



Tools for Video Analysis

RTM Manager System Guide

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RTM Manager Startup

To start up the connections between the RTM units, and the manager you will need to run the following

On each managed RTM unit:

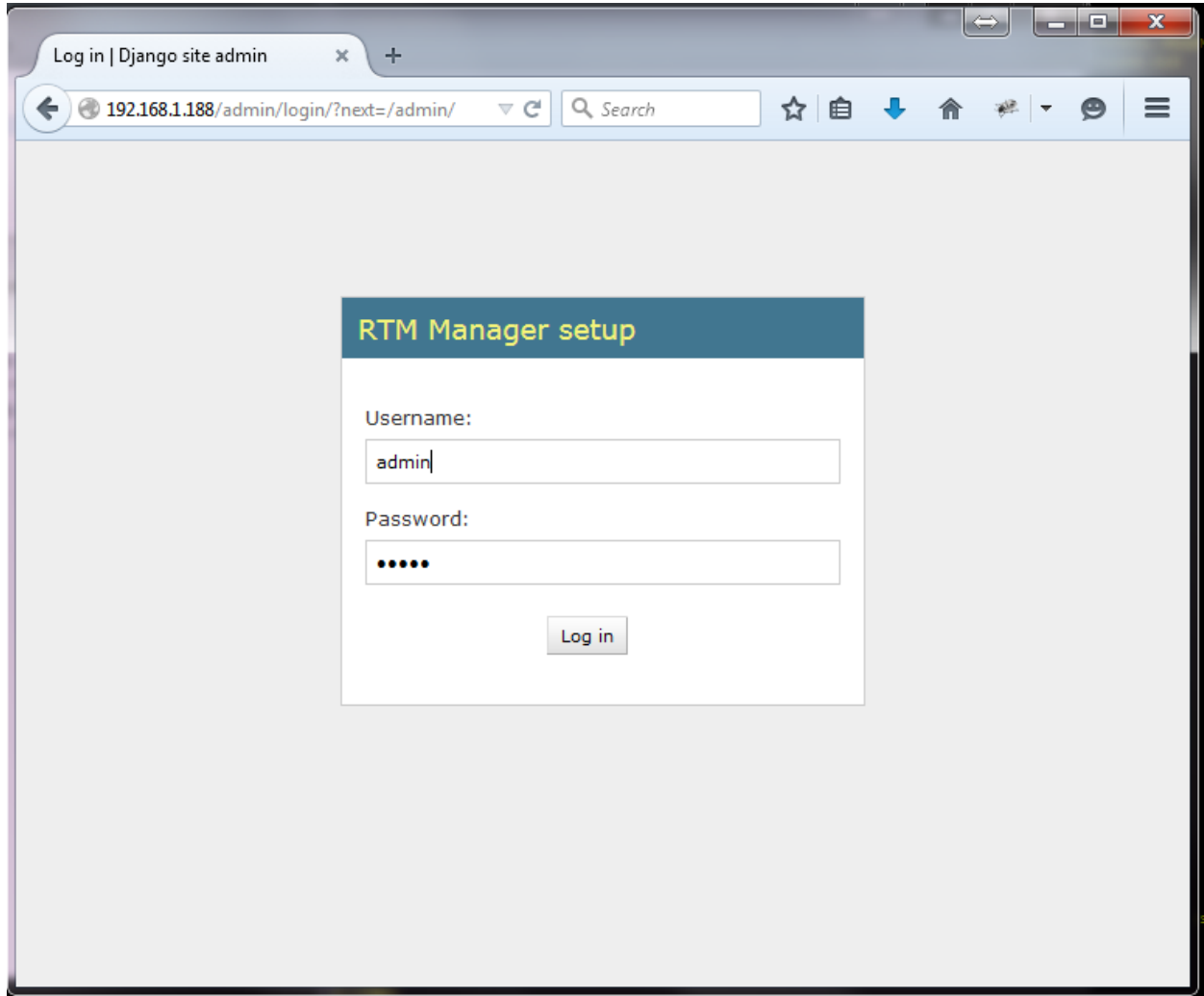
1. C:\Program Files (x86)\Video Clarity\RTMonitor\RTMserver
2. C:\Program Files (x86)\Video Clarity\RTM manager\start_rmserv

On the RTM Manager unit:

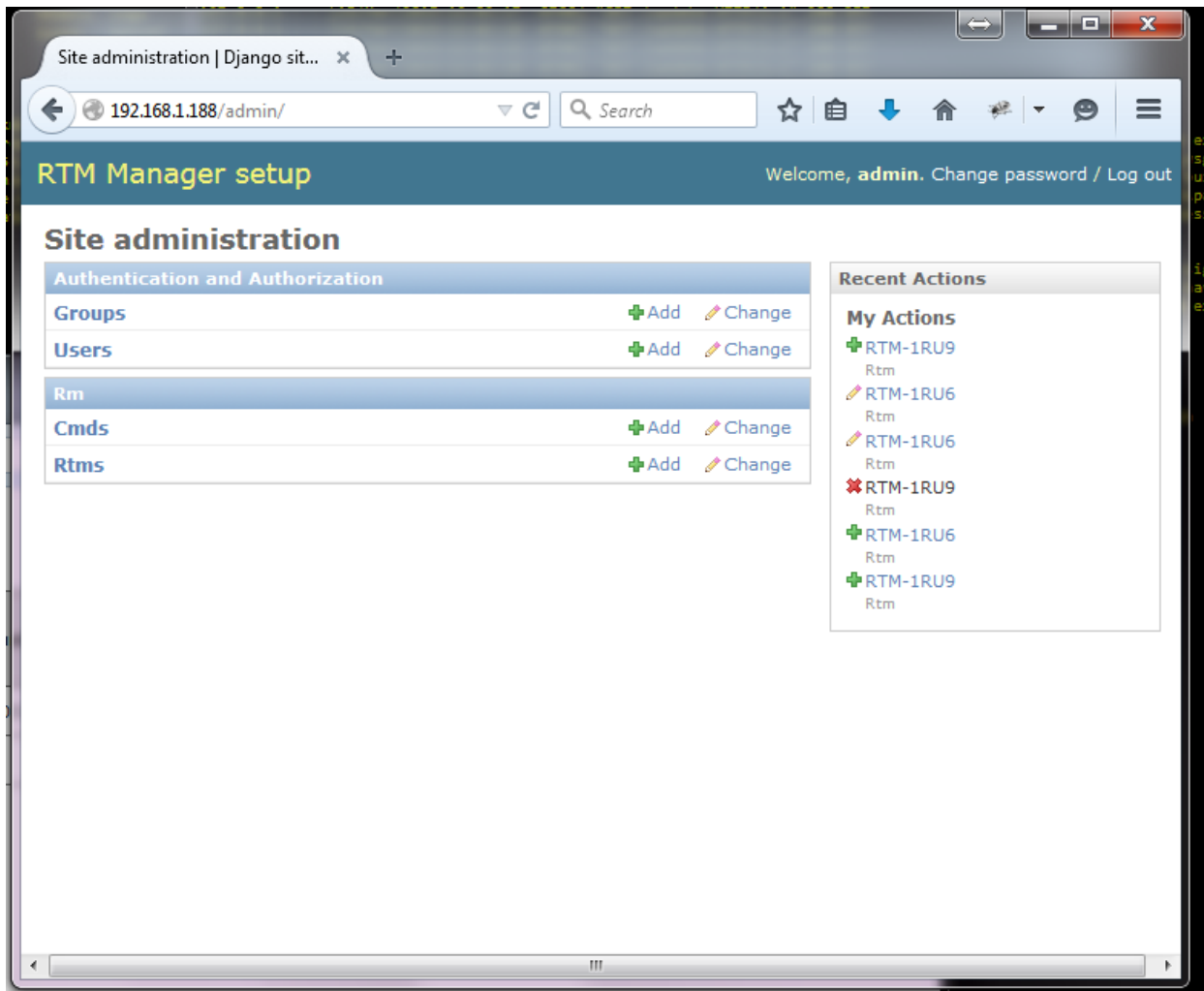
1. C:\Program Files (x86)\Video Clarity\ClearView\StartCVserver
2. C:\Program Files (x86)\Video Clarity\RTM manager\start_rm

