

## Feature Overview



### Hardware:

- ❑ 10G Ethernet iSCSI ports: 2, 4, 8 or 12 Ports

### Software Features:

- ❑ Display and configure iSCSI operating parameters
  - Immediate Data
  - Initial R2T
  - Max Outstanding R2T
  - Max Data Segment Length for Receive and Transmit
  - Max Burst Length
  - Header and/or Data Digest
- ❑ Configure iSCSI security parameters: CHAP user name and passwords for initiator and/or target
- ❑ Display iSCSI session information and configure session parameters
  - Session ID, IP address and Port number for source and destination, Header/Data digest type.
- ❑ Ability to transmit network traffic simultaneously to simulate load conditions  
Network Counters
- ❑ Port
  - VLAN support
  - Custom MAC address
  - Configurable MTU
  - Port Status
  - Display, Clear, Define Interval of Port Statistics
  - Port Configuration
  - Set State and number of targets
  - Port/Network statistics and Real time performance

- Target
  - 64 Targets per port
  - Configurable IQN ( iSCSI qualified name)
  - Tape or Storage Array Emulation
  
- LUN
  - Variable Size – Up to 100 TByte
  - 3 Memory configuration options
  - Zero, fixed or variable latency
  - Save/Restore Data files to LUN
  - Seed a Binary or Data File or Pattern to a LUN
  - Possible 512 LUNs per port
  - Profiles – Use predefined or build drive or tape profiles
  - Variable Block Size (512, 520, 524, 528 or 4096 Byte)

## **Error Capabilities:**

- Error Injection:
  - Single or Multiple Errors per command
  - By Number of I/O's
  - By Time
  - Error Conditions on specific LBN or CDB
  
- Error Conditions:
  - Busy
  - Drop
  - QueueFull
  - CheckCond
  - Read Over/Read Under
  - WriteOver/Write Under
  - ReadDelay, WriteDelay
  - Out of order Data
  - Data Corruption
  - Bad Block
  - Bad Status

## **Enhanced Command Features:**

- 6/10/12/16 byte CDB
- CDB Histogram – Logging of command frames
- Persistent Reservations
- Reserve and Release
- User Definable Mode, Diagnostic and Custom Inquiry Pages
- Selectable Queue depth

## System Features:

- Web Based Interface
  - Quickly and easily set up, run and save multiple “disk” configurations
  - Configure Port, Target and LUN characteristics
  - Generate Errors
  - View Error Counters and Statistics
  - Build, Edit and execute Scripts
  - Online Documentation
  
- Command Line Interface
  - Run Individual or Looped Commands
  - Build and Execute Scripts
  - Execute Remote Scripts
  
- Additional System Functions
  - Trace capability
  - Packet Capture and Decode

The screenshot shows the SANBlaze VirtualLUN V6.0-7-16-dev web interface. The browser address bar shows the URL: http://192.168.110.104/home.asp. The interface is divided into a left navigation pane and a main content area.

The left navigation pane shows a tree structure with the following items:

- SANBlaze VirtualLUN
  - Multi-System Manager
  - Multi-System Target Setup
  - Multi-System Init Setup
  - Multi-System Overview
  - Multi-System Status
  - 192.168.110.104
    - Target Quick Setup
    - System Overview
    - Target iSCSI:0
    - Target iSCSI:1 VLAN:5
    - Target iSCSI:2
      - Target[0]
        - LUN[0]
        - LUN[1]
        - LUN[2]
      - Target iSCSI:3
    - Tracing
    - Configuration
    - User Management
    - Scripting
    - Maintenance
    - Poweroff/Reset
    - Web User Guide (target)
    - Web User Guide (init)
    - CLI User Guide (target)
    - CLI User Guide (init)
    - Release Notes
    - User Guide PDFs

The main content area displays the "LUN 0 Configuration" page. The page title is "Port:2 [eth4 - 192.168.50.107] Target:0 LUN:0 Configuration". The page contains several sections:

- Parameter Configuration:** A table with columns for Parameter, Value, This LUN, and Scope.
 

Parameter	Value	This LUN	Scope
VendorID[8]:	SANBlaze	<input checked="" type="radio"/>	<input type="radio"/>
ProductID[16]:	VLUN P2T0L0	<input checked="" type="radio"/>	<input type="radio"/>
Revision[4]:	V6.0	<input checked="" type="radio"/>	<input type="radio"/>
Owner:	system	<input checked="" type="radio"/>	<input type="radio"/>
ReadSize:	128 (Max 100000000 MB, Min 1 MB)	<input checked="" type="radio"/>	<input type="radio"/>
WriteSize:	1 (Max 30699 MB, Min 1 MB)	<input checked="" type="radio"/>	<input type="radio"/>
Bind To File:	<input type="checkbox"/> Check box and Apply to Bind Writes to File	<input checked="" type="radio"/>	<input type="radio"/>
RdLatency:	min: 0 msec max: 0 msec	<input checked="" type="radio"/>	<input type="radio"/>
WrLatency:	min: 0 msec max: 0 msec	<input checked="" type="radio"/>	<input type="radio"/>
AddLatency:	add: 0 msec for each 0 KB of I/O size	<input checked="" type="radio"/>	<input type="radio"/>
Enabled:	<input checked="" type="checkbox"/> Current State	<input checked="" type="radio"/>	<input type="radio"/>
Write Enabled:	<input checked="" type="checkbox"/> Current State	<input checked="" type="radio"/>	<input type="radio"/>
Ready:	<input checked="" type="checkbox"/> Current State	<input checked="" type="radio"/>	<input type="radio"/>
LUN Memory:	Allocated 0MB 0% <input type="checkbox"/> In Use <input checked="" type="checkbox"/> Release SaveToFile	<input checked="" type="radio"/>	<input type="radio"/>
Restore Data:	None Data Pattern Delete	<input checked="" type="radio"/>	<input type="radio"/>
- Advanced Features:** A section with several rows of performance metrics:
 

Scope of Changes	LUN	Target	Port
Active LUNs	LUNs with ID 0	Targets with ID 0	Ports with ID 2
Inactive LUNs	All LUNs	All Targets	All Ports
Active & Inactive LUNs			