HAProxy Installation

Before You Begin

Before beginning, you'll want the following information ready and available. You will be prompted for this information during the process:

Access

Login/Username	Password
root	
proxyadmin	

Environment

Environment Info	
Gateway IP	
Hostname	
Netmask	
Netmask CIDR	
DNS 1	
DNS 2	

HAProxy Configuration

Server	IP Address
Primary HAProxy WinApps Server	
Backup HAProxy WinApps Server	
Primary HAProxy Mobile Server	
Backup HAProxy Mobile Server	
Primary Platform Server	
Backup Platform Server	
Platform Virtual	
Primary Mobile Server	
Backup Mobile Server	
Mobile Virtual	
SmartSuite Server 1	
SmartSuite Server 2	
SmartSuite Virtual	

First HAProxy Server

1. Create a New VM

a. From vSphere Client, select **File > Deploy OVF Template**.

b. Browse to **Proxy_LB.ova** within the installation package. Click **Next**.

c. Provide a unique VM name (for example, HAPWinApps-A or HAMobile-A) and then click **Next**.

d. Select the storage location.

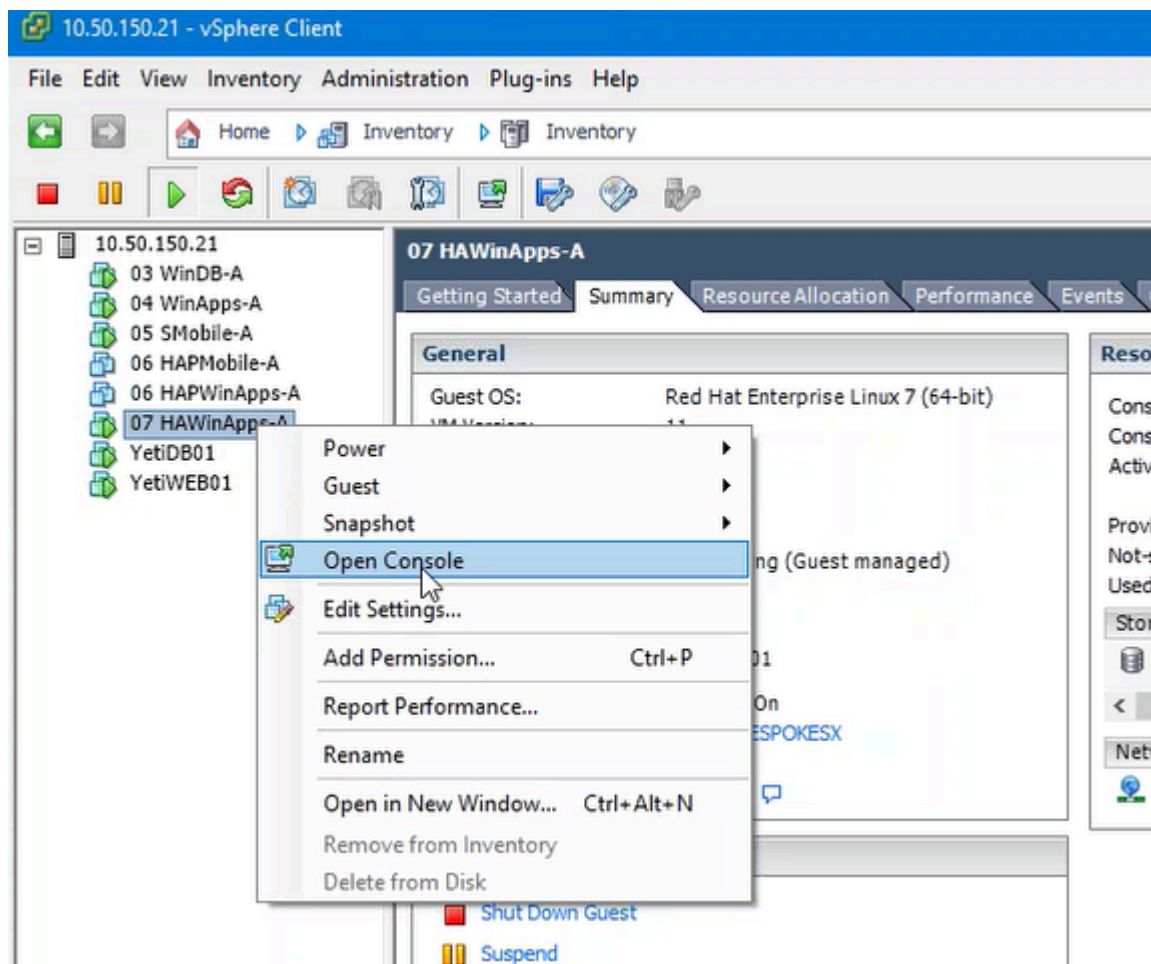e. Click **Next** through the remaining steps and then **Finish**.

f. Power on the VM when it finishes deploying.

