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**Realizing the Vision of Networked Access to
Library Resources**

*An Applied Research and Demonstration Project to
Establish and Operate a Z39.50 Interoperability Testbed*

**Procedures for Issuing Test Searches
from Z-Interop Testbed Participant's
Z-Client**

Phase 1

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Procedures for Issuing Test Searches from Testbed Participant's Z-Client

1. Introduction

This document describes the procedures that participants in the Z39.50 Interoperability Testbed (Z-Interop Participant) are to use when testing Z39.50 client (Z-client) applications. The testing of a Z-Interop participant's Z-client is limited to reviewing and analyzing the queries received by the Z-Interop reference implementation Z39.50 server. Specifically, the attribute combination and other query components (e.g., Boolean operators) are reviewed, and a report of the results will be prepared for each Z-Interop participant.

2. Procedures for Issuing Test Searches

Z-Interop participants must send a set of test searches to the Z-Interop reference Z39.50 server. These test searches are defined in the U.S. National and Bath Profiles. To assist the testbed staff in analyzing the results, the Z-Interop participant should send the test searches in the order prescribed below, and all searches should be sent sequentially during one session.

2.1 Connection Information for Z-Interop Z39.50 Server Reference Implementation

The connection of the Z-Interop Z39.50 server reference implementation is:

Domain name: **research.lis.unt.edu**

Port number: **2200**

Database name: **zinterop**

2.2 Profile Test Searches

The following sections prescribe the types of searches (i.e., Basic, Truncation, and Boolean), the specific searches and the search terms to send in the queries. Z-Interop participants must send each of the searches in the following order:

Basic searches:

- a. Any Search – Keyword
- b. Author Search – Keyword
- c. Title Search – Keyword
- d. Subject Search – Keyword

Truncation searches:

- a. Any Search – Keyword with Right Truncation
- b. Author Search – Keyword with Right Truncation
- c. Title Search – Keyword with Right Truncation
- d. Subject Search – Keyword with Right Truncation

Boolean searches:

- a. Any with OR
- b. Any with AND
- c. Any with NOT
- d. Author with OR
- e. Author with AND
- f. Author with NOT
- g. Title with OR
- h. Title with AND
- i. Title with NOT
- j. Subject with OR
- k. Subject with AND
- l. Subject with NOT

2.2.1 Profile Test Searches: Simple Keyword

For each of the following keyword searches, the Z-Interop participant will send 5 searches using the specified search terms for each type of search.

Search Number	Type of Search	Search Term
1	Any Search -- Keyword	mobile
2		nepal
3		picasso
4		root
5		varieties
6	Author Search – Keyword	aleksandrovich
7		elena
8		garrison
9		jessica
10		picasso
11	Title Search – Keyword	astronomical
12		nepal
13		root
14		terror
15		treasures
16	Subject Search – Keyword	dragons
17		mobile
18		semiconductors
19		supernatural
20		varieties

2.2.2 Profile Test Searches: Keyword with Right Truncation

For each of the following keyword truncation searches, the Z-Interop participant will send 5 searches using the specified search terms for each type of search. Search term is right truncated after last letter in word.

Type of Search	Search Number	Search Term
Any Search – Keyword with Right Truncation	1	mobile
	2	nepal
	3	picasso
	4	root
	5	varieties
Author Search – Keyword with Right Truncation	6	aleksandrovich
	7	elena
	8	garrison
	9	jessica
	10	picasso
Title Search – Keyword with Right Truncation	11	astronomical
	12	nepal
	13	root
	14	terror
	15	treasures
Subject Search – Keyword with Right Truncation	16	dragons
	17	mobile
	18	semiconductors
	19	supernatural
	20	varieties

2.2.3 Profile Test Searches: Boolean Using Simple Keyword

For each of the following keyword searches, the Z-Interop participant will send 5 searches using the specified search terms for each type of search.

Search Number	Type of Search	Boolean Operator	Search Term #1	Search Term #2
1	Any Search – Keyword	OR	root	whale
2	Any Search – Keyword	OR	inspector	interviewing
3	Any Search – Keyword	AND	nepal	everest
4	Any Search – Keyword	AND	picasso	work
5	Any Search – Keyword	NOT	mobile	homes
6	Any Search – Keyword	NOT	varieties	james
7	Author Search – Keyword	OR	aleksandrovich	alexandra
8	Author Search – Keyword	OR	laurel	josiah
9	Author Search – Keyword	AND	jessica	stirling
10	Author Search – Keyword	AND	elena	gelfand
11	Author Search – Keyword	NOT	garrison	hyslop
12	Author Search – Keyword	NOT	picasso	rubin
13	Title Search – Keyword	OR	nepal	festivals
14	Title Search – Keyword	OR	hotels	clubs
15	Title Search – Keyword	AND	astronomical	almanac
16	Title Search – Keyword	AND	terror	war
17	Title Search – Keyword	NOT	treasures	museum
18	Title Search – Keyword	NOT	root	america
19	Subject Search – Keyword	OR	mobile	robots
20	Subject Search – Keyword	OR	academia	algorithms
21	Subject Search – Keyword	AND	semiconductors	congresses
22	Subject Search – Keyword	AND	varieties	plants
23	Subject Search – Keyword	NOT	dragons	monsters
24	Subject Search – Keyword	NOT	supernatural	literature

2.3 Notifying Z-Interop Testbed Upon Completion of Sending Searches

After the Z-Interop participant has sent all searches listed above, the Z-Interop staff should be notified. Send an email message to the following address stating that the searches have been issued:

wemoen@unt.edu

In the message, please provide the following pieces of information:

- IP Address of Z39.50 client
- Date searches were sent

3. Summary

This document has described the procedures to be used by Z-Interop participants when testing their Z39.50 client application against the Z-Interop Z39.50 server reference implementation. When the Z-Interop staff has received the email message notifying that the searches have been sent, the staff will begin reviewing the queries received by the Z-Interop Z39.50 server and develop a report to summarize the results.