Selfnet

INDUSTRY WORKSHOP

Demo Introduction

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AI in 5G – Zero Touch Network in the Self Healing Context

Demo Table 1

A **fully autonomic AI driven** concept for the **detection of malfunctions in NFV** applications, with the help of **semi-supervised** learning, to provide self-healing capabilities.

Point of Contact: Julian Ahrens &
Mathias Strufe (DFKI GmbH)

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Trust Node - Hardware accelerated Self Optimization Use Case

Demo Table 2

- Showing network **adaptive** H256 video optimization
- Making SDN fast again: FPGA technology by **TrustNode®**

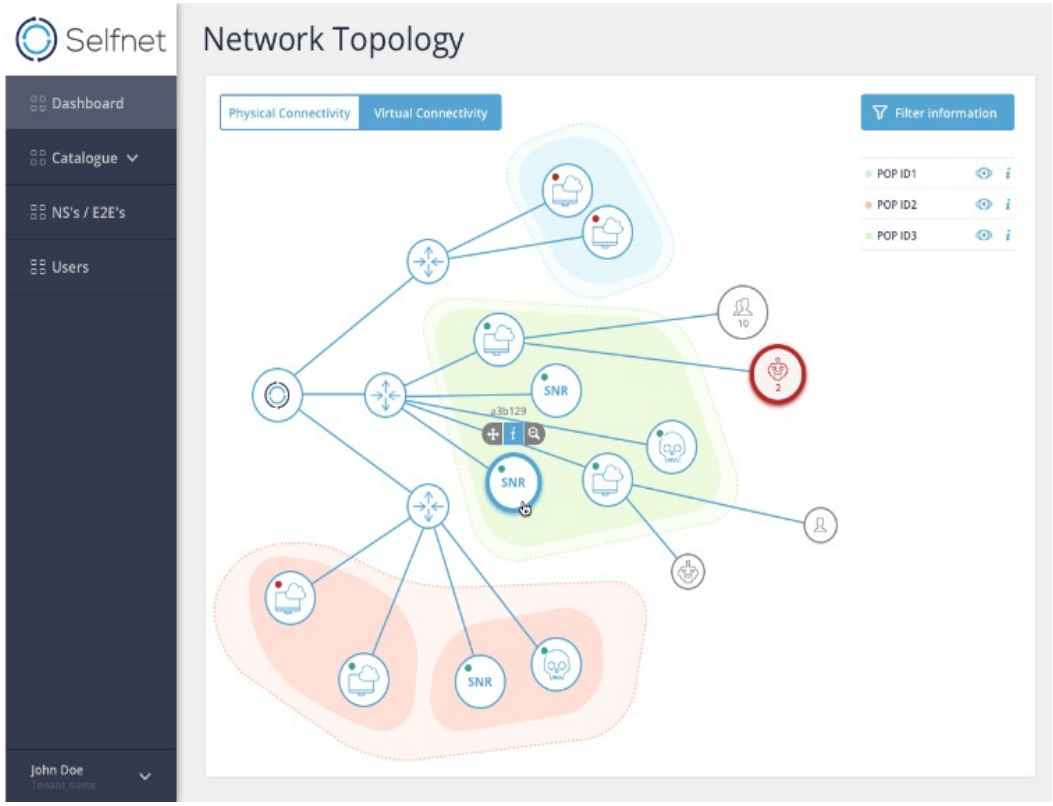
Point of Contact: *Marian Ulbricht* (InnoRoute) &
Ricardo Marco-Alaez (UWS)

SELFNET GUI – Your Network status at a glance

Demo Table 3

Intuitive and **consistent** Graphical User Interface that provides:

- **Full overview** over e2e services and network service composition
- **Complete analysis** over symptoms, alarms and performed actions



Point of Contact: *Mohammad AlSelek (PROEF) & Eunice Ribeiro* (Ubiwhere)

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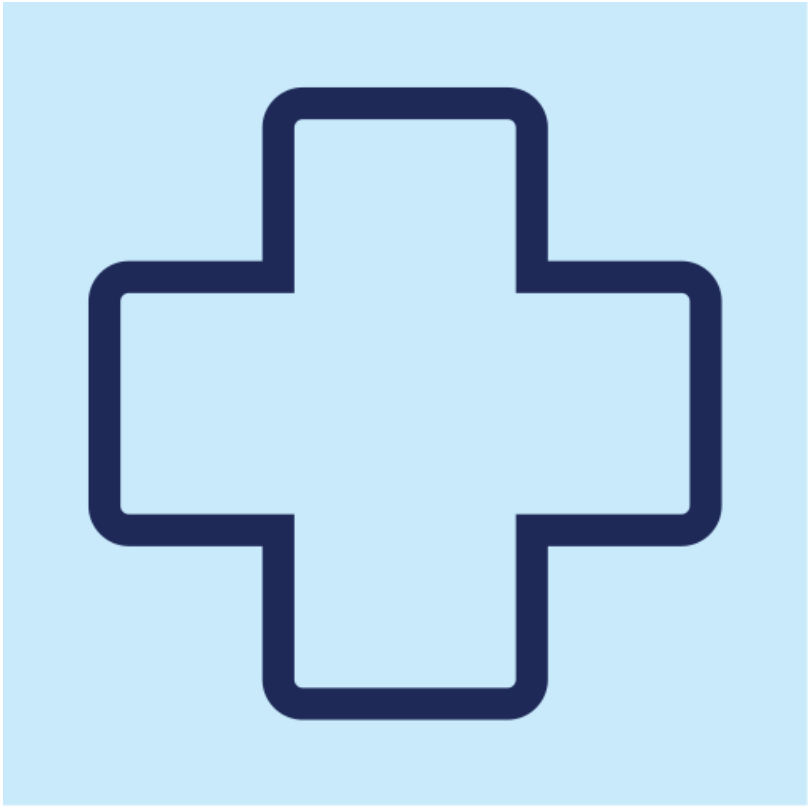
Self-Healing Use Case: Autonomous VNF fault mitigation

Demo Table 4

- **Dynamic** onboarding of NFV/SDN sensors
- **Automatic** configuration of monitoring capabilities
- QoS degradation **root cause analysis**
- **AI-driven** VNF profiling



Point of Contact: *Pedro M. Neves* &
Rui F. Pedro (AlticeLabs)

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SDN / NFV Application Management

Demo Table 5

Application based automation for enhanced sensing and actuation operations.

Enabling toolset for purpose specific applications that facilitate fine grained and **intent based autonomous management**.

Point of Contact: *Giacomo Bernini* (NextWorks) &
Kostas Koutsopoulos (CSE)

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Cybersecurity Techniques in the Self Protection Use Case

Demo Table 6

Detection (*Snort VNF*) and mitigation (*HoneyNet VNF*) of **botnets**, mirroring and diverting network flows (*FlowT SDN App*) to enable cyber security functions

Self-Protection Use Case contributes to ensure **more secure and resilient 5G network and services**, isolating malicious UEs intended to exploit cyber-attacks

Point of Contact: *Prof. Gregorio Martínez Pérez*
(University of Murcia)

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Enjoy the Demos & Lunch