

# ALOHA Load-Balancer

## *Virtual Appliance quickstart guide*

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# 1 Hypervisor Intergration

## 1.1 Citrix Xenserver 6.0 and above

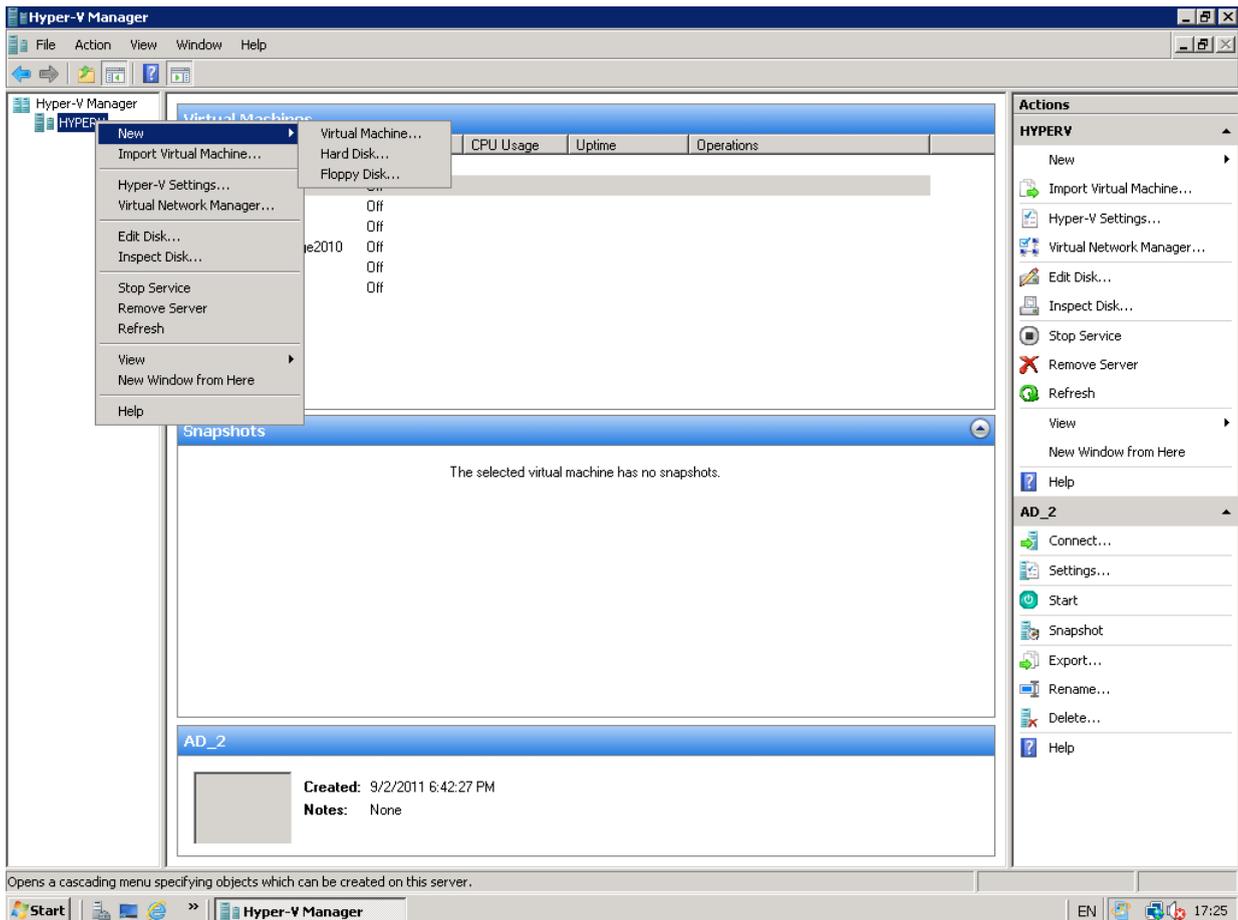
In order to install the ALOHA VA in an Citrix XenServer environment, please follow the steps below :

1. UnZIP aloha-albva-citrix-xenserver.
2. Start XenCenter Client and connect to your Cirtix Xenserver.
3. On the toolbar click on: File/Import.
4. Choose Browse, then browse to the uncompressed file aloha-albva\aloha-albva.xva.
5. Follow the installation wizard.

