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Quick Start Instructions

If you have been supplied an ODROID ARM processor, it should have an SD Card with the latest software installed.

If you are downloading the software for your Virtual Machine, Physical PC or ODROID ARM from the link at www.baqapp.com/downloads.html you will need to install the software in your backup device.

Don't forget to also download the client software!

- 1. We suggest that you first install the "client software" in at least one PC on your network that you want to backup.
- 2. When the BaqApp software is running on your device, (it takes about a minute to start) type "baqapp/" in a web browser on any PC on the network (Do not use Internet Explorer)
- 3. Complete your personal details, accept or change the suggested name for your BaqApp device, then enter your password.
- 4. The installation wizard enables you to print the password and name you have given your BaQapp device. We suggest that you keep these details in a secure place.
- 5. Run the BaqApp software by selecting "Log in to your BaqApp device."
- 6. When BaqApp is running, it will ask you to attach and format the hard drive that you will be using for storage.
- 7. Install client software in each PC on your network that you want to backup.

8.

Backups will start automatically after a few minutes, if not read manual

or call us at +61 2 9955 7575.

General Information

Before you use your BaQapp Backup Appliance

Not having backups is very dangerous!

The Golden Rule of backup is that you backup your valuable data to at least two different types of media, in at least 2 locations.

Making a backup can also cause problems.

You may have unknown problems with your existing storage media and the extra activity when making a backup causes failure in your storage media that has nothing to do with **BaQapp**.

BaQapp suggest that before you start backing up all your media, you use the Windows built in software in your computer to make a backup.

BaQapp suggest that you first make a recovery disc on DVD, and then if you have an available hard drive use the Windows software to make an image backup on this spare drive.

BaQapp can provide instructions on how to create standard Windows backups for different Windows operating systems or they are available via Google search.

BaQapp also suggest that you store and continue to store your most valuable data with a public cloud provider such as Amazon, Google, Azure..

About BaQapp software

The **BaQapp** software is supplied with and operates under the Debian version of Linux.

BaQapp uses the Linux **btrfs** File System developed by Oracle Corporation for storing backup data. **Btrfs** pronounced 'BetterFS, or even 'ButterFS' has features that are superior to almost every other file system. These are:

- 1. Linux operating systems are less vulnerable to malware which can damage your data than Windows.
- 2. **Btrfs** offers superior storage space savings, using block level deduplication and in-built compression.
- 3. **Btrfs** has redundancy with superior Error Correction for recovery from possible read errors in your storage media.
- 4. **Btrfs** is better than rsync at copying file systems with a built in feature (send/receive) so that Btrfs does not have to count through the files first when replicating backups.

There are different versions of the **BaQapp** software for each type of hardware that is supported. Currently there is a downloadable image including the operating system for:

- 1. ARM SBC ODROID-XU4.
- 2. Most Intel x64 and compatible processors.
- 3. Virtual Machine Appliance for x64 in OVA, OVF and VHD formats.

How to use the downloaded BaQapp software from the BaQapp website with an ARM single board computer.

Go to http://www.baqapp.com/download.html and complete your email and name so that you can link to the download page for the BaQapp software suitable for your hardware. You may wish to download the Recovery Software, Client installation software and other useful utilities from the website, and burn them to a Recovery CD.



The **ODROID U4** is an 8 Core processor with USB3. You will also to buy need to buy a case and a 5V (Australian) power supply.

The ODROID is one of the fastest ARM processors, about 3x faster than the CuBox-1 and 6x faster than the Pi, and the USB3 connectors supply sufficient power to directly power most USB powered hard drives.

For ARM Single Board Computers - (SBC) - copy the matching **BaQapp** ODROID **ARM** downloaded image using the free Win32 Disk Imager (<u>http://sourceforge.net/projects/win32diskimager/</u>) to a high quality Class 10 Mini SD card of at least 16 GB. Most **ARM Single Board Computers** contain an 8 GB Mini SD card already installed in the **ARM SBC**, which must be replaced with the Mini SD card of at least 16 GB with the **BaQapp** software. Insert the card with the card printing face down in the SD slot of the **ARM SBC**.

You will also need a Cat6 Ethernet cable to connect the **ARM Single Board Computer** to your network as well as a 5V 4 Amp power supply.



When BaQapp Pty Ltd supply a ready to run ODROID U4 it will come with BaQapp pre-installed complete with cables and Recovery CD.

External hard drives of 2TB or larger are usually supplied with their own 12V power supplies and





USB connectors. Smaller hard drive without its own power supply can draw power from the **ODROID USB3 port**



Quick start with supplied BaQapp ODROID

What you have been supplied

Your **BaQapp ODROID** is a black or orange appliance, with installed SD card and **BaQapp** software.

There is an Australian USB power Adapter and Micro USB cable to connect the power to the **ODROID** and a white Cat6 Ethernet cable to connect your **ODROID** to your Ethernet switch box (not supplied).

