

# Guided Exercise: Configuring Server Groups

In this lab assignment, you will configure a group of servers in a managed domain using the EAP 7 administration console.

Resources	
Files	/home/student/JB248/labs/domain y /home/student/ JB248/labs/host
app url	http://172.25.250.254:9990

## Results

You must be able to set up and start a managed domain with two server groups.

before you start

Before beginning the guided exercise, run the following command to verify that EAP was installed at /opt/jboss-eap-7.0, that no EAP instances are running, and that the previous lab work established a domain controller at /home/student/JB248/labs/domain and two hosts in /home/student/JB248/labs/host:

```
[student@workstation ~]$ lab server-groups setup
```

### 1. In this guided exercise, you will be simulating running three host computers on workstations.

In order not to alter the existing EAP 7 installation in /opt/jboss-eap-7.0, the installation script has created a domain controller in the machine1 folder in the /home/student/JB248/labs/domain directory and two folders in the /home/student/ JB248/labs/host directory named machine2 and machine3, which simulate the host controllers.

You also set up a pre-configured managed domain with the two hosts and the domain controller. There are two server groups and three predefined servers in the managed domain. You must start the managed domain and remove existing server groups and servers, and define two new server groups using the administration console.

### 2. Start the domain controller (machine1) and the two slave hosts (machine2 and machine3).

2.1. When the slave host controllers start, they connect to the domain controller and get the latest domain configuration. For this reason, the domain controller must be started first, followed by the two slaves.

Start the domain controller using a new terminal window:

```
[student@workstation ~]$ cd /opt/jboss-eap-7.0/bin
[student@workstation bin]$ ./domain.sh \
-Djboss.domain.base.dir=/home/student/JB248/labs/domain/machine1/domain/ \ --host-config=host-
master.xml
```

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### 2.2. Start the host controller on machine2.

Run the following command from your `/opt/jboss-eap-7.0/bin` folder in a new terminal window on your workstation to start host2 using the `host-slave.xml` configuration file:

```
[student@workstation domain]$ cd /opt/jboss-eap-7.0/bin
[student@workstation bin]$ ./domain.sh \
-Djboss.domain.base.dir=/home/student/JB248/labs/host/machine2/domain/ \ --host-
config=host-slave.xml \
-Djboss.domain.master.address=172.25.250.254
```

### 23. Observe the terminal window of the domain controller. must see entry

**Log showing slave host2 connecting:**

```
[Host Controller] 11:42:16,348 INFO [org.jboss.as.domain.controller] (Host Controller Service Threads -
36) WFLYHC0019: Registered remote slave host "host2", JBoss JBoss EAP 7.0.0.GA (WildFly
2.1.2.Final-redhat-1)
```

### 2.4. Start the domain controller on machine3 to join the managed domain.

Run the following command from your `/opt/jboss-eap-7.0/bin` folder in a new terminal window on your workstation to start host3 using the `host-slave.xml` configuration file:

```
[student@workstation domain]$ cd /opt/jboss-eap-7.0/bin
[student@workstation bin]$ ./domain.sh \
-Djboss.domain.base.dir=/home/student/JB248/labs/host/machine3/domain/ \ --host-
config=host-slave.xml \
-Djboss.domain.master.address=172.25.250.254
```

### 2.5. Observe the terminal window of the domain controller. must see entry

**Log showing slave host3 connecting:**

```
[Host Controller] 11:42:16,348 INFO [org.jboss.as.domain.controller] (Host Controller Service Threads -
36) WFLYHC0019: Registered remote slave host "host3", JBoss JBoss EAP 7.0.0.GA (WildFly
2.1.2.Final-redhat-1)
```

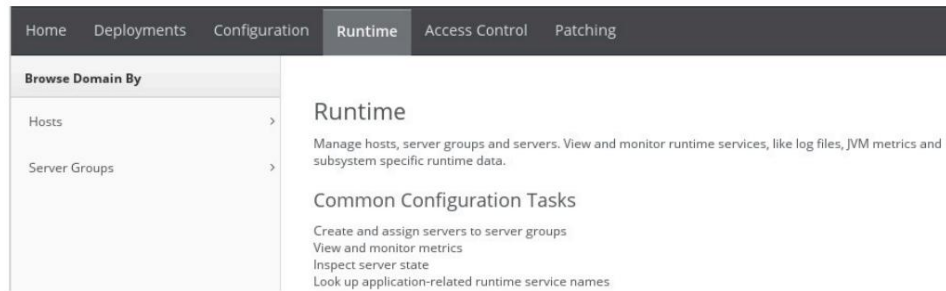
You have now started a managed domain with the domain controller running on machine1 and two slaves, host2 and host3, managed by the domain controller. In the next step, you need to log in to the administration console and configure server groups.

### 3. To configure server groups in a managed domain, you must log in to the administration console.

Go to `http://172.25.250.254:9990/`, which is the location of the management console. You will be prompted to sign in. Log in as the user `jbossadm` with the password `JBoss@RedHat123`.

