

# BLUE RIDGE APIs

Instant Data Access & Updates

**Santhosh Srirambhatla** | VP, Product Development

**Dawn Russell** | VP, Customer Experience



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PLANNING FOR A FLEXIBLE FUTURE

# WHAT IS AN API?

API: Application Programming Interface

“ set of clearly defined methods of communication among various components

*Wikipedia* ”

In the most simple definition, an API is a method of communication. It structures a way for different applications or components to communicate.

# SUPPLY CHAIN PLANNING (SCP) APIS

- SCP offers REST APIs
  - REST (Representational State Transfer) is an architectural style for creating APIs
  - Six guiding constraints govern RESTful processing

**1. PERFORMANCE**

**2. SCALABILITY**

**3. SIMPLICITY**

**4. MODIFIABILITY**

**5. VISIBILITY**

**6. PORTABILITY**

**7. RELIABILITY**

# WHY USE THE API?

- Are you adding suppliers?
  - Configuring the API interactions allows your system to update SCP immediately
  - The team working in SCP can have the supplier set up the same day
- Are you adding new items?
  - Buyers can configure the item the same day it is entered and be ready for buying immediately.
- Is your stock status changing throughout the day?
  - The item stock status API allows for updating the current stock status at any time. Your buyers will have the most current information allowing them to make the best decisions.

# AVAILABLE APIS IN SCP

API	CREATE	UPDATE	DELETE	READ
Item	●	●	●	
Supplier (Source)	●	●	●	
Item Stock Status				
Daily Demand	●	●		
Recommended Orders				●

# SCP ENDPOINTS

RESOURCE	ENDPOINT	DESCRIPTION
Authentication	/token	Get Token
Initialize API	/initializeapi/initialize	Initializes the API, sets configurations, clears the cache
Items	/itemmaster/processitem	Create, update or delete the Item
Supplier	/sourcemaster/processsource	Create, update or delete the supplier
StockStatus	/stockstatus/processstockstatus	Update the Units w.r.t. Stock for respective Item
DailyDemand	/dailydemand/processdailydemand	Create or update the Daily demand for Item
Recommended Orders	/recommendedorder/getrecommendedorders	Get all the recommended orders between the dates passed as input

- Log In requires a valid username and password to obtain a token
- Tokens are valid for 24 hours
- Each request to the SCP API must contain a valid token

# AUTHENTICATION (GET TOKEN)

# LOG IN EXAMPLE REQUEST / RESPONSE

```
$.ajax({
  url: "http://XXXXXX/token",
  contentType: 'application/json',
  type: 'post',
  dataType: "json",
  data: {
    username: "XXXXX",
    password: "XXXX",
    grant_type: "password"
  },
  type: "POST",
  success: function(response) {
    token = response.access_token;
    expiresIn = response.expires_in;
  },
  error: function(errorThrown) {
    alert (errorThrown.error);
  }
})
```

```
{
  "access_token":
  "nBqMxrvYvJe9GgA0jh21MAXPqfQvd4aEMh2oEJLqip4_
  JnMxhQvtiw_DP0zVsFSC_OBVLJfCeMyTIJs-
  Zw5eXdTXcRfdJPiVY6U5Teb1zFUW2gL9X3EIRDsqYuoV
  GnQ2SVUJw8k3wn4x3M29Jdx0nTIA_ffpQFPCqA0ulwZH
  xBoc1losRDxYYAt7HD93anDDJm9uAbfM1ejLVyJpBfBTQ
  saE03S9mwj2z3dD3Q_4bzE",
  "token_type": "bearer",
}
```



# INITIALIZE

- Endpoint `https://<ClientName>.brinv.com/api/initializeapi/initialize`
- Initializes the API, sets configurations, clears the cache
- This operation initializes the API before it is used. Initialize API needs to be called before series of API requests are sent.



# INITIALIZE EXAMPLE REQUEST / RESPONSE

```
$.ajax({
  url: "https://XXXXXXXXX/InitializeAPI/Initialize",
  type: "POST",
  beforeSend: function (xhr) {
    /* Authorization header */
    xhr.setRequestHeader("Authorization", "bearer " + token);
    xhr.setRequestHeader("Content-Type", "application/json");
  },
  success: function(response) {
    // response handling
  },
  error: function(errorThrown) {
    // error handling
  }
});
```

```
{
  "code": 200,
  "entity": "Initialization done successfully.",
  "results": null,
  "details": null,
  "creationDateTime": "2018-12-27T18:28:41.0119247-12:00",
  "creator": null,
  "NoOfRecordAdded": 0,
  "NoOfRecordsUpdated": 0,
  "NoOfRecordsDeleted": 0
}
```

# SUPPLIER (SOURCE)

- Endpoint  
<https://<ClientName>.brinv.com/api/sourcemaster/processsource>
- This endpoint facilitates the addition or alteration of suppliers into SCP throughout the day
- Missing required parameters will return errors

