

# COMPACT STORE

REST API Specification

Version 1.4

# Contents

Introduction.....	2
API Description.....	3
Common Message Format .....	4
Incoming Operations .....	5
Import Orders.....	5
Import Items.....	8
Export Orders .....	10
Inventory.....	13
Free Store Positions.....	14
Ping .....	15
Outgoing Operations .....	17
Export Orders .....	17

## Introduction

This document describes the REST API towards Compact Store. The API includes both incoming and outgoing operations.

## API Description

REST interface is used over HTTPS protocol and uses the following operations:

- GET
- POST



## Common Message Format

The message format is created according to the JSON:API specification (jsonapi.org).

This is the common message format that applies for all request and response message types:

Name	Type	Mandatory	Description
meta	Object	Yes	Keeps information about this message
meta:version	String	Yes	The version of this message
data	Object array	Yes	Keeps an array of the actual data.
data:type	String	Yes	Data type. Supported types: <ul style="list-style-type: none"> <li>- csImportOrders</li> <li>- csLiftsInventory</li> <li>- csLiftsFreeStorePositions</li> <li>- csExportOrders</li> </ul>
data:id	String	Yes	The ID of the data. Is unique.
data:attributes	Object	Yes	The content of attributes differs depending on data type.

### Example

```
{
  "meta": {
    "version": "1"
  },
  "data": [
    {
      "type": "csMyDataType",
      "id": "1370",
      "attributes": {
        "exampleAttribute1": "Example1",
        "exampleAttribute2": "Example2"
      }
    }
  ]
}
```

## Incoming Operations

Following operations are available:

- Import, insert inbound or outbound orders
- Export, get handled orders
- Inventory, shows inventory per lift
- Free store positions, shows all free positions per lift
- Ping, checks if interface is alive

All incoming operations require API key as header parameter for security. The API key value is configurable.

Example header import:

```
Content-Type: application/vnd.api+json
X-API-KEY: 3LEHUH0CSRHS2HLBYI8649UAOL2HQ44MA
Accept: */*
```

Example header inventory/free store positions

```
X-API-KEY: 3LEHUH0CSRHS2HLBYI8649UAOL2HQ44MA
accept: application/vnd.api+json
```

## Import Orders

Endpoint: /api/importOrders

Operation: POST

Content-type: application/vnd.api+json

API key header parameter: X-API-KEY

Request attributes

Name	Type	Mandatory	Description
addressInfo1	String	No	
addressInfo1	String	No	
altItemDescription	String	No	
area	String	No	
assignmentTypeid	Integer	Yes	Inbound=1 Outbound=2 Inventory=3
batchNo	String	No	If batch numbers are to be used in vertical storage
comment	String	No	Line comment
companyId	String	No	
countryCode	String	No	

country	String	No	
countryOfOrigin	String	No	
customerField1	String	No	Custom Field for additional order and/or order line information
customerField2	String	No	Custom Field for additional order and/or order line information
customerField3	String	No	Custom Field for additional order and/or order line information
customerField4	String	No	Custom Field for additional order and/or order line information
customerField5	String	No	Custom Field for additional order and/or order line information
customerField6	String	No	Custom Field for additional order and/or order line information
customerField7	String	No	Custom Field for additional order and/or order line information
deliveryDay	String	No	
dangerousGoods	String	No	
deliveryName	String	No	
deliveryTerms	String	No	
deliveryTime	String	No	
deliveryWay	String	No	
frequencyId	Integer	No	
goodsMark	String	No	
grossWeight	Float	No	Gross weight
itemDescription	String	No	Item description
itemGroupDescription	String	No	Item group description
itemNo	String	No	Item number to be picked/placed
itemNoPallet	String	No	
itemNoPrimaryPackage	String	No	
itemNoSecondaryPackage	String	No	
itemNoTertiaryPackage	String	No	
mergeAllowed	Boolean	No	
netWeight	Float	No	Net weight
orderComment	String	No	Order comment
orderInfo	String	No	

