



Valkyrie1564

Standalone Y.1564 application

Xena Valkyrie1564 is a free PC application developed by Xena Networks to help you perform the Y.1564 methodology using one or more Xena test chassis.

Y.1564 is the ITU-T standard for turning up, installing and trouble-shooting Ethernet-based services. Formulated as an improvement over RFC2544 it is the only standard test methodology that allows for complete validation of Ethernet service-level agreements (SLAs) in a single test.

Valkyrie1564 provides full support for both the configuration and performance test types described in Y.1564. It uses the same terminology and features a simple intuitive GUI that lets you connect one or more ValkyrieCompact and/or ValkyrieBay chassis for testing Layer 2 and Layer 3.

You can define multiple Ethernet services and organize them in a custom folder hierarchy. Valkyrie1564 supports different network topologies and traffic flow directions and can be used for either IPv4 or IPv6.

Via Valkyrie1564, you can define the protocol layers supported by each UNI (Ethernet, Customer and Service VLANs, MPLS, IP and UDP) as well as defining either per-UNI or per-CoS bandwidth profiles for each UNI, plus you can specify CoS-to-DSCP mapping.

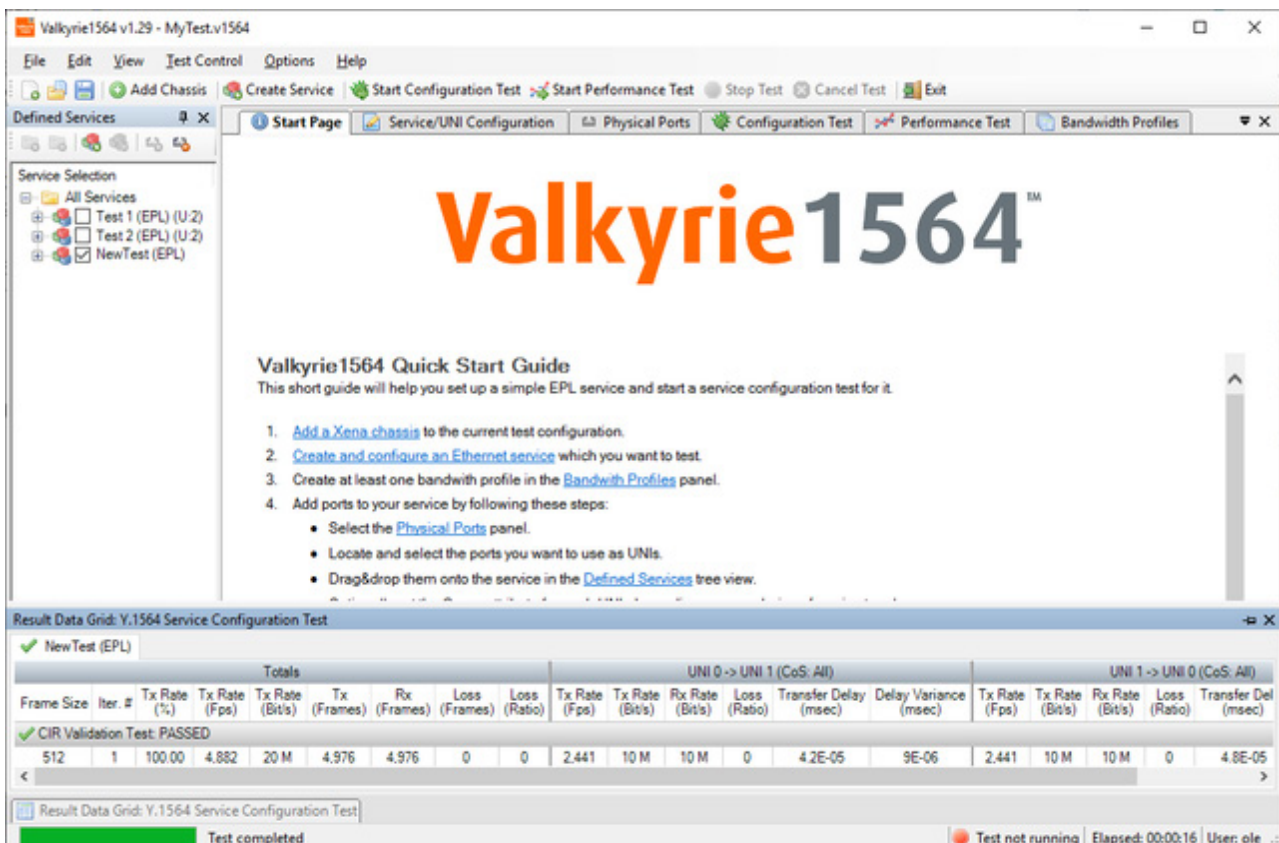
Test reports can be generated in both PDF and XML format and extensive configuration options are available for fine-tuning the tests.

