NetQuest
Monitoring Access Solutions

OptiCop Converger®: A-Series

BENEFITS

- Load balancing to overcome tool limitations
- VPI/VCI aggregation and IMA support
- Interface conversions to leverage existing and next generation tools
- Remote monitoring and tool sharing to reduce CAPEX

OVERVIEW

NetQuest's A-Series OptiCop Converger products provide test and monitoring access for today's high-speed Asynchronous Transfer Mode (ATM) networks in Carrier, Government, and Enterprise applications. The non-intrusive access optimizes tool port usage and enables network operators to implement management and assurance strategies related to the overall performance of the services being delivered, without degrading the service or distorting the results.

ATM transport networks and their inherent quality of service play an important role in today's multi-service networks. As networks continue to converge and traffic migrates from cell to packet, the monitoring of ATM backbones used in conjunction with IP and TDM infrastructure presents a unique set of challenges. Features like circuit emulation and Inverse Multiplexing over ATM (IMA) make monitoring expensive and, in some cases, impossible since ATM support is often not available in next generation monitoring solutions. OptiCop Converger's ability to terminate and convert ATM cell traffic provides a means to extract traffic of interest and leverage existing investments in test and monitoring tools.

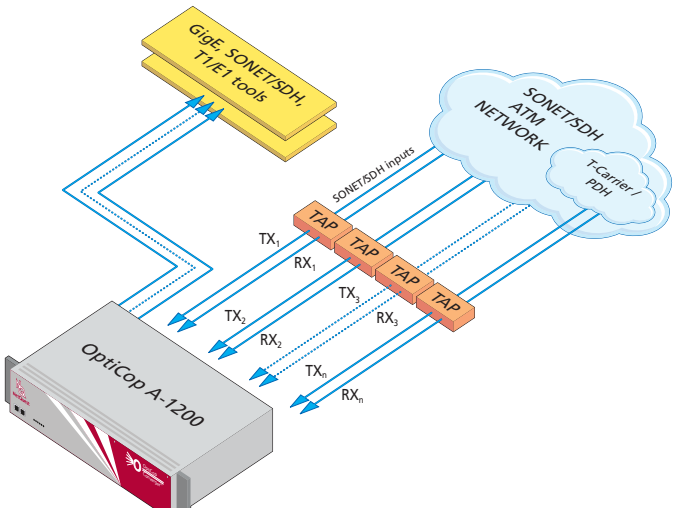
APPLICATIONS AND FEATURES

With OptiCop Converger deployed in an ATM network, engineers can traffic manage virtual circuits and paths or application protocols of interest to the appropriate test and monitor tools. Everyday, network engineers are challenged with tool constraints like port and processing limitations, interface incompatibilities, remote monitoring, and budget. Features like IMA traffic aggregation (optional), tool destination interface mapping, and load balancing make OptiCop Converger a powerful tool in the engineering of today's advanced networks.

By providing network interface conversions to GigE monitoring tools such as Sniffers, Performance Management Probes, Lawful Intercept Systems, Security/NAC Devices, Traffic Analyzers, and Bulk Data Recorders, OptiCop Converger provides real-time access to ATM network traffic. The ATM cell traffic can be translated into standard or proprietary Gigabit Ethernet traffic at full line rate without loss of data. OptiCop Converger's flexible interfaces, unique traffic handling capabilities, and high port density set a new standard for monitoring access to converged network tools.

MONITORING ACCESS

The A-Series OptiCop Converger systems can be configured to meet the most demanding applications, with the ability to monitor SONET/SDH and PDH ATM circuits ranging from T1/E1 to OC3/STM-1 through OC12/STM-4. With up to 24 SONET/SDH network/tool interfaces, the A-Series OptiCop Converger can



The A-1200 OptiCop Converger in a SONET/SDH ATM network

monitor multiple broadband circuits in either half or full duplex scenarios and will operate in conjunction with Automatic Protection Switching, ensuring monitoring applications always have the access they need.

CONFIGURATIONS

The A-Series OptiCop Converger is available in two models, the A-1200 and the A-2400, supporting 12 and 24 optical/copper interfaces respectively. Optional support for up to 256 discrete T1/E1 interfaces is offered on the A-1200. The A-Series packaging is a 2RU chassis that is rack mountable and may be ordered with single or redundant power supplies with independent inputs for AC or DC sources. The table below illustrates example port configurations available.

	MODELS	
	A-1200	A-2400
Total # SFPs (inputs + outputs)	12	24
Max # OC3/STM-1 input ports	8	16
Max # OC12/STM-4 input ports	2	4
Max # GigE output ports	8	16
Max # T1/E1 input/output ports	256	-

MANAGEMENT

OptiCop Converger can be managed locally or remotely using menu-driven screens via Telnet or a serial crafts person port. Both methods provide secure access through SSH and a multi-level password protection system that leverages Radius or TACACS+. OptiCop Converger has integral Syslog support along with a SNMP V1-V3 agent that supports TRAP functionality, making it possible to audit and manage configuration change and alarm notifications in a networked environment. For applications where a tight integration between the OptiCop Converger and the application is required, NetQuest has developed a machine-to-machine interface called GSCP, a proprietary UDP-based control protocol. Integrating GSCP with the application enables solution providers to present a unified solution at every level.

TECHNICAL SPECIFICATIONS	
Size	2U rack mount or table top chassis: 3.5"H x 19"W x 17.25"D (8.9cm H x 48.3cm W x 43.8cm D)
Weight	16 pounds (7.27kg)
Power	140 W (110/220 VAC or 48 VDC)
Operating Temp	32° - 122° F (0° - 50° C)
Humidity	10-90% non-condensing
Compliance	FCC, UL, CE, RoHS
Management	Telnet, EIA232 Craft, SNMP V1-V3

For more detailed technical specifications, please email NetQuest at info@netquestcorp.com

NetQuest Corporation • 523 Fellowship Road • Mount Laurel, NJ 08054 USA • +1.856.866.0505 • Fax: +1.856.866.2852 • Email: info@NetQuestCorp.com