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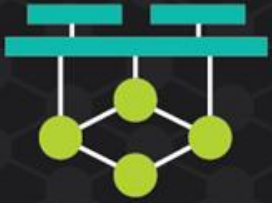
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# SDWAN POC: The road to Digital Transformation Using ONAP

Eric Debeau(Orange),  
Chaker Al-Hakim (Huawei)

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# Outline

- High-level view( Eric)
- POC details (Chaker)

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# Open source and collaboration example

This presentation outlines the growing importance of the opensource in the Telecommunications Industry it will also:

- show the transition to the world of opensource and what is needed for open source to be successful.
- focus on automation and the value of ONAP project as the common platform of carrier network automation and digitalized operation.
- cover the innovation and cooperation of Orange and Huawei to enhance the features, architecture and capabilities of ONAP platform to design and deploy SDWAN.



The road to digital world using open source

# Open source Community

- Why Open source
  - Open source is key for new On-Demand Network
  - Collaboration – Vendors and Service Providers
  - Normalizes the technical discussions
  - One common, and in most cases, a well-understood technical concept
  - Supports common needs/requirements from Operators and Vendors
  - Provides a forum for discussing similar ideas and receive immediate/quick feedback
  - Different backgrounds provides different viewpoints
  - Healthier discuss
  - Everyone is working towards a common goal

# Networking open source stack

Orchestration



SDN/NFV



Cloud Computing



deployed in Orange

Infrastructure



ONAP: Open Network Automation Platform  
OPNFV: Open Platform for NFV

PaaS Platform as a Service  
IaaS Infrastructure as a Service

# Why a service provider involved in open source ?

- Not be a consumer
- Impact on the requirements
- Participate to the solution
- Tests/feedbacks





# SDWAN POC



# POC objectives

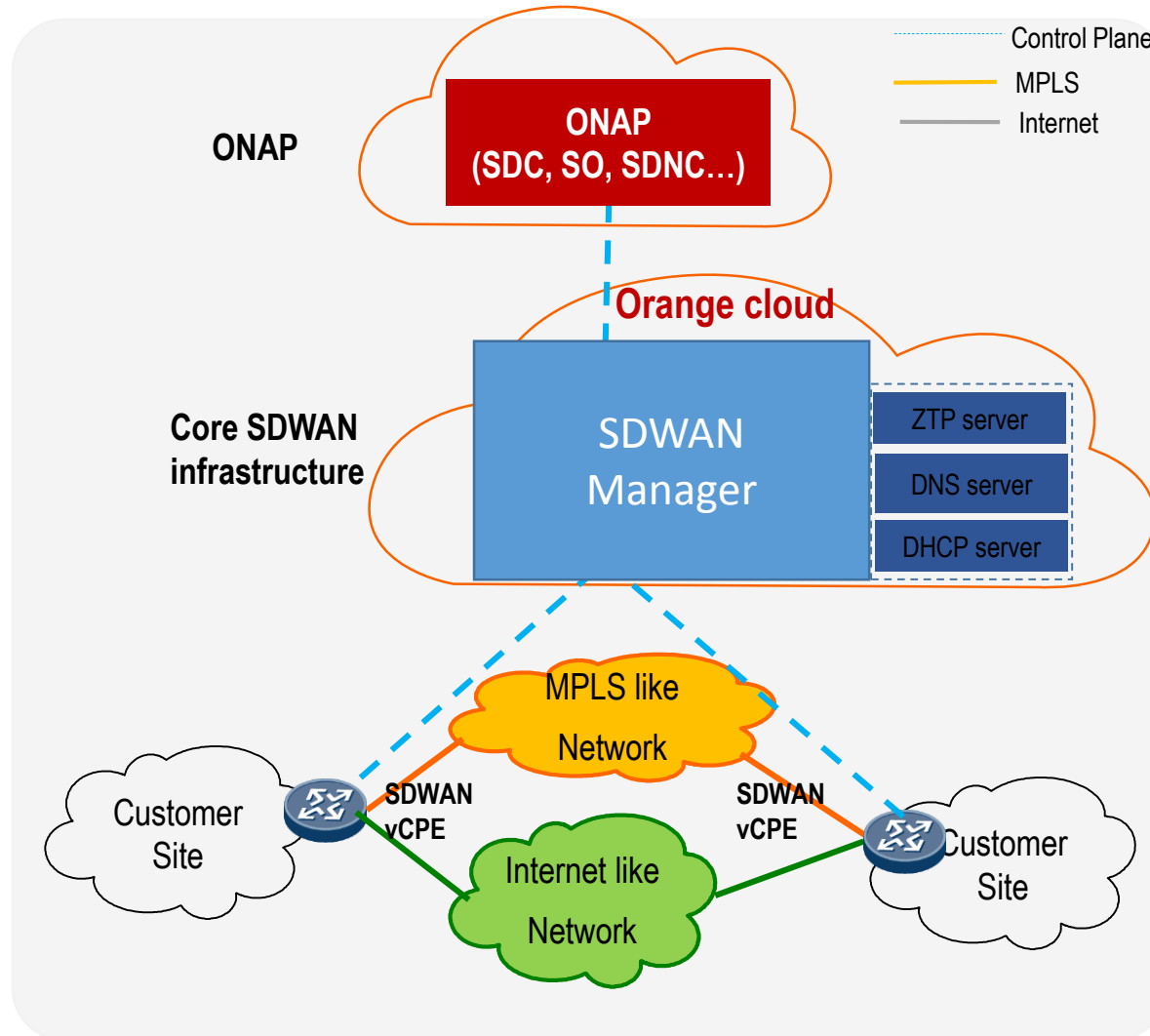
Use ONAP Beijing release to:

