

Free Download: Quick Start Guide

ViPR Controller & ViPR Controller Reporting

Abstract

This Quick Start Guide provides the main installation steps for the Free Download version of ViPR Controller and ViPR Controller Reporting. For further details and clarifications you should always refer to the original Installation & Configuration Guides. Both guides are available on the ViPR Community (http://community.emc.com/go/product_vipr) or support.emc.com

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Chapter 1 – Overview

This document provides installation instructions to setup the **Free Download** for ViPR Controller and the ViPR Controller Reporting. Both applications are deployed using an OVA file in a vSphere environment.

You will download the ViPR_Controller_Download.zip file from the ViPR Controller Download web page. This "Free Download" zip file contains the following files:

- ViPR Controller vApp installation file ("vibr-3.6.0.0.595-controller-1+0.ova" file)
- ViPR Controller license file ("ViPR_Controller_license.lic" file)
- ViPR Controller Reporting vApp installation file ("ViPR_SRM_4.0.3_1VM_vApp.ova" file)
- ViPR Controller Reporting license file ("ViPR SolutionPack licenses.zip" file)

Make sure you have these files at hand in order to perform a successful installation.

Chapter 2 - Prerequisites

Please read through this section and make sure your environment meets all prerequisites.

VMware prerequisites

ViPR Controller deployment requires administrative rights to the VMware Virtual Center.

Before you deploy ViPR Controller, you must have the following VMware software installed and configured:

- VMware vCenter Server running in the vSphere environment.
- An installed VMware ESXi server 5.0.x, 5.1.x, 5.5.x, 6.0 and 6.5 running in the vSphere environment and VMFS 5.
- An installed vSphere Client from which you can access your vCenter Server.
- DRS-enabled cluster or resource pool in a DRS-enabled cluster
- Datastore on shared block storage
- Read/write latency for ESXi datastores should average 10ms or less.

ViPR Controller vApp prerequisites

ViPR Controller Download consists of 1-VM vApp. You need to verify that the ESXi server has sufficient resources for deployment.

vCPUs	Memory (GB)	Disk Space (GB)
2	8	120

EMC ViPR Data Sheet and Compatibility Matrix on support.EMC.com is the authoritative source of information on controller VM requirements.

ViPR Controller UI prerequisites

The UI runs on a variety of web browsers. The EMC ViPR Data Sheet and Compatibility Matrix on support.EMC.com is the authoritative source of information on supported web browser versions.

All browsers must:

- Accept cookies
- Have disabled pop-up blockers
- Have Adobe Flash Player (version 11 or higher) installed

Browser	Version	Notes
Google Chrome	52, 53	None
Internet Explorer	10, 11	Compatibility mode must be Off
Mozilla Firefox	47, 48	<ul style="list-style-type: none">• Enable cookies and pop-ups• Disable all add-ons• Enable JavaScript

ViPR Controller Reporting vApp prerequisites

ViPR Controller Reporting consists of 1-VM vApp. You need to verify that the ESXi server has sufficient resources for deployment.

vCPUs	Memory (GB)	Disk Space (GB)
4	32	600

Although the VM will have all these resources, the actual memory and CPU utilization is considerably lower in most environments.

ViPR Controller Reporting UI prerequisites

ViPR Controller Reporting UI works with the following browsers and versions:

Browser	Version	Operating system	Notes
Google Chrome	Latest	Windows, Linux	Full support
Internet Explorer	10	Windows	Minimal Browse mode
Internet Explorer	10 and 11	Windows	Full support
Mozilla Firefox	Latest	Windows, Linux	Full support
Apple Safari	Latest	Mac OS X and iOS	Full support

Chapter 3 – ViPR Controller vApp Installation and Initial Setup

Installing the ViPR Controller vApp

Data gathering

You will need the following information to successfully deploy the ViPR Controller vApp.

Property name in vSphere	Key name	Description
Client		
Server IP address	network_n_ipaddr	One IPv4 address for public network.
Public virtual IP address	network_vip	IP address used for UI and REST client access.
Network netmask	network_netmask	IPv4 netmask for the public network interface.
Network gateway	network_gateway	IPv4 address for the public network gateway.

You can deploy ViPR Controller VM using the vSphere Client.

Before you begin

- You need access to the ViPR Controller deployment files.
- You need credentials to log in to vSphere Client.

