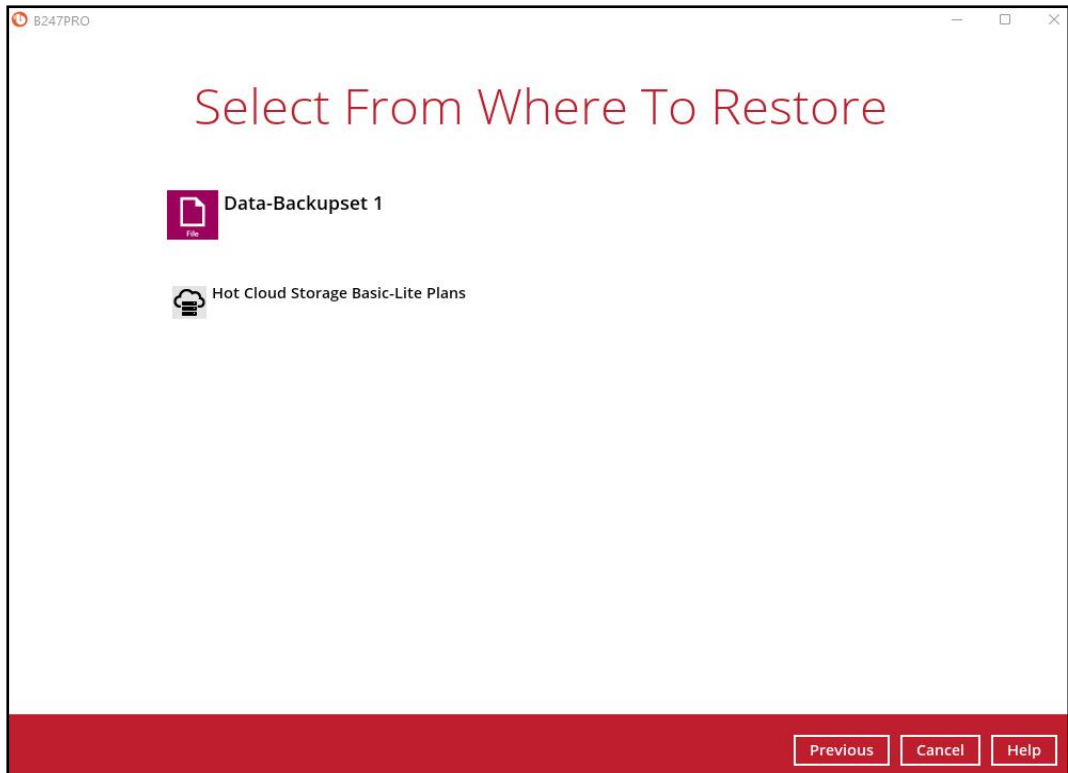
For more detailed examples using the restore filter on Advanced Client (B247PRO), refer to [Appendix B: Example Scenarios for Restore Filter](#).

Log in to Advanced Client (B247PRO) according to the instructions in [Chapter 8 Logging in to Advanced Client \(B247PRO\)](#).

- 1 Click the **Restore** icon on the main interface of Advanced Client (B247PRO).
- 2 Select the backup set that you would like to restore.

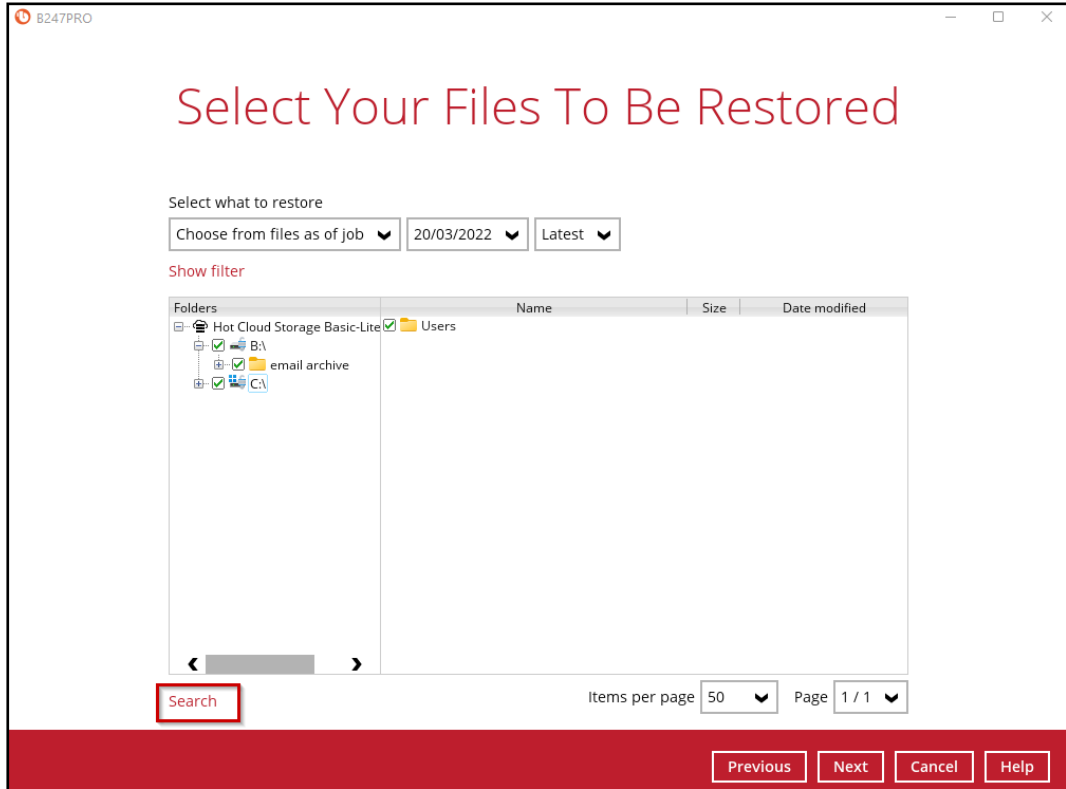


- 3 Select the backup destination that you would like to restore backed up items to.



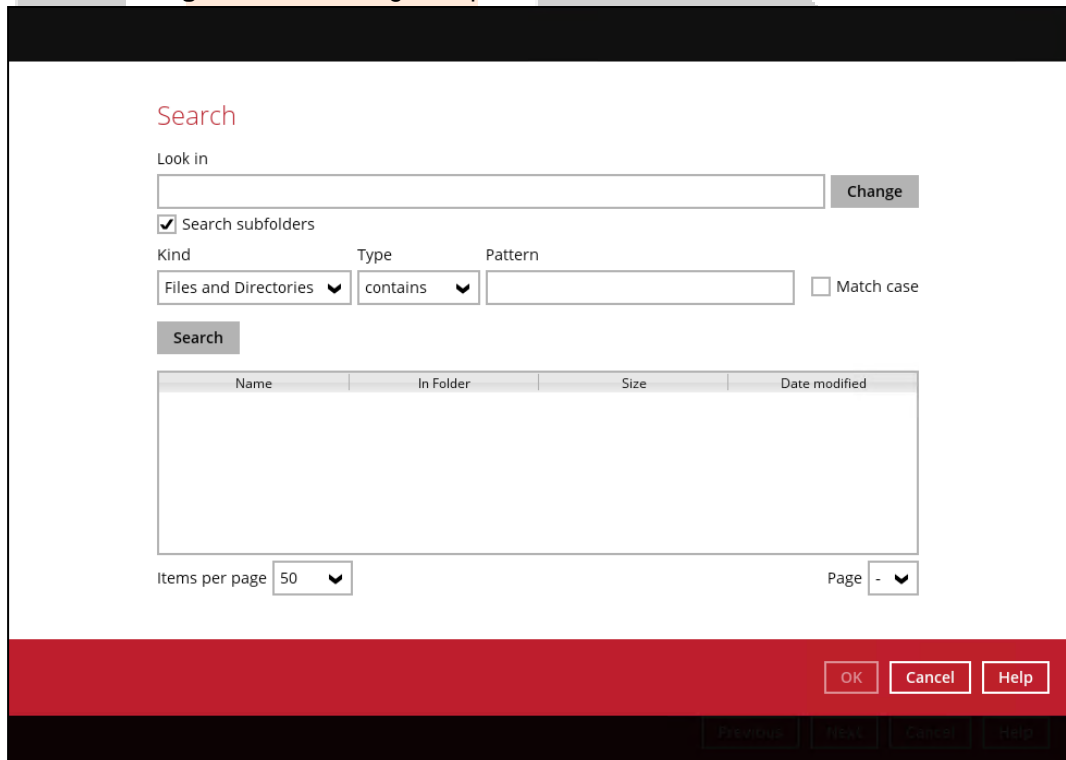
259

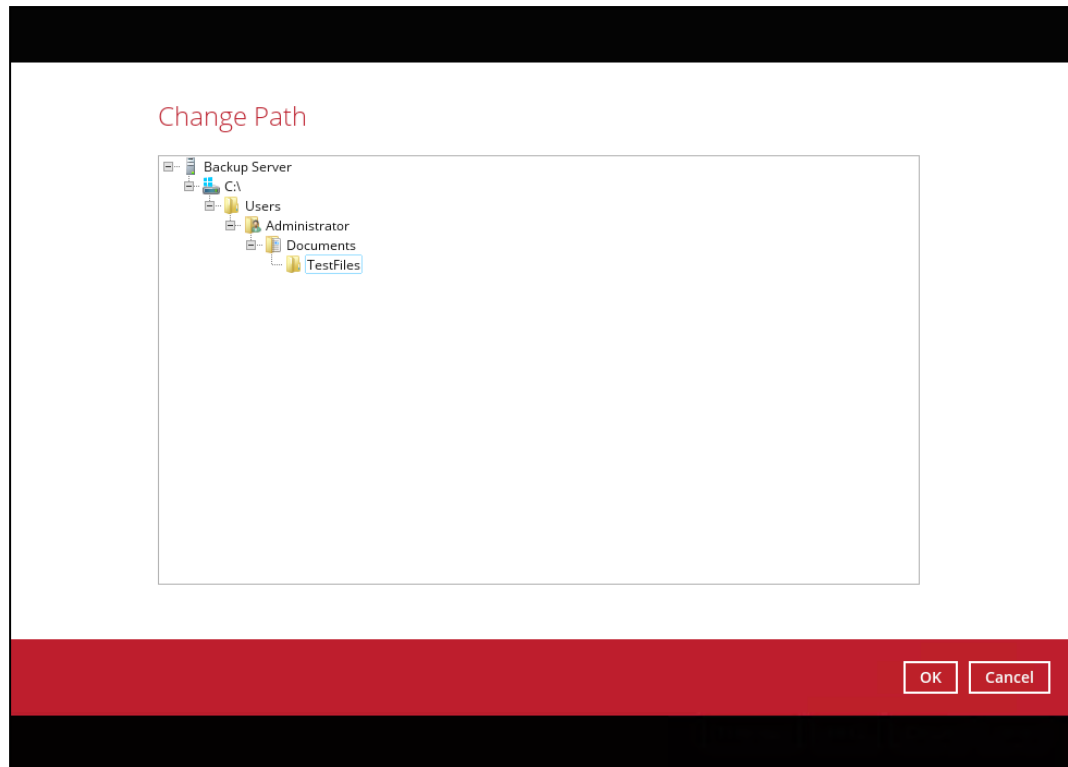
- 4 Click the **Search** located on the lower left side of the screen.



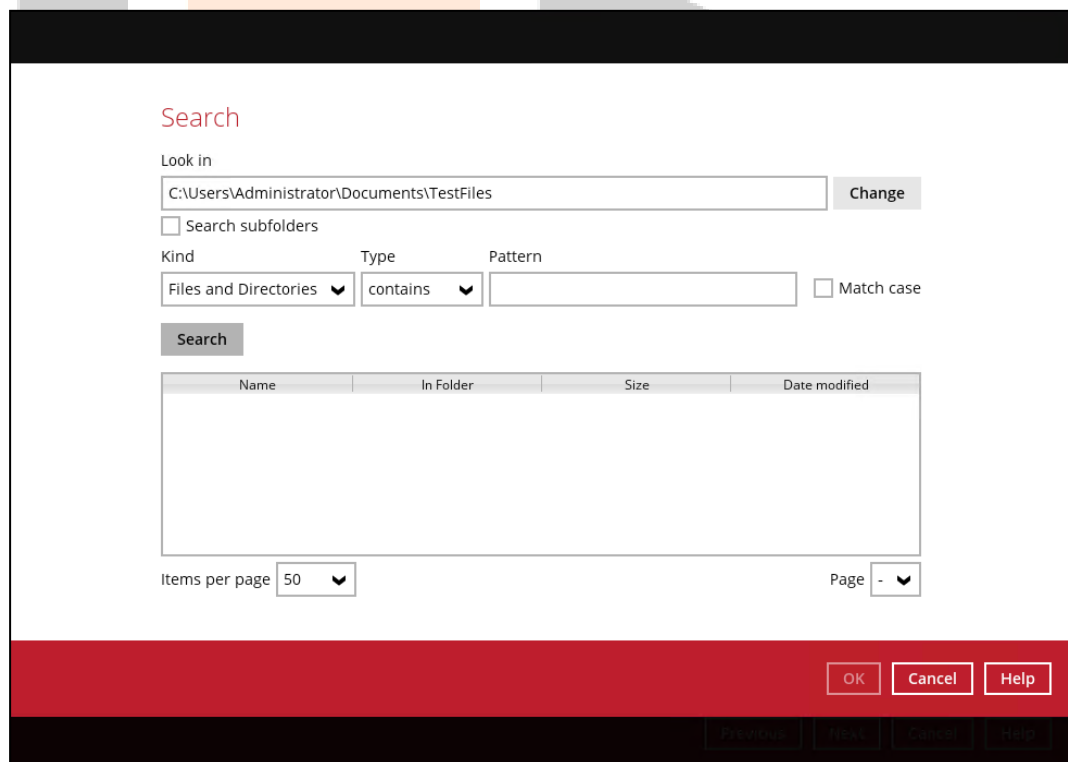
- 5 Click the **Change** button to change the path of the restore items from other location.

260





261



6 Tick the **Search subfolders** checkbox to include available subfolders upon searching.

Search subfolders

Search subfolders

7 Select from the following Kind of files you want to search.

- Files and Directories
- Files only
- Directories

8 Select from the following Type of filtering you want to search.

- Contains
- Exact
- Starts With
- Ends With

9 Enter a pattern you want and tick the **Match case** checkbox if you want to accurately search for a specific file.

Pattern

Match case

Pattern

Sheet Match case

10 Click the **Search** button and the result will be displayed.

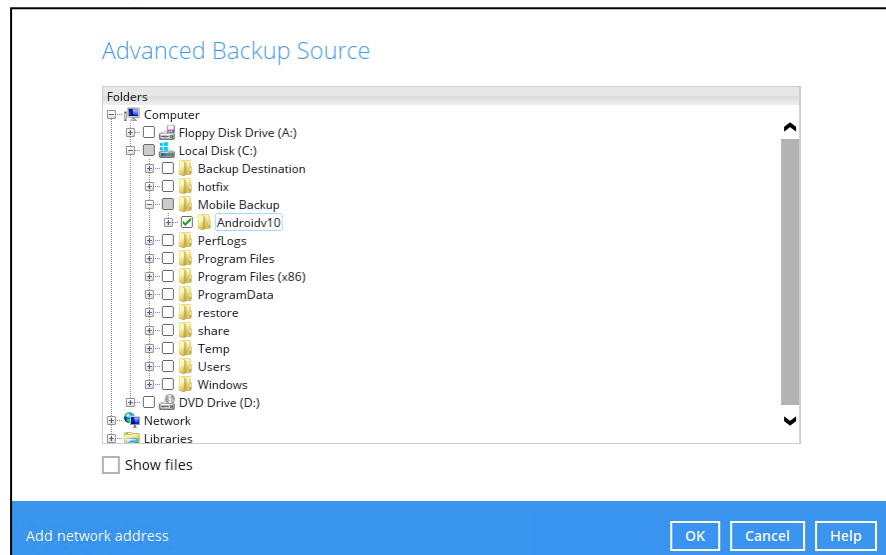
Search

11 Check all the items or check a specific item that you want and click the **OK** button to proceed, and you will return to the restore main screen.

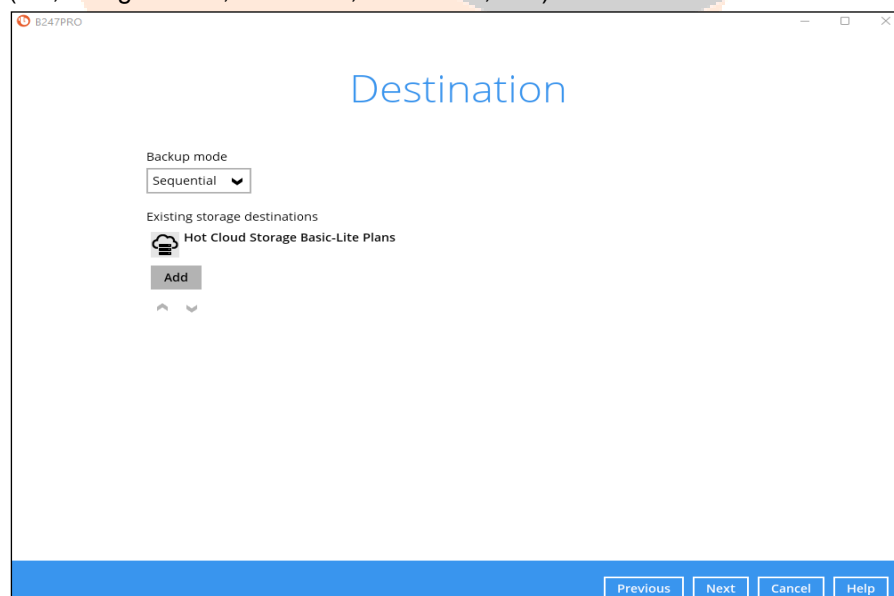
15 Mobile Backup and Restore to B247CBS and Predefined Destination

To perform a mobile backup and restore to B247CBS and/or Predefined Destination, follow the instructions below:

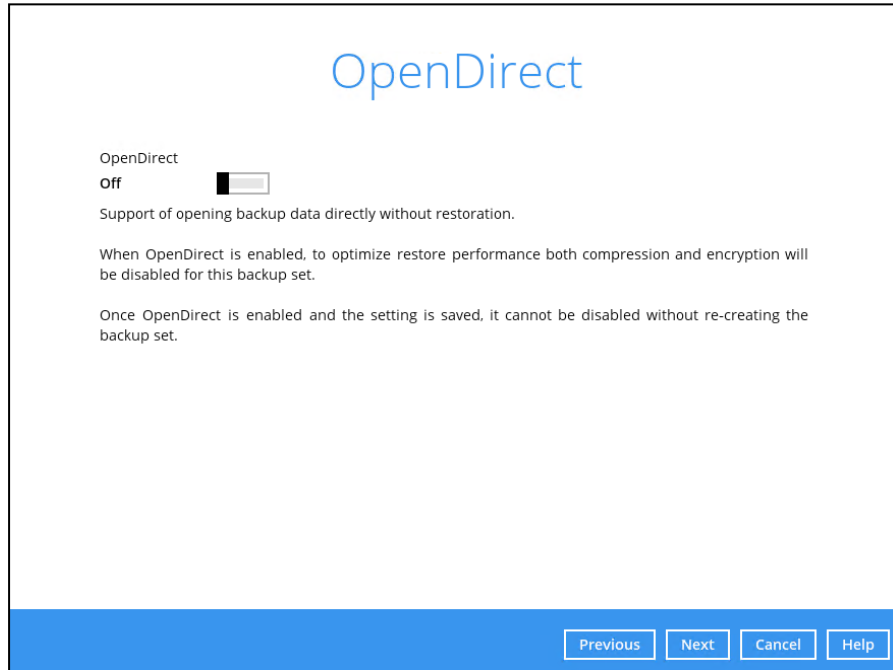
1. Backup photos, videos, documents and 2FA accounts from Backup247 Mobile (B247MOB) app to Advanced Client (B247PRO) local destination. For more detailed information, refer to **Chapter 10** of the Backup247 Mobile (B247MOB) User Guide for Android and iOS.
2. Create a File backup set according to the instructions in [Chapter 11 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 Advanced Client (B247PRO) local destination. In this example, the backup source is located in: C:\Mobile Backup\%Mobile device%



- The backup destination must be B247CBS and/or Predefined Destination (i.e., Google Drive, OneDrive, Hot Cloud, etc.)

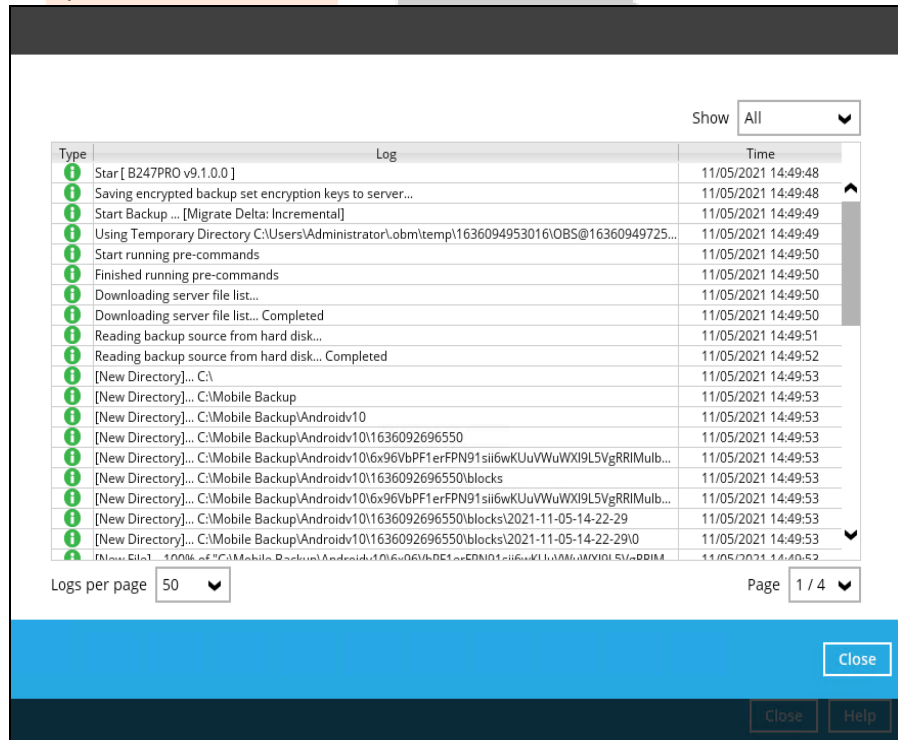


- The **OpenDirect Restore** feature must be disabled.



3. After creating the backup set, run a backup job according to the instructions in [Chapter 13.3 Start Manual Backup](#). Below is an example of a backup report for mobile backup data.

264



4. Restore data according to the instructions in [Chapter 14.1.1 Traditional Restore](#).

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 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.

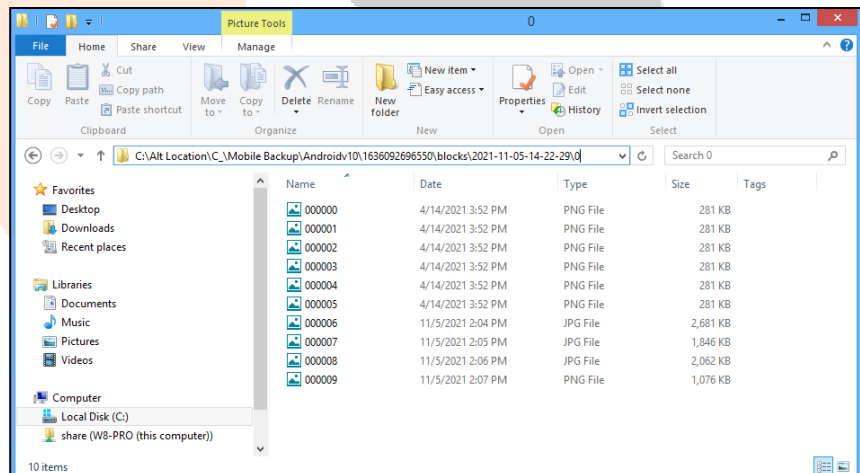
NOTE: Restore to alternate location is not supported on another Advanced Client (B247PRO) machine. Options 1 and 2 must be on the original machine where the backups were performed.

In case the original machine is no longer available, Advanced Client (B247PRO) will be able to restore the photos, videos, documents 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, documents and 2FA accounts from the Advanced Client (B247PRO).

- **Option 1:** Copy the restored data from an Alternate Location to the Original Location which is the **backup destination for your mobile device**.

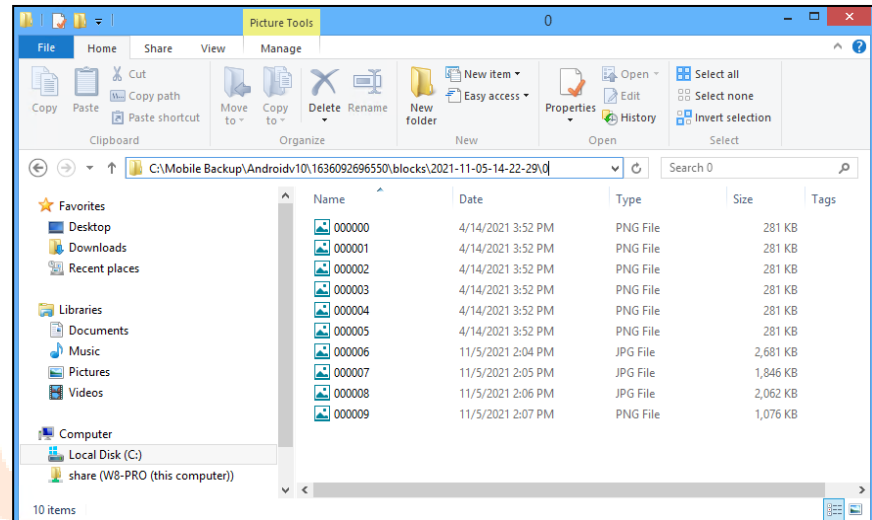
Example of the Alternate location:

C:\Alt Location



Example of the Original location:

C:\Mobile Backup



You can now use the Backup247 Mobile (B247MOB) app to restore the photos and videos back to your mobile device.

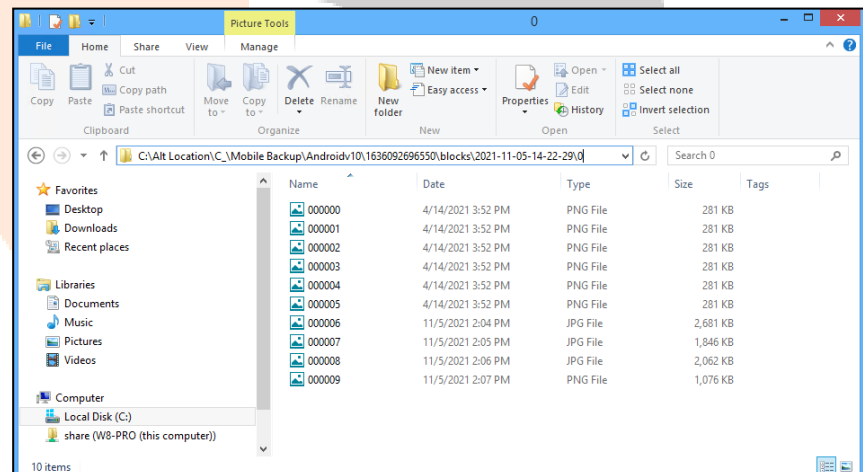
- **Option 2:** Copy the restored data from the Alternate Location to your Android or iOS mobile device.

