

QNAP

Hyper Data Protector 1.0

The central host-based
VMware/Microsoft Hyper-V
active backup solution

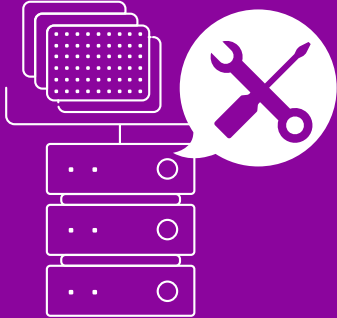


Virtual machines are commonly used in corporations

Virtual machine backup is the primary task for corporations

Virtual Machine malfunction

When virtual machine failures occur, it must be restored in a short period of time to maintain business operations



Ransomware

Multi-version backup is the key when ransomware occurs



Data Loss

Data loss may cost the reputation of company. The worst-case scenario is business disruption which is not rare



The IT pain points of product selection



Complex pricing

Variety of products on the market and their charging are different between vendors



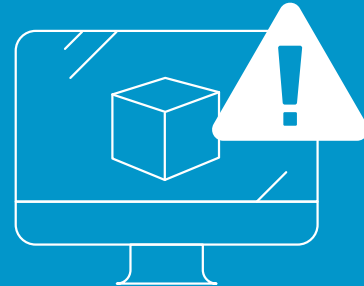
Expensive license fee

Corporation need to pay for the license fee every year. The management may not like the idea.



Spend a lot of time and human resource

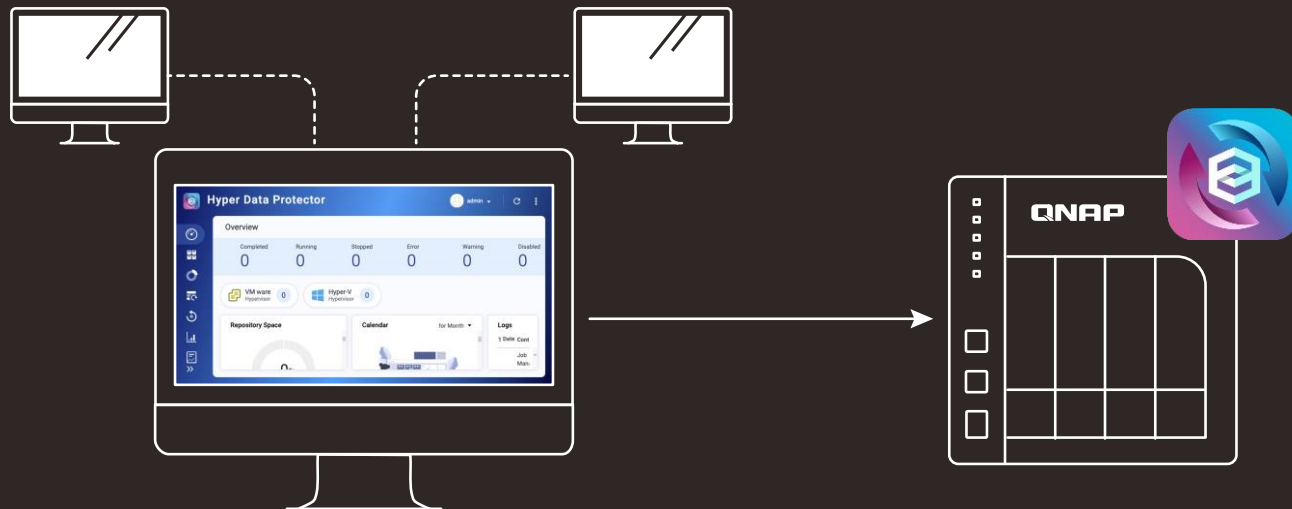
Because of the difference between hardware and software, it may cost a lot of time and efforts to troubleshoot the issue.



QNAP Hyper Data Protector – All-in-one advantages



- Unlimited VM backups and license-free for achieve money, time and storage savings
- All-in-one solution to avoid time spent on finding problems between hardware and software
- QNAP NAS RAID hard disk data protection mechanism
- QNAP NAS 3-2-1 backup mechanism

