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**Title of the presentation /Tutorial**

**Presentation: The Product Line Unified Modeler Approach to Software Product Lines, market experiences.**

**Speaker(s)**

Joseba Laka – ESI Tecnalía

**Category**

- Getting Started       Intermediate       High Maturity  
 Presentation       Tutorial

**Target Audience**

- Senior Management       IT Managers  
 Project Leaders       SEPG Leaders  
 Practitioners       Others:

**Key Words**

Software product lines, Product Line Unified Modeler, Common Variability Language.

**Abstract (maximum 250 Words)**

In this presentation we will introduce the audience to the Product Line Unified Modeler (PLUM) toolset and approach developed by ESI-Tecnalia, including the underlying methods, ready-to-use technologies and market experiences. We will also explore the potential extension points of the technology as well as the barriers identified while deploying software product lines (SPL) on concrete organizational contexts. SPL Engineering involves many different aspects of variability management including enforcing tight authorization and role based access control mechanisms, keeping track of every change made by a user/role to any asset of the product line, maintaining the relationship between the assets of the product line and its generated products in order to propagate any modification to all the products affected by each asset, and managing who and why each product differs from another, with special focus on quantitative techniques that help a SPL manager to industrialize the production of software and related artifacts. The current PLUM technology is the result of 3 years of intense research, development and piloting transfer executed by ESI-Tecnalia in order to improve the productivity of software industries, as well as the final quality of the mass-customized software artifacts of these industries. The SPL approach lies on several well known decision and feature based variability techniques, with more innovative model driven based variability management technologies to be supported by PLUM in 2011, such as the future Common Variability Language (CVL) under standardization within the OMG.

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The current CVL effort shows the need for standardization of variability management models and technologies in order to create industrial strength, compatible and interoperable solutions for SPL implantation.

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### CV (200 words)

### Photo

Joseba Laka is the manager of the Software and Embedded Systems team of ESI-Tecnalia. He holds an MBA from the “Escuela de Organización Industrial” (EOI) – Madrid and Informatics Engineering from the University of Deusto (Spain). He starts his working career as software developer in variety of roles and organisations between 1994 and 1995. In 1996 he gets involved at ESI in the R&D project VISTA-LAB (early augmented reality through VR platforms). Still in 1996, he joins Airtouch-Airtel (GSM start-up), which later becomes Vodafone Spain. Between 1996 and 1998 he works in several international software projects, based initially between Madrid, Lisboa and Bilbao. From 1999 to 2001 he leads different teams of the Fenix project, which builds and deploys brand new core BSS and OSS systems for Vodafone Spain. Later he becomes manager of Provisioning Platforms at Vodafone Spain (Madrid) to rejoin international activities between 2002 and 2006 within Vodafone Global Technology (based in Newbury, Milan and Madrid), working for projects at 14 different countries. In 2006 he joins ESI as R&D manager for Embedded Software and Systems. In this period he has been involved in a variety of projects such as ITEA-COSI, ITEA-SERIOUS, ITEA-EVOLVE, FP7-ProSE, ARTEMIS-eDIANA & SOFIA etc. Moreover he has developed the Productivity Tools Business Area at ESI, focused on MDA-MDD support and development tools, Software Product Line tools and Reuse Based Software Factories deployments and supporting tools. He is actively involved in the Spanish PROMETEO Embedded Technologies cluster as well as in open source related initiatives in Spain.



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