Contribution ID: **22**                                                                 Type: **Parallel**

# PoD: dynamically create and use remote PROOF clusters. A thin client concept.

*Monday 21 May 2012 17:25 (25 minutes)*

PROOF on Demand (PoD) is a tool-set, which dynamically sets up a PROOF cluster at a user's request on any resource management system (RMS). It provides a plug-in based system, in order to use different job submission front-ends.
PoD is currently shipped with gLite, LSF, PBS (PBSPro/OpenPBS/Torque), Grid Engine (OGE/SGE), Condor, LoadLeveler, and SSH plug-ins. It makes it possible just within a few seconds to get a private PROOF cluster on any RMS. If there is no RMS, then SSH plug-in can be used, which dynamically turns a bunch of machines to PROOF workers.

In this presentation new developments and use cases will be covered.

Recently a new major step in PoD development has been made. It can now work not only with local PoD servers, but also with remote ones.
PoD's newly developed "pod-remote" command made it possible for users to utilize a thin client concept. In order to create dynamic PROOF clusters, users are now able to select a remote computer, even behind a firewall, to control a PoD server on it and to submit PoD jobs. In this case a user interface machine is just a lightweight control center and could run on different OS types or mobile devices.
All communications are secured and provided via SSH channels. Additionally PoD automatically creates and maintains SSH tunnels for PROOF connections between a user interface and PROOF muster.

PoD will create and manage remote and local PROOF clusters for you. Just two commands of PoD will provide you with the full functional PROOF cluster and a real computing on demand.

The talk will also include several live demos from real life use cases.

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**Session Classification:**  Distributed Processing and Analysis on Grids and Clouds

**Track Classification:**  Distributed Processing and Analysis on Grids and Clouds (track 3)