OC&ERP connection guidelines

Prior to reading these guidelines, please review the OC API Specification. This document is a supplement to the specification and contains key points, highlighting questions raised by customers or areas which they tend to miss.

Version	Aligned with API Spec	Date	Author	Notes
1.0	4.1 (Beta)	24 May 2021	Steven/Jason/ Jacek	Initial draft for UK 3PPs

1. OC's ERP team receive connection request

1-1 seller/ERP initiate connection request

Unless account details have been provided by the local OC team, the Seller/ERP system should send the following request to: ERPintegrationGB.EF@orangeconnex.com

Customer Name	********limited（3PP-ERP do not required）
Country/Region	Mainland China/HK/DE/UK
OCID	00000000（3PP-ERP do not required）
ERP Type	Seller-ERP or 3PP-ERP
ERP Name	Seller-ERP Name/3PP-ERP Name
OC Service	DE /UK（3PP-ERP do not required）

*3PP-ERP means third party's ERP , Seller-ERP means seller has its own ERP

1-2 OC open the testing account & information

The OC UK team will request test accounts on behalf of UK 3PPs. On receipt of a test account request, the OC team will generate a unique ClientKey & SecretKey for each 3PP.

2. The connections process explained

2-1 Authorization code & connection token

2-1-1 Authorization code & token's connector explanation

The Clientkey provided by OC is used to get the authorization code and Token.

API name in document	Connector Usage Explanation
URL(getAuthorizationCode)	Purpose: To allow the ERP system to request OC's authorization code
accessToken&refreshToken	Usage: To allow the ERP system to request accessToken & refreshToken **Please Note:** The 'access_token' is valid for 3,600 seconds. If it has expired, please use 'refresh_token' to retrieve a new one. The "refresh token" is valid for one year, please store a record of the "refresh token" to make sure you can retrieve the 'access token'
refresh accessToken	Purpose: To allow the ERP system to use the 'refeshToken' to retrieve a new "accessToken"

2-1-2 Important note regarding the authorization code & token connectionURL(getAuthorizationCode)

The ERP system receives OC's authorization code via this connector.

For more information, please refer to OC API SPECIFICATION section 1.0 URL(getAuthorizationCode).

A connection example is shown below:

https://openapi-pr-uk.orangeconnex.com/oauth/authorize?response_type=code&client_id=ClientKey&redirect_uri=http://en.newsign.com&state=userID

Please Note:

The highlighted sections are placeholders; Clients should replace these with their own information.

http://en.newsign.com : the website which the client wishes to access

userID (ERP user): username/userID used by ERP

After inserting the link, the webpage will return to the OC website home page. At this point, please enter the client's username/userID and password.

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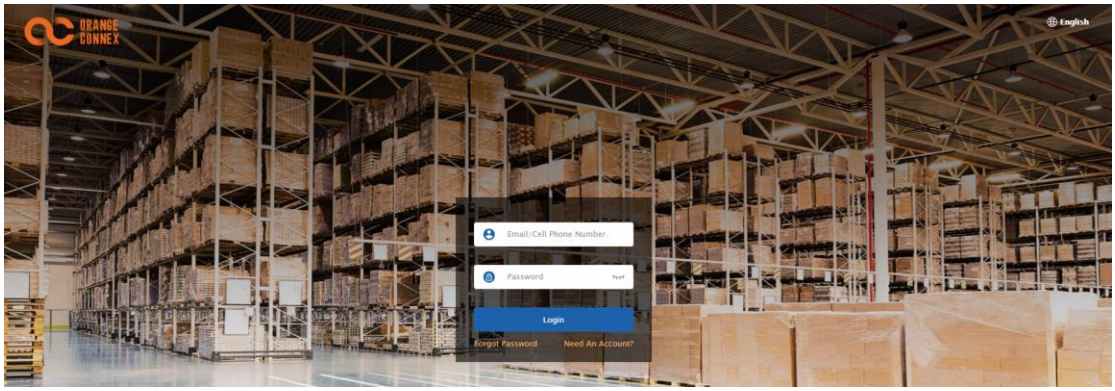
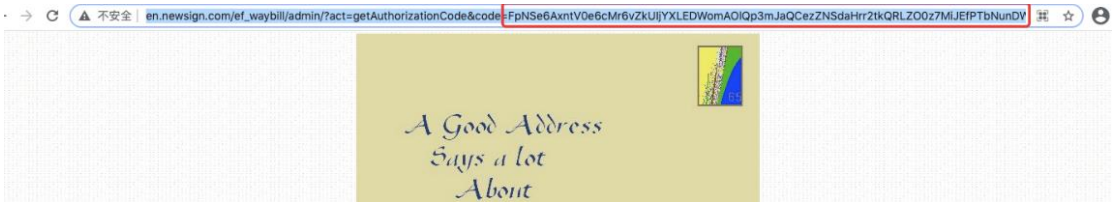


