

New Tools For The Community- GUI for Gridway

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**Introduction to gLite & RESPECT Tools at EGEE'09
Conference (Barcelona)**

21-25 September 2009

- 4th Edition – <http://code.google.com/soc/>
- Three-month projects to develop and learn free open source code
- 1,000 Students around the world – 150 mentoring organizations
- **2 accepted projects within the Globus Alliance**



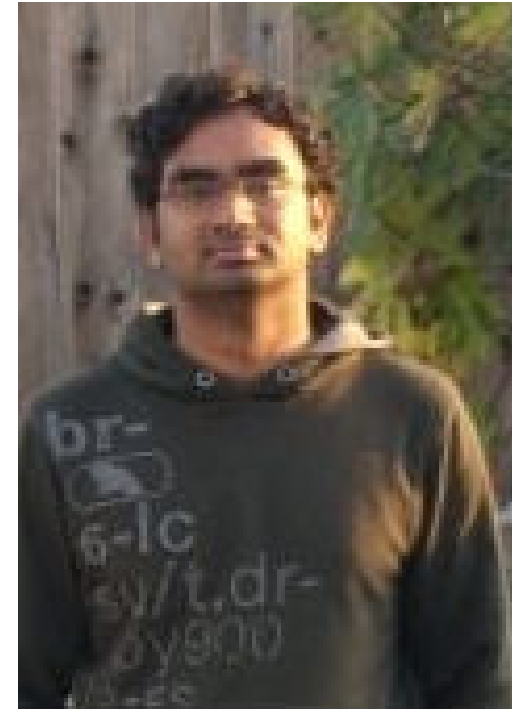
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- **To help users**

- compose, manage and control their jobs
- not using command line interface.

- **Enables**

- host and user monitoring
- filtering account statistics and execution history information


- **Supports DAGMAN workflow**


- compose the DAG file
- visualize dependencies between the jobs
- pass the DAG file to GridWay


Welcome to Gridway
_ x


JT Generator
Job Submit
Job State
Job Signal
User Details
Account Details
Host Info
History
Workflow


Basic Job Details
Streams, Check Point & Resource
Resource, Scheduling & Performance
Fault & Advanced Job Execution


