

Credit Card 3D Secure Authentication Integration with ofbiz

Hi,

I am working on integrating the 3D Secure Credit Card with ofbiz. In this process, I got it working(using protx simulator) by changing some of ofbiz files but still it is not generic, so I want to discuss it with the user community to make it generic for general usage. I am bit new to ofbiz so bear with me if I misunderstood anything.

Here the brief of changes that I have done to make it work:

Brief of 3DES: This is simple yet very good added security protocol while doing the online shopping. According to this protocol authentication/authorization takes the following flow:

1. Send the request on Issuance bank and it returns the MD(unique id), PaReq, ACSURL (authentication page for user) where user enter his password for credit card to authenticate himself on issuance bank server.
2. Send MD,PaReq and termURL (callback url, where you receive the response) to ACSURL .
3. Resd the ACSURL response on termURL(specified as callback URL by you) and Send the issuance bank authentication result + TermURL(callbackurl) to Payment Processor Authorization server
4. Read the response from Payment Processor Authorization server on termURL(specified as callback URL by you). This response contain the authentication/authorization status/result as (OK/INVALID etc)

Implementation Changes:

- 1) map3DesAttributes : This map should have minimum following attributes key/value pairs

```
attribute name="md" type="String"
attribute name="paReq" type="String"
attribute name="acsUrl" type="String"
attribute name="termUrl" type="String"
attribute name="authStatus" type="String" ( possible values: Authorized, Pending, Invalid)
attribute name="threeDSecureStatus" type="String" ( possible values: OK, Invalid)
```

- 2) Added this map in following services to pass map3DesAttributes info across the system:

```
<service name="authOrderPayments" engine="java"
  location="org.ofbiz.accounting.payment.PaymentGatewayServices" invoke="authOrderPayments" auth="true">
  .....
  .....
  .....
  <attribute name="map3DesAttributes" type="Map" mode="OUT" optional="true"/>
</service>
```

- 3) Create the following request map in "controller.xml" to handle 3Des Secure Authentication:

```
<request-map uri="process3DAuth">
  <security https="true" direct-request="false"/>
  <event type="java" path="org.ofbiz.order.shoppingcart.CheckOutEvents" invoke="process3DAuth"/>
  <response name="success" type="none"/>
</request-map>

<request-map uri="process3DAuthResponse">
  <security https="true" direct-request="true"/>
  <event type="java" path="org.ofbiz.order.shoppingcart.CheckOutEvents" invoke="process3DAuthResponse"/>
  <response name="success" type="request" value="clearcartfororder"/>
  <response name="error" type="view" value="checkoutreview"/>
</request-map>
```

- 4) Added following methods to handle in "org.ofbiz.order.shoppingcart.CheckOutEvents" class to handle 3Des Secure Authentication:

```
public static String process3DAuth(HttpServletRequest request, HttpServletResponse response)
{
    Unknown macro: {
        1. get the ACSURL
        2. send request data + callback url to ACSURL
    }

    public static String process3DAuthResponse(HttpServletRequest request, HttpServletResponse response)
    {
        Unknown macro: {
            1. Collect response from ACSURL
            2. Process response and send it to Payment Processor along with
            callback url
            3. collect response , process it and delegate it for future payment processing
        }
    }
}
```

issues:

1. Since in general ofbiz service work in request/response manner. But in case of 3Des integration as it is 2 step process:

Setp1: Issuance bank authentication

Step2: Payment Processor Authorization

So, How I implement it in generic way. Currently i have tempered the "org.ofbiz.order.shoppingcart.CheckOutEvents" to handle it as I couldn't figure out elegant way of returning the control back to PaymentGatewayServices.

2. While supporting the 3Des security we need extra status to indicate the Authentication Status (Step1: Issuance bank authentication done successfully) but Authorization is pending (Step2: Payment Processor Authorization yet to be complete). Authentication is still pending as even if both the steps ok as this decision has to be taken at Payment Gateway service.

Thanks

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