

# Cluster on Data Protection, Security and Privacy in Cloud

Meeting of the 7th of Oct 2015

CloudForward 2015, Pisa.

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# Context

- Increase impact of EU-funded projects on Cloud working in the areas of:
    - Data protection
    - Security
    - Privacy
- i.e.: IDM, AAA, cryptography, trust, security in SLAs, anonymization, privacy policies, PLAs, etc.

# DPSP Cluster objectives

1. **Maximize the impact** of the Cluster projects' results:
  - Seek synergies of proposed solutions
  - Maximise the innovation over state-of-the-art.
  - Organise joint dissemination events
  - Encourage standardisation.
2. Ensure the **market orientation and adoption** of project results.
  - Work in the deep analysis of market trends and needs.
  - Look for alignment of exploitation strategies and models as much as possible.
3. **Help define the research and innovation needs** in H2020 in the areas of Data Protection, Security and Privacy in the Cloud.

# Deliverables

- Map of synergies & challenges in research.
- White Paper on future challenges in the context of DSM.
- Catalogue of AB candidates.
- Catalogue of End-users candidates.
- Joint workshops (2 per year).





# Projects in the Cluster

Project	Project Name
<a href="#">MUSA</a>	MUlti-cloud Secure Applications
<a href="#">CLARUS</a>	A FRAMEWORK FOR USER CENTRED PRIVACY AND SECURITY IN THE CLOUD
<a href="#">ESCUDO-CLOUD</a>	Enforceable Security in the Cloud to Uphold Data Ownership
<a href="#">SERECA</a>	Secure Enclaves for REactive Cloud Applications
<a href="#">SLALOM</a>	Service Level Agreement - Legal and Open Model
<a href="#">SLA-READY</a>	SLA-Ready: Making Cloud SLAs readily usable in the EU private sector
<a href="#">SWITCH</a>	Software Workbench for Interactive, Time Critical and Highly self-adaptive cloud applications
<a href="#">PAASWORD</a>	A Holistic Data Privacy and Security by Design Platform-as-a-Service Framework Introducing Distributed Encrypted Persistence in Cloud-based Applications
<a href="#">SPECS</a>	Secure Provisioning of Cloud Services based on SLA management
<a href="#">A4CLOUD</a>	Accountability For Cloud and Other Future Internet Services

Project	Project Name
<a href="#">TRESCCA</a>	TTrustworthy Embedded systems for Secure Cloud Computing Applications
<a href="#">CLIPS</a>	Cloud approach for Innovation in Public Services
<a href="#">COCO CLOUD</a>	Confidential and Compliant Clouds
<a href="#">WITDOM</a>	WITDOM - empOWering prIvacy and securITy in non-trusted enviroNments
<a href="#">TREDISEC</a>	TREDISEC - Trust-aware, RELiable and Distributed Information Security in the Cloud.
<a href="#">STRATEGIC</a>	Service diSTRibution network And Tools for intEroperable proGrammable, and Unified public Cloud services
<a href="#">PRISMACLOUD</a>	PRIVacy and Security MAIntaining services in the CLOUD
<a href="#">SECCORD</a>	SECurity and trust COoRDination and enhanced collaboration
<a href="#">CLOUDWATCH</a>	A European cloud observatory supporting cloud policies, standard profiles and services
<a href="#">CLOUDWATCH2</a>	Think Cloud Services for Government, Business Research
<a href="#">APPHUB</a>	AppHub, the European Open Source Marketplace

+ SUNFISH: SecUre iNformation SHaring in federated heterogeneous private clouds

# Objectives for Cloud Forward 2015

1. Get to know each other. 
2. TOC of the Position paper and initial assignment of sections to projects & persons.   
Initial TOC proposal  
further discussions needed.
3. Initial organization of the 1st joint Workshop in Q1 2016. 
4. Initial identification of synergies in: Privacy, Certification and CSLAs.   
More INPUT NEEDED from Cluster Projects  
+ 2 Networking sessions at ICT 2015

# Participants

- Luigi Romano - SERECA
- Max Rak - SPECS
- Antonio Lioy - CLIPS
- Nick Ferguson – CloudWatch, CloudWatch2 and SLA-READY
- Roberto Cascella - CLARUS
- Erkuden Rios – MUSA and DPSP Cluster
- [Stefano Paraboschi – EscudoCloud]
- [Simone Braun – PAASWORD] -not attending

# Next f2f meetings

- **20-22 October 2015: Joint discussion at the following 2 Networking sessions at the *ICT2015*, Lisbon, Portugal:**
  1. “  
[Key challenges in end-to-end privacy/security in untrusted environments](#)” on Thursday, October 22nd, Room 8, (14:50-15:35)
  2. “  
[Privacy, Certification and SLA for dependable clouds](#)” on Tuesday, October 20th, Room 11, (16:00-16:45)



# More information

- Cluster website:

<https://eucloudclusters.wordpress.com/data-protection-security-and-privacy-in-the-cloud/>

- Coordinator:

[erkuden.rios@tecnalia.com](mailto:erkuden.rios@tecnalia.com)

Join us by sending an email to the coordinator!!

# Wrap-up

- Population of the 2 catalogues:
  - AB: volunteer Cluster members
  - End-users: from projects + external (public catalogue)
- We will create 2 documents:
  - Map of synergies and challenges – Current picture of our projects (similar to Infrastructure Cluster's whitepaper with mapping tables).
  - Whitepaper of DPSP in DSM – future gaps (towards WP2018-19).

We need input from the projects for both: project fiches + mapping tables filled !!
- We will contribute to the White Paper on Standards
- We will organise a Joint Workshop on the 23<sup>rd</sup> of Feb 2016 in Naples.

# First Joint Workshop

- Location and date: 23<sup>rd</sup> Feb 2016, Naples.
- 1 day duration extendable to 2 days if needed.
- Interested projects (by now): SPECS, COCO CLOUD, TRESCCA, CLOUDWATCH2, MUSA, SLA-Ready, CLIPS, CLOUD TEAMS, SUNFISH.
- Workshop on: Data Protection, Security and Privacy in the Cloud in general.
- Project results presentation, invited papers.
- Hackathon session.
- Case studies session: for helping non-security oriented projects to know: why and when are you needing our results?
- Audience: project partners and local SMEs + Other SMEs, end-users.
- We may create a book collecting the contributions to the

# Initial discussions

- Challenges from the presented papers:
  - Models and languages for the specification of security properties, security SLO, security controls, security and privacy in SLAs.
  - Continuous assessment and enforcement of security and privacy in multi-cloud environments.
  - Performance of brokers for data protection compliance assessment: runtime checking against local, national and EU laws, continuously up-to-date.
- Security-by-design and privacy-by-design in heterogeneous cloud environments (legacy apps + public clouds + private clouds + mobile apps + IoT...).
- Seamless Security and Privacy at Scale: explosion of volumes in data, cloud services, micro-services, devices, sensors, things, etc.

We will continue discussions in next weeks: f2f in ICT 2015, email, bi-weekly, Synergies & challenges map and White paper.