- **deploy and configure SD Wan solution core components** in a telco operator environment (cloud based, integration into existing management networks...)
- **set up end points (vCPEs)**

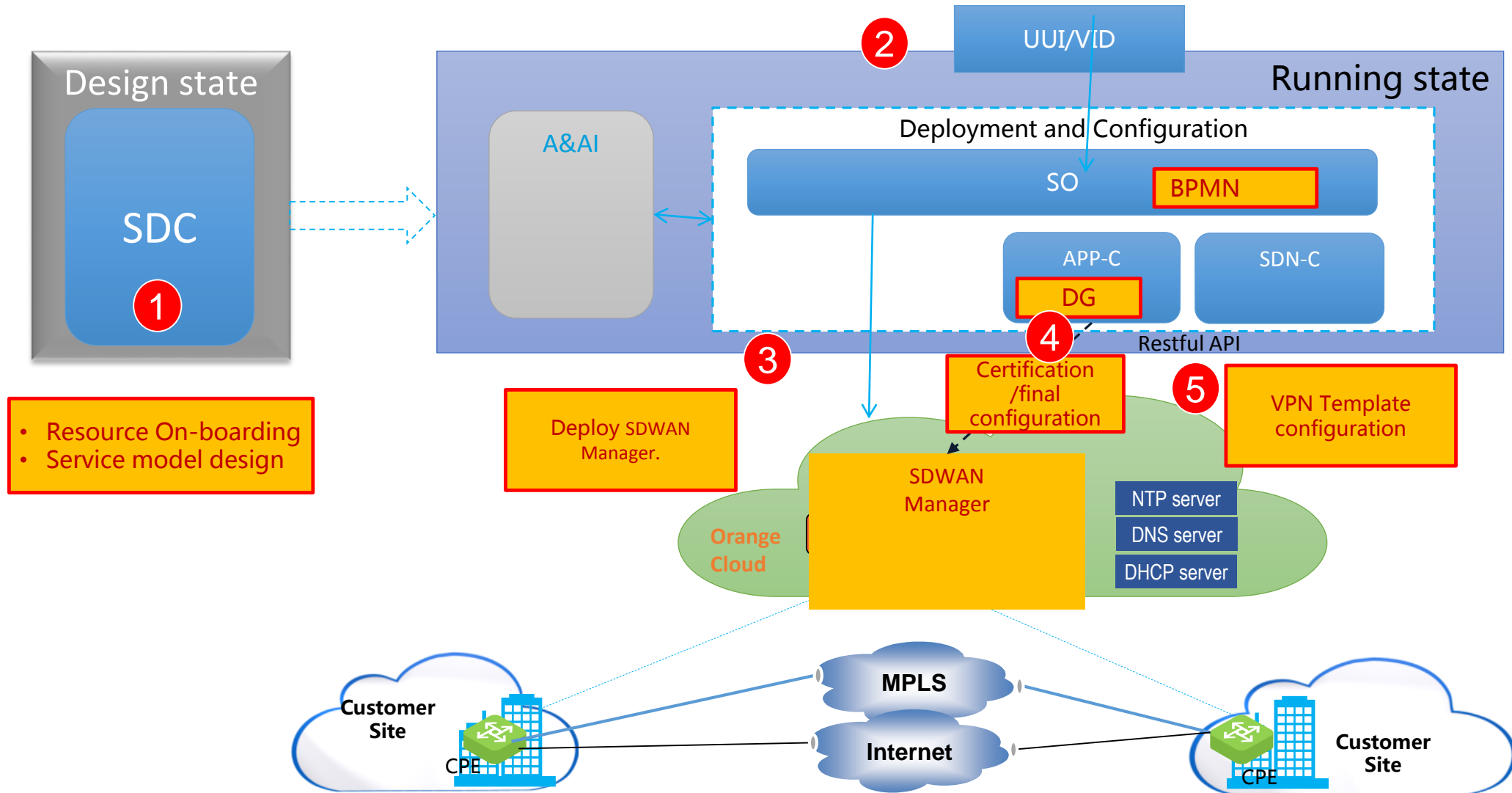
• Objectives:

