



## MultiLIS Z39.50 Server

This document provides detailed technical information regarding Sirsi's implementation of the Z39.50 standard for its MultiLIS system. The MultiLIS Z39.50 Server conforms to Z39.50-1992 (Version 2) of the standard.

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### **The Sirsi MultiLIS Z39.50 server supports the following services:**

Initialization, Search, Present, Delete

### **Servers Available for Testing at Sirsi MultiLIS**

#### ***English Catalog Test Server***

*Domain name: 216.226.62.10  
Port: 210*

*Hours of availability:  
24 hours a day, 365 days a year, except during routine updates and maintenance scheduled infrequently throughout the year.*

#### *Databases Available:*

*ONEON - a copy of SUNY Oneonta 's database that Sirsi uses for demonstration purposes. This database contains approximately 330,000 bibliographic records in USMARC format and over 390,000 associated item records. This database also contains multimedia records including full text, image and sound.*

*CIRCLE\_ITEM\_FILE - The generic database name that the Sirsi MultiLIS server refers to in order to provide item and circulation information.*

#### ***French Catalog Test Server***

*Domain name: 216.226.62.10  
Port: 5500*

*Hours of availability:  
24 hours a day, 365 days a year, except during routine updates and maintenance scheduled infrequently throughout the year.*

#### *Databases Available:*

*ULAV - a copy of Quebec City University Laval Library System's database that Sirsi uses for demonstration purposes. This database contains approximately 30,000 bibliographic records in CANMARC format and about 40,000 associated item records. This database also contains multimedia records including full text, image and sound.*

*CIRCLE\_ITEM\_FILE - The generic database name that the Sirsi MultiLIS server refers to in order to provide item and circulation information.*

### **Initialization Service**

#### *Protocol Version*

*Z39.50-1992 (Version-2)*

## Options Supported

Search  
Present  
Delete

## Preferred Message Size

The MultiLIS server will accept a maximum message size of 65,536 bytes (64 K).

## Maximum Record Size

The MultiLIS server will accept a maximum record size of 655,360 bytes (640 K).

## ID Authentication

Anonymous and Open User Id/Authentication types are supported.

Open format is: [bank-]user[/pwd]

where:

- 'bank' is the MultiLIS bank number of the corresponding user; optional.
- 'user' is a valid MultiLIS user identifier (ex: 19x)
- 'pwd' is the user id's corresponding password within the MultiLIS system, when applicable

User Identification is not required by the Sirsi MultiLIS server at this time. When not provided, user id defaults to the MultiLIS OPAC user (i.e. '0x').

## Search Service

### Result Set Name

In addition to 'default', the MultiLIS server can maintain any number of named result sets during the Z-association.

### Database Names

The MultiLIS server supports searching one or many MultiLIS banks (i.e. databases) at a time. The maximum number of banks searchable at once is 255.

Generic "CIRCLE\_ITEM\_FILE" database is the name the Sirsi MultiLIS server refers to in order to provide item and circulation information.

### Element Set Names

Only generic element set names are supported at this time.

The list is detailed in [Element Set Names Available](#)

### Preferred Record Syntax

The Sirsi MultiLIS server supports a subset of public and private Z39.50 record syntaxes.

Details follow in [Record Syntaxes Available](#).

### Query types

Type 1 only is supported.

## Attribute Set ID

*Bib-1 only is supported.*

## Operand

*The Result-set-id may be used in the Operand (for qualifying searches).*

## Operators Supported

*AND OR AND-NOT*

## Proximity

*Not supported*

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## **Present Service**

### Element Set Names

*Only generic element set names are supported at this time.*

*The list is detailed in [Element Set Names Available](#)*

### Preferred Record Syntax

*The Sirsi MultiLIS server supports a subset of public and private Z39.50 record syntaxes.*

*Details follow in [Record Syntaxes Available](#).*

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## **Delete Service**

*The Sirsi MultiLIS server supports both bulk and result sets list delete operations*

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## **Access-control Service**

*The Sirsi MultiLIS server will accept Access-control response messages, but does not send requests.*

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## **Resource-report Service**

*The Sirsi MultiLIS server will accept resource report request messages, but does not send responses.*

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## **Resource-control Service**

*The Sirsi MultiLIS server will accept Resource-control request messages, but does not send responses.*

## Trigger-resource-control Service

The Sirsi MultiLIS server will accept Trigger-resource-control request messages, but will not actually trigger a 'resource-control' request back to the client (as a consequence).

