

# Utility Function: ListRemove() and ListRemoveNoCase()

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Related Categories: Utility Function

I ran into a problem earlier where I needed to remove the elements of one list from another list I could have worked around it in a couple of ways, but I thought that I'd rather have a function to do this for me.

```
<cffunction name="ListRemove" output="false" returntype="string">
    <cfargument name="string1" type="string" required="true" />
    <cfargument name="string2" type="string" required="true" />
    <cfargument name="scope" type="string" required="false" default="all" />
    <cfargument name="delimiters" type="string" required="false" default="," />

    <cfset var returnValue = "" />
    <cfset var position = 0 />

    <cfif NOT ListFindNoCase("one,all", arguments.scope)>
        <cfthrow errorcode="ListRemove" message="Invalid argument SCOPE. Valid values are ONE and ALL." />
    </cfif>

    <cfloop list="#arguments.string1#" index="value" delimiters="#arguments.delimiters#">
        <cfset position = ListFind(arguments.string2, value, arguments.delimiters) />

        <cfif position gt 0 AND arguments.scope eq "one">
            <cfset arguments.string2 = ListDeleteAt(arguments.string2, position) />
        <cfelseif position eq 0>
            <cfset returnValue = ListAppend(returnValue, value, arguments.delimiters) />
        </cfif>
    </cfloop>

    <cfreturn returnValue />
</cffunction>
```

And that meant that I needed to make the case insensitive version as well.

```
<cffunction name="ListRemoveNoCase" output="false" returntype="string">
    <cfargument name="string1" type="string" required="true" />
    <cfargument name="string2" type="string" required="true" />
    <cfargument name="scope" type="string" required="false" default="all" />
    <cfargument name="delimiters" type="string" required="false" default="," />

    <cfset var returnValue = "" />
    <cfset var position = 0 />

    <cfif NOT ListFindNoCase("one,all", arguments.scope)>
        <cfthrow errorcode="ListRemove" message="Invalid argument SCOPE. Valid values are ONE and ALL." />
    </cfif>

    <cfloop list="#arguments.string1#" index="value" delimiters="#arguments.delimiters#">
        <cfset position = ListFindNoCase(arguments.string2, value, arguments.delimiters) />

        <cfif position gt 0 AND arguments.scope eq "one">
            <cfset arguments.string2 = ListDeleteAt(arguments.string2, position) />
        <cfelseif position eq 0>
            <cfset returnValue = ListAppend(returnValue, value, arguments.delimiters) />
        </cfif>
    </cfloop>
```

```
<cfreturn.returnValue />  
</cffunction>
```

Click more for a view of example results against some test data.

#### Data

listOne 1,2,2,3,4,a,b,C,D

listTwo 0,1,2,T,D,B

#### ListRemove()

ListRemove(listOne, listTwo) 3,4,a,b,C

ListRemove(listTwo, listOne) 0,T,B

ListRemove(listOne, listTwo, "one") 2,3,4,a,b,C

ListRemove(listTwo, listOne, "one") 0,T,B

#### ListRemoveNoCase()

ListRemoveNoCase(listOne, listTwo) 3,4,a,C

ListRemoveNoCase(listTwo, listOne) 0,T

ListRemoveNoCase(listOne, listTwo, "one") 2,3,4,a,C

ListRemoveNoCase(listTwo, listOne, "one") 0,T