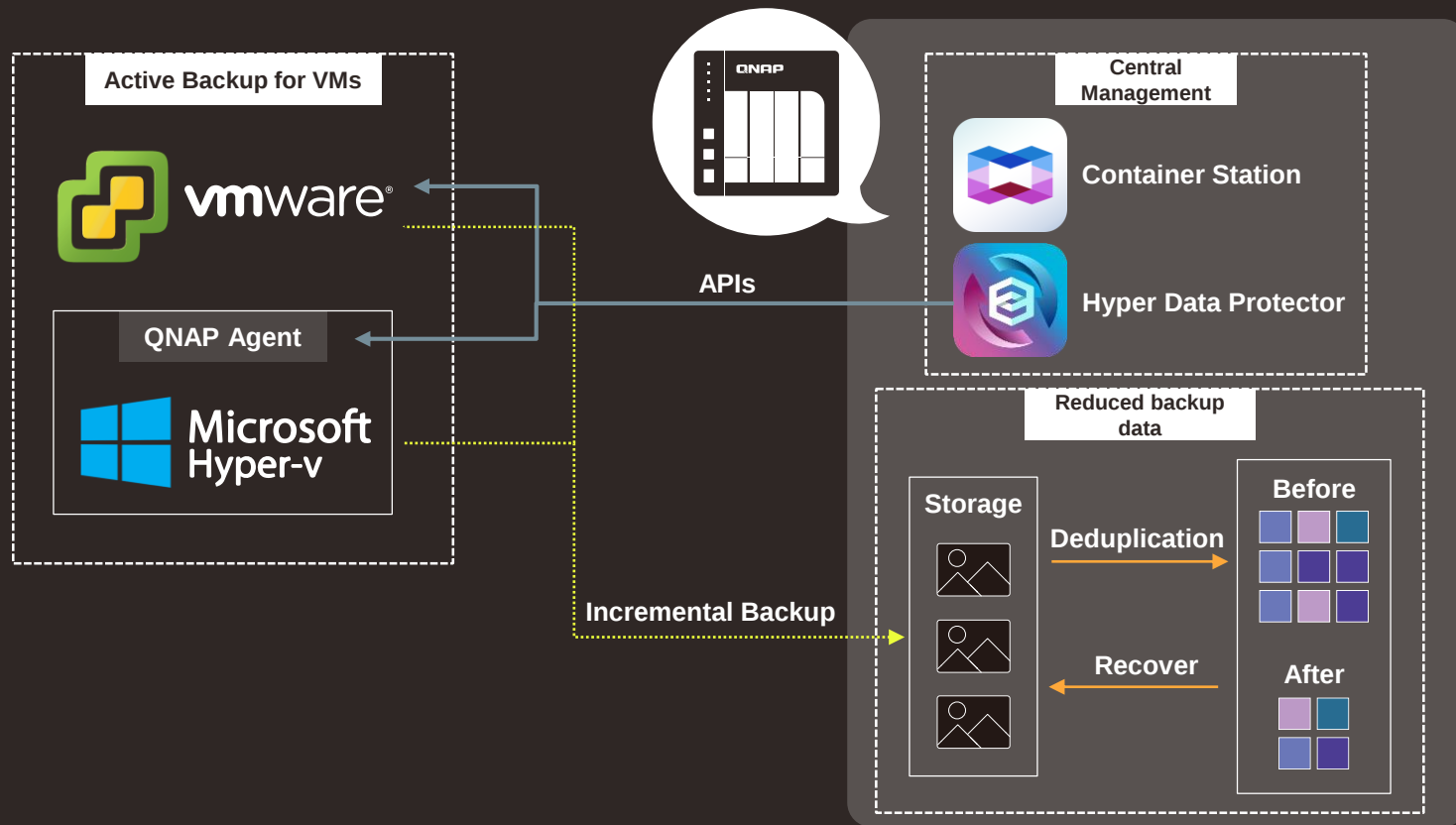




Meet QNAP Hyper Data Protector

Providing a money-, time- and storage-saving
all-in-one back up solution

QNAP All-in-one active backup solution for virtual machines

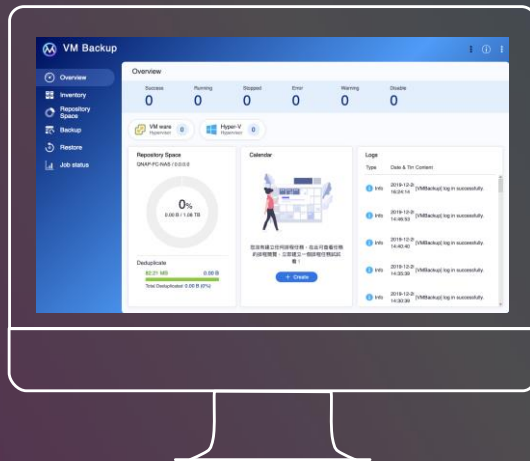


Hyper Data Protector Highlights

High speed active backup

Instant VM recovery

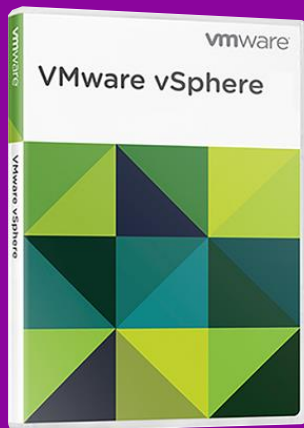
Continuous monitoring



Supported source platforms

VMware vSphere

- 6.0, 6.5, 6.7



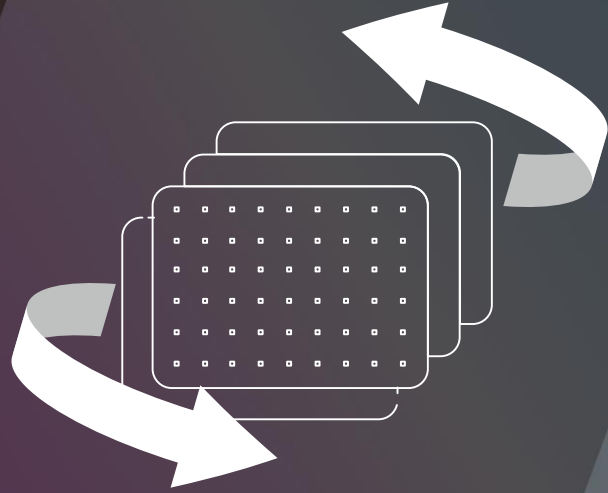
Microsoft Hyper-V

