Service transition

SA4 T1 – Service Validation & Testing

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Main goal

Ensure the software product is ready to production

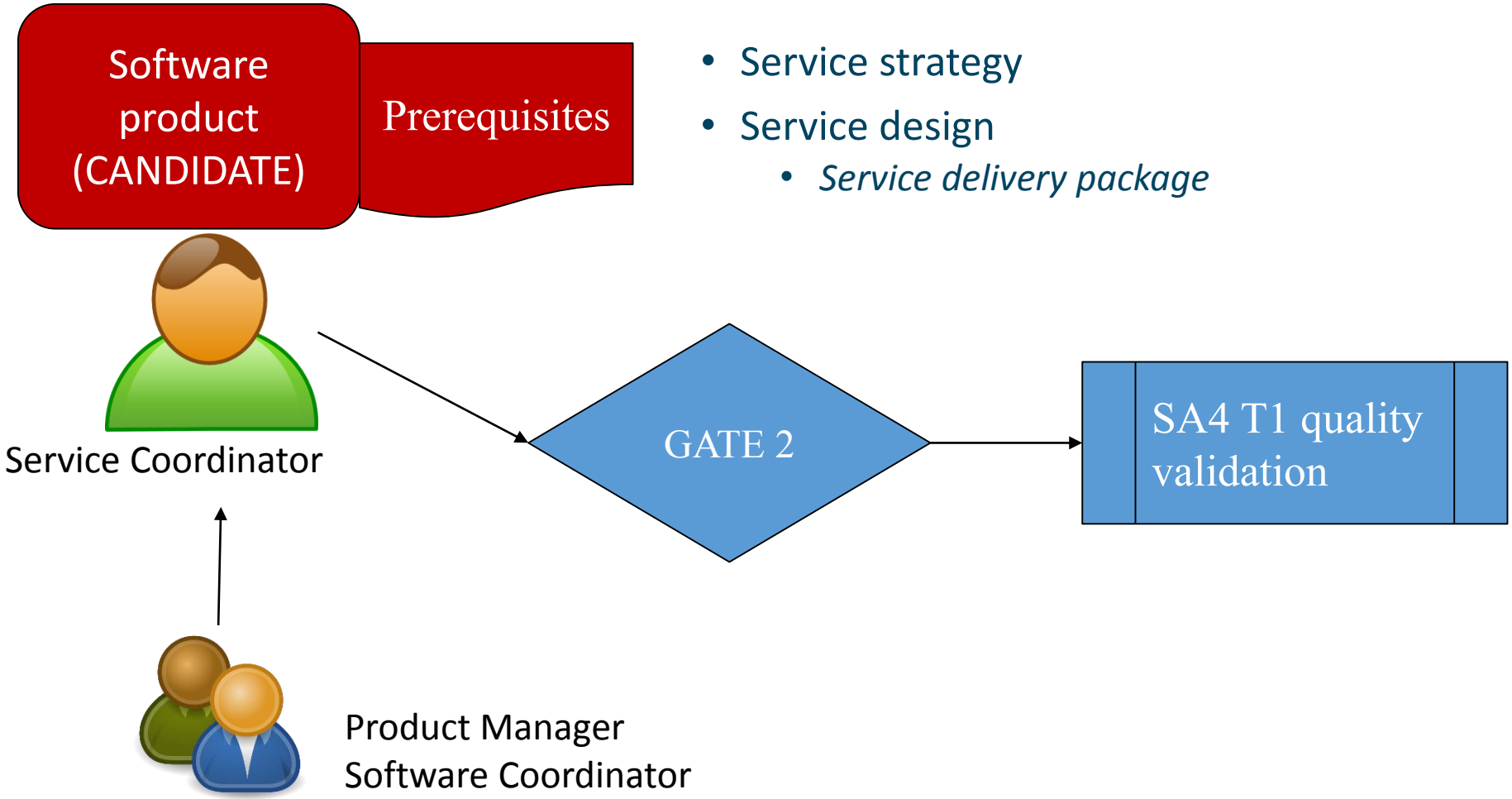
With a minimum and needed set of requirements

Service validation and testing
Objectives

- Define the service validation and testing process
- Perform software audits for all software products that are planned for production
- Perform pre-production tests
- Prepare production and support teams for production

The validation and testing process will be executed for a new service going into production or a newer version of the service

Transition to production
Request for the service validation



Transition to production
Pre-assessment survey

Scope of survey
This short survey is designed to grab basic information about services and products ready for service transition phase.

