



#### Hammercloud deployment

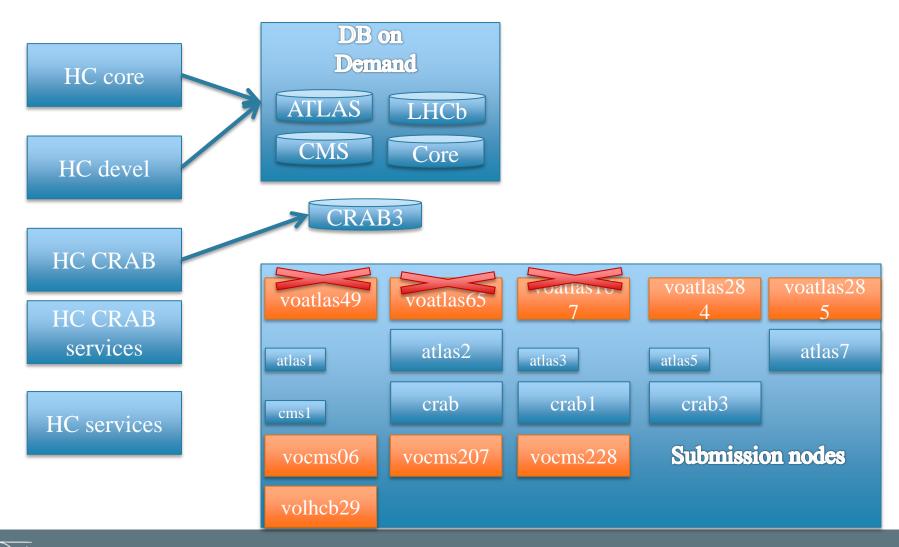
# Pablo Saiz CERN





**IT-SDC : Support for Distributed Computing** 

#### **Current deployment**



Hammercloud deployment, Pablo.Saiz@cern.ch

**IT-SDC** 

5/7/2014

#### **Overview of current setup**

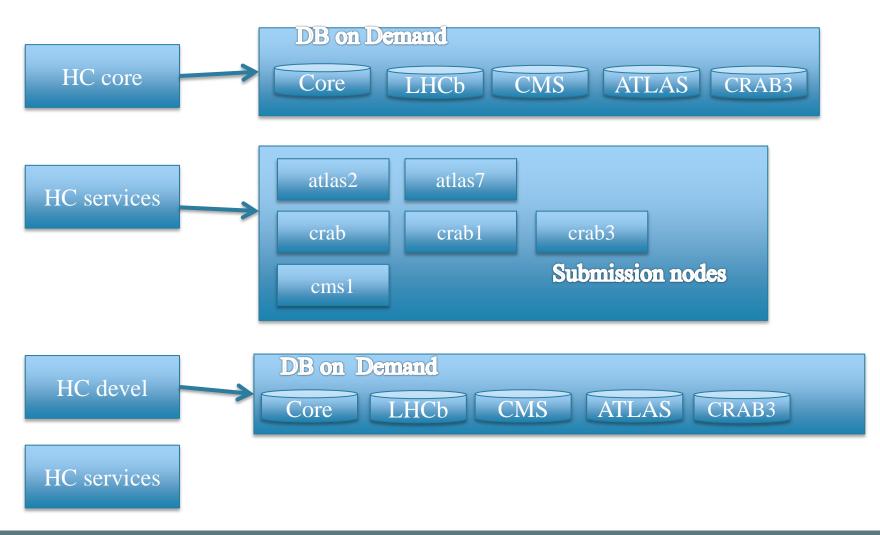
- Clear distinction of roles
- Multiple nodes for submission
  - With different sizes
  - Some of them in quattor
- Development machine for web UI
  - Using same DB
- Using openstack project
  - With multiple images: SLC5, SLC6, HC v4, atlas-snap
- Software installed on core machine
  - Using git checkout
  - And some manual modifications!
  - Nfs-mounted on submission nodes
  - Very fast deployment cycle
- Using cvmfs for PANDA dependencies

### **Possible improvements**

- Decoupling test/production
  - Like done for CRAB3
  - (Decoupling of VO?)
- All submission nodes on Al
  - Use puppet, and default images
    - Extra configuration in manifests
    - Hostgroups for core/services/submission node
- Install software on submission nodes
  - Avoid nfs mounted area
- Split Hammercloud core and VO specific repo
- Automatize release procedure
  - Introduce Koji as build system
  - Use standard ai repo (Latency: 15m ai-testing, 4h ai-stable)
  - Use automatic versioning number

5/7/2014

#### **Suggested deployment**



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## Git repo

- Current structure:
  - Single repo: hammercloud (1GB)
- Suggested:
  - Hammercloud-core (6.5 MB)
    - Plus MANIFEST.in, setup.cfg, setup.py, post-install
  - Hammercloud-atlas (1GB)
    - Apps/atlas + web/[templates/src/media]/atlas
      - (apps/atlas/inputfiles/templates/HWWNtupleCode-00-02-07/test/HWWlvlvCode/Run/\_\_panda\_rootCoreWorkDir 170 MB!)
  - Hammercloud-cms (1 MB)
    - Apps/cms + web/[templates/src/media]/cms
  - Each repo also contains:
    - Files for building rpm with python distutils: MANIFEST.in, setup.py, setup.cfg, post\_install

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