PARAMETER	DESCRIPTION
sourceDestination	Warehouse/Distribution Center ID
sourceIdentifier	Supplier Identifier from Host (Vendor / Source / Supplier)
ShipPointName	Supplier ship point or subsupplier ID from host
sourceName	Supplier Description

# SUPPLIER EXAMPLE REQUEST / RESPONSE

```
{
  "DataSource":{
    "sourceMasterDTO":{
      "SourceBeginDate ": "2019-04-29 00:00:00",
      "sourceDestination": "15",
      "sourceIdentifier": "010980",
      "SourceShipPoint ": "1001",
      "sourceName": "XXXX XXXXX XXXXX",
      "Optional1": "xxxx",
      "Optional2": "yyyy",...
    }
  },
  "requestDateTime":"2018-07-01 00:00:00"
}
```

```
{
  "code" : 200,
  "entity" : "source",
  "results" : [
    {
      "status" : "success",
      "action" : "created"
    }
  ],
  "details" : [
    {
      "sourcecontrolid" : 200,
      "sourceid": 101
    }
  ]
  "creationDateTime": "2018-01-02T17:17:01.588927+05:30",
  "creator": "Implementation"
}
```

# ITEM MASTER

- Endpoint <https://<ClientName>.brinv.com/api/itemmaster/processitem>
- This endpoint facilitates the addition or alteration of items into SCP throughout the day
- Missing required parameters will return errors

PARAMETER	DESCRIPTION
SKUItemNumber	Unique Item Identifier for Primary Supplier. If using letters, be consistent across all files. it is case sensitive.
SKUDestinationIdentifier	Warehouse/Distribution Center ID
SKUSourceIdentifier	Supplier Identifier from Host (Vendor / Source / Supplier)
SKUItemDescription	Item Description
SKUActivityClassCode	A=Active, I=Inactive, D=Discontinued, N=Non-Stock, W=Watch, M=Manual
SKUAveragePurchasePrice	Item Purchase Cost- Straight replacement cost. Used in the ordering economics in the system.

# ITEM EXAMPLE REQUEST / RESPONSE

```
{
  "DataSource":{
    "itemMasterDTO":{
      "SKUItemNumber": " 994214",
      "SKUDestinationIdentifier": "15",
      "SKUSourceIdentifier": " N12650 ",
      "SKUItemDescription": " XXXXXXXXXXXXXXXX ",
      "SKUShipPoint": "1003",
      "SKUActivityClassCode": "A",
      "SKUAveragePurchasePrice":"12.9",,
      "Optional1": "xxx",
      "Optional2": "yyy",...
    }
  },
  "requestDateTime":"2018-07-01 00:00:00"
}
```

```
{
  "code" : 200,
  "entity" : "source",
  "results" : [
    {
      "status" : "success",
      "action" : "created"
    }
  ],
  "details" : [
    {
      "sourcecontrolid" : 200,
      "sourceid": 101,
      "itemNumber": 994214,
    }
  ]
  "creationDateTime": "2018-01-02T17:17:01.588927+05:30",
  "creator": "Implementation"
}
```

# STOCK STATUS

- Endpoint `https://<ClientName>.brinv.com/api/stockstatus/processstockstatus`
- This endpoint facilitates the alteration of the current stock status for items in SCP throughout the day
- Missing required parameters will return errors

PARAMETER	DESCRIPTION
SKUItemNumber	Unique Item Identifier for Primary Supplier. If using letters, be consistent across all files. It is case sensitive.
SKUDestinationIdentifier	Warehouse/Distribution Center ID
SKUSourceIdentifier	Supplier Identifier from Host (Vendor / Source / Supplier)
SKUOnHandUnits	On Hand Value, typically as of last close of business. If not sending committed inventory in Reserve parameter, then send Net On Hand.
SKUOnOrderUnits	Cumulative Open PO qtys. or Open PO quantity for a specific receipt date for this item/location. If transferring product from one location to another, be sure to include the transfer quantity.

# STOCK STATUS EXAMPLE REQUEST / RESPONSE

```
{
  "Authenticate" : { },
  "DataSource":{
    "StockStatusDTO":{
      "SKUItemNumber": "994214",
      "SKUDestinationIdentifier": "15",
      "SKUSourceIdentifier": " N12650",
      "SKUOnHandUnits": "12",
      "SKUOnOrderUnits": "12.0",
      "Optional1": "xxxx",
      "Optional2": "yyyy",...
    }
  },
  "requestDateTime":"2018-07-01 00:00:00"
}
```

```
{
  "code" : 200,
  "entity" : "source",
  "results" : [
    {
      "status" : "success",
      "action" : "created"
    } ],
  "details" : [{
    "sourcecontrolid" : 0,
    "sourceid": 0,
    "itemNumber":," 994214"
  }]
  "creationDateTime": "2018-01-02T17:17:01.588927+05:30",
  "creator": "Implementation"
}
```



