

12_08 Last assignment

In this document, I want to share the fix that I have used to address the bug identified in the last video.

Visit the ColdFusion online documentation

Before getting started, I suggest you take a look at the ColdFusion online documentation to get some information about:

- The variables of type 'list' (<https://helpx.adobe.com/coldfusion/developing-applications/the-cfml-programming-language/using-coldfusion-variables/data-types-developing-guide.html>).
- The 'listFind()' function : (<https://helpx.adobe.com/coldfusion/cfml-reference/coldfusion-functions/functions-l/listfind.html>).


How can you detect if the request targets a page in the 'admin' folder?

To answer that question, you have to remember that the 'onRequestStart()' method of the 'Application.cfc' file accepts one argument. This argument is called 'targetPage'. It gives the 'onRequestStart()' method access to the page targeted by the request. To see the 'targetPage' attribute in action

1. Run the 'admin/main.cfm' page.
2. Once the page has finished loading in the browser, take a look at the 'Execution Time' section of the debug output.

There should be a line indicating that the 'onRequestStart()' method has been called. Notice that this line indicates the value of the 'targetPage' argument that was passed to the method.

Execution Time

Total Time	Avg Time	Count	Template
37 ms	37 ms	1	 /Applications/ColdFusion9/wwwroot/cfTraining/admin/main.cfm
2 ms	2 ms	1	/Applications/ColdFusion9/wwwroot/cfTraining/customTags/admin.cfm
1 ms	1 ms	1	/Applications/ColdFusion9/wwwroot/cfTraining/includes/
1 ms	1 ms	1	CFC[/Applications/ColdFusion9/wwwroot/cfTraining/Ap onRequestStart(/cfTraining/admin/main.cfm)]
72 ms			STARTUP, PARSING, COMPILING, LOADING, & SHUTDOWN
110 ms			TOTAL EXECUTION TIME

Implement access control to the administration application.

To summarize what needs to be done, you have to redirect the user to the 'index.cfm' page if

- The requested page is in the 'admin' directory AND
 - No user is logged in OR the logged in user is not an administrator.
1. Open the 'Application.cfc' file and locate the 'onRequestStart()' method.
 2. Just before the <cfreturn /> tag, write a meaningful comment.
 3. On the next line, create a new <cfif> tag block.
 4. The <cfif> has to check if the requested page is in the 'admin' folder. This is where the 'listFind()' function fits in!

```
<!--- Implement access control to the 'admin' folder --->  
<cfif listFind(arguments.targetPage, 'admin', '/')>  
</cfif>
```

Notice the last argument of the 'listfind()' function. It is a slash (/), so you consider the 'targetPage' argument as a list that uses the slash (/) as delimiter. This is what allows you to access the various parts of the 'targetPage' argument separately.

5. Complete the <cfif> condition to also check if a user is logged-in or if the logged in user is an administrator.
6. In the body of the <cfif> block, use <cflocation> to redirect the user to the home page of the admin site.
7. Don't forget the '?noaccess' URL parameter.

The final code is

```
<!--- Implement access control to the 'admin' folder --->  
<cfif listFind(arguments.targetPage, 'admin', '/') AND (NOT  
    isUserLoggedIn() OR NOT isUserInRole('Administrator'))>  
    <cflocation url="/final/index.cfm?noaccess" />  
</cfif>
```

Notice the use of the parenthesis after the AND keyword to group both 'OR' conditions together.

Modify the 'admin.cfm' custom tag

Since you have moved the access control of the 'admin' folder to the 'onRequestStart()' method of 'Application.cfc', you must now return to the 'admin.cfm' custom tag to remove the access control code from that file.

1. Open the 'customTags/admin.cfm' file
2. Locate the <cfif> block that redirects the user to the 'index.cfm' page.
3. Delete it.

Save the 'Application.cfc' and the 'admin.cfm' files and return to the Admin section of the site to test the bug fix.