DYNAMIC FUNCTIONS o FUNCIONES DINAMICAS

Las **funciones** dinámicas o **functions** en **QuickWin** sirven para realizar lógica que **QuickWin** no puede resolver. Son dinámicas porque su parámetro "**INPUT**" es cualquier **JSON** válido. Las funciones por si sola no pueden ser usadas en **QuickWin**. Para poderlas usar deberían ser configuradas vía **INVOKE**. Sin embargo existe otro componente llamado **DEFINED FUNCTIONS**, que permite llamar a cualquiera de ellas sin necesidad de configurar un **INVOKE** de forma interna por **QuickWin**.

REQUEST

Ejemplo de una llamada a una función dinámica.

POST http://192.168.37.148:8101/quickWin/executeDynamycFunctions HTTP/1.1

```
{
   "idFunction": "1",
   "input": {
        "param1": 3,
        "param2": 7
   }
}
```

idFunction: Id de la función configurada.

input: recibe un objeto JSON con los parámetros. Este objeto JSON es enviado a la función configurada.

Nota: el nombre de parámetro de la función del ejemplo (**jsonParams**) puede ser cualquiera, sin embargo todas estas funciones solo reciben 1 parámetro.

```
function suma(jsonParams) {
   var params = JSON.parse(jsonParams);
   var a = params.param1;
   var b = params.param2;
   var sum = a + b;
   var text = '{ "suma" : '+sum+' }';
   return text;
}
```

RESPONSE

```
{
    "success": true,
    "message": "OK",
    "code": 0,
    "result": {"suma": 10}
}
```

success: true si fue exitosa la ejecución.

message: mensaje de éxito o error.

result: es un objeto JSON dinámico formado por el RETURN de la función. También puede ser un solo valor.

CLEAR CACHE

Cualquier cambio en la función requiere **refresh**.

GET http://192.168.37.146:8101/quickWin/clearDynamycFunctionByld/1

```
{"refreshMessage":"Refresh en progreso","updated":true,"functions":null}
```

##

REQUEST DE FUNCION USADA POR FUNCION DEFINIDA.

Nota: Una función para que pueda ser llamada por un **DEFINED FUNTION** debe cumplir cierto formato, como explicamos mas adelante. Por lo pronto, aquí hay un ejemplo de un contrato de servicio.

EJEMPLO

POST http://192.168.37.148:8101/quickWin/executeDynamycFunctions HTTP/1.1

```
"[{\"offerCode\":\"3653\",\"name\":\"Claro video costo
\label{lem:gpon} $$\operatorname{GPON}'', ''\ chernloffer'', ''\ chernloffer'': ''23\\/02\\/2021\'', ''\ chernloffer'' chern
\":\"\",\"origin\":\"LOCAL\",\"price\":
{\"taxes\":\"\",\"discounts\":\"\",\"unit\":\"DOLLARS\",\"amountBeforeTaxes\":10
.0,\"total\":8.8},\"complexProducts\":\"\",\"products\":{\"product\":
[{\"productId\":\"PACK-
DIAS\",\"description\":\"3655\",\"shortName\":\"10000030\",\"expiryTime\":30,\"e
xpiryTimeUnit\":\"dias\"}]},\"fundingInfo\":\"\",\"alias\":{\"category\":
[{\"name\":\"AMCO\",\"description\":\"Ofertas Externas\",\"alias\":{\"item\":
 \label{locations} $$ [{\make}'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\ma
rDetail\":{\"detail\":
[{\"longDescription\":\"\",\"productType\":\"3236\",\"aditionalComment\":\"Adici
onal\",\"featuresDetails\":\"FIJA\"}]},\"mediaInfo\":[]},
{\"offerCode\":\"185\",\"name\":\"Claro video costo
\label{lem:hfc} $$ HFC'', ''offerType'': ''GeneralOffer'', ''startDate'': ''23\\/02\\/2021\'', ''endDate'': ''23\\/2021\'', ''endDate'': ''23\\'', ''endDate''': ''23\\'', ''endDate'': ''23\\'', ''endDate''': ''23\\'', ''endDate''': ''23\\'', ''endDate''': ''23\\'', ''endDate''': ''23\\'', ''endDate''': ''23\\'', ''endDate''': ''23\\'', ''endDate'''': ''23\\'', ''endDate'''': ''23\\'', ''endDate''''': ''23\\'', '
":\"\",\"origin\":\"LOCAL\",\"price\":
{\"taxes\":\"\",\"discounts\":\"\",\"unit\":\"DOLLARS\",\"amountBeforeTaxes\":10
.0,\"total\":8.8},\"complexProducts\":\"\",\"products\":{\"product\":
[{\"productId\":\"PACK-
DIAS\",\"description\":\"3654\",\"shortName\":\"10000030\",\"expiryTime\":30,\"e
xpiryTimeUnit\":\"dias\"}},\"fundingInfo\":\"\",\"alias\":{\"category\":
[{\"name\":\"AMCO\",\"description\":\"Ofertas Externas\",\"alias\":{\"item\":
 \label{locations} $$ [{\make}'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\ma
rDetail\":{\"detail\":
[{\"longDescription\":\"\",\"productType\":\"2600\",\"aditionalComment\":\"Adici
onal\",\"featuresDetails\":\"FIJA\"}]},\"mediaInfo\":[]},
{\color=0.05$ 
\":\"\",\"origin\":\"LOCAL\",\"price\":
{\text{"taxes}}^{"}, ^{"}, ^{"}
.0,\"total\":8.8},\"complexProducts\":\"\",\"products\":\"\",\"fundingInfo\":\"\
",\"alias\":{\"category\":[{\"name\":\"MCO\",\"description\":\"Ofertas"}
Externas\",\"alias\":{\"item\":
rDetail\":{\"detail\":
[{\"longDescription\":\"\",\"productType\":\"3232\",\"aditionalComment\":\"Adici
onal\",\"featuresDetails\":\"FIJA\"}]},\"mediaInfo\":[]},
{\"offerCode\":\"400132377\",\"name\":\"Suscripcion Claro video mensual 6,39
\label{local-dollars} $$ dollares'', '"offerType'": '"GeneralOffer'', '"startDate'": '"22\\/10\\/2020\", \"endDate \": \"22\\/10\\/2020\", \"endDate \": \"22\\/2020\", \"endDate \"22\\\2020\", \"endDate \"22\\\2020\", \"endDate \"22\\\2020\", \"endDate \"22\\\2020\", \"endDate \"22\\\2020\", \"endDate \"22\\\2020\", \"endDate \"22
ate\":\"\",\"origin\":\"LOCAL\",\"price\":
{\"taxes\":\"\",\"discounts\":\"\",\"unit\":\"DOLLARS\",\"amountBeforeTaxes\":10
.0,\"total\":8.8},\"complexProducts\":\"\",\"products\":{\"product\":
[{\"productId\":\"PACK-
DIAS\",\"description\":\"400132408\",\"shortName\":\"10000030\",\"expiryTime\":3
0,\"expiryTimeUnit\":\"dias\"}]},\"fundingInfo\":\"\",\"alias\":{\"category\":
[{\"name\":\"AMCO\",\"description\":\"Ofertas Externas\",\"alias\":{\"item\":
rDetail\":{\"detail\":
[{\"longDescription\":\"\",\"productType\":\"\",\"aditionalComment\":\"Adicional
\",\"featuresDetails\":\"MOVIL\"}]},\"mediaInfo\":
[{\"key\":\"image.jpg\",\"value\":\"\/dockerappsvol\\/dockerappdata\\/component
\\/images\\/\"}]}]"
                                                                       ]
                                                      },
                                                      {
                                                                        "id": "ID_PLAN",
                                                                        "value": [
                                                                                          "2600"
```

```
},
{
    "id": "CRM",
    "value": [
        "SGA"
    ]
}
```

RESPONSE

```
"success": true,
"message": "OK",
"code": 0,
"sessionData": {"externalSubscriberProperties": [
    "id": "OFFER_ID",
    "value": ["185"]
}]}
```

FUNCION JAVASCRIPT USADA POR FUNCION DEFINIDA.