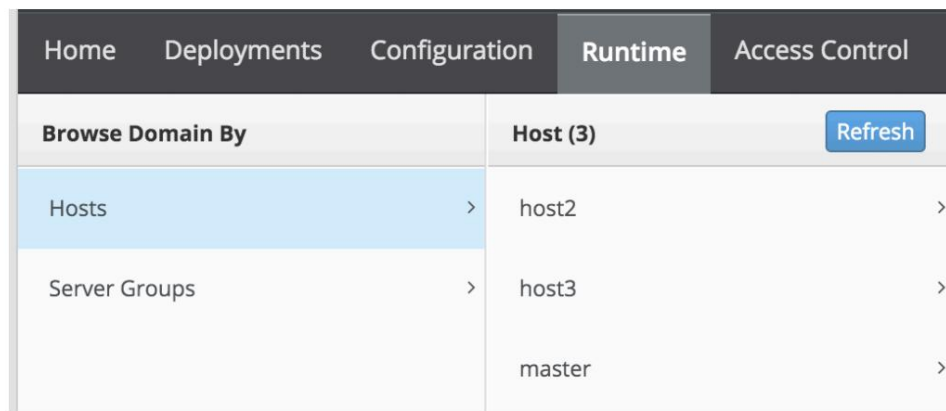
### 4. Server groups and servers can be created and managed on the Runtime section of the administration console.

In the management console, click **Runtime** in the top navigation bar.



5. A managed domain consists of a number of hosts that can run EAP 7 instances called **Servers**.

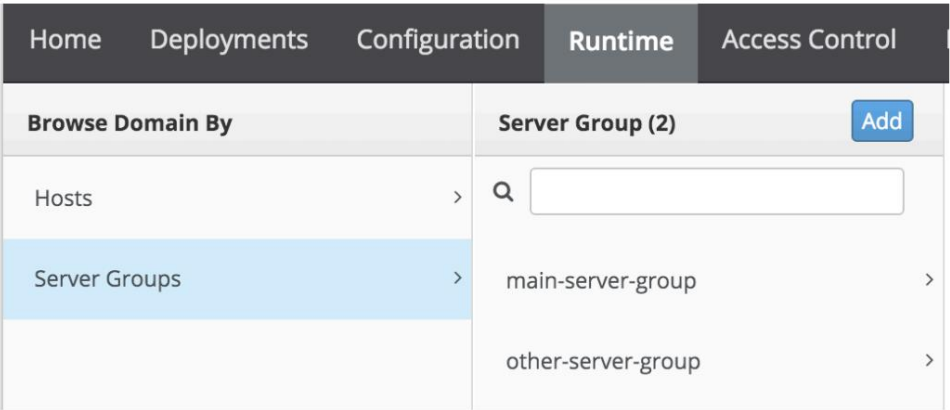
Click **Hosts** in the left navigation bar to view the hosts in the managed domain and verify that you can see three hosts named **master**, **host2**, and **host3**, respectively.



6. A server group is a logical grouping of servers (instances) EAP 7 that are managed together as a single unit. The server instances can run on different host computers, and it is the domain controller that must ensure that the settings across the managed domain are in sync.

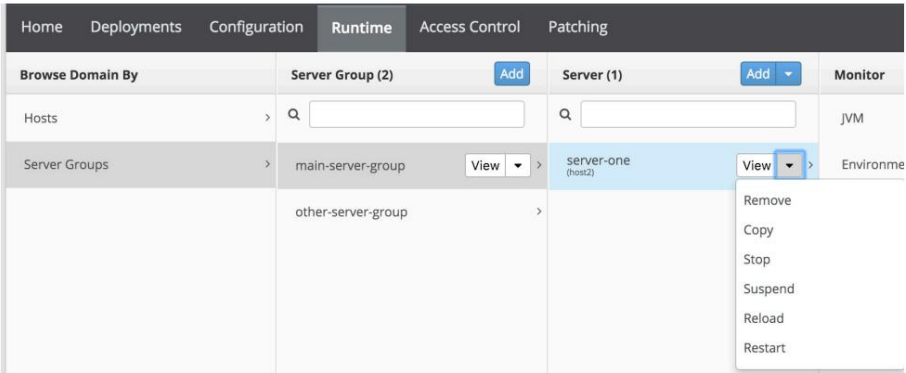
Click **Server Groups** in the left navigation bar to view the server groups in the managed domain and verify that you can see two server groups named **main-server-group** and **other-server-group**.

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7. You will be creating two new server groups, but you must first remove the existing servers and server groups.

7.1. Click `main-server-group` in the Server Group column to view the servers in this group and verify that you can see a single server named `server-one` defined. Before removing this server, you need to make sure that it has been stopped. Click the dropdown button next to `server-one` and click `Stop` to stop this server.