RTM Manager Configure

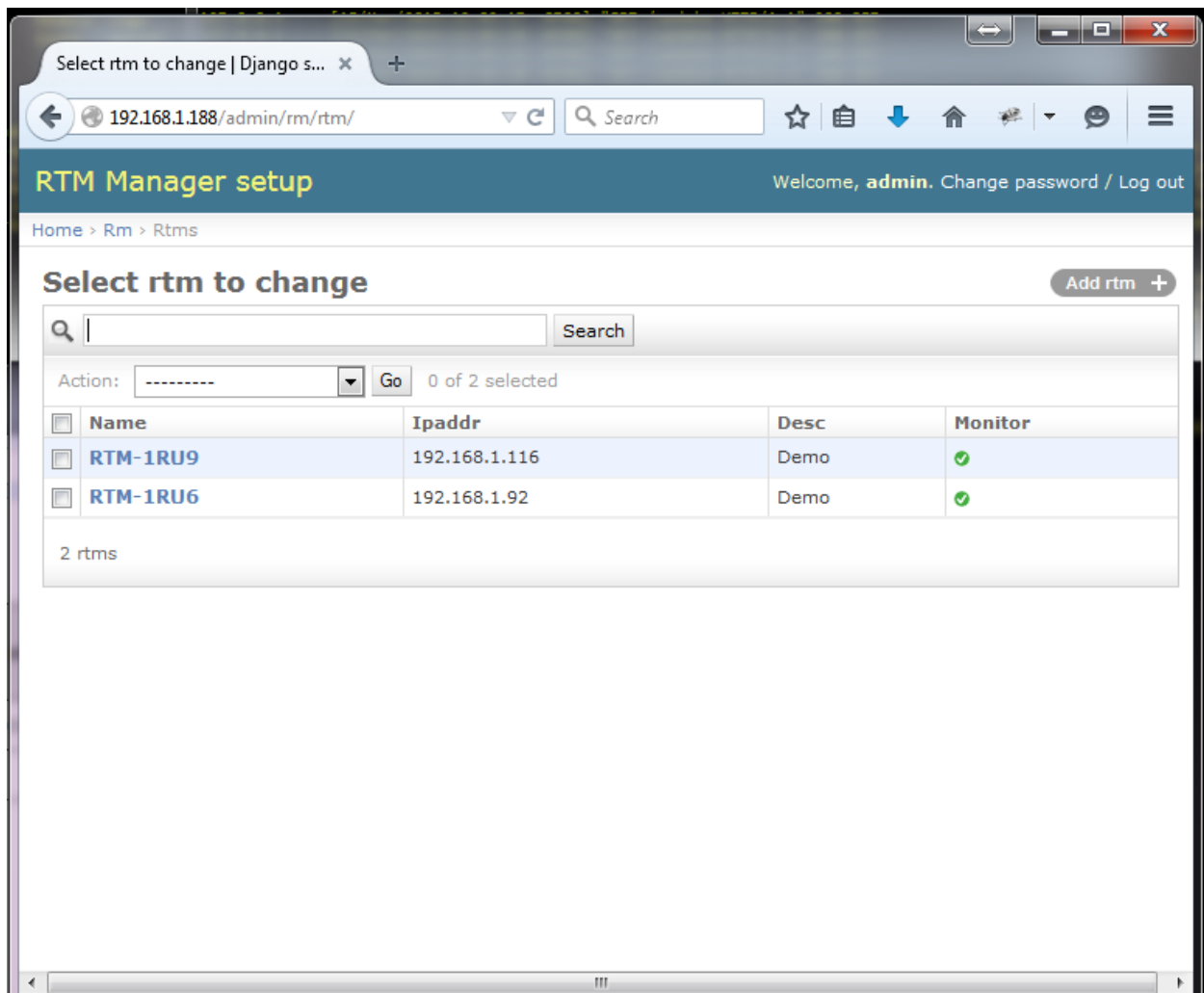
Configuration is managed via a browser interface. Log into this interface hosted by the RTM Manager unit. For example,



At the site administration page, select "Rtms"



If units have already been configured, you should a page similar to



This page above indicates that 2 RTM units have been configured with specific IP addresses. To add a new RTM unit, select the “Add rtm +”.