Procedure

1. Download the ViPR Controller OVA file (vpr-3.6.0.0.595-controller-1+0.ovq) to a temporary directory.
2. Start the vSphere Client and log in to the vCenter Server through which you will be deploying the virtual appliance.
3. From the **File** menu, select **Deploy OVF Template**.
4. Browse to and select the ViPR Controller OVA file, located in the temporary directory you created earlier.

5. On the **OVF Template Details** page, review the details about the appliance.
6. Accept the End User License Agreement.
7. Specify a name for the appliance.
8. Select the host or cluster on which to run the virtual appliance.
9. If resource pools are configured (not required for ViPR), select one.
10. If more than one datastore is attached to the ESXi Server, select the datastore for your appliance.
11. Select a disk format: Thick Provision Lazy Zeroed, Thick Provision Eager Zeroed, or Thin Provision. Using Thin Provisioning will save storage space if desired.
12. On the **Network Mapping** page, map the source network to a destination network as appropriate.
13. Enter values for the properties. See the Data Gathering section above.
14. Power on the VM.

ViPR Controller Initial login and setup

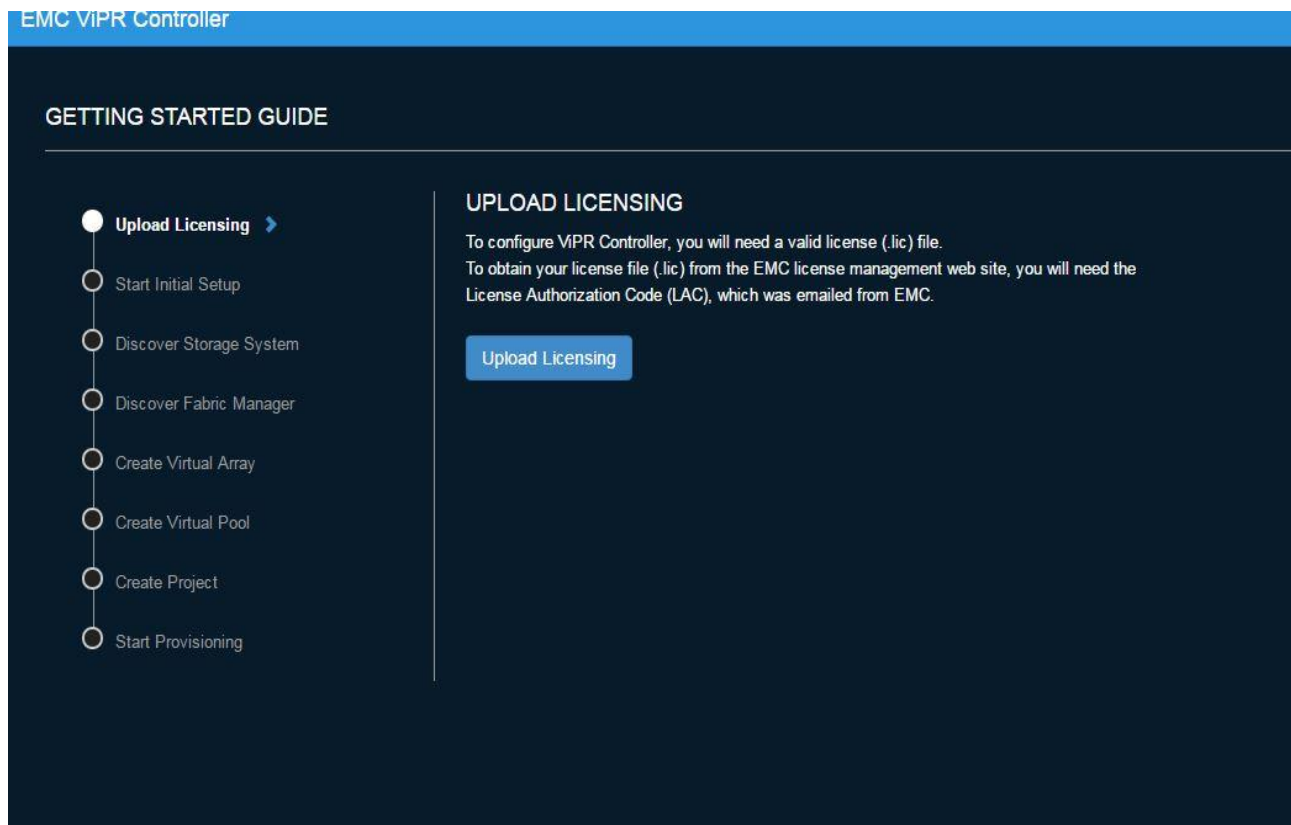
On first login as the root user, you need to change the ViPR root and system passwords and upload the ViPR license.

