Troubleshooting Services Using the Controller Admin Console

The following procedures may be used to troubleshoot services using the controller admin console:
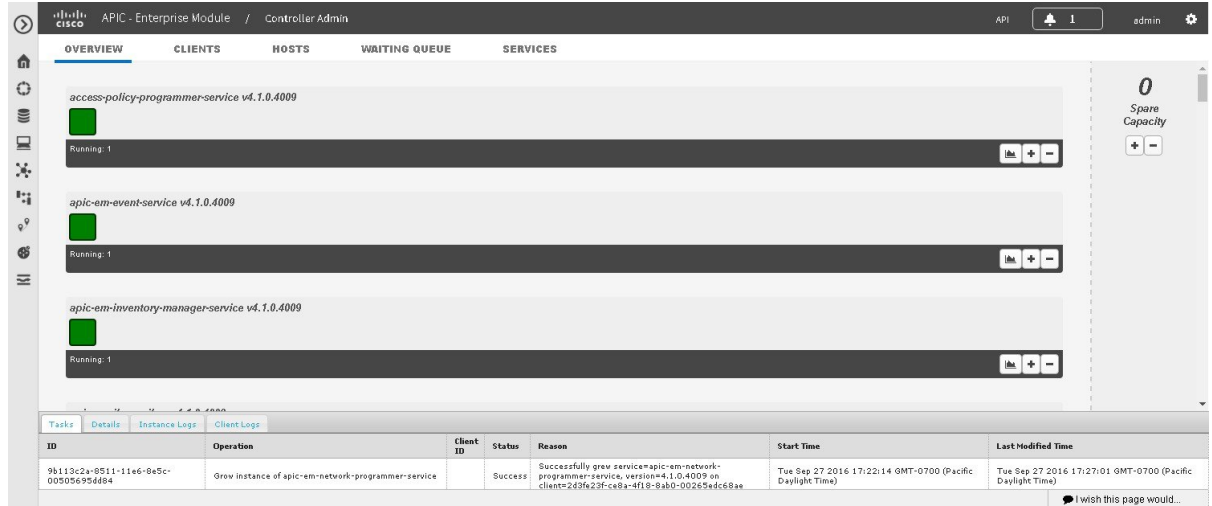
Controller Admin Console

The Cisco APIC-EM creates a Platform as a Service (PaaS) environment for your network. A service in this PaaS environment is a horizontally scalable application that adds instances of itself when increasing loads occur on a client within the network. You use the **Controller Admin** console to manage and troubleshoot

these services. The **Controller Admin** console and its tools were bundled with the deployment files and installed when you first deployed the Cisco APIC-EM.

Figure 1: Controller Admin Console

> **Note** For a multi-host cluster, you do not have to log into each host to view the **Controller Admin** console. In a multi-host cluster, you get a single, consolidated view of all of the services running on all three hosts.

The **Controller Admin** console is directly accessible from the controller's GUI. To access this console, click on **Settings** (gear) icon in the menu bar at the top of the controller's GUI, then click on the **System Administration** link in the drop down menu.

The **Controller Admin** console provides the following windows and functionality:

- **Overview**—Provides a list of services with information about their version and status. You can add or remove services in this window.

- **Clients**—Provides detailed client information in this window.

- **Hosts**—Provides detailed host information in this window.

- **Waiting Queue**—Provides information about the waiting queue.

- **Services**—Provides detailed service information. You can add or remove services in this window.

- **Logs**—Provides detailed task, instance, and client logs.

Reviewing the Service's Version, Status, and Logs

You are able to perform the following tasks using the **Controller Admin** console:

- Review the status of each service
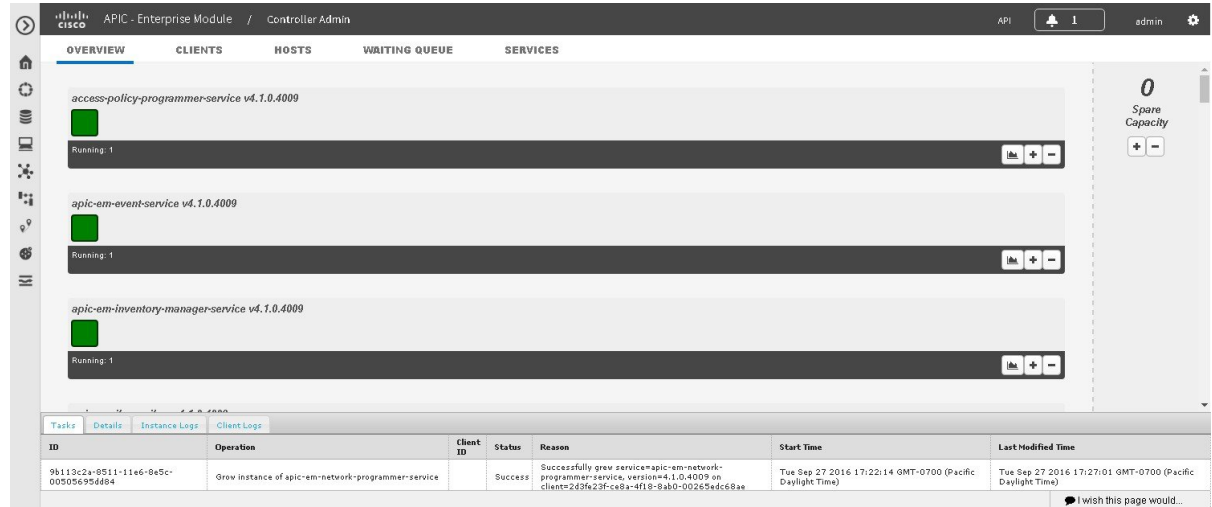- Review the version of each service

• Review the logs of each service

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Caution Only advanced users should access the **Controller Admin** console to perform the tasks described in this procedure or attempt to troubleshoot the services.

