
SPECS Project

Secure Provisioning of Cloud Services based on SLA Management

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SPECS Project



CeRICT, Italy (coordinator)



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FP7-ICT-10-610795

Project Start: 1/11/2013
Project Type: STREP
Duration: 30M
Total Funding: 3.5 M

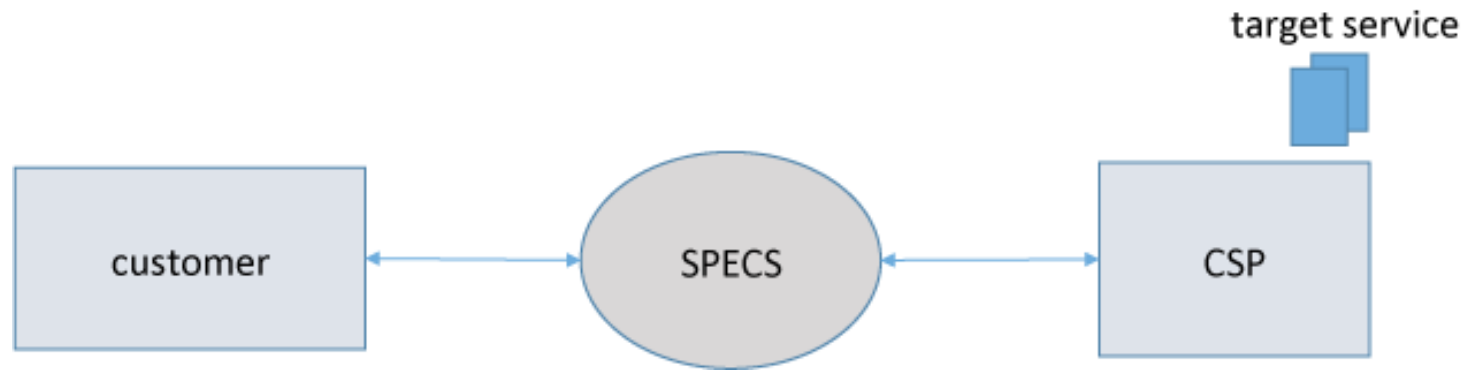
SPECS Goals

- SPECS aims at offering an automated management of Security SLAs for cloud services
- SPECS aims at dynamically defining Security SLAs according to End User needs
- SPECS aims at enforcing security controls in order to grant a Security SLA (in an automated way)
- SPECS aims at monitoring security controls in order to guarantee Security SLA (in an automated way)

SPECS Objectives

#	Objective and Expected Result
O1	A Platform-as-a-Service dedicated to security services and to SLA life cycle management
O2	End User Negotiation of Security SLAs
O3	Continuous Monitoring of Security SLAs
O4	Enforcement of services dedicated to grant security features to Cloud end users in order to fulfill an agreed SLA and, keep a sustained QoSec. .
O5	Concrete and Real World Case studies

SPECS Usage



SPECS as Third Party

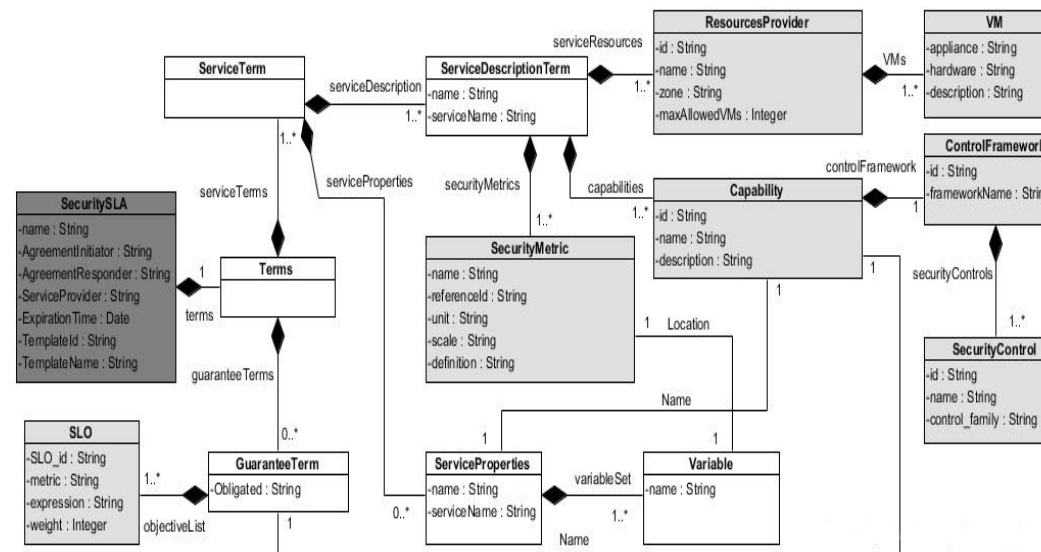
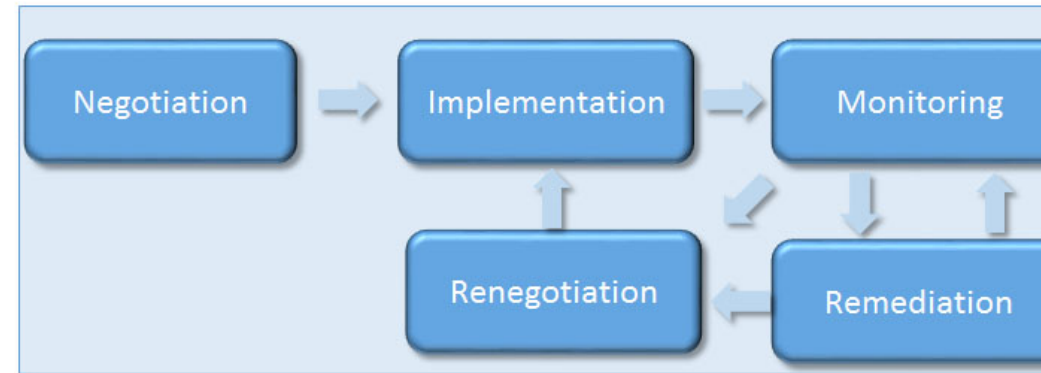
- SPECS runs independently of a single CSP, brokering resources

