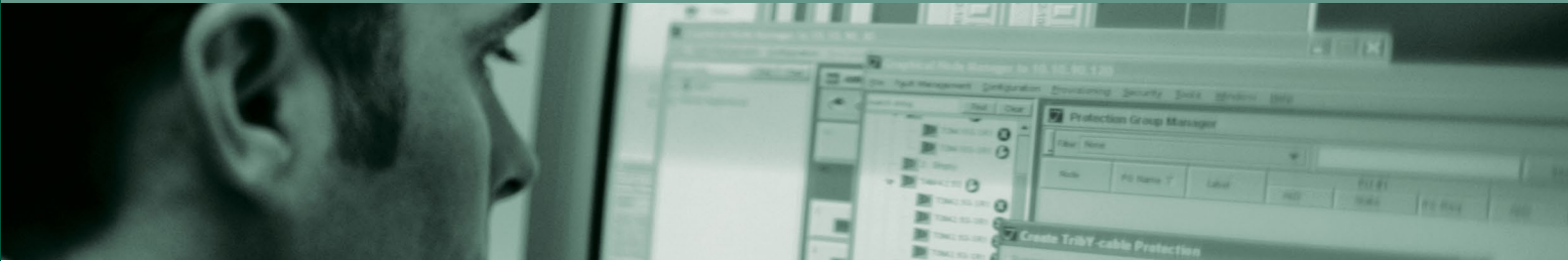


Infinera SNMP Fault Integration Server



The Infinera SNMP FIS provides an up-to-the-minute view of network health, giving you the timely information you need to quickly issue troubletickets and dispatch service personnel.

The Infinera SNMP Fault Integration Server (FIS) enables the integration of real-time asynchronous network alarms and events to the northbound SNMP trap interface and fault network management applications. It improves operational efficiency and streamlines service assurance. The Infinera SNMP FIS can interwork with up to five concurrently registered SNMP managers, keeping pace with network growth and efficiency.

The SNMP trap stream supports alarm and clearable threshold crossing events that are aggregated by the Infinera Digital Network Administrator (DNA) Element Management System from all subtending Infinera network elements within its defined management domain. It also includes traps for event notifications, such as those associated with audit log events, security events, and administrative events. Network alarms and events are synchronized to ensure up-to-the-minute network health.

