



OrderChangeNotif

Summary Document

Version: 3.4

Date: December 20, 2022



© Copyright Accelya Topco Ltd. and its subsidiaries (hereinafter jointly referred as Accelya Group). All rights reserved.

Contents in this document are confidential and proprietary to Accelya Group. No part of this document should be reproduced, published, transmitted, or distributed in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, nor should be disclosed to third parties without prior written approval from Accelya Group.



Table of Contents

- 1. Overview 5
 - 1.1. Communication Workflow 5
- 2. Preliminary OCN Setup Request 6
- 3. OCN Support 7
- 4. API Usage 8
- 5. XML Samples..... 11
- 6. Authentication Methods..... 12
 - 6.1. Basic Access Authentication 12
 - 6.2. OAuth 2.0 13
 - 6.2.1. OpenID Connect..... 13
 - 6.3. Authentication Methods – Usage Details 14



Document modification history

Date	Version	Author(s)	Modification(s)
12/20/2022	3.4	Carlos Mimoso	Updated styles and template Replaced "Farelogix" with "Accelya" Under section 2. Preliminary OCN Setup Request, removed proservices email.
11/20/2020	3.3	Carlos Mimoso	Under section 2 Preliminary OCN Setup Request: updated link to OCN setup form Under section 5 XML Samples: updated links to the OrderChangeNotif sample message and the Acknowledgement sample message.
3/7/2020	3.2	David Darner	In section 1.1, Communication Workflow, page 4: Updated list to clarify message information
10/24/2019	3.1	Carlos Mimoso	In section 6.2, OAuth 2.0: <ul style="list-style-type: none"> Updated the link to https://en.wikipedia.org/wiki/OAuth Added section 6.2.1 OpenID Connect
10/16/2019	3.0	Carlos Mimoso	In section 4 API Usage, in the OrderChangeNotif table, on page 8, removed the following components: <ul style="list-style-type: none"> Query/@OrderID Query/Owner And Added the following components <ul style="list-style-type: none"> Query/Order OrderChangeNotif/Query/Order/@OrderID OrderChangeNotif/Query/Order/@Owner OrderChangeNotif/Query/Order/BookingReferences/BookingReference/ID OrderChangeNotif/Query/Order/BookingReferences/BookingReference/OtherID OrderChangeNotif/Query/Order/BookingReferences/BookingReference/ID OrderChangeNotif/Query/Order/BookingReferences/BookingReference/AirlineID OrderChangeNotif/Query/Order/BookingReferences/BookingReference/AirlineID/@Name
10/10/2019	2.0	Carlos Mimoso	<ul style="list-style-type: none"> In section 4 API Usage, in the OrderChangeNotif table, on page 8, added the following components: <ul style="list-style-type: none"> Order/BookingReferences/BookingReference/ID Order/BookingReferences/BookingReference/OtherID In the table in section 5 XML Samples, page 11, updated the XML example, OrderchangeNotif_SampleMessage.xml Added section 6 Authentication Methods, page 12 Added Heading numbers (e.g. 1 H1, 1.1 H2, etc.)
3/16/2019	1.0	Marco Haber	Original



1. Overview

Airline PSS Systems communicate order changes to Accelya systems via Type-B messages or some alternate channel. *OrderChangeNotif* (OCN) functionality has been put in place so that Accelya can alert Endpoint Hosts about these changes.

The OCN functionality relies on an HTTP Post mechanism whereby Accelya delivers an *OrderChangeNotif* message to a designated Endpoint Host. Once an alert message has been delivered, it is then the responsibility of the Endpoint Host to pass the information on to the impacted agency / PCC.

This document provides a high-level discussion of the *OrderChangeNotif* message as well as information about the process that must be carried out for Endpoint Hosts to receive OCN notifications.

1.1. Communication Workflow

In order for an Endpoint Host to receive *OrderChangeNotif* messages, Accelya first provides an IP address that must be white-listed by the Host's IT team. The team, in turn, must also provide Accelya with a dedicated secure endpoint **HTTPS** that will be used to receive the messages.

1. Accelya receives order change details from the Airline Host System.
2. Accelya uses standard protocol to establish a Post connection to the https link provided by the Endpoint Host.
3. Accelya sends an *OrderChangeNotif* message to the Endpoint Host. The message contains all the NDC 17.2 data that IATA requires.
4. If the *OrderChangeNotif* transmission is successful, the Endpoint Host responds with a successful reception message. A Status Code of 200 should be present in the message header. (Click [HERE](#) for info on status codes.)

