

# POD

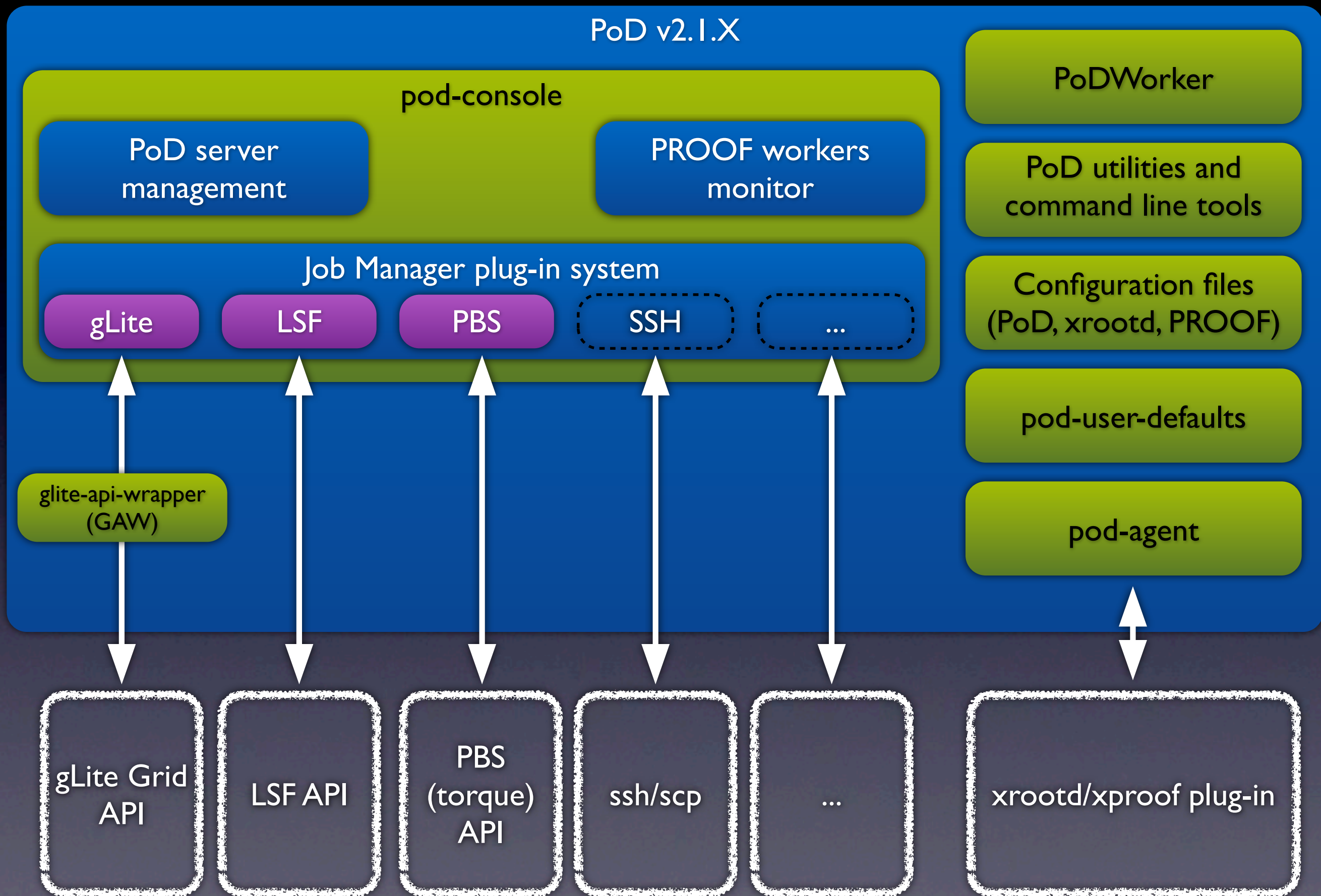
PROOF on Demand

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## Status Report v2.1.4a

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



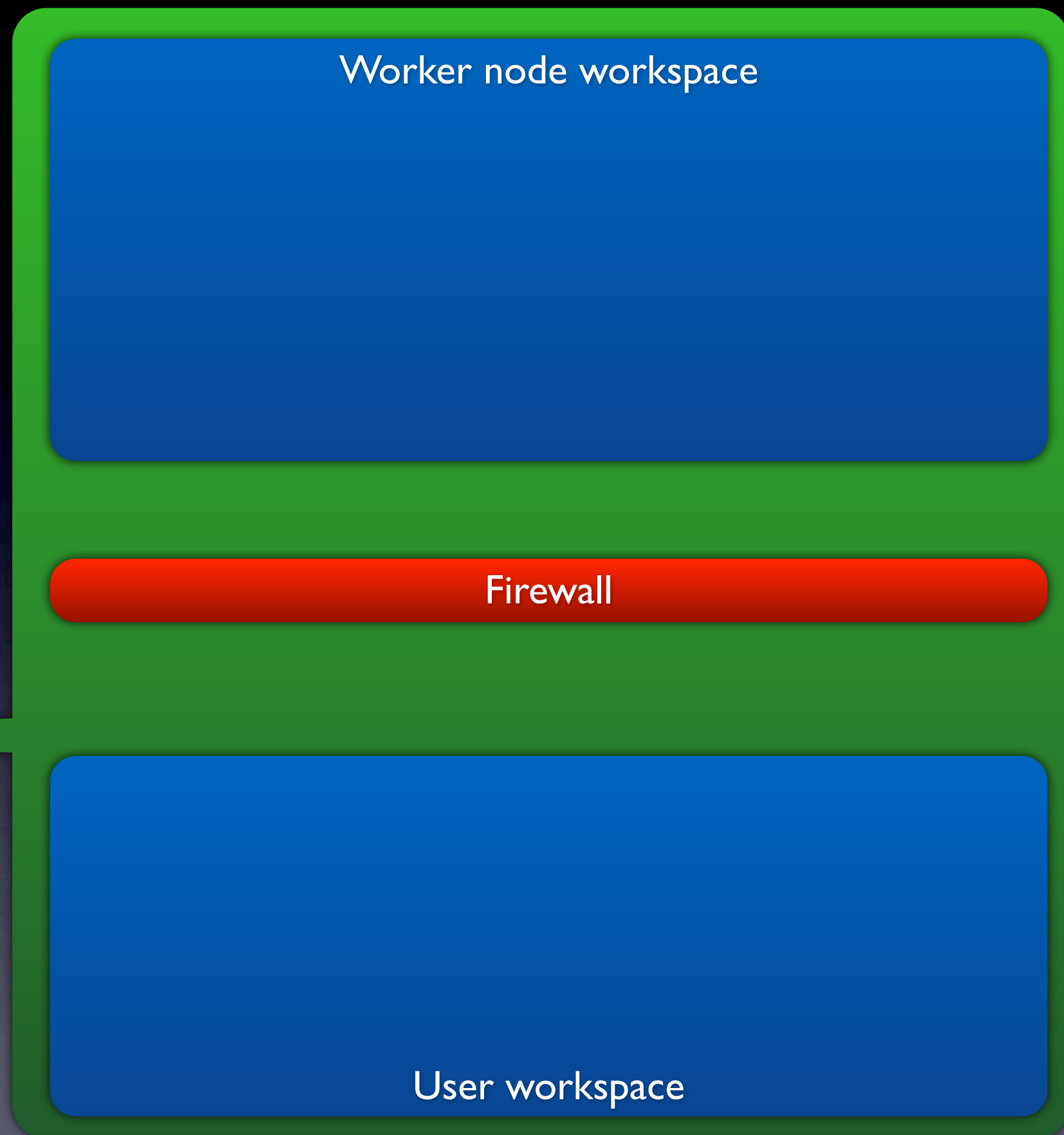
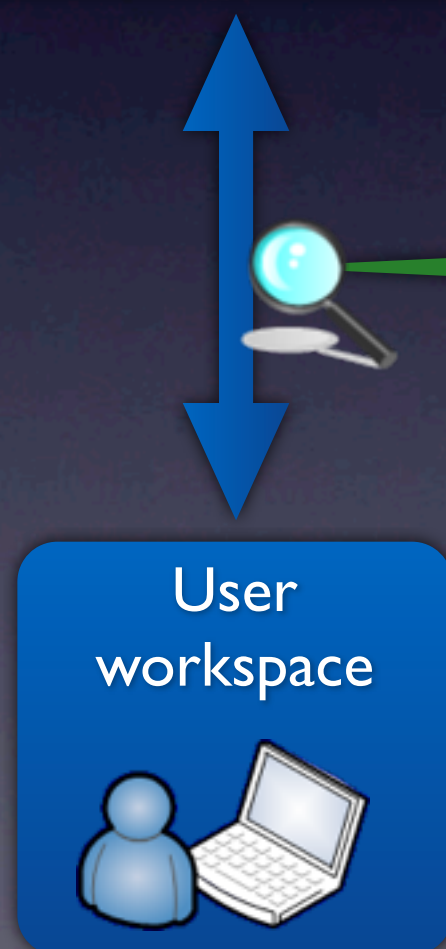