- **To evaluate ONAP capabilities and to better appreciate requested skills** for designing and managing projects
- **To assess the conditions of a packaging covering both ONAP and SD Wan solution**

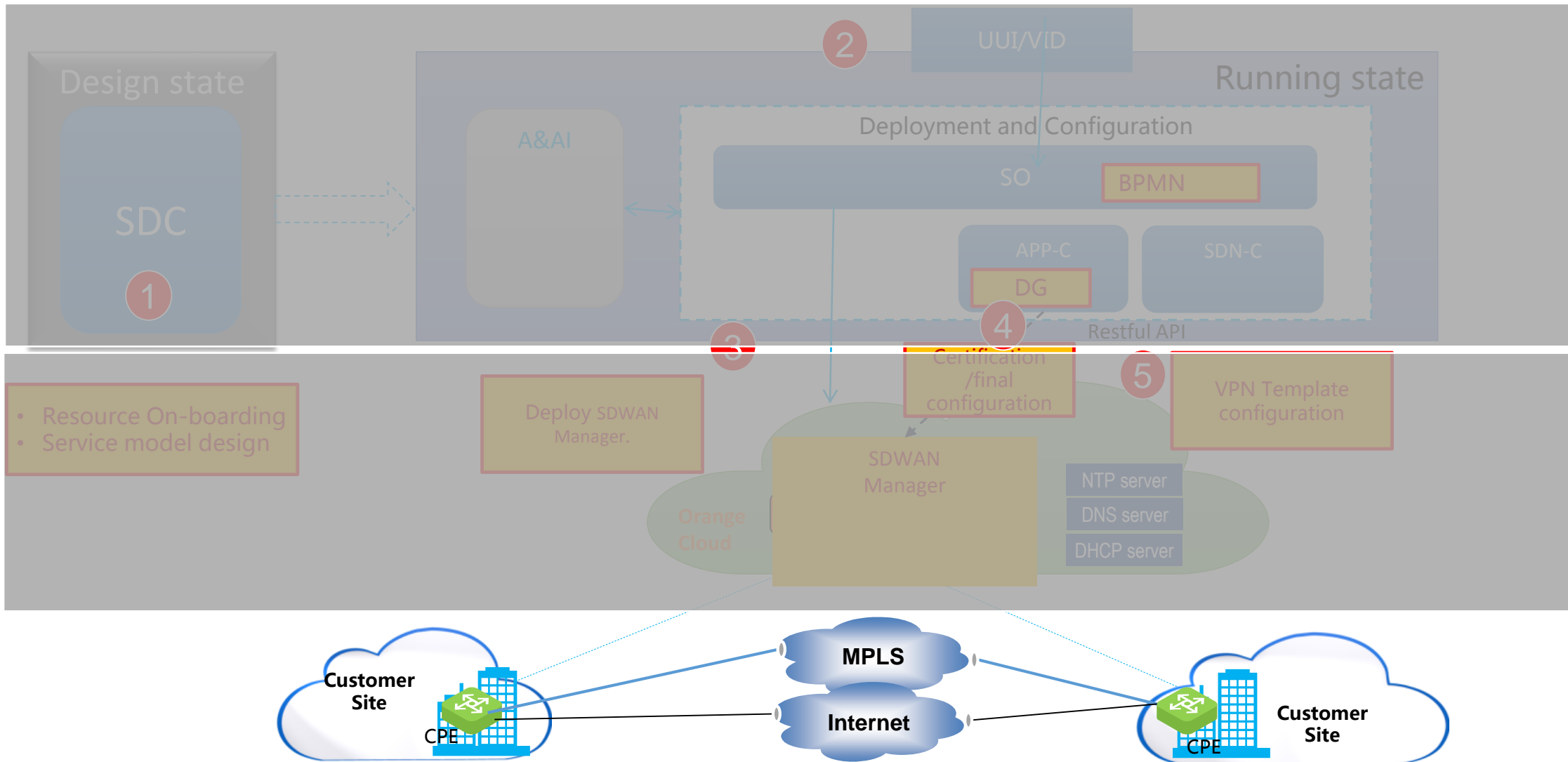
# Orange Uses POCs and Usecases to demonstrate the functionalities of ONAP