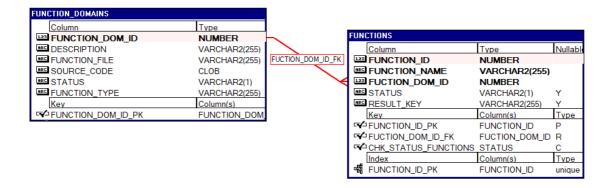
idFunction: 26

```
function getOfferCode(jsonParams) {
 var params = JSON.parse(jsonParams);
 var res;
 var offerCodeId;
 var offerDetailObject1;
 var detailObject;
 var productType;
 var arrayProductType;
 var i;
 var p;
 //var c;
  var externalsubs = params.externalSubscriberProperties;
  var jsonOffersSP = externalsubs.filter(function(x) {
  return x.id === 'CLAROVIDEO_OFFERID';
 });
  var id_plan = externalsubs.filter(function(x) {
  return x.id === 'ID_PLAN';
 });
   var jsonOffers = jsonOffersSP[0];
  jsonOffers.value[0] = jsonOffers.value[0].replace(/\\n/g, "\\n")
                                      .replace(/\\'/g, "\\'")
                                      .replace(/\\"/g, '\\"')
                                      .replace(/\\\gray(\gray)
                                      .replace(/\r/g, "\r")
                                      .replace(/\t/g, "\t")
                                      .replace(/\b/g, "\b")
```

```
.replace(/\f/g, "\f");
var array = jsonOffers.value[0];
var cadena = JSON.parse(array)
var detailObj;
var plan = id_plan[0].value;
for (i = 0; i < cadena.length; i++) {
  //offerCodeId = (JSON.parse(cadena)[i]).offerCode;
offerCodeId = (cadena[i]).offerCode;
 if ((cadena[i]).hasOwnProperty("offerDetail")) {
    offerDetailObject1 = cadena[i].offerDetail;
      if ((offerDetailObject1).hasOwnProperty("detail")) {
      //detailObj = offerDetailObject1.detail;
      detailObject = offerDetailObject1.detail;
     for (p = 0; p < detailObject.length; p++) {</pre>
      if ((detailObject[p]).hasOwnProperty("productType")) {
          productType = detailObject[p].productType;
     //if ((productType).hasOwnProperty("-")) {
        arrayProductType = productType.split("-");
        var x=0;
        var valores="";
        for (var c = 0; c < arrayProductType.length; c++) {
        if ((arrayProductType[c]) == plan) {
        //res = JSON.stringify({externalSubscriberProperties: [{id:
[(offerCodeId)] }]});
       //valores=valores+"-"+arrayProductType[c];
        res = JSON.stringify({externalSubscriberProperties: [{id:
"OFFER_ID",value: [offerCodeId] }]});
        return res;
        X++;
        }
        }
      }
   }
 }
res = JSON.stringify({externalSubscriberProperties: [{id: "OFFER_ID", value:
["0"] }]});
return res;
}
```

ANATOMIA DE FUNCIONES DINAMICAS

MODELO DE ENTIDADES



QUICKWIN_MDS.FUNCTION_DOMAINS

NAME	ТҮРЕ	NULLABLE	DEFAULT
FUNCTION_DOM_ID	NUMBER	N	
DESCRIPTION	VARCHAR2(255)	Υ	
FUNCTION_FILE	VARCHAR2(255)	Υ	
SOURCE_CODE	CLOB	Υ	
STATUS	VARCHAR2(1)	Υ	'A'
FUNCTION_TYPE	VARCHAR2(255)	Υ	

FUNCTION_DOM_ID: Id numérico.

DESCRIPTION: Descripción de Función.

FUNCTION_FILE: Descontinuado.

SOURCE_CODE: contiene la función a ejecutar. Pueden haber varias funciones en este misma configuración. Depende del campo **FUNCTION_TYPE**, para **JavaScript** o

STATUS: Estado A de Activo, I de Inactivo.

FUNCTION_TYPE: Representa el tipo de lenguaje de la función: JavaScript o groovy.

groovy

Ejemplo Groovy

```
import groovy.json.JsonSlurper
def factorial(params) {
   def slurper = new JsonSlurper().parseText(params.toString())
   def n = slurper.param1
   def n2 = slurper.param2
   def val = n + n2;
   return "{\"suma2\":"+val+", \"valor\": [\"valor\"]}";
}
```

Ejemplo JavaScript

```
function suma(jsonParams) {
   var params = JSON.parse(jsonParams);
   var a = params.param1;
   var b = params.param2;
   var sum = a + b;
   var text = '{ "suma" : '+sum+' }';
   return text;
}
```

QUICKWIN_MDS.FUNCTIONS

NAME	ТҮРЕ	NULLABLE	DEFAULT
FUNCTION_ID	NUMBER	N	
FUNCTION_NAME	VARCHAR2(255)	N	
FUNCTION_DOMAIN_ID	NUMBER	N	
STATUS	VARCHAR2(1)	Υ	'A'
RESULT_KEY	VARCHAR2(255)	Υ	'output'

FUNCTION_ID: Id numérico de la función.

FUNCTION_NAME: El nombre de la función a ejecutar.

FUNCTION_DOMAIN_ID: Id de dominio de función.

STATUS: Estado A de Activo, I de Inactivo.

RESULT_KEY: **sessionData** es un nombre obligatorio cuando se llama a la función a través de **DEFINED FUNCTIONS.** Por defecto es **output**.

STANDARD QUE DEBE CUMPLIR UNA FUNCION LLAMADA A TRAVES DE DEFINED FUNCTION

La función debe devolver un objeto con una lista de **SUBSCRIBER_PROPERTIES** identificado por **externalSubscriberProperties**.

