



Contribution ID: 287

Type: **not specified**

A Grid-based Collaborative Environment for new Space Systems design

Tuesday 2 October 2007 11:00 (20 minutes)

Nowadays, space activities are characterised by increased constraints in terms of cost and schedule combined often with a higher and higher technical and programmatic complexity.

To answer this challenge, the European Space Agency has set up the Concurrent Design Facility starting in 1998. This has widely demonstrated the advantages of applying the Concurrent Engineering approach to the assessment and conceptual design of future space missions and has raised an enormous interest among the European partners (academia, scientific communities, industry, other agencies) in the space sector.

At the same time, starting from mid 90's, a remarkable increase in computing power has been achieved by designing and prototyping technologies, most notably the Grid, to support distributing tasks and data on distributed computing centres linked with high-speed networks. Grid technology can, therefore, provide the means for secure connectivity of design environments as well as integrate multiple heterogeneous systems into a powerful virtual "single" system.

Within this framework, the European Space Agency, at beginning of 2006, awarded a project called Grid-based Distributed Concurrent Design (GDCCD) to study how to allow geographically distributed facilities to interact each other in real-time over wide area networks adopting the Grid technology for the purpose of space projects, to make the structure deployment reliable, cheap and compatible with Concurrent Facilities.

Presenter: BECO, Stefano (ElsagDatamat)

Session Classification: Business Track