

## Connecting the storage dots – the RDSI DaShNet project

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### ABSTRACT

The RDSI project has supported the establishment of eight Nodes around the country, based at major eResearch agencies in most states and territories. These Nodes will provide an ongoing and sustainable research data storage and access service for the research community. They are founded on the integration of RDSI and locally funded storage, together with NeCTAR research cloud infrastructure and other local computing resources, as well as other local value-add IT and people services in support of research.

For data to be ingested onto, accessed from, and moved between Nodes where necessary, requires an efficient and effective network. When dealing with multiple tens of petabytes around the country, that network has to be carefully designed and implemented to achieve high performance. As major research communities depend on data access to carry out their work, the network has to be dependable and robust. The DaShNet project is implemented across the new AARNet4 network, running over multiple 10Gb/s links to start with. To streamline the movement of data the RDSI project is working with AARNet on the deployment of 'ScienceDMZ' infrastructure at each Node, which helps to provide a range of fast and easy data access service tools, directly and underpinning further access services.

This talk will report on the current deployment of the DaShNet services over AARNet, the establishment of ScienceDMZ services at each Node, and what this means for users, developers, network engineers and institutional CIOs. The project is giving researchers the ability to access data at 10Gb/s – if their campus network can handle it.

### ABOUT THE AUTHOR(S)

Dr Markus Buchhorn is a former astrophysicist, a former IT geek, a former university IT director, and a former director of Services at Intersect. He has been working in the eResearch world, in Australia and overseas, for well over 15 years. He is currently supporting the RDSI project to oversee the DaShNet project rollout and to ensure that large-scale common user requirements for data access are considered and addressed.