- Windows Server Hyper-V 2016
- Windows Server Hyper-V 2019



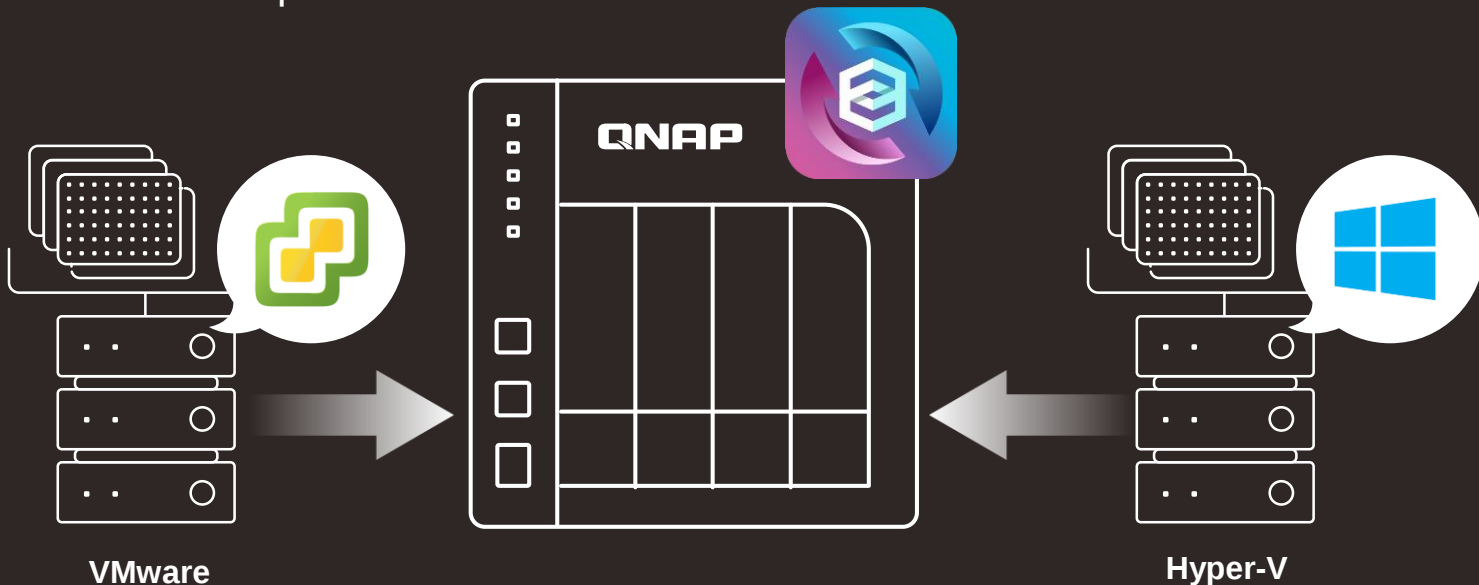
Note: Windows 10 Hyper-V not supported

High speed active backup



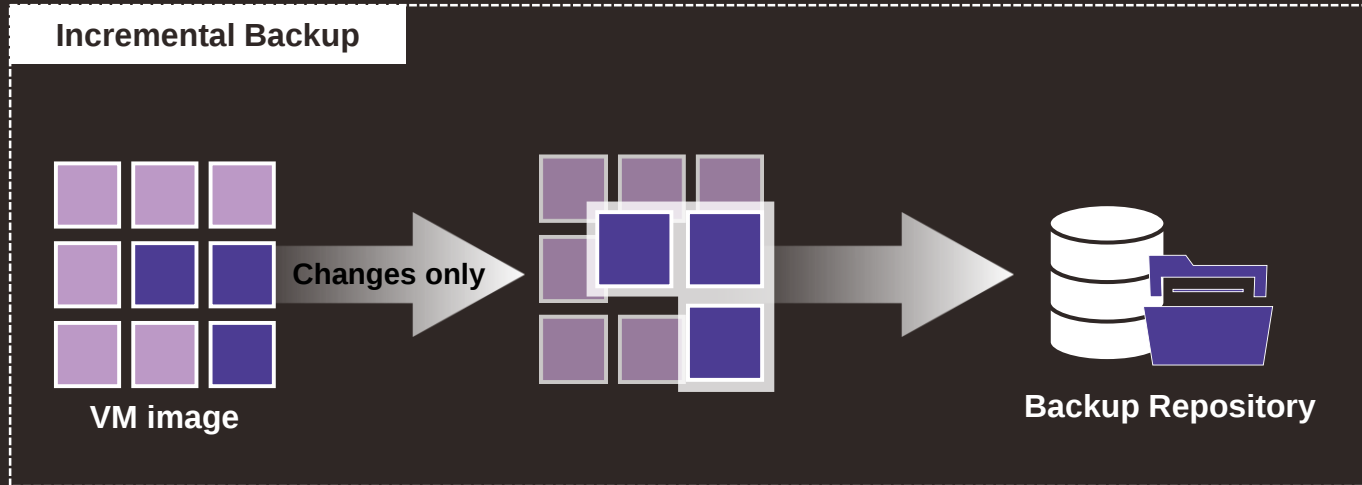
VMware / Hyper-V agentless backup

- Pull data from VM Server
- Central Management
- No agent software
- Offline backup



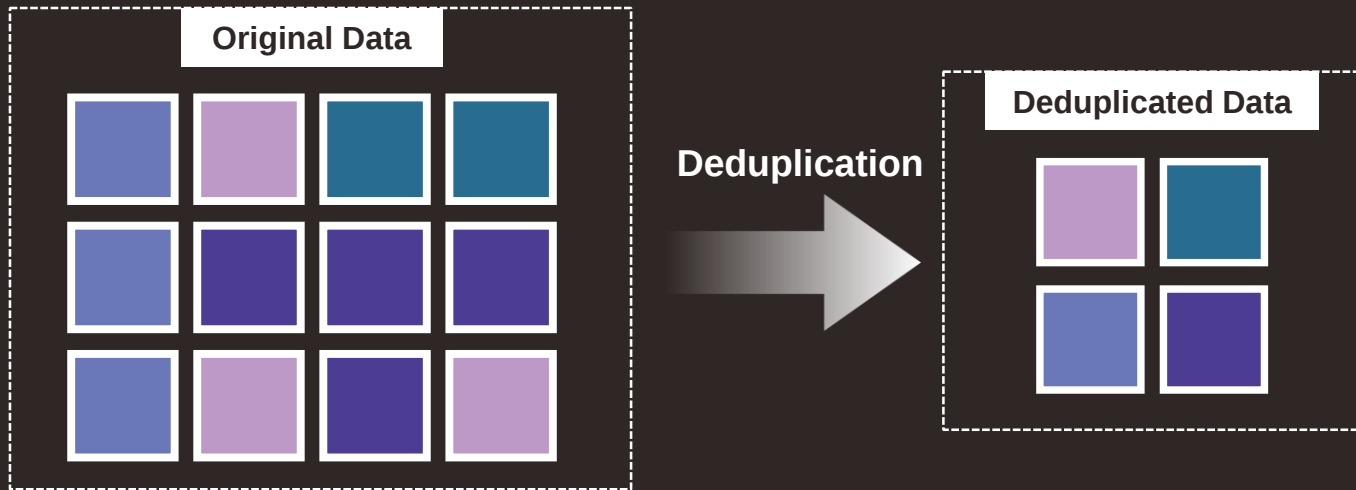
Changed data block technique to achieve incremental backup

- Incremental backup
 - VMware CBT (Changed Block Tracking)
 - Hyper-V RCT (Resilient Change Tracking)



