

POD

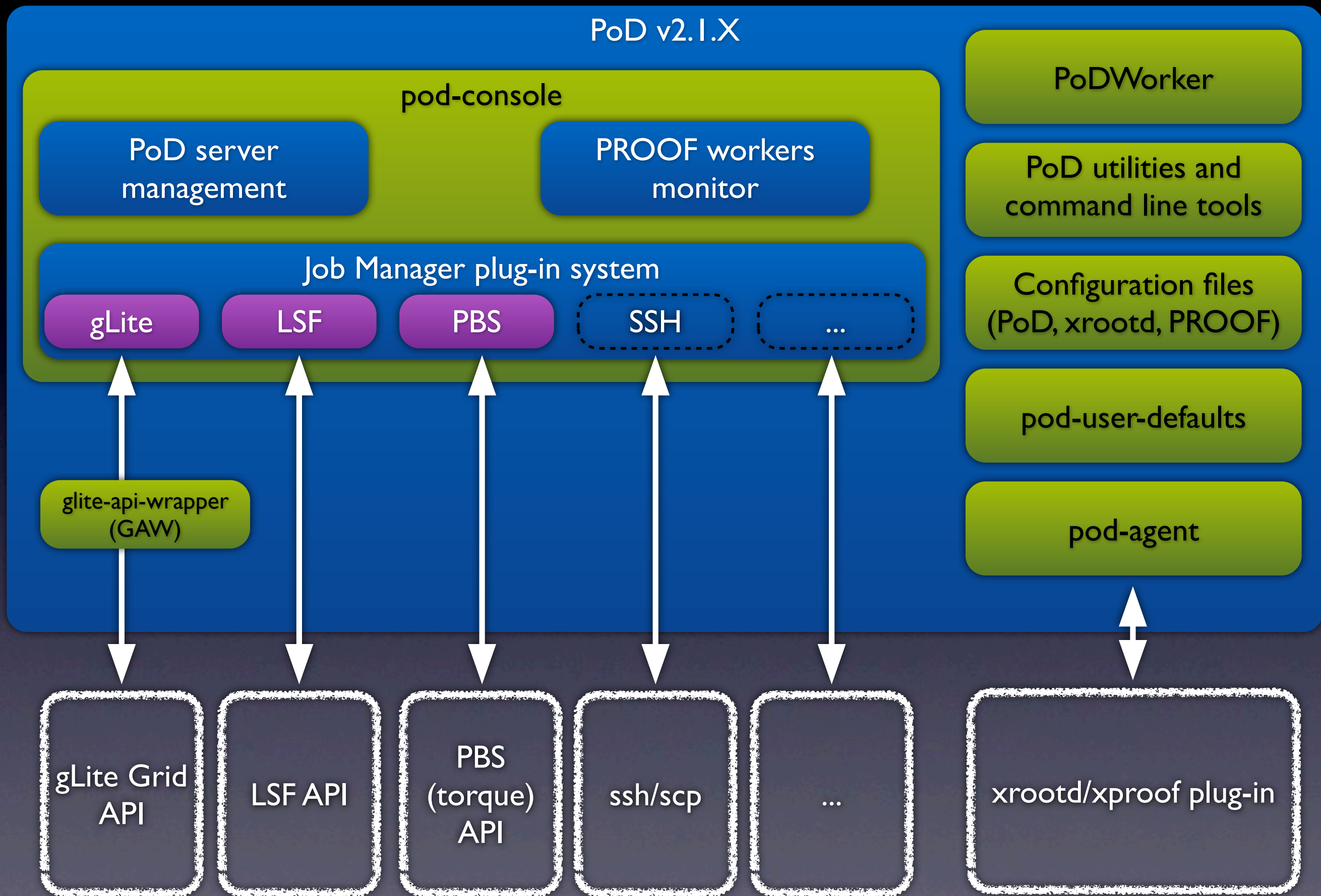
PROOF on Demand

PROOF on Demand

version 2.1.4a status report
and
user experience

Anar Manafov, GSI Darmstadt

ALICE offline week,
2010-03-17