7.2. Click `Confirm` in the confirmation dialog box that appears. After a few seconds, you will see a green message indicating that the server has been stopped successfully.

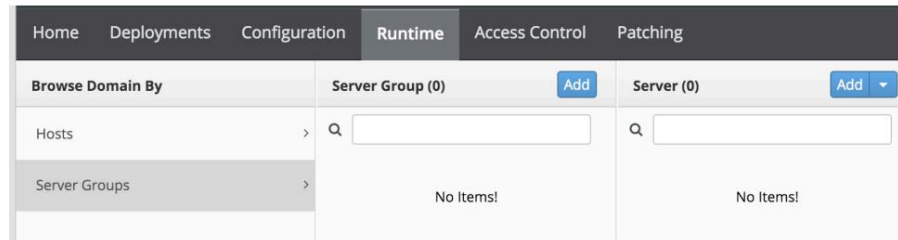
7.3. Click the dropdown button next to `server-one` again and click `Delete` to delete this server. Now click `Confirm` in the confirmation dialog box that appears. After a few seconds, you will see a green message indicating that the server was removed successfully.

7.4. Repeat this process to stop and remove `server-two` and `server-three` from `other` server-group. Before deleting a server group, make sure that the group has no servers defined.

7.5. To remove `main-server-group`, click the dropdown button next to `main` server-group and click `Remove` to remove this server group. Click `Confirm` in the confirmation dialog box that appears. After

After a few seconds, you will see a green message indicating that the pool was removed successfully.

Repeat this process to remove other-server-group from the managed domain. You should now have no server groups or servers defined in the managed domain.



8. After you have deleted the existing server groups, you can create new ones groups of servers using the administration console.

8.1. Click Add in the Server Group column of the console. administration to add a new server group. This brings up the Create Server Group dialog box.

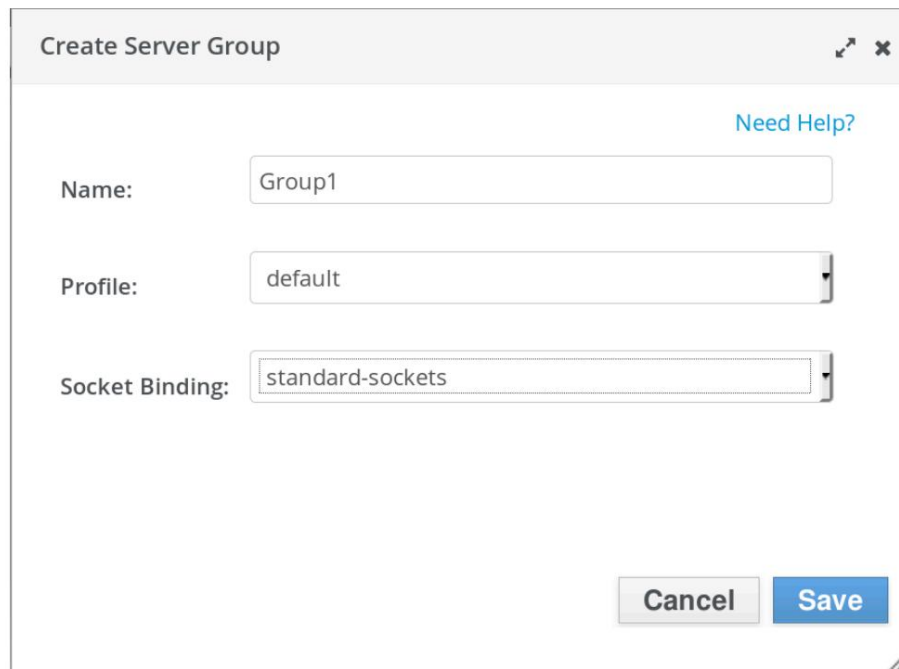
8.2. To add a new server group, you need to submit three key attributes as shown in the window. A unique Name for the server group, a valid Profile from the list of profiles defined in the domain.xml configuration file that controls the active subsystems in a given profile, and a Socket Binding that defines a set of network ports that Servers running within a server group will be used.

Add a new server group using the following details:

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- **Name:** Group1
- **Profile:** default
- **Socket binding:** standard-sockets

Click Save to create the Group1 server group.



Create Server Group

[Need Help?](#)

Name: Group1

Profile: default

Socket Binding: standard-sockets

Cancel Save

8.3. You can create multiple server groups, each with its own profile and socket binding.

Create another server group named Group2 with the following details:

- **Name:** Group2
- **Profile:** full
- **Socket binding:** full-sockets

9. You should now have two server groups named Group1 and Group2, defined in your managed domain.

Browse Domain By	Server Group (2)	Add
Hosts	Q	
Server Groups	Group1	
	Group2	

- 10. Perform cleaning.
  - 10.1.Press Ctrl+C to stop the domain controller and the two domain controllers host.
  - 10.2.This concludes the guided exercise.