Infoshare “How to Create Learning Units for the Network eAcademy and Beyond” - Intro

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Infoshare https://events.geant.org/event/1885/

May 12th, 2025

Public (PU)

Network eAcademy

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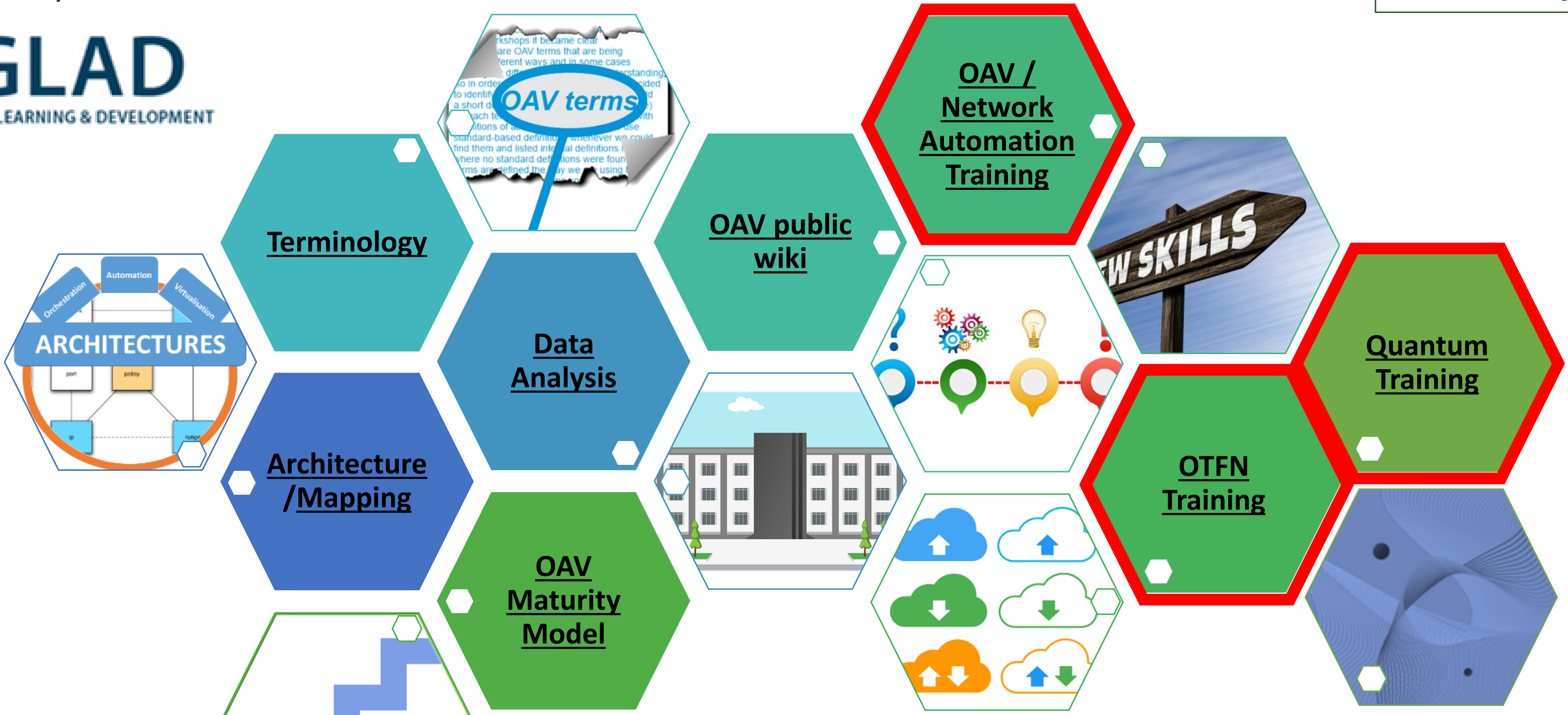
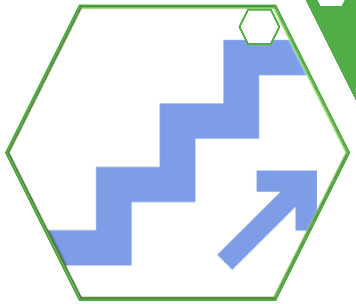
GÉANT LEARNING & DEVELOPMENT

