TUC Cloud
Skill Transfer
OVERVIEW

• Hardware
  • master node
  • compute/cloud nodes

• Network
  • diagram
  • network address ranges

• Software
  • Red Hat Enterprise Linux 6.3
1x master node - SA2260A308R

- 2x Intel Xeon CPU E5-2620 @ 2.00GHz (12 cores)
- 8x 8 GB DDR3 registered DIMMs @ 1333 MHz = 64 GB
- LSI MegaRAID 9261-8i RAID controller
  - /dev/sda: ~1 TB
  - /dev/sdb: 7 TB
  - 6x Seagate ES 2 TB disks in a single RAID set with two h/w partitions
- Intel X520-DA2 Dual Port 10 GbE NIC
- 2x GbE NICs (onboard)
- IPMI (onboard)
  - running f/w 1.87 due to reporting and disk issues with former releases
20x compute/cloud nodes in 5x SH2860A312R
- 2x Intel Xeon CPU E5-2660 @ 2.20GHz (16 cores)
- 8x 8 GB DDR3 DDR3 registered DIMMs @ 1600 MHz = 64 GB
- Single Seagate ES 2 TB disk
- 2x GbE NICs (onboard)
- IPMI (onboard)
  - running f/w 1.87 due to reporting and disk issues with former releases
4x compute/cloud nodes in 1x SH2869A312R

- 2x Intel Xeon CPU E5-2670 @ 2.60GHz (16 cores)
- 16x 16 GB DDR3 DDR3 registered DIMMs @ 1600 MHz = 256 GB
- Single Seagate ES 2 TB disk
- 2x GbE NICs (onboard)
- IPMI (onboard)
• Compute and deployment net:
  • cloud001 - cloud024  10.0.0.0/16 (eth0)
  • eth1 needed for correct KVM host configuration (IP net ?)

• Management net:
  • cloud001-ipmi - cloud024-ipmi  10.0.100.0/16 (dedicated IPMI port)
  • login: ADMIN / password: ***

• Master:
  • claudia.rz.tu-clausthal.de  10.0.0.253 (eth0)
  • claudia.rz.tu-clausthal.de  10.0.0.254 (bond0.1101) possible?
• Installation of Red Hat Enterprise Linux 6.3 on /dev/sda3
  • login: root / password: ***
  • disabled SE Linux in order to fulfill Platform Cluster Manager Advanced Edition installation settings
  • installed packages according to PCM-AE installation guide

• Additionally the following online resources were added manually:
  • http://fedoraproject.org/wiki/EPEL

• Software sources not available through the repositories are saved in /install/software/rpm and /install/software/src

• Copies of all OS to be used are located at /install/iso as ISO disk images
Questions to be discussed:
- connection to deployed system/cluster/VM for Linux and Windows
- use of SSL as standard protocol to the web portal
- depth of LDAP integration (web portal / systems / templates)
- usage of 20 GbE LACP trunk (bond0.1101) for deployment network
- Deployment of CentOS systems/clusters/VMs due to licencing reasons
- Wiki access for ongoing documentation