

NOC TOOLS

introduction

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What is a NOC?

Network Operations Centre (NOC)

- Monitors and manages a service provider's network
- Information about current, historical and planned availability of systems
- Network status and operational statistics
- Fault monitoring and management

Engineers can coordinate their work through the NOC

What is a NOC?

- Usually the first point-of-contact for other network operators
- Monitors all production systems
- Usually work longer hours than normal, often in shifts (many are 24 hours)
- Often does other things that need to happen after-hours

Core NOC Functions

- Problem solving &
- Communications/Reporting

Therefore:

- In case of trouble, the NOC's job is to co-ordinate repair efforts and
- Often, if customers have service-level agreements or other guarantees, the NOC's logs are what are used to make reports about outages

What is Network Management?

“In order to operate a reliable service, the network must be managed according to a determined discipline, using a coherent structure of information management.”

Geoff Huston, ISP Survival Guide

Network Management - Components

Parts of Network Management

- Configuration/Change management
- Performance/Accounting management
- Fault management
- Security management

NOC Tools

- What tools does the NOC need in order to carry out these kinds of management functions?

Mainly...

- Caffeine
- Television
- Video games
- Pizza
- Strange hair
- ..and very useful – MP3 players

Most Importantly...

- **mrtg**, cricket, things that measure counters
- **nfsen**, or other things that measure traffic
- **rt3**, or some other ticket system
- **syslogd**, or some other log collection tool
- **rancid**, to monitor configuration changes
- **smokeping**, to find latency problems