

Accountability for Cloud and other Future Internet Services

The A4Cloud project





Drivers for an accountability-based approach

Increase trust and assurance
Allow more dynamism
Decrease regulatory complexity
Provide effective data governance
and control in cloud-based IT



Accountability-based approaches for trust and security





Defining Accountability

Conceptual Definition:

Accountability consists of defining governance to responsibly comply with internal and external criteria, ensuring implementation of appropriate actions, explaining and justifying those actions and remedying any failure to act properly.

- Accountability for an organization consists of accepting responsibility for the stewardship of personal and confidential data with which it is entrusted in a cloud environment, for processing, sharing, storing and otherwise using the data according to contractual and legal requirements from the time it is collected until when the data is destroyed (including onward transfer to and from third parties).
- In addition, it involves committing to legal, ethical and moral obligations, policies, procedures and mechanisms, explaining and demonstrating ethical implementation to internal and external stakeholders and remedying any failure to act properly.





Increasing consumer and business confidence







The realm of accountability research

Inter-disciplinary approach for co-designing Accountability







The Cloud Accountability Community







Our deliverables



Policy Configuration and Enforcement System

Accountability Validation Tool

Choice

Risk Assessment Tool

Contract Support Tool

Compliance

Evidence Collection System

Remediation Tool

Policy Monitoring Tool

Accountability Framework

Recommendations and guidelines

Reference architecture

Models on data governance

Interoperable Policy languages

Accountability metrics

Ethical Accountability

The Cloud Accountability Project





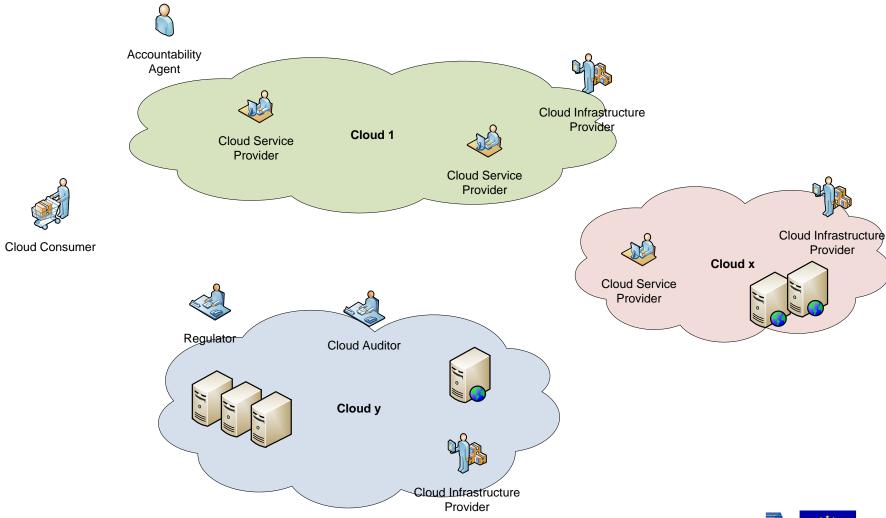
ACCOUNTABILITY Accountability Framework Input PROJECT

	Preventive	Detective	Corrective	
Users	Risk and trust assessments Policy specification Certification	Notification of policy violation Data subject access Other tracking & transparency tools	Facilitation of redress Data accuracy correction	Whol
				9 6
Providers	Risk analysis Support for contract negotiation Policy enforcement	Monitoring & policy- aware logs Reasoning tools	Liability attribution Risk mitigation	Whole eco-system approach
				pro
Regulators	Involvement in privacy impact assessments Guidelines & best practice	Audit Violation reports Trustworthiness analysis	Evidence (for dispute resolution, to aid punishment, etc.)	oach

