

The QNAP logo is located in the top left corner, featuring the brand name in white capital letters on an orange rectangular background.

QNAP®

A red badge with the year '2017' in white, positioned above the main title.

2017

The main title 'Think Big' is centered in a large, bold, blue font. A thin orange horizontal line is positioned below the word 'Think'. The background of the slide features a dynamic, abstract 3D architectural scene with various geometric shapes in grey, white, and red, some of which are illuminated with bright yellow and orange light effects, creating a sense of depth and movement.

Think Big



**Deploy a completed solution
for multiple NAS monitoring with Q'center**

Software spec base on V1.5.1202



Your Challenges, Our Solutions

IT personnel often have to monitor and manage multiple QNAP NAS in many locations

What is Q'center

An application for centrally monitoring and managing QNAP NAS that is being currently **used by over 10,000 IT professionals** worldwide.

- ✓ **Easily deployed** in large-scale network environments with Virtual Appliance support.
- ✓ Easily configurable for complex network environments with NAT router bypass support.
- ✓ **Monitor** multiple NAS status, storage pools and performance.
- ✓ Monitor this information using Visual Reports for better **Analysis**.
- ✓ Centralized Notifications/Rule, update FW for better **Management**.

Deploy Q'Center

1 QTS Application



Download and install Q'center directly from the QTS App Center.

2 Virtual Appliance



Download Q'center Virtual Appliance and deploy it on a server to monitor hundreds of NAS.

Minimum requirements for Q'center/Q'center Virtual Appliance :

X86 models / 108 GB free disk space, 1 GB memory and 4 virtual CPUs

Supported platforms: VMware ESXi (ESXi 5.0, ESXi 5.1, ESXi 5.5, ESXi 6.0),

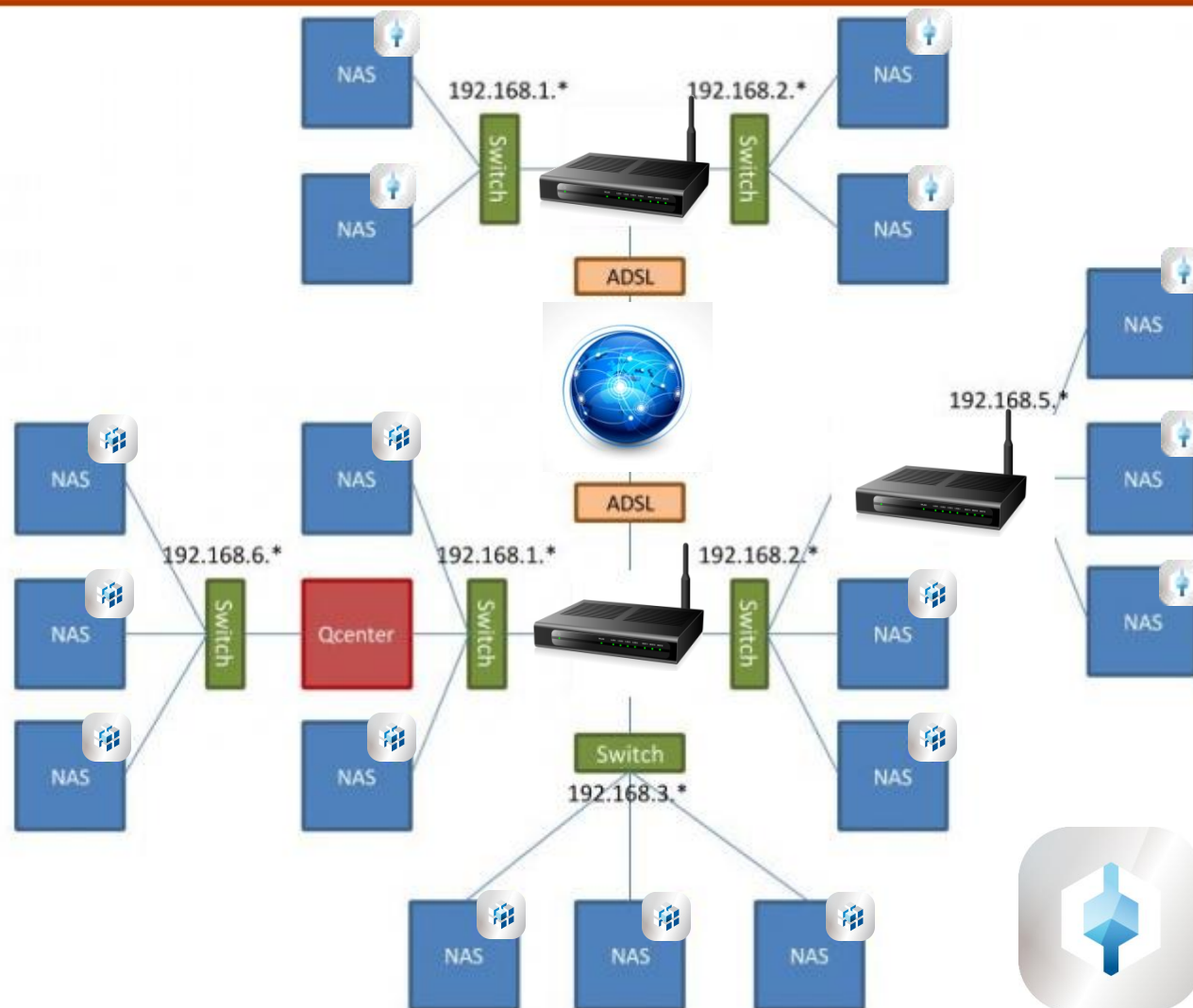
VMware Fusion 7, VMware Workstation 11, Microsoft Windows Server 2012 R2 with Hyper-V 3.0.