Nota: Funciones definida a mayor detalle se explica mas adelante.

```
function createArrayOfOffers(jsonParams) {
  var params = JSON.parse(jsonParams);
  var res;
  var externalsubs = params.externalSubscriberProperties;

var jsonOffersSP = externalsubs.filter(function(x) {
  return x.id === 'OFFER_ID_Hw2';
  });

res = JSON.stringify({externalSubscriberProperties: [{id: "OFFER_ID_Hw",value:
  [JSON.stringify(jsonOffersSP[0].value)] }]});

return res;
}
```

Finalmente {"externalSubscriberProperties":[]} se embebe dentro del objeto sessionData que es elKEY_RESULT y pasan a ser parte del objeto SessionData de QuickWin.

```
"success": true,
"message": "OK",
"code": 0,
"sessionData": {"externalSubscriberProperties": [ {
    "id": "OFFER_ID",
    "value": ["185"]
}]}
```

Nota: Al ser una función llamada por **DEFINED FUNCTIONS** los parámetros (**jsonParams**) representan una lista de parámetros de **SUBSCRIBER_PROPERTIES**. Por ejemplo.

```
[
    "id": "MESSAGE",
    "value": [
        "MESSAGESEQ"
    ]
},
{
    "id": "NAMES",
    "value": [
        "KAREN"
    ]
}
```

Los parámetros pueden ser enviados a través del contrato de servicio de **DEFINED FUNCTIONS**. Internamente cuando la función definida es usada por **QuickWin**, éste pasa las lista de todos los **subscriber properties** de **QuickWin** a estas funciones. Recuerde que todas estas funciones solo se inicializan con un solo parametro. Este parametro debe recorrerse para extraer los SUBCRIBER_PROPERTIES enviados.

```
var params = JSON.parse(jsonParams);
var res;
var externalsubs = params.externalSubscriberProperties;

var jsonOffersSP = externalsubs.filter(function(x) {
  return x.id === 'OFFER_ID_Hw2';
});
```

Las funciones definidas tienen sus propios contrato de ejecución. Sin embargo se puede probar a la función que llama a través del contrato de la función.

La forma de enviar los parámetros es dentro del objeto input.externalSubscriberProperties.[]*

```
{
    "idFunction": "26",
    "input": {
        "externalSubscriberProperties": [
            {
                "id": "MESSAGE",
                "value": [
                    "MESSAGESEQ"
                ]
            },
            {
                "id": "NAMES",
                "value": [
                    "KAREN"
                ]
            }
        ]
    }
}
```

Nota: También puede probar la función usando NODE JS.

Por ejemplo para probarlo dede NODE, puede guardar el contenido dentro de un documento llamado "**test.js**" y ejecutarlo vía CMD.

test.js

```
function shearchOfferCode(jsonParams) {
  var params = JSON.parse(jsonParams);
  var res;
  var externalsubs = params.externalSubscriberProperties;

  var jsonOffersSP = externalsubs.filter(function(x) {
    return x.id === 'OFFERID';
    });
    res = JSON.stringify({externalSubscriberProperties: [{id: "ID_OFFER",value:
    [JSON.stringify(jsonOffersSP[0].value)] }]});
    return res;
}

// PRUEBA DE PARAMETROS VIA CONSOLE
```

```
console.log(shearchOfferCode(JSON.stringify({externalSubscriberProperties: [{id:
    "OFFERID",value: ["1234","5687"] }]})))
```

Si tiene node instalado ubíquese en la ruta y ejecute node test.js

```
E:\Arquitectura\Frameworks\Quickwin\Dynamyc Functions and Defined Functions>node
test.js
{"externalSubscriberProperties":[{"id":"ID_OFFER","value":["
[\"1234\",\"5687\"]"]}]}
```

PLSQL

CREAR FUNCION DINAMICAS PLSQL

```
declare
-- DELETE INVOKES, DEBERIA SER POR ID DE GRUPO O NOMBRE UNICO
lv_description varchar(255) := '[QWV1-MGR] ';
ln_function_dom_id number := 0;
ln_function_id number := 0;
BEGIN
select nvl(max(t.function_dom_id), 0) + 1 into ln_function_dom_id from
FUNCTION_DOMAINS t;
insert into QUICKWIN_MDS.FUNCTION_DOMAINS (FUNCTION_DOM_ID, DESCRIPTION,
FUNCTION_FILE, SOURCE_CODE, STATUS, FUNCTION_TYPE)
values (ln_function_dom_id, lv_description||'Test de Funcion - Formato para usa
en Defined Function', '', 'function testFunctionForDefinedFunction(jsonParams) {
  var params = JSON.parse(jsonParams);
  var res;
  var externalsubs = params.externalSubscriberProperties;
  var jsonOffersSP = externalsubs.filter(function(x) {
  return x.id === ''OFFERID'';
  });
  res = JSON.stringify({externalSubscriberProperties: [{id: "ID_OFFER",value:
[JSON.stringify(jsonOffersSP[0].value)] }]});
  return res:
}', 'A', 'JavaScript');
select nvl(max(f.FUNCTION_ID), 0) + 1 into ln_function_id from
QUICKWIN_MDS.FUNCTIONS f;
-- nombre de funcion: testFunctionForDefinedFunction
insert into QUICKWIN_MDS.FUNCTIONS (FUNCTION_ID, FUNCTION_NAME, FUCTION_DOM_ID,
STATUS, RESULT_KEY)
values (ln_function_id, 'testFunctionForDefinedFunction', ln_function_dom_id,
'A', 'sessionData');
dbms_output.put_line('ln_function_dom_id number := '||ln_function_dom_id||';');
dbms_output.put_line('ln_function_id number := '||ln_function_id||';');
```

```
dbms_output.put_line('-----SELECT-----SELECT-----
-');
dbms_output.put_line('SELECT * FROM QUICKWIN_MDS.FUNCTIONS t where
t.fuction_dom_id = '''||ln_function_dom_id||''';');
dbms_output.put_line('SELECT * FROM QUICKWIN_MDS.FUNCTION_DOMAINS t where
t.function_dom_id = '''||ln_function_dom_id||''';');
dbms_output.put_line('http://192.168.37.146:8101/quickWin/findDynamycFunctionByI
d/'||ln_function_id);
dbms_output.put_line('-------UPDATE STATUS------
----'):
dbms_output.put_line('UPDATE QUICKWIN_MDS.FUNCTIONS t set status = ''I'' where
t.fuction_dom_id = '''||ln_function_dom_id||''';');
dbms_output.put_line('UPDATE QUICKWIN_MDS.FUNCTION_DOMAINS t set status = ''I''
where t.function_dom_id = '''||ln_function_dom_id||''';');
dbms_output.put_line('http://192.168.37.146:8101/quickWin/clearDynamycFunctionBy
Id/'||1n_function_id);
dbms_output.put_line('-----DELETE-----
-');
dbms_output.put_line('DELETE FROM FUNCTIONS t where t.fuction_dom_id =
'''||1n_function_dom_id||''';');
dbms_output.put_line('DELETE FROM FUNCTION_DOMAINS t where t.function_dom_id =
'''||1n_function_dom_id||''';');
dbms_output.put_line('-----REQUEST------
----'):
dbms_output.put_line('http://192.168.37.146:8101/quickWin/executeDynamycFunction
s');
dbms_output.put_line('-----POST REST-----
----');
dbms_output.put_line('{
   "idFunction": "'||ln_function_id||'",
   "input": {
     "externalSubscriberProperties": [
             "id": "'||'OFFERID'||'",
             "value": ["123","456"]
         }
      ]');
dbms_output.put_line(' }
}');
--chequear los erroes
exception when others then
   rollback;
   dbms_output.put_line(sqlerrm);
end;
```

Request:

Al ejecutar esa función, deberíamos tener una salida así.

