Cutting Edge or Bleeding Edge? Experience of a WINGS Development Partner

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Cutting Edge or Bleeding Edge: Experiences of a WINGS™ Development Partner

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Introduction

- Indiana University-Purdue University Fort Wayne (IPFW) a combination of the best programs of IU and Purdue

- The library offers adequate support to most undergraduate and some graduate programs, but needs ILL/DD to support graduate and faculty research.
ILL/Document Delivery at IPFW

- 1983 began using electronic mail to send ILL/DD requests
- 1986 installed a PC-based ILL/DD management system called F.I.L.L.S.
- 1986 purchased a fax machine for ILL/DD
1988 designed a document delivery management system using VAX mainframe
- Online request forms
- Online user authentication
- Complete user data files
- Request management system tracked user and request data, and created management and statistical reports of all kinds
ILL/Document Delivery at IPFW

- 1993 purchased and installed Ariel
- 1999 implemented Web delivery of photocopy material via Prospero
- 1992-1998 tested Ameritech’s Pacloan and RSS system, CIC VEL, and investigated other ILL/DD management systems
- 1998 FWLIRN laid to rest. ILL/DD package included OCLC ILL system and microenhancer, Clio, Ariel, and Prospero
Decision to Implement Wings

User Interface
- Web request forms
- Ability to substitute IPFW authentication process for the WINGS™ process
- Real-time status of ILL/DD requests
- Import citations from major database vendors
- Broadcast search and import of records from Web catalogs
Decision to Implement Wings

Staff Interface
- One-stop document delivery management system
- Dedication to implementation of ISO 10161 peer-to-peer ILL protocol
- Complete tracking of requests with search and report capability
- Broadcast search and import of records from Web catalogs
Decision to Implement Wings

- Technical Requirements
  - Designed to run off a central server with use of robust software such as Oracle or SQL
  - Staff workstations need only Internet Explorer or Netscape
  - User workstation need any Web browser that supports cookies
  - Customizable
Decision to Implement Wings

Vendor
- Dedicated to the product
- Knowledgeable about libraries and particularly ILL
- Dedicated to implementing ISO standards
- Respected in the field
- Responsive to the customer
Decision to Implement Wings

Cost

- Development partnership with Pigasus provided software and maintenance fee at a 50% discount with free upgrades and regular on-site visits

- Increase in OCLC ILL costs to IU regional campus libraries
Decision to Implement Wings

- Risks
  - Small company
  - Customer base small
  - Significant commitment of time, staff, and resources to provide production testing and feedback as a development partner
Preparing for Implementation

- Hardware and software installation
  - As part of the development partnership, IPFW and IUPUI agreed to share software on one server located at IUPUI in Indianapolis
  - IPFW and IUPUI experiment in sharing server resources
Preparing for Implementation

- OCLC – WINGS™ ISO Testing
  - June 2000 Pegasus completes ISO testing with OCLC
  - September 2000 IPFW and IUPUI contact OCLC to begin ISO testing
  - December 2000 IPFW and IUPUI still several libraries down on OCLC’s list for testing
  - February 2001 OCLC ready to begin testing
  - March 2001 IPFW and IUPUI complete ISO testing
Lending Implementation

- Requests automatically appeared in the WINGS™ queue
- Staff did all processing and updating from within WINGS™
- No need to update with OCLC microenhancer or enter requests in local Microsoft Access file for statistics
Lending Implementation

Problems
- Not all requests received in our OCLC pending queue were being sent to our WINGS™ new request queue
- Requests received in WINGS™ from libraries that had not yet been defined in the WINGS™ trading partner file had to be completely profiled
- Some messages not successfully updating OCLC
- Tensions developed between IPFW and IUPUI Information Technology Support Services
Borrowing Implementation

- **New Wrinkles**
  - IPFW purchases and installs its own server and WINGS™ software in the library
  - Pegasus Software, Inc. acquired by Auto-Graphics
Borrowing Implementation

- User Interface
  - Authentication
  - User Screens
  - View My Requests
  - Import Citations
  - User and non-ILL Staff training and guides
Borrowing Implementation

- Staff Interface
  - Creating the trading partners file
  - Learning and developing efficient workflows
  - Providing feedback to Pigasus developers
    - Batch updating added
    - Additional navigational devices added
Borrowing Implementation

- Link to Holdings
  - WINGS QUEST™ Holdings link not fully developed
  - Offered two free copies of WebClarity by Sea Change
  - WebClarity provided a Z39.50 gateway to search Web catalogs
Borrowing Implementation

- ISO 10161 ILL Protocol
  - Standards provide only a basic guide to implementation
  - Each vendor adapts the standard to resolve specific details
  - Disconnect between WINGS™ and OCLC ISO ILL protocol implementations required processing adjustments
Borrowing Implementation

- ISO 10161 ILL Protocol
  - Data mapping surprises
    - Lending string expiration date
    - Destination of data elements not mapped in OCLC
    - OCLC data elements not mapped in WINGS™
    - Shipping and billing address format
    - ILL citation data mapping destinations
    - Imported citations format
    - Messages not supported by the ISO protocol
Breakdown in ISO ILL Messaging

- WINGS™ Networker crashed on a regular basis
  - Invalid characters in citation tables
  - Incoming field larger than receiving field
  - When sending batches of data, a single error could stop all processing
Breakdown in ISO ILL Messaging

- Acknowledgement of successful receipt of an ISO message not required by the standard
- Inexplicable delays in the transfer of messages between WINGS™ and OCLC
- Any message sent or received out of sequence stopped ILL message cycle
Breakdown in ISO ILL Messaging

Consequences

- Could not properly complete the request cycle in WINGSTM or OCLC
- Both lending and borrowing libraries lost crucial internal management data
- Users confused about status of their requests
- Statistics and tracking data inaccurate
Auto-Graphics and WINGS™

- October 2001 Auto-Graphics “terminated agreement to purchase WINGS™”
- All support, maintenance, and development ceased
- WINGS™ unplugged at IUPUI and IFPW
Cutting Edge or Bleeding Edge

- IPFW to take the next six months to re-evaluate ILL/DD systems and software
- IPFW still committed to the implementation of the ISO ILL protocol
- Librarians and software producers must work together to ensure the compatibility of each implementation of the ISO ILL standard