Orolia's GNSS Simulators Now Support an Ultra-Low Latency of Five Milliseconds

The latest advancement from Skydel utilizes software-defined advantages to deliver limit-defying real-time performance

ROCHESTER, N.Y., UNITED STATES, June 17, 2021 /EINPresswire.com/ -- Orolia recently announced the launch of its Real-Time Performance capability that achieves an ultra-low latency of five milliseconds. The feature will be standard on all Skydel-powered GNSS simulators. Skydel is the software-defined simulation engine that powers Orolia's advanced GNSS simulators including its BroadSim (available via Orolia Defense & Security) and GSG product lines.

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Orolia Defense & Security Director of Engineering Tim Erbes

"Skydel is known by users for its intuitive nature and ability to be quickly re-deployed for a variety of projects. Delivering Real-Time Performance with latency as low as five milliseconds further shows that Orolia is a market leader empowering our customers by exceeding their expectations," said Orolia Defense & Security Director of Engineering Tim Erbes.

Skydel's software-defined architecture, offering unparalleled flexibility and adaptability, is designed to meet the most demanding GNSS simulation testing requirements in the automotive, military, space and other high-tech industries. Skydel also supports Hardware-in-the-Loop (HIL) simulations without sacrificing ultra-low latency and high-end performance.

The user interface boasts a sophisticated dashboard, where the Real-Time Performance graphs are located. The tool enables users to grade the simulator's performance, interpret data,

diagnose inefficiencies, and optimize scenarios on the fly. In the [video tutorial](#), Orolia demonstrates how the simulation engine processes data and how easy it is to read the graphs through its distinct visualization and precise indications. As the system reaches its limits, it remains stable and fully operational, preserving the integrity of the simulation.

Erbes said the Real-Time Performance graphs not only instill confidence in the simulator but allow for better integration in the testbed.

The Skydel Real-Time Performance graphs illustrate the software-defined engine's low latency during a GNSS simulation.

"For example, instead of just hoping their hardware-in-the-Loop configuration is working, users can view the real-time data and see that low latency is being maintained," he added. "This feature provides enhanced visibility not only into the performance of the simulation but also into the reliability of the hardware-in-the-loop integration, resulting in a more robust solution. This is critical when generating complex environments with high dynamics, jamming, spoofing, repeating, and alternative PNT sensors."

About Orolia
Orolia is the world leader in Resilient Positioning, Navigation and Timing (PNT) solutions that improve the reliability, performance and safety of critical, remote or high-risk operations, even in GPS/GNSS denied environments. With a presence in more than 100 countries, Orolia provides virtually fail-safe GNSS and PNT solutions for military and commercial applications worldwide. www.Orolia.com

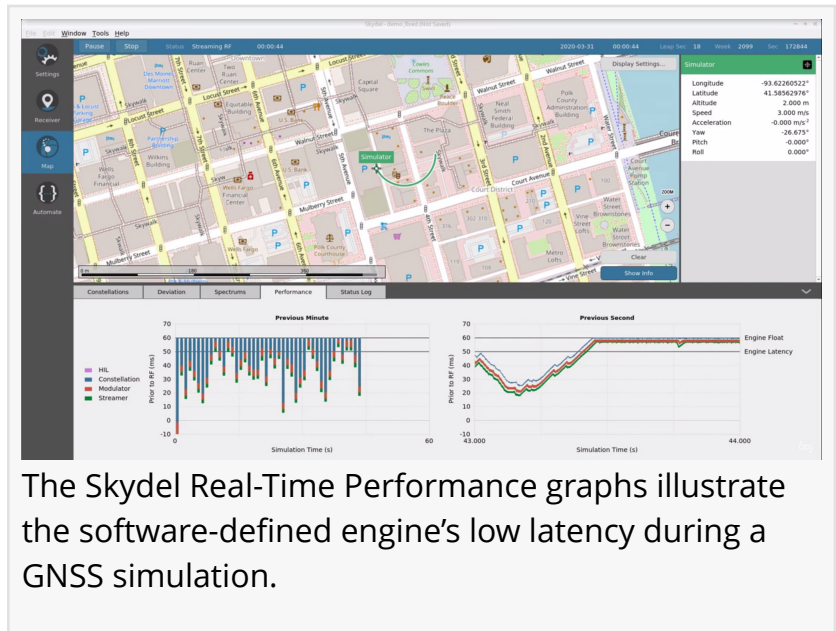About Orolia Defense & Security
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