Deploy Q'Center

1 In the same subnet

2 Behind NAT Router

3 Through Internet



Download Q'center Assistant from the NAS and enter the Q'center IP address, Host name or myQNAPcloud account.



Big
think

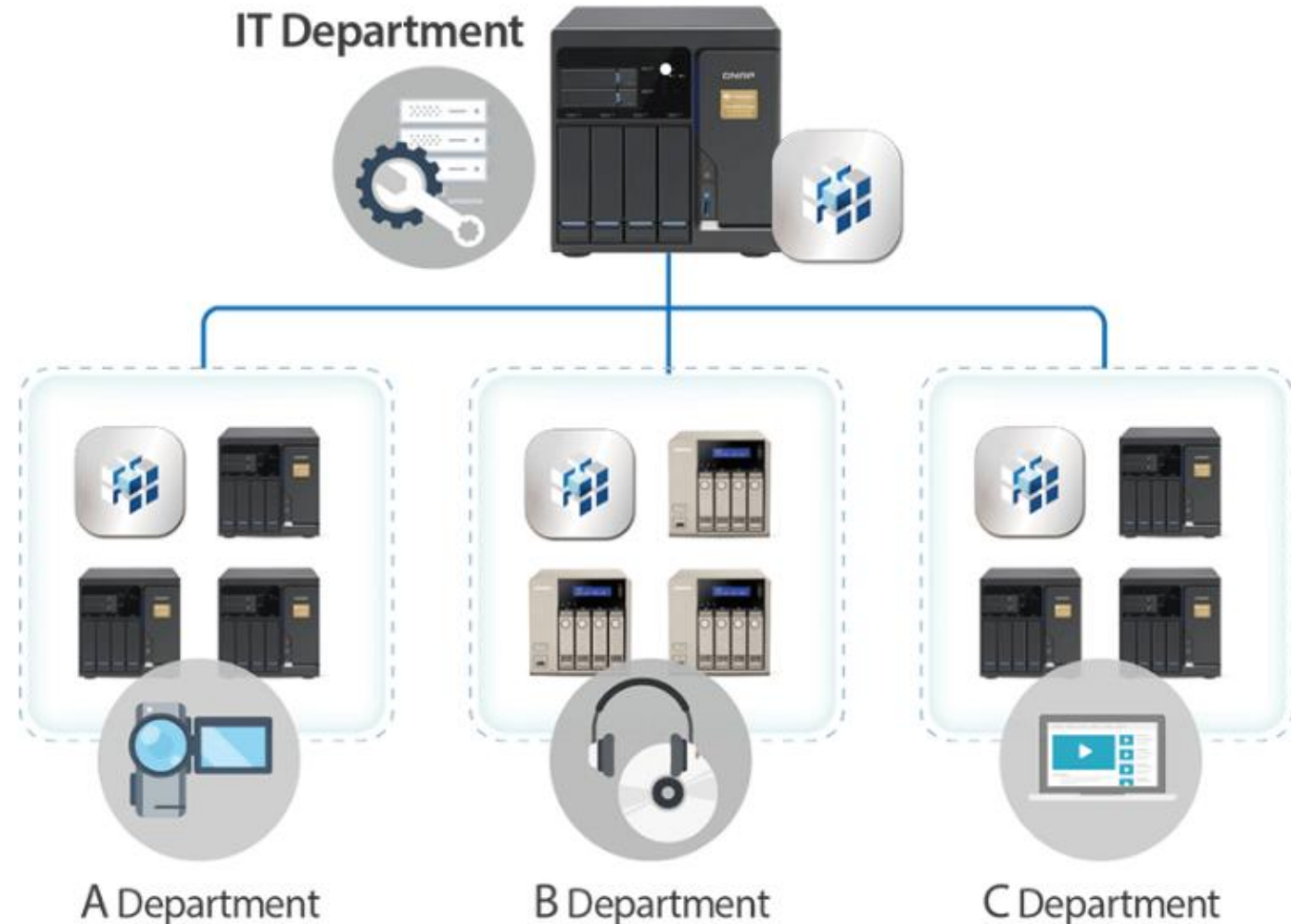
Deploy Q'Center

✓ Choose the scenario that suit your needed.

One Q'center as central IT management tool.

Or

Muiltiple Q'center as department's storage space monitoring tool.



Monitor NAS

Monitor NAS status in “Home”, “Dashboard” including:

- ✓ System Alerts,
- ✓ Server Number,
- ✓ Disk Number,
- ✓ Volume Capacity,
- ✓ Volume Number,
- ✓ and System Logs.

The screenshot displays the QNAP NAS management interface. The top section shows a red alert icon with the text "Alert: Your system has alert". Below this, there are three summary cards: "Servers total: 10 server(s) 4 server(s) are abnormal", "Disks total: 41 disk(s) 4 disk(s) are abnormal", and "Volumes total: 14 volume(s) All volumes are ready". Each card includes a progress bar and a legend for Normal (green) and Abnormal (red) status. The bottom section shows a table of server information with columns for Server, Model Name, Version, Status, Volume Health, Disk Health, Used Capacity, CPU Usage, and Memory. The table lists one server: NASAB0038, TS-469 Pro, 4.2.0 (20150630), with a status of "Alert" and "Ready".

Below the server table, the "App Center" is visible, showing a search bar and a list of apps. The "My Apps" section is active, displaying "Entertainment 5.0.0" and "Q'center Agent 1.1.17". Both apps have a toggle switch set to "ON" and an "Open" button. The "Q'center Agent" app also has a dropdown menu set to "Only display on the a".