ELIMINAR FUNCIONES DINAMICA PLSL

Nota, en caso de **DELETE**, se recomienda hacer una prueba SQL, para asegurase de no borrar otros registros en caso que los filtros estén mal realizados.

```
declare
lv_description varchar(255) := '[QWV1-MGR]%';
BEGIN
DELETE FROM QUICKWIN_MDS.FUNCTIONS T
 WHERE T.FUCTION_DOM_ID IN
       (SELECT T.FUNCTION_DOM_ID
          FROM QUICKWIN_MDS.FUNCTION_DOMAINS T
         WHERE T.DESCRIPTION LIKE lv_description);
-- ELIMINAR CONDITION GROUPS ELEMENTS
DELETE FROM QUICKWIN_MDS.FUNCTION_DOMAINS T WHERE T.DESCRIPTION LIKE
lv_description;
-- RECUPERAR DATOS BORRADOS
-- SELECT * FROM QUICKWIN_MDS.FUNCTIONS AS OF TIMESTAMP (SYSTIMESTAMP - INTERVAL
'3' HOUR);
--chequear los erroes
exception when others then
    rollback;
    dbms_output.put_line(sqlerrm);
end;
```

DEFINDED FUNCTIONS CON DYNAMIC FUNCTIONS

Hasta ahora, hemos hablado de **DEFINED FUNCTIONS** de forma general, pero que son?

Las funciones definidas se llaman así, porque son funciones que corren en el mismo Core de la aplicación de **Quickwin**. Estas funciones definidas algunas tienen un propósito muy finito. Por ejemplo sumar dos NUMEROS dado dos SUBCRIBER_PROPERTIES, sumar fechas dado dos SUBCRIBER_PROPERTIES, y por que no mencionar, EJECUTAR CUALQUIER FUNCION. Tienen un objetivo común, reciben SUBCRIBER_PROPERTIES y devuelven nuevos **SUBCRIBER_PROPERTIES** inicializados que se agregan a los datos de Sesión de **QuickWin**.

Esta una lista de todas las funciones definidas que existen en QuickWin.

EXECUTE ANY FUNCTION es la función definida que usaremos para llamar a las funciones.

DESCRIPCION DE FUNCIONES DEFINIDAS DE QUICKWIN

DEFINED_FUNCTION_ID	DESCRIPTION
ADD_DATE	Agrega una cantidad en una unidad de tiempo especifico a una fecha
CONCAT	Concatena 2 textos ya sean SP o valor fijo
EVALUAR_FECHA	Evalúa si una fecha esta dentro de un rango a partir de 2 fechas
EVALUAR_NUMERO_RANGO	Evalúa si un numero está dentro de un rango a partir de 2 numeros
EVALUAR_TEXTO	Evalúa si el texto cumple una expresión regular
EXECUTE_ANY_FUNCTION	Ejecuta Cualquier Función. Las funciones deben devolver un KEY_RESULT: sessionData y una lista de SUBSCRIBER PROPERTIES en el RETURN. La función recibe una solo parámetro que representa una lista de subcriber properties dentro de la propiedad de objeto de parámetros {externalSubscriberProperties: [{id:"SP",value: ["123"]}]}
FORMAT_DATE	formatea una fecha a partir de un SimpleDateFormat
LENGTH	Extrae la longitud de una cadena
LOOKUP	Busca un valor y lo homologa por otro
MATH_SUBSCRIBERS	Hace operaciones matemáticas con dos SP, suma, resta, divide
REPLACE	Reemplaza un valor por otro
STRING_INTERPOLATION	Ejecuta INTERPOLACION de STRING. Recibe el formato STRING como '%s', y le aplica una lista de SUBCRIB ER PROPERTIES delimitados por un SEPARADOR
SUBSCRIBER- PROPERTY_CONTAINS	Busca un valor dentro del subscriber properties
SUBSTRING	Extrae una parte de una cadena de texto a partir de los índices
TRIM	Elimina los espacios en blanco

Los **defined functions** tienen sus propios contratos de servicios por las cuales se puede probar que el defined function funcione correctamente.

REQUEST

Ejemplo de la ejecución de un Defined Function.

POST http://192.168.37.146:8101/quickWin/executeDefinedFunctions HTTP/1.1

```
{
   "definedFunctionCallId": 9,
   "sessionData": {
      "externalSubscriberProperties": [
```

```
"id": "CLAROVIDEO_OFFERID",
                                                    "value": [
                                                                     "[{\"offerCode\":\"3653\",\"name\":\"Claro video costo
\label{lem:gpon} $$\operatorname{GPON}'', \encodes $$\operatorname{GPON}''', \encodes $$\operatorname{CPON}''', \encodes $$\operatorname{
\":\"\",\"origin\":\"LOCAL\",\"price\":
 {\"taxes\":\"\",\"discounts\":\"\",\"unit\":\"DOLLARS\",\"amountBeforeTaxes\":10
 .0,\"total\":8.8},\"complexProducts\":\"\",\"products\":{\"product\":
 [{\"productId\":\"PACK-
DIAS\",\"description\":\"3655\",\"shortName\":\"10000030\",\"expiryTime\":30,\"e
 xpiryTimeUnit\":\"dias\"}},\"fundingInfo\":\"\",\"alias\":{\"category\":
 [{\"name\":\"AMCO\",\"description\":\"Ofertas Externas\",\"alias\":{\"item\":
  \label{locations} $$ [{\make}'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\make'':\ma
 rDetail\":{\"detail\":
 [{\"longDescription\":\"\",\"productType\":\"3236\",\"aditionalComment\":\"Adici
onal\",\"featuresDetails\":\"FIJA\"}]},\"mediaInfo\":[]},
 {\"offerCode\":\"185\",\"name\":\"Claro video costo
\label{lem:hfc} $$HFC\",\"offerType\":\"GeneralOffer\",\"startDate\":\"23\\/02\\/2021\",\"endDate\) $$
 ":\"\",\"origin\":\"LOCAL\",\"price\":
 {\"taxes\":\"\",\"discounts\":\"\",\"unit\":\"DOLLARS\",\"amountBeforeTaxes\":10
 .0,\"total\":8.8},\"complexProducts\":\"\",\"products\":{\"product\":
 [{\"productId\":\"PACK-
DIAS\",\"description\":\"3654\",\"shortName\":\"10000030\",\"expiryTime\":30,\"e
 xpiryTimeUnit\":\"dias\"}]},\"fundingInfo\":\"\",\"alias\":{\"category\":
 [{\"name\":\"AMCO\",\"description\":\"Ofertas Externas\",\"alias\":{\"item\":
 rDetail\":{\"detail\":
 [{\"longDescription\":\"\",\"productType\":\"2600\",\"aditionalComment\":\"Adici
onal\",\"featuresDetails\":\"FIJA\"}]},\"mediaInfo\":[]},
 {\"offerCode\":\"3238\",\"name\":\"Claro Video
\label{lem:condition} $$\operatorname{GPON}'', ''offerType'': ''GeneralOffer'', ''startDate'': ''23\\/02\\/2021\'', ''endDate'': ''and the second of the condition of the
\":\"\",\"origin\":\"LOCAL\",\"price\":
.0,\"total\":8.8},\"complexProducts\":\"\",\"products\":\"\",\"fundingInfo\":\"\
 ",\"alias\":{\"category\":[{\"name\":\"AMCO\",\"description\":\"Ofertas
 Externas\",\"alias\":{\"item\":
 [\makes] \ \makes \
 rDetail\":{\"detail\":
 [{\"longDescription\":\"\",\"productType\":\"3232\",\"aditionalComment\":\"Adici
 onal\",\"featuresDetails\":\"FIJA\"}]},\"mediaInfo\":[]},
 {\"offerCode\":\"400132377\",\"name\":\"Suscripcion Claro video mensual 6,39
 dolares\",\"offerType\":\"GeneralOffer\",\"startDate\":\"22\\/10\\/2020\",\"endD
ate\":\"\",\"origin\":\"LOCAL\",\"price\":
 {\t}^{"} amount Before Taxes \":\"\",\"unit\":\"DOLLARS\",\"amount Before Taxes\":10
 .0,\"total\":8.8},\"complexProducts\":\"\",\"products\":{\"product\":
 [{\"productId\":\"PACK-
 DIAS\",\"description\":\"400132408\",\"shortName\":\"10000030\",\"expiryTime\":3
0,\"expiryTimeUnit\":\"dias\"}]},\"fundingInfo\":\"\",\"alias\":{\"category\":
 [{\"name\":\"AMCO\",\"description\":\"Ofertas Externas\",\"alias\":{\"item\":
 [\makes] \ \makes \
 rDetail\":{\"detail\":
 [{\"longDescription\":\"\",\"productType\":\"\",\"aditionalComment\":\"Adicional
 \",\"featuresDetails\":\"MOVIL\"}]},\"mediaInfo\":
 [{\"key\":\"image.jpg\",\"value\":\"\/dockerappsvol\\/dockerappdata\\/component
 \\/images\\/\"}]}]"
                                                    ]
                                  },
```

```
{
    "id": "ID_PLAN",
    "value": [
        "2600"
    ]
},
{
    "id": "CRM",
    "value": [
        "SGA"
    ]
}
```

