



# **Topics**

- Project Objectives
- Governance
- Legal Issues
- Contributions

# Project Objectives Build the Grid Engine community Collaborate with other projects Integrate with common tools Create Standards Enhance Functionality

Sun.





# Building a Community (cont'd)

- http://gridengine.sunsource.net Provides All Sources
  - Grid Engine + Enhanced Edition
  - Integrations + Beta Modules
  - Scripts, ...
- Documentation
- Builds (binaries) for most OS platforms
- Forums for
  - Support
  - Issue Reporting
  - Developers



# **Integrations**

- Grid Frameworks
  - Globus, Avaki/Legion, Punch, ...
- Parallel Programming Paradigms
  - MPI, PVM, ...
- Special Purpose Schedulers
  - Maui, ...
- ...



### **Collaborations**

- Gridlab
- Globus
- Avaki/Legion
- Punch
- RWTH Aachen
- Raytheon
- ...



### **Create Standards**

- For all kinds of DRM interfaces
  - Submission / control / monitoring
  - Scheduling
  - Operating system dependencies
  - Security
- Driven by the public and open to everyone, in particular other DRM vendors --> DRMAA



# **Enhance Functionality**

- Integrations & Standard Interfaces (see above)
- Grid Brokerage
- Scalability (Multi-Threading, Cluster Queues)
- Security
- Resource Reservation & Preemption
- Monitoring & Accounting
- Scheduler Extensions
- Web Interfaces, Portals, Other Interfaces (e.g. Perl)
- ...



# **License and Rights**

- Grid Engine under "Sun Industry Standard Source License" (SISSL)
  - http://gridengine.sunsource.net/project/gridengine/license.html
  - open, free, commercially exploitable by everyone
  - compatibility is protected
    - compatibility test in testsuite
- Sun Grid Engine and Sun Grid Engine, Enterprise Edition are compatible comercial releases



### **Governance**

- http://gridengine.sunsource.net/project/gridengine/governance.html
- Different Roles
  - Users, Contributors, Commiters, Module Owners, Project Owner
- Appointment of an independent board
- Has not been established yet
  - So far: voting among developers
  - Any board member candidated here?



### Create Your Own GE Rel.

- The following is no legal advice.
- It also doesn't claim to be complete or entirely correct.
- It just tries to give an idea of what the Grid Engine licensing model allows.
- Details under
  - http://gridengine.sunsource.net/project/gridengine/license.html



# Create Your Own GE Rel. (1)

100% Compatible

- Understand and Accept SISSL
- Obtain source code corresponding to "reference builds"
  - http://gridengine.sunsource.net/standards.html
- Compile and create distribution
- Call it "Harry's Grid Engine"



# Create Your Own GE Rel. (3) Incompatible

- do whatever you want, but
  - don't claim you have written the code
  - don't claim you are compatible with Grid Engine
  - don't call it Grid Engine
- modified/extended interfaces and reference implementations still may need to be required (check SISSL).



# Create Your Own GE Rel. (2)

Compatible with Extensions

- as in (1) but
  - define and document interfaces to the extensions
  - deliver reference implementation of extensions
    - not your IPR, just skeleton how is the interface intended to be used?
  - preferably: check-in your interfaces

# **Contributing to the Project**

**Prerequisites** 

- We need you to sign the contributor agreement
  - http://gridengine.sunsource.net/project/gridengine/Grid\_Engine\_contributor\_agreement.PDF
- To submit your changes you
  - need to be a member of the project or
  - a member of a project mailing list.
  - See later for how to submit changes.



# **Contributing to the Project**

Legal aspects

- No copyright assignment:
  - You stay the owner of your code.
- Yet contributor agreement:
  - You agree your code is under SISSL.

