Viewpoint Quick Start Guide 9.1.3

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Chapter 1: Viewpoint

This chapter provides information about your Viewpoint configuration and access/login. All the steps below must be performed from the Moab server, where Viewpoint is installed.

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1.1 Viewpoint Prerequisites

Completing the steps below will help to ensure that you are ready to access the Viewpoint GUI.

- 1. Viewpoint uses port 8081. Confirm that access to this port is available and open. If a firewall is enabled, use the command **firewall-cmd** –list-ports; otherwise, use the command **netstat** -na |grep 8081.
- 2. Check SELinux current mode by using the command sestatus. If the Current mode in this display shows enforcing, perform the following steps:
 - A. Edit the selinux config file using the command vi /etc/sysconfig/selinux.
 - **B.** Find the line that says SELINUX=enforcing and change it to SELINUX=permissive.
 - **C.** Save the file and then run the command **setenforce 0**.
 - **D.** Then run the command getenforce, which should show permissive.
- **3.** If you are using PAM authentication, check that Apache Tomcat is running as root. If it is not, perform the following steps:
 - A. Edit/usr/lib/systemd/system/tomcat.service and change the line User=tomcat to User=root.
 - B. Save it and then run the command systemctl daemon-reload.
 - **C.** Then restart Tomcat using the command **systemctl restart tomcat**. It takes Tomcat a few minutes to start up.

4. If this environment is publicly accessible, you might want to enable HTTPS; otherwise, your passwords will be sent in plain text over the internet. If this environment is running locally and only internal employees can get to the login page, then you probably don't need to enable HTTPS. However, if anyone on the internet can get to it, you probably should secure it so it doesn't get hacked. See the section **Configuring Viewpoint to Use SSL** in the *Moab Viewpoint Reference Guide 9.1.3* (Adaptive Computing Support Portal / Product Documentation / Moab HPC Suite) for information on how to secure Viewpoint.

1.2 Licensing

Request the following two license keys from Adaptive Computing:

- **Moab License**: First, get the RLM server's host ID, which is your Mac address of the server where Moab/Viewpoint are installed. You can use either of these commands to get the MAC address:
 - **ifconfig -a** The MAC address is in the active eth0 display under ether (this is the default first Ethernet adapter).
 - **cat /sys/class/net/*/address** This displays the MAC address, which looks similar to 06:84:f4:8f:7f:18 00:00:00:00:00:00.
- Viewpoint License: This license key is needed for accessing Viewpoint.

Send the MAC address to licenses@adaptivecomputing.com requesting a Moab license and a Viewpoint license.

When requesting the above licenses, make sure to mention which product areas they are required for. If you are an existing Moab customer, the license generated will be based on what you have purchased in the past. If it is an evaluation license, we suggest asking for the full suite of Moab products including Viewpoint, and make sure the elastic license is also included (generally, this is included). If the elastic license is not included, it can be added later by updating the moab.lic in the /opt/moab/etc directory on the Moab server, after which you need to restart Moab using the following command as root systemctl restart moab. You can view the status of Moab using the command systemctl status moab, which should show as active.

1.3 Accessing Viewpoint

- **1.** Access the Viewpoint GUI by using the URL http://127.0.0.1:8081. This URL is used when accessing Viewpoint directly from the Moab server. If accessing Viewpoint from elsewhere on the internet, typically the IP address is the same one you used to SSH into the Moab server, which should assist in finding the correct IP address to access Viewpoint.
- 2. Log in using either the **viewpoint-admin** login or the **moab-admin** login. The password is what you specified in the **Automated Installer Configuration** section. If you do not remember the password, you can view it in the file <code>opt/mws/etc/mwsconfig.groovy</code>.
- **3.** When using one of the admin logins, you need to apply a Viewpoint License key:

Moab VIEWPOINT		Welcome, viewpoint-admin <u>Sign Out</u>	¢ 0			
CONFIGURATION						
Licensed Features	Viewpoint License					
	License Browse No file chosen UPL Viewpoint Host ID: 080027b5e288 License path: /opt/viewpoint/etc/license.d/license.lic PRE Viewpoint Licensed Features					
	Product License	Status				
	Admin Functionality	Enables admin functionality in Viewpoint allowing admins to manage their Moab systems directly from Viewpoint.	8			
	User Functionality	Enables user-centric functionality in Viewpoint like managing application templates and jobs.	8			
	Nitro Support	Enables Nitro support in Viewpoint, allowing admins and users to manage Nitro applications directly from Viewpoint.	8			
	Remote Visualization Support	Enables Remote Visualization in Viewpoint, allowing users to manage their remote sessions directly from the browser	8			
	Moab Pass-Through Support	Enables support for job submission and cluster monitoring	8			

- **A.** After receiving the Viewpoint license key (previously requested from Adaptive Computing), upload the file using the **BROWSE** button, select your license file and then click the **UPLOAD** button, after which it will authorize the different licensed features in Viewpoint.
- **B.** Licensed features have a green status. Open the **More Information** section to see information on each feature, as well as the license expiration date.
- **4.** Log in using the **moab-admin** login, select **Licensed Features**, and then select the **Moab License**. The screen shows if Moab has been licensed. If not, you may need to apply the license (previously requested from Adaptive Computing). After it is applied, the Moab License option should show the features as being active (green).