 New

 Open

 Save

 Clear

 New Folder

 Quit

File Path Information

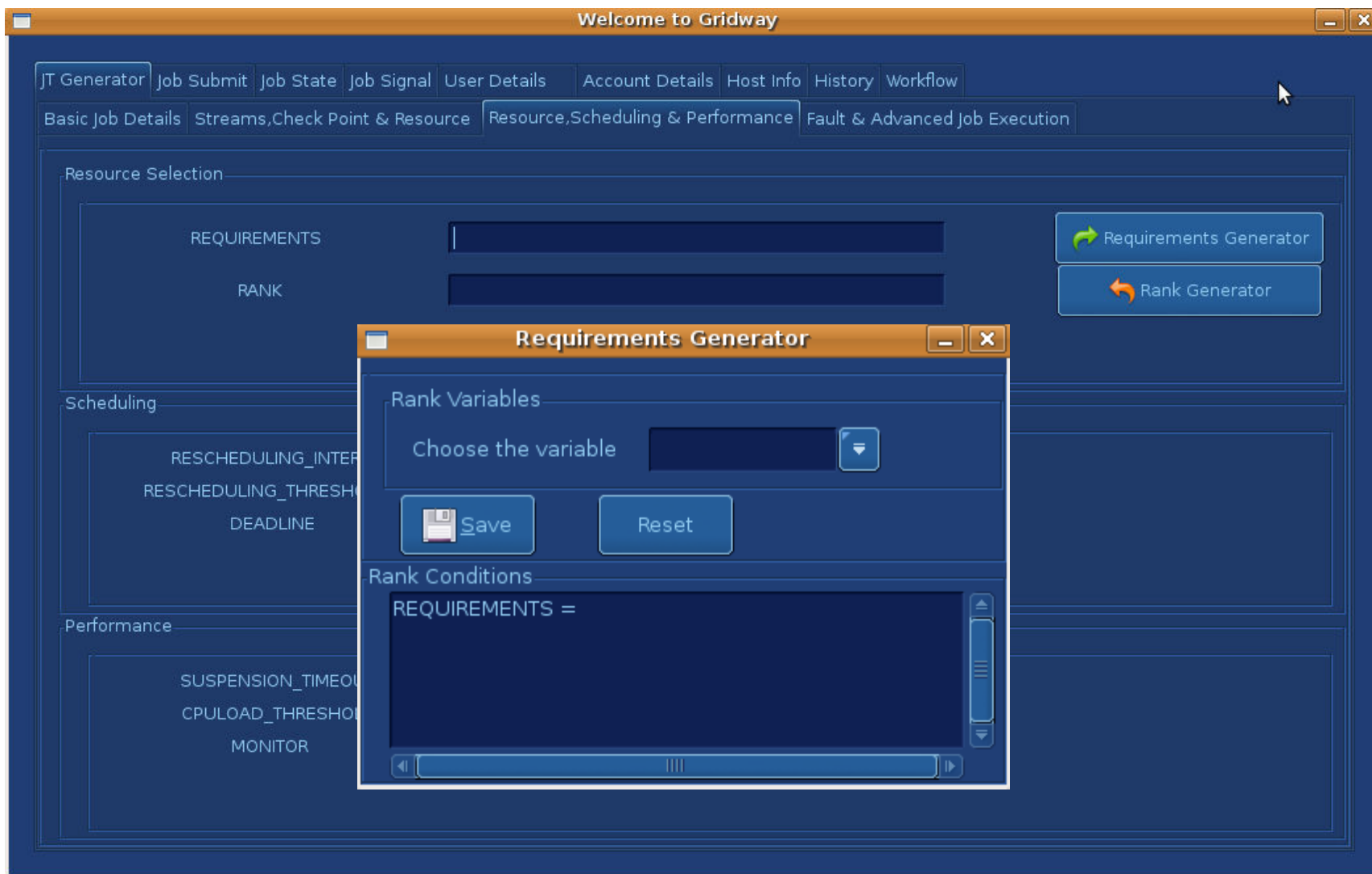
File Path

Generic

NAME

Execution

EXECUTABLE	
ARGUMENTS	
ENVIRONMENT	
TYPE	
NP	



Welcome to Gridway

JT Generator | Job Submit | Job State | Job Signal | User Details | Account Details | Host Info | History | Workflow

Basic Job Details | Streams, Check Point & Resource | **Resource, Scheduling & Performance** | Fault & Advanced Job Execution

Resource Selection

REQUIREMENTS

RANK

Requirements Generator

Rank Generator

Scheduling

RESCHEDULING_INTER

RESCHEDULING_THRESH

DEADLINE

Performance

SUSPENSION_TIMEOU

CPULOAD_THRESHO

MONITOR

Requirements Generator

Rank Variables

Choose the variable

Save

Reset


Rank Conditions

REQUIREMENTS =


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JT File

JT File Path:  Open

Data Options Menu


No of Copies:  Clear Data

 Get Job Data

Dependent Jobs

SELECT	JOBID	ARRAYID	TASKID	NAME	USER	UID	HOST	JOBSTATE	FIXEDPRIORITY	DEADLINE	TYPE	NP
<input type="checkbox"/>	3	0	2	srini	gwgui	0	ce.ui.savba.sk/jobmanager-pbs	pend	0	0:00:00	single	6
<input checked="" type="checkbox"/>	4	0	3	srini	gwgui	0	ce.scope.unina.it/jobmanager-lcgpbs	pend	0	0:00:00	single	6
<input type="checkbox"/>	9	2	0	srini	gwgui	0		hold	0	0:00:00	single	6
<input type="checkbox"/>	10	3	0	A.jt	gwgui	0		hold	0	0:00:00	single	1

Job Submission

 Submit

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JT Generator Job Submit Job State Job Signal User Details Account Details Host Info History Workflow

Job and Host Information

SELECT	JOBID	ARRAYID	TASKID	NAME
<input type="radio"/>	1	0	0	srini
<input type="radio"/>	2	0	1	srini
<input type="radio"/>	3	0	2	srini
<input type="radio"/>	4	0	3	srini
<input type="radio"/>	9	2	0	srini
<input type="radio"/>	10	3	0	Ajt
<input type="radio"/>	11	3	1	Ajt
<input type="radio"/>	12			Ajt

