



MOGAS: Grid Accounting System Latest News

By

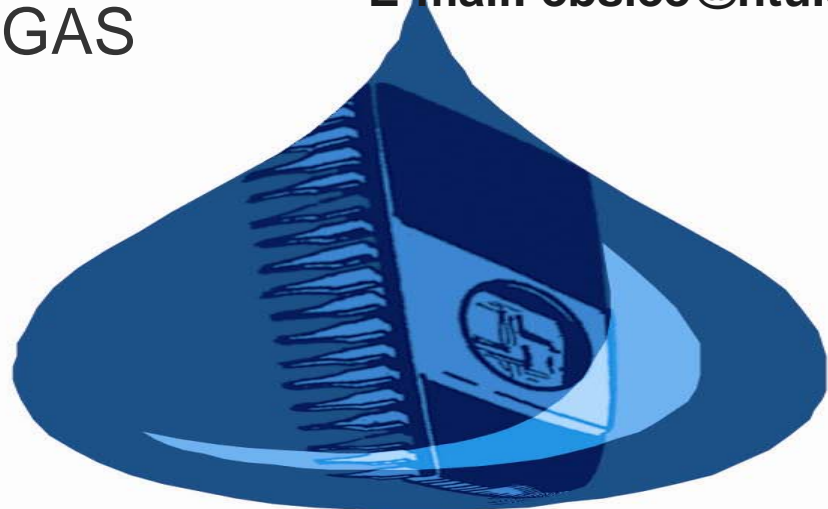
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Singapore

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<http://ntu-cg.ntu.edu.sg/MOGAS>