Network eAcademy





Take a look at the Infoshare documentation here: https://events.geant.org/event/1849/ (7th May 2025)

Access in Network eAcademy Portal

NETDEV

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- Blog

ÁRBOL DE PÁGINAS

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Network eAcademy

Creado por Susanne Nägele-Jackson, modificado por última vez en abr 22, 2025

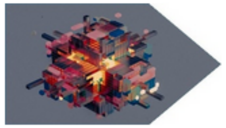
The Network eAcademy (NeA) offers knowledge sharing and exchange between GÉANT, NRENs, and organisations and is intended to serve as a platform to discuss strategies, common use cases and ideas related to a variety of topics. One of our main focus areas are network and service orchestration, automation and virtualisation (OAV) in our GÉANT community (including an OAV maturity model, information on OAV terminology and OAV architectures). Applied OAV can be found as part of our OAV community portal and with the example of the SPA Service Provider Architecture. Another major focus area of NeA is the Network eAcademy Training Portal with on-demand training courses ranging from Network Automation to Quantum Technology.

Network eAcademy Training Portal

Network Automation	Quantum Technology	Time & Frequency Networks

OAV Maturity Model

Our model defines four main dimensions that describe different aspects of OAV, each further specified using subdimensions that highlight the important OAV areas of each dimension. The short and long descriptions of stages for each subdimensions help quickly identify the current status in the organisation and the main tasks that need to be accomplished in order to advance to the next level. *Read more...*



OAV Architectures

A high-level architectural blueprint (the TM Forum Open Digital Architecture, or ODA), provides R&E institutions with an easy way to understand and compare the architectures of their Network Management (NMS), Operations and Business Support Systems (OSS/BSS) and helps guide community efforts towards the creation of interoperable systems and operations. *Read more...*

OAV Terminology

During our discussions with NRENs it became clear that there are OAV terms that are being used in different ways and in some cases with slightly different meaning and understanding. In order to have a common basis we decided to identify a list of relevant OAV terms and add a short definition with a reference link (source) for each term as well as an acronym table. *Read more...*

OAV Community Portal

Applied OAV examples by country. Follow our community portal to see what NRENs are implementing in their own environments. *Read more...*

GNA-G Network eAcademy WG

Research and Education Networks and institutions around the globe are facing the same challenges as in the GÉANT community. As Artificial Intelligence strikes in all areas, new tools arise, others disappear or stop being used, and with the daily operations of the network, an up-to-date training programme with inputs from actors in all the regions of the world is a must. Therefore a new GNA-G Network eAcademy Working Group was formed with the objective to make the current contents and tools of the Network eAcademy available to the entire research and education community. *Read more...*

Infoshares ++ Events

- **all events**
- NEW **GNA-G Network eAcademy Working Group**
- NEW Infoshare: How to create learning units for the Network eAcademy and beyond, May 12, 2025
- NEW Infoshare: Network eAcademy, May 7, 2025
- RARE/FreeRTR Use Case: Open-Source Implementation of 5G User Plane Function (UPF), Dec.19, 2024
- AI Chatbot for the GÉANT eAcademy, Dec. 18, 2024
- What's New in the Network eAcademy?, Dec. 17, 2024
- NREN Fibre Infrastructure for Sensing, Dec. 5, 2024
- Telemetry Module for the Workflow Orchestrator, Nov. 5, 2024
- 4th European perfSONAR User Workshop, May 14-16, 2024
- OAV Architecture Workshop, April 18, 2024
  GÉANT Infoshare - NETDEV Incubator, March 29, 2023
- GÉANT Infoshare: Maturity Model for Orchestration, Automation and Virtualisation, March 29, 2023
- GÉANT Infoshare: Tools for Campus Network Management as a Service (CNaaS), April 28, 2021
- Orchestration, Automation and Virtualisation in the NRENs. Ready, Steady, Go!, December 16, 2020
- **Highlights**
- **Standardisation Bodies**