Instructions:

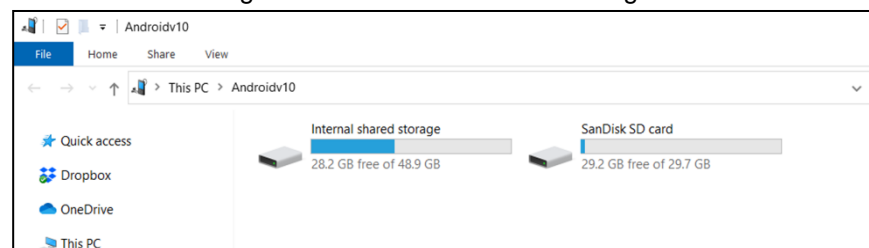
- For an Android device, you need to plug your cable and transfer the restored data from the Alternate Location to your mobile device storage.

Example of the Alternate Location:

C:\Alt Location



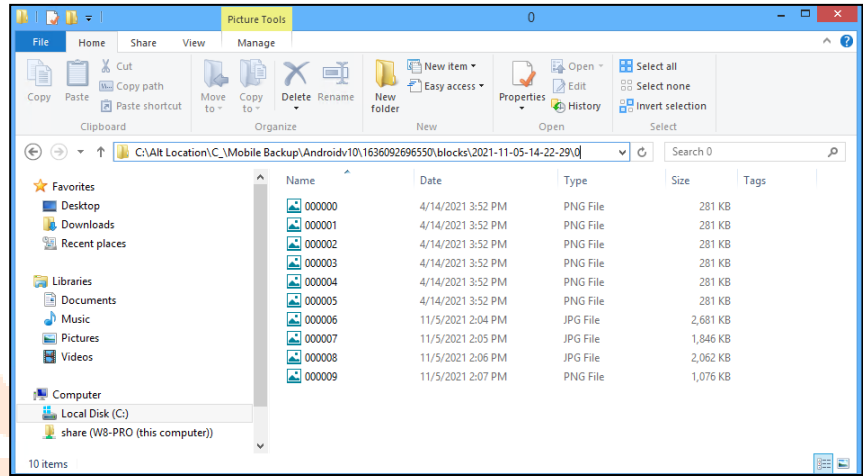
Mobile device storage: Android device Internal storage and SD card



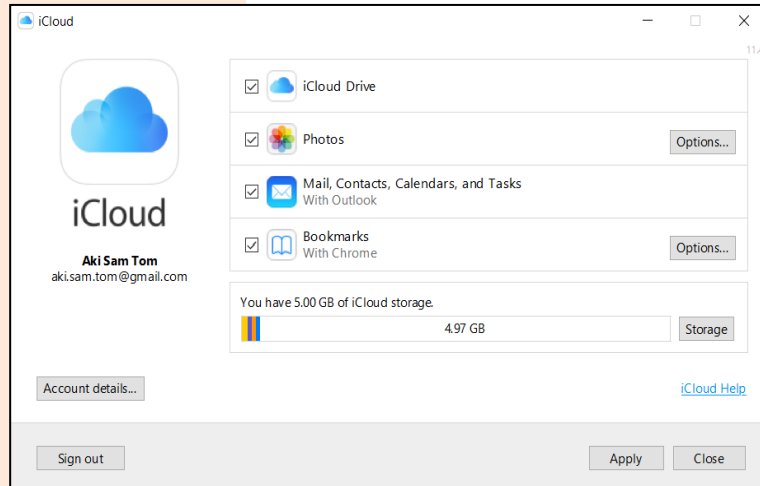
- For an iOS device, you need to transfer the restored data from the Alternate Location to iCloud.

Example of the Alternate Location:

C:\Alt Location



Upload to iCloud using the iCloud app



16 Contact Backup247

16.1 Technical Assistance

To contact Backup247 support representatives for technical assistance, visit our website <https://backup247.com.au/> for contact details.

16.2 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.

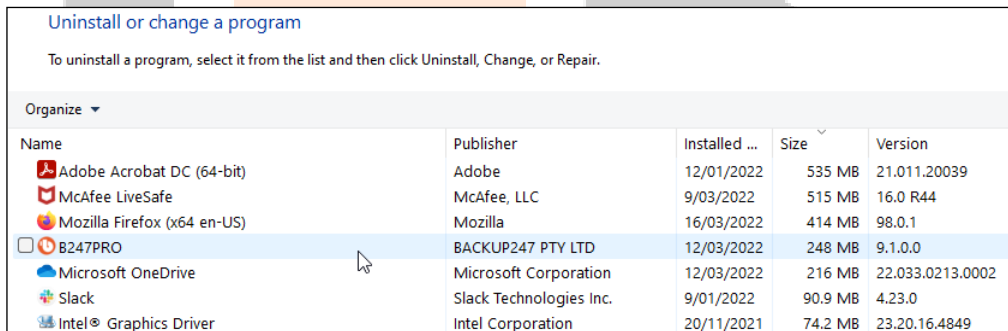
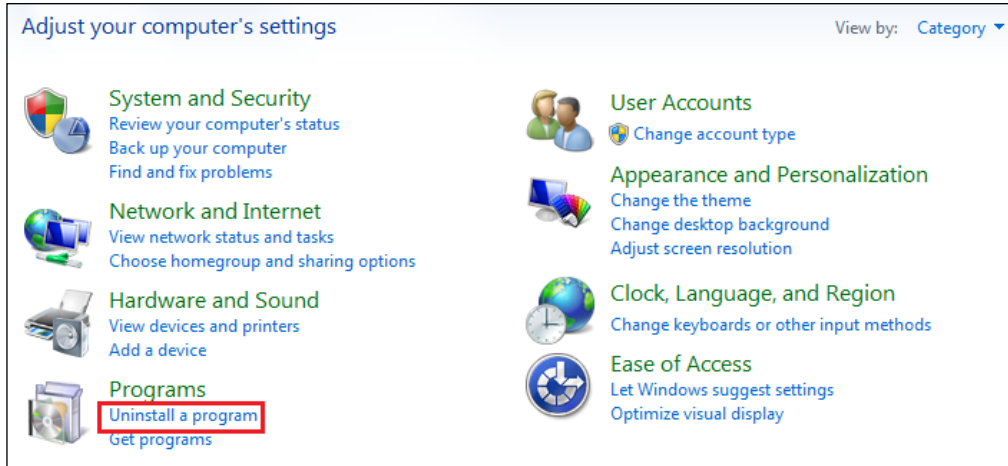


Appendix

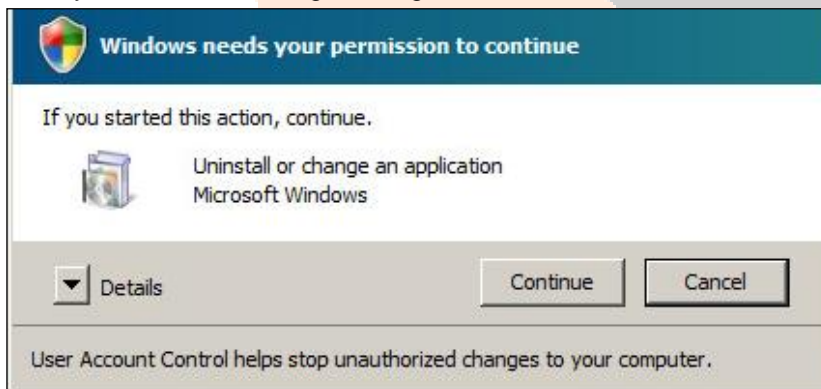
Appendix A: Uninstall Advanced Client (B247PRO)

Follow the steps below to uninstall Advanced Client (B247PRO) from your Windows.

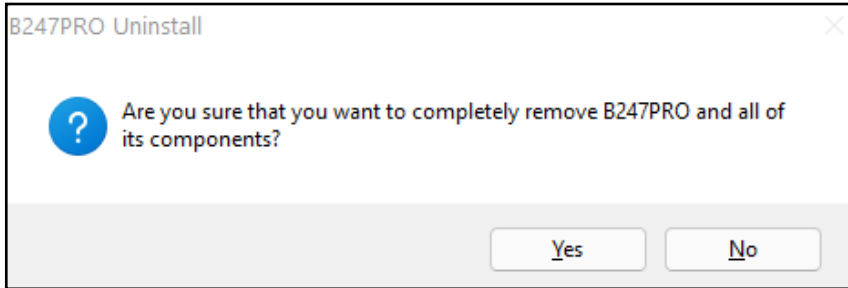
1. Go to **Control Panel > Programs and Features > Uninstall a program**, then look for Advanced Client (B247PRO) and double click on it.



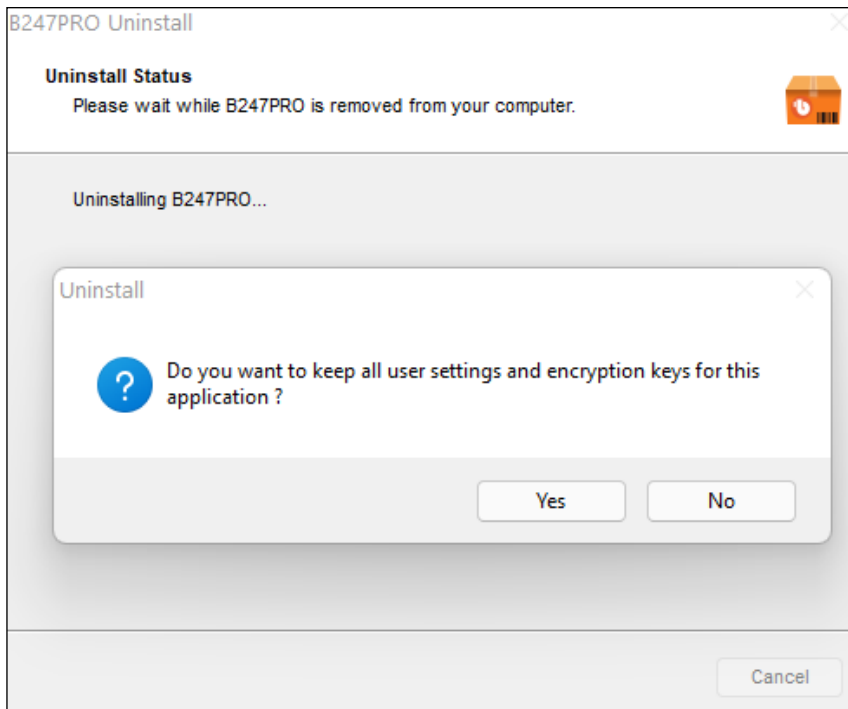
2. The following dialog box will appear only if User Account Control is enabled. Click **Continue** when you see the following message.



3. Click **Yes** to confirm and proceed with the uninstallation.

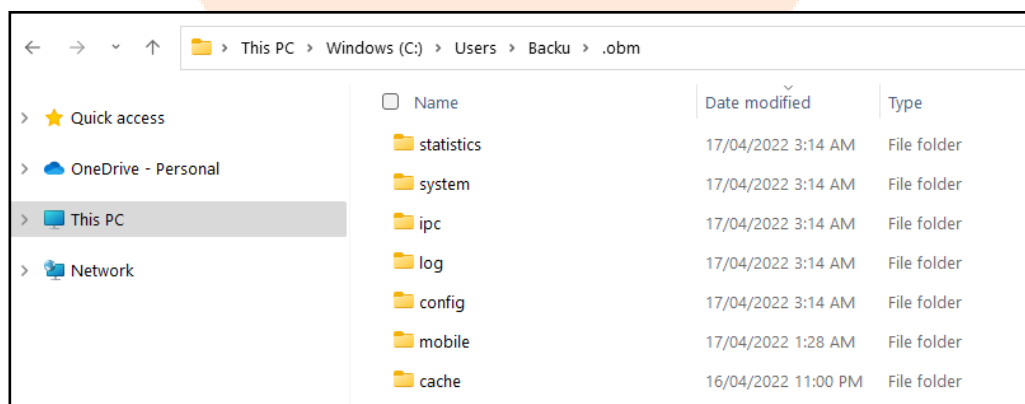


When you see the following screen:



270

- Choose **Yes** to keep all user settings and the encryption keys associated with the users. If you are likely to install Advanced Client (B247PRO) on the same machine in the future again, the user settings, e.g., login details, backup sets and so forth will remain in **C:\Users\[username]\.obm** by default. The screen capture below shows the folders remain in the machine after uninstallation.

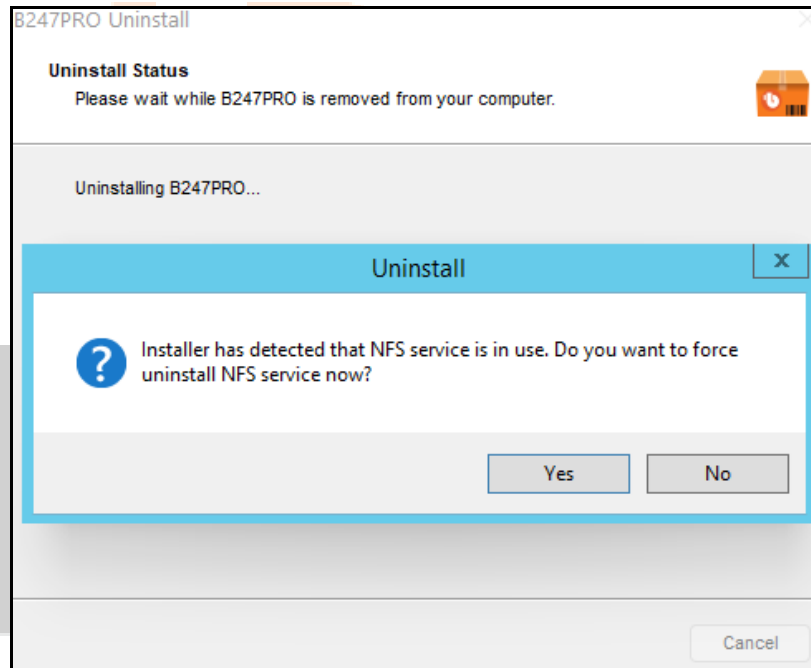


- Choose **No** to delete all user settings and encryption keys with this uninstallation. Please be reminded that the encryption keys are not retrievable once they have been deleted unless the encryption keys have been uploaded to B247CBS server, and

therefore it will no longer be possible for backup user to recover their encryption key in case they do not have a separate written record.

If there is a Run Direct restore running at the time of the Advanced Client (B247PRO) uninstallation, the following screen prompts to alert you the NFS service is in use.

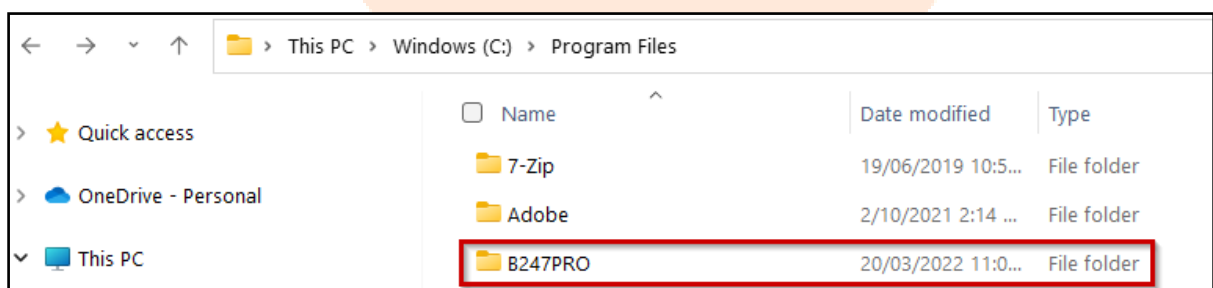
- Select **No** if you do not wish to force uninstall the NFS service. Advanced Client (B247PRO) will be uninstalled without affecting the NFS service, where the Run Direct restore will not be interrupted.
- Select **Yes** to force uninstall the NFS service. Both Advanced Client (B247PRO) and NFS service will be uninstalled from the machine. The VM running Run Direct restore and the datastore are both unmounted from the VMware server.



271

4. That completes B247PRO uninstallation from client's PC/Server.

(Optional) For a complete removal of all Advanced Client (B247PRO)-related files in your machine, please go to **C:\Program Files** and manually remove the **Advanced Client (B247PRO)** folder.



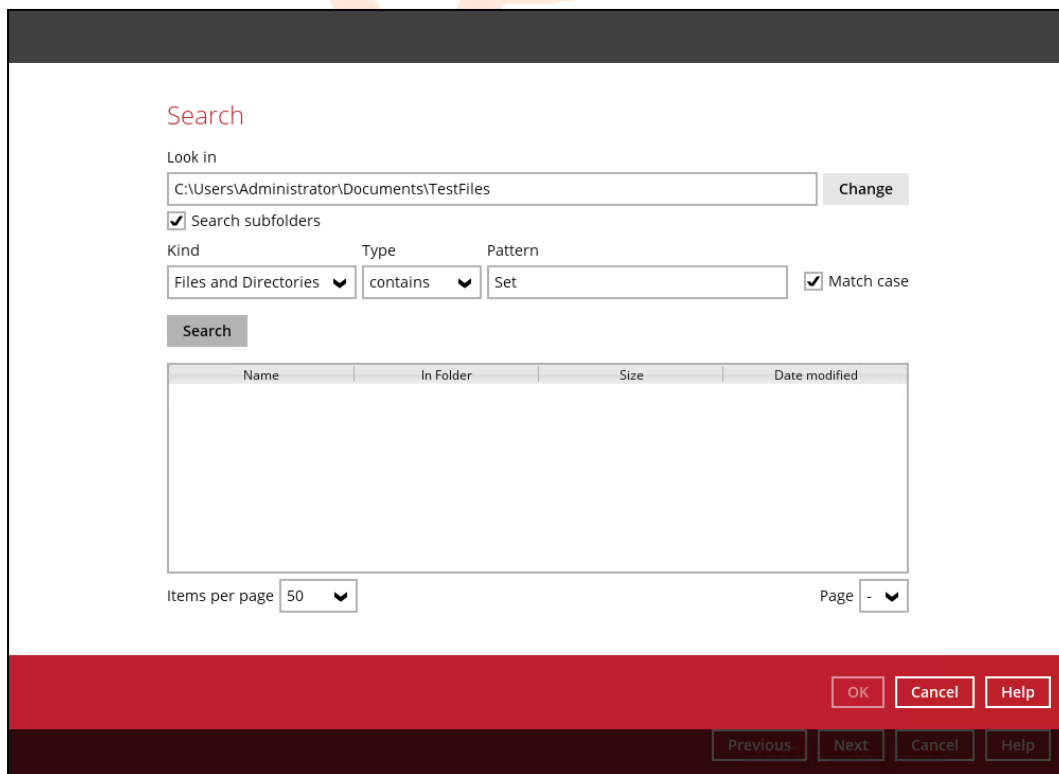
Appendix B: Example Scenarios for Restore Filter

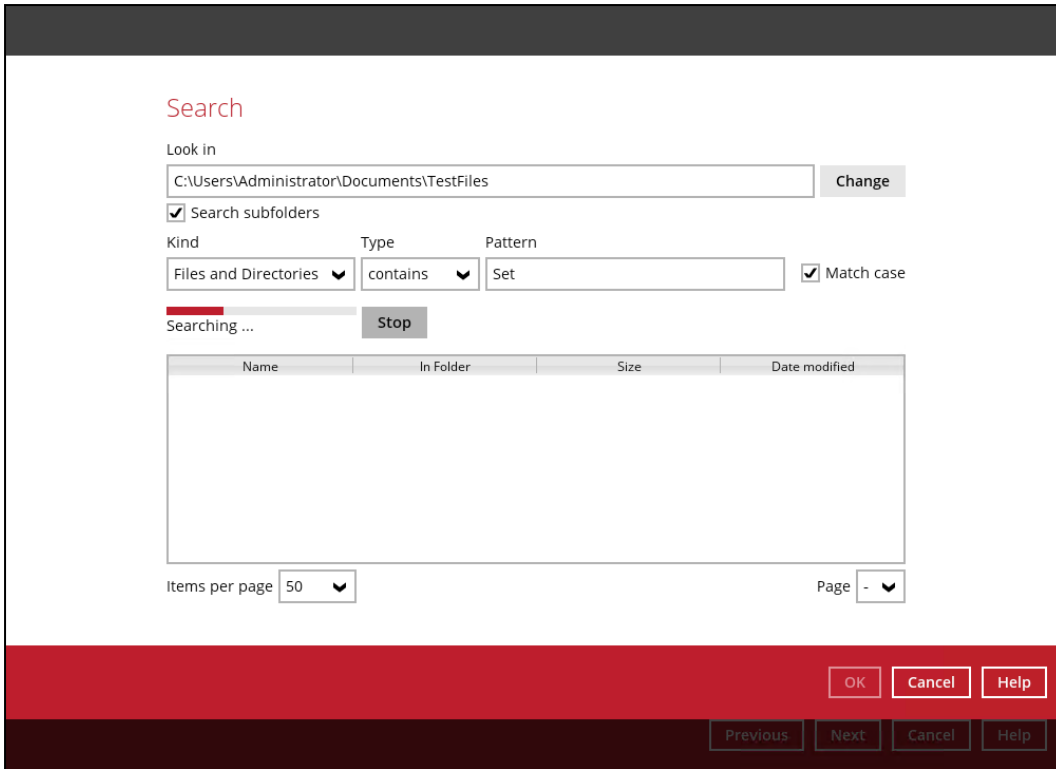
Example No.1: Restore filter setting from C:\Users\Administrator\Documents\TestFiles with filter type Contains

Location:	C:\Users\Administrator\Documents\TestFiles
Search subfolders:	True
Kind:	Files and Directories
Type:	Contains
Pattern:	Set
Match Case:	True

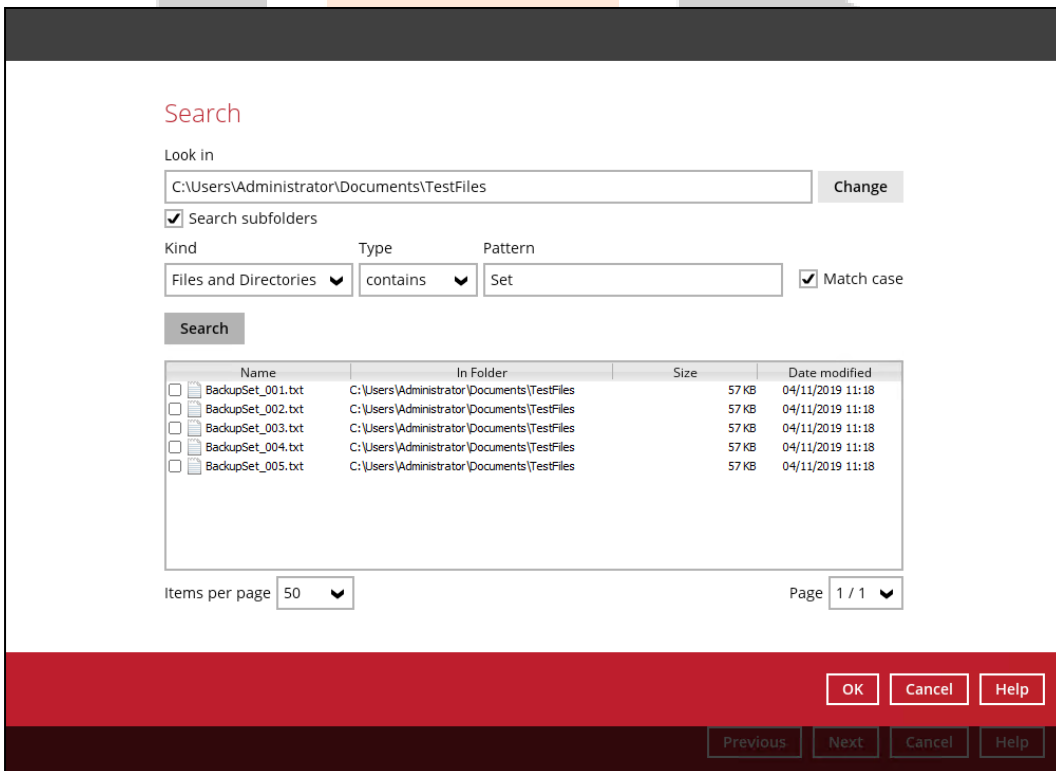
Follow the step-by-step procedure indicated on [Restore Filter](#).

272





273



Explanation:

All files and directories under C:\Users\Administrator\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.

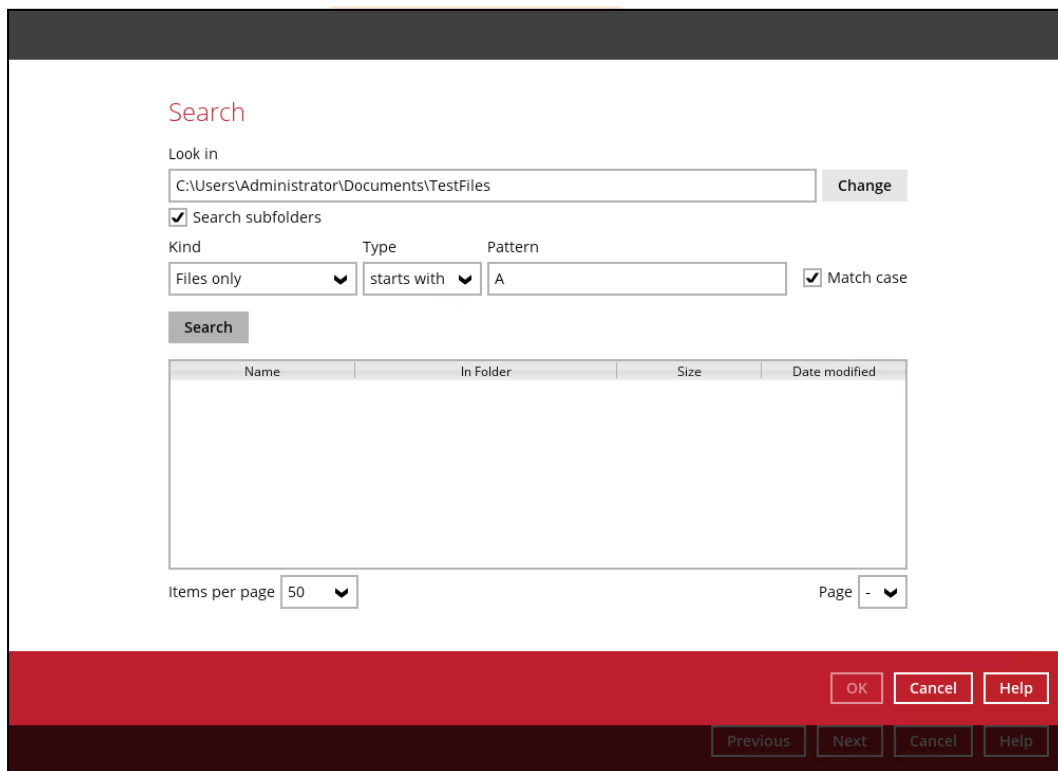
The restore filter setting includes the Search subfolder and Match case set to true. This means that the filter will include all available subfolders in \TestFiles upon searching. And it will strictly search only the specified pattern and case which starts with 'Set'.

