

Web Service

Specification v1.0

Last Update - 2024-12-12

Contents

[1. Introduction 3](#_Toc187755616)

[1.1. Purpose 3](#_Toc187755617)

[2. Typical API workflow and schema 4](#_Toc187755618)

[2.1. Fluentstock Schema 5](#_Toc187755619)

[3. Authentication and Authorization 7](#_Toc187755620)

[3.1. Username and Password Authentication 7](#_Toc187755621)

[3.2. Obtaining an Authentication Token 7](#_Toc187755622)

[4. API End-Points 9](#_Toc187755623)

[4.1. Create a Warehouse 9](#_Toc187755624)

[4.2. Create a Supplier 12](#_Toc187755625)

[4.3. Create an SKU Item 17](#_Toc187755626)

[4.4. Associate a Warehouse to SKU Item 21](#_Toc187755627)

[4.5. Update an SKU Item 26](#_Toc187755628)

[4.6. Retrieve SKU Item **associated with warehouse** 29](#_Toc187755629)

[4.7. Retrieve an SKU Item 33](#_Toc187755630)

[4.8. Create an SKU Movement 35](#_Toc187755631)

[4.9. Retrieve Purchase Orders 37](#_Toc187755632)

[4.10. Retrieve Purchase Order Line Items 40](#_Toc187755633)

[4.11. Update Order Lines of an Existing Order 42](#_Toc187755634)

[5. Change History 44](#_Toc187755635)

# **Introduction**

## Purpose

This document outlines the specifications for multiple endpoints within the FluentStock web service API, designed as a **REST-based** interface.

This API allows seamless data exchange between your FluentStock account and your custom system by utilizing **HTTPS requests** to perform CRUD (Create, Read, Update, Delete) operations on resources.

The API is structured around REST principles:

* Each resource (e.g., sku items, orders, warehouses) is represented by a unique endpoint URL.
* Standard HTTP methods: **GET, POST, PATCH** are used to interact with these resources.
* **JSON** is data format for requests and responses, facilitating straightforward integration and data handling within your system.

This RESTful structure ensures that requests are stateless, meaning each interaction with FluentStock is independent of each other, allowing for efficient, scalable, and robust data exchange.

# **Typical API workflow and schema**

The standard workflow for creating and managing inventory in the FluentStock system using its REST API generally involves the following steps:

* **Creating Warehouses**

Warehouses are established with unique identifiers, locations, and specific operational attributes. This ensures that stock levels, movements, and transfers can be accurately tracked and managed across various storage points.

* **Creating Suppliers**

Suppliers are registered within the system by providing essential details such as supplier codes, contact information, and preferred currencies, as well as any additional data required for efficient purchase order creation and management.

* **Creating SKU Items**

SKU items (Stock Keeping Units) are defined with unique identification codes and detailed attributes. During this process, you associate warehouses with each SKU and assign a supplier to it, thereby determining where the SKU will be stocked and how it will be replenished.

* **Defining and Updating SKU Movements from one or more Channels**

SKU movements - such as stock adjustments and transfers - are recorded from multiple sales or supply chain channels. This ensures that inventory data remains up-to-date, supporting accurate stock reconciliation and efficient inventory control.

* **Retrieving Orders and Transfers**

A list of issued orders (purchase orders or internal transfers) can be retrieved for monitoring status and history. This provides clear visibility into supply chain operations and helps ensure timely fulfillment and delivery.

* **Tracking SKU Quantities in Shipments**

The system allows for detailed tracking of received orders (shipments), enabling you to reconcile incoming stock against purchase orders. This promotes accurate inventory records and helps maintain alignment between expected and actual stock levels.

## Fluentstock Schema

The schema outlines key entities and relationships in an inventory management system:



* **SKU and Dimensions**

SKUs (Stock Keeping Units) link to multiple dimensions (e.g., weight, volume) for standardized measurements.

* **Warehouses and Supply Schedules**

Warehouses manage SKUs and maintain supply schedules for replenishment.

* **Suppliers and Currencies**

Suppliers are tied to specific currencies and associated with SKUs via purchase orders and order lines.

* **SKU Movements** Tracks inventory changes like adjustments, transfers, or sales for real-time updates.
* **Central Assortment**

The SKU-Warehouse association enables one-to-many relationships for multi-warehouse operations.

# **Authentication and Authorization**

## Username and Password Authentication

The FluentStock API uses a simple authentication method based on a username and password. Clients authenticate by sending their username and password in a POST request to a dedicated login endpoint. If the credentials are valid, the server returns a unique authentication token, which must then be included in the header of every subsequent API request.

