



# PHP Debugging from A to Z (Apache to Zend)

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Hi!

I've been developing and troubleshooting web applications on the IBM i for 16 years, 11 of those using PHP.

Formerly worked for BCD, now with Seiden Group



ClubSeiden  
Where open source and IBM i meet

[club.alanseiden.com](http://club.alanseiden.com)



SEIDEN  
GROUP  
[seidengroup.com](http://seidengroup.com)







# What can go wrong?

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- Setting up/configuring the Apache web server
- PHP Issues
- CL/RPG program call failures
- Javascript confusion
- HTML/CSS funkiness
- (We are assuming you have Zend Server/PHP installed)





# Apache - It won't start

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- Looking at your Apache config
  - <http://myipaddress:2001/HTTPAdmin> - hit display
  - /www/myapacheserver/conf/httpd.conf – I don't have \*IOSYSCFG
  - wrkspLf QTMHHTTP
    - This is also where spool files will be if your Apache jobs are ending abnormally
- Watch out for
  - SSL cert expired
  - Weird line endings if you edited in notepad

3.....4.....5.....6.....7.....8.....9.....0.....1.....2.....3

From procedure . . . . . : sendEscapeWithMessageFile

Statement . . . . . : 4

To module . . . . . : ZHBMAIN

To procedure . . . . . : BigSwitch\_\_FiPPc

Statement . . . . . : 247

Message . . . . : HTTP Server Instance NXAPACHE failed during start-up.

Cause . . . . : HTTP Server instance NXAPACHE failed because of a  
configuration error on line 232 in configuration file  
/www/nxapache/conf/httpd.conf. Note: If the specified directive is either a  
container directive (e.g. <Directory>), or a directive within a container,  
the line number identified above may not be correct. In that case, you will  
need to verify that all directives in the container, and the container  
itself do not have configuration errors. Recovery . . . : See previous  
job log messages. Correct the problem and start the server again.

50 09/22/16 16:18:51.660375 QWTPITP2 QSYS 0645 \*EXT \*N

Message . . . . : Job ended abnormally.

Cause . . . . : A SIGKILL signal was received for the job. The action for  
the signal was to terminate the job.

00 09/22/16 16:18:51.662974 QLIDLOBJ QSYS 06B4 QLICLLIB QSYS 06B4

More..

ft F20=Right F24=More keys





# Apache - It won't show my page

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- 404 – Page not found
  - Check there is a DocumentRoot or AliasMatch pointing to your script
- 403 – Forbidden
  - Check your Directory, Location statements
- To start it in debug:  

```
STRTCPSVR SERVER(*HTTP) HTTPSVR(MYAPACHE -vv)
```

  - Try to access your page, end the server, wrkspflf  
QTMHHTTP



## Display Spooled File

file . . . . . : QZSRHTTPTR

ontrol . . . . . : \_\_\_\_\_

ind . . . . . : search

...+....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+....

00000085:411544 ap\_unescape\_url(): URL = /products/carpet/search

00000085:411552 unescape\_url(): URL = /products/carpet/search

00000085:411560 ap\_location\_walk(): uri = "/products/carpet/search"

00000085:411560 ap\_if\_walk()

00000085:411576 mod\_rewrite: hook\_uri2file() &gt;uri = /products/carpet/search.

00000085:411584 ap\_get\_server\_name()

00000085:411600 ap\_get\_server\_name(): server name = idevusr016.idevcloud.com

00000085:411600 ap\_get\_server\_port()

00000085:411616 mod\_rewrite: apply\_rewrite\_list() &gt;directory = NULL.

00000085:411632 translate\_alias\_redir(): request URI = /products/carpet/search

00000085:411632 try\_alias\_list()

00000085:411648 try\_alias\_list()

00000085:411656 try\_alias\_list(): attempt regular expression - ^/\$

00000085:411656 Case sense is OFF

00000085:411680 try\_alias\_list(): attempt regular expression - ^\$

00000085:411680 Case sense is OFF

00000085:411696 try\_alias\_list(): attempt regular expression - ^/products/(.\*)

00000085:411696 Case sense is OFF

00000085:419800 try\_alias\_list(): match found!



# Apache logs

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- There is lots of good data in your Apache logs!

```
LogFormat "%h %T %l %u %t \"%r\" %>s %b \"%{Referer}i\" \"%{User-Agent}i\"" combined
```

```
LogFormat "%{Cookie}n \"%r\" %t" cookie
```

```
LogFormat "%{User-agent}i" agent
```

```
LogFormat "%{Referer}i -> %U" referer
```

```
LogFormat "%h %l %u %t \"%r\" %>s %b" common
```

```
CustomLog logs/access_log combined
```

- [/www/myapache/logs/](#)
- Export into lots of different great tools!



