



University Virtual Labs on NMaaS

Lightning Talk

Vojdan Kjorveziroski (UKIM/MARNET)

GÉANT Symposium

14 December 2023

Montpellier, France

Public (PU)

NMaaS for Virtual Labs in a Nutshell

- The challenge of organizing hands-on educational exercises
 - Formal learning
 - Informal learning
- NMaaS as a general-purpose application catalogue
- Core idea: Deployment of educational exercises not fundamentally different from network management applications
 - Same underlying concept and technologies
 - **Containerization, orchestration, isolation, multi-tenancy**



What Does NMaaS Bring to the Table?

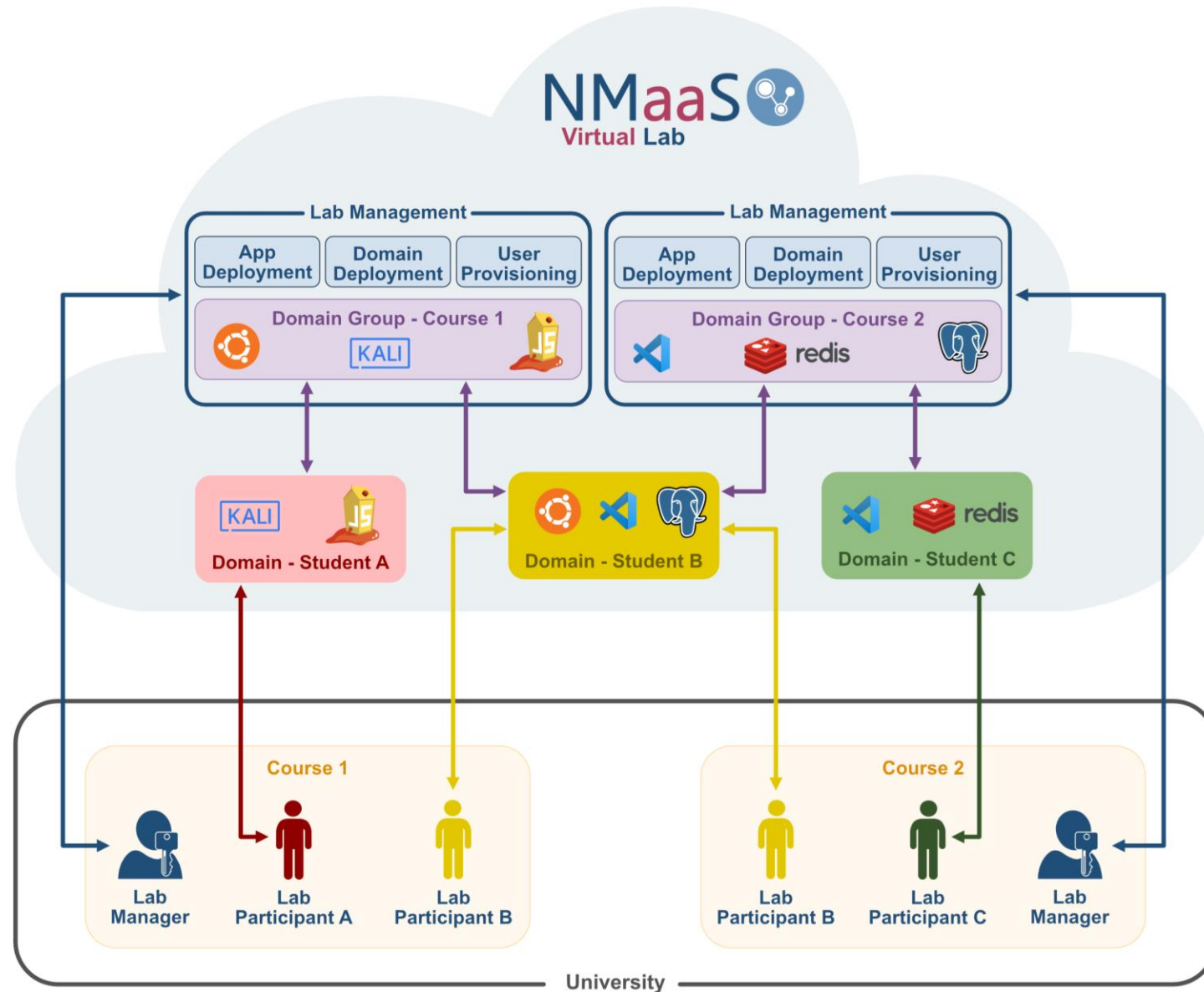
Benefits for Lab Managers

- **Reusable infrastructure** across multiple courses, or even institutions
- Granular management of participants and lab scenarios
- Extensive access control and personalization features

Benefits for Lab Participants

- Deployment of complex applications, bypassing hardware requirements
- Eliminating configuration overhead
- **Increased engagement** through lab environment personalization
- Playground for testing new software

10,000 Foot View at NMaaS for Virtual Labs



Virtual Lab Plans for the Future

- Pilots, pilots, and then some more pilots!
- Additional virtual lab scenarios
- Building a community around NMaaS
 - Sharing of applications, configurations, **course materials**
- Exploring additional **use-cases**
 - Deployment of virtual machines (not only containers)
 - Use for **scientific computing**, leveraging specialized hardware (i.e., GPUs)

WE WANT YOU



**TO ORGANIZE
A VIRTUAL LAB
PILOT ON NMaaS**



Thank You

Documentation
Contact the NMaaS team

*<https://docs.nmaas.eu/>
nmaas@lists.geant.org*



www.geant.org



Co-funded by
the European Union