

Adding a Hard Drive to Increase Available Disk Space

Unified Visitor Management

amigopod Technical Note

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Introduction

This technical note explains how to increase available disk space in a VMWare based appliance. Our default virtual machines ship with an 8 GB disk, which is suitable for most deployments. For a deployment requiring enhanced logging, or disk usage, this guide will step you through the required actions.

Note that the rack mount VMA appliances cannot have hard drives added. This guide is for virtual machines only.

Audience

This document is intended for network administrators and system integrators deploying an amigopod-based visitor management solution.

Basic familiarity with the amigopod Visitor Management Appliance is assumed. For in-depth information about the features and functions of the amigopod appliance, refer to the amigopod Deployment Guide.

Document Overview

The first section of the document explains adding a hard drive within VMWare.

The next section contains the steps within the Amigopod interface to detect and allocate the new disk.

Disclaimer

The topics of network design, security architectures and visitor access are complex subjects, and no single document can hope to cover all of the possible combinations of network equipment, network design, deployment requirements, and device configurations, nor can all the possible security implications for a particular recommendation be covered.

Therefore, while you read this document, it is best to consider it as a guide to developing your own understanding of the network design topics covered, and as a basis for further investigation.

Adding a Hard Drive

Please refer to your VMWare documentation for changes specific to your version and platform. This example uses Server 2.0.

Safely Power Off the VMA

Make sure the virtual machine is powered off. If VMWare is configured to send the soft reset signal to the operating system, this can be dine within VMWare. To be safe, the Amigopod UI has a **Shutdown** action under **Administrator > System Control**.

Home

- Start Here
- ➡ Language
- Time Zone
- Change Password

Guest Manager

- ➡ Start Here
- Create Account
- Create Multiple
- List Accounts
- Edit Accounts
- Active Sessions
- Import Accounts
 Export Accounts
- Customization

Reporting Manager

- Start Here
- ➡ List Reports

Administrator

- ➡ Start Here
- Backup & Restore
- Content Manager
- High Availability
- Network Setup
- Operator Logins
- OS Updates
- Plugin Manager
- Security Manager
- Server Time
 System Control
 - System Control
 - System Config

Use the commands below to shutdown or restart this server.



Shutdown Now Stop all services and start the OS power-down sequence immediately.





Reboot Now

Restart Services Restart all key system services without restarting the system.



Schedule Shutdown/Reboot Setup a scheduled reboot or shutdown of the system.

More Options



System Configuration Make changes to advanced system configuration parameters.



System Log Configuration Make changes to the syslog configuration of the system.

Snapshot Virtual Machine

It is highly recommended to back up your virtual machine. This is best done by performing a snapshot. Some versions of VMWare may not allow hardware configuration changes while a snapshot is in place. If that is the case in your environment, you can safely perform a snapshot after the hardware wizard below.

Add the Hard Drive

Log into the VMWare UI and select the virtual machine. You should see a single hard drive. Under commands, select **Add**.

Summary Console Tasks Events Permissions	
Performance	Status
Processors 1 X 2.735 GHz 0 GHz	Power Powered
Memory 512 MB	Guest OS 🔬 Other Linux (32-bit)
Notes	VMware Tools
Hardware	Virtual Hardware Version 4
Processors 1	DNS Name Not Available
Wemory 512 MB	IP • Not Available
□	•
Network Adapter 1 Bridged	Power On
Network Adapter 2 HostOnly	Add
CD/DVD Drive 1 (IDE 1:0) Using device	 Snapshot Take Snapshot
SCSI Controller 0 LSI Logic	Configure VM Generate Virtual Machine Shortcut

Run through the Add wizard and select the options that suit your deployment. In this example we will add a second 8 GB disk utilizing all the VMWare defaults.

Select Hard.

🖶 Add Hardware Wizard	×
Add Hardware Wizard Pages Hardware Type Hard Disk Properties Ready to Complete	Hardware Type Select a device from the following list: Image: Hard Image:
Help	Back Next Cancel

Select Create a New Virtual.

(Add Hardware Wizard	×
	Pages	Hard
	Hardware Type	A virtual disk is a special type of file, which will start small and then
	Hard Disk	grow larger as you add applications and data to your virtual machine.
	Properties	Create a New Virtual
		Choose this option to add a blank disk to your virtual machine.
	Ready to Complete	 Use an Existing Virtual Disk Choose this option to reuse or share a hard disk from another virtual machine.
	Help	Back Next Cancel

Select the hard drive options.