## Obtaining an Authentication Token

Send a POST request with your username and password to the authentication end-point.

| **Attribute** | **Description** |
| --- | --- |
| HTTP Method | POST |
| URL | <https://workspace.fluentstock.net/api/auth/login>  |
| Headers | Content-Type: application/json |
| Request Body | JSON |
| Request Example | POST /api/auth/login HTTP/1.1Host: workspace.fluentstock.netContent-Type: application/json{"username": "example\_user","password": "example\_password"} |

| **Expected Response** | **Description** |
| --- | --- |
| Status Code | 200 (OK) |
| Response Body | JSON |
| Response Example | {"token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.e30.sQ35L2nQz0h6sB3pZ1kZLQJmYZBpYbKjXjkj4mc","token\_type": "JWT","expires\_in": 86400,"header\_prefix": "Token",} |

Usage of token for subsequent requests

|  |  |
| --- | --- |
| Authorization Header | Authorization Header: Token eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.e30.sQ35L2nQz0h6sB3pZ1kZLQJmYZBpYbKjXjkj4mc |

# **API End-Points**

## Create a Warehouse

This endpoint enables you to create a single warehouse with basic attributes such as name, code, and address formatting details. Upgrading your subscription plan allows the creation and management of multiple warehouses, enabling you to scale your inventory operations across various locations.

| **Attribute** | **Description** |
| --- | --- |
| HTTP Methods | POST / GET |
| URL | <https://workspace.fluentstock.net/api/warehouses/>  |
| Headers | Content-Type: application/json |
| Request Body | JSON |
| Request Example | {"active": true, **"warehouse\_name": "Central Storage",** **"warehouse\_code": "WH001",** **"waddress\_format": "Street, City, State, ZIP"**} |

Table of parameters for the warehouse

| **Parameter** | **Mandatory** | **Type** | **Description** |
| --- | --- | --- | --- |
| active | No | Boolean | Indicates whether the warehouse is currently active. If false, no new purchase orders will be placed to be delivered to the warehouse. Defaults to true if not provided. |
| **warehouse\_name** | Yes | String | Name of the warehouse. |
| **warehouse\_code** | Yes | String | Unique code to identify the warehouse. |
| **waddress\_format** | Yes | String | A text format or template for how the warehouse address should be displayed. |

Sucess Response

| **Expected Response** | **Description** |
| --- | --- |
| Status Code | 200 (OK) |
| Response Body | JSON |
| Response Example | { "status": "success", "message": "Warehouse created successfully", "data": { "active": true, **"warehouse\_id": 101,** "warehouse\_name": "Central Storage", "warehouse\_code": "WH001", "waddress\_format": "Street, City, State, ZIP", "created\_at": "2024-12-06T15:30:00Z", "updated\_at": "2024-12-06T15:30:00Z" }} |

Error Response

| **Expected Response** | **Description** |
| --- | --- |
| Status Code | 400 (Bad Request) |
| Response Body | JSON |
| Response Example | { "status": "error", "message": "Validation failed for supplied parameters", "errors": [ { "message": "The warehouse\_name field is required.", "data": { "error\_code": "MISSING\_FIELD", "field": "warehouse\_name" } } ]} |

Error Code Table

| **Category** | **Error Code** | **Description** |
| --- | --- | --- |
| Warehouse Validation | WAREHOUSE\_NAME\_MISSING | The warehouse\_name field is required but missing in the request. |
|  | WAREHOUSE\_CODE\_MISSING | The warehouse\_code field is required but missing in the request. |
|  | WAREHOUSE\_NAME\_INVALID | The warehouse\_name field contains invalid characters or is too long. |
|  | WAREHOUSE\_CODE\_INVALID | The warehouse\_code field contains invalid characters or is too long. |
|  | WADDRESS\_FORMAT\_INVALID | The waddress\_format field, if provided, must be a valid string format. |
|  | ACTIVE\_WAREHOUSE\_LIMIT\_REACHED | The warehouse limit has been reached for active plan. |

## Create a Supplier

| **Attribute** | **Description** |
| --- | --- |
| HTTP Method | POST / GET |
| URL | <https://workspace.fluentstock.net/api/suppliers/>  |
| Headers | Content-Type: application/json |
| Request Body | JSON |
| Request Example | { "active": true, "user\_id": 101, **"supplier\_code": "SUP98765",** **"supplier\_name": "International Distributors LLC",** "warehouse\_id": 10, "order\_number\_format": "ABC{1::yyyyMMdd}-{0::0000}", "email": "info@intdist.com, support@intdist.com", "send\_order\_mail\_to\_managers": false, "order\_form\_template": "EN", "currency\_code": "EUR", "supplier\_order\_remark": "", "threshold\_to\_close\_order": 80, "days\_to\_confirm": 7, "mail\_body": "Dear Supplier, Please find attached the order details. Thank you.", "spextra1": "123 Oak Street, Springfield ", "spextra2": "+1-202-555-0123", "spextra3": " Key supplier for office furniture ", "spextra4": " John Doe "} |

