



2003 R&D 100 Awards Winner Green Destiny

Green Destiny is the world's most efficient supercomputer. For nearly a year, Green Destiny has run without any downtime in a dusty 85° F warehouse that has no facilities for cooling, humidification control, or air filtration while occupying less than 6 square feet and drawing at most 5.2 kilowatts of power for the 240-processor system. Conventional supercomputers require customized, expensive infrastructure, e.g., cooling, or even a new building. Green Destiny redefines "performance" as much more than speed at any cost, the current ranking criteria for supercomputers. And, because many projects and institutions do not have the money to invest in or sustain the total cost of ownership of conventional supercomputers, the supercomputing capacity and efficiency provided by Green Destiny is recognized worldwide as an affordable and environmentally sustainable alternative. Green Destiny is a platform for high-performance computing tasks.

Applications

- Traditional Web hosting and Web-server farms
- E-commerce
- Financial services
- Space and satellite communications
- Scientific applications
- Desktop supercomputing
- Smart house