

CPU Farm Management Specifications



Following are essential requirements of a CPU farm management system for the purpose of rendering, simulations, and other batch queue processes.

A flexible, robust, transparent and responsive CPU farm management system should...

- Be built upon a multi-threaded client-server architecture
- Formulate, prioritize, distribute and oversee queue jobs
- Be able to simultaneously manage thousands of queue job submissions
- Scale to productions of various size and complexity
- Feature a customizable, open architecture
- Support event triggers and arbitrary callbacks
- Interact with external software applications
- Feature intuitive submission & management GUIs
- Provide customizable submission templates
- Support command line submission
- Minimize repetitive file opens
- Support job prioritization
- Automatically detect and rate CPU hosts
- Support scheduled or event-based acquisition of user CPUs
- Support CPU allocation grouping
- Regularly query CPU status
- Provide configurable, priority-based job preemption
- Provide centralized administrative control of user configurations
- Support a range of user-based permissions