Monitoring and Reporting

This chapter contains the following sections:

Viewing the Cisco C880 M4 Server Reports

Reports give a view on the status of the Cisco C880 M4 Server.

Step 1 On the menu bar, choose **Physical** > **Compute**.

Step 2 In the left pane, expand the site and pod that contain the Cisco C880 M4 account, and then choose the Cisco C880 M4 account.

Step 3 Click one of the following tabs to view the status of the server and its components.

Note Cisco UCS Director displays a summary of the current status of the server and its components. Click the tabs for more details about specific components.

Name	Description
Summary tab	Overview of the MMB , BMC , system status, system boards, input/output units, disk units that are installed on the chassis of the Cisco C880 M4 sever.
Firmware Version tab	Details of the unified firmware version, firmware active bank, firmware version(bank1), firmware version(bank2), unit, and firmware.
Board Information tab	Details of the various boards on the server. This includes details such as board manufacture date, board manufacturing vendor, and serial number.
Power Control tab	The power status for the server.

Name	Description
Temperature tab	The temperature and status of units, such as the CPU, and baseboard.
Fan tab	Details and status of the fan, such as fan slot, fan monitor number, part number, status, fan speed, threshold warning, and threshold critical.
LED tab	Working status of server components, such as the system boards, input/output units, and MMB.
Power Supply tab	Details of the PSU, such as type, status, part number, and serial number.
CPU tab	Details of the CPU, such as number, status, core, max core, model, stepping, part number, and serial number.
DIMMs tab	Details of the server DIMMs, such as status, size, rank, date rate, part number, and serial number.
Boot Order tab	The current boot order.
RAID Card tab	Details of the RAID on the server, including slot number, status, vendor id, device id, physical drives count, logical drives count, serial number, and firmware version.
System Event Log tab	The System Event Log events for the server, including information about events occurring on the server.
IOU tab	Details of the input/output units (IOU) on the server, including the IOU number, part number, serial number. It has drilldown report which shows details of on board LAN, voltage, PCI express slot, and PCIeSW. **Note** The IOU onboard MAC address is captured by the BIOS and saved in the MMB firmware while the server is in the AC ON state. Your system server should be powered on after AC ON if you want to display the MAC address.

CloudSense Reports

CloudSense reports provide inventory and status information for the following server components:

- CPU

- Fan

- Power Supply

- DIMM

- RAID

- Temperature

All these reports can be viewed in a single page as a HTML or PDF. For more information about Cloudsense Reports, see the Cisco UCS Director Administration Guide.

Note A CloudSense report shows inventory reports for all accounts in a pod.

System Events and Triggers

System events and triggers are used to monitor the health of the server. For example, if the fan speed exceeds a specified value, this event triggers an email to the contact provided in the account configuration. The following table shows the objects and their parameters that you can monitor for system events and for which you can set triggers.

Objects	Parameters
Fan	Fan Speed
Temperature	Temperature Sensor
Power Consumption	Power Consumption
System Status	Power System Status OPL Status Temperature Status Fan Status MMB Status Status of System Board Status of Input/Output Unit Status of Disk Unit

Example: Creating an Email Workflow

Step 1   On the menu bar, choose **Policies** > **Orchestration**.

Step 2   Click the **Workflows** tab.

Step 3   Click **Add Workflow**.

Step 4   In the **Add Workflow Details** screen of the **Add Workflow** wizard, complete the following fields and then click **Next**.

Name	Description
Name field	A unique name for the workflow. We recommend that this name indicate the purpose of the workflow.
Description field	A description for the workflow.
Workflow Context drop-down list	Choose the context in which the workflow is used. This can be one of the following: • Any—Allows the workflow to be used in any context. • Selected VM—Allows the workflow to be executed only when a VM is selected.
Save as Compound Task check box	If checked, the workflow is defined as a compound task.
Place in New Folder check box	The folder where you want to save the workflow. If you check this check box, enter a folder name in the **Folder Name** field.
Select Folder drop-down list	Choose the folder in which you want to save the workflow. This drop-down list is only visible if you do not check the **Place in New Folder** check box.

