Cisco StadiumVision
Management Dashboard Monitored Services Guide

Release 2.3

May 2011

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About This Guide

This guide describes how to use the Monitored Services screens in the Dashboard to monitor the health of StadiumVision.

Document Audience

The intended audience is StadiumVision system administrators and Cisco Technical Field Engineers who are responsible for designing and deploying StadiumVision. It is expected that readers of this document are familiar with basic IP networking technology, have a general understanding of the sports and entertainment business, and understand the objectives and operations of live events.

Document History

Table 1. Revision History

Date	Revision	Author	Comments
5/18/2011	Rev 0	Trish McBride	First edition for StadiumVision release 2.3

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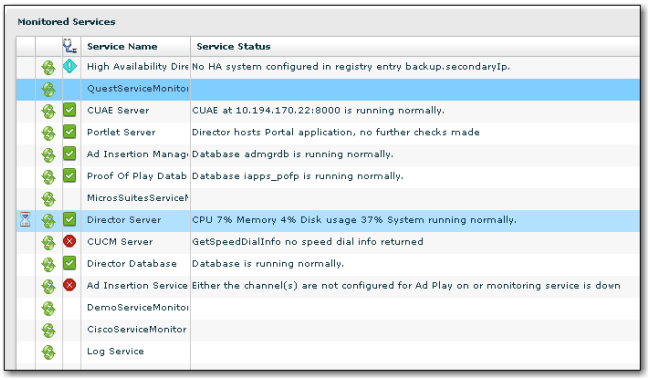
Management Dashboard Monitored Services



The Services folder in the **Dashboard** drawer displays the Monitored Services screen which shows all operational data in one console to make it easy to monitor the health of StadiumVision. If there are problems with the server or process, the Monitored Services tabs in the Device Details window help you identify the issue and provide suggestions for how to resolve it.

Table 2. Servers and Processes Monitored by the Dashboard

Name	Description
High Availability Director	Monitors the health of the secondary/failover SV Director server (if present).
Quest Services Monitor	Monitors the Point of Sale (PoS) System.
CUAE Server	Monitors the CUAE Cisco Unified Application Environment (CUAE) service running on a dedicated host. CUAE is required to support Cisco IP phone services.
Portlet Server	Monitors the Liferay server.
Ad Insertion Manager Database	Monitors the database used by the Ad Insertion Manager (if present).
Proof of Play Database	Monitors the database supporting Proof of Play.
Micros Suites Services Monitor	Monitors the health of the Micros Suites server.
Director Server	Monitors the health of the operating system for the SV Director server hosting SV Director.
Ad Insertion Services Monitor	Monitors all the mapped channels in AIM for its active/inactive status.
Cisco Service Monitor	Monitors Point of Sales for the Cisco Vendor Type.
Log Service	Provides a summary of the application error messages being logged for the SV Director Server.

Monitored Services Detailed Status Tabs

To poll for the latest status of a monitored service, click on the service and then click the refresh button. The information for that service displays in the Monitored Services detailed status tabbed area. Refer to Figure 1.

