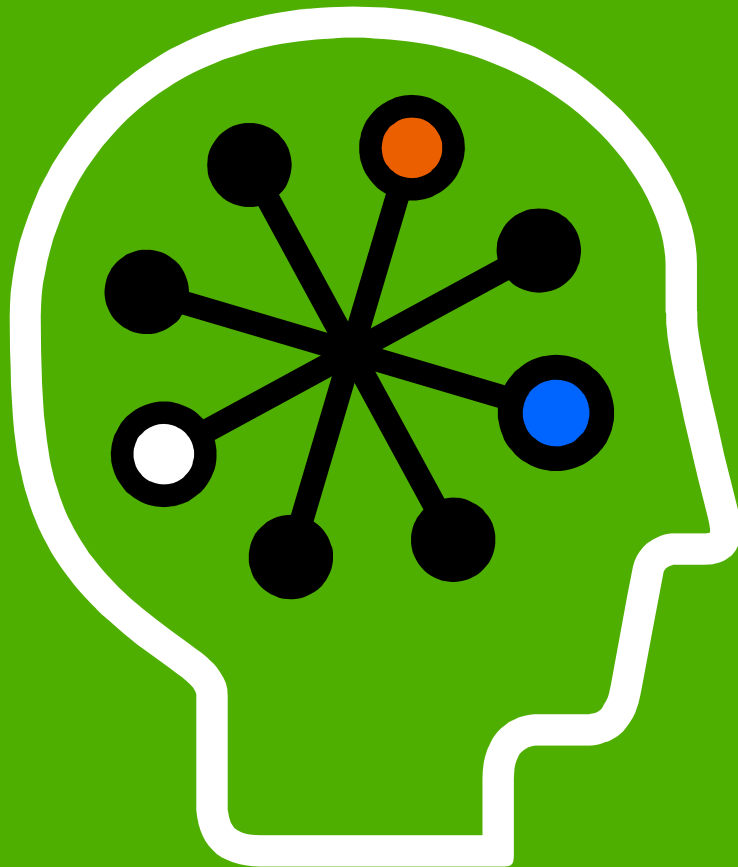




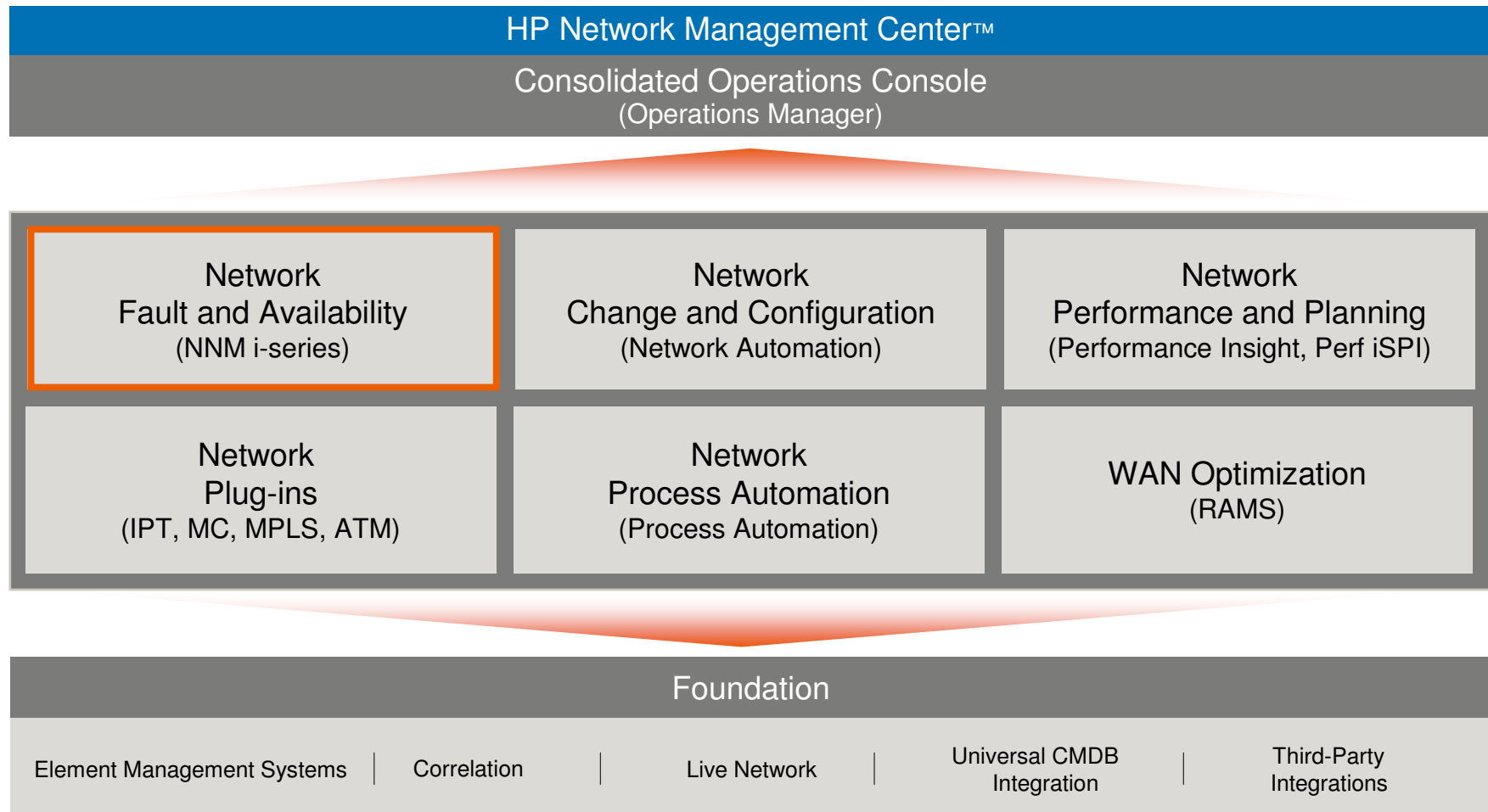
Network Node Manager i-series v8.0

Stefan Danisovsky Marketing Manager HP Software EMEA



Technology for better business outcomes

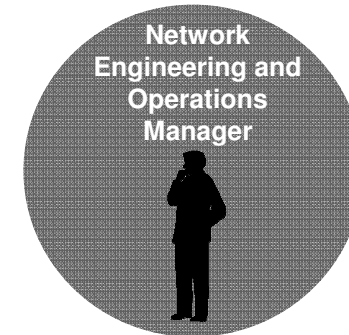
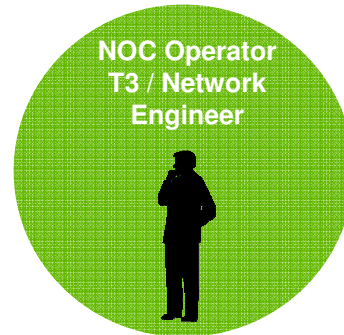
HP Network Management Center



Agenda

- Who we designed NNMi for
- Introducing NNMi and overview
- NNMi fast-tour demo
- NNMi benefits summary

Who we designed for...



