# A Little Bit About Me

I am the chief technical officer at InVision App, a prototyping and collaboration platform for designers, built by designers. I also rock out in JavaScript and ColdFusion 24x7. ( more )

Follow me: Twitter - Facebook - LinkedIn



The http://t.co/JcViV510Ju job board made its 148th Kiva donation on behalf of "Back-End Web Dev-IT" http://t.co/etneGJ2XcY #Jobs #FullTime

Latest via Twitter

RSS Feed | Custom RSS Feed



Contact

**Robust CFScript Suport For Tags In ColdFusion 11** 

**Projects** 

Posted February 24, 2014 at 7:33 AM by Ben Nadel

Tags: ColdFusion

Home

Beta

Over the past several releases of ColdFusion, the support for CFScript have been getting much better. In fact, I write most of my ColdFusion code in CFScript; but, the CFScript feature set does leaves something to be desired. With ColdFusion 11 Beta, however, it looks like Adobe has finally given us full (enough) CFScript support for CFML tags.

The syntax for the ColdFusion tag support in CFScript is rather straightforward. For tags that have bodies, the format is:

cfTagName( attribute-pairs\* ) { ... }

... and for tags that do not have bodies, the format is:

cfTagName( attribute-pairs\*);

These tags can be nested in the same way that you would nest CFML tags in your non-script code (see demo below).

For the ColdFusion tags that have bodies, the body of the tag may be associated with a new output buffer. Meaning, if you write output within the context of a CFScript-based tag, the content may or may not get written to the page buffer; the difference in outcome depends on the behavior of the given tag. CFSaveContent and CFThread are examples from prior releases of ColdFusion that have already demonstrated this behavior.

The following is a quick example that demonstrates a ColdFusion tag that consumes its output buffer (CFXml), a ColdFusion tag that consumes nested tags (CFHttp and CFHttpParam), and a ColdFusion tag that has no body (CFContent):

<!--- NOTE: ColdFusion 11 was in BETA at the time of this writing. ---> <cfscript>

// Define our friends to be converted into XML.

MY EXPERIENCE AngularJS Google









**Back-End Web Developer-Information Technologist** 

```
friends = \Gamma
            {
                 name: "Sarah",
 8
                 age: 47
            },
            {
                 name: "Joanna",
                 age: 35
            },
            {
                 name: "Kim",
                 age: 39
            }
        ];
        // Create a short-hand for the buffer output to make the CFXML
        // body a bit more readable.
        add = writeOutput;
24
        // When you use the ColdFusion tags in CFScript, the body of the
26
        // becomes an output buffer to which you can write the output-body
        // of the tag.
        cfxml( variable = "doc" ) {
28
            add( "<Friends>" );
30
            for ( friend in friends ) {
34
                 add( "<Friend age='#friend.age#'>" );
                 add( friend.name );
                 add( "</Friend>" );
            }
38
39
            add( "</Friends>" );
40
        } // END: cfxml.
43
        // Log the XML document to the "remote" service using CFHTTP.
45
        cfhttp(
            result = "apiResponse",
            method = "post",
            url = "http =//127.0.0.1:8500#cgi.script_name#.logger.cfm",
49
            getAsBinary = "yes"
            ) {
            cfhttpParam(
                type = "header",
54
                 name = "X-Sent-By",
                 value = "ColdFusion11"
            );
58
            cfhttpParam(
                type = "body",
60
```

## LOOKING FOR A GREAT JOB?

Michigan State University University
Advancement Web Information Technologist
The Back-End Web Developer-Information
Technologist will play an important role in
connecting backend data and technologies
to front-end web interfaces for University
Advancement, to deliver....

### **Recent Blog Comments**



### Mark James

Feb 27, 2014 at 3:28 PM

Encountered "(. Incorrect Select Statement, Expecting a 'FROM', But Encountered '(' Instead, A Select Statement Should Have a 'FROM' Construct.

