Visual Capacity Optimization Manager
Visual Power Manager

OVF Appliance Installation Guide

Release 6.7.0

March 2022

Eaton

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Contact Support

For your convenience Eaton provides one site where you can access the information that you need for our enterprise products. You can access the resources listed below by going to https://eatonexperience.force.com/login.

- Online and telephone contact information for technical assistance and customer services
- Product and documentation downloads
- Other helpful resources appropriate for your product

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1. Installing the OVF (Appliance)

1.1. Resources for VPM and VPM Essential OVF

The VPM and VPM Essential OVF has the following default resources to support approximately 1,000 Rackmount Assets (RMA) with a 5-minute poling interval.

Operating System	Oracle Linux 8.5 (64 bit)
Disk Space	400 GB
CPU	4 CPU (For the VCOM OVF it installed the Superset, it changes to 6CPU)
	It is strongly suggested that each VM host CPU/Core have a passmark rating of 8000 or above: https://www.cpubenchmark.net/cpu_list.php
Memory	16GB (For the VCOM OVF it installed the Superset, it change to 24GB)
Database	PostgreSQL 13.5 server (included with application)
Web Server	Tomcat 9.0.56 (included with application)
Virtual Server	VMware Workstation or ESXi 6.7 U2 and above with the Virtual Hardware Version 15 format

1.2. Resources for VCOM OVF

The VCOM OVF has the following default resources to support approximately 1,000 Rackmount Assets (RMA) with a 5-minute poling interval.

Operating System	Oracle Linux 8.5 (64 bit)
Disk Space	400 GB
CPU	6 CPUs
	It is strongly suggested that each VM host CPU/Core have a passmark rating of 8000 or above: https://www.cpubenchmark.net/cpu_list.php
Memory	24GB
Database	PostgreSQL 13.5 server (included with application)
Web Server	Tomcat 9.0.56 (included with application)
Virtual Server	VMware Workstation or ESXi 6.7 U2 and above with the Virtual Hardware Version 15 format

1.3. Before You Install the OVF

Before you install the OVF please ensure you are prepared as to the items below.

1.3.1. Licensing

There are two licensing options for your application. The application license uses hardware signature information.

- **Generic License –** The generic license does not allow for vMotion on the VM. If the server moves with vMotion then the license will break. If you can turn off vMotion for your VM then use this license option.
- **vCenter (vMotion) License** – If your VM has vMotion then you must use the vCenter license.
  - o For the vCenter License you will need a
    - **IP Address for vCenter Server**
    - **vCenter read-only service account**
    - **Static password for service account** (password cannot change)

  - o **How the vCenter License Works**
    To protect Eaton product license against possible abuse in the virtualized environment with technologies, such as vMotion (for example, running multiple unauthorized VM copies), it is necessary for our products to perform basic license validation with the following 2 simple rules:
    1. In a vCenter environment, given a specific license, only one product instance with that license is allowed to be running.
    2. The running product instance must match the IP, hostname and VM guest ID for which the license is issued.
  - o The actual license validation algorithm is simple and straightforward:
    - When the license is generated in a vCenter environment, the IP, hostname and VM guest ID is embedded in the license file which we issue for the customer.
    - When running the application, our license validation method calls vCenter to check if there is one and only one IP + hostname + VM guest ID combination existing in vCenter that matches the specification in the license.
    - Nothing else is read from vCenter other than the IP + hostname + VM GuestID combination. Typically, this has not been a security concern.

1.3.2. URL

You will need a unique DNS qualified URL for the new server. When prompted enter the complete URL minus http/https.

1.3.3. HTTP vs HTTPS

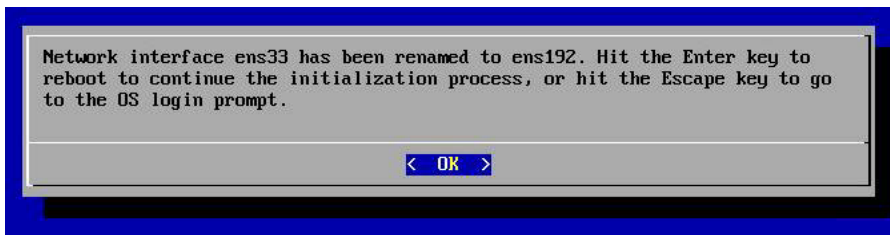If you are going to use HTTPS follow the steps for Self Sign.

If desired, you can generate your own certificates at a later time.