Following this, the webpage will return to the website entered into the code.

The following syntax is used to copy the authorization code from the address. Please copy the returned authorization code into the highlighted area.

http://en.newsign.com?act=getAuthorizationCode&code=returned authorization code&state= userID (ERP user account)



(Example of a returned web page)

2-1-2-1 accessToken&refreshToken

The ERP system retrieves the 'accessToken&refreshToken' for the user via this connector.

For more information, please refer to OC API SPECIFICATION section 1.1 accessToken & refreshToken.

The following is an example connection message:

https://openapi-pr-uk.orangeconnex.com/oauth/token?grant_type=authorization_code&code= accessed authorization code&redirect_uri=http://en.newsign.com&client_id= ClientKey

OC will return 2 tokens back to the ERP system

{"access_token": "access_token information", "token_type": "bearer", "refresh_token": "refresh_token information", "expires_in": 3600}

Please Note：

access_token： is only valid for 3,600 seconds. If expired, please use the refresh token to generate another access token.

refresh token： is valid for one year. Please store details of the refresh token to make sure you can retrieve a new access token.

2-1-2-2 refresh accessToken

The ERP system will use the refresh_token to generate another access_token.

For more information, please refer to OC API Specification section 1.2 refresh accessToken.

Connection example:

POST /oauth/token?grant_type=refresh_token&refresh_token="refresh_token"&client_id="yourclientid" HTTP/1.1（Host: server.example.com, Content-Type: application/x-www-form-urlencoded）

Response:

{"access_token": "new access_token", "token_type": "bearer", "expires_in": 3600}

Please Note：

The Access_token's validation time is very short, OC suggests that the code includes a re-access rule to prevent problems from occurring.

2-2 SKU related connection

2-2-1 SKU connector explained.

The SKUs connector allows users to maintain SKU information. Users can transfer SKU information from the ERP to OC's system. It can be used after submission and approval by OC.

Users can also finish SKU information maintenance, submission, and approval directly in OC's portal and subsequently synchronize this back to the ERP system.

API name in document	Usage
SKUCreation	Purpose: To transfer SKU information from the ERP system to OC **Please Note**: After transmission, the status of the SKU remains as 'draft'. Users will need to log into the OC portal, to request approval from OC. **Please note：** OC recommends connecting via 'SKUCreation v3'. This connector has more comprehensive features
SKUCreation v2	
SKUCreation v3	
SKUQuery	Purpose: Allows the ERP system to query SKU information from OC's system and to synchronise OC's SKU information with the ERP system **Please note**: OC recommends connecting via 'SKUQuery v3'. This connector has more comprehensive features.
SKUQuery v2	
SKUQuery v3	