orderlineNo	String	No	Line number
orderlineType	String	No	
orderNo	String	No	This is the unique key, normally id of picking list or similar
orderpoint	Integer	No	
owner	String	No	
ownerName	String	No	
package	Float	No	
pallet	Float	No	
phoneNo	String	No	
pickUnit	String	No	
priority	Integer	No	1=Normal 2=Express
quantityPallet	Float	No	
quantityPrimaryPackage	Float	No	
quantitySecondaryPackage	Float	No	
quantityTertiaryPackage	Float	No	
receiver	String	No	
receiverName	String	No	
receiverGroupDescription	String	No	
receiverMergeAllowed	Boolean	No	
requestedQuantity	Float	No	Requested quantity for picking/placing
salesOrderNo	String	No	This could contain order number from ERP
salesOrderlineNo	String	No	
serialNo	String	No	If serial numbers are to be used in vertical storage
shippingAgent	String	No	
startDirectly	Boolean	No	Flag to bypass order queue
storePosition	String	No	
supplierItemNo	String	No	
town	String	No	
zipCode	String	No	



### Response codes

HTTP status code	Description
204	All orders where added
400	Request contains faulty values
401	API key was missing or invalid
500	Internal server error

### Example

```

{
  "meta": {
    "version": "1"
  },
  "data": [
    {
      "type": "csImportOrders",
      "id": " IK10106348366962",
      "attributes": {
        "orderNo": "IK10106348",
        "orderlineNo": "366962",
        "assignmentTypeId": 1,
        "itemNo": "109291_XS-16",
        "itemDescription": "Me Ring Steel XS 16,0 mm",
        "requestedQuantity": 50.00
      }
    }
  ]
}

```

### Import Items

Endpoint: /api/importItems

Operation: POST

Content-type: application/vnd.api+json

API key header parameter: X-API-KEY

#### Request attributes

Name	Type	Mandatory	Description
altItemDescription	String	No	
comment	String	No	Line comment
customerField1	String	No	Custom Field for additional item information
customerField2	String	No	Custom Field for additional item information
customerField3	String	No	Custom Field for additional item information

customerField4	String	No	Custom Field for additional item information
customerField5	String	No	Custom Field for additional item information
customerField6	String	No	Custom Field for additional item information
customerField7	String	No	Custom Field for additional item information
grossWeight	Float	No	Gross weight
itemDescription	String	Yes	Item description
itemGroupDescription	String	No	Item group description
itemNo	String	Yes	Item number
netWeight	Float	No	Net weight
serialNo	String	No	If serial numbers are to be used in vertical storage
supplierItemNo	String	No	

#### Response codes

HTTP status code	Description
204	All orders where added
400	Request contains faulty values
401	API key was missing or invalid
500	Internal server error

#### Example

```

{
  "meta": {
    "version": "1"
  },
  "data": [
    {
      "type": "csImportItems",
      "id": " 10106",
      "attributes": {
        "itemNo": "109291_XS-16",
        "itemDescription": "Me Ring Steel XS 16,0 mm",
        "grossWeight": 50
      }
    }
  ]
}

```

## Export Orders

There are two ways to export orders from Compact Store, poll and notify. In this chapter poll for export orders is described. Notify is described in chapter Export Orders on page 17.

Poll for export orders consists of two steps

1. Get export orders
2. Acknowledge received export orders

The first step delivers a list of all export orders available. In the second step a list of order numbers is sent with the request. These orders will not be sent next time doing step 1.

### Get Export Orders

Endpoint: /api/exportOrders

Operation: GET

Accept: application/vnd.api+json

API key header parameter: X-API-KEY

Response attributes

Name	Type	Mandatory	Description
actionCode	Integer	Yes	
actualQuantity	Float	Yes	
assignmentTypeId	Integer	Yes	Inbound=1 Outbound=2 Inventory=3
companyId	String	Yes	
createdTime	String	Yes	Timestamp when this information was created
customerValue1	String	Yes	Custom Field for additional order and/or order line information
customerValue2	String	Yes	Custom Field for additional order and/or order line information
customerValue3	String	Yes	Custom Field for additional order and/or order line information
customerValue4	String	Yes	Custom Field for additional order and/or order line information
customerValue5	String	Yes	Custom Field for additional order and/or order line information
customerValue6	String	Yes	Custom Field for additional order and/or order line information
customerValue7	String	Yes	Custom Field for additional order and/or order line information

fromStorePosition	String	Yes	
itemNo	String	No	Item number picked/placed
orderInfo	String	Yes	
orderlineNo	String	Yes	Line number
orderNo	String	Yes	This is the unique key, normally id of picking list or similar
partialDelivery	Boolean	No	
quantityTyped	Integer	Yes	
reasonCode	String	Yes	
requestedQuantity	Float	Yes	Requested quantity for picking/placing
salesOrderNo	String	Yes	This could contain order number from ERP
salesOrderlineNo	String	Yes	
toStorePosition	String	Yes	
transType	Integer	Yes	