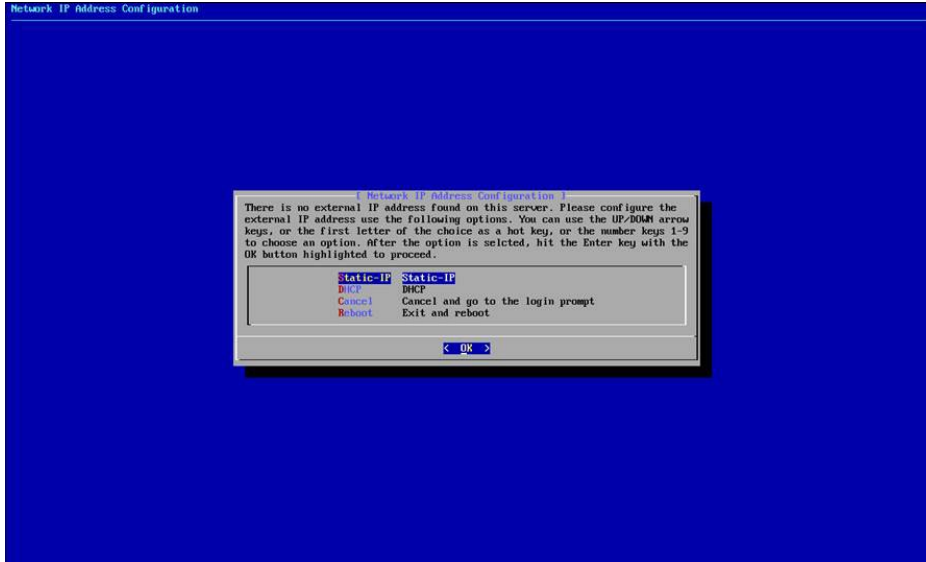![Eaton logo - Powering Business Worldwide]

1.4. Steps to Install the OVF

1. Download OVF
2. Import OVF to your VM Infrastructure
3. *NOTE: BEFORE BOOTING THE VIRTUAL MACHINE, PLEASE MAKE SURE YOU HAVE A RESERVERD OR STATIC IP FOR THIS VM AND ALSO A DNS ENTRY CREATED FOR THE WEB URL YOU WOULD LIKE TO USE TO ACCESS THE APPLICATION WEB INTERFACE. THESE ARE HARD REQUIREMENTS AND BOTH WILL BE APPLIED DURING THE NEXT STEPS OF THE INSTALLATION WIZARD.*
4. Start your VM Guest server which is running the application. **Do not add or remove a network interface to the VM Guest prior to startup.**
5. If the machine is slow, you may see this message. Click the Enter key to continue with the initialization process.


```
Still searching for network interface()...



            < OK >
```

6. If the VM Host renames the network interface, then this message may appear. If you see this message, then hit Enter to continue with the initialization process.


```
Network interface ens33 has been renamed to ens192. Hit the Enter key to
reboot to continue the initialization process, or hit the Escape key to go
to the OS login prompt.


            < OK >
```

7. Choose an IP Configuration from the Network IP Address Configuration Menu
   a. Static IP – Configure the VM Guest with a Static IP Address
   b. DHCP – Use DHCP to dynamically assign an IP Address to the VM Guest
   c. Cancel – The Network IP Address Configuration Menu window will be closed, and the user will be shown the OS login prompt.
   d. Reboot – The VM Guest will be rebooted.

Network IP Address Configuration

[Network IP Address Configuration]
There is no external IP address found on this server. Please configure the
external IP address use the following options. You can use the UP/DOWN arrow
keys, or the first letter of the choice as a hot key, or the number keys 1-9
to choose an option. After the option is selcted, hit the Enter key with the
OK button highlighted to proceed.

Static-IP   Static-IP
DHCP   DHCP
Cancel   Cancel and go to the login prompt
Reboot   Exit and reboot

< OK >

1.4.1. Static IP

1. Enter the Static IP Address to be configured for the VM Guest

Enter the static IP address:

< OK >
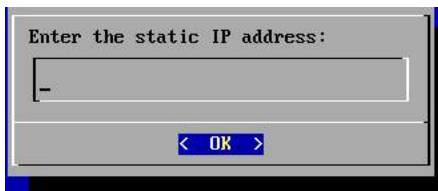
2. Enter the network mask to be used for the Static IP Address

Enter network mask(for
example:255.255.255.0):

< OK >
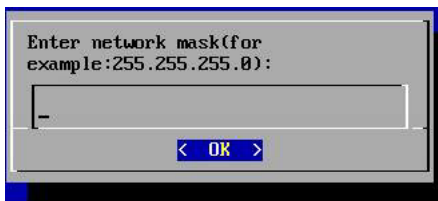
3. Enter the gateway address to be used with the Static IP Address

Enter the gateway IP address:

< OK >

4. Enter the DNS Server to be used with the Static IP Address

```
Enter the DNS Server IP address:

                    <  OK  >
```

5. The configuration of the server will be updated based on the information provided. After 20-30 seconds, the following message will be presented to the user. Access the URL specified and login with the user/password combination to continue with the initialization of the server.