Network eAcademy Expands, Connect Magazine, Issue 47, 2024, p. 22

Network Automation eAcademy, Connect Magazine, Issue 38, 2021, p. 19

https://wiki.geant.org/display/NETDEV/Network+eAcademy

Access in Network eAcademy Training Portal

Pages / NETDEV Home / Network eAcademy

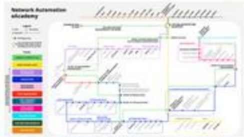
Network eAcademy Training Portal

Created by Susanne Nägele-Jackson, last modified on Dec 09, 2024


Network Training

This Training Portal is offering courses focused on the research and education community, with external references that can be useful for us and examples that can be closer to our use cases. It is training by the community for the community. We will be publishing new classes regularly; all classes are online courses that you can follow and complete at your own pace.

Network Automation

Take network automation classes to learn about orchestration, automation and virtualisation of networks. Get started with network architecture, data modeling, data formats and protocols and CI/CD and then move on towards intelligent networks using data analytics and AI.

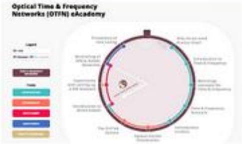
Learn more about Network Automation....

Quantum Technology


Follow our Quantum technology track to learn about basics such as QuBits, Qubit Entanglement and Teleportation. Find out about Quantum Key Distribution and quantum simulation. Or learn the latest on standards and APIs.

Learn more about Quantum Technology....

Time and Frequency Networks

Follow our track for Time and Frequency Networks to learn about the basic metrology concepts of time and frequency, or find out about working with White Rabbit in networks. Other learning units will offer an insight into Optical Carrier Distribution, or the ELSTAB system, which is which is used for Time and Frequency dissemination via optical fibers.

Learn more about Time and Frequency Networks....

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Info | Infosharing ++ Events

- **all upcoming and past events**
- **New in Network Automation: Process Flow Orchestration, Hypervisor-based Virtualisation: KVM, Nagios**

Meet us on the first Tuesday of every month
One hour for questions & answers
Just drop us an email at