#### Response codes

HTTP status code	Description
200	OK
401	API key was missing or invalid
500	Internal server error

#### Response example

```
{
  "meta": {
    "version": "1"
  },
  "data": [
    {
      "type": "csExportOrders",
      "id": " IK10106348366962",
      "attributes": {
        "exportId": 1002,
        "companyId": null,
        "transType": null,
        "orderNo": "IK10106348",
        "orderlineNo": "366962",
        "salesOrderNo": null,
        "salesOrderlineNo": null,
        "reqQuantity": 50.00,
        "actQuantity": null,
        "assignmentTypeId": 1,
        "itemNo": "109291_XS-16",

```

```

    "quantityTypeId": null,
    "fromStorePosition": "H010315",
    "toStorePosition": "H010627",
    "partialDelivery": false,
    "orderInfo": "My order info",
    "customerValue1": "My value 1",
    "customerValue2": "My value 2",
    "customerValue3": "My value 3",
    "customerValue4": "My value 4",
    "customerValue5": "My value 5",
    "customerValue6": "My value 6",
    "customerValue7": "My value 7",
    "actionCode": null,
    "reasonCode": null,
    "createdTime": "2020-03-18 13:38:45.123"
  }
}
]
}

```

### Acknowledge received export orders

Endpoint: /api/exportOrders

Operation: POST

Content-type: application/vnd.api+json

API key header parameter: X-API-KEY

Request body

Name	Type	Mandatory	Description
	Integer array	Yes	An array of exportIds to acknowledge. ExportId is found in data:attributes in export orders response described in chapter <b>Get Export Orders</b> on page 10

Response codes

HTTP status code	Description
204	All orders where acknowledged
207	Some orders could not be acknowledged
401	API key was missing or invalid
500	Internal server error

Request example

```

[
  17277,

```

```
17278,
17279
]
```

Response example. Status code 207

```
{
  "results": [
    {
      "id": "17278",
      "status": 400
    }
  ]
}
```

### Inventory

Endpoint: /api/lifts/inventory

Operation: GET

Accept: application/vnd.api+json

API key header parameter: X-API-KEY

Response attributes

Name	Type	Mandatory	Description
items	Object array		
items:batchNo	String	Yes	Batch number
items:itemNo	String	Yes	Item number
items:quantity	Float	Yes	Quantity

Response codes

HTTP status code	Description
200	OK
401	API key was missing or invalid
500	Internal server error

Example

```
{
```

```

"meta": {
  "version": "1"
},
"data": [
  {
    "type": "csLiftsInventory",
    "id": "H01",
    "attributes": {
      "items": [
        {
          "batchNo": "BATCH1",
          "itemNo": "ITEM1",
          "quantity": 100
        },
        {
          "batchNo": "BATCH1",
          "itemNo": "ITEM2",
          "quantity": 10
        },
        {
          "batchNo": "BATCH2",
          "itemNo": "ITEM2",
          "quantity": 50
        }
      ]
    }
  }
]
}

```

### Free Store Positions

Endpoint: /api/lifts/freeStorePositions

Operation: GET

Accept: application/vnd.api+json

API key header parameter: X-API-KEY

Response attributes

Name	Type	Mandatory	Description
items	Object array		
items:size	Object		
items:size:height	Float	Yes	Height
items:size:width	Float	Yes	Width
items:size:depth	Float	Yes	Depth

Response codes

HTTP status code	Description
200	OK

401	API key was missing or invalid
500	Internal server error

### Example

```
{
  "meta": {
    "version": "1"
  },
  "data": [
    {
      "type": "csLiftsFreeStorePositions",
      "id": "H01",
      "attributes": {
        "items": [
          {
            "size": {
              "height": 100,
              "width": 100,
              "depth": 100
            },
            "noOfFreePositions": 10
          },
          {
            "size": {
              "height": 100,
              "width": 200,
              "depth": 100
            },
            "noOfFreePositions": 40
          },
          {
            "size": {
              "height": 100,
              "width": 400,
              "depth": 400
            },
            "noOfFreePositions": 53
          }
        ]
      }
    }
  ]
}
```

