

4: Customizing XNAT: Use Cases, Scripting and Automation

Tips for First-time Installers

XNAT was designed and built from the ground up for flexibility and extensibility. This means that you have incredible control at your fingertips to customize XNAT for your needs. However, knowing how to get started can be difficult. Here are a few tips.

Want to hook into the XNAT API for your custom workflow?

Most XNAT functions have been codified in our REST API. There are several ways you can use the REST API to easily create and support custom workflows. Here are a few examples:

- [How to use the REST API](#). This overview article walks you through the basics of using the REST API from the command line, and includes links to tutorials on creating a new subject record, uploading and downloading files, and automating searches on XNAT data.
- [Browse the XNAT REST API Directory](#). This invaluable resource lists current and planned REST API URIs, with details on GET/POST/PUT /DELETE capabilities and available formats for submitted and returned data.

Want to extend the user interface?

- XNAT's UI is rendered from Velocity templates, which makes it easy to add, modify or obscure features of the UI, once you know your way around. Try this [Guide to extending the XNAT UI](#) to get started. Also, the [Apache documentation for Velocity 1.5](#) is a helpful resource while developing.

Attempting to set up XNAT for a complex user environment?

XNAT's user and project permissions make it possible to support a number of highly complex data collection and review protocols in a secure and trusted manner. The following case studies may help:

- [Setting up XNAT as an Institutional Repository](#). Case Study: Iowa University
- [Modifying XNAT for Clinical Research](#). Case Study: Emory University
- [Managing a Multi-site Study in XNAT](#). Case Study: Iowa University, PREDICT-HD Project

Questions? We know you've got them.

First-time XNAT downloaders can schedule a free 30-minute consultation with one of our system architects. Email us at info@xnat.org to learn more.