2-2-2 SKU connector guidelines

2-2-2-1 SKUCreation v3

The ERP system uses this connector to send SKU information to OC

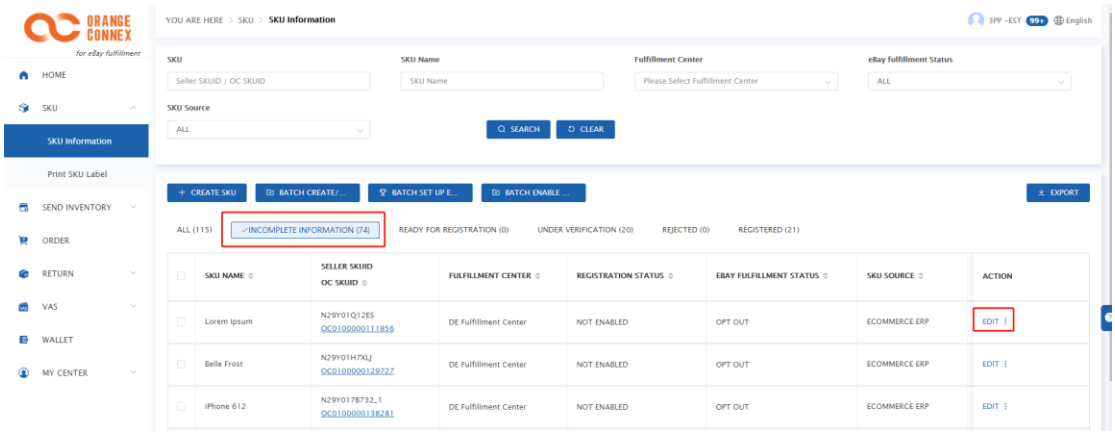
For more information, please refer to OC API Specification section 2.3 SKUCreation v3.

Please Note:

referenceSKUID: this is the serial number of the SKU in the ERP system. When the SKUcreation request is successful, OC will return a MFSKUID to the ERP system. Please record the MFSKUID in the ERP system, as this is the unique SKU identifier in OC's system. Both the later inbound and outbound orders will use this number as the SKU's unique identification.

Once the SKUCreation request is successful, the SKU can be seen in OC's system. Please note that the status of this SKU is still 'draft',

The user will need to login to https://fulfillment.orangeconnex.com/, enter any required supplementary information and then submit. OC's customer service team will approve the SKU information for the user.



2-2-2-2 SKUQuery v3

The ERP system uses this connector to transfer SKU information from OC's system back to the ERP system.

For more information, please refer to OC API Specification section 2.4 SKUQuery.

In the OC portal, https://fulfillment.orangeconnex.com/ the user can additionally choose between options 'from eBay', 'manual creation', or 'batch upload' to create SKUs. Following creation, connector 'SKUQuery' can be used to synchronize the SKU details back to the ERP system.

Please Note:

This connector can be used to query information and further filtered by selecting start/end time, referenceSKUID, sellerSKUID, and MFSKUID.

'SellerSKUID' refers to 'the information seller fills in' when setting up the SKU in the OC's system. This field can be modified by the OC's help desk.

If using 'SKUCreation v3' to import SKU's field, the number will be the same as referenceSKUID

2-3 stock management connection

2-3-1 Explanation of stock management connector

After finishing the maintenance of SKUs, the user can create an inbound order. When the inbound order is complete, the related cargo can be sent to OC's overseas warehouse.

After the warehouse receives and puts away the order, the SKU's status will change to "sellable"

The stock management connector allows the ERP system to maintain stock, synchronize SKU stock changes and real-time inventory

API name in document	Connector usage explanation
getStockMovement	Purpose: To query status of stock movement from OC system Explanation: Stock movements are queried by selecting MFSKUID, startTime, endTime
stockSnapshot	Purpose: To query SKU stock levels in OC's system in real time Explanation: Stock snapshots are queried by selecting MFSKUID

2-3-2 Important notes for the inventory management connector

2-3-2-1 getStockMovement

The ERP system uses this connector to synchronize the OC system's stock movements with the ERP system.

For more information, please refer to OC API Specification section 3.1 'getStockMovement'.

Please Note:

This connector only supports the query by selecting MFSKUID, start time/end time, but it does not support any other query.

2-3-2-2 stockSnapshot

The ERP system can use this connector to synchronize a real-time stock snapshot from OC's system with the ERP system.

For more information, please refer to OC API Specification section 3.2 'stockSnapshot'

Please Note:

This connector only supports the query by selecting MFSKUID, but it does not support any other SKUID query.

If a single MFSKUID exists in multiple warehouses, the returned data from this connector will include the stock snapshot across multiple warehouses at the same time.

2-4 Logistics channel and outbound order's connector (Multi-channel)

2-4-1Logistics channel and outbound order connector's explanation

After SKU information is approved, and stock has been received and put away. The user can then place an outbound order request to OC. The outbound order is a warehouse shipment to buyer.