Note

The body section of the HTTPs response might contain an NDC Acknowledgement message which does not play any programmatic role at this point and is not currently being validated. However, Accelya is discussing the possibility of starting to validate these messages as part of a future release.

Note

Links to sample *OrderChangeNotif* and *Acknowledgement* messages are provided in section 5 **XML Samples** below.



2. Preliminary OCN Setup Request

It is recommended that interested parties have a discussion with respective carriers before initiating the setup routine.

To initiate the OCN setup, the Endpoint Host must fill out the attached form and submit it via Zendesk or your airline's support tool.

Keep in mind that a separate form must be submitted for each carrier.

Some sample form data is provided in the table below.

Recipient Name	ENV	Airlines	SystemUser ("u")	Recipient URL (END Point)	Contact Details
ABC/ AccelyaTest	Test	F1	AccelyaTest	https://testuser. Accelya2.jsp	Airlines: test@xxxx.com SystemUser : test@yyyy.com
GDSA/AccelyaProd	Prod	F1	AccelyaProd	https://Prodtest. Accelya2.jsp	

Note: [Click here to view the OCN setup form.](#)

Note: The OCN setup form is also an attachment to this pdf.



3. OCN Support

To receive OCN support, a ticket stating the issue should be opened in accordance with the general support processes that Accelya puts forth.

- For issues in the Test environment, a ticket should be opened with ProServices.
- For issues in Production, a ticket should be opened with the FLX Help Desk.

Important

OCN Recipients must keep Accelya informed about any system changes or planned outages that impact the Endpoint Host.



4. API Usage

The tables below identify and describe all schema components that must be present in well-formed *OrderChangeNotif* and *Acknowledgement* messages, respectively.

OrderChangeNotif	
Component	Description
<i>@Version</i>	Indicates the message version.
<i>@TransactionIdentifier</i>	All XML messages are tagged with a unique ID number so that support personnel can more efficiently locate and track transactions when responding to client technical issues.
<i>Document/@id</i>	A globally unique ID for the object instance.
<i>Party/Sender</i>	Information about the message sender. In the case of OCN messages, it will be the Airline ID.
<i>OrderChangeNotif/Party/Recipient</i>	Specifies the final message recipient.
<i>Recipient/TravelAgencyRecipient</i>	Specifies who created the Order.
<i>Query/Order</i>	This node is used to provide a host of details about the Order.
<i>OrderChangeNotif/Query/Order/@OrderID</i>	Specifies the Accelya OrderID.
<i>OrderChangeNotif/Query/Order/@Owner</i>	Specifies the Owner of the OrderID.
<i>OrderChangeNotif/Query/Order/BookingReferences/BookingReference/ID</i>	Displays the Accelya Booking Reference.
<i>OrderChangeNotif/Query/Order/BookingReferences/BookingReference/OtherID</i>	Displays the F1 designator.



OrderChangeNotif	
Component	Description
<i>OrderChangeNotif/Query/Order/BookingReferences/BookingReference/ID</i>	Displays the Airline Booking Reference ID.
<i>OrderChangeNotif/Query/Order/BookingReferences/BookingReference/AirlineID</i>	Displays the Airline ID.
<i>OrderChangeNotif/Query/Order/BookingReferences/BookingReference/AirlineID/@Name</i>	Displays the Airline Name.
<i>OrderChangeNotif/Query/Order/OrderItems</i>	This node is used to specify the changes at the level of each Order item. Note that the node may or may not contain actual element values from the Order image. Hence it is recommended that integrators run an <i>OrderRetrieve</i> to get the most current <i>OrderViewRS</i> and details.
<i>OrderChangeNotif/Query/Amendments</i>	This node is used to provide amendment information pertaining to the order.
<i>Amendment/ActionType/@Context</i>	Specifies the reason for the associated action: <ul style="list-style-type: none"> • Flight Number Change: @Context 1 • Flight Retimed: @Context 2 • Flight Canceled: @Context 3 • No Reason Given: @Context 9
<i>OrderChangeNotif/Query/Amendments/Amendment/Remarks/Remark</i>	Remark text. This value is driven by the TTY message received from Airline PSS. FLX provides the raw TTY data should an implementor wish to use it.



