

SLM Exercise 1/2 – NI4OS VMs



- You are a service provider that has been on-boarded to the NI4OS pre-production environment.
- You are offering different types of VMs to the EOSC customers
- A customer can choose a VM flavor using the following parameters
 - OS (Ubuntu LTS, CentOS, FreeBSD, Kali Linux)
 - CPU cores (2 – 8)
 - RAM size (16 GB – 64 GB)
 - Disk size (512 GB – 2 TB)
 - Network (private / public / both)

SLM Exercise 2/2 – NI4OS VMs service provider



- Define a default SLA for the NI4OS VMs service provider service!
 - What are the main service level parameters?
 - Which kinds of service “incidents” and service requests may occur, and how are they addressed by the SLA?
- Identify the need for OLAs for supporting service components!



Standards for lightweight
IT service management

Service Planning & Delivery

Advanced training in service planning and
delivery according to FitSM

Version 2.5



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Standards for lightweight
IT service management

Service Level Management (SLM)

Objective

To maintain a service catalogue, and to define, agree and monitor service levels with customers by establishing meaningful service level agreements (SLAs) and supportive operational level agreements (OLAs) and underpinning agreements (UAs) with suppliers

SLM: Important terms & concepts



Definition following FitSM-0:

Service level agreement (SLA):

Documented agreement between a *customer* and *service provider* that specifies the *service* to be provided and the *service targets* that define how it will be provided

Definition following FitSM-0:

Service catalogue:

User / customer facing list of all live *services* offered along with relevant information about these *services*

Definition following FitSM-0:

Operational level agreement (OLA)

Agreement between a *service provider* or *federation member* and another part of the *service provider's* organisation or the *federation* to provide a *service component* or subsidiary *service* needed to allow provision of *services* to *customers*

SLM: Important terms & concepts



Definition following FitSM-0:

Service target:

Values for parameters or measures applied to a *service* that are listed in a *service level agreement* related to it.

Note: Typical service targets might include availability or resolution time for incidents, though many hard and soft targets can be considered.

Definition following FitSM-0:

Underpinning agreement (UA):

Documented agreement between a *service provider* and an external *supplier* that specifies the underpinning *service(s)* or *service component(s)* to be provided by the *supplier*, and the *service targets* that define how it will be provided.

Note: A UA can be seen as a service level agreement (SLA) with an external supplier where the service provider is in the customer role.

SLM: Requirements according to FitSM-1



PR2 Service Level Management (SLM)

REQUIREMENTS

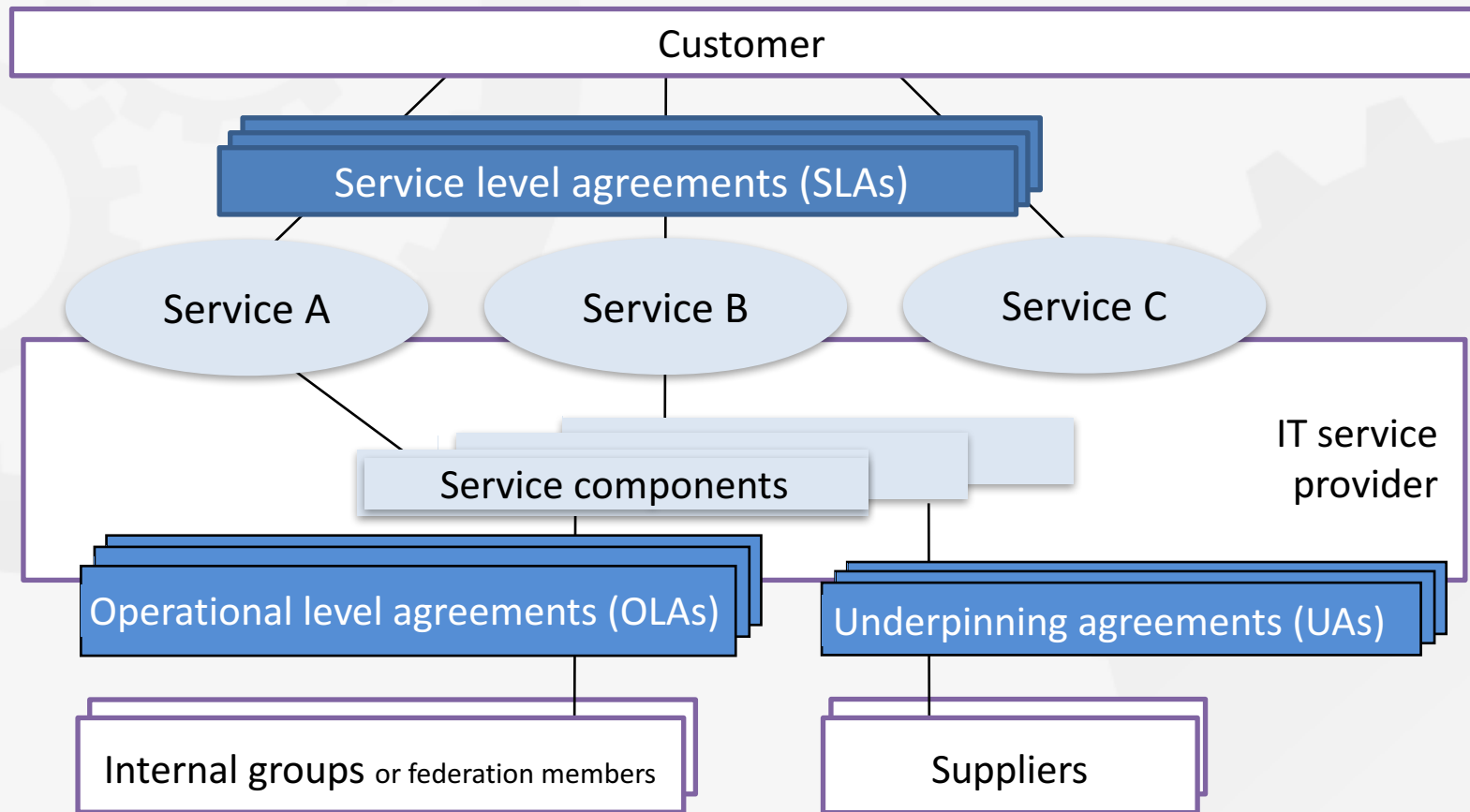
- PR2.1 A service catalogue shall be maintained.
- PR2.2 For all services delivered to customers, SLAs shall be in place.
- PR2.3 SLAs shall be reviewed at planned intervals.
- PR2.4 Service performance shall be evaluated against service targets defined in SLAs.
- PR2.5 For supporting services or service components provided by federation members or groups belonging to the same organisation as the service provider or external suppliers, OLAs and UAs shall be agreed.
- PR2.6 OLAs and UAs shall be reviewed at planned intervals.
- PR2.7 Performance of service components shall be evaluated against operational targets defined in OLAs and UAs.