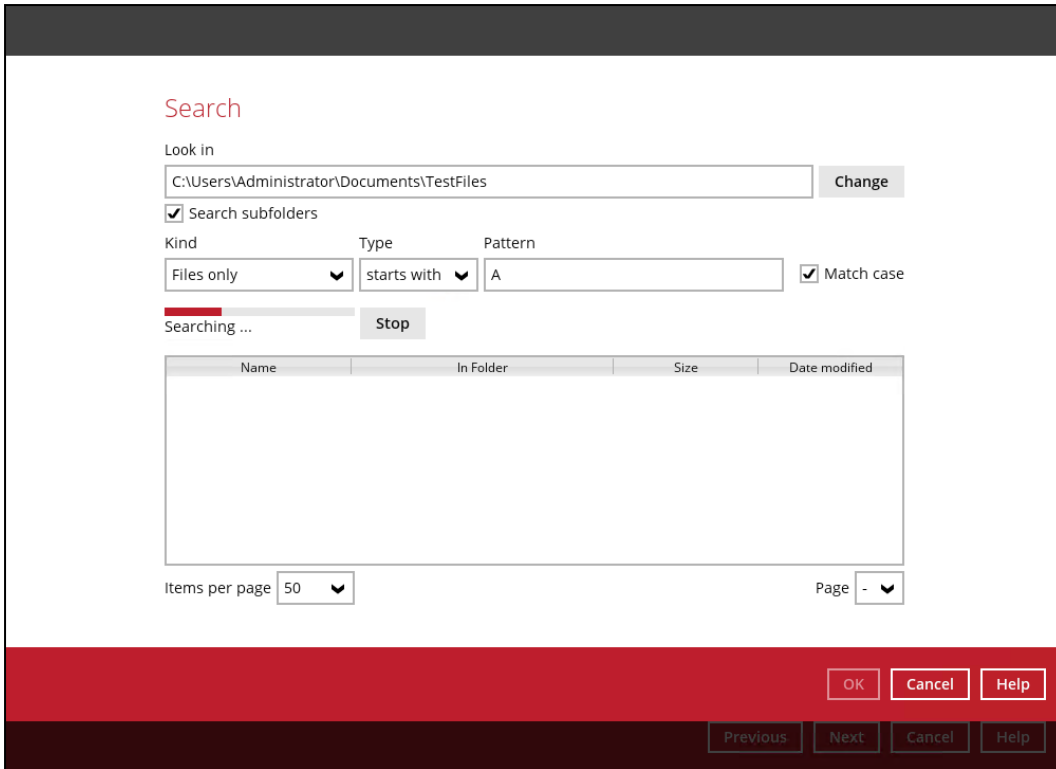
Example No.2: Restore filter setting from C:\Users\Administrator\Documents\TestFiles with filter type Starts With

Location:	C:\Users\Administrator\Documents\TestFiles
Search subfolders:	True
Kind:	Files
Type:	Starts With
Pattern:	A
Match Case:	True

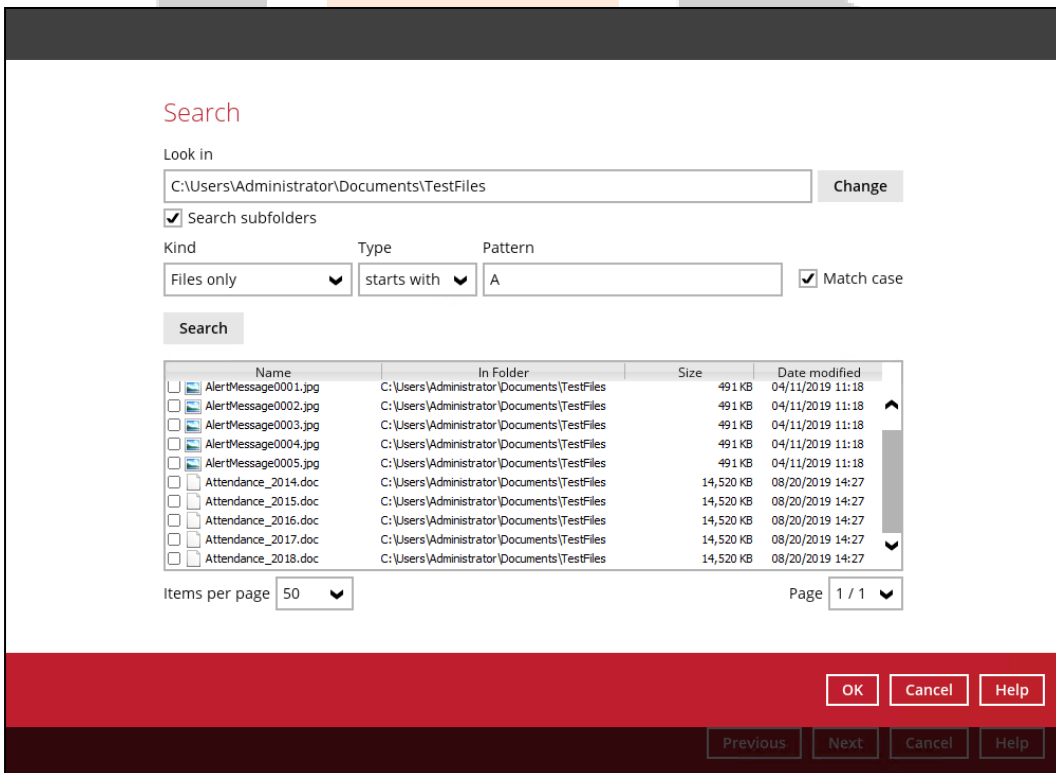
Follow the step-by-step procedure indicated on [Restore Filter](#).

274





275



Explanation:

All files and directories under C:\Users\Administrator\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.

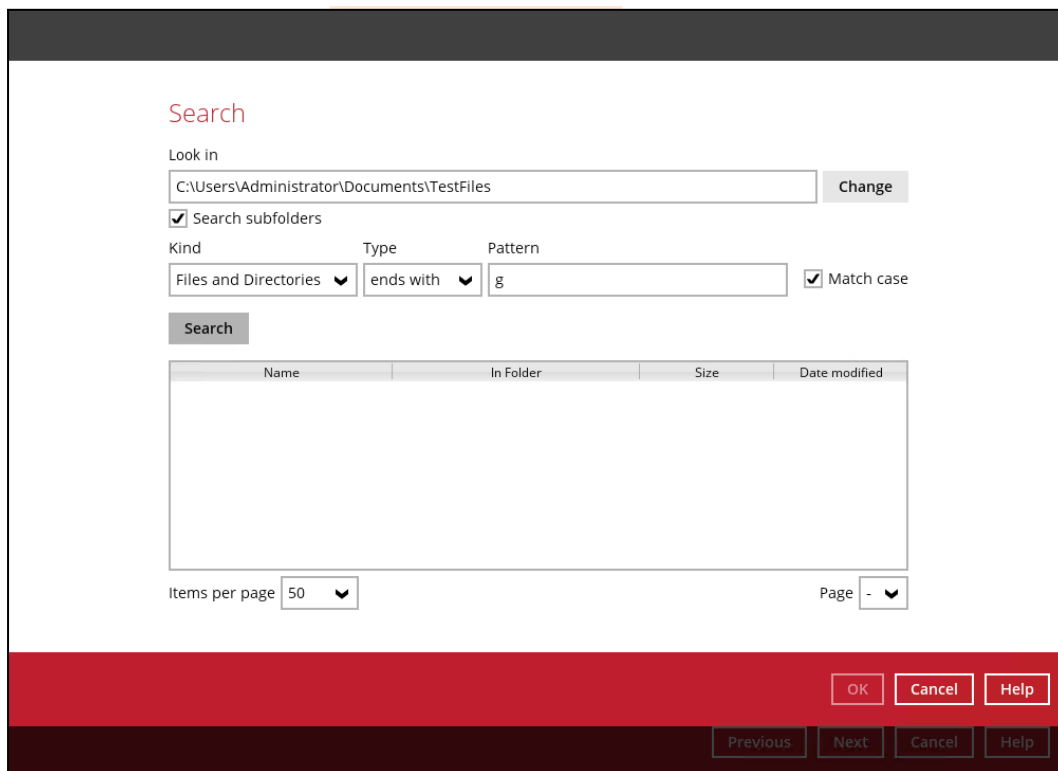
The restore filter setting includes the Search subfolder and Match case set to true. This means that the filter will include all available subfolders in \TestFiles upon searching. And it will strictly search only the specified pattern and case which starts with 'A'.

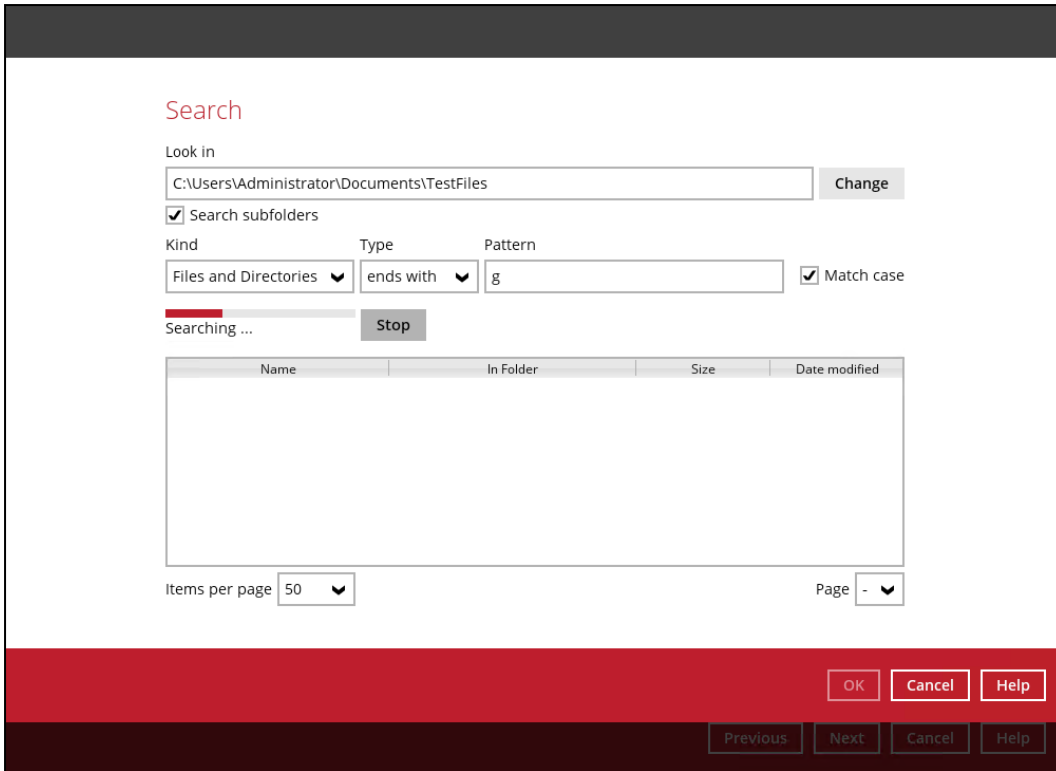
Example No.3: Restore filter setting from C:\Users\Administrator\Documents\TestFiles with filter type Ends With

Location:	C:\Users\Administrator\Documents\TestFiles
Search subfolders:	True
Kind:	Files and Directories
Type:	Ends With
Pattern:	g
Match Case:	True

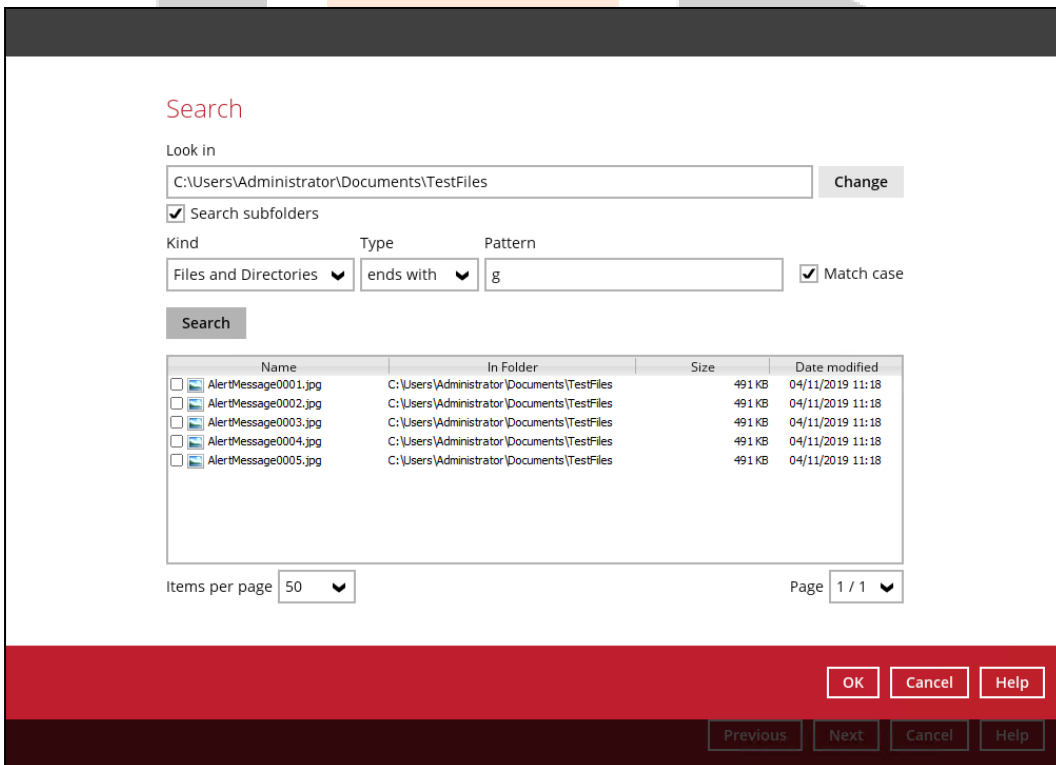
Follow the step-by-step procedure indicated on [Restore Filter](#).

276





277



Explanation:

All files and directories under C:\Users\Administrator\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.

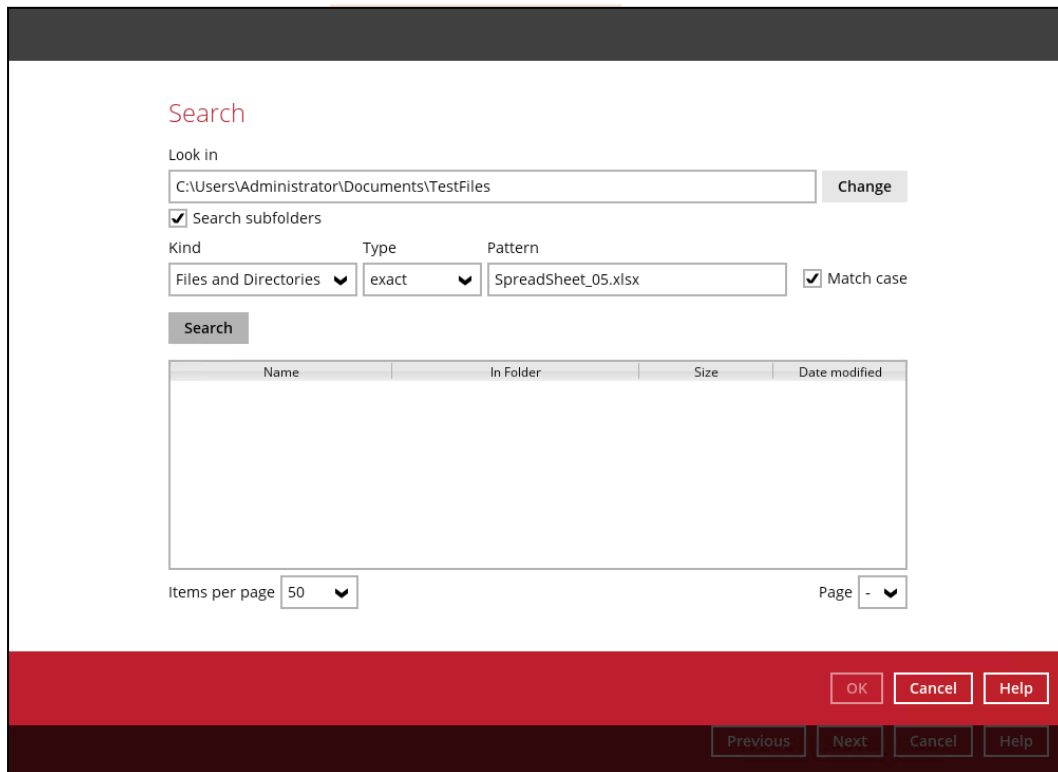
The restore filter setting includes the Search subfolder and Match case set to true. This means that the filter will include all available subfolders in \TestFiles upon searching. And it will strictly search only the specified pattern and case which starts with 'g'.

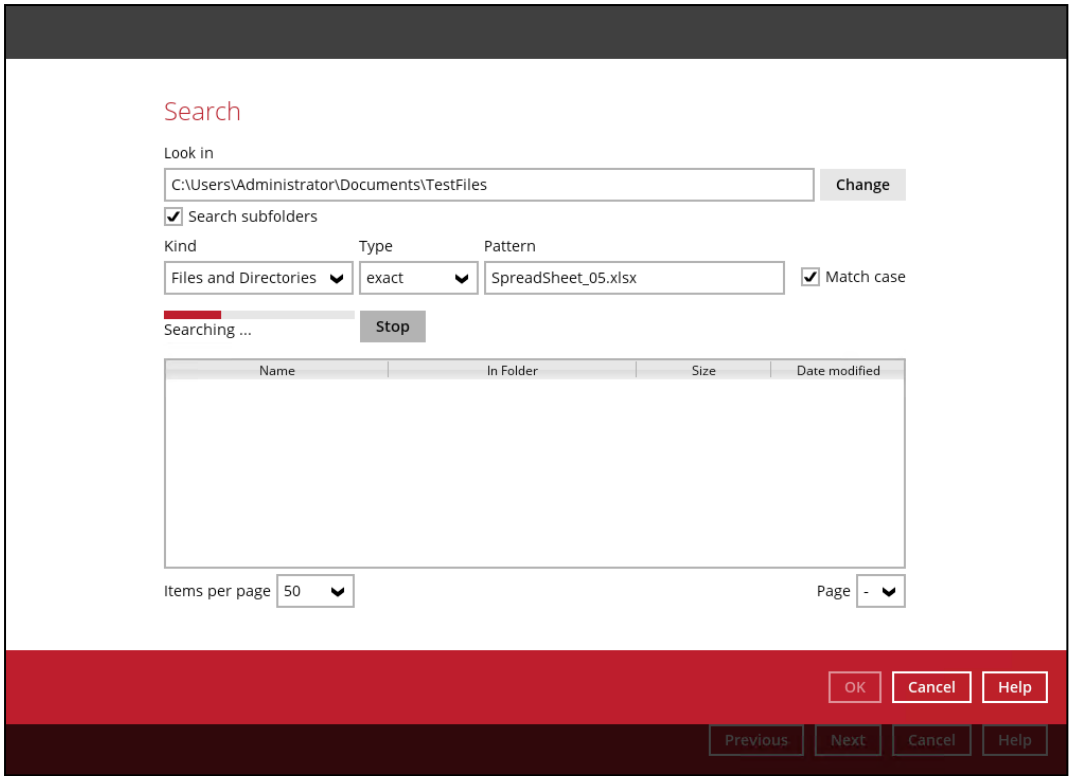
Example No.4: Restore filter setting from C:\Users\Administrator\Documents\TestFiles with filter type Exact

Location:	C:\Users\Administrator\Documents\TestFiles
Search subfolders:	True
Kind:	Files and Directories
Type:	Exact
Pattern:	SpreadSheet_05.xlsx
Match Case:	True

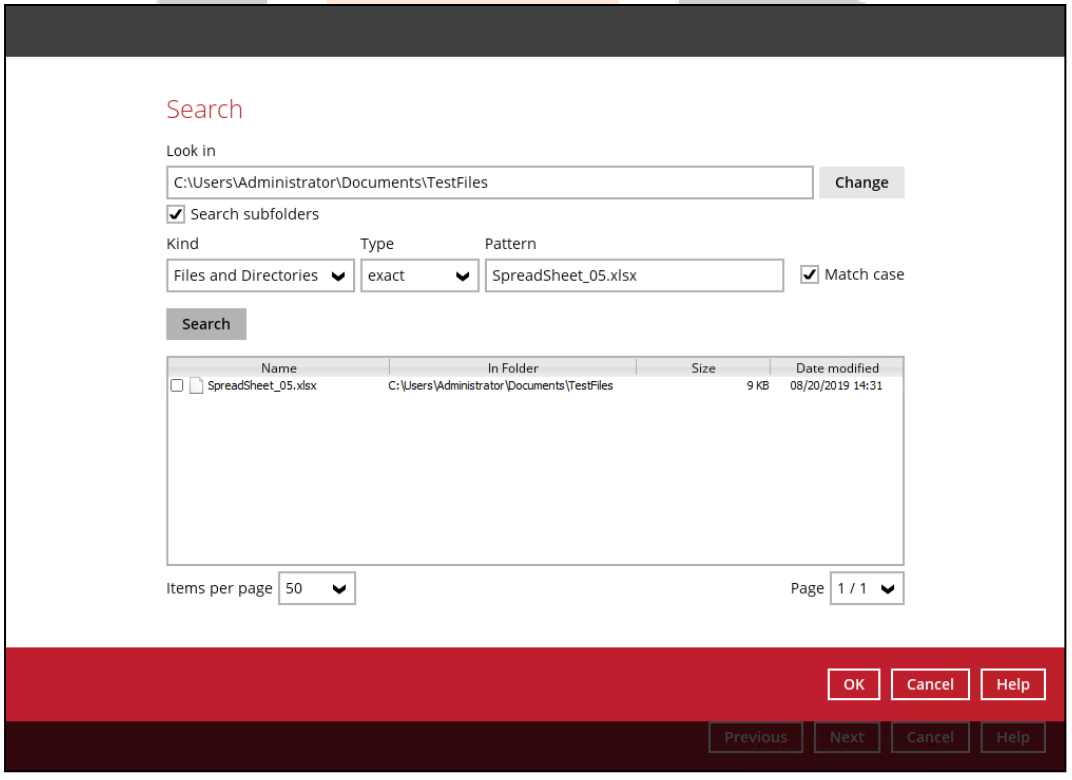
Follow the step-by-step procedure indicated on [Restore Filter](#).

278





279



Explanation:

All files and directories under C:\Users\Administrator\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'.



280



Appendix C: Batch Files

Below is the list of batch files which can be used as an alternative way to run the Advanced Client (B247PRO).

- [RunCB.bat](#)
- [RunConfigurator.bat](#)
- [ListBackupSet.bat](#)
- [RunBackupSet.bat](#)
- [ListBackupJob.bat](#)
- [Restore.bat](#)
- [Decrypt.bat](#)
- [RunDataIntegrityCheck.bat](#)

RunCB.bat

This allows the user to open the Advanced Client (B247PRO) without clicking the Advanced Client (B247PRO) icon.