Native PROOF connections & Packet-forwarded connections

Resource management system



User workspace



Resource management system



User workspace

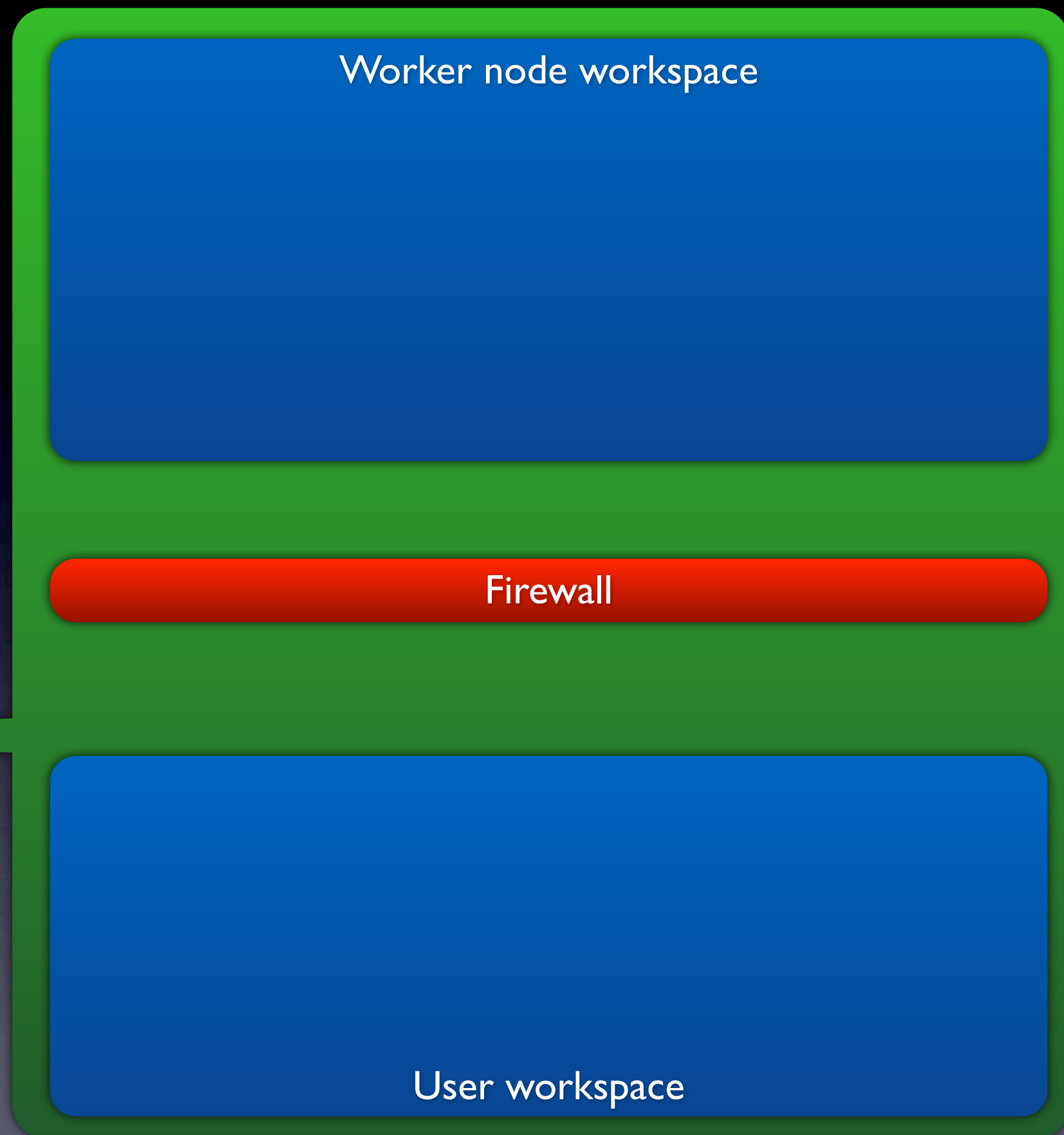
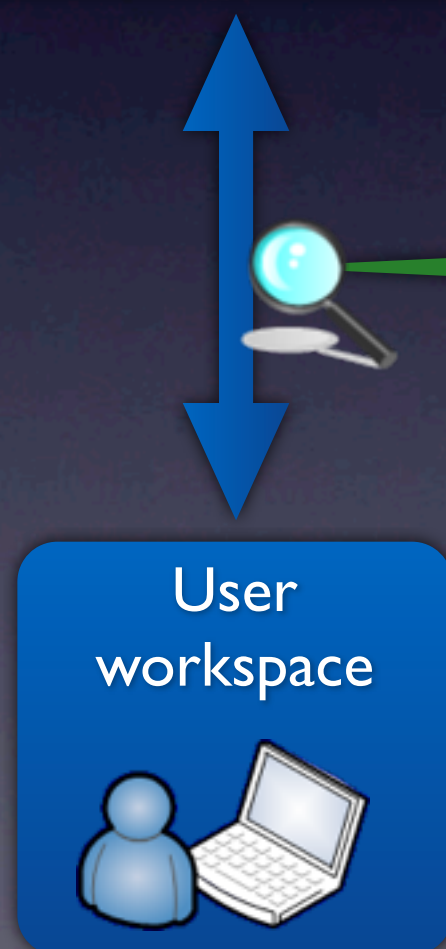