Also supplied is a recovery CD or a USB stick which also has the Windows client Install program, and other useful utilities.

External hard drive is enclosed in a case, with USB connector cable, and usually if 4TB or larger its own 12V power supply.

BaqApp Device Setup instructions

- Plug the white Cat6 Ethernet cable to your BaQapp ODROID and the other end to your Ethernet switch which is also connected to your other computers and the Internet. If you cannot get close to your Ethernet switch you may need a longer Ethernet Cable. (The ODROID obtains an IP address by being connected to a router that can allocate an IP address via DHCP.)
- 2. Plug in the small round power plug power supply usually with a 5v label into connector on the side of the **BaQapp ODROID**.
- 3. Plug in the USB cable from your hard drive into one of the blue USB connectors on the side of the **BaQapp ODROID**. If your hard drive has its own 12Vpower supply, ensure that you do not mix up the power supplies which often are the same size otherwise you will destroy your equipment.
- 3. After plugging in the network cable and power type only **baqapp/** in your web browser (no http or www and some versions of Microsoft Internet Explorer will not work).
- After about a minute the **BaQapp ODROID** software will open at the Step 1 registration page automatically finding your IP address Sub-network mask, Gateway IP and DNS server.

velcome to your new Baqapp Device			
	(h)		
Step 1 of 3 - Network Setup			
You are just a few steps away from your backups being taken of configure WIFi networking and/or setup the BaQapp to use a st	are of. The BaQapp has already automat atic network address instead.	tically configured the wired networking	ig if possible. Now you can
Network Configuration			
Automatically configure network (Recommended)			
Manually configure network (For Advanced Users Only)			
IP address	Sub-network ma	isk	
192 168 0 50	255 255 255 0		
Gateway IP	DNS server		
192.168.0.1	8.8.8.8		









4. Unless you have special internet setting, click on next and you will go to step 2 of 3.

	(02) 9955 7373	🖾 info@baqapp.com
Nelcome to your new Baqapp Device		
	()	
Step 2 of 3 - Account Setup You can now set up your Bagapp account details and select a name for your	BaQapp device. A BaQapp account allows you to reset your B	aQapp's password, access
your BaQapp over the Internet and to use BaQapp monitoring.		
Register a new BaQapp account	count	
Register a new BaQapp account I have an existing BaQapp ac E-Mail address	count Enter a name that will identify your new Baqapp	on your network
Register a new BaQapp account I have an existing BaQapp ac E-Mail E-Mail	count Enter a name that will identify your new Baqapp Name	on your network
Register a new BaQapp account I have an existing BaQapp ac E-Mail E-Mail Password (at least 3 characters)	count Enter a name that will identify your new Baqapp Name Timezone	on your network
Register a new BaQapp account I have an existing BaQapp ac E-Mail Password (at least 3 characters) Password	count Enter a name that will identify your new Baqapp Name Timezone Australia	on your network
Register a new BaQapp account I have an existing BaQapp ac E-Mail Password (at least 3 characters) Password Repeat password (ensure that this is the same as the password)	count Enter a name that will identify your new Baqapp Name Timezone Australia Sydney	on your network v
Register a new BaQapp account I have an existing BaQapp ac E-Mail Password (at least 3 characters) Password Repeat password (ensure that this is the same as the password) Repeat password	Count Enter a name that will identify your new Baqapp Name Timezone Australia Sydney I have read and agree to the Terms and Conditio	on your network
Register a new BaQapp account I have an existing BaQapp ac E-Mail Password (at least 3 characters) Password Repeat password (ensure that this is the same as the password) Repeat password	Enter a name that will identify your new Baqapp Name Timezone Australia Sydney I have read and agree to the Terms and Condition	on your network

- 5. On Step 2 of 3 register a new **BaQapp** device account is the default selection, but should this be an additional **BaQapp** device select "I have an existing **BaQapp** account" and you will then be asked for the email address of your existing registration and your existing password. This option is available because you are able and may wish to have multiple BaqApp devices operating on the same network or in other networks.
- 6. If this is a new BaqApp account please insert your email address which BaqApp will use to register your BaqApp Account. Unless you change, this email will be used to send your backup reports, which are free for the first 90 days, and thereafter will cost \$11.00 monthly or \$99.00 annually for unlimited endpoints should you wish to continue receiving reports.
- 7. Create your own password, with at least 3 characters, then re-enter the password and record the password down somewhere safely.
- 8. You can use any chosen name, and should be different to any previously BaqApp chosen name is this is an addition BaqApp device.
- 9. The name you choose is used to access your BaqApp device through your web browser, and will be at the head of your reports and referred to in monitoring.
- 10. In order that your reports and software show the correct time zone, please choose your country and then your city.
- 11. Read and accept the usual conditions, which basically indemnify **BaQapp** Pty Ltd against any claims. There is an option to print these terms and conditions which also appear at www.baqapp.com/tandc.
- 12. Once you have accepted the terms and conditions please select NEXT to go to step 3 of 3.
- 13. This may take a few moments while the wizard stores the information.