Please note:

This does not apply to eBay Fulfilment orders, which are fulfilled automatically.

API name in document	Connector usage explanation
getServiceList	Purpose: To access all logistics' shipping service code/name in OC system Explanation: The accessed 'shippingServiceCode', will be used for 'outbound order shipment' later.
placeOutboundOrder	Purpose: To send the data of outbound order, finish the order placement Explanation: Based on different overseas warehouses, intraday outbound orders' cut-off times may be different
OrdersQuery	Purpose: To query outbound order data Explanation: Using this connector, the ERP system can query the data for the outbound order. Include: order status, whether it is an automatic order, last mile order number…
orderCancellation	Purpose: Cancellation of outbound order Explanation: To cancel the outbound order if it has been placed. The order cannot be cancelled after order picking has been completed

2-4-2 Important notes for logistics channel and outbound orders connectors

2-4-2-1 getServiceList

The ERP system can use this connector to synchronize logistics' channel information from the OC's system to the ERP.

For more information, please refer to OC API Specification section 4.1 'getServiceList'

Important note:（this service has been enabled for the following:）

DEDomesticStandard, DEInternationalStandard, DEDomesticEconomy, GBDomesticStandard, GBDomesticExpress, GBDomesticEconomy, GBDomesticStandardLetter

2-4-2-2 Place Outbound Order

The ERP system uses this connector to find orders through the client's logistics channel to then send them back to the OC system.

For more information, please refer to OC API Specification section 4.2 'placeOutboundOrder'.

Please Note:

orderPlatform represents the name of the platform. If the field is 'ebay', then the user should fill in the 'eBayOrderID'

The ID must adhere to the same format as 02-05696-00555 (3 sections)

The OC system also supports 'non-ebay order' using OC services. The user would need to fill in non-ebay's orderPlatform, and just leave 'eBayOrderID' blank.

2-4-2-3 OrdersQuery

The ERP system can use this connector to query an outbound order. The query information includes, but is not limited to, tracking number, order status, order weight, and order cost.

For more information, please refer to OC API Specification section 4.3 'OrdersQuery'

Please Note:

When making a connection, the OC will return a field name such as 'autoFulfillmentEF'. If the field is 'true', it means that this order is an automatic EF order.

We strongly suggest, even for an autoFulfillment EF order, to return the order information to the ERP system and switch the ERP's order status to 'shipped'. This helps the user to better manage all order data in the ERP system.

2-4-2-4 orderCancellation

The ERP system can use this connector to cancel the placed outbound order.

For more information, please refer to OC API Specification section 4.4 'orderCancellation'.

2-5 Inbound order connector

2-5-1 inbound order connector explanation

Inbound order process: after the SKU's creation, submission, and approval, the user can then complete the inbound order creation through API connectors or OC's platform. Non-express mode（air, sea, rail, road) requires an appointment via OC's platform to make sure that the warehouses process and put away the orders efficiently.

API name in document	Connector usage explanation
inboundOrderCreation	Purpose: The creation of an inbound order Explanation: Create the inbound order, and access carton label and SKU barcode
uploadTrackingNumber	Purpose: Upload inbound order's tracking number Explanation: Upload your inbound order's tracking number to facilitate order processing and put away at the overseas warehouse
uploadFile	Purpose: Upload the customs clearance file
inboundOrdersQuery	Purpose: Query of inbound order. Check inbound order's current status, arrival information