Resource management  
system

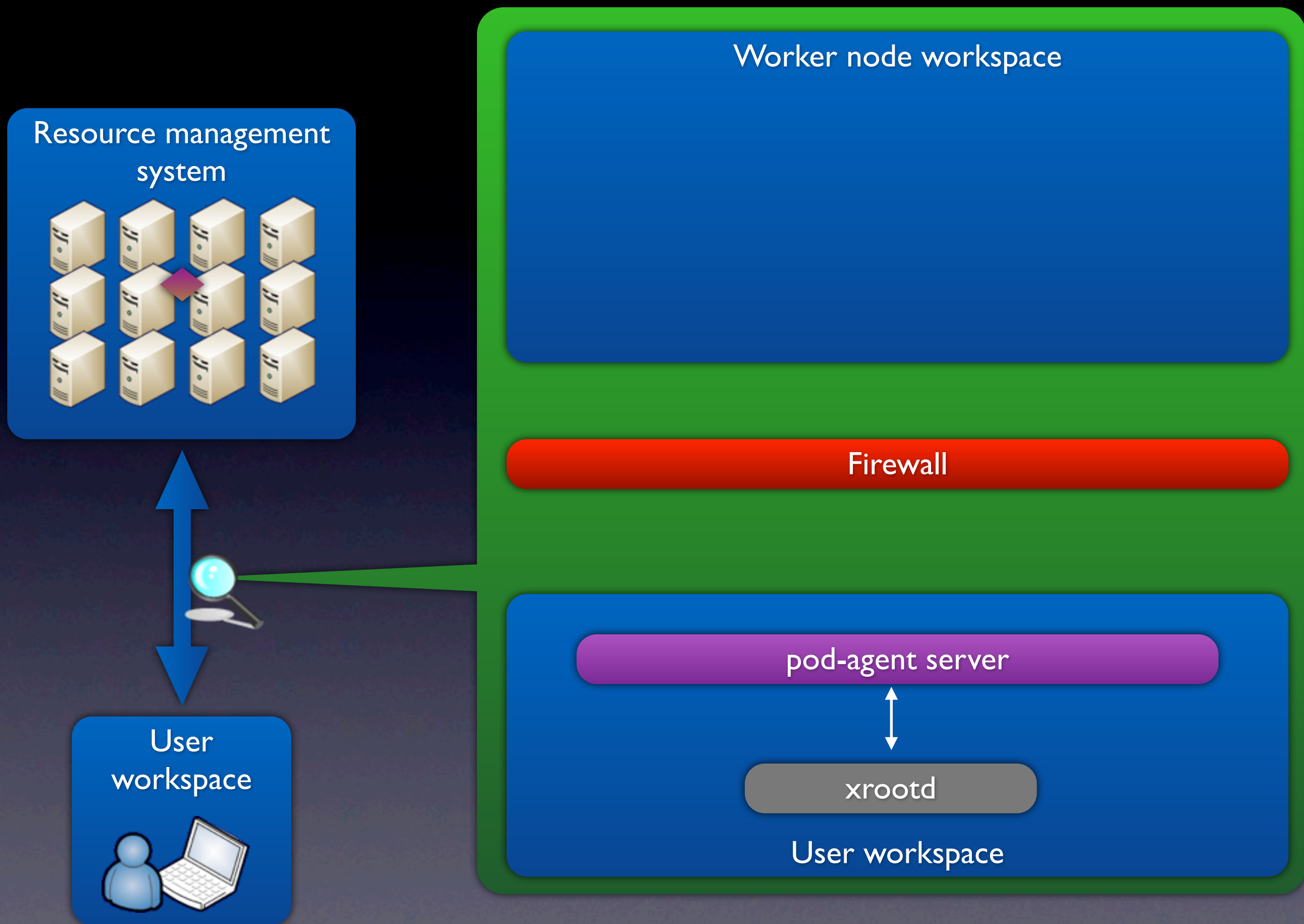


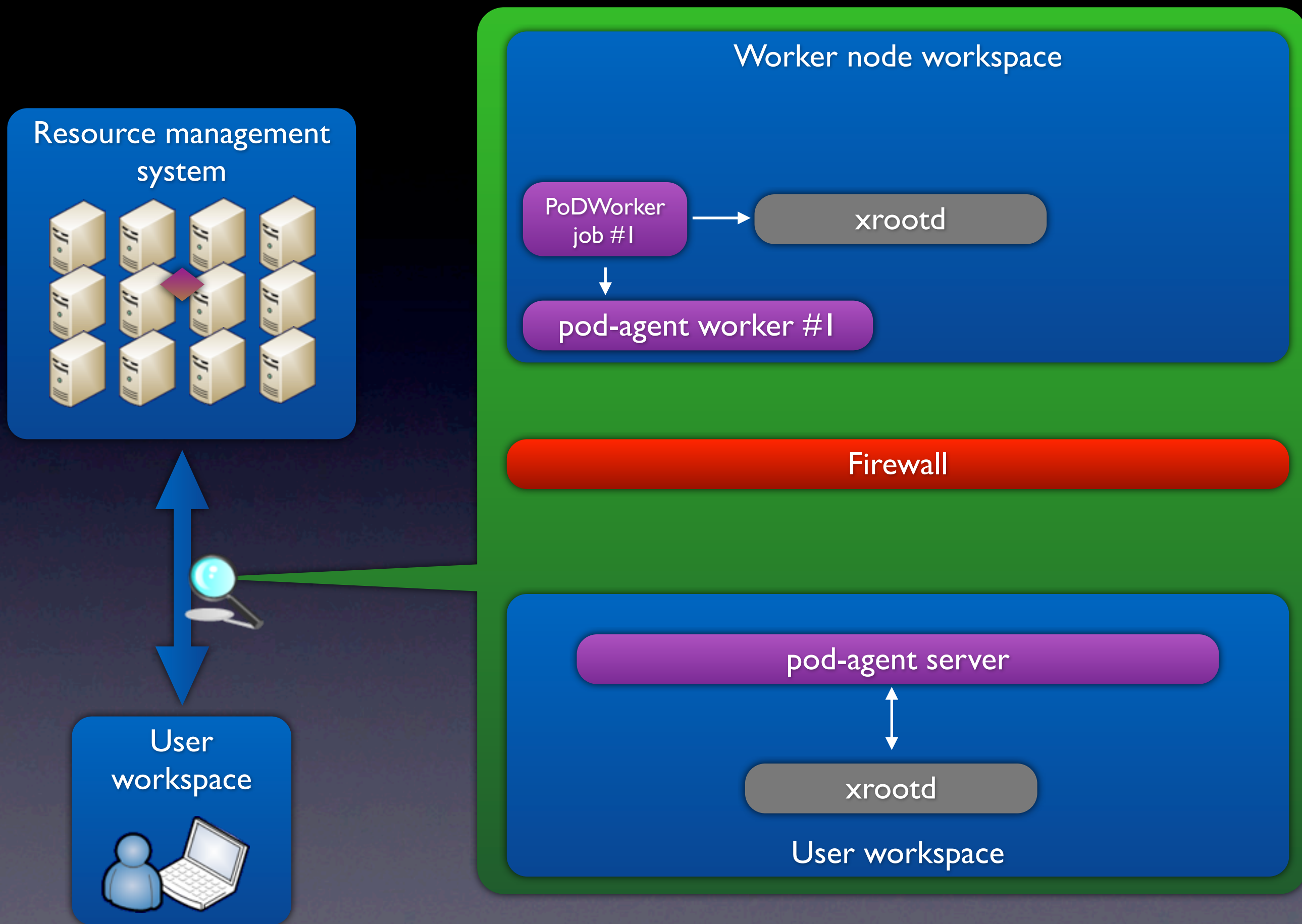
User  
workspace

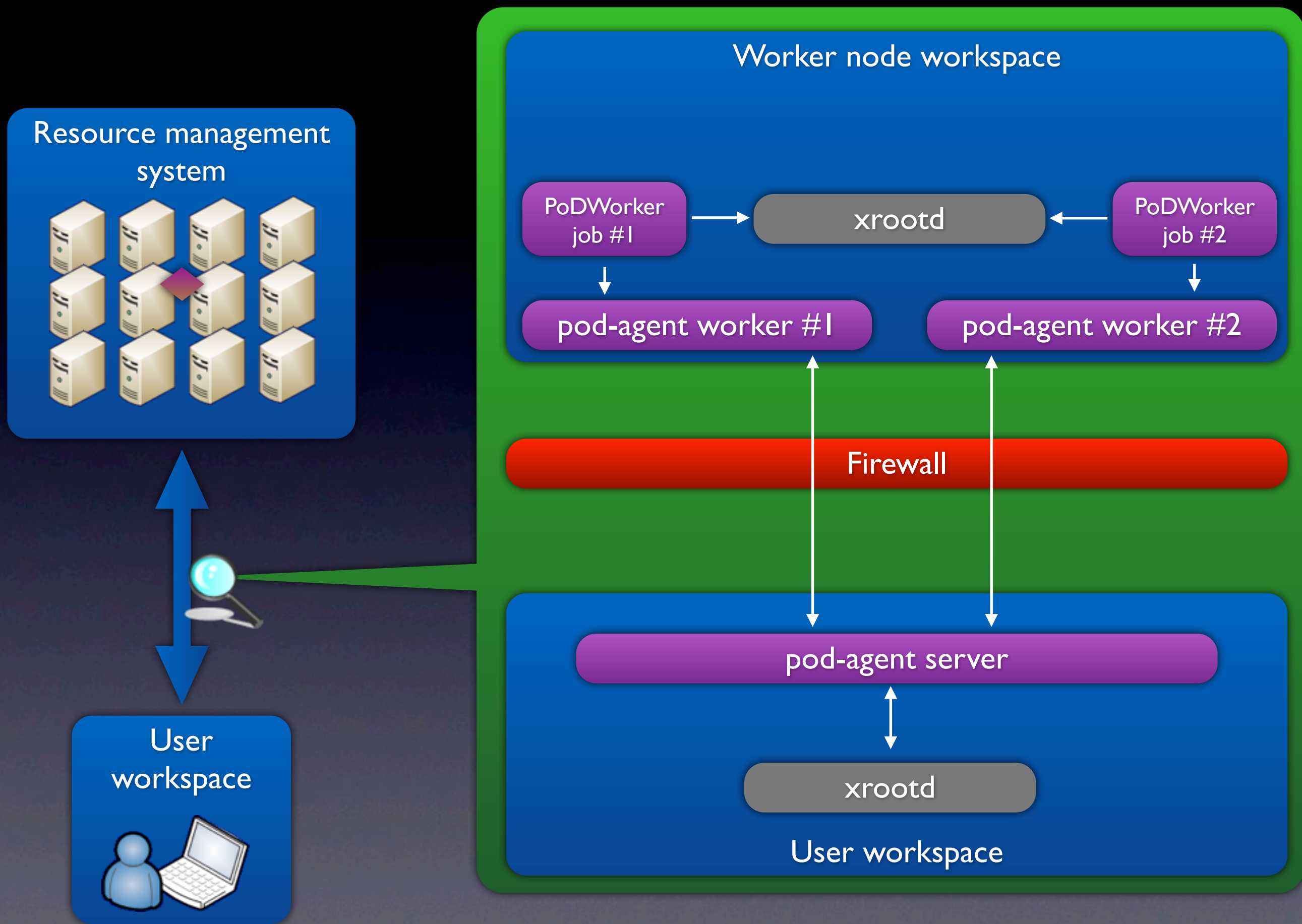




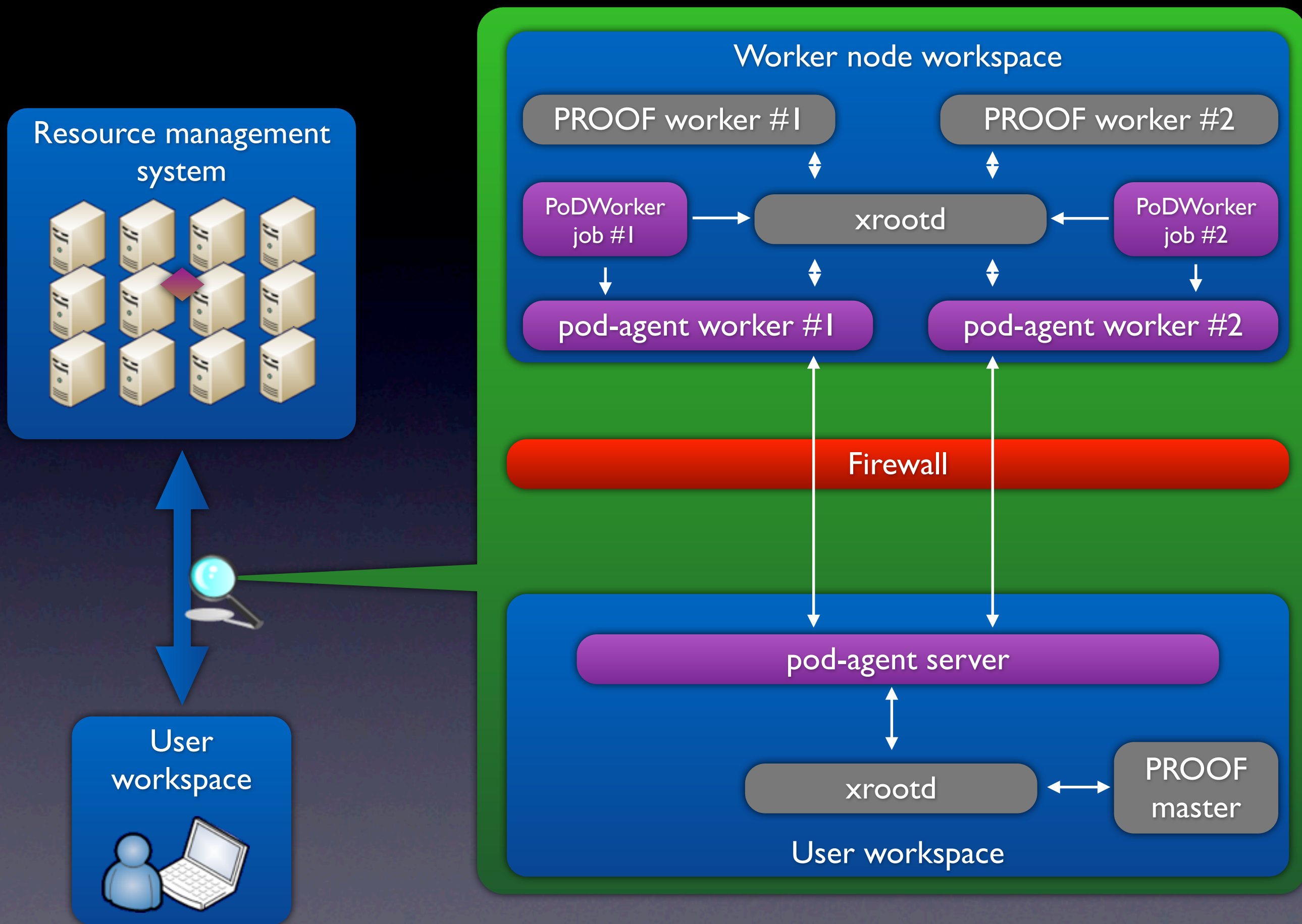


