

XenaTimeSynch

One-Way Latency (OWL) tool



Key Features

- High precision solution for chassis time synchronization
- Used for OWL measurements, synchronized traffic start and timestamping
- Can use any combination of NTP, PTP or RFC 868 TIME
- Legacy Xena testers can be retro-fitted with ValkyrieTimeSynch (GPS requires factory refit)
- Compatible with Xena1564 (ITU-T Y.1564) test methodology

XenaTimeSynch is a feature that enables multiple Xena testers to synchronize their local time to each other.

This can be used for One-Way Latency (OWL) measurements between two test chassis, synchronized traffic start between multiple chassis and accurate timestamping of captured packets in exported PCAP files.

The timing network consisting of the Xena testers can be flexibly configured to support multiple scenarios.

One tester may serve time to the other testers (and any other host on your network) using NTP or PTP. Alternatively, each tester can obtain its own time from an external NTP, PTP or GPS source.

XenaTimeSynch uses an advanced time synchronization solution called TimeKeeper from the company FSMLabs. TimeKeeper synchronizes the local time on each Xena test chassis and must therefore be installed as a separate service on each Xena chassis and is configured and monitored through the XenaManager.

Service providers often use one-way measurements to check their SLAs, since round trip delay metrics frequently fail to identify QoS issues in asymmetrical access networks where download speeds typically exceed upload. Since a round-trip delay measurement aggregates send and receive path delays, unidirectional issues can escape detection or exacerbate troubleshooting efforts. One-way measurements can quickly identify and quantify these issues if conducted with sufficient precision and accuracy.

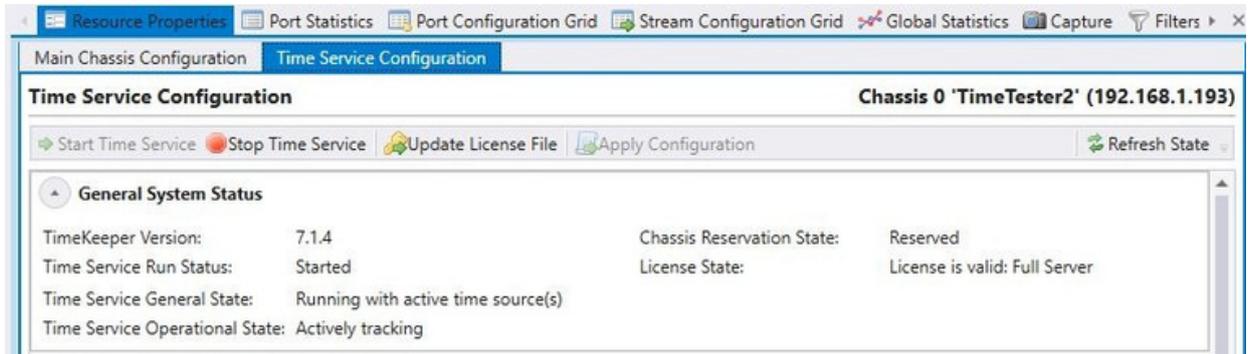
XenaTimeSynch ensures the test modules can measure with micro-second precision. Both the ubiquitous Network Time Protocol (NTP) and the newer, more precise IEEE 1588 Precision Time Protocol (PTP) are supported and can be mixed as appropriate for the network.

One Way Latency Reveals Hidden Problems

One-way delay and delay variation (jitter) measurements are important parameters for testing the quality of service (QoS) of real-time applications such as VoIP, telepresence and transactional services. High-level precision is required for both wireline (Ethernet access) and wireless backhaul networks for 4G (WiMAX / LTE), and typical SLA specifications call for unidirectional jitter below 1-5ms and latency in the 3-10ms range.

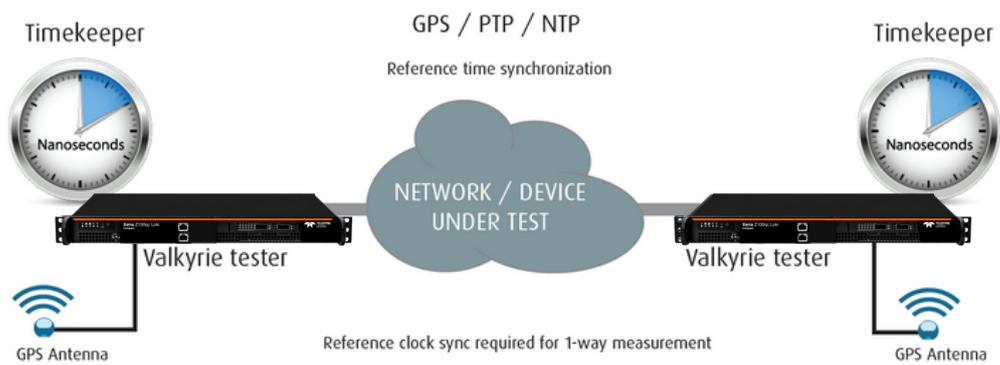
[Find out more here:](#)



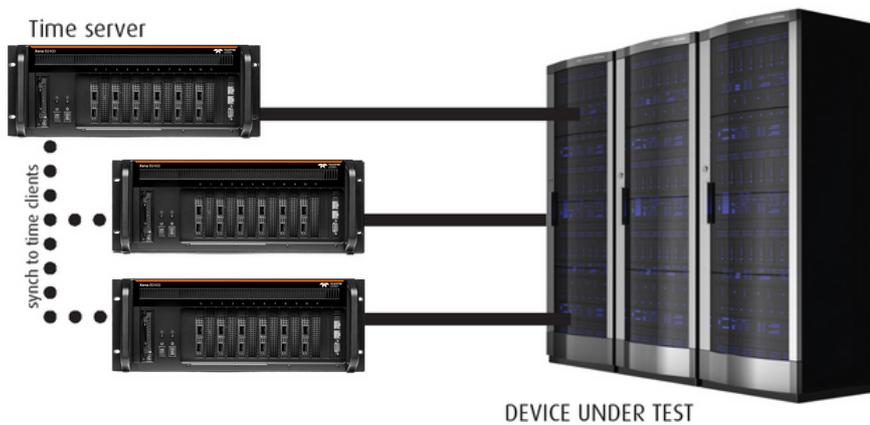


Xena's timekeeper feature is managed via XenaManager, the main software application used to generate and analyze gigabit ethernet traffic on Xena's testers.

WAN TESTING SCENARIO



LAB TESTING SCENARIO



Xena offers 12 month licenses for both client and Server/Client software for synchronization of chassis to a PTP/NTP/GPS reference clock.

It is also possible to have an integrated GPS receiver fitted both prior to purchase or in legacy equipment. Contact a local Teledyne LeCroy Xena sales partner for details.

Ordering Information

Product Description

XenaTimeSynch 12-month SW license for Client synchronization of chassis to a PTP/NTP/GPS ref. clock
XenaTimeSynch 12-month SW license for Server/Client synchronization of chassis to a PTP/NTP/GPS ref. clock

Product Code

Val-C-TK-Client-12
Val-C-TK-Server-12



Local sales offices are located throughout the world.
Visit our website to find the most convenient location.

1-800-5-LeCroy • teledynelecroy.com