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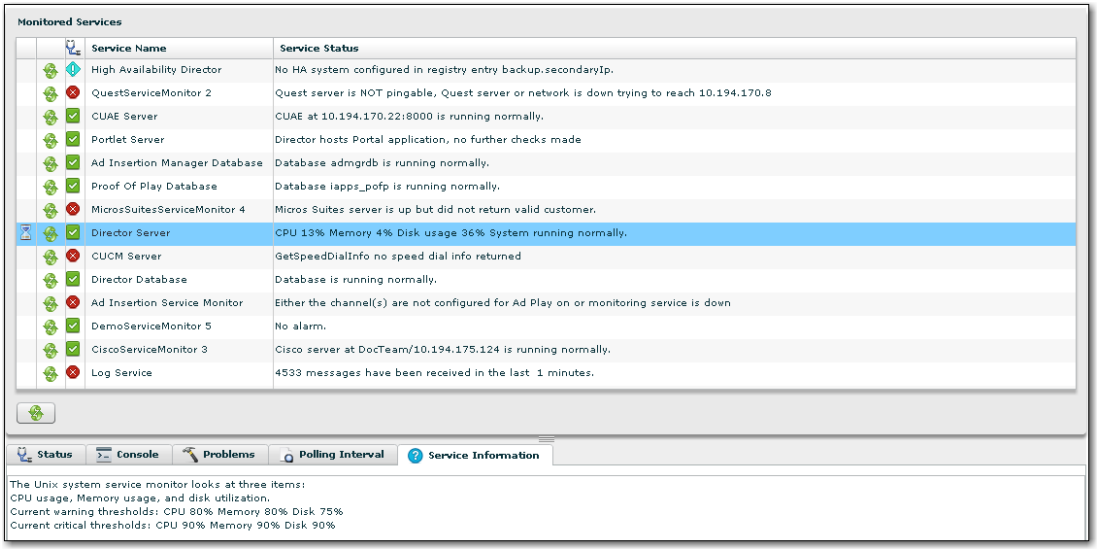
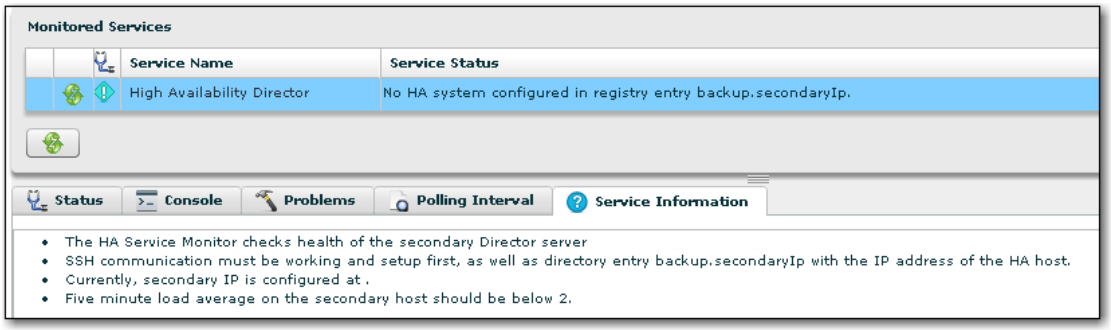
Figure 1. Monitored Services Tabs



Tab Name	Description
Status	Displays detailed status for the selected service. Data displayed is service-specific.
Console	Displays the log and other messages output during the service check operation.
Problems	Displays the actions you can take to change the state of the specific service from RED to GREEN. The Problems tab is only relevant for services that are in the RED state.
Polling Interval	Displays the poll interval, the last time status was checked, and the next scheduled status check.
Service Information	Displays details about the information monitored by the selected service.

High Availability Director



The StadiumVision solution depends heavily on the SV Director to coordinate functions throughout the stadium. If the SV Director becomes unavailable, StadiumVision functionality stops. To ensure continued operation, StadiumVision is optionally installed with a secondary SV Director called the

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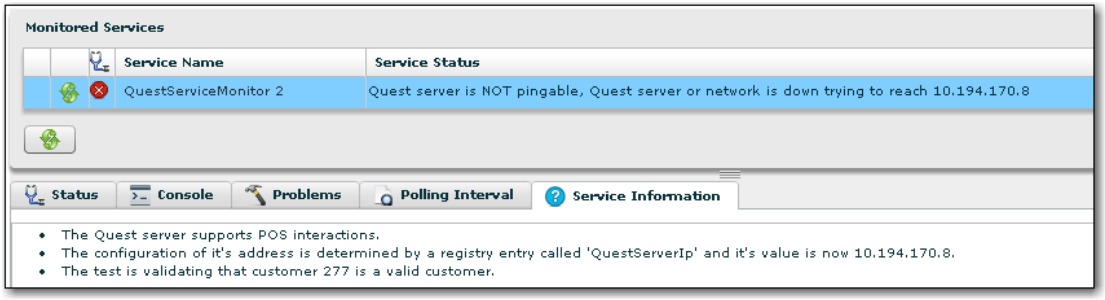
High Availability (HA) Director. The HA Director is a copy of the SV Director with all the same data installed on a duplicate database. If the primary SV Director is not functioning, the HA Director can be used to run StadiumVision. The HA director should always be up and running and available for updates to its copy of the data.

The HA Director monitoring service checks that the HA Director is up and running and reports the average load on that system. If the HA Director is up, the service status is reported as “HA System running normally”. Select the Status monitored services tab to show the five minute load average. Normally, the load average should be low as the HA Director is mostly idle until it is used (becomes primary).