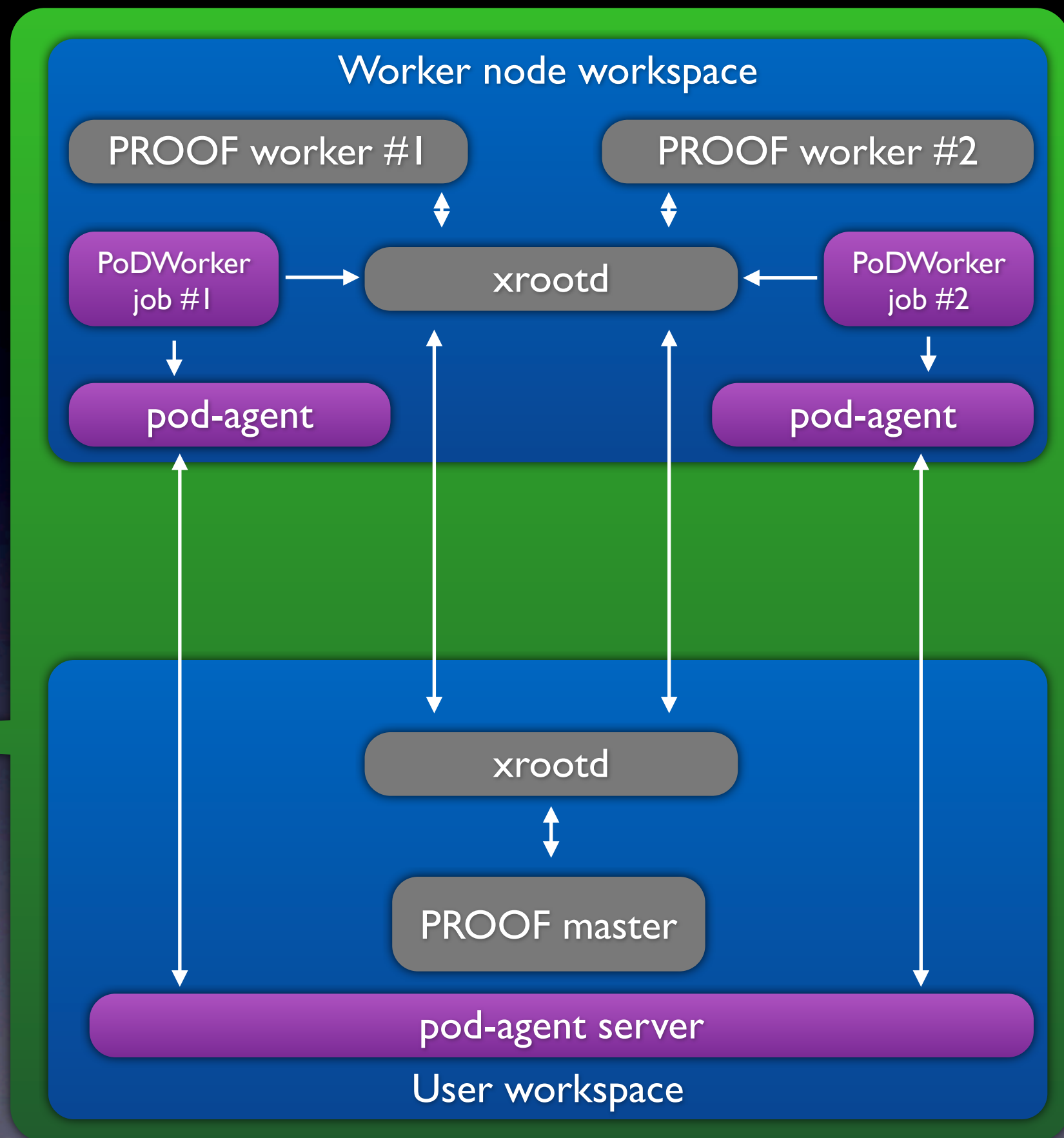
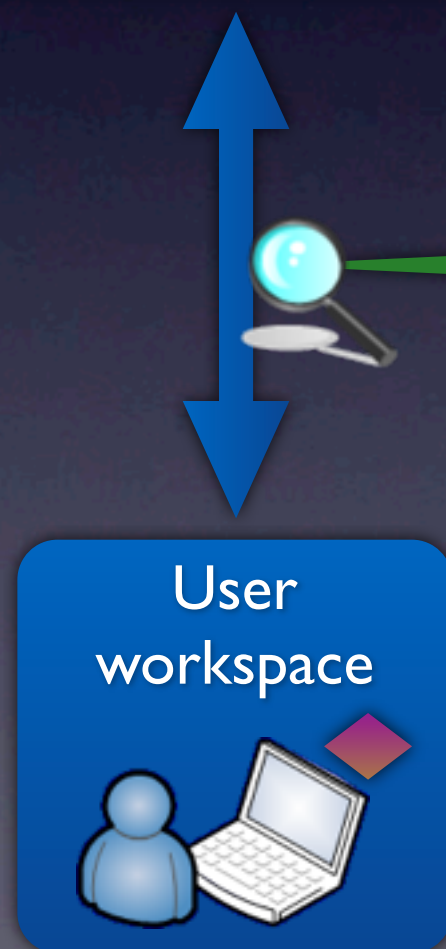












# pod-console

- 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

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

# PoD at GSI

Since November, 2009 we use PROOF only via PoD!

# PoD at GSI

Dedicated LSF queue: preemptive, max. 120 jobs per user and max. 4 hours run-time per job.

