Libilsws

Tools for Coding PHP Applications that Communicate with Symphony via Web Services

Who is this Presentation For?

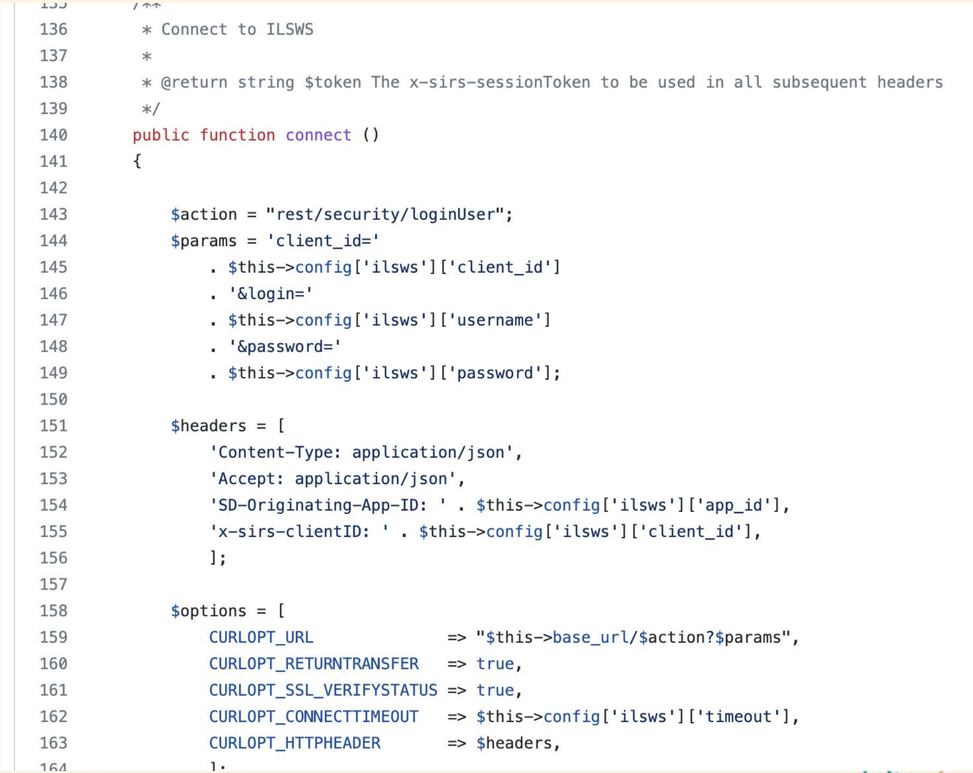
- PHP developers
- Perl programmers
- Anyone who is considering learning to program
- Anyone who has access to developers who might benefit from using the code library

About the Project

- Multnomah County Library is building a new website that uses the Drupal content management system
- Drupal is written in the PHP scripting language
- Our old website uses a slightly cumbersome method of processing forms, with Drupal talking to a custom, intermediate API which talks to the Symphony Web Services API
- For the new website, we wanted to create a simpler and more supportable method of processing patron information
- We elected to build a PHP code library that would handle all the complexity of talking to the Web Services API: Libilsws

What is a Code Library?

A collection of code functions, typically distributed in a package so that they share a common configuration and installation process



```
    /**
     * Connect to ILSWS
     *
     * @return string $token The x-sirs-sessionToken to be used in all subsequent headers
     */
    public function connect ()
    {

        $action = "rest/security/loginUser";
        $params = 'client_id='
            . $this->config['ilsws']['client_id']
            . '&login='
            . $this->config['ilsws']['username']
            . '&password='
            . $this->config['ilsws']['password'];

        $headers = [
            'Content-Type: application/json',
            'Accept: application/json',
            'SD-Originating-App-ID: ' . $this->config['ilsws']['app_id'],
            'x-sirs-clientID: ' . $this->config['ilsws']['client_id'],
            ];

        $options = [
            CURLOPT_URL              => "$this->base_url/$action?$params",
            CURLOPT_RETURNTRANSFER   => true,
            CURLOPT_SSL_VERIFYSTATUS => true,
            CURLOPT_CONNECTTIMEOUT   => $this->config['ilsws']['timeout'],
            CURLOPT_HTTPHEADER       => $headers,
            ];
```

What Kind of System Do I Need?

- Libilsws was designed, developed, and configured to be run on a computer running the Linux operating system
- You can also install it on other systems that have PHP installed on them:
  - Windows
  - Windows Linux subsystem (WSL)
  - MacOS

Where do I Get the Code Library?

- Libilsws utilizes the Composer package management software
- If you have composer on your computer, you can tell Composer to require the package
- You may also download and install the package from GitHub or Packagist:
  - https://github.com/multnomah-county-it/libilsws
  - https://packagist.org/packages/multnomah-county-it/libilsws

Need More Detail?