Figure 2: Controller Admin Console

Before You Begin

You must have successfully deployed the Cisco APIC-EM and it must be operational.

You must have administrator (ROLE_ADMIN) permissions and either access to all resources (RBAC scope set to ALL) or an RBAC scope that contains all of the resources that you want to group. For example, to create a group containing a specific set of resources, you must have access to those resources (custom RBAC scope set to all of the resources that you want to group).

Step 1 In the **Home** window, click either **admin** or the **Settings** icon (gear) at the top right corner of the screen.

Step 2 Click the **System Administration** link from the drop-down menu.

Step 3 Review the status of each service listed in the **Overview** window in the console.
Each service is represented by a square. A green colored square represents an active instance of the service, and a red colored square represents a service with a faulty or failed instance. Squares without color represents inactive services (no instances initiated and running).

In a multi-host environment, a service may be represented by two green colored squares, indicating that the service is running on two different hosts within your cluster. Place your cursor over each square to view the host (IP address) that the service is running on.

Step 4 Review the version of each service in the **Overview** window in the console.
The version is located in the header of each listed service.

Step 5 Review the service logs by clicking a specific active instance of a service (green square icon) and then viewing the **Instance** or **Client** logs located at the bottom of the window.
The **Instance** logs detail information about the instance of the service. The **Client** logs detail information about the client where the service is located.

Step 6 Proceed to review the logs under the **Tasks** tab. The following information is available for the service task:

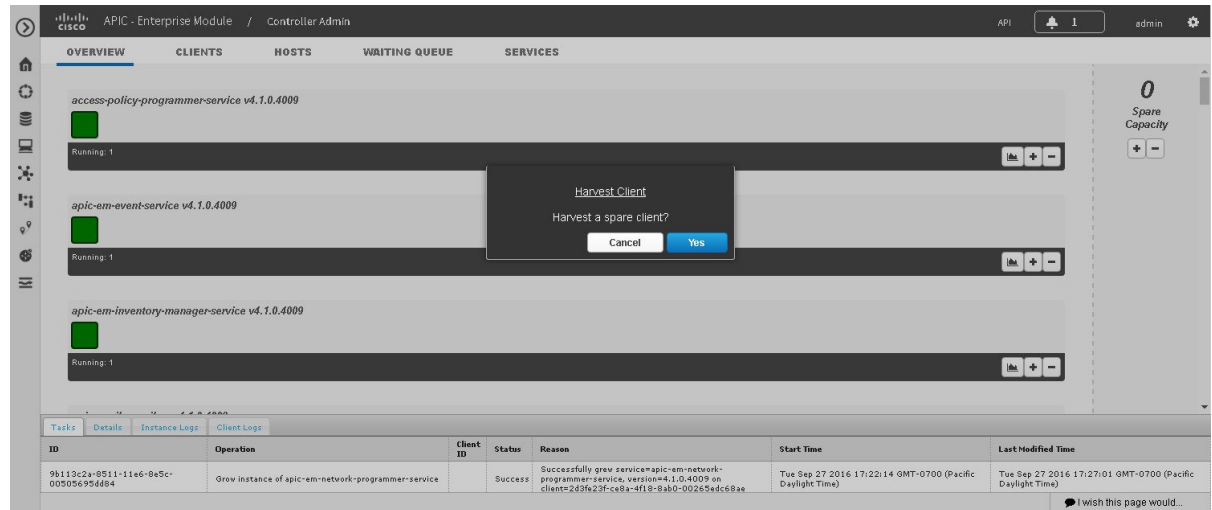|	
ID	Task identification number
Operation	Type of task, for example, growing a service
Client ID	Client identification number
Status	Status of the task, for example **Success** or **Failed**.
Reason	Reason given for either a successful or failed task.
Start Time	Time task stared.
Last Modified Time	Time service was last modified.

Removing a Service Instance

You are able to remove or harvest a service instance by using the **Controller Admin** console. The **Controller Admin** console tools are bundled within the ISO image and installed when you first deploy the Cisco APIC-EM.

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Figure 3: Removing (Harvesting) a Service Instance

Before You Begin

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You must have administrator (ROLE_ADMIN) permissions and either access to all resources (RBAC scope set to ALL) or an RBAC scope that contains all of the resources that you want to group. For example, to create a group containing a specific set of resources, you must have access to those resources (custom RBAC scope set to all of the resources that you want to group).