Qapp		<mark>2 (</mark> 02) 9955 7373	🔀 info@baqapp.co
elcome to your new Baqapp Device	Э		
(B)	(n)	(
something goes wrong with your backups.	Location for SMS Notifica	tion	
E-Mail #1 brk@cdroms.com.au	Location for SMS Notificat Australia	tion	
E-Mail #2	Phone Number for SMS No	tification	
E-Mail	+61		
Email #2 is an optional email address if you want alterna	tive notifications.		

- 14.Complete the information on step 3 of your **BaQapp** registration if you want backup notifications to be sent.
- 15.If you want a different email address please overwrite the report notifications email address.
- 16. There is an option to add additional email addresses should you want others in your organisation or even your IT consultants to also be sent email reports. There is no additional charge for additional email report recipients.
- 17.Add the mobile phone number to which you would like reminder SMS messages notifications by the **BaQapp** monitoring service incomplete backups will be sent. If you do not add a phone number no SMS reminders will be sent. You may enter more than one phone number.
- 18.Before you select FINISH you can go back to any of the registration pages either by selecting the BACK key, or the bar near the top of the page.
- 19. When you select FINISH you will be see a page with your registration details. You are advised to print these details and store the information safely.

Your Baqapp registration details are:	
A ccount details	
Email (login):	
abcd@bagapp.com	
A ccount Password:	
atleast 3	
Baqapp device name:	
B agapp1	
Baqapp device url:	
http://Baqapp1/	
City:	
Sydney	
Country:	
Australia	
Notification details	
Primary notification email:	
Secondary notification email:	
Notification SMS:	
+61	

20.A Thank you for registering BaqApp sheet will appear. You can now log in to your BaqApp account.

BaQapp	2 (02) 9955 7373	🔀 info@baqapp.com.au
Thank you for registering your Baqapp		
\bigcirc		
You have successfully completed the registration of your Baqa You will be able to sign into your account and see the state of your backups, m	pp device. onitor the level of security on your data and edit your account	details.
Visit the Baqapp Website		og in lo your Baqapp Account

- 21.You will also receive a confirmation email from BaqApp Pty Ltd asking you to acknowledge your registration.
- 22.Go to your default web browser and your BaqApp device should running. If it is not running please enter the default device name **baqapp1/** or the device name you chose previously, and login with your password.
- 23.You type this address **without** any http// or www in the browser address block and then press enter.

🏥 Apps 🌘 Recovery iPad lott	tery terms a G	Sign in - Google Acc		~				
			III Irelio	bb-brk-notebook	🗇 bb-office	🗇 bb-prod Pi	🗀 New folder	testcubox4
							Ċ	С
Ra Can	n							
	-	Status	Activities	s Backups	Logs	Statistics	Settings	
BaQapp stat	211							
Dagapp Stat	us			•				
The directory where BaQapp fix that by attaching an appro (err_folder_not_found)	will save back opriate drive ar	ups is inaccessible nd refreshing this p	e. Please age.					
				1				
There was an error. The backu	up storage is ci	urrently not availab	le.					
• Vour evaluation period has	ovpired RaOar	an has stopped porfs	rming					
any backups.	s expired. DaQaj	op nas stopped pend	Jinning					
Enter license key								
							Save Show/h	ide columns
Show 25 • entries						Search:		
Computer name 🔺 Online La	ast seen 🛛 🍦	Last file backup	Last im	age backup 🝦 F	le backup s	tatus 🍦 Ima	ge backup sta	tus 🍦

- 24. If there is no storage drive attached, there will be a note that the 'The backup storage is not available'.
- 25.Please attach the storage drive and or check all cables.

- 26. You should then see an option to format your storage drive that is attached to the BaqApp device. This will destroy all data on the drive, so do not use a drive with data that you wish to keep as the storage drive.
- 27.It is a good idea to add the backup device to your web browser favourites so that you do not need to recall your backup device name each time you wish to check the status of your backups.

Endpoint (PCs and Servers) Setup instructions

If you have not already done so, please run "BaQapp Client.exe" from the supplied CD, USB or download from *www.baqappcom/download.html* on each Windows computer or server that you want to backup. The client supports Win XP upwards to Window 10.

With each installation you will be asked to read and accept the terms and conditions, which basically indemnify BaQapp Pty Ltd against any claims.

If you have virus protection running, you might need to give your virus protection permission to install the **BaQapp Client Install**.

You may also need to allow your security and network software permission to run the BaqApp software and Client software.

BaQapp Pty Ltd suggests that once BaQapp is operating to keep in on all the time. The power usage is minimal; you might forget to restart missing a critical backup.

BaQapp Operating Instructions

The BaQapp software as a security feature will close on your desktop after a few minutes.

However the BaQapp software will still be operating in the background.

If you do not wish to sign-in each time you wish to access BaQapp, you may leave the "Activities" window open and the web interface will not close automatically.