definedFunctionCallId: Representa el ID de la **Función Definida Configurada**. Para este caso representa una instancia de función definida: message.

sessionData: Es el objeto que contiene una lista de **Subscriber Properites**. dentro de la propiedad **externalSubscriberProperties**. Aquí se envían los parámetros que necesita la función y los que necesita en si la función definida. Internamente **QuickWin** cuando llama a la función definada le pasa todos los subcriber properties de la sesion.

RESPONSE

```
{
    "functionResult": {
        "id": "$DYNAMYC_FUNCTION_RESULT$",
        "value": ["\"{\"externalSubscriberProperties\":
[{\"id\":\"OFFER_ID\",\"value\":[\"185\"]}]}\""]
    },
    "success": true,
    "message": "Funcion ejecutada correctamente",
    "code": 0
}
```

functionResult contiene un objeto con dos propiedades. **ID** representa por defecto **\$DYNAMYC_FUNCTION_RESULT\$** la propiedad que almacena el resultado de la ejecución. **(VALUE)**.

El valor de ID, puede ser cualquier otra propiedad, en el caso de configurarse en los parámetros por defecto del **Defined Functions** para la función definida con id **EXECUTE_ANY_FUNCTION**.

NOTA: Recuerde que si se usa una propiedad que inicialmente esta siendo usada, después de la ejecución se sobreescribe con el nuevo valor, cuando **QuickWin** la llama. Es recomendable usar diferentes propiedades si así la necesidad lo amerita.

success: true o false.

message: mensaje de éxito o error en caso de alguno.

code: 0 para éxito, menores que 0 representan errores de configuración.

REFRESH DATA

GET http://192.168.37.148:8101/quickWin/clearDefinedFunctionCallByld/4

```
{"refreshMessage":"Refresh en progreso","updated":true}
```

GET DATA FROM CACHE

Para consultar datos de función definida.

GET http://192.168.37.148:8101/quickWin/findDefinedFunctionCallById/4

```
{"refreshMessage": "Refresh en
progreso","updated":true,"definedFunctionBindings":
[{"definedFunctionBindingId":8,"definedFunctionCall":
{"definedFunctionCallId":4, "definedFunction":
{"definedFunctionId":"ADD_DATE","definedFunctionName":"ADD_DATE","status":"A"},"
description":"LLAMADA A ADD DATE","status":"A"},"definedFunctionParams":
{"definedFunctionParamId":12, "definedFunction":
{"definedFunctionId": "ADD_DATE", "definedFunctionName": "ADD_DATE", "status": "A"}, "
name":"UNIDAD","defaultValue":"SECOND","way":"=>","dataType":"TEXT","status":"A"
},"bindingType":"FV","fixedValue":"MINUTE","status":"A"},
{"definedFunctionBindingId":9, "definedFunctionCall":
{"definedFunctionCallId":4, "definedFunction":
{"definedFunctionId":"ADD_DATE","definedFunctionName":"ADD_DATE","status":"A"},"
description":"LLAMADA A ADD DATE", "status": "A"}, "definedFunctionParams":
{"definedFunctionParamId":13, "definedFunction":
{"definedFunctionId":"ADD_DATE","definedFunctionName":"ADD_DATE","status":"A"},"
name":"VALOR","way":"=>","dataType":"NUMBER","status":"A"},"bindingType":"SP","s
ubscriberProperties":
{"subscriberPropertyId":"$UNIT$","description":"Unit","status":"A"},"status":"A"
}]}
```

EJEMPLOS DE DEFINED FUNCITIONS

ADD DATE

Configuraciones

Parámetros

DEFINED_FUNCTION_PARAM_ID	DEFINED_FUNCTION_ID	NAME	DEFAULT_VALUE	WAY	DATA_TYPE	STATUS
10	ADD_DATE	FECHA_ENTRADA	\$TRANSACTIONDATE\$	=>	DATE	А
11	ADD_DATE	FORMATO_ENTRADA	dd/MM/yyyy HH:mm:ss	=>	TEXT	А
12	ADD_DATE	UNIDAD	SECOND	=>	TEXT	А
13	ADD_DATE	VALOR		=>	NUMBER	А
14	ADD_DATE	VARIABLE_SALIDA	\$ADDDATE_RESULT\$	<=	TEXT	А

```
select * from DEFINED_FUNCTION_CALL t
where defined_function_id like 'ADD_DATE';
```

DEFINED_FUNCTION_CALL_ID	DEFINED_FUNCTION_ID	DESCRIPTION	STATUS
4	ADD_DATE	LLAMADA A ADD DATE	А

```
-- resultado
select * from DEFINED_FUNCTION_BINDINGS t
where t.defined_function_call_id = 4;
```