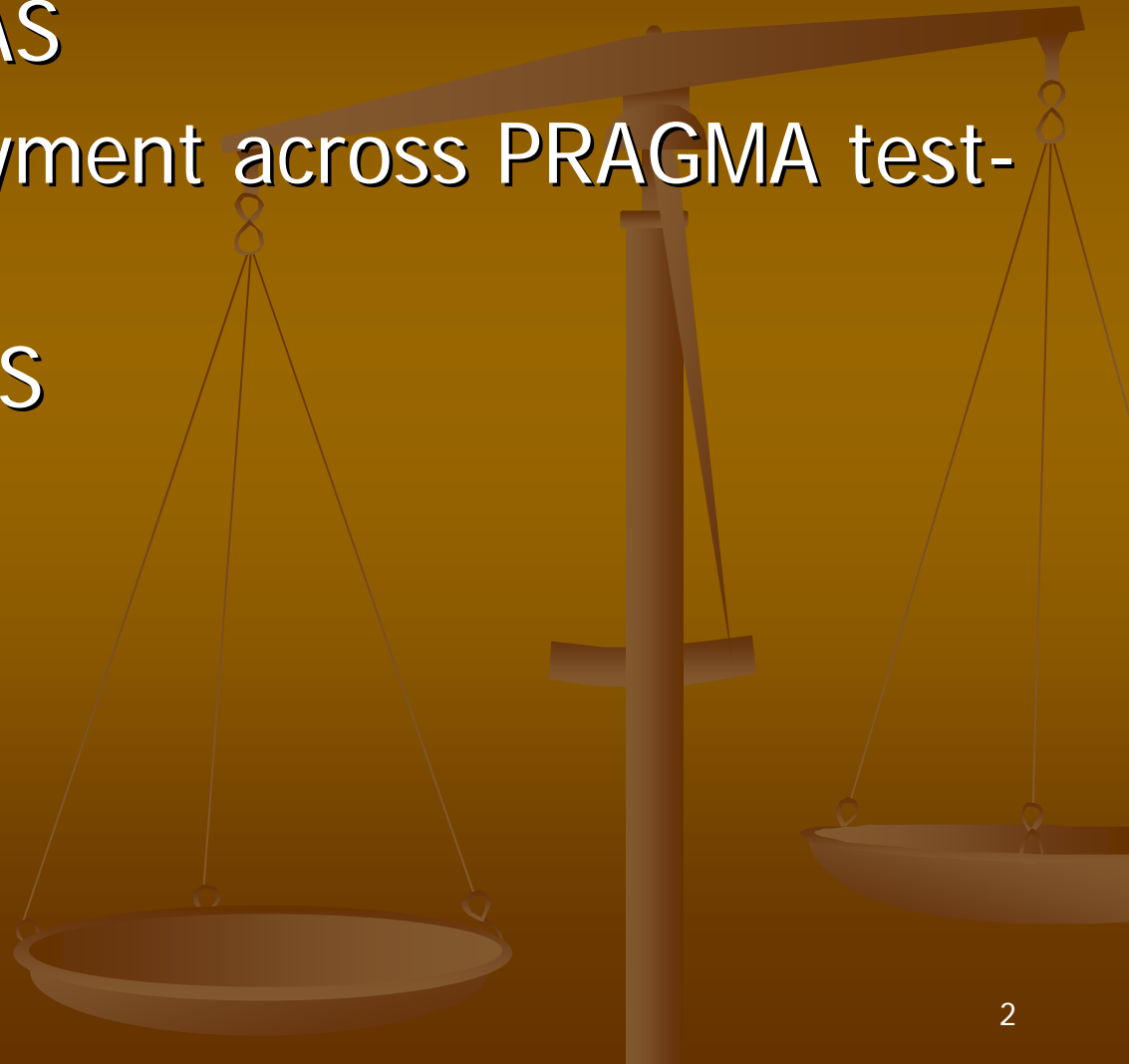


National Grid
NG
SINGAPORE

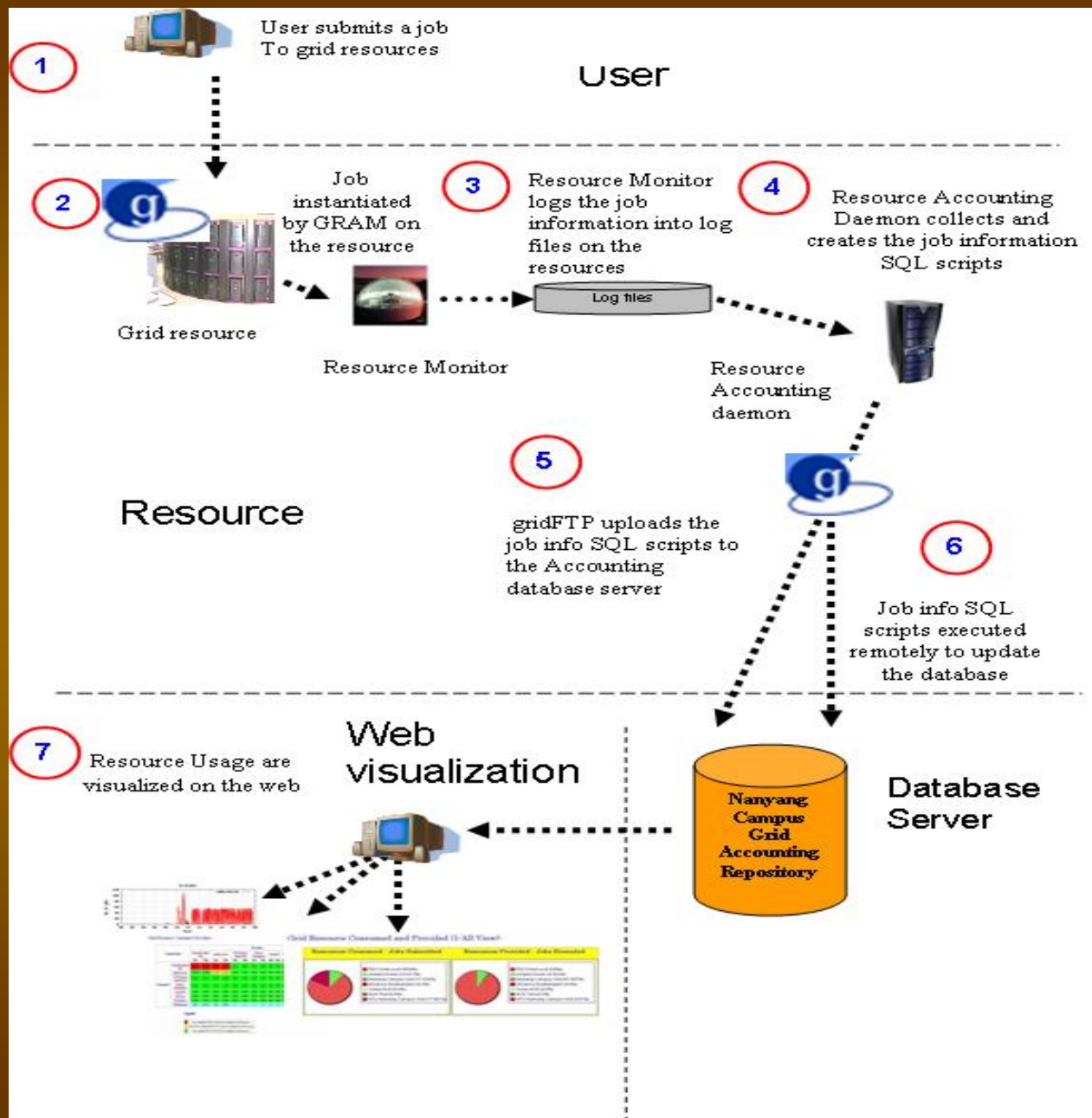


Content

- Recap on MOGAS
- Status of deployment across PRAGMA test-bed
- Power of MOGAS
- New GUI
- GRMAP



Workflow

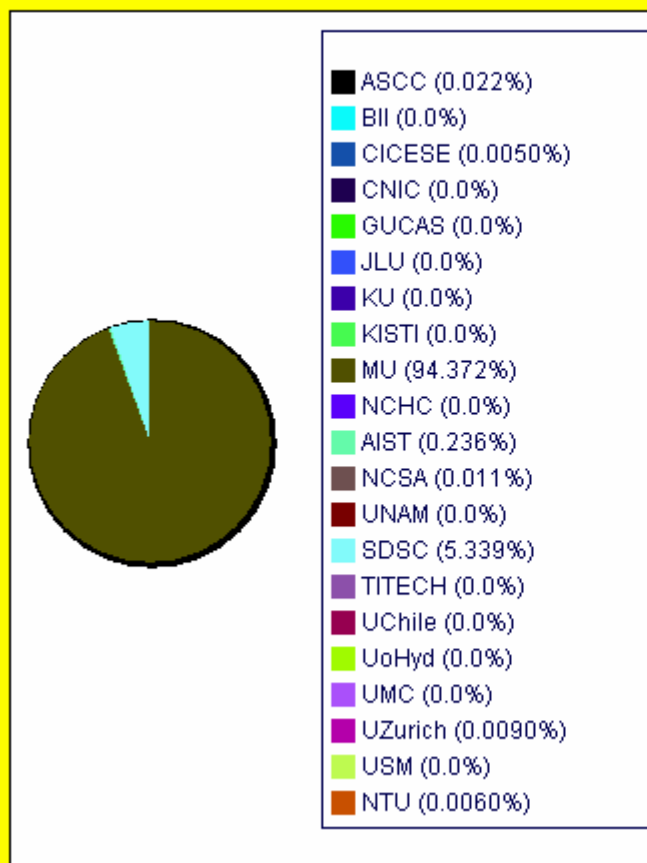


Consumer/Provider Overview

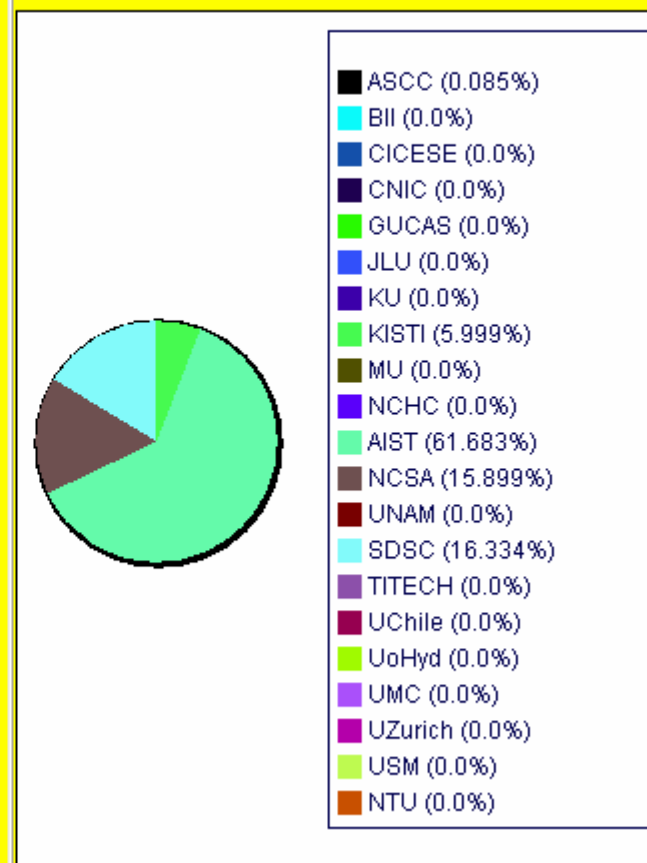
Rows are consumers and columns are providers

Org	ASCC	BII	CICESE	CNIC	GUCAS	JLU	KU	KISTI	MU	NCHC	AIST	NCSA	UNAM	SDSC	TITECH	UChile	UoHyd	UMC	UZurich	USM	NTU	Total
ASCC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.814%	0.0%	0.0%	0.388%	0.0%	0.0%	0.702%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	174
BII	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
CICESE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.517%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	70
CNIC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
GUCAS	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
JLU	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
KU	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
KISTI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
MU	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.969%	0.0%	0.0%	86.648%	0.0%	0.0%	82.941%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	19064
NCHC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
AIST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.656%	0.0%	0.0%	2.803%	1.535%	0.0%	0.369%	0.0%	0.0%	0.0%	0.0%	0.0%	1.379%	0.0%	326
NCSA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
UNAM	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.813%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	29
SDSC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	91.794%	0.0%	0.0%	9.551%	92.631%	95.053%	15.124%	57.143%	0.0%	0.0%	0.0%	0.0%	95.172%	0.0%	5775
TITECH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
UChile	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
UoHyd	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
UMC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
UZurich	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.074%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10
USM	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.379%	0.0%	2
NTU	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.766%	0.0%	0.0%	0.609%	5.834%	2.134%	0.273%	42.857%	0.0%	0.0%	0.0%	0.0%	2.069%	0.0%	184
Total	0	0	0	0	0	0	0	914	0	0	9025	977	1031	13535	7	0	0	0	0	145	0	25634

