Prototyping and Demonstrating 5G Verticals: The Smart Manufacturing Case

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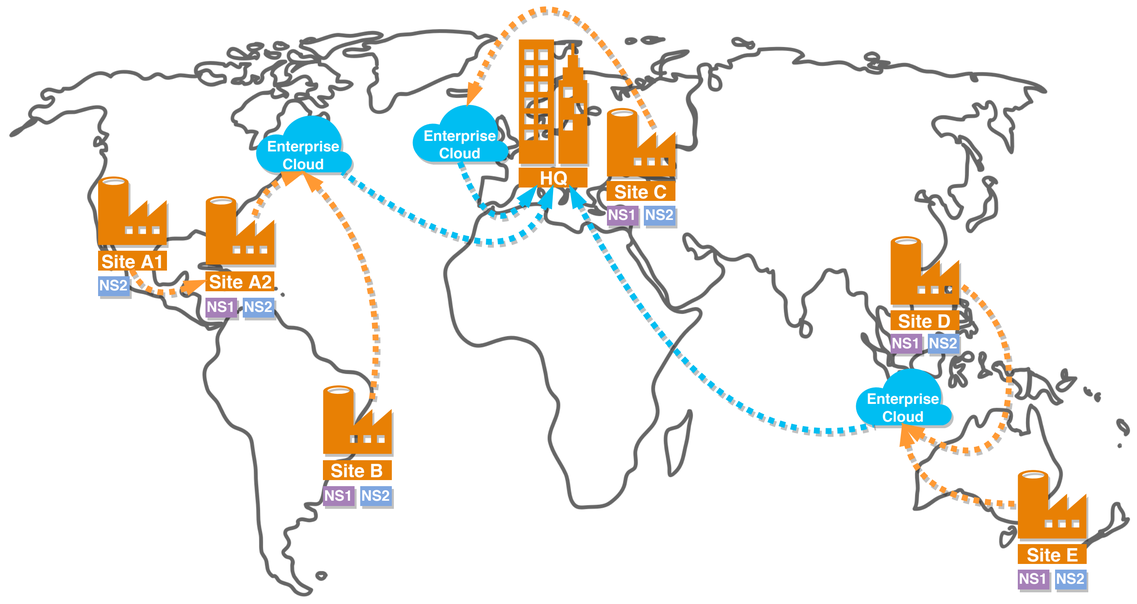
Demonstration Highlights

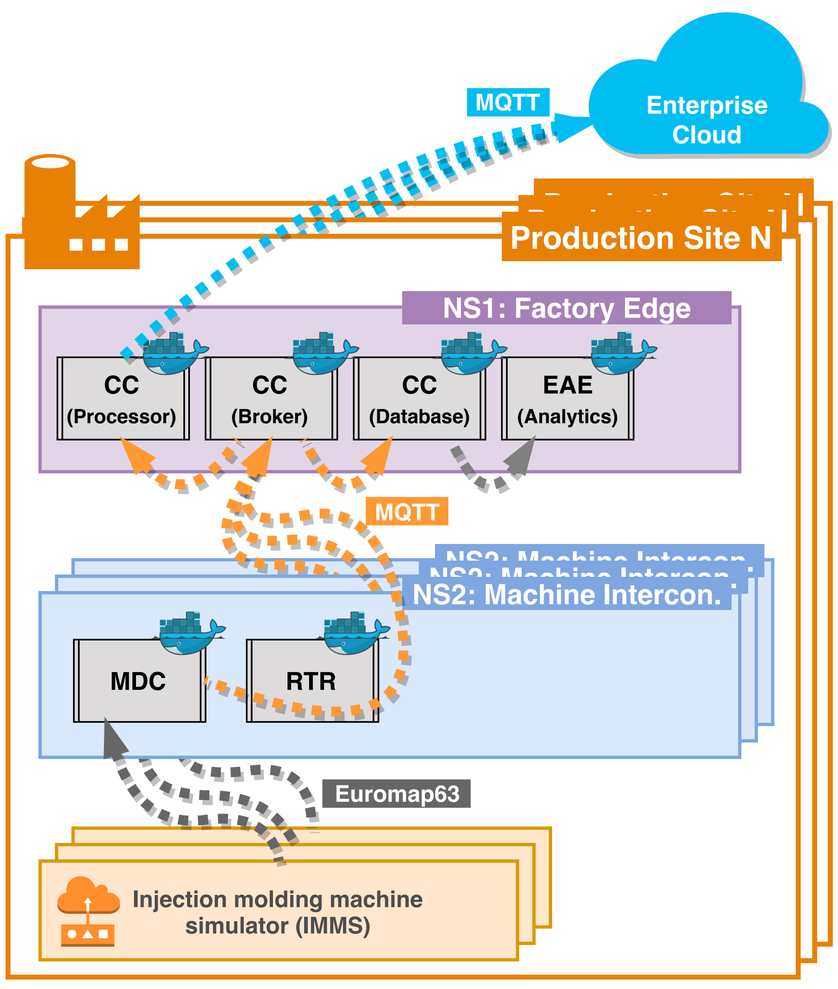
- **Realistic** smart **manufacturing use case**
- Multiple **cloud-native** NFV services
- Emulated **large-scale** network **topology**
- Lightweight **prototyping framework** [1]
- **End-to-end** lifecycle
- Injection molding **machine simulator**
- **Open-source** and available on GitHub

[1] M. Peuster, H. Karl and S. V. Rossem: *MeDICINE: Rapid Prototyping of Production-Ready Network Services in Multi-PoP Environments*, in IEEE NFV-SDN, 2016.

Distributed Smart Manufacturing Scenario



Demonstration Scenario



Demonstration Storyboard

1. Present the ETSI-aligned descriptions of the involved VNFs and network services
2. Package and on-board the used network services and VNFs to 5GTANGO's prototyping platform
3. Instantiation and configuration of a complex scenario with multiple production sites and machine simulators on top of an emulated, large-scale network topology
4. Interconnection of the deployed services and interaction with the deployed VNFs to verify the correct deployment of the demonstrated smart manufacturing use case
5. Activation of a simulated production process using the involved machine simulators
6. Analysis and verification of the collected sensor data arriving at the factory edge service as well as in the enterprise cloud backend

Open Source

https://git.io/fjuDr

Who are we?

5GTANGO

5G DEVELOPMENT AND VALIDATION PLATFORM FOR GLOBAL INDUSTRY-SPECIFIC NETWORK SERVICES AND APPS

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