LDAP:
What Is It, Do I Want it, *and* How Do I Make It Work for Me?

Rebecca Hyams

SUNY Maritime College

Overview

- LDAP: more than random letters?
- Determining if you have LDAP
- Advantages/disadvantages
- Making ILLiad play nice
- Working out the kinks

But First...

- Show of hands:
- How many of you already use LDAP?
- ILLiad Authentication?
- Something else?
- Not sure?
- Want to set up LDAP?

Disclaimer:

I am not a trained IT Person
(The upside is I can spare you the jargon)

My knowledge comes solely from the ILLiad side of the equation

As far as I’m concerned, the backend is wizard magic!

LDAP...?

- Stands for **L**ightweight **D**irectory **A**ccess **P**rotocol
- Standardized way of storing user permissions and directory information
- Installed on a centralized server
- Works in the background to authenticate sign-in for various services

Do we have that?

- Do you or your users use the same username/password for multiple services like:
  - EZ-Proxy (or other off-site database access)
  - Email
  - Library accounts
  - Course Management Platforms

From the Documentation…

- According to the Atlas Documentation there are actually five methods of authentication:
  - Basic ILLiad
    - Default setup
  - ILLiad Exclusive
    - Users are pre-populated/approved, users can't self-register and staff can't add them
  - LDAP
    - Has to exist at institution
  - User Gateway
    - Really complicated
  - III Patron API
    - Only if you use Innopac and have the module

