StockTrim
SMARTER INVENTORY PLANNING

The StockTrim API is based on REST principles. The base address is https://api.stocktrim.com/api followed by the appropriate endpoint.

Before you use the API you'll need a StockTrim account. If you don't have one, create a 14 day free trial – https://go.stocktrim.com

Basic Workflow

Step 1: Import data

We require at least two data sets: Products and Sale Orders.

If you assemble or manufacture items we also need a third data set: Bill of Materials

Optional data sets also include: Suppliers, and Locations.

Step 2: Run forecast calculations

Once your data has been uploaded, kick off the forecast calculations by hitting the

https://go.stocktrim.com/api/runforecastcalculations endpoint.

The system will then process through all your uploaded products, calculating the forecasts and required order quantities for each, based on the sales history (and BOM if included). This may take a few minutes.

IMPORTANT: Please ensure this is only done once or twice per day, especially for large datasets, since this can take some time for the system to run the forecast models and process the calculations for your whole product range.

Step 3: Read order plan

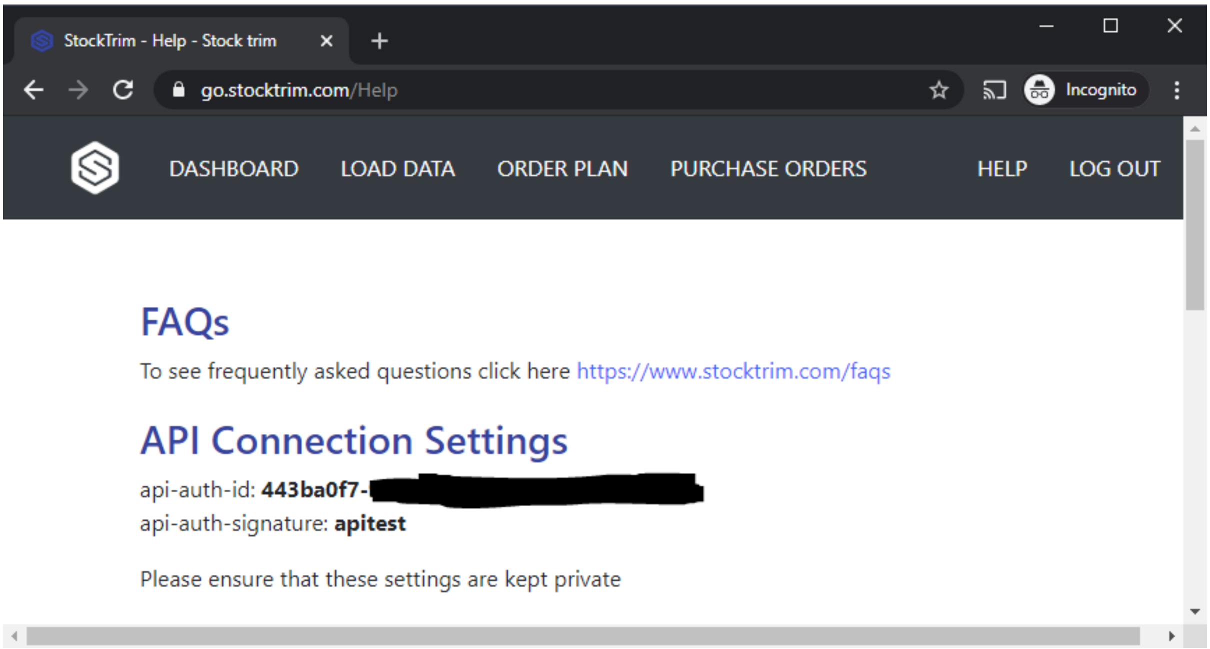
Log in to StockTrim. Once the forecast calculations have been completed, the order plan will then be available.

You can also retrieve the order plan from the API (please see separate document).

Authentication

The StockTrim API uses basic authentication. Each request must include the headers "`api-auth-id`" and "`api-auth-signature`".

These are specific to your StockTrim account and can be found in the 'Help' section within StockTrim.



