



PACKET RAID

PORTABLE 40G, 10G AND 1G NETWORK RECORDER

· · · 40G LAN · · · 10G LAN · · · 10G WAN · · · 10G POS · · · 1G LAN · · · RAW · · ·

Comprehensive Platform

PacketRAID is a high speed multi-format data recorder purpose-designed for use in test labs and network security applications. It offers a single-platform solution to a wide range of test and monitoring requirements, combining ease of use with excellent performance and reliability.

Record LAN and WAN

PacketRAID's capture/replay ports are all capable of operating independently. They variously support LAN ethernet at both 10Gb/s and 1Gb/s, 10Gb/s WAN ethernet (over SDH/SONET), and STM64c POS.

PacketRAID also supports native 40Gb/s ethernet recording by combining four ports together in firmware, as well as raw bit-level capture from 120Mbps to over 10Gbps. This latter feature enables almost any signal of any type to be recorded, so long as the bitrate is known to the user.

Replay Anything

PacketRAID can replay in all the formats it can record in, including raw mode, making it an extremely flexible tool for testing. And the replay format does not need to be the same as the original record format—for example, ethernet recorded as 40Gb/s LAN can be replayed as 10Gb/s WAN.

And because the ports use pluggable SFP/SFP+ transceivers, the physical presentation can change too—so traffic recorded off multi-mode fibre at 850nm can be replayed over single-mode fibre at 1310nm or 1550nm and vice-versa.

Huge Fast Storage

Each recorder comes equipped with a 32TB SSD RAID array which delivers extremely high performance, allowing full line rate recording across multiple ports at any speed. The use of solid state drives also means that it is possible to record and replay concurrently without impacting performance, making the platform extremely flexible for both lab and field use.



PacketRAID delivers superb functionality and performance in a compact and flexible platform.

Open Platform

PacketRAID is built on standard Linux, and offers a completely open platform to users. Full administrative (root) access is provided, and customers can install their own software and applications as required, or apply their own security and authentication settings.

Accessible Data

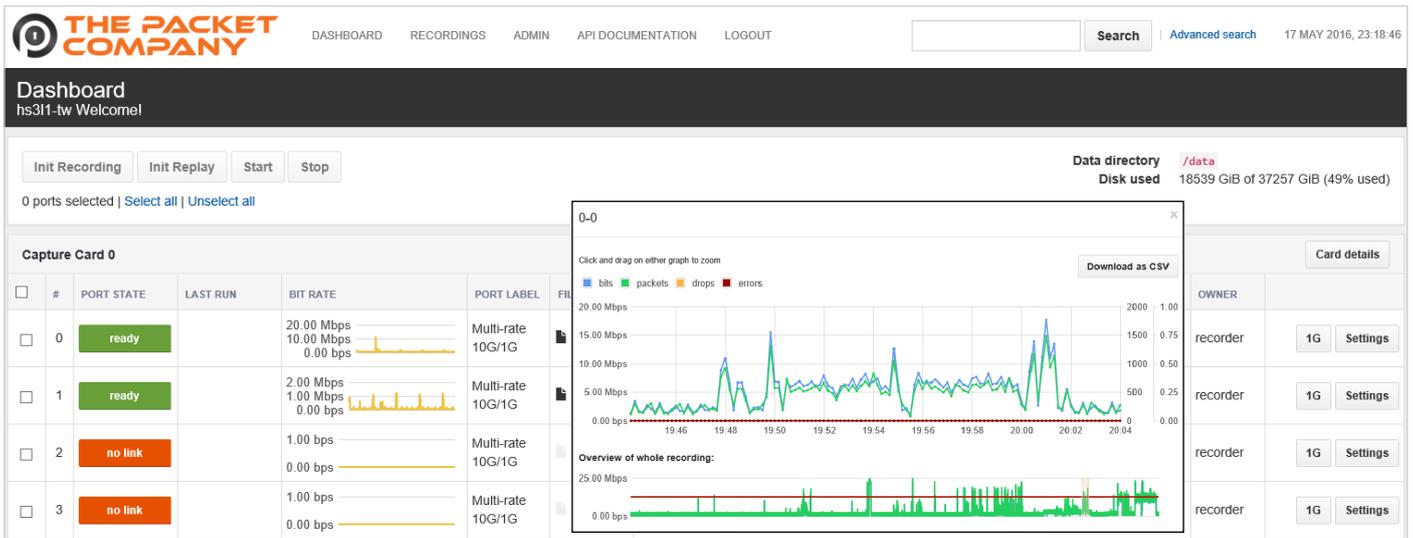
All packet captures are stored as standard files on a Linux XFS partition, and have no special requirements for access. The partition can be shared via NFS or SMB to make the recordings available to other servers, and the GUI provides an import/export capability for copying recordings to and from archive storage.

Support and Warranty

PacketRAID comes with a comprehensive 12-month RTB hardware warranty and support package including regular software updates and technical assistance with problem solving. This is designed to ensure that the customer can obtain maximum value from the recorder from the outset.

An enhanced support package is also available that includes on-site training and consultancy to assist with integrating the platform into existing frameworks, or developing new software to take advantage of the performance that it offers.

Please contact us to discuss other support options.



Packet Analysis

The PacketRAID server offers huge I/O and processing performance, combined with a large amount of RAM. This makes it an ideal platform on which to analyse recordings once made, or to process other large sequential datasets. Combined with its 10G or 40G network connectivity and generous storage volume, it can readily form the core of a comprehensive high-throughput capture and analysis system.

Compliance

PacketRAID has also been designed to assist in regulated environments where there are compliance requirements around visibility and retention of recordings.

The GUI enables expiry periods to be set either globally or on individual captures, and the recorder will generate alerts automatically as recordings approach or pass these deadlines.

Further enhancements are planned going forwards - please contact us for more details.

Remote Automation

PacketRAID provides command-line access as well as a fully featured JSON API, allowing all aspects of its operation to be controlled by scripts or applications either locally or over a network. It can easily be integrated into software frameworks such as Jenkins and is well-suited to use in automated testing and analysis.

Platform Specifications¹

CPU	8-core hyper-threaded Xeon @ 3.2GHz
RAM	128GiB 1867MHz ECC DDR4
Storage	32TB removable SSD RAID array
PSU	650W multi-voltage PSU
Management	IPMI BMC controller
Network	Dual port 10GbE or 40GbE NIC
OS	Standard Linux kernel with XFS filing system
Software	PacketRAID software suite for record, replay and monitoring with user-friendly GUI
Form Factor	Portable with carry case on wheels
Ports	4 x 10G with pluggable SFP+ transceivers
Formats	40G LAN, 10G LAN, 1G LAN, 10G WAN, STM64c POS and raw mode
Control	GUI, command-line or JSON API

¹ Also available in a rackmount form-factor