Accessing the BaQapp web interface

Enter the address that you recorded when installing your **BaQapp** software into your internet browser, best using **Chrome, Opera or Firefox.**

The BaQapp software is not compatible with some versions of Internet Explorer.

In the example below the network address chosen is 'bb-Office/'.

You type this address **without** any http// or www in the browser address block and then press enter.

/ ~	1.*	1 - 14	1						SQ.	10.00	6		
← → C fi bb-of	fice/												
Bagapp	Status	Activities	Backups	Logs	Statistics	Settings	Ф	С					
Password:				-									

Login

The following window will then appear.

Enter your password. If your computer is private, and if using the Chrome or Firefox browser, you may wish to allow your computer to remember your password so that you do not need to type it in each time you use **BaQapp**.

Sign in and Password to check that your backups are going well

BaQapp will open to the "STATUS" page of **BaQapp** software.

It can sometimes take as much as a day for **BaQapp** to backup all the PCs, depending on the number of computers and the data size.

The slider shows what % of your storage has already been used for your backups.

On-line means that the computer is seen by **BaQapp** on the network.

Last file backup and last image backup show the time of the most recent incremental or full backup.

Initially all the **File backup status** and **Image backup status** blocks will be red, and as the **BaQapp** creates the backups, they will turn green.

If a block is red then that computer has not been backed up recently.

Below the table are options to have an immediate backup of an endpoint or computer made after highlighting the last block, as well as options to remove a client from the backup list.

It is also possible to backup authorised clients that are not on the local network through the internet.

Bagapp		Status	Activitie	s Backups Log	s Statistics	Settings	Q C					
BackupBoxx status												
Currently 1.92 TB of 7.23 TB (27%) are used. Save Show/hide columns												
Show 25 • entries Search:												
Computer name	Online	Last seen	\Rightarrow	Last file backup	Last image ba	ckup 🔶 Fi	le backup sta	tus 🔶	Image backup status	Å.		
brk-notebook	Yes	2015-05-29	23:52	2015-05-30 15:14	2015-05-30 00:	27 0	k		Ok			
DESIGN-01	No	2015-05-27	15:16	2015-05-28 11:16	2015-05-28 02:	22 <mark>N</mark>	o recent backu	ıp	Ok			
Showing 2 to 2 of 2 entries Select all Select none Re	; move sele	ected Increm	ental file b	ackı 🔻 Start for selec	ted Show all cli	ents		First	Previous 1 Next	Last		
Internet clients Add additional internet clien Client name:	S:			Add								
Extra clients												
Hostname/IP On	line		Acti	ions								
No extra clients												
Hostname/IP:				Add								
Server identity fD5Kt2huZVWKxpymejx6												

How to shut down the BaQapp

From the **BaQapp** WebUI click the shutdown button in the top right corner to cleanly shutdown.

If you are using an **ARM** processor which use very little power, about 3 watts, about 1/20th of that used by a desktop PC, **BaQapp** Pty Ltd suggest that you leave the **ARM** processor on all the time. This way it will backup your computers automatically without fail.

If you are using an Intel PC as your backup server, you may wish to leave it on all the time, especially if it appears to need extra time to keep backups current, or you may wish to switch off outside working hours.

Of course as with any electrical equipment you should not cover the **ARM** processor or Intel processor so that air cannot circulate, or place it in a confined space where there is little circulation.

Changing your Password

If you wish to change the password, select the **Settings** link of the **BaQapp** software. The setting page will now appear. Just below the headings you will see the following options.

Bagapp	Status	Activities	Backups	Logs	Statistics	Settings	Ċ	С
General Users Firmware Mo	nitoring	Networki	ng Storag	ge Clie	ents	T		

Select **Users** and the following will appear.

Baga	IPP	Status	Activities	Backups	Logs	Statistics	Settings	Ċ	C
General Users	Firmware Monito	oring Ne	tworking	Storage	Clients		T		
admin	Administrato	r		Remove C	hange rig	hts Chang	e password		
Create user	I		L. L						

If you choose Change password the following menu will appear.

Type in your new password.

If you change the password please make a secure note of your new password as without it your BaQapp data may be not accessible.

Until you understand the effect of changing the other settings, **BaQapp** suggests that you leave them in default mode.

Recovering data from a backup through the BaQapp software

Choose the Backups menu.

A list of the computers that have been backed up will appear as below.

B	aQapp	Status	Activities	Backups	Logs	Statistics	Settings	Ċ	С
Clie	ents								
	Computer name	Last file backu	p						
	brk-notebook	2015-05-30 23:2	4						
	yesvideo-01	2015-05-28 11:5	9						

Select the computer that contained the file or folder that you wish to recover, and the following menu will appear.

This is a list of all the backups for that computer.

Bagapp	Status	Activities	Backups	Logs	Statistics	Settings	Ċ	С
Clients > brk-notebook								
Backup time	Incremental	Size			Archived?			
2015-05-30 23:24	Yes	443.38 N	1B					
2015-05-30 19:19	Yes	461.46 N	1B					
2015-05-30 15:14	Yes	458.91 N	IB					
2015 05 30 11:00	Vac	633 03 M	IR		_			

Scroll down the list to find that date that is most likely to have the file or folder that is required.

