Example of inserting a Struct() into a database using keys

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A while ago a colleague and I were working on a timesheet application in Flex. The idea was that you could commit a custom timebar object, generated in flex, and it would update the dataset in the back end using the ColdFusion flex gateway.

I came across the code recently, and decided to tidy it up a bit, and make the query dynamic, based on the Struct contents. The obvious limitation to this is that your Struct and your database schema have to match exactly.

I won't go into the Flex application here, but I've emulated its input arguments here with a pre-populated structure.

```
<cfscript>
timesheetTask = StructNew();
StructInsert(timesheetTask, "employeeid", '36');
StructInsert(timesheetTask, "timesheetDT", '0');
StructInsert(timesheetTask, "projectid", '6');
StructInsert(timesheetTask, "weekid", '25');
StructInsert(timesheetTask, "taskid", '39');
StructInsert(timesheetTask, "hours", '8');
StructInsert(timesheetTask, "comment", 'Comments for this task live here');
StructInsert(timesheetTask, "szStatus", '1');
StructInsert(timesheetTask, "iFirstLineApproval", '23');
StructInsert(timesheetTask, "iSecondLineApproval", '34');
StructInsert(timesheetTask, "iCurrentApprover", '');
StructInsert(timesheetTask, "szRejectReason", '');
StructInsert(timesheetTask, "szDescription", '');

updateTimesheet = createObject("component", "timesheet");
updateTimesheet.updateTask(timesheetTask);
</cfscript>
```

Notice that this code also calls the CFC object at the end. The data itself isn't massively important, it's a time object for recording tasks.

Next we have the function, which accepts a Struct() argument called 'taskStruct'. I then loop through the structure, and populate a SQL query using the keys from a collection. The only logic is a check to see if it is the last structure element, as this controls the ',' placement.

```
me="updateTask" access="remote" returntype="string" hint="Creates a record for tim
               <cfargument name="taskStruct" type="struct" required="yes">
                               <cfset var count = 0>

                     <cfdump var="#arguments.taskStruct#">
          <cfset variables.structSize = structCount(arguments.taskStruct)>

                    <cfquery datasource="#application.dsn#">
                            INSERT INTO [dbo].[timesheet]
                (<cfloop collection="#arguments.taskStruct#" item="key">
                                            [#key#]
                                    <cfset count = count + 1>
                        <cfif count LT variables.structSize>,</cfif>
                                        </cfloop>)

                                 <cfset count = 0>

           VALUES(<cfloop collection="#arguments.taskStruct#" item="key">
                                 '#arguments.taskStruct[key]#'
                                 <cfset count = count + 1>
                    <cfif count LT variables.structSize>,</cfif>
                                       </cfloop>)
                                      </cfquery>

                                    <cfreturn true>
                                  </cffunction>
```

That will insert your Struct into a database, in small and tidy manner. It was somewhere around here that we started using cfproperty tags, and creating strongly typed objects for Flex.