Subject: NIS Users on NFS homes
Posted by Thomas Sattler on Thu, 24 Jan 2008 16:06:33 GMT

Hi there ...

We have a beowulf cluster here. The master holds all data
and distributes work to eight compute nodes. The system
is running well but as debian old stable is used I can't
install some newer software.

I thought about running a kind of application server in
a VE. So people using bleading edge software will be
transparently send to the VE (using a wrapper like this:
alias latest_software='ssh -X VE-IP latest_software')

Installing NIS on the VE worked fine. I can see all users
via getent. But automounter refuses to work:

Jan 24 15:27:44 beo-09 automount[24060]: failed to create iautofs
directory /data
Jan 24 15:27:44 beo-09 automount[24060]: /data: mount failed!

I found some older mails that autofs is not yet supported
inside VEs so I tried to install NIS in the HN. The first
thing I found out this way is that portmap refuses to start
in HN if there is a portmapper running in the VE. (Starting
the portmapper in the HN first works.)

Then I saw that the bind mount didn't solve my problem very
well. /data is a virtual directory, managed by autofs. The
content is dynamically added and removed. While I can use
the mounted directories on the HN, in the (bind mounted) VE
only the first level of directories is shown.

(*) HN# mount --bind /data /var/lib/vz/root/9/data

I can also trigger the automounter from inside the VE. But
when changing to an autofs mounted directory, it is complete
empty:

root@beo-09:/data/home3# ls -la
ls: .: No such file or directory

Becoming a user works, but he cannot see his homedir:

root@beo-09:/data/home3# su - tsattler
No directory, logging in with HOME=/

tsattler@beo-09:/$

I have no more ideas about this at the moment. Can anyone give me a hint what I can do to get the NIS managed users and their NIS/autofs managed to work inside a VE?

Thanks for reading this long mail ;-)
Thomas