# Apache logs

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- Many tools to analyze and visualize the logs
  - I use Sawmill: <http://sawmill.net/>
  - Josh uses Go Access: <https://goaccess.io/>



- dar
- board
- nt
- types
- es/directories
- es
- ken Links
- systems
- iew
- and time
- demographics
- ers
- ons
- page Summary
- etail

## Dashboard 04/Aug/2016, 1 day (entire date range)

### Overview

Hits	Visitors	Size	Page views	Sessions	Session duration	Bounces	Bounce
52,695 Avg/day —	79 Avg/day —	773.02 M Avg/day —	45,226 Avg/day —	149 Avg/day —	1d 08:33:34 Avg/day —	124 Avg/day —	83.22

### Traffic



### Search engines

No data returned in query

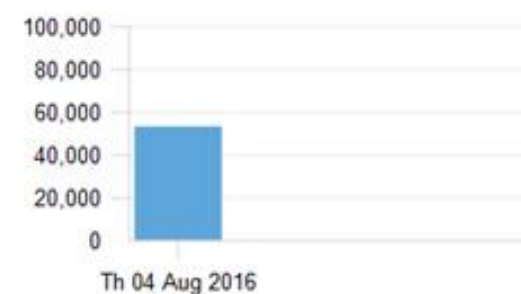
#### Page views



#### Visitors



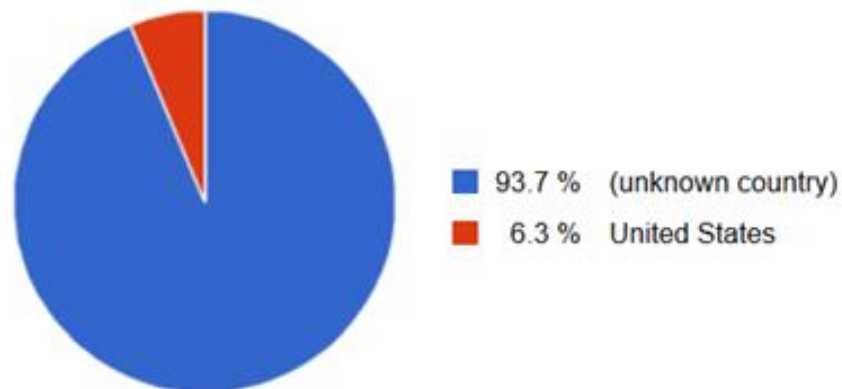
#### Hits



### Country



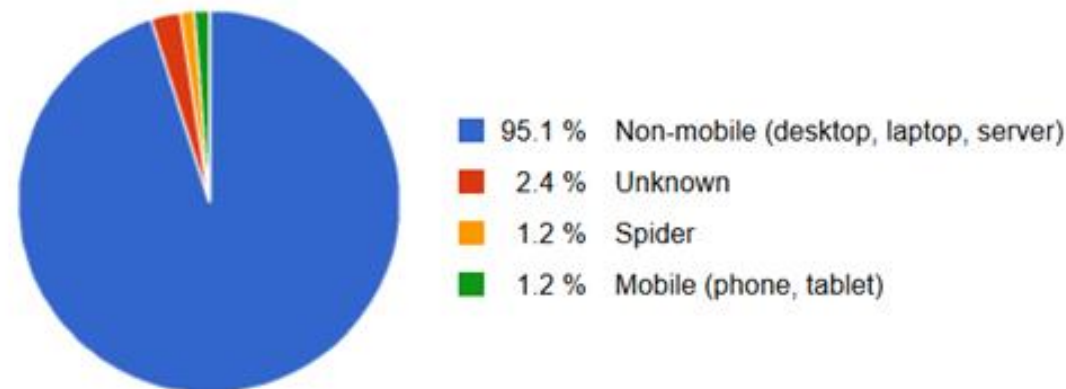
#### Visitors (descending)



### Device Category



#### Visitors (descending)







## Pages 04/Aug/2016, 1 day (entire date range)

1 - 10 of 1543

	Page		↓ Hits		Visitors	Size	Page views	Sessions	Session duration	Bounces
1	/Prod/PublicPHP/page1	op.php	7,952	15.1 %	1	13.36 M	7,952	1	00:59:26	0
2	/Prod/PublicPHP/page2	Jrl	3,165	6.0 %	1	210.13 K	3,165	1	01:40:31	0
3	/Prod/Prod/sanotherpage	ients.php	3,090	5.9 %	1	3.00 M	3,090	2	00:49:04	0
4	/Prod/PublicPHP/somemorephp	aServer.php	2,752	5.2 %	1	17.76 M	2,752	1	05:09:57	0
5	/Prod/PublicPHP/yetanotherpage	a.wsdl	2,752	5.2 %	1	5.35 M	2,752	1	00:15:28	0
6	/Prod/Prod/someimportantdata		1,457	2.8 %	1	67.87 M	1,457	3	00:30:26	0
7	/Prod/Prod/awebservice		1,385	2.6 %	1	3.69 M	0	0	00:00:00	0
8	/Prod/PublicPHP/Inotsoimportantdata	ata.php	1,380	2.6 %	1	641.60 K	1,380	1	00:40:21	0
9	/Prod/Prod/ssomething.php		1,196	2.3 %	1	4.63 M	0	0	00:00:00	0
10	/Prod/Prod/sbankinfo.php	ip	1,139	2.2 %	1	2.03 M	1,139	2	00:03:06	0
1533 other items			26,427	50.2 %	1,608	654.49 M	21,539	–	22:25:15	124
Total			52,695	100.0 %	1,618	773.02 M	45,226	–	1d 08:33:34	124







# FastCGI settings

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- `SetEnv="PHP_FCGI_CHILDREN=20"`
- `RequestTimeout="60"`
- `SetEnv="CCSID=1208"`
- `SetEnv="LDR_CNTRL=MAXDATA=0x40000000"`