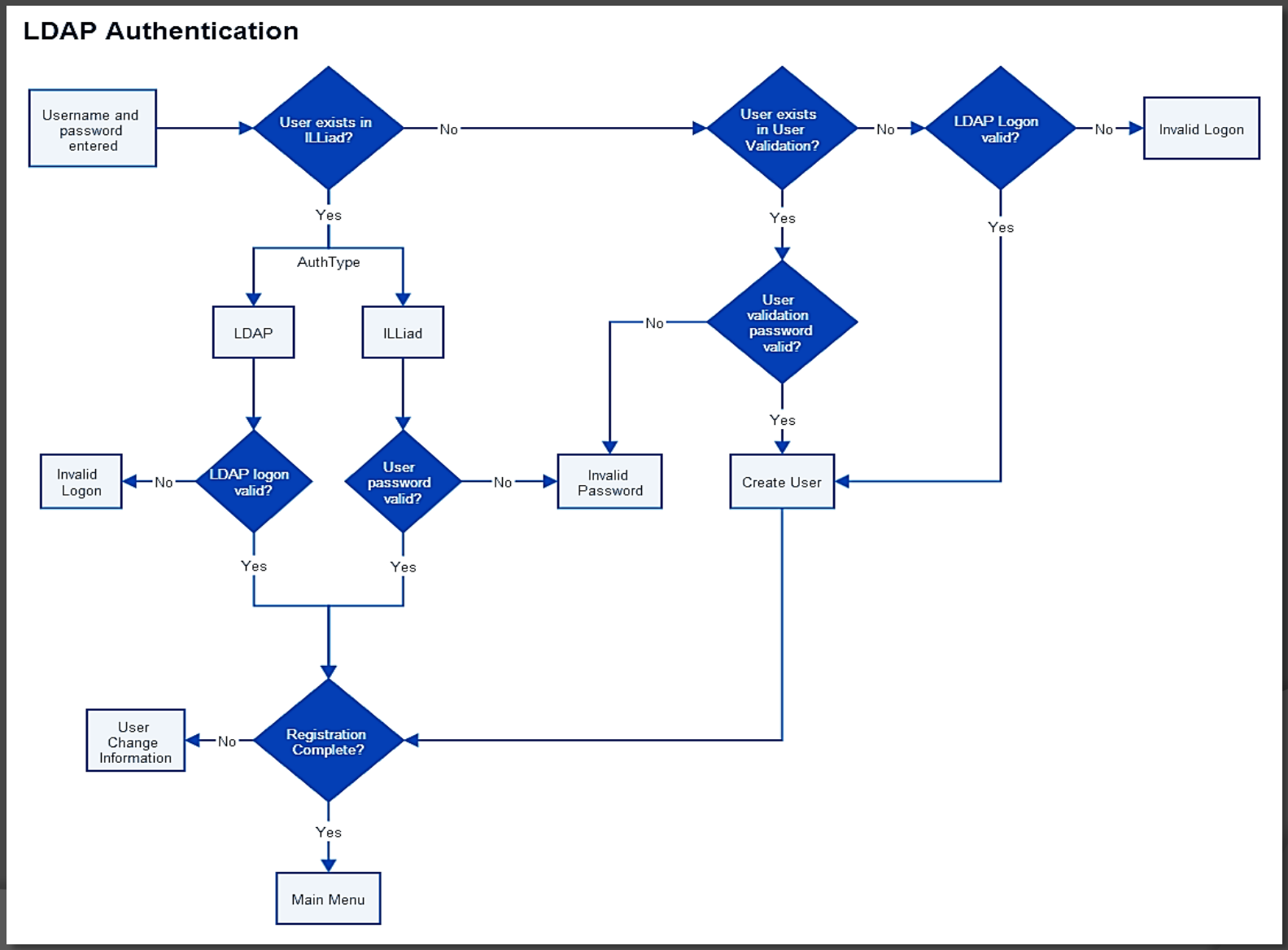
Default Setting

- By default ILLiad uses “ILLiad Authentication”
  - Username/password stored in the ILLiad user database
- When a new user approaches the system they need to click a “new user” link and go to the New User Registration form
- After they fill the form they get placed in the Clear Users queue in ILLiad

With LDAP

- Everyone (new and existing users) use the same logon box
  - If the LDAP username has no match in the ILLiad database, the user is brought to NewAuthRegistration to fill out a registration form
  - If the LDAP username matches a name in the ILLiad database, they are taken to the Main Menu
- ILLiad database does not contain LDAP passwords.
  - Passwords are used only to match on the LDAP authentication
  - Password resets cannot be done by ILL Staff

Lovely Atlas Flowchart:



Making the Decision

- If you have the buy-in from IT and have an LDAP Server at your institution considerations include:
  - Time spent clearing users
  - Handling existing vs. new users
    - Is it feasible to make a correlation table?
    - Will the reference/instruction folks support the changes?
  - Are you hosted?
    - If you're self-hosted you may have way more to grapple with

The Good

- One fewer username/password to remember for your users
  - At Maritime our users now have the same login for ILLiad that they have for campus wifi, desktop workstations, their email, off-campus database access, and Angel
- No more clearing users manually
  - LDAP authenticates only if they’re active

The Bad

- Need to get buy-in from the keeper of the LDAP (likely IT)
  - They may need to help with configuration and testing
  - There may be firewall or security issues
- If the LDAP Server is down, no one can sign into your ILLiad page
- If you already have users you *may* have a mess on your hands…

The (possibly very) Ugly

- If you already have users in your ILLiad system you have three options:
  1. Grandfather in existing users with their ILLiad usernames/passwords, make new users use LDAP.
  2. Start everyone over with LDAP, creating new accounts for existing users.
  3. Make a correlation table of existing usernames and their corresponding LDAP names. Have OCLC do some magic.

Option 1: Grandfathering

- Keeps the existing accounts in the system as-is
  - Existing users will continue to log in as they have in the past (ILLiad authentication)
  - Only users that create accounts after LDAP implementation will go through LDAP
- Can cause many headaches for Reference/Instruction folks
  - Users might not know which camp they're in

Option 2: Burn and Rebuild

- All users to use LDAP log-in
- Everyone has the same log-in process
- Existing users also have to reregister
- Existing users lose account history
  - Which can be disastrous if they refer back to their old requests for citations

Option 3: Down and Dirty

- “You’re probably not going to want to do this but…”
- Create a table of existing usernames and their LDAP equivalents
  - Can be super involved if usernames are not predictable or obvious
- If you’re hosted, OCLC will merge the LDAP usernames and existing user data
- End result is that everyone uses LDAP and existing users remain in the system with their history

	A	B
1	ILLiad Username	LDAP Username
2	abdullahkoc.09	abdullahkoc.09
3	Acolleran	acolleran
4	AlexanderSha	AlexanderSha.12
5	AlexCarela	alexandracar.08
6	alexcar.11	Alexcar.11
7	alexvug.11@sunymaritime.edu	alexvug.11

Down and Dirty Cleanup

- Maritime chose option #3
- Ran a report of all registered users (we only had about 240)
- Added a column for LDAP name
- In some cases a single user had more than one account so they had to be merged
- Made sure everyone had the right delivery and notification preferences set
  - Users who created accounts before those were hidden default fields sometimes skipped them or put weird preferences