On the command prompt (cmd), export the batch file to a text editor using the following script.

```
C:\Program Files\Advanced Client (B247PRO)\bin>notepad RunCB.bat
C:\Program Files\Advanced Client (B247PRO)\bin>
```

281

Configure the following parameters:

- **SETTING_HOME** – this is the directory to your setting home. If not set, the directory will be "C:\Users\USER\.obm" by default.

e.g. `SET SETTING_HOME="C:\Users\John\.obm"`

- **DEBUG_MODE** – this parameter is used to enable or disable the debug mode when opening the Advanced Client (B247PRO) application.

e.g. `SET DEBUG_MODE="--debug"`
or `SET DEBUG_MODE=""`

```
@ECHO OFF
REM ##### RunCB.bat #####
REM # You can use this batch to run the backup client application
REM #####
REM ##### Start: User Defined Section #####
REM ----- SETTING_HOME -----
REM | Directory to your setting home. Default to
REM | "C:\Users\USER\.obm" when not set.
REM | e.g. SET SETTING_HOME="C:\Users\John\.obm"
REM -----
SET SETTING_HOME=""
REM ----- DEBUG_MODE -----
REM | Enable/Disable debug mode
REM | e.g. SET DEBUG_MODE="--debug"
REM | or SET DEBUG_MODE=""
```

282

```

REM -----
SET DEBUG_MODE=""
REM ##### END: User Defined Section #####
SET EXE_DIR=%CD%
SET APP_HOME=..
SET JAVA_HOME=%APP_HOME%\jvm
SET JAVA_EXE=%JAVA_HOME%\bin\bJW.exe
SET JAVA_LIB_PATH=-Djava.library.path=%APP_HOME%\bin
SET PATH=%JAVA_HOME%\bin;%PATH%
IF "%PROCESSOR_ARCHITECTURE%"=="x86" (
    SET "DEP_LIB_PATH=X86"
    SET JAVA_OPTS=-Xms128m -Xmx768m -XX:MaxDirectMemorySize=512m -
Dsun.java2d.noddraw -Dsun.nio.PageAlignDirectMemory=true
) ELSE (
    SET "DEP_LIB_PATH=X64"
    SET JAVA_OPTS=-Xms128m -Xmx2048m -XX:MaxDirectMemorySize=1024m -
Dsun.java2d.noddraw -Dsun.nio.PageAlignDirectMemory=true
)
SET PATH=%APP_HOME%\bin\%DEP_LIB_PATH%;%JAVA_HOME%\bin;%PATH%
SET CLASSPATH=%APP_HOME%\bin;%APP_HOME%\bin\cb.jar
REM #####
ECHO -
ECHO APP_HOME=%APP_HOME%
ECHO SETTING_HOME=%SETTING_HOME%
ECHO JAVA_HOME=%JAVA_HOME%
ECHO JAVA_EXE=%JAVA_EXE%
ECHO JAVA_OPTS=%JAVA_OPTS%
ECHO JAVA_LIB_PATH=%JAVA_LIB_PATH%
ECHO PATH=%PATH%
ECHO CLASSPATH=%CLASSPATH%
ECHO -
@ECHO ON
%JAVA_EXE% %JAVA_LIB_PATH% -cp %CLASSPATH% %JAVA_OPTS% Gui %DEBUG_MODE%
%APP_HOME% %SETTING_HOME%
@ECHO OFF
CD "%EXE_DIR%"
IF "%APP_HOME%"==".." PAUSE
@ECHO ON

```

Once the parameters are configured, save the changes, and close the text editor. Proceed back to **cmd** and enter **RunCB.bat**.

```

C:\Program Files\Advanced Client (B247PRO)\bin>RunCB.bat

-

APP_HOME=..

SETTING_HOME=""

JAVA_HOME=..\jvm

JAVA_EXE=..\jvm\bin\bJW.exe

```

```

JAVA_OPTS=-Xms128m -Xmx2048m -XX:MaxDirectMemorySize=1024m -
Dsun.java2d.noddraw -Dsun.nio.PageAlignDirectMemory=true

JAVA_LIB_PATH=-Djava.library.path=..\bin
PATH=..\bin\X64;..\jvm\bin;..\jvm\bin;C:\Program Files (x86)\Common
Files\ Oracle\Java\javapath;C:\Windows\system32;C:\Windows;C:\Windows\
System32\Wbem;C:\Windows\System32\WindowsPowerShell\v1.0\;C:\Program
Files\Microsoft SQL Server\Client SDK\ODBC\110\Tools\Binn\;C:\Program
Files (x86)\Microsoft SQL Server\120\Tools\Binn\;C:\Program
Files\Microsoft SQL Server\120\DTS\Binn\;C:\Program
Files\PuTTY\CLASSPATH=..\bin;..\bin\cb.jar

-

C:\Program Files\Advanced Client (B247PRO)\bin>..\jvm\bin\bJW.exe -
Djava.library.path=..\bin -cp ..\bin;..\bin\cb.jar -Xms128m -Xmx2048m -
XX:MaxDirectMemorySize=1024m-Dsun.java 2d.noddraw -Dsun.nio. PageAlignDi
rectMemory=true Gui "" .. ""

```

If the debug mode is ENABLED, more technical information will be displayed for troubleshooting purposes.

```

C:\Program Files\Advanced Client (B247PRO)\bin>RunCB.bat
-
APP_HOME=..

SETTING_HOME=""

JAVA_HOME=..\jvm

JAVA_EXE=..\jvm\bin\bJW.exe

JAVA_OPTS=-Xms128m -Xmx2048m -XX:MaxDirectMemorySize=1024m -Dsun.java2d.
noddraw -Dsun.nio.PageAlignDirectMemory=true

JAVA_LIB_PATH=-Djava.library.path=..\bin PATH=..\bin\X64;..\jvm\bin;..\
jvm\bin;C:\Program Files (x86)\Common Files\Oracle\Java\javapath;C:
\Windows\system32;C:\Windows;C:\Windows\System32\Wbem;C:\Windows
\System32\WindowsPowerShell\v1.0\;C:\Program Files\Microsoft SQL
Server\ClientsDK\ODBC\110\Tools\Binn\;C:\Program Files (x86)\Microsoft
SQL Server\120\Tools\Binn\;C:\Program Files\Microsoft SQL
Server\120\Tools\Binn\;C:\Program Files\Microsoft SQL
Server\120\DTS\Binn\;C:\Program Files\PuTTY\CLASSPATH=..\bin;..
\bin\cb.jar

-

C:\Program Files\Advanced Client (B247PRO)\bin>..\jvm\bin\bJW.exe -
Djava.library.path=..\bin -cp..\bin;..\bin\cb.jar -Xms128m -Xmx2048m -
XX:MaxDirectMemorySize=1024m -Dsun.java2d.noddraw -
Dsun.nio.PageAlignDirectMemory=true Gui "--debug" .. ""
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/..\bin/asm-3.1.jar to classpath ...OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/..\bin/bcmail-jdk15on-1.51.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/..\bin/bcpkix-jdk15on-1.51.jar to classpath ... OK

```

```
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/bcprov-jdk15on-151.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/cab-parser-2.9.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/cab-parser-dorkbox-util-1.1.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/cabinet-maker-1.0.0.1.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/commons-codec-1.6.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/commons-io-2.5.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/commons-logging-1.1.3.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/commons-net-3.3.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/dom4j-1.6.1.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/dropbox-core-sdk-1.7.5.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/dropbox-core-sdk-3.0.3.1.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/dropbox-core-sdk-3.0.3.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/fluent-hc-4.3.5.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/forms-1.3.0.jar to classpath... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/google-api-client-1.19.1.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/google-api-client-jackson2-1.19.1.jar to
classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/google-api-services-drive-v2-rev158-1.19.1.jar to
classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/google-http-client-1.19.0.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/google-http-client-jackson2-1.19.0.jar to
classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/google-oauth-client-1.19.0.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/httpclient-4.3.5.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/httpclient-cache-4.3.5.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/httpcore-4.3.2.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/httpmime-4.3.5.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jackson-annotations-2.2.3.jar to classpath ... OK
```

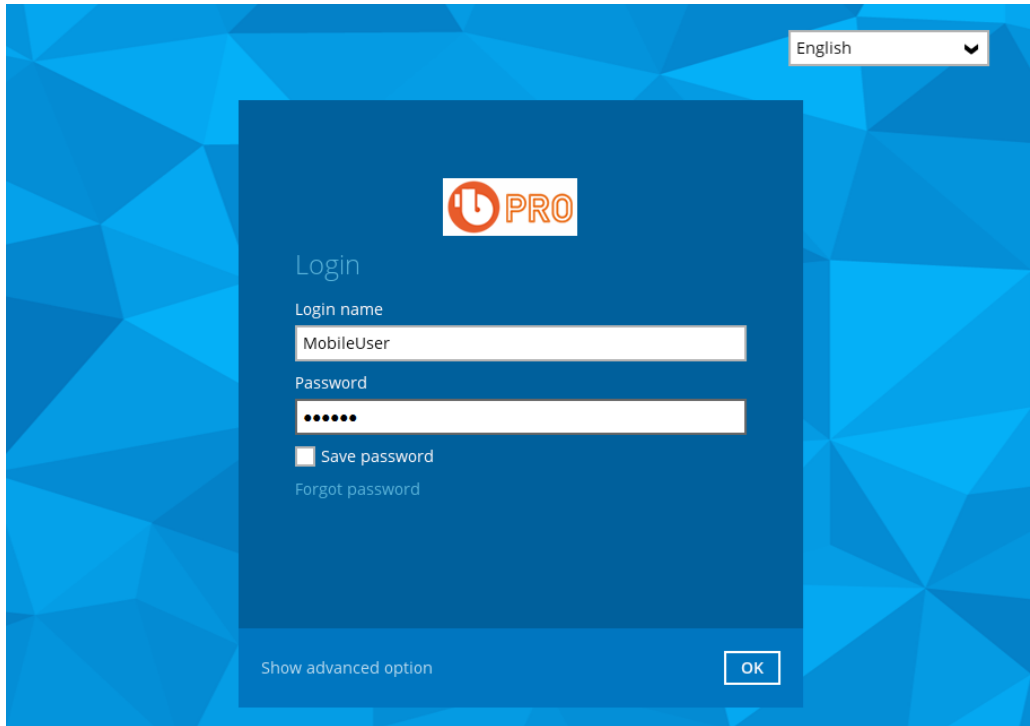


```
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jackson-annotations-2.7.4.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jackson-core-2.2.3.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jackson-core-2.7.4.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jackson-core-asl-1.9.13.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jackson-databind-2.2.3.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jackson-databind-2.7.4.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jackson-jaxrs-1.9.2.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jackson-mapper-asl-1.9.13.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jackson-xc-1.9.2.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/java-xmlbuilder-0.4.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/javax.mail.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jcifs-1.3.18.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jdoka-20170627.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jdom-1.1.3.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jersey-apache-client4-1.18.1.jar to classpath ...
OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jersey-bundle-1.18.1.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jersey-multipart-1.18.1.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jettison-1.1.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jsch-0.1.50.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jsch-0.1.54.1.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/json_simple-1.1.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/jsr305-1.3.9.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/log4j-1.2.17.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/microsoft-windowsazure-api-0.4.6.jar to
classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/microsoft-windowsazure-storage-sdk-1.0.0.jar to
classpath ... OK
```

```
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/microsoft-windowsazure-storage-sdk-6.0.0.1.jar to
classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/microsoft-windowsazure-storage-sdk-6.0.0.jar to
classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/mysql-connector-java-5.0.8-bin.jar to classpath ...
OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/mysql-connector-java-5.1.46-bin.jar to
classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/ojdbc6.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/org.json-20150730.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/servlet-api.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/sinetfactory.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/bin/./bin/yavijava.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/jvm/lib/charsets.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/jvm/lib/jce.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/jvm/lib/jfxswt.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/jvm/lib/jsse.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/jvm/lib/management-agent.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client
(B247PRO)/jvm/lib/resources.jar to classpath ... OK
Adding file:/C:/Program%20Files/Advanced Client (B247PRO)/jvm/lib/rt.jar
to classpath ... OK
```

286

Eventually, the Advanced Client (B247PRO) login screen will be displayed.



287



RunConfigurator.bat

This allows the user to run the Advanced Client (B247PRO) through *cmd*. Export the batch file to a text editor using the following script.

```
C:\Program Files\Advanced Client (B247PRO)\bin>notepad
RunConfigurator.bat

C:\Program Files\Advanced Client (B247PRO)\bin>
```

Configure the following parameters:

- **SETTING_HOME** – this is the directory to your setting home. If not set, the directory will be "C:\Users\USER\.obm" by default.

e.g. `SET SETTING_HOME="C:\Users\John\.obm"`

- **DEBUG_MODE** – this parameter is used to enable or disable the debug mode when opening the Advanced Client (B247PRO) application.

e.g. `SET DEBUG_MODE="--debug"`
or `SET DEBUG_MODE=""`

```
@ECHO OFF
REM ##### RunOBC.bat #####
REM # You can use this batch to run the backup client application
REM #####
##### Start: User Defined Section #####
REM ----- SETTING_HOME -----
REM | Directory to your setting home. Default to
REM | "C:\Users\USER\.obm" when not set.
REM | e.g. SET SETTING_HOME="C:\Users\John\.obm"
REM -----
SET SETTING_HOME=""
REM ----- DEBUG_MODE -----
REM | Enable/Disable debug mode
REM | e.g. SET DEBUG_MODE="--debug"
REM | or SET DEBUG_MODE=""
REM -----
SET DEBUG_MODE=""
REM ##### END: User Defined Section #####
SET APP_HOME=..
SET JAVA_HOME=%APP_HOME%\jvm
SET JAVA_EXE=%JAVA_HOME%\bin\bjw.exe
SET JAVA_OPTS=-Xms128m -Xmx768m -Dsun.java2d.noddraw -
Dsun.nio.PageAlignDirectMemory=true
SET JAVA_LIB_PATH=-Djava.library.path=%APP_HOME%\bin
SET PATH=%JAVA_HOME%\bin;%PATH%
IF "%PROCESSOR_ARCHITECTURE%"=="x86" (
    SET "DEP_LIB_PATH=X86"
) ELSE (
    SET "DEP_LIB_PATH=X64"
)
SET PATH=%APP_HOME%\bin\%DEP_LIB_PATH%;%JAVA_HOME%\bin;%PATH%
SET CLASSPATH=%APP_HOME%\bin;%APP_HOME%\bin\cb.jar
REM #####
```

```

ECHO -
ECHO APP_HOME=%APP_HOME%
ECHO SETTING_HOME=%SETTING_HOME%
ECHO JAVA_HOME=%JAVA_HOME%
ECHO JAVA_EXE=%JAVA_EXE%
ECHO JAVA_OPTS=%JAVA_OPTS%
ECHO JAVA_LIB_PATH=%JAVA_LIB_PATH%
ECHO PATH=%PATH%
ECHO CLASSPATH=%CLASSPATH%
ECHO -
@ECHO ON
%JAVA_EXE% %JAVA_LIB_PATH% -cp %CLASSPATH% %JAVA_OPTS% Gui --config
%DEBUG_MODE% %APP_HOME% %SETTING_HOME%
@ECHO OFF
CD "%APP_HOME%"
IF "%APP_HOME%"==".." PAUSE
@ECHO ON
  
```

Save the changes and close the text editor. Proceed back to *cmd* and enter *RunConfigurator.bat*. The Advanced Client (B247PRO) login menu will be displayed.

```

C:\Program Files\Advanced Client (B247PRO)\bin>RunConfigurator.bat

-
APP_HOME=..
SETTING_HOME=""
JAVA_HOME=..\jvm
JAVA_EXE=..\jvm\bin\bJW.exe
JAVA_OPTS=-Xms128m -Xmx768m -Dsun.java2d.noddraw -
Dsun.nio.PageAlignDirectMemory=true
JAVA_LIB_PATH=-Djava.library.path=..\bin
PATH=..\bin\X64;..\jvm\bin;..\jvm\bin;C:\Program Files (x86)\Common
Files\Oracle\Java\javapath;C:\Windows\system32;C:\Windows;C:\Windows\Sys
tem32\Wbem;C:\Windows\System32\WindowsPowerShell\v1.0\;C:\Program
Files\Microsoft SQL Server\Client SDK\ODBC\110\Tools\Binn\;C:\Program
Files (x86)\Microsoft SQL Server\120\Tools\Binn\;C:\Program
Files\Microsoft SQL Server\120\Tools\Binn\;C:\Program Files\Microsoft
SQL Server\120\DTS\Binn\;C:\Program
Files\PuTTY\CLASSPATH=..\bin;..\bin\cb.jar
-
C:\Program Files\Advanced Client (B247PRO)\bin>..\jvm\bin\bJW.exe -
Djava.library.path=..\bin -cp..\bin;..\bin\cb.jar -Xms128m -Xmx768m -
Dsun.java2d.noddraw -Dsun.nio.PageAlignDirectMemory=true Gui --config
"" .. ""
Config file found
  
```

Login Menu

- ```

(1). Login
(2). Change Network Settings
(3). Forgot Password
(4). Quit

```

Your Choice:

If you want to modify the network settings before logging in, select option **(2)** from the login menu.

**Login Menu**

- ```
-----  
(1). Login  
(2). Change Network Settings  
(3). Forgot Password  
(4). Quit  
-----
```

Your Choice: 2

Network Setting

- ```

(1). Backup Server URL [127.0.0.1]
(2). Port [-1]
(3). Protocol [http]
(4). Proxy Setting [Not in Use]
(5). Save and Return
(6). Discard and Return

```

Your Choice:

Otherwise, select option **(1)**. Input your login name and password to log in. After a successful login, the Advanced Client (B247PRO) main menu will be displayed.

**Login Menu**

- ```
-----  
(1). Login  
(2). Change Network Settings  
(3). Forgot Password  
(4). Quit  
-----
```

Your Choice: 1

Login Name : Win_OBM

Password : *****

Please wait while verifying user account with server...

Your profile has been downloaded and updated.

Main Menu

-
- (1). List Backup Sets
 - (2). Delete Backup Set
 - (3). Export Backup Set Settings to XML
 - (4). Import Backup Set Settings from XML
 - (5). Generate new Backup Set Settings Template
 - (6). Change Language [English]
 - (7). Update Profile Settings
 - (8). Quit
-

Your Choice:

If the password is forgotten, choose **(3)** on the login menu and input your login name. A link will be sent to the email you provided in the B247CBS server to reset the user account password.

Login Menu

-
- (1). Login
 - (2). Change Network Settings
 - (3). Forgot Password
 - (4). Quit
-

Your Choice: 3

Login Name : Win_OBM

Select option **(4)** to exit the Advanced Client (B247PRO).

Login Menu

-
- (1). Login
 - (2). Change Network Settings
 - (3). Forgot Password
 - (4). Quit
-

Your Choice: 4

Exit Configurator Utility

Press any key to continue . . .

ListBackupSet.bat

This allows the user to see the list of existing backup set/s under the backup account. Enter *ListBackupSet.bat* to display the list of available backup sets with their backup set ID.

```
C:\Program Files\Advanced Client (B247PRO)\bin>ListBackupSet.bat

-

APP_HOME=..

SETTING_HOME=

JAVA_HOME=..\jvm

JAVA_EXE=..\jvm\bin\bJW.exe

JAVA_OPTS=-Xms128m -Xmx768m -Dsun.java2d.noddraw -
Dsun.nio.PageAlignDirectMemory=true

JAVA_LIB_PATH=-Djava.library.path=..\bin PATH=..\jvm\bin;C:\Program
Files (x86)\Common Files\Oracle\Java\javapath;C:\Windows\system32;C:
\Windows;C:\Windows\System32\Wbem;C:\Windows\System32\WindowsPowerShell
\v1.0\;C:\Program Files\Microsoft SQL Server\Client
SDK\ODBC\110\Tools\Binn\;C:\Program Files (x86)\Microsoft SQL
Server\120\Tools\Binn\;C:\Program Files\Microsoft SQL Server\120\
Tools\Binn\;C:\Program Files\Microsoft SQL Server\120\DTS
\Binn\;C:\Program Files\PuTTY\CLASSPATH=..\bin;..\bin\cb.jar

-

Listing all backup sets under this backup account ...

C:\Program Files\Advanced Client (B247PRO)\bin>..\jvm\bin\bJW.exe -
Djava.library.path=..\bin -cp..\bin;..\bin\cb.jar -Xms128m -Xmx768m -
Dsun.java2d.noddraw -Dsun.nio.PageAlignDirectMemory=true
ListBackupSet ..

BackupSet Name= Data Backup, ID= 1562897045523

BackupSet Name= File Backup, ID= 1561974801639

C:\Program Files\Advanced Client (B247PRO)\bin>PAUSE

Press any key to continue . . .
```


RunBackupSet.bat

This allows the user to run a backup. Export the batch file to a text editor using the following script.

```
C:\Program Files\Advanced Client (B247PRO)\bin>notepad RunBackupSet.bat
C:\Program Files\Advanced Client (B247PRO)\bin>
```

Make sure that the following parameters are set accordingly:

- **BACKUP_SET** – this is the backup set which you would like to run. There are two (2) options to specify the backup set; using the *backup set name* or the *backup set ID*. If the backup set name is not in English, use the backup set ID.

e.g. `SET BACKUP_SET="FileBackupSet-1"`
or `SET BACKUP_SET="1119083740107"`

You can leave this parameter blank if you only have one (1) backup set.

e.g. `SET BACKUP_SET=""`

If having multiple backup sets, you must specify which backup set you would like to be run.

- **BACKUP_DESTS** – this is the destination(s) of the backup set which you will run. There are two (2) options to specify the destination; using the *destination name* or the *destination ID*. If the destination is not in English, use the destination ID.

e.g. `SET BACKUP_DEST="Local-1"`
or `SET BACKUP_DEST="1119083740107"`

Multiple destinations can be specified in a comma-separated format, or you can indicate "ALL" to run a backup for all destinations.

e.g. `SET BACKUP_DESTS="Destination-1, Destination-2"`
or `SET BACKUP_DESTS="ALL"`

- **BACKUP_TYPE** – this is the backup set type. This does not need to be changed if backing up a file backup set.

Options available: FILE/DATABASE/DIFFERENTIAL/LOG

e.g. `SET BACKUP_TYPE="FILE"` for file backup
or `SET BACKUP_TYPE="DATABASE"` for Full database backup
or `SET BACKUP_TYPE="DIFFERENTIAL"` for Differential database backup
or `SET BACKUP_TYPE="LOG"` for Log database backup

For MExchange 2010 BackupSet:

e.g. `SET BACKUP_TYPE="DATABASE"` for Full database backup
or `SET BACKUP_TYPE="DIFFERENTIAL"` for Differential database backup
or `SET BACKUP_TYPE="LOG"` for Incremental database backup
or `SET BACKUP_TYPE="COPY"` for Copy database backup

- **SETTING_HOME** – this is the directory to your setting home. If not set, the directory will be "C:\Users\USER\obm" by default.

e.g. `SET SETTING_HOME="C:\Users\John\obm"`

- **DELTA_MODE** – this is used to set the In-File Delta mode when running a backup.
 - e.g. `SET DELTA_MODE="I"` for Incremental In-file delta backup
 - or `SET DELTA_MODE="D"` for Differential In-file delta backup
 - or `SET DELTA_MODE="F"` for Full File backup
 - or `SET DELTA_MODE=""` for using backup set in-file delta setting
- **CLEANUP_MODE** – same as the Retention Policy job and space freeing up, this parameter is used to remove obsolete files from your backup destinations after a backup has been run.

Options available: ENABLE-CLEANUP/DISABLE-CLEANUP

e.g. `SET CLEANUP_MODE="ENABLE-CLEANUP"`
 or `SET CLEANUP_MODE="DISABLE-CLEANUP"`

- **DEBUG_MODE** – this parameter is used to enable or disable the debug mode when there is a backup job running.

Options available: ENABLE-DEBUG/DISABLE-DEBUG

e.g. `SET DEBUG_MODE="ENABLE-DEBUG"`
 or `SET DEBUG_MODE="DISABLE-DEBUG"`

294

```
@ECHO OFF
REM ##### RunBackupSet.bat #####
REM # You can use this batch to run any of your backup sets from the
REM # command line. Just customize the "User Defined Section" below with
REM # your values for your backup action.
REM #####
REM ##### START: User Defined Section #####
REM ----- BACKUP_SET -----
REM | The name or ID of the backup set that you want to run.
REM | If backup set name is not in English, please use ID instead.
REM | e.g. SET BACKUP_SET="1119083740107"
REM | or SET BACKUP_SET="FileBackupSet-1"
REM |
REM | You can leave this parameter blank if you have only 1 backup set.
REM -----
SET BACKUP_SET=""
REM ----- BACKUP_DESTS -----
REM | The list of name or ID of the backup destinations that you want to
REM | run. If backup destination name is not in English, please use ID
REM | instead.
REM | e.g. SET BACKUP_DESTS="1740107119083"
REM | or SET BACKUP_DESTS="Destination-1, Destination-2"
REM | or SET BACKUP_DESTS="ALL"
REM |
REM | You can specify multiple destinations in comma-separated format,
REM | or use "ALL" to run backup for all destinations.
REM -----
SET BACKUP_DESTS="ALL"
REM ----- BACKUP_TYPE -----
REM | Set backup type. You don't need to change this if you are backing
```

```

REM | up a file back set.
REM | Options available: FILE/DATABASE/DIFFERENTIAL/LOG
REM | e.g. SET BACKUP_TYPE="FILE"           for file backup
REM | or  SET BACKUP_TYPE="DATABASE"       for Full database backup
REM | or  SET BACKUP_TYPE="DIFFERENTIAL"   for Differential database
REM | backup or SET BACKUP_TYPE="LOG"       for Log database backup
REM |
REM | For MExchange 2010 BackupSet
REM | e.g. SET BACKUP_TYPE="DATABASE"       for Full database backup
REM | or  SET BACKUP_TYPE="DIFFERENTIAL"   for Differential database
REM | backup
REM | or  SET BACKUP_TYPE="LOG"             for Incremental database
REM | backup or SET BACKUP_TYPE="COPY"      for Copy database
REM | backup
REM -----
SET BACKUP_TYPE="FILE"
REM ----- SETTING_HOME -----
REM | Directory to your setting home. Default to
REM | "C:\Users\USER\.obm" when not set.
REM | e.g. SET SETTING_HOME="C:\Users\John\.obm"
REM -----
SET SETTING_HOME=""
REM ----- DELTA_MODE -----
REM | Set In-File Delta mode.
REM | Options available: Incremental/Differential/Full (I/D/F)
REM | e.g. SET DELTA_MODE="I"   for Incremental In-file delta backup
REM | or  SET DELTA_MODE="D"   for Differential In-file delta backup
REM | or  SET DELTA_MODE="F"   for Full File backup
REM | or  SET DELTA_MODE=""    for using backup set in-file delta
REM | setting
REM -----
SET DELTA_MODE=""
REM ----- CLEANUP_MODE -----
REM | You can enable Cleanup mode to remove obsolete files from your
REM | backup destinations after backup.
REM | Options available: ENABLE-CLEANUP/DISABLE-CLEANUP
REM | e.g. SET CLEANUP_MODE="ENABLE-CLEANUP"
REM | or  SET CLEANUP_MODE="DISABLE-CLEANUP"
REM -----
SET CLEANUP_MODE="DISABLE-CLEANUP"
REM ----- DEBUG_MODE -----
REM | Set Debug mode.
REM | Options available: ENABLE-DEBUG/DISABLE-DEBUG
REM | e.g. SET DEBUG_MODE="ENABLE-DEBUG"
REM | or  SET DEBUG_MODE="DISABLE-DEBUG"
REM -----
SET DEBUG_MODE="DISABLE-DEBUG"
REM ##### END: User Defined Section #####
SET APP_HOME=..
SET JAVA_HOME=%APP_HOME%\jvm
SET JAVA_EXE=%JAVA_HOME%\bin\bJW.exe
SET JAVA_LIB_PATH=-Djava.library.path=%APP_HOME%\bin
SET PATH=%JAVA_HOME%\bin;%PATH%

```

295

296

```

SET CLASSPATH=%APP_HOME%\bin;%APP_HOME%\bin\cb.jar
IF "%PROCESSOR_ARCHITECTURE%"=="x86" (
    SET "DEP_LIB_PATH=X86"
    SET JAVA_OPTS=-Xms128m -Xmx768m -XX:MaxDirectMemorySize=512m -
Dsun.java2d.noddraw -Dsun.nio.PageAlignDirectMemory=true
) ELSE (
    SET "DEP_LIB_PATH=X64"
    SET JAVA_OPTS=-Xms128m -Xmx2048m -XX:MaxDirectMemorySize=1024m -
Dsun.java2d.noddraw -Dsun.nio.PageAlignDirectMemory=true
)
SET PATH=%CD%\%APP_HOME%\bin\%DEP_LIB_PATH%;%PATH%
REM #####
ECHO -
ECHO APP_HOME=%APP_HOME%
ECHO SETTING_HOME=%SETTING_HOME%
ECHO JAVA_HOME=%JAVA_HOME%
ECHO JAVA_EXE=%JAVA_EXE%
ECHO JAVA_OPTS=%JAVA_OPTS%
ECHO JAVA_LIB_PATH=%JAVA_LIB_PATH%
ECHO PATH=%PATH%
ECHO CLASSPATH=%CLASSPATH%
ECHO -
ECHO Running Backup Set - '%BACKUP_SET%' ...
@ECHO ON
%JAVA_EXE% %JAVA_LIB_PATH% -cp %CLASSPATH% %JAVA_OPTS% RunBackupSet
%APP_HOME% %BACKUP_SET% %BACKUP_DESTS% %BACKUP_TYPE% %SETTING_HOME%
%DELTA_MODE% %CLEANUP_MODE% %DEBUG_MODE%
@ECHO OFF
CD %APP_HOME%
IF "%APP_HOME%"==".." PAUSE
@ECHO ON

```

NOTE

If some parameters are not configured, the backup job will run with the default backup settings.