Offline Deduplication

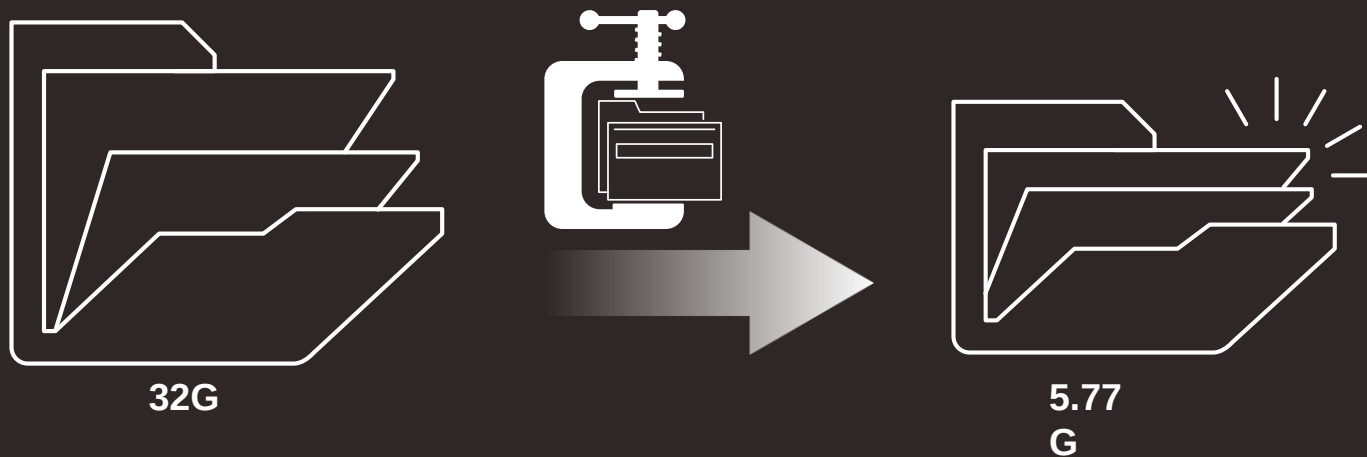
- Reduce the storage of multi-version back up
- Up to 90% reduction in duplicated data when clone VMs.



Data compression and deduplication technology promoted by well-known manufacturers

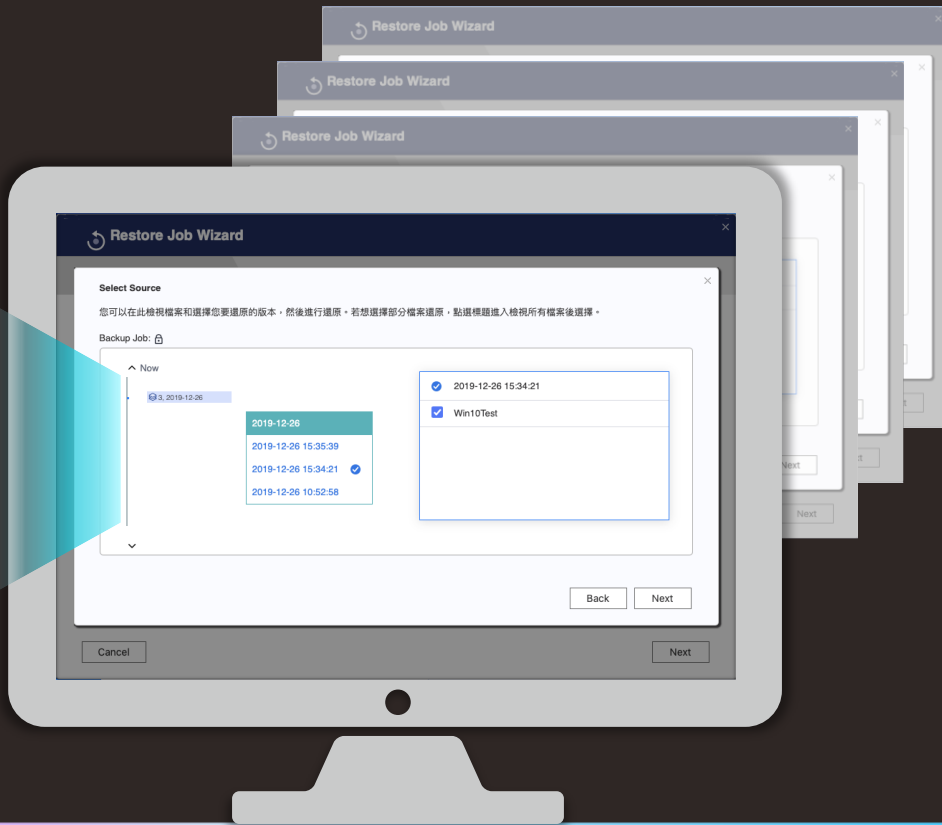
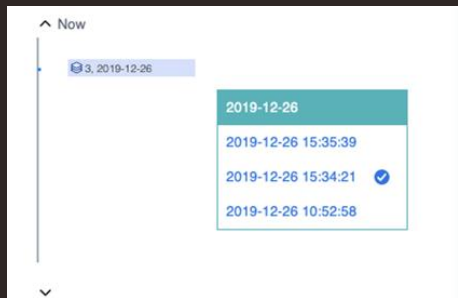
- Compression ratio in actual testing :
 - QNAP HDP and well-known manufacturers have achieved compression ratio more than 80%

For example, 32G VM becomes 5.77G after compression that greatly save backup storage



