



## Software-Defined Infrastructure at RNP

Marcos Schwarz – R&D Coordinator

Tallinn, Estonia

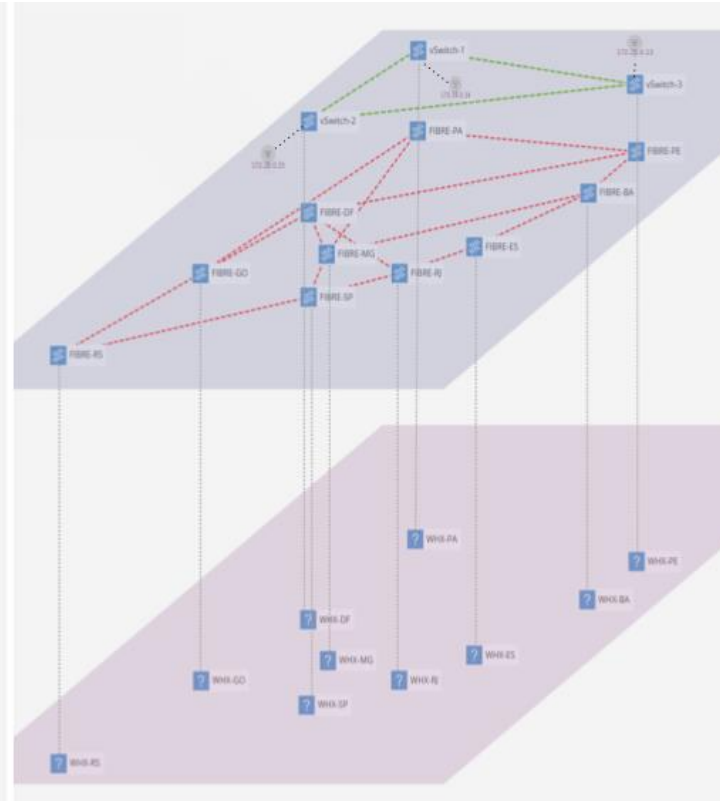
June 17<sup>th</sup>, 2019

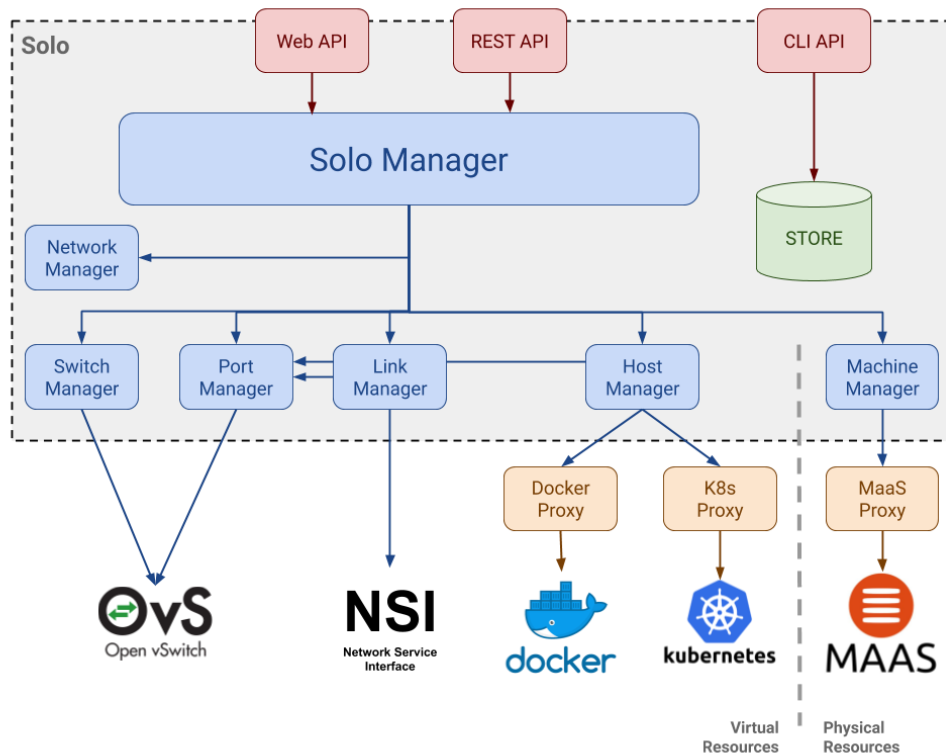
- **What**

- Virtualizable and programmable physical infrastructure
  - Composed of an Overlay SDN and an Edge Cloud in 13 Points of Presence
- Infrastructure orchestration platform