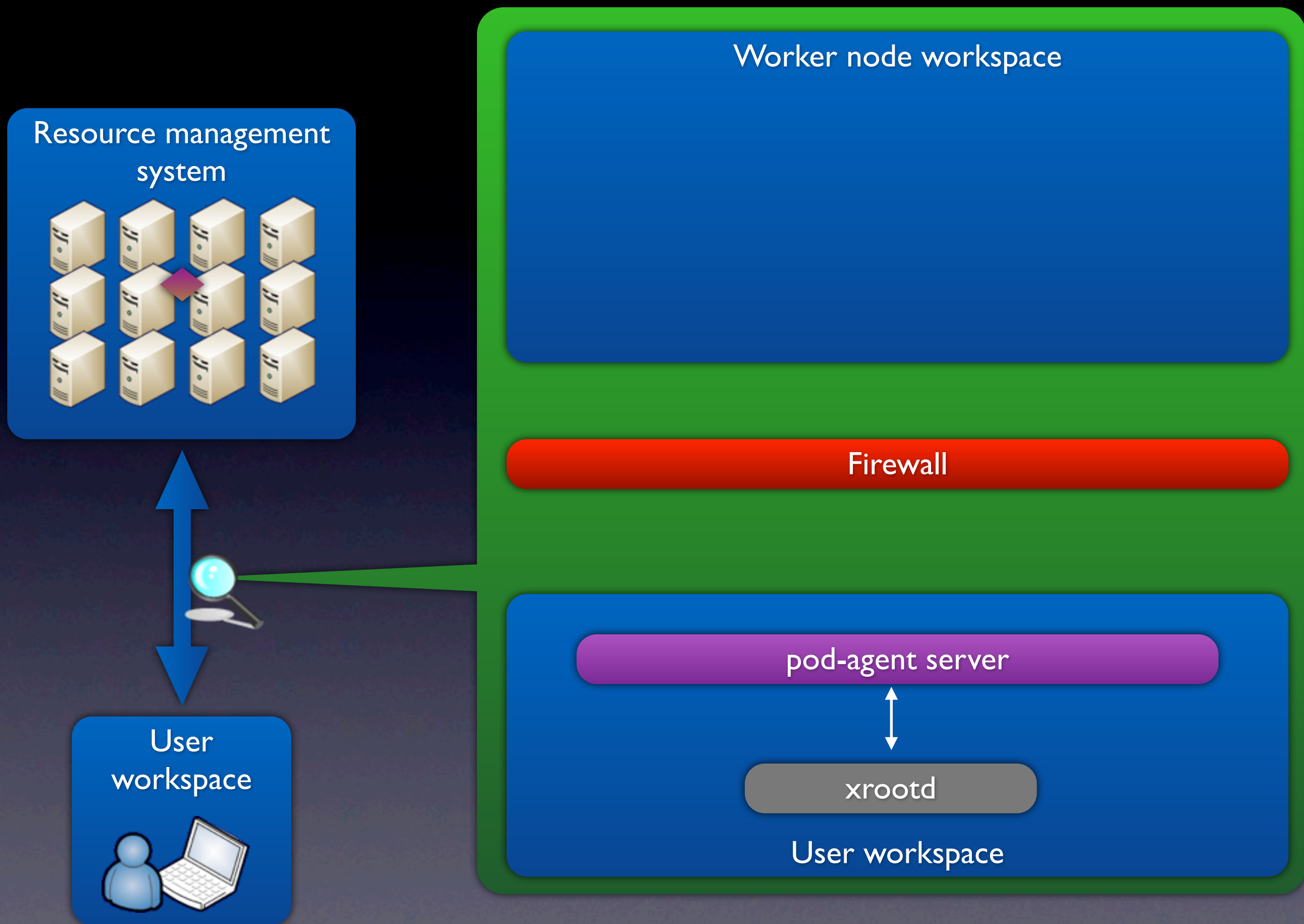
Resource management
system

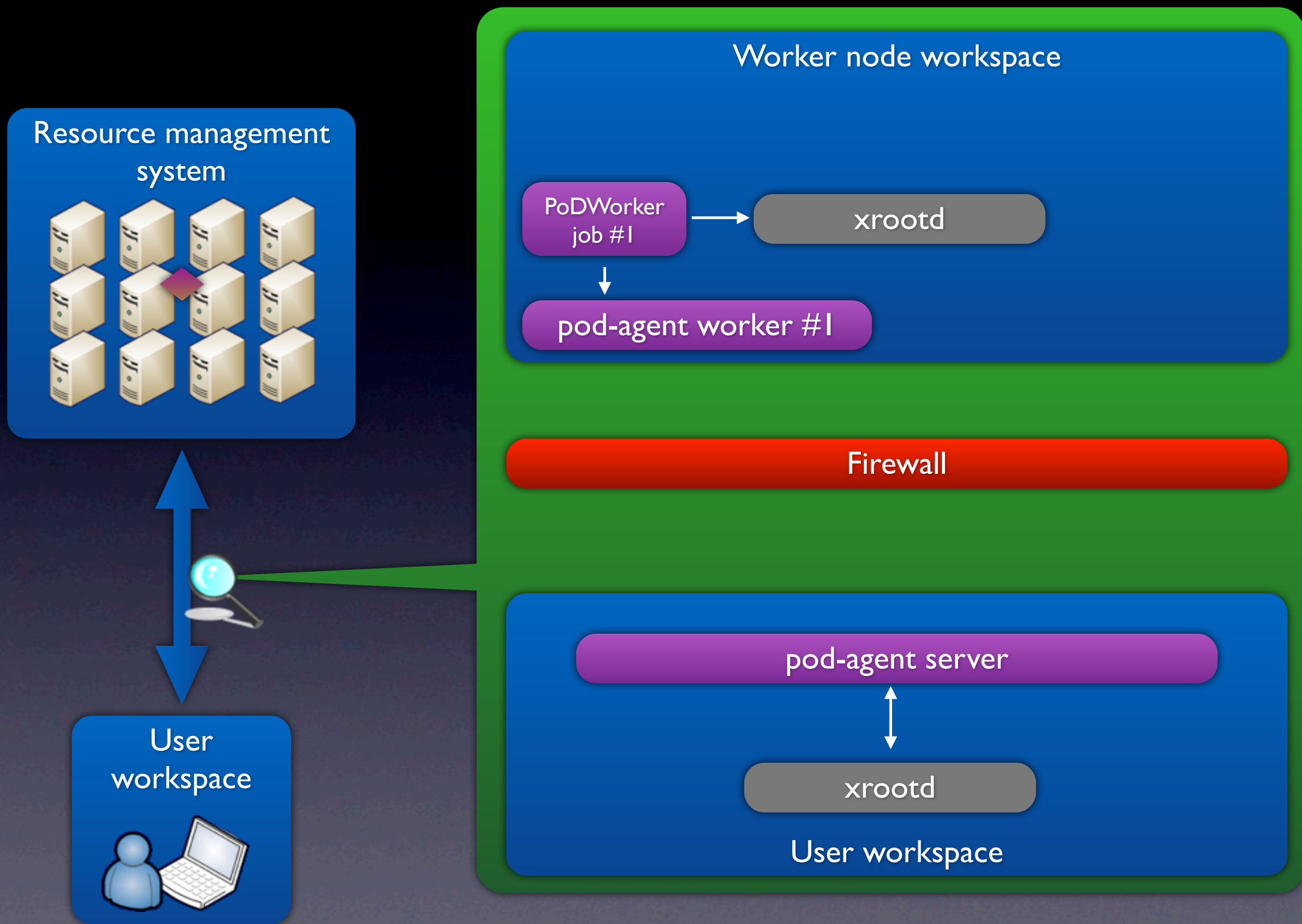


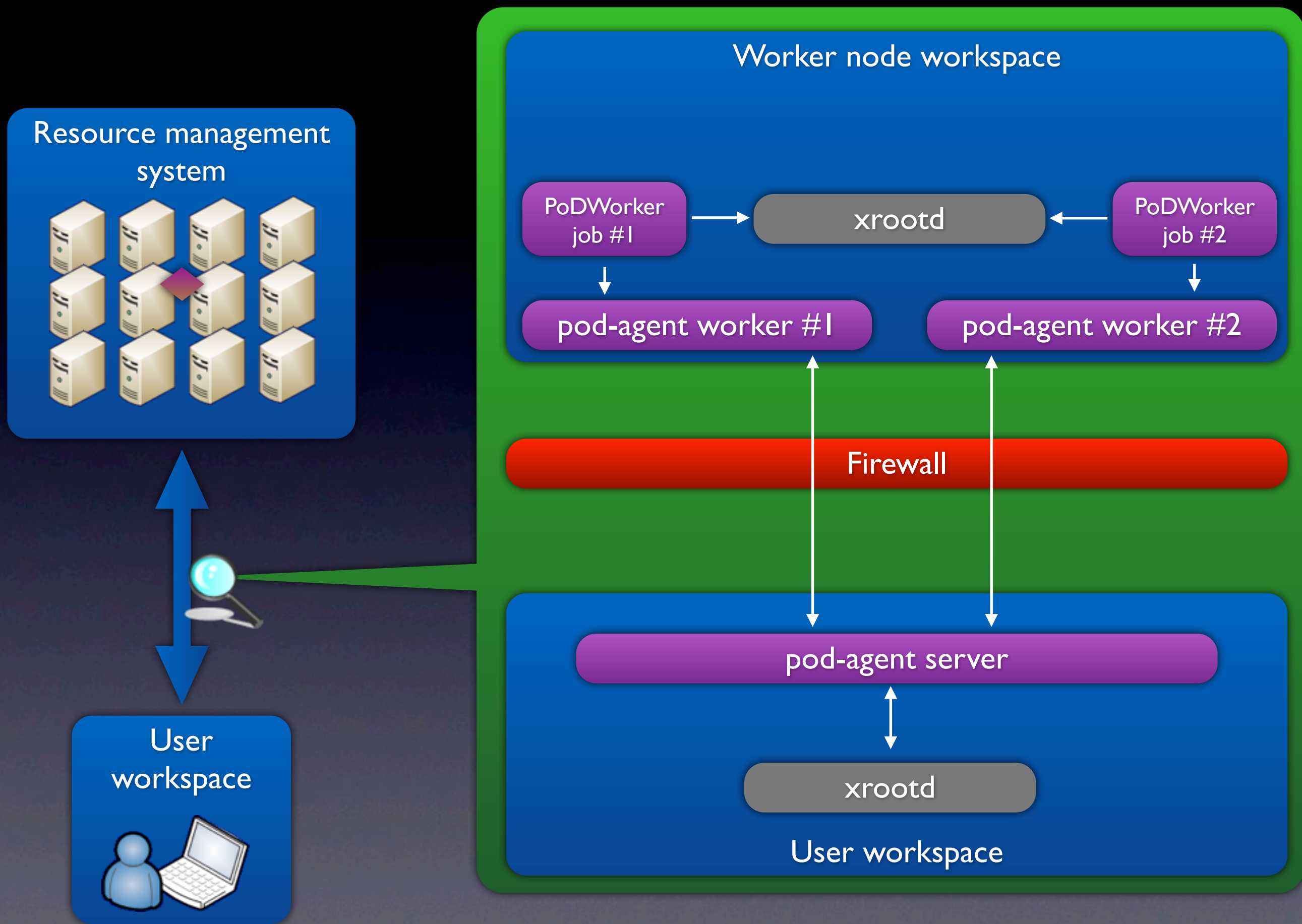
User
workspace

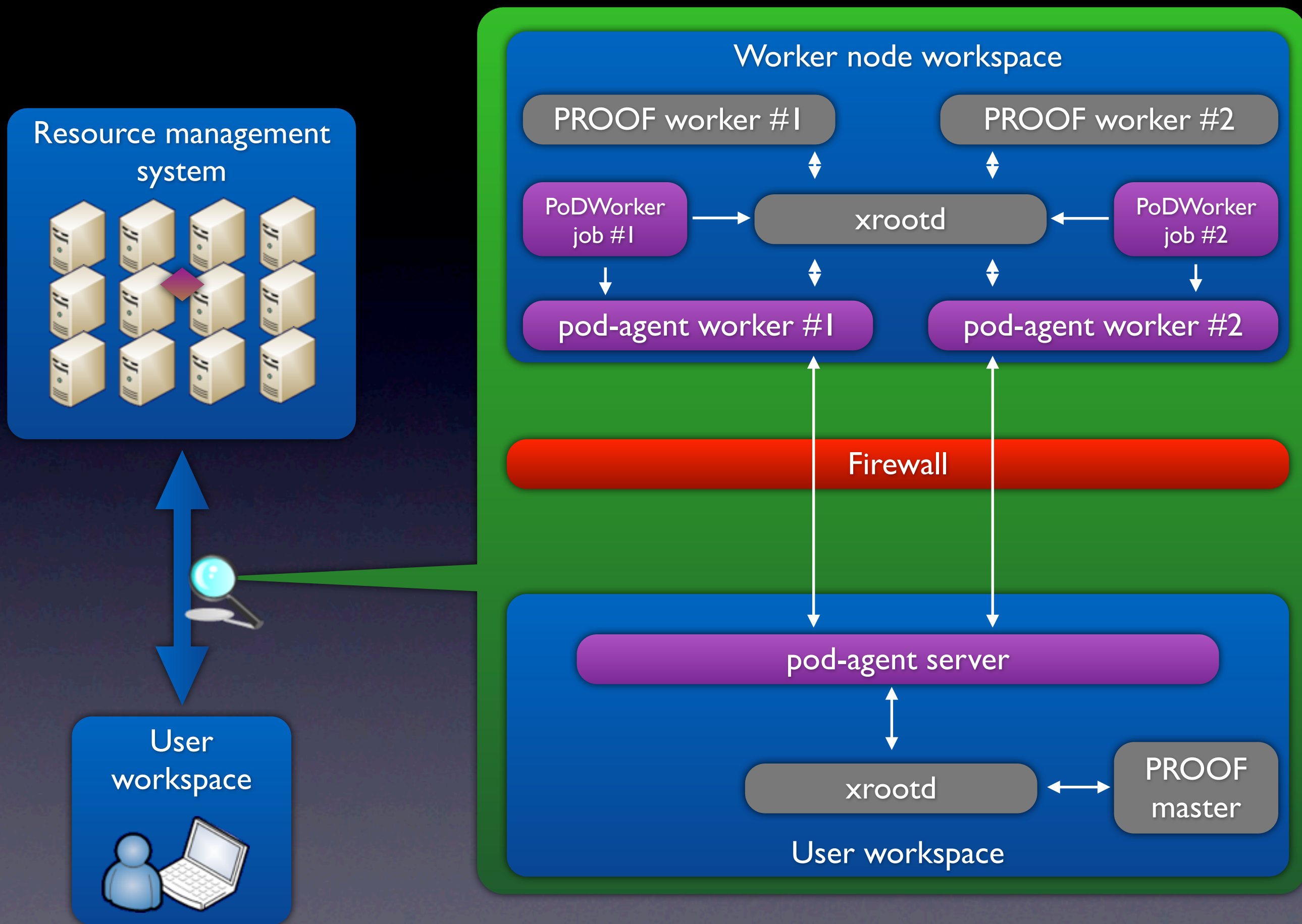


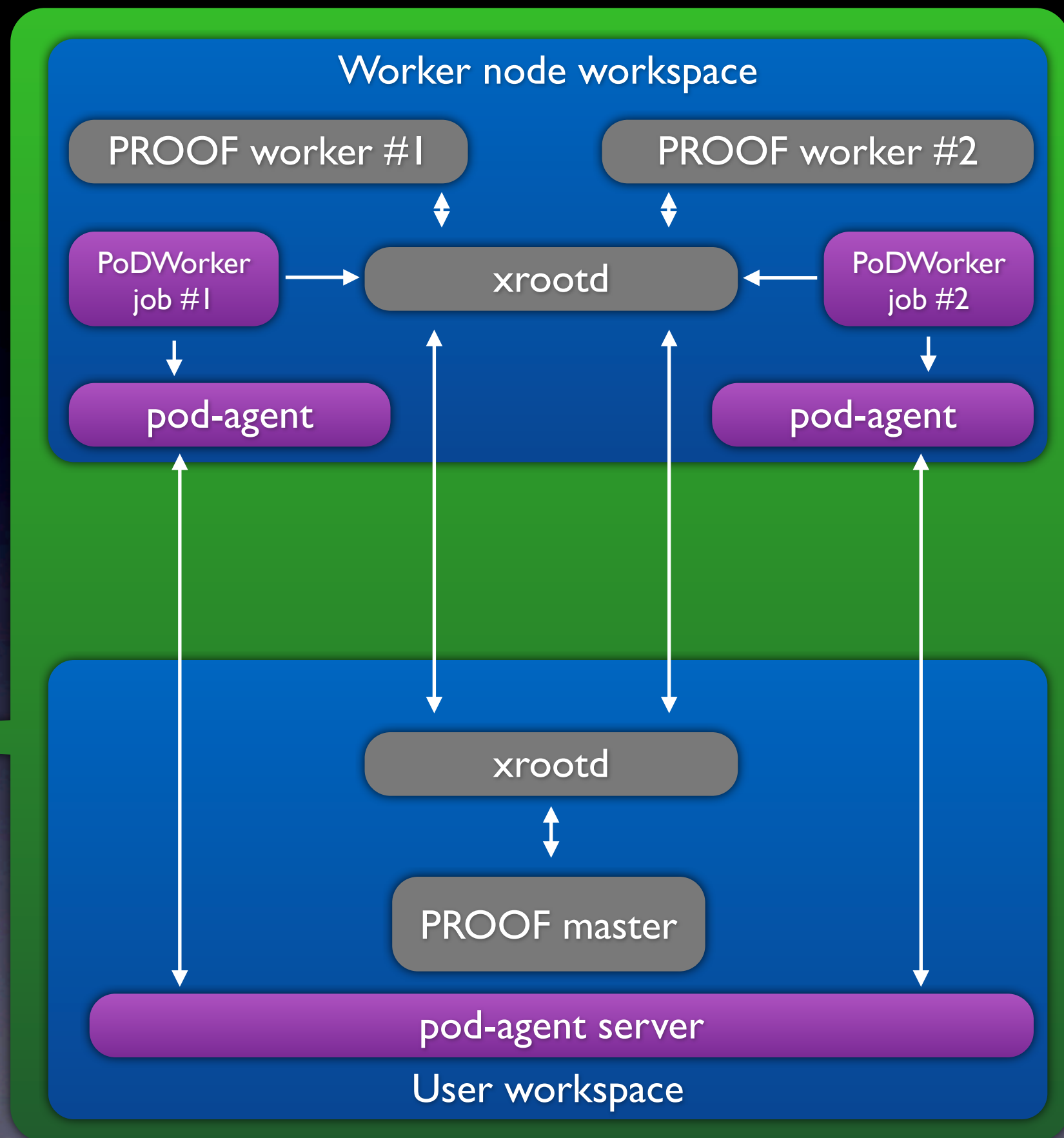