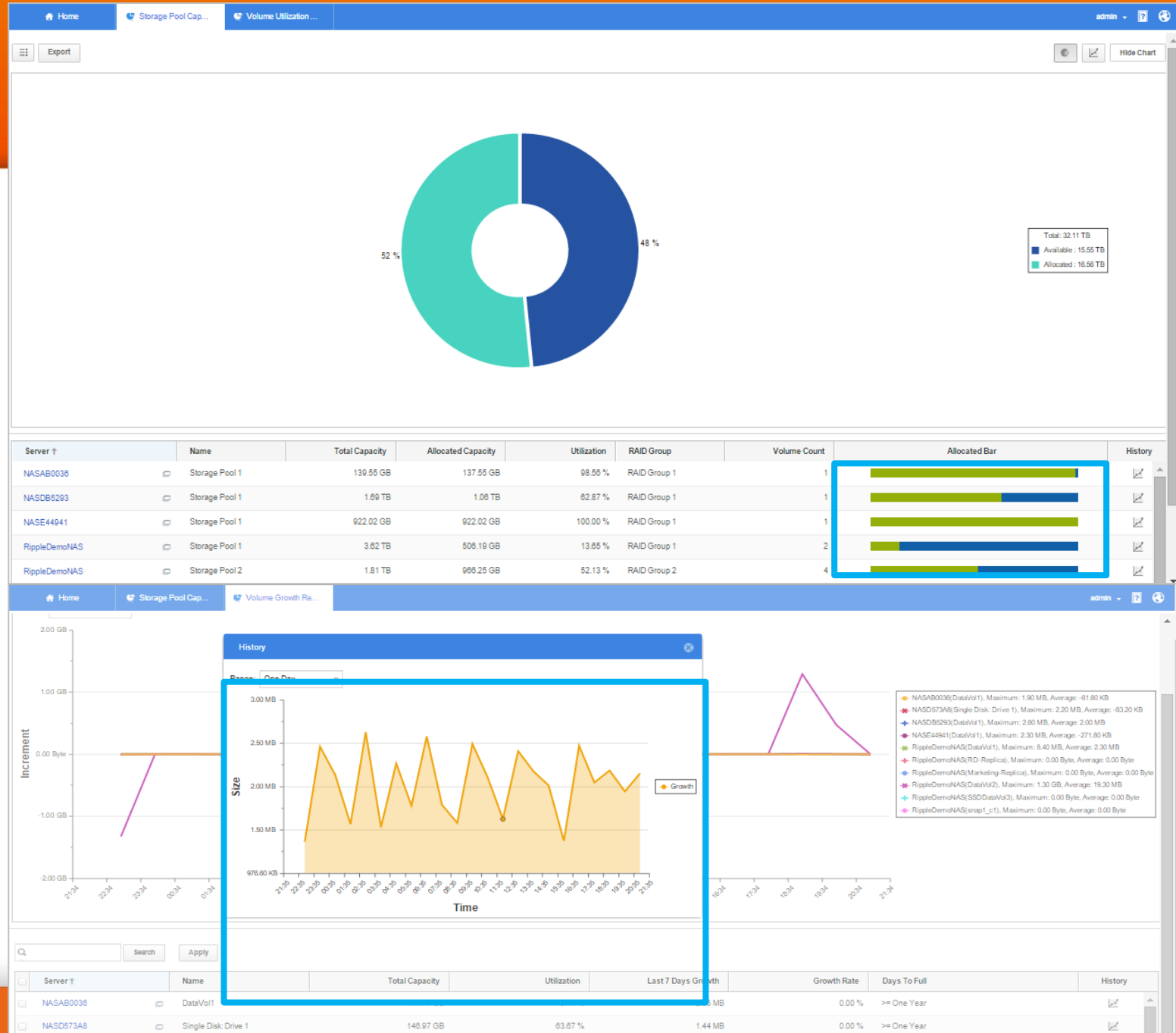
Q'center Agent:
By joining a QNAP NAS to Q'center, a Q'center Agent QPKG will be installed on the NAS and will constantly upload data depending on the type of data.

