

RTRemote – Real Time Remote Interface for SimGEN™



RTRemote.exe: is a PC application providing a flexible interface between industry leading simulation environments used in defence, aviation, transport etc, to control in real time through SimGEN™, Spirent's GNSS range of Simulator products. With RTRemote, Integration engineers can dynamically control SimGEN from within third party ("user") simulation environments automatically generating the trajectory information for SimGEN in real time in response to user inputs.

RTRemote's key features include;

- Serial / Ethernet UDP interfacing between user simulation environment and SimGEN
- Real time data and/or file capture modes of operation, with all captured data available for replay as required.
- Precise internal timing driven from Spirent SimGEN for application back to the user simulation
- Precise coordinate transformations between the user simulation environment and GPS WGS84
- Sophisticated filtering and queuing of user simulation data internally prior to SimGEN application
- Capture and reporting of Spirent SimGEN control feedback and error reporting

X-Plane Ver 9.0 Interface: available in RTRemote Ver 1.0, integrates directly to the popular X-Plane Ver 9.0 software flight simulator to control GNSS simulators via the SimGEN /SimREMOTE interface. This enables user-controlled scenarios to be "flown" in real-time with high fidelity GPS RF signals created in-space for injection into the target GPS receiver. The figure below illustrates how this powerful technique can be used to test aviation GPS equipment and downstream avionics in a controlled and repeatable laboratory environment. RTRemote transforms X-Plane's simulated vehicle's dynamic trajectory parameters from a planar projection to GPS spherical coordinates, provides sophisticated 3D navigation filtering and then precisely queues timed data for SimGEN/SimRemote.

RTRemote V1.0 product set includes;

- RTRemote.exe software application
- RTRemote Operator Manual & Install Guide
- PC-PRN1 / Simulator Timing cable
- XPlane Ver 9 CD Pack & World Scenery

Recommended Min PC Requirements (X-Plane V9);

- Win-XP Professional
- Dual Core Pentium (for XPlane Scenery loading)
- 1GB RAM, with 30GB HDD Space free
- Video accelerated OpenGL, >=128meg RAM

GPSat Systems Australia is a leader in quality solutions for industrial satellite navigation and simulation applications in Australia. Supported by a dedicated team of engineers with broad multidisciplinary skills in GNSS technology, electronics, software, geomatics communication engineering, etc. our customers are always guaranteed the highest levels of technical support and professional competency.