Acknowledgement	
Component	Description
<i>@Version</i>	Use this attribute (<i>Schema Root / @Version</i>) found in every NDC Request to indicate which version corresponds to the message being delivered to the Gateway.
<i>@TransactionIdentifier</i>	All XML messages must be tagged with a unique identifying number. This allows support personnel to more efficiently locate and track transactions when responding to client technical issues.
<i>Document/Name</i>	A globally unique ID for the object instance.
<i>Document/StatusCode</i>	Value= Ok to inform FLX system about receiving by the end point system



5. XML Samples

[Click here to view the OrderChangeNotif sample message.](#)

Note: The OrderChangeNotif sample message is also an attachment to this pdf.

[Click here to view the Acknowledgement sample message.](#)

Note: The Acknowledgement sample message is also an attachment to this pdf.



6. Authentication Methods

Accelya has enhanced the HTTPS communication process with two industry standard authentication methods. The implementor now has three options for authentication:

1. No Authentication (Default)
2. Basic Access Authentication
3. OAuth 2.0

6.1. Basic Access Authentication

Basic Access Authentication uses username and password credentials to grant access to web servers. The username and password are passed in the HTTP request header. For more information see <https://tools.ietf.org/html/rfc7617>.

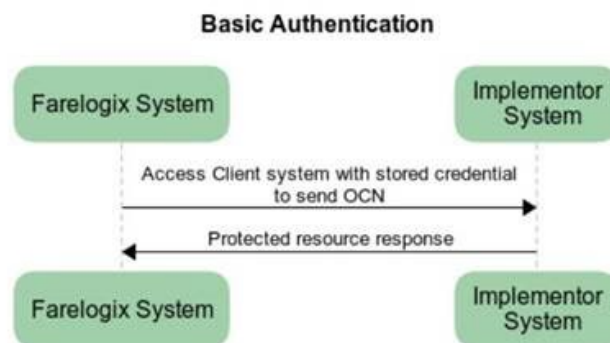


FIGURE 1



6.2. OAuth 2.0

OAuth 2.0 uses Access Tokens to allow websites or applications access to information. This method does not require passwords. For more information see, <https://en.wikipedia.org/wiki/OAuth>.

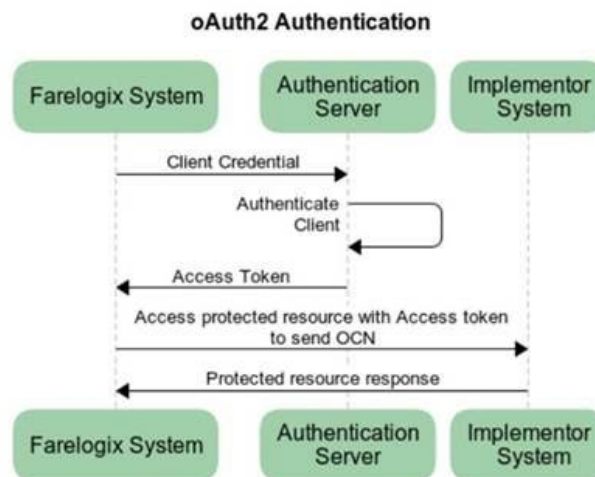


FIGURE 2

6.2.1. OpenID Connect

OpenID Connect is a profile of OAuth 2.0 that defines a workflow for authentication. The big difference between OpenID Connect and OAuth2 is the `id_token`. There is no `id_token` defined in OAuth2 because the `id_token` is specific to federated authentication.



6.3. Authentication Methods – Usage Details

By default, no authentication is attempted when trying to POST a payload to an endpoint. If requested by the configured Recipient, supported authentication methods are:

Type	AuthName	AuthParams	Example
No Authentication (only IP white-listing)	none or blank		
HTTP Basic (User & Password)	Basic	user pass	{ user: "flx", pass: "t1_x35" }
OAuth2 (Client Credentialsgrant workflow)	oAuth2_CliCred	client_id client_secret discovery_url -opt. scope -opt.	{ client_id: "flx", client_secret: "xQ3dF0k=", discovery_url: "https://a.do.main/and/path/", scope: "poc_tests" }