

LHCb DB Requirements and Work Plan

Marco Clemencic
LHCb

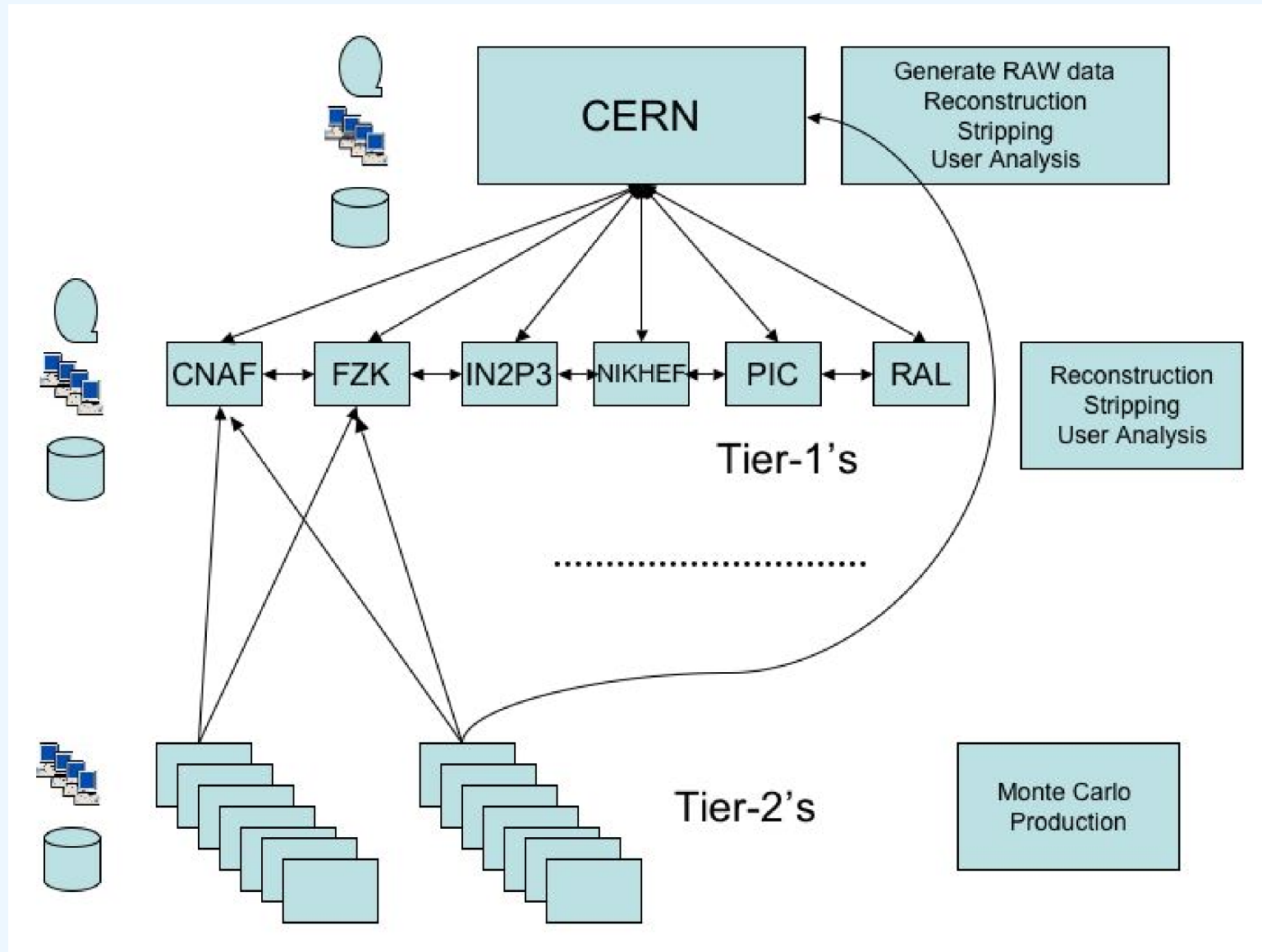
3D Meeting 22-06-2006

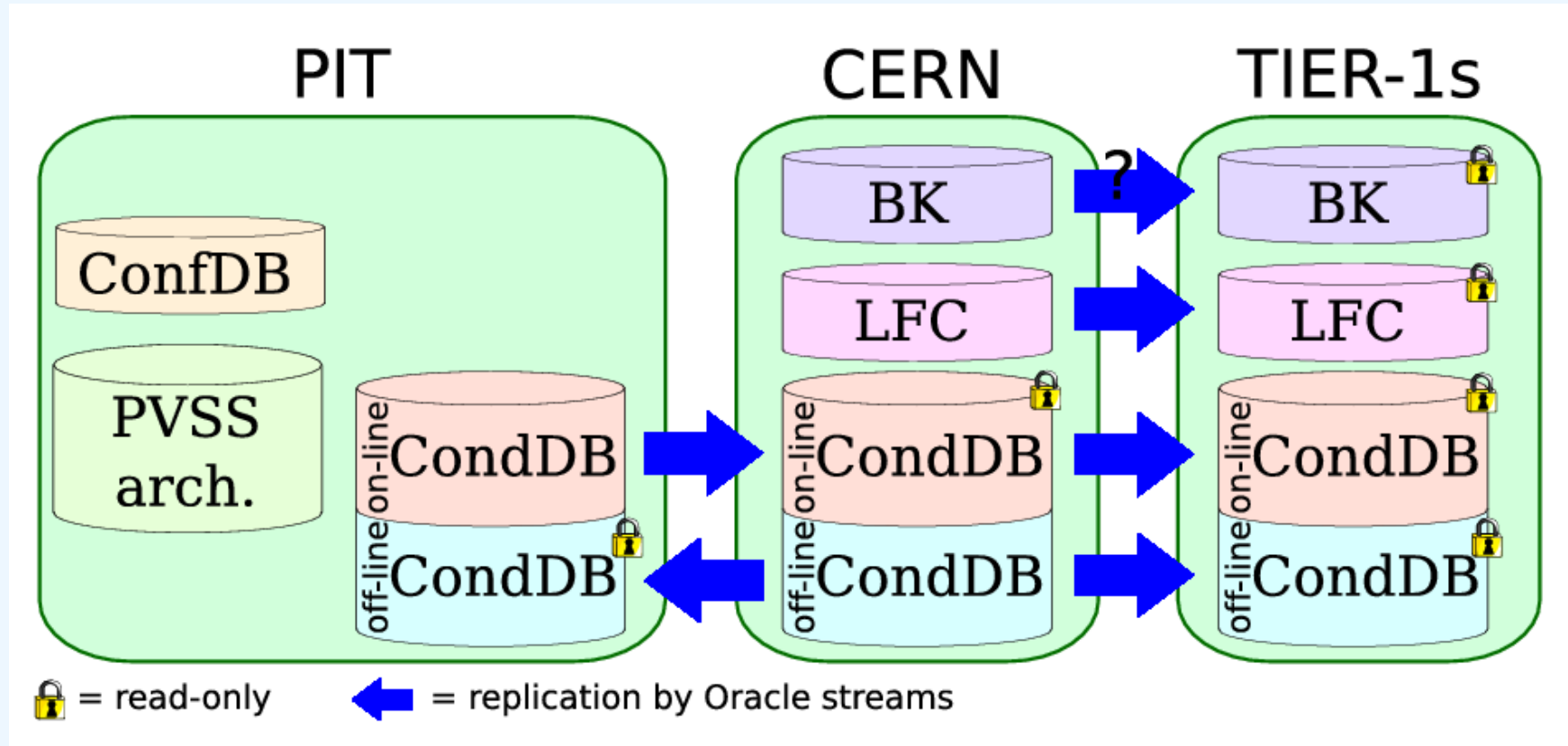


Overview

- Introduction
- Requirements
- Plans for Jul-Oct
 - CondDB
 - LFC
- Production Phase
- Conclusions

Introduction – Computing Model





No update with respect to the numbers already reported.

Tier 1 Hardware Setup

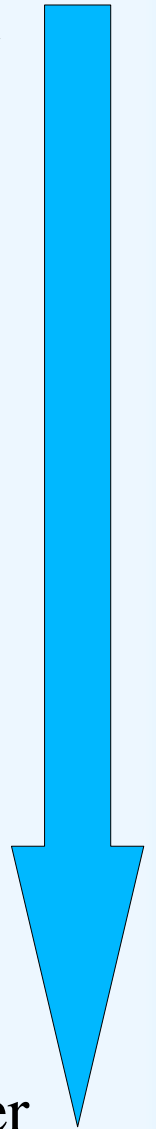


- Propose to setup for first 6 month
 - 2/3 dual-cpu database nodes with 2GB or more
 - Setup as RAC cluster (preferably) per experiment
 - ATLAS: 3 nodes with 300GB storage (after mirroring)
 - LHCb: 2 nodes with 100GB storage (after mirroring)
 - Shared storage (eg FibreChannel) proposed to allow for clustering
 - CMS: 2-3 dual-cpu Squid nodes with 1GB or more
 - Squid s/w packaged by CMS will be provided by 3D
 - 100GB storage per node
