Debug LWP

Debugging LWP applications all steps at the same time

Julien Fiegehenn (simbabque)

LWP::UserAgent

- WWW::Mechanize
- Test::WWW::Mechanize
- SOAP::Lite
- SOAP::Compile::WSDL
- REST::Client
- A bunch of others

probably not
WWW::Mechanize::Chrome

often used under the hood

debugging is hard

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LWP::Debug - search.cpan.org
search.cpan.org/dist/libwww-perl/lib/LWP/Debug.pm ▼
LWP::**Debug** - deprecated ... LWP::**Debug** is used to provide tracing facilities, but these are not used by
... use **LWP::UserAgent**; $ua = **LWP::UserAgent**->new; ...

Debugging LWP - PerlMonks
www.perlmonks.org/?node_id=529565 ▼
Feb 11, 2006 - 7 posts - 4 authors
my $useragent = **LWP::UserAgent**->new(protocols_allowed => ["htt +ps"]); my $request = POST(
"https://secure.mydomain.com/script.dll", ...

Re: **LWP::UserAgent** doesn't send my HTTP::Cookies (trace/**debug** ...   1 Jul 2016
Help with **LWP** & SSL 500 Internal response error   12 May 2015
SSL Certificate Verification problem, using **LWP::UserAgent**   2 Mar 2015
LWP is there any way to get "real" outgoing headers?   24 May 2014
More results from www.perlmonks.org

how to validate lwp::useragent request? - PerlMonks
www.perlmonks.org/bare/?node_id=464442 ▼
-does **LWP::UserAgent** always add certain headers to be sent? ... you can use LWP::DebugFile to
debug your script and it allows you to see what your calls to ...

LWP::Debug - deprecated

Only describes some debugging stuff

A bunch of old posts

How to get headers?

by hand

```
my $res = $ua->get('http://example.org');
warn $res->req->as_string;
warn $res->as_string;
```

very tedious

half-automatic

```
$ua->add_handler("request_send",  sub { shift->dump; return });
$ua->add_handler("response_done", sub { shift->dump; return });

$ua->get("http://www.example.com");
```

using advice from LWP::Debug

```
GET http://www.example.com
User-Agent: libwww-perl/6.19

(no content)
HTTP/1.1 200 OK
Cache-Control: max-age=604800
Connection: close
Date: Mon, 26 Jun 2017 11:09:04 GMT
ETag: "359670651+gzip+ident"
Server: ECS (iad/182A)
Vary: Accept-Encoding
Content-Length: 1270
Content-Type: text/html
Expires: Mon, 03 Jul 2017 11:09:04 GMT
Last-Modified: Fri, 09 Aug 2013 23:54:35 GMT
Client-Date: Mon, 26 Jun 2017 11:09:05 GMT
Client-Peer: 93.184.216.34:80
Client-Response-Num: 1
```

sucks if you need it a lot

how do you debug stuff that's inside a Catalyst Model?

So I built something

```perl
package Foo;
use LWP::UserAgent;
use Class::Method::Modifiers 'around';

around 'LWP::UserAgent::new' => sub {
    my $orig = shift;
    my $self = shift;

    my $ua = $self->$orig(@_);
    $ua->add_handler( request_send  => sub { shift->dump; return; } );
    $ua->add_handler( response_done => sub { shift->dump; return; } );

    return $ua;
};
```

then I went on IRC #lwp

LWP::ConsoleLogger

And LWP::ConsoleLogger::Easy

OALDERS

Olaf Alders 🧑

```perl
use LWP::ConsoleLogger::Easy qw( debug_ua );
use WWW::Mechanize;

my $mech           = WWW::Mechanize->new;    # or LWP::UserAgent->new() e
my $console_logger = debug_ua( $mech );
$mech->get( 'https://metacpan.org' );

# now watch the console for debugging output
# turn off header dumps
$console_logger->dump_headers( 0 );

$mech->get( $some_other_url );
```

```
GET http://www.nytimes.com/2014/04/24/technology/fcc-new-net-neutrality-rules.html

GET params:
.-----+-------.
| Key | Value |
+-----+-------+
| _r  | 1     |
| hp  |       |
'-----+-------'


.----------------+------------------------------------.
| Request Header | Value                              |
+----------------+------------------------------------+
| Accept-Encoding | gzip                              |
| Cookie2         | $Version="1"                      |
| Referer         | http://www.nytimes.com?foo=bar    |
| User-Agent      | WWW-Mechanize/1.73                |
'----------------+------------------------------------'


==> 200 OK
```

Title: The New York Times - Breaking News, World News & Multimedia

```
.------------------------+------------------------------------.
| Response Header        | Value                              |
+------------------------+------------------------------------+
| Accept-Ranges          | bytes                              |
| Age                    | 176                                |
| Cache-Control          | no-cache                           |
| Channels               | NytNow                             |
| Client-Date            | Fri, 30 May 2014 22:37:42 GMT      |
| Client-Peer            | 170.149.172.130:80                 |
| Client-Response-Num    | 1                                  |
| Client-Transfer-Encoding | chunked                          |
| Connection             | keep-alive                         |
| Content-Encoding       | gzip                               |
| Content-Type           | text/html; charset=utf-8           |
| Date                   | Fri, 30 May 2014 22:37:41 GMT      |
| NtCoent-Length         | 65951                              |
| Server                 | Apache                             |
| Via                    | 1.1 varnish                        |
| X-Cache                | HIT                                |
| X-Varnish              | 1142859770 1142854917              |
'------------------------+------------------------------------'


.------------------------+------------------------------------.
| Text                   |                                    |
+------------------------+------------------------------------+
| F.C.C., in a Shift, Backs Fast Lanes for Web Traffic...     |
'------------------------+------------------------------------'
```

- indents XML
- indents JSON
- converts XML to Perl data structure
- and a ton of other things

really cool

But still hard to use. Need to have the ua objects.

```
my $logger = debug_ua($ua);
```
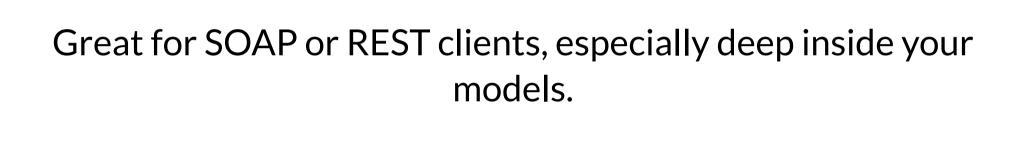
COMBINE

ALL THE THINGS !!!!

memegenerator.net

```
use LWP::ConsoleLogger::Everywhere;
```

And that's it.

- works with all LWP::UserAgent subclasses
- deep down in your app
- load wherever you want
- as long as it's loaded at compile time it will work

```perl
# access all the loggers somewhere
my $loggers = LWP::ConsoleLogger::Everywhere->loggers;



# customize individually
$loggers->[0]->pretty(0);
```

Great for SOAP or REST clients, especially deep inside your models.

Live Demo

```perl
use Dancer2;
use LWP::UserAgent;

get '/json' => sub {
    my $ua = LWP::UserAgent->new;
    my $res = $ua->get("http://localhost:5001/json");
    return $res->decoded_content;
};

get '/xml' => sub {
    my $ua = LWP::UserAgent->new;
    my $res = $ua->get("http://localhost:5001/xml");
    return $res->decoded_content;
};

dance;
```

but doesn't work with WWW::Mechanize::Chrome

Thank you