Configuring Server Power Usage

This chapter includes the following sections:

Server Power Usage

You can set the level of power usage for each server in a Cisco UCS instance, as follows:

Enabled

You can specify the maximum amount of power that the server can consume at one time. This maximum can be any amount between 0 watts and 1100 watts.

Disabled

No power usage limitations are imposed upon the server. The server can use as much power as it requires.

If the server encounters a spike in power usage that meets or exceeds the maximum configured for the server, Cisco UCS Manager does not disconnect or shut down the server. Instead, Cisco UCS Manager reduces the power that is made available to the server. This reduction can slow down the server, including a reduction in CPU speed.

Setting the Power Usage for a Server

Procedure

	Command or Action	Purpose
Step 1	UCS-A# **scope server** *chassis-id*/*server-id*	Enters chassis server mode for the specified server.
Step 2	UCS-A /chassis/server # **set power-budget committed {disabled	*watts*}**	Commits the server to one of the following power usage levels:

	Command or Action	Purpose
		• **disabled**—Does not impose any power usage limitations on the server.
		• *watts*—Allows you to specify the upper level for power usage by the server. If you choose this setting, enter the maximum number of watts that the server can use. The range is 100 to 1,100 watts.
Step 3	UCS-A /chassis/server # **commit-buffer**	Commits the transaction to the system configuration.
Step 4	UCS-A /chassis/server # **show power-budget**	(Optional) Displays the power usage level setting.

The following example limits the power usage for a server to 1000 watts and commits the transaction:

```
UCS-A# scope server 2/4
UCS-A /chassis/server # set power-budget committed 1000
UCS-A /chassis/server* # commit-buffer
UCS-A /chassis/server # show power-budget
Power Budget:
    Committed (W): 1100
    Oper Committed (W): Disabled

UCS-A /chassis/server #
```

Viewing Server Power Usage

Procedure

	Command or Action	Purpose
Step 1	UCS-A# **scope server** *chassis-id*/*server-id*	Enters chassis server mode for the specified server.
Step 2	UCS-A /chassis/server # **show stats mb-power-stats**	Displays the power usage statistics collected for the server.

The following example shows the server power usage:

```
UCS-A# scope server 2/4
UCS-A /chassis/server # show stats mb-power-stats

Mb Power Stats:
    Time Collected: 2010-04-15T21:18:04.992
    Monitored Object: sys/chassis-1/blade-2/board
    Suspect: No
    Consumed Power (W): 118.285194
    Input Voltage (V): 11.948000
    Input Current (A): 9.900000
    Thresholded: Input Voltage Min
UCS-A /chassis/server #
```