Inter-disciplinary co-design

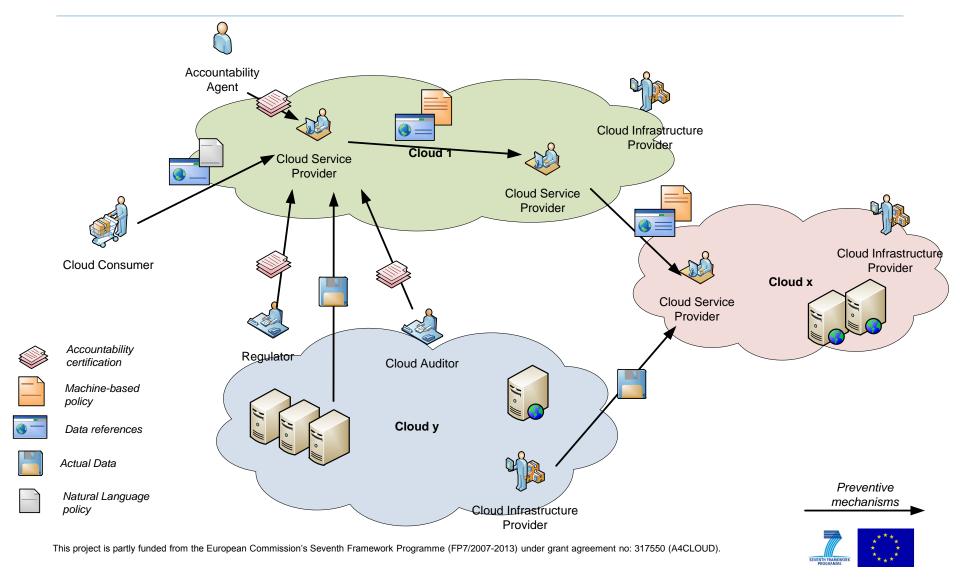




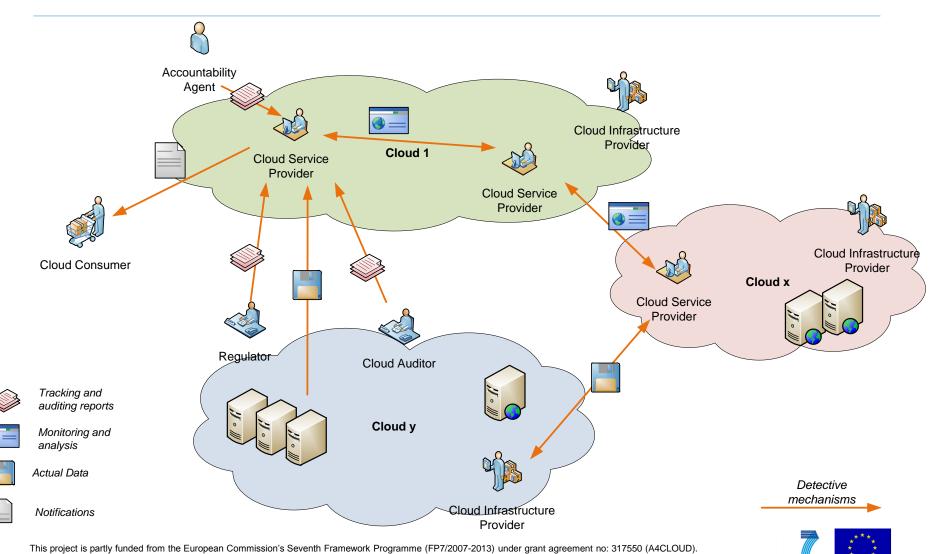




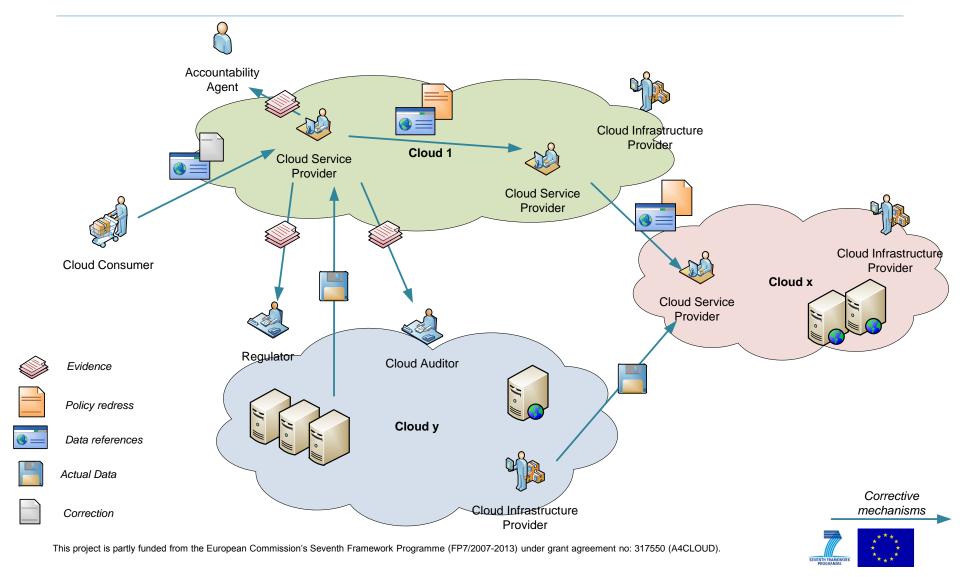






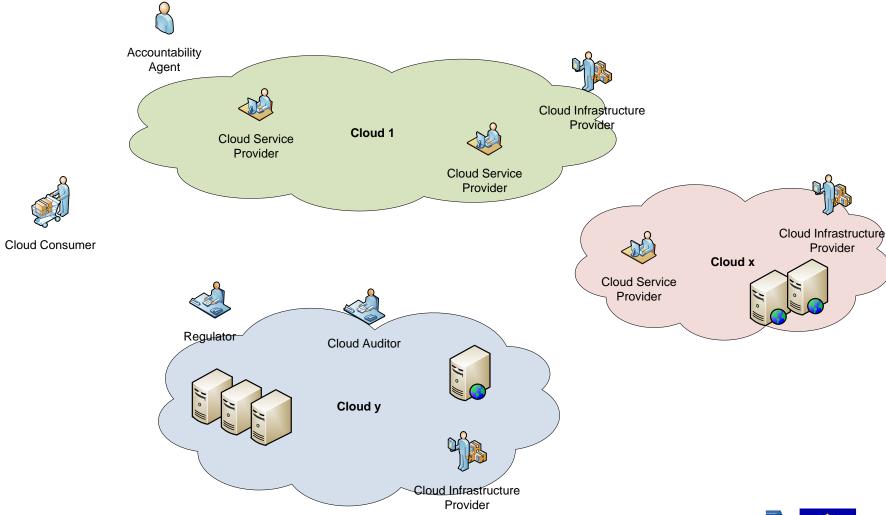








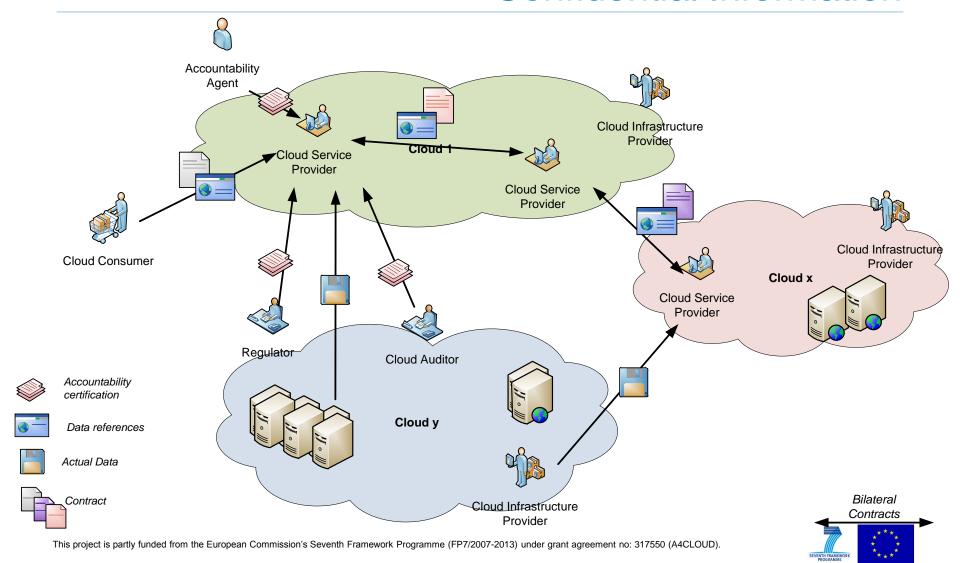
Respecting Confidential Information







Respecting Confidential Information





ACCOUNTABILITY Stimulating uptake and interest

Demonstrating visible presence & leadership by partners

Publishing requirements, concepts and approaches early in the project

Targeting communities of interest and identifying early adopters

Engaging in standardisation during the project lifetime

Publishing guidelines and practices for cloud providers and users to use

Reference implementations and pilot services





Raising societal and economic impact

Make all stakeholders accountable for the use of data in the cloud

 Shift the balance of power in the relationship between providers and users of cloud services

Scale of economics on bringing data intensive services to the market

Uptake on new added value services

Novel accountability services businesses on the way

Independent initiative for accountability in cloud services





Realising the benefits

For cloud service users

- Control and transparency over how their data is used
- Help in assessing trustworthiness of CSPs
- Support in obtaining redress

For service providers

- Techniques to make services more trustworthy
- Ways to satisfy business policies and demonstrate compliance
- Allowing differentiation

For regulators/auditors:

Assurance about compliance with policies and regulations



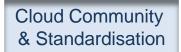


Who we are

Industry Partners









Coordinated by:







Research Institutes















R&D in technical, legal and socio-economic aspects of Accountability





Project Details

Collaborative Project under Call 8 of the 7th Framework Programme of the European Commission

DG.CONNECT – <u>Unit H4: Trust & Security</u>

Project Start Date: 1st October, 2012

Project Duration: 42 months

Contact us: info@a4cloud.eu

Stay tuned - www.a4cloud.eu





Thank You.