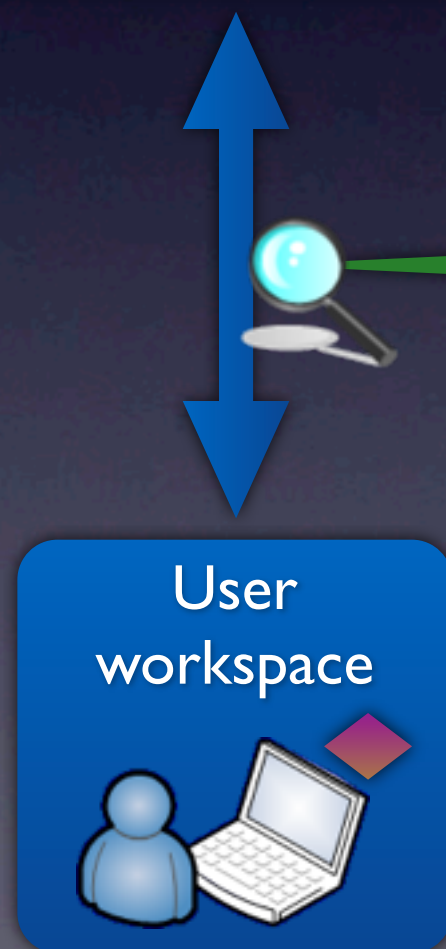












pod-console

- automatically switches off sensors after specified time of non usage,
- an improved algorithm of updating available PROOF workers (based on FS events),
- LSF plug-in: status only for unfinished jobs,
- many other improvements in LSF plug-in, in order to make it LSF and resource friendly.

PoD package

- new build system and installation procedure,
- command line interface (use PoD remotely or in a batch mode),
- PBS plug-in,
- new web site (<http://pod.gsi.de>) - now generated using the DocBook schema.

