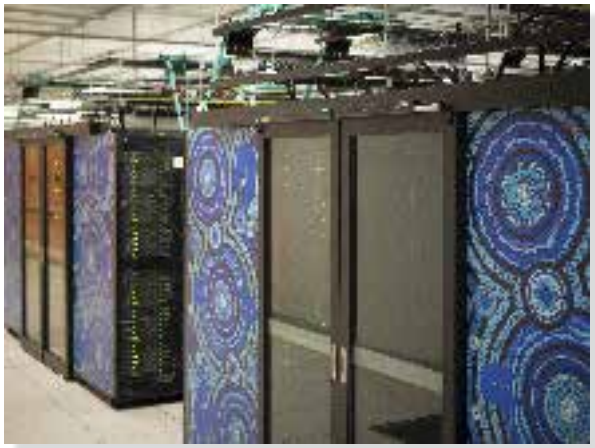
NCI AUSTRALIA

Delivering world-class, high performance computing and data services for Australian research and innovation.

NCI, Australia's national high-end research computing service, is providing Extreme Computing and Data Analytics for Australia.



Through tightly-coupled, high-performance computing and data infrastructure, and internationally renowned expertise in computational science, data science and data management, NCI provides essential services that support the needs of research and industry today and into the future.

NCI supports the work of over **5,500 researchers** from 35 universities, five national science agencies, a dozen NCRIS science infrastructure providers, 3 medical research institutes, and industry. Scientific research is highly dependent on the fusion of "big compute" and "big data" that NCI provides in areas such as weather and climate science, the earth sciences, earth observation, bioinformatics, and astronomy.

NCI provides the essential high-performance computing and data foundation for more than **1,800 research projects**, Centres of Excellence, and fellowships. Funding for these projects from the Australian Research Council and the National Health and Medical Research Council totals over **$800 million**.

NCI serves as the development platform of the Australian national weather and climate modelling suite, ACCESS. NCI is also the national hub for major national and international satellite earth observation collections, used in agriculture, for informing policy development, and for the development of data products for primary industry.

NCI is a collaborative hub at the centre of the Australian research ecosystem. We enable transformative science through big data and computing technologies, platforms and expertise.

NCRIS National Research Infrastructure for Australia

Australian National University

CSIRO

Australian Government Bureau of Meteorology

Australian Government Geoscience Australia

UNSW SYDNEY

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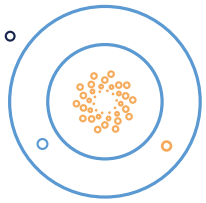
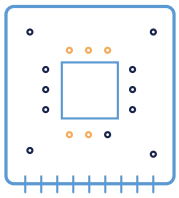
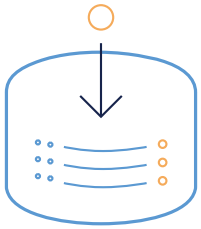


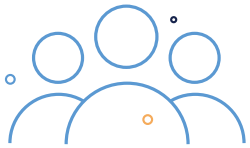
Australia's Tier-1 supercomputer, Gadi, is capable of over 1.5 billion hours of computing per year, across more than **200 supported software packages** . With **15+ Petaflops** of peak performance, it is the fastest CPU-based research supercomputer in the Southern Hemisphere.



Gadi is made up of more than **250,000 Intel Sapphire Rapids, Cascade Lake, Skylake and Broadwell CPU cores**, **640 NVIDIA V100 GPUs** and **2 NVIDIA A100 DGXs** across 4,962 nodes, with more than 930 Terabytes of memory.



NCI makes available **dozens of Petabytes of Analysis-Ready Data**, all stored in accessible, searchable and interoperable formats. In total, Gadi has access to over **100 Petabytes** of data storage across six separate global Lustre filesystems, enabling next-generation **high-throughput computing**.



NCI offers dedicated **training** workshops to its user community to cover beginner techniques as well as advanced HPC, HPD and HTC methods in **Machine Learning, Data Analytics and Visualisation**.

Contact us:

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