Video Clarity

Tools for Video Analysis

# Scheduler - For RTM and Venue Player Applications


## Summary

The Scheduler command line utility may be used to create multiple tests in RTM or a playback schedule with the Venue Player application that is timed for video sequence playback duration. The Scheduler for RTM applies test start times for video and audio quality analysis and may set duration for selected test events in sequential order. For Venue Player any number of playback events may be applied to the number video outputs available on one or more systems for programmatic presentation of highest quality uncompressed visual media.


## General

Scheduler is a tool that generates a sequence server commands according to a schedule defined by an input text file. It can be used to send commands to the RTMonitor or Venue Player servers via their respective client front-ends at scheduled times. It resembles the crontab feature in Linux. The input file is assumed to be called 'scheduler.tab', and must be located in the same directory as the Scheduler tool itself.

For example:

```
# Sample crontab like input file for scheduler
# Date     HH:mm:ss   IPaddr        Port   rtm/vp  Command Sequences

2023-04-12  07:30:04   127.0.0.1     40001  rtm    version;boardtemp
2023-04-12  09:33:02   127.0.0.1     40002  rtm    version;boardtemp

daily     12:00:00   127.0.0.1     40001  rtm    version;boardtemp
hourly      30:00   192.168.1.120  40001  rtm    alignmentstatus
hourly      15:00   192.168.1.120  40001  rtm    alignmentstatus
hourly       1:00   127.0.0.1     40001  vp     managerStatus
```

Lines beginning with a "#" character are comment lines. Otherwise, rows are whitespace-delimited, containing fields for:

- Date and time to launch the command sequence
- The IP address and port for the target server
- ";" –delimited sequence of RTM or Venue Player commands
- rtm/vp indicator of server type
- 'Date' is expressed in YYYY-MM-DD format, also known as ISO 8601

-If the input file is modified while the tool is running, the schedule is regenerated internally as the tool continues execution.
-Rows that specify a "fixed" date and time are invoked once at the date and time specified. If that time is in the past, that row will be skipped.
-Rows may specify a "daily" schedule. This indicates that the corresponding commands should be invoked at the specified time each day.
-Rows may specify an "hourly" schedule. This indicates that the corresponding commands should be invoked at the specified time each hour of each day.

## Installation

To install, execute the installer called SchedulerSetup.exe

## Execution:

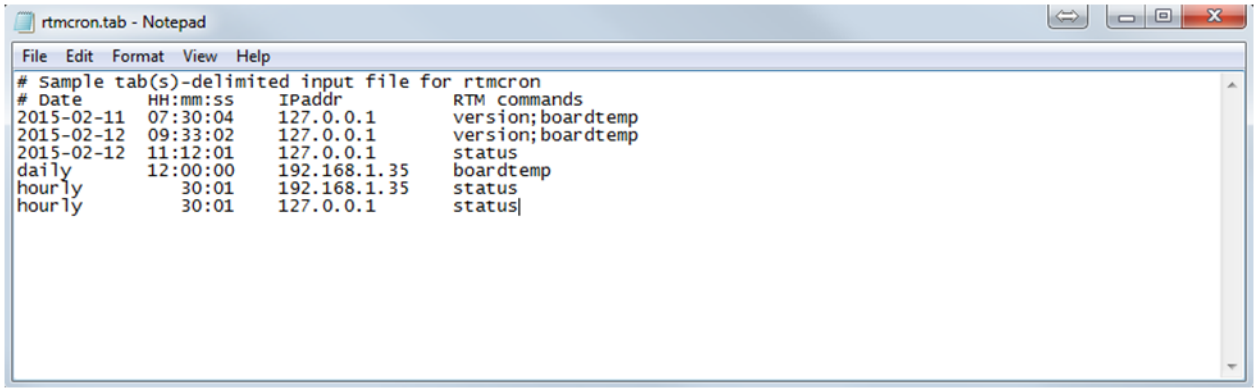
To start the tool, use Windows Explorer to select the tool. This will open a command window that also captures log status. Alternatively, the tool may be invoked directly from a command window. Status for all runs is logged in scheduler.log.

The tool continues to execute as long as there are commands scheduled sometime in the future. If the input text file contains a line starting with either "daily" or "hourly", the toll continues to run until it is manually stopped.

## RTM Typical Usage:

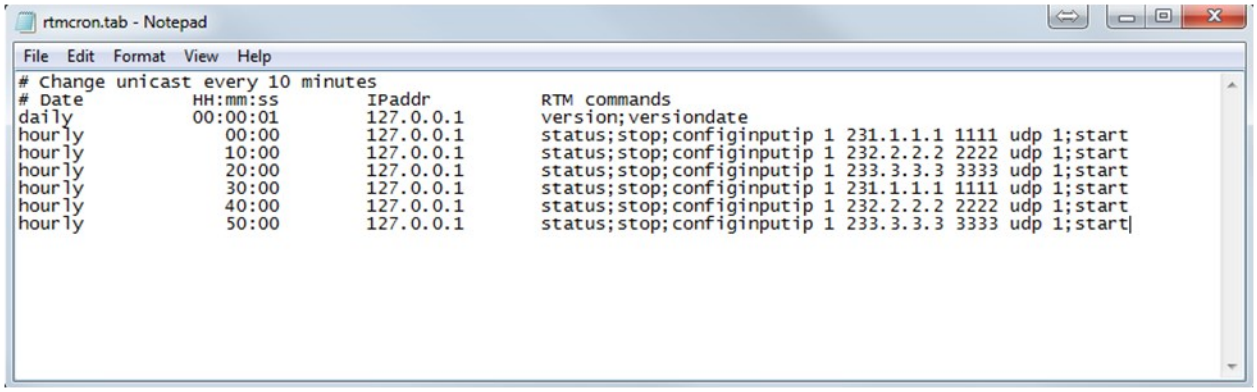
The Scheduler allows operators to use a single RTM unit to monitor several programs or channels in series. Although RTM can still monitor a single channel at a time (source versus processed via two inputs of the same content), it can now automatically switch from one program/channel pair automatically. This is useful when the RTM is monitoring and SDI source with a IP processed. RTM can select either SDI1 or SDI2 as the source and any IP stream address as the processed comparator for quality measurement and monitoring. Additionally this can be selectively scheduled for monitoring IP source versus IP processed stream as well .

# Example 1




In this example, three sets of commands will be sent at a specific date, and time. One command to check board temperature will be sent daily, and the status of two RTM's will be checked hourly.

# Example 2




In this example the scheduler is telling RTM to switch unicast addresses every 10 minutes. A series of commands is separated by semicolons to check the status, stop RTM, configure the new input, then start back up again.