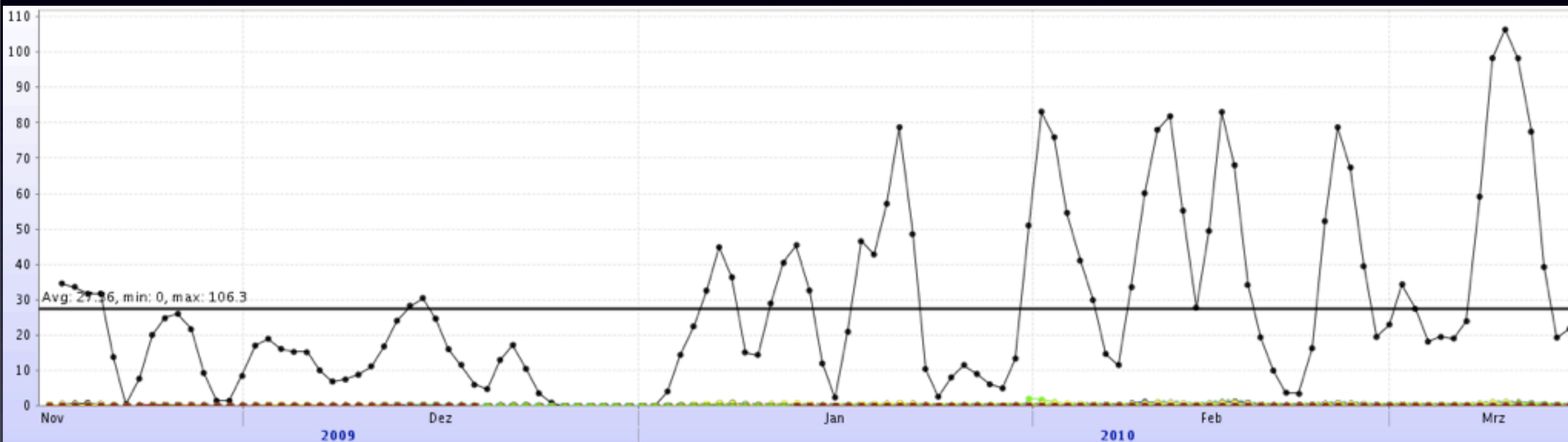
Data located on the lustre FS.