To change an existing configuration, select the name of the RTM to change. For example, to change the IP address for RTM-1RU6:

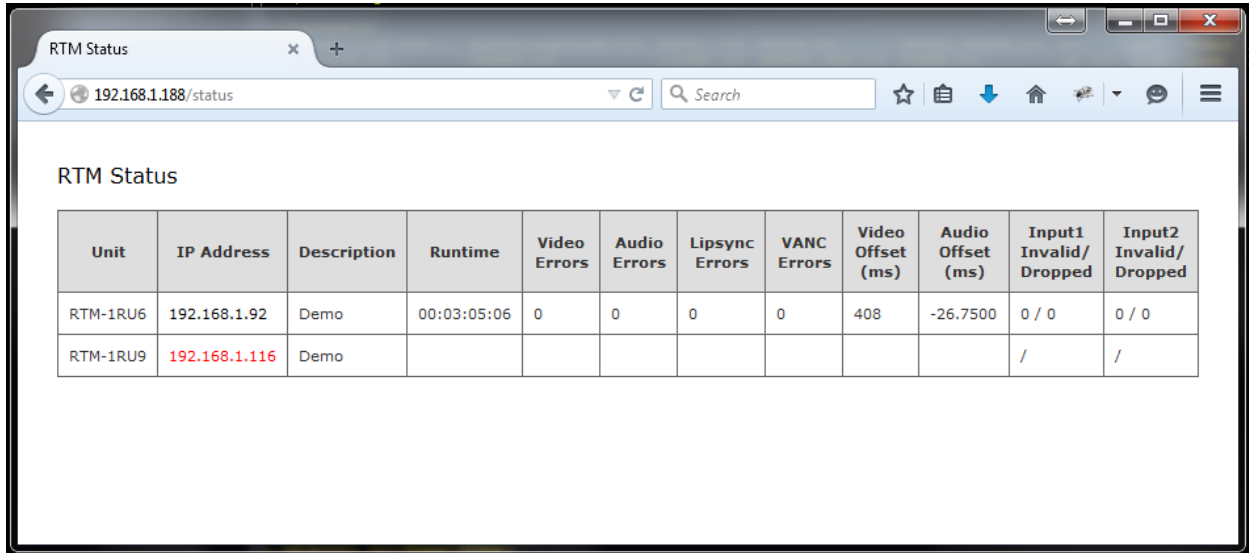
Individual RTM Configuration

The screenshot shows a web browser window with the address bar displaying "192.168.1.188/admin/rm/rm/RTM-1RU6/". The page title is "RTM Manager setup" and the user is logged in as "admin". The breadcrumb trail is "Home > Rm > Rtms > RTM-1RU6". The main heading is "Change rtm" with a "History" button. The form contains the following fields:

Name:	RTM-1RU6
Ipaddr:	192.168.1.92
Desc:	Demo
<input checked="" type="checkbox"/> Monitor	
Online:	0
Runtime:	00:03:05:06
Video	0

Enter a new description or IP address field. To save the new configuration scroll to the bottom of the page and select "Save".

RTM Manager Status



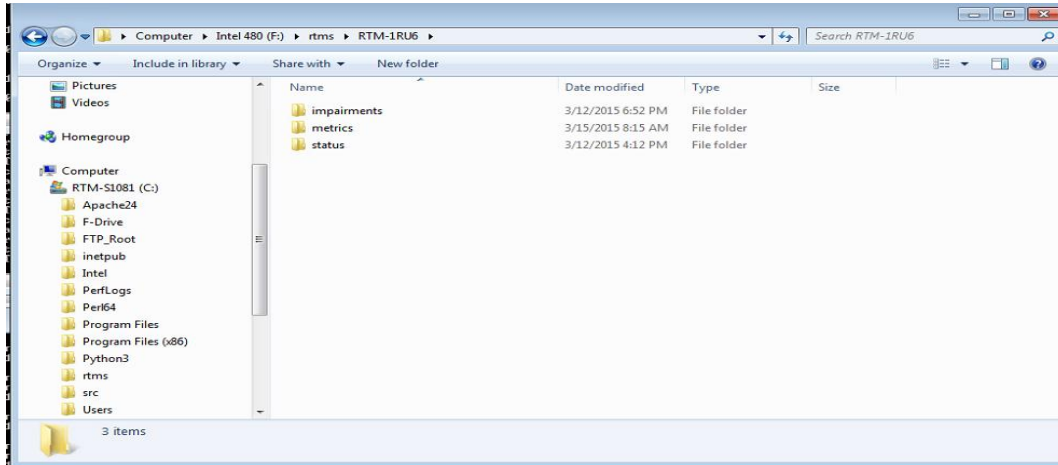
Unit	IP Address	Description	Runtime	Video Errors	Audio Errors	Lipsync Errors	VANC Errors	Video Offset (ms)	Audio Offset (ms)	Input1 Invalid/Dropped	Input2 Invalid/Dropped
RTM-1RU6	192.168.1.92	Demo	00:03:05:06	0	0	0	0	408	-26.7500	0 / 0	0 / 0
RTM-1RU9	192.168.1.116	Demo								/	/

