



PNT Integrity User Interface Documentation

v3.0.0

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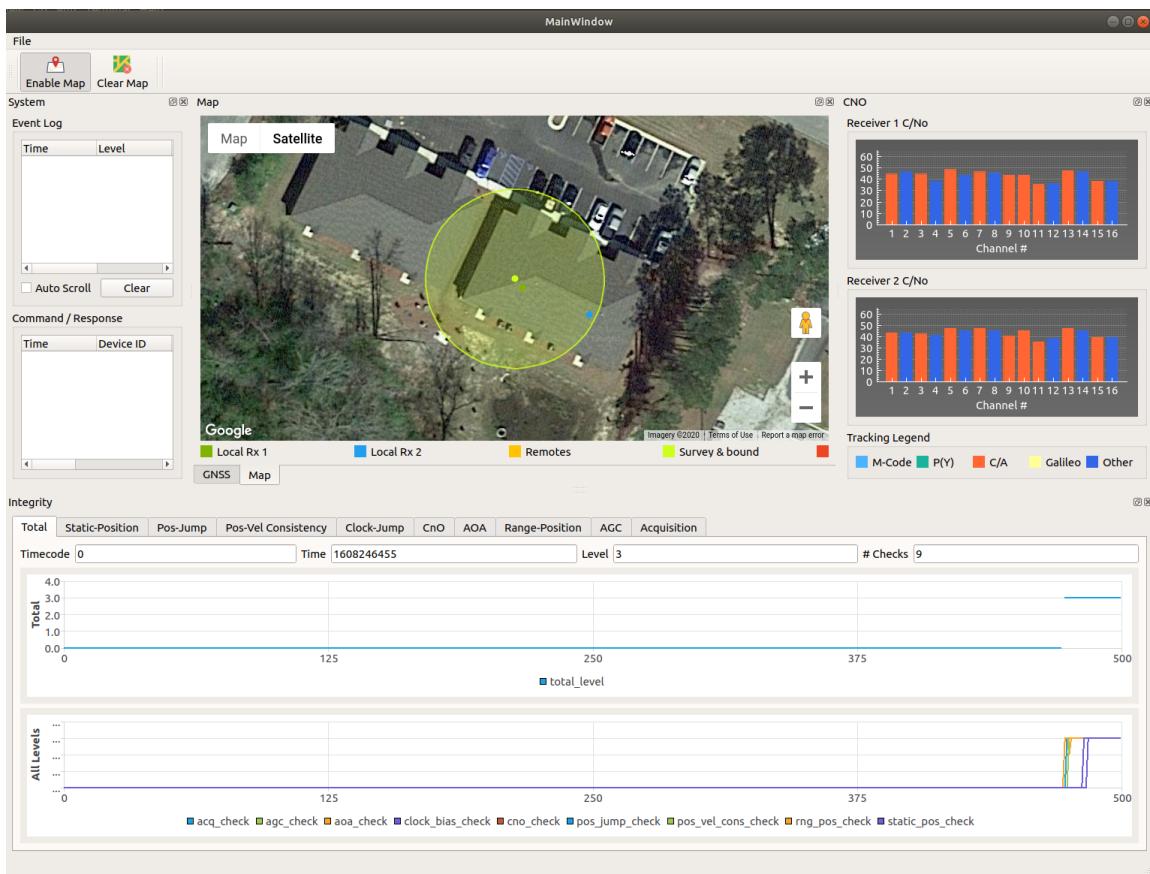
## Chapter 1

# PNT Integrity User Interface Application Guide

### Launching the Application

Refer to the guide for the proper parent application for launching the UI

The application window will display in the default configuration



## UI Components

The UI consists of several sub-windows that can be docked or un-docked depending on user preference. Each window and the content it displays is discussed in the following sections

### Map Window

The map window contains an interactive google map widget. It displays the track history of both local receivers, as well as the track histories of any connected remote receivers / nodes (future capability). It also shows the surveyed position and bound from the static position check. The final piece of information displayed in the map plot are the location of identified threats from the threat-location check.



