



OrderLookupAPI v5

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Document Revision

Date	Version	Description
28/10/2020	1.0	Initial draft

API Description

OrderLookAPI is a RESTful API to query the status of each shipment related to a sales order or customer purchase order number.

What is RESTful?

Representational State Transfer (REST) is a software architectural style that defines a set of constraints to be used for creating Web services. Web services that conform to the REST architectural style, called RESTful Web services (RWS), provide interoperability between computer systems on the Internet. RESTful Web services allow the requesting systems to access and manipulate textual representations of Web resources by using a uniform and predefined set of stateless operations.

Authentication

API authentication is provided through OAuth 2.0. OAuth 2.0 is an authorization type that enables you to approve an application that contacts another application for you without exposing your password. A token is requested from the Access Token URL by providing the App ID and Client Secret assigned to your application in the Ingram Micro Partner Central portal. The issued token is valid for 24 hours and should be included in the Authorization HTTP header when calling the API.

Request

Item	Value
Access Token URL	https://api.ingrammicro.com/oauth/oauth30/token
Method	POST
Content-Type	application/x-www-form-urlencoded
Form field 1 name	grant_type
Form field 1 value	client_credentials
Form field 2 name	client_id
Form field 2 value	<i>Your application App ID</i>
Form field 3 name	client_secret
Form field 3 value	<i>Your application Shared Secret</i>

Sample Request

```
POST https://api.ingrammicro.com/oauth/oauth30/token
grant_type=client_credentials&client_id=W83TU6HBE9cOVdwB6ngroBnV4Lrw2KBI&client_secret=nqZJXva14dWI3SXf
```

Response

Item	Value
access_token	<i>Your access token</i>
token_type	Bearer
expires_in	<i>Token expiry (seconds)</i>

Sample Response

```
{  
  "access_token": "m13aA1Z62Yi1R6k634h19Ga84lmz",  
  "token_type": "Bearer",  
  "expires_in": "86399"  
}
```

System Availability

During normal operating conditions, APIs should be available during weekdays between the times listed in the table below. Ingram Micro endeavours to limit planned maintenance activities to evenings and weekends. These outages will be communicated in advance where possible. API availability may be limited during weekends and public holidays.

Country	Weekday Available From (local time)	Weekday Available To (local time)
BE and NL	00:00	00:00
AT, CH, DE, HU, SE	05:00	23:00
ES and PT	06:00	01:00
FR and IT	05:00	00:00
UK	06:00	00:30

Rate Limiting

This API is subject to rate limiting. Rate limiting ensures fair access to API resources for all users and prevents performance degradation due to excessive transaction volumes.

Rate-Limiting Period (s)	Transaction Limit
60	60

Rate limits can be monitored by checking special HTTP headers returned in the API response

Response Header Name	
X-RateLimit-Limit	Number of transactions allowed within rate-limiting period
X-RateLimit-Remaining	Number of transactions remaining within rate-limiting period
X-RateLimit-Reset	Rate-limiting period reset timestamp (UNIX format - milliseconds elapsed since 1970-01-01 00:00:00)

If a rate limit is exceeded, an HTTP 429 response code will be returned (Too Many Requests). No further API calls will be allowed until the rate limiting reset period is reached.

Ingram Micro Warehouse Identifiers

Warehouse identifiers are used in several APIs such as MultiSKUPriceAndStockAPI and OrderCreateAPI. The table below provides a cross-reference for the codes provided in these messages. Please note that only certain product ranges can be ordered directly from the central warehouse. Your local ecommerce representative can advise on options for identifying these products via the FTP price file service. Only products listed as available in your local/central warehouse are available for you to order.

Customer Account Country	ERP	Local Warehouse IDs	Local Warehouse locations	Central Warehouse ID	Central Warehouse location
AT	Impulse	28 44	Vienna, Austria Straubing, DE	N/A	N/A
BE	SAP	NL01 PE02	Tilburg, NL Tilburg, NL	PEDE	Straubing, DE
CH	Impulse	27 44	Altishofen, CH Straubing, DE	N/A	N/A
DE	Impulse	44	Straubing, DE	N/A	N/A
ES	Impulse	29 78 43	Tarragona, ES Tarragona, ES Madrid, ES	81	Straubing, DE
FR	Impulse	21 82	Lomme, FR Lomme, FR	81	Straubing, DE
HU	Impulse	40 44	Fót, HU Straubing, DE	N/A	N/A
IT	Impulse	23 86	Settala, IT Settala, IT	81	Straubing, DE
NL	SAP	NL01 PE02	Tilburg, NL Tilburg, NL	PEDE	Straubing, DE
PT	Impulse	26	Sintra, PT	81	Straubing, DE
SE	Impulse	33 84	Rosersberg, SE Rosersberg, SE	81	Straubing, DE
UK	Impulse	20 85	Crick, UK Crick, UK	81	Straubing, DE