To display the status page, select

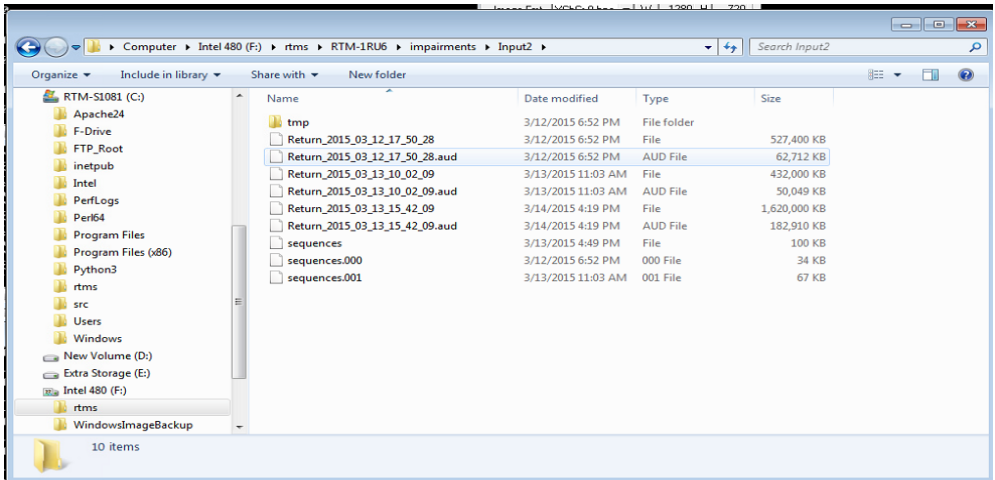
This indicates that RTM-1RU6 is responding to the RTM manager, while RTM-1RU9 is not. Status is checked periodically and automatically updated from within the browser. The status page need not be manually reloaded.

For each managed RTM unit, manager gathers RTM status logs, RTM metric files, and RTM impairment files, and stores these on the RTM manager unit. For example,

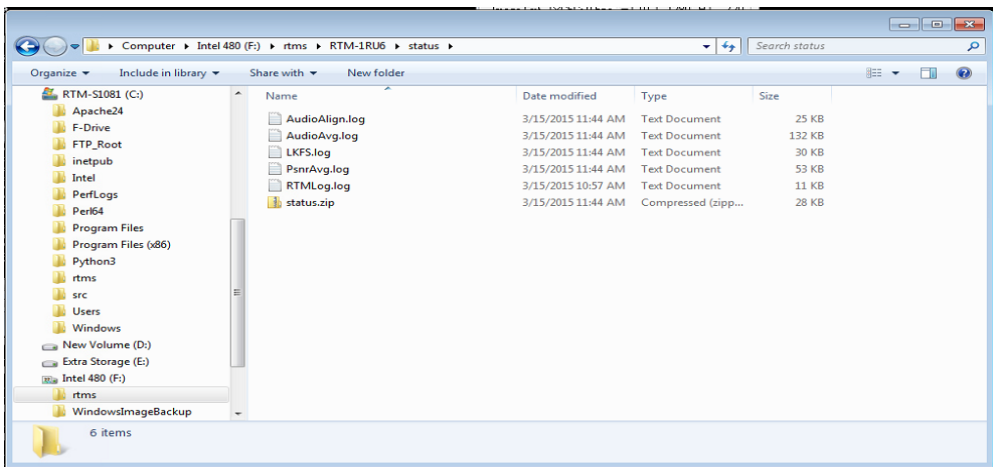
Viewing RTM impairments, metrics, and status