Table of parameters for Supplier

| **Parameter Name** | **Mandatory** | **Type** | **Description** |
| --- | --- | --- | --- |
| active | No | Boolean | Indicates whether the supplier is currently active. If false, no new orders should be placed. Defaults to true if not provided. |
| user\_id | No | Integer | Unique identifier of the responsible manager for the supplier. If not defined, the default account manager is allocated. |
| **supplier\_code** | Yes | String | Unique external code or reference for the supplier, used to identify them in the system and across integrations. |
| **supplier\_name** | Yes | String | The official name of the supplier, displayed in listings, documents, and references. |
| warehouse\_id | No | Integer | If a warehouse is associated with the supplier, then orders made to/from this supplier are treated as internal transfers rather than purchase orders. |
| order\_number\_format | No | String | The format for generating the order number. For example, ABC{1::yyyyMMdd}-{0::0000} would produce an order number - ABC20221014-0001. |
| email | No | String | Contact email(s) for the supplier. Multiple emails should be separated by commas. All must be valid email addresses. |
| send\_order\_mail\_to\_managers | No | Boolean | If true, order confirmation emails are also sent to internal managers in addition to the supplier. Defaults to false if not specified. |
| order\_form\_template | No | String | Specifies which order form template to use. Possible values: EN, LT. |
| currency\_code | No | String | ISO currency code used for transactions (e.g., USD, EUR, GBP). |
| supplier\_order\_remark | No | String | An internal note or remark about sending new orders to the supplier. It is not visible to the supplier but can be viewed internally in the "To be sent" column under "Supplier note". |
| threshold\_to\_close\_order | No | Integer | The percentage of the order that must be received for the system to automatically close the order. For instance, 80 means the order will close once 80% of items are received. Use a value below 100 if the supplier often partially fulfills orders. |
| days\_to\_confirm | No | Integer | The number of days the supplier has to confirm the order. If the supplier does not confirm within this period, the system will show this under daily tasks as an unconfirmed order. |
| mail\_body | No | String | Custom message body included in the email sent with the order documents. |
| spextra1 | No | String | The supplier’s address. |
| spextra2 | No | String | The supplier’s phone number. |
| spextra3 | No | String | Additional information related to the supplier. |
| spextra4 | No | String | Full name of the contact person at the supplier. |

Sucess Response

| **Expected Response** | **Description** |
| --- | --- |
| Status Code | 200 (OK) |
| Response Body | JSON |
| Response Example | { "status": "success", "message": "Supplier created successfully", "data": { **"supplier\_id": 202,** "active": true, "user\_id": 101, "supplier\_code": "SUP98765", "supplier\_name": "International Distributors LLC", "warehouse\_id": 10, "order\_number\_format": "ABC{1::yyyyMMdd}-{0::0000}", "email": "info@intdist.com, support@intdist.com", "send\_order\_mail\_to\_managers": false, "order\_form\_template": "EN", "currency\_code": "EUR", "supplier\_order\_remark": "Handle fragile items with care", "threshold\_to\_close\_order": 80, "days\_to\_confirm": 7, "mail\_body": "Dear Supplier, Please find attached the order details. Thank you.", "spextra1": "123 Oak Street, Springfield ", "spextra2": "+1-202-555-0123", "spextra3": " Key supplier for office furniture ", "spextra4": " John Doe ", "created\_at": "2024-12-06T13:00:00Z", "updated\_at": "2024-12-06T13:00:00Z" }} |

Error Response

| **Expected Response** | **Description** |
| --- | --- |
| Status Code | 400 (Bad Request) |
| Response Body | JSON |
| Response Example | { "status": "error", "message": "Validation failed for supplied parameters", "errors": [ { "message": "The supplier\_code field is required.", "data": { "error\_code": "MISSING\_FIELD", "field": "supplier\_code" } }, { "message": "The email field must contain a valid email address.", "data": { "error\_code": "INVALID\_FIELD\_FORMAT", "field": "email" } } ]} |

Error Code Table

| **Category** | **Error Code** | **Description** |
| --- | --- | --- |
| Supplier Validation | SUPPLIER\_CODE\_MISSING | The supplier\_code field is required but missing in the request. |
|  | SUPPLIER\_NAME\_MISSING | The supplier\_name field is required but missing in the request. |
|  | SUPPLIER\_CURRENCY\_CODE\_INVALID | The currency\_code field must be a valid ISO currency code (e.g., "USD", "EUR"). |
|  | SUPPLIER\_DAYS\_TO\_CONFIRM\_INVALID | The days\_to\_confirm field must be a valid integer. |
|  | SUPPLIER\_ACTIVE\_INVALID | The active field must be a boolean value (true or false). |
|  | SUPPLIER\_PARTIAL\_DELIVERY\_INVALID | The partial\_delivery field must be a boolean value (true or false). |
|  | SUPPLIER\_SEND\_ORDER\_MAIL\_TO\_MANAGERS\_INVALID | The send\_order\_mail\_to\_managers field must be a boolean value (true or false). |
|  | SUPPLIER\_USER\_ID\_INVALID | The user\_id field must be a valid integer. |
|  | SUPPLIER\_WAREHOUSE\_ID\_INVALID | The warehouse\_id field must be a valid integer. |

## Create an SKU Item

| **Attribute** | **Description** |
| --- | --- |
| HTTP Method | POST / GET |
| URL | <https://workspace.fluentstock.net/api/sku/>  |
| Headers | Content-Type: application/json |
| Request Body | JSON |
| Request Example | {"user\_id": 1, **"sku\_code": "SKU12345",** **"sku\_name": "Product ABC",** "group\_name": "Group ABC", "dimension\_name": "KG",  "weight": 0.5, "volume": 0.5, "a\_mover": true, "b\_mover": false, "c\_mover": false, "manufacturer\_id": 123, "manufacturer\_code": "MABC", "group": "group1", "extra1": null, "extra2": null, "extra3": null, "extra4": null, "extra5": null, "extra6": null, "extra7": null, "extra8": null, "extra9": null, "extra10": null, } |
|  |  |

