Production infrastructure/operation

Armando Fella on behalf of Italian distributed computing group

Distributed Computing human network

CNAF Caltech SLAC McGill UVIC Queen Mary RAL T1 RAL T2 GRIF CCIN2P3 Bari <u>Legnaro - Padova</u> <u>Napoli</u> Ferrara <u>Pisa</u>

Italian group Frank Porter, Piti Ongmongkolkul Steffen Luiz, Wei Yang Steven Robertson Ashok Agarwal Adrian Bevan, Christopher Wilson Fergus Wilson, Chris Brew Fergus Wilson, Chris Brew **Nicolas Arnaud** Nicolas Arnaud Giacinto Donvito, Vincenzo Spinoso Gaetano Maron, Alberto Crescente Silvio Pardi Giovanni Fontana, Marco Ronzano Alberto Ciampa, Enrico Mazzoni, Dario Fabiani

02/62/10ail list: superb-grid-mng@lists.infn.it

Distributed resources

CPU				Disk spa	sk space for data		
		maximum	"average"	(2 GB per day-core)		9	
	minimum				available	needed	
			(2*min+max)/3				
	(cores)	(cores)	(cores)		(TB)	(TB)	
CNAF	500	1000	667	CNAF	50	12	
SLAC	200	1000	467	SLAC	few*10	8	
UVIC	100	300		UVIC	2	1	
CALTECH	250	250	250	CALTEC	20	5	
McGill	60	60	60	McGill	_	1	
RAL T2	50	100		RALT2	10	7	
RALT1	300	600	400	RALT1	10	7	
CCIN2P3	300	600	400	CCIN2P3	-	7	
GRIF	50	100	400	GRIF	-	-	
QMUL	50	50	400	QMUL	2	2	
Pisa	50	200	100	Pisa	_	2	
Legnaro-Pd	50	100	67	Leg naro-Pd	_	1	
Napoli	50	100	67	Napoli	_	1	
Bari	50	100	67	Bari	-	1	
Ferrara	10	50	23	Ferrara	-	0	
Total	2060	4560	3343.33	Total	94		
	may need to	be updated			may need to	be updated	

Site setup status

Sites ready for test production:

- GRIF, RAL T2, QMUL, Pisa, Bari, Legnaro

Sites still need configuration effort for Grid enabling

- SLAC, RAL T1, Napoli

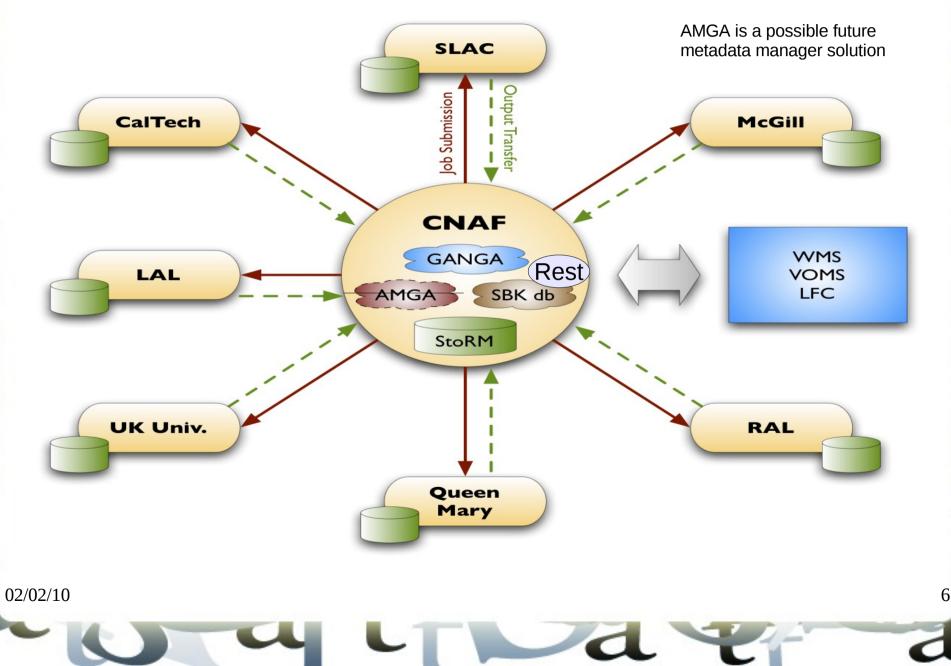
Sites still need configuration effort for local production enabling

- UVIC, Caltech

Production suite status

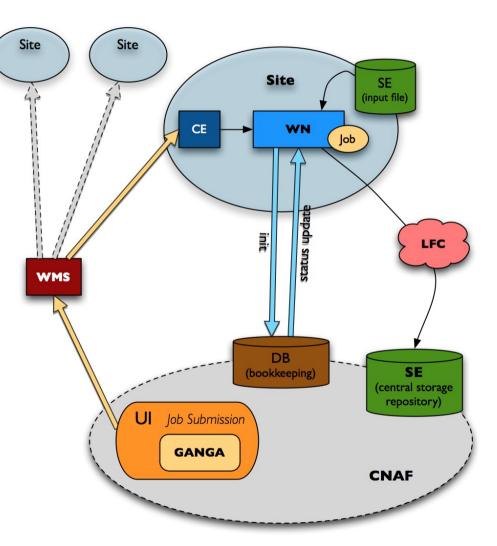
- Suite for background study: ready
- Suite for BkgFrame production: ready
- Suite for distributed Fast Simulation production: waiting for Dave feedback

Full Grid integrated production design



Full Grid integrated production workflow

- The job input files are transferred via LCG-Utils to the involved site Storage Elements
- The job submission is performed by GANGA on User Interface at CNAF
- The WMS routes the jobs to the matched site
- The job is scheduled by the site Computing Element to a Worker Node
- The job during running time
 - accesses the DB for initialization and status update via Rest interface
 - retrieves/access input files by local Storage Element
 - transfers the output to the CNAF Storage Element



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