SELECT	HID	HOSTNAME
<input type="radio"/>	0	aristoteles.inf-cr.uclm.es
<input type="radio"/>	1	ce01.macc.unican.es
<input type="radio"/>	2	test01.egee.cesga.es
<input type="radio"/>	3	hydrus.dacya.ucm.es
<input type="radio"/>	4	aquila.dacya.ucm.es
<input type="radio"/>	5	ce06.pic.es
<input type="radio"/>	6	ce01-tic.ciemat.es
<input type="radio"/>	7	ce07.pic.es

Get Job details

Get Host details

Get Job State

State Options

Generate state based on Job ID Array ID Host Name User ID Job State

JOBID	ARRAYID	TASKID	NAME	USER	UID	HOST	JOBSTATE	FIXEDPRIORITY	DEADLINE	TYPE	NP	EMSTATE
4	0	3	srini	gwgui	0	egeece01.ifca.es/jobmanager-lcgpbs	wrap	0	0:00:00	single	6	fail

Welcome to Gridway

Job and Host Information

SELECT	JOBID	ARRAYID	TASKID	NAME
<input type="radio"/>	1	0	0	srini
<input type="radio"/>	2	0	1	srini
<input type="radio"/>	3	0	2	srini
<input type="radio"/>	4	0	3	srini
<input type="radio"/>	9	2	0	srini
<input type="radio"/>	10	3	0	A.jt
<input type="radio"/>	11	3	1	A.jt
<input type="radio"/>	12			A.jt

SELECT	HID	HOSTNAME
<input type="radio"/>	0	aristoteles.inf-cr.uclm.es
<input type="radio"/>	1	ce01.macc.unican.es
<input type="radio"/>	2	
<input type="radio"/>	3	
<input checked="" type="radio"/>	4	
<input type="radio"/>	5	
<input type="radio"/>	6	
<input type="radio"/>	7	

State Options

Generate state based on Job ID Array ID

ID Job State

Failed

NO matching jobs found:

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Job Information

SELECT	JOBID	ARRAYID	TASKID	NAME	USER	UID	HOST	JOBSTATE	FIXEDPRIORITY	DEADLINE	TYPE	NP	EMS
<input type="checkbox"/>	9	2	0	srini	gwgui	0		hold	0	0:00:00	single	6	----
<input type="checkbox"/>	10	3	0	A.jt	gwgui	0		hold	0	0:00:00	single	1	----
<input type="checkbox"/>	11	3	1	A.jt	gwgui	0		hold	0	0:00:00	single	1	----
<input checked="" type="checkbox"/>	12			A.jt	gwgui	0		pend	0	0:00:00	single	1	----
<input type="checkbox"/>	13			A.jt	gwgui	0		pend	0	0:00:00	single	1	----
<input type="checkbox"/>	14			A.jt	gwgui	0		pend	0	0:00:00	single	1	----
<input type="checkbox"/>	15			B.jt	gwgui	0		pend	0	0:00:00	single	1	----

Signalling Options

Job/Array ID

Generate signal based on Job ID Array ID

Signal Type

Choose the signal **HARD KILL**

Get Job Information

Generate Signal

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User Data

[Get User Details](#)

User Information

USERID	USERNAME	ACTIVEJOBS	RUNNINGJOBS	IDLE	IDENTITY
0	gwgui	11	4	0	

Execution Manager Driver

MADID	NAME	PID
0	ws	22040
1	prews_nsh	30625

Transfer Manager Driver

MADID	NAME	PID
0	gridftp	30644
1	dummy	30663

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Host Information

SELECT	HID	HOSTNAME	FIXED_PRIORITY	OS_NAME	OS_VERSION	ARCH	CPU_MHZ	CPU_FRE
<input type="radio"/>	0	aristoteles.inf-cr.uclm.es	1				0	0
<input type="radio"/>	1	ce01.macc.unican.es	1	Linux	2.6.9-78.0.13.EL.cernsmp	x86	2333	600
<input type="radio"/>	2	test01.egee.cesga.es	1	Linux	2.6.20-1.3002.fc6xen	x86	1595	100
<input type="radio"/>	3	hydrus.dacya.ucm.es	1				0	0
<input type="radio"/>	4	aquila.dacya.ucm.es	1				0	0
<input type="radio"/>	5	ce06.pic.es	1	ScientificSL	Beryllium	i686	2500	0