Correlating Names:

If their username already followed one of our LDAP patterns, I copied it to the LDAP name column

If they used their campus email, I copied that, trimming off the @sunymaritime.edu suffix

If they were faculty or staff I used the first initial + last name LDAP pattern

If they were a student I looked them up in the campus directory (because our pattern includes their year of entry)

If they weren't in the campus directory I flagged them (9 users) because they're presumably no longer valid

The Easy Part

- Once LDAP was enabled for ILLiad we made some tweaks to the log-in page
  - (for about 10 days we had a Grandfather solution)
    - 6 requests in that entire time
  - We did the whole process in early January when everything was quiet
- OCLC support ran a bunch of scripts and did testing to make sure things were right

IT and the Fun Stuff

- There are several keys in Customization Manager that deal with LDAP
- You will almost definitely need someone from IT to assist
- If you're lucky they'll just give you the information you need
  - (If you're me you have two guys come and bumble for a bit before getting it right)

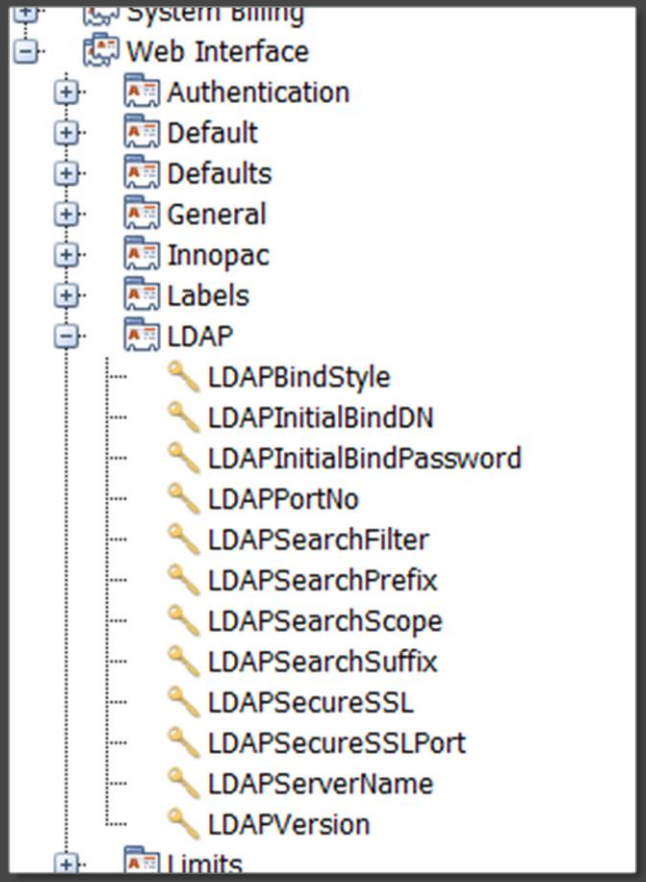
By the way…

- There are two styles of LDAP, one-step and two-step
  - Two-step is more secure (but whatever your institution uses is what you'll use here)
- They require different keys in Customization Manager
- Set type in LDAPBindStyle
  - OneStep or TwoStep

About Setup

- Your local friendly IT person *should* be able to provide the information
  - The required information appears to be similar from platform to platform
- They may need to open the firewall to allow communication between ILLiad and the LDAP server

Your Keys



- All the keys you need are located under Web Interface → LDAP in Customization Manager

Info You'll Need:

One-step LDAP

- LDAPPortNo
- LDAPSearchPrefix
- LDAPSearchSuffix
- LDAPServerName
- LDAPVersion

