Setting up OMERO on an out of the box RHEL6 Workstation

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PDBe / EMDB
Specification

- Dell Precision T5500
  - Dual quad core
  - 12 GB RAM
  - 500 GB disk
  - RHEL6 Workstation

- Red Hat comes in many flavours – what is included on the boxes are varies significantly.
  - RHEL6
  - RHEL6 Server – compilers, X-server etc. may be missing
  - RHEL6 Workstation
  - RH non EL
Registration

• Careful to distinguish between RH and RHN registration
• Trying to do RHN first caused some confusion
• RHN refused to accept that I was not an EBI systems managed machine
Initial updates

• Came with RHEL6.0 out of the box
• ~600 updates later X-server failed to come up on reboot
  • Edit driver module blacklist to include flgrx and not radeon
• Disk partitioning - /home had only 4GB
  • Moved /home into main partition
• Firefox 3.x to 10 – failed. Downloaded installer worked.
Ice 3.4.2

- ZeroC only had RHEL6Server and RHEL6 versions available through yum.
- They added a RHEL6Workstation version on request – two rounds of queries to make them understand that it was a versioning issue
- Place zeroc-ice-rhel6.repo in /etc/yum.repos.d
- `yum install ice ice-* db48* mcpp-devel` (ZeroC recommends ice* which fails on non ZeroC components)
- set ICE_HOME=/usr
Postgres

- postgreSQL 8.4.9 installed but not server and contrib parts
- yum install postgresql-server postgresql-contrib
- OMERO manual refer to /var/lib/postgresql... this has moved to /var/lib/pgsql
- Documentation mentions that there 8.4 require some extra steps not in 8.3 but does not list what they are
- service postgresql initdb
- chkconfig postgresql on
- pg_hba.conf has “METHOD” md5 -> ident (is this an issue?)
- service postgresql start
Python

• Python 2.6.6 by default
• easy_install installed via “egg” method
  • Installing rpm from pypi.python.org/pypi/setuptools failed
• easy_install PIL
  • Installed but with several warnings: package name, C-compiler
  • TKINTER, LITTLECMS not supported – think this is OK
• easy_install numpy – many warnings and errors – despite this it appears to work. numpy.distutil failed. Some of the warnings were due to no proper math libraries – blas/atlas/lapack installed. In a production environment you may want to install them before installing numpy
Build tools

- `yum install ant` – could not build, easy to figure out
- `yum install log4j` – lots of warnings/errors, still easy to figure out
- `yum install ant-*` - still lots of warnings, at this point not inclined to try the add-ons one by one
git

• Remember to add your public rsa key to .ssh/id_rsa.pub
• git init – do not forget to do this once
• git clone git://git.openmicroscopy.org/ome.git
• etc/omero.properties -> etc/local.properties
  • omero.version=4.4.0-DEV
  • versions.ice=3.4.2 – no good the ivy resolver could resolve this
  • versions.ice=3.3.1 – no good, slice runs fine, but then the java build fails on missing Ice 3.4 components
• Missing ice-3.4.2.jar etc, which I get on my other system.
The vision

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