

## What is new in Sun Grid Engine 6.2 Update 2 (SGE 6.2u2)

A new Graphical User Interface installer helps new users to more easily install the software. It complements the existing command line based installation routine. It democratizes the accessibility to this popular software and will result in higher adoption on the market.

New -support for 32-bit and 64-bit editions of Microsoft Windows Vista (Enterprise and Ultimate Edition), Windows Server 2003R2 and Windows Server 2008. SGE 6.2u2 opens new possibilities in integrating within the high scalability Sun Grid Engine Windows clusters as nodes. This enlarges the addressable market, and opens up new partnerships with Microsoft in many accounts where Windows operating system is present.

A client and server side Job Submission Verifier (JSV). This is an automatic filter for the system administrator to control, enforce and adjust jobs requests, or, as a last resort, to reject a job from users. JSV scripts can be written in any scripting language, like Unix shells, Perl or TCL. This lowers the barrier for users of High Performance Applications, where small typos or inaccurate resource requests from users can be automatically corrected.

Consumable resources are resources like free memory, unused s/w licenses, free disk space or the available bandwidth on a network connection. They need to be managed judiciously. Before SGE 6.2u2 the resources requested for parallel jobs have been multiplied with the number of parallel tasks. Now an administrator can still select the option to have the consumable resource multiplied with the number of tasks of a parallel job , but has the additional option to be counted only once. This is very helpful for managing software licenses , or free memory, and makes it easier to specify task ranges for parallel jobs.

There are improvements in starting parallel jobs faster and reducing memory requirements in qmaster (which is the central component of Sun Grid Engine)(which is the central component of Sun Grid Engine)

- Linux distributions (x86, x64 platforms) come with a default memory allocator malloc library which is not as efficient as the open source jemalloc memory allocator library- used by the Firefox project. SGE 6.2 Update 2 replaces the native Linux malloc library with the jemalloc library. This has a positive effect on the master host performance in large and high throughput Sun Grid Engine clusters on Linux and reduces the memory footprint up to 20%. This will lead to a significant performance increase.
- SGE 6.2 Update 2 introduces some changes in the communication library between the master and execution hosts in Sun Grid Engine on Linux. The system call poll(2) replaces the system call select(2). This means on Linux the master host can now handle more than 6000 execution hosts (matching the performance of Solaris systems) without stopping to handle other client requests.

Running and pending jobs from SGE 6.2 and SGE 6.2 Update 1 can continue to stay in the system when doing the upgrade to SGE 6.2u2.

## How to get the Sun Grid Engine 6.2 Update 2?

For new users, the the 6.2 binaries will be available from one of the following URLs

- [Sun Grid Engine 6.2 Get It page](#)

Users with an existing support contract can download patches via [Sun Solve](#).