

PROOF on Demand (PoD)

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PoD is a set of utilities, which allows starting a PROOF cluster at user request, on any resource management system. Installation is simple and doesn't require administrator privileges, and all the processes run in user space. PoD gives users, who don't have a centrally-administrated static PROOF cluster at their institute, the possibility to enjoy the full power of interactive analysis with PROOF.

PoD is a specially designed solution to provide a PROOF cluster on the fly.

Native PROOF connections

Whenever possible PoD setups a direct PROOF connections between nodes. It results in a full functional PROOF cluster. Users gets native speed and the whole range of functions, which PROOF provides. To use native connections an incoming traffic must be allowed on PoD workers. Otherwise PoD uses packet-forwarding algorithms.

Multiuser/-core environment

PoD implements an automatic port mapping algorithms to properly start and handle several PoD instances (servers/workers) on the same machine by different users. PoD also automatically manages cases when several PoD workers are started on the same node.

Easy in use

One click installation. The process of installation is fully automated and is in a user space. PoD works out of the box. Its distributive contains everything, users need to just immediately start to work with it right after the installation.

Packet-forwarding

When worker nads are behind a firewall than PoD uses its packet-forwarding algorithms to maintain the PROOF traffic. The algorithms are very efficient, there will be no speed penalty, but some PROOF function will be missing (submergers, online logs).

GUI & Command-line

PoD provides a simple and intuitive graphics user interface in order to simplify access to its functionality. For user's convenience there is also a command line interface, which makes it easier to manage PoD cluster remotely with a bad internet connection or in a batch mode.

Different job managers

PoD supports different job manager via plug-in system. It is very easy to extend PoD to support different kinds of resources. PoD currently supports gLite and LSF. Release v2.1.4 will be shipped with an SSH plug-in. In the future versions more plug-ins will be implemented, such as PBS, Condor and SGE.



3 steps to get your private PROOF cluster ready