Save the changes and close the text editor. Proceed back to *cmd* and enter *RunBackupSet.bat*.

```

C:\Program Files\Advanced Client (B247PRO)\bin>RunBackupSet.bat
-
APP_HOME=..
SETTING_HOME=""

JAVA_HOME=..\jvm
JAVA_EXE=..\jvm\bin\bJW.exe
JAVA_OPTS=-Xms128m -Xmx2048m -XX:MaxDirectMemorySize=1024m -
Dsun.java2d.noddraw -Dsun.nio.PageAlignDirectMemory=true

JAVA_LIB_PATH=-Djava.library.path=..\bin PATH=C:\Program Files\Advanced
Client (B247PRO)\bin\..\bin\X64;..\jvm\bin;C:\Program Files (x86)\Common
Files\Oracle\Java\javapath;C:\Windows\system32;C:\Windows;C:\Windows\
System32\Wbem;C:\Windows\System32\WindowsPowerShell\v1.0\;C:\Program
Files\Microsoft SQL Server\Client SDK\ODBC\110\Tools\Binn\;C:\Program
Files (x86)\Microsoft SQL Server\120\Tools\Binn\;C:\Program

```

```
Files\Microsoft SQL Server\120\Tools\Binn\;C:\Program Files\Microsoft
SQL Server\120\DTS\Binn\;C:\Program
Files\PuTTY\CLASSPATH=..\bin;..\bin\cb.jar
-
Running Backup Set - "" "" ...
C:\Program Files\Advanced Client (B247PRO)\bin>..\jvm\bin\bJW.exe -
Djava.library.path=..\bin -cp ..\bin;..\bin\cb.jar -Xms128m -Xmx2048m -
XX:MaxDirectMemorySize=1024m -Dsun.java2d.noddraw -
Dsun.nio.PageAlignDirectMemory=true RunBackupSet .. "" "ALL" "FILE" ""
"" "DISABLE-CLEANUP" "DISABLE-DEBUG"
[2019/07/12 12:50:20] [info] [-] Start [ Advanced Client (B247PRO)
v8.2.1.18 ]
[2019/07/12 12:50:20] [info] [-] Saving encrypted backup set encryption
keys to server...
[2019/07/12 12:50:22] [info] [1562897364604] Start Backup ... [In-File
Delta: Incremental]
[2019/07/12 12:50:22] [info] [1562897364604] Using Temporary Directory
C:\Users\Administrator\temp\1562897045523\OBS@1562897364604
[2019/07/12 12:50:22] [info] [-] Start running pre-commands
[2019/07/12 12:50:22] [info] [-] Finished running pre-commands
[2019/07/12 12:50:22] [info] [1562897364604] Downloading server file
list...
[2019/07/12 12:50:22] [info] [1562897364604] Downloading server file
list... Completed
[2019/07/12 12:50:23] [info] [1562897364604] Reading backup source from
hard disk...
[2019/07/12 12:50:25] [info] [1562897364604] Getting all files which
have been moved...
[2019/07/12 12:50:25] [info] [1562897364604] Getting all files which
have been moved... Completed
[2019/07/12 12:50:25] [info] [1562897364604] Reading backup source from
hard disk... Completed
[2019/07/12 12:50:25] [info] [1562897364604] Total New Files = 0
[2019/07/12 12:50:25] [info] [1562897364604] Total New Directories = 0
[2019/07/12 12:50:25] [info] [1562897364604] Total New Links = 0
[2019/07/12 12:50:25] [info] [1562897364604] Total Updated Files = 0
[2019/07/12 12:50:25] [info] [1562897364604] Total Attributes Changed
Files = 0
[2019/07/12 12:50:25] [info] [1562897364604] Total Deleted Files = 0
[2019/07/12 12:50:25] [info] [1562897364604] Total Deleted Directories =
0
[2019/07/12 12:50:25] [info] [1562897364604] Total Deleted Links = 0
[2019/07/12 12:50:25] [info] [1562897364604] Total Moved Files = 0
[2019/07/12 12:50:26] [info] [1562897364604] Saving encrypted backup
file index to 1562897045523/blocks at destination B247CBS...
[2019/07/12 12:50:26] [info] [1562897364604] Saving encrypted backup
file index to 1562897045523/blocks/2019-07-12-12-50-20 at destination
B247CBS...
[2019/07/12 12:50:27] [info] [-] Start running post-commands
[2019/07/12 12:50:27] [info] [-] Finished running post-commands
[2019/07/12 12:50:27] [info] [1562897364604] Deleting temporary file
C:\Users\Administrator\temp\1562897045523\OBS@1562897364604
```

[2019/07/12 12:50:27] [info] [1562897364604] Backup Completed
Successfully

Press any key to continue . . .



ListBackupJob.bat

This allows the user to display the list of backup jobs under a specific backup set. Enter the following script to export the batch file to a text editor.

```
C:\Program Files\Advanced Client (B247PRO)\bin>notepad ListBackupJob.bat
C:\Program Files\Advanced Client (B247PRO)\bin>
```

Configure the following parameters:

- **BACKUP_SET** – this is the backup set which you would like to be displayed. There are two (2) ways to specify the backup set; using the *backup set name* or the *backup set ID*. If the backup set name is not in English, use the backup set ID.

e.g. `SET BACKUP_SET="FileBackupSet-1"`
 or `SET BACKUP_SET="1119083740107"`

You can leave this parameter blank if you only have one (1) backup set.

e.g. `SET BACKUP_SET=""`

- **BACKUP_DEST** – this is the destination of the backup set which you would like to be displayed. There are two (2) ways to specify the backup destination; using the *destination name* or the *destination ID*. If the destination is not in English, use the destination ID.

e.g. `SET BACKUP_DEST="Local-1"`
 or `SET BACKUP_DEST="1119083740107"`

You can leave this parameter blank if you only have one (1) backup destination.

e.g. `SET BACKUP_DEST=""`

```
@ECHO OFF
REM ##### ListBackupJob.bat #####
REM # You can use this batch to list all backup jobs which ran under #
REM # this backup set. #
REM #####
REM ##### Start: User Defined Section #####
REM ----- BACKUP_SET -----
REM | The name or ID of the backup set that you want to run
REM | If backup set name is not in English, please use BackupSetID
REM | e.g. SET BACKUP_SET="1119083740107"
REM | or SET BACKUP_SET="FileBackupSet-1"
REM |
REM | You can leave this parameter blank if you have only 1 backup set.
REM -----
SET BACKUP_SET="File Backup"
REM ----- BACKUP_DEST -----
REM | The name or ID of the destination that you want to list
REM | If destination name is not in English, please use DestinationID
REM | e.g. SET BACKUP_DEST="1119083740107"
REM | or SET BACKUP_DEST="B247CBS"
REM |
REM | You can leave this parameter blank if you have only 1 destination.
REM -----
```

300

```

SET BACKUP_DEST=""
REM ##### END: User Defined Section #####
REM #####
REM #          SCRIPT          USAGE
REM #####
REM # Input Arguments will overwrite the above settings
REM # defined in 'User Defined Section'.
IF NOT %1.==. SET BACKUP_SET=%1
IF NOT %2.==. SET BACKUP_DEST=%2
REM #####
SET APP_HOME=..
SET SETTING_HOME=
SET JAVA_HOME=%APP_HOME%\jvm
SET JAVA_EXE=JAVA_HOME%\bin\bJW.exe
SET JAVA_OPTS=-Xms128m -Xmx768m -Dsun.java2d.noddraw -
Dsun.nio.PageAlignDire
ctMemory=true
SET JAVA_LIB_PATH=-Djava.library.path=%APP_HOME%\bin
SET PATH=%JAVA_HOME%\bin;%PATH%
SET CLASSPATH=%APP_HOME%\bin;%APP_HOME%\bin\cb.jar
REM #####
ECHO -
ECHO APP_HOME=%APP_HOME%
ECHO SETTING_HOME=%SETTING_HOME%
ECHO JAVA_HOME=%JAVA_HOME%
ECHO JAVA_EXE=%JAVA_EXE%
ECHO JAVA_OPTS=%JAVA_OPTS%
ECHO JAVA_LIB_PATH=%JAVA_LIB_PATH%
ECHO PATH=%PATH%
ECHO CLASSPATH=%CLASSPATH%
ECHO -
ECHO Listing all backup jobs for Backup Set - '%BACKUP_SET%' ...
@ECHO ON
%JAVA_EXE% %JAVA_LIB_PATH% -cp %CLASSPATH% %JAVA_OPTS% ListBackupJob --
app-home=%APP_HOME% --backup-set=%BACKUP_SET% --backup-
dest=%BACKUP_DEST% --setting-home=%SETTING_HOME%
PAUSE

```

NOTE

You can only select one (1) backup set and one (1) destination at a time.

Save the changes and close the text editor. Proceed back to *cmd* and enter *ListBackupJob.bat*. The list of backup jobs under the specified backup set will be displayed.

```

C:\Program Files\Advanced Client (B247PRO)\bin>ListBackupJob.bat

-

APP_HOME=..

SETTING_HOME=

JAVA_HOME=..\jvm

```



```
JAVA_EXE=..\jvm\bin\bJW.exe

JAVA_OPTS=-Xms128m -Xmx768m -Dsun.java2d.noddraw -
Dsun.nio.PageAlignDirectMemory=true

JAVA_LIB_PATH=-Djava.library.path=..\bin PATH=..\jvm\bin;C:\Program
Files (x86)\Common Files\Oracle\Java\javapath;C:\Windows\system32;C:
\Windows;C:\Windows\System32\Wbem;C:\Windows\System32\WindowsPowerShell
\v1.0\;C:\Program Files\Microsoft SQL Server\Client SDK\ODBC\110\Tools
\Binn\;C:\Program Files (x86)\Microsoft SQL
Server\120\Tools\Binn\;C:\Program Files\Microsoft SQL
Server\120\Tools\Binn\;C:\Program Files\Microsoft SQL
Server\120\DTS\Binn\;C:\Program
Files\PuTTY\CLASSPATH=..\bin;..\bin\cb.jar

-

Listing all backup jobs for Backup Set - "File Backup" ...

C:\Program Files\Advanced Client (B247PRO)\bin>..\jvm\bin\bJW.exe -
Djava.library.path=..\bin -cp..\bin;..\bin\cb.jar -Xms128m -Xmx768m -
Dsun.java2d.noddraw -Dsun.nio.PageAlignDirectMemory=true ListBackupJob -
-app-home=.. --backup-set="File Backup" --backup-dest="" --setting-home=

File Backup [1562220462692]

2019-07-05-11-31-41

2019-07-04-20-00-00

2019-07-04-14-08-13

C:\Program Files\Advanced Client (B247PRO)\bin>PAUSE

Press any key to continue . . .
```

301

Restore.bat

This allows the user to restore backed up data. Enter the following script to export the batch file to a text editor.

```
C:\Program Files\Advanced Client (B247PRO)\bin>notepad Restore.bat  
C:\Program Files\Advanced Client (B247PRO)\bin>
```

Configure the following parameters:

- **BACKUP_SET** – this is the backup set which you would like to restore. If the backup set name is not in English, use the backup set ID.

e.g. `SET BACKUP_SET="FileBackupSet-1"`
or `SET BACKUP_SET="1119083740107"`

- **DESTINATION** – this is the destination where you want to restore the backed up data from. If the destination is not in English, use the destination ID.

e.g. `SET DESTINATION="Local-1"`
or `SET DESTINATION="1119083740107"`

You can leave this parameter blank if you only have one (1) backup destination.

e.g. `SET DESTINATION=""`

- **RESTORE_TO** – this is the location where the files will be restored.

e.g. `SET RESTORE_TO=" C:\Temp"`

- **RESTORE_FROM** – this is the selected file or directory on the backup server which you would like to restore.

e.g. `SET RESTORE_FROM=" C:\Users"`

- **POINT_IN_TIME** – this is the point-in-time snapshot (of a successful backup) that you want to restore from the backup server. Use "Current" for the latest backup snapshot. You can retrieve the point in time by using the *ListBackupJob.bat*.

e.g. `SET POINT_IN_TIME="2006-10-04-12-57-13"`
or `SET POINT_IN_TIME="Current"`

- **RESTORE_PERMISSION** – set this to "Y" if you want to restore file permissions. Otherwise, indicate "N" if you do NOT want to restore file permissions.

e.g. `SET RESTORE_PERMISSION="N"`

- **SKIP_INVALID_KEY** – set this to "Y" if you want to skip restore file with an invalid key. Set this to "N" if you want to prompt user to input the correct key.

e.g. `SET SKIP_INVALID_KEY="N"`

- **SYNC_OPTION** – set this to "Y" if you want to enable the sync option. Set this to "N" if you do NOT want to enable sync option. Leave this blank if you want to prompt user for a selection.

e.g. `SET SYNC_OPTION="N"`

- **REPLACE_EXISTING_FILE** – set to "--all" to replace all existing file(s) of the same filename. Set this to "--none" to skip all existing file(s) with the same filename. Leave this blank if you want to prompt user for a selection.

e.g. `SET REPLACE_EXISTING_FILE="--all"`

- **SETTING_HOME** – this is the directory to your setting home. If not set, the directory will be "C:\Users\USER\obm" by default.

e.g. `SET SETTING_HOME="C:\Users\John\obm"`

- **FILTER** – this parameter is used to filter the files that you want to restore.

e.g. `SET FILTER="-Pattern=.txt-Type=exact-Target=toFile"`

- **TEMP_DIR** – this is the directory where you would like to store the restore files temporarily.

e.g. `SET TEMP_DIR="C:\Temp"`

- **VERIFY_CHKSUM** – set this to "Y" if you want to verify the in-file delta file checksum during restore. Otherwise, set this to "N" if you do NOT want to verify the in-file delta file checksum during restore.

e.g. `SET VERIFY_CHKSUM="N"`

303

```
@ECHO OFF
REM ##### Restore.bat #####
REM # You can use this batch file to restore backup files using command-
REM # line. Just customize the "User Define Section" below with values
REM # for your restore action.
REM #####
REM ##### Start: User Defined Section #####
REM ----- BACKUP_SET -----
REM | The name or ID of the backup set that you want to restore.
REM | If backup set name is not in English, please use ID instead.
REM | e.g. SET BACKUP_SET="1119083740107"
REM | or SET BACKUP_SET="FileBackupSet-1"
REM |
REM | You can leave this parameter blank if you have only 1 backup set.
REM -----
SET BACKUP_SET=""
REM ----- DESTINATION -----
REM | The name or ID of the backup destination that you want to restore
REM | from.
REM | If backup destination name is not in English, please use ID
REM | instead.
REM | e.g. SET DESTINATION="1740107119083"
REM | or SET DESTINATION="Destination-1"
REM |
REM | You can leave this parameter blank if you have only 1 destination.
REM -----
SET DESTINATION=""
```

```

REM ----- RESTORE_TO -----
REM | Directory to where you want files to be restored
REM | Use "\\\" instead of "\" when you specify a UNC path
REM | set to "" to restore files to original location
REM | e.g. SET RESTORE_TO="C:\Temp"
REM -----
SET RESTORE_TO="C:\Temp"
REM ----- RESTORE_FROM -----
REM | File/Directory on the backup server that you would like to restore
REM | e.g. SET RESTORE_FROM="C:\Data"
REM -----
SET RESTORE_FROM=" C:\Users\Administrator\Desktop\Data backup"
REM ----- POINT_IN_TIME -----
REM | The point-in-time snapshot (successful backup) that you want to
REM | restore from the backup server.
REM | Use "Current" for the latest backup
REM | snapshot e.g. SET POINT_IN_TIME="2006-10-04-12-57-13"
REM | or SET POINT_IN_TIME="Current"
REM |
REM | You can retrieve the point in time by using the ListBackupJob.bat
REM -----
SET POINT_IN_TIME="Current"
REM ----- RESTORE_PERMISSION -----
REM | set to "Y" if you want to restore file permissions
REM | set to "N" if you do NOT want to restore file permissions
REM -----
SET RESTORE_PERMISSION="N"
REM ----- SKIP_INVALID_KEY -----
REM | set to "Y" if you want to skip restore file with invalid key
REM | set to "N" if you want to prompt user to input a correct key
REM -----
SET SKIP_INVALID_KEY="N"
REM ----- SYNC_OPTION -----
REM | Delete extra files
REM | set to "Y" if you want to enable sync option
REM | set to "N" if you do NOT want to enable sync option
REM | set to "" to prompt for selection
REM -----
SET SYNC_OPTION="N"
REM ----- REPLACE_EXISTING_FILE -----
REM | set to "--all" to replace all existing file(s) of the same
REM | filename set to "--none" to skip all existing file(s) with the same
REM | filename set to "" to prompt for selection
REM -----
SET REPLACE_EXISTING_FILE="--all"
REM ----- SETTING_HOME -----
REM | Directory to your setting home. Default to
REM | "C:\Users\USER\.obm" when not set.
REM | e.g. SET SETTING_HOME="C:\Users\John\.obm"
REM -----
SET SETTING_HOME=""
REM OPTION:
REM ----- FILTER -----

```

```

REM | Filter out what files you want to restore
REM | -Pattern=xxx-Type=yyy-Target=zzz
REM | where xxx is the filter pattern,
REM |       yyy is the filter type, which can be one of the following:
REM |       [exact | exactMatchCase | contains | containsMatchCase|
REM |       startWith | startWithMatchCase | endWith |
REM | endWithMatchCase] |
REM |       zzz is the filter target, which can be one of the following:
REM |       [toFile | toFileDir | toDir]
REM |
REM | e.g. SET FILTER="-Pattern=.txt-Type=exact-Target=toFile"
REM -----
SET FILTER=""
REM ----- TEMP_DIR -----
REM | Directory to where you want to store restore files temporarily
REM | Use "\\\\" instead of "\\" when you specify a UNC path
REM | set to "" to use the temporary directory in the backup set
REM | e.g. SET TEMP_DIR="C:\Temp"
REM -----
SET TEMP_DIR=""
REM ----- VERIFY_CHKSUM -----
REM | set to "Y" if you want to verify in-file delta file checksum
REM | during restore
REM | set to "N" if you do NOT want to verify in-file delta file
REM | checksum during restore
REM -----
SET VERIFY_CHKSUM="N"
REM ##### END: User Defined Section #####
SET APP_HOME=..
SET JAVA_HOME=%APP_HOME%\jvm
SET JAVA_EXE=%JAVA_HOME%\bin\bJW.exe
SET JAVA_LIB_PATH=-Djava.library.path=%APP_HOME%\bin
SET PATH=%JAVA_HOME%\bin;%PATH%
SET CLASSPATH=%APP_HOME%\bin;%APP_HOME%\bin\cb.jar
IF "%PROCESSOR_ARCHITECTURE%"=="x86" (
    SET "DEP_LIB_PATH=X86"
    SET JAVA_OPTS=-Xms128m -Xmx768m -XX:MaxDirectMemorySize=512m -
Dsun.java2d.noddraw -Dsun.nio.PageAlignDirectMemory=true
) ELSE (
    SET "DEP_LIB_PATH=X64"
    SET JAVA_OPTS=-Xms128m -Xmx2048m -XX:MaxDirectMemorySize=1024m -
Dsun.java2d.noddraw -Dsun.nio.PageAlignDirectMemory=true
)
SET PATH=%CD%\%APP_HOME%\bin\%DEP_LIB_PATH%;%PATH%
REM #####
ECHO -
ECHO APP_HOME=%APP_HOME%
ECHO SETTING_HOME=%SETTING_HOME%
ECHO JAVA_HOME=%JAVA_HOME%
ECHO JAVA_EXE=%JAVA_EXE%
ECHO JAVA_OPTS=%JAVA_OPTS%
ECHO JAVA_LIB_PATH=%JAVA_LIB_PATH%
ECHO PATH=%PATH%

```

305

```
ECHO CLASSPATH=%CLASSPATH%
ECHO -
@ECHO ON
%JAVA_EXE% %JAVA_LIB_PATH% -cp %CLASSPATH% %JAVA_OPTS% Restore --
to=%RESTORE_TO% --from=%RESTORE_FROM% --backup-set=%BACKUP_SET% --
backup-dest=%DESTINATION% %REPLACE_EXISTING_FILE% --date=%POINT_IN_TIME%
--set-permission=%RESTORE_PERMISSION% --skip-invalid-
key=%SKIP_INVALID_KEY% --sync=%SYNC_OPTION% --filter=%FILTER% --temp-
dir=%TEMP_DIR% --verify-delta-file-chksum=%VERIFY_CHKSUM% --app-
home=%APP_HOME% --setting-home=%SETTING_HOME%
@ECHO OFF
CD %APP_HOME%
IF "%APP_HOME%"==".." PAUSE
@ECHO ON
```

NOTE

If some parameters are not set, the restore job will run with the default restore settings.

Save the changes and close the text editor. Proceed back to *cmd* and enter *Restore.bat*.

```
C:\Program Files\Advanced Client (B247PRO)\bin>Restore.bat

-
APP_HOME=..
SETTING_HOME=""
JAVA_HOME=..\jvm
JAVA_EXE=..\jvm\bin\bJW.exe

JAVA_OPTS=-Xms128m -Xmx2048m -XX:MaxDirectMemorySize=1024m -
Dsun.java2d.noddraw -Dsun.nio.PageAlignDirectMemory=true

JAVA_LIB_PATH=-Djava.library.path=..\binPATH=C:\Program Files\Advanced
Client (B247PRO)
\bin\..\bin\X64;..\jvm\bin;C:\Program Files (x86)\Common Files\Oracle\
Java\javapath;C:\Windows\system32;C:\Windows;C:\Windows\System32\Wbem;
C:\Windows\System32\WindowsPowerShell\v1.0;C:\Program Files\Microsoft
SQL Server\Client SDK\ODBC\110\Tools\Binn\;C:\Program Files
(x86)\Microsoft SQL Server\120\Tools\Binn\;C:\Program Files\Microsoft
SQL Server\120\Tools\Binn\;C:\Program Files\Microsoft SQL
Server\120\DTS\Binn\;C:\Program Files\PuTTY\CLASSPATH=..
\bin;..\bin\cb.jar

-

C:\Program Files\Advanced Client (B247PRO)\bin>..\jvm\bin\bJW.exe -
Djava.library.path=..\bin -cp ..\bin;..\bin\cb.jar -Xms128m -Xmx2048m -
XX:MaxDirectMemorySize=1024m -Dsun.java2d.noddraw -
Dsun.nio.PageAlignDirectMemory=true Restore --to="C:\Temp" --
from="C:\Users\Administrator\Desktop\Data backup" --backup-set="" --
```

```
backup-dest="" "--all" --date="Current"--set-permission="N" --skip-  
invalid-key="N" --sync="N" --filter="" --temp-dir="" --verify-delta-  
file-chksum="N" --app-home=.. --setting-home=""
```

Filter Pattern not set, filter would not apply to restore

Temporary directory not set, use the temporary directory in the backup set

```
[2019-07-12 11:52:03] Start [ Advanced Client (B247PRO) v8.2.1.18 ]
```

```
[2019-07-12 11:52:03] OS: Windows Server 2012 R2 (w2k16R2-std); CPU  
Model: VMware-Intel(R) Xeon(R) CPU E5520 @ 2.27GHz,Intel(R) Xeon(R) CPU  
E5520 @2.27GHz; Number of Processors: 4; Heap Size: 32.3MB (Current) /  
1.8GB (Maximum); Physical Memory: 726.9MB (Free) / 4GB (Total)
```

```
[2019-07-12 11:52:03] start,Start [ Advanced Client (B247PRO)  
v8.2.1.18 ],0,0,0,,0,0
```

```
[2019-07-12 11:52:03] Initializing decrypt action...
```

```
[2019-07-12 11:52:03] Initializing decrypt action... Completed
```

```
[2019-07-12 11:52:04] Creating new directory... "C:\Temp\C_"
```

```
[2019-07-12 11:52:04] Creating new directory... "C:\Temp\C_\Users"
```

```
[2019-07-12 11:52:04] Creating new directory...  
"C:\Temp\C_\Users\Administrator"
```

```
[2019-07-12 11:52:04] Creating new directory...  
"C:\Temp\C_\Users\Administrator\Desktop"
```

```
[2019-07-12 11:52:04] Creating new directory...  
"C:\Temp\C_\Users\Administrator\Desktop\Data backup"
```

```
[2019-07-12 11:52:04] Downloading...  
"C:\Temp\C_\Users\Administrator\Desktop\Data backup\Sample file.txt"  
(Total 0 bytes)
```

```
[2019-07-12 11:52:04] Downloading...  
"C:\Temp\C_\Users\Administrator\Desktop\Data backup\Text File.txt"  
(Total 0 bytes)
```

```
[2019-07-12 11:52:05] file,C:\Temp\C_\Users\Administrator\Desktop\Data  
backup\Sample file.txt,0,0,1562897245044,,1562903525530,1562903525531
```

```
[2019-07-12 11:52:05] file,C:\Temp\C_\Users\Administrator\Desktop\Data  
backup\Text File.txt,0,0,1562897254708,,1562903525531,1562903525531
```

```
[2019-07-12 11:52:06] Restore Completed Successfully
```

```
[2019-07-12 11:52:06] end,RESTORE_STOP_SUCCESS,0,0,0,,0,0
```

Press any key to continue . . .

