

XOA

Xena OpenAutomation

What Is XOA?

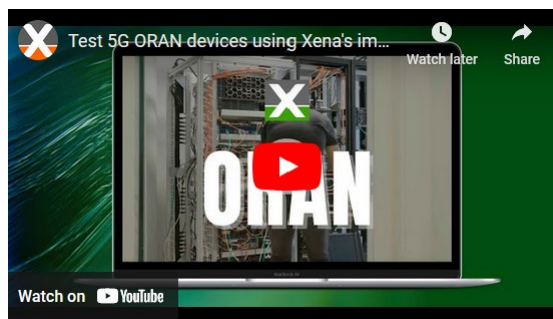
Xena OpenAutomation (XOA) is an open-source test automation framework for use with Xena's Valkyrie & Vulcan Traffic Generation & Analysis (TGA) solutions and Chimera, our network impairment emulator.

Fast, easy to use and extremely flexible, XOA features a **Python API** that runs on any OS. All the code is freely accessible on GitHub, and there is a wealth of tech documentation to help you get going (see last page).

View these two videos for quick examples of XOA in action.



Test AN/LT with XOA



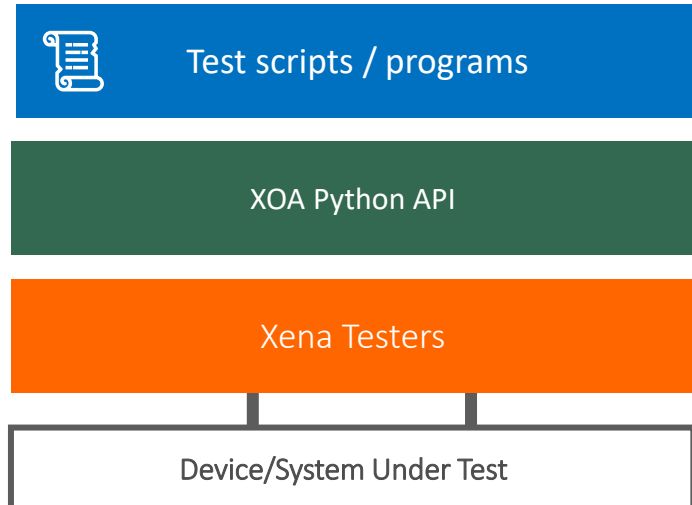
Test 5G ORAN devices with XOA



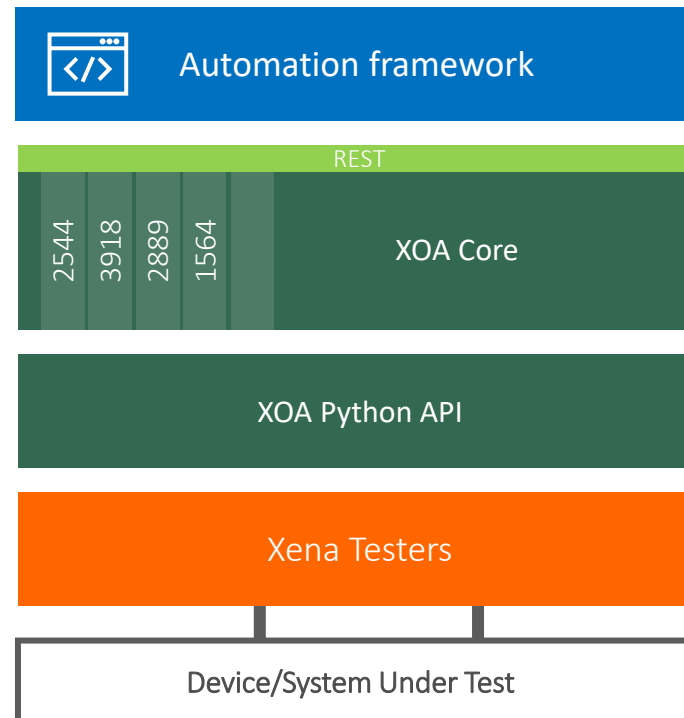
Xena OpenAutomation

Three Ways You Can Use XOA

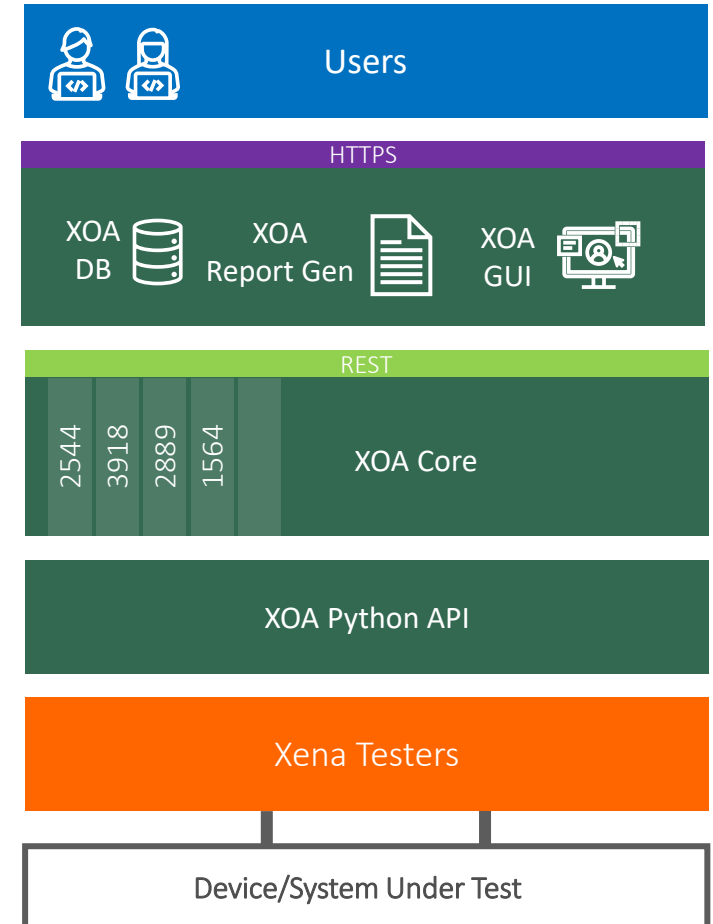
1. Develop your own test scripts/programs to meet special requirements.



2. Integrate XOA test suites into your automation framework. Regression, automated, REST.



3. Use XOA UI to run tests, download reports, collaborate as a team.



XOA Python API

XOA's full open-source Python API provides user-friendly communication interfaces to Xena's Ethernet TGAs and impairment test solutions.

Key Features

- Objected-oriented, high-level abstraction – help users save time on parsing command responses and concentrate on test logic
- IDE auto-complete, built-in class/function/API manual – increase development efficiency
- Sending commands in batches, automatically matching command requests and server response – increase test execution efficiency
- Server-to-client push notification, and event subscription – reducing user code complexity
- Covering commands of various Xena testers, including Valkyrie, Vulcan, Chimera
- Asynchronous – increase I/O performance
- Support Python 3.8 and higher



XOA Core

XOA Core is a framework that provides a standardized way for developers and test specialists to execute, develop, and integrate test suites, and manage Xena's physical and virtual Ethernet Traffic Generation and Analysis (TGA) testers.

Xena has used XOA Core to develop test suites for:

- RFC2544
- RFC2889
- RFC3918
- Y.1564 (coming soon)

