



Creating a new Virtual Appliance

A Virtual Appliance is a pre-configured software stack comprising one or more Virtual Machines. Each Virtual Machine is an independently installable run-time entity comprising an operating system, applications and other application-specific data.




Virtual Appliances are changing the software distribution paradigm because they allow application builders to optimize the software stack for their application and deliver a turnkey software service to the end user. Virtual Appliances offer an opportunity to dramatically simplify the software management lifecycle through the adoption of a standardized, automated, and efficient set of processes that replace operating system and application specific management tasks.

For example, consider a typical web application that is divided into three tiers. A web tier that implements the presentation logic, an application server tier that implements the business logic, and a back-end database tier. A straightforward implementation would divide this into 3 Virtual Machines, one for each tier.


Basic Operations

Virtual Appliances are managed in the Virtual Appliances tab of a Virtual Datacenter.

The operations available for managing Virtual Appliances are:

Button	Action
	Create a new Virtual Appliance
	Remove a Virtual Appliance
	Edit the selected Virtual Appliance

Creating a New Virtual Appliance

To create a new Virtual Appliance, select the Virtual Datacenter where the Virtual Appliance will be deployed, click the  button, and complete the form:

×
Create Virtual Appliance

Name *

Virtual Datacentre *


Automatically open it after creation

The fields are:

Field	Description
Name	The name of the Virtual Appliance
Virtual Datacenter	The Virtual Datacenter where the Virtual Appliance will be deployed
If the checkbox is marked, the user will be able to edit the Virtual Appliance after clicking Accept.	

The new Virtual Appliance will appear in the list in the Virtual Appliances tab.

Deleting a Virtual Appliance

To delete an existing Virtual Appliance, first you must undeploy it. Then select it and click the  button.

Only Virtual Appliances that are not deployed can be deleted.

Deploying and Undeploying a Virtual Appliance

Virtual Appliances can be easily deployed and undeployed using the controls that appear at the bottom of the screen when a Virtual Appliance is selected.

Common issues deploying a Virtual Appliance

One common issue is that your Enterprise allocation limits would be exceeded when you attempt to deploy an Appliance. The Notifications window will tell you that the Virtual Appliance could not be deployed. To find out why, go to the Events page. You may see an error such as this:

```

SOURCE: Abiquo System / SYSTEM /
TIMESTAMP: 2011-11-05 17:32:47.0
ACTION PERFORMED: WORKLOAD_HARD_LIMIT_EXCEEDED
PERFORMED BY: SYSTEM

```

STACK TRACE: Enterprise [COMPANY NAME] ;
USED CPU=1 RAM=128 MB HD=26 MB **Storage=1024 MB** VLAN=1 IP=1 ;
REQUIRED CPU=1 RAM=1024 MB **HD=20480 MB** Storage=0 MB VLAN=0 IP=0 ;
SOFT LIMIT CPU=2 RAM=4096 MB HD=4096 MB Storage=1024 MB VLAN=1 IP=1 ;
HARD LIMIT CPU=2 RAM=4096 MB **HD=4096 MB** **Storage=1024 MB** VLAN=1 IP=1 ;
STATUS CPU=SOFT_LIMIT RAM=OK **HD=HARD_LIMIT** **Storage=HARD_LIMIT** VLAN=null
IP=null ;

SEVERITY: MAJOR

In this case you can see that the HD Hard limit (i.e. the allocation limit for the Enterprise) is 4096MB, and the appliance needs 20480MB, so the HD parameter has exceeded the hard limit.

The Storage limit has also been reached, but it's not relevant to this deployment as no external storage is required.

Errors deploying a Virtual Machine

Occasionally a VM won't start due to a misconfiguration or some other issue. In that case the machine with the error can be identified by a spinning "error" marker at the bottom-left of the VM icon:

Go to the **events page** to view the cause of the error.

Source URL: <http://cloudhelp.claranet.com/content/creating-new-virtual-appliance>