Basic information

Service name	
Web page	
Contact person	
GÉANT 4 Activity and Task	
Maturity	
Project lifetime	

Description

Service users and operators

Operational model

Type of end-users

Number of current users:

Expected number of users:

References

Issue tracker

User guide

Administrator guide

Checking the prerequisites of a service
Help to estimate the numer (size) of needed resources

https://wiki.geant.org/display/gn41sa4t1qualityprivate/Template

Service Validation and Testing
ITIL concept

- Objective: to ensure that deployed Releases and the resulting services meet customer expectations, and to verify that IT operations is able to support the new service.
  - service design and release will deliver a new or changed service or service offering that is fit for purpose and fit for use
- Key Input (to the test planning and design): service design package (SDP). The SDP includes the service charter, which documents the agreed utility and warranty for the service from the perspective of outcomes, assets and patterns of business activity.
- Direct Output
  - Configuration baseline of the testing environment
  - Testing carried out
  - Results from those tests
  - Analysis of the results

Service Validation and Testing
Interfaces

- IT operations team:
  - operational procedures that should be reviewed/examined against specific metrics (e.g. Daily backup of software configuration and data against an availability level, completeness of release procedures)
  - Service KPIs
  - resources needed to perform effectively the 1st/2nd level of support (e.g. documentation availability, FAQ, existing user support channels)
  - operational procedures (e.g. incident management)
- Users (customer)
  - users expectations with regard to non-functional quality attributes (e.g. usability)

Input from: SA4 T2, SA4 T3, SA6

Service Validation and Testing
Quality models for software systems

- Goal: find a model to describe the project vs service vs software quality measures in an uniform way
- Quality models for software systems help to determine various qualitative characteristics of the product and the processes that lead to its development and maintenance
  - IEEE 25010 – quality in general
  - IEEE 12207 – software lifecycle
  - IEEE 829, IEEE1008, IEEE 29119 – unit testing and test documentation
- Methodology
  - Define model structure (3 tiers)
  - Defining the instance of the model
    - Selection of KPIs (mandatory and optional) relevant to the project
  - Model calibration

Input from: SA4 T3

Service Validation and Testing
What next

- Technological survey - summarize the technological skills of the SA4 T1 team
- Pre-assessment survey – first check
  - FaaS
  - MDVPN-SI
  - PS UI
- Quality validation and testing of FaaS
  - Software quality assurance
  - Secure code audit
  - Application validation and testing
  - Support preparation

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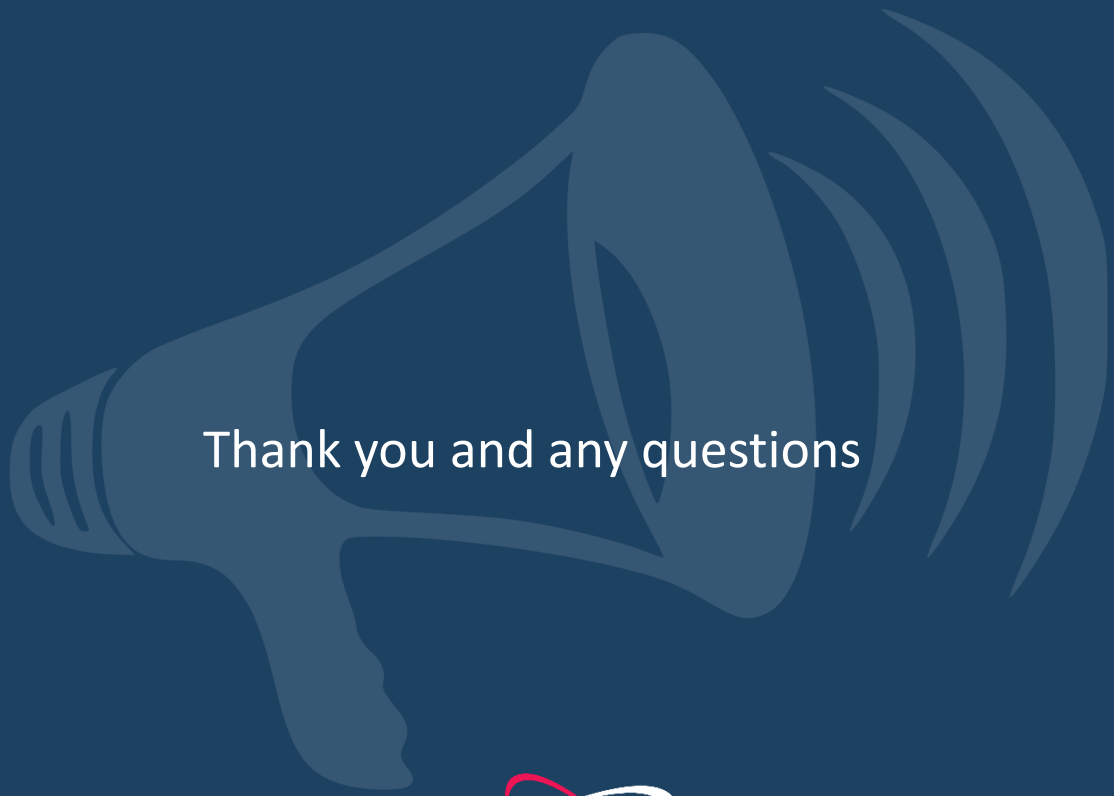

Thank you and any questions

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