Resources Consumed - Jobs Submitted



Resources Provided - Jobs Executed

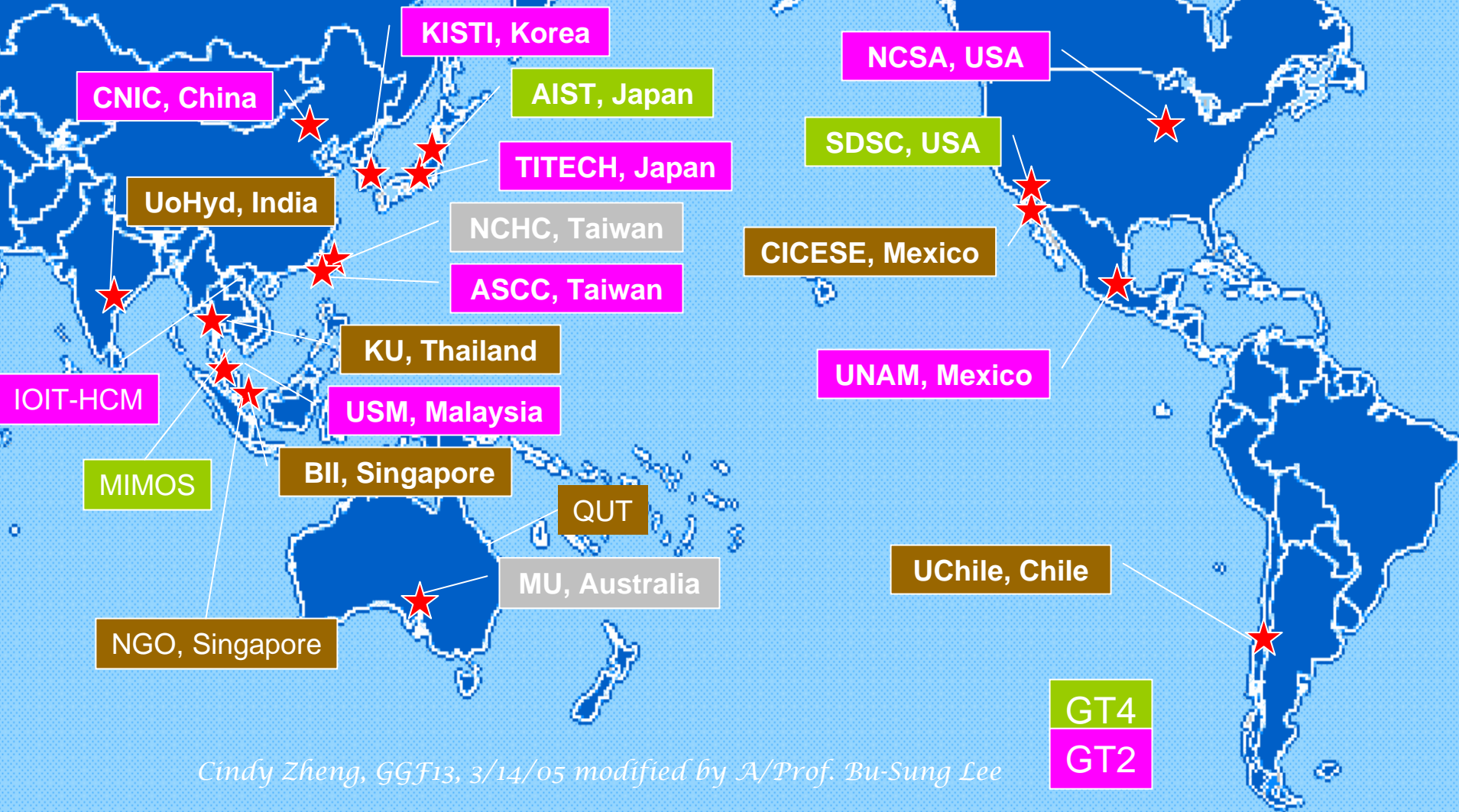


Top 10 Jobs Executed:

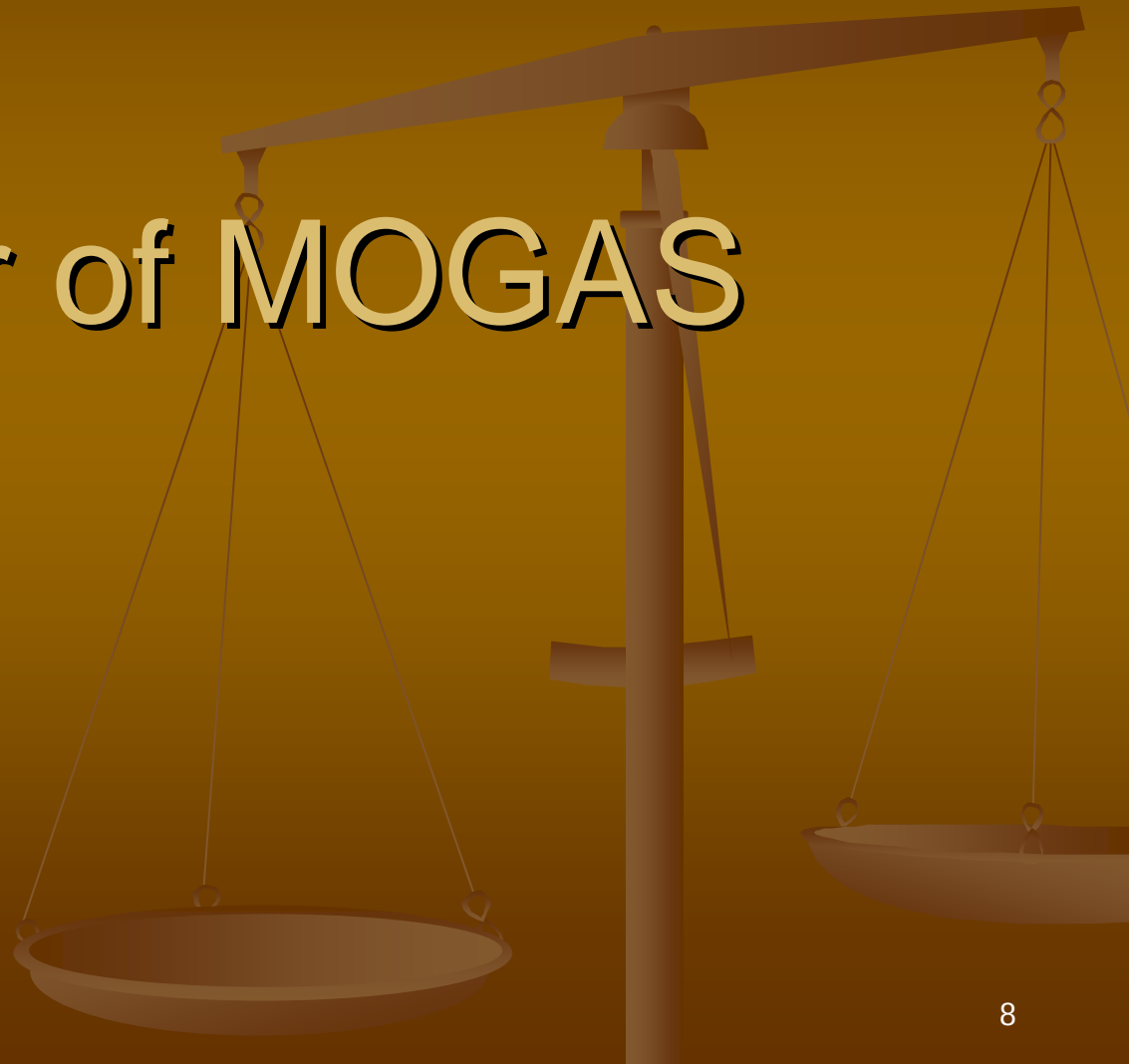
Please select month and year: based on

Top 10 jobs executed in 2005 Sep based on cost	
/home/cme/nimrod/cmehamahar.csse.monash.edu.au --contact tcp%mahar.csse.monash.edu.au%43011 --ident 1	351210
/home/cicese/MM5_SANTANA/MM5/Run/mm5.mpp	215020
/home/cme/nimrod/cmehamahar.csse.monash.edu.au --contact tcp%mahar.csse.monash.edu.au%43002 --ident 1	181340
/home/takemiya/QMMD_Dynamic/Serv/Ver_1/_stub_QM --client=pine.hpcc.jp.35625 --gassServer=http://pine	175965
/home/cicese/MM5_MARTY/MM5/Run/mm5.mpp	132690
/home/cme/nimrod/cmehamahar.csse.monash.edu.au --contact tcp%mahar.csse.monash.edu.au%43000 --ident 1	89725
/home/cme/nimrod/cmehamahar.csse.monash.edu.au --contact tcp%mahar.csse.monash.edu.au%43007 --ident 1	84565
/home/cme/nimrod/cmehamahar.csse.monash.edu.au --contact tcp%mahar.csse.monash.edu.au%43001 --ident 1	11860
/home/cicese/MM5-3.7/Run/mm5.mpp	8010
/home/cicese/MM5_DIARIO/datos/mm5_fase1.csh	7275