The test reports can be created in either PDF or XML format or both. The automated script environment may need to perform post-processing actions on the generated reports, either by parsing the data or sending the report somewhere else (by email or by copying it to a remote server). The XML report contains both a test results section and a test configuration section. The results section will contain the actual results, whereas the configuration section contains the full configuration used to perform the test.



Top Features

- Full configuration and performance testing according to Y.1564
- Complete validation of Ethernet service-level agreements (SLAs) in a single test
- Multiple protocols supported per UNI (Ethernet, Customer and Service VLANs, MPLS, IPv4, IPv6, and UDP)
- Define Per-UNI or per-CoS bandwidth profiles, and specify CoS-to-DSCP mapping
- Support for different network topologies and traffic flow directions
- Summary and result reports in PDF and XML formats
- User-friendly GUI makes Valkyrie1564 simple to learn, easy to use thereby reducing time-to-test
- Valkyrie1564 is free software supplied with all Xena test equipment





UNI Configuration

Frame Configuration | Ingress Bandwidth Profiles | Egress Bandwidth Profiles

Frame Header Composition

VLAN: Customer Tag

VLAN: Service Tag

MPLS Header(s)

Stack Size:

IP Header

IP Version:

UDP Header

Enable UDP Checksum

L2

Frame Payload

Payload Type:

Payload Pattern:

```
00 00 00 00 00 00
00 00 00 00 00 00
00 00 00 00 00 00
```

Frame Editor

Ethernet	Type	MPLS	Label	Class	T
	88 47		0	0	25

Create Ethernet Service

Service Main Type

Service Label:

Service Type: EPL E-LAN E-Tree

Is Virtual Service:

Service Acceptance Criteria

Frame Loss Ratio: Use in test

Frame Transfer Delay: msec Use in test

Frame Delay Variance: msec Use in test

Availability: % Use in test

Testflow Characteristics

Topology: Pairs Blocks Mesh

Direction: East -> West West -> East Bidirectional

WEST ↔ EAST

Specifications

Valkyrie1564 measures these parameters (in accordance with ITU-T Y.1564):

- | | |
|--|---|
| <p>Totals:</p> <ul style="list-style-type: none"> • Tx rate (%) • Tx rate (Fps) • Tx rate (Bps) • Tx and Rx frames • Loss (frames) • Loss (ratio) | <p>Per UNI-CoS pair:</p> <ul style="list-style-type: none"> • Tx rate (Fps) • Tx rate (Bps) • Rx rate (Bps) • Loss (ratio) • Transfer Delay • Delay Variance |
|--|---|

The screenshot shows the Valkyrie1564 v1.29 interface. Key sections include:

- Service Selection:** A tree view showing 'Test 1 (EPL) (U/2)', 'Test 2 (EPL) (U/2)', and 'New Test (EPL)'.
- Select Test Steps:** A list of tests such as 'CIR Validation Test', 'EIR Configuration Test', and 'Traffic Polking Test'.
- Test Execution Parameters:** Fields for 'Iterations' (1), 'Step Duration' (1), 'Break Test On Fail' (checked), 'Start Rate' (25% of CIR), 'Step Rate' (25% of CIR), and 'Grace Factor' (0.00).
- Frame Sizes:** Options for 'Software Controlled Sizes' (ITU-T Default, Custom Sizes, Size Range) and 'Hardware Controlled Sizes' (Incrementing, Butterfly Sizes, Random Sizes, Mixed Sizes).
- Hardware Controlled Sizes:** Fields for 'Min. size' (64) and 'Max. size' (1500).



Test. Improve. Repeat.

Xena Networks is an award-winning manufacturer of advanced Gigabit Ethernet test and measurement solutions.

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