

OAG Historical Flight Status

Web Service User Guide

November 2015

1. Overview

The OAG Historical Flight Status Information web service returns information on the historical status/schedules of flights from 48 hours after flight arrival. Calls to the web service access the OAG Historical Flight Status database which contains flight status information from 2004 onwards. Base schedules information is returned alongside status changes. As with other OAG Web Services, customers wishing to initiate communication with OAG Historical Flight Status Information web service need a user id and password to validate user rights. If successful, they will have access to the OAG Historical Flight Status Information web service.

Once successfully authenticated on to the system, requests may be issued to OAG for any combination of:

1. carrier
2. carrier and flight number
3. departure airport or city
4. arrival airport or city

An initial date must be also selected. This can be expanded to cover a date range of a day before and a day after. The date and at least one other parameter are mandatory.

This document describes each of the web service methods and provides sample SOAP documents for each method.

2. XML Web Services

2.1 Communicating with OAG XML Web Services

Communication with the OAG Historical Flight Status Information web service occurs with SOAP documents contained in the HTTP request. SOAP version 1.2 is a specification standard providing a definition for XMLbased information to be exchanged between distributed systems. For detailed information on the specification visit the World Wide Web Consortium web site at <http://www.w3.org>

To use any of the OAG Historical Flight Status Information web methods, a single SOAP request is submitted to the service containing the method name and parameters as defined for the method in the SOAP body section. Proper use of SOAP over HTTP requires an HTTP header to be transmitted containing the SOAPAction which is set to an empty string (""), the method name is the 1st node in the SOAP body. Each method will have its own http header.

In general, the following parameters need to be set in the http header:

POST: <http://status.oag.com/historical/OFSHistoricalWebServiceImplPort> / HTTP/1.1
Host: status.oag.com
Content-Type: text/xml; charset=utf-8
Soap Action: ""

The web service description language file is defined at the following location:

- WSDL: http://status.oag.com/historical/OFSHistoricalWebServiceImplService_v2.0.wsdl

2.2 Response and Error messages

All of the OAG Historical Flight Status web methods return response xml message in normal success scenarios. If there is any error in the input message or if the web service application couldn't successfully process the request, an error message is returned with detailed description of the error details.

If the reply xml message contains node <getFlightsResponse> immediately under the soap body, this means the request has been successfully processed and response details are returned.

If the reply xml message contains node <Fault> immediately under the soap body, this means the request has been failed to process and a fault code with details are returned.

See *Fault message* Reference section of this document for exception/error details.

2.3 Webservice Methods

This section describes each of the web methods included in the OAG Flight Status Information web service. There is a description of each web method along with the input parameters and output parameters.

2.3.1 GetFlights

Returns the historical status information for the entered parameters on a particular date or date plus and minus 1 day. N.B. date is mandatory. One other field must also be selected. If flightNum is selected, airlineCode must also be selected.

Input Parameters

Parameter Name	Type	Data type	Description
airlineCode	Optional	string	IATA carrier code – Mandatory if flight number is provided. E.g. BA
flightNum	Optional	string	Alphanumerical part of the flight number. E.g. 276
fromDate	Mandatory	string	Valid local date for on which the flight departed Format: YYYY-MM-DD
plusMinusDay	Optional	boolean	0 = one day only 1 = date range one day either side of the entered date
depAptCode	Optional	string	IATA airport code
depCityCode	Optional	string	IATA city code
Note: Only one of the above two can be provided			
arrAptCode	Optional	string	IATA airport code
arrCityCode	Optional	string	IATA city code
Note: Only one of the above two can be provided			
loginDetails			
password	Mandatory	string	OAG-provided password
username	Mandatory	string	OAG-provided user name

Method:

getFlights (Apart from the mandatory parameters, at least one optional parameter must be provided)

Output:

ResultXML

getFlightsResponse XML document
(see XML schemas and Sample XML section of this document)

(or)

Fault XML message
(see Fault message reference)