Table of parameters of SKU

| **Parameter Name** | **Mandatory** | **Type** | **Additional Information** |
| --- | --- | --- | --- |
| user\_id | No | Integer | Unique identifier of the responsible manager for the supplier. If not defined, the default account manager is allocated. |
| **sku\_code** | Yes | String | Unique identifier for the SKU. |
| **sku\_name** | Yes | String | Descriptive name of the SKU. |
| group\_name | No | String | Descriptive name of the group.  |
| dimension | No | String | The unit in which the SKU is consistently measured across warehouses. Example values: KG, G, PCS, T. If dimension does not exist FluentStock will create it.  |
| weight | No | Float | Weight of the item. Defaults to 0 if not provided. |
| volume | No | Float | Volume of the item. Defaults to 0 if not provided. |
| a\_mover | No | Boolean |  Only one mover type can be set to true. |
|   | No | Boolean |
| c\_mover | No | Boolean |
| manufacturer\_id | No | Integer | Id of the manufacturer or external supplier. |
| manufacturer\_code | No | String | Code of the manufacturer or external supplier. |
| group | No | String | Group or classification of the SKU. |
| extra1-extra10 | No | String | General custom fields for additional SKU information, shared across all warehouses. |

Sucess Response

| **Expected Response** | **Description** |
| --- | --- |
| Status Code | 200 (OK) |
| Response Body | JSON |
| Response Example | { "status": "success", "message": "SKU item created successfully", "data": { "user\_id": 1, **"sku\_id": 12345,** "sku\_code": "SKU12345", "sku\_name": "Product ABC", "dimension": "KG", "weight": 0.5, "volume": 0.5, "a\_mover": true, "b\_mover": false, "c\_mover": false, "manufacturer\_id": 123, "manufacturer\_code": "MABC", "group": "group1", "created\_at": "2024-11-13T10:15:30Z", "updated\_at": "2024-11-13T10:15:30Z" }} |

Error Response

| **Expected Response** | **Description** |
| --- | --- |
| Status Code | 400 (Bad Request) |
| Response Body | JSON |
| Response Example | { "status": "error", "message": "One or more validation errors were encountered.", "errors": [ { "message": "The SKU code already exists in the system.", "data": { "error\_code": "SKU\_DUPLICATE" } } ]} |

Error Code Table

| **Category** | **Error Code** | **Description** |
| --- | --- | --- |
| **SKU Validation** | SKU\_CODE\_DUPLICATE | The SKU code already exists in the system. |
|  | SKU\_CODE\_MISSING | The SKU code was not provided in the request. |
|  | SKU\_NAME\_MISSING | The SKU name was not provided in the request. |
| **User / Manager Validation** | USER\_ID\_INVALID | The user ID provided does not exist in the system. |
| **Manufacturer****Validation** | MANUFACTURER\_ID\_CODE\_INVALID | The manufacturer ID provided does not exist in the system. |
| **Weight** **Validation** | WEIGHT\_INVALID | The measure provided is invalid (e.g., negative or not a number). |
| **Mover****Validation** | MOVER\_INVALID | Only one mover type can be set to true.  |

## Associate a Warehouse to SKU Item

| **Attribute** | **Description** |
| --- | --- |
| HTTP Method | POST / GET |
| URL | <https://workspace.fluentstock.net/api/sku-warehouses/> |
| Headers | Content-Type: application/json |
| Request Body | JSON |
| Request Example |  { "user\_id": 3, **"sku\_id": 1234,** **"sku\_code": "SKU12345",** **"warehouse\_id": 1,** **"supplier\_id": 56,** "state": "ND", "moq": 100, "usq": 50, "purchase\_price": 25.50, "sale\_price": 30.00, "sales\_pace\_week": 30.00, "min\_buffer": 0, "max\_buffer": 0, "init\_buffer": 0, "safety\_buffer": 0, "safety\_buffer\_2": 0, "safety\_buffer\_3": 0, "wextra1": null, "wextra2": null, "wextra3": null, "wextra4": null, "wextra5": null, "wextra6": null, "wextra7": null } |

Table of parameters for warehouse

| **Parameter Name** | **Mandatory** | **Type** | **Description** |
| --- | --- | --- | --- |
| user\_id | Yes | Integer | Unique identifier of the user which manages stock in this particular warehouse. If not defined, the default account manager is allocated. |
| **sku\_id** | Yes | Integer | It is mandatory to define sku\_id or sku\_code. |
| **sku\_code** | String |
| **warehouse\_id** | Yes | Integer | Unique identifier of the warehouse where the SKU is stored. |
| **supplier\_id** | Yes | Integer | Unique identifier of the supplier for the SKU. |
| state | No | String | Current status of the SKU. Allowed values: DTA, DTO, NA, ND. Defaults to "ND". |
| moq | No | Integer | Minimum Order Quantity for the SKU. Defaults to 1 if not provided. |
| usq | No | Integer | Usual Stock Quantity for maintaining stock levels. Defaults to 1 if not provided. |
| purchase\_price | Yes | Float | Average purchase price without VAT. Defaults to 0 if not provided. |
| sale\_price | Yes | Float | Average sale price without VAT. Defaults to 0 if not provided. |
| sales\_pace | No | String | Indicates sales amount per week.  |
| min\_buffer | No | Integer | Minimum storage quantity. |
| max\_buffer | No | Integer | Maximum storage quantity. |
| init\_buffer | No | Integer |  |
| safety\_buffer | No | Integer |  |
| safety\_buffer\_2 | No | Integer |  |
| safety\_buffer\_3 | No | Integer |  |
| wextra1-wextra7 | No | String | Custom fields for additional SKU-specific information specific to the warehouse. |
| group | No | String | Group or classification of the SKU in the warehouse. |

