SPA platform - OAV-based service management

Update

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GN4-3 WP6 T2

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Service Provider Architecture and Platform

SPA is a modular blueprint guide for designers and developers that want to build a next generation service management platform by integrating functionalities in a flexible and uniform way.

SPA platform is the implementation of the SPA to manage network services in the GÉANT and NREN network infrastructures.

Service Provider Architecture (SPA)

Design a LEGO type of service architecture

Support the service lifecycle of all network services within the service provider

Use automation wherever possible

Orchestration for complex workflows

Common information model

TMF Frameworx compliant

SPA Platform Principles

Loose coupling - microservices   Modular components

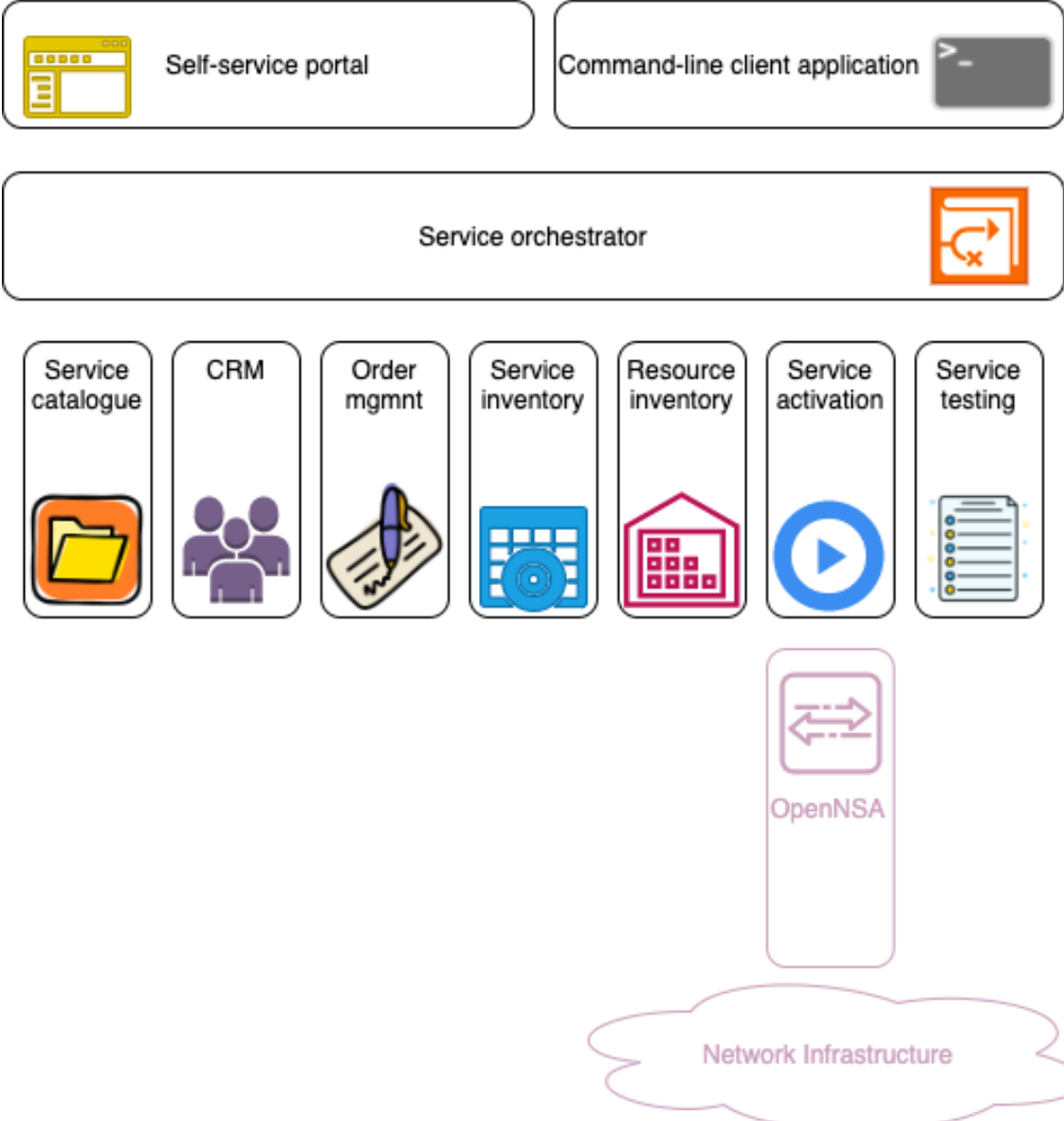Well-defined REST API for each component   [TMF Open APIs](#)

Free open-source components

Service agnostic design

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SPA platform

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NETDEV/SPA Wiki

Information source about SPA and its implementation

https://wiki.geant.org/display/NETDEV/SPA

SPA platform in 2021

Enhancements in the GÉANT Connection Service (GCS)

- Topology import, management and presentation

Service testing improved

- Regular and on-demand tests and reports

A new command-line client application

- Automation on user's side
- Simple troubleshooting

GÉANT IP service management via the SPA platform

- Service and resource data model compatible with the SPA Inventory – analysis completed
- Inventory management extension for SPA Self-Service Portal – ongoing development

SPA platform in 2021

Containerization of the SPA platform

- Installation and configuration from scratch is not a straightforward task
- Automation with Docker
- Use of default settings
- Simple distribution
- Testing and deployment simplified
- NMaaS as an option for deployment

SPA Inventory already available in NMaaS to be used as a standalone service and resource management application

SPA platform – Next Steps

Offer the SPA platform as docker containers for NRENs and projects

- SPA team will support all users
- For the E-Line service based on OpenNSA

Add the complete SPA Platform to the portfolio of NMaaS

- E-Line service with default settings

Support users who are interested only in a single SPA component

Provide full GÉANT IP service lifecycle management in the SPA platform

- Process management
- Customer relationship management
- Policy management
- Order management
- Catalogue management
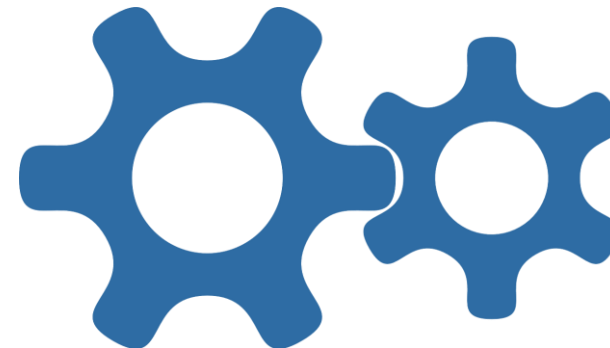
SPA platform – Next Steps

Knowledge Sharing

- Experience gained during the work on this kind of system
- Components
- TMF Open API integration
- Orchestration and process management

Continuous software improvements

- Performance
- TMF Open API compliance
- Upgrades/replacements of software components
  - Ex. migration from Activiti to Camunda
- Testing in testbeds

Thank you

Any questions?

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