DEFINED_FUNCTION_BINDING_ID	DEFINED_FUNCTION_CALL_ID	DEFINED_FUNCTION_PARAM_ID	BINDING_TYPE	SUBSCRIBER_PROPERTY_ID	FIXED_VALUE	STATUS
177	4	10	SP	\$TRANSACTIONDATE_WS\$		A
194	4	11	FV		yyyy-MM-dd'T'HH:mm:ssXXX	A
195	4	14	SP	RESULTDESC		А
8	4	12	FV		MINUTE	А
9	4	13	SP	\$UNIT\$		A

Request

Se suman 5 minutos

```
{
    "definedFunctionCallId": 4,
    "sessionData": {
        "externalSubscriberProperties": [
                "id": "$UNIT$",
                "value": [
                    "5"
                ]
            },
                "id": "$TRANSACTIONDATE_WS$",
                "value": [
                    "2021-05-12T18:55:29-05:00"
                ]
            },
            {
                "id": "RESULTDESC",
                "value": [
                    "OLD_RESULT_ID"
                ]
           }
        ]
   }
}
```

Response

. La suma de la fecha, se la hace en formato Webservice

```
"functionResult": {
    "id": "OLD_RESULT_ID",
    "value": ["2021-05-12T19:00:29-05:00"]
},
    "success": true,
    "message": "Funcion ejecutada correctamente",
    "code": 0
}
```

STRING INTERPOLATION

Configuraciones

Parámetros

```
select * from DEFINED_FUNCTION_PARAMS t
where defined_function_id like 'STRING_INTERPOLATION';
```

DEFINED_FUNCTION_PARAM_ID	DEFINED_FUNCTION_ID	NAME	DEFAULT_VALUE	WAY	DATA_TYPE	STATUS
65	STRING_INTERPOLATION	OUTPUT_VARIABLE	\$INTERPOLATION_VALUE\$	<=	TEXT	Α
52	STRING_INTERPOLATION	STRING		=>	TEXT	А
55	STRING_INTERPOLATION	VALUES		=>	TEXT	А
50	STRING_INTERPOLATION	VALUES_SEPARATOR	1	=>	TEXT	А

```
select * from DEFINED_FUNCTION_CALL t
where defined_function_id like 'STRING_INTERPOLATION';
```

DEFINED_FUNCTION_CALL_ID	DEFINED_FUNCTION_ID	DESCRIPTION	STATUS
73	STRING_INTERPOLATION	GENERA TOKEN CLARO VIDEO	А

```
select * from DEFINED_FUNCTION_BINDINGS t
where defined_function_call_id = 73;
```

DEFINED_FUNCTION_BINDING_ID	DEFINED_FUNCTION_CALL_ID	DEFINED_FUNCTION_PARAM_ID	BINDING_TYPE	SUBSCRIBER_PROPERTY_ID	FIXED_VALUE	STATUS
200	73	52	FV		%s;phone-context=claro.ec	A
201	73	55	FV		\$SUBSCRIBERID\$	A
202	73	65	FV		TOKEN	A

Request

Response

```
"functionResult": {
    "id": "TOKEN",
    "value": ["123344455;phone-context=claro.ec"]
},
"success": true,
"message": "Funcion ejecutada correctamente",
"code": 0
}
```

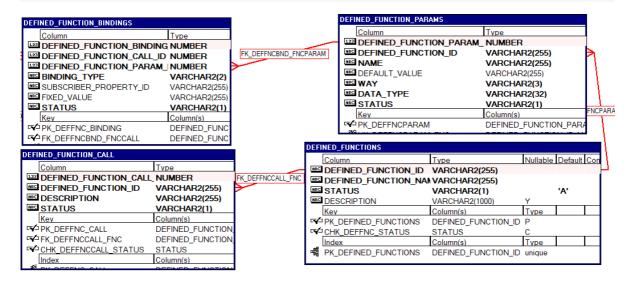
LOOKUP TABLE

Configuraciones

Parámetros

ANATOMIA DE DYNAMIC FUNCTIONS

MODELO DE ENTIDADES



QUICKWIN_MDS.DEFINED_FUNCTIONS.

Esta es una tabla de catálogos de funciones. Normalmente todas las funciones definida comparten la misma filosofía de configuración.

NAME	ТҮРЕ	NULLABLE	DEFAULT
DEFINED_FUNCTION_ID	VARCHAR2(255)	N	
DEFINED_FUNCTION_NAME	VARCHAR2(255)	N	
STATUS	VARCHAR2(1)	N	'A'
DESCRIPTION	VARCHAR2(1000)	Υ	

DEFINED_FUNCTION_ID: ID de función definida.

DEFINED_FUNCTION_NAME: Nombre de función definida.

STATUS: Estado A de Activo, I de Inactivo.

DESCRIPTION: Descripción de lo que la función hace.

QUICKWIN_MDS.DEFINED_FUNCTION_PARAMS

En esta tabla se definen una lista parámetros de cada función representados por **DEFINED_FUNCTION_PARAM_ID** . Cada parámetros se puede sobrescribir con sus valores por defecto si así se desea en la tabla **DEFINED_FUNCTION_BINDINGS**. Algunos parámetros son obligatorios y no hay valores por defectos.

NOTA: Los Id de **DEFINED_FUNCTION_PARAM_ID** no siempre corresponden en producción. Los **DEFINED_FUNCTION_PARAM_ID** deberían ser consultados por **NAME** y **DEFINED_FUNCTION_ID**.

