

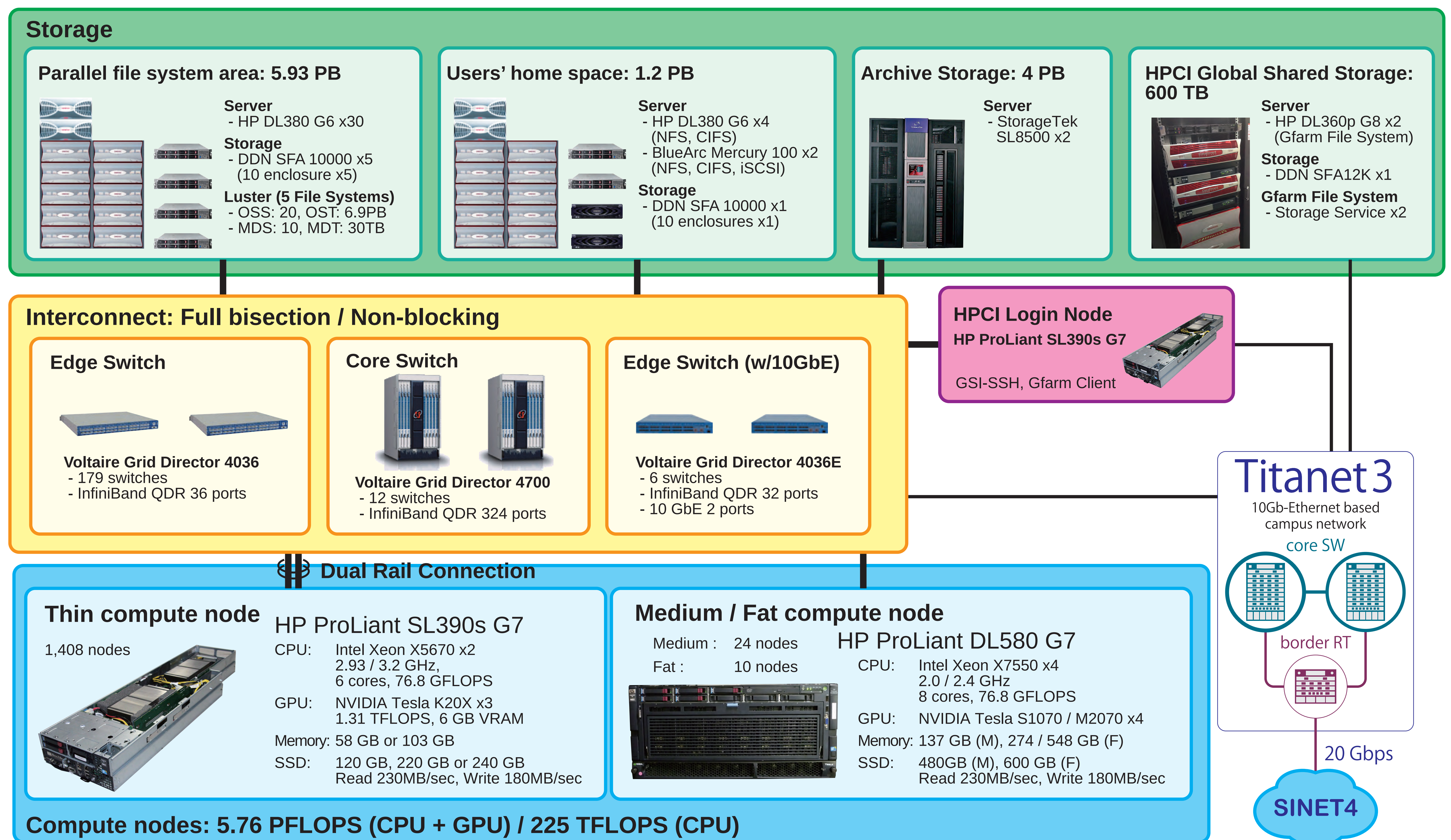


TSUBAME 2.5

Architecture & Services

TOKYO TECH
Pursuing Excellence

Hardware



Software

System Software

- OS: SUSE Linux Enterprise Server 11 SP3,
- Compiler: Intel Compiler, PGI CDK, GNU Compiler Collection
- MPI: OpenMPI, MVAPICH2
- Job Scheduler: PBS Professional

Software for GPU Computing

- Computing Architecture: CUDA 7.0
- Automatic Parallelization: PGI Accelerator Compiler
- Linear Algebra Library: CULA

Validated Applications

ABAQUS, AMBER, ANSYS Fluent / Mechanical, AVS Express, CST STUDIO SUITE, Discovery Studio, GAMESS, Gaussian, GROMACS, LS-DYNA, Maple, Materials Studio, Mathematica, MATLAB, MSC Nastran / Marc / Patran, POV-Ray

