How to Setup Bare Metal Adaxa Suite Demonstration Box

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1 Pre-Requisites

1.1 Hardware Requirements

1.1.1 CPU Virtualization Support

Adaxa Suite relies on the KVM hypervisor in running various applications in separate Operating System. Thus, processor should satisfy KVM hardware requirements. Preferably 4 cores or more as each application is hardware intensive.

1.1.2 Memory

8 Gb or more

1.1.3 Network Interface Card (NIC)

Adaxa Suite requires 2 NIC as it simulates Network Infrastructure in a real business scenario. Adaxa Suite also acts as a firewall between public and private network.

1.1.4 Hard Disk

7200 RPM SATA (120Gb minimum) or faster

1.1.5 Additional Network Switch

100/1000 Mbps for the local network

2.1 Default CentOS Installation

Adaxa Suite requires the latest CentOS installation (5.4 as of this writing)

2.2 Kernel Virtual Machine

KVM virtualisation should be enable in this operating system. Please make sure that KVM is properly working by creating a test virtual machine. Most of the installation problems occur because KVM is not working properly.

2.3 Networking

Adaxa Suite networking is a bit more complicated. Some configuration files are already provided, still basic networking knowledge is necessary. We separate networking on 3 devices.

2.3.1 Device – eth0

This NIC is connected to the internet or your office network. Usually it is in DHCP mode, as it is dependent on your network environment. Please make sure that the cable connecting to your office switch / router is connected to NIC1 (eth0). This interface is responsible for applications running in virtual machines to connect to the internet.

Please refer to configuration file (ifcfg-Outside) , copy this file to "/etc/sysconfig/network-scripts" . MAC address should reflect the actual MAC of your eth0 device.

2.3.1.1 The first test – connect to the internet

In the default browser (e.g. Mozilla Firefox), connect to the internet (make sure there is no cable on eth1)

2.3.2 Device – eth1

Device eth1 is basically doing nothing, it's just a bridge between Virtual Machines and the Local Area Network.

Please refer to configuration file (ifcfg-LAN) , copy this file to "/etc/sysconfig/network-scripts" . MAC address should reflect the actual MAC of your eth1 device.

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2.3.3 Device – br0

Device – br0 is the gateway for all virtual machines and any network devices connected to its Virtual LAN (the extra switch is connected to NIC2/eth1). It's IP address is fixed to 192.168.100.1 and cannot be changed as all the applications/configurations are referring to this IP address.

Please refer to configuration file (ifcfg-br0) , copy this file to "/etc/sysconfig/network-scripts" .

2.4 Domain Name Server (DNS)

Adaxa Suite runs its own Name Server. Please install default BIND (Berkeley Internet Domain Name) server from CentOS.

2.4.1 DNS Zone – cobox.local

Please create a new zone, cobox.local with the following address/alias. Note: Use webmin for easy configuration

```
cobox.local.    IN    NS    fw.cobox.local.
fw.cobox.local.      IN    A     192.168.100.1
elastix.cobox.local.      IN    A     192.168.100.12
dbserver.cobox.local.      IN    A     192.168.100.11
spagobi.cobox.local.      IN    A     192.168.100.16
exoplatform.cobox.local. IN    A     192.168.100.17
cobox.local.    IN    MX    0 smtp.cobox.local.
smtp.cobox.local.    IN    CNAME      mail.cobox.local.
mail.cobox.local.    IN    A    192.168.100.13
ldap.cobox.local.    IN    CNAME      mail.cobox.local.
adempiere.cobox.local.    IN    A    192.168.100.19
client.cobox.local. IN    A    192.168.100.20
dms.thunderbox.local.cobox.local.    IN    CNAME
        exoplatform.cobox.local.
```

2.5 DHCP

Virtual machines relies on its Adaxa Suite DHCP server. SIP handsets can get it's IP through this server as well.

Please refer to dhcpd.conf for settings. Note: Use webmin for configuration

3.1   Virtual Machines

Running virtual machines should be as simple as copy/paste if all the settings/preparations are done properly.

3.1.1   VM Configuration files

Note: Config files are in folder "vm_xml"

Copy files to /etc/libvirt/qemu

adempiere.xml

elastix.xml

kolab.xml

spagobi.xml

dbserver.xml

exoplatform.xml

3.1.2   VM Images

You can't get it wrong, these are huge files (about 14Gb expanded)

Note: Images in folder "vm_images"

Unpack images to "/var/lib/libvirt/images"

*.img.tar.gz → *.img

4.1   Shell scripts

There are some automation scripts created to ease the deployment of virtual machines. Place shell scripts inside "/opt/"

Note: shell scripts are in folder "automation_script"

4.2   Firewall

Opens the firewall so you can access each virtual machines

Run coboxfw.sh

Note : If you trying to access each VM through eth0 NIC (internet), define static route on your machine to access the 192.168.100.x range. DNS server if applicable

4.3   Start/Run Virtual Machines

Fire virtual machines in correct sequence.

Run start.sh

Note: Should you encounter problem running shell scripts remotely, please search on the topic - "password less ssh"

4.4   Stop/Shutdown Virtual Machines

Shutdown all the virtual machines in correct sequence

Run stop.sh

Note: Should you encounter problem running shell scripts remotely, please search on the topic - "password less ssh"

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