FAQs

To see frequently asked questions click here https://www.stocktrim.com/faqs

API Connection Settings

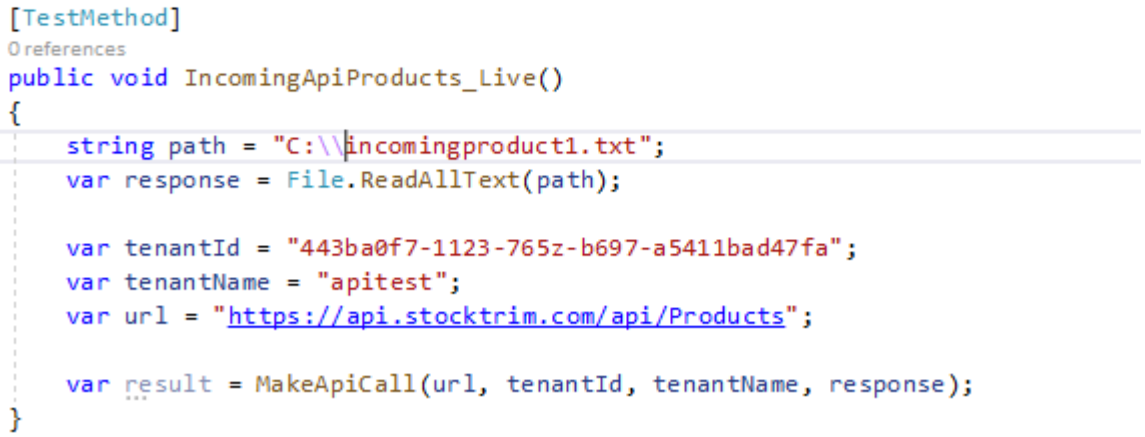
api-auth-id: **443ba0f7-**[redacted]

api-auth-signature: **apitest**

Please ensure that these settings are kept private

Sample Code (C#)

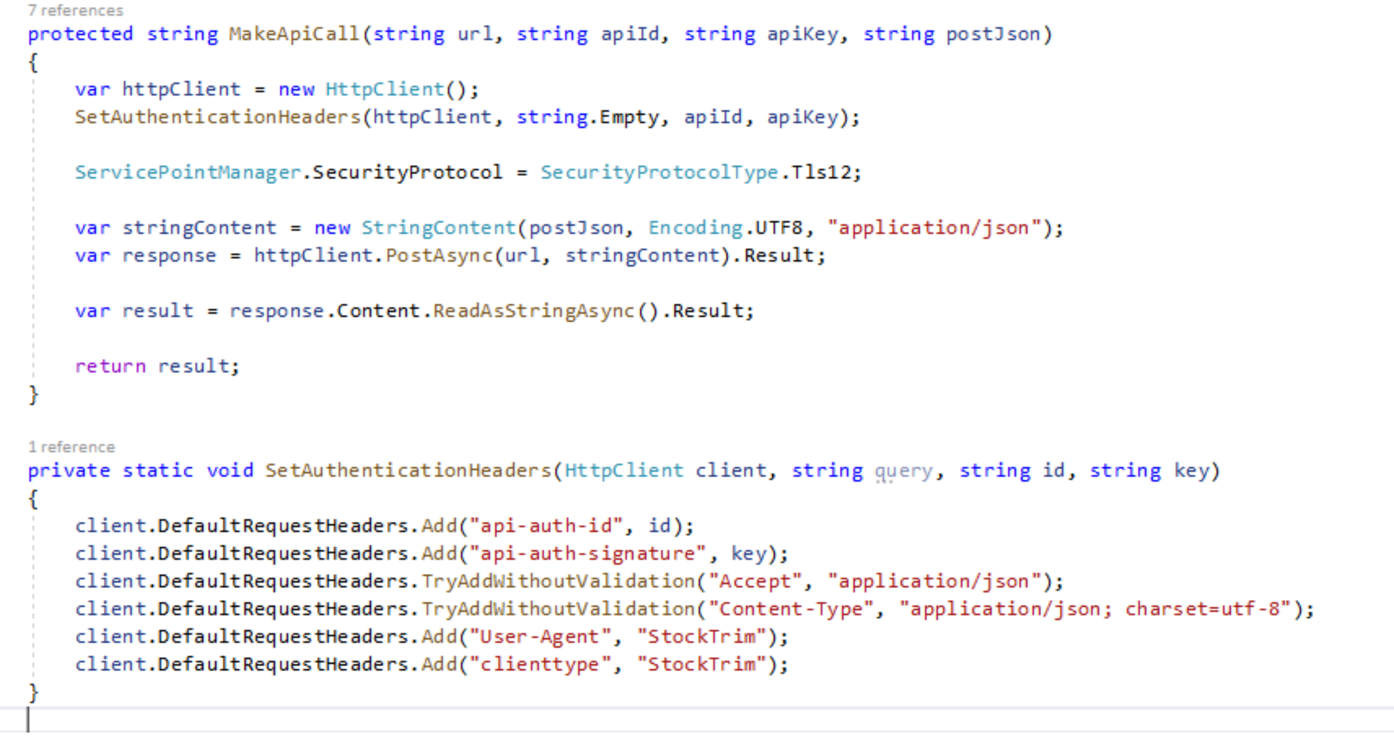
The following code snippet shows how to insert or update a product. Products are matched on the 'ProductId' – if there are no existing products with the included ProductId then a new one is created, otherwise the existing one is updated.



```
[TestMethod]
0 references
public void IncomingApiProducts_Live()
{
    string path = "C:\\incomingproduct1.txt";
    var response = File.ReadAllText(path);

    var tenantId = "443ba0f7-1123-765z-b697-a5411bad47fa";
    var tenantName = "apitest";
    var url = "https://api.stocktrim.com/api/Products";

    var result = MakeApiCall(url, tenantId, tenantName, response);
}
```



```
7 references
protected string MakeApiCall(string url, string apiId, string apiKey, string postJson)
{
    var httpClient = new HttpClient();
    SetAuthenticationHeaders(httpClient, string.Empty, apiId, apiKey);

    ServicePointManager.SecurityProtocol = SecurityProtocolType.Tls12;

    var stringContent = new StringContent(postJson, Encoding.UTF8, "application/json");
    var response = httpClient.PostAsync(url, stringContent).Result;

    var result = response.Content.ReadAsStringAsync().Result;

    return result;
}

1 reference
private static void SetAuthenticationHeaders(HttpClient client, string query, string id, string key)
{
    client.DefaultRequestHeaders.Add("api-auth-id", id);
    client.DefaultRequestHeaders.Add("api-auth-signature", key);
    client.DefaultRequestHeaders.TryAddWithoutValidation("Accept", "application/json");
    client.DefaultRequestHeaders.TryAddWithoutValidation("Content-Type", "application/json; charset=utf-8");
    client.DefaultRequestHeaders.Add("User-Agent", "StockTrim");
    client.DefaultRequestHeaders.Add("clienttype", "StockTrim");
}
```

