Data Privacy Re-visited During Covid19

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Abstract

The COVID19 Pandemic has highlighted our dependence on online services (from government, e-commerce/retail, and entertainment), often hosted over external cloud computing infrastructure. The users of these services interact with a web interface rather than the larger distributed service provisioning chain that can involve an interlinked group of cloud providers. The data and identity of users are often provided to service provider who may share it (or have automatic sharing agreement) with backend services (such as advertising and analytics). We propose the development of compliance-aware cloud application engineering, which is able to improve transparency of personal data use – particularly with reference to the European GDPR regulation. Key compliance operations and the perceived implementation challenges for the realization of these operations in current cloud infrastructure are outlined. This talk will also explore how the convenience-vs-privacy challenges can be realised as users and service providers go on-line, and the economics behind delivering privacy services as part of cloud-based provision.

Bio: Omer F. Rana is a Professor of Performance Engineering at Cardiff University, with research interests in high performance distributed computing, data analysis/mining and multiagent systems. He leads an EPSRC-funded project focusing on GDPR-compliance of cloudhosted services (in collaboration with Newcastle University and UCL in the UK). He is also the Dean of International for the Physical Sciences and Engineering College. He was formerly the deputy director of the Welsh eScience Centre and had the opportunity to interact with a number of computational scientists across Cardiff University and the UK. Rana has contributed to specification and standardisation activities via the Open Grid Forum and worked as a software developer with London-based Marshall Bio-Technology Limited prior to joining Cardiff University, where he developed specialist software to support biotech instrumentation. He also contributed to public understanding of science, via the Wellcome Trust funded "Science Line", in collaboration with BBC and Channel 4. Rana holds a PhD in "Neural Computing and Parallel Architectures" from Imperial College (London Univ.), an MSc in Microelectronics (Univ. of Southampton) and a BEng in Information Systems Eng. from Imperial College (London Univ.).