# CCSID Issues

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- FastCGI CCSID setting
  - SetEnv="CCSID=1208"
- Apache CCSID settings:
  - DefaultFsCCSID 37
  - CGIJobCCSID 37
  - DefaultNetCCSID 01208
- php.ini setting
  - default\_charset="UTF-8"
- ibm\_db2.ini setting
  - ibm\_db2.i5\_override\_ccsid=0

<https://support.zend.com/hc/en-us/articles/206477507-Upgrade-to-Zend-Server-for-IBM-i-8-5-causes-CCSID-issues-in-DB2>





# PHP - 500 Error

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- Look at the log ... `/usr/local/zendphp7/var/log/php.log`
- Occasionally it will not show up there
  - Look in `/www/myapache/logs/` for the error log
- Watch out for @ signs!





# PHP - Unexpected results

---

- `var_dump` and `die()`
- `error_log("some message", 3, "/path/to/myspecial.log");`
- Hide on the page:

```
echo "<!--";  
var_dump($mySqlString);  
echo "-->";
```
- Don't forget to clean them up afterwards!
- Watch out for try/catch

# PHP – Locked jobs

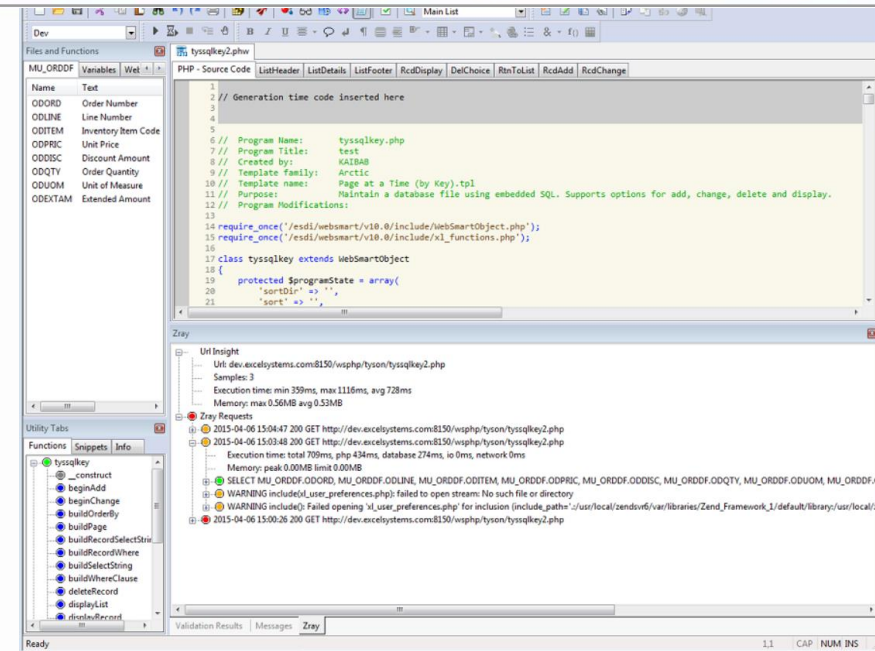
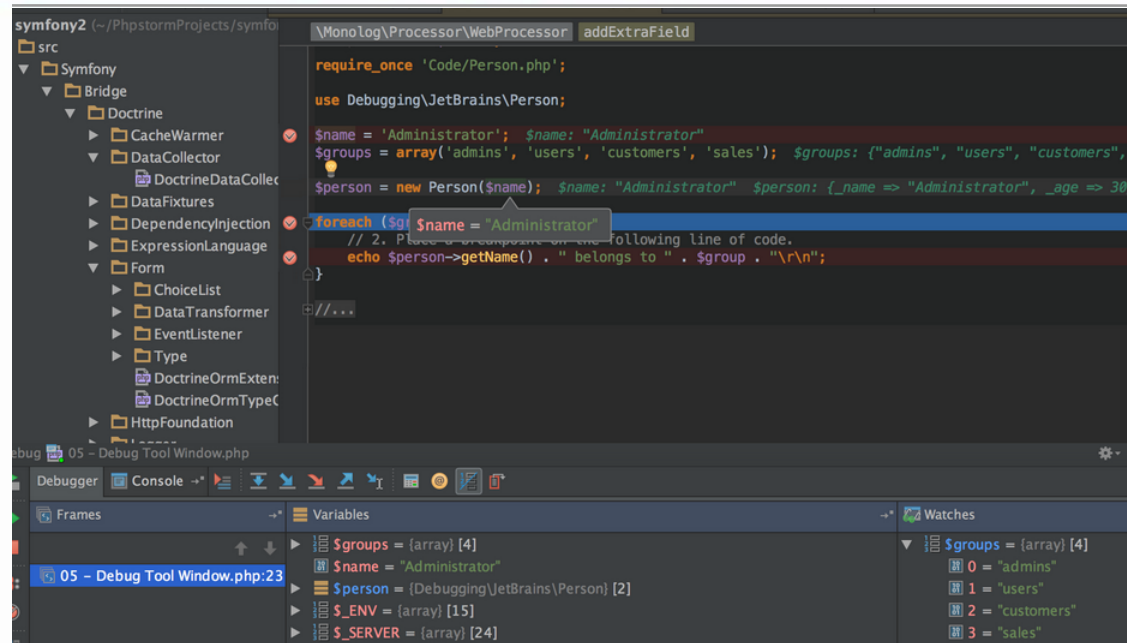
---

- Are all of your jobs in THDW?
- Check for AJAX and session locking!
- Use `session_write_close` as soon as you are done updating the session (at the beginning if all you do is read!)