 - Need to clarify service responsibility (DB or admin team?)
- Target s/w release: Oracle 10gR2
 - RedHat Enterprise Server to insure Oracle support

Work Plan - CondDB

- Set up streaming to Tier-1s
- Test the replication Tier-0 → Tier-1s
- Set up streaming between a LHCb managed RAC (Online) and the CERN one
- Test replication
 - CERN → Online
 - Online → CERN → Tier-1s

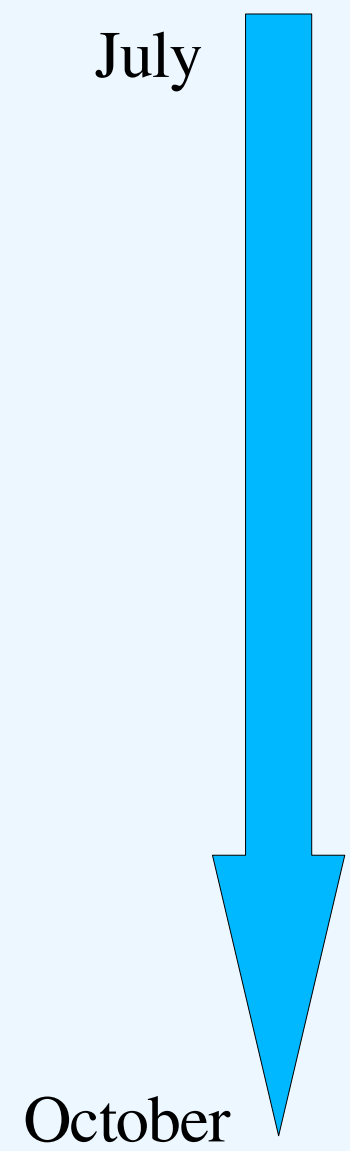
July



October

Work Plan - LFC

- Replication tests ongoing
 - CERN → CNAF
- Large scale tests using available Tier-1s
 - LFC setup at Tier-1s
 - Oracle streaming setup



- CondDB and LFC up and running
 - Master copy at CERN
(RAC in the PIT will not be ready before end of the year)
 - Replicas at Tier-1s
 - GRID access

Conclusions

- Provided resources are enough for start-up
- Setup and tests should expose problems or limitations
- September deadline for corrections to the requirements should be ok