A special feature of BaQapp software is that every backup appears as a full backup of all your data, even though the incremental data is only as big as the changes since the previous backup.

Double click or select the chosen date.

E	3a <mark>Q</mark> ar	Status	Activities	Backups	Logs	Statistics	Settings	Q	С
(Clients > brk-notebr	$a_{0}k > 2015.05.26 16.25$							
ľ	File	Size							
lt	С								
	Download folder as	ZIP							

You have the choice to download the entire drive to your chosen destination, or to navigate down through the drive's folders until you find the file or folder that you require. Select the file and it will download automatically to your default downloads folder.

Bagapp	Status Activities		Rackups Logs (Statistics	Sottings	Q	С
	Status	Activities	Nilles Backups		Statistics	Settings		
Clients > brk-notebook > 2015-05-26 16:25	> C > User	rs > user > Do	cuments > Ba	ackup Svs	tems > Manua	als		
File		Size						
BRR TEPOT 22 OCLEDING		410.28						
Backup Boxx Full Manual.docx		575.5	KB					
Backup Boxx Manual 17 May 2015.docx		486.9	KB					
Backup Boxx Manual 23 May 2015.docx		536.6	536.6 KB					

How to recover files from the File backups directly through the network.

Simplest method is to go to "My computer" on your desktop, double click, look down to 'Network", and there you will find your **BaQapp** name you registered with the setup wizard. Double click on your **BaQapp**, you will be asked for your login credentials.

Username: admin Password: <your admin password>

This will give you read only access over the network, to all client backups, time and date stamped in folders. Any additional users added to the system can login with their credentials and access only their backups.

Sometimes your **BaQapp** will not appear under the network browser.

The backups may be accessed on the network via Windows explorer using a UNC path name.

\\<baqapp-name>



Open this folder by double clicking, and there you will see all your backups in chronological order, of all the computers that have been backed up.

If you want a file from your most recent backup, look in the folder marked "current". Your files will be in the same folders and sub-folders as they were on each computer's hard drive. You can either open the file directly from your backup, or you can copy any file or folder to your hard drive for use.

As a form of security you cannot change, write to or delete any files or folders in your BaQapp.

I want to extract a file from the image backups. How do I do that?

The image backups are saved as VHD-files or compressed VHD-files. Those are standardised (by Microsoft) virtual disk container formats. Microsoft Virtual PC and Windows XP Mode use the same file format. If you use one of these products you can simply add the image as a hard disk to the virtual machine.

Windows 7 allows you to directly add the uncompressed VHD files as a hard disk in *system settings->Manage->Computer management->Disk management->Other Actions -> Add Virtual Hard Disk.* The image will appear as another drive in the explorer. You can then extract the file. This seems to only work if the image is on a local hard drive -- you have to copy the image from the server on one of your hard disks. If you do not want to do this the (free) <u>Gizmo Central</u> can mount VHD files from network paths.

Always mount the images read only!

Changing the email sending address

The Back-to-Base reporting or monitoring service to **BaQapp** will operate without you doing anything or making any changes to the email settings.

However you can change the email addresses.

Choose the Setting menu, and then choose Monitoring.

The following menu will appear.



Change or add email addresses and or phone numbers, and then save your changes.

These addresses are where the **BaQapp** monitoring service will send your backup reports as well as reminders should backups be missed.

SMS reports will not be sent unless email warnings of missed backups are ignored for 7 days, unless otherwise requested by the user.

Other settings

We suggest that you do not limit the backup speed for the local network unless **BaQapp** is taking so much network capacity that it is interfering with your other applications.

How to specify the volumes to backup?

BaQapp backs up all the volumes you specify in the "Volumes to backup" field. You should specify volume letters (C,D,E,...) separated by ";" or "," there. With **BaQapp** Client and Server you can also specify "ALL" to backup all volumes.

Bear in mind a mapped drive will fail and the Status screen will continually show this.

Settings – Server screen

Status Activities Bac	kups Logs Statistics Settin	Js C
General Users Firmware Monitoring Netw Server File backups Image backups Client A	vorking Storage Clients .rchival Internet	
Interval for incremental file backups:	4	hours 🔲 Disable
Interval for full file backups:	30	days 🔲 Disable
Maximal number of incremental file backups:	400	
Minimal number of incremental file backups:	40	
Maximal number of full file backups:	10	
Minimal number of full file backups:	2	
Excluded files (with wildcards):	*\Google Desktop Data*;*\A	?
Included files (with wildcards):		?
Default directories to backup:	C:\	?

Save

The Backup Storage Path is setup by you when your **BaQapp** backup appliance is started.

The default interval for each incremental file backup is 4 hourly. This means that every 4 hours that the client, your PC is on, the **BaQapp** will make an incremental backup to ensure that any changes that you have made are stored in the **BaQapp**.

