ODS Invoice Pull API Interface Specification

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| **Author:** | Arpan Kumar |
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Document Approval

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Reviewers

|  |  |
| --- | --- |
| ***Name*** | ***Position*** |
|  |  |
| Michael Olivieri | Integrations Manager |
|  |  |
|  |  |

Revision History

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# Introduction

The document describes in detail about the Invoice Pull API interface specifications for Invoice Pull data events from ODS to consumer systems (currently salesforce and website).

# System Overview

This document covers in its entirety, the service/API details required for any Consumer system (currently salesforce and website) that are looking for list of Invoices based on a Customer Number via the specified ODS Invoice Pull API implemented as part of the BIC Graphic Integration Platform.

# Definitions

|  |  |
| --- | --- |
| ***Term*** | ***Definition*** |
| WSDL | Web Services Definition Language |
| XML | eXtensible Markup Language |
| XSD | Schema which defines the message format |
| SSL | Secured Socket Layer |
| HTTP | Hypertext Transfer Protocol |
| WADL | Web Application Description Language |
| JSON | JavaScript Object Notation |
| REST | Representational State Transfer |

# Service Specification

## Service Details

|  |  |  |
| --- | --- | --- |
| ***SERVICE SPECIFICATION PARAMETERS*** | ***SERVICE SPECIFICATION VALUES*** | ***COMMENTS*** |
| ***Service Name*** | InvoicePullAPI |  |
| ***Protocol*** | HTTP/REST |  |
| ***Security Protocols*** | NONE |  |
| ***DEV Service URL*** | TBD |  |
| ***TEST Service URL*** | TBD |  |
| ***PROD Service URL*** | TBD |  |

## Service Operations:

|  |  |  |
| --- | --- | --- |
| ***OPERATIONS*** | ***METHOD*** | ***COMMENTS*** |
| ***InvoiceRead*** | POST |  |

### Operation: InvoiceRead

Systems that are SOT’s for Invoice data may transmit any add, update or deletes in Invoice information to ODS. Any consumer systems that requires real time invoice data by customers may use this operation to pull invoice data out of ODS. The expected data elements and JSON structure required to use this functionality are described in the sections below:

### Data Elements:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Data Grouping*** | ***Element Name*** | ***Data Type*** | ***Validations if any*** | ***Required(Y/N)*** | ***Sample Values/Description*** |
| *EventRequest* | EventObject | string | All Mandatory fields must be passed on every call. The event object must match value provided in Sample Value Column. *Else validation error will be returned from API* | Y | INVOICES |
| *EventRequest* | EventType | string | The event type must match value provided in Sample Value Column. *Else validation error will be returned from API* | Y | PULL\_REQUEST |
| *EventRequest* | EventDateTime | dateTime |  | Y | 2018-12-26T00:00:00 |
| *EventRequest* | EventRequestSystem | string |  | Y |  |
| *EventRequest* | EventSystemofTruth | string |  | N |  |
| *EventRequest* | EventBusinessID | string |  | Y |  |
| *EventRequest/* *RequestRecords/* *RequestRecord* | KeyName | string | The Key Name must match value provided in Sample Value Column. *Else validation error will be returned from API* | Y | “customerNumber” and “StartNumber” – “EndNumber” |
| *EventRequest/ RequestRecords/ RequestRecord* | EventRequestSystem | string | *This value cannot be empty. This customer account # must be a valid number in ODS. Else validation error will be returned from API*  *Consumer sends customer account number to be searched in ODS and range of numbers that indicates the service to pick batch of invoices from Mongo. This is for pagination issues.. For ex: when customerNumber = 123*  *StartNumber = 0*  *EndNumber = 50*  *Then first 50 invoices for the customer number 123 will be returned by service. The ordering will be based on descending order of the invoiceDate* | Y | The value of customer number and pagination batch values |

#### Response:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Data Grouping*** | ***Element Name*** | ***Data Type*** | ***Required (Y/N)*** | ***Sample Values*** |
| *EventResponse* | EnterpriseEventID | string | Y | Event ID returned from ODS |
| *EventResponse* | EventBusinessID | string | Y | Event business id sent by source system in the request |
| *EventResponse* | EventStatus | dateTime | Y | SUCCESS/ERROR |
| *EventResponse* | EventErrorCode | String | N | INTERR-100 |
| *EventResponse* | EventStatusMessage | string | N | Any error message or event details to source system |
| *EventResponse* | MustRetryFlag | string | Y | If error then let source know to retry again. |
| *EventResponse/Invoicelist/* | CustomerNumber | Number | Y | The customer account number requested by the consumer |
| *EventResponse/Invoicelist/* | Invoices | array | Y | The list of Invoices returned from ODS for the current event request from consumer system |
| *EventResponse/Invoicelist/Invoices/Invoice* | invoiceNumber | String | Y | Unique ID. |
| *EventResponse/Invoicelist/Invoices/Invoice* | invoiceType | String | Y |  |
| *EventResponse/Invoicelist/Invoices/Invoice* | invoiceDate | DateTime | Y |  |
| *EventResponse/Invoicelist/Invoices/Invoice* | dueDate | DateTime | Y |  |
| *EventResponse/Invoicelist/Invoices/Invoice* | invoiceAmount | Decimal | Y | Total Invoice Amount |
| *EventResponse/Invoicelist/Invoices/Invoice* | purchaseOrderNumber | String | Y | Customer Purchase Order Number associated to the Invoice |
| *EventResponse/Invoicelist/Invoices/Invoice* | salesOrderNumber | String | Y | Sales Order Number associated to the Invoice |
| *EventResponse/Invoicelist/Invoices/Invoice* | CurrencyCode | String | Y | Examples: USD/CAN |
| *EventResponse/Invoicelist/Invoices/Invoice* | invoiceStatus | String | Y | Open/Completed. Defines Payment status for an Invoice |
| *EventResponse/Invoicelist/Invoices/Invoice* | amountDue | Decimal | Y | Any amount due to be paid by customer, when the invoice is partially fulfilled. |
| *EventResponse/Invoicelist/Invoices/Invoice* | customerNumber | String | Y |  |
| *EventResponse/Invoicelist/Invoices/Invoice* | customerName | String | Y |  |
| *EventResponse/Invoicelist/Invoices/Invoice* | customerParentNumber | String | Y |  |
| *EventResponse/Invoicelist/Invoices/Invoice* | fileName | String | Y |  |
| *EventResponse/Invoicelist/Invoices/Invoice* | fileType | String | Y |  |