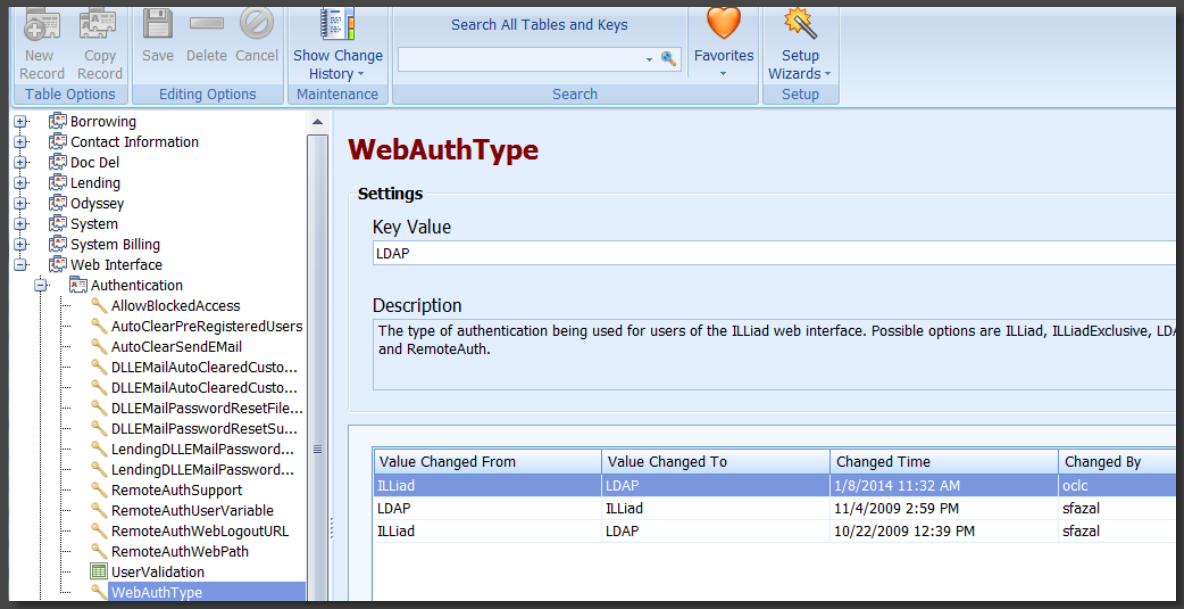
Two-step LDAP

- LDAPInitialBindDN
- LDAPInitialBindPassword
- LDAPSearchFilter
- LDAPSearchScope
- LDAPSearchSuffix
- LDAPSecureSSL
- LDAPSecureSSLPort
- LDAPServerName
- LDAPVersion

What Do I Put For…?

- I can show you what we have, but…
- Every setup is going to be different
- Variables include how many directories you have, OneStep vs. TwoStep
- The keeper of your server should know what works with your LDAP

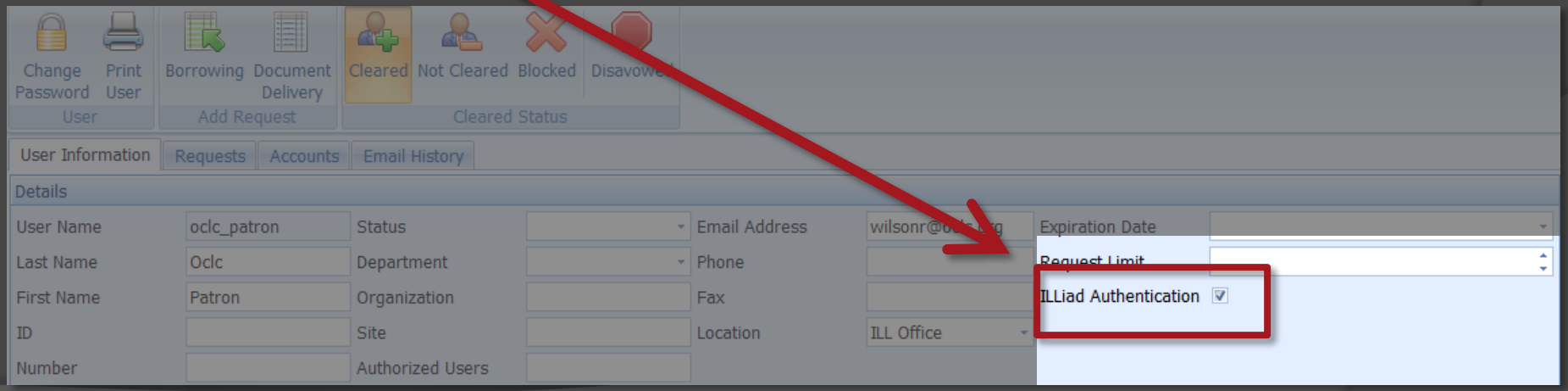
Super Important!