# DAILY DEMAND

- Endpoint <https://<ClientName>.brinv.com/api/dailydemand/processdailydemand>
- This endpoint facilitates updates to the daily demand for items in SCP
- Missing required parameters will return errors

PARAMETER	DESCRIPTION
SKUItemNumber	Unique Item Identifier for Primary Supplier. If using letters, be consistent across all files. It is case sensitive.
SKUDestinationIdentifier	Warehouse/Distribution Center ID
SKUSourceIdentifier	Supplier Identifier from Host (Vendor / Source / Supplier)
SKUSoldUnits	This day's orders, sales, or shipments
SKUSalesAddSwitch	A=Add, R=Replace. Add to or replace week to date demand. If sending one demand by item/location by day, then send R. If sending multiple demands by item/location by day, then send A. Always send individual demand days if possible.
SKUDemandDate	The demand date for this daily demand

# DAILY DEMAND EXAMPLE REQUEST / RESPONSE

```
{
  "DataSource":{
    "DailyDemandDTO":{
      "SKUItemNumber": "994214",
      "SKUDestinationIdentifier": "15",
      "SKUSourceIdentifier": " N12650",
      "SKUSoldUnits": "12",
      "SKUSalesAddSwitch": "A",
      "SKUDemandDate": "2018-10-10 12:00:00",
      "Optional1": "xxxx",
      "Optional2": "yyyy",...
    }
  },
  "requestDateTime":"2018-07-01 00:00:00"
}
```

```
{
  "code" : 200,
  "entity" : "source",
  "results" : [
    {
      "status" : "success",
      "action" : "created"
    }
  ],
  "details" : [
    {
      "sourcecontrolid" : 0,
      "sourceid": 0,
      "itemNumber":," 994214"
    }
  ]
  "creationDateTime": "2018-01-02T17:17:01.588927+05:30",
  "creator": "Implementation"
}
```

# RECOMMENDED ORDERS

- Endpoint  
`https://<ClientName>.brinv.com/api/dailydemand/recommendedorder/getrecommendedorders`
- This endpoint allows retrieval of approved recommended orders throughout the day
- Missing required parameters will return errors

PARAMETER	DESCRIPTION
fromDate	From Date format to be passed is YYYY-MM-DD HH:MM:SS, FromDate should always be greater than toDate
toDate	To Date format to be passed is YYYY-MM-DD HH:MM:SS

# RECOMMENDED ORDERS EXAMPLE REQUEST / RESPONSE

```
{  
  "fromDate": "2018-07-01 00:00:00",  
  "toDate": "2018-10-01 00:00:00"  
}
```

```
{  
  "orderId": 1540373,  
  "orderDetails": [{  
    "orderOutputId": 1234,  
    "sequenceId": 1234,  
    "skuItemNumber": "1234",  
    "skuItemDescription": "XXXXXXXXXXXXXXXX",  
    "orderDeliveryDate": "11/13/2018",  
    "skuSourceIdentifier": "1234",  
    "skuSourceShipPoint": "WC, NJ",  
    "skuDestinationIdentifier": "YYYYYYYYYY",  
    "skuApprovedQuantity": 42,  
    "skuForwardBuyQuantity": 0,  
    "skuPlannedQuantity": 0, "orderSourceFlag": "V",  
    "systemOrderFlag": "N", "alternateSourceFlag": "N",  
    "alternateSourceId": "0", "transferShortQuantity": 0,  
    "skuAveragePurchasePrice": "408.2", "skuMinimumPurchaseQuantity": 0,  
    "skuBuyingMultipleUnits": 33,  
    "orderDate": "11/8/2018",  
    "expediteDate": "11/13/2018",  
    "pickupFlag": "N", "pickupDate": "11/13/2018",  
    "headerComments": "", "lineComments": "",  
    "fob": "None", "deliveryMethod": "Net 30 Days",  
    "carrierMethod": "Wire", "allocationMethod": "W",  
    "consolidateFreight": "N", "freightExpense": 0,  
    "skuPurchaseUnitCost": "0",  
    "skuPurchaseUnitM": "",  
    "skuApprovedQuantityUnitOfMeasure": "",  
    "groupVendorId": "",  
    "confirmationReqd": "N", "userDefinedField1": "",  
    "userDefinedField2": "", "userDefinedField3": "",  
    "userDefinedField4": "", "orderRemarks": "",  
    "transmitType": "Email", "costsMatch": "N",  
    "interfaceId": "",  
    "supplierBuyerId": "n",  
    "pocancellationFlag": 0,  
    "hostPOSsplitOption": "1-Uncided",  
    "hostPOSsequence": "0107",  
    "constraintUnits": 42,  
    "originalOrderId": 0,  
    "unitWeight": 45.96, "groupOrderId": 0  
  }]  
}
```



# HOW DO I GET STARTED?

- Contact our support team
- We will send you a copy of the API Guidebook
- Support will need to configure your test and production systems to access the APIs

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**THANK YOU!**