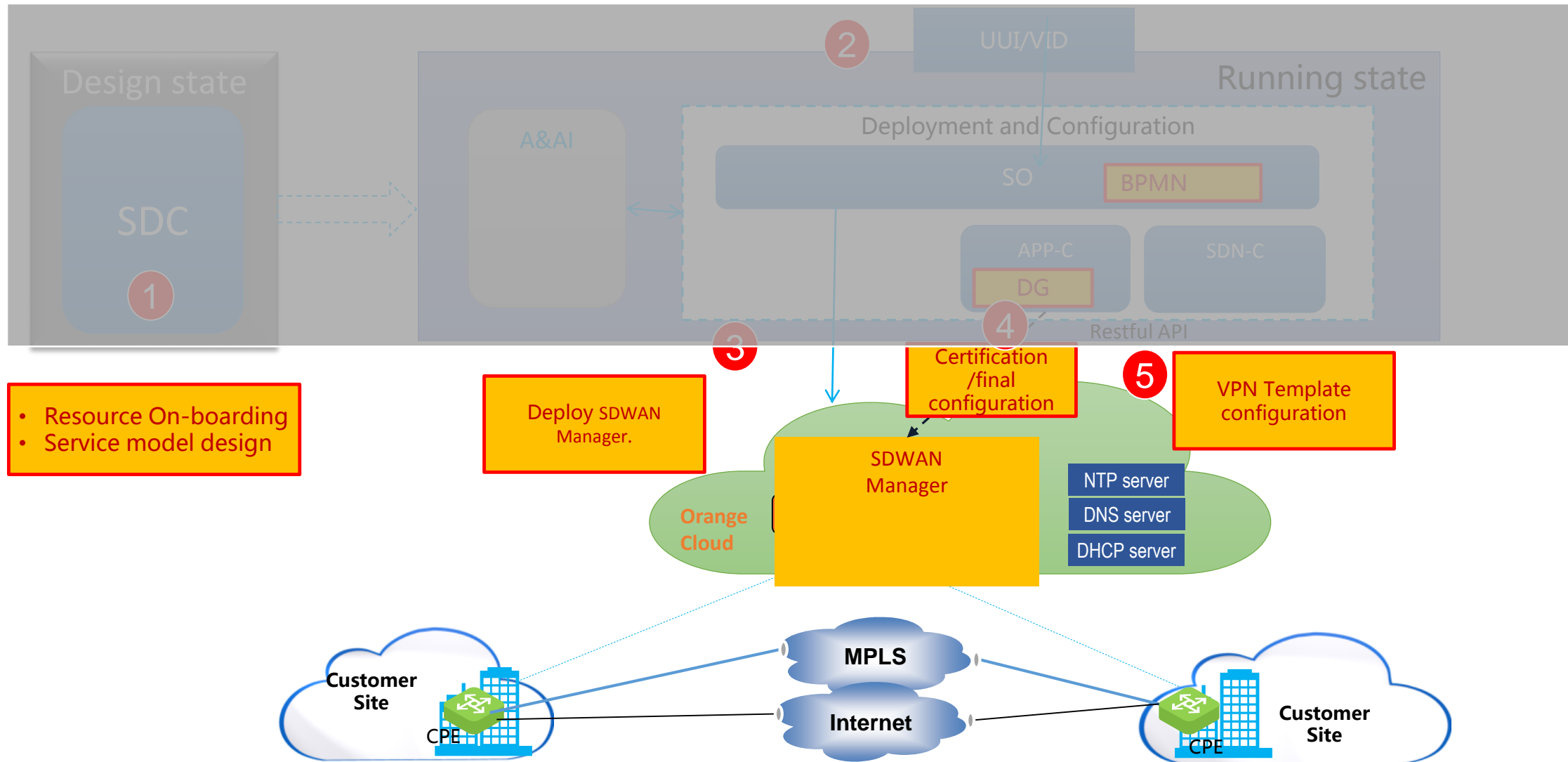
# ONAP SD-WAN Integrated Architecture



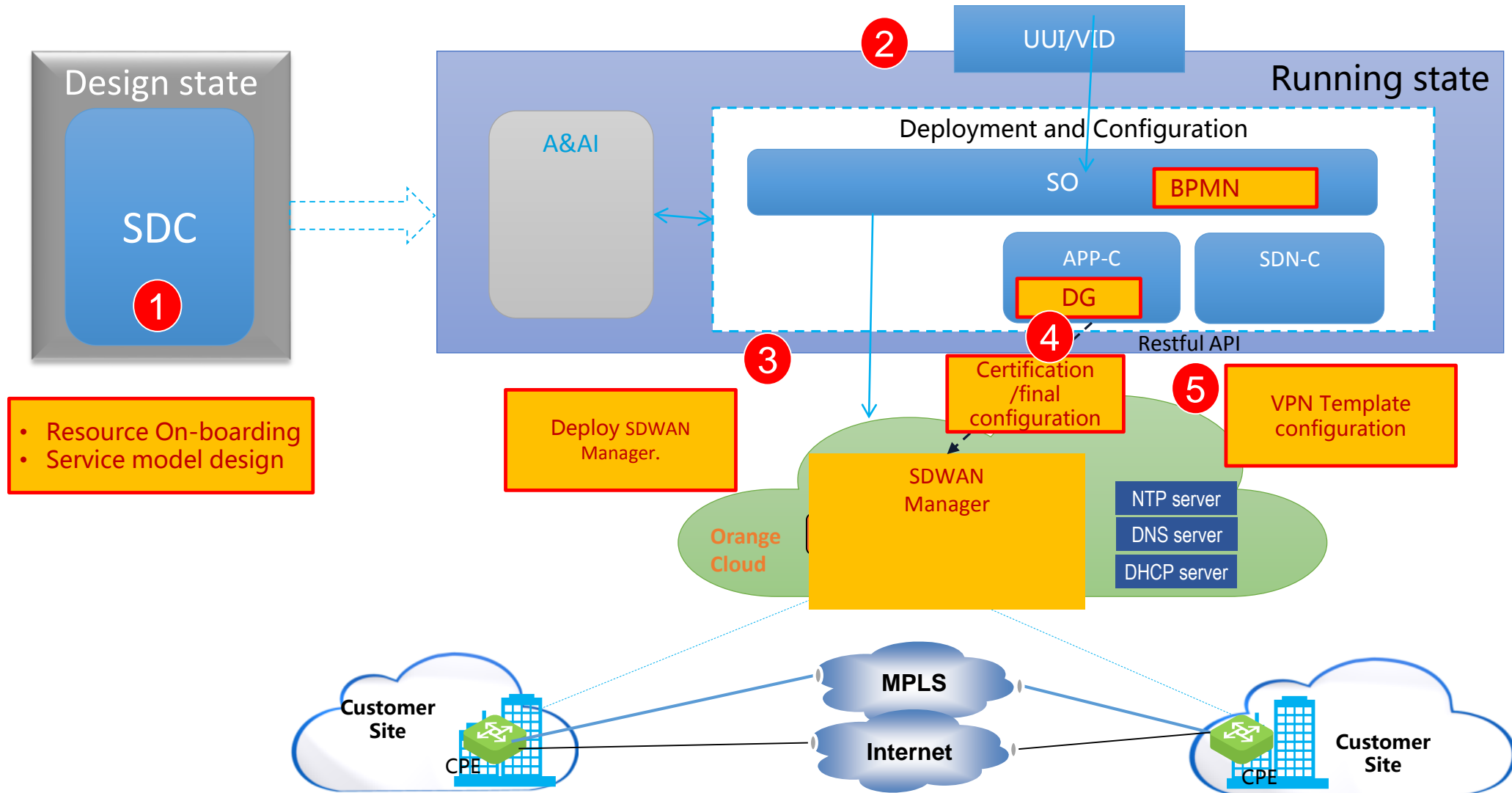
# ONAP SD-WAN Integrated Architecture



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# ONAP SD-WAN Integrated Architecture



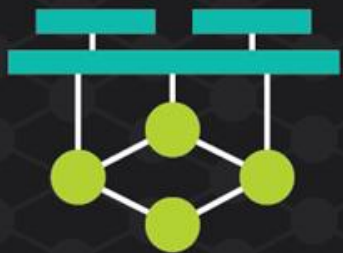
# POC SDWAN – Key Takeaways

- What we proved on full automation: open source value
  - With open source code, there is no blocking point