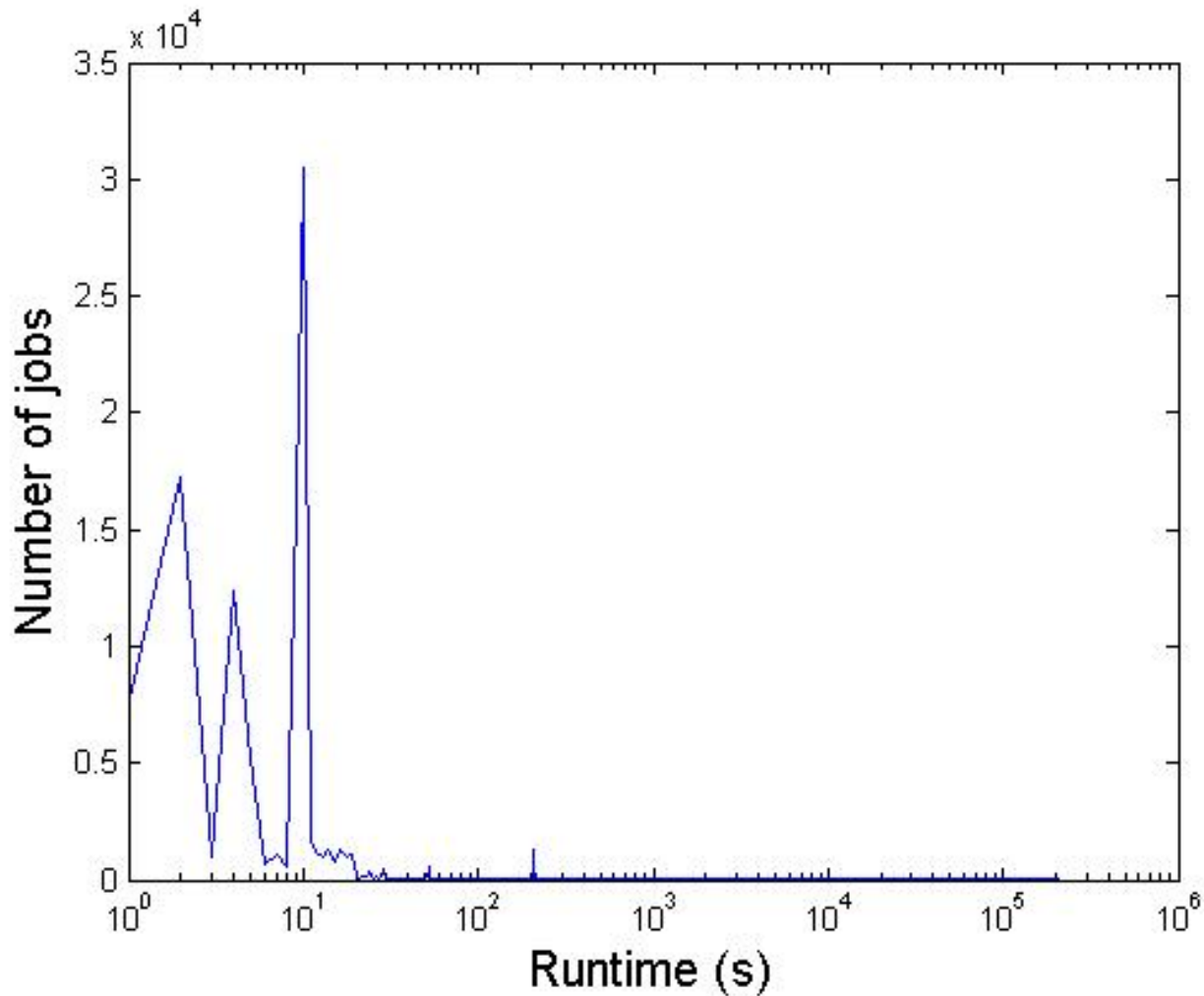
PRAGMA MOGAS status *(27/3/2006)*



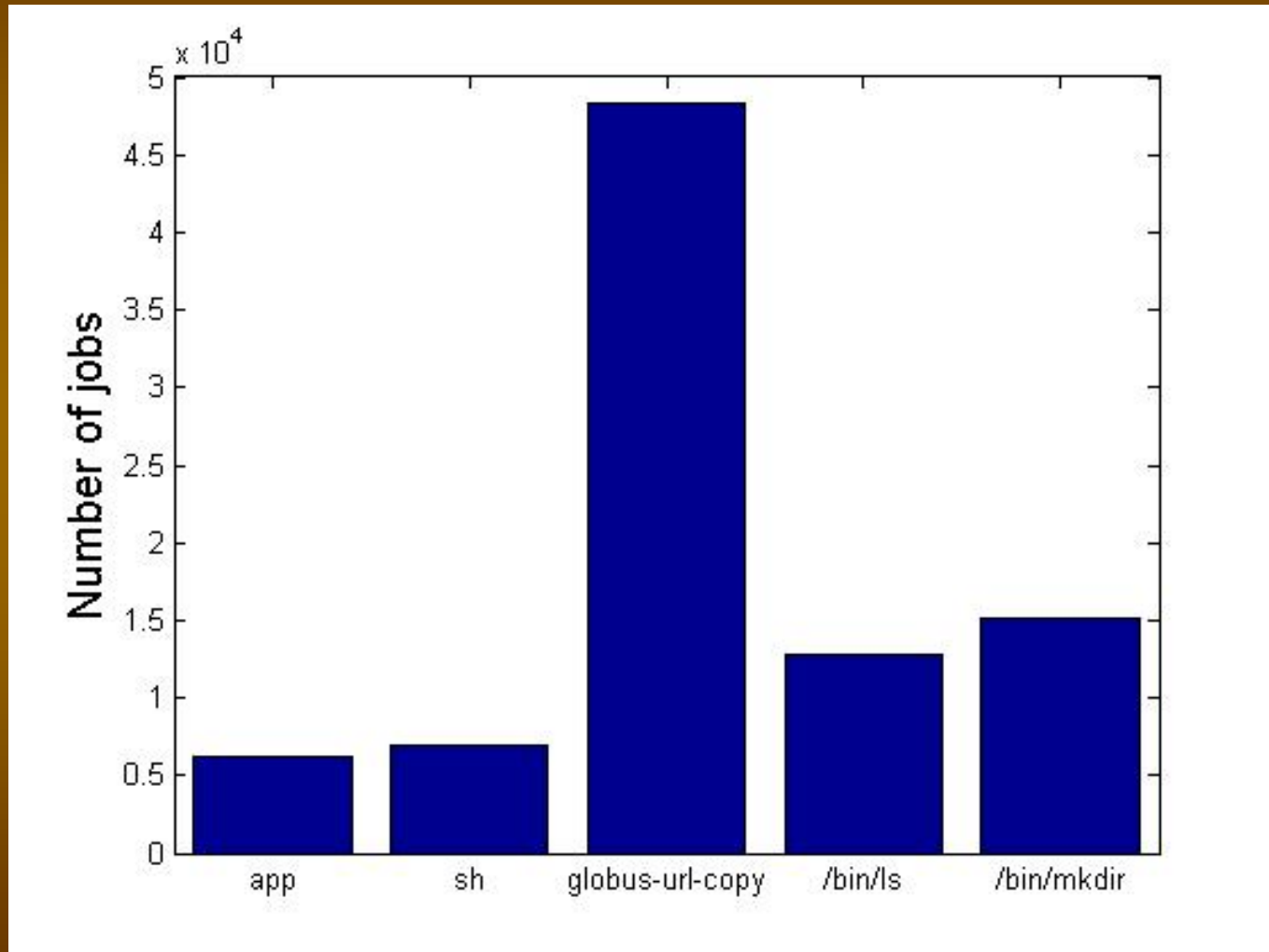
Power of MOGAS



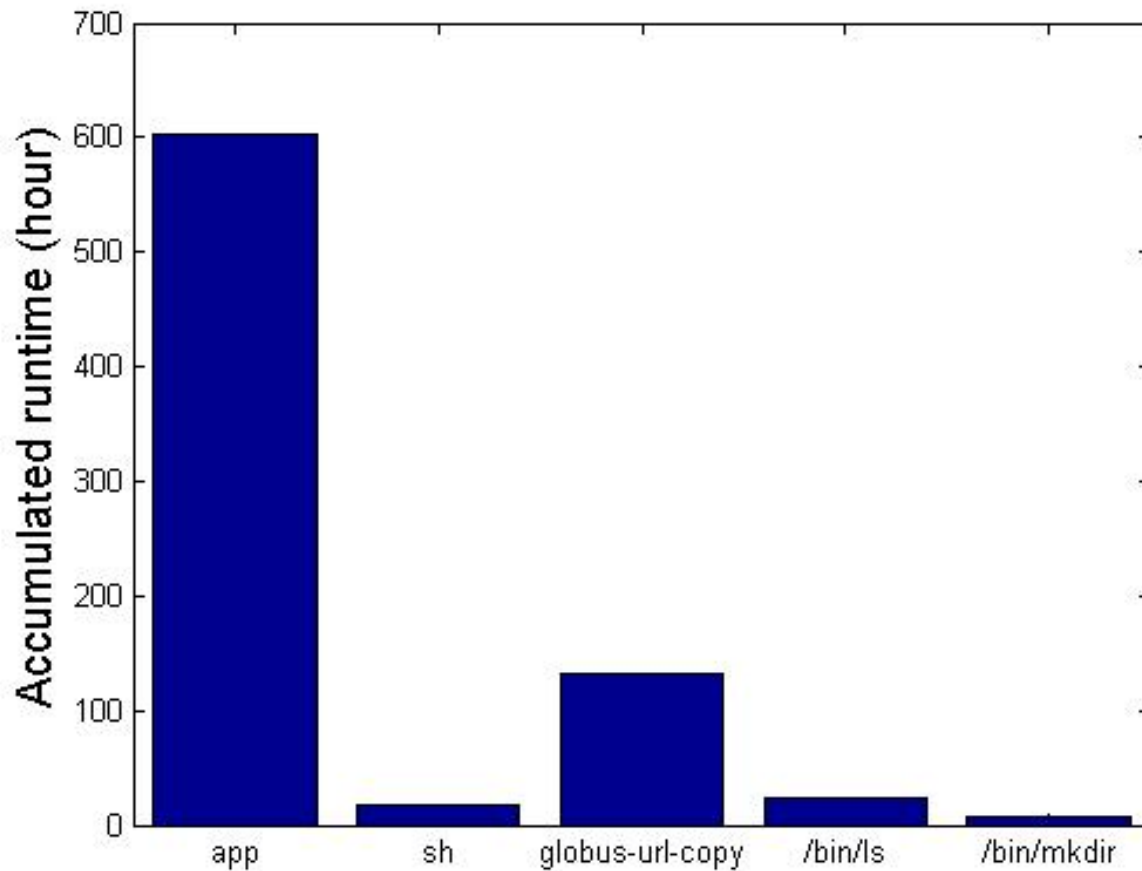
