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An Introduction to Scripting New Functionality in ILLiad

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The OCLC ILLiad Newsletter

Welcome New OCLC ILLiad Licensees!

Saint Olaf College
Center for Research Libraries
Shippensburg University
Regis University
Simmons College
Chapman University
Lake Forest College
Cold Spring Harbor Laboratory
School for International Training
Savitt Medical Library
College of Saint Rose
University of Oklahoma, Tulsa
John Brown University
University of Texas at Dallas
Brooklyn Public Library
Samford University
University of Colorado at Denver
Berry College
Central Michigan University
University of Portland
Weill Cornell Medical College in Qatar
Bloomsburg University of Pennsylvania

For a complete listing of OCLC ILLiad sites, go to www.oclc.org/illiad and look under "Support, Talk to and learn from others".

Going to Chicago? Come see us at the exhibits in Booth 2405. And don't forget the OCLC ILL/ILLiad Users Group, Sunday, June 26, from 4:00 to 6:00 p.m. See you there!

New Features for ILLiad

The Version 7 release of ILLiad introduced a variety of improvements to the OCLC interface within the client. Based off of feedback from ILLiad users, we have continued developing new features to improve the interaction between your interlibrary loan management software and OCLC. Version 7.0.4.0 of ILLiad will be released after ALA and will add many additional enhancements to the searching, updating and management of OCLC requests. Some key features are:

- Special Messages are now accessible from a separate form under the OCLC menu on the Main Menu. Items at a Special Message status no longer change their ILLiad transaction status and are not downloaded by the Connection Manager. The new Special Message form allows staff to perform manual updates to the request as well as link back to the ILLiad transaction.
- The Current Statuses menu option under the OCLC menu has been changed to Search/Review Statuses. The top section allows staff to search by ILL Number, Author/Title, Borrowing or Lending Library, Patron Information and Title.
- For any OCLC request, the editable fields for any status are marked with green labels and asterisks. Any of those fields can then be edited and saved within the client.
- On the show OCLC request form, there is an option to export the detailed tab view to a web browser for easier printing.

New Atlas Systems Products to Debut at ALA in Chicago

Atlas Systems will be unveiling 2 new products to the library market at the ALA show in Chicago. These are the Odyssey™ standalone electronic delivery software and the ares™ electronic reserves software package.

Odyssey Standalone

The Odyssey standalone is free electronic document delivery software from Atlas Systems. Odyssey was designed to remove the cost barrier in electronic document delivery software while delivering a product that is easy to use and administer. Our Odyssey software utilizes the open Odyssey protocol published by Atlas Systems and integrated into the OCLC ILLiad ILL management system. The standalone module allows sites to send and receive electronic documents to and from other Odyssey sites, OCLC ILLiad sites, and any other vendor's software that supports the Odyssey protocol.

ares Electronic Reserves

The ares system is designed to automate library reserve services and provide fast effective use for faculty, students and reserve staff. ares provides around-the-clock access to your reserves collection and saves time for your faculty members and library staff. Web based interfaces for students and faculty members allow for simple access to the system at any internet connected machine. The reserve client is installed onto the reserve staff workstations and allows full control of all electronic reserve functions.

The software is priced as a hosted application, which means that the local site needs only minimal IT support to install and maintain the software. A wide range of configuration options allow the reserve staff to make the software match the current reserve policies for areas like copyright, authentication, and reserve material administration.

Full demonstrations of both software packages will be available in the Atlas Systems booth (#2405) at ALA in Chicago.

The OCLC ILLiad Users Forum
A quarterly feature highlighting innovations in the field of Interlibrary Loan
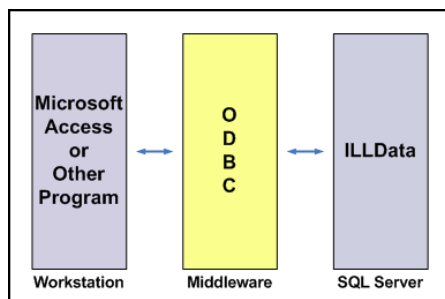
An Introduction to Scripting New Functionality in ILLiad

by Michael Witt, Lead Systems Administrator, Purdue University Libraries

Although using common software and services such as ILLiad and OCLC has done much to standardize the practice of interlibrary loan, each library is unique in the patrons we serve and services we provide. These differences are reflected in our workflow. Many of them can be accommodated by flexibility within ILLiad (e.g. the Customization Manager and custom queues) but there will always be some things that the software doesn't do for us exactly the way we'd like. For these situations, one option is to create the functionality you need yourself by using a scripting language and Open Database Connectivity (ODBC).

