

RDMS CMS Computing and DC04&DC05

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CMS Computing in Russia

Directions of Activities:

- *support and development of current versions of CMS SW;*
- *participation in PCP 03&PCP04 & preparation for participation in DC05;*
- *participation in the EGEE project (NA4) (just now at a planning stage): CMS applications support&development;*
- *www-informational support of RDMS activities.*

March.2004

Man Power for CMS Computing in Russia

Institutes	farm administration	installation& production running	production tools	PRS SW code ORCA	Physics generators	Σ FTE
SINP MSU & RCC	1	1.5	-	3.5	4	10
JINR	0.4	0.4	-	2.3	2.8	5.9
ITEP	0.8	0.2	1	2	-	4
IHEP	0.3	0.6	0.2	0.4	1.3	2.8
LPI	0.6	0.4	-	0.7	0.3	2
Kharkov (Ukraine)	1	0.6	-	-	-	1.6
Σ FTE	4.1	3.7	1.2	8.2	8.1	

in a total – 26.3 FTE

RDMS CMS staff responsibilities in CMS SW

Production tools (IHEP):

BODE (a graphical interface to BOSS production system)

GAR (an archiver for a large number of small files)

ORCA (administration of packages and developing)

(SINP,ITEP,JINR,IHEP):

HcalCalibration - a package for off-line calibration and monitoring

- ✓ trigger,reconstruction,analysis objects
- ✓ isolated particles
- ✓ histogramming
- ✓ gamma/Z+jet
- ✓ calibration DB - ORCA interface

Jets/AdvancedJets

- ✓ jet energy correction with tracker pile-up subtraction algorithm

HeavyIonAnalysis

- ✓ analysis and reconstruction objects for heavy ion events
- ✓ PrimaryVertexFinder
- ✓ HICMuonReco
- ✓ AzimuthalAssimetry