2. System Configuration

a. Right-click the VM name and select **Open Console**.

b. Login in as root.

c. Enter the following commands:

d. Press **1** to select "Red Hat 7 System Configuration".

e. Press **1** to select "System Configuration" and enter the following information:

- IP/Netmask of the VM (available under the **Summary** tab in vSphere Client)

- Gateway IP

- DNS server IPs (comma delimited list)

- Hostname

f. A script displays a summary review. Press **<Enter>**.

> 🚩 **NOTE:** If you need to make changes, press **1** again. Press **<Enter>** until you reach the correct prompt.

g. Press **2** to select "Commit Changes."

h. A script displays the changes. Press **<Enter>**.

i. Press **q** to exit.

j. Reboot the server.

> 🚩 **NOTE:** If you are configuring the first HAProxy server, continue.
>
> If you are configuring a subsequent server, see Additional HAProxy Servers below.

3. Build the Server Configuration File

a. Using the **proxyadmin** username and password, login via SSH to the server. If you cannot connect, verify that the VM network adaptor is properly configured.

b. Run the following commands:

c. Press **2** to select "Build HAProxy Server Configuration File."

d. Select the project.

e. Follow the prompts to enter information (this is the information you have gathered to complete HAProxy Configuration above).

> 💡 **TIP:** You cannot selectively edit entries once the file is built. If you provide the wrong information for a prompt, it's easier to press **<Enter>** until you reach the "Create File (y/n)?" prompt. Press **n** and then start over.
>
> To help minimize typing errors, copy and paste your responses. You will only be asked to complete this once.

f. If all entries have been entered correctly, press **y** when the "Create File (y/n)?" prompt appears.

The project configuration file is created and saved under **/home/proxyadmin/Scripts/ HAProxy_Config.dat**.

4. Update the Firewall

a. Still logged in as root and working under **/home/proxyadmin/Scripts**, run the following command again:

b. Press **3** to select "Load HAProxy Server Configuration File and Update Firewall."

The script reads **HAProxy_Config.dat** (created under the previous section) and builds the Agentd, HAProxy, and KeepAlived configuration files. It then updates the Linux firewall.

5. Start the Agents

a. Run the following commands to enable and start the required agentd services:

Server Role	Agentd Service Name
HAProxy WinApps	agentd-platform.service
HAProxy WinApps	agentd-ssuite.service
HAProxy Mobile	agentd-mobile.service

b. Check the agentd logs.

For more information about the agent daemon, see [HAProxy Agent Daemon Reference](#).

6. Start HAProxy Services

a. Run the following commands to enable and start the HAProxy services:

b. Check the logs:

Ensure that you see "Started HAProxy Load Balancer."

c. Open a web browser to check the services in the HAProxy stats website:

  i. Enter the following URL: `http://<HAProxy IP Address>:8700/status`

  ii. Username: proxyadmin

  iii. Password

HAProxy
Statistics Report for pid 1946

7. Start Keepalived Services

a. Run the following commands to enable and start the Keepalived services:

b. Check the logs:

You should see messages about Keepalived transitioning to a master state.

8. Verify Virtual IPs

Run the following command to verify that the virtual IPs are operational:

Additional HAProxy Servers

1. Complete the steps under the following sections:

   - [1. Create a New VM](#)

   - [2. System Configuration](#)

2. Run the following commands:

3. Enter yes when prompted for the authenticity of the host.

4. Enter the proxyadmin password and then the following command:

5. Press **3** to select "Load HAProxy Server Configuration File and Update Firewall."

6. The script reads the configuration file copied from the first server, builds the configuration files, and updates the Linux firewall.

7. Resume the instructions above starting with step [5. Start the Agents](#).