

API Documentation

Connecting ERP Systems



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Background

Big Red has developed an API that provides several interfaces with [Client Name]:

- Orders to be Transferred
- Delivery Recording

The API will accept requests and return responses in JSON format.

The following pages contain details of each of the end points and methods that are available for this:

Connecting To The API

Connection Details

We have created a test URL for the API that interfaces with the portal (<http://testapi.big-red-digital.com/>)

API URL - <http://testapi.big-red-digital.com/>

API APP ID - [API APP ID]

API KEY - [API KEY]

Authentication Process

The API uses HMAC authentication based on the API APPID, API Key, HTTP Method, Time Stamp and a “nonce” to verify that requests to the API come from authorised clients.

All requests made to the API should therefore include the HASH key generated in the request headers authentication.

The HASH should be created using SHA256

The time stamp used to create the HASH should use Unix Time
(https://en.wikipedia.org/wiki/Unix_time)

If the request contains a body, then these should be hashed using and MD5 Hash and converted to BASE64. This is required to ensure that the body of the request has not been altered during the transmission from the client to the server.

Big Red can provide a sample project in C# if required to assist developers in achieving this.

API Endpoints and Methods

Orders to Transfer

The API provides an end point that can be called to return a list of approved orders that have not been extracted previously. The response from the API will provide a list of orders and the items on the order in JSON format.

When the application you use to call the API has received/processed the response, then the application should then call the API to record that the orders have been successfully/unsuccessfully processed. This will mark the orders in the uniform portal so that the orders are not picked up in subsequent calls to the API.

Type – Get

Request URL: – <http://testapi.big-red-digital.com/order/getorders>

Response Body

The response received for the API endpoint will provide a JSON object with a list of orders and the items/products on the order. The following is an example of a response:

```
[
  {
    "OrderId":34,
    "CustomerAccount":"P0016",
    "OrderDate":"12/9/2019",
    "OrderedByName":"XXX XXX",
    "InvoiceAddress1":"Address1",
    "InvoiceAddress2":"Address2",
    "InvoiceAddress3":"Address3",
    "InvoiceAddress4":"Address4",
    "InvoicePostCode":"Postcode",
    "DeliveryAddress1":"Address1",
    "DeliveryAddress2":"Address2",
    "DeliveryAddress3":"Address3",
    "DeliveryAddress4":"Address4",
    "DeliveryPostCode":"Postcode",
    "VATRate": 20,
    "Currency ":"GBP",
    "DeliveryCharge ":10.50,
    "Comments":"Free Text Comment",
    "CustomerReference":"PO Number",
    "CostCentre":"Cost Centre",
    "StaffNumber":"Staff Number",
    "[ERP]Database":"CLIENT NAME",
    "OrderItems":[
      {
        "ItemId":0,
        "SKU":"PFL50PCAL-XL",
        "CLIENT NAME Code":"PFL50PCAL",
        "UnitPrice": 9.99,
        "Quantity":1
        "Customisation":""," ",
        "VATRate":20
      }
    ]
  },
  {
    "OrderId":35,
    "CustomerAccount":"STI001",
    "OrderDate":"14/9/2019",
    "OrderedByName":"XXX XXX",
    "InvoiceAddress1":"Address1",
    "InvoiceAddress2":"Address2",
    "InvoiceAddress3":"Address3",
    "InvoiceAddress4":"Address4",
    "InvoicePostCode":"Postcode",
```

```
"DeliveryAddress1": "Address1",  
"DeliveryAddress2": "Address2",  
"DeliveryAddress3": "Address3",  
"DeliveryAddress4": "Address4",  
"DeliveryPostCode": "Postcode",  
"VATRate": 20,  
"Currency": "GBP",  
  
"DeliveryCharge": 0,  
"Comments": "Free Text Comment",  
"CustomerReference": "PO Number",  
"CostCentre": "Cost Centre",  
"StaffNumber": "Staff Number",  
"[ERP]Database": "CLIENT DATABASE",  
  
"OrderItems": [  
  {  
    "ItemId": 0,  
    "SKU": "PFL50PCAL-XL",  
    "CLIENTNAMECode": "PFL50PCAL",  
    "UnitPrice": 9.99,  
    "Quantity": 1,  
    "Customisation": "Logo Required",  
    "VATRate": 20  
  }  
]  
},  
  
]
```

Order Received and Processing Results

The application should inform the portal that the order(s) have been received and processed, or if any errors were detected.

