The webinos project will define and deliver an Open Source Platform and software components for the Future Internet. The main platform delivery will be in the form of web runtime extensions, and complimentary infrastructure components. This will enable web applications and services to be used and shared consistently and securely over a broad spectrum of connected devices, including mobile, PC, home media (TV) and in-car units.

At a glance

Project title (full):
webinos (Secure Web OS Application Delivery Environment)

Project coordinator:
Dr. Stephan Steglich
Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V.

Partners:
Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V. (DE), Deutsche Telekom AG (DE), GEIE ERCIM (F), University of Oxford (UK), Telecom Italia S.p.A. (I), Netherlands Organization for Applied Scientific Research TNO (NL), BMW Forschung und Technik GmbH (DE), AmbieSense Ltd (UK), Sony Ericsson Mobile Communications AB (S), Samsung Electronics (UK) Ltd, (UK), Volantis Systems Ltd (UK), VisionMobile Ltd. (UK), National Technical University of Athens (GR), FutureText (UK), Istituto Superiore Mario Boella Sulle Tecnologie Dell'Informazione e delle Telecomunicazioni (I), Politecnico di Torino (I), Universita degli studi di Catania (I), Technische Universität München (DE), Interdisciplinary institute for Broadband Technology (B), Telefónica Investigación y Desarrollo S.A. (ES), DOCOMO Communications Laboratories Europe GmbH (DE), Impleo Ltd (UK)

Duration:
09/2010 – 08/2013

Total cost:
14 Mio €

Programme:
FP7-ICT-2009-5 - Objective 1.2

Further information:
http://webinos.org
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webinos in a Nutshell

The webinos vision is to build a multi-platform, applications platform based on web technology that is fit for purpose, across a wide range of connected devices. webinos will ensure that the platform technologies for describing, negotiating, securing, utilizing device functionalities and adapting to context are fit for purpose.

Innovations in contextual description will be broad, including but not limited to, device capabilities, network access, user identity and preferences, location, behaviourally induced properties and finally the more complex issue of the users' social network context and social media engagement.

webinos will boost the industry migration towards web-based services. webinos will support this by providing interoperable, standards based, open source technology usable across domains with direct commercially exploitable value.

webinos will also act as an industry catalyst to encourage collaboration and discourage fragmentation in this space. There are strong industry moves towards Internet friendly technology and Internet integrated offerings. A window of opportunity exists to place the webinos technology on a robust open foundation that will remove economic barriers to engagement, embody policy on data privacy in concrete technology and create a centre of web centric expertise.

Web-based Application Platform

webinos supports the following key concepts:

- webinos builds on the achievements of the Web community and extends an open source web runtime environment.
- webinos symbolizes a leap forward: it is a federated web runtime that offers a common set of APIs to allow apps easy access to cross-user, cross-service, cross-device functionality, in an open yet secure manner.
- webinos aims to support easy programming of applications by offering a single virtual device that can consist of all devices owned by a user. This virtual device inherently represents the changing circumstances of context and devices.
- webinos will create open specifications and open source reference implementations that not only show the feasibility of specifications but also simplifies the adaptation by the industry.
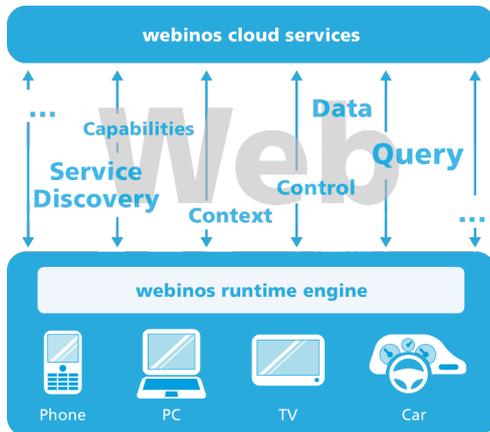
The resulting application platform features web components that can be deployed on mobiles, PC, in-car units and TVs supporting a web runtime, will support the rapid creation of innovative and secure web applications, where...

- applications can be used in several contexts across all user devices.
- applications can make use of the specific capabilities and resources that the underlying hardware platform provides.
- applications can securely access private and non-private data and other services on the cloud and social web, as well as data on the user terminal.
- Applications are developed once by service providers and deployed anywhere.
- manufacturers and network operators have a service platform constituted by open standards and open source, which satisfies the requirements of the four domains mobile, PC, Home media and in-car units.

webinos – A Secure Platform

webinos will directly address security and privacy issues to support the expectations and requirements of end users, developers and other stakeholders in the mobile application ecosystem. The specific challenges that will be addressed include how to provision and adapt security across a range of devices, services, and networks as well as how individuals can gain control over the privacy aspects of their web presence regardless of the device or web application being used.

Context and privacy are intimately intertwined: rich context is valuable but without user-controlled privacy it becomes a liability. This dual approach will be a hallmark of the webinos design.

Specification and Development

The specification and development of webinos will be carried out in two 18-month-cycles, each encompassing the same set of activities:

1. Requirement analysis
2. Specification
3. Application Platform Development
4. Proof-of-Concept and Evaluation

Stay tuned for updates on device APIs to access resources on different kind of devices, fine-grained policy mechanisms to control access to such resources, and Web-based technologies to establish service-interworking across manufacturer boundaries.

Be Part of webinos

webinos is driven by a strong consortium built from mobile phone manufacturers, mobile telecommunications operators, car manufacturers, and leading universities and research facilities.

Our joint goal is the development of a secure application platform that facilitates the creation of apps for multiple devices and operating systems. The webinos platform will overcome the restrictions of proprietary and vendor-specific technologies, and therefore enable rapid creation of more personalized, secure, and innovative applications. To this end, in the coming months there will also be an open source project for development of the platform itself.

Visit http://webinos.org to keep track, participate, download publications, subscribe to our mailing lists, read our blog, and connect via social media.