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Collaborative Engineering LAB

www.ecolleg.org

E-COLLEG - Advanced Infrastructure for Pan-European Collaborative Engineering
IST-1999-11746
2000 - Sept. 2003

E-Colleg develops technology that will enable engineers located in remote sites to efficiently collaborate over the Internet

Key target – ACI: *Advanced Collaborative Infrastructure*
that will enable seamless Internet-based
(multi-site and multi-platform)
integration and management of tools and data

ACI components:
- Basic Collaborative Services
- Advanced Tool Registration and Management Services (TRMS)
- XML-based Integration Technologies
- Collaborative Extensions to Design Tools

Two industrial cases in distributed engineering:
- Thales Optronique / ITE
- Infineon Technologies / SUT

Specification
IP development
IP development
Design integration
Simulation
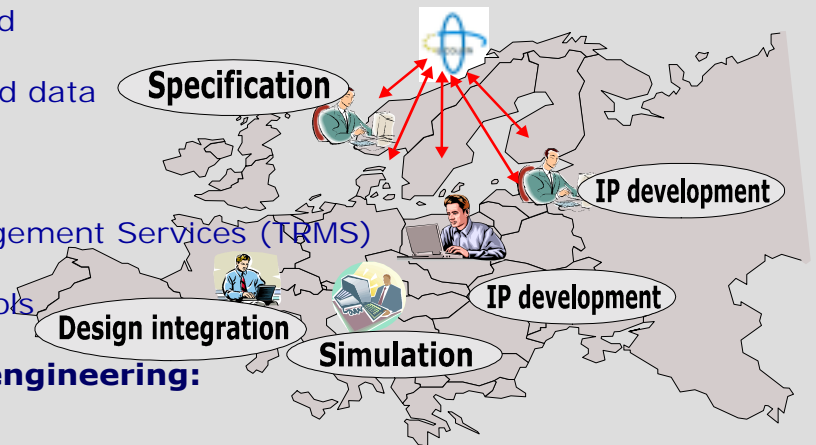
BASIC COLLABORATIVE SERVICES:
- **Definition and implementation of complex distance-spanning engineering workflows**
- **Heterogeneous environment (OSs, domains, etc.)**
- **Higher level of workflow automation**
- **Profound experiments through 2 case studies: Thales Optronique/ITE, Infineon/SUT**
- **Definition of requirements for advanced services (TRMS)**
- *but*
- **Passive tool-integration & oriented towards ASTAI(R)**

TRMS:
- **Open platform for dynamic tool-registration and management**
- **Dynamic, active advanced tool registration and discovery through Jini, PnP**
- **Generic data and tool encapsulation through XML, XSLT**
- **Standard technologies: XML, Corba, SNMP, WfXM, SOAP**
- **Integration of available service tools, e.g. security plug-in**

XML-BASED EDA TOOL INTEGRATION:
- **Already supported by a spectrum of tools for transformations, queries, editing validation**
- **Increasingly used for bi-directional transport of data and structure between applications**
- **XML is flexible enough for special extensions**

COLLABORATIVE EXTENSIONS TO DESIGN TOOLS:
- **Collaboration via Web-enabled Auriga™ simulation services**
- **Fine-grain version control with Intellectual Property protection**

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