CMon
Multi-Domain Circuit Monitoring

Trupti Kulkarni
Product Manager, GÉANT

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Agenda

- CMon
  - About
  - Architecture, Design Considerations
  - Information Workflow

- Current Status

- Roadmap

- CMon for GTS

- Conclusion
• Unified platform for multi-domain circuit monitoring
• Different methods for monitoring data aggregation
  • Active and passive monitoring
• Complete view of monitoring data
  • Designed to provide end-to-end circuit monitoring services with ease, regardless of underlying circuit provisioning system
CMon – Architecture & Design Considerations

• Central and distributed modules
• Well-defined interfaces between modules
• Loosely coupled
• Scalable
CMon – Information Workflow

- Circuit Notification
  - Starts at circuit request
  - HQ receives circuit meta data

- Circuit Monitoring
  - Starts when circuit is established
  - Agent starts collecting data in each domain

- Circuit Termination
  - Manually or automatically
  - HQ receives notification

* - central instances of CMon
** - distributed module of CMon, ideally, per-domain.
CMon - Current Status

- Inter-operable with AutoBAHN v3.x
- More NRENs signing up
- Catering to static user panel
- Evaluating integration with other monitoring systems...
CMon – Roadmap

• October 2015 – Release v1.1
  • EduGAIN integration
  • More metrics to display (packet loss, packet error count)
  • GUI improvements
  • Keep-alive between AGTs and HQ

• Other use cases being researched/worked on
  • GTS
  • AWaaS

• November 2015 – Q1 2016
  • Release v1.2
What can CMon offer GTS

• Monitoring of links
  • Availability status, packet (errors, discards) and byte count statistics

• Work with GVM
  • Common resource control primitives for API lifecycle management
    • define, reserve, activate, query, deactivate, release, undefined
  • In the context of GVM functional layers, this means:
    • CMon to interface with RCA-VC at the general virtualisation services layer
      • Receive circuit setup (CRM), tear-down (CTM) notification messages at HQ
      • AGT monitors circuits when activated, until tear-down; collects metrics
      • Alert upon hitting threshold
    • Explore if metrics can be retrieved via Junos
Conclusion

• For more
  • https://forge.geant.net/forge/display/cmon/Home
  • Email us: cmon-dev@geant.net
    • Participate in pilot and beyond
    • Collaboration, Ideas
  • http://www.terena.org/publications/tnc2014-proceedings/
  • CMon GUI: http://test-cmon-gui.geant.net (EduGAIN enabled)
Thank you

trupti.kulkarni@geant.org