- For ILLiad to know which type of authentication you're using by default you need to set the key in Customization Manager
- Web Interface → Authentication → WebAuthType

Also Good to Know

- Even if you have LDAP Authentication as default, you can still have users that use ILLiad Authentication
  - "ILLiad Authentication" box ***MUST*** be checked off for them to log in to their account

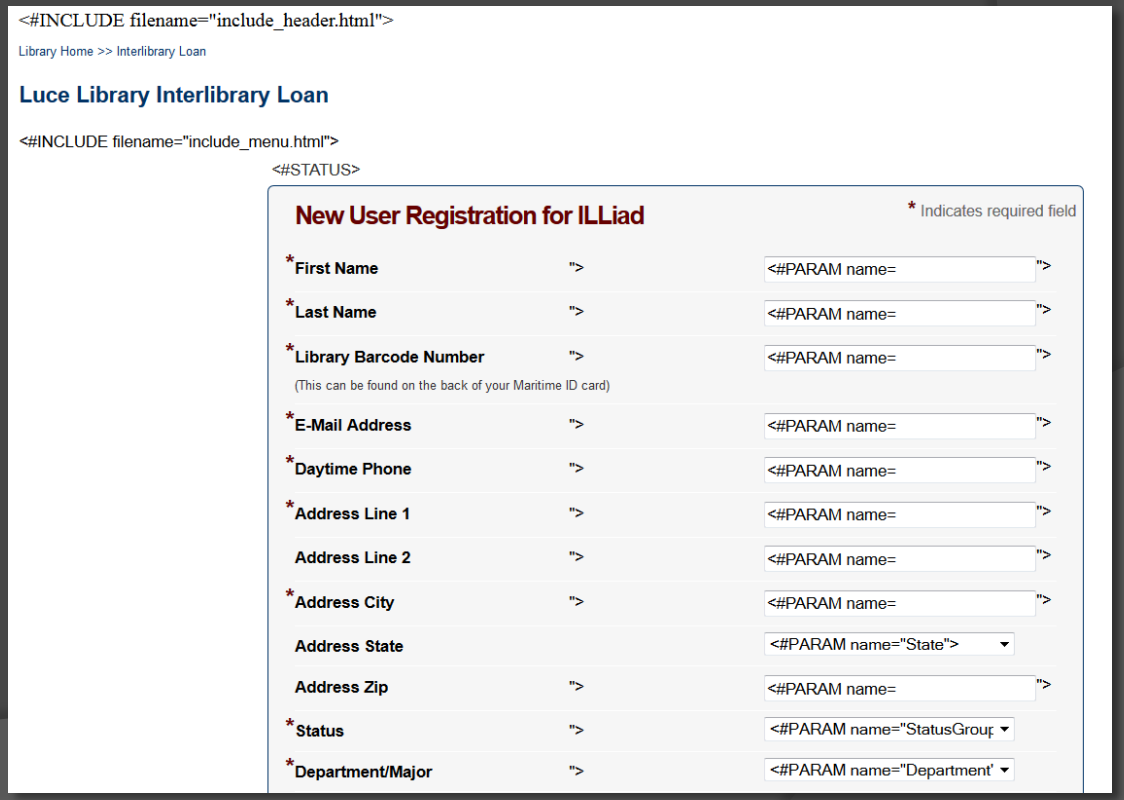


Coexistence

- It's complicated, but LDAP and ILLiad authentication can co-exist, even for new users
  - Nassau Community College has students use LDAP and Faculty/Staff use ILLiad authentication
  - Page has to have both sets of instructions
    - (And sometimes students don't follow them and try to create accounts manually)

On the Web Side...