Optional Applications

Desmond MD, LAMMPS, myPresto/psygene-G, NAMD, NWChem, PHASE, Quantum Espresso, Remcom XFDTD, STAR-CCM+, VASP, Caffe, Theano, Chainer

Debug & Performance Analysis Tools

PAPI, Scalasca, Score-P, TotalView, Vampir

(Red: GPU Ready, Blue: GPU Experimental Support)

HPCI Confederation

HPCI : High Performance Computing Infrastructure

- National grid infrastructure for HPC research

Resources

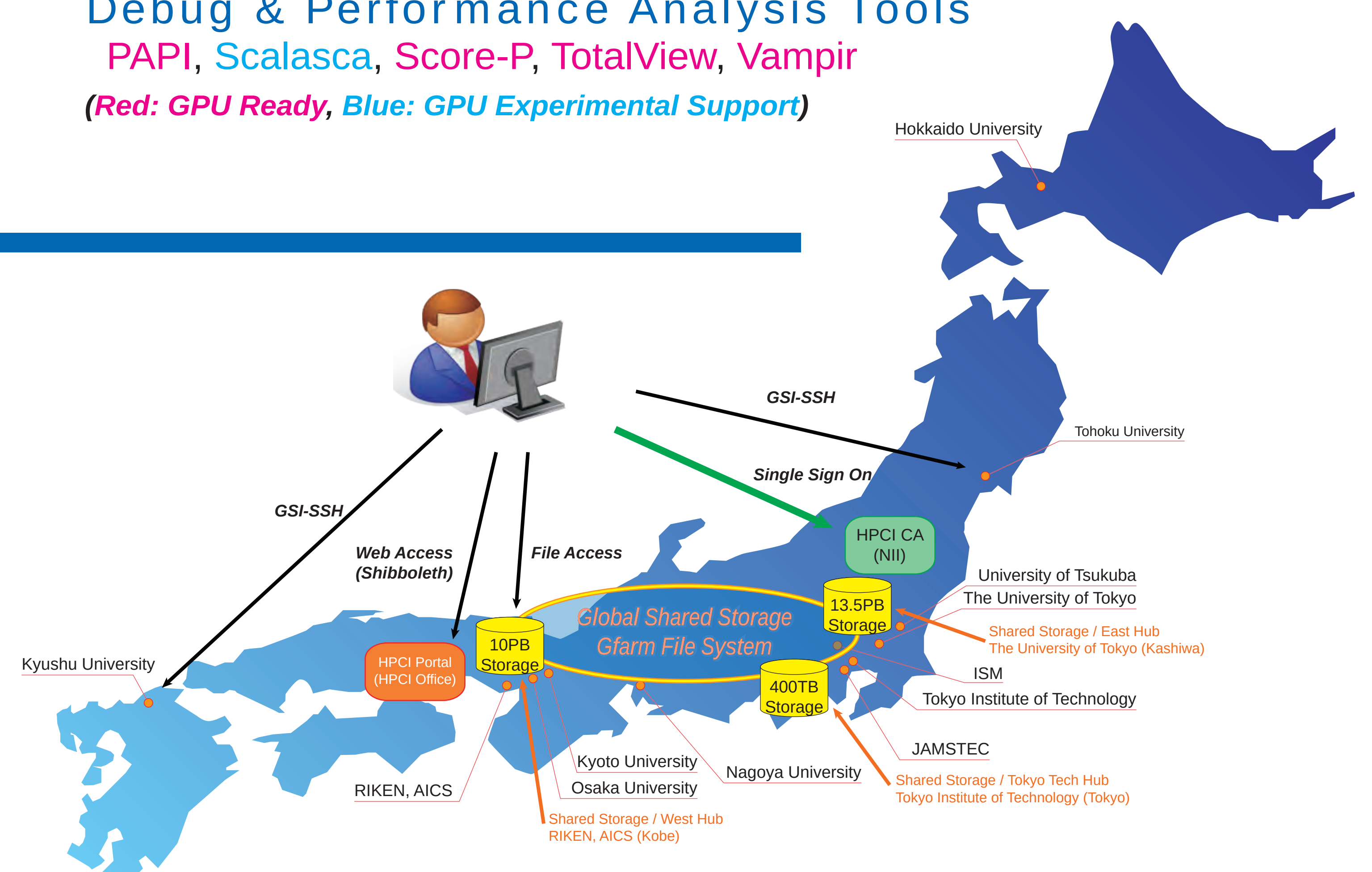
- 11 supercomputers in Japan, including TSUBAME 2.5
- Distributed VM hosting service to help developing network and distributed systems (PLAN, GSIC is leading the project)
- 100PB global shared storage to share data

Services

- One-stop sign up to all resources
- Single sign on to all resources using Shibboleth & GSI

Status

- 14 projects and 82 users use TSUBAME 2.5 for the HPCI project on FY2014



For more details, Please go to booth #2421

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