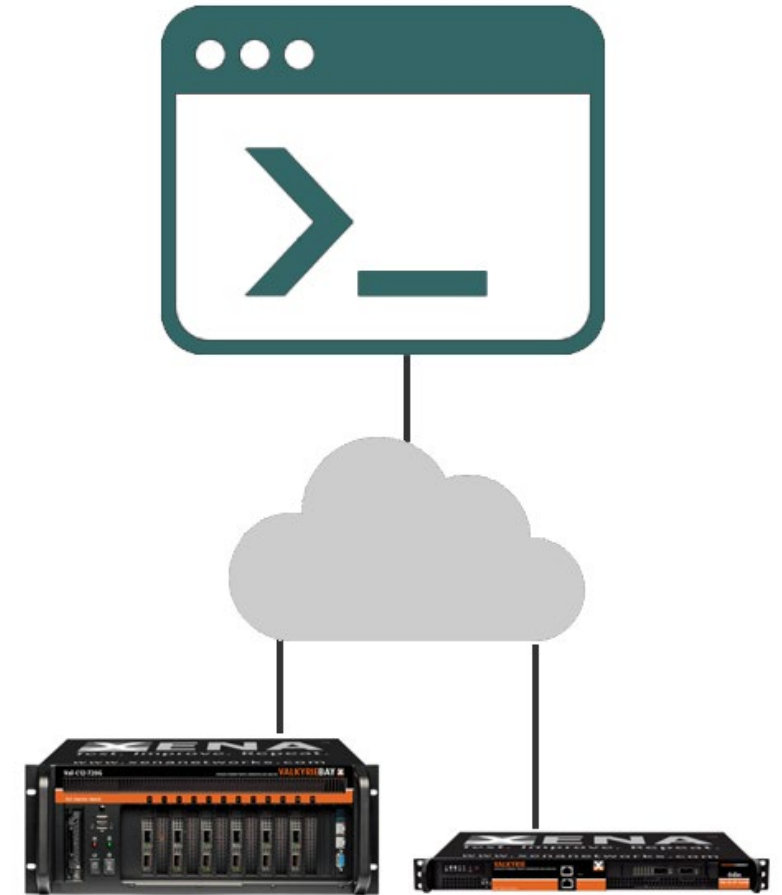
And because the source code is open, you can do the same – develop and integrate your own test suites for your specific needs.



XOA CLI

Xena OpenAutomation CLI (XOA CLI) lets you control Xena's physical and virtual Traffic Generation and Analysis (TGA) testers via a command-line-interface using a text-based scripting interface, and a point-and-click interactive using Manager applications.

The CLI commands are simple lines of texts exchanged between a client and the Xena tester.

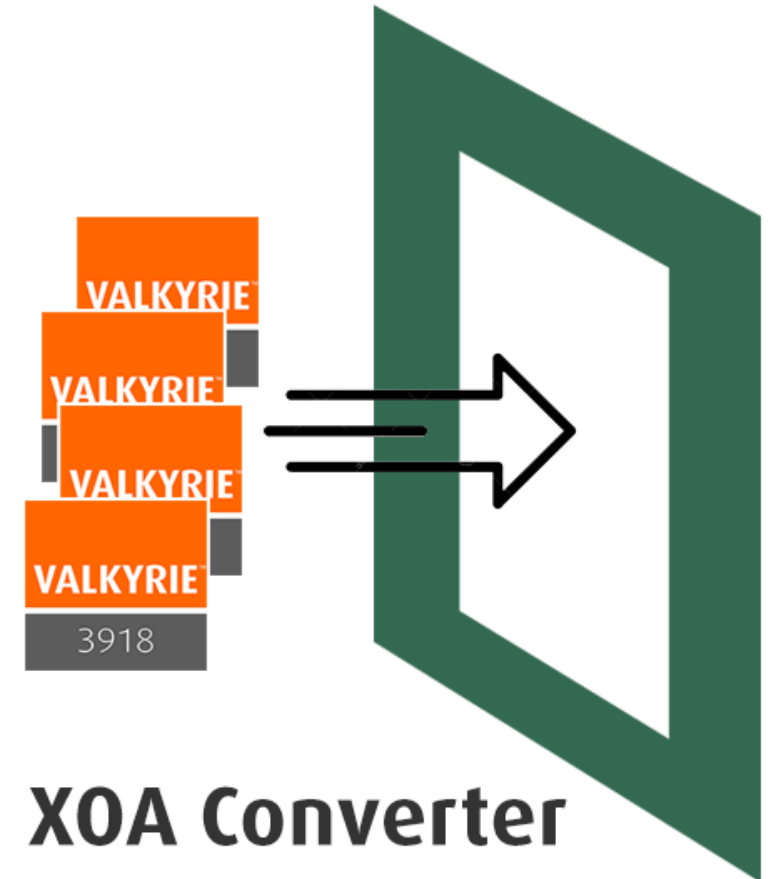


XOA CLI

Want to quickly migrate your existing Valkyrie test suite configurations into XOA? Easy – use XOA Converter.

