

SECOND OPEN CALL

- ▶ Second Open Call for **additional Application Experiments** within the CloudFlow Project will be open from June to September 2015.
- ▶ with **1 million euros** budget available for future project partners!
- ▶ Application Experiments shall be rooted in computational technology for manufacturing and engineering industries, preferably SMEs, in stages covering but not limited to:
 - ▶ design (CAD),
 - ▶ simulation (product, process, factory, ...),
 - ▶ optimization,
 - ▶ visualization,
 - ▶ manufacturing planning and execution,
 - ▶ quality control and
 - ▶ data managementaddressing workflows along the value chain in and across companies.
- ▶ www.eu-cloudflow.eu/open-calls/second-call.html
- ▶ **Open from June 30 to September 30, 2015**

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Cloudflow

**SECOND
OPEN CALL**

**COMPUTATIONAL CLOUD SERVICES AND
WORKFLOWS FOR AGILE ENGINEERING**



CONCEPT

WHAT'S THE IDEA?

- ▶ CloudFlow is a European FP7 IP project connecting **22 partners** from **11 European countries**.
- ▶ The project goal is to integrate Cloud based computational services into established **engineering workflows** and standards.
- ▶ CloudFlow Project aims to empower **different scalable computational services**, without the need for costly high performance local infrastructure or complex software installations.
- ▶ With this project and innovation initiative for the manufacturing sector the European Commission will enable high-tech SMEs to exploit the potential of ICT to help **grow their businesses**.

FIRST WAVE EXPERIMENTS

CloudFlow enables engineers to access services on the Cloud spanning domains such as CAD, CAM, CAE (CFD) systems and PLM, and combines them to integrated workflows leveraging HPC resources.

CloudFlow will build on existing standards and components to facilitate an as-vendor-independent-as-possible Cloud engineering workflows platform.

Experiments are an integral concept of the project. They are SME-driven use cases for the CloudFlow platform that is being developed. In the first project phase the CloudFlow platform will be evaluated by implementing, executing and validating six 'internal' experiments:

- ▶ CAD on the Cloud,
- ▶ CAM on the Cloud,
- ▶ CFD on the Cloud,
- ▶ PLM on the Cloud,
- ▶ Systems simulation on the Cloud and
- ▶ Point cloud vs. CAD comparison on the Cloud.

FIRST WAVE EXPERIMENTS



SECOND WAVE EXPERIMENTS

SECOND WAVE EXPERIMENTS

The first Open Call of CloudFlow was looking for seven additional application experiments to which 36 proposals have been submitted. The selected application experiments span the following topics:

- ▶ Electronics Design Automation (EDA): Modelling of MEMS Sensors
- ▶ Automobile Light Design: Thermal Simulation of Lighting Systems
- ▶ Plant Simulation: Optimization of Steel Structure Manufacturing
- ▶ SIMCASE: Discrete Event Simulation of Welding Lines
- ▶ Cooling Air-Flow Optimization for Compressors
- ▶ Multiphase Flow Simulation of Bioreactors
- ▶ CFD Design of Biomass Boilers

These seven application experiments bring 18 additional beneficiaries to the CloudFlow project: seven end users, three R&D institutions, six independent software vendors and two HPC center.