



## Synapticon shows OBLAC 1.0 at Embedded World – Virtualized Development of Embedded Systems in the Cloud

**Gruibingen (Germany), February 12, 2015** - Synapticon, located near Stuttgart, presents a revolution in the development process of embedded systems at this year's Embedded World. On stand 190 in Hall 5 of the Nuremberg Fair, the company shows OBLAC 1.0, its first time web-based development environment for configuring, programming, and maintenance of embedded systems. With OBLAC 1.0 engineers and developers can edit handy, fast and inexpensive complex development projects and realize virtually at their fingertips.



“Cost and time pressures are phenomena that have an impact on the development of embedded systems. Conventional approaches hardly meet today’s requirements. The consequences are often stress, improper solutions and incomplete projects,” said Nikolai Ensslen, CEO and founder of Synapticon. “At Embedded World, we are introducing OBLAC 1.0, a web-based platform that allows us to overcome many challenges that developers cause a headache today.”

OBLAC automates the entire structure of an embedded hardware and software infrastructure, which is usually required for the development of a new application. With the web-based development environment even very complex hardware systems based on Synapticon SOMANET, including all sensors and actuators, can be quickly configured graphically. The software required to use this hardware, such as

interface drivers, communication stacks or motor control packets, is then generated individually by pressing a button. The user can immediately begin developing his application in C and C ++.

“Those who prefer using their familiar development environment such as Eclipse can easily export the entire project at their fingertips,” said Nikolai Ensslen. “OBLAC virtualizes also the development process of embedded systems. In traditional embedded systems, the user first needs a development board, to set it up and install it than, which takes sometimes more, sometimes less effort. But at the earliest after several days he can start evaluating the technology. We reduce this lead time to a fraction.”

### System software at your fingertips

With OBLAC, the evaluation of embedded system solutions based on Synapticon technology, can start after a few minutes: With the browser the user logs into OBLAC (<https://oblac.synapticon.net/>), creates a new project and configures the desired system hardware. Then, the developer at the push of a button can generate the required system software (Board Support Package BSP) for all hardware nodes. After that the user can create in the code editor an own program or view and change a demo. This software the developer can compile online in the Synapticon cloud and also directly in the simulator - including an analysis of real-time behavior.

“All this is free and without obligation until the user decides to purchase hardware. If he is convinced of the solution, the hardware of the applied project can be ordered at his fingertips and is available after about five to seven days,” promises the winner of the TÜV SÜD Innovation Awards for Digitized Industries. „Once the developer has got the hardware, he can transmit and execute the programmed software on it.”

For companies that do not yet trust Synapticon’s free cloud solution or cannot use it for privacy or compliance reasons, Synapticon offers an alternative: OBLAC can be installed for productive use in the respective corporate network or on dedicated servers on the Internet. The server images provided by Synapticon are easy to install in VMware or VirtualBox virtualization solutions. For using the platform in this way, Synapticon provides a simple and

affordable licensing model.

### **Modules for rapid prototyping and small batch series - system-on-chips for cheap mass production**

In addition to OBLAC 1.0 Synapticon shows at the Embedded World the SOMANET modules. For the development of real-time systems SOMANET nodes can be configured on a series of processor, communication and interface modules. Each module comes with a software package. The SOMANET modules are suited for rapid prototyping and small batch series of sophisticated control solutions in robotics, automation, logistics, medical technology and e-mobility. A sort of Arduino for professional and performance-critical applications.

Another offering that Synapticon presents at the fair in Nuremberg are the SOMANET system-on-chips for cost-effective transferring of solutions (that have been developed based on SOMANET modules) on mass production. They also allow the development of customized applications for cyber-physical systems and the Internet of Things. The extremely powerful and cost-effective system-on-chips are integrating industrial communication, sensor data acquisition and motor & motion control in a single component.

“In addition to hardware and software, we provide our customers also with our know-how in a very practical way. We develop regularly turnkey solutions and products for our customers,” Nikolai Ensslen summarizes. „Of course, we use here the SOMANET hardware and OBLAC software that we present at the Embedded World. We also like to work together with embedded development houses, which can achieve a significant competitive advantage. So, ambitious development suppliers attending this year’s Embedded World should visit us at booth 190 in hall 5.”

**### END ###**

### **About Synapticon**

Synapticon GmbH, established in 2010, is a young embedded systems company based in the region of Stuttgart, Germany. The company specializes in hardware and software for sensor & actuator-intensive, internet-connected systems. Customers benefit from Synapticon’s cross-domain expertise through a range of customizable products and turn-key solutions for robotics, autonomous vehicles, smart industrial automation, special machinery and the Internet of Things. The Synapticon DYNARC platform for distributed computing & control comprises the vertical product lines SOMANET, NEOCORTEX and OBLAC. It enables developers of cyber-physical systems to easily configure, build and program distributed computing systems with fully integrated actuator control, sensor data acquisition and high bandwidth data processing. ([www.synapticon.com](http://www.synapticon.com))

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