Let’s do it together

Install the Library

```
1.   sudo apt update
2.   sudo apt install composer
3.   composer require multnomah-county-it/libilsws “~1.0.3”
4.   cp vendor/multnomah-county-it/libilsws/libilsws.yaml.sample ./libilsws.yaml
5.   nano libilsws.yaml
```

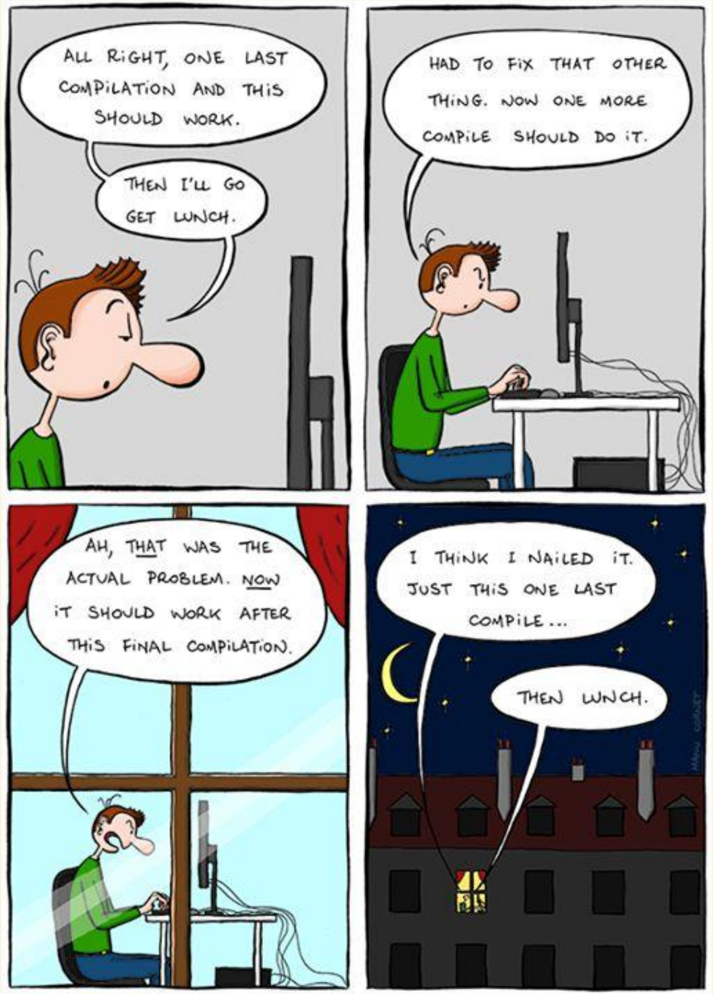
Configure the Library

- Edit the libilsws.yaml file
- Get connection credentials from SirsiDynix for the ilsws section
- Things to check in the configuration:
    - Age ranges
    - Patron profiles
    - Support languages
    - Zip codes of your service area
    - Patron categories

The Library is Installed–What Now?

```
$ilsws = new Libilsws\Libilsws("./libilsws.yaml");
$token = $ilsws->connect();
$params = [
   'ct'             => '50',
   'rw'             => '1',
   'j'              => 'AND',
   'includeFields' => 'key,firstName,middleName,lastName',
   ];
$response = $ilsws->search_patron($token, $index, $search, $params);
$json = json_encode($response, JSON_PRETTY_PRINT);
print "$json\n\n";
```

Let’s write a PHP script!


ALL RIGHT, ONE LAST COMPILATION AND THIS SHOULD WORK.
THEN I'LL GO GET LUNCH.
HAD TO FIX THAT OTHER THING. NOW ONE MORE COMPILE SHOULD DO IT.
AH, THAT WAS THE ACTUAL PROBLEM. NOW IT SHOULD WORK AFTER THIS FINAL COMPILATION.
I THINK I NAILED IT. JUST THIS ONE LAST COMPILE...
THEN LUNCH.
MANU CORNET

The Script

```
<?php

require_once 'vendor/autoload.php';

if ( count($argv) < 3 ) {
    print "Syntax: php $argv[0] INDEX SEARCH\n";
    exit;

}

$index = $argv[1];
$search = $argv[2];

// Initialize
$ilsws = new Libilsws\Libilsws("./libilsws.yaml");

// Connect and get token
$token = $ilsws->connect();

/**
 * Search for a patron. If the $params array is empty or any item is omitted,
 * default values will be supplied as shown, with the exception of the
 * includeFields, which is configured in the libilsws.yaml file.
 */
$params = [
    'ct'            => '50',
    'rw'            => '1',
    'j'             => 'AND',
    'includeFields' => 'profile,birthDate,library,lastActivityDate,alternateID,firstName,middleName,displayName,lastName,barcode,category01,category02,category07,category11,lastActivityDate',
    ];
$response = $ilsws->search_patron($token, $index, $search, $params);
$json = json_encode($response, JSON_PRETTY_PRINT);
print "$json\n\n";

// EOF
```

Sample Scripts Included

check_duplicate.php

delete_patrons.php

describe_bib.php

describe_item.php

describe_patron.php

get_bib_circ_info.php

get_bib_marc.php

get_bib.php

get_bib_raw.php

get_call_number.php

get_hold.php

get_item.php

get_library_paging_list.php

register_patron.php

reset_patron_password.php

search_bib.php

search_patron.php

send_get_describe_call.php

test.php

Application Made with Libilsws

https://lib-paging.multcolib.org/paging-dev/

Questions

Is cereal soup? Why or why not?

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