

Dutch National Supercomputer Huygens at SARA

In May 2008 the new Dutch National Supercomputer Huygens, a 60+ TFlop/s IBM Power6 575 Hydro-Cluster, was installed at SARA. Huygens is currently the largest IBM Power6 supercomputer running Linux. The system is integrated in the DEISA supercomputing grid, and is selected as one of the prototype systems in PRACE.

Huygens configuration

108 nodes each with:

- 32 Power6 processor cores 4.7 GHz
- 128-256 GB shared memory (4-8 GB/core)
- 2 quad port IB adapters

Total nr. of cores: 3456
Total memory: 15,6 TB
Interconnect: 8 QLogic IB switches (non-blocking)
SAN disk storage: 972 TB
Operating system: SUSE Linux v10
Peak performance: > 60 TFlop/s



Huygens

Huygens is named after Christiaan Huygens (1629-1695), a famous Dutch mathematician, physicist and astronomer.

User community

More than 200 users from 15 different universities, scientific institutes, government and industry in the Netherlands use the National supercomputer.

DEISA

The Huygens Power6 system is integrated in the European supercomputer grid DEISA (www.deisa.org), and is connected with a dedicated 10 Gbit/s link to the DEISA network.

PRACE

The Partnership for Advanced Computing in Europe (www.prace-project.eu) has selected a broad coverage of promising architectures for Petaflop class systems to

be deployed in 2010.

SARA/NCF will evaluate the IBM Power6 architecture, a fat node cluster prototype. SARA/NCF will collaborate with IBM to evaluate results of the IBM PERCS project.

SARA

SARA is the national Supercomputing and Networking Center in the Netherlands. Since 1985 SARA provides the Dutch National Supercomputing service, hosting and managing the national supercomputer, software, storage facilities and network infrastructure. SARA supports all users of the national supercomputers by documentation, courses and assistance in programming, optimization and parallelization problems.

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