Click the **Service Information** tab to find the IP Address for the HA Director as well as other self-explanatory information.

Quest Services



The Quest Services Monitor is used only when a Quest server is present in the network. The Quest Server monitoring service checks that the Quest server is up and running and responds to web service requests. To confirm that the Quest server is working, the monitoring service sends a simple call to the Quest server to validate the web services are operational.

Click on the **Service Information** tab to find the IP Address for the Quest server and the customer ID being used for validation. If the customer is not configured in StadiumVision Director and does not match the Quest system, the status will be ‘non-optimal’ rather than green.

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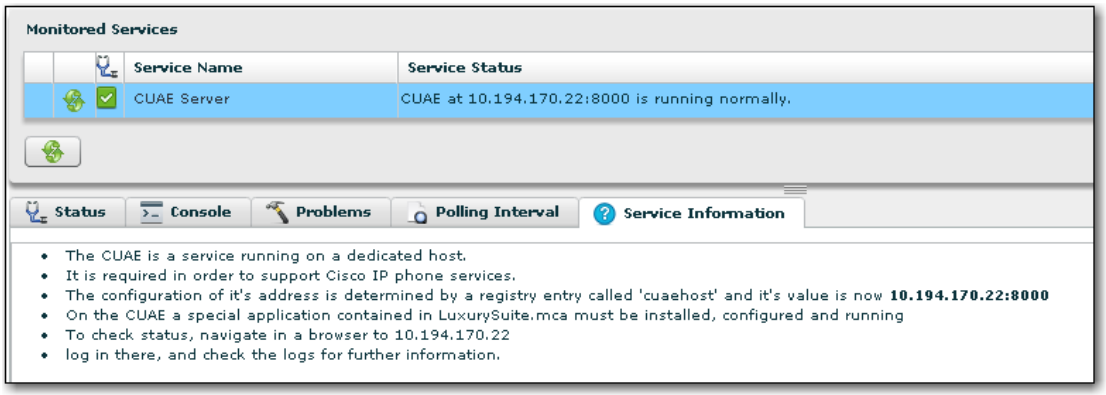
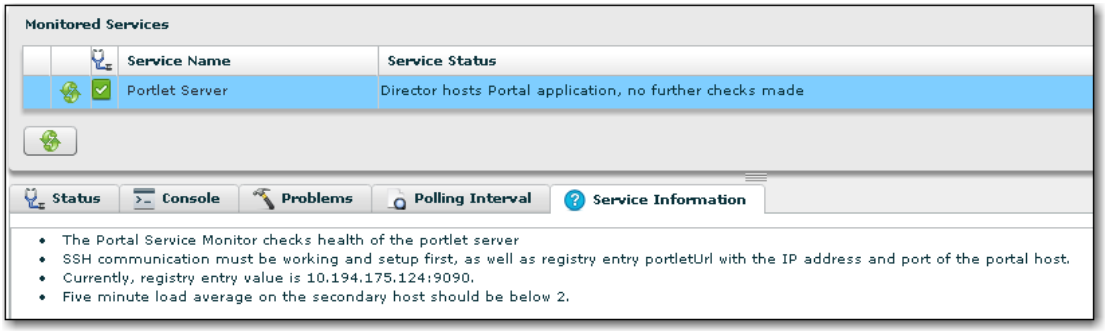
CUAE Server



The Cisco Unified Application Environment (CUAE) server is a separate server and application that provides data to the phone applications. The CUAE Server monitoring service checks that the CUAE server is up and running and displays status information on the **Service Information** tab.

Portlet Server



The Portal Service Monitor checks the health of the portlet server. To monitor this service, the SSH communication must be setup and working and there should be a registry entry “portletUrl” with the IP address and port of the portal host. The Registry value entry should point to the IP Address of the SV Director server. The five minute load average on the secondary host should be below 2.

