

# Service Provider Architecture

Automated Service Management

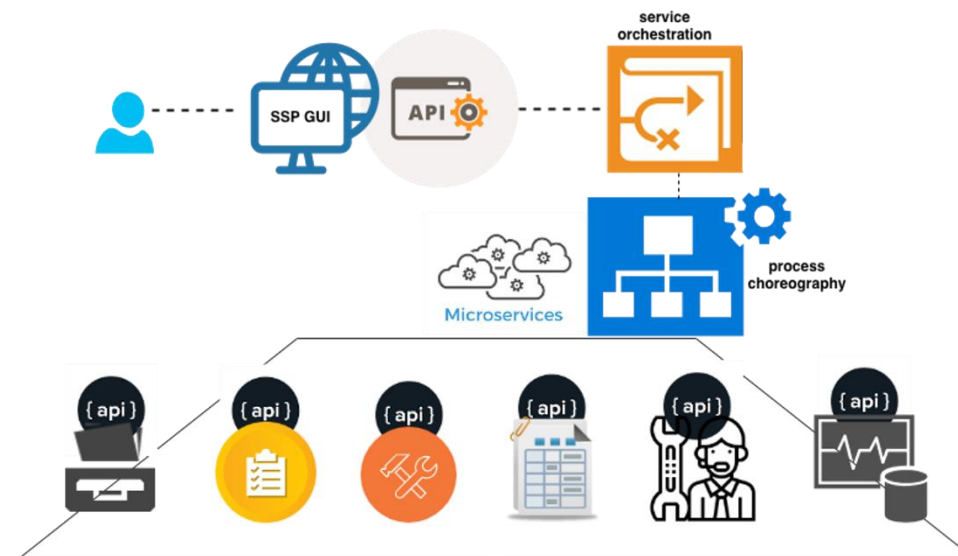
Roman Łapacz

TNC21, OAV BoF, 25/06

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# Service Provider Architecture

**SPA** is a modular architecture to guide designers and developers to build a next generation digital platform addressing new business and technology requirements.



## Requirements



Flexible architecture to support the digital transformation



Unified approach to all services



Lightweight modular solution



Open and interoperable

## SPA Architectural Choices



LEGO type of service architecture



Manage the lifecycle of all network services



Use automation wherever possible



Orchestration for complex workflows



Common information model



TM Forum Framework compliant

## SPA Design Principles



Loose coupling - microservices

Modular components



Well-defined REST API for each component

[TMF Open APIs](#)

