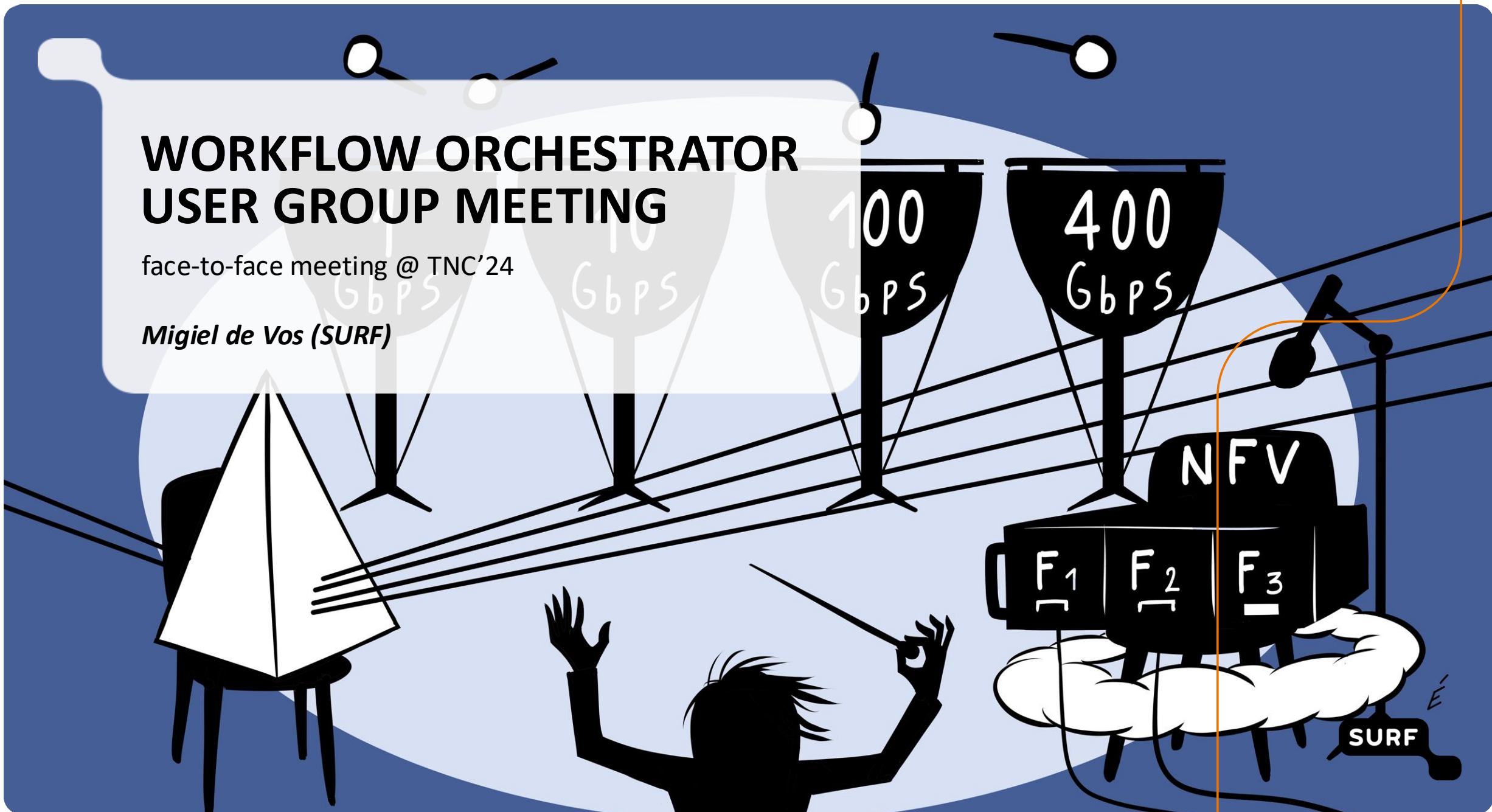


# WORKFLOW ORCHESTRATOR USER GROUP MEETING

face-to-face meeting @ TNC'24

*Miguel de Vos (SURF)*



# Agenda

Time	Topic
13:45 - 14:00	Get a coffee
14:00 - 14:25	Welcome, introduction and status of the programme (Migiel) How to organise and stimulate joined software development (Chris)
14:25 - 15:30	Overview of current and/or planned deployments by partners and graduates: <ul style="list-style-type: none"><li>• HEAnet (Mick)</li><li>• Canarie (?)</li><li>• Geant (Simone)</li><li>• ESnet (Alex)</li><li>• SURF (Peter)</li></ul>
15:30 - 16:00	Break
16:00 - 16:20	Roadmap update / feature requests - Peter & Scott
16:20 - 17:00	Modelling generic product domain models (Alex) Example refactor (Alex) Use the example orchestrator products in a diagram showing the relations. <ul style="list-style-type: none"><li>- SURF diagram (Wouter)</li><li>ESnet diagram (Scott)</li><li>- GÉANT diagram (Karel)</li></ul>
17:00 - 17:30	Update on new WFO user interfaces: <ul style="list-style-type: none"><li>• Orchestrator UI v2 (Wouter)</li><li>• NMS GUI (Wouter)</li></ul>

# What is the Workflow Orchestrator programme?

*“The purpose of the Workflow Orchestrator programme is to provide an **easy-to-use** set of tools, samples and documentation for **automating and orchestrating** order, administration and provisioning processes.”*

*“The programme was started to **facilitate** worldwide **collaboration** in the field of (network) automation and orchestration, by sharing code, knowledge, examples and ideas.”*

<https://workfloworchestrator.org/>

# Workflow Orchestrator governance

- Programme established under The Commons Conservancy
- Mainly NREN's with networking use case, but a few other use-cases as well
- All code is licensed under Apache 2.0
- All Intellectual Property remains at each contributor
- Membership levels

*<https://commonsconservancy.org/programmes/>*

# Membership levels

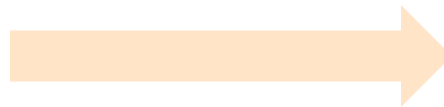
## WFO Partner

- WFO software in production.
- Dedicated team.
- Engages in discussions.
- Contributes to features, usability, documentation, examples, etc.
- Contributes to support and onboard Graduate and Sandbox members.
- May nominate board members.
- Can provide board members.



## WFO Graduate

- Committed to using WFO software in production.
- Implementation strategy available.
- Dedicated team (expected).
- Can request assistance from WFO Partners.
- Contributes to support Sandbox members.
- May nominate board members.