The default interval for full file backup is once every 30 days. This means that every 30 days that the client, your PC is on, **BaQapp** will make a full file backup to ensure that all your files, folders, settings, applications etc. are stored in the BaQapp backup appliance.

As you become more familiar with BaQapp, you might want to change these settings, bearing in mind that the more backups that are made, the quicker your BaQapp backup appliance hard drive storage will fill, and the earlier your old backup files will be deleted (except for backups that have been marked to archive).

Your **BaQapp** defaults are set not to backup certain file types.

They are temporary files, Macintosh files found in Windows Systems where the file contains / which confuses the Windows file system.

You can of course add or change these specified files if you are sufficiently technically savvy.

These intervals are suggested times. The shorter the interval between backups, the greater the network traffic and processing capacity needed.

Theoretically there is no limit to the number of active clients, depending on the network capacity and speed, the size of the data backed up and on the available storage.

It is also possible to set create different settings for each client by selecting each client under the client menu. The client menu can be accessed through the **BaQapp** icon in the bottom right corner of your screen.

What is the clean-up window?

During the time set for cleanup **BaQapp** will do its housekeeping. Old backups and removed, clients will be deleted, old database entries are removed, quotas enforced, and the database is backed up.

The Cleanup Window, which is the time that **BaQapp** will clean up your system is set 1-7 which is 7 days of the week, where 1 is Monday, and 7 is Sunday, and after 0 is midnight, while 24 is just before midnight. You can also use the abbreviations of the days (Mon, Tues, Wed, Thurs, Fri, Sat, and Sun).

You can set the Cleanup window to any time you wish, although **BaQapp** suggests that you leave the default settings, which are 1-5/1-7 which is weekdays from 1 AM to 7 AM.

If you have a good reason, you might want to exclude more files?

You can exclude files with wildcard matching. For example if you want to exclude all MP3s and movie files enter something like this:

.mp3;.avi;*.mkv;*.mp4;*.mpg;*.mpeg

If you want to exclude a directory e.g. Temp you can do it like this:

/Temp/

This would exclude all files in directories named Temp. You can also give the full local name C:\Users\User\AppData\Local\Temp* or the name you gave the location e.g. with C:|C_Drive C_Drive\Users\User\AppData\Local\Temp*

Rules are separated by a semicolon (";"). Use a backslash for Windows clients ("\") and a forward slash for LINUX clients ("/") to separate folders.

The default setting is to include some temporary files, as well as some files that Windows cannot back-up.

How to include files?

If you do not define an include pattern all files in the backups paths except the excluded ones are backed up. As soon as you define an include pattern only files which match this pattern are backed up. Similar to the exclude pattern you can include files by their extension:

.doc;.docx

Will only backup Word documents.

\Documents

Will only backup files in document folders.

Additionally to the standard wildcard ("*") which matches every character you can use ":" which matches every character except the path separator (/ or \). If you backup e.g. the C:\Users path and want to backup all document directories you can use the pattern Users\:\Documents*

That way e.g. Users\Foo\Other\Documents would not be backed up.

The pattern is used for all paths you specify. So if you use the above rule for the Users folder and want to backup all files in another folder be sure to add that folder to the pattern e.g. by specifying Users\:\Documents*;D:\bla*

How to define a backup window?

The backup window defines the time when **BaQapp** will do backups. You may not want backups through the night and on weekends.

Go to the "Settings" page of the **BaOapp** main menu.

Bagapp	Status	Activities	Backups	Logs	Statistics	Settings	Ċ	С
General Users Firmware Mo	nitoring	Networkir	ig Storag	e Clier	nts	T		
Server File backups Image back	ups Clie	nt Archiva	I Internet					
Backup window	1-	7/0-24		Show	v details ?			
Max backup speed for local ne	twork: -			MBit	/s			
Save								

Select the submenu "Client". The default settings are shown below.

The Backup Window, which is the time that the **BaQapp** will look for and back-up your system is set 1-7 which is 7 days of the week, where 1 is Monday, and 7 is Sunday, and after 0 is midnight, while 24 is just before midnight. If you want to skip backups between midnight and 8:00 AM, and not on Saturday and Sunday, you can change these settings to "1-5/8-6. You can set the Backup window to any time you wish, noting that **BaQapp** will not start a backup outside the backup window. However any backup that started outside the backup window will continue until completed.

You can also use the abbreviations of the days (Mon, Tues, Wed, Thurs, Fri, Sat, and Sun). The times can either consist of only full hours or of hours with minutes. The hours are on the 24 hour clock. You can set multiple days and times per window definition, separated per ",". You can also set multiple window definitions. Separate them with ";".

Each client can start any type of backup on their own from the "Status" page.

We suggest that you do not limit the backup speed for the local network unless **BaQapp** is taking so much network capacity that it is interfering with your other applications.

