

All of Australia's marine science data will soon be accessible through a massive online database being developed by UTAS

# Fishing for data BlueNet

"Tools for entry and discovery of data will be developed to international standards, and be flexible enough to apply to any kind of marine data whether it be geological, chemical, biological or whatever.

"For example, for fifty or sixty years people have been looking at zooplankton on Australia's eastern seaboard. The ability to download an amount of data that covers a long time sequence could be enormously valuable, particularly for answering questions about one of the key signatures of climate change."

Professor Johnson says a project of this magnitude throws up some interesting challenges.

"There are other large DEST funded projects feeding directly into BlueNet. One deals with authentication and access. How do you ensure the people getting access to all of these data are who they say they are? Others will focus on issues to do with managing open source software and the IP issues associated with data access, and the stability and longevity of digital data repositories," he said.

Academic partners include the University of Sydney, University of Melbourne, University of Queensland, University of Western Australia, Flinders University, University of Adelaide, James Cook University, the Australian Partnership for Advanced Computing and the Tasmanian Partnership for Advanced Computing.

"Each university will be able to decide what data it puts onto the network repositories, or whether they wish to host a repository as a node of the network. The whole idea is that people will see the combined benefit to everybody. The Commonwealth agencies have taken a lead role in this. They have all agreed to share their data," Professor Johnson said.

Regardless of whether university researchers contribute to BlueNet or not, they are still free to use BlueNet resources.

The vision is that the network will expand to ultimately encompass all of Australia's marine data, including marine data held or generated by universities and other institutions outside Australian government agencies.



The BlueNet project aims to provide a virtual data centre to support long-term curation and management of data for Australia's marine science researchers.

BlueNet will link vast data repositories and marine resources that currently reside in academic and government institutions both in Australia and overseas.

It is an extension of the nation's first online, virtual facility – the Australian Ocean Data Centre Joint Facility (AODCJF). The AODCJF is a brand new venture between the main Commonwealth agencies engaged in marine science, and BlueNet will link universities into the network.

The AODCJF is trying to create a virtual data centre with web-based access, a 'single sign-on' log-on process, powerful and flexible search tools, and real time access to the data managed by these agencies.

Professor Craig Johnson, from the UTAS School of Zoology, is the chief investigator for BlueNet.

"Up until now universities have not been particularly good at managing data. We are more focused on project outcomes. So the whole idea of BlueNet is to connect universities to a national grid, and to provide them with a data management and curation service. This will facilitate knowledge discovery, and allow everybody access to the vast amounts of marine science information generated every year.