

Status of UTA IAC

Jae Yu

2nd SAR Workshop

Sept. 26 – 27, 2003

Oklahoma University

UTA IAC MC Farm and Analysis Resources

- UTA has been doing MC production for the past decades
- Have two independent farms
 - Swift farm (HEP)
 - 22 dual P3 900MHz
 - 250Mbyte/cpu
 - A total of .6TB disk space
 - CSE Farm
 - 10 P3 900MHz cpu's
- Analysis Machines
 - Four desktop machines of ~2GHz + 0.5GB each
 - Storage space ~0.4TB



The UTA-DØGrid Team

- We've been working well with CSE colleagues
- Faculty: 2 HEP + 1 CSE
- Senior Research Associate: 0.1 FTE
- Research Associate: 1.4 FTE (1 at FNAL + 0.4 at UTA)
- Software Program Consultant: ½ FTE
- Engineering MS Students: 2
- Physics Undergraduate Student: 1

Software Products

- McFarm: A UTA developed, python based MC production control software (Drew Meyer)
- Ganglia resource monitoring (the ganglia team and Prashant)
 - Contains 6 farms, including Tata institute
- McFarmGraph: MC production job monitoring system using gridftp
 - Improved to increase the speed for report
 - Users make good use out of it
- MC Farm Performance Monitoring (Prashant)

Ganglia Resource Monitoring

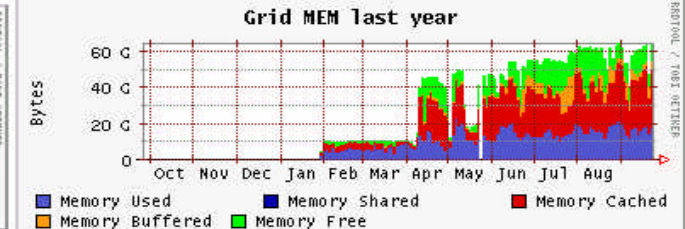
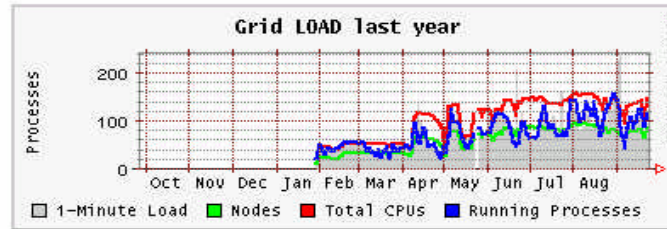


Grid > -Choose a Cluster ▾

Name / Info	Load Averages			%CPU User, Nice, System, Idle			
Grid (6 Clusters)	62.97	62.87	61.25	3.6	28.5	0.7	67.2

92 hosts up and running
(153 CPUs Total)

0 hosts down



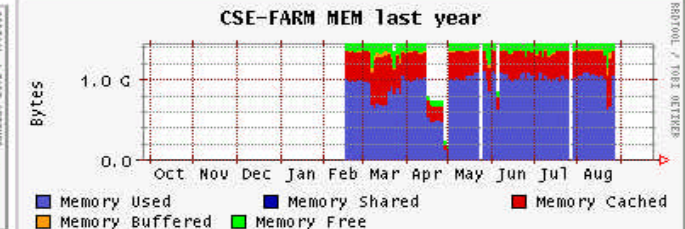
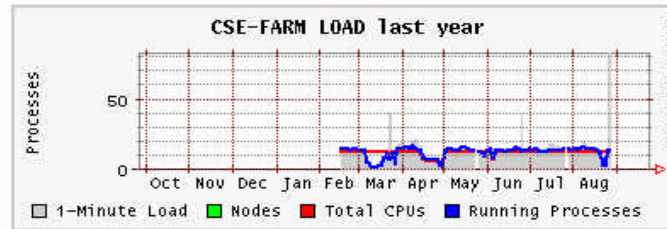
CSE-FARM (physical view)

0.22	0.36	1.46	0.9	0.0	0.2	99.6
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Cluster Localtime:
**September 24, 2003,
3:05 pm**

12 hosts up and running
(12 CPUs Total)