Statistics Options

Date Filter:

Data Options Menu: User Name:

Statistics

USERNAME	HOSTNAME	TRANSFER	EXECUTION	SUSPENSION	TOTS	SUCC	ERR	KILL	USER	SUSP	DISC	SELF	PERF	S-R
alorca	hydrus.dacya.ucm.es	00:00:00	00:00:00	00:00:00	0	0	0	0	0	0	0	0	0	0
gwgui	hydrus.dacya.ucm.es	00:20:03	00:01:31	00:19:23	263	128	135	0	0	0	0	0	0	0
jlvarez	hydrus.dacya.ucm.es	00:00:10	00:00:01	00:00:14	21	2	17	2	0	0	0	0	0	0

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Host Information

SELECT	HID	HOSTNAME	FIXEDPRIORITY	OSNAME	OSVERSION	ARCH	CPUMHZ	CPUPER
<input type="radio"/>	0	aristoteles.inf-cr.uclm.es	1				0	0
<input type="radio"/>	1	ce01.macc.unican.es	1	Linux	2.6.9-78.0.13.EL.cernsmp	x86	2333	600
<input type="radio"/>	2	test01.egee.cesga.es	1	Linux	2.6.20-1.3002.fc6xen	x86	1595	100
<input type="radio"/>	3	hydrus.dacya.ucm.es	1				0	0
<input type="radio"/>	4	aquila.dacya.ucm.es	1				0	0
<input type="radio"/>	5	ce06.pic.es	1	ScientificSL	Beryllium	i686	2500	0

Statistics Options

Date Filter

Select the Option

Data Options Menu

User Name

Get Host Information

Get Statistics

Statistics

USERNAME	HOSTNAME	TRANSFER	EXECUTION	SUSPENSION	TOTS	SUCC	ERR	KILL	USER	SUSP	DISC	SELF	PERF	S-R
gwgui	agh2.atlas.unimelb.edu.a	00:00:00	00:00:00	00:00:00	25	0	25	0	0	0	0	0	0	0
gwgui	aquila.dacya.ucm.es	00:05:41	00:07:32	00:08:49	158	23	135	0	0	0	0	0	0	0
gwgui	axon-g01.ieeta.pt	00:00:00	00:00:00	00:00:00	16	0	16	0	0	0	0	0	0	0
gwgui	cclcgceli03.in2p3.fr	00:00:00	00:00:00	00:00:00	30	0	30	0	0	0	0	0	0	0

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Host matching requirements based on Job [Host and Queue Information](#)

Job Information

SELECT	JOBID	ARRAYID	TASKID	NAME	USER	UID	HOST	JOBSTATE	FIXEDPRIORITY	DEADLINE	TYPE
<input checked="" type="radio"/>	9	2	0	srini	gwgui	0		hold	0	0:00:00	single
<input type="radio"/>	10	3	0	A.jt	gwgui	0		hold	0	0:00:00	single
<input type="radio"/>	11	3	1	A.jt	gwgui	0		hold	0	0:00:00	single
<input type="radio"/>	12			A.jt	gwgui	0		pend	0	0:00:00	single
<input type="radio"/>	13			A.jt	gwgui	0		pend	0	0:00:00	single

User Data

Queue Information

HID	QUEUENAME	RANK	FIXEDPRIORITY	SLOTS	HOSTNAME
1	filogen	0	1	22	ce01.macc.unican.es
1	esr	0	1	22	ce01.macc.unican.es
1	ngigen	0	1	22	ce01.macc.unican.es
1	photonics	0	1	22	ce01.macc.unican.es
1	slgrid	0	1	22	ce01.macc.unican.es

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Host matching requirements based on job [Host and Queue Information](#)