Job characteristics



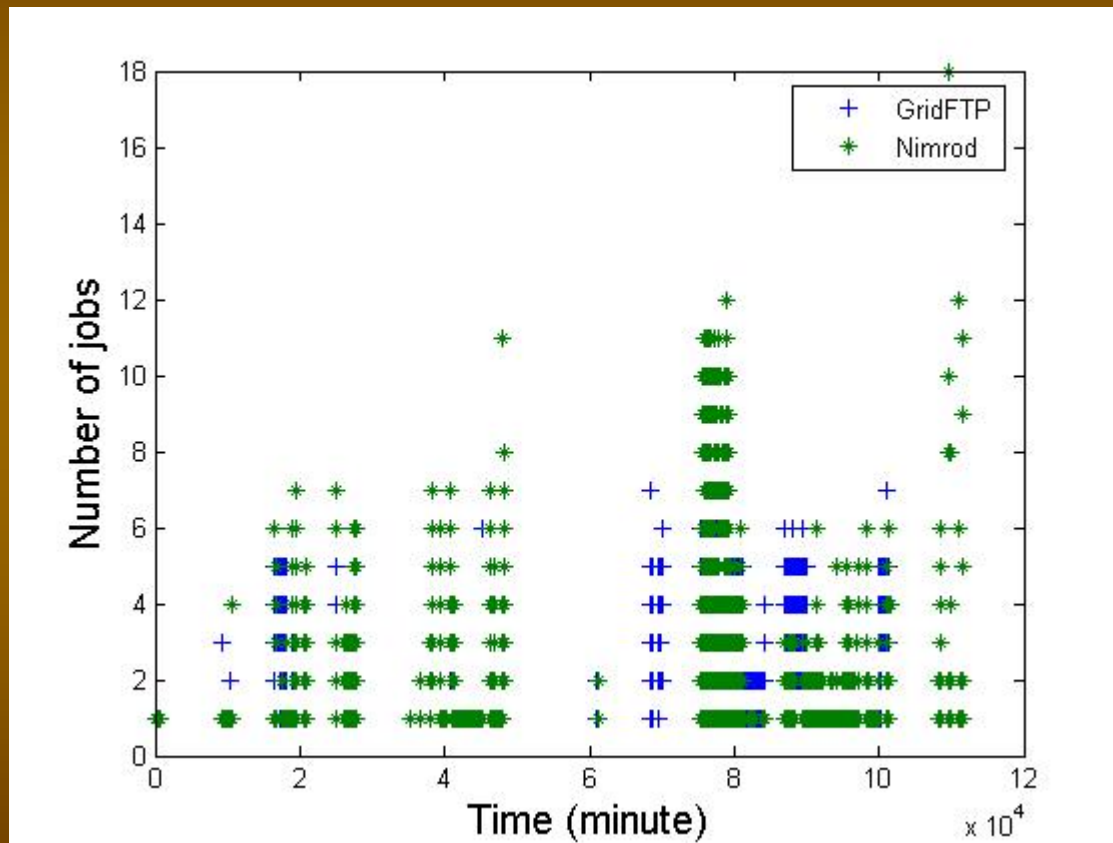
Job types by Monesh Univ.



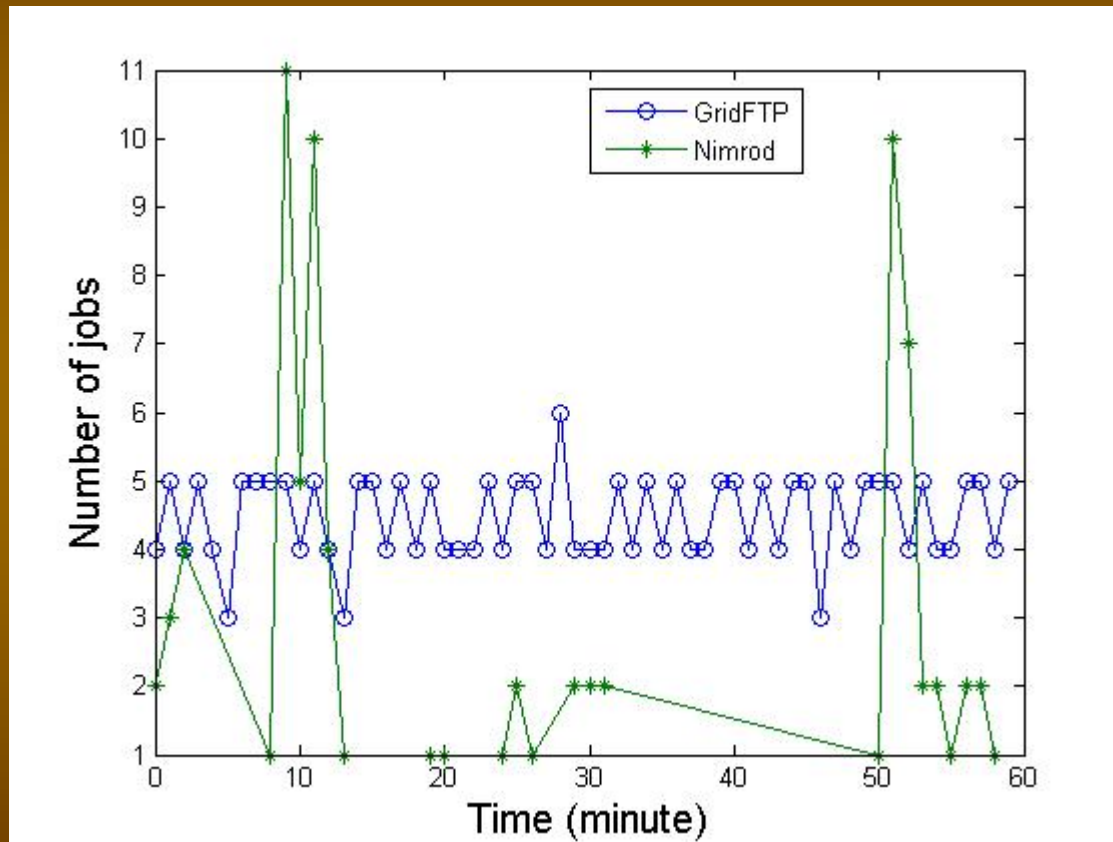
Job runtime by Monesh Univ.



