

( The Following is a “How’s It Works” write-up as opposed to one for: “How Do I Use It” )

( Actual Beginning )

This document describes 2 associated sequences in the deprecated HP Merc-Training Education Portal:

- Credit Card Order
- SOAP Message

Credit Card Order:

- JavaScript, and JSON are used to process the credit card transaction to the internal Payment Gateway Service.

When Order Viewed:

- SOAP is used to report all the user and product data to a server in Austin.

### Credit Card Order

File: /orderprocessing/usePGS/1253/ccValidateForm.cfm ( 1253 is a specific server in the cluster )

Location of JavaScript files:

```
10 <SCRIPT type=text/javascript src="https://phc.atlanta.hp.com/PHCJS/PGS_PHC-1.0.min.js"></SCRIPT>
<SCRIPT type=text/javascript src="https://phc.atlanta.hp.com/PHCJS/json2-1.0.min.js"></SCRIPT>
```

Form values are copied from the form by JavaScript and packaged: ( note: p['JsonExample'].value = phcReqStr; )

```
18 <SCRIPT type=text/javascript>
19   function CallPHC()
20   {
21       var phcReqStr = GetPHCReqStr();
22       sendJSON(phcReqStr);
23   }
24   function GetPHCReqStr()
25   {
26       var p = document.forms['myForm'];
27       var phcReqObj = new Object();
28       phcReqObj.MerchantName = p['MerchantName'].value;
29       phcReqObj.OrderID = p['OrderID'].value;
30       phcReqObj.CustomerID = p['CustomerID'].value;
31       phcReqObj.CustomField = p['CustomField'].value;
32       phcReqObj.CustomerInfo = new Object();
33       phcReqObj.CustomerInfo.FirstName = p['FirstName'].value;
34       phcReqObj.CustomerInfo.LastName = p['LastName'].value;
35       phcReqObj.BillAddress = new Object();
36       phcReqObj.BillAddress.Address1 = p['Address1'].value;
37       phcReqObj.BillAddress.City = p['City'].value;
38       phcReqObj.BillAddress.State = p['State'].value;
39       phcReqObj.BillAddress.Zip = p['Zip'].value;
40       phcReqObj.BillAddress.Country = p['Country'].value;
41       phcReqObj.CreditCards = new Array();
42       var CreditCard = new Object();
43       CreditCard.CCNumber = p['CCNumber'].value;
44       CreditCard.CardType = p['CardType'].value;
45       CreditCard.CCExpYear = p['CCExpYear'].value;
46       CreditCard.CCExpMon = p['CCExpMon'].value;
47       CreditCard.CVV = p['CVV'].value;
48       CreditCard.IsSaveProfile = false;
49       phcReqObj.CreditCards[0] = CreditCard;
50       phcReqStr = JSON.stringify(phcReqObj);
51       p['JsonExample'].value = phcReqStr;
52       return phcReqStr;
53   }
54 </SCRIPT>
```

Actual HTML Form: ( values stored in session scope are brought in, **note:** there is no **action** )

```
101 <FORM enctype=application/json method=post name=myForm action="">
102   <input type="hidden" id="MerchantName" value="32286FFD7A104517A2CA7DFD98CMHHPs">
103   <input type="hidden" id="OrderID" value="#session.ordernumber#">
104   <input type="hidden" id="CustomerID" value="#session.bill_company#">
105   <input type="hidden" id="CustomField" value="#session.ordernumber#">
106   <input type="hidden" id="FirstName" value="#session.bill_firstname#">
107   <input type="hidden" id="LastName" value="#session.bill_lastname#">
108   <input type="hidden" id="Address1" value="#session.bill_address1#">
109   <input type="hidden" id="City" value="#session.bill_city#">
110   <input type="hidden" id="State" value="#session.bill_state#">
111   <input type="hidden" id="Zip" value="#session.bill_zip#">
112   <input type="hidden" id="Country" value="#session.bill_country#">
113   <input type="hidden" id="CVV" value=""> |
114   <input type="hidden" id="IsSaveProfile" value="false">
115 <tr>
116   <td class="FORMINFO">&nbsp;  </td>
117   <td class="FORMINFO">Credit&nbsp;  Card&nbsp;  </td>
118 <td class="FORMFIELD">
119   <select id="CardType" name="CardType" class="LIST">
120     <option value="001">VISA</option>
121     <option value="002">MasterCard</option>
122     <option value="003">American Express</option>
123   </select>
124 </td>
125 </tr>
126 <tr>
127   <td class="FORMINFO">&nbsp;  </td>
128   <td class="FORMINFO">Credit&nbsp;  Card&nbsp;  Number*&nbsp;  </td>
129 <td class="FORMFIELD">
130   <input class="EDIT" type="text" name="CCNumber" id="CCNumber" value="" size="40"
131     maxLength="30">
132 </td>
</tr>
```

The **Form** code continues: ( **note:** **JSON** values defined above are bound to the **TEXTAREA** shown below ), and when the user clicks on the **Submit** button ( shown below ) it does: **onclick** = "CallPHC()".

