By automating system verification and conformance testing to ITU-T synchronization standards, you'll save on time and resources, and avoid potential test execution errors. This application note describes how you can use the Paragon-X's Script Recorder to easily record Tcl, PERL and Python commands that can be integrated into your own test scripts for fast and efficient automated testing.

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Insight and Innovation

AUTOMATING YOUR
SYNC TESTING

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Easily automate synchronization testing using the Paragon-X

Fast and easy automation by recording GUI key presses

Supports the key test languages Tcl, PERL and Python

Pre-prepared G.8262 Conformance Scripts reduces test execution errors

If you perform System Verification and Conformance Testing to ITU-T synchronization standards on a regular basis, you'll know that manual operation of these tests can be time consuming, tedious and prone to operator error — as well as tying up much needed resources. Automation is the answer but very often a lack of time and resource means it remains on the 'To do' list. Now, with Calnex's new Script Recorder feature, you can get your automation up and running quickly, plus, with our pre-prepared G.8262 Conformance scripts, you'll save hours of test development time.

USING THE SCRIPT RECORDER

Each GUI key press on the Paragon-X user interface automatically records the associated Tcl script. This capability enables fast generation of complex Tcl scripts simply by using the instrument in the normal fashion. The Script Recorder can also record PERL and Python commands.
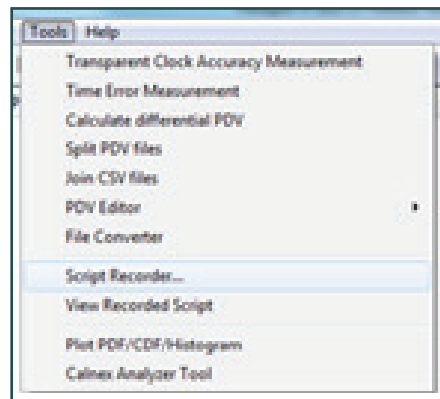
Key presses are recorded to one file which can be copied and pasted into your own test scripts, greatly simplifying the setup and execution of these previously complex measurements.

To get started, select Script Recorder from the Tools menu and the Record Macro window appears. Then choose the

language you want to record i.e. Tcl, PERL or Python, then select Start.

Select View Recorded Script from the tools menu and a window will appear showing the recorded Tcl scripts. You can continue to press buttons and watch the associated Tcl (or PERL/Python) commands populate the Recorded Macro - Notepad window. The recorded commands can then be easily pasted into your own scripts.

COMPREHENSIVE LANGUAGE SUPPORT

Paragon-X supports Tcl, PERL and Python scripting. In addition, remote control commands exist for all operations that can be performed through the GUI. These include commands for setup, querying of setup, and results querying. You can also remotely export PDV and metrics data to .CSV files. Remote control commands are likewise available for the CAT (Calnex Analysis Tool) providing metric selection, mask checking and report generation, as well as saving PDV and Metrics images to JPG, PDF or to a printer.

SyncE CONFORMANCE TEST

Calnex provides Conformance Test Scripts to ITU-T G.8262 for SyncE conformance testing using the Paragon-X. These test scripts can also be easily tailored and edited to meet your exact test requirements. This provides an easy means of getting your test automation up and running and providing a repeatable means of proving performance, primarily for ITU-T standards conformance.

Quick Launch Menu and Configurator

The Configurator creates Tcl test scripts aligned with each test in the Calnex G.8262 SyncE Conformance Test Application Note. You can confirm (or modify) key parameters in the Configuration Worksheet and press the "Make Scripts" button to produce a set of scripts. These scripts can be then be copied and pasted into an automated test environment. A "Quick Launch" menu enables the launching of individual scripts. A user editable worksheet is provided to enter test parameters directly or via pull down menus. The worksheet additionally provides error checking on parameter validity.

Calnex also supports Perl and Python automation environments. Please contact Calnex about integrating these scripts into your own framework.

KEEPING YOU UP-TO-DATE

The first scripts we have produced are focused on ITU-T G.8262 SyncE Conformance Testing but other scripts are being developed. Please contact Calnex or your local Calnex representative for further details on their availability or to register your interest.