SPECS in a CSP

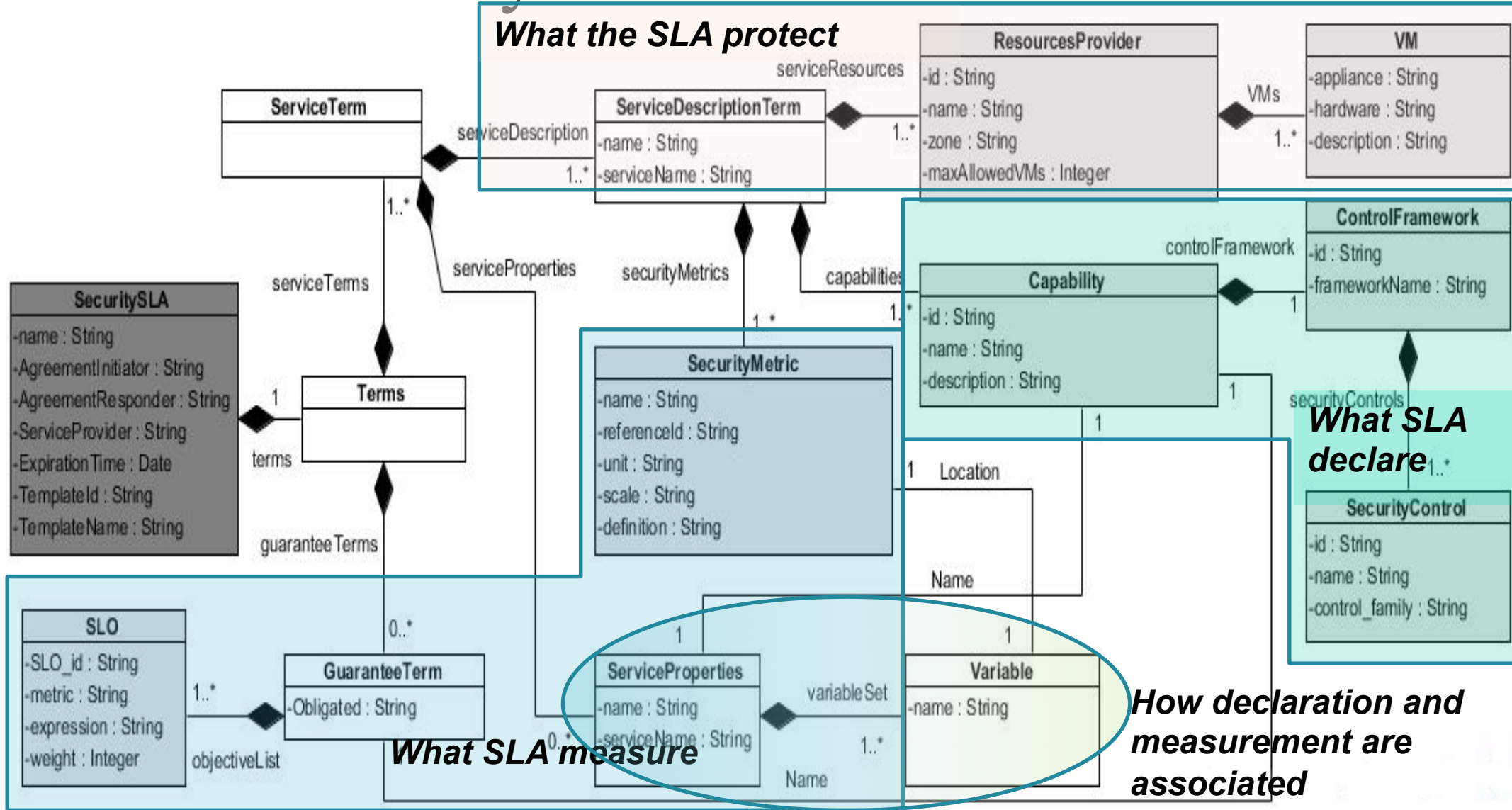
- SPECS runs INSIDE a CSP, using the local resources and granting SLAs

