#contentWrapper #fs, #sidebarContent #fs, #contentWrapper div [id * = 'myExtraContent'], #sidebarContent div [id * = 'myExtraContent'] {display: block;}

The Kermith workshop (https://translate.googleusercontent.com/translate_c? depth=1&hl=en&prev=search&rurl=translate.google.com&sl=fr&sp=nmt4&u=htt

Rest API of Centreon with LiveCode

Article créé ou modifié le : 18/1/2018

web : SUPPORTED clapi: SUPPORTED



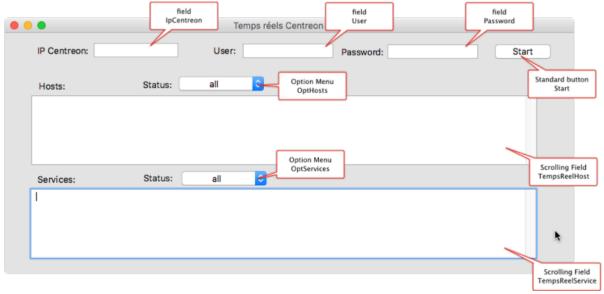
Here's a program for budding developers like me to use Centreon's Rest API with a graphical interface. We will use LiveCode, a fast multiplatform development environment. The realized program will be able to work as well on windows, Mac OS or Linux. In spite of its somewhat peculiar language, we will realize a summary interface of a real time Centreon.

1 Prerequisite

We will use LiveCode Community 9. We will need a Centreon monitoring server with an account that is allowed to make Rest API requests.

2 Creating the interface

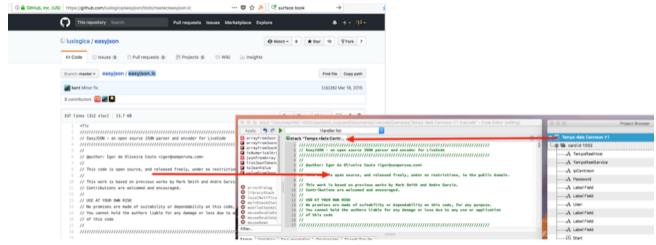
Our interface will be relatively simple for the moment. We will have a single window called stack.



Creating the interface

3 The code of the interface

It will be necessary to add the library for the management of the JSON results. You will find this library at this address https://github.com/luxlogica/easyjson (https://github.com/luxlogica/easyjson(https://translate.google.com&sl=fr&sp=nmt4&u=https://github.com/luxlogica/easyjson&xid=25657,15">https://github.com/luxlogica/easyjson&xid=25657,15. Just copy the contents of the easyjson.lc file and paste it into the program project.



Adding the library

Currently our project is reduced to its simplest expression:

- setting the Api Rest connection
- password management (you have to recognize a little twisted with LiveCode)
- Host and service status management
- launching the order with the result.

3.1 setting the Api Rest connection

We will need the IP address of the Centreon server, the user and his password which is entitled to Api Rest. There will also be the password management of the Field password object.

```
we keyDown pKeyName
 put the hiddenText of me into temp
 put pKeyName after temp
 set the hiddenText of me to temp
 put "*" after me
 put temp
end keyDown
on backspaceKey
 set the hiddenText of me to empty
 set the text of me to empty
end backspaceKey
```

For the preparation of the request, we will use the button object. We recover the authentication token before issuing the command to obtain the real time.

on mouseUp pMouseButton

```
- empty fields
put empty into fld "TimeReelHost"
put empty into fld "TimeReelService"
put the fld "IpCentreon" into tlpCentreon
put the fld "User" into tUser
put the hiddenText of fld "Password" into tPassword
put "Accept: application / json, text / plain, text / event-stream" & cr about couchHeaders
put "Content-Type: application / x-www-form-urlencoded" after couchHeaders
set httpheaders to couchHeaders
put "username =" & tUser & "& password =" & tPassword into tData
put "http: //" & tlpCentreon & "/centreon/api/index.php?action=authenticate" into tUrl
post tData to URL tUrl
```