This is done by submitting JSON for each order with the status (Ok or Error) and where there is an error the description for the error.

Below is an example of a JSON Request with 2 orders, one that was processed successfully and another with an error.

When an order is marked as errored, it will not be “marked” as being processed by the calling application. This means that these orders will not be picked up when subsequent calls to the API to get orders is called.

Type – Post

Endpoint – <http://testapi.big-red-digital.com/order/orderreceived>

Request Body

```
[
  {
    "OrderId":17623,
    "Status":"Ok",
    "ErrDescription":""
  },
  {
    "OrderId":17633,
    "Status":"Fail",
    "ErrDescription":"Error Processing Order"
  }
]
```

Record a Delivery

When an order is delivered/dispatched then the API will be called to record the order items that have been dispatched, and create a delivery docket in the Uniform Portal and email the “employee” to say that the order has been dispatched.

Below is a sample of the JSON required to be submitted with the request identifying the order and delivery date. Each order will contain a list of order items with the SKU being delivered and the quantity delivered.

Type – Post

Endpoint – <http://testapi.big-red-digital.com/order/orderdelivered>

Request Body

```
[
  {
    "OrderId":17623,
    "DeliveryDate":"01 September 2019",
    "Courier":"UPS",
    "TrackingCode":"ABC123",
    "DeliveryItems":[
      {
        "SKU":"BM54/M",
        "Quantity":1
      }
    ]
  },
  {
    "OrderId":17633,
    "Courier":"DPD",
    "TrackingCode":"XYZ999",
    "DeliveryItems":[
      {
        "SKU":"PFL84PCAL",
        "Quantity":1
      }
    ]
  }
]
```

Each delivery will require to send the Courier used and Tracking Code if applicable.

Order Reset

This will set an order so that it can be transferred from the portal to [ERP] again

Type – Post

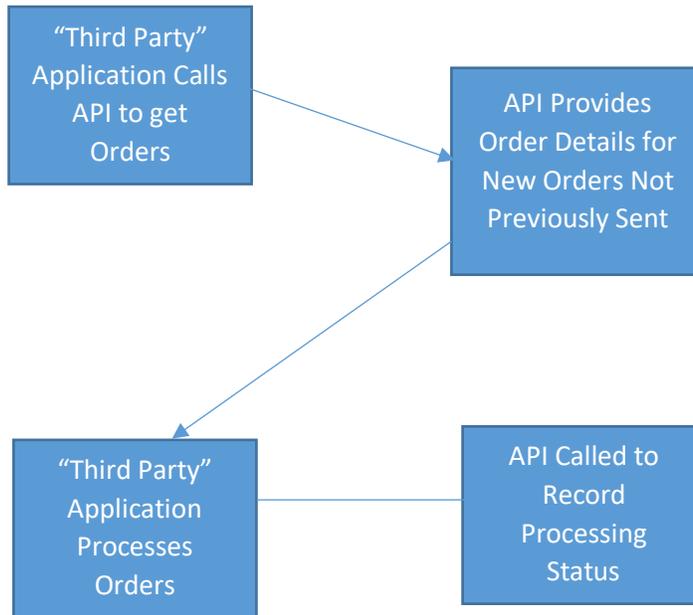
Endpoint – <http://testapi.big-red-digital.com/order/resetorder>"

Request Body

```
[  
  {  
    "OrderId":17623  
  },  
  {  
    "OrderId":17633  
  }  
]
```

Process Diagram

Get Orders



Record Delivery

