Janet6 OSS Background, Requirements

» Replace expensive HP OpenView
» Currently just fault management not full FCAPS
» Based around topological maps
  › Easy navigation for service desk
» Single reference for both IP and Optical faults
» Interact with Ciena NMS ‘OneControl’
» Open Source based i.e. inexpensive
Core system uses Nagios
  • Development flexibility for new/mod’ed plugins
  • Config DB + lots of scripts to semi-automate configs
  • Scales! (MK Livestatus yes, NDOUtils no)
Nagvis for topological maps
  • Manual configs but bearable
TMF814 and MTOSI APIs with OneControl
Quick look...
Customer Tool - Netsight

» Customer facing monitoring tool
» Customer reporting based on Netsight stats
» Traffic, Latency, Loss, Availability
» Only one login/view per customer
» Good for specific connections but not general estate
» Third party development and maintenance
  › Contract not being renewed, bring in-house
» Quick look...

24/10/2018 5th SIG-PMV, Jisc Monitoring Platforms
Before CPT internal users relied on Netsight
  › Slow (then), difficult to navigate around
  › Expensive and time consuming for bespoke requests
Combination of open source tools and scripts
  › Cacti, RRDtool, Weathermap, Python, PHP
  › MySQL for config DB (same as OSS)
Designed around visual navigation (maps)
Quick look...
Other Tools Used

» Performance Monitoring
  › perfSONAR (see Tim’s slides)
  › In-house bespoke scripts for PSBA (Wales)
    – May transition to PS

» SNIPS
  › Still used by NOC, simple but flexible

» Netflow
  › Mainly for threat detection and mitigation
» Automation, Automation, Automation

» Move towards a more modern OSS/BSS
  – More FCAPS like
  – rather than just faults from a ‘fancy’ Nagios

» Replace TMF814/MTOSI
  › Ciena’s BluePlanet MCP APIs

» Netsight replacement

» Netflow for customer traffic reports (scale!)