### Sample Payloads:

#### Request

{

"EventRequest": {

"EventObject": "INVOICES",

"EventType": "PULL\_REQUEST",

"EventDateTime": "2018-12-26T00:00:00",

"EventRequestSystem": "Website",

"EventSystemOfTruth": "EBS",

"EventBusinessID": "ABCDEFGHIJKLMNOPQR",

"RequestRecords": {

"RequestRecord": [

{

"KeyName": "customerNumber",

"KeyValue": "1234"

},

{

"KeyName": "StartNumber",

"KeyValue": "0"

},

{

"KeyName": "EndNumber",

"KeyValue": "50"

}

]

}

}

}

#### Response:

{

"EventResponse": {

"EnterpriseEventID": "ODSEvent1231",

"EventBusinessID": "InvoicePULL#123",

"EventStatus": "SUCCESS",

"MustRetryFlag": false,

"InvoiceList": {

"Invoices": [

{

"Invoice": {

"invoiceNumber": "ABCDEFGHIJKLMNOPQRSTUVW",

"soNumber": "ABCDEFGH",

"invoiceType": "ABCDEFGHIJKLMNOPQRSTU",

"invoiceDate": "ABCDEFGHIJKLMNOPQRSTU",

"dueDate": "ABCDEFGHIJKLMNOPQRSTUVW",

"invoiceAmount": 389,

"poNumber": "ABCDEFGHIJKLMNOPQRSTUVWXY",

"CurrencyCode": "ABCDEFGHIJ",

"invoiceStatus": "ABCDEFGHIJKLMNOPQRSTUVWXYZ",

"amountDue": 194.0,

"customerNumber": "ABCDEFGHIJK",

"customerName": "ABCDEFGHIJKLMNOPQ",

"customerParentNumber": "ABCDEFGH",

"fileName": "ABCDEFGHIJKLM",

"fileType": "ABCDEFGHIJKLMN",

"fileURL": "ABCDEFGHIJKLMNOPQR",

"fileCreationDate": "ABCDEFGHI"

}

},

{

"Invoice": {

"invoiceNumber": "ABCDEFGHIJKLMNOPQRSTUVW",

"soNumber": "ABCDEFGH",

"invoiceType": "ABCDEFGHIJKLMNOPQRSTU",

"invoiceDate": "ABCDEFGHIJKLMNOPQRSTU",

"dueDate": "ABCDEFGHIJKLMNOPQRSTUVW",

"invoiceAmount": 389,

"poNumber": "ABCDEFGHIJKLMNOPQRSTUVWXY",

"CurrencyCode": "ABCDEFGHIJ",

"invoiceStatus": "ABCDEFGHIJKLMNOPQRSTUVWXYZ",

"amountDue": 194.0,

"customerNumber": "ABCDEFGHIJK",

"customerName": "ABCDEFGHIJKLMNOPQ",

"customerParentNumber": "ABCDEFGH",

"fileName": "ABCDEFGHIJKLM",

"fileType": "ABCDEFGHIJKLMN",

"fileURL": "ABCDEFGHIJKLMNOPQR",

"fileCreationDate": "ABCDEFGHI"

}

}

]

},

"EventErrorCode": "",

"EventStatusMessage": ""

}

}

#### Error:

{

"EventResponse": {

"EnterpriseEventID": "ODSEvent1231",

"EventBusinessID": "InvoicePull#123",

"EventStatus": "ERROR",

"EventErrorCode": "INTERR-111",

"EventStatusMessage": "Invalid Data structure. Fix the data structure and retry",

"MustRetryFlag": "true"

}

}

### 

### Error Codes

|  |  |  |
| --- | --- | --- |
| ***Error Code*** | ***Error Description*** | ***Comments*** |
| INTERR-111 | Invalid Data Structure in Request. |  |
| INTERR-112 | Mandatory request field missing. |  |
| INTERR-113 | Incorrect request field value |  |
| INTERR-114 | No Records found for Customer Account # : |  |
| INTERR-115 | Invalid Customer Account #: “ “ . Account # not found in ODS |  |

### Data Structure

The operation specific data elements are provided in a JSON Schema format to help conform and create JSON data required to

|  |  |  |
| --- | --- | --- |
| ***Artifact Name*** | ***Artifact File*** | ***Comments/Usage*** |
| EventRequest JSON Schema |  | This document provides the schema required to build the JSON data to invoke the “InvoiceRead” operation. |
| EventResponse JSON Schema |  | This document provides the schema required to build the JSON data response from the “InvoiceRead” operation. |
|  |  |  |

# References

|  |  |  |
| --- | --- | --- |
| ***Document ID*** | ***Title*** | ***Comments*** |
|  |  |  |