Add Hardware Wizard	×
Pages Hardware Type	Properties
Hard Disk	How much software and data should this hard disk be able to store? Capacity: 8 GB V
Properties	Location: [standard] amigopod NARA/amigopod NARA Browse
Ready to Complete	 File Options Disk Mode Virtual Device Node Policies
Help	Back Next Cancel

Finish the add hardware wizard and power on the server.

Add Hardware Wizard	• • • • • • • • • • • • • • • • • • •				
Pages	Ready to				
Hardware Type	The following hardware will be added to your virtual machine. Please				
Hard Disk	verify that this list is accurate.				
Properties	Hard Disk: 8 GB				
Ready to Complete	More Hardware				
Help Power on your virtual machine Back Finish Cancel					

The VMA should power up and you should see two hard drives in its setup.

Summary Console Tasks Events Permissions	
Performance	 Status
Processors 1 X 2.735 GHz 0.069 GHz	Power Powered
Memory 512 MB	Guest OS A
384 MB	VMware Tools (∰) ▶ Running
Hardware	 Virtual Hardware Version 4
Processors 1	DNS Name
Image: Wemory 512 MB Image: Wemory 512 MB Image: Wemory 8.00 GB Image: Hard Disk 1 (SCSI 0:1) 8.00 GB Image: Hard Disk 2 (SCSI 0:1) 8.00 GB Image: Network Adapter 1 Bridged	IP Addresses (Network Adapter = fe80::20c:29ff;fe4f;f996 = 10.0.1.16 IP Addresses (Network Adapter = fe80::20c:29ff;fe4f;f9a0 = 192.168.113.129
Network Adapter 2 HostOnly	Commands
CD/DVD Drive 1 (IDE 1:0) Using device	 Power Off Suspend Reset

Allocating the New Hard Disk

Check Plugin Versions

Allocating extra disk space requires the following plugin versions:

amigopod Administrator 3.0.2 or later

To verify you have the correct plugin versions installed, navigate to **Administrator** > **Plugin Manager** > **Manage Plugins** and check the version number in the list.

Use the Update Plugins link to download and install updated plugins.

Backup Configuration

It is important to take a full backup of your configuration under **Administrator** > **Backup & Restore > Configuration Backup**.

Confirm New Disk Detection

Navigate to **Administrator > System Information** and expand the **Storage** section. It should summarize two disks. The new disk (probably /dev/sdb) will display a warning regarding the disk "doesn't contain a valid partition table".



Allocate Space

This advanced feature is currently not available within the system navigation. Please manually type in the file admin_sys_add_hd.php.

+ 🗼 https://10.0.1.16/admin_sys_add_hd.php

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The page should load and give a summary of the current status.

Confirm your desire to add the disk, and click Allocate Space.



NOTE Though we support adding multiple partitions, it is highly recommended to leave the Last Cylinder selection blank.

Depending on your disk size, **Allocate Space** should take about 10 seconds. If the action takes longer than 60 seconds, refresh the page (do not resubmit).



Hard Drive Summary

Disk	Cylinders	Size
Logically Available		13.91 GB
sda	1044	8589 MB
sda1	13	
sda2	1031	
sdb	1044	8589 MB
sdb1	1044	

If you return to the System Information page, you will see the new allocation.

Administrator Start Here	503.2 MB total, 6.2 MB free 1 More details						
 → Backup & Restore → Content Manager → High Availability 	Storage:	2 disks, 16.0 GB	More details	5			
 Network Setup Operator Logins OS Updates Plugin Manager 		Disk /dev/sda: 8589 MB, 8589934592 bytes 255 heads, 63 sectors/track, 1044 cylinders Units = cylinders of 16065 * 512 = 8225280 bytes					
Security Manager		Device Boot	Start	End	Blocks	Id	System
Server Time		/dev/sda1 *	1	13	104391	83	Linux
System Control System Information System Loss		/dev/sda2	14	1044	8281507+	8e	Linux LVM
System Logs		Disk /dev/sdb:	8589 MB, 8589	934592 bytes			
RADIUS Services		255 heads, 63 sectors/track, 1044 cylinders					
 ➡ Start Here ➡ Server Control 		Units = cylind	ers of 16065 *	512 = 82252	80 bytes		
Server Configuration		Device Boot	Start	End	Blocks	Id	System
 Authentication Database List 		/dev/sdb1	1	1044	8385898+	8e	Linux LVM

The space is now ready for use.