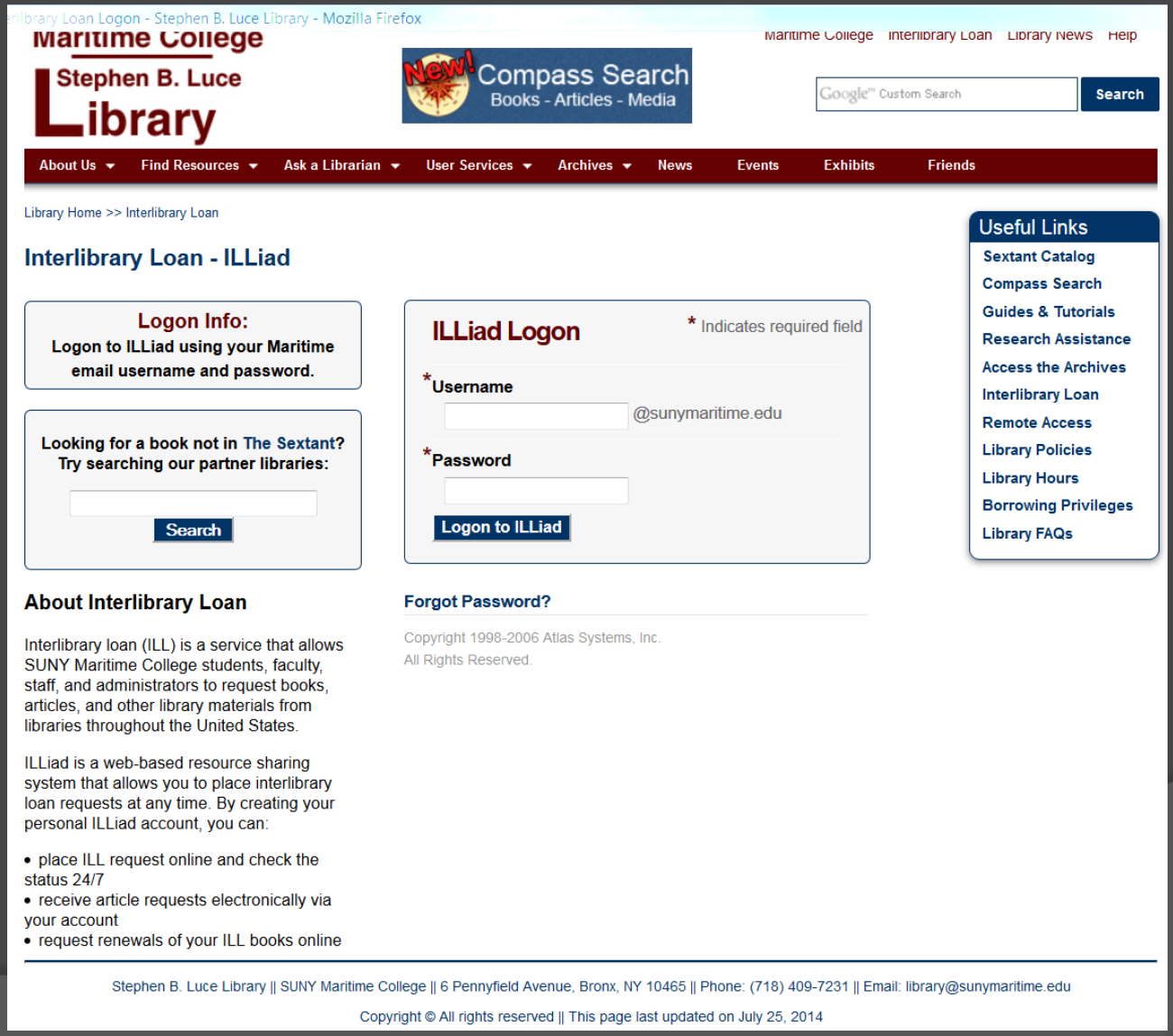
- Biggest problem is that there is only one way to view NewAuthRegistration as your users will see it:
  - Log in with a valid LDAP username that does not exist in your ILLiad database
  - Essentially a one-shot page



