

How to Resize AOS 8.x MM or VMC

One of the benefits of running an AOS 8.x Mobility Master (MM) or Virtual Mobility Controller (VMC) is that if/when needed, it can be scaled up easily without purchasing new hardware or licenses*.

Instructions on migrating a MM or VMC to a larger platform size is covered in the 'Aruba Mobility Master and VMC Installation Appendix' at the end of the PDF. But first, let's understand what is involved.

* - Note that if you have licenses on a standalone or MCM VMC with an MC-VA-XX and then you scale up that platform, it WILL be relicensed.

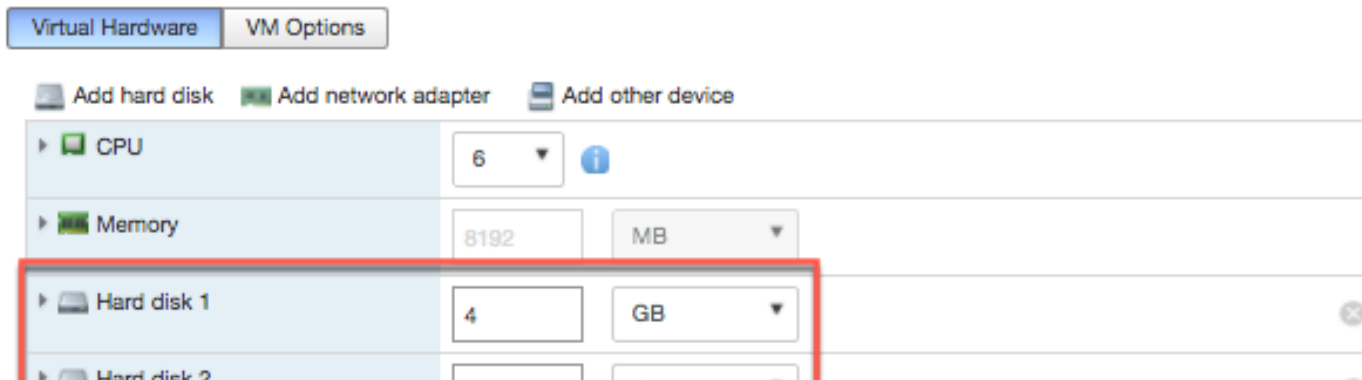
What disks are on the MM or VMC?

When you look at the virtual machine settings of an MM or VMC, there will be two disks:

Hard Disk 1 - should be 4GB and this is where the bootloader and AOS image partitions are located (partition 0 and partition 1). **Do not change or modify.**

Hard Disk 2 - will default to 6GB from the MM or VMC OVA (unless deployed from the migration tool, where it will be sized according to the platform selected). This is where the /flash partition is, used by applications to store data and configuration. This is the disk that will be resized.

This is done this way to ensure that we can support moving to a new hard disk for a larger /flash with minimal impact to the system. This was done to drastically reduce the required disk size when it was maintained on a single virtual disk.



It goes without saying that the MM or VMC being resized should be backed up externally, as well as via a Snapshot to be thorough.

The 'Aruba Mobility Master and VMC Installation Guide' has the VM sizing requirements for each type of MM or VMC platform. Memory and Flash/Disk sizing match for each platform. So when resizing the MM or VMC, the RAM must be at least as large as in use. Conversely, the size of the Flash Disk should be at least half of the RAM provisioned. If the provisioned RAM is more than an error will be thrown in the console. So it is not supported to provision a large amount of RAM for a small Flash disk/platform



```
Aruba Networks
ArubaOS Version 8.1.0.0 (build 59206 / label #59206)
Built by p4build@pr-hpn-build01 on 2017-04-13 at 20:44:01 AST (gcc version 4.7.2)
(c) Copyright 2016 Hewlett Packard Enterprise Development LP.

[20:23:43]:Starting device manager           [ OK ]

WARNING: Flash size (5 GB) should be at least half the size of RAM (16 GB)
-Reduce the RAM size or re-add a new hard disk with at least half the size of RAM

<<<<< Welcome to Aruba Networks - Aruba MM-UA >>>>>

[20:23:46]:Probing for real-time clock       [ OK ]
[20:23:46]:Uncompressing core image files
```