2.4 Fault message Reference

The format of a fault message is as below:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
<S:Body>
<S:Fault xmlns:ns3="http://www.w3.org/2003/05/soap-envelope">
<faultcode>S:Server</faultcode>
<faultstring> FAULT_MESSAGE </faultstring>
<detail>
<ns2:OFSSStatusProcessException
xmlns:ns2="http://ws.business.ofshistorical.ubmaviation.com/">
<message> FAULT_MESSAGE </message>
</ns2:OFSSStatusProcessException>
<ns2:exception class="com.ubmaviation.ofshistorical.exception.OFSSStatusProcessException"
xmlns:ns2="http://jax-ws.dev.java.net/">
<message> FAULT_MESSAGE </message>
<ns2:stackTrace>
<!--Detailed stack trace
</ns2:stackTrace>
<ns2:cause class="org.apache.axis.AxisFault">
<message> FAULT_MESSAGE2 </message>
<ns2:stackTrace>
<!--Detailed stack trace
</ns2:stackTrace>
</ns2:cause>
</ns2:exception>
</detail>
</S:Fault>
</S:Body>
</S:Envelope>
```

FAULT_MESSAGE AND FAULT_MESSAGE2 messages vary depending upon the type of fault.

3. XML Schemas and Sample XML

3.1 Soap Request and Response XML

getFlights

Request

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.
w3.org/2001/XMLSchema" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
<soap:Body>
<ws:getFlights>
<!--Optional:-->
<arg0>
<!--Optional:-->
<flightsQueryWSVO>
<!--Optional:-->
<flightNum/>
```

```

<!--Optional:-->
<fromDate>2011-01-10T00:00:00.000</fromDate>
<plusMinusaDay>>false</plusMinusaDay>
<!--Optional:-->
<airlineCode>BA</airlineCode>
<!--Optional:-->
<depAptCode>LHR</depAptCode>
<!--Optional:-->
<!--Optional:-->
<arrAptCode>DEL</arrAptCode>
<!--Optional:-->
</flightsQueryWSVO>
<!--Optional:-->
<loginDetailsVO>
<!--Optional:-->
<password>xxxxxxx</password>
<!--Optional:-->
<username>xxxxxxx</username>
</loginDetailsVO>
</arg0>
</ws:getFlights>
</soap:Body>
</soap:Envelope>

```

Response

```

<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.
w3.org/2001/XMLSchema" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
<soap:Body>
<ns2:getFlightsResponse xmlns:ns2="http://ws.business.ofshistorical.ubmaviation.com/">
<return>
<actArrDate>2011-01-11T02:45:00Z</actArrDate>
<actDepDate>2011-01-10T13:10:00Z</actDepDate>
<aircraftName>Boeing 747-400 (Passenger)</aircraftName>
<arrAptCode>DEL</arrAptCode>
<arrStatus>DY</arrStatus>
<arrSubStatus>IN</arrSubStatus>
<arrTerminal>3</arrTerminal>
<arrivalAirport>Delhi</arrivalAirport>
<carrierCode>BA</carrierCode>
<carrierName>British Airways</carrierName>
<depAptCode>LHR</depAptCode>
<depStatus>DY</depStatus>
<depSubStatus>OUT</depSubStatus>
<depTerminal>5</depTerminal>
<departAirport>London Heathrow Apt</departAirport>
<flightNumber>143</flightNumber>
<fltLegSeqNo>1</fltLegSeqNo>
<id>1110660</id>
<schdArrDate>2011-01-11T01:25:00Z</schdArrDate>
<schdDepDate>2011-01-10T11:45:00Z</schdDepDate>

```

```

</return>
<return>
<actDepDate>2011-01-10T21:38:00Z</actDepDate>
<aircraftName>Boeing 747-400 (Passenger)</aircraftName>
<arrAptCode>DEL</arrAptCode>
<arrStatus>DY</arrStatus>
<arrSubStatus>ETA</arrSubStatus>
<arrTerminal>3</arrTerminal>
<arrivalAirport>Delhi</arrivalAirport>
<carrierCode>BA</carrierCode>
<carrierName>British Airways</carrierName>
<depAptCode>LHR</depAptCode>
<depStatus>DY</depStatus>
<depSubStatus>OUT</depSubStatus>
<depTerminal>5</depTerminal>
<departAirport>London Heathrow Apt</departAirport>
<flightNumber>257</flightNumber>
<fltLegSeqNo>1</fltLegSeqNo>
<id>1006529</id>
<schdArrDate>2011-01-11T10:25:00Z</schdArrDate>
<schdDepDate>2011-01-10T20:45:00Z</schdDepDate>
</return>
</ns2:getFlightsResponse>
</soap:Body>
</soap:Envelope>

```

3.2 OAG Historical Flight Status Information Web services Schema

3.2.1 getFlightsResponse Schema

Please refer to <http://status.oag.com/historical/OFSHistoricalWebServiceImplPort?xsd=1> for the XML Schema definition of the web service.

4 Flight Status Code Reference

The following tables list the decode values for the status and sub-status codes returned by the web service.

Flight Status Code

Status Code	Status Code Description
OT	On time
EY	Early
DY	Delayed
CX	Cancelled

Flight Status Detail Code and Description

Status Detail Code	Status Detail Code Description
EMPTY	No status available
ARVS	No delays posted
CNCL	Cancelled flight
CX	Cancelled
CXCL	Cancelled
DCSN	Check with airline
DPTS	No delays posted
DY	Delayed
EOFF	Estimated departed off the ground
EON	Estimated arrived on the ground
ETA	Estimated arrival time
ETD	Estimated departure time
EY	Early
IN	Arrived in the gate
LX	Cancelled leg
NA	Not available
NO	No-op
NS	No Status Derivable
OFF	Departed off the ground
ON	Arrived on the ground
OT	On Time
OUT	Departed out of the gate
PRE	Preliminary estimated time
RFA	Return from Airborne
RTR	Return to Ramp
SCHD	Schedule change

Delay Reason Code

The delay reason codes provided are those that follow the IATA standard. Please see Sections 730 & 731 in the IATA Airport Handling Manual regarding these codes.