  - Capability to replay the POC in various environments
- Importance to develop many powerful tests tools to fully automate
  - Avoid manual tasks
- What we discovered with a such POC
  - Still some non-mature components
  - Release management needs more improvements
  - A method to test VNF and its integration in ONAP
- Ways to leverage results within the community

# POC SDWAN, Benefits to the community

- Many feedbacks from this PoC to the community:
  - To ease E2E automation
  - Footprint optimization
  - Documentation as code
- Avoid manual tasks to
  - onboard DG
  - duplicate id...
- And some code wrapper for keystone v3





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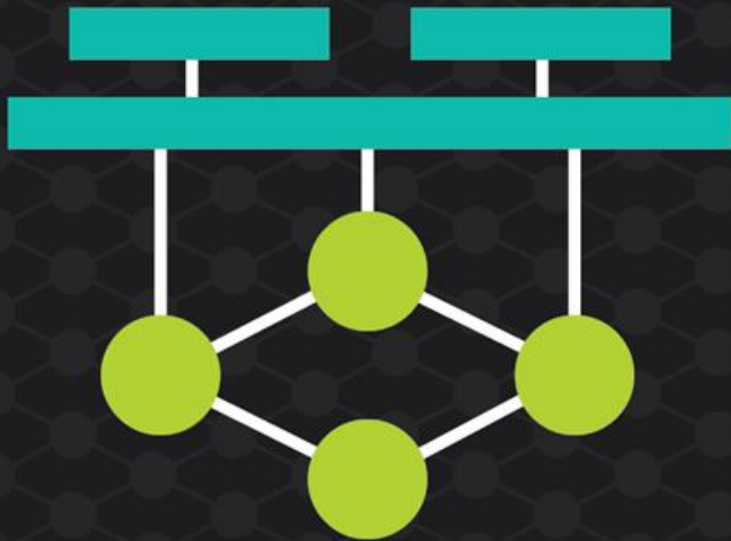
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# Thank you!

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