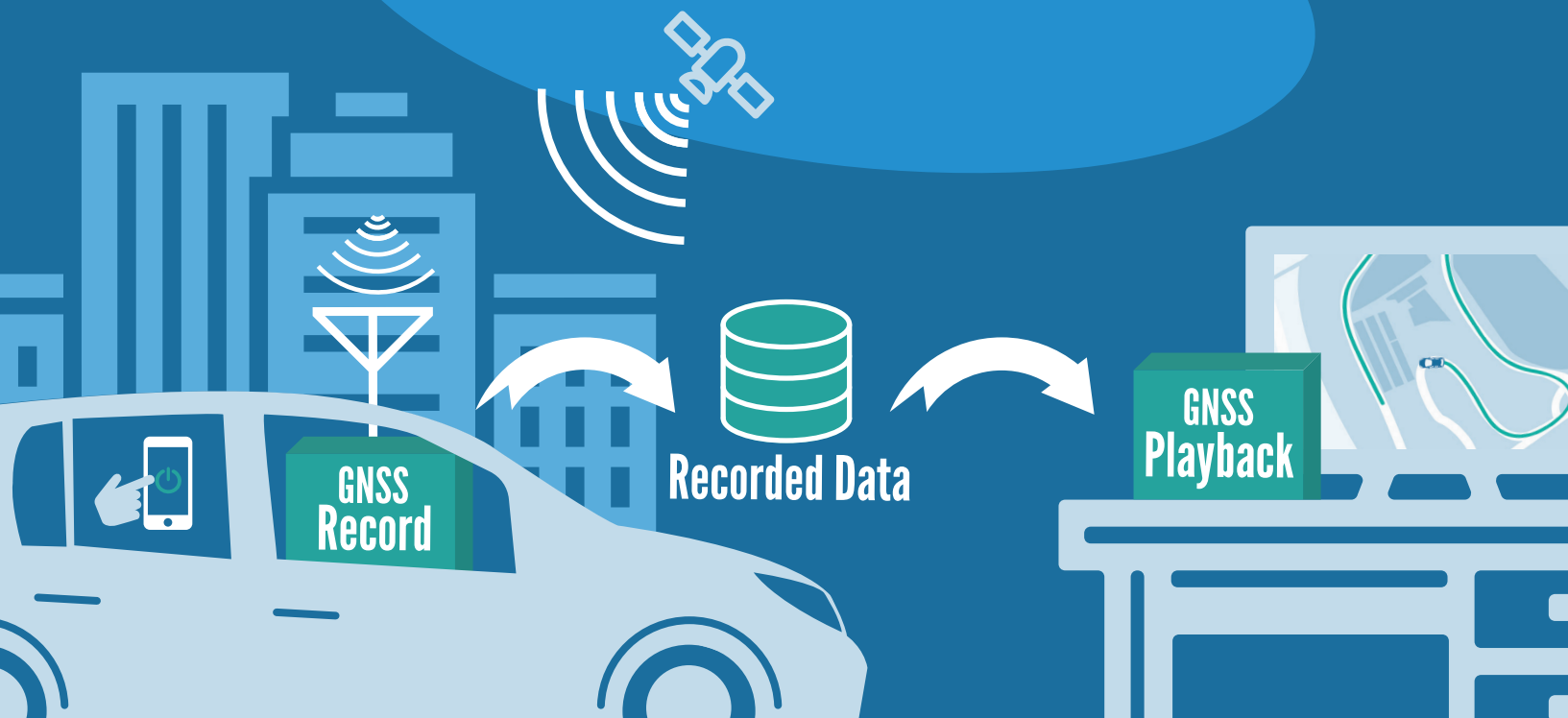


StellaNGC Record & Playback

StellaNGC is a fully customizable and upgradable software suite to support GNSS tests and measurements needs throughout the design cycle, from prototyping to manufacturing.

StellaNGC Record & Playback provides an accurate solution to record real life GNSS signals (multi-constellations & multi-frequency) and replay them through an ergonomic and intuitive interface.



GNSS Sensor Characterization

Obtain GNSS sensor performance through repeatable replay of recorded scenario

System Approval

Test and validate system performances based on real environment recorded scenario

Capture and Replay Real-World Signals

Ensure representative sensor data for complex environment

StellaNGC Record & Playback Key Features

Record & Playback

- RF Signals (GNSS Bands)
- Digital signal (PPS signal)
- Multiple simultaneous signal
- Automatic Gain Control

Easy to use HMI

- Ergonomic Graphical User Interface
- Application Programming Interface through TCP commands
- Predefined GNSS Bands selector
- Precalibration Procedure
- Monitoring (RF Spectrum, ADC/DAC Occupation)
- Conversion tool for Post-Processing on I/Q Samples

Highly Configurable

- Center Frequency, Bandwidth, Quantization, Reference Level
- Delayed Start / Hardware TTL Trigger
- Start Offset on Playback
- Configurable RF Gain on Playback
- Automatic Gain Control on Record
- Support for different RF targets: from high-grade (VST 1st and 2nd generation) to entry-level (USRP-RIO)

Portable Solution

- From robust PXIe chassis to lightweight USRP-RIO
- GUI Deployed on Tablets (Android / iPad)

StellaNGC Record & Playback Performances

- ✓ 4 Simultaneous Channels
- ✓ Interchannels Synchronization : 5ps
- ✓ Recorded Band from 100MHz to 6GHz (1Hz step)
- ✓ Bandwidth from 1 to 250MHz (step 1MHz)
- ✓ Quantization from 1 to 16 bits
- ✓ Positioning Fidelity : 98% (on 95 percentiles)

StellaNGC Hardware Platforms



VST 2nd generation



VST 1st generation



USRP-RIO

Modular software :
« it's all about the layers »