This operation is a **post** to the **Payment Gateway** with all the **form** values in **JSON**.

```
142 <tr>
143   <td class="FORMINFO">&nbsp;  </td>
144   <td class="FORMINFO">Expiration&nbsp;  Date&nbsp;  </td>
145 <td class="FORMFIELD">
146   <select id="CCExpMon" name="CCExpMon" class="LIST">
147     <cfloop index="month" from="1" to="12">
148       <cfif Len(month) eq 1>
149         <option value="#month#">#month#</option>
150       <cfelse>
151         <option value="#month#">#month#</option>
152       </cfif>
153     </cfloop>
154   </select> /
155 <select name="CCExpYear" id="CCExpYear" class="LIST">
156   <cfloop index="year" from="#Year(NOW())#" to="#Year(NOW())+6#">
157     <option value="#year#">#year#</option>
158   </cfloop>
159 </select><br>
160 </td>
161 </tr>
162 </cfoutput>
163 <DIV class="hidethis">
164   <TEXTAREA id=JsonExample rows=6 cols=90 name=JsonRequest visible="false"></TEXTAREA>
165 </DIV>
166 <tr>
167 <td colspan="3" align="center">
168   <br /><INPUT onclick=CallPHC() value=Submit type=button name=valid><br /><br />
169 </td>
170 </tr>
```



If the **Try** ( above ) succeeds ( *because those returning variables exist* ) ( *StructKeyExists( )* ) the **Listener Posts a Form** with a **URL variable** named: **type** and a **value of FA** along with another variable named **orderid** that contains the **actual order number of** to **/nextGen/index.cfm**

```
50 <cfhttp method="Post" url="http://#WEB_SERVER_PATH#/nextGen/index.cfm">
51 <cfhttpparam type="URL" name="type" value="FA">
52 <cfhttpparam type="URL" name="orderid" value="#orderid#">
53 </cfhttp>
```

When: **/nextGen/index.cfm** receives this post, it generates a **SOAP Message** to:

<http://www.hp.com/eCommerce/PaymentGateway/>

## Format of SOAP Message

SOAP FORMAT SPEC:

```
12 <cfsavecontent variable="soapBody">
13 <soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema">
```

File: **/nextGen/index.cfm – Full Auth Section**

This index template receives the post and sends a **SOAP message** containing all the **Order details**, back to the **Gateway**.

```
1 <cfswitch expression="#url.type#" >
2 | <cfcase value="FA" >
3 <cfif Not IsDefined("session.ls_sitepick")>
4     Warning SitePick is not available.
5 </cfif>
6 <cfsavecontent variable="soapBody">
7 <soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema">
8     <soap:Body>
9         <OrderPayment xmlns="http://www.hp.com/eCommerce/PaymentGateway/">
10             <userRequest>
11                 <FromRole>
12
13                     <globalpartnerclassificationcode>xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx</global
partnerclassificationcode>
14                     <cfif evaluate("application.pgsTable#url.orderid#").site_pick EQ
'US'>
15                         <GlobalBusinessIdentifier>yyyyyyyyyy</GlobalBusinessIdentifier>
16                     <cfelseif evaluate("application.pgsTable#url.orderid#").site_pick
EQ 'UK'>
17                         <GlobalBusinessIdentifier>zzzzzzzzzzzz</GlobalBusinessIdentifier>
18                     <cfelseif evaluate("application.pgsTable#url.orderid#").site_pick
EQ 'CA'>
19                         <GlobalBusinessIdentifier>wwwwwwwwwwww</GlobalBusinessIdentifier>
20                     </cfif>
21                 </FromRole>
22                 <General_Info>
23                     <MerchantID>
24                         <cfoutput>#evaluate("application.environment.config.pgs.mids." &
evaluate("application.pgsTable#url.orderid#").site_pick)</cfoutput>
25                     </MerchantID>
26                     <cfoutput>
27                         <Merchant_Ref_No>#evaluate("application.pgsTable#url.orderid#").o
rderid#</Merchant_Ref_No>
28
29                         <GrandTotalAmount>#evaluate("application.pgsTable#url.orderid#").
ord_total#</GrandTotalAmount>
30                         <TotalTaxAmount>0</TotalTaxAmount>
31                     </cfoutput>
```

