

Privacy Preserving Resource Consumption in the Cloud

Motivation

Modern technologies of server virtualization and fast Internet connections promote more and more services to be transferred to so-called cloud computing infrastructures.

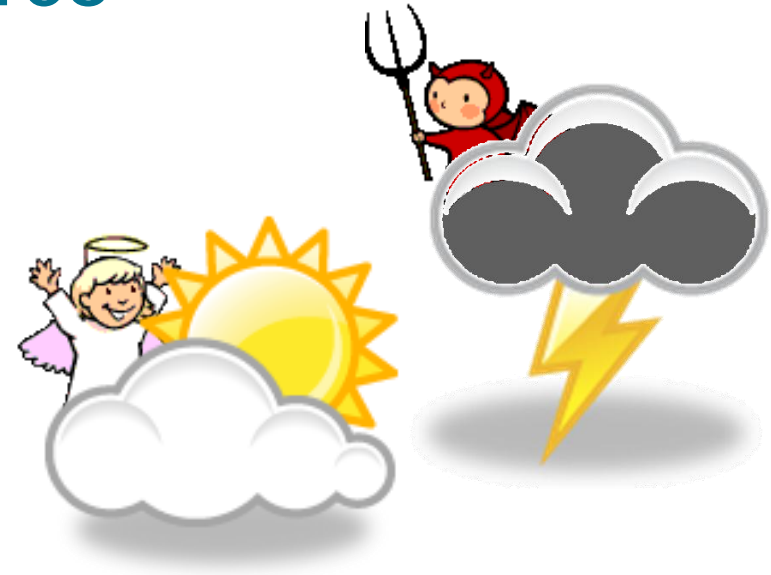
However, the seemingly simple idea of outsourcing local IT services to remote cloud hosted processing instances poses a number of data security and privacy problems to be solved.

Project Description

The scenario is a modern smartphone which wants to outsource data storage or data processing intensive tasks to a remote cloud facility.

This project will prototype an anonymity preserving cryptographic protocol and processing flow for billing the cloud resource consumption of the client, while still protecting the cloud provider from abuse.

The client platforms are ARM/Android based.



Deliverables

Source of developed prototype.

Written documentation of approach, use case and comparison with previous efforts.

Scope & Credits

The effort and credits of this project are scalable

Advisor / Contact

Martin Pirker (mpirker@iaik.tugraz.at)