

## CMS-2200 Diagnostic Steps

If a CMS-2200 is no longer accessible to the SMS software, try these steps to diagnose the unit. Support from USL can help much more quickly once we have logs and information found by these steps:

First try to access the web tool through a web browser at

[http://\\*\\*Projector\\_IP\\_Address\\*\\*:43758/cgi-bin/pycgi.py](http://**Projector_IP_Address**:43758/cgi-bin/pycgi.py)

and replace **\*\*Projector\_IP\_Address\*\*** with the ip of your projector. The web tool can get a current status from the CMS-2200. If you can access the web tool, select "Generate Log Package" and "download" to get a log package sent to your browser. Please forward the log package to USL.

If you cannot get to the web tool, please check the status lights on the front of the CMS.

- When the projector is powered on, the "POWER" light on the face of the CMS should come on solid. If that does not happen, the projector is not powering the IMB slot, or the CMS has a catastrophic power problem.
- When the projector goes from standby to fully booted, the "READY" light on the face of the CMS should start flashing about 30seconds after boot. It should flash for about 15 seconds, and then come on solid. This indicates the media block is ready to play video.
- The "DRIVES" lights should come intermittently after the projector boots, during the first 2 minutes of powered on operation. After that, they should rarely flash, unless content is being ingested or played. If the drive lights never activate, the server is not ready to operate.

Please let USL know the status of these lights on power-up.

If you don't get the expected boot sequence from the status LEDs, please login to the projector software and locate error information.

- On Barco Communicator software, there will be a popup window, or a red circle icon that will give a description of the error.
- On NEC DCCs2 software, the error information can be found under the "Info" tab in the "error" box. More information is available on "Info" tab, under the "SIB/IMB" page by clicking on "IMB STATUS".
- On a Christie projector, status information is available by clicking the status icon. A green or red icon is shown next to each of the projector systems.

If you get the expected LED response from the CMS during boot, try to login to the service terminal on the IMB. Use a telnet client (I like "Putty", a free client you can download) and create a telnet connection to the projector's IP address on port 43747. This will bring up the service terminal menu for the IMB on the CMS-2200. If you have access, please check 2 things:

- Enter "s" then enter "i" to show the secure silicon information. Please copy what is found here and send to USL.

- Enter "q" to get back to the main menu, then enter "l", enter "d" and enter "all" to go to the log system and dump all logs. Please copy the last 500 lines and send that to USL.

If the IMB accepts connection to the service menu, please try to open a terminal to the server. Use an SSH client (I like Putty for this, too) and open an SSH connection to the Projector's IP address on port 43757. Login with user: admin password: ultrateal If you can access the server, please run the command:

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cat /var/log/messages
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and copy the last 500 lines. Please send this log information to USL.

It would also be helpful to know if any other changes were made to the install when this started happening. This information will greatly help USL staff diagnose an problem with the CMS-2200 quickly.

If you would like to read the logs captured, they are in plain text stored in a tar.gz file. Winrar and 7zip are free programs available to unpack these files. There are several file types stored in the package:

- IMB\_Log\_sn\_date.txt – IMB information logs
- Message.\* - Server informational logs
- CMS\_Status\_sn\_date.txt – Server version and drive status information
- Smsd.conf – The server configuration file
- Auth.log – linux user authorization log; not used
- Cron.log – linux CRON log; rarely useful for CMS diagnosis
- Kern.log – linux kernel log; rarely useful for CMS diagnosis
- User.log – linux user logs; rarely useful for CMS diagnosis

The log files are saved in reverse chronological order. i.e. messages is the newest log file, and messages.4 is the oldest. These logs are plaintext and contain information useful in determining the status of the CMS-2200 system. Note that these are operational logs; the Secure logs are available by download through the SMS software.