Up to 1,000 multi-version backups

- Restore at any time point



- Sequential version backup

AES-256 encryption technology in data transmission

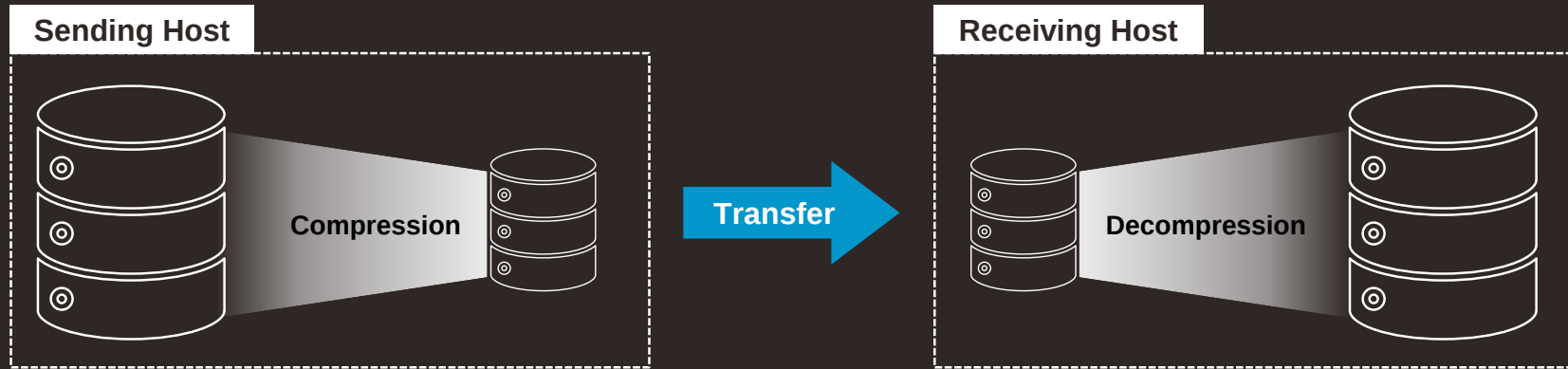
- AES (Advanced Encryption Standard) is a specification for the encryption of electronic data established by the U.S. National Institute of Standards and Technology (NIST)

256-bit Encryption



Reduce bandwidth usage through transmission compression

- Data compression before transmission
- Automatically decompress at the destination
- Save the bandwidth and the capacity of transmission