PoD at GSI

Dedicated LSF queue

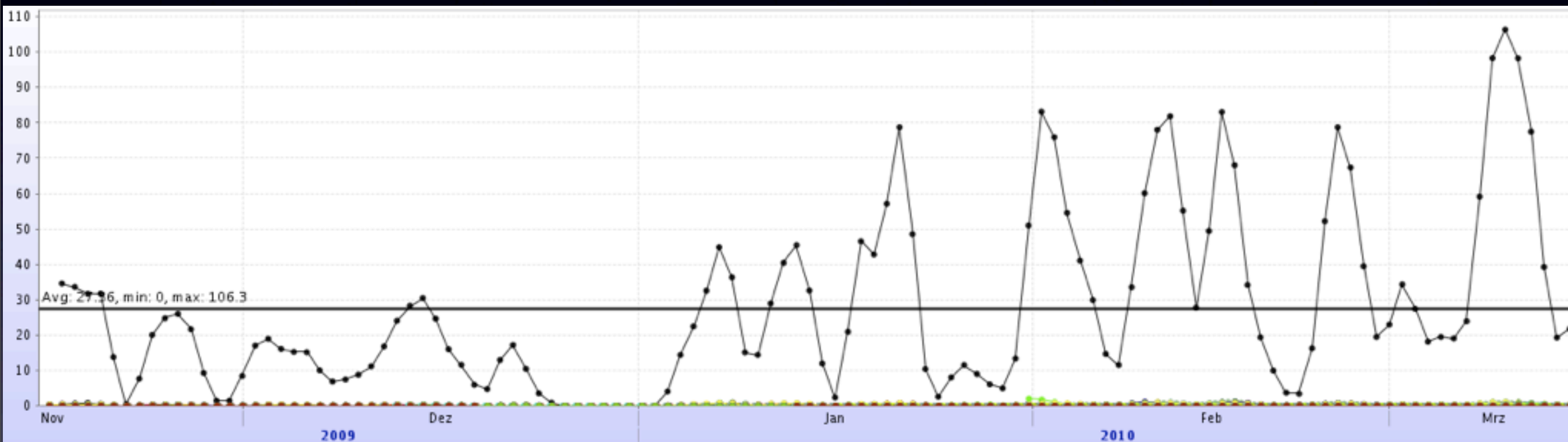
- preemptive, max. 120 jobs per user and max. 4 hours run-time per job.

Data located on the lustre FS.

Mainly used by ALICE group (GSI, Heidelberg, Münster).

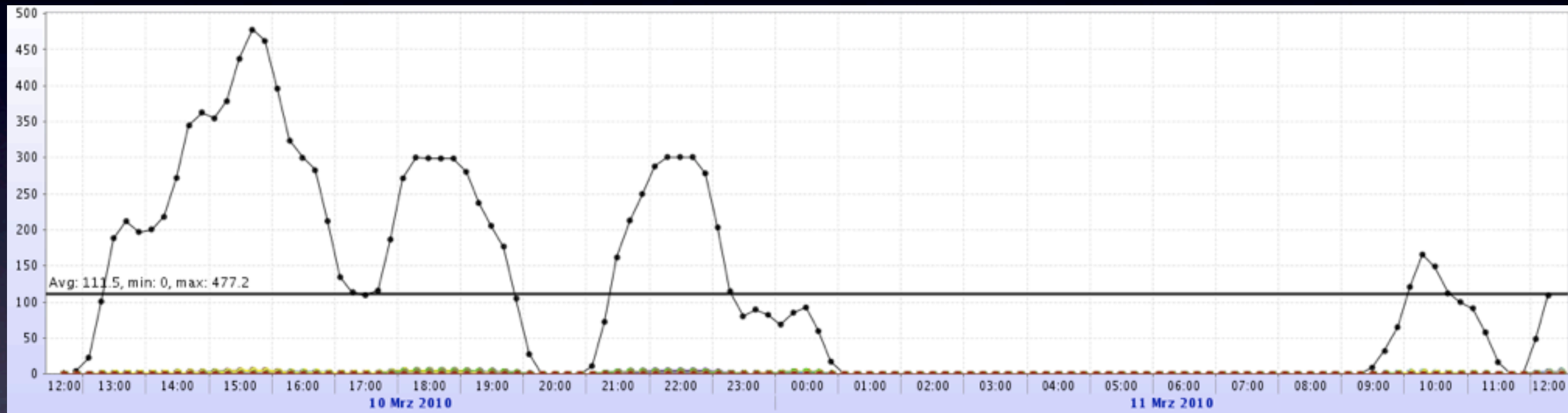
Everyday, in average, we have 2-5 concurrent users with 20-120 workers each.

An average number of PoD WNs at GSI since November 2009

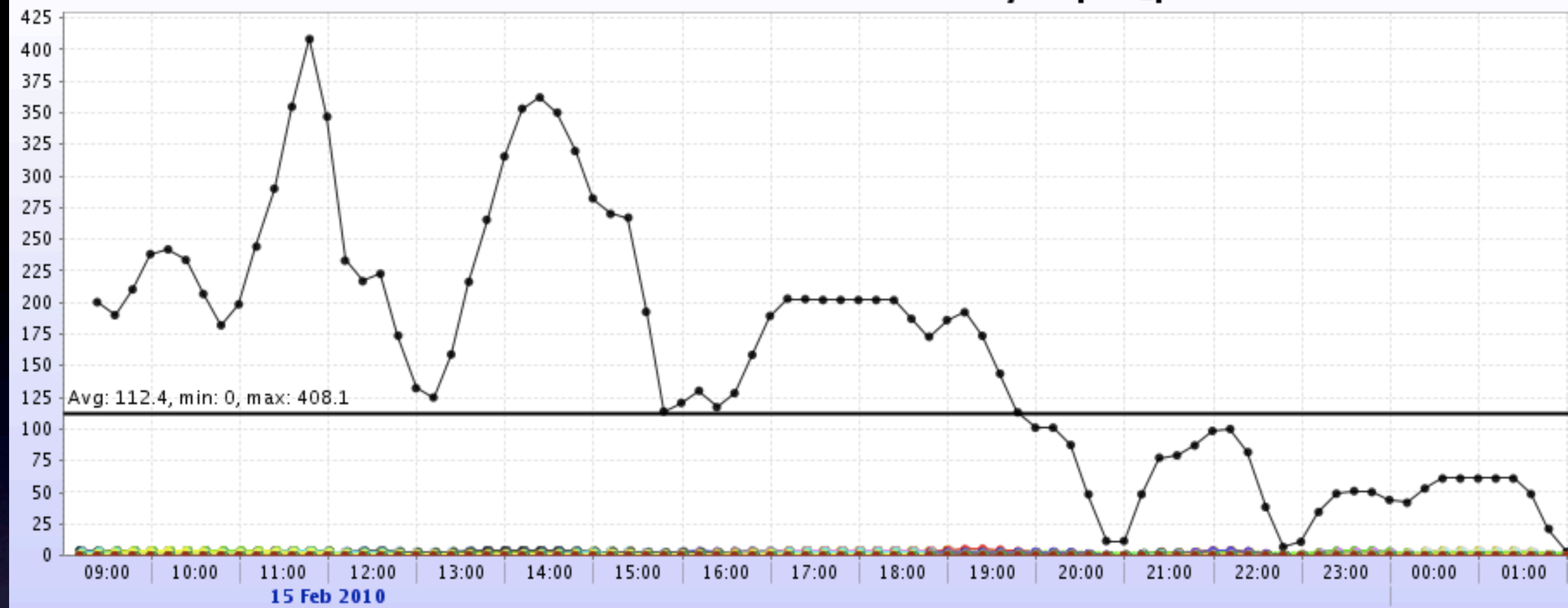


PROOF usage via PoD is constantly growing since the first release.