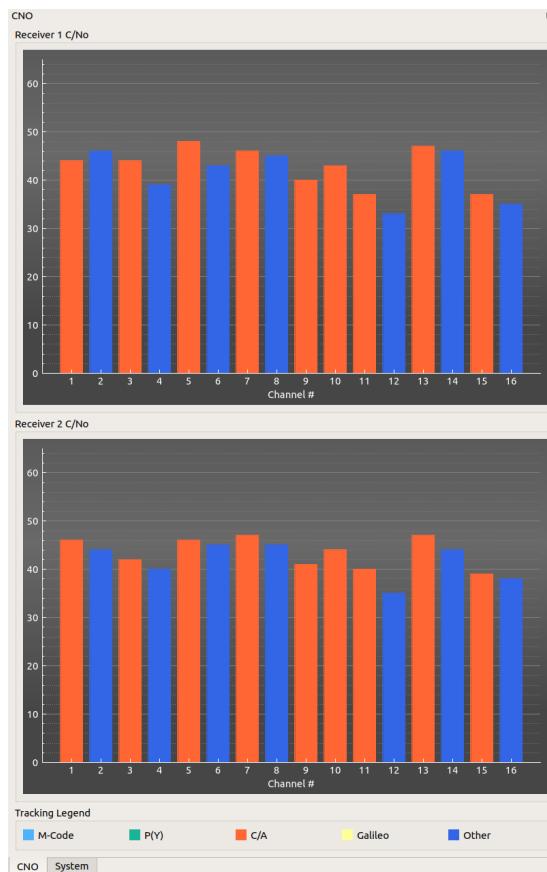
### GNSS Window

The GNSS Window shows PVT, channel status, and observable data from both local receivers

GNSS															
Receiver 1					Receiver 2										
Lat: 32.537105		Lon: -85.519611		Alt: 102.899		Lat: 32.537076		Lon: -85.519496							
N Err: 1.23		E Err: 1.23		D Err: 3.614		N Err: 1.236		E Err: 1.236							
V_N: -0.009		V_E: 0.002		V_D: 0.029		V_N: -0.003		V_E: -0.001							
VN Err: 0.009		VN Err: 0.002		VD Err: 0.029		VN Err: 0.003		VE Err: 0.001							
Week: 2136					Week: 2136										
Second: 428950					Second: 428950										
PRN	^ Sys	Band	Sig	C/N0	Pseudorange	Carrier Phase	Doppler	PRN	^ Sys						
9	0	0	1	46	2.17856e+7	1.14404e+8	10262.6	9	0						
9	0	1	2	45	2.17856e+7	0.93884e+8	-471.68	9	0						
8	0	0	1	48	2.15733e+7	1.13369e+8	1397.05	8	0						
8	0	1	2	43	2.15733e+7	8.83392e+7	1088.62	8	0						
7	0	0	1	43	2.38042e+7	1.25092e+8	2118.68	7	0						
7	0	1	2	37	2.38042e+7	9.74743e+7	1650.96	7	0						
4	0	0	1	44	2.18978e+7	1.15074e+8	-2395.57	4	0						
4	0	1	2	45	2.18978e+7	8.96679e+7	-1866.95	4	0						
30	0	0	1	39	2.60977e+7	1.37144e+8	2515.89	30	0						
30	0	1	2	35	2.60977e+7	1.06866e+8	1960.87	30	0						
27	0	0	1	47	2.17098e+7	1.14404e+8	-111.17	27	0						
27	0	1	2	46	2.17098e+7	8.83392e+7	-910.297	27	0						
26	0	0	1	36	2.6094e+7	1.37125e+8	-3234.84	26	0						
26	0	1	2	36	2.6094e+7	1.06851e+8	-2520.54	26	0						
21	0	0	1	32	2.55619e+7	1.34328e+8	2120.9	16	0						
16	0	0	1	40	2.34445e+7	1.23202e+8	-3181.39	11	0						
11	0	0	1	42	2.48808e+7	1.3075e+8	2847.08	11	0						

## CNO Window

The CNo window shows the carrier-to-noise ratio for each tracked PRN for both receivers. The CNo level bars are color-coded for different signal-types and constellations.



## Integrity Window

The integrity window contains charts for the total assurance level from the integrity monitor application, as well as levels for each configured assurance check. Additional diagnostic information for each check is contained on separate tabs. Information on how to interpret the diagnostic information can be found in the integrity monitor application user guide.