  - To provision distributed compute and networking resources
  - Based on the integration of Open solutions for automation and orchestration

- **Why**

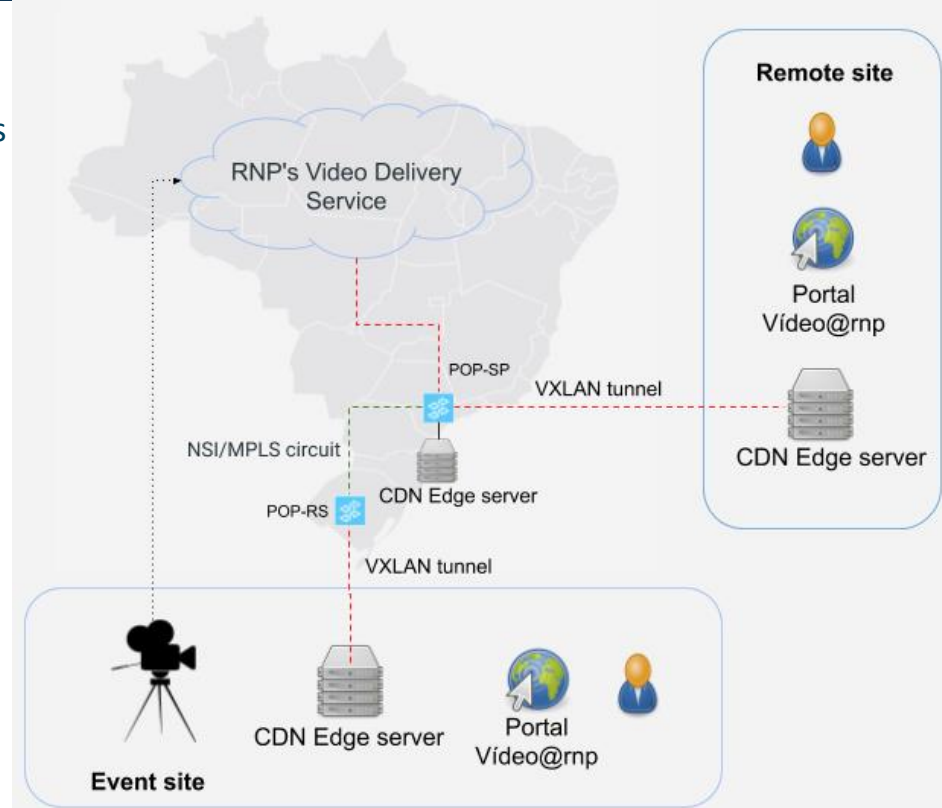
- To support the evolution of existing applications and services to the hybrid cloud paradigm
- To adopt new methodologies and processes of validation, testing and provisioning