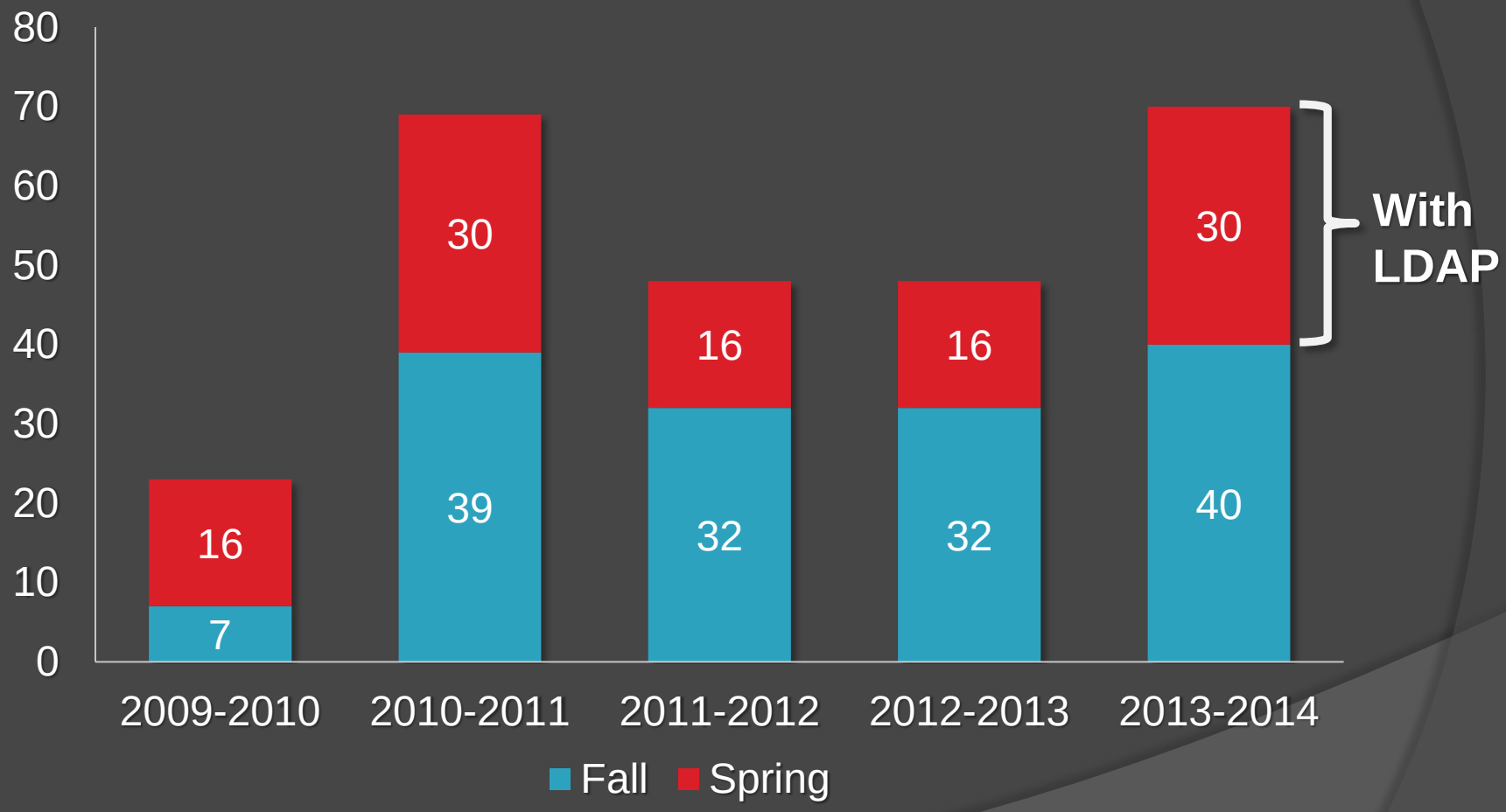
Maritime's Experience

- There had been a previous unsuccessful attempt to set up LDAP when we installed ILLiad in 2009
- Over 4 ½ years prior to LDAP implementation approx. 240 users registered for accounts
  - Some of those were duplicate accounts
    - (one faculty member had created three separate ones!)
- Added approx. 30 new accounts post-LDAP so far
  - Tied for best spring for registration with Spring 2011