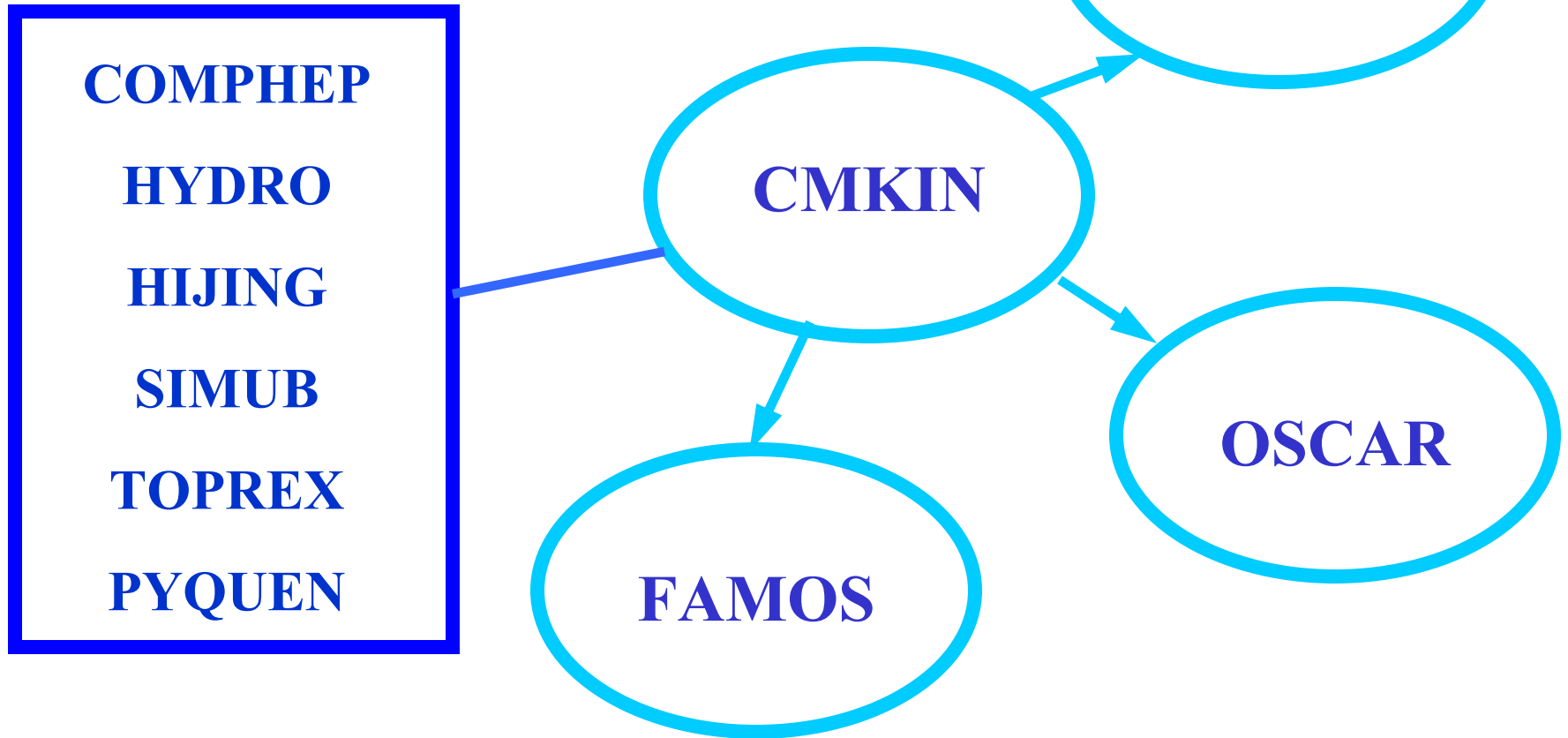
Muon - subsystem of packages

IN PLANS:

- ✓ radiation damages in CMSIM,OSCAR,ORCA
- ✓ local track reconstruction in muon system

GENERATORS

(SINP, ITEP, JINR, IHEP responsibilities)



library of COMPHEP events

library of parton events /datacards /channel selection codes

*Current Status of Software installed &
in use at RDMS CMS institutes :*

**CMSIM up to v.133; ORCA up to v. 7_6_1;
complete production chain; McRunJob;
BOSS; BODE**

**SRB (Storage Resource Broker) clients are
installed at SINP MSU, JINR, IHEP,
Kharkov and FIAN**

www informational support

The image displays four overlapping Netscape browser windows, each showing a different web page related to the CMS (Compact Muon Solenoid) project. The windows are arranged in a collage, with some overlapping others.

- Top-left window:** Titled "Netscape: ME1/1 Technical Documentation". The address bar shows "http://sunct2.jinr.ru/docs/rdms_1/". The page content includes a link to "Structure of Catalogues of Technical Documentation on ME1/1 Muon Station and ME1/1 Chamber" and a section for "ME1/1 Chamber".
- Top-right window:** Titled "Netscape: WWW page of Dubna CMS B-physics group". The address bar shows "http://cmsdoc.cern.ch/~shulga/". The page features a header with "Web Page of CMS B-physics Dubna group" and logos for CERN, CMS, and LEP. It lists links for "SIMUB - the package for B meson generation and deconvolution", "R physics on CMS", and "News".
- Bottom-left window:** Titled "Netscape: IHEP in CMS". The address bar shows "http://sirius.ihep.su/cms/". The page has a large "CMS IHEP Physics" header and a navigation menu with buttons for "General", "Activity", "Meetings", "TALKS", "Publications", "Documents", and "Forum". The main content area includes a "Welcome to CMS-IHEP Physics" message and a list of links for "CMSIP group" and "We study (click Activity for more information):" such as "hard diffraction phenomena", "physics of the top quarks and charged Higgs bosons", "event generators", and "statistical methods of estimation of discovery potential for mass-production runs".
- Bottom-right window:** Titled "Netscape: RDMS CMS SERVER". The address bar shows "http://sunct2.jinr.ru/". The page is a comprehensive overview of the "RDMS CMS WWW" site, described as "The Compact Muon Solenoid Collaboration". It features a central navigation menu with categories like "News", "Organizational", "Project", "Annual Reports", "Institutes", "Subsystem Groups", "Related Events", "Archive", "Contact", and "Home". The main content area is divided into sections: "News, Announcements", "RDMS CMS Organizational Structure", "RDMS CMS Project" (with sub-links for "Table of Contents" and "Table of Figures"), "RDMS Institutes", "RDMS CMS Related Events", "Archive of RDMS CMS Related Papers", "ME1/1 Technical Documentation", "RDMS CMS Subsystem Groups" (listing various detector components like "Endcap Muon Station ME1/1", "Hadron Endcap Calorimeter", "Electromagnetic Calorimeter", etc.), and "FTP Working Server". At the bottom, it lists contact information for the "Chairman of Collaboration Board" (V. Matveev) and the "Spokesperson" (I. Golutvin).

Current PCP resources in Russia (March2004)

Institutes	CPUs in use	Disks, TB
IHEP	10	0.2
ITEP	12	0.9
JINR	20	0.6
Kharkhov	16	1.4
SINP	12	0.9
LPI	6	0.04

In a total: 76 CPU; 4.04 TB of disk space

**Participation of Russian institutes
in CMS production is stable
at a level of 5% from all CMS simulations
since 2000 year**

During PCP03 we have produced more than 2 000 000 events

Short-term plans:

- ✓ to determine samples and resources for PCP04**
- ✓ to specify tasks and staff for participation in EGEE NA4
(CMS applications)**