Monitor NAS

Inspect NAS Storage Pools,
Volumes, Shared Folders with:

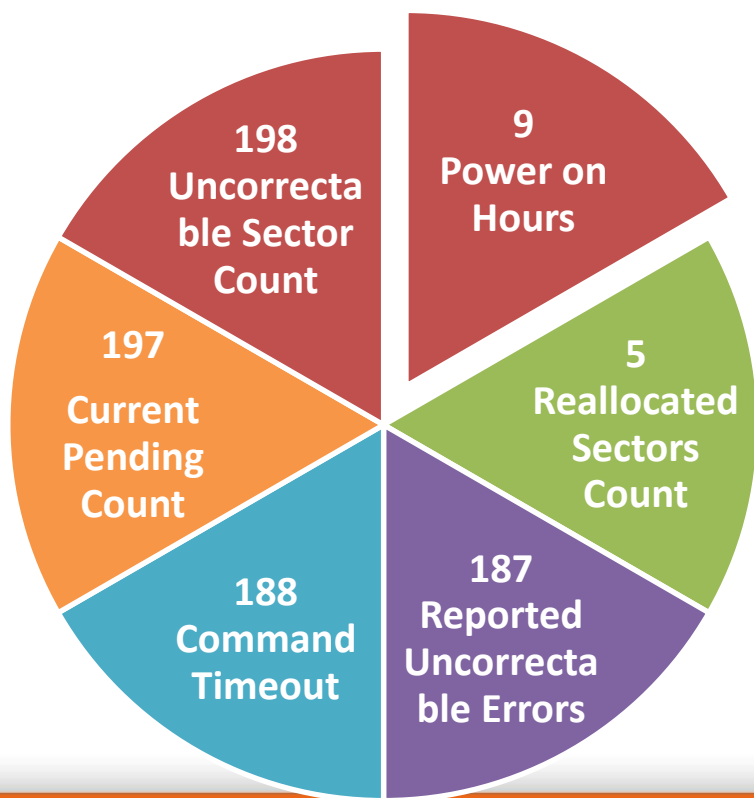
- ✓ Capability,
- ✓ Utilization,
- ✓ and Growth Rate.

✓ Provides detailed information
and historical records.



