Service Challenge 3
CMS Plans

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Schedule Overview

- **July: throughput phase**
  - ✴ Optional leading site-only tuning phase, may use middleware only
  - ✴ T0/T1/T2 simultaneous import/export using CMS data placement and transfer system (PhEDEx) to coordinate the transfers
  - ✴ Overlaps setup phase for other components on testbed; will not distract transfers – setting up e.g. software installation, job submission etc.
- **September: service phase 1 — modest throughput**
  - ✴ Seed transfers to get initial data to the sites
  - ✴ Demonstrate bulk data processing, simulation at T1, T2s
    - ◆ Requires software, job submission, output harvesting, monitoring, …
    - ◆ Not everything everywhere, something reasonable at each site
- **November: service phase 2 — modest throughput**
  - ✴ Phase 1 + continuous data movement
  - ✴ Any improvements to CMS production (as in MC production) system
    - ◆ Already in September if available then

Preparation

- By June 17
  - PhEDEx V2.2 SC3 instance available (done)
  - Site configurations and fallbacks determined
  - Technical details (server machines, path names, …) determined
- By June 22
  - All CMS data loaded to Tier 0 buffer
  - Test transfers begin at latest
  - Full chain to tape at Tier 1, to Tier 2 disk
- By June 29
  - All logging, monitoring arranged to be visible

Throughput Phase

▶ July 1
* Jamie push the big "launch" button
* Beginning of optional site-tuning phase (e.g. FTS-only transfers)
* Beginning of disk-to-disk phase

▶ July 11: Last date to begin CMS transfers using PhEDEx

▶ July 20: Disk-to-disk phase ends, report to GDB

▶ July 21-25: Disk-to-tape phase

▶ July 25-31: T2-T1 transfers phase

Service Phase Preparation

▸ **End of June**

  ✳ All participating sites determined

  ✳ Systems and services in use agreed

▸ **End of July**

  ✳ Gateway system installed (PhEDEx, PubDB, harvesting)

    ◆ Including associated databases and web server PubDB

    ◆ Plus of course everything used in throughput phase

  ✳ Automatic software installation available

  ✳ UI for testing and job submission available

▸ **End of August**

  ✳ All above components tested

Service Phase: Part I

- September 1 - 14
  - ✳ Transfer seed data
    - ◆ Full chain from Tier-0 to Tier-2s
  - ✳ Ensure skim jobs work at Tier-1s
  - ✳ Ensure MC jobs work at Tier-2s
- September 15 - 30
  - ✳ Demonstrate Tier 1/2 data processing targets
    - ◆ One period of at least a week sustained (at each site)
    - ◆ Data processing (bulk analysis, skim jobs) at Tier 1s
    - ◆ Data processing (bulk analysis) and MC production at Tier 2s
    - ◆ Job submission from anywhere on any data
- October
  - ✳ Reserve for changes, re-tuning, re-testing
  - ✳ Deployment of part II system, including updated/new components
  - ✳ Testing of PhEDEx/FTS backend, transfer fail-over
- October 15: Successful components deployed into production

Service Phase: Part II

▶ **November 1 - 21**

✳ Concurrent data processing and transfer (all directions)

◆ Using FTS on sites that prefer it, provided integration tests and throughput phase were successful

◆ Including Tier-1 transfer fail-over and subsequent catching up

✳ Demonstrate full service challenge goals

◆ One period of at least a week sustained globally

▶ **November 22 - 31**

✳ Reserve

▶ **December 15**

✳ Successful components deployed into production