Security SLAs Model

- SLA Life Cycle (needed to implement a SLA-based PaaS)
- A Security SLA model to represent security in a way that enable SLA management
- Adherence to all existing standards



SPECS Security SLA



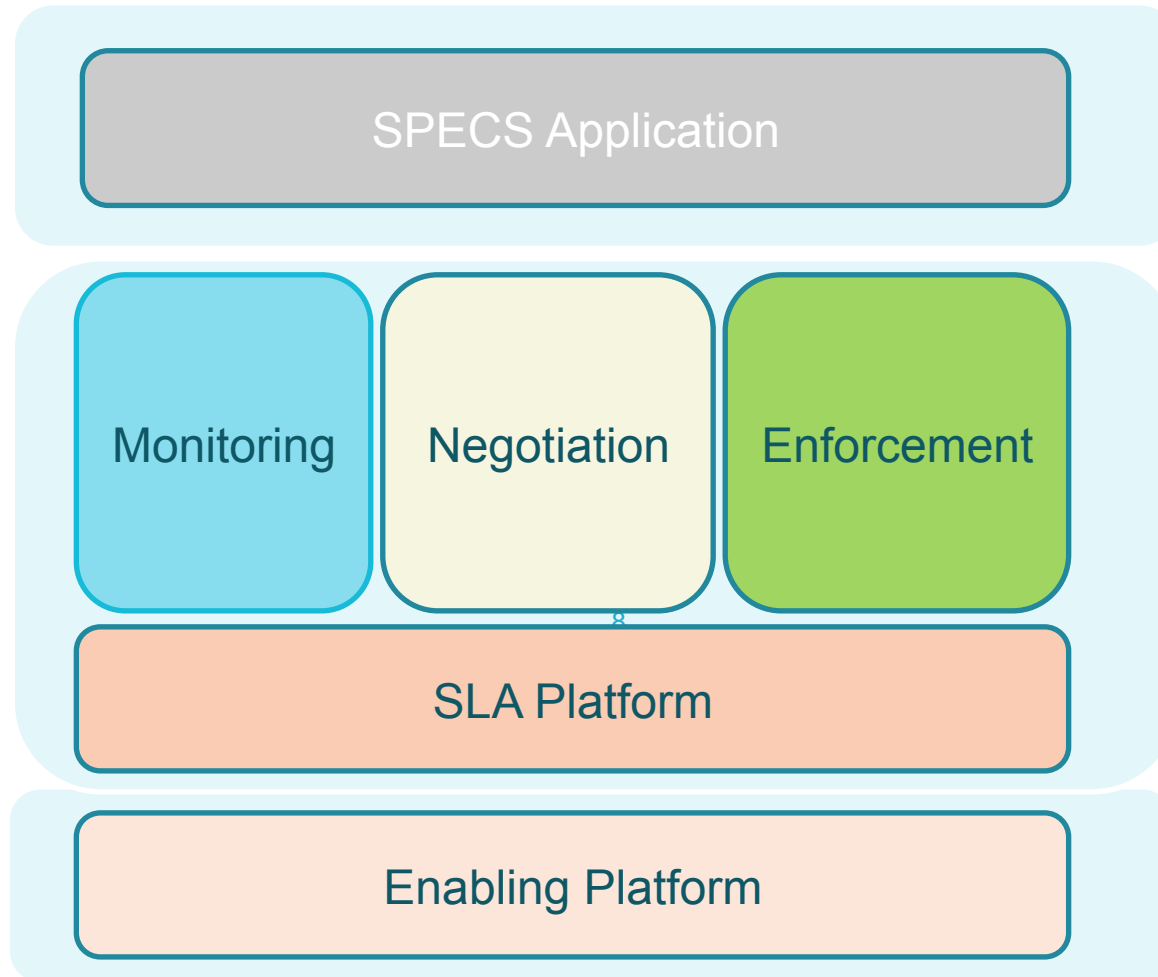
What the SLA protect

What SLA declare

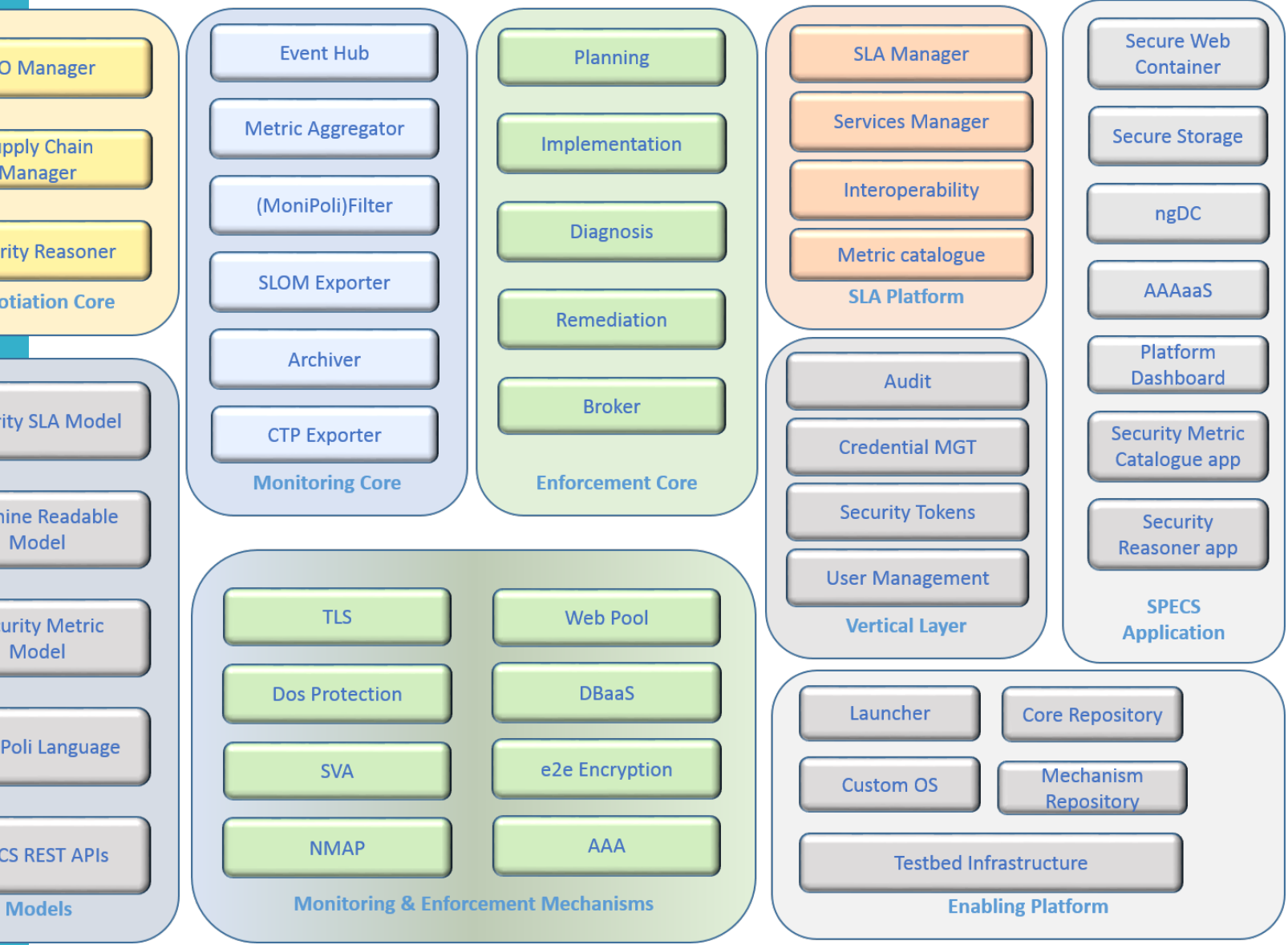
What SLA measure

How declaration and measurement are associated

SPECS PaaS Architecture



SPECS Framework in detail



SPECS framework is open source

Get it on bitbucket.

<http://bitbucket.org/specs-team>

SPECS Portfolio

- **Secure Web Container:** Demonstrator Application, Platform as a service, offering Web Containers granted by Security SLAs
- **End-to-End Encryption:** Security Mechanisms (offered –aaS) able to offer cloud storage encrypting data on the End User terminal.
- **STARWatch:** Compare and Evaluate Cloud Service Provider according to their self-assessment certification data
- **SPECS+ViPR:** Offer Storage-a-as-Service using the SPECS platform integrated in the EMC ViPR solution

Check SPECS Portfolio on SPECS Web Site

<http://http://www.specs-project.eu/portfolio>

Thanks