Too many meaningless events

Too many escalations from Tier 1

Upgrades are a nightmare

Missed SLAs

Cumbersome GUI

RCA based on out of date topology

Lengthy discoveries

Staff inefficiency

Poor information

Swivel chair management

Labor intensive integrations

Costly mgmt infrastructure

Fault management is not enough

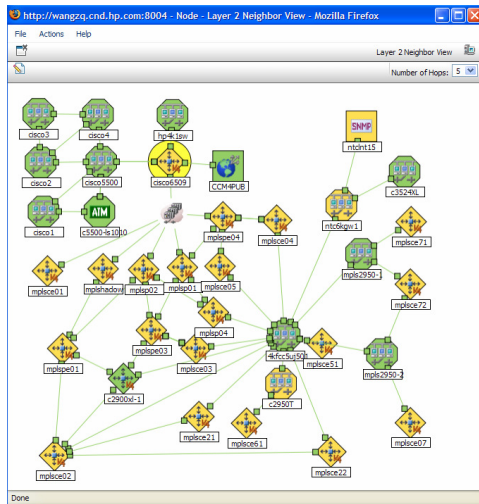
Fault management is not enough

Complex configurations and deployments

Security and audit concerns

Introducing Network Node Manager **i**

NNM**i**



innovative technology delivers low TCO

intuitive design increases operator efficiency and productivity

intelligent automation reduces MTTR

integrated solution increases efficiency across IT

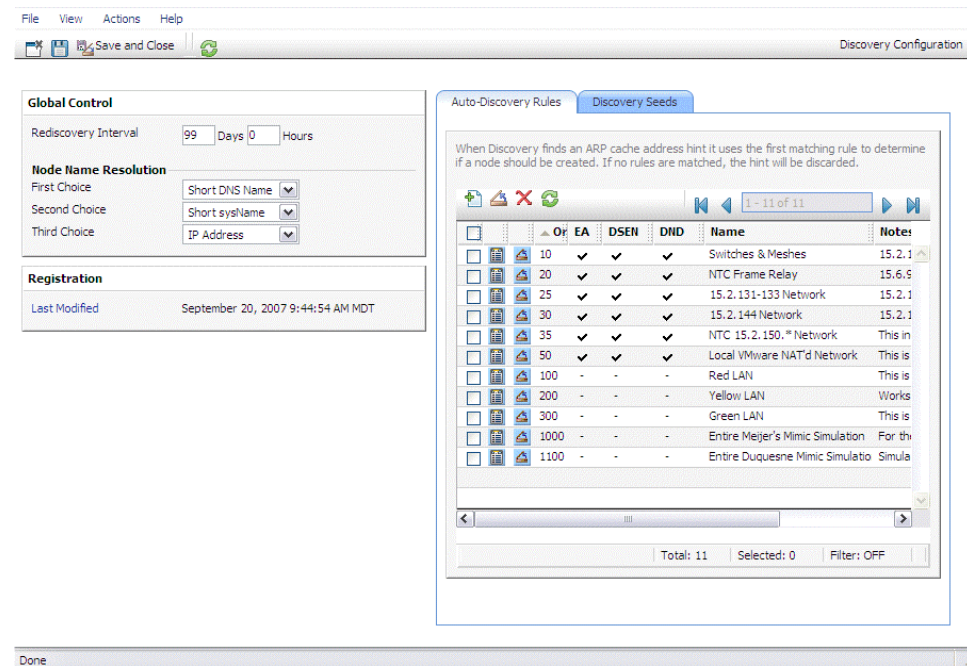
immense scalability decreases management costs

