



Space is big, really big



# Space

Introducing [Space.intersect.org.au](https://space.intersect.org.au), a large scale, high performance, collaborative, and cost effective digital storage system specially tailored, designed and constructed by researchers for researchers. Space offers continuously growing capacity of up to 50 petabytes of fast, reliable and safe active and archive data retention. You have data, so we have Space.

## The Big Bang

In the beginning, Space was created by Intersect Australia, a joint venture of universities from NSW and the ACT. It was bootstrapped through the Research Data Storage Infrastructure (RDSI) Project, an initiative of the National Collaborative Research Infrastructure Strategy, funded from the Education Investment Fund under the Super Science (Future Industries) initiative.

## Why Space?

1. Space is networked to the entire Australian higher education sector at unmatched speed.
2. Space is easily and securely accessed with existing IDs.
3. Space is available in simple and predictable subsidised and unsubsidised models.
4. Space is a product of Intersect, owned and endorsed by member universities and subsidised by the Australian and NSW Governments.

## Confidently store, retrieve and share your research data fast with Intersect infrastructure

Space is connected by optical fibre to [Australia's Academic and Research Network](https://www.aarnet.edu.au) (AARNet) the not-for-profit company that operates the National Research and Education Network (NREN).

This means Space travel is optimally fast to critical eResearch infrastructure, such as high performance computing cluster Raijin, other [AeRO](#) organisations, medical research and clinical facilities and every Australian university campus. AARNet operates dedicated international fibre and interconnects as a peer of Internet2 in the USA, TEIN in Asia and GÉANT in Europe. Because AARNet also connects directly to commercial organisations and telecommunications companies, rapid transit is also possible between Space and Google, Amazon, Microsoft, Telstra, Optus and more.

Data storage options can be overwhelming and technical. We make it easy to get into Space by combining technologies into helpful product choices that are simple to understand and use. There are many ways to travel in Space...

## Plotting Your Trajectory

There's no such thing as an 'average' researcher when it comes to intensity, appetite and turnover of data, so no one size of Space fits all. A bioinformatician may need flexible access, an astronomer's primary need may be throughput. Collaboration tools may be the biggest driver for a social scientist, while an archaeologist needs geocoding. Intersect people are flexible and ready to help leverage Space to solve individual, team, and organisational data challenges.

Research data is often encumbered by ethical, confidentiality or legal constraints that change over time. No matter what, you can always take your data out of Space if you decide to move. Terms of Service for Space guarantee agreed data sovereignty, audience, intellectual property rights and control of sharing.

Although Space is as simple as it can be, every mission involves pre-launch complexity. It's important to understand upfront that in general Space bundles differ. For example SpaceShuttle stores data with different security models, access protocols and data formats. Your Intersect eRA will work with you to recommend the right Space for your project.

## Control Your Space

In Space you control who can hear you scream. Space identity is assured by the [Australian Access Federation](#) (AAF), meaning that you can easily share with potentially every Australian university researcher, many NGOs, and private sector research organisations using their own credentials. You can narrow or widen the audience at your discretion, and you can even add people that do not have [AAF](#) federated identities.

## Lost in Space

Estimating research data storage needs can be tricky as they depend on many factors including volume, growth, longevity, access speed, collection significance, originating research organisation, replacement value and so on. Don't panic – [please get in touch](#) and we'll work through it with you.

“We turned to Intersect to essentially design a way forward to meet Australia’s needs within computation, data storage and software to help us access the data.” Professor Brian Schmidt AC, Nobel Laureate and Chair of Astronomy Australia

**Space Camp:** Scheduled training and seminars run on NSW university campuses. Get in touch with your local [eResearch analyst](#) or find out more [here](#).

## Get Started

Want to ask questions about Space or have us contact you?

Reach out by emailing [space@intersect.org.au](mailto:space@intersect.org.au) or visit [help.intersect.org.au](http://help.intersect.org.au)