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

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

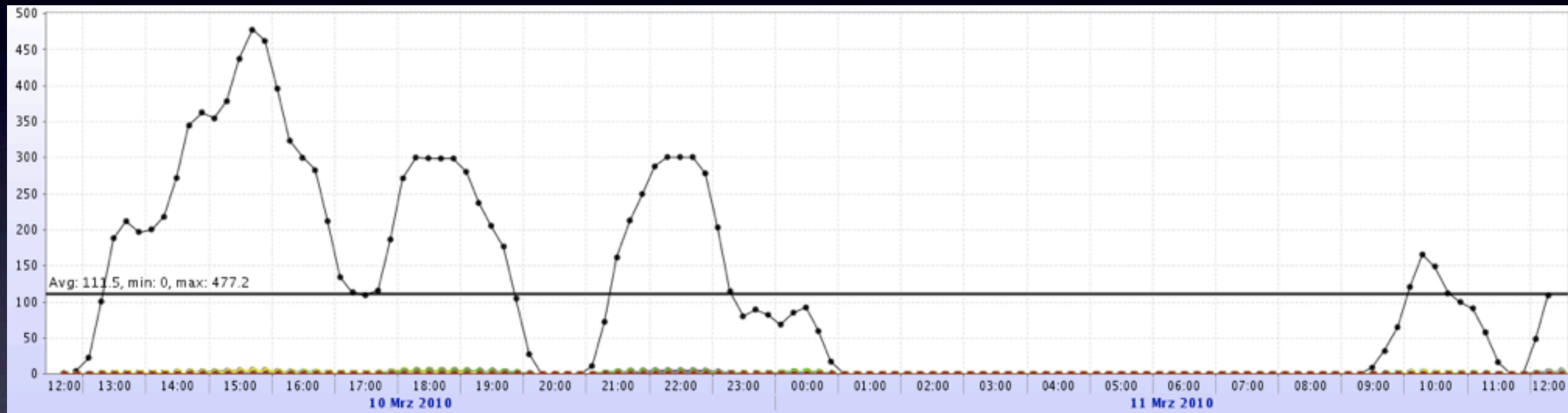


# An average number of PoD WNs at GSI since November 2009

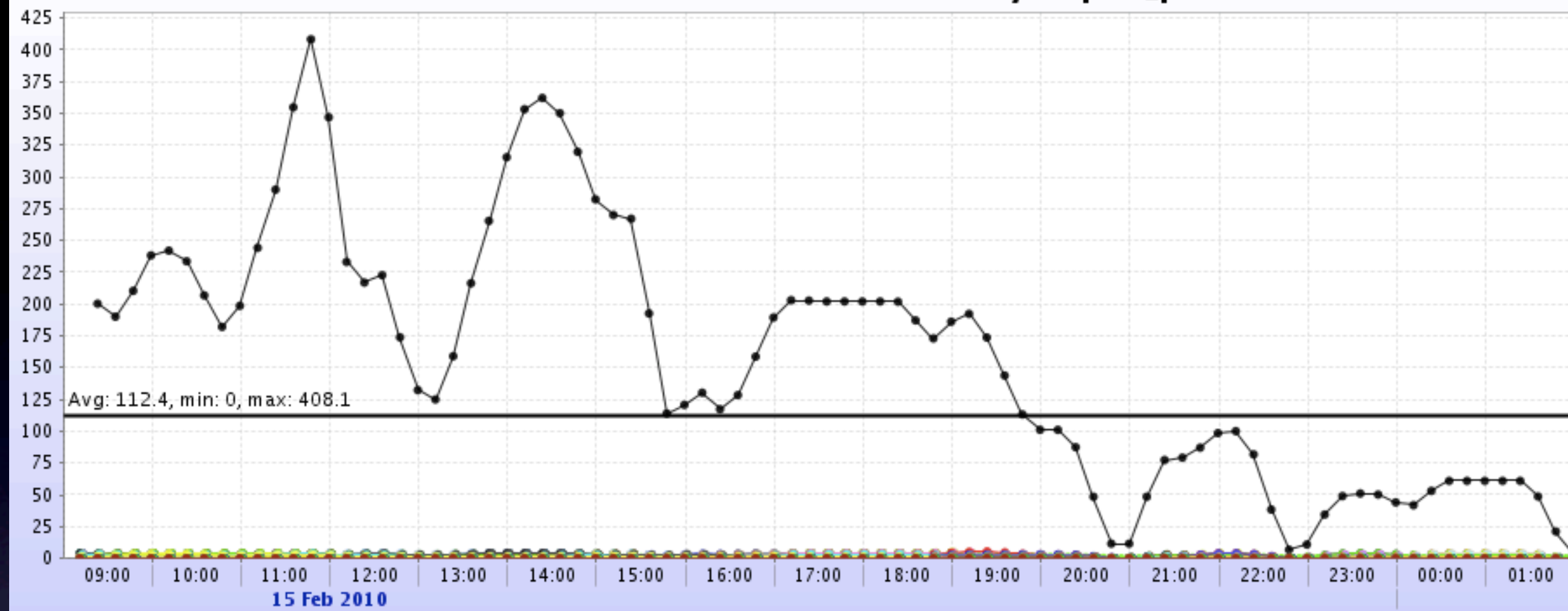


PROOF usage via PoD is constantly growing since the first release.