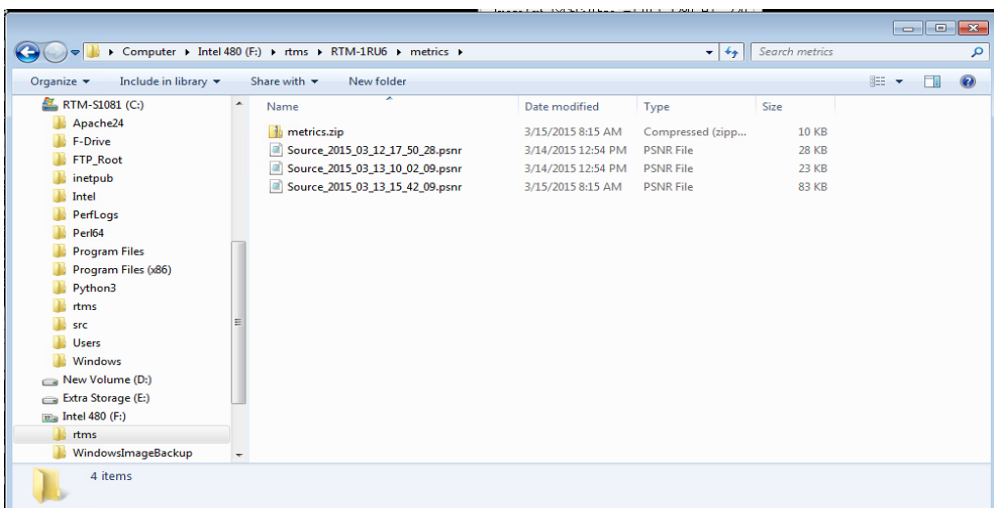
A impairments, metrics, and status folder will be created for each of the RTM's connected to the manager. The individual folder location is F:\rtms.



Impairments



Status



Metrics

RTM Scheduler

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

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

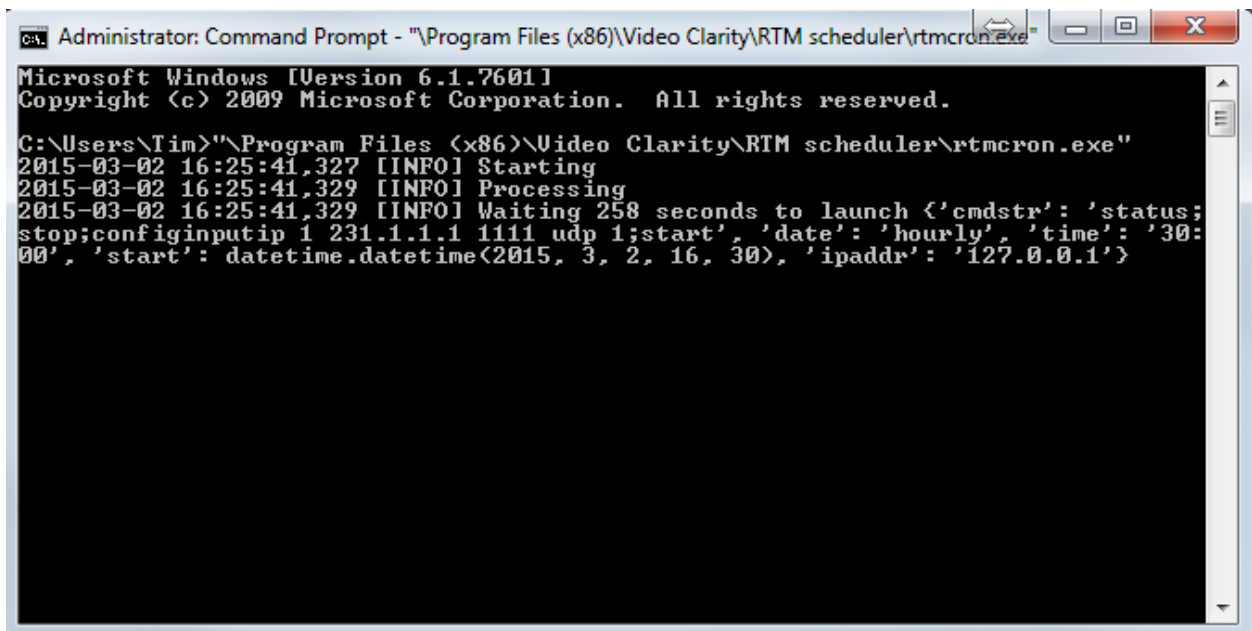
Rows may specify a "daily" schedule. This indicates that the corresponding commands should be invoked at the specified time each day.