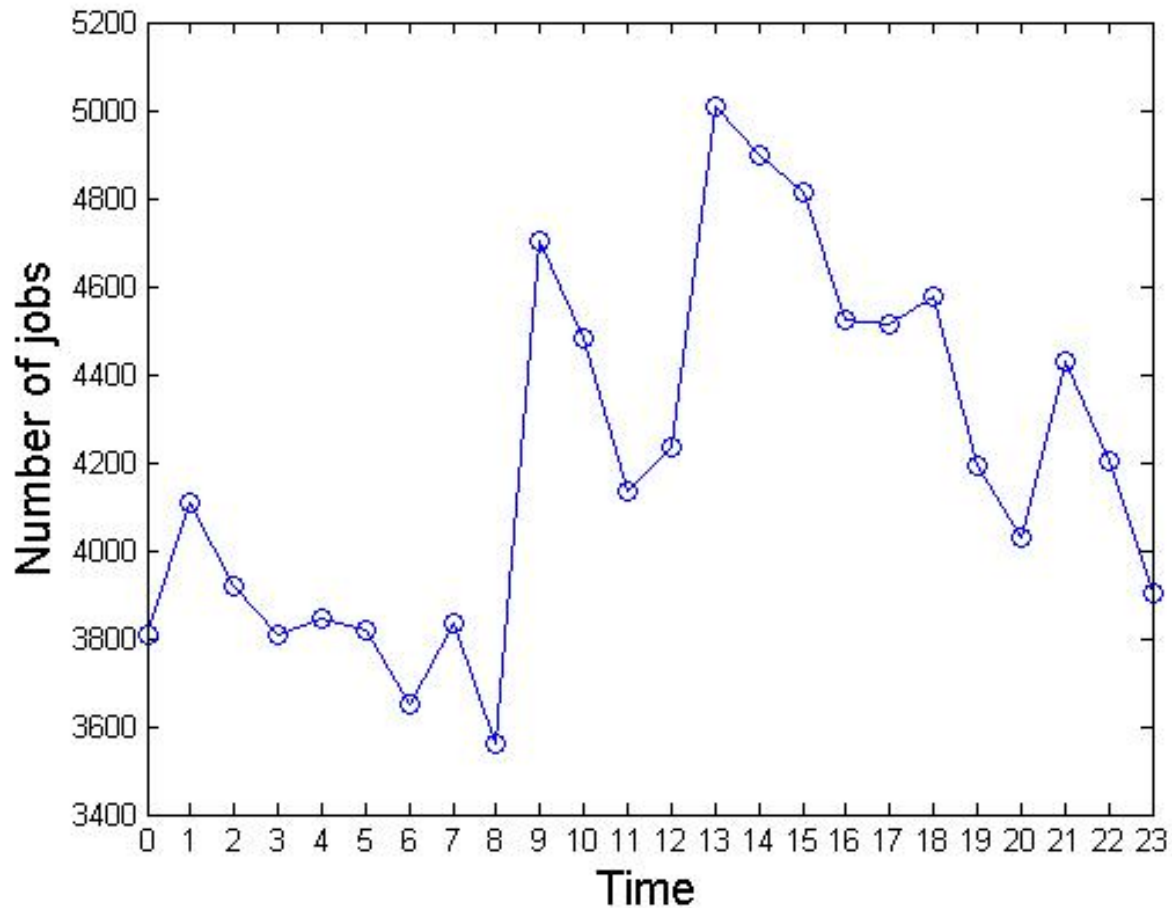
Job distribution across time



Savannah application from MU



Jobs usage across 24 hrs.

