CHR in NAS VM

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About:

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Agenda

- CHR in General
- CHR setup in NAS
- Different methods to add CHR in NAS
- Connections
- Usage
- Q & A

CHR in a nutshell

Cloud Hosted Router (CHR) - **RouterOS version** intended for running as a virtual machine. It supports the **x86 64-bit architecture** and can be used on most of the popular hypervisors such as **VMWare, Hyper-V, VirtualBox, KVM** and others. CHR has **full RouterOS** features enabled by default but has a different licensing model than other RouterOS versions.

Licencing model for CHR:

License	Speed limit	Price
Free	1Mbit	FREE
P1	1Gbit	$45
P10	10Gbit	$95
P-Unlimited	Unlimited	$250

Free – Speed limited to 1Mbit

P1 – Limited to 1Gbit upload per interface
All the rest of the features provided by CHR are available without restrictions.

P10 – Limited to 10Gbit upload per interface

P-Unlimited – Unlimited

Disk Images

RAW disk image (.img file) (import method)
VMWare disk image (.vmdk file)
Hyper-V disk image (.vhdx file)
VirtualBox disk image (.vdi file)

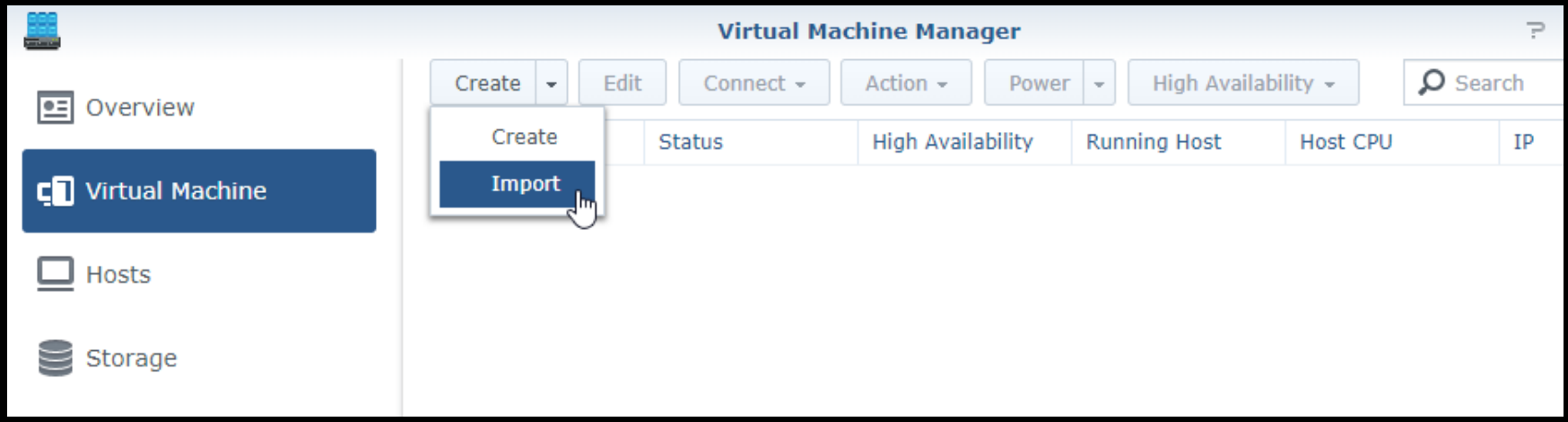
Installation of CHR in NAS

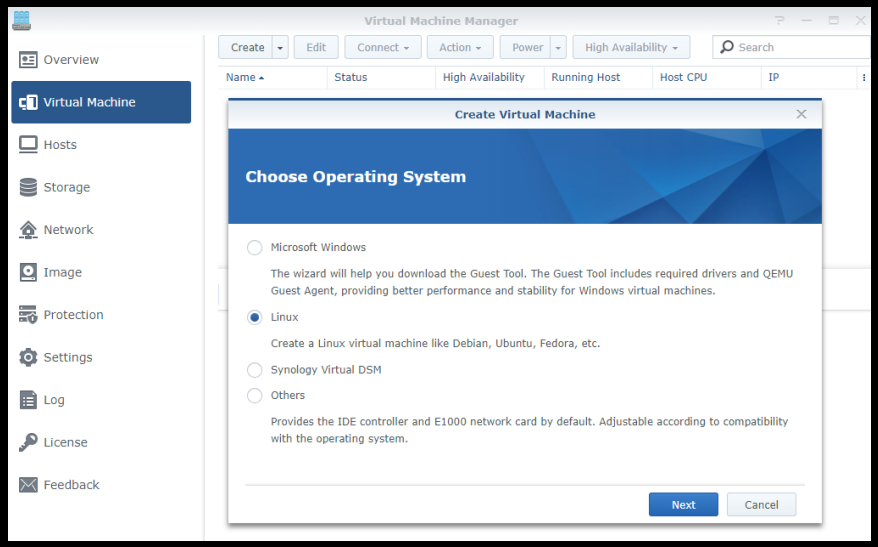
Synology®

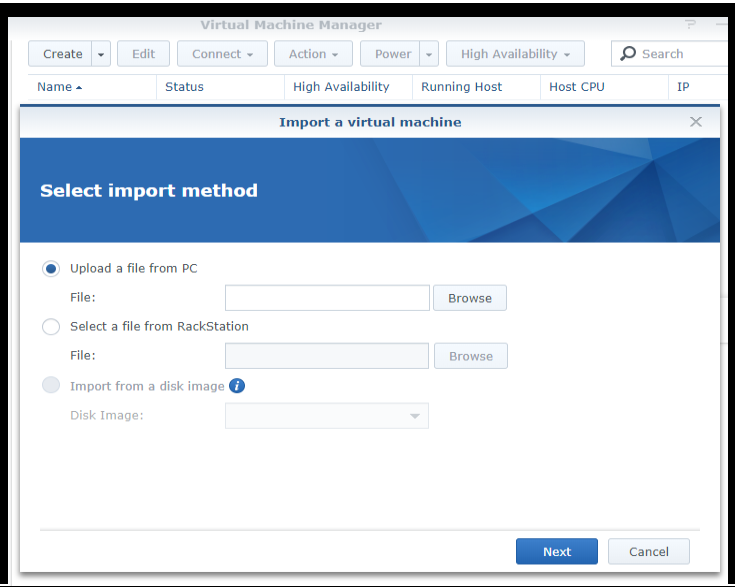
Virtual Machine Manager

Live Demonstration

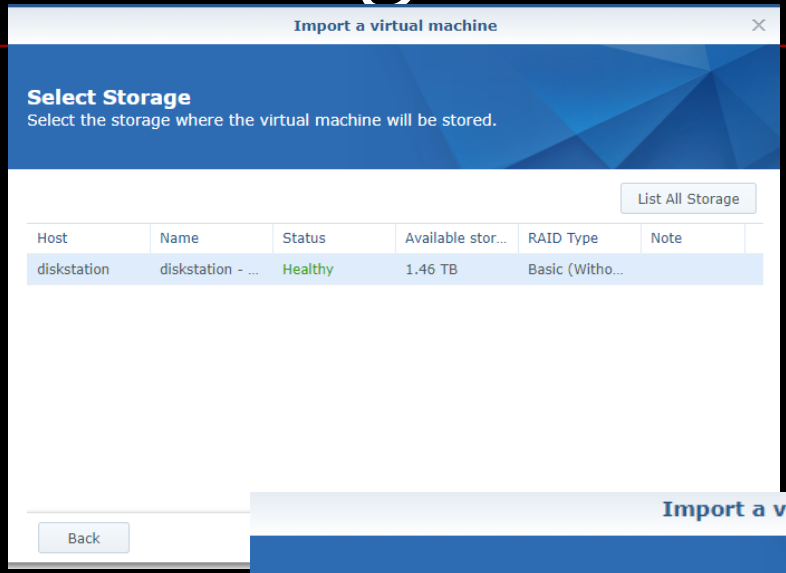
Methods to add CHR:

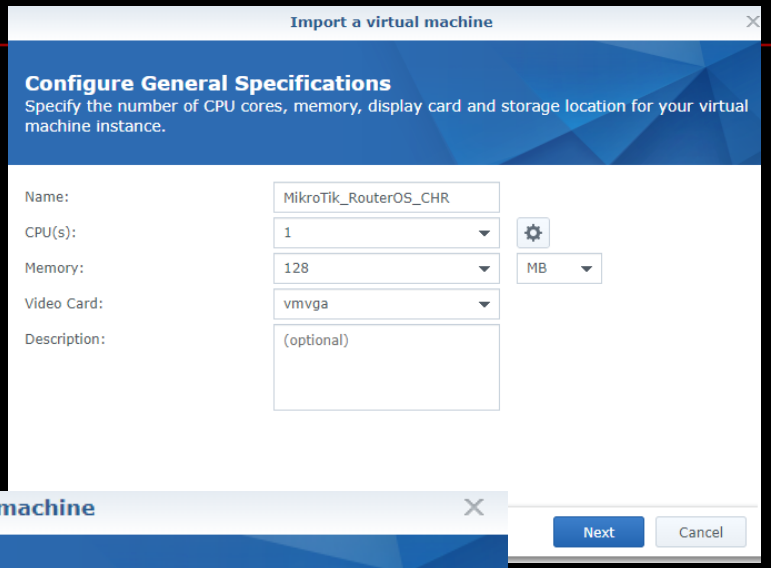


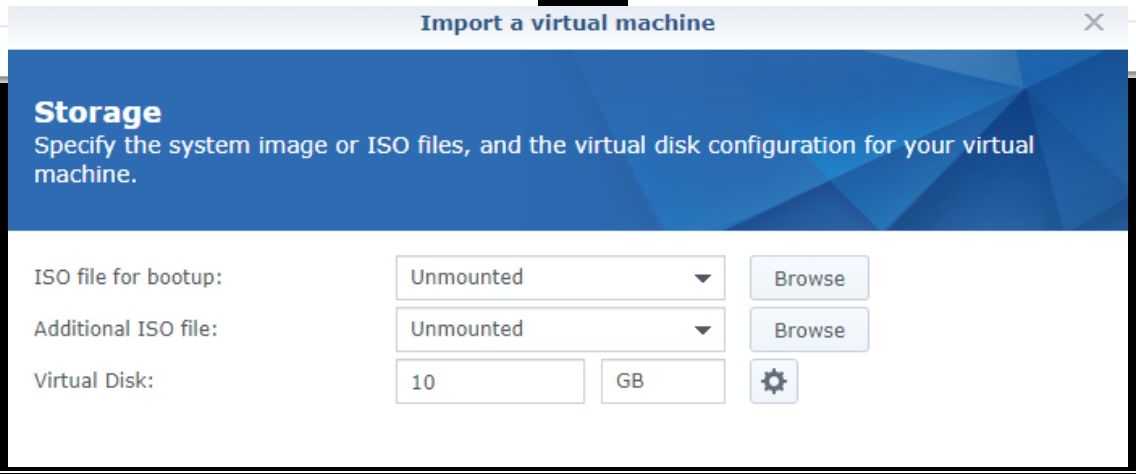




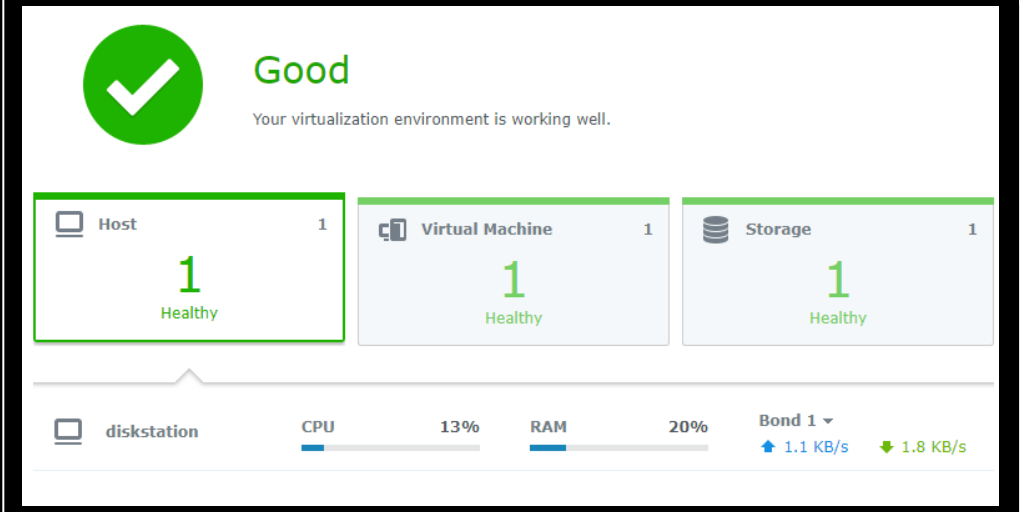
Creating CHR

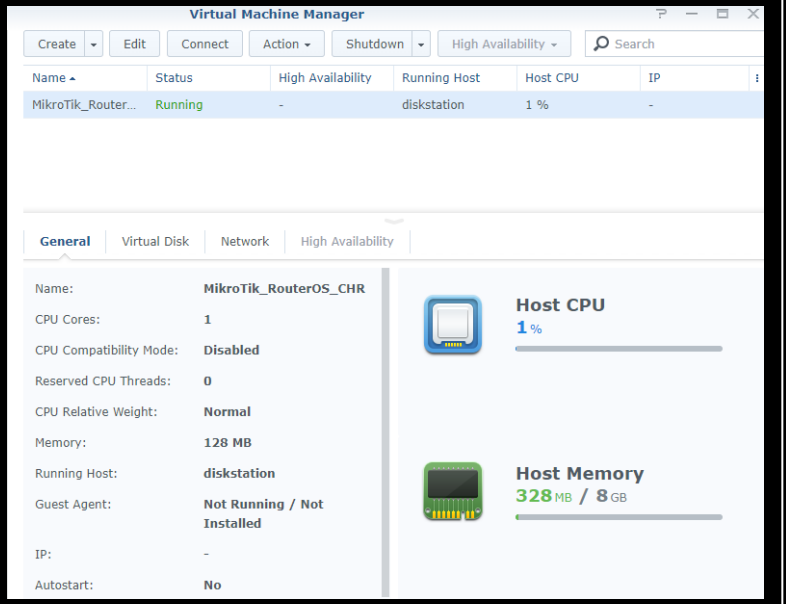




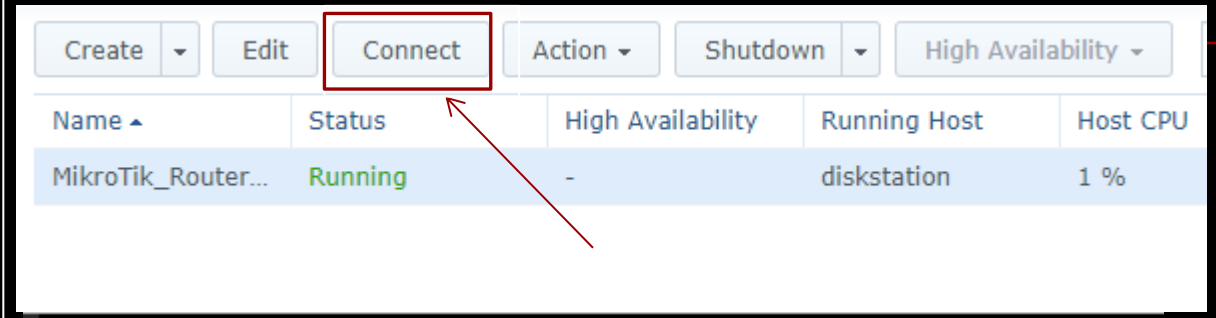


Completion


Good
Your virtualization environment is working well.
Host 1
1
Healthy
Virtual Machine 1
1
Healthy
Storage 1
1
Healthy
diskstation
CPU 13%
RAM 20%
Bond 1
1.1 KB/s
1.8 KB/s


Virtual Machine Manager
Create
Edit
Connect
Action
Shutdown
High Availability
Search
Name
Status
High Availability
Running Host
Host CPU
IP
MikroTik_Router...
Running
-
diskstation
1 %
-
General
Virtual Disk
Network
High Availability
Name: MikroTik_RouterOS_CHR
CPU Cores: 1
CPU Compatibility Mode: Disabled
Reserved CPU Threads: 0
CPU Relative Weight: Normal
Memory: 128 MB
Running Host: diskstation
Guest Agent: Not Running / Not Installed
IP: -
Autostart: No
Host CPU
1 %
Host Memory
328 MB / 8 GB

Connection




```
MikroTik 6.43.8 (stable)
MikroTik Login:


[admin@MikroTik] > system
[admin@MikroTik] /system> license print
  system-id: oHFMfJ1PZVA
      level: free
[admin@MikroTik] /system>> _
```

```
[admin@MikroTik] > system
[admin@MikroTik] /system> resourc print
                   uptime: 5m50s
                  version: 6.43.8 (stable)
               build-time: Dec/21/2018 07:10:42
             free-memory: 77.8MiB
            total-memory: 96.0MiB
                      cpu: Intel(R)
                cpu-count: 1
            cpu-frequency: 2394MHz
                 cpu-load: 0%
           free-hdd-space: 9.9GiB
          total-hdd-space: 9.9GiB
  write-sect-since-reboot: 126264
         write-sect-total: 126265
       architecture-name: x86_64
              board-name: CHR
                platform: MikroTik
```

Usage

- Router with NAS storage and application functions
  - NAS functions:
    - Mail/video/storage/HA
- NAS with multiple routers setup via VM
- For conducting MikroTik Training lessons

Q & A

Thank you