API Request

Item	Value
Production Endpoint URL	https://api.ingrammicro.com/resellers/v5/orders/search
Sandbox Endpoint URL	https://api.ingrammicro.com/sandbox/resellers/v5/orders/search
Method	GET
Accept HTTP header value	application/json
Authorization HTTP header value	Bearer<space> + <i>your access token</i> (e.g. Bearer 7b7888117cb72c437a3748554734fe2bd8b8c795)

Query Parameters

Name	Description
customernumber	Ingram Micro customer account number.
isocountrycode	Country Code.
ordernumber	Ingram sales order number
customerordernumber	Customer purchase order number
orderstatus	Ingram Micro order status code
startcreatetimestamp	Search order entry start date/time in UTC format
endcreatetimestamp	Search order entry end date/time in UTC format
pagesize	Number of records per call for pagination – default 25, max 100
pagenumber	Page number reference – default 1

Sample Request

```
GET https://api.ingrammicro.com:443/resellers/v5/orders/search?customerNumber=20-123456&isocountrycode=UK&customerordernumber=CUSTPO
```

API Response

Field Descriptions

Name	Parent	Type	Data Type	Min,Max Occurrence	Description
serviceresponse		Object		1,1	Service response container.
responsepreamble	serviceresponse	Object		1,1	Response preamble container.
requeststatus	responsepreamble	Parameter	String	1,1	Response status.
returnmessage	responsepreamble	Parameter	String	1,1	Response message.
ordesearchresponse	serviceresponse	Object		1,1	Order lookup response container
ordersfound	ordesearchresponse	Parameter	Integer	1,1	Number of results
pagesize	ordesearchresponse	Parameter	Integer	1,1	Submitted page size, default 25
pagenumber	ordesearchresponse	Parameter	Integer	1,1	Submitted page number, default 1.
orders	ordesearchresponse	Array			Sales order collection
ordernumber	orders	Parameter	String	1,1	Ingram Micro sales order number (without the order branch)
entrytimestamp	orders	Parameter	String	1,1	Order entry timestamp in UTC
customerordernumber	orders	Parameter	String	1,1	Customer purchase order number.
suborders	orders	Array		1,1	Shipment collection
subordernumber	suborders	Parameter	String	1,1	Ingram Micro suborder number
statuscode	suborders	Parameter	String	1,1	Ingram Micro order status code (see Order Status Codes)
status	suborders	Parameter	String	1,1	Ingram Micro order status description (see Order Status Codes)
holdreasoncode	suborders	Parameter	String	1,1	Order hold reason code (see Hold Reason Codes)
holdreason	suborders	Parameter	String	1,1	Order hold reason description (see Hold Reason Codes)
links	suborders	Array		1,n	HATEOAS links for the details and invoices of the sub-orders if available
topic	links	Parameter	String	1,1	Shows if link is order or invoice
href	links	Parameter	String	1,1	API endpoint link for access the data
type	links	Parameter	String	1,1	Request type for accessing the data

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Sample Response

```
{
  "servicerresponse": {
    "responsepreamble": {
      "requeststatus": "SUCCESS",
      "returnmessage": "Data found"
    },
  },
  "ordesearchresponse": {
    "ordersfound": "3",
    "pagesize": "1",
    "pagenumber": "1",
    "orders": [
      {
        "ordernumber": "20-RD12H",
        "entrytimestamp": "2020-04-04T14:28:18Z",
        "customerordernumber": "CUSTPO",
        "suborders": [
          {
            "subordernumber": "20-RD12H-11",
            "statuscode": "C",
            "status": "CREDIT HOLD",
            "holdreasoncode": "CH",
            "holdreason": "HARD-9 CUST NOT FLOOR ORD",
            "links": [
              {
                "topic": "orders",
                "href": "/resellers/v5/orders/20-RD12H-11?customerNumber=20-123456&isoCountryCode=UK",
                "type": "GET"
              }
            ]
          }
        ]
      },
      {
        "links": {
          "topic": "orders",
          "href": "/resellers/v5/orders/20-RD12H?customerNumber=20-123456&isoCountryCode=UK",
          "type": "GET"
        }
      }
    ]
  }
}
```

```
}  
  }  
    }  
  }  
}
```

Recommended Tests

Scenario	Context
Invalid Access token.	Always test this scenario.
Query a valid order by Ingram Micro sales order number.	Test if you intend to use this option.
Query a valid order by Ingram Micro sales order number, order status, and timestamp.	Test if you intend to use this option.
Query a valid order with multiple shipments using pagenumber and pagesize.	Test if you intend to use this option.
Query a valid order by customer purchase order number.	Test if you intend to use this option.
Query an order by invalid search criteria.	Test if you intend to use this option.
Query a valid order with multiple sales orders.	Test if you intend to use this option.