# XDebug



- <https://www.seidengroup.com/2018/05/21/xdebug-and-your-ide-on-your-ibm-i/>



# Debugging with Zend Server

## The events monitor:

Getting Started

Dashboard

Monitoring

URL Insight

Events

Event Rules

Logs

Settings

Z-Ray

PHP

Applications

Servers

Job Queue

Caching

Debugging

Plugins

Administration

EVENTS

7 Monitoring

Show Filters

All Issues

Time Range

All

From

22/Sep/2016 11:52

To

23/Sep/2016 11:52

Search...

Filter By :

Currently no filter selected

Delete

Save As...

Save

Delete Selected

Delete Filtered (3625)

<input type="checkbox"/>	!	Count	Event ID	Name	Last Occurred	Application	Summary	Code Trace	IDE Actions
<input type="checkbox"/>		7k	615	High Memory Usage	Today, 11:52:19		Request to http://10.32.32.32:10088/Prod/someurl		
<input type="checkbox"/>		882	20002	Slow Query Execution	Today, 11:52:18		Function PDOStatement::execute() took 1056ms		
<input type="checkbox"/>		5k	805	High Memory Usage	Today, 11:52:12		Request to http://10.32.32.32:10088/Prod/Prod/Guidelines/ consum...		
<input type="checkbox"/>		22k	18371	PHP Error	Today, 11:51:53		Function db2_pconnect() caused a PHP error		
<input type="checkbox"/>		5k	152	High Memory Usage	Today, 11:51:52		Request to http://10.32.32.32:10088/Prod/someurl		
<input type="checkbox"/>		5k	111	Slow Request Execution	Today, 11:51:43		Request to http://10.32.32.32:10088/prod/someurl		
<input type="checkbox"/>		5k	149	High Memory Usage	Today, 11:51:41		Request to http://10.32.32.32:10088/Prod/someurl		
<input type="checkbox"/>		7k	166	Slow Function Execution	Today, 11:51:41		Function fsockopen() took 28706ms		
<input type="checkbox"/>		18k	14882	Slow Query Execution	Today, 11:51:33		Function db2_execute() took 1127ms		
<input type="checkbox"/>		74k	153	Slow Request Execution	Today, 11:51:31		Request to http://10.32.32.32:10088/Prod/someurl		
<input type="checkbox"/>		2k	359	Slow Request Execution	Today, 11:51:19		Request to http://10.32.32.32:10080/Prod/Prod/someurl		



# Debugging with Zend Server

- Setting up event rules:

nd Server Enterprise

12:00

Getting Started

Dashboard

Monitoring

URL Insight

Events

Event Rules

Logs

Settings

Z-Ray

PHP

Applications

Servers

Job Queue

Caching

Debugging

Plugins

## Event Rules / Monitoring

Enable

Disable

Event Tracing Mode: Disabled

	Name	Type	Status	Thresholds	Tracing Code	Actions
	Global Rules (12 globals)					<a href="#">+</a> <a href="#">↗</a>
<input type="checkbox"/>	Custom Event	Custom Event ?	Enabled			
<input type="checkbox"/>	Database Error	Function Error ?	Enabled			
<input type="checkbox"/>	Failed Writing Code Tracing Data	Failed Writing Code Tracing Data ?	Enabled			
<input type="checkbox"/>	Function Error	Function Error ?	Enabled			
<input type="checkbox"/>	High Memory Usage	High Memory Usage ?	Enabled	49152 KB +1		
<input type="checkbox"/>	Inconsistent Output Size	Inconsistent Output Size ?	Enabled	200 % +1		
<input type="checkbox"/>	PHP Error	PHP Error ?	Enabled	85 +1		
<input type="checkbox"/>	Slow Function Execution	Slow Function Execution ?	Enabled	2000 ms +1		
<input type="checkbox"/>	Slow Query Execution	Slow Function Execution ?	Enabled	2000 ms +1		
<input type="checkbox"/>	Slow Request Execution	Slow Request Execution ?	Enabled	5000 ms +1		
<input type="checkbox"/>	Uncaught Java Exception	Uncaught Java Exception ?	Enabled			
<input type="checkbox"/>	Zend Framework Exception	Custom Event ?	Enabled			



# Debugging with Zend Server cont...

- Have Zend Server email you when database errors occur:

The screenshot displays the 'Database Error' configuration page in the Zend Server Enterprise interface. The left sidebar contains navigation links: 'Getting Started', 'Dashboard', 'Monitoring' (selected), 'URL Insight', 'Events', 'Event Rules', 'Logs', 'Settings', 'Ray', 'HP', 'Applications', 'Servers', 'Job Queue', 'Tracing', 'Debugging', and 'Plugins'. The main content area is titled 'Database Error' with a sub-path '/ Monitoring / Monitoring Rules'. It shows the 'Rule Name' as 'Database Error' and the 'Application' as 'Global'. The 'Type' is set to 'Function Error'. On the right, the 'Email' field is 'name@example.com' and the 'Callback URL' is 'http://url.com/filename.php'. Below this, a section titled 'Select the severity level for this event:' offers three options: 'Critical' (selected), 'Warning', and 'Notice'. Each severity level has a set of checkboxes for 'Send email' and 'Call URL', and a section for 'Trace code' with radio buttons for 'Activate Code Tracing for 120 seconds after triggered events' (selected) and 'Always activate Code Tracing for triggered events'. To the right of these settings is a list of database functions with checkboxes, including 'mssql\_connect', 'mssql\_execute', 'mssql\_query', 'mssql\_unbuffered\_query', 'mysql\_connect', 'mysql\_db\_query', 'mysql\_query', 'mysql\_unbuffered\_query', 'mysqli\_connect', 'mysqli\_execute', 'mysqli\_master\_query', 'mysqli\_multi\_query', 'mysqli\_query', 'mysqli\_real\_connect', and 'mysqli\_real\_query'. An 'Add Function' button is located at the top right of this list.

ndServerEnterprise 11:59

Database Error / Monitoring / Monitoring Rules

Rule Name Database Error Application Global

Type Function Error

Email name@example.com

Callback URL http://url.com/filename.php

Select the severity level for this event:

☒ **Critical**

☒ Send email ☐ Call URL

☐ Trace code

☒ Activate Code Tracing for 120 seconds after triggered events

☐ Always activate Code Tracing for triggered events

☐ **Warning**

☐ Send email ☐ Call URL

☐ Trace code

☒ Activate Code Tracing for 120 seconds after triggered events

☐ Always activate Code Tracing for triggered events

☐ **Notice**

☐ Send email ☐ Call URL

☐ Trace code

☒ Activate Code Tracing for 120 seconds after triggered events

☐ Always activate Code Tracing for triggered events

Create an event when detected in the following functions:

Add Function

- ☒ mssql\_connect
- ☒ mssql\_execute
- ☒ mssql\_query
- ☒ mssql\_unbuffered\_query
- ☒ mysql\_connect
- ☒ mysql\_db\_query
- ☒ mysql\_query
- ☒ mysql\_unbuffered\_query
- ☒ mysqli\_connect
- ☒ mysqli\_execute
- ☒ mysqli\_master\_query
- ☒ mysqli\_multi\_query
- ☒ mysqli\_query
- ☒ mysqli\_real\_connect
- ☒ mysqli\_real\_query





# Other monitoring

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There are other tools that monitor and report errors to you:

- New Relic - <https://newrelic.com/php>
- Grafana - <https://grafana.com>
- Sentry - <https://sentry.io/welcome/>
- And others





# Toolkit debugging (RPG/CL program call)

---

- Unless you know what you're doing, make it stateless
- It's hanging! Check QSQSRVR jobs in QSYSWRK for MSGW jobs
- Check `/usr/local/zendphp7/var/log/toolkit.log` for general error messages
- You can turn debug on in the Toolkit settings
  - Toolkit settings (usually) in `/usr/local/zendphp7/share/ToolkitAPI/toolkit.ini`
  - Joblog error messages will show up in debug log (usually `/usr/local/zendphp7/var/log/tkit_debug.log` )



# Toolkit debug log

Browse : /usr/local/ZendSVR6/var/log/Toolkit\_debug.log

Record : 6309318 of 6309335 by 18

Column : 1 181 by 131

Control :

.....1.....2.....3.....4.....5.....6.....7.....8.....9.....0.....1.....2.....

Exec end: 2016-09-23 12:09:50. Seconds to execute: 0.02148699760437.

Exec start: 2016-09-23 12:09:50

Version of toolkit front end: 1.6.0

IPC: '/tmp/php/FHACHandler\_\_1474657488.1694'. Control key: \*idle(180/kill) \*cdata \*sbmjob

Stmt: call ZENDSVR6.iPLUG32K(?,?,?,?) with transport: ibm\_db2

Input XML: <?xml version="1.0" encoding="ISO-8859-1" ?>

<script>

<cmd>CHGAUT OBJ('/vdlf/Prod/some/path \_ \_ \_ \_ \_ /CSQ5122000515RS.xml') USER(QTMHHTTP1 GRPMIS GRPICA GRPWEB MEYEDIS1) DTAAUT(\*RWX

</script>

Output XML: <?xml version="1.0" encoding="ISO-8859-1" ?>

<script>

<cmd><success><![CDATA[+++ success CHGAUT OBJ('/vdlf/Prod/some/path \_ \_ \_ \_ \_ onse/CSQ5122000515RS.xml') USER(QTMHHTTP1 GRPMIS GRPIC

</cmd>

</script>

Exec end: 2016-09-23 12:09:50. Seconds to execute: 0.026160955429077.

