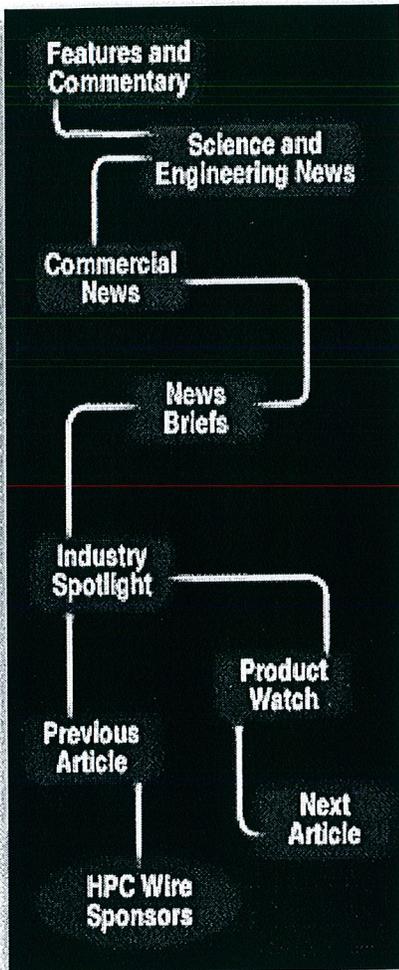
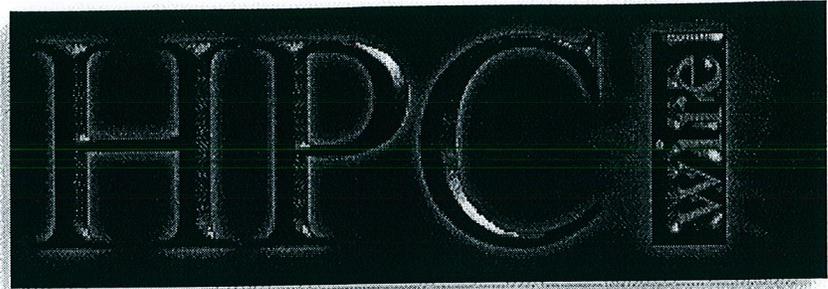




Quadrics Supercomputers World Ltd.



ESNET AWARDS QWEST COMMUNICATIONS \$50 MILLION CONTRACT

SCIENCE AND ENGINEERING NEWS

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Berkely, CA -- The Department of Energy's Energy Sciences Network (Esnet) announced that it has awarded a \$50 million contract to Qwest Communications International Inc. to support ESnet for up to seven years.

Under the contract, Qwest will provide performance levels up to a terabit (one million megabits/second) network by the year 2005, offering 500 times the highest speed available in the industry today.

ESnet is funded by DOE to provide advanced networking and communications support to the scientific research programs. Managed by DOE's Lawrence Berkeley National Laboratory in Berkeley, Calif., ESnet operates a backbone network connecting more than 30 major research sites. Scientists using ESnet conduct research to explore new sources of energy, understand our genetic makeup, develop new materials, analyze global climate change and study fundamental scientific questions in physics, biology and chemistry.

Qwest is extending its fiber optic network to four of these sites. This enhanced local access ensures that Qwest will be able to meet DOE's increasing requirements and provide scalable levels of service. DOE's demand for bandwidth is doubling every year as scientific simulations get larger and more essential to research, and as researchers in multiple locations need to share computational resources in real-time as well as provide the capability for remote, high-resolution visualization of simulations and experiments.

"This new partnership between the Department of Energy's ESnet and Qwest will dramatically increase our nation's capabilities for collaborative research by linking the nation's top scientists with DOE's unparalleled research facilities," said Energy Secretary Bill Richardson. "For 25 years, Department of Energy facilities have pioneered telecommunications technologies to help advance scientific research at national laboratories, universities and industrial partners, and this agreement will continue both our scientific and technological leadership."

"This is another important milestone in the development of advanced Internet services, which is a top priority for President

Clinton and Vice President Gore," said Thomas Kalil, Special Assistant to the President for Economic Policy. "The ESnet is a great example of public-private sector cooperation to strengthen America's technological leadership in the twenty-first century. The applications of this leading-edge network also will accelerate the pace of discovery in a wide range of scientific disciplines."

According to Jim Leighton, the ESnet project manager at DOE's Berkeley National Laboratory, Qwest's response to the "ESnet III" Request For Proposal (RFP) not only was the lowest in evaluated cost, but also rated highest overall by the nine-member procurement Source Selection Committee.

"We were looking for a vendor that would work with us in a mutually beneficial 'partnership' style, rather than a more normal seller-client relationship. The Selection Committee felt that the Qwest proposal showed the best understanding of that style, while being aggressive with both pricing and technology deployment," Leighton said. "We expect to continue to incorporate leading-edge emerging communications technology as it becomes available during the term of the contract, some of which may not even be conceived of today."

Qwest plans an aggressive roll-out that will have some initial ESnet services up and running this month. Qwest plans to have all ESnet transitioned by the fourth quarter of 2000.

ESnet also will connect its sites including the national labs, as well as major corporate partners and universities, to Qwest's high performance Asynchronous Transfer Mode (ATM) network, offering connection speeds up to OC-48 (2.5 gigabits per second). Qwest is leading the industry charge for providing next-generation Internet services, and offers the possibility to transition ESnet to new technologies such as Qwest's OC-192 all optical internet network.

"Qwest's strategy as an early adopter of advanced network capabilities is paying off in its ability to deliver futuristic network capacity, speeds and efficiencies," said Jim Payne, Qwest senior vice president, government systems. "DOE requirements for ESnet called for performance standards unheard of in today's commercial and federal government marketplace. Qwest's ability to satisfy those unprecedented demands speaks to its ability to become the federal marketplace leader in meeting government's enormous needs, both now and more importantly, in the future."

Qwest's commitment to advanced Internet initiatives, especially as it pertains to academia, is evidenced by the backbone facility developed for the University Corporation for Advanced Internet Development (UCAID) Abilene project, the most advanced research and education network in the world that will connect over 160 universities.

In fulfilling the contract requirements, Qwest will develop testbed networks to explore terabit capability and other new technology that will allow wide area distributive computing and extra-high resolution, high-fidelity visualizations of computations and experiments.

An example of the advanced capabilities of ESnet III and the Qwest-provided services is the "Probe Project," a newly established distributed testbed for storage-intensive applications that will combine the high-speed networking of the latest ESnet technology with the research and development 100 award-winning High Performance Storage System. The storage system was developed by four DOE laboratories in collaboration with industry and academia.

Today's scientific researchers are generating staggering volumes of data, with sources ranging from computational simulations of combustion and global and regional climate to digital instrumentation of physical experiments and satellite imagery. The explosion of biological information, especially in genomics and structural biology, will require sharing and analyzing large amounts of data. The Probe testbed is a joint project of both the Energy Department's Oak Ridge National Laboratory (ORNL) and the DOE's National Energy Research Scientific Computing Center (NERSC). Probe will be used to study strategies for exploiting wide-area, high-bandwidth networks connecting terascale data archives across the country.

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