

RTM Scheduler

Summary

RTM Scheduler is a new solution for RTM systems. It can be used to create a multiple test schedule that is timed for duration using RTM's SDI or IP inputs. The Scheduler acknowledges start time and a set duration on multiple inputs or streams in sequential order. Thus allowing the users to run multiple program tests in sequence for RTM systems. This grants the monitoring and recording of errors from a predetermined threshold in one or more configurations programmed in the RTM system.

General

RTM scheduler is a tool that generates a sequence of RTM server commands according to a schedule defined by an input text file. The input file is assumed to be called 'rtmcron.tab', and must be located in the same directory as the RTM Scheduler tool itself. The input file is tab-delimited, containing fields for :

- Date and time to launch the command sequence
- The IP address for the target RTM unit
- “;” –delimited sequence of RTM commands
- 'Date' is expressed in YYYY-MM-DD format, also known as ISO 8601

The tool continues to execute as long as there exists RTM commands scheduled sometime in the future. If the input text file contains line starting wither "daily" or "hourly", the tool continues to run until it is manually stopped or until no ore commands need to be scheduled. Any Changes made to the scheduler's input file are immediately interpreted by the scheduler while it is still executing.

Running the Scheduler:

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 rtmcron.txt

If the input file is modified while the tool is running, the schedule is regenerated internally as the tool continues execution. 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.

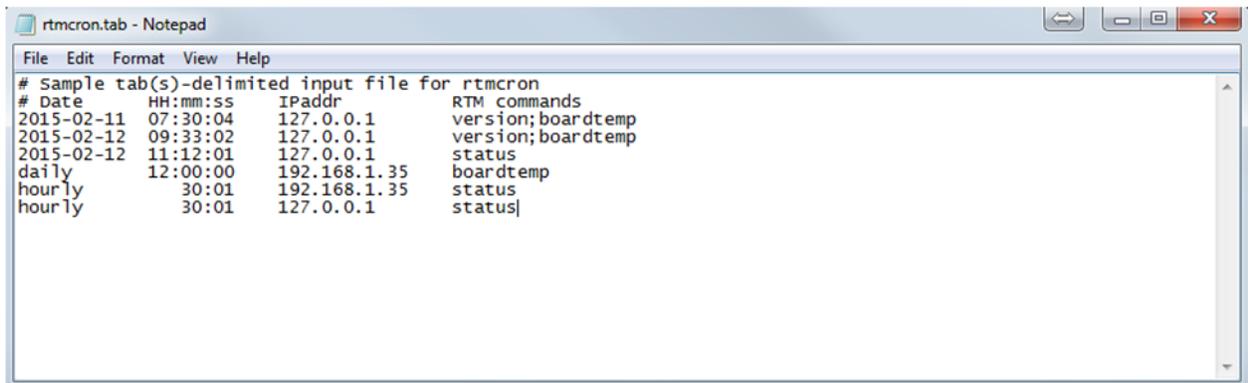
Typical Usage:

The RTM 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 .

For example, a single RTM can be scheduled to monitor as follows:

12:00 AM – 4:00 AM	SDI1 compared to 231.1.1.1:1111
4:00 AM – 8:00 AM	SDI1 compared to 232.2.2.2:2222
8:00 AM – 12:00 PM	SDI2 compared to 233.3.3.3:3333
12:00 PM – 4:00 PM	SDI2 compared to 234.4.4.4:4444
4:00 PM – 8:00 PM	234.4.4.4:4444 compared to http://IPADStream.m3u8
8:00 PM – 12:00 PM	232.2.2.2:2222 compared to http://AdobeStream/manifest.f4m

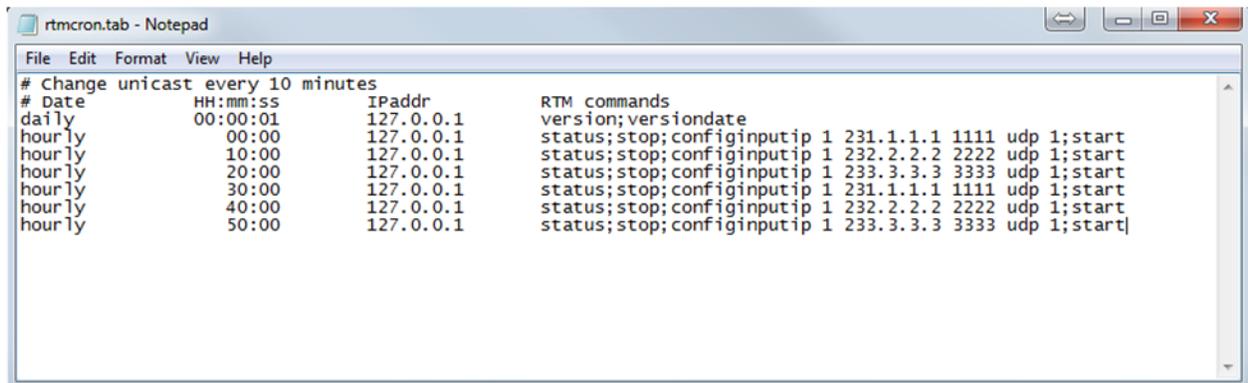
Example 1



```
rtmcron.tab - Notepad
File Edit Format View Help
# Sample tab(s)-delimited input file for rtmcron
# Date      HH:mm:ss  IPaddr      RTM commands
2015-02-11  07:30:04  127.0.0.1   version;boardtemp
2015-02-12  09:33:02  127.0.0.1   version;boardtemp
2015-02-12  11:12:01  127.0.0.1   status
daily       12:00:00  192.168.1.35 boardtemp
hourly      30:01     192.168.1.35 status
hourly      30:01     127.0.0.1   status|
```

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



```
rtmcron.tab - Notepad
File Edit Format View Help
# Change unicast every 10 minutes
# Date      HH:mm:ss  IPaddr      RTM commands
daily       00:00:01  127.0.0.1   version;versiondate
hourly      00:00     127.0.0.1   status;stop;configinputip 1 231.1.1.1 1111 udp 1;start
hourly      10:00     127.0.0.1   status;stop;configinputip 1 232.2.2.2 2222 udp 1;start
hourly      20:00     127.0.0.1   status;stop;configinputip 1 233.3.3.3 3333 udp 1;start
hourly      30:00     127.0.0.1   status;stop;configinputip 1 231.1.1.1 1111 udp 1;start
hourly      40:00     127.0.0.1   status;stop;configinputip 1 232.2.2.2 2222 udp 1;start
hourly      50:00     127.0.0.1   status;stop;configinputip 1 233.3.3.3 3333 udp 1;start|
```

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.