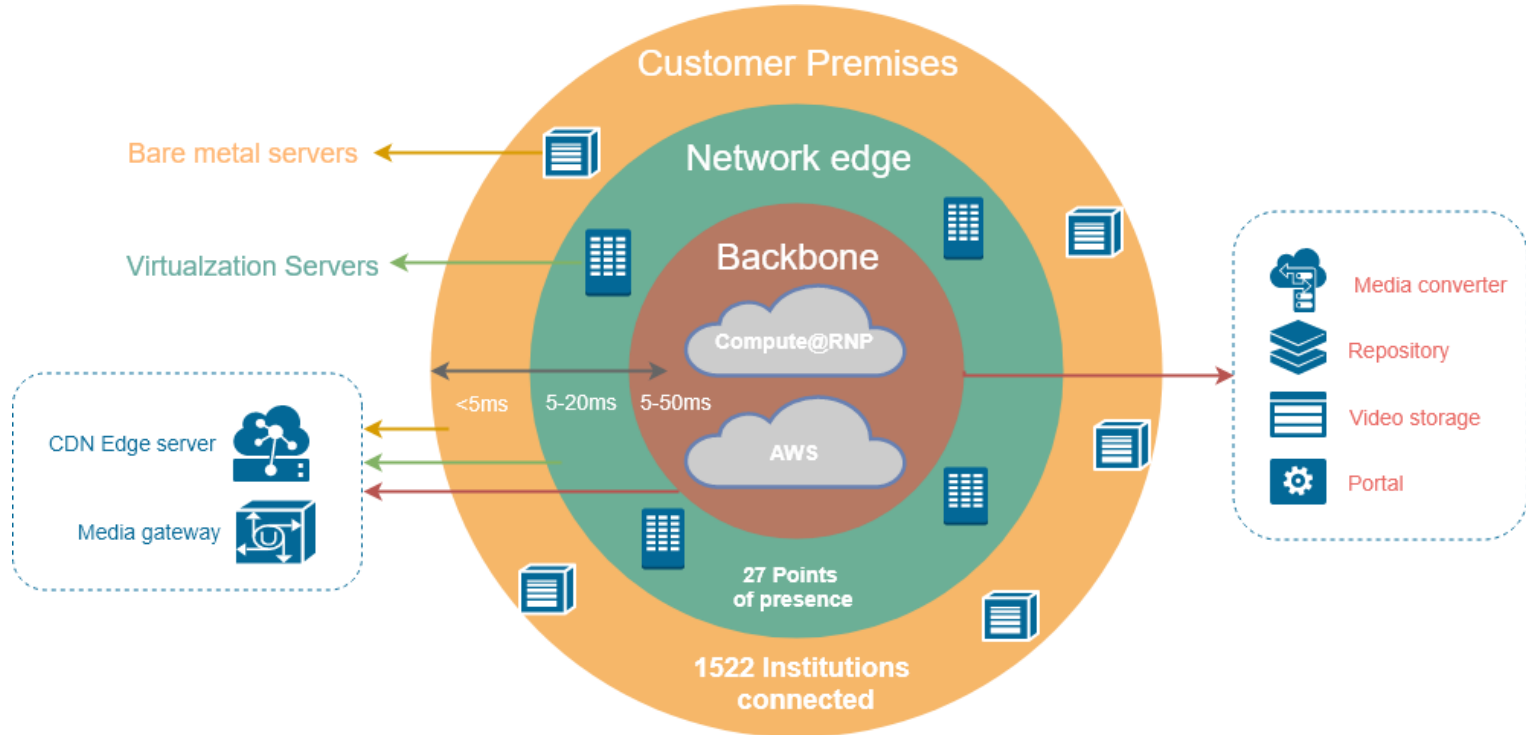




## Use Case: PoC evolution of RNP's Video Delivery Service

- Scope
  - Extend the service control network to remote sites
    - Using SDN, NSI and VXLAN
  - On demand deployment of CDN Edge servers
    - Instantiated on the nearest PoP to the user
    - Automatic discovery/registration (via Consul)
- Benefits
  - Optimization of resources usage and location
  - Seamless integration to existing infrastructure





***tnc*19** Tallinn, Estonia  
16-20 June 2019  
***Forging Digital Societies***



**Thank you**  
**Any Questions?**

marcos.schwarz@rnp.br



As part of the GÉANT 2020 Framework Partnership Agreement (FPA), the project receives funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 856726 (GN4-3).