

**The Isaac Network
An Internet Scout Project
Initiative
Co-sponsored by CNI**



The Isaac Network

A major issue for Internet users today is to be able to locate resources that they deem relevant and of high quality. Ultimately each individual has to decide for themselves which resources are relevant and credible in a given situation. However the task of discovering these resources would be much simplified if the pool of possibilities was narrowed to a manually, pre-selected subset of resources chosen by information specialists to be of high quality.

While there are numerous collections of "quality resources" available on the Web today, they are generally individual, autonomous sites, not connected in any way to other quality collections. Internet users, especially those in academia, need the ability to send a single search command which will reach specific quality collections, and just as importantly, only those quality collections. The Isaac Network is being built to provide them with this service.

Goals of The Isaac Network

- To link together geographically dispersed collections of highly selective Internet resources into a single, virtual collection.
- To allow end-users to search several of these highly selective collections at once through a single search interface.
- To allow collaborators to continue to develop, maintain, and manage their own collections. Isaac provides a method to link the collections and will not subsume any of the individual collections. Content providers retain ownership of, control over, and credit for the metadata records shared through the network.
- To experiment with metadata standards, such as the Dublin Core, to provide a common set of attributes with which to catalog and subsequently search collections of Internet resources.
- To develop a collaborative laboratory in which we can research topics of interest, such as indexing algorithms, alternative user interfaces, and the development of a set of guidelines for connecting selective collections, within the Isaac Network, and between Isaac and other similar efforts.

Architecture

The Isaac Network uses standard Internet protocols, in particular, the Lightweight Directory Access Protocol (LDAP) and the Common Indexing Protocol (CIP) The Isaac Network content providers use the Dublin Core (DC) metadata set.

Collaborator Criteria

We are primarily interested in highly authoritative collections of Internet resources that have been hand-selected by librarians or information specialists. Collections may focus on a particular topic or discipline, or cover a broad subject range. The Internet Scout Project would like to partner with organizations that can provide the following:

An existing collection of human-mediated metadata about Internet resources that is regularly verified and updated:

- The collection should contain more than 500 records but fewer than 20,000
- The metadata should be applied by professional catalogers or information specialists
- The metadata should include at least the following fields:

Author
Title
Subject or Keywords
Resource Description
URL

Computing resources to run the Isaac software:

- A machine directly connected to the Internet, with at least 200 Mb of free disk space running one of the following versions of Unix:

SunOS/Solaris
Digital Unix
HP-UX
AIX
IRIX

- Expertise and time to work with the Internet Scout Research Team to develop data extraction/conversion tools to facilitate the export/import of metadata records and to establish mappings between metadata formats

Additional Information

For more information on The Isaac Network, see:

<http://scout.cs.wisc.edu/scout/research/index.html>

The Internet Scout Project, which is funded by the National Science Foundation and is located in the Computer Sciences Department at the University of Wisconsin-Madison, is charged with assisting the higher education community in resource discovery on the Internet. More information about the Internet Scout Project can be found at <http://scout.cs.wisc.edu/>