Connecting to Your Database

ILLiad uses Microsoft's SQL Server to store your data, which ODBC can make easily accessible to Access and programs that you write yourself that run on your workstation or web server. ODBC is referred to as "middleware" because it sits between your program and the database and translates the communication between them, providing a common interface for any database that supports ODBC. Because it makes accessing data from different kinds of databases so easy, ODBC has been widely adopted and is supported by many scripting languages and applications. If you haven't already, your first step will

always be to configure your SQL Server to allow read-only, incoming ODBC connections. These instructions are well-documented in Chapter 6 of the *ILLiad Administrative Suite: Reporting & Statistics*. If you follow all of the instructions, you will set up an ODBC data source and create an Access database on your workstation that is linked to your ILLiad database. This local database is appropriately named "ILLiadLink". Once you're done, familiarize yourself with the design of the database by clicking on the various tables and exploring them. The fields are described in the *ILLiad Administrative Suite: Reference Guide*, which you will want to keep handy.

Selecting a Scripting Language

In selecting a scripting language, the two primary considerations are the expertise of your staff and the functionality you desire. Does anyone on your ILL or IT staff already have programming experience in a particular language? Or do you have a computer-savvy student employee or volunteer? If you're starting from scratch, don't despair. Many languages are fairly easy to learn, and documentation and training are readily available. As you can imagine, scripting languages have different strengths and weaknesses. For example, *perl* may be a good choice for reformatting text whereas *Active Server Pages* may be better for providing a web interface to run customized reports.

We will review the most common scripting languages that are used to add functionality to ILLiad and help you determine the best language for your environment. This list and these descriptions are not comprehensive; instead, they are intended to give an overview and practical introduction to this topic.
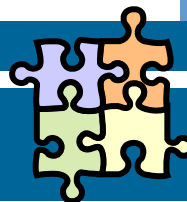
Visual Basic for Applications (VBA)

While technically not a scripting language, VBA is an embedded language that is included with Access. It may not be the easiest language to learn, but its tight integration with Access makes it very useful. Among other things, VBA can be used to provide interactivity within an Access database to enhance reporting. For example, you could create a form within your ILLiadLink database to ask a user for a range of dates and a keyword. Your VBA code could query ILLiad for all records within the date range, filter and sort the data based on the keyword, and then return the results in a custom report that is suitable for printing. Some sophisticated ILL departments have reconstructed their ILLiadLink database as a "portal" for their ILL staff with a switchboard menu and multiple forms that execute code and generate a variety of customized reports that complement their workflow. VBA is only recommended for programs that will be used internally by your ILL staff because there isn't a good way to limit access to patron information. You can extend the functionality of your VBA programs by using ActiveX controls, which can be installed by clicking "Tools" and "ActiveX Controls" in Access. To learn more about VBA (including a tutorial and a reference guide), consult the "Help" menu option.

perl

Practical Extraction and Reporting Language, or perl, has been called "the duct-tape of the Internet." While the learning curve may be steep, perl is a very powerful scripting language for string manipulation and is supported by an open-source community that has written hundreds of modules ("mods") that provide all kinds of functions that are useful in conjunction with ILLiad. For example, you can send an email to announce an upcoming service outage to all of your ILLiad patrons by writing only five lines of perl. In addition to being used by staff internally, perl scripts can be executed by your web server as common gateway interfaces (CGIs) by patrons using a web browser.

At Your Service - Helping You Put the Pieces Together
By Kevin Ford, Documentation and Technical Support Specialist

Basics of ILLiad OpenURL Setup

As most of you already know by now, ILLiad is capable of linking with any database system that supports OpenURL, including FirstSearch, SFX, and EBSCOhost to name a few.

This allows the ILL customer to request items found in various library databases directly in ILLiad by clicking on a link, without having to re-key any of the request information. This link pulls up the ILLiad OpenURL logon pages, where the customer may enter his/her ILLiad username and password to log into the system. Once logged in, the customer is taken to the usual ILLiad request forms, with the request information already completed for them. The customer may then add any further information they wish, and submit the request to ILLiad. Once requested using ILLiad OpenURL, the transaction will appear in the ILLiad Client at the appropriate status and will then behave like any other ILLiad Borrowing Request.

Since OpenURL is built into the ILLiad DLL, no ILLiad setup is required for this to work other than any desired web page editing to customize the look and feel of your pages. The ILLiad OpenURLMapping table is pre-seeded with a setup that should work with most default OpenURL systems. If you need to change the behavior of how OpenURL interprets certain fields or genres, this is where you can make the changes. The OpenURLMapping table appears in the Customization Manager under Web Interface - OpenURL - OpenURLMapping.

All that is really required in setting up the other systems (FirstSearch, SFX, EBSCOhost, etc.) is pointing them at your ILLiad system. For FirstSearch, this is as simple as specifying the link as follows:

For Single-Server ILLiad systems: http://YourILLiadServer/illiad/illiad.dll/OpenURL

For Shared Server (Symbol ABC): http://YourILLiadServer/illiad/ABC/illiad.dll/OpenURL

For other systems, the tools are different, but the basic idea is the same.