Step 1   In the **Home** window, click either **admin** or the **Settings** icon (gear) at the top right corner of the screen.

Step 2   Click the **System Administration** link from the drop-down menu.

Step 3   Review the list of operational services in the **Overview** window in the console.

Each service is represented by a square. A green colored square represents an active instance of the service, and a red colored square represents a service with a faulty or failed instance. Squares without color represents inactive services (no instances initiated and running).

Placing your cursor over a square displays the IP address of the client where the service is running.

In a multi-host environment, a service may be represented by two green colored squares, indicating that the service is running on two different hosts within your cluster. Place your cursor over each square to view the host that the service is running on.

Note   At the right of the console window are spare clients that are not running any service instances.

Step 4   Locate the service where you want to remove (harvest) an instance of a service and click the subtraction sign (-) at the lower right.

You are then prompted to confirm your action to harvest an instance.

Step 5   Choose **Yes** in the dialog box to confirm that you want to harvest an instance of the service.
The controller then proceeds to spin down the instance of the service.

When the process is finished, the square representing the service instance is removed.

What to Do Next

Manage your services by growing additional instances or removing (harvesting) instances from the services.
When finished with the **Controller Admin** console, click another icon on the **Navigation** pane to exit the
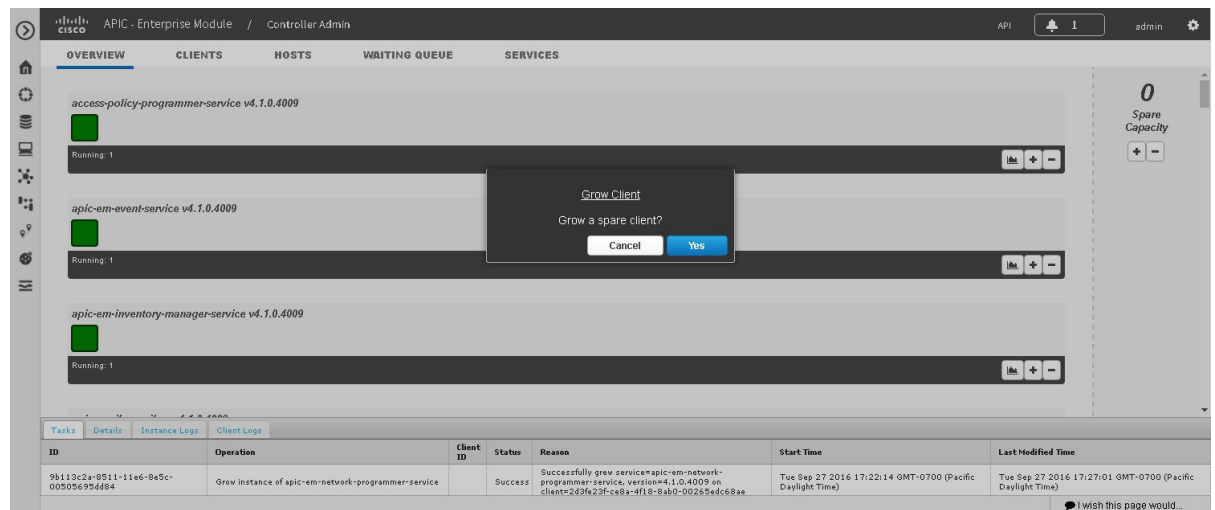console.

Creating a Service Instance

You can create or grow a service instance using the **Controller Admin** console.

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Caution   Only advanced users should access the **Controller Admin** console to perform the tasks described in this
procedure or attempt to troubleshoot the services.

Figure 4: Creating (Growing) a Service Instance

Before You Begin

You must have successfully deployed the Cisco APIC-EM and it must be operational.

You must have administrator (ROLE_ADMIN) permissions and either access to all resources (RBAC scope
set to ALL) or an RBAC scope that contains all of the resources that you want to group. For example, to create

a group containing a specific set of resources, you must have access to those resources (custom RBAC scope set to all of the resources that you want to group).

Step 1	In the **Home** window, click either **admin** or the **Settings** icon (gear) at the top right corner of the screen.
Step 2	Click the **System Administration** link from the drop-down menu.
Step 3	Review the list of operational services in the **Overview** window in the **Controller Admin** console.
	Each service is represented by a square. A green colored square represents an active instance of the service, and a red colored square represents a service with a faulty or failed instance. Squares without color represents inactive services (no instances initiated and running).
	Placing your cursor over a square displays the IP address of the client where the service is running.
	In a multi-host environment, a service may be represented by two green colored squares, indicating that the service is running on two different hosts within your cluster. Place your cursor over each square to view the host that the service is running on.
	Note At the right of the console window are spare clients that are not running any service instances.
Step 4	Locate the service where you want to manually grow an instance of a service and click the addition sign (+) at the lower right.
	You are then prompted to confirm your action to grow an instance.
Step 5	Choose **Yes** in the dialog box to confirm that you want to grow an instance of the service.
	The controller then takes a client from the **Spare Capacity Pool** and spins up an instance of the service.
	When the process is finished, the square that represents the new service instance turns green.