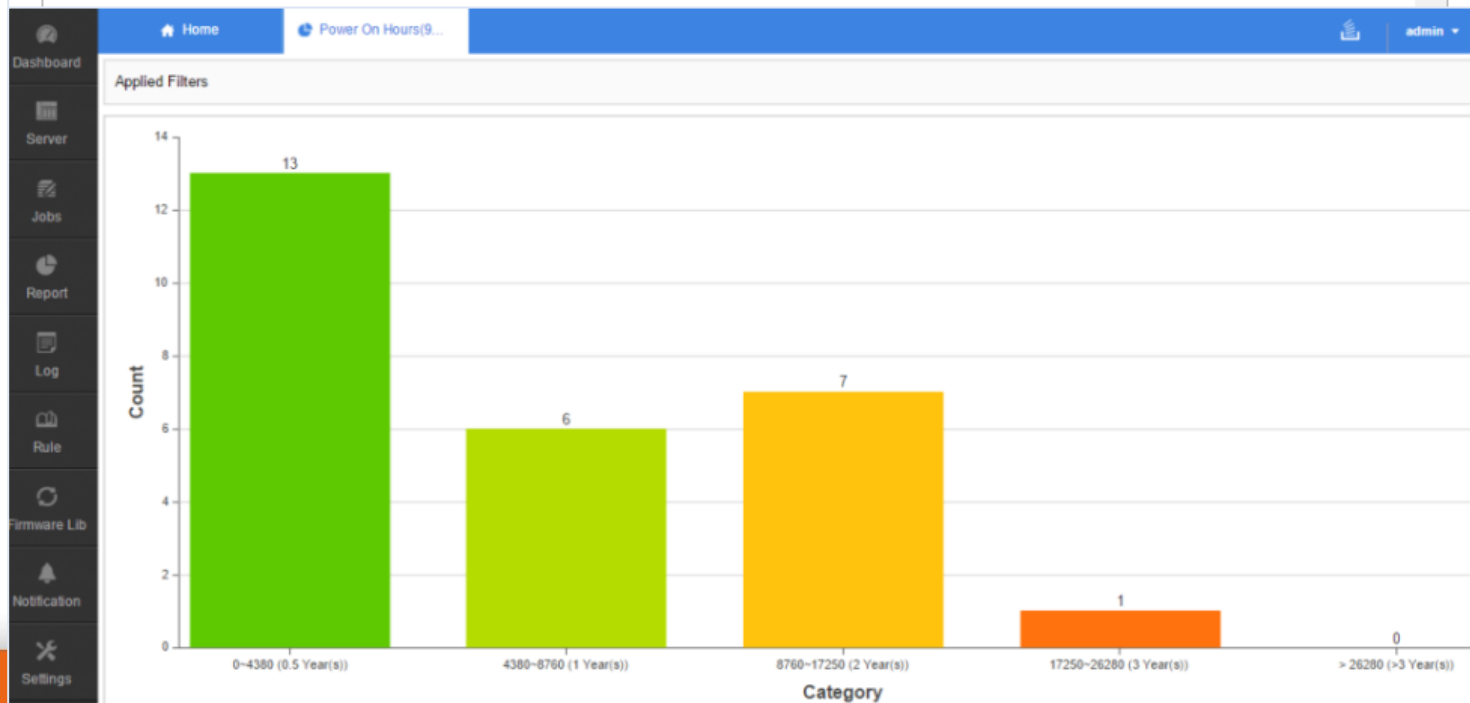
Analysis NAS

✓ Analysis the 6 most important S.M.A.R.T. Attributes of all HDD in Q'center.



SMART Information

ID ↑	Description	Value	Worst V...	Threshold	Raw Value	Status
4	Start_Stop_Count	100	100	020	222	Good
5	Retired_Block_Count	100	100	010	0	Good
7	Seek_Error_Rate	082	060	030	175196...	Good
9	Power_On_Hours	092	092	000	7278	Good
10	Spin_Retry_Count	100	100	097	0	Good



Analysis NAS

Inspect NAS CPU, Memory,
✓ **Network usage,**
✓ **Disk performance,**
✓ **Enclosure temperature and**
✓ **Fans Speed.**

Disk performance contains
✓ **Volume IOPS**
✓ **Volume throughput**
✓ **Disk throughput**
✓ **Disk IOPS**
✓ **SSD Cache hit rate report.**



Manage NAS

Set Q'center Alert Notifications:

- ✓ CPU usage
- ✓ Memory usage
- ✓ Volume usage
- ✓ Pool Usage
- ✓ Network Usage
- ✓ Server Abnormal Status