To resize the MM or VMC, the VM must first be shut down. Once powered off, a new hard disk will need to be created ('Hard Disk 3' required). In the below example, the MM-VA-500 (6 Cores, 8GB RAM, 6GB of Disk) was resized to an MM-VA-1K (8 Cores, 12GB of Disk) by changing the CPU and RAM and creating Hard Disk 3 at 12GB in size.



```

Aruba Networks
ArubaOS Version 8.1.0.0 (build 59206 / label #59206)
Built by p4build@pr-hpn-build01 on 2017-04-13 at 20:44:01 AST (gcc version 4.7.2)
(c) Copyright 2016 Hewlett Packard Enterprise Development LP.

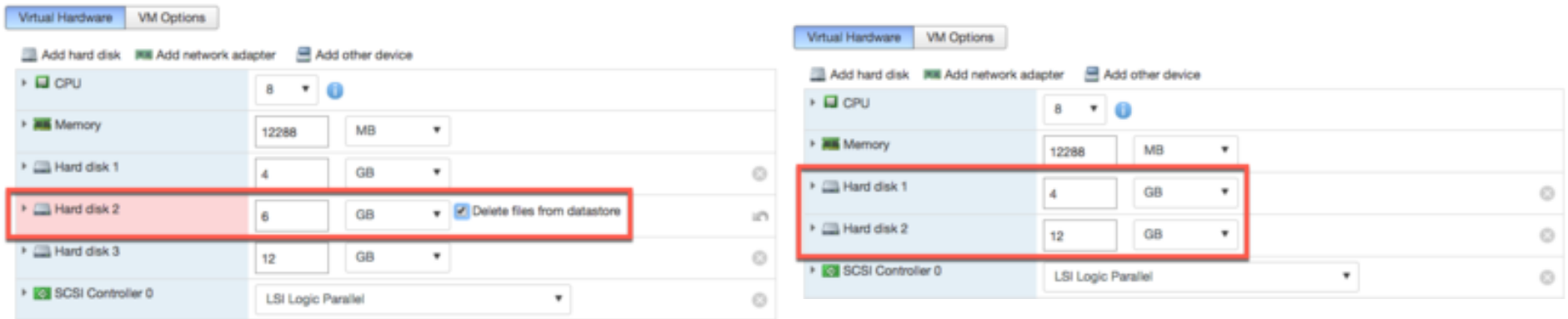
[20:42:29]:Starting device manager          [ OK ]

Formatting new flash                        [ OK ]
Forcing filesystem check on new flash      [ OK ]

Mounting new flash                         [ OK ]
Copying files to new flash                 [ OK ]

```

Once the migration is complete, and the new MM or VMC is stood up, the old 'Hard Disk 2' can be deleted at any time (though it should be halted as a best practice before deleting). Once 'Hard Disk 2' is deleted, 'Hard Disk 3' will automatically rename itself to



Once done, the new appliance platform capacity should be available.

Before Migration:

```

-----
Mgmt Port HW MAC Addr      : 00:0C:29:F1:0D:92
HW MAC Addr                : 00:0C:29:F1:0D:9C
Product key#               : MM3F10D92
Activate license           : Not Applicable
Active device type         : MM-VA-500
-----

```

After Migration

Caveats

Only three disks will be recognized by AOS, so in the above example, if we needed to add a 20GB disk later on, it would not be recognized if a 6GB disk is deleted. Once the non-used disk is deleted, data would be migrated upon reboot/powerup as shown above.

Note that any new disks being added, the new disk being added should have a higher Virtual SCSI device node number than the others, otherwise the disk names will get re-ordered within AOS and the data migration won't happen and may cause other issues.

Advanced Options

These advanced options do not usually need to be changed.

The screenshot shows a management console interface for configuring a virtual disk. On the left, there are navigation links: [Device Type](#), [Select a Disk](#), and [Create a Disk](#). Below these is the section **Advanced Options** with the status 'Ready to Complete'. The main area is titled 'Specify the advanced options for this virtual disk. These options do not usually need to be changed.' It contains several settings:

- Virtual Device Node:** A dropdown menu is open, showing a list of SCSI device nodes: SCSI (0:1), SCSI (0:2), SCSI (0:3), SCSI (0:4), SCSI (0:5), SCSI (0:6), SCSI (0:8), and SCSI (0:9). The 'SCSI (0:1)' option is highlighted in blue.
- Mode:** A checkbox labeled 'Independent' is checked.
- Cache:** A radio button labeled 'Nonpersistent' is selected. Below it, the text reads: 'Changes to this disk are discarded when you power off or reboot the virtual machine. Changes are permanently written to the disk when you create snapshots.'