network-eacademy@lists.geant.org

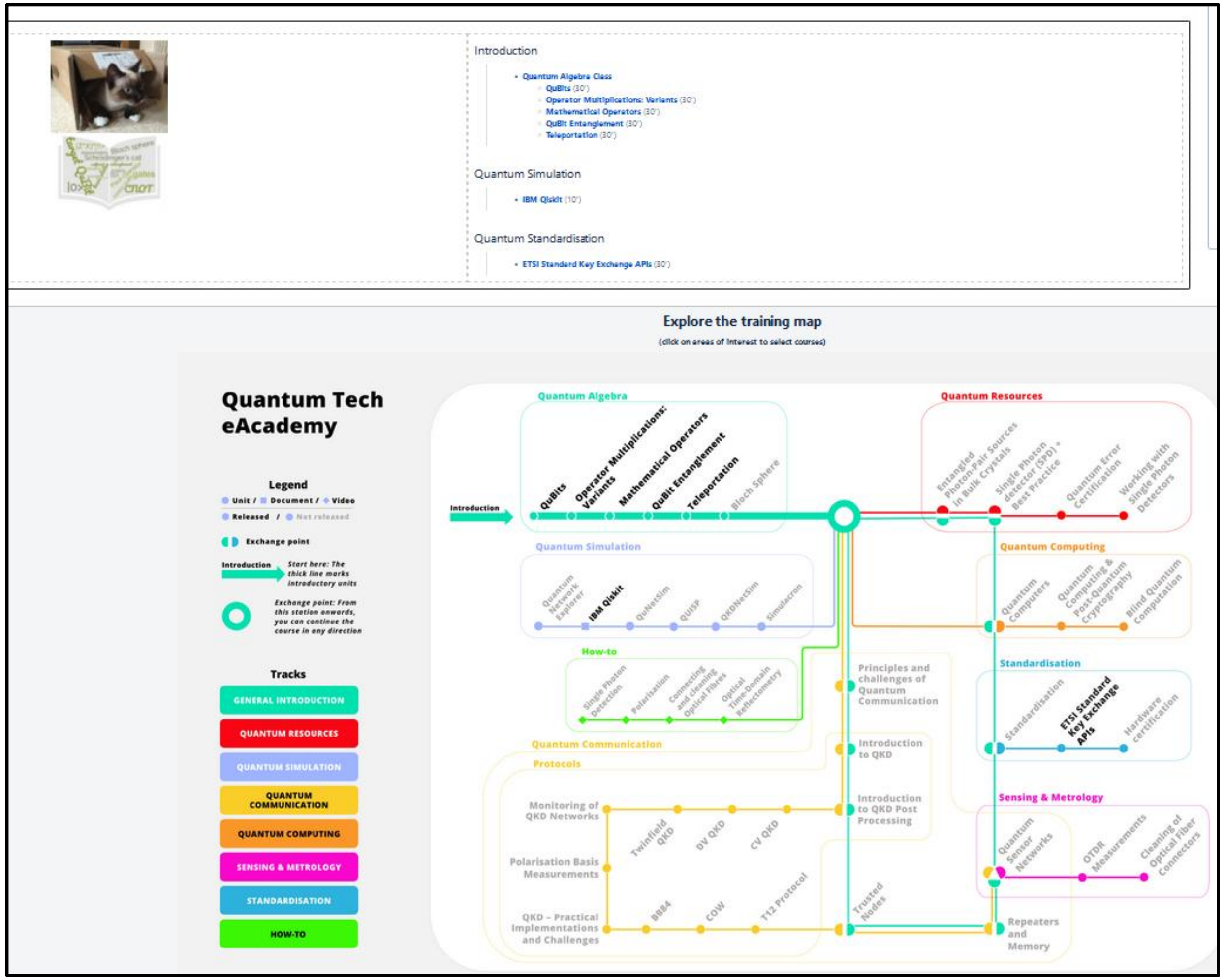
and we will send you the link.

Watch our video:

Towards Service Automation for Research and Education

Quantum Technology Training

- https://wiki.geant.org/display/NETDEV/Quantum+Technology+Training



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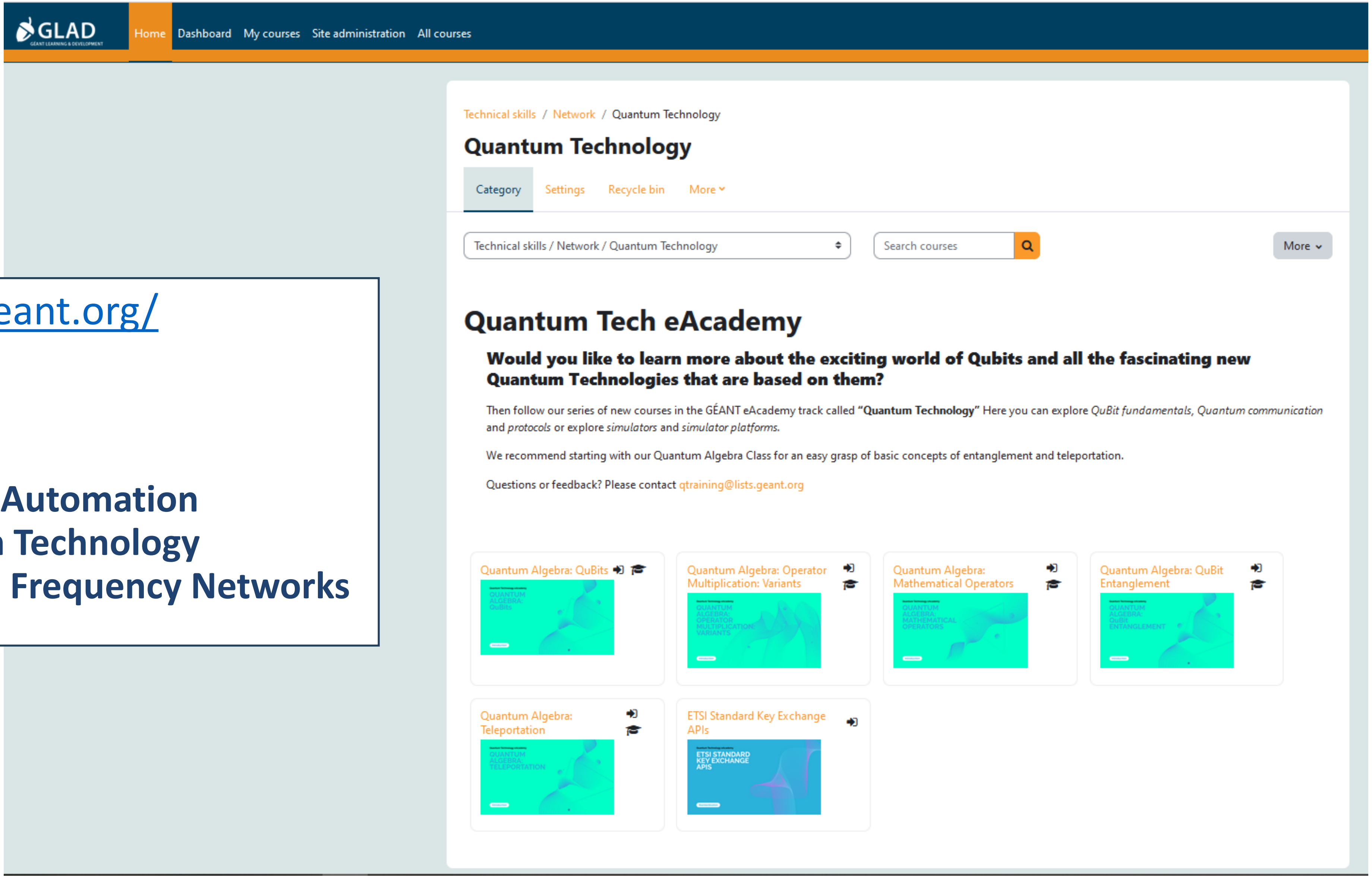


- https://e-academy.geant.org/
  - ➢ All courses
    - ➢ Technical Skills
      - ➢ Network
        - ➢ Network Automation
        - ➢ Quantum Technology
        - ➢ Time and Frequency Networks

