Setting up OMERO on an out of the box RHEL6 Workstation

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PDBe / EMDB

EMBL-EBI

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

- postgreSQL8.4.9 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

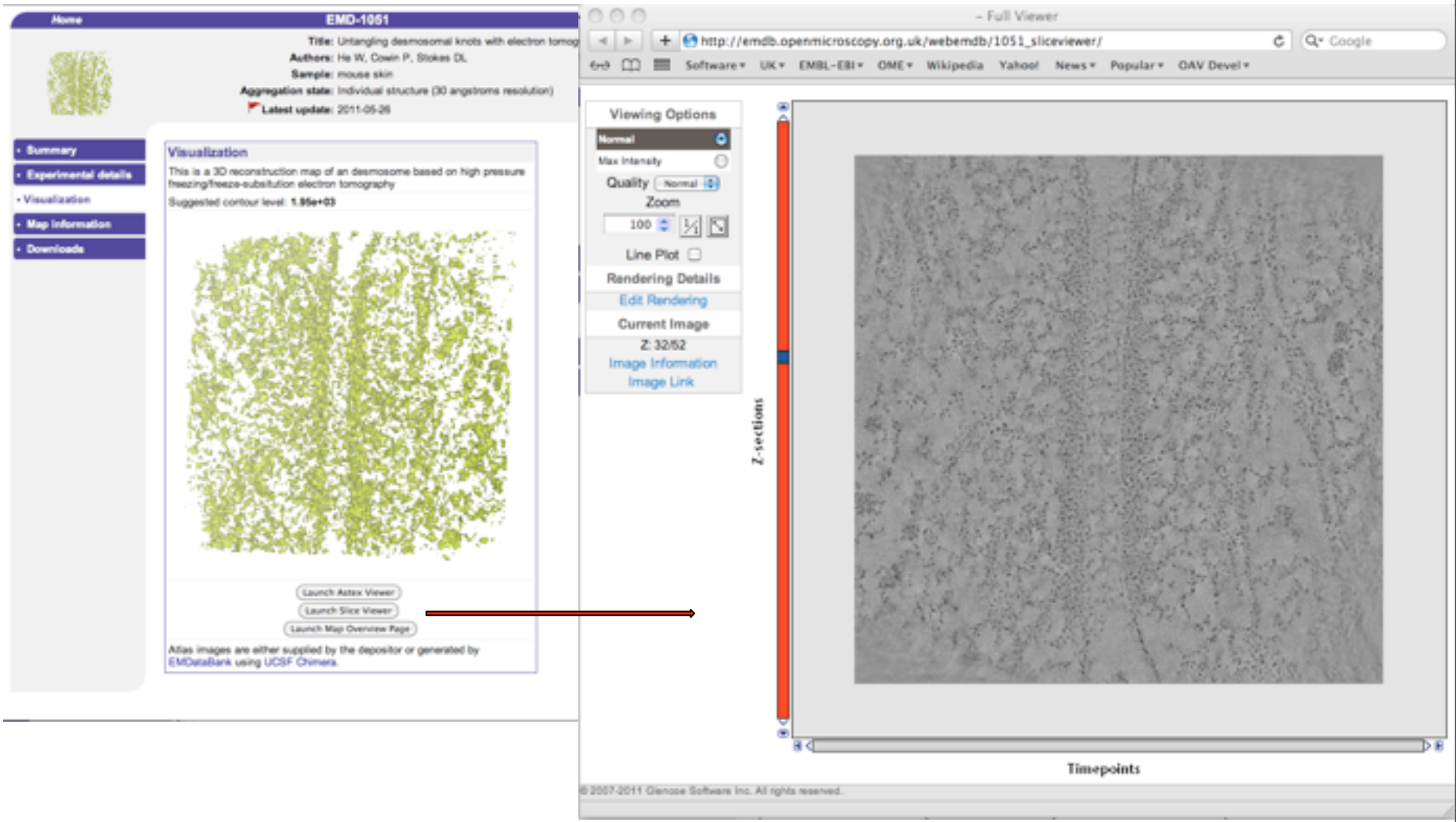
Build tools

- 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


Home
EMD-1051
Title: Untangling desmosomal knots with electron tomog
Authors: He W, Cowin P, Stokes DL
Sample: mouse skin
Aggregation state: Individual structure (30 angstroms resolution)
Latest update: 2011-05-26
Summary
Experimental details
Visualization
Map Information
Downloads
Visualization
This is a 3D reconstruction map of an desmosome based on high pressure freezing/freeze-substitution electron tomography
Suggested contour level: 1.95e+03
Launch Astex Viewer
Launch Slice Viewer
Launch Map Overview Page
Atlas images are either supplied by the depositor or generated by EMDataBank using UCSF Chimera.
- Full Viewer
http://emdb.openmicroscopy.org.uk/webemdb/1051_sliceviewer/
Software
UK
EMBL-EBI
OME
Wikipedia
Yahoo!
News
Popular
OAV Devel
Viewing Options
Normal
Max Intensity
Quality
Normal
Zoom
100
Line Plot
Rendering Details
Edit Rendering
Current Image
Z: 32/52
Image Information
Image Link
Z-sections
Timepoints
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