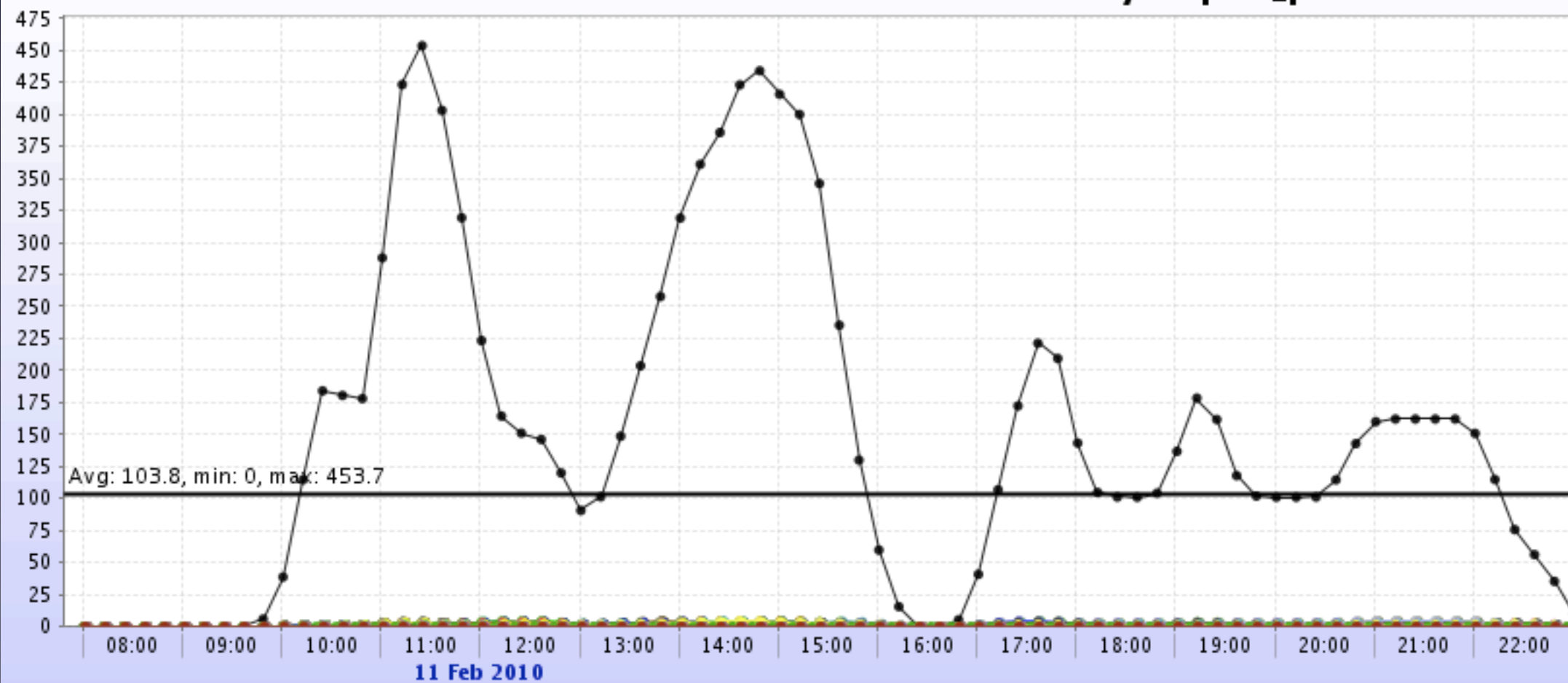
# PoD daily usage



### History of pod\_processes



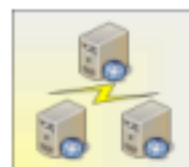
### History of pod\_processes







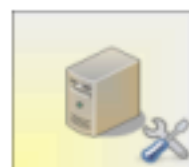
Server



LSF  
Job Manager



PROOF  
Workers



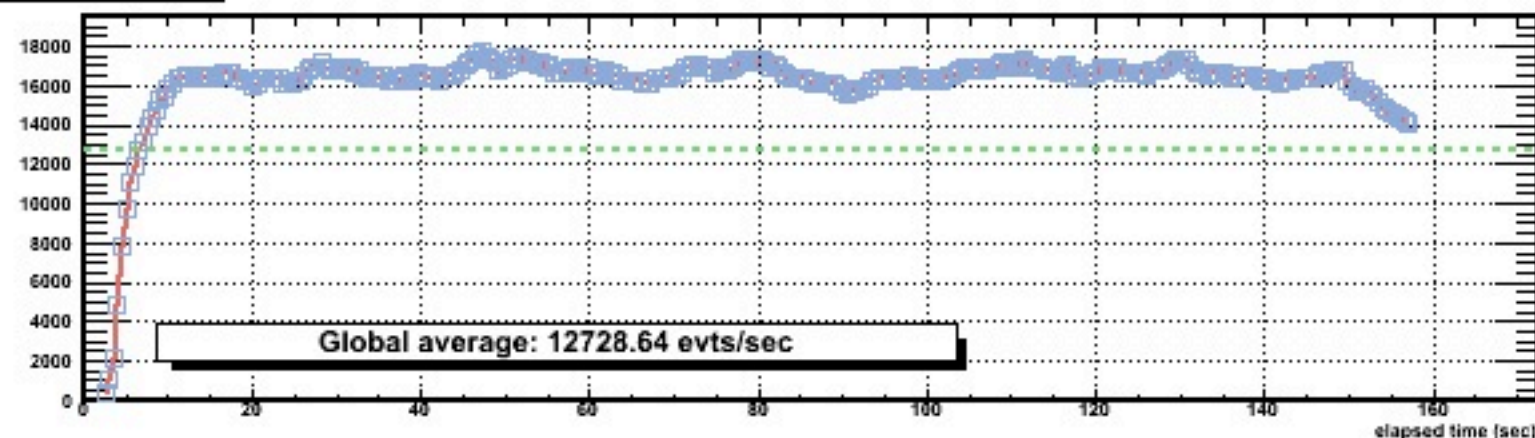
Preferences

Worker(s)

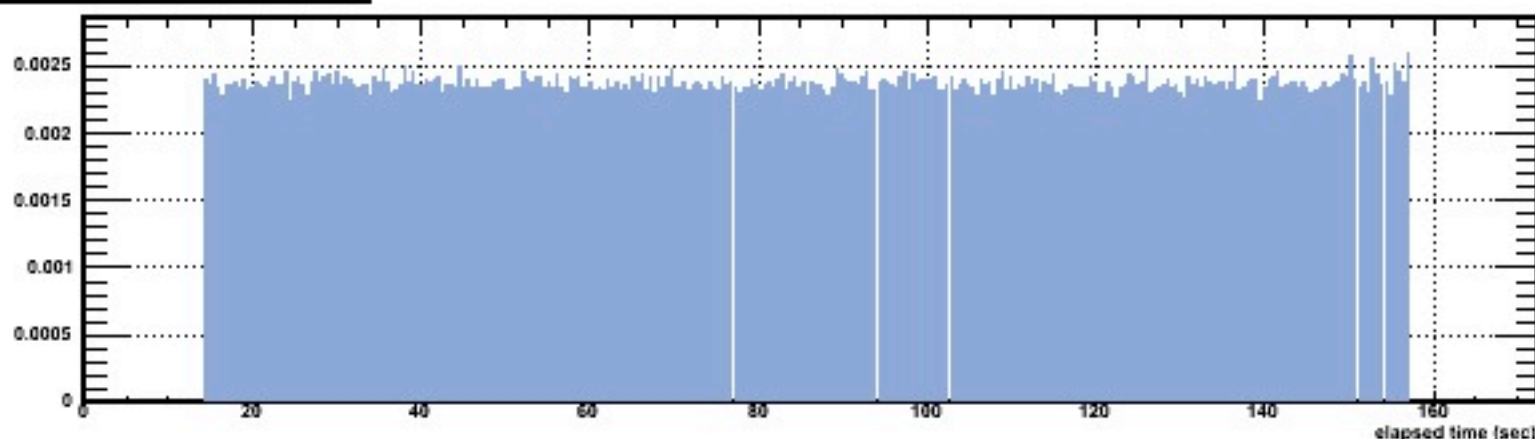