Network Automation eAcademy

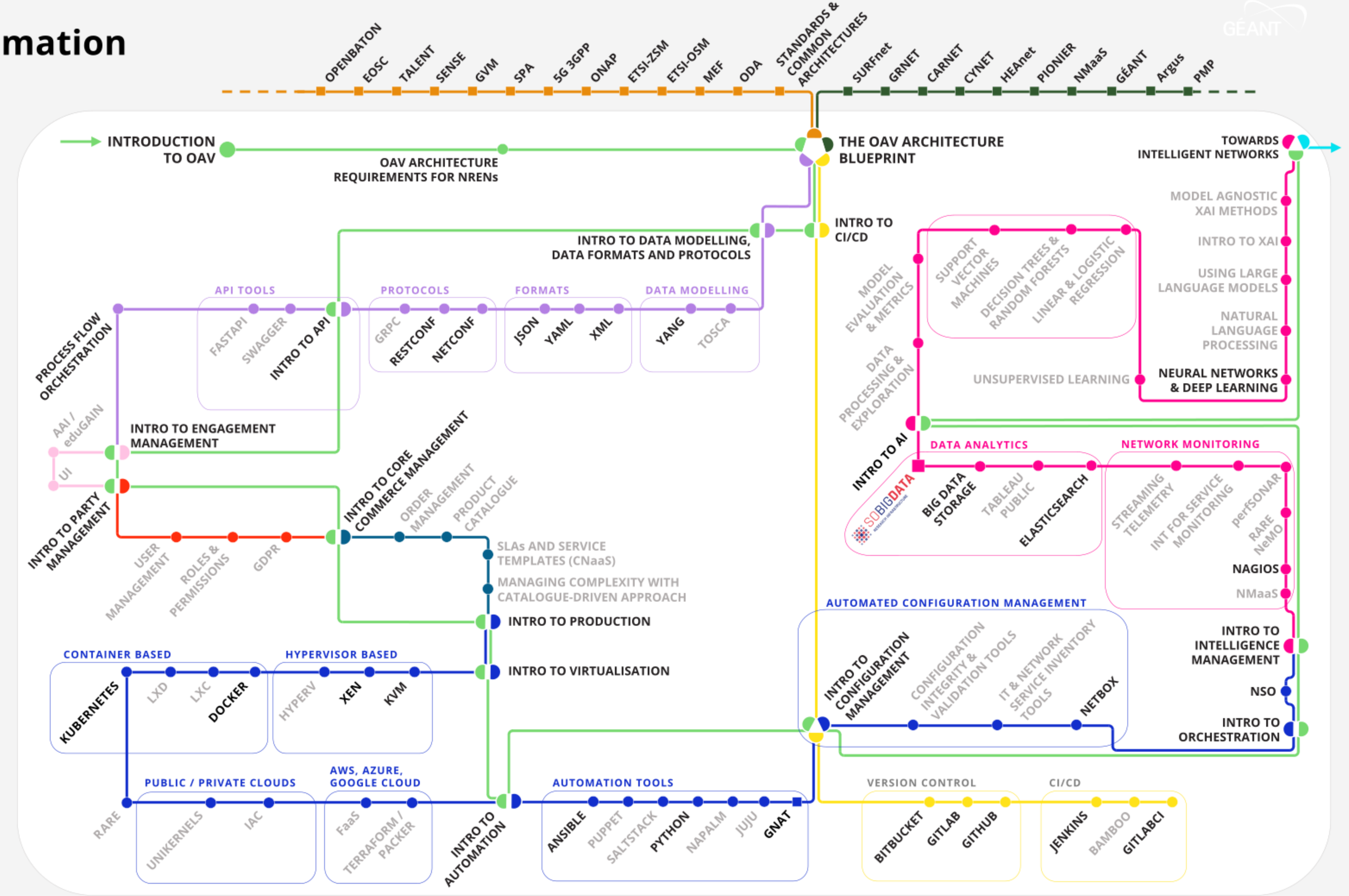
Legend

- ● Unit / ■ Document / ext. link
- ● Released / ● Not released
- Exchange point
- *You can jump back and forth between this station and all exchange points at any time*