The screenshot shows the 'Edit Alert Policy' window in the Q'center interface. The 'Alert Criteria' tab is selected, showing a table of metrics and their alert thresholds. The 'CPU Usage' metric is highlighted in the dropdown menu.

Navigation: Home | Notification | Rule

Alert Policy | SMTP Server | SNMP Trap

Edit Alert Policy

Basic Information | Server List | Alert Criteria

Add

Metric Name	Criterion	Value	Durati...	Resend Period	Repeat	Severity
Metric	Criterion	Value	Minute	Minutes	Times	Severity
CPU Usage	Greater than			5 min(s)	5	Error
Memory Usage	Greater than	80 %	1 min(s)	5 min(s)	5	Error
Volume Usage	Greater than	100 M...	1 min(s)	5 min(s)	5	Warning
Pool Usage	Greater than	80 %	1 min(s)	5 min(s)	5	Warning
Network Download						
Network Upload						
Server Abnormal						

Update Cancel

OK Cancel

Manage NAS

Set Rules for all NAS with:

- ✓ Network: IP configuration
- ✓ Security: Block access
- ✓ Notification: SMTP settings
- ✓ Domain Security: Join Domain
- ✓ FTP Service
- ✓ Telnet/SSH Service
- ✓ SNMP Service
- ✓ Win/Mac/NFS Share Service