Available PROOF workers: 317 out of 319

```
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
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worker mfasel@lxb384.gsi.d
worker mfasel@lxb524.gsi.d
```

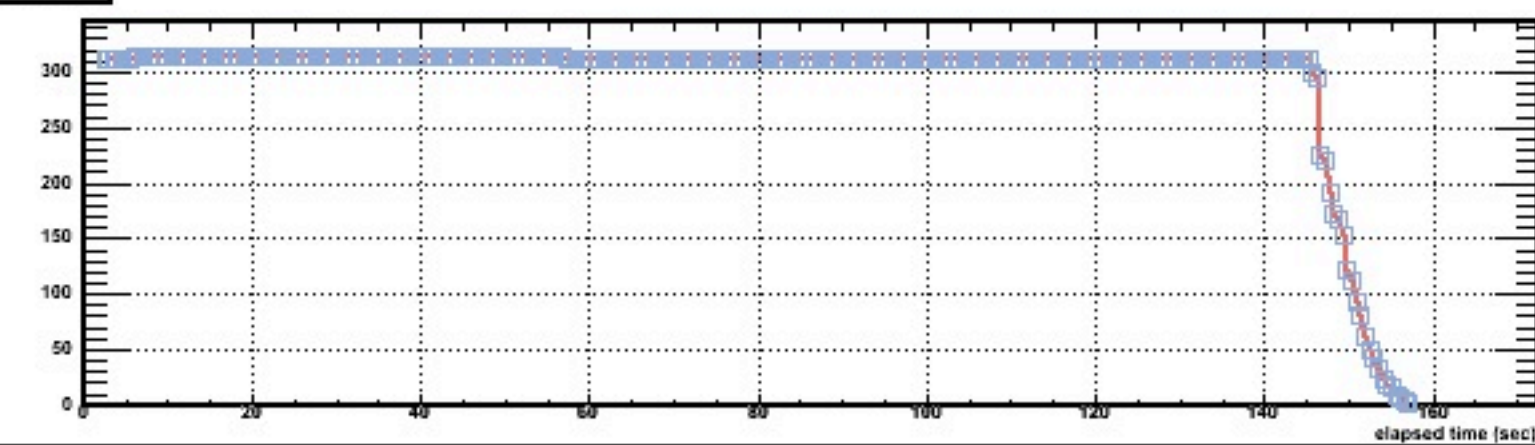
Processing rate (evts/sec)



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

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

<http://pod.gsi.de>