

Project Proposal

Web ASSIST Articulation Maintenance Software

January, 1997

Purpose:

The Web ASSIST Articulation Maintenance Software provides authorized users with data maintenance capabilities for articulation information in the ASSIST database. This software duplicates the functionality of the Revelation-based ASSIST software for maintenance of articulation data. Authorized users will access this software via web browsers running on computers connected to the Internet.

Background:

The 1996-97 ASSIST Technology Plan (November 27, 1996) recognized that the currently utilized Revelation environment is not sufficient to fully support current and future customer needs. The Technology Plan calls for a new platform that migrates the basic capabilities and features of the current Revelation-based products to Internet/HTTP-based technologies that have emerged as clear technological trends in the higher education community.

The Technology Plan specified that the complete Web-based ASSIST system consist of two subsystems: the Articulation User Subsystem, and the Articulation Maintenance Subsystem. Each is being developed as a separate project. This proposal addresses the articulation maintenance component of the software. A separate proposal has been developed for the user component.

This project was originally referenced in the 1996-97 ASSIST Technology Plan and represents the second part of ASSIST to be converted to the new ASSIST computing environment.

Needs to be Addressed:

The following needs have been identified in the Technology Plan for the articulation maintenance activity:

- Migrate away from current Revelation-based environment and to a more mainstream environment
- Provide HTML/HTTP-based interaction for all database entry, updating and maintenance

- Facilitate creating and maintaining articulation information by authorized institutions
- Reduce the redundant maintenance of information in related information systems
- Limit maintenance access to data to personnel responsible for maintaining that data
- Log changes made to data and notify interested parties whenever changes are made to data
- Allow public access to data only after the authorized institution has approved it for release
- Provide a centralized data repository to eliminate the current database collection and dissemination procedures and ensure timely access to information
- Provide centralized archival and recovery of data

Proposed New Products:

The Web ASSIST Articulation Maintenance Software will consist of the following products:

- Server-side applications developed in PowerBuilder 5.0 and Sybase 11, running on computers at the ASSIST Coordination Site. This application communicates with users running standard web browsers remotely. The applications manage the public and maintenance copies of the ASSIST database. The applications allow the maintenance of data by providing entry forms, validations, verification of authority, transfer of information between copies of the database, maintenance of logs describing changes to the data, and utilities for the maintenance of data.

Note: In the future this applications may be installed on multiple server computers located throughout the state.

- Client-side software developed in PowerBuilder 5.0 to facilitate the maintenance of articulation data over the Internet using World Wide Web browsers (such as Netscape or Internet Explorer).

Affected Customers and Benefits:

Campuses responsible for maintaining data in ASSIST will derive the following benefits:

- The Revelation runtime and LAN Pack products will no longer need to be purchased by participating campuses.
- The ASSIST software and database will no longer need to be installed locally, and campuses

will no longer be required to submit data to the Coordination Site on a periodic basis.

- The replacement of replicated copies of the ASSIST database with a single copy means that synchronization problems will be eliminated.
- The current text-based user interface will be replaced with a graphical user interface that will be easier to use and conform to current user interface standards.
- Any computer running web browsers with HTTP access to the Internet will be able to access and use the ASSIST Web Maintenance Software.
- Articulation information will be publicly available immediately upon its finalization.
- Restricted access to data maintenance functions will ensure better security for data.
- The maintenance of check-in logs and the automatic e-mail notification of interested parties when data changes ensures that customers are always informed when changes take place and are able to quickly and easily determine the nature of any change.
- Backup and recovery of data will be provided automatically.

Costs:

The following cost areas are anticipated for the development of the Web ASSIST Articulation Maintenance Software. These costs are referenced in the Project ASSIST Budget Analysis, dated January 1997.

Staffing

One programmer (PowerBuilder 5.0 programmer at the Programmer/Analyst II level) in addition to the ASSIST Technical Manager and current Coordination Site programming staff.

Hardware

One additional Unix Internet server.

Increased capacity for the network connection between the Coordination Site and the Internet.

Software

The following Powersoft software products will be purchased: PowerBuilder 5.0 Enterprise, S-Designor Suite, Sybase 11.

Training

Training course(s) in PowerBuilder for some existing Coordination Site staff.

Schedule:

The ASSIST Coordination Site targets full deployment of the Web ASSIST Articulation Maintenance Software in December 1998.

References:

1. 1996-97 ASSIST Technology Plan, November 27, 1996
2. Project ASSIST Budget Analysis, January 27, 1997
3. Project Proposal, Web ASSIST Displays, January 23, 1997