## 1.2 Microsoft HyperV

In order to install the ALOHA VA in an HyperV environment, please follow the steps below :

1. Unzip the Aloha from its archive.
2. Move the Aloha VHD file into your VM directory.
3. Run the HyperV Manager and get connected to your HyperV server.
4. Create a new Virtual Machine



5. Fill the form to meet your requirements.

- Memory size: 512 MB is fine, you can put more if you wish.
- check Use an existing virtual hard disk then points the location path to your aloha VHD file
- click on finish

6. Configure your Network card as appropriate.

7. You can now startup your Aloha and get connected to it.

## 1.3 VMWare ESX 3.5

In order to install the ALOHA VA in an ESX 3.5 environment, please follow the steps below :

1. UnZIP aloha-albva-esx3X.zip.
2. Start VMware Infrastructure Client and connect to your ESX Server.
3. On the toolbar click on: File/Virtual Appliance/Import.
4. Choose 'Import From File': browse to the uncompressed file aloha-albva\aloha-albva.ovf.
5. Follow the installation wizard.

## 1.4 VMWare VSphere 4.x and above

In order to install the ALOHA VA in a vSphere environment, please follow the steps below:

1. UnZIP aloha-albva-vsphere4X.zip.
2. Start VMware vSPHERE Client and connect to your vSHPERE Server.
3. On the toolbar click on: File/Deploy OVF Template.
4. Choose 'Deploy from file': browse to the uncompressed file aloha-albva\aloha-albva.ovf.
5. Follow the installation wizard.

## 2 Configuration settings check-list

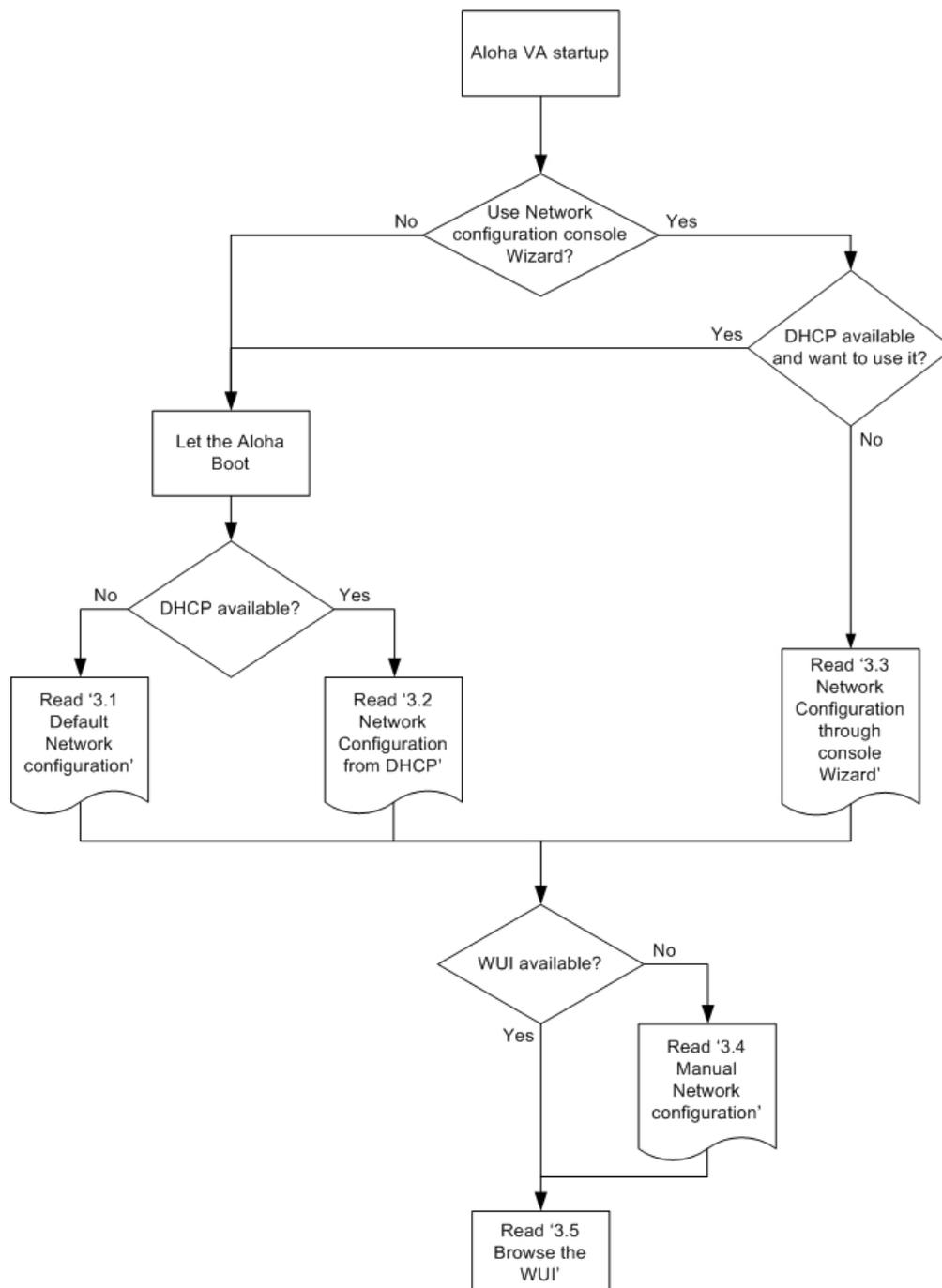
In order to properly configure your Aloha Load-Balancer, you need at least the information listed below:

- IP address:
- Subnet netmask:
- Default gateway :
- Password:

## 3 First network configuration

The diagram below shows the process flow about ALOHA first network configuration options, using a DHCP or manual setting. Just read the chapter corresponding to your need.

The easiest way is to let the ALOHA uses the DHCP server when available. If no DHCP servers are available, then using the startup network configuration wizard is recommended.



## 3.1 Default network configuration

The default IP addresses configured on ALOHA's eth0 interface are: 192.168.0.200 and 192.168.1.200. The first prompt should look like this:

```
ALOHA - Copyright (C) 2005-2011 EXCELIANCE
No license found, running in limited performances evaluation mode.

Access WEB User Interface :
http://192.168.0.200:4444/
http://192.168.1.200:4444/

Warning, keyboard set to QWERTY by default.
ALOHA1 login:
```

As you can see on the picture above, the Web User Interface is available on two URLs:

- <http://192.168.0.200:4444/>
- <http://192.168.1.200:4444/>

Just point a browser to any of them to get the Web User Interface.



If you can't reach the ALOHA Load-Balancer IP address from your laptop, please read [3.4 Manual Network configuration](#)

## 3.2 Network configuration from DHCP

If the ALOHA Load-Balancer can reach a DHCP server, then it gets its network configuration from it. The first prompt should look like this:

```
ALOHA - Copyright (C) 2005-2011 EXCELIANCE
No license found, running in limited performances evaluation mode.

Access WEB User Interface :
http://10.0.4.166:4444/

Warning, keyboard set to QWERTY by default.
ALOHA1 login:
```

As you can see on the picture above, the Aloha Web User Interface is available at the URL <http://10.0.4.146:4444/>.