Decrypt.bat

This allows the user to restore raw data. Enter the following script to export the batch file to a text editor.

```
C:\Program Files\Advanced Client (B247PRO)\bin>notepad Decrypt.bat  
C:\Program Files\Advanced Client (B247PRO)\bin>
```

Configure the following parameters:

- **SOURCE_DIR** – this is the path of the folder which contains the backed up files that you want to decrypt.
e.g. `SOURCE_DIR="C:\john\backupdata\1498444438340\blocks"`
- **ENCRYPT_KEY** – this is the encryption key that was set for the backup set. You can leave this parameter blank if the backed up data is not encrypted.
e.g. `ENCRYPT_KEY="NjQAtHhBSyAVgfFkaFI="`
e.g. `ENCRYPT_KEY=""`
- **DECRYPT_TO** – this is the specified directory where the decrypted files will be stored.
e.g. `SET DECRYPT_TO=" C:\Temp"`
- **DECRYPT_FROM** – this is the file or directory on the backup data that you would like to decrypt.
e.g. `SET DECRYPT_TO="C:\Data"`
- **POINT_IN_TIME** – this is the point-in-time snapshot (of a successful backup) that you want to decrypt from the backed up data. Use "Current" for the latest backup snapshot. The point-in-time should be one of the directory names under `SOURCE_DIR`.
e.g. `SET POINT_IN_TIME="2006-10-04-12-57-13"`
or `SET POINT_IN_TIME="Current"`
- **RESTORE_PERMISSION** – set this to "Y" if you want to restore file permissions. Otherwise, indicate "N" if you do NOT want to restore file permissions.
e.g. `SET RESTORE_PERMISSION="N"`
- **SKIP_INVALID_KEY** – set this to "Y" if you want to skip decrypt file with invalid key. Set this set to "N" if you want to prompt user to input a correct key.
e.g. `SKIP_INVALID_KEY="Y"`
- **SYNC_OPTION** – set this to "Y" if you want to enable sync option. Set this to "N" if you do NOT want to enable sync option. Leave this parameter blank if you want to prompt user for selection.
e.g. `SET SYNC_OPTION="N"`
e.g. `SET SYNC_OPTION=""`

- **REPLACE_EXISTING_FILE** – set this to "--all" if you want to replace all existing file(s) of the same filename. Set this to "--none" if you want to skip all existing file(s) with the same filename. Leave this parameter blank if you want to prompt user for selection.

e.g. `SET REPLACE_EXISTING_FILE="--all"`
 e.g. `SET REPLACE_EXISTING_FILE="--none"`
 e.g. `SET REPLACE_EXISTING_FILE=""`

- **SETTING_HOME** – this is the directory to your setting home. This is where the log files will be placed. If not set, the directory will be "C:\Users\USER\obm" by default.

e.g. `SET SETTING_HOME="C:\Users\John\obm"`

- **FILTER** – this parameter is used to filter the files that you want to decrypt.

e.g. `SET FILTER="-Pattern=.txt-Type=exact-Target=toFile"`

- **TEMP_DIR** – this is the directory where you would like to store the decrypt files temporarily.

e.g. `SET TEMP_DIR="C:\Temp"`

- **VERIFY_CHKSUM** – set this to "Y" if you want to verify the in-file delta file checksum during decrypt. Set this to "N" if you do NOT want to verify the in-file delta file checksum during decrypt.

e.g. `SET VERIFY_CHKSUM="N"`

309

```
@ECHO OFF
REM ##### Decrypt.bat #####
REM # You can use this batch file to decrypt backup files using command-
REM # line. Just customize the "User Define Section" below with values
REM # for your decrypt action.
REM #####
REM ##### Start: User Defined Section #####
REM ----- SOURCE_DIR -----
REM | The path to the [<backup set ID>/blocks] folder which contains |
REM | the backup files that you want to decrypt.
REM | This folder should be located under backup destination physically.
REM | e.g. SET SOURCE_DIR="C:\john\backupdata\1498444438340\blocks"
REM | where directory "C:\john\backupdata" is path of local destination
REM -----
SET SOURCE_DIR="C:\Program
Files\B247CBS\user\win_OBM\1562897045523\blocks"
REM ----- ENCRYPT_KEY -----
REM | The encrypting key of the backup data.
REM | e.g. SET ENCRYPT_KEY="RU5DU11QVF9LRVk="
REM |
REM | You can leave this parameter blank if backup data is not
REM | encrypted.
REM -----
SET ENCRYPT_KEY=""
REM ----- DECRYPT_TO -----
REM | Directory to where you want files to be decrypted
REM | Use "\\\" instead of "\" when you specify a UNC path
REM | e.g. SET DECRYPT_TO="C:\Temp"
```

```

REM -----
SET DECRYPT_TO="C:\Data"
REM ----- DECRYPT_FROM -----
REM | File/Directory on the backup data that you would like to decrypt
REM | e.g. SET DECRYPT_FROM="C:\Data"
REM -----
SET DECRYPT_FROM="C:\Users\Administrator\Desktop\Data backup"
REM ----- POINT_IN_TIME -----
REM | The point-in-time snapshot (successful backup) that you want to
REM | decrypt from the backup data. Use "Current" for the latest backup
REM | snapshot
REM | e.g. SET POINT_IN_TIME="2006-10-04-12-57-13"
REM | or SET POINT_IN_TIME="Current"
REM |
REM | The point in time should be one of the directory name under
REM | SOURCE_DIR unless you want to decrypt latest backup snapshot.
REM -----
SET POINT_IN_TIME="Current"
REM ----- RESTORE_PERMISSION -----
REM | set to "Y" if you want to restore file permissions
REM | set to "N" if you do NOT want to restore file permissions
REM -----
SET RESTORE_PERMISSION="N"
REM ----- SKIP_INVALID_KEY -----
REM | set to "Y" if you want to skip decrypt file with invalid key
REM | set to "N" if you want to prompt to input a correct key
REM -----
SET SKIP_INVALID_KEY="Y"
REM ----- SYNC_OPTION -----
REM | Delete extra files
REM | set to "Y" if you want to enable sync option
REM | set to "N" if you do NOT want to enable sync option
REM | set to "" to prompt for selection
REM -----
SET SYNC_OPTION="N"
REM ----- REPLACE_EXISTING_FILE -----
REM | set to "--all" to replace all existing file(s) of the same
REM | filename set to "--none" to skip all existing file(s) with the
REM | same filename set to "" to prompt for selection
REM -----
SET REPLACE_EXISTING_FILE="--all"
REM ----- SETTING_HOME -----
REM | Directory to your setting home. Log files will be located inside.
REM | Default to "C:\Users\USER\.obm" when not set.
REM | e.g. SET SETTING_HOME="C:\Users\John\.obm"
REM -----
SET SETTING_HOME="C:\Users\Administrator\.obm"
REM OPTION:
REM ----- FILTER -----
REM | Filter out what files you want to decrypt
REM | -Pattern=xxx-Type=yyy-Target=zzz
REM | where xxx is the filter pattern,
REM | yyy is the filter type, whice can be one of the following:

```

```

REM |          [exact | exactMatchCase | contains | containsMatchCase|
REM |          startWith | startWithMatchCase | endWith |
REM |          endWithMatchCase]
REM |          zzz is the filter target, which can be one of the following:
REM |          [toFile | toFileDir | toDir]
REM |
REM | e.g. SET FILTER="-Pattern=.txt-Type=exact-Target=toFile"
REM -----
SET FILTER=""
REM -----
REM |          TEMP_DIR -----
REM | Directory to where you want to store decrypt files temporarily
REM | Use "\\\" instead of "\" when you specify a UNC path
REM | e.g. SET TEMP_DIR="C:\Temp"
REM -----
SET TEMP_DIR="C:\Temp"
REM -----
REM |          VERIFY_CHKSUM -----
REM | set to "Y" if you want to verify in-file delta file checksum
REM | during decrypt
REM | set to "N" if you do NOT want to verify in-file delta file
REM | checksum during decrypt
REM -----
SET VERIFY_CHKSUM="N"
REM ##### END: User Defined Section #####
SET APP_HOME=.
SET JAVA_HOME=%APP_HOME%\jvm
SET JAVA_EXE=%JAVA_HOME%\bin\bJW.exe
SET JAVA_LIB_PATH=-Djava.library.path=%APP_HOME%\bin
SET PATH=%JAVA_HOME%\bin;%PATH%
SET CLASSPATH=%APP_HOME%\bin;%APP_HOME%\bin\cb.jar
IF "%PROCESSOR_ARCHITECTURE%"=="x86" (
    SET "DEP_LIB_PATH=X86"
    SET JAVA_OPTS=-Xms128m -Xmx768m -XX:MaxDirectMemorySize=512m -
Dsun.java2d.noddraw -Dsun.nio.PageAlignDirectMemory=true
) ELSE (
    SET "DEP_LIB_PATH=X64"
    SET JAVA_OPTS=-Xms128m -Xmx2048m -XX:MaxDirectMemorySize=1024m -
Dsun.java2d.noddraw -Dsun.nio.PageAlignDirectMemory=true
)
SET PATH=%CD%\%APP_HOME%\bin\%DEP_LIB_PATH%;%PATH%
REM #####
ECHO -
ECHO APP_HOME=%APP_HOME%
ECHO SETTING_HOME=%SETTING_HOME%
ECHO JAVA_HOME=%JAVA_HOME%
ECHO JAVA_EXE=%JAVA_EXE%
ECHO JAVA_OPTS=%JAVA_OPTS%
ECHO JAVA_LIB_PATH=%JAVA_LIB_PATH%
ECHO PATH=%PATH%
ECHO CLASSPATH=%CLASSPATH%
ECHO -
@ECHO ON
%JAVA_EXE% %JAVA_LIB_PATH% -cp %CLASSPATH% %JAVA_OPTS% Decrypt --
to=%DECRYPT_TO% --from=%DECRYPT_FROM% --source-dir=%SOURCE_DIR% --

```

311

```
key=%ENCRYPT_KEY% %REPLACE_EXISTING_FILE% --date=%POINT_IN_TIME% --set-
permission=%RESTORE_PERMISSION% --skip-invalid-key=%SKIP_INVALID_KEY% --
sync=%SYNC_OPTION% --filter=%FILTER% --temp-dir=%TEMP_DIR% --verify-
delta-file-chksum=%VERIFY_CHKSUM% --app-home=%APP_HOME% --setting-
home=%SETTING_HOME%
@ECHO OFF
CD %APP_HOME%
IF "%APP_HOME%"==".." PAUSE
@ECHO ON
```

Save the changes and close the text editor. On the *cmd*, enter *Decrypt.bat*. When asked if you want to input the encrypting key, select '1' (Yes). Enter the correct encryption key to continue.

```
C:\Program Files\Advanced Client (B247PRO)\bin>Decrypt.bat
-
APP_HOME=..
SETTING_HOME="C:\Users\Administrator\.obm"
JAVA_HOME=..\jvm
JAVA_EXE=..\jvm\bin\bJW.exe
JAVA_OPTS=-Xms128m -Xmx2048m -XX:MaxDirectMemorySize=1024m -
Dsun.java2d.noddraw -Dsun.nio.PageAlignDirectMemory=true

JAVA_LIB_PATH=-Djava.library.path=..\bin PATH=C:\Program Files\Advanced
Client (B247PRO)\bin
..\bin\X64;..\jvm\bin;C:\Program Files (x86)\Common
Files\Oracle\Java\javapath;C:\Windows\system32;C:\Windows;C:\Windows\
System32\Wbem;C:\Windows\System32\WindowsPowerShell\v1.0;C:\Program
Files\Microsoft SQL Server\Client SDK\ODBC\110\Tools\Binn\;C:\Program
Files (x86)\Microsoft SQL Server\120\Tools\Binn\;C:\Program
Files\Microsoft SQL Server\120\Tools\Binn\;C:\Program Files\Microsoft
SQL Server\120\DTS\
Binn\;C:\Program Files\PuTTY\CLASSPATH=..\bin;..\bin\cb.jar
-
C:\Program Files\Advanced Client (B247PRO)\bin>..\jvm\bin\bJW.exe -
Djava.library.path=..\bin -cp ..\bin;..\bin\cb.jar -Xms128m -Xmx2048m -
XX:MaxDirectMemorySize=1024m -Dsun.java2d.noddraw -
Dsun.nio.PageAlignDirectMemory=true Decrypt --to="C:\Data" --
from="C:\Users\Administrator\Desktop\Data backup" --source-
dir="C:\Program Files\B247CBS\user\Win_OBM\1562897045523\blocks" --
key="" "--all" --date="Current" --set-permission="N" --skip-invalid-
key="Y" --sync="N" --filter="" --temp-dir="C:\Temp" --verify-delta-file-
chksum="N" --app-home=.. --setting-home="C:\Users\Administrator\.obm"

Filter Pattern not set, filter would not apply to decrypt
(C:\Program Files\Backup247
B247CBS\user\Win_OBM\1562897045523\blocks\index-
s0.j00.100.16be3f1a078.cgz)

Please input the Encrypting Key.
Want to input encrypting key?
1.YES 2.CANCEL >>1
Enter Correct Encrypting Key:*****

[2019-07-12 10:27:23] Start [ Advanced Client (B247PRO) v8.2.1.18 ]
```

```
[2019-07-12 10:27:25] OS: Windows Server 2012 R2 (w2k16R2-std); CPU
Model: VMware-Intel(R) Xeon(R) CPU E5520 @ 2.27GHz,Intel(R) Xeon(R) CPU
E5520 @ 2.27GHz; Number of Processors: 4; Heap Size: 35.6MB (Current)
/ 1.8GB (Maximum); Physical Memory: 722.2MB (Free) / 4GB (Total)
[2019-07-12 10:27:25] start,Start [ Advanced Client (B247PRO)
v8.2.1.18 ],0,0,0,,0,0
[2019-07-12 10:27:25] Initializing decrypt action...
[2019-07-12 10:27:25] Initializing decrypt action... Completed
[2019-07-12 10:27:26] Creating new directory... "C:\Data\C_"
[2019-07-12 10:27:26] Creating new directory... "C:\Data\C_\Users"
[2019-07-12 10:27:26] Creating new directory...
"C:\Data\C_\Users\Administrator"
[2019-07-12 10:27:26] Creating new directory...
"C:\Data\C_\Users\Administrator\Desktop"
[2019-07-12 10:27:26] Creating new directory...
"C:\Data\C_\Users\Administrator\Desktop\Data backup"
[2019-07-12 10:27:26] Downloading...
"C:\Data\C_\Users\Administrator\Desktop\Data backup\Sample file.txt"
(Total 0 bytes)
[2019-07-12 10:27:26] Downloading...
"C:\Data\C_\Users\Administrator\Desktop\Data backup\Text File.txt"
(Total 0 bytes)
[2019-07-12 10:27:27] file,C:\Data\C_\Users\Administrator\Desktop\Data
backup\Sample file.txt,0,0,1562897245044,,1562898447522,1562898447522
[2019-07-12 10:27:27] file,C:\Data\C_\Users\Administrator\Desktop\Data
backup\Text File.txt,0,0,1562897254708,,1562898447522,1562898447522

[2019-07-12 10:27:28] Restore Completed Successfully
[2019-07-12 10:27:28] end,RESTORE_STOP_SUCCESS,0,0,0,,0,0

Press any key to continue . . .
```

RunDataIntegrityCheck.bat

This allows the user to perform data integrity check to all available backup sets. Enter the following script to export the batch file to a text editor.

```
C:\Program Files\Advanced Client (B247PRO)\bin>notepad
RunDataIntegrityCheck.bat

C:\Program Files\Advanced Client (B247PRO)\bin>
```

To perform a data integrity check, the following parameters must be set first:

- **SETTING_HOME** (*Optional*)– this is the directory to your setting home. This is where the log files will be located. If not set, the directory will be "C:\Users\USER\obm" by default

e.g. `SET SETTING_HOME="C:\Users\John\obm"`

- **BACKUP_SET** – this is the backup set which you would like to run a data integrity check on. If the backup set name is not in English, use the backup set ID.

e.g. `SET BACKUP_SET="FileBackupSet-1"`
or `SET BACKUP_SET="1119083740107"`

You can leave this parameter blank if you only have one (1) backup set.

e.g. `SET BACKUP_SET=""`

- **BACKUP_DEST** – this is the destination of the backup set which you will run a data integrity check on. If the destination is not in English, use the destination ID.

e.g. `SET BACKUP_DEST="Destination-1"`
or `SET BACKUP_DEST="1740107119083"`

This parameter can be left blank if you have a single destination.

e.g. `SET BACKUP_DEST=""`

This parameter will be ignored if the `BACKUP_SET` is set to "ALL".

e.g. `SET BACKUP_SET="ALL"`

- **CRC_MODE** – when enabled, a Cyclic Redundancy Check (CRC) will run during the data integrity check.

e.g. `SET CRC_MODE="ENABLE-CRC"`
`SET CRC_MODE="DISABLE-CRC"`

```
@ECHO OFF

REM ##### RunDataIntegrityCheck.bat #####
REM # You can use this batch to run any of your backup sets from the
REM # command line. Just customize the "User Defined Section" below with
REM # your values for your backup action.
REM #####
REM ##### START: User Defined Section #####
REM ----- SETTING_HOME (Optional) -----
```

```

REM | Directory to your setting home. Default to
REM | "C:\Users\USER\.obm" when not set.
REM | e.g. SET SETTING_HOME="C:\Users\John\.obm"
REM -----
SET SETTING_HOME=""
REM -----
REM | BACKUP_SET -----
REM | The name or ID of the backup set that you want to run.
REM | If backup set name is not in English, please use ID instead.
REM | e.g. SET BACKUP_SET="1119083740107"
REM | or SET BACKUP_SET="FileBackupSet-1"
REM | You can use "ALL" to run data integrity check for all backup sets.
REM | i.e. SET BACKUP_SET="ALL"
REM |
REM | You can leave this parameter blank if you have only 1 backup set.
REM -----
SET BACKUP_SET="Data Backup"
REM -----
REM | BACKUP_DEST -----
REM | The name or ID of the backup destination that you want to run.
REM | If backup destination name is not in English, please use ID
REM | instead. e.g. SET BACKUP_DEST="1740107119083"
REM | or SET BACKUP_DEST="Destination-1"
REM | You can use "ALL" to run data integrity check for all
REM | destinations. i.e. SET BACKUP_DEST="ALL"
REM |
REM | You can leave this parameter blank if you have only 1 destination.
REM | Remark: This option is ignored if BACKUP_SET="ALL"
REM -----
SET BACKUP_DEST=""
REM -----
REM | CRC_MODE -----
REM | You can run Cyclic Redundancy Check (CRC) during data integrity
REM | check
REM | Options available: ENABLE-CRC/DISABLE-CRC
REM | i.e. SET CRC_MODE="ENABLE-CRC"
REM | or SET CRC_MODE="DISABLE-CRC"
REM -----
SET CRC_MODE="DISABLE-CRC"
REM ##### END: User Defined Section #####
SET APP_HOME=..
SET JAVA_HOME=%APP_HOME%\jvm
SET JAVA_EXE=%JAVA_HOME%\bin\bJW.exe
SET JAVA_LIB_PATH=-Djava.library.path=%APP_HOME%\bin
SET PATH=%JAVA_HOME%\bin;%PATH%
SET CLASSPATH=%APP_HOME%\bin;%APP_HOME%\bin\cb.jar
IF "%PROCESSOR_ARCHITECTURE%"=="x86" (
    SET "DEP_LIB_PATH=X86"
    SET JAVA_OPTS=-Xms128m -Xmx768m -XX:MaxDirectMemorySize=512m -
Dsun.java2d.noddraw -Dsun.nio.PageAlignDirectMemory=true
) ELSE (
    SET "DEP_LIB_PATH=X64"
    SET JAVA_OPTS=-Xms128m -Xmx2048m -XX:MaxDirectMemorySize=1024m -
Dsun.java2d.noddraw -Dsun.nio.PageAlignDirectMemory=true
)

```



```

SET PATH=%CD%\%APP_HOME%\bin\%DEP_LIB_PATH%;%PATH%
REM #####
ECHO -
ECHO APP_HOME=%APP_HOME%
ECHO SETTING_HOME=%SETTING_HOME%
ECHO JAVA_HOME=%JAVA_HOME%
ECHO JAVA_EXE=%JAVA_EXE%
ECHO JAVA_OPTS=%JAVA_OPTS%
ECHO JAVA_LIB_PATH=%JAVA_LIB_PATH%
ECHO PATH=%PATH%
ECHO CLASSPATH=%CLASSPATH%
ECHO -
ECHO Running data integrity check for backup set - '%BACKUP_SET%',
destination - '%BACKUP_DEST%' ...

@ECHO ON

%JAVA_EXE% %JAVA_LIB_PATH% -cp %CLASSPATH% %JAVA_OPTS%
RunDataIntegrityCheck %APP_HOME% %SETTING_HOME% %BACKUP_SET%
%BACKUP_DEST% %CRC_MODE% %REBUILD_MODE%
@ECHO OFF
CD %APP_HOME%
IF "%APP_HOME%"==".." PAUSE
@ECHO ON
  
```

316

Save the changes and close the text editor. Proceed back to *cmd* and enter the following script.

```

C:\Program Files\Advanced Client (B247PRO)\bin>RunDataIntegrityCheck.bat
-
APP_HOME=..
SETTING_HOME=""
JAVA_HOME=..\jvm
JAVA_EXE=..\jvm\bin\bJW.exe
JAVA_OPTS=-Xms128m -Xmx2048m -XX:MaxDirectMemorySize=1024m -
Dsun.java2d.noddraw -Dsun.nio.PageAlignDirectMemory=true
JAVA_LIB_PATH=-Djava.library.path=..\bin PATH=C:\Program Files\Advanced
Client (B247PRO)
\bin\..\bin\X64;..\jvm\bin;C:\Program Files (x86)\Common Files\Oracle
\Java\javapath;C:\Windows\system32;C:\Windows;C:\Windows\System32\Wbem;C
:\Windows\System32\WindowsPowerShell\v1.0\;C:\Program Files\Microsoft
SQL Server\Client SDK\ODBC\110\Tools\Binn\;C:\Program Files
(x86)\Microsoft SQL Server\120\Tools\Binn\;C:\Program Files\Microsoft
SQL Server\120\Tools\Binn\;C:\Program Files\Microsoft SQL
Server\120\DTS\Binn\;C:\Program
Files\PuTTY\CLASSPATH=..\bin;..\bin\cb.jar
-
  
```



```
Running data integrity check for backup set - '"Data Backup"',
destination - '""' ...

C:\Program Files\Advanced Client (B247PRO)\bin>..\jvm\bin\bJW.exe -
Djava.library.path=..\bin -cp ..\bin;..\bin\cb.jar -Xms128m -Xmx2048m -
XX:MaxDirectMemorySize=1024m -Dsun.java2d.noddraw -
Dsun.nio.PageAlignDirectMemory=true RunDataIntegrityCheck .. "" "Data
Backup" "" "DISABLE-CRC" "DISABLE-REBUILD"

[doInfo] Start [ Advanced Client (B247PRO) v8.2.1.18 ]

[doStart] Start data integrity check on backup set "Data
Backup(1562897045523)", "B247CBS(1562897364604)", crc disabled, rebuild
index disabled

[doDetail] Start processing data integrity check on backup set= "Data
Backup" destination= "B247CBS"

[doLogProgress] Start processing data integrity check on backup set=
"Data Backup" destination= "B247CBS"

[doLogProgress] Browsing "/files/1562897045523"

[doLogProgress] Browsing "1562897045523/blocks/2019-07-12-10-09-33"

[doLogProgress] Browsing "1562897045523/blocks/2019-07-12-10-09-33/0"

[doLogProgress] Processing Job "2019-07-12-10-09-33", ""

[doLogProgress] Processing Job "Current", ""

[doLogProgress] Processing Job "Current", "C:"

[doLogProgress] Processing Job "Current", "C:/Users"

[doLogProgress] Processing Job "Current", "C:/Users/Administrator"

[doLogProgress] Processing Job "Current",
"C:/Users/Administrator/Desktop"

[doLogProgress] Processing Job "Current",
"C:/Users/Administrator/Desktop/Data backup"

[doLogProgress] Checking dangling backup file index entries...

[doInfo] Existing statistics of backup set= "Data Backup" destination=
"B247CBS": Data area compressed size: 32B, Data area uncompressed size:
0B, Data area file count: 2, Retention area compressed size: 0B,
Retention area uncompressed size: 0B, Retention area file count: 0

[doInfo] Recalculated statistics of backup set= "Data Backup"
destination= "B247CBS": Data area compressed size: 32B, Data area
uncompressed size: 0B, Data area file count: 2, Retention area
compressed size: 0B, Retention area uncompressed size: 0B, Retention
area file count: 0
```

```
[doInfo] The statistics of backup set= "Data Backup" destination=
"B247CBS" is correct.

[doLogProgress] Saving encrypted backup file index to
1562897045523/blocks at destination B247CBS...

[doInfo] Saving encrypted backup file index to 1562897045523/blocks at
destination B247CBS...

[doDetail] Data integrity check on backup set= "Data Backup"
destination= "B247CBS" is completed

[doLogProgress] Data integrity check on backup set= "Data Backup"
destination= "B247CBS" is completed

[doEnd][INFO] Finished data integrity check on backup set "Data
Backup(1562897045523)", "B247CBS(1562897364604)", crc disabled, rebuild
index disabled

[doInfo] Completed data integrity check on backup set "Data
Backup(1562897045523)", "B247CBS(1562897364604)", crc disabled, rebuild
index disabled

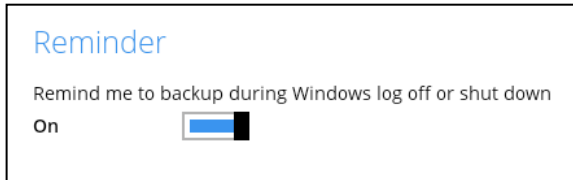
Press any key to continue . . .
```

Appendix D: Example Scenarios for the Reminder

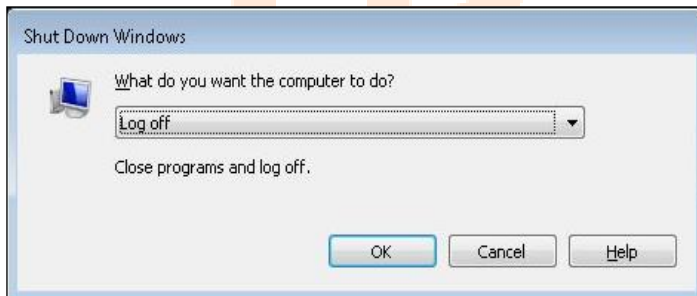
Windows Log Off

The following example shows when the user performs Windows Log off with the Reminder setting turned on.

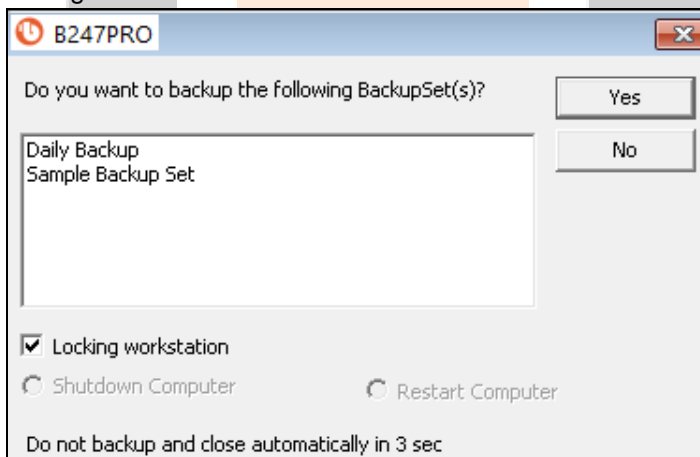
1. Turn on the Reminder setting, then click the [Save] button.



2. Perform Windows logoff.



3. A dialog box will prompt the user to back up all the backup sets with enabled 'Reminder' setting.

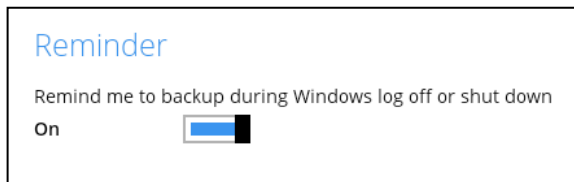


319

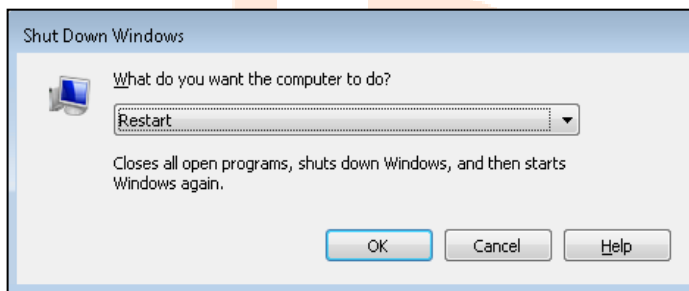
Windows Restart

The following example shows when the user performs Windows restart with the Reminder setting turned on.

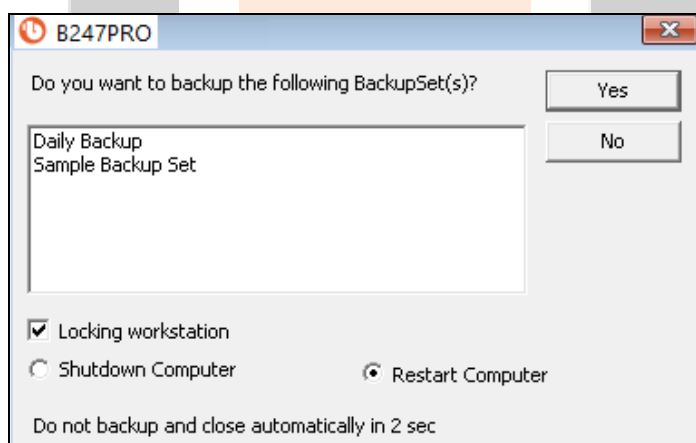
1. Turn on the Reminder setting, then click the [Save] button.



