

A Status Report on the CNI Networked Information Discovery and Retrieval(NIDR) White Paper

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Since October 1994 we have been exploring some of the issues involved in the development of architectures and systems which will support networked information discovery and retrieval. This work also examines the roles of standards and metadata in the development of these systems and architectures. This effort has been carried out under the auspices of the Coalition for Networked Information with major support from the Mitre corporation, which has made Avra Michelson available to work on the project for a year. Our objective is to prepare a white paper documenting the current state of the art, the key research issues, barriers to progress, and to suggest directions for future progress in systems implementation, architectural thinking and, where appropriate, in standards development.

Networked information discovery and retrieval has become an extremely dynamic research area over the past year, stimulated by initiatives such as the ARPA/NASA/NSF Digital Libraries program, progress on efforts within the Internet Engineering Task Force in Uniform Resource Identifiers, the NCSA/OCLC Metadata conference, the Internet Activities Board/IESG Information Infrastructure Workshop, the emergence of sophisticated architectures such as the HARVEST system developed by Mike Schwartz and his colleagues, and a wide range of other projects. At the same time, our own thinking about the NIDR area has evolved substantially as we have worked on this project, and the focus of our work has changed somewhat as a result.

For the Spring 1995 CNI Task Force meeting, we are releasing a draft of Chapter 1 of the white paper, titled "The Nature of the NIDR Challenge" and our current working outline for the remainder of the white paper. We expect to release Chapters 2 and 3, "Architectures and Technologies to Support NIDR Processes" and "Content and Metadata to Support NIDR Processes" in draft in late April or early May, and the concluding chapter, "A Critique of Current NIDR Objectives: Are These Goals Too Limited?" in late June 1995. We hope to finalize the white paper in September. For the Spring 1995 CNI Task Force meeting we are also making available a pre-print draft of a paper that Clifford Lynch has prepared for the *IEEE Journal on Selected Areas in Communications* titled "Networked Information Discovery: An Overview of Current Issues" which provides a good deal of material that is relevant to the white paper.

We welcome your comments on the draft chapter and outline that we are distributing and your thoughts on the project as a whole. We particularly invite your reactions to our developing argument that the NIDR problem, as currently framed, is an outgrowth of the library tradition of helping people to identify and obtain access to information resources in the networked information environment. It will some day have to span the enormous gulf between this tradition and the new challenge of permitting programs to interoperate on a broad scale with complex information resources in the still-murky world of agent-based services, "knowbots" and similar constructs. These issues are touched on in Chapter 1 of the draft white paper, and will be explored in more depth in Chapter 4.

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