Rows may specify an "hourly" schedule. This indicates that the corresponding commands should be invoked at the specified time each hour of each day.

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

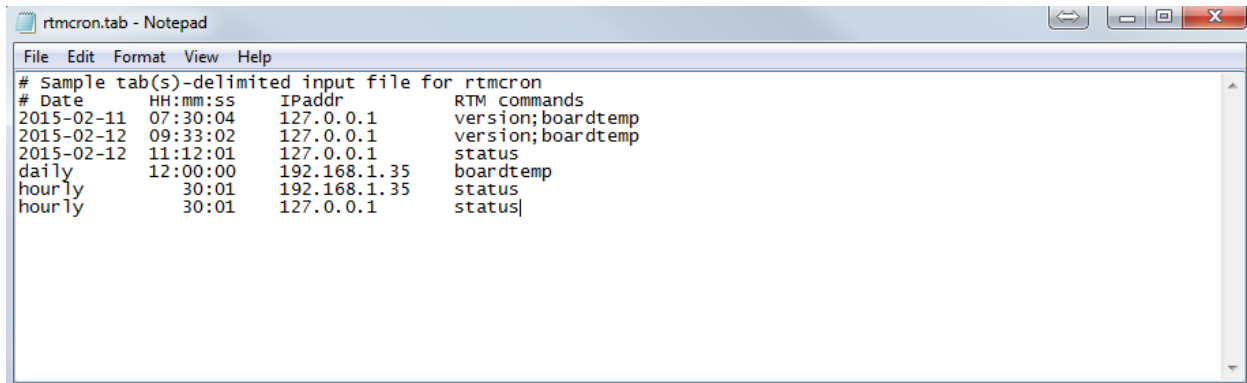
The tool continues to execute as long as there exists RTM commands scheduled sometime in the future. If the input text file contains line starting wither "daily" or "hourly", the tool continues to run until it is manually stopped.



```
Administrator: Command Prompt - "\Program Files (x86)\Video Clarity\RTM scheduler\rtmcron.exe"
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\Tim>"\Program Files (x86)\Video Clarity\RTM scheduler\rtmcron.exe"
2015-03-02 16:25:41,327 [INFO] Starting
2015-03-02 16:25:41,329 [INFO] Processing
2015-03-02 16:25:41,329 [INFO] Waiting 258 seconds to launch {'cmdstr': 'status;
stop;configinputip 1 231.1.1.1 1111 udp 1;start', 'date': 'hourly', 'time': '30:
00', 'start': datetime.datetime(2015, 3, 2, 16, 30), 'ipaddr': '127.0.0.1'}
```

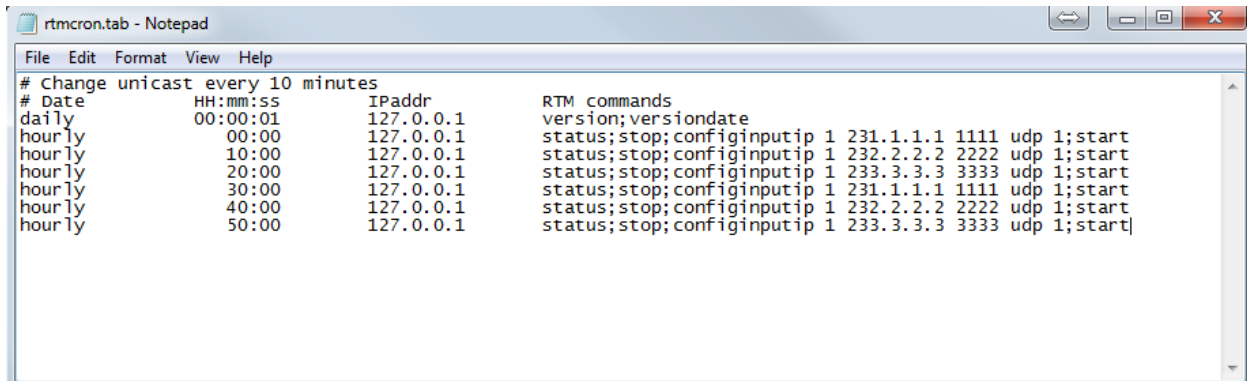
Example 1



```
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.