In this example, the contents of the Products POST data in the test file “incomingproduct1.txt” are:

```
{
  "productId": "ABC123",
  "name": "Product 1",
  "category": "Category 1",
  "subCategory": "SubCategory 1",
  "serviceLevel": 0.96,
  "leadTime": 35,
  "stockOnHand": 234,
  "stockOnOrder": 56,
  "cost": 56.66,
  "price": 67.78,
  "suppliers": [
    {
      "supplierId": "Sup1",
      "supplierName": "Supplier 1"
    }
  ],
  "forecastPeriod": 0,
  "manufacturingTime": 10,
  "orderFrequency": 40,
  "minimumOrderQuantity": 10,
  "minimumShelfLevel": 5,
  "maximumShelfLevel": 600,
  "overriddenDemand": 0,
  "overriddenDemandPeriod": 0,
  "stockLocations": [
    {
      "locationCode": "AKL",
      "stockOnHand": 20,
      "stockOnOrder": 10
    },
     {
      "locationCode": "WLG",
      "stockOnHand": 30,
      "stockOnOrder": 5
    }
  ]
}
```

FAQ

1. **I've imported my Products and sales orders but there is still no data in my StockTrim account – how do I see it?**

You'll still need to run the forecast calculations so that the system can create your forecasts and order plan. Hit the /runforecastcalculations endpoint.

2. **Can I create a free developer account that won't require a payment after the 14 day free trial is over?**

Yes. Just email us at support@stocktrim.com with your account name and we'll sort this for you.

3. **I keep getting error messages related to Invalid Authorization Headers, or invalid auth Id or signature. How do I fix it?**

Ensure that the headers "`api-auth-id`" and "`api-auth-signature`" are present in your request, and that they exactly match the values in your account – https://go.stocktrim.com/help

4. **I get the error message 400 bad request. What's gone wrong here?**

Firstly, double check the security protocol. We recommend using at least Transport Layer Security (TLS) 1.2.

Also double check that all fields in your request body match the required formats.

You can identify whether any errors are in your request vs your code by trying the request in the API sandbox (swagger UI) – api.stocktrim.com/index.html

5. **What is the Purchase Orders endpoint for?**

Usually you will not need to import Purchase Orders via the API. In StockTrim, purchase orders are only read to calculate the current “Stock on order” value (sum of open purchase orders for a product with a sent date but not received), or to automatically calculate the lead time (average difference in sent date and received date).

Ideally you should use the Products POST to set the StockOnOrder and LeadTime explicitly (having known this at your end). However, if you find it challenging to read this information from your other connected system, then there is this option to import purchase orders so that StockTrim can calculate it.