0 hosts down



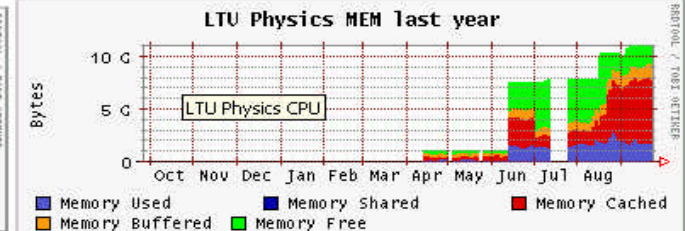
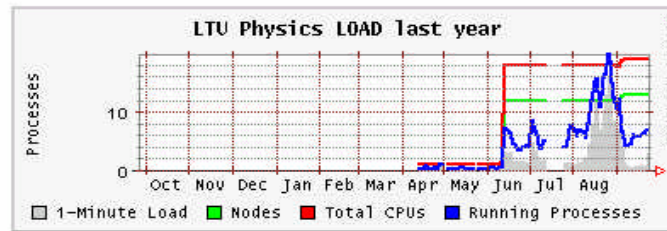
LTU Physics (physical view)

5.99	5.07	4.61	10.3	3.8	1.2	84.8
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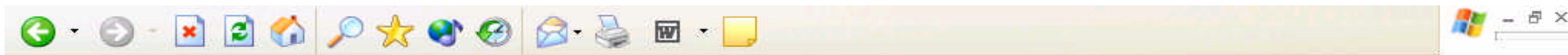
Cluster Localtime:
**September 24, 2003,
3:06 pm**

13 hosts up and running
(19 CPUs Total)

0 hosts down



McFarmGraph



SWIFT-HEP Farm Request Desc for mcp14

Request	%Done	Graph
Req5934	87.11%	<ul style="list-style-type: none"> ARCH 54.54% SIM 25.75% READY TO GATHER 3.03% DOGS STAR 16.66%
Req5935	30.00%	<ul style="list-style-type: none"> ARCH 29.82% DOGS STAR 10.52% READY TO EXECUTE 59.64%
Req5936	0.00%	<ul style="list-style-type: none"> READY TO EXECUTE 100.0%
Req7565	93.33%	<ul style="list-style-type: none"> ARCH 93.33% FAIL 6.66%
Req7738	0.00%	<ul style="list-style-type: none"> FAIL 100.0%



ARCHIVED REQUESTS

[Home](#)

2007-08-08 10:00:00

McFarmGraph Archive Report



SWIFT-HEP List of Archived jobs for mcp11

REQUEST	JOB COUNT	EVENTS	PHASES
bbbar	2	27000	P
minbias	62	375000	PD
npv00+04+09+bbbar	51	25500	DSRr
npv00+04+09+susy	42	21000	DSRr
npv00+04+09+z	180	90000	DSRr
ProdUnknown	9	4500	RT
qcd	2	110000	P
Req2526	85	42500	D
ReqTest13.05.00	1	10	P
susy	3	27000	P
topv00+04+08+ttbar	18	9000	DSRr
ttbar	2	12000	P
z	7	117500	P
TOTAL		861010	

[Home](#)

[CSE-HEP farm status](#)

[LTU-HEP farm status](#)

[OU-HEP farm status](#)

[SWIFT-HEP farm status](#)

LEGEND

P: PYTHIA

D: DOGSTAR

S: SIM

R: DORECO(reco)

T: DORECO(tmb)

