PRISMACLOUD - PRIvacy and Security MAintaining services in the CLOUD

PRISMACLOUD is an EU Horizon 2020 research project of 42 month duration (1February 2015 – July 2018) developing the next generation of cloud security technologies. With a budget of 8.5 Million Euro over 3.5 years, the project brings together European leading companies, universities and research institutes with strong expertise and experience in the fields of cryptography, information security and cloud computing.

As the growth of cloud computing is increasing constantly, the traditional computing paradigm is experiencing a fundamental shift. Organisations using cloud computing services do no longer completely control their own data, but hand them over to external untrusted parties, i.e. cloud service providers, for processing and storage. Currently there exist no satisfactory approaches to protect data during its lifetime from cloud providers and from other users of the cloud. PRISMACLOUD develops innovative solutions based on efficient cryptographic techniques for cloud computing. These techniques improve the security of data at rest, data in move, and data in use, as well as the privacy of cloud users.

The project brings novel cryptographic concepts and methods to practical application to improve the security and privacy of cloud based services and make them usable for providers and users. The main idea and ambition of PRISMACLOUD is to enable end-to-end security for cloud users and to provide tools to protect user privacy with the best technical means possible - by cryptography.
To make this vision come true, PRISMACLOUD plans innovation in the fields of verifiability of data and infrastructure use, user privacy and anonymisation, securing data at rest, secure and efficient implementations, methodology, tools and guidelines for fast adoption.

The consortium with 16 partners from 7 different EU member states and two associated countries (Switzerland and Israel) is led by AIT Austrian Institute of Technology (Vienna, Austria) as project coordinator, and IAIK-TUG Graz University of Technology (Graz, Austria) as Technological Manager. Further partners include Atos Spain, S.A. (Spain), CEA - Commissariat à l'énergie atomique et aux énergies alternatives (France), TUDA - Technische Universität Darmstadt (Germany), ETRA - ETRA Investigación y Desarrollo S.A. (Spain), FCSR - Fondazione Centro San Raffaele (Italy), IBM - IBM Israel Science & Technology Ltd. (Israel), IRT - Interoute S.p.a. (Italy), KAU - Karlstad University (Sweden), LISPA - Lombardia Informatica S.p.A. (Italy), MPL – MikroPlan GmbH (Germany), UNEW - University of Newcastle upon Tyne (UK), UNIL - Université de Lausanne (Switzerland), UNI PASSAU - Universität Passau (Germany), XT – XiTrust Secure Technologies GmbH (Austria). Furthermore, PRISMACLOUD has initiated a User Advisory Board which consists of end-user organizations and (Cloud) security experts.