SLM: Important terms & concepts



- Typical contents in an SLA (included or referenced):
 - Service description
 - Service hours and exceptions
 - Service components and dependencies
 - Support (incident handling and fulfilment of service requests)
 - Service level targets
 - Limitations and constraints
 - Communication, reporting and escalation (general communication, regular reporting, SLA violations, escalations and complaints)
 - Information security and data protection
 - Additional responsibilities of the service provider
 - Customer responsibilities
 - Review
 - Glossary of terms

SLM: Types of service agreements and their relationships



SLM: Initial process setup



Initial activities	Typical results
Define the structure and format of the service catalogue, and create an initial service catalogue based on the service portfolio	Initial service catalogue
Define a basic / default SLA valid for all services provided to customers, where no specific / individual SLAs are in place	Default / corporate level SLA
Define templates for individual SLAs, OLAs and UAs	SLA template, OLA / UA template
Identify the most critical supporting service components, and agree OLAs and UAs with those contributing to delivering services to customers	Initial OLAs and UAs
Agree individual SLAs with customers for the most important / critical services	Initial SLAs

SLM: Inputs & outputs



Inputs

Defined service portfolio
General and specific customer requirements

Outputs

Up-to-date service catalogue
Default / corporate level SLA
Individual SLAs with customers
Supporting OLAs and UAs



SLM: Ongoing process activities

- Maintain the service catalogue
 - Add a service to service catalogue
 - Update a service in the service catalogue
 - Remove a service from service catalogue
- Manage SLAs
 - Negotiate and sign a new SLA
 - Evaluate and report on SLA fulfilment
 - Notify customer of an SLA violation
 - Update or resign an SLA



- Manage OLAs and UAs
 - Negotiate and sign an OLA / UA
 - Evaluate and report on OLA / UA fulfilment
 - Notify supporting party / federation member or supplier of an OLA / UA violation
 - Update or resign an OLA / UA

SLM: Roles



Role	Tasks	Ca. number of persons performing this role
Process owner SLM	<i>Generic tasks of a process owner applied in the context of SLM</i>	1 in total
Process manager SLM	<i>Generic tasks of a process manager, plus:</i> <ul style="list-style-type: none">• Maintain the service catalogue• Manage updates to the service catalogue• Ensure the service catalogue is aligned with the service portfolio• Negotiate SLAs with customers• Propose and negotiate OLAs with internal groups or federation members• Propose and negotiate UAs with external suppliers• Ensure that all SLAs, OLAs and UAs are documented in a consistent manner• Approve new or changed SLAs, OLAs and UAs• Ensure SLAs, OLAs and UAs are aligned to each other	1 in total

SLM: Roles



Role	Tasks	Ca. number of persons performing this role
SLA / OLA / UA owner	<ul style="list-style-type: none">• Maintain the SLA, OLA or UA under his/her ownership and ensure it is specified and documented according to relevant specifications• Evaluate the fulfillment of the SLA, OLA or UA• Ensure that violations of the targets defined in the SLA, OLA or UA are identified and investigated to prevent future recurrence• Perform regular reviews of the SLA, OLA or UA• Understand new or changed requirements on the SLA, OLA or UA under his/her ownership, and initiate necessary updates or other follow-up actions	1 per SLA, OLA and UA

SLM: Critical success factors & KPIs



Critical success factors	Key performance indicators (KPIs)
A complete and consistent service catalogue is made available to customers	<ul style="list-style-type: none">• Percentage of services not covered by the service catalogue
Every service provided to one or more customers is subject to one or more SLAs	<ul style="list-style-type: none">• Number of SLAs• Frequency of SLA reviews or updates
For critical supporting service components, OLAs and/or UAs are in place	<ul style="list-style-type: none">• Number of OLAs and UAs• Frequency of OLA and UA reviews or updates