

Recent developments in ICAT and TopCAT

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The Information CATalogue (ICAT) has been in production for a number of years at many facilities including DLS, ISIS and SNS at ORNL. ICAT provides a WSDL interface to metadata associated with an experiment. The metadata might include the project proposal, data about individual files and references to any subsequent publications. A number of tools have been built which interface with ICAT including: Mantid [1], ICAT Explorer [2] and TopCAT. Here we are focussing on ICAT and TopCAT; both of which are under active development at STFC.

ICAT version 4 has recently been released. This provides a much simpler yet more powerful API with pluggable authentication modules, rule based authorization and a flexible mechanism to configure the sending of notifications. ICAT is being evaluated by the PaNdata project [3] as their metadata catalogue and is being rolled out across many sites. An Umbrella [4] authentication plugin is being developed for ICAT to simplify data access across multiple sites

TopCAT provides the ability to simultaneously search through the metadata of several sites. It has recently been extended to show the proposal abstract, publication references, and a number of other related fields. Having selected data files based on searches of the metadata it is then possible to use TopCAT to download the actual data. ISIS and DLS have both provided DOI “landing pages” [5] with DOIs registered with Datacite [6]. The landing page contains a direct link to the data via TopCAT. TopCAT will be given the ability to request a new DOI and using a facility dependent plugin to create and register the landing page thereby making the data discoverable and publicly available. A mechanism to allow the principle investigator of an experiment to give and revoke permissions to access both the metadata and the data is also being developed.

References

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6. German National Library of Science and Technology, DataCite, <http://www.datacite.org/>

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