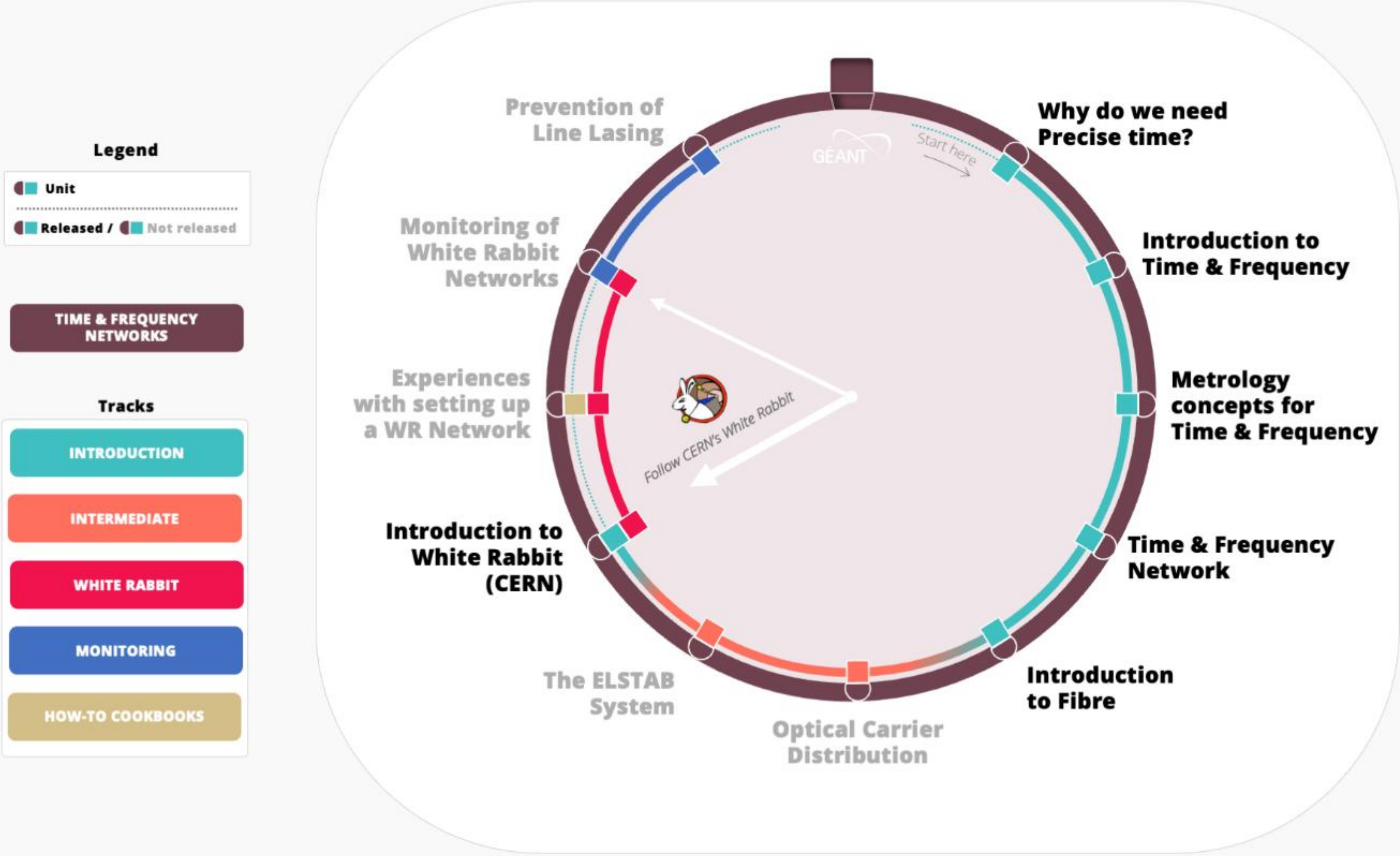
Tracks

- GENERAL INTRODUCTION
- AGILE, DevOps, CI/CD
- DECOUPLING & INTEGRATION
- PRODUCTION
- ENGAGEMENT MANAGEMENT
- PARTY MANAGEMENT
- CORE COMMERCE MANAGEMENT
- INTELLIGENCE MANAGEMENT
- OAV REALISATION
- USE CASES AND EXAMPLES
- ARCHITECTURE

Functional Blocks in the TM Forum OPEN DIGITAL ARCHITECTURE (ODA)

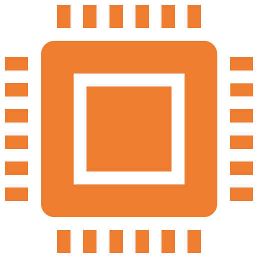


Optical Time & Frequency Networks (OTFN) eAcademy

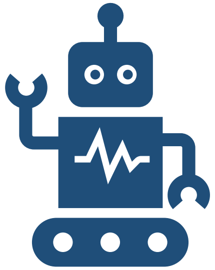


New Network eAcademy Working Group in GNA-G: Objectives

Make the current contents and tools of the Network eAcademy **available to the entire research and education community** and known through meetings, GNA-G community VCs and side meetings.



Be a tool for Research and Education institutions around the world to help them **check their maturity status and compare their architecture** in Orchestration, Automation and Virtualisation with other sibling organisations.



Be a **platform for knowledge sharing and discussion** to improve the content of the Network eAcademy, in the areas of Automation, Artificial Intelligence, Quantum Technologies, and other Network Development areas.

Contact us at network-eacademy@lists.geant.org.

To participate in the GNA-G WG, subscribe to: https://lists.gna-g.net/postorius/lists/network-eacademy-wg.lists.gna-g.net/

Thank You!

network-eacademy@lists.geant.org

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