

# RTM VQ Multicast Tech Note

## Technical Note: RTM VQ Metric Data

The RTM can be configured to send VQ metric data on a multicast stream. The multicast address and port are configured on the RTM "Log and Alert" configuration tab. The metric data is sent as a JSON string.

Streams from all RTMs are monitored by the RTM Manager. The JSON strings are logged on the RTM Manager filesystem at C:\Program Files (x86)\Video Clarity\RTM Manager\rm\rmcast.log\*

The following is an example of a single log entry for the DMOS metric. In this example, "237.7.7.7:7777" is the multicast address, and "{...}" corresponds to the actual JSON string sent by the RTM:

```
2016-03-16 08:10:19,363 [INFO] 237.7.7.7:7777
{
  "session": "720P_SDI1_IP231_DMOS_Stereo",
  "host": "16-Seagates2",
  "ipaddr": "192.168.1.115",
  "timestamp": "2016-03 16 08:10:31",
  "frame": 3439770,
  "numframes": 30,
  "videoOffset": 317,
  "averageY": 0.3631,
  "minimumY": 0.2007,
  "maximumY": 0.4765,
  "failureY": 0,
  "thresholdY": 3.0000,
  "thresholdDuration": 5
}
```

The keys in the JSON string are described as follows.

Key	Definition
session	Session Name, as configured on the RTM Sequence Creation configuration tab
host	RTM system host name
ipaddr	First network IP address used by the RTM
timestamp	ISO 8601 timestamp generated by the RTM
frame	Current frame number
numframes	Number of frames belonging to the average, minimum, and max score values. This corresponds to the "Metric Score Broadcasting Interval" setting on the Logs and Alerts RTM Configuration tab. A value of 1 implies a duration of 1 frame, in which case the averageY, minimumY, and maximumY scores will be the same.
videoOffset	Current RTM video offset value of input 1 vs. input 2, reported in number of frames
averageY	Average luma value for the configured video metric
minimumY	Minimum luma value for the configured video metric
maximumY	Maximum luma value for the configured video metric
failureY	Boolean value indicating whether or not the score is a failure based on the threshold: a value of 0 indicates no failure; a value of 1 indicates failure
thresholdY	Current RTM Video Quality Threshold value applied for PSNR or DMOS metric measurement
thresholdDuration	Current RTM Video Quality Threshold duration setting applied is number of video frames of threshold failure that trigger an event recording and log