iInnovative technology

Quick Start Configuration Wizard

GUI based configuration tuning

- Communication
- Incident
- Monitoring
- Discovery



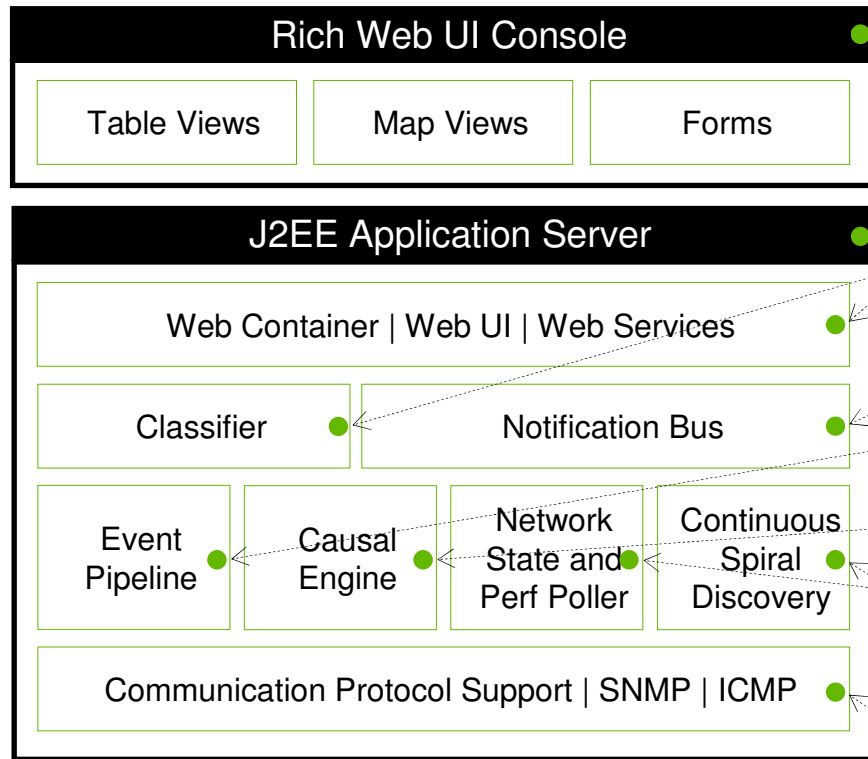
LOW TCO: Quick Time To Value



“As a leader in the transmission and distribution of electric energy, Duquesne Light prides itself on superior customer service and reliability, and that starts with the service and reliability of our IT infrastructure. We made the decision to deploy HP Network Node Manager i 8.0 to help us achieve faster mean time to resolution (MTTR) and because it is easy to use, easy to learn, and easy to deploy. We were managing our network within two hours after downloading the software.”

Kevin Turkovich, manager, IT infrastructure and support
Duquesne Light

i nnovative technology



- n-tier architecture provides deployment flexibility
- Rich web client provides maximum accessibility
- Web services and future-proof SOA based integration interface
- Classifier provides for automatic containerization and grouping
- Notification bus ensures accurate and real-time updates
- Event Pipeline provides high performance event correlation
- Causal Engine provides advanced deterministic RCA
- Network state poller with aggressive polling intervals
- Continuous spiral discovery delivers hyper-accurate topology in dynamic environment
- Diverse communication protocol support

LOW TCO | Performance | Flexibility | Diversity

intuitive design

Management by Exception

The screenshot shows the HP Network Node Manager web interface. The browser address bar indicates the URL is `http://localhost:8004 - HP Network Node Manager : 192.168.177.170 - Mozilla Firefox`. The page title is "HP Network Node Manager". The user is logged in as "domruf" with the role of "Administrator".

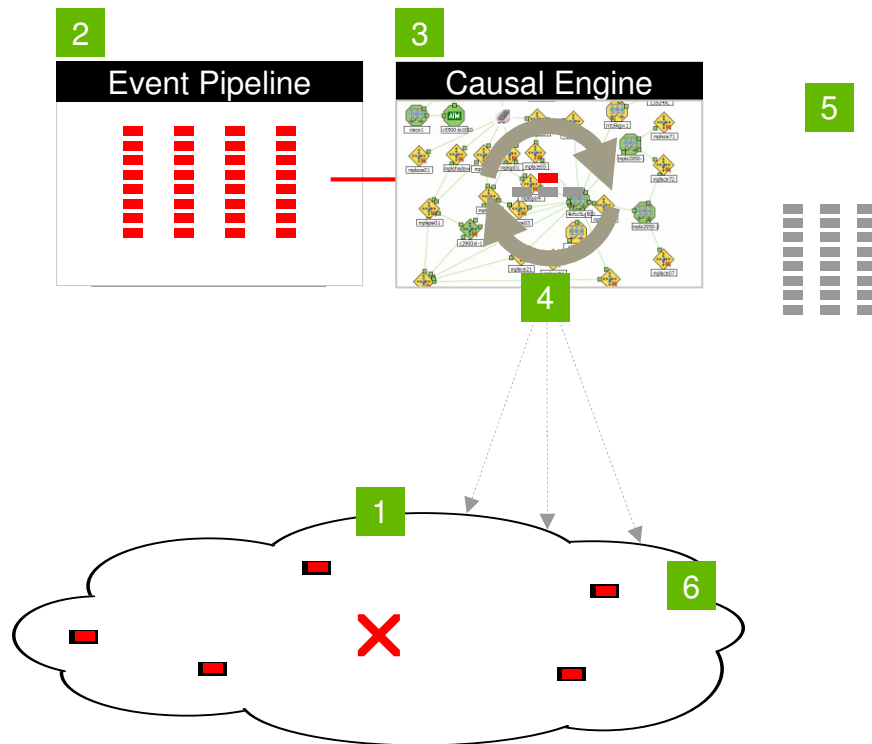
Annotations highlight key features:

- User Roles:** Located in the top right corner, showing the user's name and role.
- Incident and device grouping:** Points to the left sidebar menu where incidents are categorized (e.g., "My Open Incidents", "Unassigned Root Cause Incidents").
- Incident Ownership:** Points to the "Se" (Severity) and "Pr" (Priority) columns in the incident table.
- Root cause analysis and event correlation:** Points to the "Ca" (Cause) and "Fa" (Fault) columns in the incident table.
- Event Lifecycle:** Points to the status icons (e.g., red 'X', green checkmark) in the incident table.
- Task oriented views:** Points to the bottom left navigation menu with categories like "Monitoring", "Troubleshooting", "Inventory", "Management Mode", "Support", and "Configuration".

The main table displays a list of incidents with columns: "Se", "Pr", "Source Node", "Cause Object", "Ca", "Fa", "Or", "Message", and "Notes". The table shows 20 incidents, with the first few rows including details like "Connection Down" and "Interface Down".

MAX OPERATOR EFFICIENCY AND PRODUCTIVITY
Pre-configured | Customizable | Elegant

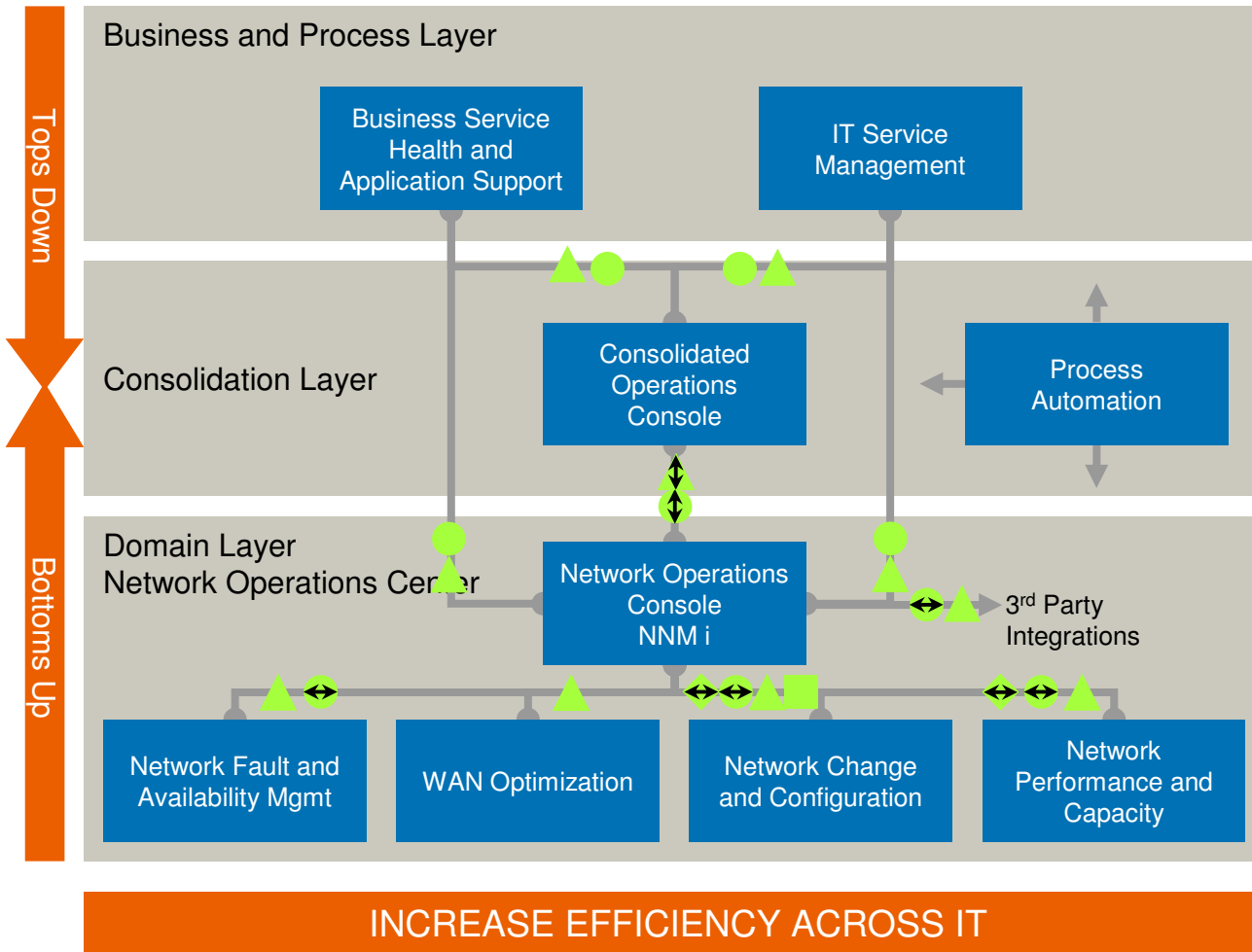
intelligent automation








- 1 Network problem creates flood of traps and events to Event Pipeline
- 2 Event Pipeline correlates events and then stores them in DB
- 3 Causal Engine analyzes conditioned incident stream
- 4 Causal Engine triggers polling of network for additional data
- 5 Causal Engine produces Root Cause Analysis Problem and sympathetic incidents and events.
- 6 Causal Engine updates network status in NNMi views

MAXIMIZE AVAILABILITY AND PERFORMANCE

integrated solution



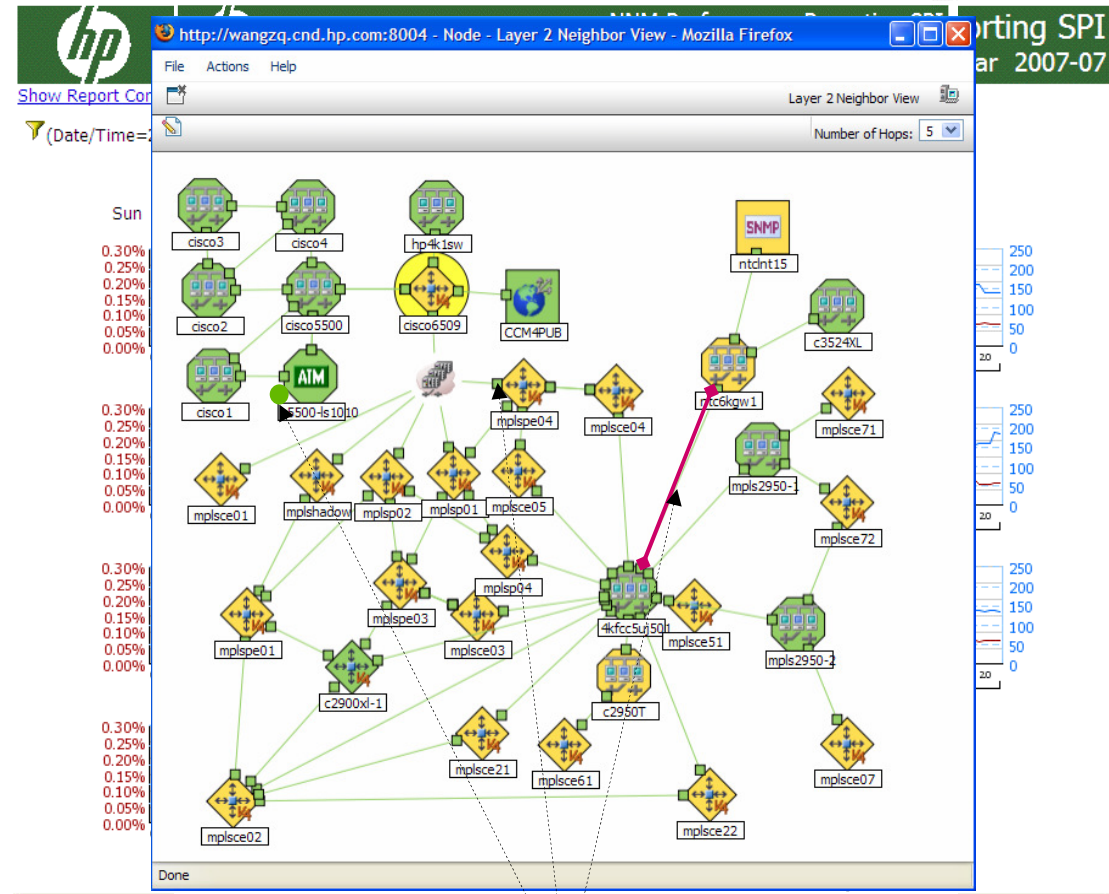
Type

-  Event forwarding
-  Device / node synchronization
-  Contextual cross-launch
-  Advanced (data, workflow, etc..)
-  Indicates bi-directional integration