1.4.2. DHCP

1. When the DHCP option is selected the configuration of the server will be updated. After 20-30 seconds, the following message will be presented to the user. Access the URL specified and login with the user/password combination to continue with the initialization of the server.

1.4.3. Wait 5 Minutes Before Attempting ServerAdmin

Please wait 5 minutes before attempting to connect to the Server Admin tool to continue configuration.


```
DHCP is configured. Please point your browser to
https://10.10.10.175/ServerAdmin to initialize the application server




                    <  OK  >
```
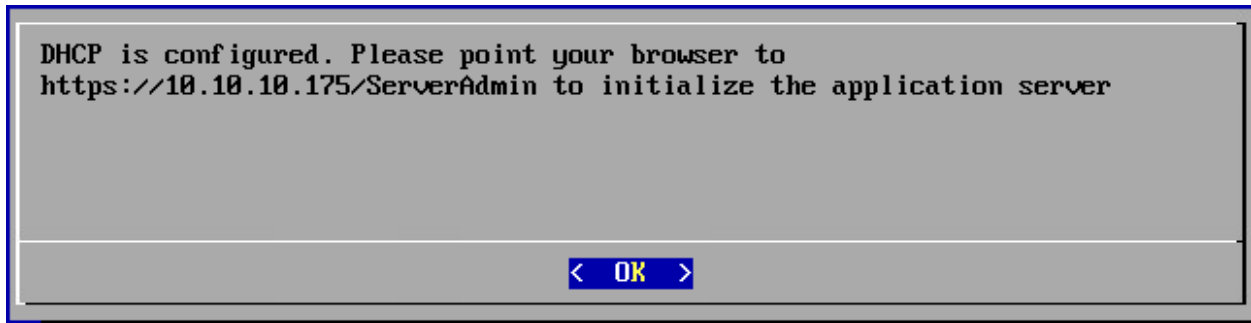
2. Finish Configuration in the Server Admin tool

1. Using a web browser application, access the https://IPAddress/ServerAdmin address which was specified in the IP Address Configuration message.
2. Use the admin / Monit@r#1 user/pw combination to login to this Server Admin interface.
3. Server Admin will recognize the server has not been fully initialized and will present the initialization screen. It needs to accept the Eula then will show the initialization steps page.

4. Initialize page will auto disable SSH and firewall port.

    Enable SSH   Enable Firewall Port

    a. Disable SSH means user can't access server by SSH command. If you want to access server by SSH, click Enable SSH.
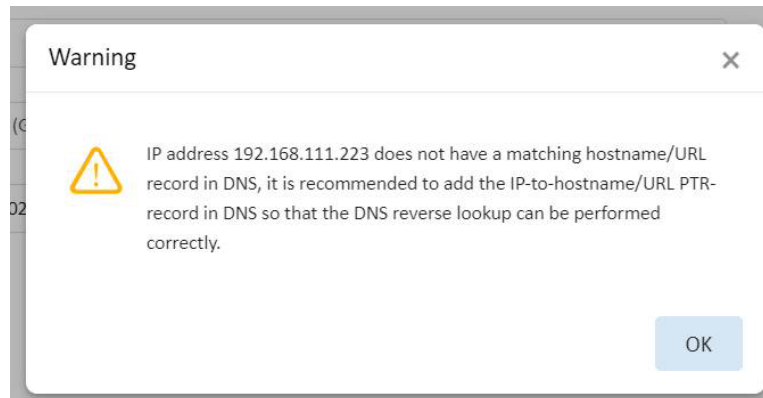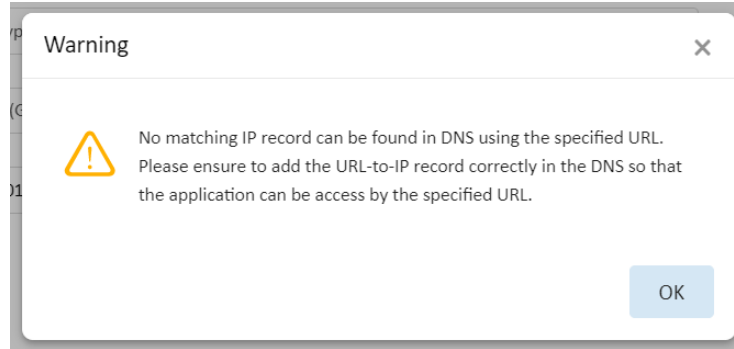   b. Disable Firewall means server will close 12001-12006 ports. If you want to open port 12001-12006 for firewall, click Enable Firewall Port.

