

## PRESS RELEASE

Latest news

# HPI presents environmental monitoring software at SAP customer fair in the USA

17 May 2016

Potsdam/Orlando. The SAPPHIRE NOW in Orlando (USA) will see scientists from the Hasso Plattner Institute (HPI) demonstrate how analysing vast volumes of data can help visualize air quality at large port facilities. From 17 to 19 May, the Potsdam IT specialists will be attending the world's largest customer fair run by IT group SAP SE (stand 100) to present a software solution designed to enable Hamburg's port to track emissions at all times and thereby assists experts in minimising environmental pollution, for example. In addition to the project with the Hamburg Port Authority (HPA) the HPI will also be presenting twelve other applications from its latest research on main-memory databases and new online learning formats for universities and companies.

"Every day, the port of Hamburg records around 1.5 million measurement readings from ship movements, traffic flows and environment sensors. Our software application enables these different data sources to be linked together. Furthermore, the vast amounts of data can be visualized in order to give a comprehensive picture of the port facility", explains Dr Matthias Uflacker, deputy chair of the HPI faculty for Enterprise Platforms and Integration Concepts. According to Uflacker, it will allow air quality trends to be accurately represented for specific time frames and regions.

The software can be used to approximately calculate and track sulphur dioxide readings, nitrogen dioxide readings, particulate matter readings, and the positions and traffic flows of various ships and vehicles on an interactive map of the port area. The application is based on the SAP HANA platform, whose in-memory database technology was co-developed at the HPI, where it continues to be researched. It speeds up the process for analysing vast volumes of data in real time.

### **SAPPHIRE NOW: Plattner as keynote speaker, presentations and projects**

The SAP HANA platform is the main topic of this year's SAPPHIRE NOW, which is aimed at SAP customers from all over the world. In addition to further projects relating to the main-memory database technology, the HPI will also be presenting its MOOC House learning platform, where companies

and educational establishments can run their own open online courses, known as Massive Open Online Courses (MOOCs), on all kinds of topics.

HPI founder and SAP supervisory board chairperson Prof. Hasso Plattner will give a keynote speech at the event, while HPI director Prof. Christoph Meinel will hold two other presentations on the challenges of digital transformation (Wednesday) and working with the openSAP and openHPI learning platforms (Thursday). On the Wednesday, Dr Matthias Uflacker will speak about the latest research projects based on the main-memory database technology. All the projects representing the four areas of expertise – Enterprise Platform and Integration Concepts, Internet Technologies and Systems, Computer Graphics Systems and Business Process Technology – will be exhibited at stand 100.

#### **Editorial information:**

All information on HPI's appearance at SAPPHIRE NOW can be found here: <http://hpi.de/sapphire-now>

The latest HPI announcements on SAPPHIRE NOW can be found on our social medial channels:

<https://www.facebook.com/HassoPlattnerInstitute>

[https://twitter.com/HPI\\_DE](https://twitter.com/HPI_DE)

#### **Profile of Hasso Plattner Institute**

The Hasso Plattner Institute for Software Systems Engineering GmbH (<https://hpi.de>), at the University of Potsdam, is Germany's university excellence center for IT-Systems Engineering. HPI is the only university institution in Germany offering the Bachelor's and Master's degree in "IT Systems Engineering"—a practical and engineering-oriented alternative to conventional computer science studies. Current enrollment is at approximately 480 students. The HPI School of Design Thinking is Europe's first innovation school for university students. It is based on the Stanford model of the d.school and offers 240 places annually for a supplementary course of study. There are a total of twelve HPI professors and over 50 guest professors, lecturers and contracted teachers at the Institute. HPI carries out research noted for its high standard of excellence in its eleven topic areas. Research work is also conducted at the Potsdam HPI Research School for PhD candidates as well as at its branches in Cape Town, Haifa and Nanjing. HPI teaching and research focuses on the foundation and application of largescale, highly complex and distributed IT systems. The development and exploration of user-driven innovations for all sectors of life is an additional area of importance. HPI always earns the highest positions in the CHE university ranking.

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