

MiVoice MX-ONE Service Node Virtual Appliance

INSTALLATION INSTRUCTION



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1 GENERAL

This document describes the usage of the MX-ONE Service Node (SN) packed as a Virtual Appliance for VMware vSphere/ESXi version 5.x.

1.1 GLOSSARY AND ACRONYMS

For a complete list of abbreviations and glossary, see the description for *ACRONYMS, ABBREVIATIONS AND GLOSSARY*.

2 PREREQUISITES

- A VMware ESXi 5.1 host (minimum) or a vCenter solution.
- The vSphere Client installed on a workstation.
- The MX-ONE Service Node Virtual Appliance file.
- Good knowledge of VMware vSphere 5.x.
- Good knowledge of SLES11 and MX-ONE installation.

3

EXECUTION

Procedure:

1. Import of the Virtual Appliance
 - Import on a single ESXi host
 - Import into a vCenter cluster
2. Post-configuration of a newly imported MX-ONE virtual machine
3. Install and Configure MX-ONE

3.1

IMPORT OF THE VIRTUAL APPLIANCE

3.1.1

IMPORT ON A SINGLE ESXI HOST

This part of the guide will help you install the MX-ONE Service Node Virtual Appliance on a single VMware ESXi host via the vSphere client. This scenario covers the free version of ESXi.

1. Log on directly on the ESXi host with the vSphere client.
2. From the "File"-menu, select "Deploy OVF Template...".
3. A wizard is started that will assist in the deployment process. First step is to select the Virtual Appliance file
4. Next page shows some information of the Virtual Appliance.
5. Specify a name and location for the deployed template.
6. Select a data store for the virtual machine. It could be either local or centralized (SAN).
7. Select disk format for the virtual disks. Thick provisioning allocates all space at once, thin allocates on demand. Thick gives a slight performance gain and eliminates the risk of over-shooting actual storage space.
8. Map the networks used in this OVF to networks in your inventory.
9. All done - click "Finish" to start the deployment task.

When the import is complete, you will have a MX-ONE Service Node in turnkey state. At this moment, the server is un-configured and generic (it has not yet been assigned any specific function). Starting up the virtual machine will trigger the turnkey installation process that is identical to the one used on physical MX-ONE servers.

If more than one MX-ONE Service Node is needed on the same host (in case of a multi-LIM system), repeat the process above with the same Virtual Appliance, just giving the virtual machine a new name.

3.1.2

IMPORT INTO A VCENTER CLUSTER

This part of the guide covers the import process of a MX-ONE Service Node Virtual Appliance in a VMware vCenter cluster environment.

Such environment contains multiple hosts, centralized storage and distributed network architecture.

This supports the vCenter features like vMotion, High Availability (HA) and Fault Tolerance (FT)

1. From the vSphere client, log on to the vCenter server.
2. From the "File"-menu, select "Deploy OVF Template...".
3. A wizard will start that guides you through the deployment process. The first step is to select the Virtual Appliance file to import
4. A page with information about the Virtual Appliance is displayed
5. Enter a name for the virtual machine, and also, select the Datacenter where it should be used.
6. Select the host that should handle the new virtual machine.
7. Select datastore for the virtual machine. Choose a centralized storage (SAN) if HA/FT is going to be used.
8. Select disk format for the virtual disks. If FT is going to be used, thick provisioning must be selected. For other cases, any format will do fine (you can keep the default selected).
9. Select what virtual network the virtual machine should connect to. In a clustered environment, this is normally a Distributed Switch. Be sure that switch is connected to the production/telephony network
10. All necessary information is now collected. Click "Finish" to start the deployment task.

As with the single host case, this import creates a generic MX-ONE Service Node that is in turnkey state. What type of server (LIM) it becomes will be decided when the virtual machine is powered up and the turnkey installation is run.

If more than one MX-ONE Service Node is needed, just run the process above multiple times using the same Virtual Appliance file. Give each virtual machine a unique name and distribute them over the hosts in the cluster (how depends on the cluster setup, the amount of servers inside the cluster and the load on the hosts)

3.2

POST-CONFIGURATION OF A NEWLY IMPORTED MX-ONE VIRTUAL MACHINE

Before using a newly imported MX-ONE virtual server, some settings must be considered and maybe changed. These are mainly related to processor and memory allocation

- Hardware - Memory

The amount of memory the virtual machine is equipped with. Minimum for a MX-ONE Service Node is 2048 MB (small or secondary LIM). For a single-LIM system or LIM 1 in a multi-LIM node, 4096 MB is recommended. More memory might be needed in large systems. For configuration and planning of virtualization, see the description MX-ONE Service Node Virtualization.

- Hardware - CPU

By default, two CPU's are allocated to the virtual machine. If you plan to use Fault Tolerance together with the MX-ONE Service Node, this must be changed to one CPU as multi-CPU is unsupported in FT-mode. Also, numbers of CPUs needed in a server depends on desired performance. For configuration and planning of virtualization, see the description MX-ONE Service Node Virtualization.

- Options - Paravirtualization

This must be disabled on Fault Tolerance-enabled virtual machines as it is not supported. On all other configurations, keep this enabled

- Resources - CPU

This setting affects the resource allocation in the cluster/host. This must be configured to match required performance of the MX-ONE and the capacity of the cluster/host and how many virtual machines are running in parallel

- Resources - Memory

As for the CPU-resources, this setting depends on the capacity needed, the cluster/host configuration and how many other virtual machines are running in parallel.

Note: Be sure that the network configuration of the virtual machines is properly set up in the cluster. By default, the standard "VM Network" is used. In a cluster environment where distributed switches are used (a requirement if HA/FT is used), this must certainly be changed.

3.3

INSTALL AND CONFIGURE MX-ONE

With all the virtual MX-ONE servers in place and configured, it is time to build a PBX out of them. The procedure of setting up the system is the same as for physical MX-ONE servers loaded with turnkey installations. The difference lays in the access of the MX-ONE servers that is done through the vSphere client.

For more details see *INSTALLING AND CONFIGURING MIVOICE MX-ONE*.