### Ping

Endpoint: /api/ping

Operation: GET

Accept: application/vnd.api+json

API key header parameter: X-API-KEY

Response attributes

Name	Type	Mandatory	Description
------	------	-----------	-------------



name	String		Describing name of this interface
version	String		Current version

Response codes

HTTP status code	Description
200	OK
401	API key was missing or invalid

Example

```
{  
  "name": "Weland Compact Store API Inbound",  
  "version": "1.2.0"  
}
```

## Outgoing Operations

The outgoing interface provides notifications from Compact Store. Following operations are available:

- Export, notify about inbound, outbound or inventory orders

### Export Orders

Endpoint is configurable

Operation: POST

Content-type: application/vnd.api+json

Additional headers can be added by configuration

Request attributes

Name	Type	Mandatory	Description
actionCode	Integer	Yes	
actualQuantity	Float	Yes	
assignmentTypeId	Integer	Yes	Inbound=1 Outbound=2 Inventory=3
companyId	String	Yes	
createdTime	String	Yes	Timestamp when this information was created
customerValue1	String	Yes	Custom Field for additional order and/or order line information
customerValue2	String	Yes	Custom Field for additional order and/or order line information
customerValue3	String	Yes	Custom Field for additional order and/or order line information
customerValue4	String	Yes	Custom Field for additional order and/or order line information
customerValue5	String	Yes	Custom Field for additional order and/or order line information
customerValue6	String	Yes	Custom Field for additional order and/or order line information
customerValue7	String	Yes	Custom Field for additional order and/or order line information
fromStorePosition	String	Yes	
itemNo	String	No	Item number picked/placed
orderInfo	String	Yes	
orderlineNo	String	Yes	Line number
orderNo	String	Yes	This is the unique key, normally id of picking list or similar

partialDelivery	Boolean	No	
quantityTypeId	Integer	Yes	
reasonCode	String	Yes	
requestedQuantity	Float	Yes	Requested quantity for picking/placing
salesOrderNo	String	Yes	This could contain order number from ERP
salesOrderlineNo	String	Yes	
toStorePosition	String	Yes	
transType	Integer	Yes	

#### Response codes

HTTP status code	Description
204	All orders where accepted
207	Some of the orders where not accepted. See example below. The orders not accepted will be marked as not delivered. No retry will be performed
Others	If other status codes orders will be marked as not delivered. No retry will be performed

#### Response format when using status code 207 multi status

Name	Type	Mandatory	Description
results	Object array	Yes	An array of orders that was not accepted by the server
results:id	String	Yes	data:id from the export request body for this order
result:status	Float	Yes	The HTTP status code

#### Request example

```
{
  "meta": {
    "version": "1"
  },
  "data": [
    {
      "type": "csExportOrders",
      "id": " IK10106348366962",
      "attributes": {
        "exportId": 1002,
        "companyId": null,
        "transType": null,
        "orderNo": "IK10106348",
        "orderlineNo": "366962",

```

```
"salesOrderNo": null,  
"salesOrderlineNo": null,  
"reqQuantity": 50.00,  
"actQuantity": null,  
"assignmentTypeId": 1,  
"itemNo": "109291_XS-16",  
"quantityTypeId": null,  
"fromStorePosition": "H010315",  
"toStorePosition": "H010627",  
"partialDelivery": false,  
"orderInfo": "My order info",  
"customerValue1": "My value 1",  
"customerValue2": "My value 2",  
"customerValue3": "My value 3",  
"customerValue4": "My value 4",  
"customerValue5": "My value 5",  
"customerValue6": "My value 6",  
"customerValue7": "My value 7",  
"actionCode": null,  
"reasonCode": null,  
"createdTime": "2020-03-18 13:38:45.123"  
  }  
}  
]  
}
```

#### Response Example

```
{  
  "results": [  
    {  
      "id": "IK10106348366962",  
      "status": 400  
    },  
    {  
      "id": "IK10106348366970",  
      "status": 400  
    }  
  ]  
}
```