I found this same issue when trying to use MID() in a cfquery of a query (PDF Solr Collection). I've been going nuts trying to find away around this problem all day. I need part of the date string in ... read »



#### Dave Gruska

Feb 27, 2014 at 2:45 PM

#### Lazy Loading Image With AngularJS

Fantastic code, Ben. Thanks - this really speeds up lazy loading significantly within an ng-repeat. One thing I noticed, though, was that it was taking a while before any images showed up above the ... read »



#### Radoslav Sandov

Feb 27, 2014 at 11:47 AM

# Using Underscore.js Templates To Render HTML Partials

because I wanted to use asignmet of external templates like: <code> <script type="text/template" id="templateid" src="template.js"></script> <code& ... read >> </script> <code& ... read >> </script> </scrip



#### Boyd

Feb 27, 2014 at 11:00 AM

# Preventing Cross-Site Request Forgery (CSRF / XSRF) With AngularJS And ColdFusion

Thanks man, I love how I never have to search for too long... ..in this case my search was about 10 seconds on google to find yet another useful post from you. lol... You guys rock!:) There is a jQ ... read »



### sergio

Feb 27, 2014 at 10:49 AM

Using A Name Suffix In ColdFusion's CFMail Tag

Pretty easy right! And, just about all ColdFusion tags can be used this way; though, I wasn't able to get CFLoop and CFTimer to work properly (not that those are particularly meaningful tags in a CFScript context).

The ColdFusion tag attributes can be provided as a comma-delimited list of key-value pairs; or, as a precomposed attributeCollection set:

```
<!--- NOTE: ColdFusion 11 was in BETA at the time of this writing. --->
   <cfscript>
        // Define all of the attributes first. This allows you to
        // conditionally build up the attributes to be used.
        attributes = {
6
            name: "asyncCode",
            action: "run",
8
9
            thisVar: "Hello",
            thatVar: "World"
        };
        // Invoke script-based tag with collection.
14
        cfthread( attributeCollection = attributes ) {
            thread.echoThis = thisVar:
            thread.echoThag = thatVar;
18
19
        }
20
        // Join and output.
        cfthread( name = "asyncCode", action = "join" );
24
        writeDump( cfthread );
   </cfscript>
attributes.cfm hosted with by GitHub
                                                                                   view raw
```

In addition to the generic ColdFusion tag syntax, ColdFusion 11 Beta also provides a convenience function - queryExecute() - specifically for streamlining SQL execution. In previous versions of ColdFusion, we could execute database queries within CFScript by using the Query.cfc component. This always felt a bit junky, which is why I (and many others), still use CFML tags when it comes to data gateway components.

The new CFML/CFScript syntax continues to fall short when it comes to the CFQuery tag. This is due to the commingling of the CFQuery's output buffer with the nested CFQueryParam tags. The queryExecute() function tries to bridge this gap by providing a native method that combines SQL, query params, and tag attributes in the same function signature.

Hello, I am new to coldfusion, I have a problem with sending mail within the code I want to put the values ??of a specific mail server, SMTP, USER, PASSWORD, PORT. ETC. Thank you. ... read »



#### Using A Name Suffix In ColdFusion's CFMail Tag

Hello, I am new to coldfusion, I have a problem with sending mail within the code I want to put the values ??of a specific mail server, SMTP, USER, PASSWORD, PORT. ETC. Thank you. ... read »



#### Using A Name Suffix In ColdFusion's CFMail Tag

Hello, I am new to coldfusion, I have a problem with sending mail within the code I want to put the values ??of a specific mail server, SMTP, USER, PASSWORD, PORT. ETC. Thank you. ... read »



# Using The Timeout Attribute With CFHttp In ColdFusion To Limit Blocking

I don't think I've ever used that attribute before ... glad you posted this. Cheers! ... read »

# ColdFusion Server Monitor

www.fusion-reactor.com/ proactive monitoring on CF 8,9 & 10 download FusionReactor today!