Before you begin

- Wait 5 minutes after controller deployment before following the steps in this procedure. This will give the required ViPR services time to start up.
- Be prepared to provide new passwords for the ViPR root and system accounts.
- You need access to the ViPR license file.

Procedure

1. Open https://ViPR_virtual_ip (the ViPR public virtual IP address, also known as the network.vip) with a supported browser and log in as root. Initial password is **ChangeMe**. You are brought to the Initial Setup wizard.
Note: you might need to acknowledge the SSL certificates on your browser.
2. Browse to and select the license file that was downloaded from the ViPR Controller Download web site and click **Upload Licensing**.



3. Enter new passwords for the root and system accounts.

The passwords must meet these requirements:

- at least 8 characters
- at least 1 lowercase
- at least 1 uppercase
- at least 1 numeric
- at least 1 special character
- no more than 3 consecutive repeating
- at least change 2 characters (settable)
- not in last 3 change iterations (settable)

The ViPR root account has all privileges that are needed for initial configuration; it is also the same as the root user on the Controller VMs. The system accounts (sysmonitor, svcuser, and proxyuser) are used internally by ViPR.

4. For DNS servers, enter two or three IPv4 or IPv6 addresses (not FQDNs), separated by commas.
5. For NTP servers, enter two or three IPv4 or IPv6 addresses (not FQDNs), separated by commas.
6. In the ConnectEMC section, under Transport, select **None**.
7. Click **Finish**.

GETTING STARTED GUIDE

- ✔ Upload Licensing
- **Start Initial Setup** ▶
- Discover Storage System
- Discover Fabric Manager
- Create Virtual Array
- Create Virtual Pool
- Create Project
- Start Provisioning

INITIAL SETUP

To use ViPR you will need to configure some basic settings first.

The initial setup includes:

- Setting new root and system password
- Configuring the network settings for the nodes
- Configuring the Connect EMC settings
- Configuring the SMTP settings for sending notification emails

[Start Initial Setup](#)

WELCOME TO EMC VIPR CONTROLLER

With the ViPR Controller Guide we have made it easy for you to provision your EMC VMAX All Flash, EMC Unity All Flash, and XtremIO storage.

Exit the guide if you are not configuring ViPR Controller with all flash arrays, or prefer a custom configuration.

Guide Me

Exit

Results

At the end of this procedure you are logged in to the UI as root user, at **Admin > System > Dashboard**.

Chapter 4 - ViPR Controller Reporting vApp Installation and Initial Setup

Installing the ViPR Controller Reporting vApp

You can deploy an appliance from an OVF file using a vSphere Client.

Before you begin

Make sure you have:

- An administrator login with root privileges
- vCenter location where you are deploying the appliance
- Data store you can use for deployment
- Static IP address to assign to your appliance
- Gateway
- Netmask

- DNS Servers

Procedure

1. Open vSphere Client and connect to the vCenter Server that manages your VMware environment.
2. From the File menu, select **Deploy OVF Template**.
3. In the **Source** step, browse to the location of the “ViPR_SRM_4.0.3_1VM_vApp.ova” file.
4. Click **Next**.

To minimize the deployment time, deploy the appliance within the same local area network (LAN) shared by your VMware ESXi servers. The deployment time is approximately 5 to 15 minutes. Deployment across a WAN can take 2 hours or more.

5. In the **OVF Template Details** step, review the details of the loaded .ova file and click **Next**.
6. In the **End User License Agreement** step, review the license agreement. Click **Accept** and then click **Next** to continue.
7. In the **Name and Location** step:
 - a. Type a **Name** for the appliance.
 - b. Specify an **Inventory Location** for the appliance within your VMware environment.
 - c. Click **Next**.
8. For Configuration, select “All-IN-One”
9. In the **Host/Cluster** step, select a host or cluster where the appliance will run and click **Next**.
10. In the **Resource Pool** step, select a resource pool associated with the host or cluster where the appliance will run and click **Next**.

Note: This step is required only if the host or cluster contains a predefined resource pool.

11. In the **Datastore** step, select a datastore to hold the appliance images and click **Next**.
12. In the **Disk Format** step, select the storage space provisioning method and click **Next**.
13. In the **Network Mapping** step, select a destination network that has an IP Pool associated with it and click **Next**.
14. Provide the values of the properties as defined in the Virtual Appliance Properties table and click **Next**.
15. In the **Ready to Complete** step, review the list of properties for the appliance and click **Finish**.
A status bar appears in the vSphere Client showing the deployment progress.
16. After deployment is complete, click **Close** in the **Deployment Completed Successfully** dialog box.
17. Power on the VM.
18. It normally takes around 5-10 minutes to completely power up the first time and be ready for use. You can monitor the VM console to check the progress. It will be ready when you see a login prompt.

