

Network Operations Center (NOC)

Automation Readiness Checklist

1. Incident Management

- ☐ Automate the creation of incident tickets for critical events and alerts.
- ☐ Include diagnostic information in incident tickets (e.g., device details, show command outputs).
- ☐ Implement alarm suppression to reduce noise and false positives.
- ☐ Enable auto-resolution and auto-closure of tickets for recurring incidents with proven solutions.

2. Problem Management

- ☐ Develop workflows to identify and document root causes of frequent incidents.
- ☐ Automate resolution tasks for common problems (e.g., recurring configuration errors).
- ☐ Maintain a knowledge base of 'known errors' and their resolutions.

3. Change Management

- ☐ Automate standard network changes (e.g., VLAN updates, switch port modifications).
- ☐ Validate changes with automated configuration reporting tools.
- ☐ Ensure all changes are logged and associated with proper approvals.

4. Performance and Capacity Management

- ☐ Establish baseline metrics for critical devices and interfaces.
- ☐ Configure alert thresholds for key performance indicators (e.g., CPU, memory, bandwidth).
- ☐ Auto-generate proactive incident tickets based on threshold breaches.
- ☐ Use historical trends and top talker analysis to predict capacity needs.

5. Asset and Configuration Management

- ☐ Regularly audit device configurations for compliance using automated tools.
- ☐ Automate the detection and remediation of non-compliant configurations.
- ☐ Schedule automated backups of device configurations and validate changes.

6. Event and Alert Correlation

- ☐ Suppress downstream events caused by upstream issues to minimize unnecessary alerts.
- ☐ Deduplicate recurring alerts to avoid overburdening the alarm console.
- ☐ Use event correlation to link related alerts and provide actionable insights.

7. Integration and Automation Tools

- ☐ Integrate NOC automation tools (e.g., FirstWave's NMIS and opConfig) with existing ITSM systems.
- ☐ Use APIs to streamline data flow between monitoring and ticketing systems.
- ☐ Enable real-time dashboards for a single-pane-of-glass view of network health.

8. Reporting and Continuous Improvement

- ☐ Automate reporting for stakeholders on network performance and incidents.
- ☐ Regularly review and optimize automation workflows based on NOC performance data.
- ☐ Train NOC personnel on leveraging automation tools effectively.