Host Information

SELECT	HID	HOSTNAME	FIXEDPRIORITY	OSNAME	OSVERSION	ARCH	CPUMHZ	CPUF
<input type="radio"/>	0	aristoteles.inf-cr.uclm.es	1				0	0
<input checked="" type="radio"/>	1	ce01.macc.unican.es	1	Linux	2.6.9-78.0.13.EL.cernsmp	x86	2333	600
<input type="radio"/>	2	test01.egee.cesga.es	1	Linux	2.6.20-1.3002.fc6xen	x86	1595	100
<input type="radio"/>	3	hydrus.dacya.ucm.es	1				0	0
<input type="radio"/>	4	aquila.dacya.ucm.es	1				0	0
<input type="radio"/>	5	ce06.pic.es	1	ScientificSL	Beryllium	i686	2500	0

Host and Queue

Queue Information

QUEUENAME	QUEUEFREENODECOUNT	QUEUENODECOUNT	QUEUEMAXTIME	QUEUEMAXCPU	QUEUEMAXCOUNT	QUEUEMAXRUNNING
filogen	22	146	0	-1	0	-1
esr	22	146	0	-1	0	-1
ngigen	22	146	0	-1	0	-1
photonics	22	146	0	-1	0	-1

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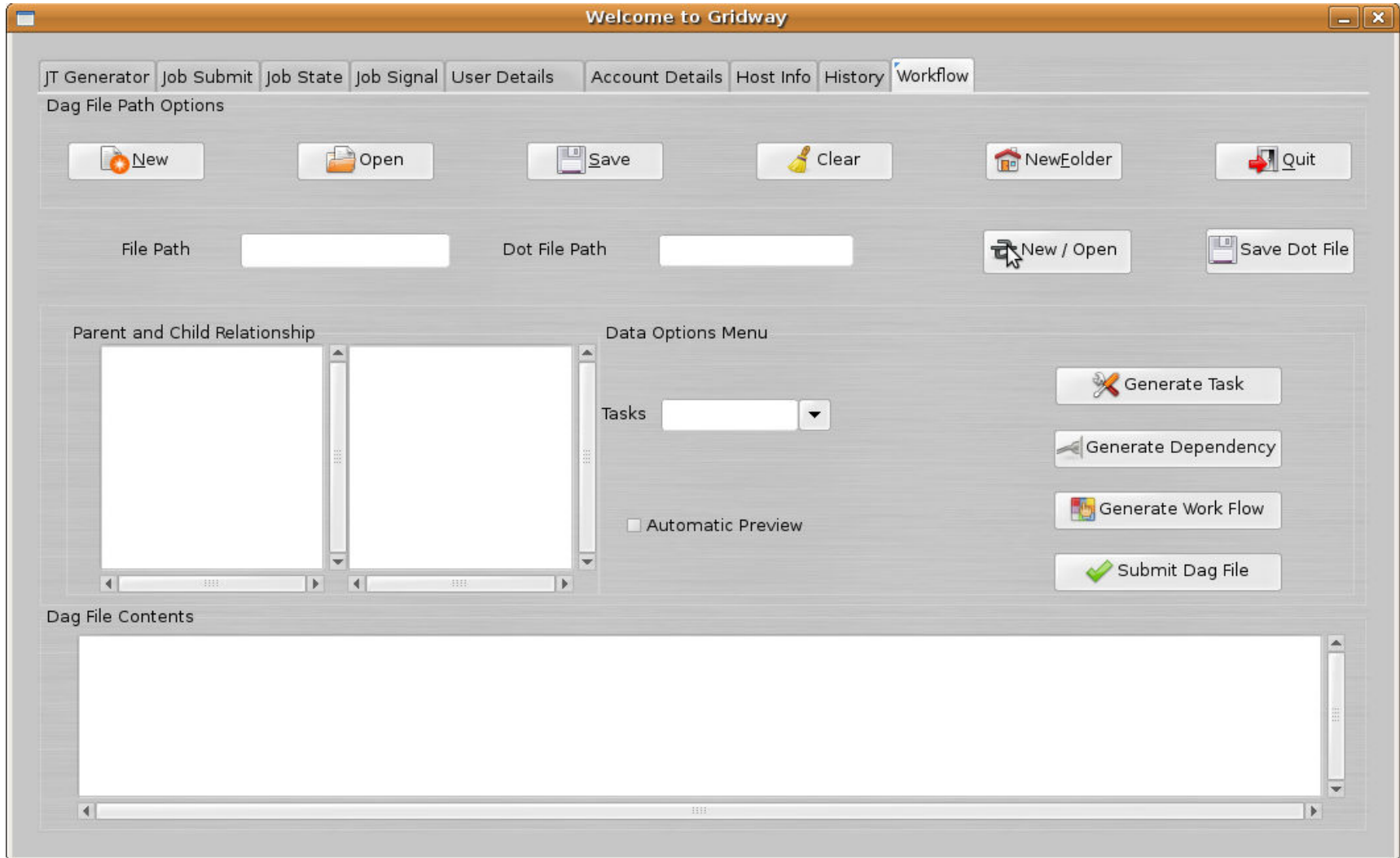
Job State view

