eduroam peering monitoring
NRO perspective

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Why monitor peers?

- UK ORPS are part of eduroam (UK)
  - affect user experience
  - helping local admins improves the service
- Monitoring helps us help them
  - we are regularly asked for support
  - monitoring improves both efficiency and effectiveness of support
  - opportunities for proactive improvements
Previous experience

- Nagios too noisy and somewhat limited
- Scripts emailing us reports were good, not great
  - monitoring results not available to members
  - need actioning, often chasing
  - we tried scripting that too…
- Local admins have competing priorities
  - eduroam not the only service they support
  - varying levels of expertise
  - with luck, alerts generated tickets
Delivering monitoring results

- eduroam support portal
  - Brings together monitoring, configuration, troubleshooting

- Single source of succinct information
  - summarisation (particularly for EAP tests)
  - a picture is worth a thousand words – log graphs
  - still much room for improvement

- Web GUI adds interactivity
  - help with results
  - on demand testing
  - contextual testing
The more useful checks

- Active monitoring (testing) per member
  - EAP
  - DNS (A + AAAA)
  - NAPTR

- Passive monitoring (log analysis) per member
  - general statistics
  - unknown clients, kernel logs
  - success/fail ratios over time

- Global statistics over time
What next

- Lots more can be done to improve monitoring
  - Better presentation of notifications
  - Interactive notifications – click for guidance
  - Email alerts

- Add automation as the need arises