integrated solution

Unified Fault and Performance

- Performance state visualized along with fault and availability state
- Click through to detailed performance reports for advanced diagnostics
 - Headline view
 - Calendar report



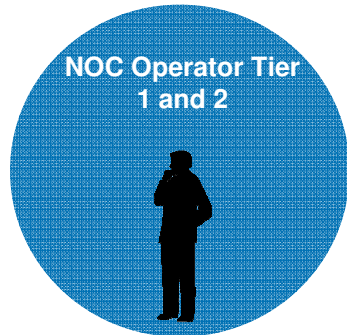
Optimize resources | Increased Tier 1 productivity

i mmense scalability

Max discovered topology	<ul style="list-style-type: none">•15,000 nodes•250,000 interfaces
Initial discovery time 5k node test, seeded	<ul style="list-style-type: none">•1.5 hours
RCA Speed 10 interface down	<ul style="list-style-type: none">•10 seconds
Event Store Bulk Speed	<ul style="list-style-type: none">•50 traps/second
Trap Injection Speed	<ul style="list-style-type: none">•1000 traps/second

LOW TCO: scalability lowers management infrastructure expense

NNMi features and benefits summary



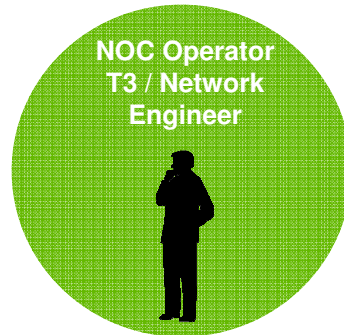
NOC Operator Tier 1 and 2

New intuitive GUI

Exception Based Management

Unified Fault and Performance

Scoping of views based on my responsibility



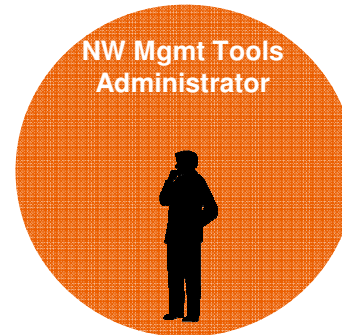
NOC Operator T3 / Network Engineer

Improved Tier 1 effectiveness means less escalations

Continuously updated topology reflected in RCA

Unified Fault and Performance Management

Deep integration potential with other tools



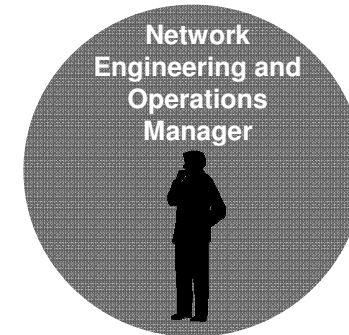
NW Mgmt Tools Administrator

Continuous Spiral Discovery

n-tier architecture

Web services / SOA API

User roles



Network Engineering and Operations Manager

3 hours to value

Immense scalability

Intelligent automation

Integrated solution

The HP NNMi Difference

Minimize the cost of maximizing your network availability

Technology Leadership

- Deterministic root cause analysis enabled by adaptive Causal Engine and continuous spiral discovery process

Unique combination of value

- Extreme scalability, low TCO and intelligent automation in one tool.

Integrated Solution: Tear down the silos

- Optimize within network operations AND across IT
- The HP Network Management Center is an integrated solution designed to support a service driven operation.

Market Leadership and Proven Success

- Largest customer base (NNM) and partner program in the world
- Market leading software, support and services

Award winning software

- Network World Best of the Tests Winner 2006
- Windows IT Pro Readers' Choice Awards Winner 2005
- Network World Clear Choice Winner 2005



i n v e n t