PARAMETROS DE FUNCIONES DEFINIDAS

DEFINED_FUNCTION_PARAM_I	D DEFINED_FUNCTION_ID	NAME	DEFAULT_VALUE	WAY	DATA_TYPE	STATU
10	ADD_DATE	FECHA_ENTRADA	\$TRANSACTIONDATE\$	=>	DATE	А
11	ADD_DATE	FORMATO_ENTRADA	dd/MM/yyyy HH:mm:ss	=>	TEXT	Α
12	ADD_DATE	UNIDAD	SECOND	=>	TEXT	Α
13	ADD_DATE	VALOR		=>	NUMBER	Α
14	ADD_DATE	VARIABLE_SALIDA	\$ADDDATE_RESULT\$	<=	TEXT	А
4	CONCAT	TEXTO_A_CONCATENAR		=>	TEXT	Α
3	CONCAT	TEXTO_ENTRADA		=>	TEXT	А
5	CONCAT	VARIABLE_SALIDA	\$CONCAT_RESULT\$	<=	TEXT	Α
39	EVALUAR_FECHA	FECHA_ENTRADA	\$TRANSACTIONDATE\$	=>	DATE	Α
40	EVALUAR_FECHA	FORMATO_ENTRADA	dd/MM/yyyy HH:mm:ss	=>	TEXT	A
				=>	TEXT	
11	EVALUAR_FECHA	UNIDAD	SECOND			A
42	EVALUAR_FECHA	VALOR		=>	NUMBER	A
13	EVALUAR_FECHA	VARIABLE_SALIDA	\$EVALUAR_FECHA_RESULT\$	<=	TEXT	A
32	EVALUAR_NUMERO_RANGO	NUMERO_ENTRADA		=>	NUMBER	Α
37	EVALUAR_NUMERO_RANGO	SEPARADOR_DECIMALES		=>	TEXT	А
85	EVALUAR_NUMERO_RANGO	VALOR_MAXIMO		=>	NUMBER	А
36	EVALUAR_NUMERO_RANGO	VALOR_MAXIMO_INCLUSIVO	SI	=>	TEXT	Α
33	EVALUAR_NUMERO_RANGO	VALOR_MINIMO		=>	NUMBER	А
34	EVALUAR_NUMERO_RANGO	VALOR_MINIMO_INCLUSIVO	SI	=>	TEXT	А
18	EVALUAR_NUMERO_RANGO	VARIABLE_SALIDA	\$EVALUAR_NUMERO_RESULT\$	<=	TEXT	А
17	EVALUAR_TEXTO	EXPRESION_REGULAR		=>	TEXT	A
16	EVALUAR_TEXTO	TEXTO_ENTRADA		=>	TEXT	A
			¢EVALUADTEVTO DECLUT¢			
18	EVALUAR_TEXTO	VARIABLE_SALIDA	\$EVALUARTEXTO_RESULT\$	<=	TEXT	A
58	EXECUTE_ANY_FUNCTION	ADD_SESSION_DATA	YES	=>	TEXT	Α
57	EXECUTE_ANY_FUNCTION	FUNCTION_ID		=>	TEXT	Α
50	EXECUTE_ANY_FUNCTION	KEY_OUTPUT	sessionData	=>	TEXT	Α
59	EXECUTE_ANY_FUNCTION	RESULT_VALUE	\$DYNAMYC_FUNCTION_RESULT\$	<=	TEXT	Α
5	FORMAT_DATE	FECHA_ENTRADA	\$TRANSACTIONDATE\$	=>	DATE	А
7	FORMAT_DATE	FORMATO_ENTRADA	dd/MM/yyyy HH:mm:ss	=>	TEXT	А
3	FORMAT_DATE	FORMATO_SALIDA		=>	TEXT	А
9	FORMAT_DATE	VARIABLE_SALIDA	\$FORMATDATE_RESULT\$	<=	DATE	Α
14	LENGTH	TEXTO_ENTRADA		=>	TEXT	А
15	LENGTH	VARIABLE_SALIDA	\$LENGTH_RESULT\$	<=	NUMBER	A
30	LOOKUP	CATALOGO	\$22.1011_12021\$	=>	TEXT	A
29	LOOKUP	SEPARADOR_CLAVE_VALOR	:	=>	TEXT	A
28	LOOKUP	SEPARADOR_ELEMENTOS	,	=>	TEXT	Α
27	LOOKUP	VALOR_BUSQUEDA		=>	TEXT	A
31	LOOKUP	VARIABLE_SALIDA	\$LOOKUP_RESULT\$	<=	TEXT	А
19	MATH_SUBSCRIBERS	DATA_TYPE_CASTING	INT	=>	TEXT	А
54	MATH_SUBSCRIBERS	OPERATION	ADD	=>	TEXT	А
56	MATH_SUBSCRIBERS	RESULT_VALUE	\$SP_MATH_RESULT\$	<=	TEXT	Α
51	MATH_SUBSCRIBERS	VALUE1	500	=>	TEXT	А
53	MATH_SUBSCRIBERS	VALUE2	600	=>	TEXT	Α
20	REPLACE	EXPRESION_A_REEMPLAZAR		=>	TEXT	А
21	REPLACE	EXPRESION_REEMPLAZO		=>	TEXT	A
				=>		
9	REPLACE	TEXTO_ENTRADA	¢DEDLACE DECLUTA		TEXT	A
	REPLACE	VARIABLE_SALIDA	\$REPLACE_RESULT\$	<=	TEXT	A
55	STRING_INTERPOLATION	OUTPUT_VARIABLE	\$INTERPOLATION_VALUE\$	<=	TEXT	Α
52	STRING_INTERPOLATION	STRING		=>	TEXT	Α
5	STRING_INTERPOLATION	VALUES		=>	TEXT	А
0	STRING_INTERPOLATION	VALUES_SEPARATOR	I	=>	TEXT	А
6	SUBSCRIBER-PROPERTY_CONTAINS	DOMINIO		=>	TEXT	Α
7	SUBSCRIBER-PROPERTY_CONTAINS	SEPARADOR	,	=>	TEXT	Α
5	SUBSCRIBER-PROPERTY_CONTAINS	SUBSCRIBER_PROPERTY		=>	TEXT	Α
8	SUBSCRIBER-PROPERTY_CONTAINS	VARIABLE_SALIDA	\$CONTAINS_RESULT\$	<=	TEXT	A
25	SUBSTRING	INDICE_FIN		=>	NUMBER	A
24	SUBSTRING	INDICE_INICIO		=>	NUMBER	A
23	SUBSTRING	TEXTO_ENTRADA		=>	TEXT	A
16	SUBSTRING	VARIABLE_SALIDA	\$SUBSTRING_RESULT\$	<=	TEXT	Α

DEFINED_FUNCTION_PARAM_ID	DEFINED_FUNCTION_ID	NAME	DEFAULT_VALUE	WAY	DATA_TYPE	STATUS
2	TRIM	VARIABLE_SALIDA	\$TRIM_RESULT\$	<=	TEXT	Α

QUICKWIN_MDS.DEFINED_FUNCTION_PARAMS.

NAME	ТҮРЕ	NULLABLE	DEFAULT	COMMENTS
DEFINED_FUNCTION_PARAM_ID	NUMBER	N		Clave Primaria
DEFINED_FUNCTION_ID	VARCHAR2(255)	N		Referencia a la tabla DEFINED_FUNCTIONS
NAME	VARCHAR2(255)	N		Nombre del parametro
DEFAULT_VALUE	VARCHAR2(255)	Υ		Valor por defecto en caso que no exista un binding
WAY	VARCHAR2(3)	N		Sentido de la variable, Entrada = => Salida = <=
DATA_TYPE	VARCHAR2(32)	N		Tipo de datos de la variable TEXT,NUMBER,DATE
STATUS	VARCHAR2(1)	N	'A'	Estado logico

QUICKWIN_MDS.DEFINED_FUNCTION_BINDINGS.