\*\*\*\*\*End of Data\*\*\*\*\*





# Toolkit Debugging cont...

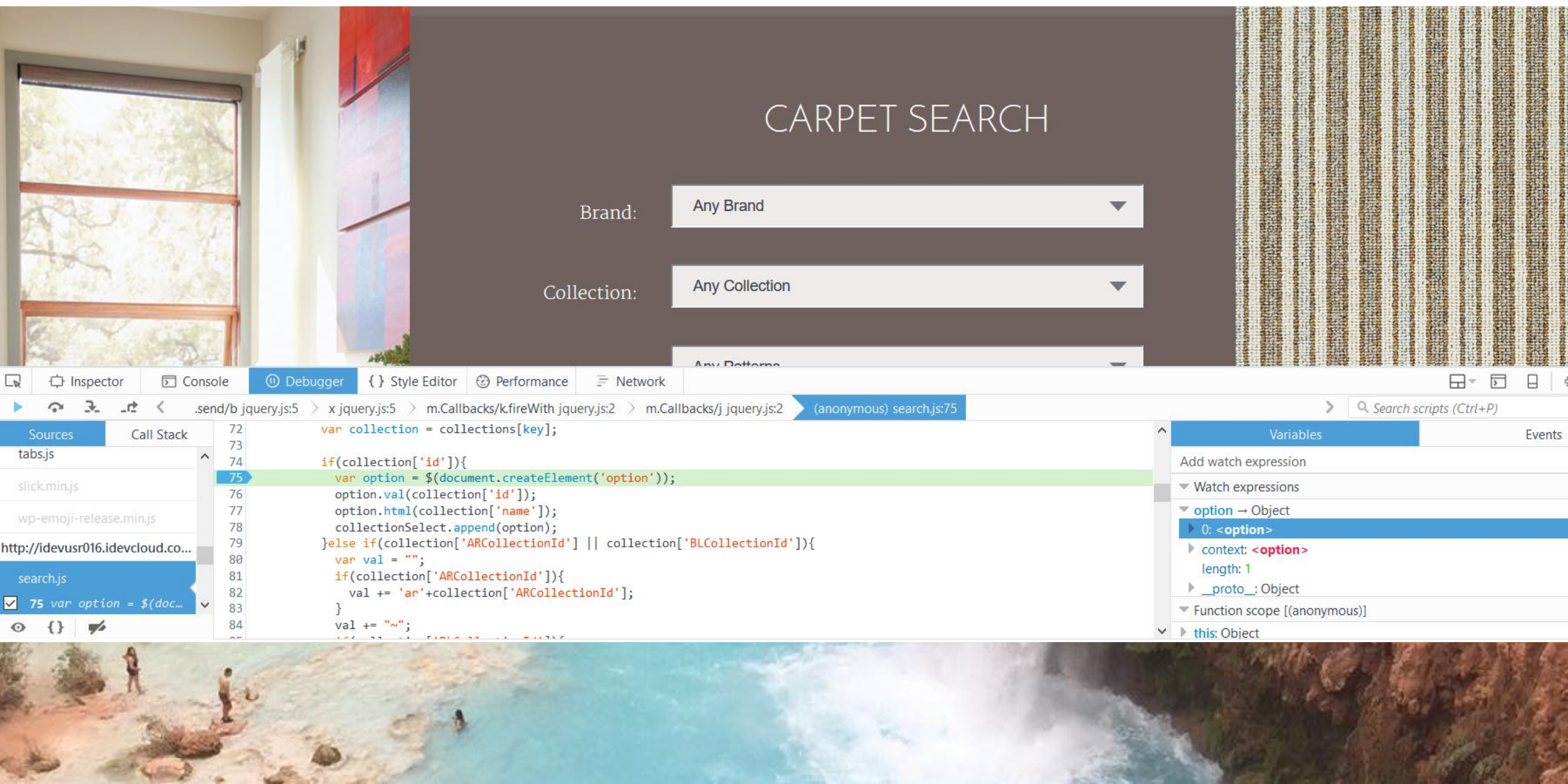
```
$namingMode = DB2_I5_NAMING_OFF; // ON or OFF  
$db2conn = db2_pconnect(' *LOCAL-DEBUG', ' ', ' ');  
$toolkit_service =  
ToolkitService::getInstance($db2conn, $namingMode);
```

- Wrkactjob, find MSGW job
- Look at joblog to find QSQSRVR job to watch
- STRSRVJOB on that QSQSRVR job
- STRDBG on your program, add a breakpoint
- Give the message a “G”
- Step through debug!



# Javascript Debugging

- F12 for developer toolbars! (firefox)





# Javascript Debugging cont....

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- You can add conditional breakpoints (right click on the breakpoint)
- You can add XHR breakpoints - break when certain URLs are called (for AJAX)
- You can add DOM breakpoints – break when an element on the page is changed/removed (right click, break on)







# Javascript Console

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- `Console.log(somevar)` in your code will output the `somevar` variable to the console (similar to echoing from PHP).
- `Console.table(somejson)` will output json received in a pretty table format to the console.
- `Console.trace()` will show a stack trace of function calls to that point
- `Monitor(functionname)` will output to the console every time that function is called and show the parameters





# Javascript events

- (Chrome) check event listeners

The screenshot displays a web browser window with a 'CARPET SEARCH' form. The form includes dropdown menus for 'Brand' (Any Brand), 'Collection' (Alexia), 'Pattern' (Any Patterns), and 'Style' (Any Style). A 'Paused in debugger' banner is visible at the top of the form. To the right of the form, there is a sidebar with a 'COURISTAN Here to Help.' chat button and a 'WELCOME PLEASE CHAT WITH US!' message.