In the following code, I demonstrate the previously available approach, the new CFML/CFScript approach, and then the new queryExecute() approach:

```
<!--- NOTE: ColdFusion 11 was in BETA at the time of this writing. --->
   <cfscript>
3
4
       // Previous CFScript implementation of CFQuery.
       getFriends = new Query(
        sql = "
6
               SELECT
8
9
              FROM
                 friend
10
           id > :id
              ORDER BY
               id ASC
14
       datasource = "testing"
16
       );
18
       getFriends.addParam(
19
        name = "id",
20
          value = 1,
           cfSqlType = "cf_sql_integer"
24
       writeDump( var = getFriends.execute().getResult(), label = "Friends" );
26
28
30
31
       // New CFScript implementation of CFQuery.
       cfquery(
34
          name = "friends",
           datasource = "testing"
36
         ) {
           writeOutput( "
38
39
            SELECT
40
           FROM
41
           friend
42
              WHERE
43
44
               id >
           ");
45
46
           cfqueryparam( value = 1, cfSqlType = "cf_sql_integer" );
47
48
49
           writeOutput( "
50
            ORDER BY id ASC
           ");
53
       }
54
       writeDump( var = friends, label = "Friends" );
56
```

```
58
60
61
62
       // New CFScript implementation of CFQuery.
63
64
       // NOTE: When passing the SQL as a tag argument, I do not believe
       // that it is possible to actualy use query pamaters, which is why
65
       // I am hard-coding the "1" in the WHERE clause.
67
       cfquery(
           name = "friends",
68
           datasource = "testing",
           sq1 = "
70
           SELECT
73
               FROM
74
               friend
               WHERE
           id > 1
76
            ORDER BY
             id ASC
78
79
       );
80
81
82
        writeDump( var = friends, label = "Friends" );
83
84
85
86
87
88
89
       // Alternate new function implementation for CFQuery.
90
       // NOTE: The last two arguments are optional.
91
92
        friends = queryExecute(
93
94
               SELECT
95
              FROM
96
           friend
97
98
           WHERE
           id > :id
99
100
            ORDER BY
              id ASC
101
           {
              id: {
104
               value: 1,
                 cfSqlType: "cf_sql_integer"
106
               }
107
108
         },
109
          {
110
               datasource: "testing"
          }
        writeDump( var = friends, label = "Friends" );
114
116 </cfscript>
```

I have to say, as someone who has always questioned whether or not I could ever give up the CFQuery tag (the tag-based CFQuery tag), the queryExecute() function does seems rather nice. It gets rid of all the ceremony required by the Query.cfc component and still keeps the logic mostly readable. Could this spell the end of all CFML tags for my non-UI (User Interface) related code?

**NOTE**: The saving grace of the CFScript-based query is the fact that ColdFusion natively allows for multi-line strings. This allows a query statement to be formatted correctly with out the ceremony of string concatenation or line-break escaping.

While the new CFScript tag syntax does make just about every construct in the ColdFusion language available, there are a few notable tags that we have all been waiting for!

```
<!--- NOTE: ColdFusion 11 was in BETA at the time of this writing. --->
    <cfscript>
        // Define page settings. CFSettings support finally in CFScript!
        cfsetting(
            requestTimeout = 2,
            showDebugOutput = true
        );
8
9
        // Define response headers. CFHeader support finally in CFScript!
        cfheader(
            name = "X-Served-By",
            value = "ColdFusion 11 Beta"
18
        );
19
24
        // Set new cookies. CFCookie support finally in CFScript!
26
        cfcookie(
27
            name = "coldFusionLives",
28
            value = "You bet your @$$",
            expires = "never"
        );
34
        // Execute binaries. CFExecute support finally in CFScript!
38
39
        cfexecute(
40
            variable = "standardOutput",
            name = "echo",
41
            arguments = "What what!",
42
43
            timeout = 1
44
        );
45
46
```

```
47
48
49
50
        // Build XML documents (via buffer). CFXML support finally in
        // CFScript. It's not quite as nice looking at E4X; however, it's
         // a heck of a lot better than xmlParse().
         cfxml( variable = "doc" ) {
54
             writeOutput( "<Numbers>" );
56
            for ( i = 1 ; i < 5 ; i++ ) {
59
                 writeOutput( "<Number>#i#</Number>" );
60
61
62
             writeOutput( "</Numbers>" );
64
66
67
68
69
70
        // Generating PDFs. CFDocument support finally in CFScript.
74
         // ... um, yay, I guess.
         cfdocument(
76
            format = "pdf",
            filename = expandPath( "./cf11.pdf" ),
 78
            overwrite = true
             ) {
 79
80
             cfdocumentItem( type = "footer" ) {
81
82
                 writeOutput( "Page #cfdocument.currentPageNumber#" );
83
             }
85
86
             cfdocumentSection() {
87
88
                 writeOutput( "<h1>ColdFusion 11</h1>" );
89
90
91
92
93
             cfdocumentSection() {
                 writeOutput( "<h1>Getting Started</h1>" );
95
96
97
98
99
         }
100
102
104
        // Process images. While there are a lot of CFIMage methods that
106
```

```
// have been available, I think this is the first time that the
        // "WriteToBrowser" action is available in CFScript!
108
        cfimage(
            source = "./goose-duck.jpg",
110
            action = "writeToBrowser",
            width = 100
114
118
119
        // There are other ways to build a dynamic invocation signature
120
        // (such as constructing an argumentCollection object). However,
        // I just wanted to see if this would work with cfInvoke.
        // NOTE: The ColdFusion 11 Beta documentation states that these
124
        // functions are not available; so, don't use them as they may
126
        // be removed in the final release.
        cfinvoke(
           returnVariable = "result",
128
            method = "sum"
            ) {
130
            // Dynamically build up the invocation arguments.
            for ( i = 1 ; i <= 10 ; i++ ) {</pre>
134
                 cfinvokeArgument( name = i, value = i );
            }
138
139
140
141
        // I am the method we are invoking with a dynamic number of args.
142
        public string function sum() {
144
            // NOTE: Totally overkill (and inefficient) approach - just
            // using reduce since it's new in ColdFusion 11.
146
            return(
147
148
                arguments.reduce(
                   function( result, item, index, collection ) {
150
                         return( result + item );
            },
154
                 )
            );
156
158
        }
159
160
164
        // Invoke a ColdFusion custom tag from CFScript! I don't really
        // use custom tags anymore; but, this is an interesting possability.
166
```