5. Create a user (Principal) to log in with, because none of the admin logins allow submitting jobs. On the **CONFIGURATION** tab, select **Principals**:

Moab	VIEWPOINT					Welcome, moab-admin <u>Si</u> g	m Out 🌣 🥹
HOME	WORKLOAD	TEMPLATES	NODES	SESSIONS	CONFIGURATION		
Basic Configu	ration		Principal M	anagement	C		CREATE
File Manager	Configuration		Principal Name	Descriptio	<u>n</u>		
Roles			MoabNodus	MoabNodu	IS		
Principals			JohnCieply	John Cieph	(
Remote Visua	lization Services		centos	centos			
Nitro Services			Show 10 T	entries	5	← prev	n 1 next →
Reporting Co	nfiguration						
Application Te	emplates						
Licensed Feat	ures						

- **A.** Click the **CREATE** button, and in the **Name** field, enter a user that already exists on the Moab server. If you created a user (Principal) as part of the Automated Installer, this user will already be available and you can edit this user rather than creating a new one.
- **B.** Enter a **Description** and select which **Roles** you want this user to have access to. Typically we suggest setting up an initial running Moab environment having full access, so select all of them. This can always be changed later. See the *Moab Viewpoint Reference Guide* (Adaptive Computing Support Portal / Product Documentation / Moab HPC Suite) for detailed instructions and configuration options. For the Moab environment setup, we only use the required sections and configurations to set up this environment.
- 6. Select Edit Users/Groups and then enter the username you selected earlier as **Principle Entity**.
 - **A.** As PAM was the authentication used on this OS, select **PAM Username**. If LDAP or another protocol is available, these options will become available here rather than PAM.
 - **B.** When finished editing, click the **APPLY** button.

7. Now you can log out of your admin login and use **Principal** as the login. The password for this user is the same as what you have configured the user to use on your OS. After logging in to Viewpoint as a Moab user, a screen similar to this appears:

Moab VIEWPOINT Welcome, centos Sign Out & @										
HOME	WOR	KLOAD	REPORTIN	G TEM	MPLATES	NODES	5	FILE MANAGER	SESSIONS	CONFIGURATION
Search								▼ Q	Dedicated Sys	tem Resources
Work	load 🖻)		Refresh	Interval 5s	•		CREATE JOB	CPU 100	MEMORY
<u>Job ID</u> \Rightarrow <u>Moab.378</u>	Job Name	<u>Submitter ID</u> centos	 <u>Start Date</u> <i>2</i>020-02-25 <u>19:12:26 </u> 	Submit Date 2020-02-25 19:12:23	Queue Status	<u>Cores</u> <u>N</u>	odes (<u>Wall Clock</u>	50	
Moab.377	Sleep_5_min	centos	2020-02-25 19:11:57	2020-02-25 19:11:52	COMPLETED	1	1	01:00:00:00		
550	sleeptest.sh	centos	2020-02-25 19:12:26	2020-02-25 19:09:23	COMPLETED	1	1	00:01:00:00	0	
549	sleeptest.sh	centos	2020-02-25 19:12:26	2020-02-25 19:07:41	COMPLETED	1	1	00:01:00:00	24h	Current
548	sleeptest.sh	centos	2020-02-25 19:07:22	2020-02-25 19:07:20	COMPLETED	8	1	00:01:00:00	Node Summar	v
Moab.376	sleeptest.sh	centos	2020-02-25 19:01:13	2020-02-25 18:58:21	COMPLETED	1	1	00:01:00:00	2 NODES	,
Moab.375	sleeptest.sh	centos	2020-02-25 18:58:06	2020-02-25 18:58:02	COMPLETED	1	1	01:00:00:00		
Moab.374	sleeptest.sh	centos	2020-02-25 18:57:48	2020-02-25 18:57:45	COMPLETED	1	1	00:01:00:00		
Moab.373	sleeptest.sh	centos	2020-02-25 18:57:48	2020-02-25 18:57:44	COMPLETED	1	1	00:01:00:00		IDLE
Moab.372	sleeptest.sh	centos	2020-02-25 18:57:38	2020-02-25 18:57:37	COMPLETED	1	1	00:01:00:00	2	