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Information Retrieval (Z39.50): Application Service Definition and Protocol Specification

Abstract: This standard defines a client/server based service and protocol for Information Retrieval. It specifies procedures and formats for a client to search a database provided by a server, retrieve database records, and perform related information retrieval functions. The protocol addresses communication between information retrieval applications at the client and server; it does not address interaction between the client and the end-user.

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Foreword

(This foreword is not a part of NISO Z39.50-2003 Information Retrieval (Z39.50): Application Service Definition and Protocol Specification. It is included for information only.)

This standard is a maintenance revision of Z39.50-1995. Appendix 19 describes how this version differs from Z39.50-1995, and the reasons for these changes.

This standard was processed and approved for submittal to ANSI by the National Information Standards Organization. It was balloted by the NISO Voting Members March 29, 2002 - May 13, 2002. It will next be reviewed in 2007. Suggestions for improving this standard are welcome. They should be sent to the National Information Standards Organization, 4733 Bethesda Avenue, Suite 300, Bethesda, MD 20814. NISO approval of this standard does not necessarily imply that all Voting Members voted for its approval. At the time it approved this standard, NISO had the following members:

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Information Retrieval (Z39.50): Application Service Definition and Protocol Specification

1. Introduction

This standard, ANSI/NISO Z39.50-2003, Information Retrieval (Z39.50) Application Service Definition and Protocol Specification, defines an application protocol for search and retrieval of information in databases.

1.1 Scope and Field of Application

This standard describes the Information Retrieval Application Service (section 3) and specifies the Information Retrieval Application Protocol (section 4). The service definition describes services that support capabilities within an application; the services are in turn supported by the Z39.50 protocol. The description neither specifies nor constrains the implementation within a computer system. The protocol specification includes the definition of the protocol control information, the rules for exchanging this information, and the conformance requirements to be met by implementation of this protocol.

This standard is intended for systems supporting information retrieval services for organizations such as information services, universities, libraries, and union catalogue centers. It addresses connection oriented, program - to - program communication. It does not specify a user interface.

1.2 Version

Z39.50-1995 specifies versions 2 and 3 for the Z39.50 service and protocol. This standard Z39.50-2003 also specifies versions 2 and 3, and additionally, incorporates many clarifications, amendments, defect corrections, and implementer agreements, all of which have been endorsed by the Z39.50 Implementers Group.

Z39.50-1992 specifies version 2 only. Version 2 of Z39.50 is assumed identical to version 1 of Z39.50; thus implementations that support version 2 automatically support version 1. Implementations that support version 3 are required to support version 2 (and thus version 1 as well).

Certain procedures specified within the standard apply specifically to version 2 or version 3 and are noted as such.

1.3 References

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|-----------------------|--|
| ANSI/NISO Z39.53-2001 | Codes for the Representation of Languages for Information Interchange. |
| ISO 2709 | Documentation - Format for Bibliographic Information Interchange on Magnetic Tape. |