I will probably never jump through the necessary hoops required to use CFDocument in CFScript. I only have it in this demo as a means to further illustrate using nested CFScript tags with output buffers. And, CFXmI, while not the prettiest, is still better than what we had before.

While ColdFusion 11 has made [just about] every CFML tag available in CFScript, this update does leave us with a number of redundant constructs. We now have several tags that can be defined in multiple ways. The following is a non-exhaustive demonstration of both the existing and the new approaches to select tags:

```
<!--- NOTE: ColdFusion 11 was in BETA at the time of this writing. --->
    <cfscript>
 3
        // Previous CFScript implementation of CFThread.
        thread
            action = "run",
 6
            name = "AsyncCode"
 8
9
            thread.ben = "Jamin";
10
        }
14
        // NOTE: This difference applies to other body-style tags like:
        // - CFLock.
        // - CFTransaction.
17
        // - CFSaveContent.
18
        // New CFScript implementation of CFThread.
        cfthread(
            action = "run",
24
            name = "AsyncCode2"
            ) {
            thread.word = "to your mother!";
28
29
        }
30
        // Join thread using existing syntax.
        thread name = "AsyncCode" action = "join";
34
        // Join thread using new syntax.
        cfthread( name = "AsyncCode2", action = "join" );
36
38
40
41
42
```

```
43
        // Previous CFScript implementation of CFHttp.
        apiRequest = new Http(
44
45
         result = "apiResponse",
            method = "post",
46
          url = "http =//127.0.0.1:8500#cgi.script_name#.logger.cfm",
47
            getAsBinary = "yes"
48
49
        );
50
        apiRequest.addParam(
           type = "header",
            name = "X-Sent-By",
            value = "ColdFusion11"
54
        );
56
        apiResponse = apiRequest.send();
58
59
60
        // New CFScript implementation of CFHttp.
61
        cfhttp(
            result = "apiResponse",
62
            method = "post",
63
            url = "http =//127.0.0.1:8500#cgi.script_name#.logger.cfm",
            getAsBinary = "yes"
65
66
            ) {
67
68
            cfhttpParam(
                type = "header",
69
               name = "X-Sent-By",
70
               value = "ColdFusion11"
           );
        } // END: cfhttp.
74
76
78
79
80
81
        // Previous CFScript implementation of CFParam that is totally
        // broken and you should only use this syntax if you don't like
82
        // your fellow programmers. No, for real, don't use this syntax.
83
        // It's not cool. And people will make fun of you.
84
        param url.groove = "sauce";
85
86
        // Previous CFScript implementation of CFParam.
87
        param name = "url.ben" type = "string" default = "jamin";
88
89
        // New CFScript implementation of CFParam.
90
        cfparam( name = "url.foo", type = "string", default = "bar" );
91
92
93
94
95
96
97
        // Previous CFScript implementation of CFInclude.
98
99
        include "./code.cfm";
100
101
        // New CFScript implementation of CFInclude.
        cfinclude( template = "./code.cfm" );
```

```
106
107
108
109
         // Previous CFScript implementation of CFThrow.
110
         throw( type = "Fail", message = "Ooops." );
         // New CFScript implementation of CFThrow.
         cfthrow( type = "Fail", message = "Ooops." );
114
118
119
         // Previous CFScript implementation of CFExit.
120
         exit "exitTemplate";
         // New CFScript implementation of CFExit.
         cfexit( method = "exitTemplate" );
124
128
129
130
        // Previous CFScript implementation of CFAbort.
         abort "Something went wrong";
134
         // New CFScript implementation of CFAbort.
         cfabort( showError = "Something went wrong" );
    </cfscript>
updated-tags.cfm hosted with by GitHub
                                                                                  view raw
```