5. Define the IP Address of the server – Dropdown list will display IP Address found on the server automatically.
    a. Note, the following message may appear and will require attention from the network administrator.

6. Define the Host URL to be used to access the application
7. Define the Time zone to be used for the server
8. Confirm the current time fields
9. Click Submit to process configuration updates on the server and application.
    a. Note, if DNS does not have the specified URL registered, the following message will appear. Click OK to continue with the initialization process. You will need to register the specified URL with the DNS system to be able to access the application login page when initialization is complete.
    b. Alternatively, the computer performing the installation may configure the local Windows hosts file with the IP and URL combination. This will allow the initialization process to complete, but end users would also need to configure hosts files to access the login page. **Please make sure the URL is registered in the DNS system.**

Warning ✕

⚠ No matching IP record can be found in DNS using the specified URL. Please ensure to add the URL-to-IP record correctly in the DNS so that the application can be access by the specified URL.

OK

10. The application default it set to HTTPS Self Sign, if there are doesn't want to change it, please turn to step3. If want to change to HTTP or HTTPS Upload Certificate, please submit changes. After clicking the Submit, it will restart the server admin and it takes about 10 seconds. Please do not close the tab after it started it will show the server admin page.

Step 2: SSL Certificate (Optional)

◯ HTTP ◉ HTTPS

Type   ◯ Self Sign ◉ Upload Certificate

Certificate File   * [   ] Browse

Certificate Key File   * [   ] Browse

Certificate Chain File   [   ] Browse

Submit   Generate CSR Request

11. In the Initialization Window Step 3: Select License Type, click the radio button for either Generic License or vCenter License.

   Note: The Generic License binds the application to the hardware and will fail if vMotion migration moves the server. A vCenter license allows for vMotion migration of the application server. If you are using VMware we strongly recommend this option.

11   Finish Configuration in the Server Admin tool

12. For a vCenter license enter the following information in the fields shown below:
    - The IP address for the vCenter server
    - A read-only username and its Password for the vCenter server

13. Click the Generate License Request button
    A message will appear which explains the need to obtain a license activation key for the application. Click OK and wait for the License Request File to be automatically downloaded to the laptop/PC and it can be found in the Downloads folder.


14. Send the License Request File to the support team. The Support team will generate a License Activation File which can be used for the application server.

15. When the License Activation File has been received, use Step 4 of the Initialization web page on Server Admin to upload the license file. Use the Select File button to choose the License Activation File. Click Upload License to apply the License Activation File to the server.
16. The license will be applied to the server. Click OK to close the message window.
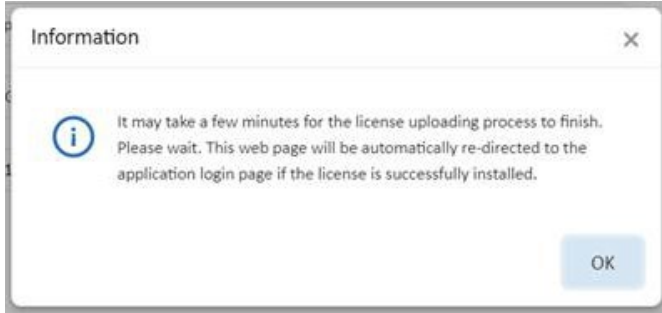
17. The application of the license will require a reboot of the server and a full startup of the application and database processes. This process, depending on the speed of the server, can take up to 15 minutes to complete. A status message will indicate the license is being applied to the server.
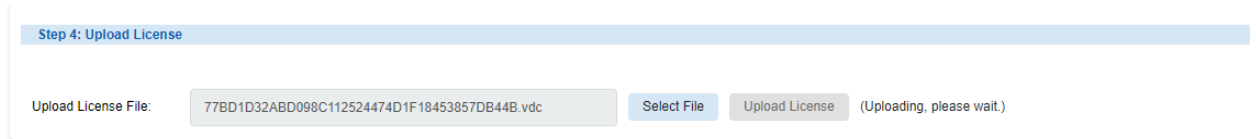
18. If the license is applied successfully, the browser session will be forwarded to the application login page. User will be presented the login page for the application.
    Login with user = admin and password = Monit@r#1 which is the default user for a new installation.
    a. The following error message will be received if the startup process fails. The most common reason for this issue is related to resolving the specified URL to the IP Address of the server. Please ensure the DNS system is properly configured with the URL so the initialization process is able to complete the system startup processed.