Installing and licensing the ViPR SolutionPack

In this section we will login onto the ViPR Controller Reporting vApp, install the license and install the ViPR SolutionPack reports.

Before you begin

- ViPR Controller must be installed and running.
- You need to know the network virtual IP address and credentials for an account with the System Monitor role on the ViPR virtual appliance from which you want to collect data.
- ViPR Controller Reporting vApp should be installed.

Adding licenses

1. Log in to the ViPR Controller Reporting vApp (<http://<hostname>:58080/APG/>) using **admin** as user and **changeme** as password
2. Click **Administration icon** in the top right hand corner of menu.
3. Under “**Centralized Management**”, click “**Licenses**”.
4. On the bottom of “Licenses Listing” page, click “**Select All**” button and then “**Delete**” to delete all Trial licenses. Click “OK” in License Removal dialog to confirm. Make sure to perform steps 6 and 7 immediately (**within 30 minutes**) following step 5.
5. Click **Upload** button on the upper right side of the screen.
6. In the **License Upload** dialog box, browse to your “ViPR SolutionPack licenses.zip” license file. Click **OK**.
7. When License Upload Complete appears, then click **Continue**.
8. Licenses in a .zip file are extracted and appear in the **Licenses Listing** pane.
9. Do not close the page.

Installing the ViPR SolutionPack

1. Make sure you still are in the Centralized Management page.
2. Select **SolutionPack Center** from the top menu bar.
3. In the **Browse and Install SolutionPacks** screen select **EMC ViPR**.
4. Read the summary information and click **Install**.
5. In the Select the components to install screen, leave the defaults and click next.
6. Accept the defaults for **Alert Consolidation, Pre-Configured Alerts, Data Collection, and Reports** screens.
7. Select **Install** to install the SolutionPack. This will take several minutes to complete. When the installation finishes, click **OK**.

Discovering your ViPR instance

1. On the left tree pane, select **Discovery Center -> Devices Management -> ViPR**.
2. Click **Add New Device** and enter information for ViPR Unique Name, ViPR IP or hostname, user and password.
3. You can click Test to check connectivity to your ViPR instance.
4. Click **OK** and then click **Save**.

After these steps are completed, it takes around 1 hour for the SolutionPack to collect all relevant data from the ViPR instance. After 1 hour, log back in to the main user interface. You may need to log out and log back into the main user interface in order to see "EMC ViPR" in the Report Library. ViPR reports can be found in the **Report Library** section in this area:

<http://<hostname>:58080/APG/>

Appendix A - Additional documentation

For additional information about ViPR Controller configuration and administration, please refer to the Documentation and How-To sections on the ViPR Community page at http://community.emc.com/go/product_vipr

For additional information about ViPR SolutionPack, please refer to SRM documentation on the ViPR Community site:

ViPR SRM Product Documentation Index at <https://community.emc.com/docs/DOC-49148>

Appendix B – Remove old SolutionPacks and licenses after trial period

The ViPR Controller Reporting installation comes with a 30-day trial license for other SolutionPacks besides EMC ViPR. If other SolutionPacks besides EMC ViPR have been installed in the ViPR Controller Reporting instance, and their trial period has expired, you might see a warning message.

In order to get rid of these messages, follow this procedure:

Remove SolutionPacks

1. Open an internet browser and log in into the ViPR Controller Reporting GUI as admin.
2. Click **Administration**.
3. In the **Centralized Management** pane, select **SolutionPacks**. You will see a list of installed SolutionPacks.
4. Click on the SolutionPack that needs to be removed.
5. At the bottom you will see several instances with a garbage can next to them. Click each one of them to completely remove the SolutionPack.
6. Repeat steps 4 and 5 for any other undesired SolutionPack.

Remove expired licenses

1. Open an internet browser and log in into the ViPR Controller Reporting GUI as admin.
2. Click **Administration**.
3. In the **Centralized Management** pane, select **Licenses Management**. You will see a list of installed licenses.
4. From the list of installed licenses, select all expired licenses (already marked in red) and click **Delete** at the bottom of the list. **Note:** You can sort the licenses by expiration date to group all expired licenses together.