

What is an Integrated Cohesive Infrastructure?

For Geoscience Australia, this is an aspirational concept

Complex infrastructure that is becoming more complex everyday

Currently undergoing transition from on premises to cloud

This is complicated by the need to support:

- commodity computing
- scientific computing
- data storage and archiving
- data delivery

IT Systems used by Geoscience Australia

On-premises

- Desktop
- Servers
- Clusters

Public cloud

- Research (NCI)
- APS

Private cloud

- AWS – VMs
- Azure – platform as a service (OneDrive)

HPC – NCI (not currently using cloud options)

BYOD

Challenges and Lessons Learned

Challenges related to dealing with different systems:

- Data management
- Communications
- Identity
- Security

Lessons Learned:

- Continuously reassess options – what goes where? – infrastructure needs to be fit for purpose
- Compartmentalise functions and projects
- Focus of interfaces and automation – this requires strong governance (standards and APIs)