2-5-2 Important notice for the inbound order connector

2-5-2-1 inboundOrderCreation

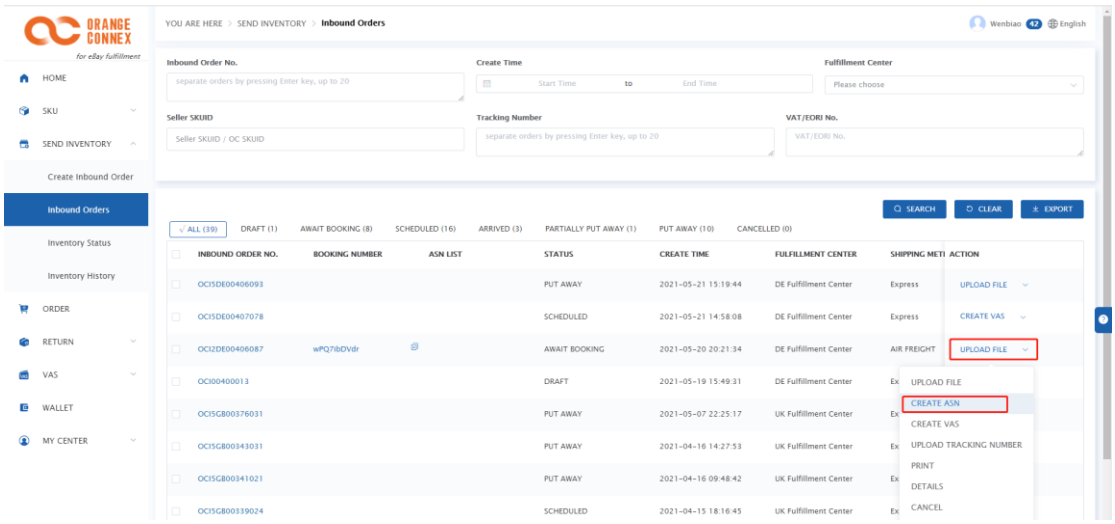
The ERP system can use this connector to create the inbound order and access carton labels and SKU barcodes.

For more information, please refer to OC API Specification section 5.1 'inboundOrderCreation'.

Please Note:

The user can select an inbound shipping method when creating the inbound order (eg: express, sea, air, truck). After completing the inbound order, the user needs to use the inbound order to make a 'warehouse receive appointment' in the OC platform. Failure to do this may affect the processing and put away of the inbound orders.

(when the user uses the express method, no appointment is needed for processing of the order in the warehouse).



This connector will return the SKU label and shipping barcode.

Each individual SKU package MUST contain a visible SKU ID barcode, to correctly process and store the SKU at the fulfillment centre. The barcode should be clearly visible and scannable.

If the item packaging already contains a clearly visible SKU barcode (these can be GTIN, UPC, EAN, seller defined barcodes), then an additional OC SKUID barcode label is not required.

A clearly visible carton label must be printed and attached to the outside of each carton. This is to correctly identify each individual carton at the fulfillment centre

When using this AP connector, 'sellerInboundNumber' means the order number used by the user in the ERP system.

The OC system will return an inboundNumber, this is the unique inbound order number in the OC system.

2-5-2-2 uploadTrackingNumber

The ERP system can use this connector to upload the tracking number of the express inbound order to the OC system.

For more information, please refer to OC API Specification section 5.2 'uploadTrackingNumber'.

Please Note:

If the user chooses 'express' to send cargo to the warehouse, uploading of the tracking number is not mandatory, but recommended to ensure that users' shipments is processed by the warehouse as efficiently as possible.

2-5-2-3 uploadFile

The ERP system can use this connector to upload all inbound order shipments' customs clearance files to the OC system.

For more information, please refer to OC API Specification section code 5.3 'uploadFile'.

Please Note:

When placing an inbound order, if the user chooses 'true' when filling in 'needClearanceDoc', the ERP system must upload a customs clearance file through this connector.

2-5-2-4 inboundOrdersQuery

The ERP system can use this connector to query information relating to the inbound order.

For more information, please refer to OC API Specification section 5.4 'inboundOrdersQuery'

Please Note:

When placing an inbound order, if the user chooses 'true' when filling in 'needClearanceDoc' the ERP system must upload a customs clearance file through this connector.

3. Set up of the production environment account

3-1 Verification of the testing results

The OC team will verify the testing results and record the API connectors' testing status as quickly as possible.

3-2 Opening of the production environment account

After passing the 'testing environment tests, the OC team will then open a production-environment account for the user and ERP system. It takes around 1-2 working days to action. In addition, third-party ERP needs to provide user set-up guidelines to help users finish set-up.

4. Support

Thank you for using OC's services.

OC's ERP team will be fully active in the user's ERP connection to ensure that the testing and connection process is successful and quick.

The ERP team's shared e-mail address is:

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