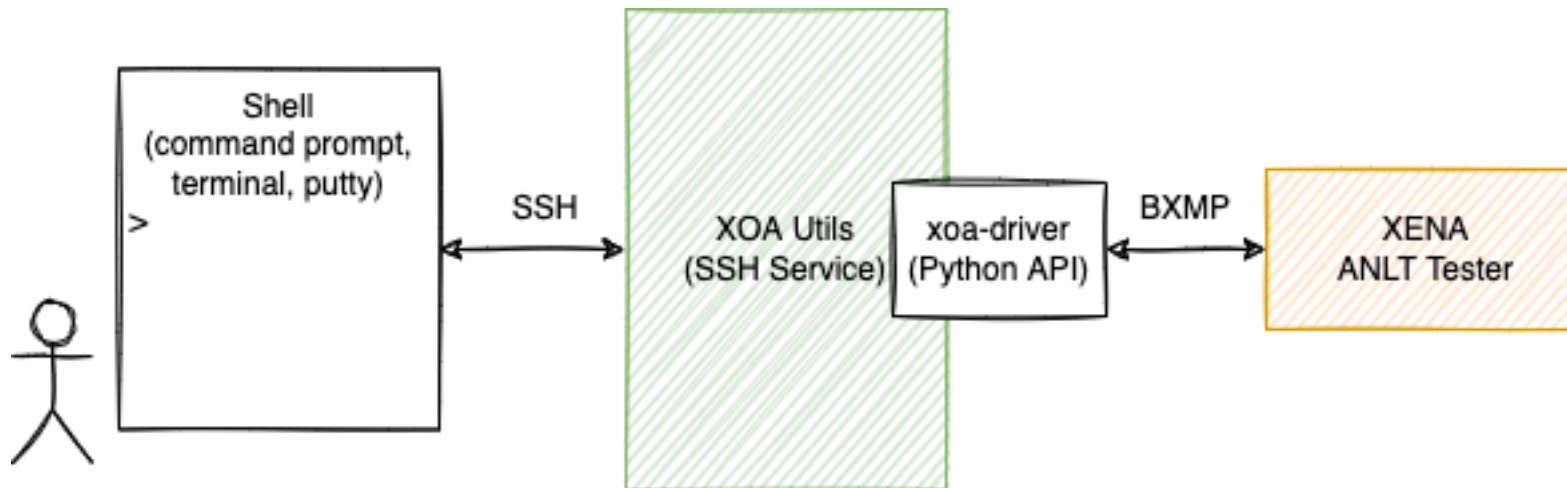
Xena's test suite applications have been around for many years – but only worked on MS Windows. Moving forward, all of Xena's existing and future test suites will be included in XOA and therefore not limited to Windows.

To help you easily migrate your existing Windows test suite configurations (Valkyrie2544, Valkyrie2889, Valkyrie3918, and Valkyrie1564) into XOA, we developed XOA Converter.



XOA UTILITIES

Xena OpenAutomation Utilities is an interactive shell that lets you control Xena's [FreyaCompact ANLT Test Appliance](#) via command-line interface (CLI) commands to perform operations for Auto-Negotiation and Link Training testing.



XOA Utilities

NEXT STEPS

XOA is bundled together with all the other software that Xena provides free of charge with every solution as part of the Xena Value Pack.

The only part of it that requires buying a license is XOA Utilities which Xena developed for running the auto-neg & link training tests on our FreyaCompact ANLT Test Appliance.

You can freely download and use the [XOA software on GitHub](#).

And here you can view all the [XOA documentation](#).

