Sodalite

"SOftware Defined Application Infrastructures managemenT and Engineering"

SODALITE incorporates faster and easier mechanisms for software developers to abstract their applications, gaining time and reducing costs in the different software life cycle processes.

In recent years, the global market has seen a tremendous rise in utility computing, which serves as the back-end for practically any new technology, methodology or advancement from healthcare to aerospace. We are entering a new era of heterogeneous, software-defined and high-performance computer and cloud environments.

SODALITE, a Research and Innovation Action project (RIA) coordinated by XLAB and funded under the European Commission Horizon 2020 program, addresses the complexity caused by this heterogeneity by providing application developers and infrastructure operators with tools that abstract their application and infrastructure requirements.

Deploying SODALITE tools will **enable simpler and faster development**, operation, and execution of heterogeneous applications and result in better performance, quality, manageability, and reliability.

SODALITE will follow a path to simplify and ease the way developers approach the development of next-generation applications in the convergence between Cloud computing and High-Performance Computing (HPC) for the benefit of the European Industry. Moreover, **SODALITE** supports the digital transformation of the European industry by increasing design and runtime effectiveness of software-defined infrastructures, to ensure high-performance execution over dynamic heterogeneous execution environments. SODALITE simplifies model application and infrastructures, improves manageability, collaboration and reduces time to market.

The project coordinator, **Daniel Vladušič** (XLAB) affirms that “Performance-oriented Infrastructure-as-a-Code in heterogeneous environments is the next step for the modern systems design and overall lifecycle”.

Adrian Tate, Director of Cray´s European Research Lab said: “For Cray customers, performance has always been primary but in cloud environment performance is lost due to virtualization and machine abstraction. This project draws on Cray´s vast HPC knowledge to figure out how native performance can be retained while providing the flexibility that is typical of a cloud environment”

With a total budget of 3.650.731,000€, SODALITE will run for 36 months from February 2019 to January 2021. The SODALITE multidisciplinary consortium includes a strong computer science research in Europe (XLAB, Slovenia), a global service provider (ATOS, Spain), a global leader in supercomputing (CRAY, United Kingdom), a High-Performance Computing Centre for research and service institution affiliated to the University of Stuttgart (Germany), Researchers from Politecnico di Milano (Italy), a German SME focused on enabling adaptable and ethical data utilization (ADAPTANT, Germany), the European network of Cybersecurity centers and competence Hub for innovation and Operations (CERTH, Greece), IBM Research (Israel), and finally The European Research Institute in Service Science(UVT-JADS, Netherlands).

For more information on the project, please contact the coordinator Daniel Vladušič (daniel.vladusic@xlab.si) or visit our website www.sodalite.eu. SODALITE is funded by the EC under Grant Agreement 825480.