It may be different in your environment

### 3.3 Network configuration through console Wizard

When the prompt below appears, you have 10 seconds to choose between **DHCP** (type “D”) or static (type “s”) configuration.

```
Warning: No IP configuration found ?
Warning: DHCP configuration is available for test purpose only.
Warning: ALOHA does not performs any renew at end of lease time.
Warning: A static IP configuration is recommended.
Retrieve IP using DHCP or configure static ... 10sec (D/s)? _
```

Type “s” to configure a static IP.

The appliance will then ask three questions:

- The IP address you want to configure on the appliance
- The subnet
- The appliance default gateway

The picture below shows an example of configuration:

```
Configure IP manually
Use IP address (192.168.0.200)? 10.0.0.17
Use netmask (255.255.255.0)? 255.255.0.0
Use default gateway (none)? 10.0.1.1
Commit and save this configuration (N/y)?
```

Type “y” to validate your configuration.

You can now access your Appliance Web User Interface at the address <https://10.0.0.17:4444/>.

The picture below shows the appliance telling you where to find the WUI:

```
Access WEB User Interface :
https://10.0.0.17:4444/
```

### 3.4 Manual network configuration

If you need to update manually the default Aloha IP configuration, just get connected on the console using the login **admin** and the password **admin**.

Then get root rights by running the command:

```
root
```

Finally, type the commands below:

```
service network stop
ip link set eth0 up
ip address add x.x.x.x/xx dev eth0
ip route add default via y.y.y.y
```

where x.x.x.x/xx is the Aloha IP address and subnet and y.y.y.y is its default gateway.



This configuration done through the CLI is not saved. As soon as you run it, you're invited to run the wizard through the GUI to configure the network of your Aloha. Please read *"4 First Network configuration through the wizard"*

## 3.5 Browse the Web User Interface

Open the console of your Aloha and it would print out where to find the GUI.

In example:

```
ALOHA - Copyright (C) 2005-2011 EXCELIANCE
No license found, running in limited performances evaluation mode.

Access WEB User Interface :
http://10.0.4.166:4444/

Warning, keyboard set to QWERTY by default.
ALOHA1 login:
```

## 4 Network configuration through the WUI wizard

To set up the network configuration of your ALOHA, you can use the **Wizard** which will ask you few questions then build your networking configuration.



Keep in mind that running the **wizard** will erase all previous network settings you may already have saved.

### 4.1 Launch the wizard

- On the WUI, click on the **Wizard** tab.
- Click on **Next** in the config or **Cancel** to quit the wizard.
- Click on **Next** to continue

### 4.2 Step 1 : Network interface

This step allows you to configure physical network interfaces.

The screenshot shows the 'Wizard : Physical interfaces' configuration screen, labeled as 'Step 1/7'. On the left is a sidebar with a list of configuration steps: Start wizard, Physical interfaces (highlighted), Link aggregation, VLANs configuration, IP addresses, IP routes, High availability, Management, and Summary. The main area contains a table with columns for Name, Speed, Mode, and Description. Below the table are three buttons: '< Back', 'Next >', and 'Cancel'.

Name	Speed	Mode	Description
eth0	auto	auto	
eth1	auto	auto	
eth2	auto	auto	

- Select **network speed** (Auto / 10 / 100 / 1000 Mbps)
- Select **negotiation mode** (Auto / half duplex / full duplex)
- (optional) Write a **description** for the interface
- Click on **Next** to go to the next step.

## 4.3 Step 2 : Link aggregation

This step allows you to aggregate network interfaces together

Wizard : Link aggregation (bonding) Step 2/7

**Aggregate interfaces:**

eth0  eth1  eth2

Description:

**Link aggregations**

Name	Aggregated interfaces	Description

< Back   Next >   Cancel

If you want to aggregate two or more network interfaces:

- Check the network interfaces to aggregate together
- Type a description
- Click Aggreg.

Result should look like the picture below:

**Aggregate interfaces:**

eth2

Description:

**Link aggregations**

Name	Aggregated interfaces	Description
bond0	eth0, eth1	public

- Start again as required
- Click on Next to go to the next step
- If you don't need to create an aggregate, click on Next to go to the next step

## 4.4 Step 3 : VLANs

This step allows you to create tagged virtual interface in order to integrate the Aloha within an architecture with VLANs.