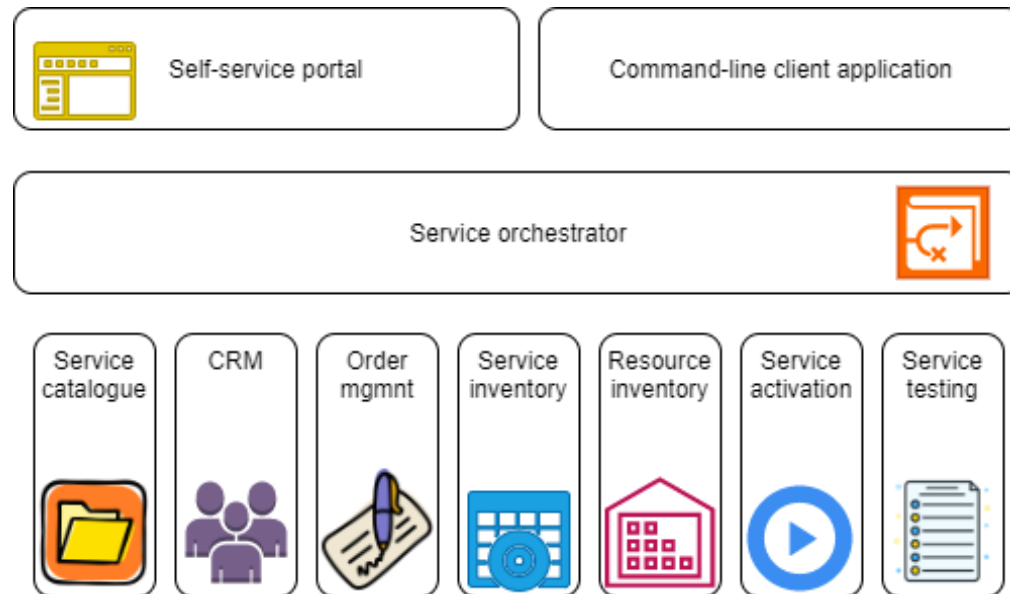


Service agnostic design

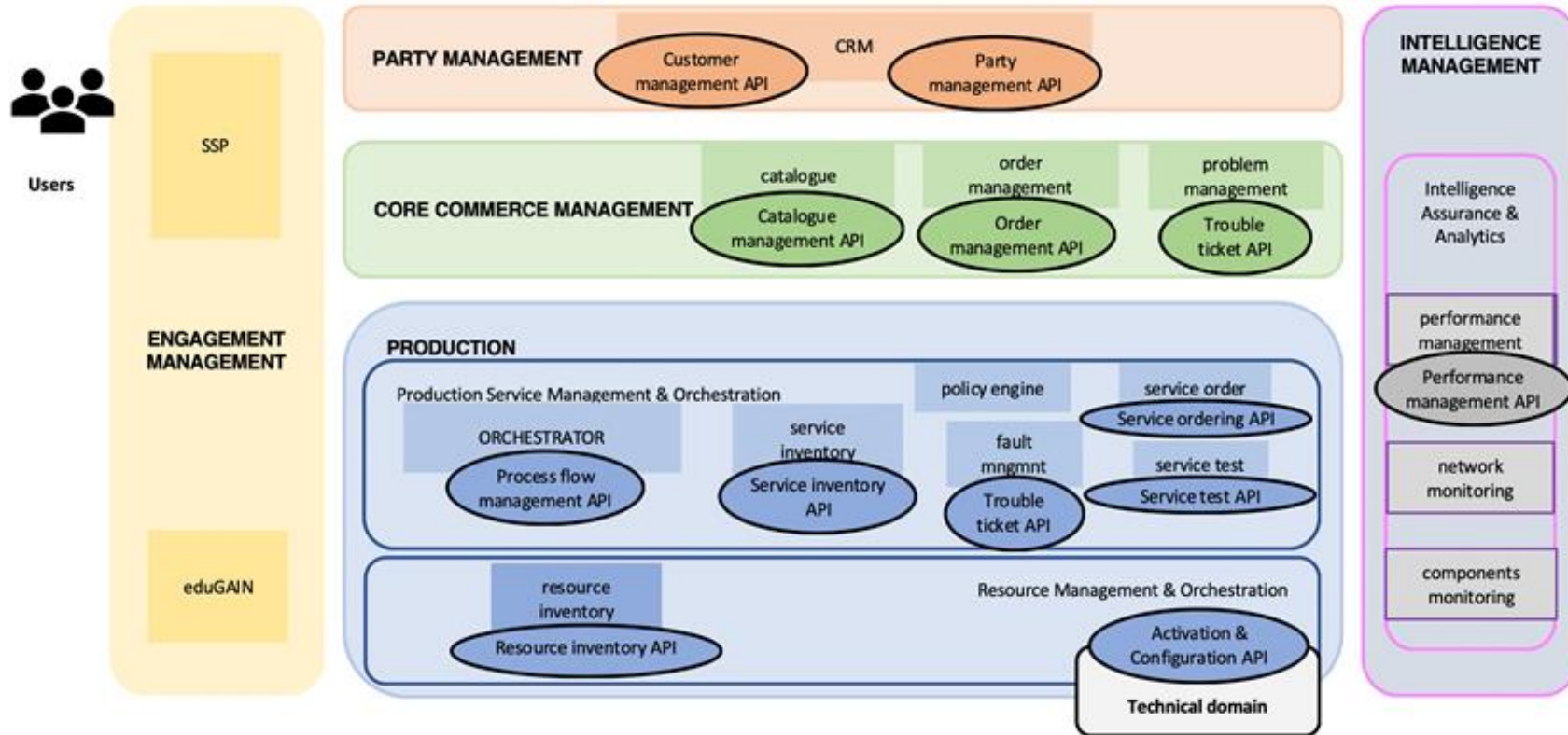


Free open-source components

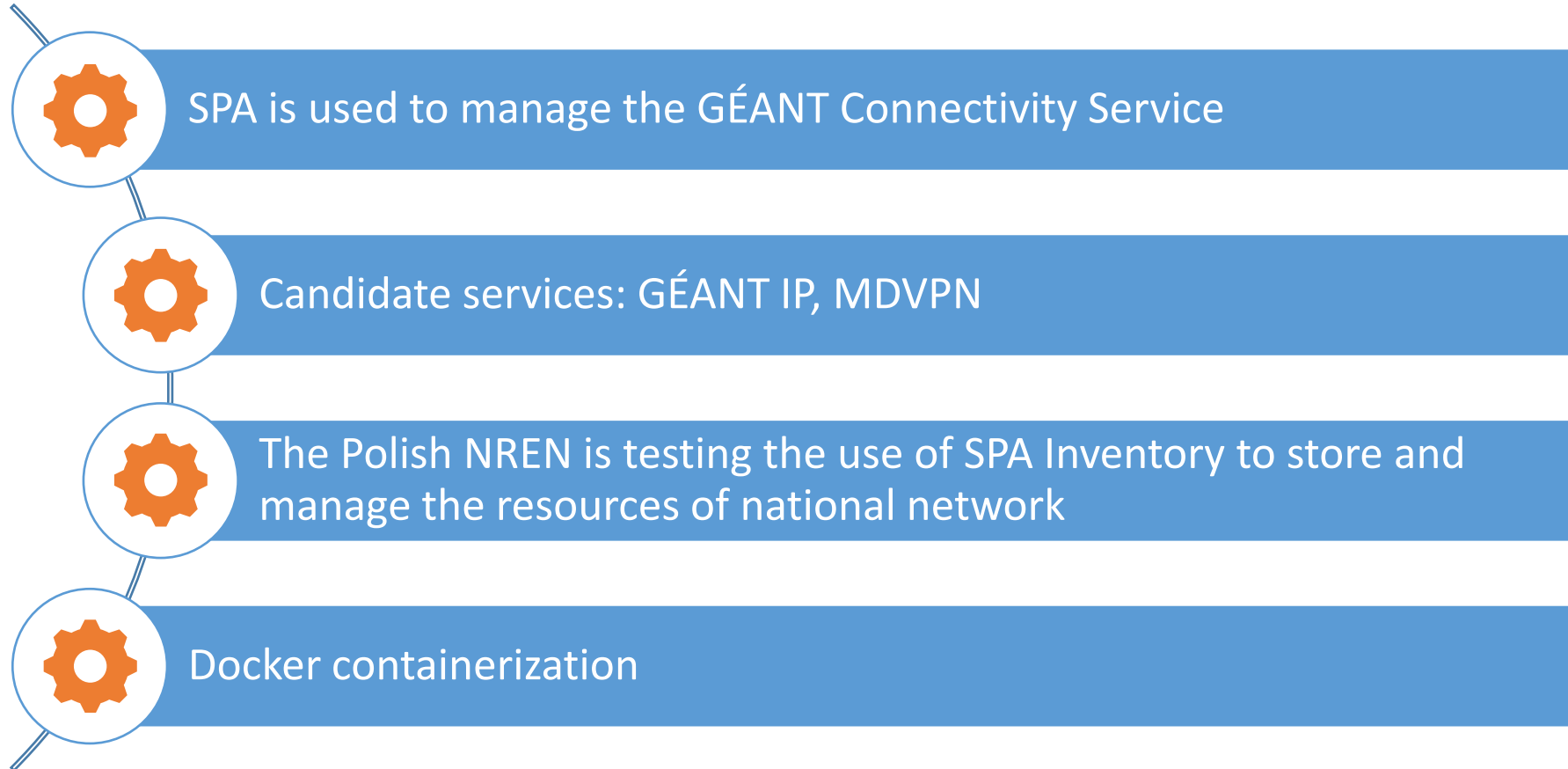
# SPA components



# APIs between SPA components



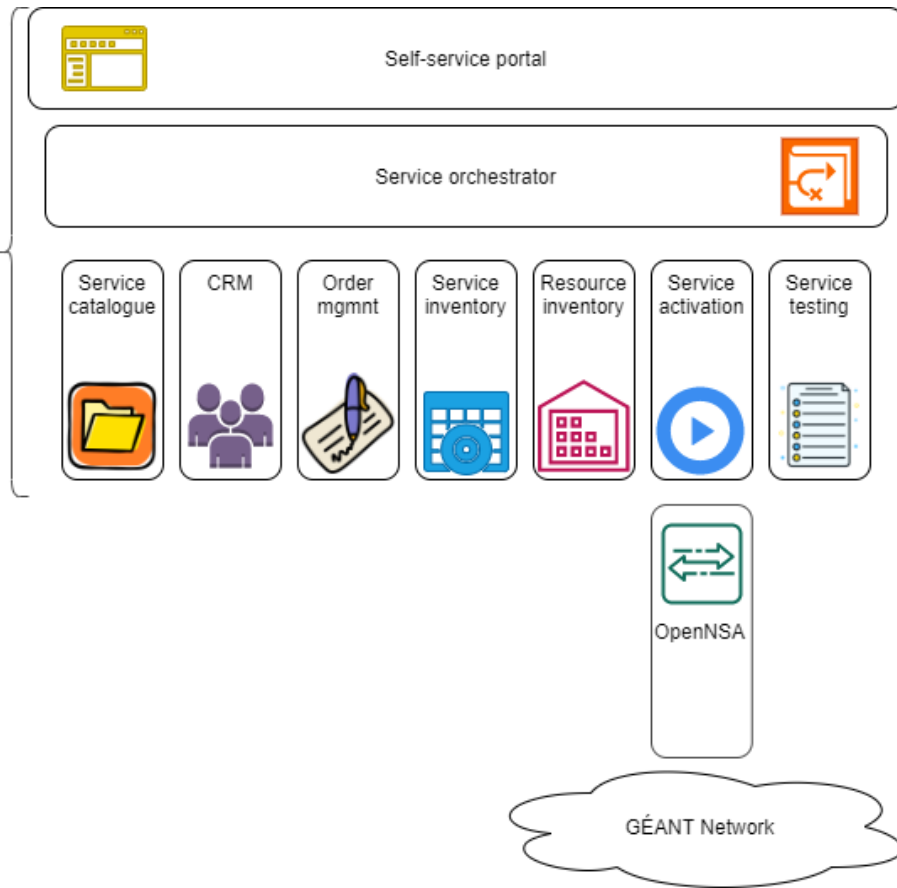
# SPA roadmap





# GÉANT Connectivity Service (GCS)

SPA components



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Status [Ack+Act+Inact ↓](#) Start Date From  Start Date To  Text  [Q ON](#)

Request Details							Service Details						