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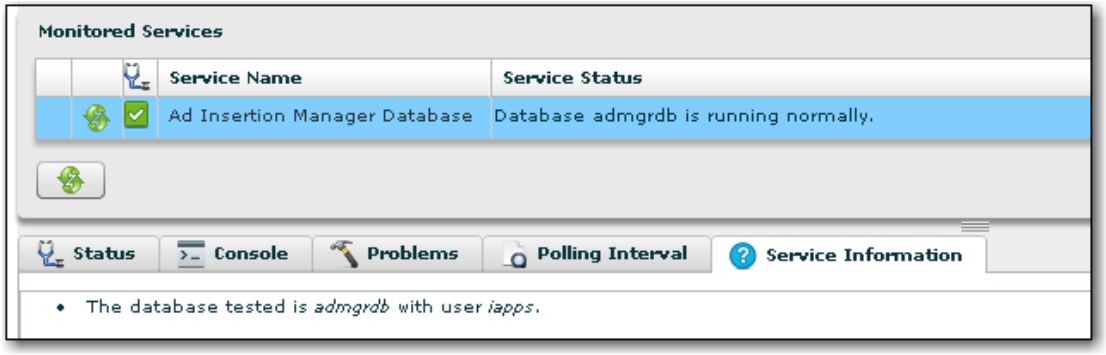
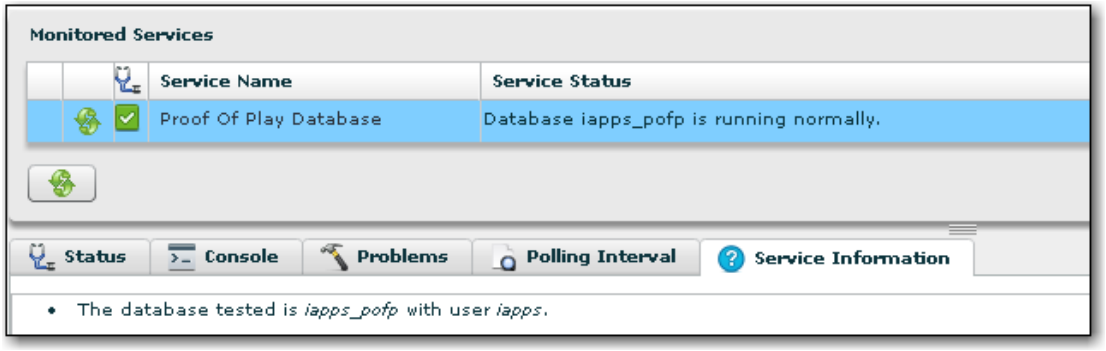
Ad Insertion Manager Database



The Ad Insertion Manager (AIM) is an optional addition to the StadiumVision solution. This database is a separate database that stores information about AIM data. The Ad Insertion Manager monitoring service checks that the AIM database is up and running and displays status information in the Service Information tab. The AIM database runs on the same machine as StadiumVision.

Proof of Play Database



The Proof of Play (PoP) database is a separate database that stores information about PoP data when optionally enabled. The Proof of Play monitoring service checks that the PoP database is up and running and displays status information in the Service Information tab. The PoP database runs on the same machine as StadiumVision.

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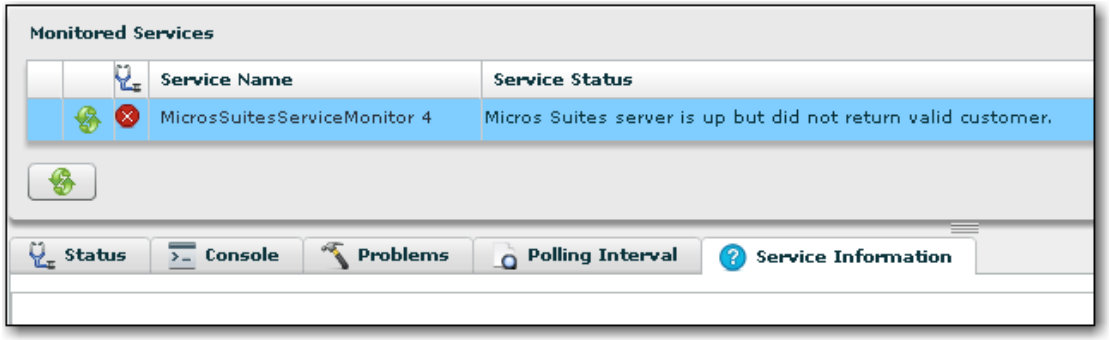
Micros Suites Services

