Institute of Museum and Library Services National Leadership Grant

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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



Status Report to The Institute of Museum and Library Services

April 1 through June 30, 2002

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Introduction

This document provides a status report on the Z39.50 Interoperability Testbed Project (Z-Interop) covering the period of April 1, 2002 through June 30, 2002. The previous status report covered a ten-month period from May 1, 2001 through March 31, 2002. The Principal Investigator (PI) requested a no-cost extension for this project, which the Institute of Museum and Library Services approved. With the letter of approval, IMLS set a revised schedule for project status reports. Beginning July 1, 2002, status reports are due every six months. To respond to the revised schedule of status reports, this document highlights activities and accomplishments to communicate to IMLS progress on our project since the last status report.

We are pleased to report that in May 2002, we conducted interoperability testing with the first Z-Interop Testbed participant.

Accomplishments and Challenges

This section summarizes the key accomplishments and challenges. Subsequent sections discuss these in more detail.

Accomplishments

- Processed requests from two Z39.50 vendors/developers to participate in Z-Interop testbed (April – May 2002)
- Successfully carried out the first interoperability testing (May 2002)
- Developed procedures to analyze and report interoperability testing results (April – June 2002)
- Publicized the testbed through presentations (April – June 2002).

Challenges

- Developing procedures for preparing test scenarios for more complex queries
- Encouraging more participation in testbed.

Project Personnel

The Principal Investigator (PI) has committed time to the project throughout this period with a 20% effort in Spring 2002 and 40% effort in Summer 2002.

Total staff working on the Z-Interop as of June 30, 2002:

- 1 graduate student (one Ph.D.) working 15 hours per week
- 2 graduate students (one Ph.D. and one Masters) working 10 hours per week.

These students comprise the Z-Team.

Project Management

The PI has overall project management responsibilities for scheduling work, keeping Z-Team members on task, and moving the project forward. Fewer meetings with the Z-Team occurred during this period since each of the members had specific tasks to carry out and the need for full team meetings was not necessary. The PI communicates regularly with each of the Z-Team members via email.

Project Schedule

As reported in the previous status report, there had been some slippage in the project schedule. Because of this, the PI requested on April 1, 2002, that IMLS grant a no-cost extension for this project. IMLS agreed to this request, and the project now has a completion date of December 30. 2003.

With this approval, the PI is creating a revised work plan to guide the next 18 months of work. Important components of the plan will be preparing additional testing scenarios to address more complex queries, continuing collection of data for evaluation purposes, and advertising and encouraging participation in the testbed.

Interoperability Testing

Phase 1 testing began in April. The PI used the international Z39.50 Implementors Group (ZIG) meeting to encourage interest on the part of Z39.50 developers and vendors to participate in the testbed. Phase 1 testing involves simple keyword searches as defined in the Bath and U.S. National Profiles, Functional Area A, Level 0. The profiles define four keyword searches.

In April, two Z39.50 vendors/developers indicated their interest in having their systems go through interoperability testing. The two organizations are:

- InQuirion Pty Ltd, Australia
- OCLC, Office of Research, U.S.

Additional inquiries about participation have been received from several other vendors and developers in the U.S., the U.K., and Europe.

In May, we successfully conducted interoperability testing with InQuirion by sending a set of test searches and analyzing the results. Through this initial experience with InQuirion, we have been able to refine our understanding of interoperability testing procedures and analysis. Interoperability testing with the OCLC Z39.50 server is scheduled for early July.

Since April, the project team has been developing strategies for preparing test searches, benchmarks, and other procedures to support Phase 2 testing to begin in late summer or early fall. Phase 2 testing will address the Bath and U.S. National Profiles, Functional Area A, Level 1 search requirements. Nearly 20 searches are defined for Level 1, including more complex phrase searching.

The PI continues to communicate with possible participants in the testbed. For example, he participated in a teleconference for the meeting of the Illinois Statewide Cataloging Standards Committee to present information about the testbed. The Illinois State Library is encouraging the 12 Illinois Regional Library Systems and other libraries to go through the testbed as a way of demonstrating the utility of similarly configured online catalogs and Z39.50 servers.

In addition, the PI is working with the Texas State Library and Archives Commission on its Library of Texas initiative. In conjunction with that work, participants in a Library of Texas proof of concept demonstration will be required to participate in the interoperability testbed. Interoperability testing for that project will occur in September 2002.

Project Website

The project website <http://www.unt.edu/zinterop/> continues to serve as our vehicle for promoting and publicizing the project. In addition, we use the website to publish project documents and for online collection of information from potential testbed participants.

Project Technology and Software

No additional technology or software was acquired during this period.

Project Documentation

The project staff continues to develop documentation for the testbed. Currently being developed are the following:

- Standard report format to issue interoperability testing results to individual participants
- Detailed documentation of the various scripts, programs, and procedures that are used to automatically process the interoperability testing results
- Detailed description of setting up the Z39.50 client reference implementation for testing.
- Detailed description of the steps and procedures using in using the Z39.50 client reference implementation for testing and the analysis procedures for determining the results
- Detailed description of establishing the benchmarks for each of the test searches.

It is important in building trust in the testbed that all procedures and policies of the testbed are publicly available.

Summary and Next Steps

During the past three months, we have proven out our approach to interoperability testing. The results from Phase 1 testing with our first participant demonstrated that the testbed logic and the procedures are generally valid and workable. Yet we continue to fine-tune and refine. In addition, we are moving forward toward Phase 2 testing in late summer or early fall.