High Speed Network with QNAP NAS

- Ready-to-use infrastructure after purchasing
- 2.5G/5G/10G
- QNAP 10G Switch



QSW-308-1C



QSW-1208-8C

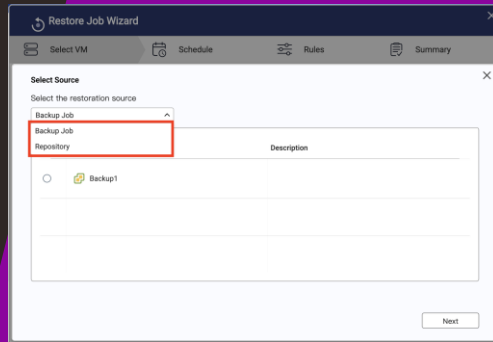
Instant VM recovery



Restore virtual machine back up

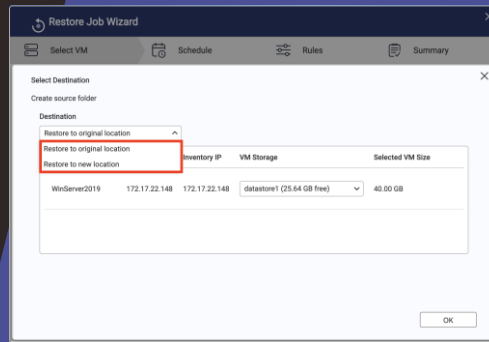
Select Source

- Form Backup job
- From Repository



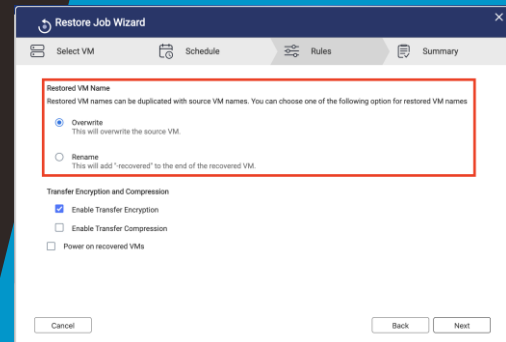
Select Destination

- Restore to original location
- Restore to new location

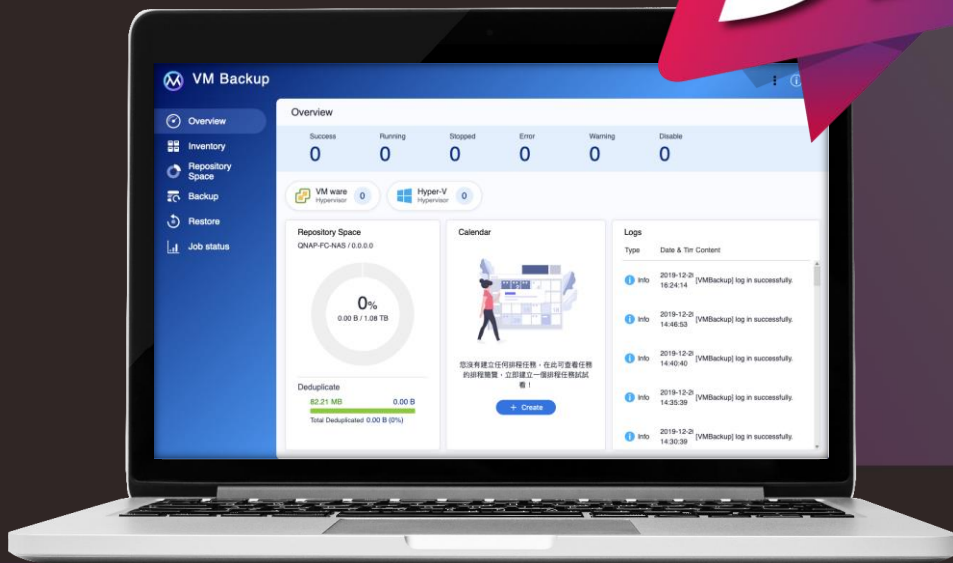


Restore Option

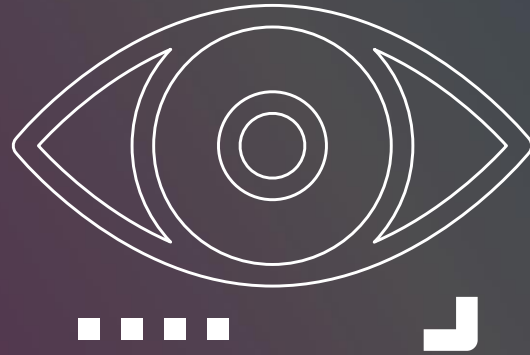
- Overwrite
- Rename



DEMO

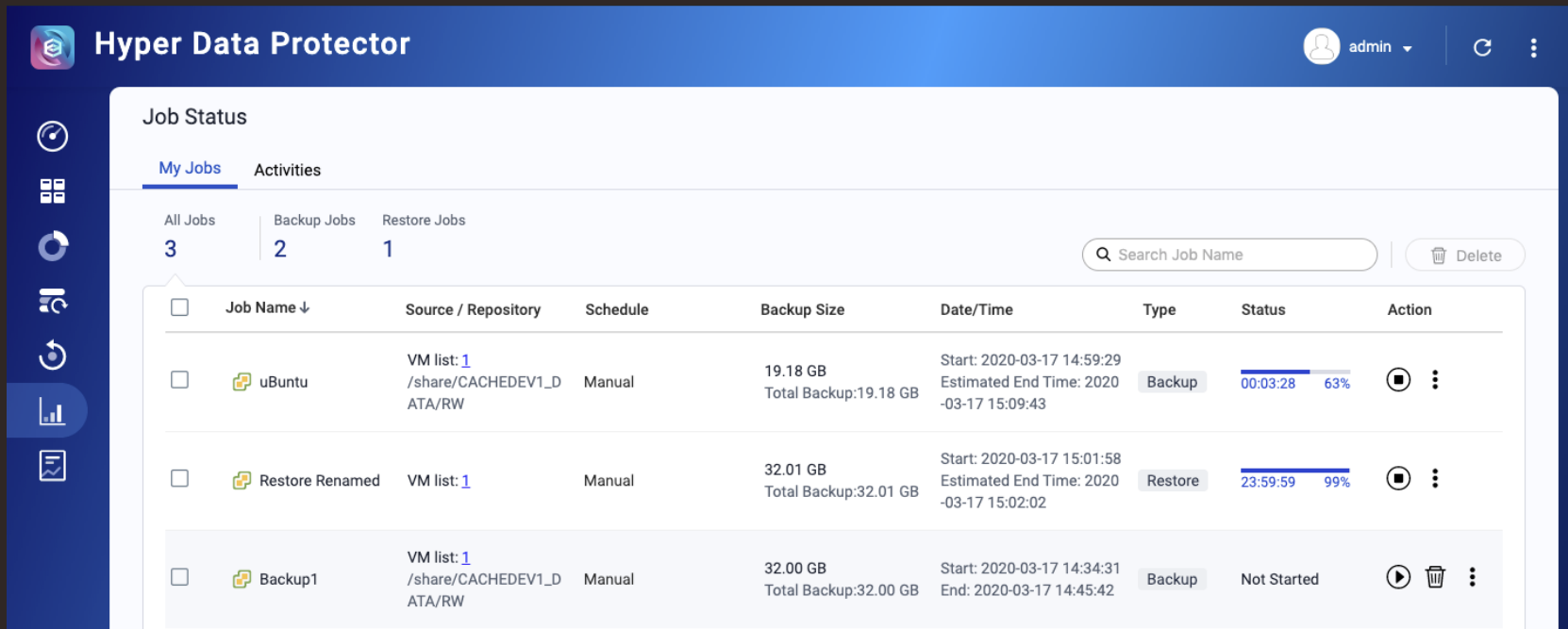


Continuous monitoring



Task overview

- Overview tasks in single-page
- Quick and intuitive operation



The screenshot displays the 'Hyper Data Protector' web interface. The top navigation bar is blue and includes the application logo, the name 'Hyper Data Protector', a user profile 'admin', and a refresh button. A left sidebar contains several icons for navigation. The main content area is titled 'Job Status' and has two tabs: 'My Jobs' (selected) and 'Activities'. Below the tabs, there are three filters: 'All Jobs' (3), 'Backup Jobs' (2), and 'Restore Jobs' (1). A search bar labeled 'Search Job Name' and a 'Delete' button are also present. The main table lists the jobs with columns for checkboxes, job names, source/repositories, schedules, backup sizes, dates/times, types, statuses, and actions.

☐	Job Name ↓	Source / Repository	Schedule	Backup Size	Date/Time	Type	Status	Action
☐	 uBuntu	VM list: 1 /share/CACHEDEV1_D ATA/RW	Manual	19.18 GB Total Backup: 19.18 GB	Start: 2020-03-17 14:59:29 Estimated End Time: 2020-03-17 15:09:43	Backup	00:03:28 63%	 
☐	 Restore Renamed	VM list: 1	Manual	32.01 GB Total Backup: 32.01 GB	Start: 2020-03-17 15:01:58 Estimated End Time: 2020-03-17 15:02:02	Restore	23:59:59 99%	 
☐	 Backup1	VM list: 1 /share/CACHEDEV1_D ATA/RW	Manual	32.00 GB Total Backup: 32.00 GB	Start: 2020-03-17 14:34:31 End: 2020-03-17 14:45:42	Backup	Not Started	  

Job Status monitoring

- Full view of backup task history

 **Hyper Data Protector**

admin

Job Status

My Jobs Activities

Status	Job Name	VM List	Type	Date/Time	Action
 Running	Restore Renamed	VM list: 1	Restore	2020-03-17 15:01:58 - 2020-03-17 15:02:02 (0 hr, 0 min, 4 sec)	
 Running	uBuntu	VM list: 1	Backup	2020-03-17 14:59:29 - 2020-03-17 15:07:07 (0 hr, 7 min, 38 sec)	
 Success	Backup1	VM list: 1	Backup	2020-03-17 14:34:31 - 2020-03-17 14:45:42 (0 hr, 11 min, 11 sec)	

Activity Notification

- Notification Center

Email

SMS

Instant Messaging

Push Service



Notification Center

 Notification Center

 Overview

 Notification Queue and History

 Service Account and Device Pairing

 System Notification Rules

 Global Notification Settings

In Overview, you can view the number of messages sent over a specific period of time. You can also view the settings of notification rules, service accounts, and device pairing.