- Choose the **Interface** you want to create a new vlan on
- Type the **VLAN ID**
- (optional) Type a short **Description** for this virtual interface
- Click on **Create**
- Click on **Next** to go to the next step

If you don't need to create any VLAN interface, click on **Next** to go to the next step.

## 4.5 Step 4 : IP Addresses

This step allows you to configure IP addresses related to the ALOHA network interfaces. These addresses are generally **internal IPs** or **dedicated to the administration**, allowing your servers and monitoring system to reach the ALOHA Load-balancer.



When using two ALOHA Load Balancers in a cluster, the shared Service IP addresses will be hosted by VRRP protocol, setup at step 6.

- Choose the **Interface** you want to configure
- Type in the **IP address/mask** respecting the format: aaa.bbb.ccc.ddd/mm.
- Click on **Add**

Result should look like the image below:

**Add a new IP address:**

Interface:

IP address/mask:

**IP addresses**

Interface	IP address	Mask
eth0	10.0.0.3	255.255.0.0

- Start again the operation as required.
- Once done, click on **Next**

## 4.6 Step 5 : IP Routes

This step allows you to configure static routes on the ALOHA Load Balancer.

**Wizard : IP routes** Step 5/7

**Add a new route:**

Interface:

Network:

Gateway:

**IP routes**

Interface	Network	Dest.	Network	Mask	Gateway
-----------	---------	-------	---------	------	---------

< Back   Next >   Cancel



In a production environment, it is necessary to configure at least one route to tell the ALOHA how to reach users or servers which are located on a different subnet.

You should at least configure the gateway for the default route (0.0.0.0/0).

- Choose a network **Interface**
- Type in the destination **Network**, respecting the format aaa.bbb.ccc.ddd/mm
- Click on **Add**

Result should look like the image below:

IP routes			
Interface	Network Dest.	Network Mask	Gateway
eth0	default		10.0.1.1 

- Start again the operation as required.
- Once done, click on **Next**

## 4.7 Step 6 : VRRP (High Availability)

This step allows you to configure high availability for two ALOHA Load balancers. The IP addresses dedicated to virtual services will be hosted by the VRRP Protocol on the ALOHA master.

- Choose the Interface
- Fill up the VRRP **Address** : this is the Virtual IP Address (VIP) which will be presented to the network
- Fill up the **vrID** : this is an integer from 0 to 255 for all the server in the cluster sharing the same service.  
**This ID must be unique on your network.**
- Fill up the **Priority**: this is an integer from 1 to 254, which is used to choose the master ALOHA. The higher, the stronger.  
You can also activate configuration synchronization between two ALOHA Load balancers and choose a different role for each of them.
- Click on **Next**

## 4.8 Step 7 : Aloha management configuration

This step allows you to configure the management of your Aloha.

- **SSH** is the remote CLI configuration access
- **Web Interface** is the WUI and choose the language.
- You can setup your Aloha load balancer **Hostname**
- You can enable **SNMP**: choose a **community** and a network to restrict access
- Click on **Next**

## 4.9 Summary

This step summarizes the different piece of configuration and allows you to apply it.

**Physical interfaces**

Name	Speed	Mode	Description
eth0	auto	auto	eth0
eth1	auto	auto	eth1
eth2	auto	auto	eth2

---

**Link aggregations**

Name	Aggregated interfaces	Description
------	-----------------------	-------------

---

**IP addresses**

Interface	IP address	Mask
eth0	10.0.0.3	255.255.0.0

---

**IP routes**

Interface	Network	Dest.	Network	Mask	Gateway
-----------	---------	-------	---------	------	---------

---

**High availability**

**VRRP instances**

Interface	Address ID	Priority
-----------	------------	----------

---

**Synchronization configuration**

Role:

Local address:

Remote address:

---

**Management**

Hostname:

Interface	Status	IP address	Port
WUI	HTTP	*	4444
SSH	Enabled	*	22
SNMP	Disabled		

---

Click on **Apply** to install the freshly created configuration.

