## Trimble NetRS Receiver resets Run Time at 497.1 Days

771 Freddy Blume November 23, 2015 Trimble NetRS 2123

The "Receiver Status -> Activity" page on the NetRS shows the "Run Time" - the length of time since the receiver has last rebooted. However if the receiver has been operating continuously for more than 497.1 days, the counter will reset to zero without a reboot occurring. For example, a receiver that was last rebooted 597.1 days ago would show a Run Time of 100 days.

This is the result of the way uptime is stored in a standard linux kernel: as an unsigned long (32 bit) counter and counts a 100 Hz clock. Therefore, the 100 Hz clock rolls over after... 0.01 \* 2^32 seconds 497 days 2 hours 27 minutes 52.96 seconds

This is known in the IT world as the "<u>497.1 Day Bug</u>", and while it has been observed to cause problems in some computing applications, no ill effects have been observed in our NetRS networks.

## Trimble.

Receiver Status		
Identity	Receiver Status - Activity	2
Activity	·	•
Position	Satellites Tracked:	
Satellites	1 3 6 11 14 18 19 21 22 24 31 32	
Data Logging Receiver Configuration	Data Logging:	
Internet	Session 24HR_15S_a logging to /201302/a/P041201302010000a.T00	
I/O Configuration	Session 1HR_5H_c logging to /201302/c/P041201302012000c.T00	
Security	Session 1HR_1S_b logging to /201302/b/P041201302012000b.T00	
Firmware	Session 1HR_15S_m logging to /201302/m/P041201302012000m.T00	
Programmatic Interface	00 0	
	Input/Output:	
In Browser	Met/Tilt interface active on Serial Port 2	
Standalone Window	Streaming Binex to 69.44.86.36 over TCP Port 42042	
	Power Supply Info:	
	Primary Voltage: 0.191 Volts	
	Secondary Voltage: 13.457 Volts	
	Temperature: 21° C	
	Run Time: System has been running for 50 days 21 hours 36 minutes	
	UTC Date & Time: 1 Feb 2013 - Fri of GPS Week 1725 - 20:29:20	

Online URL: https://kb.unavco.org/article/trimble-netrs-receiver-resets-run-time-at-497-1-days-771.html