NBIC Galaxy @ SURFsara HPC Cloud

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**SURFsara HPC Cloud**
- 19 nodes, 32 cores and 256 GB RAM each
- 400 TB storage in total
- Maximum 40 Gb access to storage

**Installation Automation**
- Automatic tool installation
  - Cloudman script with opennebula support
  - Galaxy codebase
  - PostgreSQL DB & Sun Grid Engine
  - Common NGS tools, e.g., BWA, bowtie, samtools, etc.
- Automatic reference dataset installation
  - Cloudbiolinux script
  - Common genome builds, hg18, hg19, mm9, tair10, etc.
  - Tool specific genome indexes for bowtie, BWA, etc.

**System Architecture**
- Implemented using Cloudman script
- NFS shared file system
  - /mnt/galaxyTools: galaxy, 3rd party tools,
  - /mnt/galaxyData: galaxy user data, postgres DB
  - /mnt/galaxyIndices: genomes, liftover chains

**Usage**
- Used successfully in a number of NGS courses organized by NBIC
- Base image was used by several project specific Galaxy instances running at SURFsara HPC Cloud

**Acknowledgement**
- Enis Afgan and the members of NBIC Galaxy administration team
- NIOO, SURFsara, CTMM-TraIT

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