Known problems with BaQapp

As with any system, things can go wrong, but have no fear, if you cannot fix them; help is available at the end of a telephone. Just call 02 9955 7373 or email us at techs@baqapp.com.au.

Currently help is available during normal working hours, but we intend to offer 24/7 phone support in the near future.

For a current list of known problems, see <u>www.backupboxx.com.au/knownproblems</u>.

Internet Explorer will not open BaQapp properly

Some versions of Internet Explorer do not allow you to access **BaQapp** server, and a fix is on the way.

This may have something to do with the security settings in Internet Explorer.

It will however work on Chrome, Opera and Firefox.

BaQapp does not find a PC.

If the **BaQapp** server has not found your computer, it might help to uninstall the client software, and then reinstall.

You can either uninstall going to the Control Panel, selecting "programs and features', and then selecting the "**BaQapp** Client", which you then uninstall.

🚱 🔍 💌 🔯 🕨 Control Panel 🕨 All Control Panel Items 🕨 Programs and Features								
Control Panel Home	Uninstall or change a program							
View installed updates	To uninstall a program, select it from the list and then click Uninstall, Change, or Repair.							
😵 Turn Windows features on or	or or or Organize 👻							
off								
	Name Publisher Installed On Size Version							
	😌 BackupBoxx Client	BackupBoxx	10/10/2014	7.48 MB	1.4.1.0			
	📵 Mozilla Firefox 32.0.3 (x86 en-GB)	Mozilla	29/09/2014	75.0 MB	32.0.3			
	Image: Martin Prikryl 25/09/2014 12.8 MB 5.5.5							
	Adobe Flash Player 15 ActiveX	Adobe Systems Incorporated	25/09/2014	6.00 MB	15.0.0.167			
	😌 Dropbox	Dropbox, Inc.	20/09/2014		2.10.30			
	📓 Java 7 Update 67	Oracle	18/09/2014	118 MB	7.0.670			

However that is not all. You may still need to find the "BaQapp" in your Programs folder, and then restart your computer.

A much easier method is to find the "BaQapp" on your programs folder, open it, find and select "uninstall".

Now reinstall the "Client Install" supplied with your **BaQapp**. You might want to copy the "client Install" to a convenient location on your hard drive.

BaQapp does back up any endpoints.

A simple reboot of the BaqApp device will usually reset and it will then start backups.

Windows 8 and 10 partitioning

Some Windows 8 computers are installed using GPT and EFI partitioning instead of MBR - Master Boot Record. These newer partitioning systems allow boot disks of larger than 2.2 TB.

The **BaQapp** will make a good file backup of a Windows 8 and 10 system, but if EFI the image backup this will not be useful to recover your Windows 8 complete system.

If your Windows 8 or 10 system has been installed with the optional MBR or GPT without EFI, there will be no difficulty in using the Windows 8 image for a complete restore.

Frequently asked technical questions

Some of these notes are rather technical and not necessary to understand to use your BaQapp safely and securely.

Updates will appear at wwwbagapp.com /techs.

Remember that help is at hand at 02 9955 7373 or email techs@backapp.com.au.

Can I use other Backup software?

Yes. **BaQapp** will not interfere with another brand of backup or service device.

Can I use more than one BaQapp on one network?

The **BaQapp** Client only automatically sees the first **BaQapp** backup appliance it first sees to backup files. If this server is the one that you have been using previously backups to this server should start automatically.

It is possible to install several **BaQapp** backup devices on the same network. However you will manually need to add the Server Identity for each **BaQapp** to the Client software.

In your Computer find Local Disk (C:), open to find a folder 'Program Files'. Open this folder and find a folder 'BackupBoxx'. Open this folder and open a file 'server_idents". Now look at the bottom of

the **BaQapp** Status page in your **BaQapp** software and you will see **Server Identity** and a 16 digit number below. Select or copy this number and paste it under the text in the file that opened a server_idents. Now close and save server_idents.

In some systems you will need to first copy the server_idents file to your desktop, make the changes and save it there, then drag and drop it back in the BackupBoxx folder where you found it.

Alternatively you want to back-up to a different server, or you are on a different network such as another network with a **BaQapp**, or your home **BaQapp**, you can do any of the following:

Uninstall the Backup Client, then reinstall.

Click the Start button, locate the BackupBoxx folder and click Uninstall. Alternatively you can uninstall from Programs and Features in the Windows Control Panel.

You now need to reinstall the Client Software from the original disc or USB stick that was supplied to you or download from www.backupboxx.com.au/client

Allow several minutes for **BaQapp** to find your computer.

Can I upgrade my BaQapp processor?

You can upgrade you **BaQapp** processor by installing **BaQapp** software in your new processor. If you are using the same storage, **BaQapp** will recover the backup directories from the storage and continue adding backups.

Can I upgrade my BaQapp storage (hard drives)?

Currently if you upgrade your hard drive storage you will need to re-install your **BaQapp** software. We suggest that you replace the SD or USB card and keep the card with the old drive for quick restoration of old data if needed.