Sucess Response

| **Expected Response** | **Description** |
| --- | --- |
| Status Code | 200 (OK) |
| Response Body | JSON |
| Response Example | { "status": "success", "message": "Warehouse associated successfully to the SKU.", "data": { **"item\_id": 1208464,** "sku\_code": "SKU12345", "warehouse": { "warehouse\_id": 1, "supplier\_id": 56, "state": "ND", "moq": 100, "uso": 50, "purchase\_price": 25.50, "sale\_price": 30.00, "min\_buffer": 0, "max\_buffer": 0, "init\_buffer": 0, "safety\_buffer": 0, "safety\_buffer\_2": 0, "safety\_buffer\_3": 0, "wextra1": null, "wextra2": null, "wextra3": null, "wextra4": null, "wextra5": null, "wextra6": null, "wextra7": null, "created\_at": "2024-11-15T10:15:30Z", "updated\_at": "2024-11-15T10:15:30Z" } }} |

Error Response

| **Expected Response** | **Description** |
| --- | --- |
| Status Code | 400 (Bad Request) |
| Response Body | JSON |
| Response Example | { "status": "error", "message": "One or more validation errors were encountered.", "errors": [ { "message": "The warehouse ID is missing.", "data": { "error\_code": "WAREHOUSE\_ID\_MISSING" } }, { "message": "The purchase price provided is invalid.", "data": { "error\_code": "PURCHASE\_PRICE\_INVALID" } } ]} |

Error Code Table

| **Category** | **Error Code** | **Description** |
| --- | --- | --- |
| **SKU** **Validation** | SKU\_ID\_CODE\_MISSING | SKU ID or SKU code is invalid or missing. |
| **Warehouse Validation** | WAREHOUSE\_ID\_MISSING | The warehouse ID was not provided in the request. |
|  | WAREHOUSE\_ID\_INVALID | The warehouse ID provided does not exist in the system. |
| **Supplier Validation** | SUPPLIER\_ID\_MISSING | The supplier ID was not provided in the request. |
|  | SUPPLIER\_ID\_INVALID | The supplier ID provided does not exist in the system. |
| **State Validation** | INVALID\_STATE\_VALUE | The state provided is not one of the allowed values (DTA, DTO, NA, ND). |
| **Price Validation** | PURCHASE\_PRICE\_INVALID | The purchase price provided is invalid (e.g., negative or not a number). |
|  | SALE\_PRICE\_INVALID | The sale price provided is invalid (e.g., negative or not a number). |
| **Quantity Validation** | MOQ\_INVALID | The Minimum Order Quantity is invalid (e.g., negative or not a number). |
|  | USO\_INVALID | The Usual Stock Quantity is invalid (e.g., negative or not a number). |

## Update an SKU Item

In the examples below, we will update a previously created SKU entry by modifying the main SKU parameters and editing parameters of the SKU in warehouse 2.

1. Updating SKU Element

| **Attribute** | **Description** |
| --- | --- |
| HTTP Method | PATCH |
| URL | [https://workspace.fluentstock.net/api/sku/](https://workspace.fluentstock.net/api/sku/%7B) |
| Headers | Content-Type: application/json |
| Request Body | JSON |
| Request Example  | sku\_id or sku\_code is **mandatory**{ **"sku\_id": 1208464,** **"sku\_code": "SKU12345",** "sku\_name": "Updated Product ABC", "weight": 0.75} |

Success Response

| **Expected Response** | **Description** |
| --- | --- |
| Status Code | 200 (OK) |
| Response Body | JSON |
| Response Example | Please refer to example of succes response on [Page 7](#SkuSuccess) of this document with message being „SKU item updated successfully“. |

Error Response

| **Expected Response** | **Description** |
| --- | --- |
| Status Code | 400 (Bad Request) |
| Response Body | JSON |
| Response Example | Please refer to example of error response on [Page 11](#SkuError) of this document. |

1. Editing Parameters of the SKU associated with Warehouse 2

| **Attribute** | **Description** |
| --- | --- |
| HTTP Method | PATCH |
| URL | <https://workspace.fluentstock.net/api/sku/warehouses/> |
| Headers | Content-Type: application/json |
| Request Body | JSON |
| Request Example | item\_id or sku\_id or sku\_code is **mandatory**warehouse\_id is **mandatory**supplier\_id is **mandatory**{ **"item\_id": 1208464,** **"sku\_id": 1234,** **"sku\_code": "SKU12345",** **"warehouse\_id": 2,** **"supplier\_id": 56,** "user\_id": 2, "supplier\_id": 56, "purchase\_price": 40, "state": "DTO", "sales\_pace\_week": "250.00", "wextra1": „Customer Parameter 3“} |

## Retrieve SKU Item **associated with warehouse**

| **Attribute** | **Description** |
| --- | --- |
| **HTTP Method** | GET |
| **URL** | https://workspace.fluentstock.net/api/sku-warehouses/ |
| **Headers** | Authorization: Bearer your\_tokenContent-Type: application/json |
| **Request Body** | None |
| **Description** | Fetches a list of SKU items. Use query parameters to filter results or control the output. |