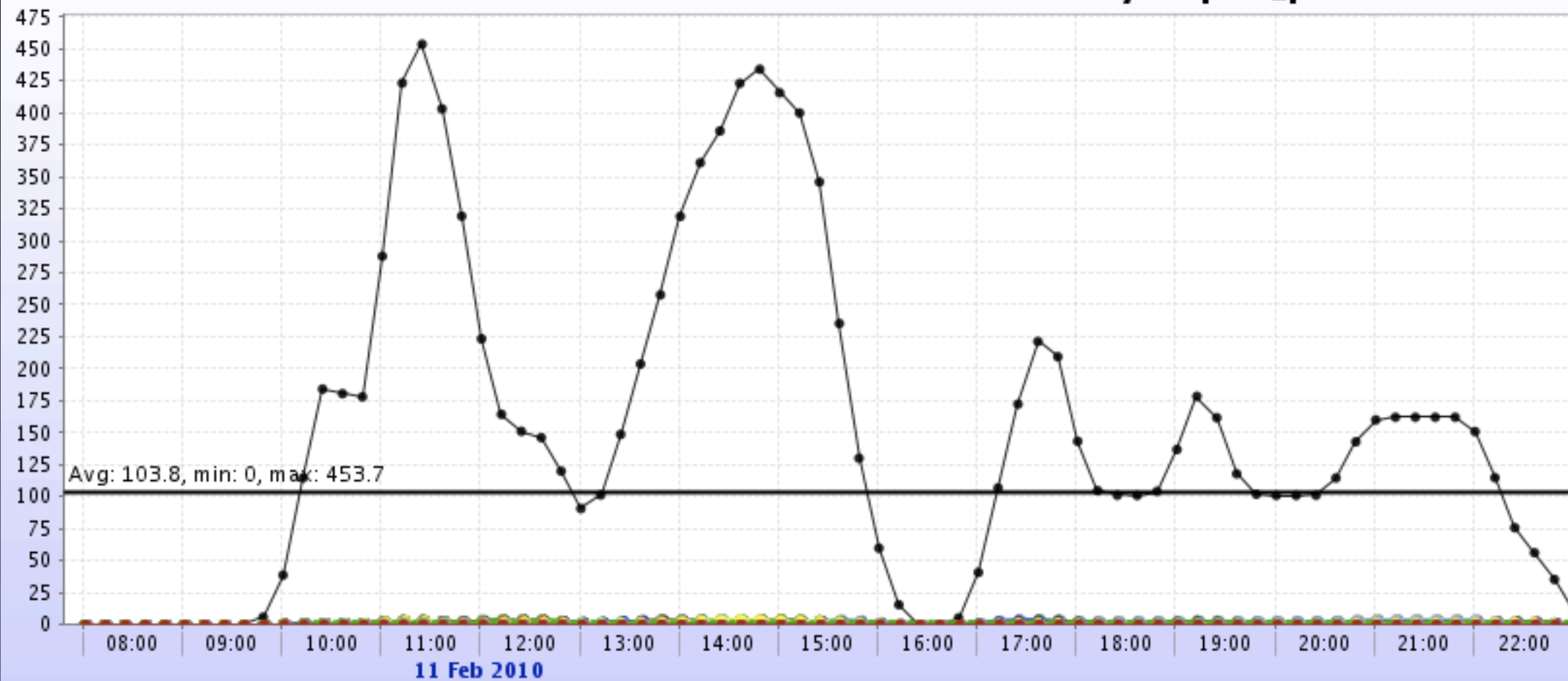
PoD daily usage



History of pod_processes

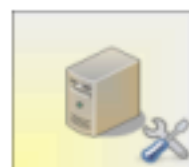


History of pod_processes





Server

LSF
Job ManagerPROOF
Workers

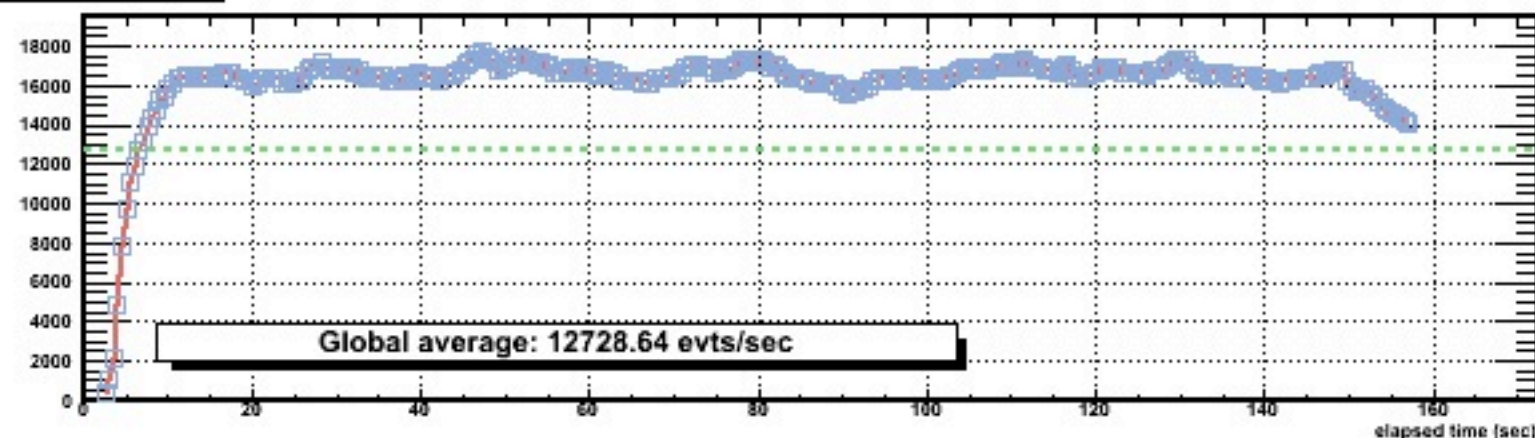
Preferences

Worker(s)