## WFO Sandbox

- Actively investigating WFO software.
- Can use the shared Slack channel to ask questions to Partners and Graduates.

# Regulations – updated May'24

- Introduced the membership levels (Partner, Graduate, Sandbox) to strengthen the community.
  - Shows what is expected of a member organisation and what they can expect in return.
  - Distribute the load of organisations that want to start using WFO software across Partners (and Graduates).
- Board members must be employed by an organisation with Partner status.
- Added the Evangelist role (in addition to Chair, Technical Lead, Core Developer).
  - Actively promotes and shares WFO benefits and capabilities to a wide audience.
  - Has in-depth understanding of WFO functionalities and benefits.
  - Collaborates with developers to gather feedback and ensure continuous improvement of the software.

# WFO Board members



Migiel de Vos – SURF  
(Chair) [until May 2025]



Hans Trompert – SURF  
[until May 2024]



John Macauley – ESnet  
[until May 2025]



Bram Peeters – GÉANT  
[until May 2026]



Scott Richmond – ESnet  
[until May 2026]

# WFO Technical Leads



Peter Boers –  
SURF



Scott Richmond –  
ESnet

# Workflow Orchestrator core tooling

- Orchestrator-Core:
  - Production-ready Orchestration Framework, developed in Python and utilising the FastAPI framework, designed to manage product lifecycles and workflows.
- Orchestrator UI
  - Component library for our NextJS app on top of the Orchestrator-Core.
- Orchestrator Example UI
  - Example UI with a NextJS implementation of our component library.

# Workflow Orchestrator other software

- Lightweight Service Orchestrator (LSO)
  - This application provides an API layer on top of Ansible playbooks.
- Example Orchestrator
  - This repository houses a Docker-compose running a full stack of the Orchestrator, UI and Netbox. It includes examples our best (coding) practices and an example integration with Netbox.
- PyNSO-Restconf
  - A thin client for interfacing with Cisco NSO using Restconf.
- Pydantic-Forms
  - A library that includes standardised Python Form classes that can be used when generating form components from JSON-schema.
- SuPA
  - An NSI Ultimate provider agent with a gRPC API.
- PolyNSI
  - A bidirectional SOAP to gRPC translating proxy server for the NSI protocol.

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# THANKS!



Migiel de Vos



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## Driving innovation together

**SURF**

**Driving innovation together**