API HTTP Response Codes

HTTP Code	HTTP Code Description	Reason	Remedial Action
200	OK	Successful transaction.	None required.
400	Bad Request	The server could not understand the request due to invalid syntax.	Check that your request is correctly formed.
401	Unauthorized	The request was unauthenticated.	Check App ID and Client Secret values are valid and request a new token.
403	Forbidden	The client does not have access rights to the content.	Check you are using the correct endpoint and that you have been granted access to the requested API.
404	Not Found	The server cannot find the requested resource.	Check you are using the correct endpoint.
429	Too Many Requests	The user has sent too many requests within a given amount of time ("rate limiting").	None required but no more requests will be allowed within the allotted period.
500	Internal Server Error	The server has encountered a situation it doesn't know how to handle.	Retry the transaction. If the error persists, contact your local ecommerce representative.
502	Bad Gateway	This error response means that the server, while working as a gateway to get a response needed to handle the request, got an invalid response.	Retry the transaction. If the error persists, contact your local ecommerce representative.
503	Service Unavailable	The server is not ready to handle the request.	Retry the transaction. If the error persists, contact your local ecommerce representative.
504	Gateway Timeout	This error response is given when the server is acting as a gateway and cannot get a response in time.	Retry the transaction. If the error persists, contact your local ecommerce representative.

Response Preamble Status Codes

responsestatus	responsemessage	Reason	Remedial Action
SUCCESS	Data Found	Success with requested search criteria.	None required.
SUCCESS	Data found	1 or more results were found	None
SUCCESS	x Records Found.	1 or more results were found	None
SUCCESS	No Data Found for given Search Criteria.	No results matched your search criteria	Check your search criteria and resubmit your request
FAILED	No data found	No results matched your search criteria	Check your search criteria and resubmit your request

Order Status Codes

Code	Description
blank	In progress/Open order
C	Credit hold
D	Shipment hold
E	Billing error
F	Invoiced
I	Billed
O	Ecommerce Hold
R	Released to the warehouse management system
S	Sales Hold
V	Deleted order
W	Order not released to the warehouse management system

Hold Reason Codes

Code	Description
blank	No hold
AC	Adjusted cost hold
BA	Bad address hold
BL	Special bid hold
BO	Bill only hold
C3	Credit hold
C4	Credit hold
C5	Credit hold
C8	Credit hold
CC	Credit card hold
CH	Credit check hold
CL	Credit check hold
EA	ACOP hold
EH	ACOP hold
ER	Final review hold
ES	End-user rejected/missing
EU	End-user data missing
EX	Export hold
FL	Flooring hold
GM	Margin hold
IC	All orders set to hold (customer setting)
IM	Customer hold
IN	Fulfilment (dropship) value hold
LM	Margin hold
LT	Margin hold
MN	Pricing hold
PC	Credit check hold
PD	Credit check hold
R1	Export hold

RP	Export hold
S2	Combined SM/SP hold
SB	Special bid hold
SE	Special product hold
SF	Freight hold
SH	Sales hold
SM	Waive minimum order fee hold
SP	Price change hold
TV	Transmit to vendor hold (awaiting a response)
VO	Deleted order
VR	Vendor required information missing
WT	Weight hold
ZS	IM-Online offline hold

Order Lookup Scenarios

Query an Order by Ingram Order Number

Search by ordernumber instead of customerordernumber in query string.

```
GET https://api.ingrammicro.com:443/resellers/v5/orders/search?customerNumber=20-123456&isocountrycode=UK&ordernumber=20-12345
```

Query an Order with pagination

Exclude the distributionnumber and shipmentnumber parameters to return all shipments.

```
GET https://api.ingrammicro.com:443/resellers/v5/orders/search?customerNumber=20-123456&isocountrycode=UK&ordernumber=20-12345&pagesize=2&pagenumber=5
```

Query all Shipments on Sales Hold for a specific date period

Search with orderstatus, startcreatetimestamp and endcreatetimestamp query string.

```
GET https://api.ingrammicro.com:443/resellers/v5/orders/search?customerNumber=20-123456&isocountrycode=UK&ordernumber=2012345&orderstatus=S&startcreatetimestamp=2020-10-03T15:54:39Z&endcreatetimestamp=2020-11-03T15:54:39Z
```