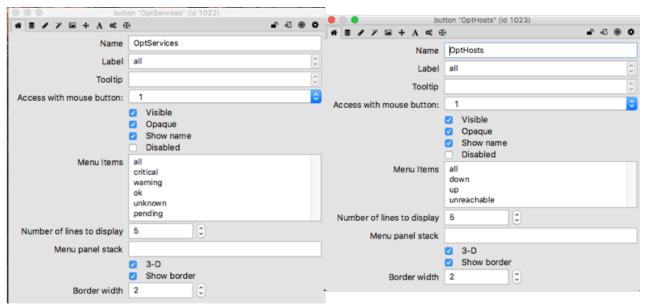
```
put JSONToArray ( the urlResponse ) into tAuthenticate
put tAuthenticate [ "authToken" ] into tToken

put "Content-Type: application / json" & cr about couchHeaders
put "centeron-auth-token:" after couchHeaders
put tToken after couchHeaders
set httpheaders to couchHeaders
```

..... ..

end mouseUp

Before going any further, you will add two Option Menu OptHosts and OptServices objects that correspond to different states of hosts and services.



object properties Option Menu

And here is the code for OptHosts

global tOptHosts

- Sent when a menu item is picked from the menu option

```
on menuPick pItem
switch pItem
case "all"
put "& status = all" into tOptHosts
break
box "down"
put "& status = down" into tOptHosts
break
case "up"
put "& status = up" into tOptHosts
break
case "unreachable"
put "& status = unreachable" into tOptHosts
break
```

end switch

end menuPick

global tOptServices

- Sent when a menu item is picked from the menu option on menuPick pltem switch pltem case "all" put "& status = all" into tOptServices break case "warning" put "& status = warning" into tOptServices break case "critical" put "& status = critical" into tOptServices break case "ok" put "& status = ok" into tOptServices break case "pending" put "& status = pending" into tOptServices break case "unknown" put "& status = unknown" into tOptServices break end switch end menuPick We still have to add the code in the button object that will display the real time. global tOptHosts global tOptServices - Sent when the mouse is released by clicking - pMouseButton which mouse button was pressed on mouseUp pMouseButton - empty fields put empty into fld "TimeReelHost" put empty into fld "TimeReelService" put the fld "IpCentreon" into tlpCentreon put the fld "User" into tUser put the hiddenText of fld "Password" into tPassword put "Accept: application / json, text / plain, text / event-stream" & cr about couchHeaders put "Content-Type: application / x-www-form-urlencoded" after couchHeaders set httpheaders to couchHeaders put "username =" & tUser & "& password =" & tPassword into tData put "http: //" & tlpCentreon & "/centreon/api/index.php?action=authenticate" into tUrl post tData to URL tUrl put JSONToArray (the urlResponse) into tAuthenticate

put tAuthenticate ["authToken"] into tToken

put "Content-Type: application / json" & cr about couchHeaders
put "centeron-auth-token:" after couchHeaders
put tToken after couchHeaders
set httpheaders to couchHeaders

put "http://" & tlpCentreon & "/centreon/api/index.php?object=centreon_realtime_hosts&action=list" & tOptHosts into tUrlHost

put URL tUrlHost into fld "TimeReelHost"

put "http: //" & tlpCentreon & "/centreon/api/index.php?object=centreon_realtime_services&action=list" & tOptServices into tUrlService

put URL tUrlService into fld "TimeReelService"

end mouseUp

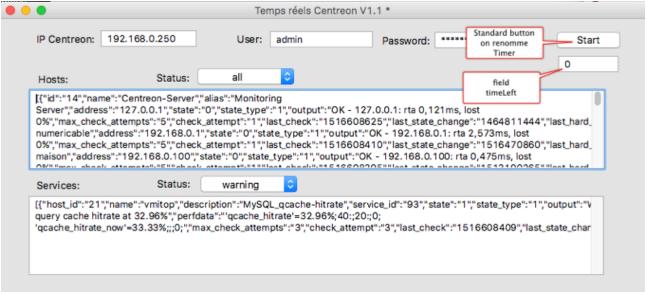
Attention the number of display of objects will be limited to 30, to increase this limit, it will be necessary to play with the variable limit. We'll see more features of the Rest Centreon API soon. You can download the first version of my program (https://translate.googleusercontent.com/translate_c?