Service Type	User	Time(UTC)	Status	Conn. ID	Name	3rd party ID	Start(UTC)	End(UTC)	Capacity	Src. STP	Src. VLAN	Dest. STP	Dest. VLAN
Geant E-line	Operations Centre	2019-12-02 10:31:58	active	GC-0ff2428874	BELNET_ExpressRoute_Vlan4080	SKEY:c34e3b9c-b79f-44ef-958b-b8c0354e1115	2019-12-02 10:30:58	None	0	1-ams-nl.gcs.geant.net_2019_topology:belnet-ap3-expressroutes	4080	1-fra-de.gcs.geant.net_2019_topology:ms_exp_ress_route_1	2
Geant E-line	Operations Centre	2019-12-02 10:30:47	active	GC-7b6b96a6f5	BELNET_ExpressRoute_Vlan4081	SKEY:c34e3b9c-b79f-44ef-958b-b8c0354e1115	2019-12-02 10:29:11	None	0	1-lon-uk.gcs.geant.net_2019_topology:belnet-ap2-expressroutes	4081	1-fra-de.gcs.geant.net_2019_topology:ms_exp_ress_route_2	2

# Thank you

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

Any questions?

Send an e-mail to:

GN4-3 WP6 Task 2 development team

[gn4-3-wp6-t2-dev@lists.geant.org](mailto:gn4-3-wp6-t2-dev@lists.geant.org)

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