



# Panel discussion about the Future of Network Monitoring

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- Opening access to network information



Connect. Communicate. Collaborate

- Various approaches within the REN community
- Reasons not to open access
  - Network security
  - Not to overload the NOC with complaints
  - No resources
  - Privacy issues



Connect. Communicate. Collaborate

- **Researchers needs**

- Anomaly detection
  - Raw netflow data (as little sampling and anonymisation as possible, data for at least a month)
- Traffic Engineering
  - IGP and BGP historical information
  - Traffic matrixes (ingress-egress or AS to AS), from netflow of inferred from link utilisation
  - Configuration, network topology
- Network modelisation
  - Traffic information
  - Errors/fault information
  - Ticket information
- Active testing



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## • Future of monitoring?

- Increase the pro-activity than reactivity and improved vision on what's happening.
- Not overload the operator with too much information (concise overview).
- Extension Multi-domain (IP packets doesn't stop at the boundary of a domain)
- Finer grained monitoring on selected flows when "difficult" performance problem arise.
- When new protocols are being build, their monitoring should be automatically covered as well as providing troubleshooting capabilities.