Query Parameters

| **Query Parameter** | **Description** | **Example** |
| --- | --- | --- |
| sku\_code | Comma-separated list of SKU codes to filter results. | sku\_code=SKU12345,SKU67890 |
| supplier\_id | Filter results by supplier ID. | supplier\_id=1 |
| warehouse\_id | Filter results by warehouse ID. | warehouse\_id=101 |
| state | Filter results by SKU state. Allowed values: DTA, DTO, NA, ND. | state=ND |
| limit | Maximum number of SKU items to retrieve in one request. Default is 10. | limit=5 |
| offset | Number of items to skip for pagination. Default is 0. | offset=10 |

| **Example** | **URL** |
| --- | --- |
| Query | https://workspace.fluentstock.net/api/sku/?sku\_code=Table1&state=ND&supplier\_id=4691&warehouse\_id=40 |

Sucess Response

| **Expected Response** | **Description** |
| --- | --- |
| Status Code | 200 (OK) |
| Response Body | JSON |
| Response Example | { "status": "success", "message": "Data retrieved successfully", "data": [ { "created\_at": "2024-12-20T00:00:00", "init\_buffer": 0.0000, "item\_id": 329583, "max\_buffer": 0.0000, "min\_buffer": 0.0000, "moq": 1.0000, "updated\_at": "2024-12-20T12:59:52.873", "usq": 1.0000, "purchase\_price": 1.0000, "safety\_buffer": 0.0000, "safety\_buffer\_2": 0.0000, "safety\_buffer\_3": 0.0000, "sale\_price": 1.0000, "sales\_pace": null, "sku\_code": "Table1", "sku\_id": 13417, "state": "ND", "supplier\_code": "S1", "supplier\_id": 4691, "user\_id": 57, "warehouse\_code": "W1", "warehouse\_id": 40, "wextra1": "", "wextra2": "", "wextra3": "", "wextra4": "", "wextra5": "", "wextra6": "", "wextra7": "" } ], "pagination": { "limit": 10, "offset": 0, "total": 1, "next": "https://test.fluentstock.net:443/api/sku-warehouses/?sku\_code=Table1&state=ND&supplier\_id=4691&warehouse\_id=40&offset=10" }} |

Error Response

| **Expected Response** | **Description** |
| --- | --- |
| Status Code | 400 (Bad Request) |
| Response Body | JSON |
| Response Example | { "status": "error", "message": "Invalid request parameters", "errors": [ { "message": "One or more SKU codes provided are invalid.", "data": { "error\_code": "SKU\_NOT\_FOUND" } }, { "message": "The limit parameter must be a positive integer.", "data": { "error\_code": "INVALID\_QUERY\_PARAM" } } ]} |

Error Code Table

| **Category** | **Error Code** | **Description** |
| --- | --- | --- |
| SKU Validation | SKU\_CODE\_NOT\_FOUND | No SKU items were found matching the provided filters. |
|  | SKU\_CODE\_INVALID | One or more SKU codes provided in the request are invalid. |
| Query Validation | INVALID\_QUERY\_PARAM | One or more query parameters are invalid or unsupported. |
| Authorization | AUTH\_TOKEN\_MISSING | Authorization token was not provided in the request. |
|  | AUTH\_TOKEN\_INVALID | The provided authorization token is invalid or expired. |
| Warehouse Validation | WAREHOUSE\_INVALID | The warehouse ID provided does not exist in the system. |
| State Validation | INVALID\_STATE\_VALUE | The state provided is not one of the allowed values (DTA, DTO, NA, ND). |
| Pagination Validation | LIMIT\_INVALID | The limit parameter is invalid (e.g., negative or exceeds the allowed range). |
|  | OFFSET\_INVALID | The offset parameter is invalid (e.g., negative or exceeds the total number of records). |
| Supplier Validation | SUPPLIER\_ID\_INVALID | The supplier ID provided does not exist in the system. |

## Retrieve an SKU Item

| **Attribute** | **Description** |
| --- | --- |
| **HTTP Method** | GET |
| **URL** | https://workspace.fluentstock.net/api/sku/ |
| **Headers** | Authorization: Bearer your\_tokenContent-Type: application/json |
| **Request Body** | None |
| **Description** | Fetches a list of SKU items. Use query parameters to filter results or control the output. |

Query Parameters

| **Query Parameter** | **Description** | **Example** |
| --- | --- | --- |
| sku\_code | Comma-separated list of SKU codes to filter results. | sku\_code=SKU12345,SKU67890 |
| supplier\_name | Filter results by SKU name | sku\_name=Product ABC |
| limit | Maximum number of SKU items to retrieve in one request. Default is 10. | limit=5 |
| offset | Number of items to skip for pagination. Default is 0. | offset=10 |

| **Example** | **URL** |
| --- | --- |
| Query | https://workspace.fluentstock.net/api/sku/?sku\_code=SKU12345&sku\_name=Product ABC |

Sucess Response

| **Expected Response** | **Description** |
| --- | --- |
| Status Code | 200 (OK) |
| Response Body | JSON |
| Response Example | { { "status": "success", "message": "Data retrieved successfully", "data": [ { "dimension\_id": 1, "manufacturer\_id": 4704, "sku\_id": 13418, "user\_id": 57, "a\_mover": false, "b\_mover": false, "c\_mover": false, "created\_at": "2025-01-06T00:00:00", "dimension\_name": "vnt", "extra1": "", "extra10": "", "extra2": "", "extra3": "", "extra4": "", "extra5": "", "extra6": "", "extra7": "", "extra8": "", "extra9": "", "group\_name": "Group ABC", "manufacturer\_code": "Supplier15\_correct", "sku\_code": "SKU12345", "sku\_name": "Product ABC", "updated\_at": "2025-01-06T13:43:35.423", "volume": 0.500000, "weight": 0.500000 } ], "pagination": { "limit": 10, "offset": 0, "total": 1, "next": "https://test.fluentstock.net:443/api/sku/?sku\_code=SKU12345&sku\_name=Product%20ABC&offset=10" }} |