<u>depth=1&hl=en&prev=search&rurl=translate.google.com&sl=fr&sp=nmt4&u=http://www.sugarbug.fr/resources/LiveCode/API-Rest/Temps-re%25CC%2581els-Centreon-</u>

 $\underline{V1.livecode\&xid=25657,15700022,15700124,15700149,15700186,15700191,15700201\&usg=ALkJrhjy-MSTTR-pRrnw0Dj21-X_oC9b1g)}.$

4 Adding a timer for queries

Let's improve our program by adding a timer to execute queries automatically every minute. We will add a field object named timeLeft. the start button will be renamed timer



adding a timer

Any part of the code that makes the API Rest request will be copied to a function called RequireAPIRest. We'll add another function for the one-minute timer, which will be called timerCountDown

global countDownValue

global tOptHosts

global tOptServices

on timerCountDown

subtract 1 from CountDownValue
if countDownValue> 0 then

```
put countDownValue into field "timeLeft"
   send "timerCountDown" to me in 1 sec
  else
   if the label of button "Timer" = "Stop" then
    RequeteAPIRest
    put 60 into countDownValue
    put countDownValue into field "timeLeft"
    send "timerCountDown" to me in 1 sec
   else
    put 0 into countDownValue
    put countDownValue into field "timeLeft"
   end if
  end if
end timerCountDown
On requestAPIRest
  - empty fields
  put empty into fld "TimeReelHost"
  put empty into fld "TimeReelService"
  put the fld "IpCentreon" into tlpCentreon
  put the fld "User" into tUser
  put the hiddenText of fld "Password" into tPassword
  put "Accept: application / json, text / plain, text / event-stream" & cr about couchHeaders
  put "Content-Type: application / x-www-form-urlencoded" after couchHeaders
  set httpheaders to couchHeaders
  put "username =" & tUser & "& password =" & tPassword into tData
  put "http: //" & tlpCentreon & "/centreon/api/index.php?action=authenticate" into tUrl
  post tData to URL tUrl
  put JSONToArray (the urlResponse) into tAuthenticate
  put tAuthenticate [ "authToken" ] into tToken
  put "Content-Type: application / json" & cr about couchHeaders
  put "centeron-auth-token:" after couchHeaders
  put tToken after couchHeaders
  set httpheaders to couchHeaders
  put "http: //" & tlpCentreon & "/centreon/api/index.php?object=centreon_realtime_hosts&action=list" & tOptHosts into tUrlHost
  put URL tUrlHost into fld "TimeReelHost"
  put "http: //" & tlpCentreon & "/centreon/api/index.php?object=centreon_realtime_services&action=list" & tOptServices into
tUrlService
  put URL tUrlService into fld "TimeReelService"
end RequireAPIRest
Let's change the timer button code
global tOptHosts
global tOptServices
global countDownValue
```

- Sent when the mouse is released by clicking

- pMouseButton which mouse button was pressed

on mouseUp pMouseButton
 if the label of button "Timer" = "Start" then
 set the label of the button "Timer" to "Stop"
 put 60 into countDownValue
 put countDownValue into field "timeLeft"

send "timerCountDown" to me in 1 sec

RequeteAPIRest

else

set the label of button "Timer" to "Start"
put 0 into countDownValue
put countDownValue into field "timeLeft"

end if

end mouseUp

The program is now modified, during the first request we trigger a timer that will execute an API Rest request automatically every minute. To stop automatic queries, simply click the button again. You can download version 1.1 of my_program (https://translate.googleusercontent.com/translate_c?

<u>depth=1&hl=en&prev=search&rurl=translate.google.com&sl=fr&sp=nmt4&u=http://www.sugarbug.fr/resources/LiveCode/API-Rest/Temps-re%25CC%2581els-Centreon-</u>

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