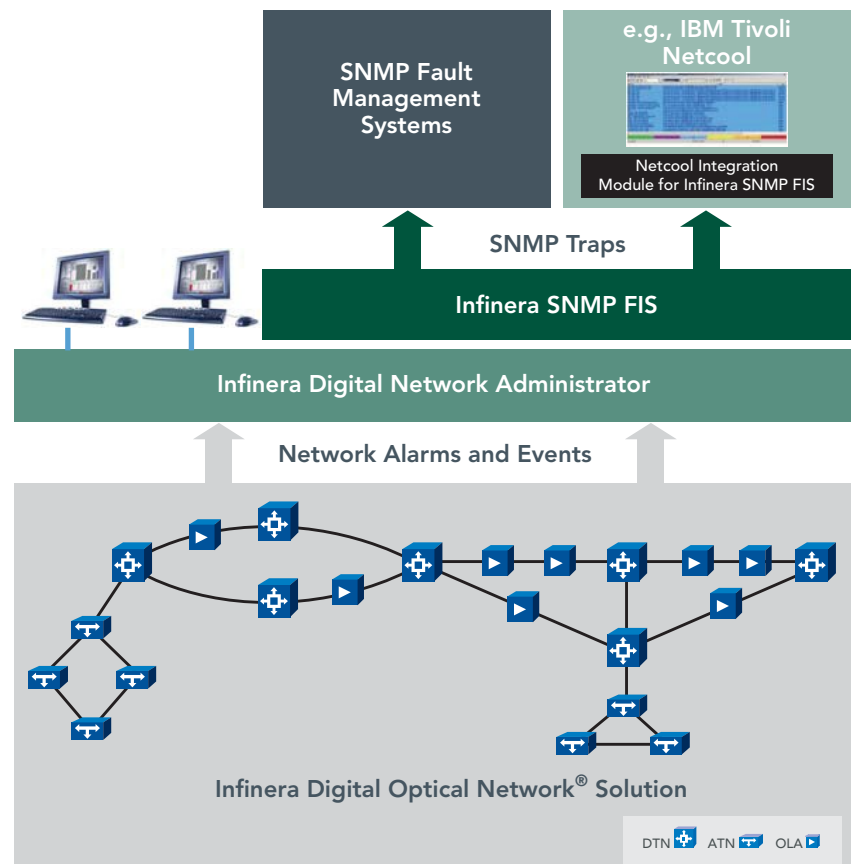
Service Architecture and Administration

The Infinera SNMP FIS is co-located and performed as a mediation layer on top of the Infinera DNA EMS. The Infinera DNA EMS provides a GUI-based functional manager called the SNMP Manager that supports the registration of the SNMP traps that the external SNMP Manager(s) is(are) expected to receive. The Infinera SNMP FIS forwards the traps to

the external SNMP managers accordingly. Up to five active SNMP managers are allowed.

Supported External SNMP Managers

The Infinera SNMP FIS has been tested with IBM Tivoli Netcool™ under the Tivoli Netcool Technology Program. Infinera SNMP FIS also has



been tested with HP OpenView™ NNM Releases including B.07.50, B.07.51, and B.07.53. Other third-party SNMP Managers can leverage the Infinera SNMP FIS to establish integration for fault network management applications.

Infinera SNMP FIS Features

Trap Generation: A trap message is a format that reports a fault condition on any of the network elements managed by the Infinera DNA. Infinera SNMP traps include alarms, TCA notifications, and event notifications that are raised or cleared on the Infinera network elements.

Alarms: Hardware and software failure alarms. An alarm is an indication of a failure condition. Alarms are assigned severities as critical, major, minor, and warning, depending on the degree of service degradation or disruption.

TCAs: Threshold-crossing events are reported as Clearable and Non-Clearable events in the Infinera DNA.

Events: Events include administrative events that indicate the state change of a managed object triggered by the user action and/or changes in the operation capability of the managed object; audit events that reflect all user actions that change attribute value(s) of a managed object; and security events related to the system's security.

Robust Trap Handling: All traps are assigned Session Sequence IDs to help in identifying any out-of-sequence or lost traps. Traps are preserved and

outstanding traps can be re-sent to the registered SNMP managers.

SNMP Version: Infinera SNMP FIS follows the SNMPv2c protocol per IETF RFC 3416, 3417, and 3418 specifications, supporting the SNMPv2Trap PDU type which is an unsolicited notification from an agent to an SNMP manager.

Interworking Requirements

The Infinera SNMP FIS must be installed on the same Infinera DNA server with a matching system release. For example, Release 6.0 of the Infinera DNA must be present with Release 6.0 of the SNMP FIS.

For the IBM Tivoli Netcool fault management integration solution, a matching Netcool Integration Module for Infinera SNMP Fault Integration Server, available from IBM Tivoli, must be installed on the Tivoli Netcool server. For example, Release 6.0 of the Netcool Integration Module for Infinera SNMP Fault Integration Server must be installed on the IBM Tivoli Netcool to work with Release 6.0 of the Infinera SNMP FIS



Infinera Global Headquarters
169 Java Drive
Sunnyvale, CA 94089
USA
Tel: +1.408.572.5200
Fax: +1.408.572.5454
www.infinera.com

**Sales Contacts:
Americas**
sales-am@infinera.com

Asia and Pacific Rim
Infinera Asia Limited
391B Orchard Road
#23-01 Ngee Ann City Tower B
Singapore 238874
Tel: +65.6832.8099
sales-apac@infinera.com

Europe, Middle East, and Africa
CityPoint
1 Ropemaker Street
London, EC2Y 9HT
UK
Tel: +44.207.153.1086
sales-emea@infinera.com

**Customer Service and
Technical Support**
Within North America
Tel: 1.877.INF.5288
Outside North America
Tel: +1.408.572.5288
techsupport@infinera.com