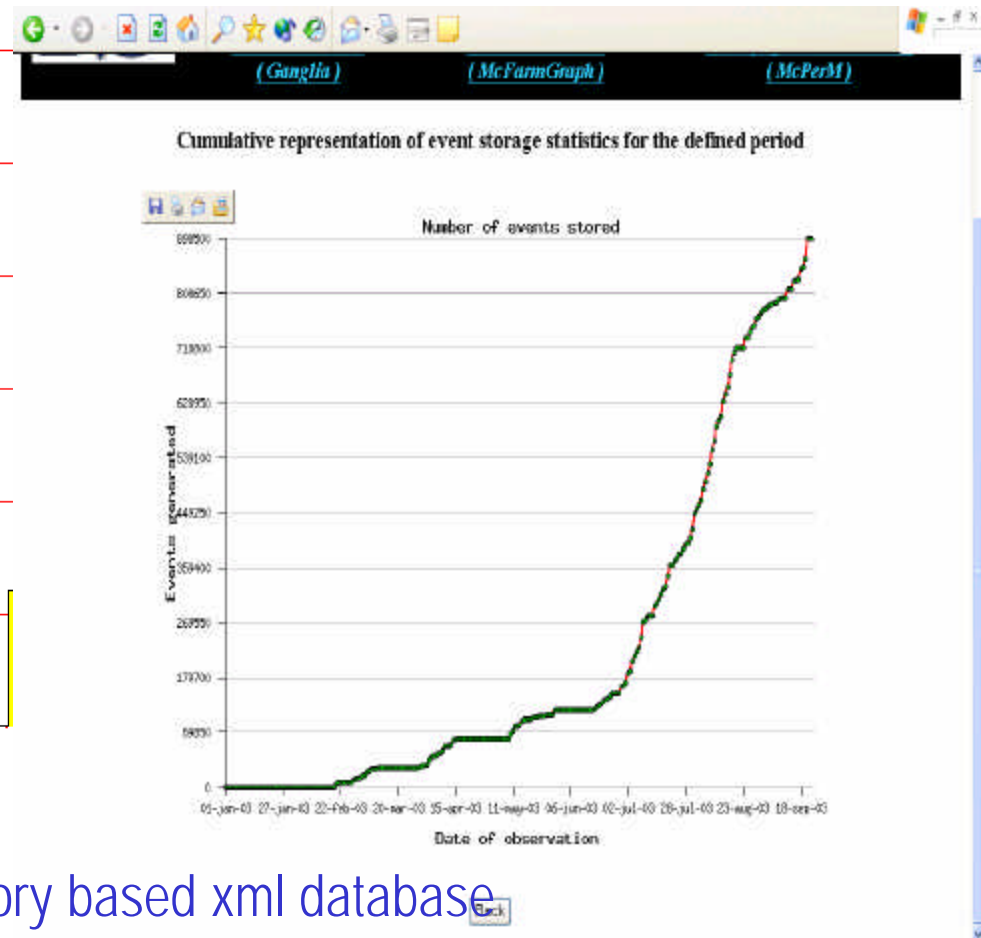
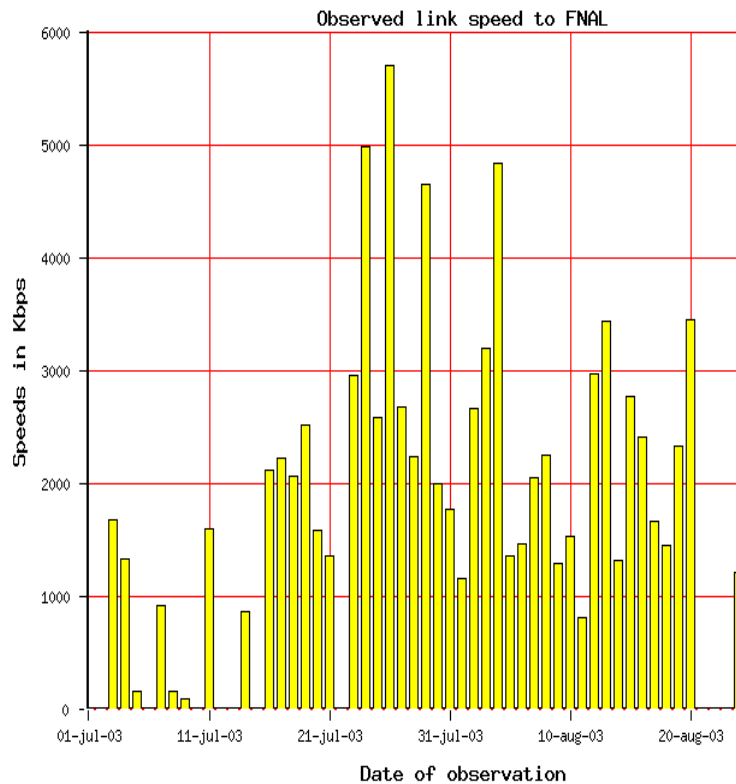
r: RECOA

This webpage is a joint project of CSE@UTA and Department of Physics

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McPerM



- Data organized in directory based xml database
- Local farms only

Sept. 26, 2003

UTA Status, J. Yu
2nd DØSAR Workshop, OU

Future Projects

- Preparation of DØRAC equipment (The Team)
 - MC Production
 - Re-reconstruction
- McFarm (Meyer)
 - Integration of re-processing within the context of SAM/Grid
 - Enhanced monitoring
 - Better error handling
- McFarm Interface to SAM/Grid (Nirma+HyunWoo)
- MySQL McFarm Monitoring Information Database for both McFramGraph and McPerM (David)
- McPerM improvement (Prashant)
- Automated MC Request download and production (??)

Conclusions

- SAR has been the driving force behind all the improvements
 - So far only supported by the university funds
- UTA will continue making improvements but will be beneficial to have help from other institutions within the region
- Was successful in re-processing-by-hand
- Expeditious preparation of RAC is highest priority
- Have been keeping our own color but should work within the context of SAM/Grid
- Must work together to bring external funds