## Skipping down

```
76 ▼          <CreditCardRequests>
77              <ServiceRequired>true</ServiceRequired>
78              <Operation>Auth</Operation>
79 ▼          <RequestData>
80 ▼              <CC_PaymentItemRequestData>
81 ▼                  <CreditCard>
82 ▼                      <cfoutput>
83
84                          <CC_Token>#evaluate("application.pgsTable#url.ordernumber#").
                          CCToken#</CC_Token>
85
86                          <CC_Signature>#evaluate("application.pgsTable#url.ordernumber
                          #").CCSignature#</CC_Signature>
87
88                          <CC_Type>#evaluate("application.pgsTable#url.ordernumber#").p
                          ayment_cc_type#</CC_Type>
89
90                          <CC_Expmo>#evaluate("application.pgsTable#url.ordernumber#").
                          payment_cc_month#</CC_Expmo>
```

## Finalizing SOAP and then Posting it.

```
88              <CC_Expyr>#evaluate("application.pgsTable#url.ordernumber#").
              payment_cc_year#</CC_Expyr>
89              </cfoutput>
90              <CC_CV_Number></CC_CV_Number>
91 ▼          </CreditCard>
92          <cfoutput>
93
94              <Amount>#evaluate("application.pgsTable#url.ordernumber#").ord_to
              tal#</Amount>
95              </cfoutput>
96          </CC_PaymentItemRequestData>
97      </RequestData>
98  </CreditCardRequests>
99  </userRequest>
100 </OrderPayment>
101 </soap:Body>
102 </soap:Envelope>
103 </cfsavecontent>
104 </cfcase>
```

```
302 <cfset headers="SoapAction:http://www.hp.com/eCommerce/PaymentGateway/OrderPayment">
303 <CFX_HTTP5 URL="#application.environment.config.pgs.serviceURL#"
304     METHOD="POST"
305     headers="#headers#"
306     BODY="#soapBody#" OUT="RESULT">
307 ▼ <cfif STATUS EQ "ER">
308 ▼     <cfoutput>
309         <H3>Error while processing request. Message: #MSG#<BR>
310         Error number: #ERRN#</H3>
311     </cfoutput><!-- editor messing up color -->
```

( Resuming discussion of the **Form** )

( **note:** since the **form** has no **action**, the user must click: **Continue** which sends them to: **action\_billingPGS.cfm** )

```
162 <tr>
163 <td colspan="3" align="left">
164 <div class="V13Navy">After you have inserted your Credit Card information, please
    click the Submit Button above.<br /><br />
165
166 <p>Please hold while we verfiy your payment method.<br />Do not close or navigate
    from this window.</p>
167
168 <BR />Then click this link to: <span id='smBlueRedLink2'><a href="
    <cfoutput>http://#WEB_SERVER_PATH#/orderprocessing/action_billingPGS.cfm?
    Action=SubmitBilling</cfoutput>">Continue</a></span></div>
169 </td>
170 </tr>
171 </table>
172 <IFRAME id="PHCiFrame" height="1" src="about:blank" frameborder="0" width="1"
173 name="PHCiFrame"></IFRAME>
174 </FORM>
```

**File: /orderprocessing/action\_billingPGS.cfm**

- makes local copies of **order** and **billing** related **data** from the **session** and **application** scopes
- checks the **Order** for completeness
- sets session.store\_status to **Preview**
- inserts code from: **action\_process.cfm**

**File: /orderprocessing/action\_process.cfm – Preview Section**

( Invokes **preview.cfm** )

```
297 <cflocation addtoken="No"
    url="#add_sitepick('#SECUREHTTP#://#WEB_SERVER_PATH#/orderprocessing/preview.cfm')#">
298 <cfabort>
```

**File: /orderprocessing/preview.cfm**

( **note:** **form** submits to: **action\_preview.cfm** – at this point the **user** can either **Confirm** the order or **Cancel** it. )

```
61 <div class="container">
62 <div class="row">
63 <h3>Order Preview & Confirmation</h3>
64 <cfset request.store_status = "preview">
65 <cfinclude template="#includepath#/_storebar.cfm">
66 <div class="panel panel-default">
67 <div class="panel-heading">
68 <h3 class="panel-title">Preview</h3>
69 </div>
70 <div class="panel-body">
71 <cfinclude template="include/_preview_display.cfm">
72 </div>
73 <div class="panel-body">
74 <form action="action_preview.cfm" method="post">
75 <input type="Hidden" name="show_as_TU" value="#show_as_TU#">
76 </div>
77 <div class="panel-footer clearfix">
78 <input class="btn btn-danger pull-left" type="submit" name="Action" value="Cancel
    Order">
79 <input class="btn btn-info pull-right" type="submit" name="Action" value="Confirm
    Order">
80 </div>
81 </form><!-- editor messing up color all over the place -->
82 </div>
83 </div>
84 </div>
```

