



Global Network Advancement: Today and Tomorrow

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GNA-G Leadership Team

3 March 2024

GNA-G Side Meeting, I2CX, Chicago USA

Agenda



- Welcome (5')
- GNA-G Leadership Team update (5')
- Introduction to the Security Bootcamps WG – Ana Alves (GEANT) (15')
- Update from GREN Engineering Advancement WG – Chris Wilkinson (Internet2) (15')
- MetrANOVA – Edward Balas (ESnet) (15')
- Conclusion (5')

Our vision



A unified global advanced network infrastructure to support the unique needs of research and education.

Our mission



The GNA-G:

- embodies a vision for international collaboration of the global research and education (R&E) networks

The Global R&E network:

- a large and diverse set of networks with differences in speed, accessibility, and capacity

GNA-G's purpose:

- to build on the work of GNA and GLIF to make interconnection of networks more effective for data-intensive research and education

Goals:

- Develop innovative architectures, services, and models for more effective use of GREN resources;
- Provide testbed resources for the demonstration of future capabilities;
- Agree on a blueprint for aligning equitable spending on intercontinental bandwidth for greatest value;
- Advance data movement capabilities and end-to-end experience;
- Provide a forum which brings together researchers, National Research and Education Networks (NRENs), Global eXchange Point (GXP) operators, regional and other R&E providers;
- Promote awareness of the capability, reach and connectedness of the Global R&E Network.

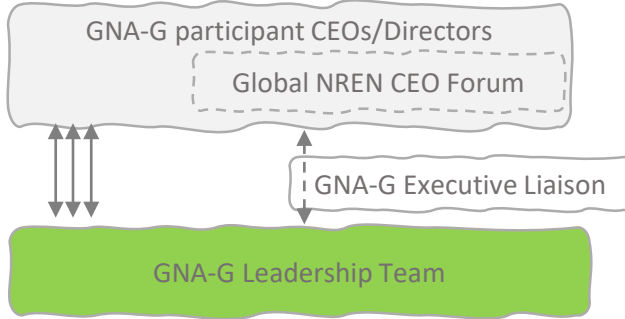
GNA-G - what is it?

A global **network**
testbed for innovation

Action-oriented
Working-Groups to
develop the GREN

A **forum for discussion**
between operators,
researchers and users
of the GREN

GNA-G structure



Research & Development

Operations

Data Intensive Science

Smart sensor cables

GREN Risk Review

Securing the GREN

Advancing GREN Operations

GREN Mapping

AutoGOLE/SENSE

Telemetry

Routing Anomalies

Network Automation

GXP Architectures & Services

GREN: Collaboration on the intercontinental transmission layer

Link consortia

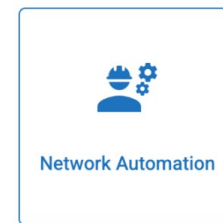
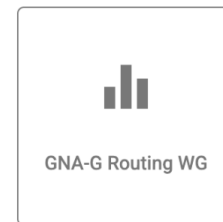
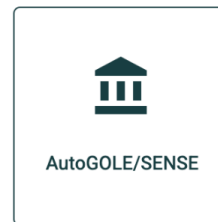
- AER
- APR
- ANA
- AmLight
- ...

GNA Architecture v2.0

GNA-G Working Groups



- AutoGOLE/SENSE: autogole@lists.gna-g.net
- GREN Map: gren-mapping-wg@lists.nordu.net
- Routing: routing-wg@lists.gna-g.net
- Data Intensive Science: gna-dis-wg@lists.gna-g.net
- Network Automation: network-automation@lists.gna-g.net
- GREN Engineering Advancement: gren-engineering-wg@lists.gna-g.net
- NomCom: nomcom@lists.gna-g.net



Securing the GREN

<https://www.gna-g.net/working-groups/>



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Conclusion

GNA-G meetings

Meetings planned for 2024 (so far):

1. Internet2 Community Exchange (5-7 Mar - Chicago, USA)

- Side Meeting Tuesday 5 March, 12-1pm
- Presentation Tuesday 5 March, 1:30-2pm

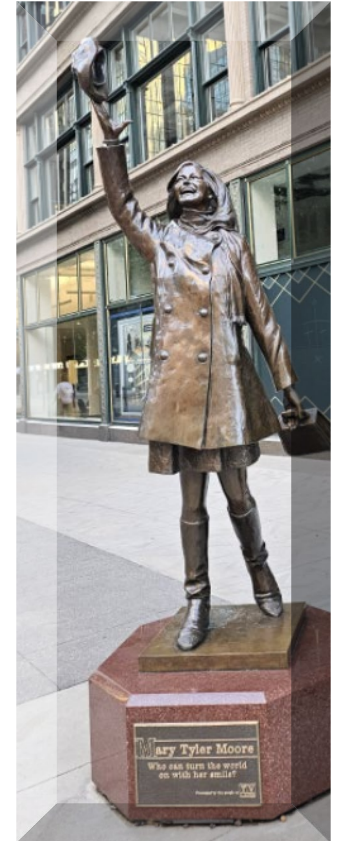
2. Community VCs (via Zoom)

- Tue 16 April 8-10pm UTC / Thu 18 April 6-8am UTC

3. TNC24 (10-14 June - Rennes, France)

- GNA-G full meeting: Monday 10 June, 2-5.30pm
- Network Automation WG: Monday 10 June, 9am-12.30pm
- WFO users meeting: Monday 10 June, 2-5.30pm

Full details: <https://www.gna-g.net/meeting/>



How can you get involved?

Join the GNA-G Community mailing-list:

<https://lists.gna-g.net/postorius/lists/all.lists.gna-g.net/>

Join a working-group

<https://www.gna-g.net/working-groups/>

Contribute your thoughts & ideas at the next meeting/VC:

<https://www.gna-g.net/meeting/>

Reach out to the Leadership Team

Web: <https://www.gna-g.net/contact-us/>

Email: leadershipteam@lists.gna-g.net



Thank you