Oracle® Hospitality OPERA Exchange Interface

HTTP Communication Specification for Business Event XML Retrieval

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ORACLE

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Preface

This document explains the HTTP/HTTPS communication mechanism supported by OPERA to retrieve Business Event XMLs. Since the details are technical in nature, target audience of this document is developers who are familiar with the fundamentals of the HTTP communication mechanism.

The only operation supported is for the retrieval of Business Event XML from OPERA using an HTTP GET operation. Messages can be retrieved only once and there is no mechanism available to request the same message again.

External systems have to pull the Business Event XML messages from OPERA. OPERA does not have the ability to push the Business Event XML messages to the external systems.

Audience

This document is intended for web developers, programmers, and architects.

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL:

https://support.oracle.com

When contacting Customer Support, please provide the following:

Product version and program/module name

Functional and technical description of the problem (include business impact)

Detailed step-by-step instructions to re-create

Exact error message received and any associated log files

Screen shots of each step you take

Documentation

Oracle Hospitality product documentation is available on the Oracle Help Center at http://docs.oracle.com/en/industries/hospitality/

1 HTTP/HTTPS

OPERA supports HTTP and HTTPs communication mechanisms. The following details apply to both HTTP and HTTPS. To use HTTPS, the http server used for communication at OPERA side has to be configured accordingly.

Since there could be multiple external systems interested in receiving Business Event XMLs from OPERA, external systems must identify themselves in the URL parameter.

HTTP Operation : GET

URL : http://*OperaHTTPServer*:*Port*/Operajserv/OXIServlets/BEInterface
?subscriberName=*EXTERNAL-SYSTEM-CODE*
&ignoreNullValue=[0|1]
&showOldValue=[0|1]

URL Components

All italicised underlined words in the URL given above must be replaced with actual values. All other values should be specified as given and they are case sensitive. Description of those fields follows:

OperaHTTPServer	Replace with the IP address or host name of the OPERA HTTP server designated for communication.
Port	HTTP service's listening port on the OPERA HTTP server. Optional. Specify if different from standard port 80 for http or 443 for https.

URL Parameters

Parameter names and values are case sensitive. Parameter names must be in camel case as shown below and values must be in upper case.

Name	**Description**
subscriberName	Code designated by OPERA for the specific external system attempting to communicate with OPERA. Must be specified in upper case.
ignoreNullValue	Whether to exclude elements with null values from the Business Event XML. Pass 1 to exclude elements with null values, 0 to include elements with null values.
showOldValue	Whether to include old values in the Business Event XML. Pass 1 to include old values, 0 to exclude old values.

Sample URL

URL : http://nploxid11/Operajserv/OXIServlets/BEInterface?
subscriberName=BETEST&ignoreNullValue=0&showOldValue=1

RequestMethod : GET

HTTP Response - Message is Available for External System

HTTP Return Code	200 OK
Response Stream	XML message (Content of the message will be based on the type of business event and the business event subscription configured in OPERA and the URL parameters passed.)
Response Header Fields	
Content-Type	text/xml
Content-Length	Not present

Sample Response

```
Response code    : 200
Response message : OK
```

Header Fields

```
HTTP/1.1 200 OK
Date: Mon, 18 Aug 2008 15:09:42 GMT
Server: Oracle-Application-Server-10g/10.1.2.0.2 Oracle-HTTP-
Server
Pragma: no-cache
Cache-Control: no-cache
title: ODH|RESERVATION|1949381|852887|
Connection: close
Transfer-Encoding: chunked
Content-Type: text/xml; charset=UTF-8
```

