



# ValkyrieCLI

## Automation and scripting tool

**Powerful and simple scripting tool makes test automation easier for test engineers.**

The ValkyrieBay and ValkyrieCompact chassis are typically controlled using ValkyrieManager, the free GUI application provided by Xena Networks. For automation applications, Xena also offers ValkyrieCLI which is a command-line-interface scripting API.

Any client platform can be used to establish a TCP/IP connection and send and receive CLI commands as lines of text. Typical client platforms include Tcl\*, Perl\*, Python\*, BASH\*, Ruby\*, Java\*, and VBA. All Xena chassis support multiple concurrent scripting sessions, enabling different users to work on the same Xena chassis simultaneously.

To start a scripting session simply open a TCP/IP connection to the Xena chassis using TCP port 22611, on the same IP address as when using the ValkyrieManager. You can then send lines of ASCII text to the chassis (in the ValkyrieCLI command syntax format), terminated by CR/LF, and receive lines of ASCII text in response (also in the ValkyrieCLI command syntax format).

You can either open the scripting connection from a console tool such as Telnet, or from the ValkyrieCLI bundled with the ValkyrieManager. Then you can interact with the Xena chassis using the ValkyrieCLI command syntax format.

Everything you can do with ValkyrieManager can also be done via ValkyrieCLI, using simple CLI text commands. There are several hundred scriptable parameters: from basic streams and capture setup to wild-carding across modules and ports. It is, of course, possible to use the client-side functionality to execute script commands both conditionally and repetitively, which offers real advantages when it comes to test automation.

A unique and powerful feature is that ValkyrieManager saves test port configurations in the exact same CLI command format as used by ValkyrieCLI. This makes it very easy to go back and forth between a ValkyrieManager environment and a ValkyrieCLI environment. For example, exporting a port configuration from ValkyrieManager generates a configuration file in a simple text format that can be edited using a text editing tool such as Microsoft Notepad. It can then be imported back into ValkyrieManager. (See page 2 for an example.)

The seamless interaction between ValkyrieManager and ValkyrieCLI accelerates your scripting learning curve, letting you get more done quicker as complex test port configurations can easily be defined in ValkyrieManager, and then exported to a text based configuration file, which in turn can be cut & pasted into your scripting tool environment.

The Valkyrie2544 and Valkyrie1564 applications can also be executed and post-processed from your automated scripting environment via command line utilities provided together with these test applications. (For more information on this, refer to the Valkyrie2544 and Valkyrie1564 documentation.)

(\*scripting examples are available on our website)



# VALKYRIE™



# CLI

### Top features

- Ideal for test automation of e.g. production environments
- Powerful CLI approach from any TCP/IP capable tool environment
- Unified syntax for CLI- and GUI-generated test port configurations makes it easy to learn
- Script examples of Tcl, Perl, Java, Ruby, BASH and Python available
- Intelligent console tool bundled free with ValkyrieManager



Below is a simple example showing how 3 parameters from the ValkyrieCLI client match the structure of the ValkyrieManager GUI (below).

```
Xena Script Client v20 - 192.168.1.178
Command
0/0 ps_config [0] ?
0/0 PS_ENABLE [0] ON
0/0 PS_PACKETLIMIT [0] -1
0/0 PS_COMMENT [0] "Stream number 0"
0/0 PS_RATEPPS [0] 123456
0/0 PS_BURST [0] 5 100
0/0 PS_HEADERPROTOCOL [0] ETHERNET
0/0 PS_PACKETHEADER [0] 0x0000000000000004F4BC056CE0FFFF
0/0 PS_MODIFIERCOUNT [0] 0
0/0 PS_PACKETLENGTH [0] RANDOM 200 1500
0/0 PS_PAYLOAD [0] INCREMENTING 0x00
0/0 PS_TPLDID [0] 3
0/0 PS_INSERTFCS [0] ON
```

- 1
- 2
- 3



STREAM: Dev 1G / Module 0 / Port 0 / Stream 0 (TID = 3)

1  Enabled Stop after:  packets Error injection:

Description:

Insert test payload, TID:  Insert frame checksum, FCS:

Stream transmission profile:

Rate:  percent   
 packets per second  
 Mbits/sec

Inter packet gap:  ns (20 bytes)

2 Burst: Size:  packets Density:  percent

Inter burst gap:  ns (733 bytes)

Packet content, auto-generated:

3 Packet length:  Min:  bytes Max:  bytes

Length: 14



Test. Improve. Repeat.

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

[www.xenanetworks.com](http://www.xenanetworks.com)  
Sales contact: [sales@xenanetworks.com](mailto:sales@xenanetworks.com)