## Create an SKU Movement

The **Create an SKU Movement endpoint** is used to register individual SKU movements in the system. These movements represent changes in the inventory, such as incoming stock, outgoing sales, transfers, reservations, or write-offs, at specific warehouses on a given date and time.

**Warning:** Failure to submit movement data for *every* SKU - regardless of whether its inventory quantity has changed - will result in incomplete data in the FluentStock system. As a consequence, **purchase orders for the affected warehouse(s) will not be generated**, leading to potential stockouts, delayed shipments, and overall disruptions in your supply chain operations.

Please ensure that you provide daily movement data for *all* SKUs to maintain accurate order processing and inventory visibility.

| **Attribute** | **Description** |
| --- | --- |
| HTTP Method | POST |
| URL | <https://workspace.fluentstock.net/api/sku-movements/> |
| Headers | Content-Type: application/json |
| Request Body | JSON |
| Request Example | [{ "warehouse\_id": 101, "date": "2024.12.04", "time": "16:23:45", "sku\_code": "SKU12345", "sku\_id": 13433, "balance": 150.0000, "qnt\_in": 50.0000, "qnt\_out1": 10.0000, "qnt\_out2": 20.0000, "qnt\_out3": 5.0000, "reservation": 15.0000}] |

Table of parameters for SKU movement

| **Parameter Name** | **Mandatory** | **Type** | **Description** |
| --- | --- | --- | --- |
| **warehouse\_id** | Yes | Integer | The unique identifier of the warehouse where the SKU movement is being recorded. |
| **date** | Yes | Date | The date for which the balance is calculated. Format: YYYY.MM.DD (year, month, day, separated by dots). |
| **time** | No | String | The time of the movement on the specified date. Format: HH:mm:ss (hours, minutes, seconds). If not provided, defaults to the end of the day. |
| **sku\_id** | Yes | Integer | It is mandatory to define sku\_id or sku\_code. |
| **sku\_code** | String |
| **balance** | Yes | Float | The remaining quantity of the SKU in the specified warehouse at the end of the given date.  |
| **qnt\_in** | No | Float | The quantity received or returned during the day. This includes all operations that increased the balance, such as supplier arrivals or returns. Incoming quantities are recorded with a "+" sign, while returns are recorded with a "-" sign. If no transactions occurred, this value should be 0. |
| **qnt\_out1** | No | Float | The quantity sold or returned to customers **since midnight**. This includes all operations that decreased the balance due to sales or customer returns. Sales are recorded with a "+" sign, while returns are recorded with a "-" sign. If no transactions occurred, this value should be 0. |
| **qnt\_out2** | No | Float | The quantity transferred or returned among warehouses during the day – **internal transfers**. This includes all operations that decreased the balance due to transfers or returns from other warehouses. Transfers are recorded with a "+" sign, while returns are recorded with a "-" sign. If no transactions occurred, this value should be 0. |
| **qnt\_out3** | No | Float | The quantity written off or sold at a loss during the day. This includes all write-offs or sold-out quantities that decreased the balance. Write-offs and sold-out quantities are recorded with a "+" sign. If no transactions occurred, this value should be 0. |
| **reservation** | No | Float | The quantity of the SKU reserved internally. This reflects items reserved by managers from the existing balance. |

## Retrieve Purchase Orders

This endpoint retrieves a list of orders. Query parameters can be used to filter results, including support for filtering multiple values using commas.

| **Attribute** | **Description** |
| --- | --- |
| **HTTP Method** | GET |
| **URL** | https://workspace.fluentstock.net/api/orders/ |
| **Headers** | Authorization: Bearer your\_tokenContent-Type: application/json |
| **Request Body** | None |
| **Description** | Fetches a list of purchase orders. Use query parameters to filter results. |

Query Parameters

| **Query Parameter** | **Description** | **Example** |
| --- | --- | --- |
| order\_id | Filter orders by one or more order IDs (comma-separated). | order\_id=ORD12345,ORD67890 |
| order\_state | Filter orders by one or more states (in\_progress, closed, etc.). | order\_state=in\_progress,closed |
| supplier\_code | Filter orders by one or more supplier codes (comma-separated). | supplier\_code=SUP12345,SUP67890 |
| supplier\_name | Filter orders by one or more supplier names (comma-separated). |  |
| warehouse\_code | Filter orders by one or more warehouse codes (comma-separated). | warehouse\_code=WH001,WH002 |
| order\_create\_date | Filter by the date the order was created. Use YYYY-MM-DD format. | order\_create\_date=2024-06-01 |
| limit | Maximum number of orders to retrieve. Default is 10. | limit=5 |
| offset | Number of items to skip for pagination. Default is 0. | offset=10 |

| **Example** | **URL** |
| --- | --- |
| Query | https://workspace.fluentstock.net/api/orders?order\_state=in\_progress,closed&supplier\_code=SUP12345,SUP67890&limit=5&offset=0 |

