

# US-CMS Milestone Report

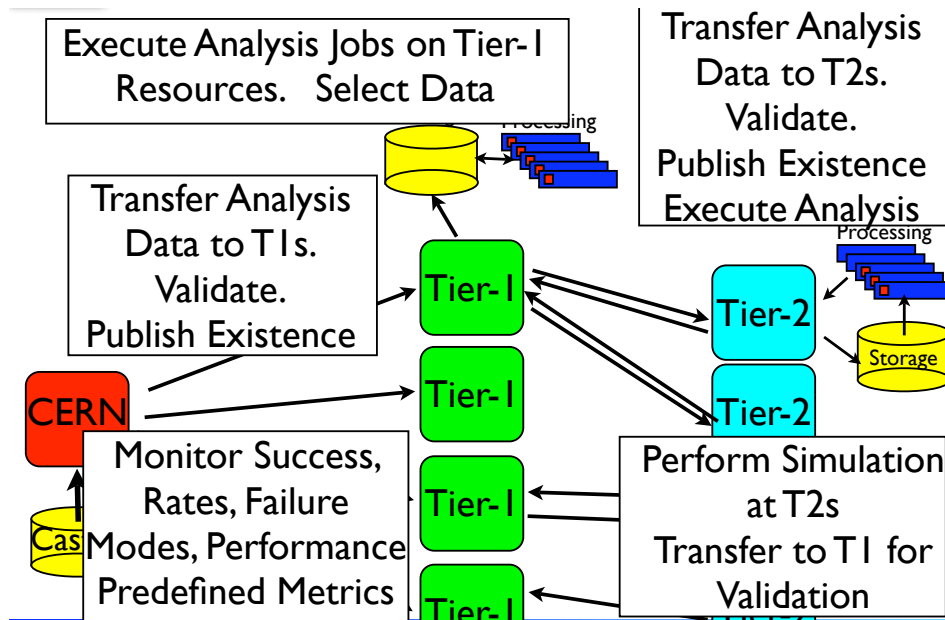
## Participation in Service Challenge 4

### Anticipated April 2006 - September 2006 (Started April)

The service challenges (SC) are a series of tests organized by the WLCG to develop and deploy a production computing system for LHC experiments. The initial 2 SC's were bandwidth challenges mainly demonstrating the ability to transfer data between centers. SC3 introduced experiment services and was designed to demonstrate the basic low level functionality of the computing tiers simultaneously. This included data transfers from CERN to Tier-1, event hosting and access at Tier-1 centers, transfer of data to Tier-2 centers, simulation at Tier-2 centers and archiving of data back to Tier-1 centers

Service Challenge 4 was intended to demonstrate a production service to the experiments. For CMS SC4 served as a dress rehearsal for the Computing Software and Analysis Challenge 2006 (CSA06).

The participation in service challenge 4 milestone was met and the site commissioning and service validation activities were extremely useful in preparing for CSA06. The work-flows exercised in SC4 are shown in the figure below.



Sites were validated using a series of commissioning tasks. In the end approximately 25 sites participated in the service challenge, including the US-CMS Tier-1 and all the US Tier-2 centers.