The screenshot displays the QNAP NAS management interface. At the top, there are tabs for 'Home', 'Notification', and 'Rule'. Below these is a search bar with the placeholder 'Name, Description...' and buttons for 'Search', 'Add', and 'Remove'. The main content area is titled 'Edit Rule' and has a close button in the top right corner. On the left side, there is a sidebar menu with categories: 'System Settings' (containing 'Network', 'Security', and 'Notification'), 'Privilege Settings' (containing 'Domain Security'), and 'Network Services' (containing 'FTP', 'Telnet/SSH', 'SNMP', and 'Win/Mac/NFS'). The 'Security' option under 'System Settings' is selected. The main panel shows the 'Rule' configuration for 'Network Access Protection'. It includes a 'Security Level' tab and a section to 'Enable this rule' with three radio button options: 'Allow all connections', 'Deny connections from the list' (which is selected), and 'Allow connections from the list only'. Below this, there is a text prompt: 'Enter the IP address or network from which the connections to this server will be allowed or rejected.' followed by 'Add' and 'Remove' buttons. A table lists the configured rules:

	Genre	IP or Network Domain	Time Left for Blocking
<input type="checkbox"/>	Single IP address	172.17.32.188	Block forever
<input type="checkbox"/>	Single IP address	172.17.32.204	Block forever

At the bottom right of the interface are 'OK' and 'Cancel' buttons.

Manage NAS

Firmware Library :

✓ Upload QNAP NAS Firmware to Q'center and deploy the Firmware to multiple NAS at once.

✓ Or restore to an older version if a NAS behaves abnormally after updating the firmware.

The screenshot displays the QNAP Q'center interface, specifically the Firmware Library and Server management sections.

Firmware Library Section:

- Navigation tabs: Home, Firmware Lib, Server.
- Search bar: Model, Firmware vers.
- Buttons: Search, Upload, Download, Update, Delete, Check For Update.
- Status: Last Checked: 2015/09/01 22:14:25 Success.
- Table of Firmware Models:

Model Name	Server
TVS-871T	TVS-871-HDD, TVS-871T-47
TS-451S	NASEA1405
TS-879 Pro	RippleTestNAS
TS-870 Pro	NASDB5293, RippleDemoNAS
TS-489 Pro	NASAB0038, RippleJBODNAS
TS-120	NASD573A8
TAS-288	NAS2A2B2C
TS-853S Pro	NASE44941

Update Server Section:

- Navigation tabs: Home, Firmware Lib, Server.
- Search bar: Server, Model...
- Buttons: Search, Add, Action, App Manager.
- Table of Servers:

Server	IP Address
NASAB0038	172.17.32.74
NASD573A8	172.17.32.98
NASDB5293	172.17.32.29
NASE44941	172.17.32.182
NASEA1405	172.17.32.142
RippleDemoNAS	172.17.32.250
✓ RippleJBODNAS	172.17.32.221
RippleTestNAS	192.168.0.100
TVS-871-HDD	172.17.26.19
TVS-871T-47	172.17.26.6

Update Server Dialog:

- Model Name: TS-489 Pro
- Count: 1
- Update Version: 4.2.0 (20150810), 4.2.0 (20150810), 4.1.3 (20150408)
- Auto Reboot after Update: ☐
- Buttons: OK, Cancel

TS-469 Pro Dialog:

- Stored Firmware Image:
- Version: 4.2.0 (20150810), 4.1.3 (20150408)
- Buttons: OK