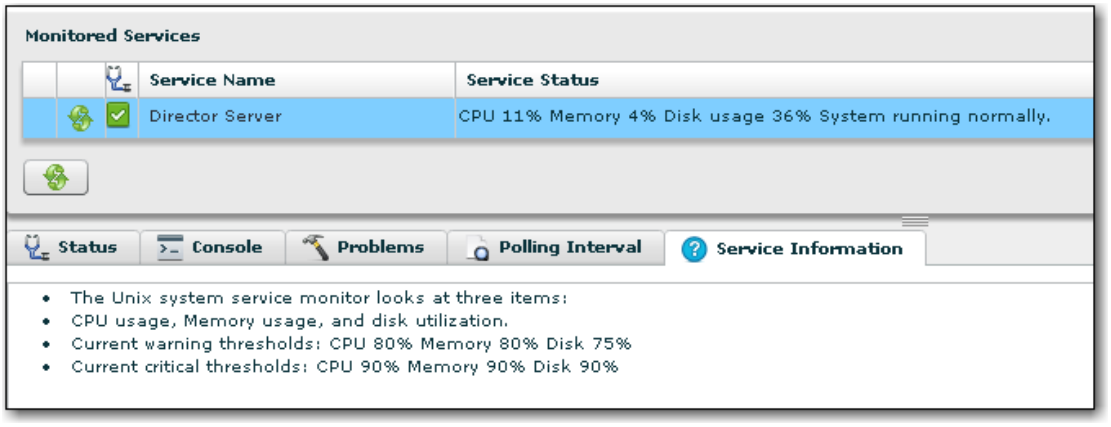


The Micros Services Monitor checks if the Micros server is up and running and can be reached over the network from the SV Director. If it can and there are Stores that have been defined for a Micros vendor installation, the services monitor checks that it can do a basic call to the Micros server for that store. This check confirms the Store exists in Micros and is configured and responding.

If there is an error in any of the above, the status will be red/down instead of green/up.

Additionally, if there are Stores configured, the Micros service monitor performs another action that does not influence the overall up/down status. For each store, a call is made that will 'wake up' the Micros internal processes. This is to make sure that when an order comes through, all the Micros processes will be ready for a quick response. If this were not done, the first real transaction to come through could time out or fail. This process runs briefly once every 30 minutes.

Director Server



The Director Server monitoring service gathers information from the underlying SV Director operating system. It looks at three parameters: CPU

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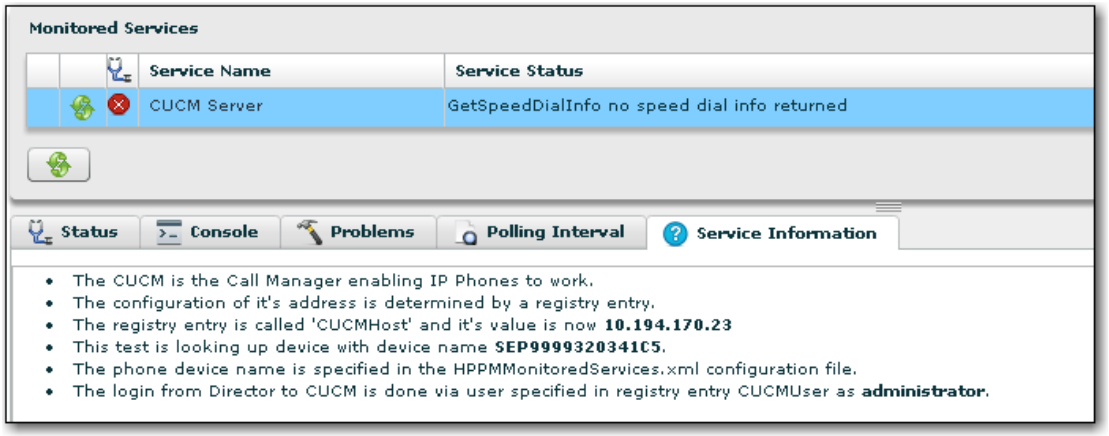
Utilization, Disk utilization, and memory utilization. The Dashboard will show an alarm if any of these go above 90%.

If CPU utilization is above the threshold for a short period of time, it's probably acceptable. However, if CPU utilization remains elevated, there is a problem such as a run-away process or a task that is consuming all the available CPU which can result in reduced responsiveness of the system. You will need to look at the system and determine how to resolve.