## 4.10 Configuration building

This step allows to definitely validate the configuration and to apply it after a reboot. Click on **Yes** to save your new configuration and reboot the Aloha.

## 5 License

By default, the ALOHA Load-Balancer is delivered in Evaluation version, with a limitation to 10 connections per second.

This is a good way to check if the ALOHA can meet your requirements.

If you want to test it with “live” traffic, then you can get a time limited license.

### 5.1 Get a time limited license for a standalone ALOHA

- On your ALOHA WUI, click on the Setup tab, where you'll see the activation link below:



- Click on [activation].  
It will open a new tab in your browser, on Exceiance website.
- Fill the customer details form with your information:

**Customer details**

license type ? :

Company :

Zip :

City :

State :

Country :

Salutation :

Contact first name :

Contact lastname :

Phone (Int'l format) :

Email (licence reception) :

- Check the required details looks right:

**License required details**

ALOHA model : \*

Information available on the 'setup' tab of your ALOHA's user interface

ALOHA version : \*

ETHID (any ALOHA model) : \*

This field should be automatically filled if you made a request from your ALOHA setup UI. If not, please paste your ALOHA ETHID

UUID (Virtual only) :

This field should be automatically filled if you made a request from your ALOHA setup UI. If not, please paste your ALOHA UUID.

- Don't forget to fill up the math question at the bottom of the page:

This question is for testing whether you are a human visitor and to prevent automated spam submissions.

**Math question:** \*  $6 + 2 =$

Solve this simple math problem and enter the result. E.g. for 1+3, enter 4.

- Wait for the mail which will come back with a link where you'll be able to download the license file.
- Go on the Setup Tab, at the bottom of the page and fill up the license add form.  
Click on Add.  
Click on Save.
- Now, you should see a new row describing your license:  
Check your license status is **valid**.

Lic ID	Owner	Unit(s)	Feature(s)	From	Expire	Status
	MALBVA-		B-4U-7U-R2K-M2K-r6K-m256K-S700-P200M-C1M	2012-04-23	2012-05-23	valid 

- At the top of the Setup page, you should now see the capacity allowed by the license:

License	
Status:	<b>valid</b>
License ID:	
Authorized Performances	
Conns Rate/s (Layer7):	2000
Conns Rate/s (Layer4):	6000
SSL Trans. Rate/s:	700
Simul. Conns (Layer7):	2000
Simul. Conns (Layer4):	256000
Bandwidth b/s:	200000000
Comp. Bandwidth b/s:	1000000
Real Servers (Layer7):	Unlimited
Real Servers (Layer4):	Unlimited

## 5.2 Get a time limited license for a cluster of ALOHA

- Run the procedure described in “5.1 Get a time limited license for a standalone ALOHA” to get a license for the first ALOHA.
- Note the License ID generated
- Run the procedure described in “5.1 Get a time limited license for a standalone ALOHA” to get a license for the second ALOHA.

When filling the form on Exceliance Website, don't forget to fill up the license ID field:

Primary ALOHA license Id:

Only required for a full license, for the second ALOHA in a cluster. Please paste the licence # shown in the 1st installed ALOHA in the cluster.

## 6 Support & assistance

Should you have any question about the Aloha Load balancer operating mode, you may contact Exceliance's technical assistance by email [support@exceliance.fr](mailto:support@exceliance.fr) or by phone +33 130.676.071 (French business hours).

Please, prepare your serial number and/or support contract number as well as your firmware revision ('setup' tab) before calling.

To activate your product standard guarantee or your warranty extension, you need to register it on the dedicated form on our website at:

- French :  
<http://www.exceliance.fr/fra/enregistrement-des-extensions-de-garantie-xlcare>
- English :  
<http://www.exceliance.fr/en/xlcare-extended-warranty-registration>