2. Perform Windows restart.



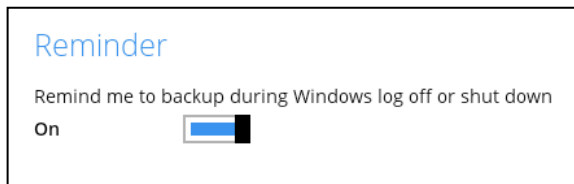
3. A dialog box will prompt the user to back up all the backup sets with enabled 'Reminder' setting.



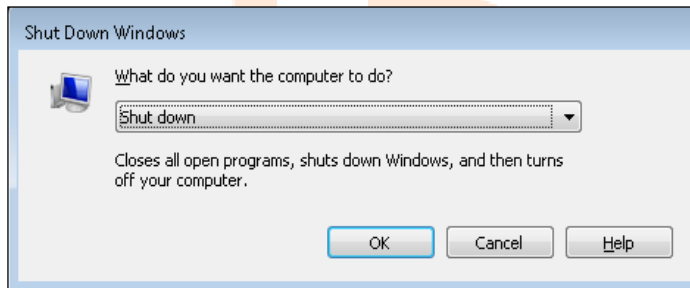
Windows Shutdown

The following example shows when the user performs Windows shutdown with the Reminder setting turned on.

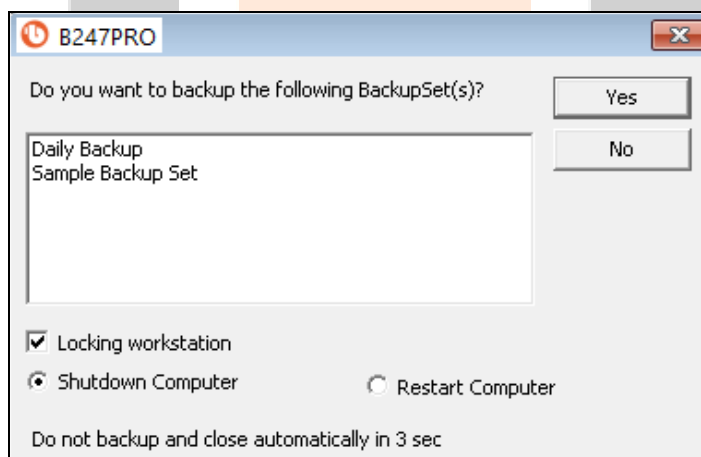
1. Turn on the Reminder setting, then click the [Save] button.



2. Perform Windows shutdown.



3. A dialog box will prompt the user to back up all the backup sets with enabled 'Reminder' setting.



Below is the list of example scenarios with complex settings:

Scenario 1 (Windows Log Off + Enabled Locking Workstation)

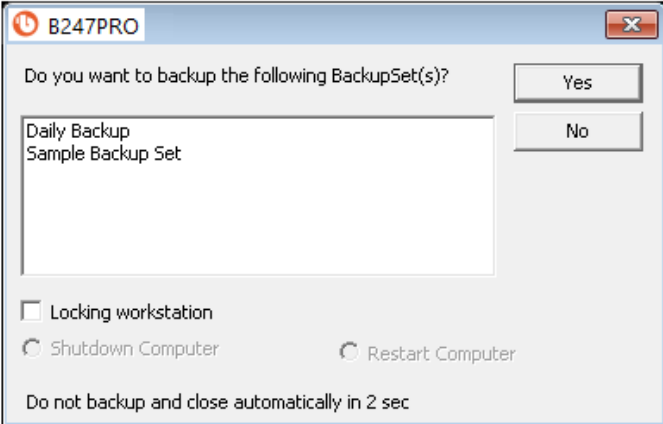
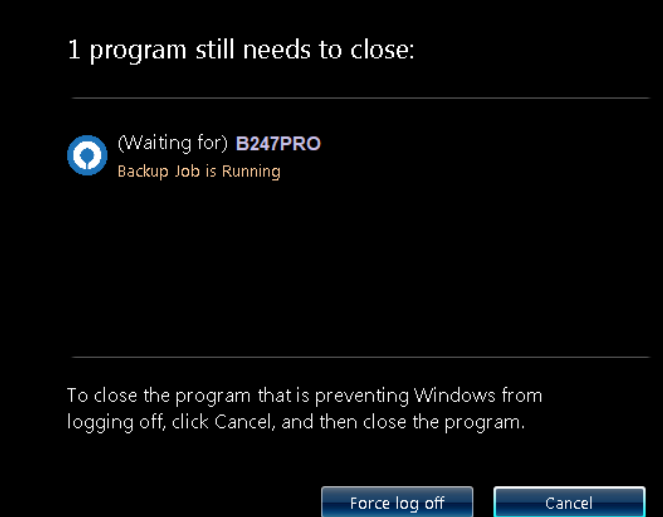
The following scenario shows when the user performs Windows logoff with the Reminder setting turned on, and Locking Workstation enabled.

	<p>[Yes] – If Yes is selected, then the Windows will be locked, and the displayed backup sets will start backing up in the background. Once all the backup jobs are completed, the machine will log off automatically even if Windows is still on lock.</p> <p>[No] – If No is selected, then no backup job will run, and the machine will proceed to log off.</p>
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NOTE
 The machine will log off after four (4) seconds if no action is selected.

Scenario 2 (Windows Log Off + Unselected Locking Workstation)

The following scenario shows when the user performs Windows logoff with the Reminder setting turned on, and Locking Workstation unselected.

 <p>A dialog box titled "B247PRO" with a close button. The text reads: "Do you want to backup the following BackupSet(s)?" Below this is a list box containing "Daily Backup" and "Sample Backup Set". To the right are "Yes" and "No" buttons. At the bottom, there are radio buttons for "Locking workstation" (unchecked), "Shutdown Computer", and "Restart Computer". A timer at the bottom says "Do not backup and close automatically in 2 sec".</p>	<p>[Yes] – If Yes is selected, an alert message will be displayed to inform the user that a backup job is still running which prevents Windows from logging off.</p>
<p>Clicking the [Yes] button will result to the following screen:</p>	<p>[No] – If No is selected, then no backup job will run, and the machine will proceed logging off.</p>
 <p>A Windows log off dialog box with a black background. It says "1 program still needs to close:" followed by a blue circular icon and "(Waiting for) B247PRO Backup Job is Running". Below this is the instruction: "To close the program that is preventing Windows from logging off, click Cancel, and then close the program." At the bottom are "Force log off" and "Cancel" buttons.</p>	<p>[Force log off] – If you choose to force log off the machine, the backup job will not push through, then the machine will log off immediately.</p> <p>[Cancel] – If Cancel is selected, the backup job will run in the background. Once all the backup jobs are completed, the machine will log off automatically.</p>

Scenario 3 (Windows Restart + Enabled Locking Workstation)

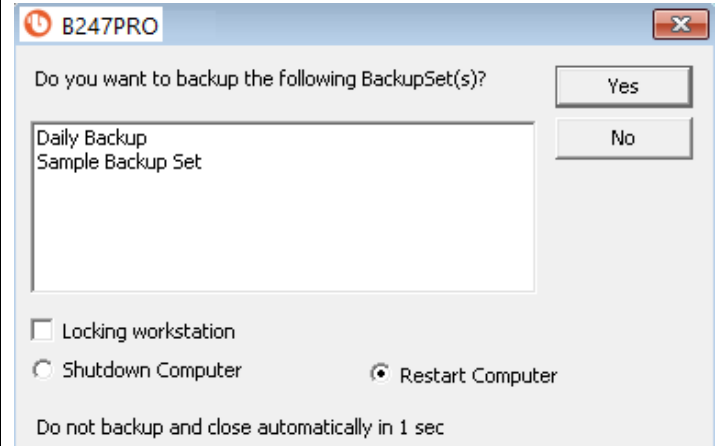
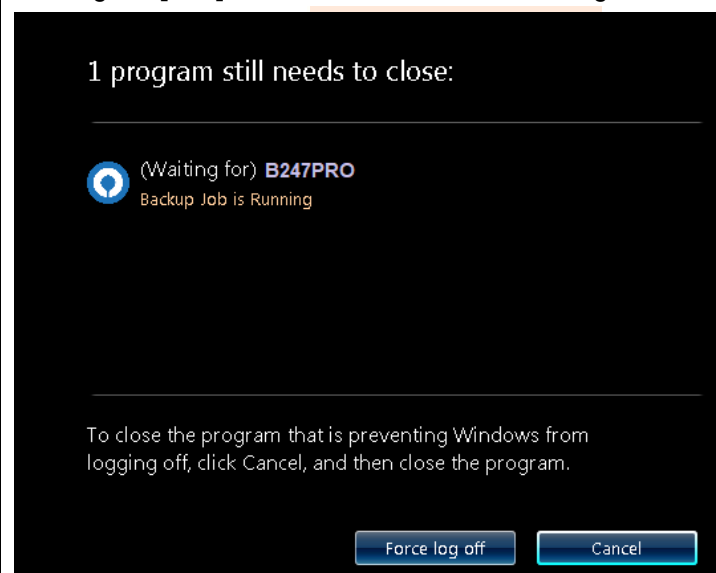
The following scenario shows when the user performs Windows restart with the Reminder setting turned on, and Locking Workstation enabled.

	<p>[Yes] – If Yes is selected, then the Windows will be locked, and the displayed backup sets will start backing up in the background. Once all the backup jobs are completed, the machine will restart automatically even if the Windows is still on lock.</p>
	<p>[No] – If No is selected, then no backup job will run, and the machine will restart immediately.</p>

NOTE	
1.	You can select the 'Shutdown Computer' from the options in the dialog box, but the machine will still follow the action that you perform from the Windows, which is 'restart'. The machine will reboot once all the backup jobs are completed.
2.	The machine will restart after four (4) seconds if no action is selected.

Scenario 4 (Windows Restart + Unselected Locking Workstation)

The following scenario shows when the user performs Windows restart with the Reminder setting turned on, and Locking Workstation unselected.

 <p>The screenshot shows a dialog box titled "B247PRO" with the question "Do you want to backup the following BackupSet(s)?". A list box contains "Daily Backup" and "Sample Backup Set". There are "Yes" and "No" buttons. Below the list box, there are three radio buttons: "Locking workstation" (unchecked), "Shutdown Computer", and "Restart Computer" (checked). At the bottom, it says "Do not backup and close automatically in 1 sec".</p>	<p>[Yes] – If Yes is selected, an alert message will be displayed to inform the user that a backup job is still running which prevents Windows from restarting.</p>
	<p>[No] – If No is selected, then no backup job will run, and the machine will restart immediately.</p>
<p>Clicking the [Yes] button will result to the following screen:</p>  <p>The screenshot shows a Windows alert message with a black background and white text. It says "1 program still needs to close:" followed by a blue circular icon and the text "(Waiting for) B247PRO Backup Job is Running". Below this, it says "To close the program that is preventing Windows from logging off, click Cancel, and then close the program." At the bottom, there are two buttons: "Force log off" and "Cancel".</p>	<p>[Force restart] – If you choose to force restart the machine, the backup job will not push through, then the machine will restart immediately.</p>
	<p>[Cancel] – If Cancel is selected, the backup job will run in the background. Once all the backup jobs are completed, the machine will restart automatically.</p>

Scenario 5 (Windows Shutdown + Enabled Locking Workstation)

The following scenario shows when the user performs Windows shutdown with the Reminder setting turned on, and Locking Workstation enabled.

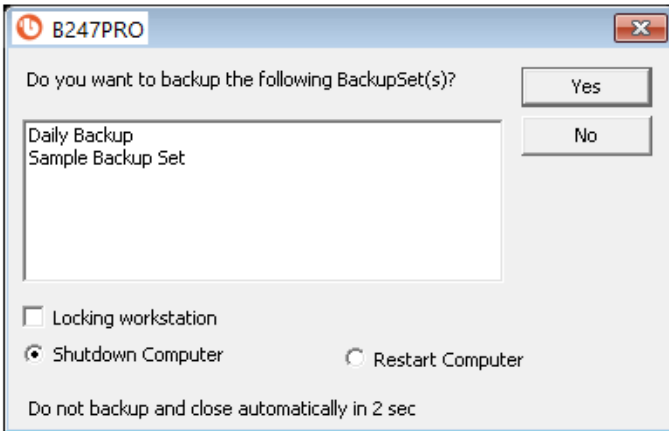
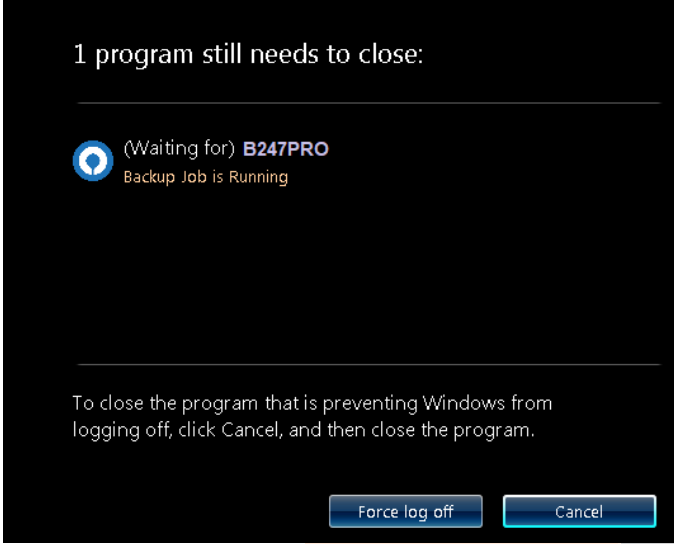
	<p>[Yes] – If Yes is selected, then the Windows will be locked, and the displayed backup sets will start backing up in the background. Once all the backup jobs are completed, the machine will shut down automatically even if the Windows is still on lock.</p> <p>[No] – If No is selected, then no backup job will run, and the machine will shut down immediately.</p>
--	---

NOTE

1. You can select the 'Restart Computer' from the options in the dialog box, but the machine will still follow the action that you perform from the Windows, which is 'shutdown'. The machine will shut down once all the backup jobs are completed.
2. The machine will shut down after four (4) seconds if no action is selected.

Scenario 6 (Windows Shutdown + Unselected Locking Workstation)

The following scenario shows when the user performs Windows shut down with the Reminder setting turned on, and Locking Workstation unselected.

 <p>A dialog box titled "B247PRO" with a close button in the top right corner. The main text asks "Do you want to backup the following BackupSet(s)?" and lists "Daily Backup" and "Sample Backup Set" in a list box. To the right are "Yes" and "No" buttons. Below the list box are three options: "Locking workstation" (unchecked checkbox), "Shutdown Computer" (selected radio button), and "Restart Computer" (unselected radio button). At the bottom, it says "Do not backup and close automatically in 2 sec".</p>	<p>[Yes] – If Yes is selected, an alert message will be displayed to inform the user that a backup job is still running which prevents Windows from shutting down.</p>
<p>Clicking the [Yes] button will result to the following screen:</p>	<p>[No] – If No is selected, then no backup job will run, and the machine will shut down immediately.</p>
 <p>A Windows shutdown dialog box with a black background and white text. It says "1 program still needs to close:" followed by a blue circular icon and "(Waiting for) B247PRO Backup Job is Running". Below this, it says "To close the program that is preventing Windows from logging off, click Cancel, and then close the program." At the bottom are two buttons: "Force log off" and "Cancel".</p>	<p>[Force shut down] – If you choose to force shutdown the machine, the backup job will not push through, then the machine will shut down immediately.</p> <p>[Cancel] – If Cancel is selected, the backup job will run in the background. Once all the backup jobs are completed, the machine will shut down automatically.</p>

Appendix E: Create Free Trial Account in Advanced Client (B247PRO)

Users can create a free trial account when they login to 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 registration option will only be displayed once the user login for the first time. If you cannot create a free trial account kindly contact Backup247 Technical Support Team.
- 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 Backup247 Technical Support Team for further details.
- The add-on modules available and quota size are determined by the backup service provider.
- The trial account period is determined by Backup247 Technical Support Team. Please contact Backup247 Technical Support Team for details.

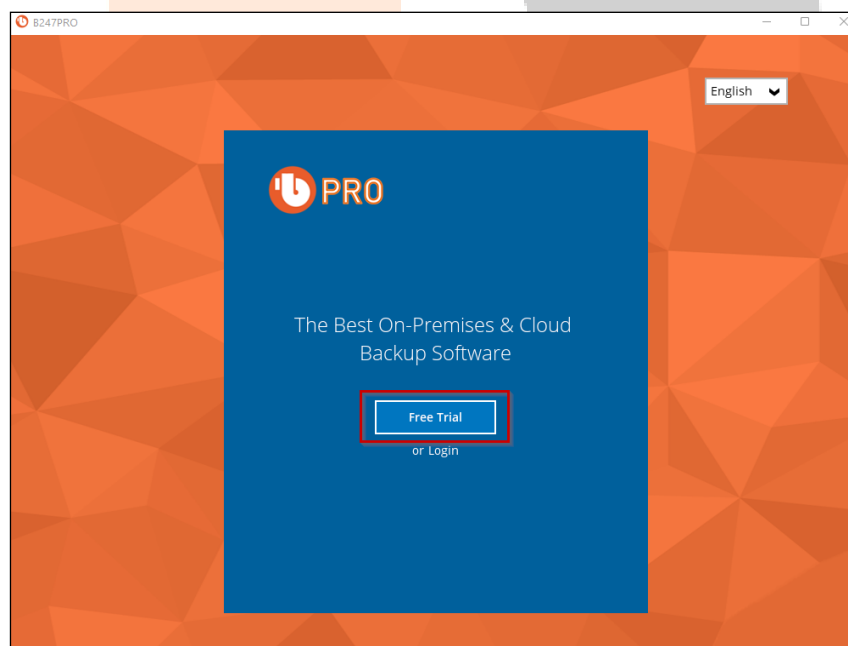
NOTE

The Free Trial registration option may not be available. This depends on the settings preconfigured by us. Please contact Backup247 Technical Support Team for more information.

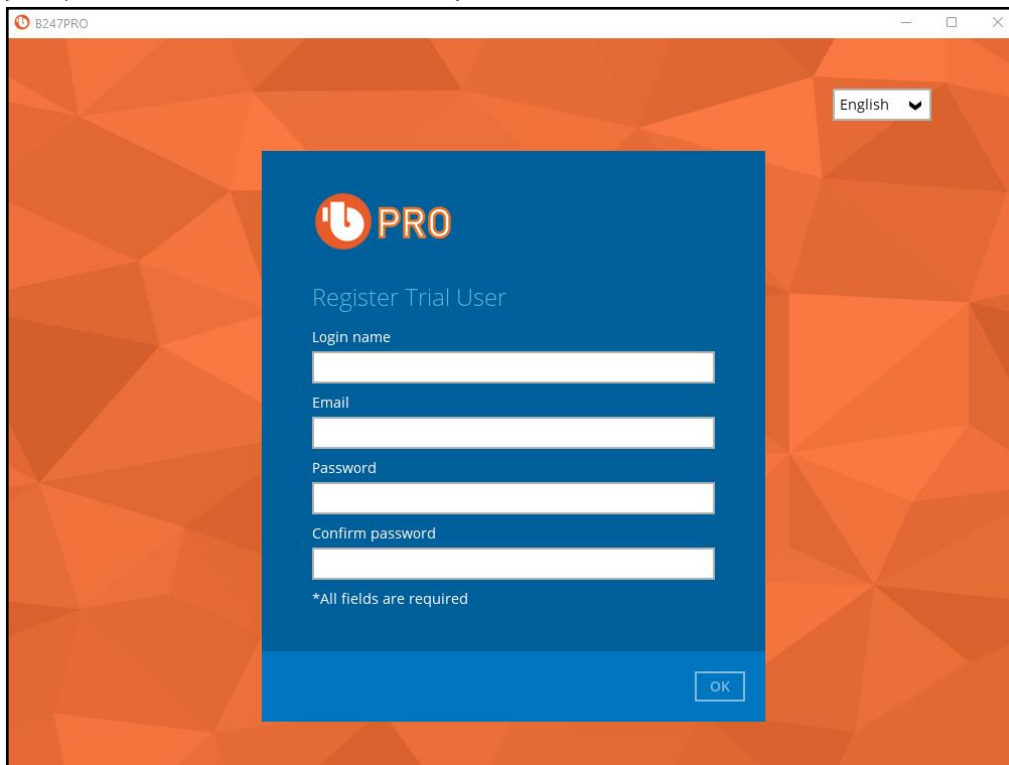
328

Follow the steps below to create a Free Trial backup account in Advanced Client (B247PRO).

1. Click on **Free Trial**.

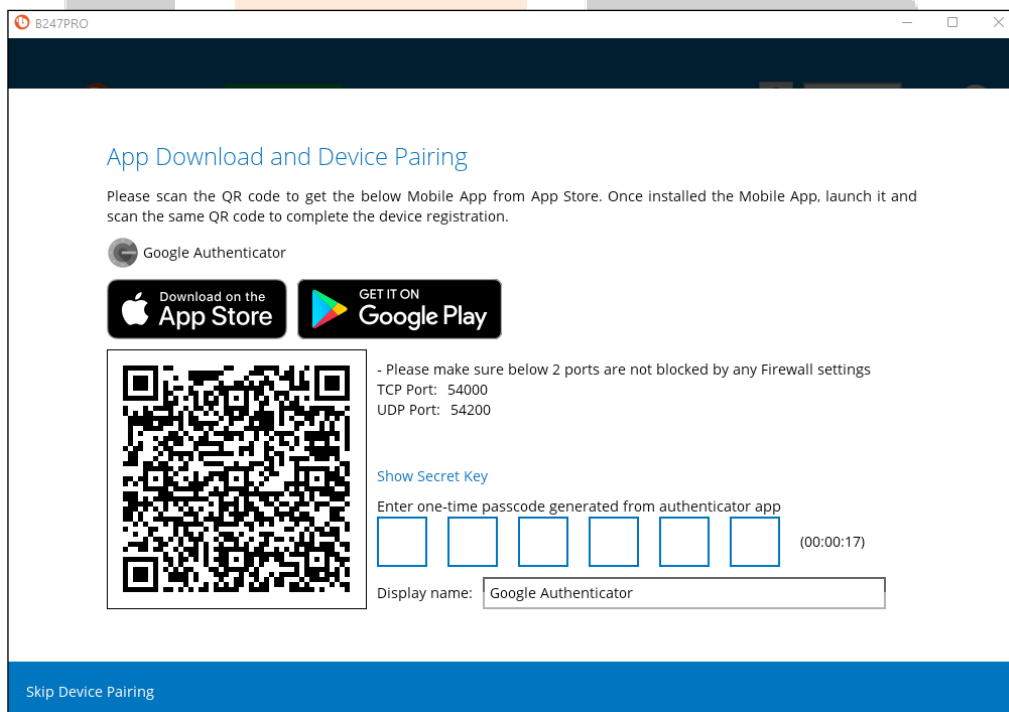


2. Enter the Login name that you want. Also provide your email address and password. Confirm your password and click **OK** to create your trial account.



The screenshot shows a web browser window titled "B247PRO" with a language dropdown set to "English". The main content is a blue registration form titled "PRO Register Trial User". It contains four input fields: "Login name", "Email", "Password", and "Confirm password". A note at the bottom of the form states "*All fields are required". An "OK" button is located at the bottom right of the form.

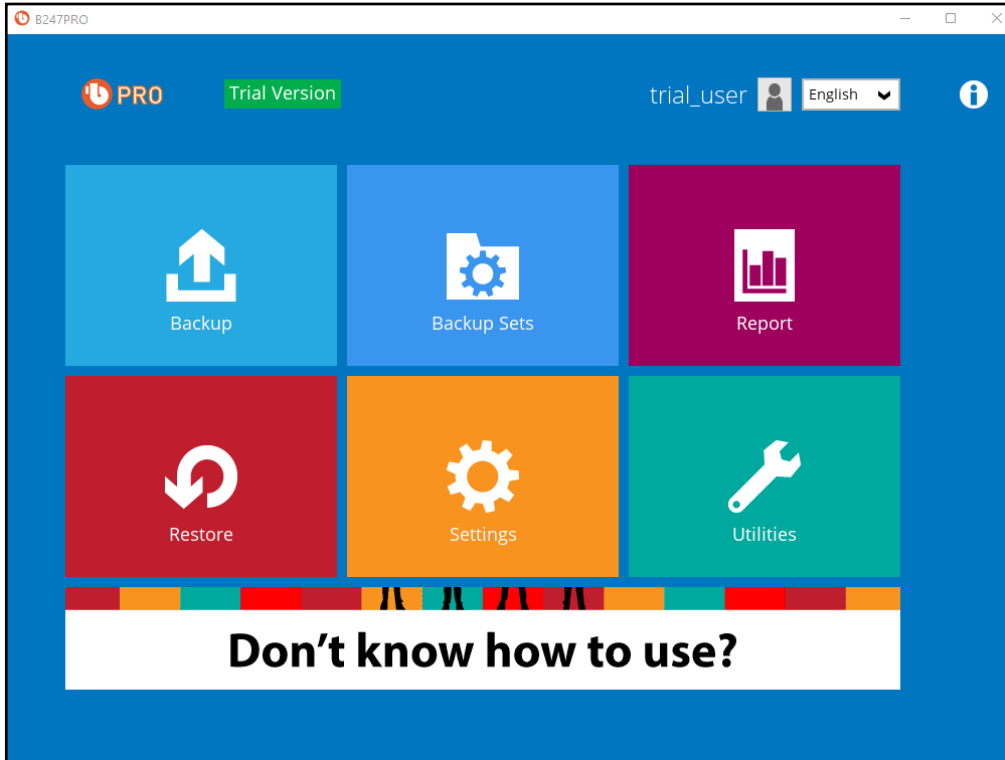
- 329
3. Download Google Authenticator on your mobile phone and scan QR code presented by the installer. Alternatively, you may choose to skip device pairing, however it's not recommended.



The screenshot shows a web browser window titled "B247PRO" displaying the "App Download and Device Pairing" screen. The page instructs the user to scan a QR code to get the mobile app from the App Store or Google Play. It features logos for "Download on the App Store" and "GET IT ON Google Play". A QR code is displayed on the left. To the right of the QR code, there is a note: "- Please make sure below 2 ports are not blocked by any Firewall settings", followed by "TCP Port: 54000" and "UDP Port: 54200". Below this, there is a link "Show Secret Key" and a prompt "Enter one-time passcode generated from authenticator app" with six input boxes and a timer "(00:00:17)". A "Display name:" field contains the text "Google Authenticator". At the bottom left, there is a "Skip Device Pairing" button.