 System Notification Rules

More

 Service Account and Device Pairing

More

 Event Notifications

 Alert Notifications

 E-mail

 SMS

 Instant Messaging

 Push Service

 Settings

 Settings

 Settings

 Settings

 Settings

 Settings

Inactive

Inactive

Inactive

Inactive

Inactive

Inactive

 System Logs

Last 50 Logs

last 30 days:  Warning:4  Error:1

More

S...	Date and ...	Users	Source IP	Application	Category	Content	Action
	2020/04/...	System	127.0.0.1	User Data Pro...	Repository Man...	[Hyper Data Protector] Deleted r	

Installation and operation



Download Hyper Data Protection in App Center

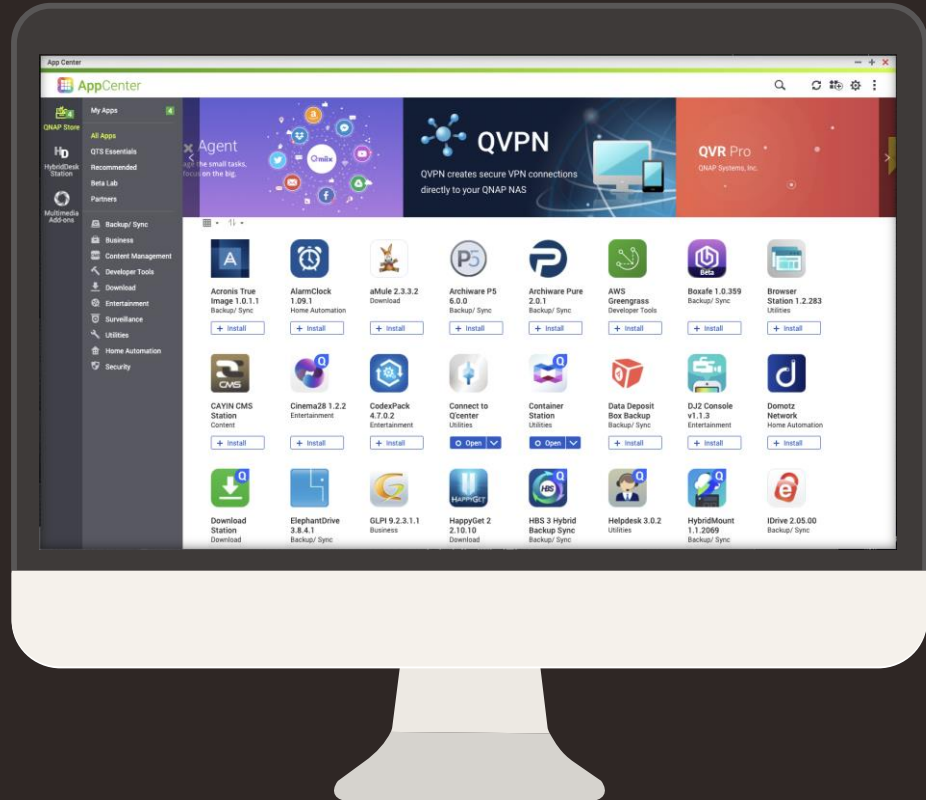
1

Install Container Station



2

Install Hyper Data Protector

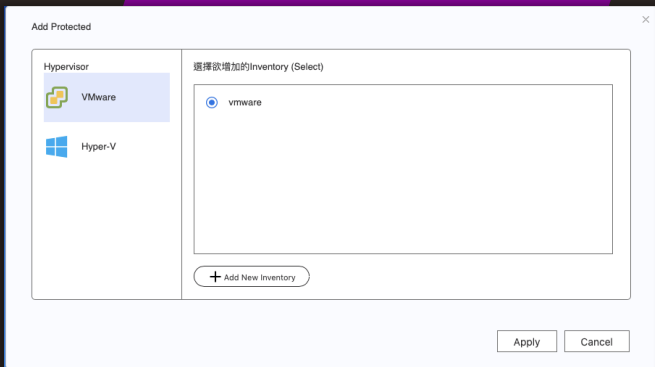


Note : HDP only supports QNAP NAS models with x86-based Intel or AMD processors.

3-step setup

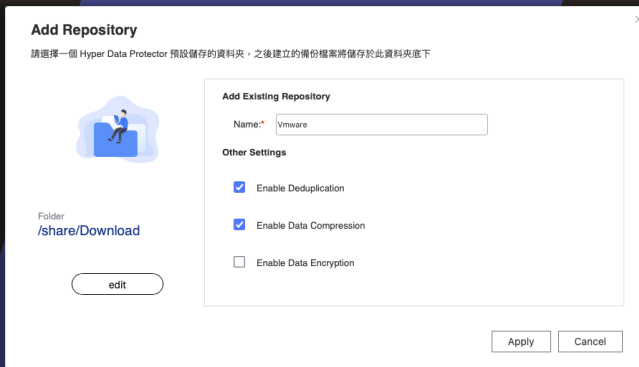
1

Create VM backup inventory



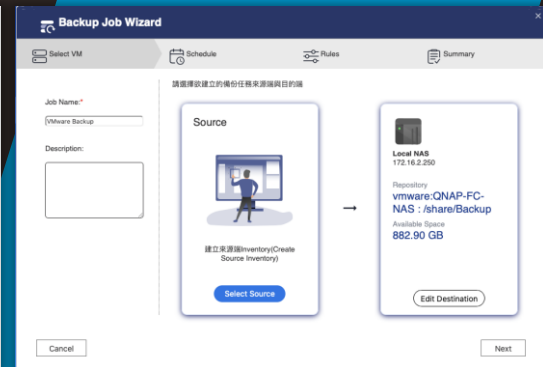
2

Create VM backup repository

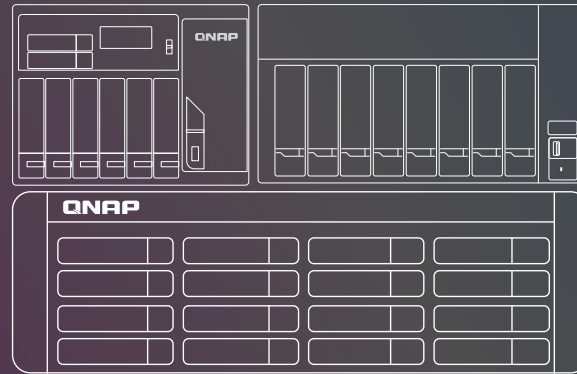


3

Create VM backup job



Recommended models



Recommended model

HDP only supports QNAP NAS models with x86-based Intel or AMD processors

SMB Entry

TS-673

- 6 x 3.5"/2.5" SATA 6Gb/s HDDs/SSDs
- AMD R-Series RX-421BD quad-core 2.1 GHz processor, burst up to 3.4 GHz
- Max 64GB RAM