The server is still working, but the Client says the backup is done?

The **BaQapp** copies the files as fast as possible from your PC, the client. Thereafter **BaQapp** examines the files and sorts them into the right directory. This can take some time, and **BaQapp** does not require access to the client, your PC, until the next planned backup.

Where are the backups saved?

BaQapp is supplied with the default to save the files in the Debian Linux configured storage drive supplied by Backup System Pty Ltd with your **BaQapp**.

Each client or computer on the network has its own directory. Both Image and file backups are stored in this one directory.

Image backups are titled Image_<DriveName>_<YYMMDD-HHMM>vhd. YY is the year, MM is the Month, DD is the Day, HH is the Hour MM are the minutes

The file backups are in subdirectories with the pattern YYMMDD-HHMM.

The most recent completed Backup is marked :current".

The backups are ordered chronological if you sort by file or by directory name. In the directory 'clients' there are links to the most current file backup of each client.

The Image backups are saved in the path set by default and supplied with your **BaQapp** or in the web-interface. In this path there is one directory per client. Directly in this directory there are the image backups. They have the pattern Image_<Drive>_<YYMMDD-HHMM>.vhd is the imaged partition, DD the date, MM the month, YY the year, HH the hour and MM the minute.

What does the "Archived" column show?

If the box in that column is checked the backup is archived. As long as a backup is archived **BaQapp** won't delete it under any circumstance. If there is a stop watch next to the box it means the backup will stop being archived after some time. This time is shown if you hover over the stop watch.

How to use the archive window?

The archival window allows you to archive backups at very specific times. The format is very similar to *crontab*. The fields are the same except that there are no minutes:

Field	Allowed values	Remark
Hour	0-23	
Day of month	1-31	
Month	1-12	No names allowed
Day of week	0-7	0 and 7 are Sunday

To archive a file backup on the first Friday of every month we would then set "Archive every" to something like 27 days. After entering the time we want the backups archived for we would then add

;;*;5

as window (hour;day of month;month;day of week). To archive a backup every Friday we would set "Archive every" to a value greater than one day but less than 7 days. This works because both conditions have to apply: The time since the last backup archival must be greater than "Archive every" and the server must be currently in the archive window. Other examples are easier. To archive a backup on the first of every month the window would be

;1;;*

and "Archive every" something like 2-27 days. One can add several values for every field by separating them via a comma such that

;;*;3,5

and "Archive every" one day would archive a backup on Wednesday and Friday. Other advanced features found in *crontab* are not present.

What is the global soft file system quota?

During clean-ups **BaQapp** will look at the used space of the file system the backup folder is on. If the used space is higher than the global soft file system quota **BaQapp** will delete old backups, if possible, till the used space is below the quota. Be aware that not only **BaQapp**'s files count against the quota, but other files as well. A quota that only takes into account **BaQapp**'s files is the client specific quota. You can specify the quota via a percentage of total space, or by a size. For example let the size of the Backup device be 1 Tera-byte: If you set the global file system quota to "90%", **BaQapp** will delete old backups as soon as more than about 900 Giga-bytes of the available space is used. You could also directly set the quota to 900 Giga-bytes by setting it to "900G". Other units are possible, e.g. "900000M" or "1T".

Microsoft Outlook .ost files aren't backed up!

Microsoft Outlook adds exceptions to the Microsoft Shadow Copy Service to exclude the .ost files. Several Backup tools (**BaQapp** included) therefore do not backup them. Here is what seems like an official statement from Microsoft: "Maintaining changes to .ost files within shadow copies is expensive in terms of space and I/O activity. The performance impact doesn't occur during the image backup itself--the only extra work at backup time is backing up the .ost file as part of the image. Instead, the performance impact occurs during the ongoing, everyday I/O to the .ost file when Outlook is running. If the .ost changes were kept in shadow copies, then every time Outlook writes to the .ost file, the result is a copy-on-write I/O hit (2 writes, 1 read). Although we have worked to reduce the impact of copy-on-writes on shadow copies, a heavily churned file like an .ost file could still cause problems. For these reasons, and the fact that .ost files can be regenerated, we chose to delete .ost files from the shadow copy before the image is created. Even if the performance issues didn't exist, there are situations where Exchange will, after an .ost is restored, detect a "future" version of the .ost file and force you to delete and then regenerate the local .ost file. Therefore, it's still preferable to regenerate an .ost file instead of restoring it."

Basically just backup the Exchange server (which you can do with **BaQapp** too) and you are good.

Open files in TrueCrypt volumes are not backed up!

This is a TrueCrypt limitation. From the former TrueCrypt FAQ page:

The Windows Volume Shadow Copy Service is currently supported only for partitions within the key scope of active system encryption (e.g. a system partition encrypted by TrueCrypt, or a non-system partition located on a system drive encrypted by TrueCrypt, mounted when the encrypted operating system is running). Note: For other types of volumes, the Volume Shadow Copy Service is not supported because the documentation for the necessary API is not available.