Step 5   In the **Add User Inputs** screen of the **Add Workflow** wizard, do the following:

a) Click **Add**.

b) In the **Add User Inputs** dialog box, complete the following fields and then click **Submit**:
    If you configure the workflow with the required user inputs, you can configure the workflow tasks to prompt for certain values when the workflow runs.

Name	Description
Input Label field	The label assigned to the input.
Input Description field	A description for the input.
Input Type field	The type of input category.

Name	Description
Admin Input field	Input from the administrator based on the input type. The inputs are not required to be provided by the end user who executes the workflow. You can also prevent an end user from providing certain types.
Admin Input List field	The current administrator's list of inputs. The input order can be rearranged.
Admin Input Filter field	The administrator's input filter value used to define custom inputs based on a filter (static or dynamic). For example, you can filter on aggregate, volumes, and POD.

Step 6   Click **Submit**.

If you created the workflow in a new folder, you might need to click **Refresh** to see that folder in the folder list.

Step 7   On the icon bar, click the purple drop-down list icon and choose **Workflow Designer** .

Step 8   In the **Available Tasks** pane of the Workflow Designer, expand **Cloupia Tasks** > **General Tasks**.

Step 9   Click **SendEmail** and drag and drop the task onto the Workflow Designer work area .

Step 10   In the **Task Information** screen of the **Add Task (SendEmail Profile)** wizard, do the following:

a) Enter a task name and comment to identify the task.

b) If you want Cisco UCS Director to automatically retry the workflow if it encounters an error, do the following:

    1 Check the **Retry Execution** check box.

    2 From the **Retry Count** drop-down list, choose the number of retry attempts .

    3 In the **Retry Frequency** field, enter a comma-separated list of values that represents the number of seconds between retries.

c) Review the task details.

d) Click **Next**.

Step 11   In the **User Input Mapping** screen, click **Next**.

Step 12   In the **Task Inputs** screen, do the following:

a) Enter a valid **E-mail Address**.

b) Enter a **Subject**.

c) (Optional) Enter a **Description**.

d) Click **Next**.

Step 13   In the **User Output Mapping** screen, click **Submit**.

Adding a Trigger

Before You Begin

Create a custom workflow task.

Step 1   On the menu bar, choose **Policies** > **Orchestration**.

Step 2   Choose the **Triggers** tab and then click **Add**.

Step 3   In the **Trigger** dialog box, click **Trigger Information**.

Step 4   In the **Trigger Information** dialog box, complete the following fields:

Name	Description
Trigger Name field	A unique name for the trigger.
	Note The trigger name is used in the subject line of the email notification
Description field	(Optional)A description for the trigger.
Frequency drop-down list	Choose the frequency at which you want to monitor the event for this trigger.
Trigger Type drop-down list	Choose **Stateful** to ensure that the trigger remembers the current state and only executes actions when there is a change in trigger state.

Step 5   Click **Next**.

Step 6   Click **Add(+)**.

Step 7   In the **Add Entry to Conditions** dialog box, complete the following fields:

Name	Description
Type of Object to Monitor drop-down list	Choose Cisco C880 M4.
Object drop-down list	Choose the object you want to monitor for this trigger.
Parameter drop-down list	Choose the parameter for which you want to set the trigger.
Operation drop-down list	Choose the operation that you want to include in the trigger.
Value drop-down list	Choose the value that you want to include in the trigger.

Step 8   From the **Trigger When** drop-down list, choose the condition that will invoke the trigger conditions.

• **All Conditions**—The trigger is invoked only when all conditions are satisfied.

• **Any Conditions**—The trigger is invoked when any of the given conditions is satisfied.

Step 9   Click **Next**.

Step 10   On the **Specify Workflow** screen, complete the following fields:

Name	Description
Maximum Invocation drop-down list	Choose the Maximum Invocation count that you want to use with this trigger.
Select Workflow drop-down list	Choose the workflow that you want to run automatically when the trigger state becomes Active or Clear.

Step 11   Click **Next**.

Step 12   In the **Specify Workflow Input** field, provide the inputs for the selected workflow, if any.

Step 13   Click **Submit**.