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INOC

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Business Development



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INOC Overview

» 24x7 Global NOC Provider

- Providing NOC services for over 11 years
- Global customers include Enterprises & Carriers
- Technical NOC support
- Primary NOC and disaster recovery facilities

» Multi-Vendor and Multi-Technology Support

- Support for Layer 1, 2 & 3 technologies – Ethernet, SONET, DWDM, PON, ATM, TDM, IP, MPLS
- Servers, applications, security devices
- Multiple vendors supported

» Support Levels

- Tier 1
- Advanced (Tier 2 & 3)

» Clients

- Enterprise – Government, Healthcare, Web, Financial and other
- Carrier – Fiber, Wireless, IXC, CLEC, Exchanges, Data Centers



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INOC Overview (Cont.)

» Processes & Procedures

- Processes are customized by service, device, technology, location, 3rd parties, etc. (Map to customer's network / IT support environment)
- All INOC services are built around a standardized support framework (ITIL)

» Service Benefits

- Immediate action on network faults
- Minimizes mean time to repair
- Significantly improves visibility and communication
- Accelerates problem resolution
- Increases accountability of 3rd party services (Carriers, field support, etc.)
- Increased end-user satisfaction
- NOC will have letters of agency to be able to communicate with Carriers



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Support Capabilities

Vendors

Cisco	MRV
Ciena	ADVA
Juniper	Zhone/Sorrento/
Force 10	LuxN
Nortel	FlexLight
Alcatel-Lucent	PCT
Adva	MetaSwitch
Riverstone	NexTone
Foundry	ECI Telecom
Extreme	Sphere
Microsoft	Packeteer
Novell	Allott
Red Hat	Trapeze
Sun	Alvarion
HP IBM	Avocent
Dell	Digital V6
D-Link	Nokia
3COM	Fortinet
Allied Telesis	APC
	ADC / LGC
	Powerwave

Devices

Servers
Switches — Ethernet,
Optical
Routers
Wireless / Cellular
Distributed Antenna
Systems
Soft-switches
VoIP Phones/PBXs
Traffic Shapers
Remote Access
Equipment
SAN Switches
Firewalls
VPN Concentrators
Antivirus Gateways
Security Cameras
UPS
HVAC Equipment
Environmental Sensors

Technology

Applications
Web
Database
Directory Services
Email
Custom Developed
Operating Systems
Linux
Solaris
HP-UX
AIX
Windows
Mac OS
Novell
Network Technology
Gigabit Ethernet
SONET
DWDM
PON
ATM
TDM
Wireless/Cellular
Security Technology
Firewall
VPN
Antivirus

• Partial
List



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IRHN NOC Support

- » **Act as IRHN NOC**
- » **Support Channel**
 - Direct calls to IRHN NOC via toll free number
 - Emails to IRHN NOC
 - IRHN NOC web portal
 - > Ticket views
 - > Update entries
 - > Device status
- » **What will be supported on the network**
 - Multiple carriers
 - Ciena Optical
 - > Managed Ethernet (MetroE)
 - > Dark Fiber
 - Ceragon Wireless
 - > Point-to-Point links



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Transport Network Support

» Advanced Engineering Expertise & Support for-

- 10 Gigabit Ethernet & SONET
- OCx ATM
- DWDM
- GPON
- OTN
- PBB

» Fiber Deployment Support

- Project Management for fiber roll-outs
- Install & test equipment
- Moves/adds/changes on gear

» Monitoring/Management

- 24x7 monitoring of metrics
 - > Loss of signal
 - > Bit errors
 - > Optical power levels
 - > Laser current
 - > Voltage output
 - > Bandwidth
- Custom processes/procedures
- Engagement with carrier NOCs and Field Support to coordinate support activity
- Configuration & Performance Management
- Custom report and branded web portal



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Customer Portal

The screenshot displays the INOC Customer Portal interface. At the top right, there are navigation links: Setup, Logout, Create Request, and Contact NOC. The main content area is titled 'Incident Management' and includes a search bar with a 'Search' button and a 'Location Filter' dropdown. Below the search bar, there are filters for 'Open', 'Closed', and 'All' tickets, and a 'Date Range' section with 'Start' and 'End' date pickers. A table of tickets is shown with columns for Ticket ID, Date/Time Last Modified, Status, and Title. The table contains six rows of data. A callout box points to the search bar with the text: 'Individual Trouble Tickets can be searched.' Another callout box points to the date range filters with the text: 'Type, date range & status filters help view Trouble Tickets by groups.' A third callout box points to the 'Escalation' status in the table with the text: 'Trouble Tickets can be viewed (click each one to expand) and updated within the portal.'

Ticket ID	Date/Time Last Modified	Status	Title
98-8080	2009-11-26 12:37:03	Pending	Unreachable: Out of Band Management Access
98-14160	2009-12-02 11:17:53	Pending	Traceback Alert: s-luch-3960-9 (10.100.100.203)
98-14221	2009-12-02 11:18:38	Pending	wcc-1650-2: Device Disable (shh-nmr2a)
98-14911	2009-12-03 09:35:03	Returned to NOC	Power Supply Alarm: dm116-3950-+ 10.100.100.7 PowerSupplyWS
98-15017	2009-12-03 09:35:03	Returned to NOC	Not Receive Alarms - Waukesha UPS at 10.1.5.28
98-15077	2009-12-02 12:35:05	Escalation	Threshold Alert: buildwep-1 (10.1.5.24)

NOCVIEW Incident Management (Trouble Ticketing)



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Customer Portal

The screenshot displays the INOC Customer Portal interface. At the top, there are navigation links for 'Setup', 'Logout', 'Create Request', and 'Contact NOC'. Below this is a 'Dashboard' section with tabs for 'Status Summary' and 'Report Builder'. The main area is titled 'Incident Management' and features a search bar and a 'Location Filter' dropdown. A table lists various incidents with columns for 'Severity Change', 'Name', 'Value Name', 'Location', and 'Condition'. The 'Condition' column uses color coding: green for 'Info', yellow for 'Warn2', and orange for 'Warn3'. Three callout boxes provide additional information:

- Top Callout:** "Color indicates link (IRHN device) status and beginning of initial troubleshooting." (Points to the 'Warn2' and 'Warn3' status indicators in the 'Condition' column.)
- Bottom-Left Callout:** "Status, date ranges of devices when added or removed and device types can be filtered to view." (Points to the 'Device Type' filter section on the left.)
- Bottom-Right Callout:** "Click to expand individual devices for status and deep analysis: - IP Addresses - Trending Graphs - Interfaces - Attributes - Associated Tickets" (Points to a device name in the table.)

NOCVIEW Device Management (Enables Device Drill-Down Capabilities)



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Questions

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