## File: /orderprocessing/action\_preview.cfm – Confirm Order Section

- makes sure the **session** hasn't expired
- makes sure the **bill\_email** variable is not empty
- sets **session.store\_status** to **Receipt**
- inserts code from: **action\_process.cfm**

## File: /orderprocessing/action\_process.cfm – Receipt Section

- stores **Order Number** and **Order Total** locally
- sets **session.store\_status** to **Review**
- saves **order** to **database**
- sends out **confirmation email**
- resets all **session variables**
- invokes **receipt.cfm**

## File: /orderprocessing/receipt.cfm

Besides displaying the **Order**, this template performs the **final post** to the **index.cfm** template to generate the **Confirm SOAP** message ( entitled: **Capture** ) to the **Payment Gateway**.

```
109 <cfhttp method="Post" url="http://#WEB_SERVER_PATH#/nextGen/index.cfm">
110 <cfhttpparam type="URL" name="type" value="C">
111 <cfhttpparam type="URL" name="orderid" value="#getID.ord_ordernumber#">
112 </cfhttp><!-- editor getting colors wrong again -->
```

## File: /nextGen/index.cfm – Capture Section:

```
108 <cfcase value="C" >
109 <cfif Not IsDefined("session.ls_sitepick")>
110     Warning SitePick is not available.
111 </cfif>
112 <cfsavecontent variable="soapBody">
113 <soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema">
114 <soap:Body>
115 <OrderPayment xmlns="http://www.hp.com/eCommerce/PaymentGateway/">
116 <userRequest>
117 <FromRole>
118
119 <globalpartnerclassificationcode>xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx</global
    partnerclassificationcode>
120 <cfif evaluate("application.pgsTable#url.ordernumber#").site_pick EQ
    'US'>
121 <GlobalBusinessIdentifier>yyyyyyyyyy</GlobalBusinessIdentifier>
122 <cfelseif evaluate("application.pgsTable#url.ordernumber#").site_pick
    EQ 'UK'>
123 <GlobalBusinessIdentifier>zzzzzzzzzzzzzz</GlobalBusinessIdentifier>
124 <cfelseif evaluate("application.pgsTable#url.ordernumber#").site_pick
    EQ 'CA'>
125 <GlobalBusinessIdentifier>wwwwwwwwwwww</GlobalBusinessIdentifier>
126 </cfif>
127 </FromRole>
128 <General_Info>
129 <MerchantID>
130 <cfoutput>#evaluate("application.environment.config.pgs.mids." &
    evaluate("application.pgsTable#url.ordernumber#").site_pick)#</cfoutput>
131 </MerchantID>
132 <Merchant_Ref_No>
133 <cfoutput>#evaluate("application.pgsTable#url.ordernumber#").orderid#
134 </cfoutput></Merchant_Ref_No>
135 <GrandTotalAmount>
136 <cfoutput>#evaluate("application.pgsTable#url.ordernumber#").ord_total#
137 </cfoutput></GrandTotalAmount>
138 <TotalTaxAmount>0</TotalTaxAmount>
139 <PGS-Token />
```

Skipping down



```

153         <PurchasingLevel>2</PurchasingLevel>
154     <LevelData>
155         <AmexL2>#evaluate("application.pgsTable#url.ordernumber#").or
            dernumber#</AmexL2>
156     </LevelData>
157 </cfif>
158 </cfoutput>
159 </CC_PaymentItemRequestData>
160 </RequestData>
161 </CreditCardRequests>
162 </userRequest>
163 </OrderPayment>
164 </soap:Body>
165 </soap:Envelope>
166 </cfsavecontent>
167 </cfcase>

```

Executing the **Post** operation:

```

302 <cfset headers="SoapAction:http://www.hp.com/eCommerce/PaymentGateway/OrderPayment">
303 <CFX_HTTP5 URL="#application.environment.config.pgs.serviceURL#"
304     METHOD="POST"
305     headers="#headers#"
306     BODY="#soapBody#" OUT="RESULT">
307 <cfif STATUS EQ "ER">
308     <cfoutput>
309         <H3>Error while processing request. Message: #MSG#<BR>
310         Error number: #ERRN#</H3>
311     </cfoutput><!-- editor messing up color -->

```

This concludes the description of the **Credit Card Order** portion and its associated **SOAP Messaging** portion, in the deprecated HP Merc-Training Education Portal.