## **Hoffmann Cluster**

Node	Motherboard version	Processor	Cores	Hyperthreading on?	RAM	Hard Drive
headnode	Supermicro X9DRW-iF v3.2	Dual Xeon E5- 2620v2	8	N	16GB	3ware 9750-4i RAID controller - firmware FH9X 5.12.00.007  RAID1 setup on (2) 3TB drives and back-in-time setup on additional 3TB drive
rh001	Asus DSBF-DE v1006	Dual Xeon E5420	8	N	16GB	1TB
rh002	Asus DSBF-DE v1006	Dual Xeon E5420	8	N	16GB	1.5TB
rh003	Asus DSBF-DE v1006	Dual Xeon E5420	8	N	12GB	1.5TB
rh004	Supermicro Z8PE-D12 v1401	Dual Xeon E5520	8	N	12GB	1.5TB
rh005	Supermicro Z8PE-D12 v1401	Dual Xeon E5520	8	N	12GB	1.5TB
rh006	Supermicro Z8PE-D12 v1401	Dual Xeon E5520	8	N	12GB	1.5TB
rh007	Supermicro Z8PE-D12 v1401	Dual Xeon E5520	8	N	12GB	1.5TB
rh008	Supermicro Z8PE-D12 v1401	Dual Xeon E5520	8	N	12GB	1.5TB
rh009	Supermicro Z8PE-D12 v1401	Dual Xeon E5520	8	N	12GB	1.5TB
rh010	Supermicro Z8PE-D12 v1401	Dual Xeon E5520	8	N	12GB	1.5TB
rh011 - previous HN	?	?	?	?	?	?
rh012	Supermicro X9DRT-HF v3.3	Dual Xeon E5- 2620v2	12	N	32GB	2ТВ
rh013	Supermicro X9DRT-HF v3.3	Dual Xeon E5- 2620v2	12	N	32GB	2ТВ
rh014	Supermicro X9DRT-HF v3.3	Dual Xeon E5- 2620v2	12	N	32GB	2ТВ
rh015	Supermicro X9DRT-HF v3.3	Dual Xeon E5- 2620v2	12	N	32GB	2TB
rh016	Supermicro X9DRT-HF v3.3	Dual Xeon E5- 2620v2	12	N	32GB	2TB
rh017	Supermicro X9DRT-HF v3.3	Dual Xeon E5- 2620v2	12	N	32GB	2TB
rh018	Supermicro X9DRT-HF v3.3	Dual Xeon E5- 2620v2	12	N	32GB	2TB
rh019	Supermicro X9DRT-HF v3.3	Dual Xeon E5- 2620v2	12	N	32GB	2TB
rh020	Supermicro X10DRT-H v1.0a	Dual Xeon E5- 2630v3	16	N	64GB	500GB
rh021	Supermicro X10DRT-H v1.0a	Dual Xeon E5- 2630v3	16	N	64GB	500GB
rh022	Supermicro X10DRT-H v1.0a	Dual Xeon E5- 2630v3	16	N	64GB	500GB
rh023	Supermicro X10DRT-H v1.0a	Dual Xeon E5- 2630v3	16	N	64GB	500GB
rh024	Supermicro X10DRT-H v1.0a	Dual Xeon E5- 2630v3	16	N	64GB	500GB
rh025	Supermicro X10DRT-H v1.0a	Dual Xeon E5- 2630v3	16	N	64GB	500GB
rh026	Supermicro X10DRT-H v1.0a	Dual Xeon E5- 2630v3	16	N	64GB	500GB
rh027	Supermicro X10DRT-H v2.0	Dual Xeon E5- 2630v3	16	N	64GB	500GB

Applications	Version			
adf	2012.01 & 2012.10.29 & 2013.01 & 2014.04ls			
firefly	71g & 8_beta_linux_openmpi_1.4			
gaussian	g03-E.01 & g09-A.02 & g09-C.01 & g09-D.01			
gv	508			
intel compiler	2015.0.090			
mathematica	10.2.0 (removed 8/8/2016)			
mopac	2009			
mpich	1.2.7.p1			
mpich2	1.4.1p1			
openmpi	1.4.4 & 1.6.5 & 1.8.4			
phonopy	1.6.1			
vasp	5.3.5			
vmd	1.8.7			
yaehmop	3.0.3			

To check sol head node hard drives status, go:

https://192.168.255.100:888

with Administrator as log in name, password is root password

## Maintenance records:

3/8/2016: Lulu: No errors detected on hard drive checks. No security updates available via YUM. FSCK run and no errors.

3/8/2016: updated BIOS on rh027 to v2.0 from v1.0a, ran into serious problems, did not do others in same series but did do the IPMI firmware updates on them, updated rh012-rh019 from v3.0 to v3.2, ran out of time to do the BIOS updates on rh004-rh010 - meh26

7/26/2016: Lulu: No firmware update from Michael. There are no security updates available via YUM. Checked all hard drives are fine. Forced fsck, no errors found. User's home data occupied 92% data partition. Hoffmann group users need clean their home directories. Here are four users who had used most of the space:

705386768KB lgr48 361360488KB yt443 355886296KB px32 354069408KB tz265

10/18/2016: Lulu: No firmware update from Michael. There are no security updates available via YUM. Checked all hard drives are fine. Tried ddimage the root partition to an image file at external hard drive. Use sgdisk to backup disk partition table.

1/17/2017: Lulu: No firmware update from Michael. There are no security updates available via YUM. Checked all hard drives are fine. Forced fsck, no errors found. User's home data occupied 87% data partition. Checked root /usr & /var space, looks OK now.

4/18/2017: Lulu: No firmware update from Michael. There are no security updates available via YUM. Checked all hard drives are fine. User's home data occupied 93% data partition.

7/18/2017: Michael: no need to worry about any firmware on motherboards or RAID controller.

7/18/2017: Lulu: There are about 6 security updates via yum on head node. There are about four security updates on capsule but failed and aborted on updating. We got the version before yum update from Ezbackup and stored in /data/chroot/centos6-6-restore. We will see if we need revert it back to the version before update. Checked all hard drives are fine. Forced fsck,

1/16/2018: Lulu: No security updates via yum on head node. ("No packages needed for security;" - meltdown won't got patched by this) Checked all hard drives are fine. Forced fsck,

4/17/2018: Lulu: No security updates via yum on head node. Checked all hard drives are fine. Forced fsck, root partition was 90% full. Then I cleaned up many server and job logs. Root partition is 69% full. Cannot access 3ware web interface with error message "The server at 192.168.255.100 is taking too long to respond. 3ware commands working. Need more investigation.

10/16/2018: Michael did some firmware update on compute nodes. Michael replaced the router with EdgeRouter X. Lulu: No security updates via yum on head node. Checked all hard drives are fine. Forced fsck, Root partition is 77% full. Access 3ware web interface without problem.

1/17/2019: Lulu: No security updates via yum on head node. Checked all hard drives are fine. root partition was quite full. I cleaned up many server and job logs. Now root partition is 70% full.

## 4/16/2019: Michael:

- 1. Update EdgeRouter X from 1.10.7 to 2.0.1
- 2. Update headnode BIOS from 3.2 to 3.3

Lulu: Forced fsck. data is 93% full. rh001 cannot boot.

7/23/2019: Lulu: backintime /dev/sdb drive has I/O errors. I disabled mounting and disabled time machine for now. It has EZbackup now. data is 97% full. rh001 cannot boot.

10/15/2019: Lulu: forced fsck. backintime /dev/sdb drive has I/O errors.rh001 does not boot.

01/22/2020: Lulu: backintime /dev/sdb drive has I/O errors.rh001 does not boot