The Chrome DevTools console is open, showing the 'Sources' tab. The 'search.js' file is selected, and the following JavaScript code is visible:

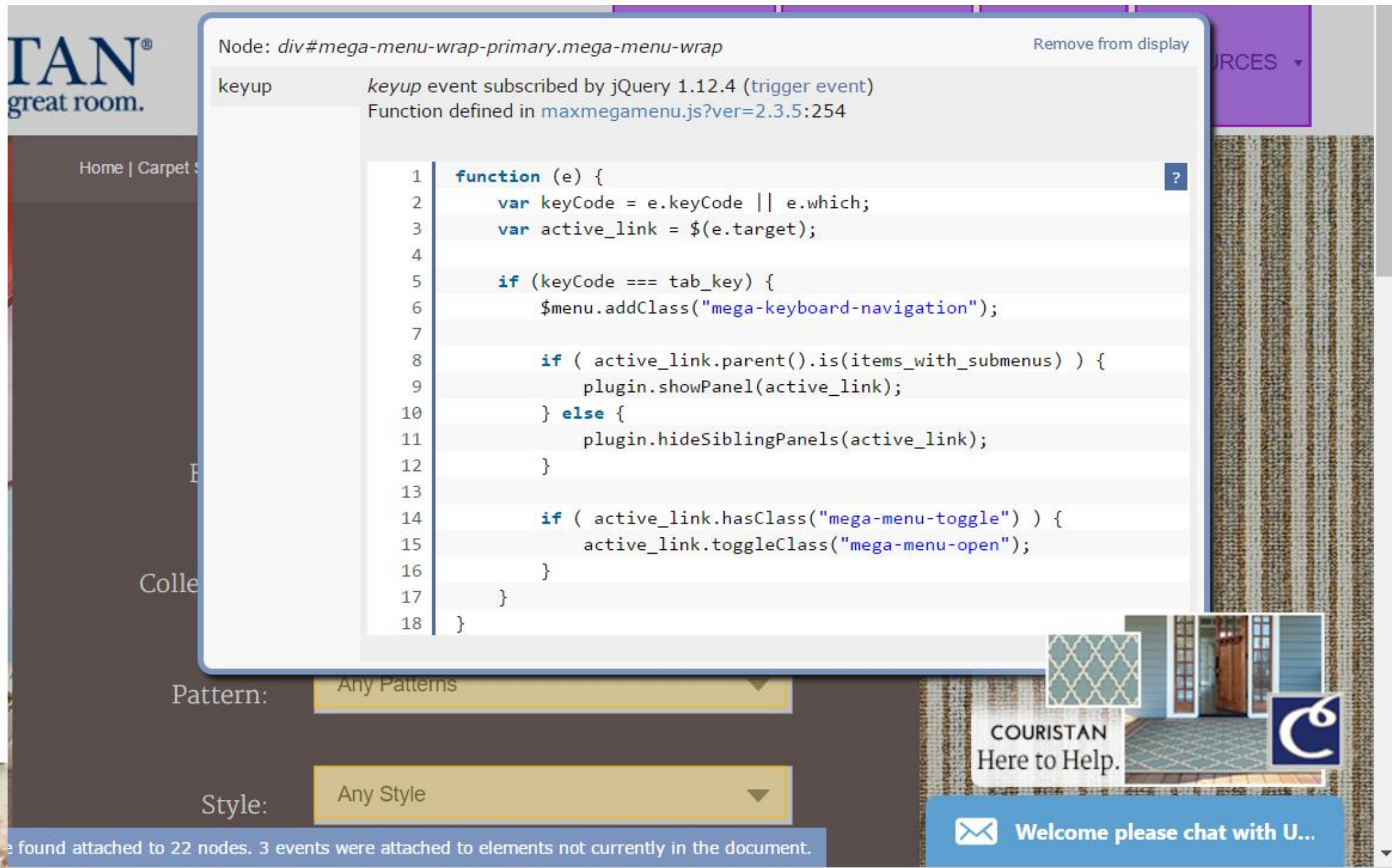
```
1 jQuery( document ).ready(function( $ ) {  
2   // Code using $ as usual goes here.  
3   $('#search-filter').change(function(){  
4     var input = $(this); input = [select#collection-filter.search-filter, context: select#collection-filter.search-filter]  
5     var form = input.closest('form'); form = [form.form-horizontal, prevObject: e.fn.init[1], context: select#collection-filter.search-filter]  
6     var url = window.location.pathname.replace('/products/', '/products/api/').replace('/search', '/filters');  
7     if(url != ''){  
8       var data = form.serialize();  
9       if(form.closest('.searchform-roll-runner').length > 0){  
10        data += "&shape=2"; //roll runner shape id is 2  
11      }else if(form.closest('.searchform-area-rug').length > 0){  
12        data += "&shape=1"; //rectangle shape id is 1  
13      }else if(form.closest('.searchform-special-shapes').length > 0){  
14        //if its a special shapes search  
15        data += "&shape=shapes";  
16      }  
17      $.get(url, data, function(data){  
18        $('#search-filter').attr("disabled", "disabled");  
19        var brands = data['brands'];  
20      });  
21    }  
22  });  
23 }
```

The 'Event Listeners' panel on the right shows a list of event listeners for the selected element. The 'load' event is highlighted, and the 'Window' object is selected as the context. The 'search:993' event is also visible in the console.



