CMX Analytics System Messages

This appendix lists and describes system messages for Cisco CMX analytics service. The system software sends these messages to the console during operation.

This appendix contains the following sections:

During Setup

The below table lists the error messages that you may get while setting up the CMX analytics system.

Table A-1   Error Messages During Setup

Error Message	Recommended Actions
No UI is displayed at all	• Check if Jboss is running. Use Telnet to connect and if it is not accepting connections on localhost, then connect using the IP address of the machine.
Can't login to application	• Check if the MSE database is up and running and is accepting connections. • Execute ""java -jar QueryTool.jar "select count(*) from point"". Check it displays a number > 0. If not, then, check if the MSE API is up and accepting connections by running the MSE client. If not, check whether the MSE is running.
Invalid Username/Password	CMX analytics uses the same login and password that you give at the time of selecting the service in the Prime Infrastructure UI.
3D Environment appears but all floors are black	• Clear the browser cache. • Check that there are not large floor plan being loaded.
Can't select dates	When the application starts up, it downloads information from the Oracle database. This may take a little time before available dates are present

Table A-1   Error Messages During Setup

Error Message	Recommended Actions
No zones are referenced or shown	The user needs to enter the coverage areas in the Prime Infrastructure, which correspond to zones. Stop the Analytics and add zones and then restart.
Latest available date is not current	Login to the MSE and check /opt/mse/logs/analytics/mse.log for the latest download of data. This shows the latest data. Also check the MSEclient process (java -jar MSEclient.jar run) is running as this transfers data from the MSE to the CMX analytics. Check if the Prime Infrastructure is showing the current clients.

During Analytics

The below table lists the error messages that you may during analytics.

Table A-2   Error Messages During Analytics

Error Messages	Recommended Action
Analytics hangs - no analytics results shown	• Restart jboss to see if that frees up some resources that were required but not available. • Check server.log to see the analytics progressing and look for which step does not succeed.
Points shown outside map or not where expected	• There may be an outdoor area defined in which case this is deliberate. However, it typically indicates that points are being located outside the building by the MSE triangulation algorithm. One way to address this is to make sure the floors have the default inclusion region, which is usually the boundary of the image. The inclusion region makes sure, that anything located outside the floor is snapped to the closest boundary. • Check GPS marker placements on NCS map (for 2D) to confirm they are correctly placed. • Check for recent changes in dimensions of floor plan which puts historical points outside. • Check also AP placement

Table A-2   Error Messages During Analytics

Error Messages	Recommended Action
No results appear in reports	• This may be because the parameters specify no solution. • Check that the same type of analysis can be done in the analytics.

Analytics not relating to believed reality	• There are many aspects which may not match expectations (busier in areas which are meant to be calm, dwell times shorter than expected, etc.) The main ones are the number of the number of devices being shown and where they are located within the building.
	
	• Historically, we have seen areas of high interference in which many more devices were detected than were in the area, even from up to 100m away. However, this should not be apparent in well configured networks with few, if any rogue APs.
	
	• There are many places to check to see if everything is in order.
	
	   – 1.Examine the heatmap option. This shows where points have been located and the density of them. Typically, the darker colors should be in areas of high traffic. You should not be seeing inordinate amounts of traffic in areas with believed few people. If the distribution of points is skewed, and/or with artefacts, then you are perhaps looking at a suboptimal network layout. See example below. In addition, the user can turn on the AP locations and verify that detected points are around them.
	
	   – The points on which the analytics take place are taken directly from the MSE history database. The Analytics is a way of visualizing this data, and at the same time it may show times at which the MSE or network was down where there is lack of device presence. Check the previous availability of the MSE. Analytics brings in each point from the MSE and builds a database of device/paths. Therefore, by looking directly at the Analytics database will show what the subsequent analytics is based up.
	
	   – To check the number of devices for a certain rules in the analytics, select "Typical locations" with "no of locations" set to 1. The balloon on the resulting single node will indicate the number of devices/paths and points. This facility will be made more explicit in future releases.
	
	3.Look at the reports as they show long term behavior and so the user should be seeing things like weekend trends or peak times. This may help focus the diagnosis into particular parts of the databases.

Analytics Error Message

The below table lists the Analytics error messages.

Table A-3   Analytics Error Message

Error Message	Recommended Action
not enough data, please broaden your search terms"	No data was found for the specified set of rules. Try to remove or extend some of the filters to see if that makes the message go away. If it does not, then you need to check that there is data in the database.
Max Point Limit Reached, using sample	Too much data was found for the specified set of filters. A maximum of 250k points are currently considered for the analysis. This means that the figures for number of devices is fixed below the actual detected level, however the other parameters such as dwell, crowding are still valid. This is a hard limit at the moment.
Please provide correct beacon points"	No beacon points have been set to carry out alternative path analysis.
Internal server error	Need to contact CMX analytics Team (mse-analytics@cisco.com)