We're in the process of gathering together instructions for pointing these different systems at the ILLiad database. So far, we have the following:

For information specific to setting up Cambridge Scientific Abstracts via FirstSearch, see this KB Article:

http://portal.knowledgebase.net/article.asp?article=144927&p=1901

For information specific to setting up SFX, see this KB Article:

http://portal.knowledgebase.net/article.asp?article=149483&p=1901

And if anyone else out there would care to share with the rest of the ILLiad community any OpenURL setup information for other systems, please send them to service@atlas-sys.com. We'd love to add another article or three to the knowledge base.

T.I.P.S. - Training Information Per Stephanie
By Stephanie Spires, Training and Technical Support Specialist

OCLC ILLiad Certified Operator training offered summer 2005

Atlas Systems, Inc. is offering an opportunity to complete all four classes required for the Certified ILLiad Operator program online this summer. If you are interested in meeting those requirements, please email training@atlas-sys.com so that we can be sure you are invited to attend the required sessions as they are offered. Course descriptions are available at https://www.atlas-sys.com/ClassReg/.

Our new schedule begins in June with both online and onsite selections:

Online Courses:

- Billing**
- Customizing OCLC ILLiad**
- Generating Reports in OCLC ILLiad**
- ILLiad Administrator
- Implementing OCLC ILLiad **

Onsite Classes:

- University of Chicago location. Generating Reports in OCLC ILLiad** June 23, 2005 9:00am-4:00pm

** Completion of all four of these classes will earn the designation of "Certified OCLC ILLiad Operator."

Watch the ILLiad-L list for training schedule announcements. Please join us in an online class soon and make the most of your investment in OCLC ILLiad. Registration is available online at www.atlas-sys.com. If you have ideas for future OCLC ILLiad Quick Course topics or have other training needs, please send them to training@atlas-sys.com.

Stephanie is Training and Technical Support Specialist for Atlas Systems. If you would like to suggest a topic for T.I.P.S., please e-mail her at sspires@atlas-sys.com.

Atlas Systems was founded in July of 1995 primarily to work with computerized parking systems. While the company continues to do special projects in this area, after the launch of ILLiad in 1999, Atlas has been primarily focused on the development and support of the ILLiad Interlibrary Loan System. In October of 2000, OCLC licensed the ILLiad software from Atlas and Virginia Tech (where it was originally designed). Atlas continues to be the authorized service, support, and development arm of OCLC ILLiad.

Atlas Systems also does specialty database development projects, mainly related to workflow automation. Atlas's development background of utilizing pre-design operational flowcharting and analysis, as well as our common sense approach to programming produce easy to understand and maintain applications.

OCLC is a nonprofit membership organization serving 42,489 libraries in 86 countries and territories around the world. Membership in OCLC is a unique cooperative venture, giving your library global access to all our services and databases, including WorldCat. Together OCLC member libraries make up the world's largest consortium.

Founded in 1967 by university presidents to share library resources and reduce library costs, OCLC introduced an online shared cataloging system for libraries in 1971 that today is used by libraries around the world. The Interlibrary Loan service was introduced in 1979 and since then has been used for more than 122 million loans among 6,928 libraries around the world.

An Introduction to Scripting New Functionality in ILLiad (cont.)

The most prevalent perl interpreter for Windows can be downloaded from http://www.activestate.com/perl, and a binary distribution of the mod to enable ODBC (Win32::ODBC) is available at http://www.roth.net/perl/odbc. These are both free downloads and their installation procedures are well-documented. To learn more about writing perl scripts, O'Reilly's Programming Perl is highly recommended.

Active Server Pages (ASP)

ASP is a web-based scripting language that is included with Microsoft's Internet Information Server (IIS), the web server that supports the patron interface of ILLiad. If you are a local ILLiad site, you probably already have ASP installed. Because both the back-end database and the web server are Microsoft products, it's no surprise that ASP works well with both. The syntax of ASP is similar to VBA, and it's a good choice for creating web applications that use ILLiad data. Although it is used primarily for web-based development, ASP's functionality is not limited to the web.

ColdFusion

Macromedia's ColdFusion is another web-based scripting language, similar to ASP. It is easier for web developers to learn because it is tag-based like HTML and can be coded using Macromedia Dreamweaver, a popular website editor. The administration of ODBC is handled by wizards that help you set up your programming environment, making it very easy to write and debug web-based programs in ColdFusion. Unlike the other languages that are either free or bundled with software that you already own, ColdFusion is third-party software that you will need to purchase.

Summary

While there are other programming and scripting languages that can be used with ILLiad, these represent a sample of the most useful and popular options:

Language	Difficulty to Learn	Cost	Reference
VBA	Medium	Free (with Access)	Access "Help" file
perl	Difficult	Free (open source)	Programming Perl (ISBN: 0596000278)
ASP	Medium	Free (with IIS)	http://www.asp.net
ColdFusion	Easy	$$ from Macromedia	SAMS Teach Yourself ColdFusion in 21 Days (ISBN: 0672317966)