SMB Mid-end

TVS-882

- 6 x 3.5-inch + 2 x 2.5-inch SATA 6Gb/s, 3Gb/s
- Intel® Core™ i5-7500 quad-core 3.4 GHz processor, Max turbo to 3.8 GHz
- Max 64GB RAM



SMB High-end

TS-1683XU-RP

- 16 x 3.5-inch SATA 6Gb/s, 3Gb/s
- Intel® Xeon® E-2124 quad-core 3.3 GHz processor (burst up to 4.3 GHz)
- Max 64GB RAM



Enterprise

TDS-16489U R2

- 20 bay, Front 16 x 3.5-inch, Rear 4 x 2.5-inch
- Intel® Xeon® E5-2630 v4
- 10-core 2.2 GHz
- Max 1TB RAM



Beta Program

Duration : From 2020/4/1 18:00 (GMT +8)
To 2020/4/30 23:59(GMT +8)

Landing Page: <http://www.qnap.com/go/solution/hyper-data-protector/>

A screenshot of the Hyper Data Protector landing page. It features a dark background with a grid of server racks. At the top center is a logo consisting of a stylized 'H' inside a blue and purple hexagon. Below the logo, the text 'Hyper Data Protector' is displayed in a large, white, sans-serif font. Underneath this, in a smaller, teal-colored font, is the text 'License-free VMware® and Hyper-V backup appliance'. A paragraph of white text follows, stating: 'With only one QNAP NAS required and with no license fees to pay, you can backup unlimited VMware® and Hyper-V environments. Hyper Data Protector provides you with a cost-effective and reliable disaster recovery plan, ensuring 24/7 operation of your services.' At the bottom center, there is a blue rectangular button with the white text 'JOIN THE BETA PROGRAM'.

HDP Beta-Download :
https://download.qnap.com/QPKG/HyperDataProtector_1.0.2_0401_x86_64.zip



**QNAP will select a participant
for a TS-332X NAS!**

How to report bugs/issues in the Hyper Data Protector Beta Program?

1

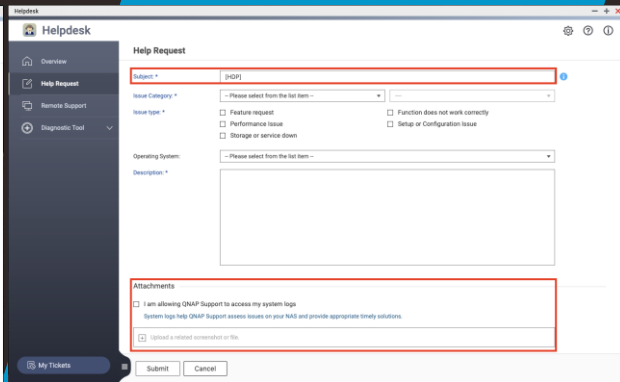
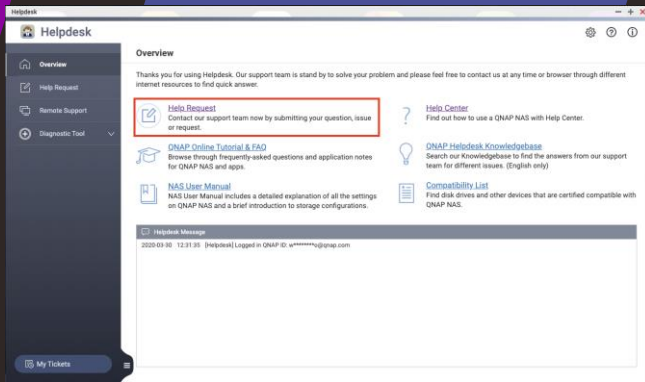
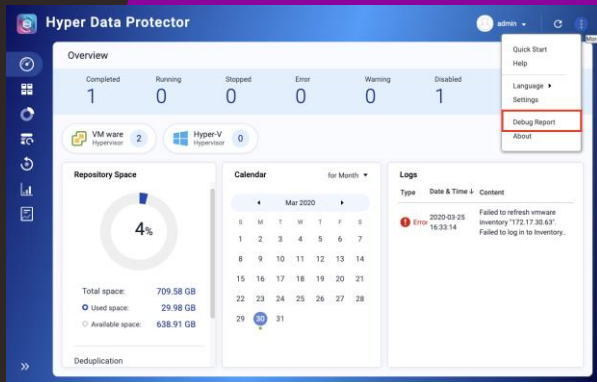
Go to Hyper Data Protector and click **:** > Click(Download) Debug report

2

Open QNAP Helpdesk in QTS(Login by QID) > Help Request

3

Subject with [HDP] in content > Describe some categories and upload the Debug Report

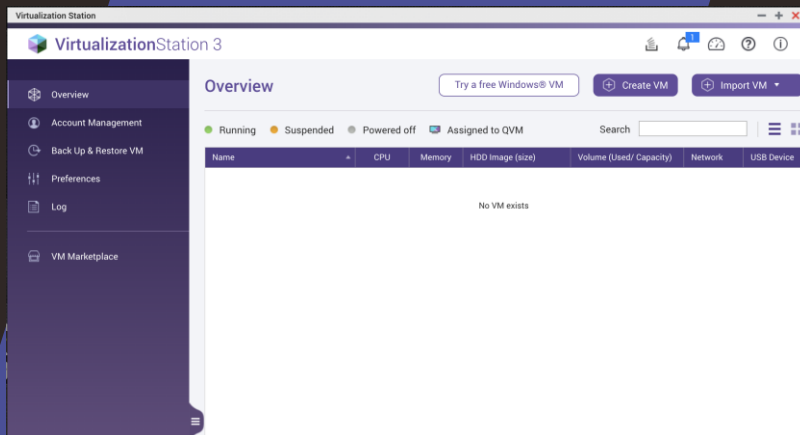


Feature roadmap

**Window server and PC
backup/restore**



**QNAP
Virtualization Station**



Summary

- QNAP NAS All-in-one central management
- High speed active backup
- Save your money, time and storage

QNAP NAS is your best choice for VM back up



QNAP

Hyper Data Protector 1.0

is your best choice!

