



Developing an Australasian XNAT Roadmap Workshop

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GENERAL INFORMATION

- Length: **Half-Day**
- Does the workshop include a hands-on component? **Yes**
- Number of attendees: **No Constraint**
- Are there any special seating or table requirements: **Teams**
- Technical requirements: **Zoom capable room (Mic and camera), power boards for connecting laptops**

DESCRIPTION

Institutions across Australia and New Zealand are building platforms to manage imaging data. In the clinical space, research practice is often married to clinical practice, using the same instruments and often the same patients. Depending on where an instrument is housed, data may be anonymized to various degrees, ranging from having almost all metadata removed for public data sets, to having completely identifiable (linked or otherwise) data used for clinical reporting.

One of the popular candidates for a research imaging platform is XNAT, currently deployed at 8 Australian research institutions to our knowledge, and recently enabled with Australian Access Federation (AAF) support through a plugin developed by Queensland Cyber Infrastructure Foundation Limited (QCIF). At eResearch 2018 we held a series of presentations and a successful Birds of a Feather that sowed the seeds for further institutional adoption of XNAT. We want to build on this momentum and host a technical workshop to discuss the challenges and future directions so we can work together as a more cohesive community. The outcomes of the workshop will be: (i) increased understanding of the challenges and rewards of a successful institutional XNAT deployment; (ii) alignment of features that would benefit the community, e. g. integration with the Characterisation Virtual Laboratory (CVL); and (iii) planning for the development of the Australian XNAT Roadmap that will include effective models of cross-institutional collaborations and technical exchange as well as stakeholder (end-user) engagement critical to the uptake of this eResearch platform. The workshop will be organised into the following sessions to steer the conversation:

1. **Deployment (60 min):** We will discuss the multiple deployment approaches that different institutions have adopted, including in relation to internal infrastructure, public cloud such as AWS, and turnkey solutions offered by Radiologics.

2. **Data Ingestion, Format Standards, & TDR (45 min):** XNAT works out of the box with standardized DICOM data, but has had challenges with other data formats, both open source and proprietary. We will go over the latest development in non-DICOM upload tools.
3. **Sensitive Data & Lifecycle Management (45 min):** The outcomes of the ARDC Discovery Activity on handling of sensitive data will be discussed, along with current procedures and goals of the participating institutions. We will also look at options for data sentencing.
4. **Pipelines (45 min):** Recent work has seen the XNAT Pipeline engine moving from an XML schema to containerized workflows. We will discuss how this helps reproducibility, and what steps can be taken to ensure interoperability between deployments.
5. **Roadmap & Steps Forward (30 min):** We will discuss ways forward to coordinate and share future activities, as well as help, grow and train the community.

WHO SHOULD ATTEND

Members of the imaging community or eResearch personnel who support them.

WHAT TO BRING

Yourselves, suggestions and ideas, laptop.