To be honest, I am not sure which syntax I like better. I am very familiar with using the existing syntax for tags like CFTransaction and CFLock in CFScript. Plus, the color-coding (in SublimeText 2) is much better for the existing syntax, at least for the moment. That said, I do love consistency; so, if I were to start using some of the new tags, which required the new syntax, I'd probably switch over all tags to the new syntax for the sake of consistent formatting.

Like 7 people like this. Sign Up to see what your friends like.

# You Might Also Be Interested In:

• The Elvis Operator vs. IsNull() In ColdFusion 11 Beta

# Looking For a New Job?

<u>View All Jobs</u> | <u>Post A Job</u> »

- Back-End Web Developer-Information Technologist at Michigan State University
- ColdFusion Developer at Nonfat Media
- Mid-to-Senior Level Web Application Developer at SiteVision, Inc.

- Junior-to-Mid Level Web Application Developer at Peavey Electronics
- Full time on site Senior Coldfusion Developer needed at Interactive Sites

25% of job board revenue is donated to Kiva. Loans that change lives - Find out more »

#### **Reader Comments**



Ben Nadel

Feb 24, 2014 at 7:39 AM // reply »

11,694 Comments

80,148 Points

@All,

I should note that both struct pairs and attribute pairs can be defined using either "=" or ":". However, I have chosen to use "=" for attributes and ":" and for structs. Using the colon with the attribute pairs doesn't sit well with me - it sets my spider sense off.



Ben Nadel

Feb 24, 2014 at 8:12 AM // reply »

11,694 Comments

@All,

Also, one thing I forgot to mention is that the CFML tags do not / cannot return values. So, don't try to do something like this:

response = cfhttp() { ... }

It won't compile. In order to get "return" values, you have to use the normal "result", "variable", and "returnVariable" attributes that you would have in normal CFML markup.



## Cfsplender

Feb 24, 2014 at 8:34 AM // reply »

1 Comments

9 Points

Thanks a lot ben, Really awesome updates from adobe .. waiting for it!!



Jean

Feb 24, 2014 at 11:04 AM // reply »

14 Comments

40 Points

It is a shame Adobe did not follow Railo's lead for the basic syntax (no cf in front of the script version of a tag)



#### Kevin Boudloche

Feb 24, 2014 at 12:27 PM // reply »

18 Comments

197 Points

I like the cf leading the script version of the tag, it makes it easy to differentiate a tag-based cfscript use vs a regular function. I also like the added parentheses to wrap the attributes. I hope railo follows suit so that I can use that syntax.



**Aaron Martone** 

Feb 24, 2014 at 1:26 PM // reply »

1 60 Comments 635 Points

Ben, you have too much fun with your code. I can tell, merely by your examples, that you're having lots of fun dissecting through CF11.

Keep up the examples; this singular post has been THE BEST reference for cfscript syntax that I could find online.



## Gert Franz

Feb 25, 2014 at 2:43 AM // reply »

2 Comments 21 Points

@Kevin: we originally implemented the tag based notation in cfscript as the CFML advisory committee proposed it 5 years ago. So in the latest 4.2 update, we extended the syntax to match ACF's version of it. So the following works in Railo:

cfloop(from="1", to="10", index="i") {}

cfloop(from: "1" to: "10" index: "i") {}

loop from="1" to="10" index="i" {}

If possible, we will implement the following syntax as well shortly:

response = cfhttp (...)

Gert



### John Allen

Feb 26, 2014 at 2:17 PM // reply »



@Franz you all totally rule. Railo rulz

Like 7 people like this. Sign Up to see what your friends like.

### Post A Comment

Comment Etiquette: Please do not post spam. Please keep the comments on-topic. Please do not post unrelated questions or large chunks of code. And, above all, please be nice to each other - we're trying to have a good conversation here.

**Author Name:** 

Author Email:

**Author Website:** 

Comment:

Supported HTML tags for formatting:

<strong>bold</strong> <em>italic</em> <code>code</code>

Remember my information

Subscribe to comments

Send me a copy of this comment

Ben Nadel © 2014. All content is the property of Ben Nadel and BenNadel.com