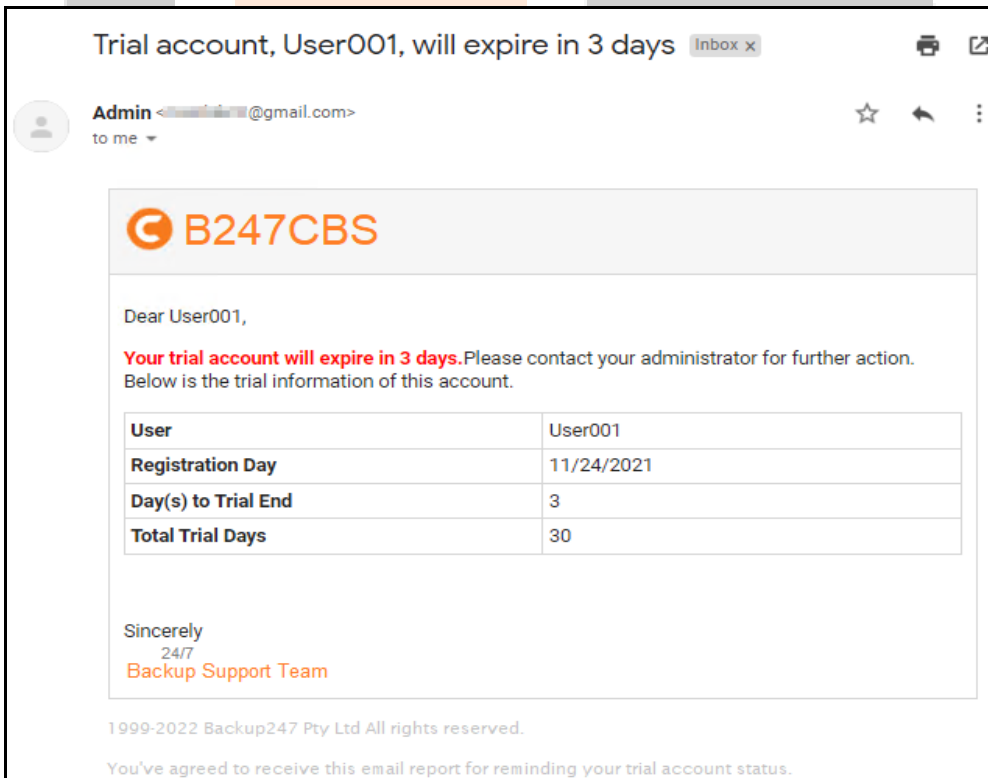
4. Enter once-time passcode generated from authenticator app.

5. Once the trial account is created, this screen will be displayed.



6. 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.



330

Appendix F: How to Manage Network Drives which are not set in Windows

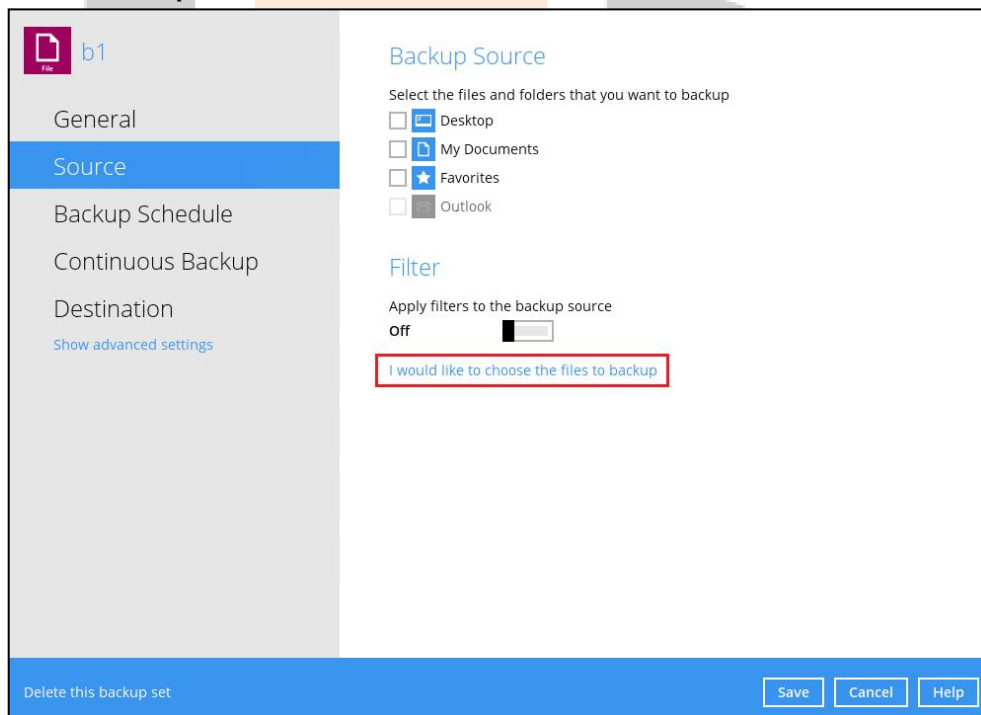
Users have several options in managing network drives that are not set up on Windows, which are the following:

- Select All – selects all the files and folders in the network drive.
- Select Only – will only deselect the network drive but the file selection will remain the same.
- Deselect All – deselects all the files and folders in the network drive.
- Edit Credential – allows changing the credentials of the network drive even after it has been set upon creation of the backup set.
- Delete – deletes the network drive.

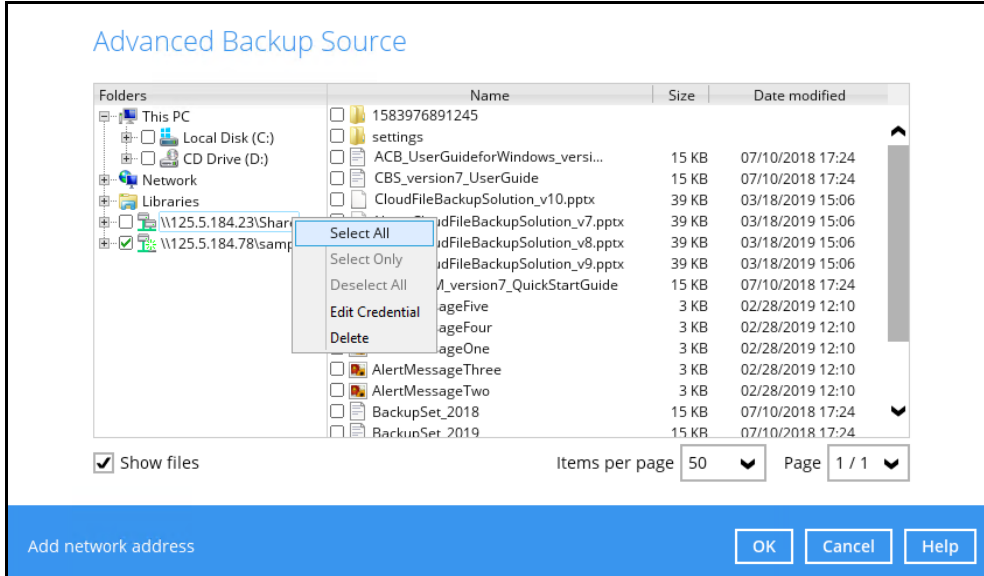
For instructions on how to use the different functions, see instructions below:

Select All

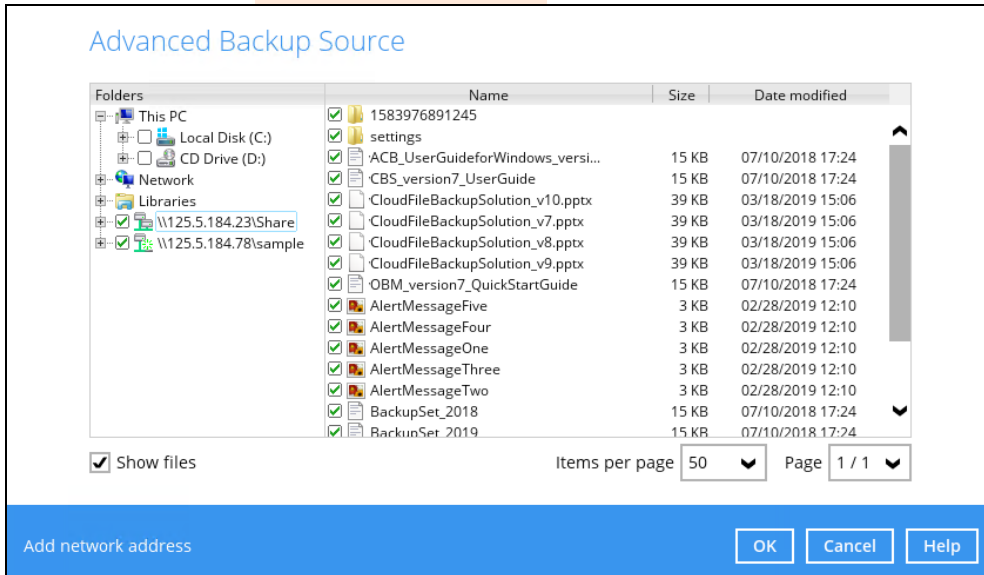
1. Go to Backup Sets, select the backup set. Select Source and click **I would like to choose the files to backup.**



2. Right-click on the network drive and **Select All**.

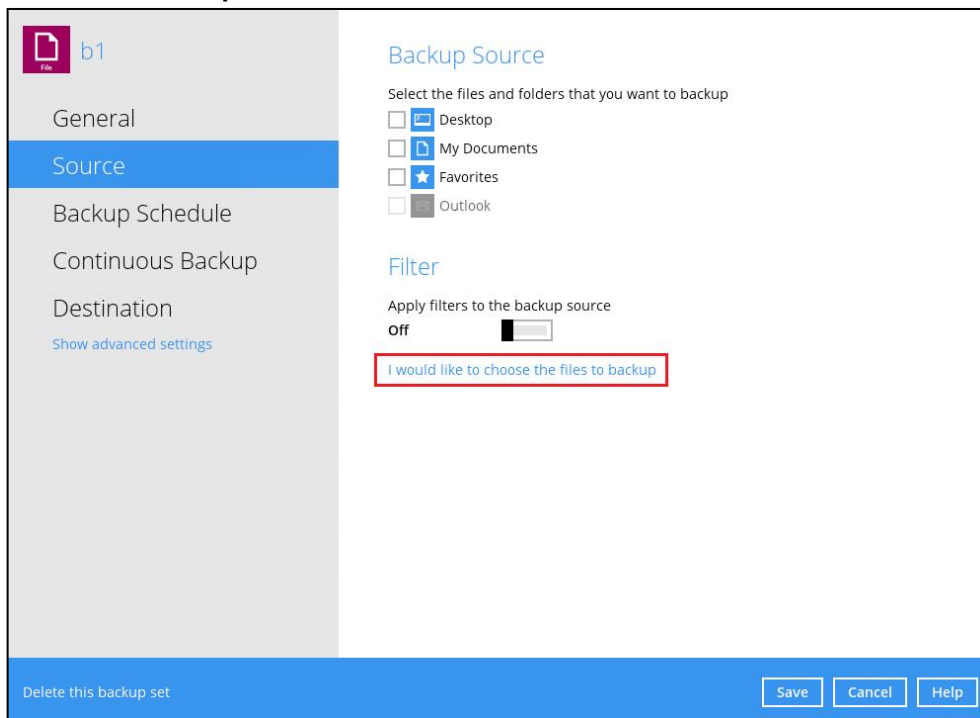


3. All the files and folders in the network drive will now be selected.



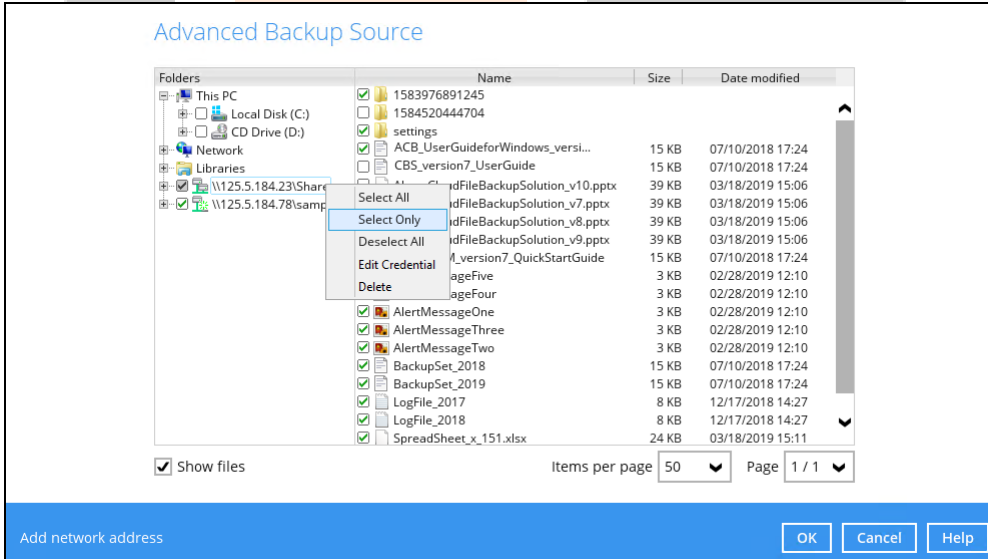
Select Only

1. Go to Backup Sets, select the backup set. Select Source and click **I would like to choose the files to backup.**

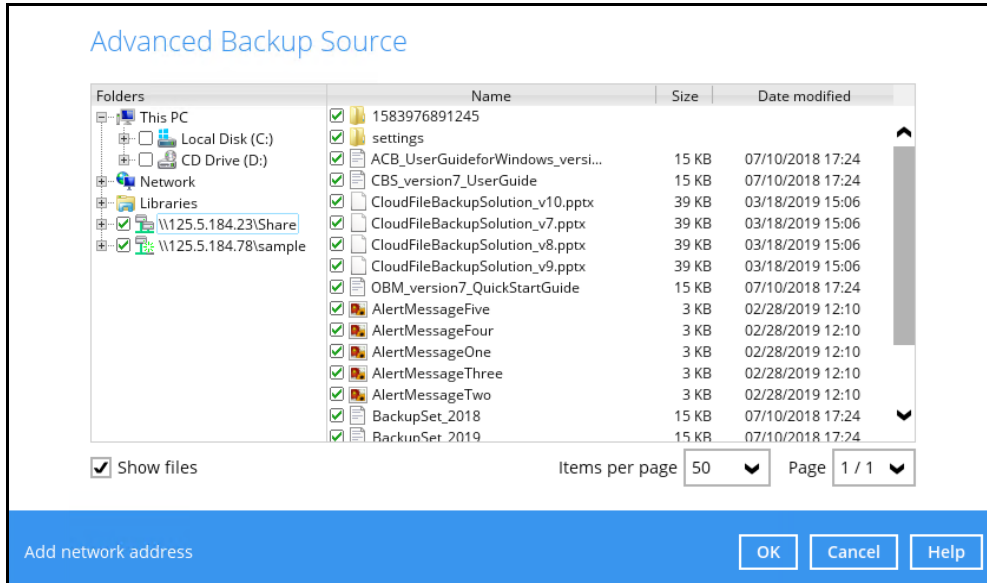


333

2. Right-click on the network drive and select **Only**.

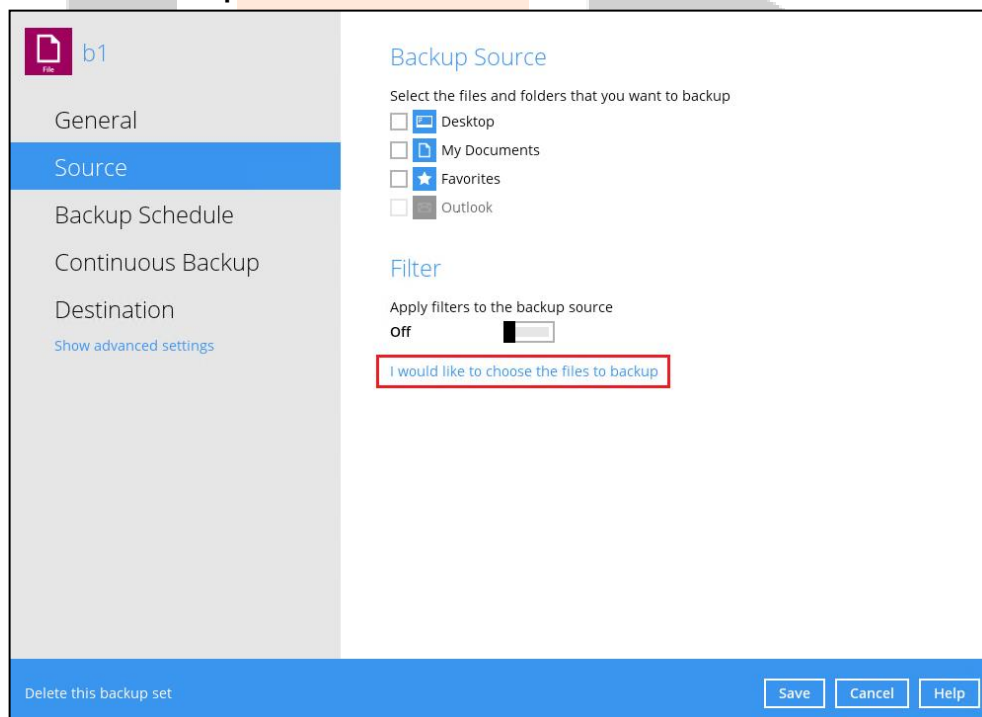


- The network drive will now be deselected but there will be no change in the file selection.

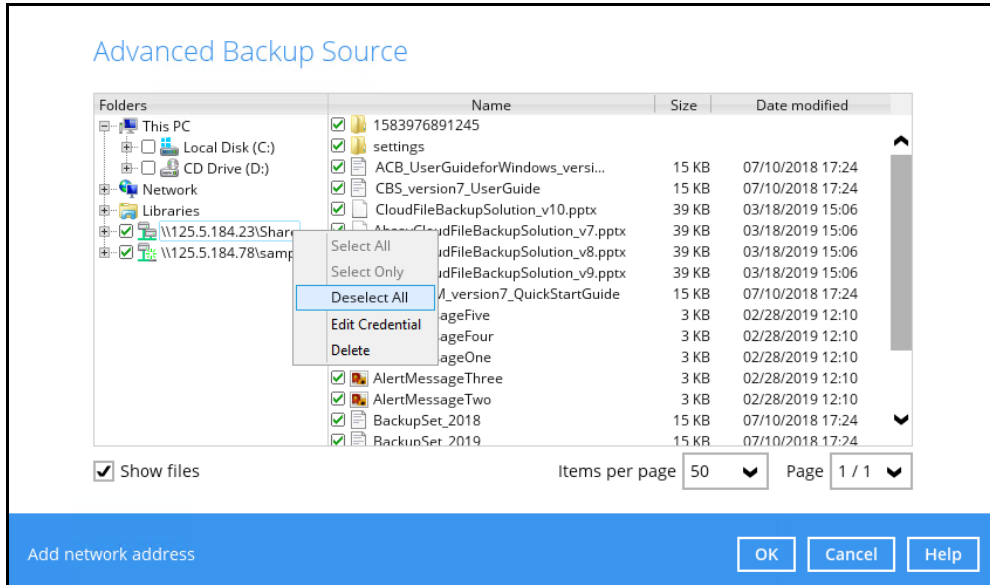


Deselect All

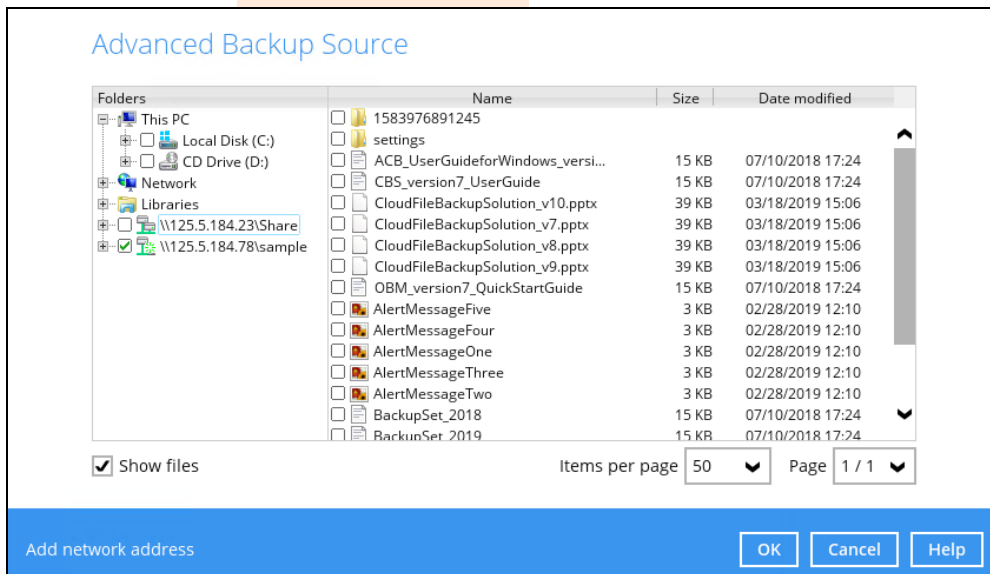
- Go to Backup Sets, select the backup set. Select Source and click **I would like to choose the files to backup.**



2. Right-click on the network drive and select **Deselect All**.

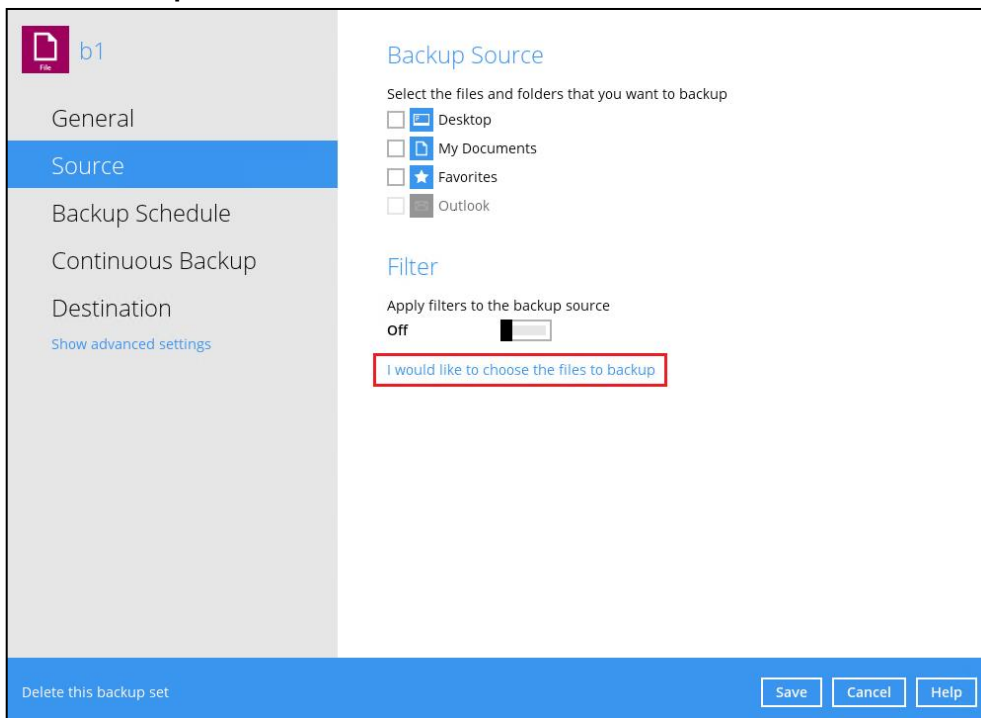


3. All the files and folders in the network drive will now be deselected.



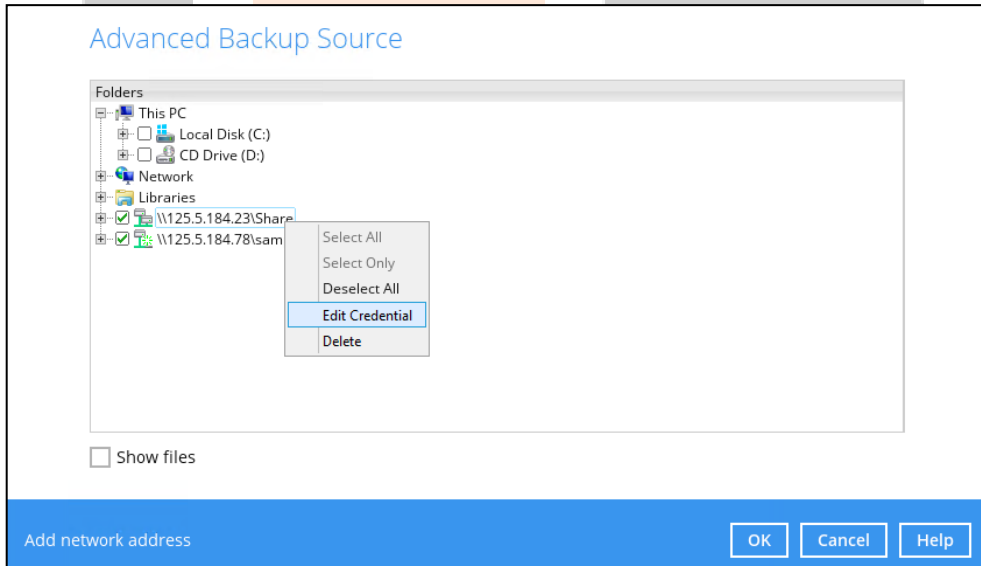
Edit Credential

1. Go to Backup Sets, select the backup set. Select Source and click **I would like to choose the files to backup.**



336

2. Right-click on the network drive and select **Edit Credential.**



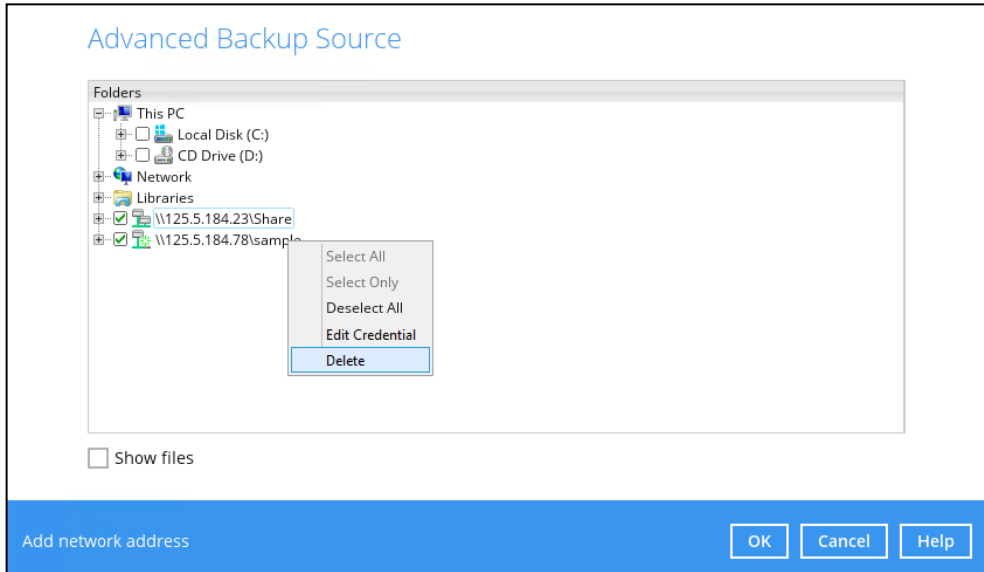
3. The Network Address window will appear, update the Username and/or Password. Click **OK** once done.

Delete

1. Go to Backup Sets, select the backup set. Select Source and click **I would like to choose the files to backup.**

337

2. Right-click on the network drive and select **Delete**.



The network drive will now be deleted.

