

Question

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REST and IO redirection

Problem: I have a REST broker, and if I hit a code block, which does IO redirection, the REST reply becomes broken in one of the following ways:

- Binary output
- No output
- First 4096 characters of the reply are missing

Consider the following REST broker:

```
Class A.REST Extends %CSP.REST
{

XData UrlMap
{
<Routes>
<Route Url="/Test/:redirect" Method="GET" Call="Test"/>
</Routes>
}

ClassMethod Test(Redirect As %Boolean = {$$$YES}) As %Status
{
    Set str = $TR($J("",4098)," ","1") // Get a string with the length of 4098 symbols

    Do:Redirect ..OutputToStr($Classname(), "UnrelatedAction")
    Write str
    Return $$$OK
}

ClassMethod UnrelatedAction()
{
    Set a=1
}

/// Executes actions and returns device output <br>
/// pObj - OREF or class<br>
/// pMethod - instance or class method to execute respectively<br>
/// pArgs - additional arguments
ClassMethod OutputToStr(pObj, pMethod, pArgs...) As %String [ ProcedureBlock = 0 ]
{
    try {
        set str=""

        //Redirect IO to the current routine - makes use of the labels defined below
        use $io::("^"_$ZNAME)

        //Enable redirection
```

```

do ##class(%Device).ReDirectIO(1)

    if $isobject(pObj) {
        do $Method(pObj,pMethod,pArgs...)
    } elseif $$$comClassDefined(pObj) {
        do $ClassMethod(pObj,pMethod,pArgs...)
    }

//Disable redirection
do ##class(%Device).ReDirectIO(0)
} catch ex {

    if ##class(%Device).ReDirectIO() {
        do ##class(%Device).ReDirectIO(0)
    }
    set str = ""
}

quit str

//Labels that allow for IO redirection
//Read Character - we don't care about reading
rchr(c)    quit
//Read a string - we don't care about reading
rstr(sz,to) quit
//Write a character - call the output label
wchr(s)    do output($char(s)) quit
//Write a form feed - call the output label
wff()      do output($char(12)) quit
//Write a newline - call the output label
wnl()      do output($char(13,10)) quit
//Write a string - call the output label
wstr(s)    do output(s) quit
//Write a tab - call the output label
wtab(s)    do output($char(9)) quit
//Output label - this is where you would handle what you actually want to do.
// in our case, we want to write to str
output(s)  set str=str_s quit
}

}

```

After I create a webapplication (name /test) with this broker, I expect that these two requests:

```

http://localhost:57772/test/Test/0
http://localhost:57772/test/Test/1

```

Would return the same result (namely, a string containing 4098 symbols "1").

But in reality the second call would return only 2 symbols "1". The only difference between calls, is that method OutputToStr, which contains IO redirection gets called.

How do I modify OutputToStr method, so that it does not affect REST output?

\$zv Cache for Windows (x86-64) 2016.1 (Build 656U) Fri Mar 11 2016 17:42:42 EST

[Download GitHub Gist with code.](#)

[#ObjectScript](#) [#REST API](#) [#Caché](#)

Source URL: <https://community.intersystems.com/post/rest-and-io-redirection>