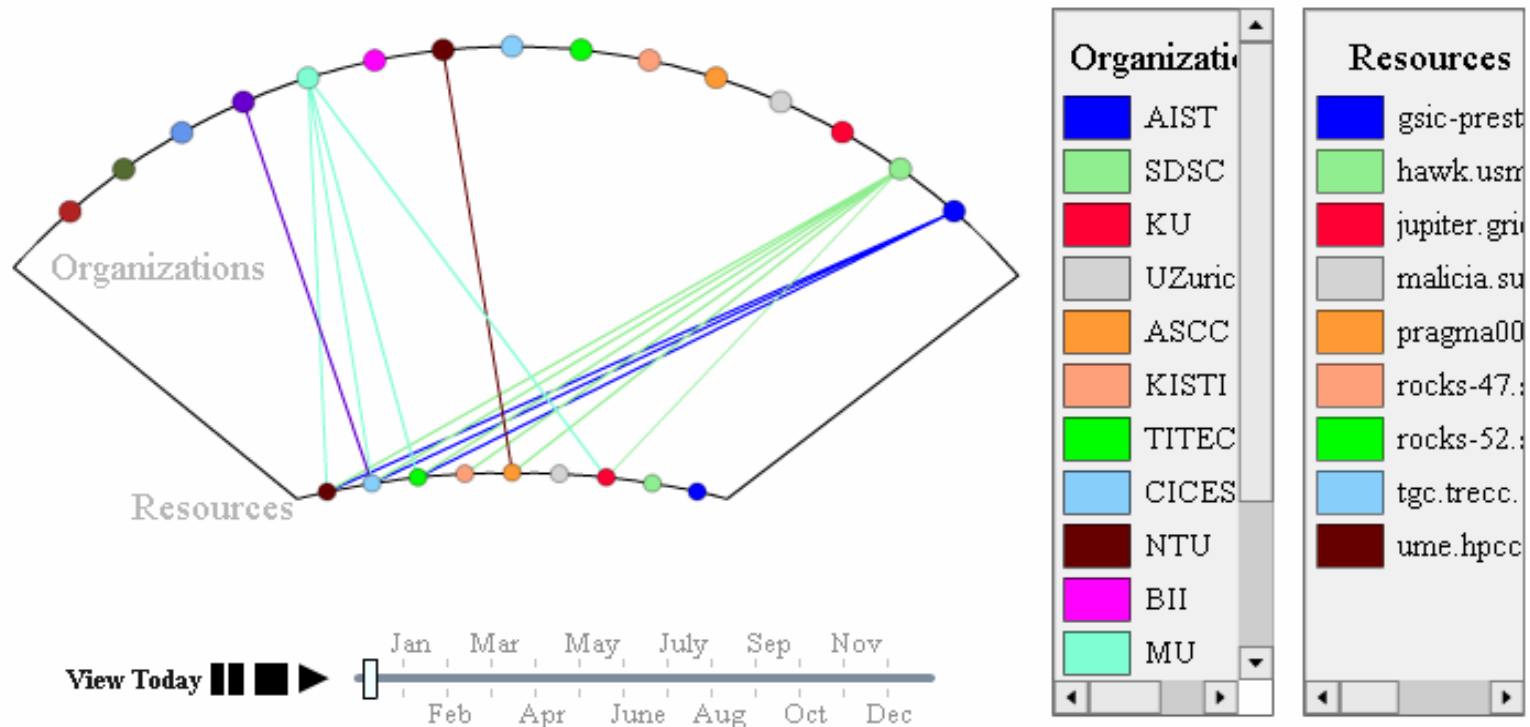


New GUI



New resource trading view

Last Updated on: Thu Jan 05 16:49:45 SGT 2006



Overall resource trading view

Last Updated on: Thu Jan 05 16:24:30 SGT 2006

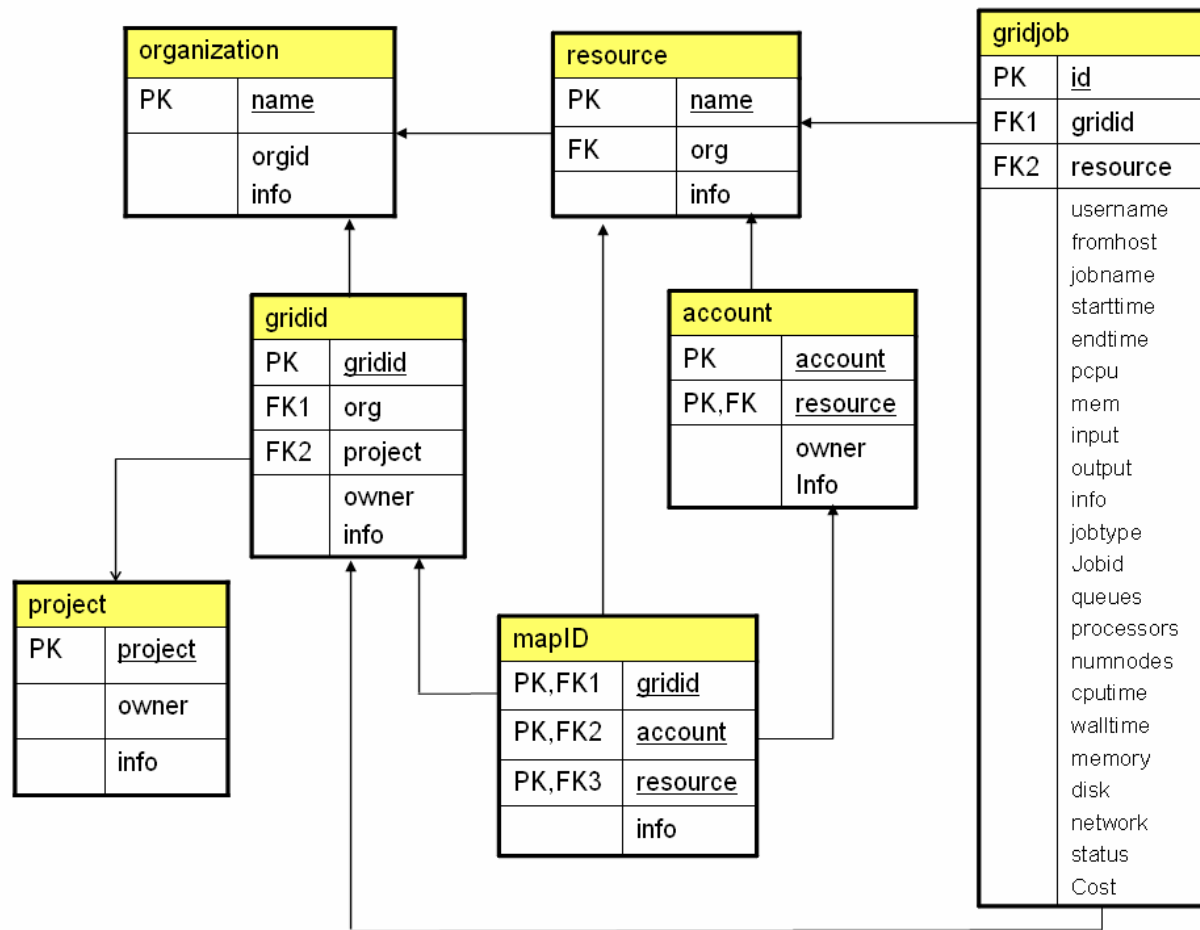


Zoom to:

Grid Resource MAP (Thai National Grid & Nanyang Technological University Singapore)



MOGAS Database



SCMSWeb Database

Tables_in_scmsweb_accounting
jobs

Field	Type	Null	Key	Default	Extra
id	int(11)		PRI	NULL	auto_increment
local_job_id	varchar(255)	YES		NULL	
job_name	varchar(255)	YES		NULL	
num_proc	int(11)	YES		NULL	
local_uid	int(11)	YES		NULL	
local_gid	int(11)	YES		NULL	
local_user	varchar(32)	YES		NULL	
local_group	varchar(32)	YES		NULL	
globus_user	varchar(255)	YES		NULL	
globus_service	varchar(255)	YES		NULL	
account_string	varchar(255)	YES		NULL	
queue	varchar(255)	YES		NULL	
scheduler	varchar(255)	YES		NULL	
hostname	varchar(255)	YES		NULL	
submit_time	datetime	YES		NULL	
start_time	datetime	YES		NULL	
end_time	datetime	YES		NULL	
year	int(11)	YES		NULL	
month	int(11)	YES		NULL	
day	int(11)	YES		NULL	
exit_status	int(11)	YES		NULL	
source	varchar(255)	YES		NULL	
target	varchar(255)	YES		NULL	
memory	varchar(20)	YES		NULL	
disk	varchar(20)	YES		NULL	
cpu	varchar(20)	YES		NULL	

MOGAS Table --- gridjob

Field	Type	Null	Key	Default	Extra
id	int(20) unsigned		PRI	NULL	auto_increment
gridid	varchar(255)				
resource	varchar(255)				
username	varchar(255)	YES			
projectname	varchar(255)	YES			
fromhost	varchar(255)	YES			
gramjobcontact	varchar(255)	YES			
portalid	varchar(255)	YES		NULL	
jobname	varchar(255)				
starttime	int(20)			0	
endtime	int(20)			0	
pcpu	varchar(255)	YES		NULL	
mem	varchar(255)	YES		NULL	
input	varchar(255)	YES		NULL	
output	varchar(255)	YES		NULL	
info	varchar(255)	YES		NULL	
jobtype	varchar(20)	YES		NULL	
jobid	int(20)	YES		0	
queue	varchar(255)	YES		NULL	
processors	int(10)	YES		0	
numnodes	int(10)	YES		0	
cputime	int(20)	YES		0	
walltime	int(20)	YES		0	
memory	varchar(255)	YES		NULL	
disk	int(20)	YES		0	
network	int(20)	YES		0	
status	int(10)	YES		0	
cost	int(20)	YES		0	

Proposed Shared Table

GGF field	MOGAS	SCMSWEB	Proposed field name	Proposed Type
-	id	id	id (primary key - auto increment)	int(20) unsigned
Username	username	local_user	username	varchar(255)
ProjectName	projectname	account_string	projectname	varchar(255)
JobId	jobid	local_job_id	jobid	varchar(255)
Queue	queue	queue	queue	varchar(255)
GridId	gridid	globus_user	gridid	varchar(255)
FromHost	fromhost	source	fromhost	varchar(255)
execHost	resource	target	execheost	varchar(255)
StartTime	starttime	submit_time	starttime	int(20)
EndTime	endtime	end_time	endtime	int(20)
Processors	processors	num_proc	processors	int(11)
NumNodes	numnodes	(NULL)	numnodes	int(11)
Cputime	cputime	cpu	cputime	int(20)
Walltime	walltime	(COMPUTE)	walltime	int(20)
Memory	memory	memory	memory	varchar(255)
Disk	(NULL)	disk	disk	varchar(255)
Network	(NULL)	(NULL)	network	int(20)
jobName	jobname	job_name	jobname	varchar(255)
Status	status	exit_status	status	int(11)
Charge	cost	(NULL)	charge	int(20)
JobType	jobtype	scheduler	jobtype	varchar(255)



Go where NO grid has gone
BEFORE

MOGAS is there to help