Sucess Response

| **Expected Response** | **Description** |
| --- | --- |
| Status Code | 200 (OK) |
| Response Body | JSON |
| Response Example | { "status": "success", "message": "Data retrieved successfully", "data": [ { "order\_arrival\_date": "2025-01-11T00:00:00", "autocreate": false, "calc\_intransit": false, "order\_create\_date": "2025-01-10T12:27:42.84", "order\_doc\_no": "000000000001", "last\_save\_date": "2025-01-14T12:48:57.65", "order\_extra\_1": null, "order\_extra\_2": null, "order\_id": 45664, "order\_remark": null, "order\_state": "closed", "order\_place\_date": "2025-01-14T12:48:34.67", "regular": false, "supplier\_code": "S1", "supplier\_confirmed": true, "supplier\_id": 4691, "supplier\_name": "Supplier Name", "supplier\_order\_remark": "", "warehouse\_code": "W1", "warehouse\_id": 40, "warehouse\_name": "Warehouse 4" } ], "pagination": { "limit": 10, "offset": 0, "total": 1, "next": "https://workspace.fluentstock.net/api/orders/&offset=10" }} |

## Retrieve Purchase Order Line Items

This endpoint retrieves a list of purchase order line items. Query parameters can be used to filter results, including support for filtering multiple values using commas.

| **Attribute** | **Description** |
| --- | --- |
| **HTTP Method** | GET |
| **URL** | https://workspace.fluentstock.net/api/orderlines/ |
| **Headers** | Authorization: Bearer your\_tokenContent-Type: application/json |
| **Request Body** | None |
| **Description** | Fetches a list of purchase orders. Use query parameters to filter results. |

Query Parameters

| **Query Parameter** | **Description** | **Example** |
| --- | --- | --- |
| order\_id | Filter orders by one or more order IDs (comma-separated). | order\_id=ORD12345,ORD67890 |
| order\_state | Filter orders by one or more states (in\_progress, closed, etc.). | order\_state=in\_progress,closed |
| supplier\_code | Filter orders by one or more supplier codes (comma-separated). | supplier\_code=SUP12345,SUP67890 |
| supplier\_name | Filter orders by one or more supplier names (comma-separated). |  |
| warehouse\_code | Filter orders by one or more warehouse codes (comma-separated). | warehouse\_code=WH001,WH002 |
| order\_create\_date | Filter by the date the order was created. Use YYYY-MM-DD format. | order\_create\_date=2024-06-01 |
| limit | Maximum number of orders to retrieve. Default is 10. | limit=5 |
| offset | Number of items to skip for pagination. Default is 0. | offset=10 |

| **Example** | **URL** |
| --- | --- |
| Query | https://workspace.fluentstock.net/api/orderlines/?order\_state=closed&order\_id=45664&supplier\_code=S1&supplier\_name=Supplier Name |

Sucess Response

| **Expected Response** | **Description** |
| --- | --- |
| Status Code | 200 (OK) |
| Response Body | JSON |
| Response Example | { "status": "success", "message": "Data retrieved successfully", "data": [ { "order\_doc\_no": "000000000001", "order\_id": 45664, "order\_item\_id": 8193454, "order\_state": "closed", "shipped\_quantity": 10.0000, "sku\_code": "TestSKU", "sku\_remark": "", "unshipped\_quantity": 0.0000 }, { "order\_doc\_no": "000000000001", "order\_id": 45664, "order\_item\_id": 8193455, "order\_state": "closed", "shipped\_quantity": 15.0000, "sku\_code": "T2", "sku\_remark": "", "unshipped\_quantity": 0.0000 } ], "pagination": { "limit": 10, "offset": 0, "total": 2, "next": "https://test.fluentstock.net:443/api/orderlines/?order\_state=closed&order\_id=45664&supplier\_code=S1&supplier\_name=Supplier%20Name&offset=10" }  |

## Update Order Lines of an Existing Order

This endpoint allows you to update individual order lines (SKUs) for a previously created purchase or transfer order.

| **Attribute** | **Description** |
| --- | --- |
| HTTP Method | PATCH |
| URL | <https://workspace.fluentstock.net/api/orderlines/>  |
| Headers | Content-Type: application/json |
| Request Body | JSON |
| Request Example | [{ **"order\_id": 101,** **"sku\_code": "SKU12345",** "sku\_remark": "Urgent stock replenishment", "unshipped\_quantity": 10, "shipped\_quantity": 80}] |

Table of parameters for Order Line Items

| **Parameter Name** | **Mandatory** | **Type** | **Description** |
| --- | --- | --- | --- |
| order\_id | Yes | Integer | Unique identifier for the order. |
| sku\_code | Yes | String | Code of the SKU item. |
| sku\_remark | No | String | Additional remarks for the SKU line. |
| unshipped\_quantity | No | Integer | Quantity yet to be shipped. |
| shipped\_quantity | No | Integer | Quantity already shipped. Can only be increased.  |

# **Change History**

|  |  |  |
| --- | --- | --- |
| **Version** | **Date**  | **Reason for issue** |
| v1.1 | 2024.12.18 | Added support for purchase orders |
| v1.0 | 2024.12.12 | Initial API release supporting FluentStock. |