## Supported Bib-1 Attributes

The MultiLIS server supports, for each MultiLIS defined search type, the following bib-1 attribute combinations. Values in gray cells do not need to be specified, as they become the implicit value implemented by the server. Default values, when more than one is acceptable for a particular attribute and none is provided, are shown using "(D)".

MultiLIS	Bib-1 Attribute combinations					
Search Types	Use	Relation	Position	Structure	Truncation	Compl.
Keyword title	4-Title	3-Equal	3-Any.	6-Word list (D) 2-Word	101-Proc.#	1- Inc.subfield
Exact title	4-Title	3-Equal	2-First in subfield	1-Phrase	100-Do not truncate	2-Complete subfield.
Series	5-Title Series	3-Equal	3-Any	6-Word list (D) 2-Word	101-Proc. #	1- Inc.subfield
ISBN	7-ISBN	3-Equal	3-Any	2-Word (D) 109-Num.String	101-Proc. #	1- Inc. subfield
ISSN	8-ISSN	3-Equal	3-Any	2-Word (D) 109-Num.String	101-Proc. #	1- Inc. subfield
LCCN	9-LCCN	3-Equal	3-Any	2-Word (D) 109-Num.String	101-Proc. #	1- Inc. subfield
Subject	21-Subject Heading	3-Equal	3-Any	6-Word List (D) 2-Word	101-Proc.#	1-Inc. subfield
MultiLIS Bibliographic record number	12- Local number	3-Equal	n/a	2-Word (D) 109-Num.String	100-Do not truncate	n/a
Abstract (520)	62-Abstract	3-Equal	3-Any	6-Word List (D) 2-Word	101-Proc. #	1-Inc. subfield
Personal author, Corporate and Conference author	1003-Author	3-Equal	n/a	n/a	101-Proc. #	1-Inc. subfield
Personal author	1004-Author Personal	3-Equal	1-First in field	101-Name Normalized	101-Proc. #	1-Inc. subfield
Corporate and conference author	1005-Author Corporate	3-Equal	3-Any	6-Word List (D) 2-Word	101-Proc. #	1-Inc. subfield
Corporate and conference author	1006-Author Conference	3-Equal	3-Any	6-Word List (D) 2-Word	101-Proc. #	1-Inc. subfield
Keyword title, Series, Subject, Abstract, Personal author, Corporate author, Conference author	1016-Any	3-Equal	n/a	n/a	101-Proc. #	1-Inc. subfield
Document type	1031-Material Type	3-Equal	n/a	6-Word List (D) 2-Word	101-Proc. #	n/a
Same searches as	1035-Anywhere	3-Equal	n/a	n/a	101-Proc. #	1-Inc. subfield

## Element Set Names Available

Generic element set names, per category, are as follow:

### MARC related element set names:

- 'F' for Full MARC records (default)

### GRS-1 Multimedia items element set names:

- 'VARIANT' for GRS-1 multimedia items inquiry
- 'MEDIUM *n*' for GRS-1 multimedia items retrieval, where '*n*' is the multimedia item number

### GRS-1 Holdings element set names:

- 'HOLDINGS' for GRS-1 number of holdings inquiry
  - 'HOLDINGS-*n*' for GRS-1 holdings retrieval, where '*n*' is the starting holdings offset number
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## Record Syntaxes Available

The Sirsi MultiLIS server supports the following Z39.50 public syntaxes:  
US-MARC (default), Can-MARC, GRS-1, OPAC

The MultiLIS server also supports the local 'Sirsi-Holdings' record syntaxes.

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## Supported Diagnostic Sets

Bib-1 is the default diagnostic set supported. General format of diagnostics consists in a diagnostic code followed by a contextual description.

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## Supported Z39.50 Profiles

The Sirsi MultiLIS server conforms with the following Z39.50 profiles:

- Z39.50 over TCP