The ebbits consortium consists of nine organisations from five European countries, representing a wide taste of Europe in terms of population, culture and economic strength.

The consortium unifies a number of research groups that have a world-leading position in their respective fields:

FIT, Fraunhofer Institute for Applied Information Technology:

www.fit.fraunhofer.de

CNET, CNet Svenska AB: www.cnet.se

SAP AG, SAP Research: www.sap.com

COMAU, COMAU S.p.A.: www.comau.it

TUK, Technical University of Kosice: www.tuke.sk

ISMB, Istituto Superiore Mario Boella: www.ismb.it

TNM, TNM A/S: www.tnmit.dk

IN-JET, In-JeT ApS: www.in-jet.dk

INTERSOFT, Intersoft AS: www.intersoft.sk

Follow the project at: www.ebbits-project.eu

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The ebbits project is a four-year European research project which started in 2010. It is co-funded by the European Commission within the 7th Framework Programme in the area of Internet of Things and Enterprise Environments under Grant Agreement No. 257852. For more information, contact the project coordinator Dr. Markus Eisenhauer from Fraunhofer FIT: markus.eisenhauer@fit.fraunhofer.de

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Enabling the Business-Based Internet of Things and Services

SEVENTH FRAMEWORK PROGRAMME

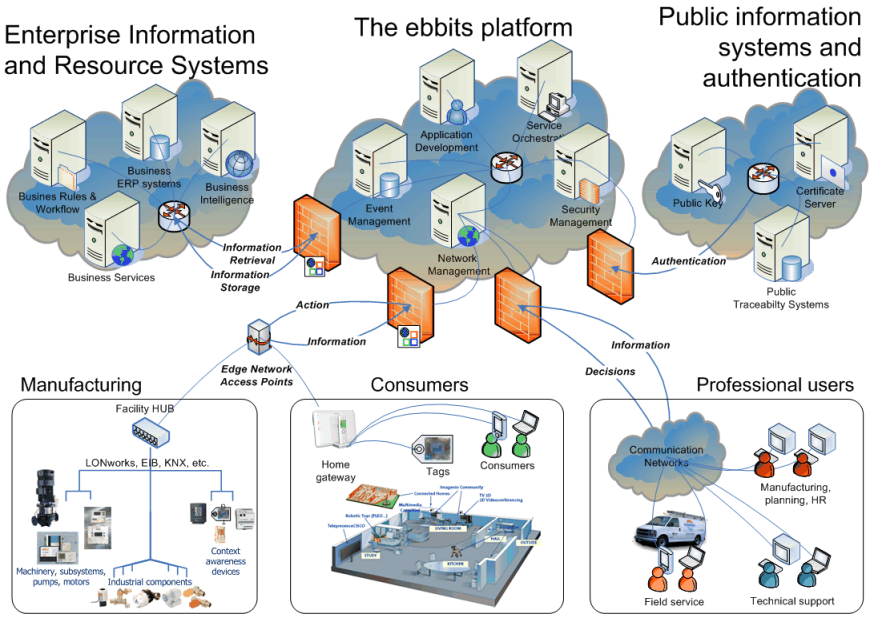
Bridging the gap between enterprise systems and the world of people, things and services

The ebbits project does research in architecture, technologies and processes that allow businesses to semantically integrate the Internet of Things into mainstream enterprise systems and support online life cycle management.

The aim is to provide semantic resolution to the Internet of Things and thereby present a new bridge between back-end enterprise applications and the surrounding physical world.

This is achieved by establishing a communication infrastructure that automatically and dynamically connects to sensors and devices in the physical world and to mainstream back-end information systems, public authentication systems and regulatory information sources, providing data access for professional users as well as consumers.

The platform is based on a Service-oriented Architecture with open protocols and middleware where every subsystem or device is transformed into a web service with semantic resolution. The ebbits platform thus enables the convergence of the Internet of People, the Internet of Things and the Internet of Services into the “Internet of People, Things and Services” for business purposes.



Follow the life cycle of products

The platform will be demonstrated in end-to-end business applications that locate, connect to and monitor a product during its entire life cycle. Focus is on two applications: Automotive manufacturing and food traceability.

In automotive manufacturing processes, the ebbits platform will support interoperability and interconnectivity between various subsystems and demonstrate real-time optimisation metrics, including energy savings.

In terms of food traceability, the platform makes it possible for the consumer to trace the life cycle of the product and receive information e.g. about unsafe or counterfeit products and “best-before” dates by means of RFID tags.

A widely deployed platform and service concept

The vision is that ebbits will be a widely deployed platform and service concept for the Internet of People, Things and Services where it is possible for manufacturers to:

- Integrate physical devices, systems and components directly into their optimising systems, i.e. managing workflows and turn them into useful, value-added business services or service components
- Obtain interoperability between various subsystems in manufacturing environments across manufacturing cells, lines end entire plants with the aim to support production and energy optimisation
- Meet increasing consumer demands and regulatory requirements for authentication and traceability of products by providing support for authentication and traceability through ubiquitous services integrated in wireless communication networks and existing smart home infrastructures
- Network products with mainstream enterprise systems in an easy and cost-effective manner via interoperable solutions in an open architecture