



PRACTICE is co-financed by the European Commission under the Seventh Framework Programme

## **ANNOUNCEMENT LETTER**

The **PRACTICE project** has officially started on 1<sup>st</sup> November 2013 with a set duration of 36 months. It has received funding from the European Union's Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 609611.

## **PRACTICE: PRIVACY-PRESERVING COMPUTATION IN THE CLOUD**

The traditional computing paradigm is experiencing a fundamental shift: organizations no longer completely control their own data, but instead hand it to external untrusted parties – cloud service providers - for processing and storage. There currently exist no satisfactory approaches to protect data during computation from cloud providers and from other users of the cloud. PRACTICE has therefore assembled key experts throughout Europe who will work towards providing privacy and confidentiality for computations in the cloud.

PRACTICE will create a secure cloud framework that allows for the realization of advanced and practical cryptographic technologies providing sophisticated security and privacy guarantees for all parties in cloud-computing scenarios.

The main goals of the PRACTICE project are:

- eliminating the need for users to trust their cloud providers for data confidentiality and integrity;
- computation on encrypted data, which will prevent even insiders from disclosing secrets or disrupting the service;
- flexible architecture and tools that allow seamless migration from execution on unchanged clouds today towards new platforms while gradually adding levels of protection.

This will open new markets, increase their market share, and possibly lead to the acquisition of foreign markets where reach has been limited due to confidentiality and privacy concerns.

The PRACTICE project will

- enable European customers to save costs by globally outsourcing to the cheapest providers while still maintaining guaranteed security and legal compliance;
- deliver a Secure Platform for Enterprise Applications and Services providing application servers and automatic tools enabling privacy-sensitive applications on the cloud;
- include a Secure Platform that protects user data from cloud providers and other users, supporting cloud-aided secure computations by mutually distrusting parties and will support the entire software product lifecycle.

One goal of the Secure Platform is to support users in selecting the right approach and mechanisms to address their specific security needs.

Furthermore PRACTICE is

- strongly industry-driven and will demonstrate its results on two end-user defined use cases in statistics and collaborative supply chain management.
- based on real-life use cases underpinning the business interests of the partners. Our focus is on near-term and large-scale commercial exploitation of cutting edge technology where project results are quickly transferred into novel products.
- the first project to mitigate insider threats and data leakage for computations in the cloud while maintaining economies of scale.



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This goes beyond current approaches that can only protect data at rest within storage clouds once insiders have misbehaved. Moreover, it will investigate economical and legal frameworks, quantify the economic aspects and return on security investment for secure computation deployment as well as evaluate its legal aspects regarding private data processing and outsourcing.

The PRACTICE consortium is well-positioned to achieve its objectives by bringing together a team of leading industrial and research companies, a research-oriented SME as well as well respected European universities. These 18 project partners from 11 different countries form a complete chain stretching from basic research and service design, via applied research, up to end-user oriented service providers. The PRACTICE partners are:

- Technikon Forschungs- und Planungsgesellschaft mbH, Austria
- SAP AG, Germany
- Technische Universität Darmstadt, Germany
- Alexandra Instituttet A/S, Denmark
- Arcelik A.S., Turkey
- Bar Ilan University, Israel
- Cybernetica AS, Estonia
- Julius-Maximilians Universität Würzburg, Germany
- Intel GmbH, Germany
- Katholieke Universiteit Leuven, Belgium
- Inesc Porto – Instituto de engenharia de sistemas e computadores do porto, Portugal
- Aarhus Universitet, Denmark
- Technische Universiteit Eindhoven, Netherlands
- University of Bristol, United Kingdom
- Distretto tecnologico aerospaziale S.C. A R.L., Italy
- Università degli studi di Milano, Italy
- Partisia APS, Denmark
- Georg-August-Universität Göttingen Stiftung öffentlichen Rechts, Germany

For more information visit <http://www.practice-project.eu/> (active in December 2013)

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