NAME	TYPE	NULLABLE	DEFAULT	COMMENTS
DEFINED_FUNCTION_BINDING_ID	NUMBER	N		Clave Primaria
DEFINED_FUNCTION_CALL_ID	NUMBER	N		Estado Logico
DEFINED_FUNCTION_PARAM_ID	NUMBER	N		Foranea a defined Function Param
BINDING_TYPE	VARCHAR2(2)	N		Tipo de valor que tomar el parametro en el binding, SP SUBSCRIBERPROPERTY, FV: VALOR FIJO
SUBSCRIBER_PROPERTY_ID	VARCHAR2(255)	Υ		Foranea del subscriber property a usar
FIXED_VALUE	VARCHAR2(255)	Υ		Valor fijo del binding
STATUS	VARCHAR2(1)	N	'A'	

SCRIPT PLSQL

CREATE DEFINED FUNCTION EXECUTE_ANY_FUNCTION PLSQL

```
declare
lv_description varchar(255) := '[QWV1-MGR] ';
lv_defined_function_id varchar(255) := 'EXECUTE_ANY_FUNCTION';
ln_defined_function_call_id number := 0;
ln_id_param number := 0;

BEGIN
```

```
select nvl(max(t.DEFINED_FUNCTION_CALL_ID), 0) + 1 into
ln_defined_function_call_id from DEFINED_FUNCTION_CALL t;
insert into DEFINED_FUNCTION_CALL (DEFINED_FUNCTION_CALL_ID,
DEFINED_FUNCTION_ID, DESCRIPTION, STATUS)
values (ln_defined_function_call_id, lv_defined_function_id, lv_description ||
'Ejemplo de Creacion de Defined Functions', 'A');
-- LOS PARAMATROS QUE SE NECESITAN..
-- PARAMETRO QUE PIDE EL ID DE LA FUNCION A EJECUTAR..
SELECT t.defined_function_param_id into ln_id_param
  FROM DEFINED_FUNCTION_PARAMS t
where t.defined_function_id = lv_defined_function_id
   and t.name = 'FUNCTION_ID';
-- ESTE VALOR PUEDE SER FIJO, O ENVIADO A TRAVES DE UN SUBSCRIBER_PROPERTIES.
-- BINDING_TYPE ES SP cuando el valro viene en un SUBSCRIBER PROPERTY, Y FV, para
valores FIJOS.
-- PARA ESTE CASO PROBARERMOS LA FUNCION DINAMICA #44 CREADA PREVIAMENTE
insert into DEFINED_FUNCTION_BINDINGS (DEFINED_FUNCTION_BINDING_ID,
DEFINED_FUNCTION_CALL_ID, DEFINED_FUNCTION_PARAM_ID, BINDING_TYPE,
SUBSCRIBER_PROPERTY_ID, FIXED_VALUE, STATUS)
values ((select nvl(max(T.DEFINED_FUNCTION_BINDING_ID), 0) + 1 from
DEFINED_FUNCTION_BINDINGS T), ln_defined_function_call_id, ln_id_param, 'SP',
'FUNCTION_ID', '', 'A');
SELECT t.defined_function_param_id into ln_id_param
  FROM DEFINED_FUNCTION_PARAMS t
where t.defined_function_id = lv_defined_function_id
   and t.name = 'ADD_SESSION_DATA';
-- este insert es opcional, a pesar que no se envia por parametro o es fijo, no
es necesario, por defecto es YES
insert into DEFINED_FUNCTION_BINDINGS (DEFINED_FUNCTION_BINDING_ID,
DEFINED_FUNCTION_CALL_ID, DEFINED_FUNCTION_PARAM_ID, BINDING_TYPE,
SUBSCRIBER_PROPERTY_ID, FIXED_VALUE, STATUS)
values ((select nvl(max(T.DEFINED_FUNCTION_BINDING_ID), 0) + 1 from
DEFINED_FUNCTION_BINDINGS T), ln_defined_function_call_id, ln_id_param, 'FV',
'', 'YES', 'A');
dbms_output.put_line('ln_defined_function_call_id number :=
'||ln_defined_function_call_id||';');
dbms_output.put_line('-----SELECT-----SELECT-----
-');
dbms_output.put_line('SELECT * FROM QUICKWIN_MDS.DEFINED_FUNCTION_BINDINGS t
where t.defined_function_call_id = '''||ln_defined_function_call_id||''';');
dbms_output.put_line('SELECT * FROM QUICKWIN_MDS.DEFINED_FUNCTION_CALL t where
t.defined_function_call_id = '''||ln_defined_function_call_id||''';');
dbms_output.put_line('http://192.168.37.146:8101/quickwin/findDefinedFunctionCal
lById/'||ln_defined_function_call_id);
dbms_output.put_line('------UPDATE STATUS------
----');
dbms_output.put_line('UPDATE QUICKWIN_MDS.DEFINED_FUNCTION_BINDINGS t set
status = ''I'' where t.defined_function_call_id =
'''||1n_defined_function_call_id||''';');
```

```
dbms_output.put_line('UPDATE QUICKWIN_MDS.DEFINED_FUNCTION_CALL t set status =
''I'' where t.defined_function_call_id =
'''||1n_defined_function_call_id||''';');
dbms_output.put_line('http://192.168.37.146:8101/quickWin/clearDefinedFunctionCa
11ById/'||1n_defined_function_call_id);
dbms_output.put_line('-----DELETE-----
-');
dbms_output.put_line('DELETE FROM DEFINED_FUNCTION_BINDINGS t where
t.defined_function_call_id = '''||ln_defined_function_call_id||''';');
dbms_output.put_line('DELETE FROM DEFINED_FUNCTION_CALL t where
t.defined_function_call_id = '''||ln_defined_function_call_id||''';');
dbms_output.put_line('------REQUEST------REQUEST------
----');
dbms_output.put_line('http://192.168.37.146:8101/quickWin/executeDefinedFunction
s');
dbms_output.put_line('-----POST REST------
----');
dbms_output.put_line('{
  "definedFunctionCallId": "'||ln_defined_function_call_id||'",
  "sessionData": {
     "externalSubscriberProperties": [');
FOR SUBS IN (SELECT T.SUBSCRIBER_PROPERTY_ID FROM DEFINED_FUNCTION_BINDINGS T
WHERE T.BINDING_TYPE = 'SP' AND T.DEFINED_FUNCTION_CALL_ID =
ln_defined_function_call_id ) LOOP
dbms_output.put_line('
                              {"id":
"'||subs.subscriber_property_id||'","value": ["44"]},');
END LOOP;
-- DATOS DE LA FUNCION
dbms_output.put_line('
                            {"id": "'||'OFFERID'||'","value":
["1111","2222"]}');
dbms_output.put_line('
                         ]');
dbms_output.put_line(' }
}');
--chequear los erroes
exception when others then
   rollback;
   dbms_output.put_line(sqlerrm);
end;
```

Al ejecutar este Script nos dará un request:

Note que usamos la función con id, 44 que creamos anteriormente. También podemos enviar cualquier función que cumpla el Standard definido y ese valor puede ser fijo en la función oculto por defecto. Adicional enviamos los **SUBSCRIBER_PROPERTIES** que necesita la función a ejecutarse. Para este ejemplo. **OFFERID**.

Con el siguiente resultado.

```
{
    "functionResult": {
        "id": "$DYNAMYC_FUNCTION_RESULT$",
        "value": ["\"{\"externalSubscriberProperties\":
[{\"id\":\"ID_OFFER\",\"value\":[\"[\\\"1111\\\",\\\"2222\\\"]\"]}]}\""]
    },
    "success": true,
    "message": "Funcion ejecutada correctamente",
    "code": 0
}
```

Nota: Recuerde que internamente **QuickWin** cuando usa las funciones definidas, envía todos los **suscriber properties** con los cuales esta configurado.

ELIMINAR DEFINED FUNCTION PLSQL

Support

QukickWin is a Claro's project. It can grow thanks to feeback and support of other actors inside the company

Stay in touch

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