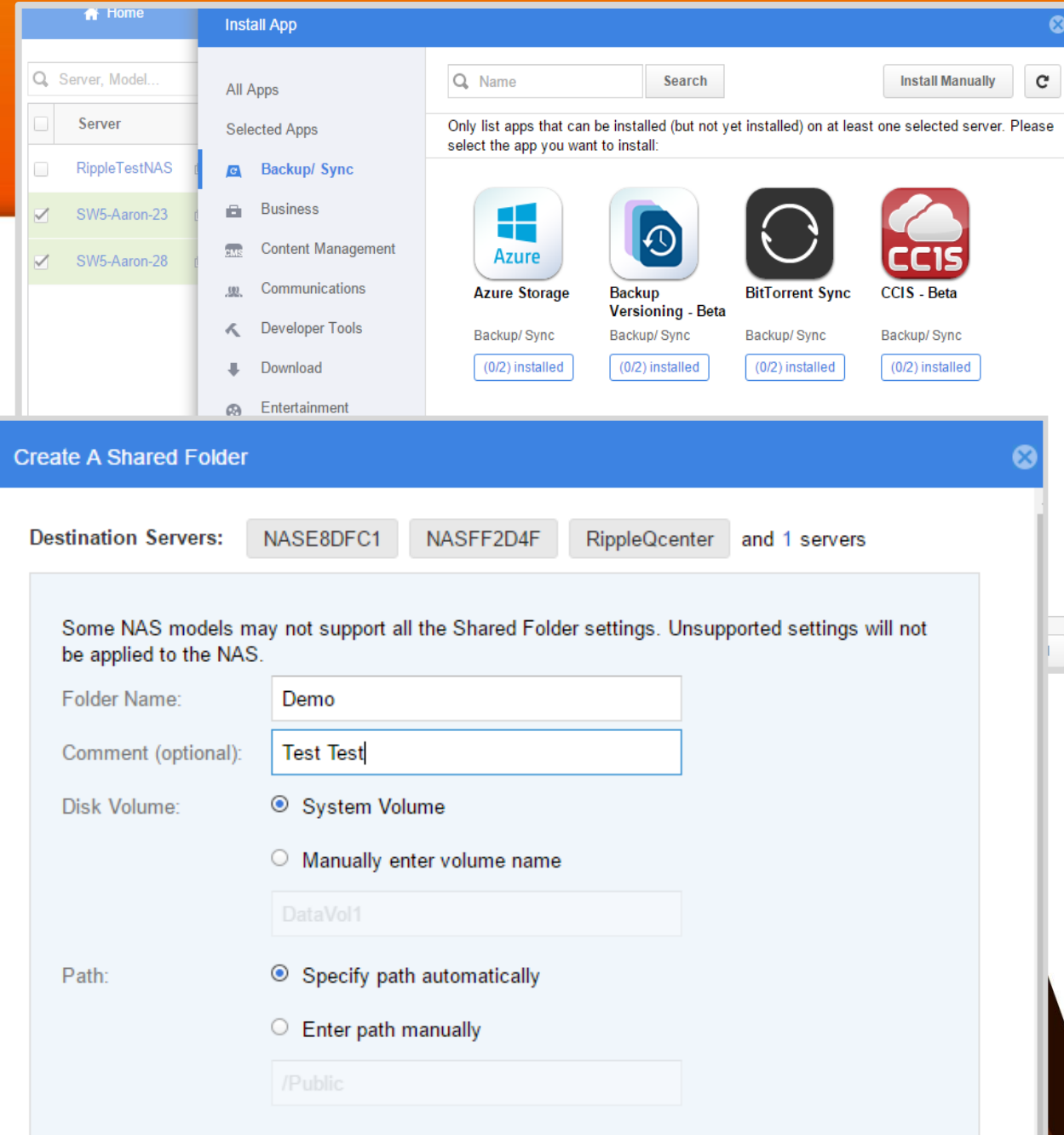
Manage NAS

App manager:

Upload community App to Q'center and deploy to all NAS or allow each NAS to download the App from App center.

NAS Manager:

Setup shared folder on multiple NAS. Support change the location and permission. Backup the configurations of all managed NAS.



Purpose Q'center to win your bid

Basic Requirements for up to 100 NAS:

4 virtual CPUs with at least 1GB RAM and 108 GB storage space.

Between 100 ~ 500 NAS:

Dedicated Server, Intel i5 Quad Core (or similar) with at least 8GB RAM and customized 500GB storage space.

More than 500 NAS:

Dedicated Server, Intel i5 Quad Core (or similar) with at least 16 GB RAM and customized 1TB storage space.