# Javascript events cont...

- Or use visual event



Node: `div#mega-menu-wrap-primary.mega-menu-wrap` Remove from display

keyup *keyup event subscribed by jQuery 1.12.4 (trigger event)*  
Function defined in `maxmegamenu.js?ver=2.3.5:254`

```
1 function (e) {  
2     var keyCode = e.keyCode || e.which;  
3     var active_link = $(e.target);  
4  
5     if (keyCode === tab_key) {  
6         $menu.addClass("mega-keyboard-navigation");  
7  
8         if ( active_link.parent().is(items_with_submenus) ) {  
9             plugin.showPanel(active_link);  
10        } else {  
11            plugin.hideSiblingPanels(active_link);  
12        }  
13  
14        if ( active_link.hasClass("mega-menu-toggle") ) {  
15            active_link.toggleClass("mega-menu-open");  
16        }  
17    }  
18 }
```

Pattern: Any Patterns

Style: Any Style

1 event found attached to 22 nodes. 3 events were attached to elements not currently in the document.

COURISTAN Here to Help.

Welcome please chat with U...



# HTML/CSS Debugging

- Use the DOM explorer to see what styles are applied to your HTML, and to experiment with changing the HTML itself (Edge)

The screenshot shows the Microsoft Edge browser interface. The main content area displays a website with a large image of a rug on the left and a text block on the right. The text block includes a paragraph about cowhide leather rugs, a 'READ MORE >' link, and several buttons: 'WHERE TO BUY', 'SHARE THIS', 'DECORATING TIPS', 'CARE', 'WARRANTY', and 'E-CATALOG'. Below these buttons is a 'DETAILS' section with 'FEATURES:' and 'AVAILABLE SIZES/COORDINATES:'. The 'FEATURES:' section lists: 'Cowhide Leather Area Rugs', 'Materials Sourced Ethically', and 'Unique Modern Stripe, Abstract and Geometric Designs'. The 'AVAILABLE SIZES/COORDINATES:' section shows a 'RECTANGLE:' with sizes '2' x 4'', '3'6'', '5'6'', and '8' x'. A 'WELCOME PLEASE CHAT WITH US!' button is visible in the bottom right corner of the website content.

The DOM Explorer panel is open at the bottom, showing the HTML structure. The selected element is the `<body>` tag, which has the following attributes: `class="group-blog su-other-shortcodes-loaded"`. The `<div id="olark" style="display: none;">` tag is also visible.

The Styles panel is open on the right, showing the 'Inline style' and 'body' styles. The 'body' style includes the following properties: `font-family: Open Sans,sans-serif;`, `overflow-x: hidden;`, and `max-width: 100%;`.





# Debugging with Fiddler

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- A proxy you install to monitor HTTP and HTTPS traffic
- You can compare sessions using the diff tool
- Get statistics about the page “weight” and “wait”
- Set breakpoints to set the request or response on the fly
- Can filter or flag traffic ... and lots more
- <https://www.telerik.com/download/fiddler>





# API Debugging with Postman

The screenshot displays the Postman application interface. At the top, there's a dark header bar with navigation tabs for 'Builder' and 'Team Library', along with user profile 'Steph R' and various utility icons. Below this is a horizontal bar containing environment selectors like 'myAc', 'MyAp', 'https:', 'CoreL', 'servic', 'Partn', 'Riverf', 'Contacts', 'Users', 'Contracts', 'myKe', and 'branc'. A dropdown menu shows 'No Environment' selected. The main workspace is titled 'branches' and shows a 'POST' request to 'https://some.api/branches'. The 'Body' tab is active, showing a JSON payload. The bottom section is labeled 'Response'.

Builder Team Library

myAc MyAp https: CoreL servic Partn Riverf Contacts Users Contracts myKe branc + ... No Environment

branches Examples (0)

POST https://some.api/branches Params Send Save

Authorization Headers (1) Body Pre-request Script Tests Code

form-data x-www-form-urlencoded raw binary JSON (application/json)

```
1 {
2   "data": [{
3     "branch_number": "257",
4     "branch_region_id": "26",
5     "branch_region_name": "Northwest",
6     "branch_type": "B",
7     "branch_name": "North Coast",
8     "public_name": "Lake Oswego North Coast",
9     "branch_license_number": "789007",
10    "branch_license_text": "We are licensed to do business in the states of Oregon, Texas and Washington. ML-176;",
11    "branch_status": "1",
12    "branch_address_1": "1520 SE Discovery Lane",
13    "branch_address_2": "Ste D",
14    "branch_city": "Warrenton",
15    "branch_state": "OR",
16    "branch_zip": "97146",
17    "branch_phone": "5033254840",
18    "branch_fax": "0",
19    "branch_nmls_manager_id": "WGJL",
20    "branch_nmls_manager_name": "Jacob Leenders",
21    "branch_closed date": 0
22  }]
23 }
```

Response





# Any questions?

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- So much more to debug!
- Performance
- Design
- SEO







# Thank you

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- I would love your feedback:
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<https://joind.in/event/zendcon-2018/php-debugging-on-the-ibm-i-from-a-to-z-apache-to-zend>