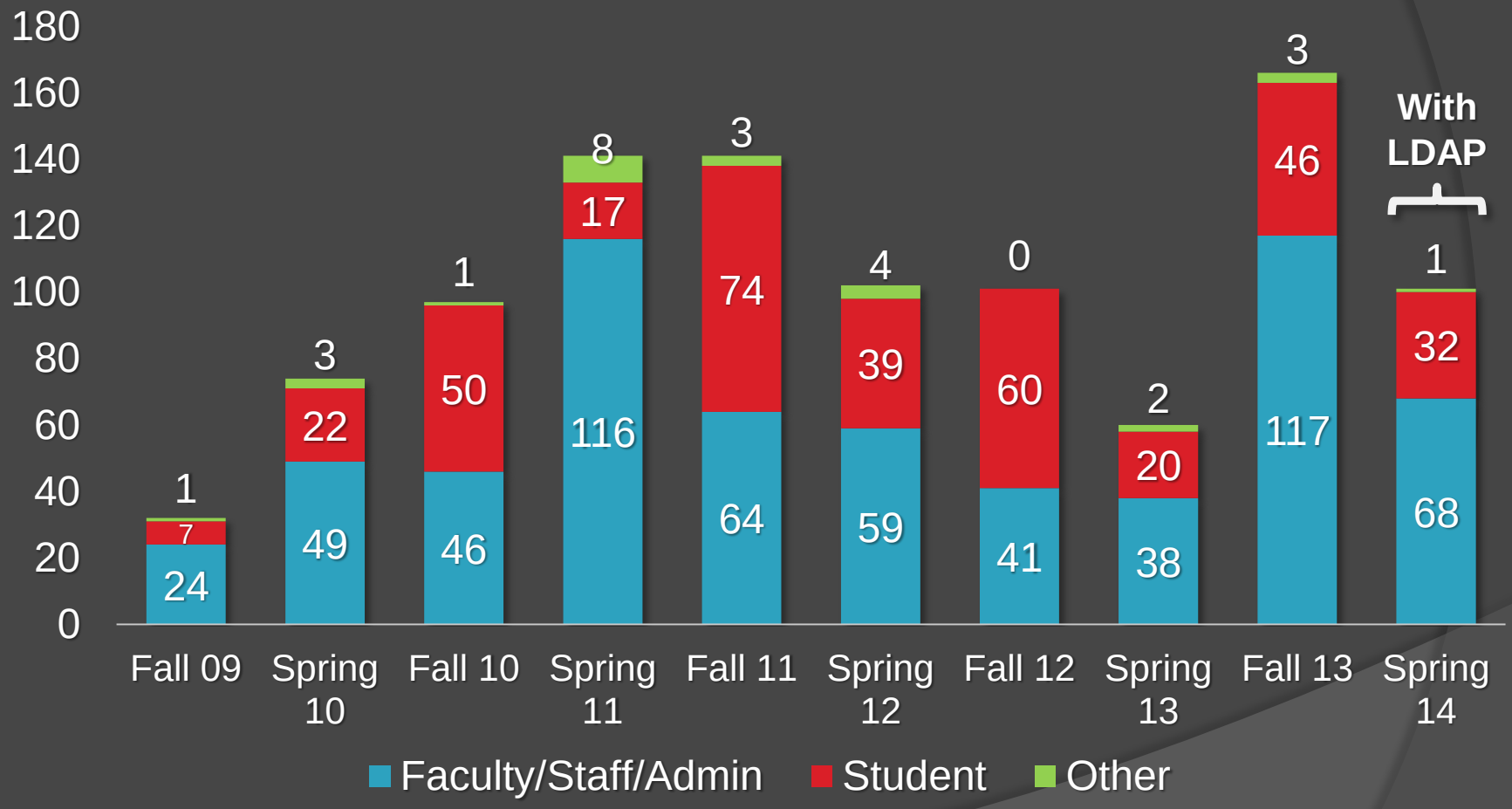
Our Current Logon Page:



New Users


80
70
60
50
40
30
20
10
0
16
7
30
39
16
32
16
32
30
40
With LDAP
2009-2010
2010-2011
2011-2012
2012-2013
2013-2014
Fall
Spring

Requests by User Status



A Few Factors

- Shortly before adding LDAP, we also added OpenURL links
- Some librarians have been encouraging new students to make accounts at orientation to speed the request process when they actually need something
- Fall is peak time for new accounts, so the payoff may be a few months away

There's Always Issues

- We stumped OCLC Support with a bug:
  - If a user skipped any of the required fields in NewAuthRegistration, hit submit, and then tried to correct their mistake, the form would clear and their registration could not be completed
    - After the initial attempt the username was added to the ILLiad database, but no other data was added to the record
    - Had to manually add user info in ILLiad so they could use their account
    - Problem may have stem from missing <#STATUS> line in code of page

In the End…

- Was it worth it?
  - Minus the one bug the registration process has been simplified
  - No more worry that users will forget their usernames/passwords
  - Can do preemptive registration
    - Dual benefit of early exposure for students plus avoiding the conflict between OpenURL and the need to register for ILLiad

Questions/Comments?

Contact info:
Rebecca Hyams
rhyams@sunymaritime.edu