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