If memory utilization is above the threshold over a long period of time, there could be something running in the system which is using more memory than it should. Identify which processes are using the most memory.

If disk utilization is above the threshold, the disk space is filling up. The disk should be cleaned up before utilization reaches 100% because at that point, the StadiumVision system could stop working. The disk might fill up due to having a lot of backup files, PoP files, or log files on the system. Determine what files are filling the disk and remove what can be removed. If this is a regular problem, a cron job may be required to regularly remove old files.

CUCM Server



The Cisco Unified Communication Server (CUCM) server is the core component of the Cisco IP Phone's ability to place calls. StadiumVision Director communicates with the CUCM to support the StadiumVision IP Phones for background and application control. The Dashboard tests communication between the SV Director and the CUCM. If communication goes down, it could be because the network is down, or because the CUCM itself is down.

To find more information about the CUCM, such as its IP Address, click on the CUCM Server and then click on the **Service Information** tab at the bottom of the screen.

If communication between the StadiumVision Director and CUCM is down, the Cisco IP Phones in luxury suites within the stadium will not work.

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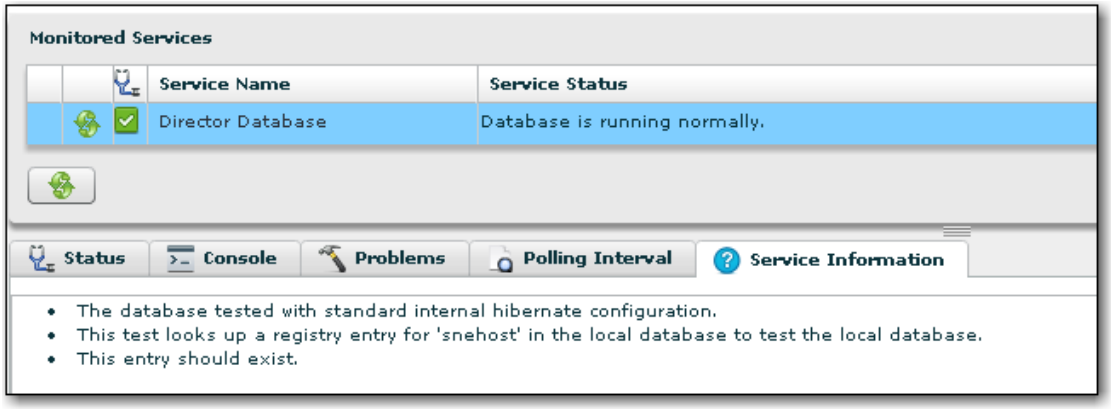
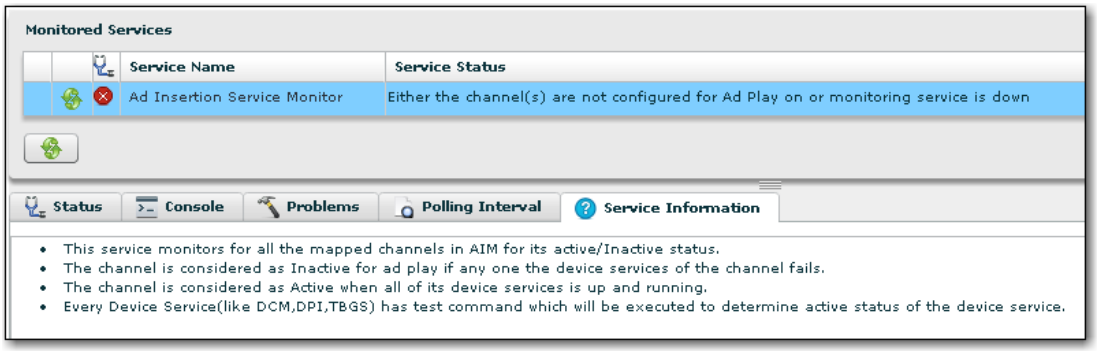
Director Database



The StadiumVision Director Database stores information such as playlists, configuration for suites and DMPs and must be up and running for StadiumVision to function. The Director Database monitoring service checks that the database is up and running and displays the status in the **Service Information** tab. The SV Director Database runs on the same machine as StadiumVision.