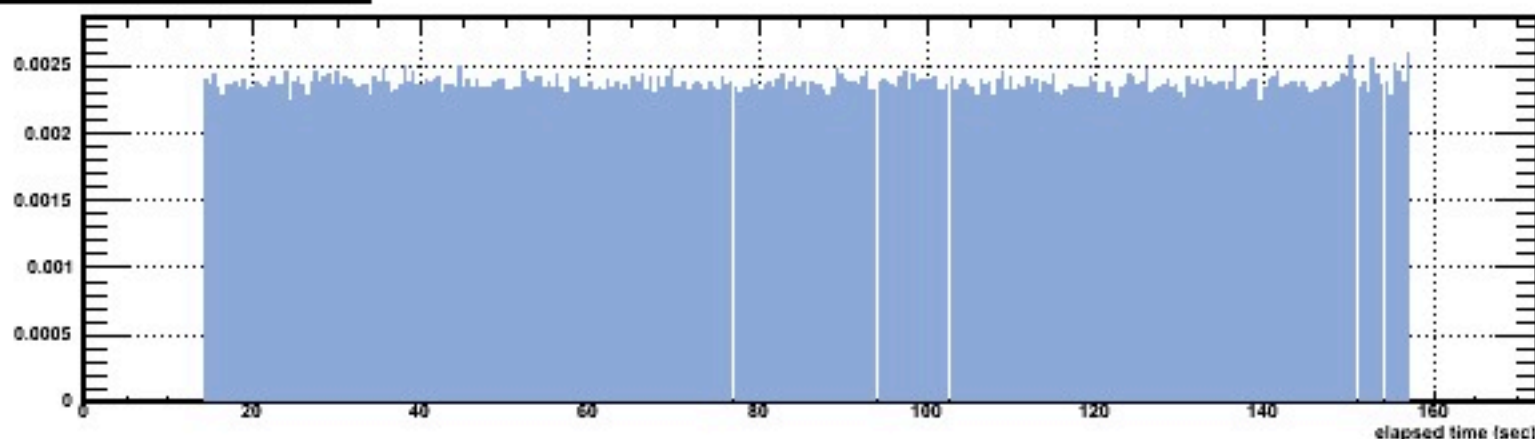
Available PROOF workers: 317 out of 319

```
master lxb333.gsi.de
worker mfasel@lxb511.gsi.de:21001 (direct connection)
worker mfasel@lxb544.gsi.de:21001 (direct connection)
worker mfasel@lxb541.gsi.de:21001 (direct connection)
worker mfasel@lxb521.gsi.de:21001 (direct connection)
worker mfasel@lxb529.gsi.de:21001 (direct connection)
worker mfasel@lxb556.gsi.d
worker mfasel@lxb400.gsi.d
worker mfasel@lxb505.gsi.d
worker mfasel@lxb449.gsi.d
worker mfasel@lxb407.gsi.d
worker mfasel@lxb396.gsi.d
worker mfasel@lxb519.gsi.d
worker mfasel@lxb462.gsi.d
worker mfasel@lxb495.gsi.d
worker mfasel@lxb386.gsi.d
worker mfasel@lxb466.gsi.d
worker mfasel@lxb429.gsi.d
worker mfasel@lxb477.gsi.d
worker mfasel@lxb384.gsi.d
worker mfasel@lxb524.gsi.d
```

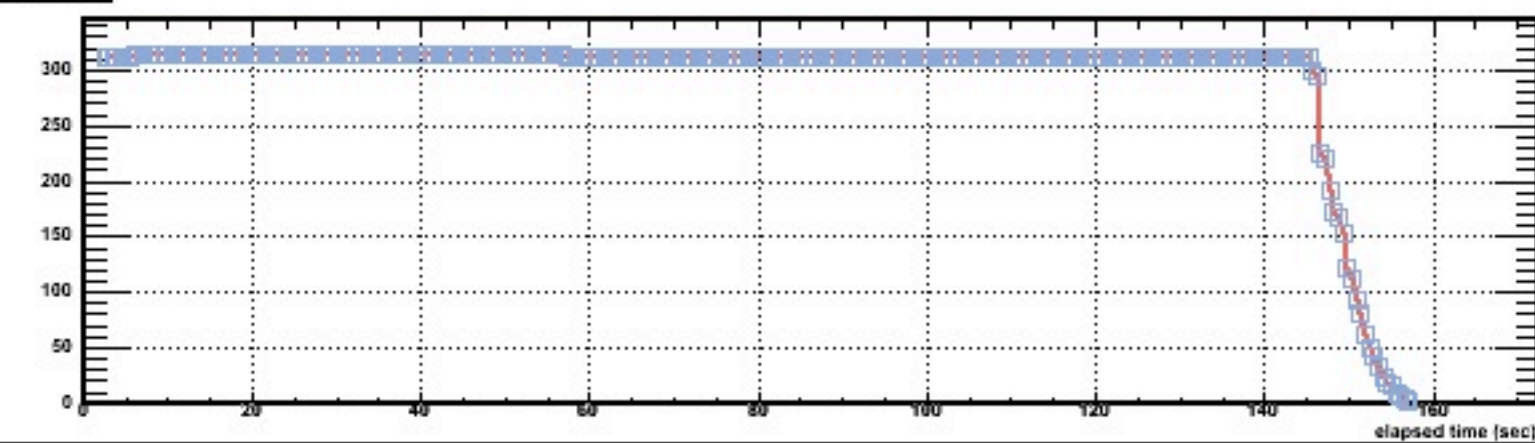
Processing rate (evts/sec)



Average read chunk size (MBs/request)



Active workers



PoD at CERN

- Since v2.1.2 PoD could be used on CERN's AFS,
- PoD was tested on CERN's LSF cluster.

ToDo

- SSH plug-ins,
- “out of server” UI,
- native Mac OS X implementation of UI,
- AliEn plug-in.