How to install Proxmox Backup Client

This guide explains how to install and use Proxmox Backup Client on a Debian VM. This would allow non proxmox machine to be backed up using PBS.

Proxmox Backup Client Documentation

Proxmox Installaton for Proxmox Backup Client Documentation

Installing Proxmox Backup Client

1. Add the repository
2. In order to configure this repository you need to first setup the Proxmox release key

Please note that this installation is for Debian 12 (Bookworm). If you are on a newer version, use this guide a reference with the updated command on: https://pbs.proxmox.com/docs/installation.html#package-repositories-client-only-apt

```
sudo wget https://enterprise.proxmox.com/debian/proxmox-release-bookworm.gpg -O /etc/apt/trusted.gpg.d/proxmox-release-bookworm.gpg
```

```
sudo nano /etc/apt/sources.list.d/pbs-client.list
```

3. add the line

```
deb http://download.proxmox.com/debian/pbs-client bookworm main
```

4. Install Proxmox Backup Client

```
sudo apt update
```

```
sudo apt install proxmox-backup-client
```

```
proxmox-backup-client version
```

Configure Proxmox Backup Client

First backup

```
sudo proxmox-backup-client backup "backupname".pxar:"directory" --repository
"backupuser"@pbs@"PBS-IP":"DataStoreName" -ns "YourNameSpace"
```

Example:

```
sudo proxmox-backup-client backup mkdocsbackup.pxar:/home/user/docker --repository
ardougneBackupUser@pbs@100.102.226.112:HDD-storage-5Tb -ns azure_mkdocs
```

List all backups

```
proxmox-backup-client list --repository "backupuser"@pbs@"PBS-IP":"DataStoreName" -ns
"YourNameSpace"
```

example:

```
proxmox-backup-client list --repository ardougneBackupUser@pbs@100.102.236.112:HDD-storage-5Tb
-ns azure_mkdocs
```

Backup encryption

```
proxmox-backup-client key create /home/user/encryption.key
```

Fill in your desired key

Storing credentials

This is so that you do not need to enter credentials for each backups.

- **Environment variables:** is an option, but credentials are stored in plain text.
- **Systemd credentials:** are stored as encrypted files that only systemd decrypts when launching a service. We will be using systmd credentials for this guide.

To store the password of the backup user:

```
sudo systemd-ask-password -n | systemd-creds encrypt --name=proxmox-backup-client.password - /your/password/directory/password.cred
```

To store the encryption key we created:

```
systemd-ask-password -n | sudo systemd-creds encrypt --name=proxmox-backup-client.encryption-password - /home/user/encryption-password.cred
```

Let's create a systemd service:

```
sudo nano /etc/systemd/system/backup.service
```

Paste in the following (fill in your own details and remove the quotes):

```
[Unit]
Description=Proxmox Backup Client service
Wants=network-online.target
After=network-online.target

[Service]
Type=oneshot
ExecStart=proxmox-backup-client backup "backupname".pxar:/home/user/docker \
  --repository "backupuser"@pbs@"PBS-IP":"DataStoreName" \
  -ns "YourNameSpace" \
  --keyfile /home/user/encryption.key
LoadCredentialEncrypted=proxmox-backup-client.password:/home/user/password.cred
LoadCredentialEncrypted=proxmox-backup-client.encryption-password:/home/user/encryption-password.cred

[Install]
WantedBy=multi-user.target
```

Reload systemd so it picks up the service

```
sudo systemctl daemon-reload
```

Test it:

```
sudo systemctl start backup.service
```

Schedule a backup

To start a backup at a certain time

```
sudo nano /etc/systemd/system/backup.timer
```

```
[Unit]
Description=Run backup daily at 2am

[Timer]
OnCalendar=*-*-* 02:00:00
Persistent=true

[Install]
WantedBy=timers.target
```

```
sudo systemctl daemon-reload
```

```
sudo systemctl enable --now mkdocs-backup.timer
```

Restore a backup

First list all your backups:

```
sudo proxmox-backup-client snapshot list "backupname".pxar:"directory" --repository
"backupuser"@pbs@"PBS-IP":"DataStoreName" -ns "YourNameSpace"
```

To restore a backup:

```
proxmox-backup-client restore host/"YourHostname"/2025-08-09T15:51:02Z "backupname".pxar
/where/to/restore --repository "backupuser"@pbs@"PBS-IP":"DataStoreName" -ns "YourNameSpace"
```

Revision #4
Created 2025-12-01 20:39:19 UTC by lumxux
Updated 2026-01-28 22:54:43 UTC by lumxux