

# WS<sub>4</sub>D – WEB SERVICES FOR DEVICES

CROSS DOMAIN TECHNOLOGY FOR SMART-SYSTEMS



The development of self configuring and distributed Embedded Systems will be more and more influenced by existing internet technologies. The usage of these technologies in the domains of healthcare, industrial automation, telecommunications, home communication and automotive appliances will bring the challenges to integrate the corresponding and needed protocols. The WS<sub>4</sub>D solutions and the WS<sub>4</sub>D community will face these challenges to enable Web Service based interactions in heterogeneous devices ensembles for smarter environments.

*WS<sub>4</sub>D - Web Services for Devices Technology* (see [www.ws4d.org](http://www.ws4d.org)) developed at the University of Rostock establishes the basis for a comprehensive middleware to connect existing and future heterogeneous device ensembles. WS<sub>4</sub>D enables use of Web Services on resources-constrained devices including wireless sensor network nodes. WS<sub>4</sub>D offers software solutions that implement the recently approved OASIS standard Devices Profile for Web Services (DPWS).

**WS<sub>4</sub>D** is a basic technology to enable the „Internet of Things“

- enabling the intelligent networking of devices and appliances
- full compatibility with Windows 7, .NET Micro Framework
- it represents the OASIS® DPWS Standard
- developer tools and stacks for C/C++ and Java
- easy creation of devices ensembles and combination with WS<sub>4</sub>D-Pipes
- Open Source licensed

## WHAT WE WILL PRESENT?

- We present the world wide first SpO<sub>2</sub> sensor based on WS<sub>4</sub>D-uDPWS
- We will give an overview about the WS<sub>4</sub>D technology and answer all questions
- We will present advanced software toolkits for WS<sub>4</sub>D development
- We will demonstrate the capabilities of WS<sub>4</sub>D and WS<sub>4</sub>D-Pipes



## Contact and more information on WS4D

University of Rostock - Institute of Applied Microelectronics and Computer Engineering

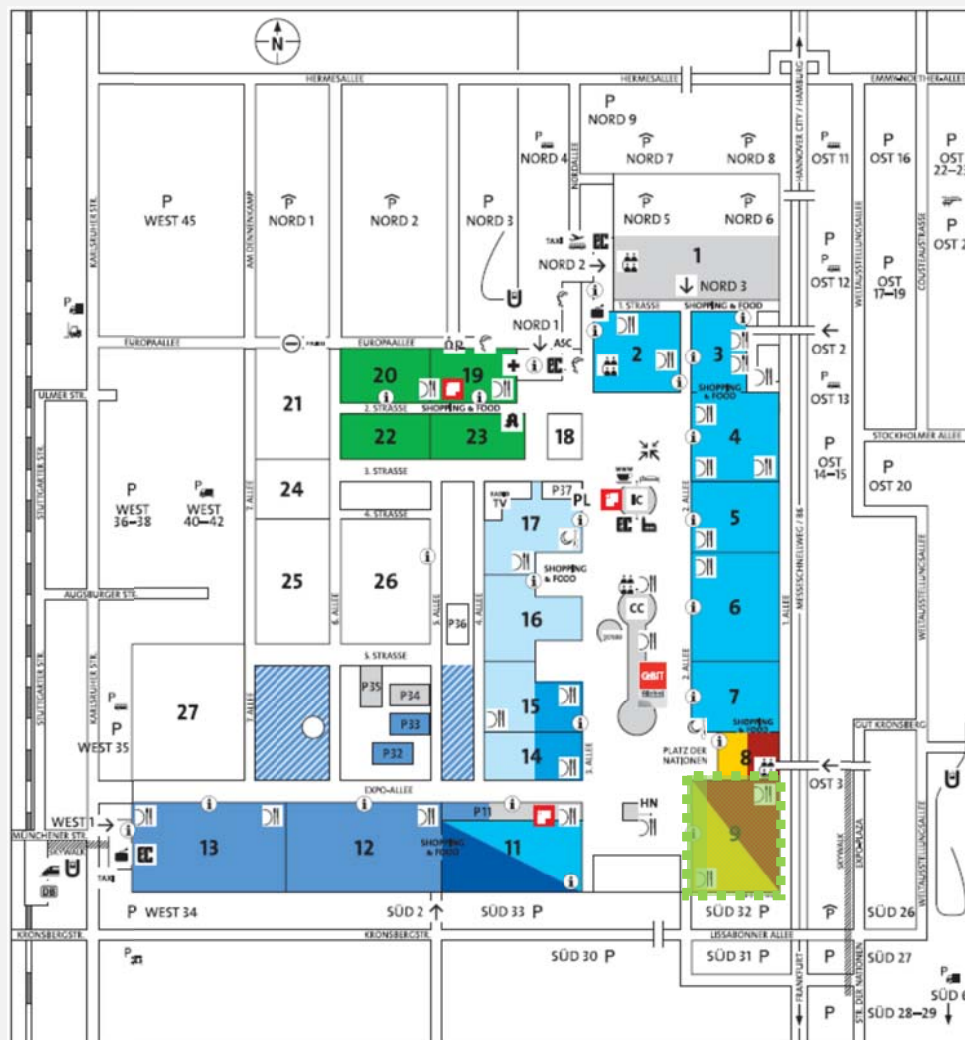
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## Our location at the CeBIT 2010



## Our location at the CeBIT 2011

Halle 9, Stand C09 → Universities and Companies from M-V