Ad Insertion Service



The Ad Insertion Service monitors all the mapped channels in AIM for its active/inactive status. The channel is considered Inactive for ad play if any one of the device services of the channel fails. The channel is considered Active when all of its device services are up and running.

Every Device Service (like DCM,DPI,TBGS) has a test command which will be executed to determine the activity status of the device service.

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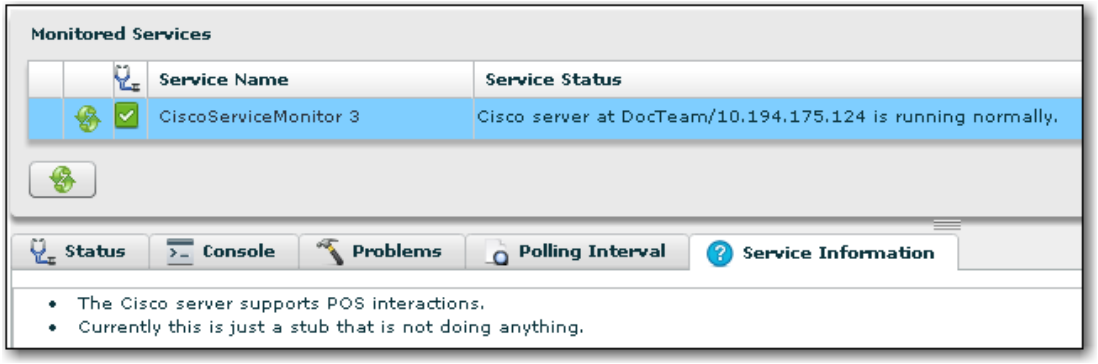
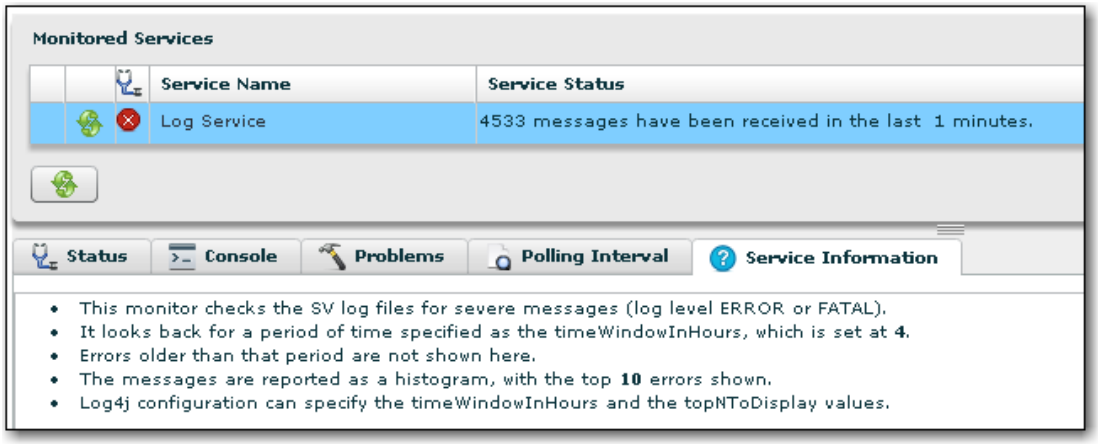
Cisco Services Monitor



This service is not currently implemented.

Log Service



As events happen within SV Director, they are logged in log files. A normal event may be logged at a low log level such as 'INFO'. A more critical event that requires intervention to fix will be logged at a higher log level such as 'ERROR' or 'FATAL'. Any messages in the log files logged at ERROR or FATAL are also shown in the Log Service status window.

The Log Services monitor checks the StadiumVision log files for severe messages (log level ERROR or FATAL). It looks back for a period of time specified as the timeWindowInHours, which is set at 8. Errors older than that period are not shown here. The messages are reported as a histogram,with the top 10 errors shown.

Log4j configuration can specify the timeWindowInHours and the topNToDisplay values.

The Log Service Status window shows a report with the following information:

- **Timestamp:** When the first error in the rolling 8 hour window occurred.
- **Level:** The log level at which the message was logged.

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- **Count:** How many times in the 8 hour window this message has recurred.
- **Name:** The component within StadiumVision that issued the log event.
- **Message:** The message that the StadiumVision component put in the log. This may be only the start of the message. Sometimes the log file itself may need to be examined to get the full message.

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