Reasons for a shared pool

• Combine CPU and GPU sites to get balanced ratio
• Single submission point
• Pyglidein simpler to install, more lightweight than previous tool

Inner workings and code

Server

• Cache HTCondor queue status
• HTTP server
  - JSON-RPC – client request, heartbeat, status info
  - Human browsable status report

Client / Submit

• Get idle job info from the server
• Discard non-matching jobs
  - CPU/GPU-only sites
  - Resource limits
• Sort jobs by site priority
  - GPUs > high memory > others
• Conform to submit queue
  - Optimal memory per CPU core
  - Whole nodes

Glidein

• Dynamic partitionable slots
• Standard syntax for GPU resources
• Parrot / CMVFS support

Practical usage experiences