SELECT	JOBID	ARRAYID	TASKID	NAME	USER	UID	HOST	JOB_STATE	FIXEDPRIORITY	DEADLINE	TYPE
<input type="radio"/>	10	3	0	A.jt	gwgui	0		hold	0	0:00:00	single
<input type="radio"/>	11	3	1	A.jt	gwgui	0		hold	0	0:00:00	single
<input type="radio"/>	12			A.jt	gwgui	0		pend	0	0:00:00	single
<input type="radio"/>	13			A.jt	gwgui	0		pend	0	0:00:00	single
<input type="radio"/>	14			A.jt	gwgui	0		pend	0	0:00:00	single

Job State and Job History

Job History View

HID	STARTTIME	EXITTIME	PROLOG	WRAPPER	EPILOG	MIGRATION	REASON	QUEUE	HOST
33	11:14:52	--:--:--	0:00:00	0:00:06	0:00:00	0:00:00	----	eggeecrescoshort	egce-cresco.portici.enea.it/jobmanager-lcglsf
32	11:14:32	11:14:47	0:00:00	0:00:15	0:00:00	0:00:00	err	biomed	ce01.ariagni.hellasgrid.gr/jobmanager-pbs
152	11:14:12	11:14:27	0:00:00	0:00:15	0:00:00	0:00:00	err	forngi	e-ce.iaa.es/jobmanager-lcgpbs
29	11:13:52	11:14:07	0:00:00	0:00:15	0:00:00	0:00:00	err	infinite	grid-ce.lns.infn.it/jobmanager-lcgpbs
28	11:13:32	11:13:47	0:00:00	0:00:15	0:00:00	0:00:00	err	grid	grid001.ts.infn.it/jobmanager-lcglsf



Welcome to Gridway (on gridway)

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Dag File Path Options

New | Open | Save | Clear | New Folder | Quit

File Path: /local/home/srini/te

Parent and Child Relationship

SELECT	TASK	SELECT
<input type="checkbox"/>	A	<input type="checkbox"/>
<input type="checkbox"/>	B	<input type="checkbox"/>
<input type="checkbox"/>	C	<input type="checkbox"/>
<input type="checkbox"/>	D	<input type="checkbox"/>
<input type="checkbox"/>	E	<input type="checkbox"/>
<input checked="" type="checkbox"/>	F	<input type="checkbox"/>

Dag File Contents

```
JOB D /local/home/srini/D.jt
JOB E /local/home/srini/E.jt
JOB F /local/home/srini/F.jt
JOB A /local/home/srini/A.jt
JOB B /local/home/srini/B.jt
JOB C /local/home/srini/C.jt
```

Failed (on gridway)

If you don't see the DAG it's because you need to specify the dependencies!

Generate Task

Generate Dependency

Generate Work Flow

Submit Dag File

OK

Welcome to Gridway (on gridway)

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Dag File Path Options

About gridgui (on gridway)

gridgui

Close

Quit

Dot File

Dag File

```

JOB E /local/home/srini/E.jt
JOB F /local/home/srini/F.jt
JOB A /local/home/srini/A.jt
JOB B /local/home/srini/B.jt
JOB C /local/home/srini/C.jt
JOB G /local/home/srini/G.jt
    
```

**¡Muchísimas
Gracias!
Questions?**