Output Data Stream

```
<?xml version="1.0"?>
<BusinessEvent eventType="RESERVATION" action="UPDATE
RESERVATION" eventState="STANDARD">
  <HotelReference>
    <hotelCode>ODH</hotelCode>
  </HotelReference>
  <key>852887</key>
  <creationDate>2008-08-18T11:09:43.000</creationDate>
  <businessDate>2004-10-09T00:00:00.000</businessDate>
  <Name dataType="string">
    <newValue>Smith</newValue>
    <oldValue>Smith</oldValue>
  </Name>
  <FirstName dataType="string">
    <newValue>John</newValue>
    <oldValue>John</oldValue>
  </FirstName>
  <ConfirmationNo dataType="string">
    <newValue>885679</newValue>
    <oldValue>885679</oldValue>
  </ConfirmationNo>
```

```
  <ConfirmationLegNo dataType="number">
    <newValue>1</newValue>
    <oldValue>1</oldValue>
  </ConfirmationLegNo>
  <RateCode dataType="string">
    <beginScope>2008-09-12T00:00:00.000</beginScope>
    <endScope>2008-09-12T00:00:00.000</endScope>
    <newValue></newValue>
    <oldValue>CHILLER</oldValue>
  </RateCode>
  <RateCode dataType="string">
    <beginScope>2008-09-09T00:00:00.000</beginScope>
    <endScope>2008-09-11T00:00:00.000</endScope>
    <newValue>CHILLER</newValue>
    <oldValue>CHILLER</oldValue>
  </RateCode>
  <SourceCode dataType="string">
    <beginScope>2008-09-12T00:00:00.000</beginScope>
    <endScope>2008-09-12T00:00:00.000</endScope>
    <newValue></newValue>
    <oldValue>GUD</oldValue>
  </SourceCode>
  <SourceCode dataType="string">
    <beginScope>2008-09-09T00:00:00.000</beginScope>
    <endScope>2008-09-11T00:00:00.000</endScope>
    <newValue>GUD</newValue>
    <oldValue>GUD</oldValue>
  </SourceCode>
  <JointoResvNameId dataType="string">
    <newValue></newValue>
    <oldValue></oldValue>
  </JointoResvNameId>
</BusinessEvent>
```

HTTP Response - Message is Not Available for Property

HTTP Return Code	200 OK (In the future, the System may return 204/No Content to indicate that there is no data available.)
Response Stream	Not applicable
Response Header Fields	
Content-Type	Not Applicable
Content-Length	0

Sample Response

```
Response code    : 200
Response message : OK
```

Header Fields

```
HTTP/1.1 200 OK
Date: Mon, 18 Aug 2008 15:41:29 GMT
```

```
Server: Oracle-Application-Server-10g/10.1.2.0.2 Oracle-HTTP-
Server
Content-Length: 0
Pragma: no-cache
Cache-Control: no-cache
Connection: close
Content-Type: text/plain
```

HTTP Response - Error Occurred While Processing the GET Request

HTTP Return Code	400 Bad Request 500 Internal Server Error
Response Stream	Applicable error message
Response Header Fields	
Content-Type	text/plain
Content-Length	Not Applicable
Title	Not Applicable

Sample Response

```
Response code    : 400
Response message : Bad Request
```

Header Fields

```
HTTP/1.1 400 Bad Request
Date: Mon, 18 Aug 2008 15:43:20 GMT
Server: Oracle-Application-Server-10g/10.1.2.0.2 Oracle-HTTP-
Server
Content-Length: 99
Pragma: no-cache
Cache-Control: no-cache
Connection: close
Content-Type: text/plain
```

Error Stream

```
Bad request: showOldValue parameter must be specified as 0 or 1
while requesting business events.
```

2 Troubleshooting

In development or production, if external system encounters any errors while communicating with OPERA communication http server, both the http return code and the error message returned in http response should be captured and reported.
External systems should make reasonable effort to ensure that the issue is not related to their network or code before requesting assistance from Oracle for further troubleshooting.

- If no http response code is received from OPERA http server, most likely the request did not reach the server. This could be due to network issues, incorrect server IP address/host name used or the server or the http listener on the server is down.
- If the response code is 400/Bad Request, server will send the reason why it thinks the request is bad in the response stream. Perform the necessary corrections and request again.
- If the response code is 500/Internal Server Error, server is experiencing issues and the error message returned in the response stream will be helpful in narrowing down the issue, so it must be captured and reported to Oracle for further troubleshooting.
- If the response code is something else, make sure that the URL is constructed as explained in this document, including case (upper/lower) and all parameters are passed as expected.