
State of Iowa Dispensary API guide

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Change Log

Version Number	Date	End Point	Change Note
1.3	02/14/2019	Dispensary Return	Added Return Field to designate Return transaction
2.0	04/11/2019	All	Added page numbers, overview corrected, clarified event and field descriptions, did not change field names due to existing Leaf Logix API and mapping by 365
2.1	04/22/2019	Sales	Change the definition and picklist for returns
3.0	10/10/2019	All	Update of URL end points
3.1	11/8/2019	Return	Clarify Return values

Middleware API Overview

The system provided by the Iowa Department of Health through OstriJ is a one-way API where each event that needs to be reported to the state system is a unique end point. This document reviews each event, the end point details, the fields with data type and if a field is required or optional. Events may occur in a different order based on each dispensary's process. Data Integration will consist of data being posted or updated from the Manufacturer system to the State compliance system. The state system will not make outbound calls to the dispensary and the data containing in the State system cannot be queried.

All External ID's will have a dispensary prefix, and an object indicator following the prefix, to indicate the organization and ensure unique ID's are used across the statewide program. Each record will have a unique ID that is generated by the dispensary's system. External ID's will be Alpha numeric and not less than 16 characters. External ID's can be reused in the Sandbox and Production systems. There is a separate API document for testing in the sandbox environment.

Response Details

200: Success - Create

201: Success - Update

500: System Error

401: Malformed Data

404: URL Does Not Exist

Request Details

POST Format http://52.74.242.136/sip/runflow/{!FlowId}

Content-Type – application/Json

Authentication – Not needed. Each Flow ID is encrypted, and authentication is handled in middleware.

Parameters – See events below for expected parameters per request.

Example Request:**POST** [http:// OstriJ.io/runflow/NDE4NzkwM2VkMGMy](http://OstriJ.io/runflow/NDE4NzkwM2VkMGMy)**HEADER Content-Type** application/json**BODY [for Multiple records]**

```
[
  {
    "Room_ID": {},
    "Immature_Plant_Group_ID": {},
  },
  {
    "Room_ID": {},
    "Immature_Plant_Group_ID": {},
  },
  {
    "Room_ID": {},
    "Immature_Plant_Group_ID": {},
  }
]
```

HEADER Content-Type application/json**BODY [When sending multiple items in one object]**

```
[
  {
    "Sales_ID": "313",
    "Caregiver_ID": "789456123",
    "Patient_ID": "456789123",
    "Dispensary_ID": "787",
    "Purchase_Date": "2018-05-12T10:22:22Z",
    "Line": [
      {
        "Line_ID": "445",
        "Sales_ID": "313",
        "Product_ID": "65234432",
        "Product_Name": "CBD Oil",
        "Package_Lot": "789648",
        "Tracking_Number": "987stg8764",
        "Product_Lot": "456789",
        "Quantity": "1",
        "Amount": "30.50"
      },
      {
        "Line_ID": "446",
        "Sales_ID": "313",
        "Product_ID": "652346852",
        "Product_Name": "CBD Tincture",
        "Package_Lot": "7896569",
        "Tracking_Number": "987stat8766",
        "Product_Lot": "456755",
        "Quantity": "2",
      }
    ]
  }
]
```

```
    "Amount": "68.00"  
  },  
  ],  
}  
]
```

Pre-populated Data

Employees will be pre-populated in the State System. This can be as simple as a single employee or we can pre-load all employees. Once load, the dispensary manages this employee table through a dispensary management system provided via OstriJ. This is where the dispensary manager will determine the authority of each employee. Example: The Manager and Assistant Manager may be the only employees able to accept a transfer in the state system (as this transfers inventory to the dispensary). The manager may want an employee to only have access to check in patients or caregiver on the state system (verify card info). These employee records for the state and authorities assigned by dispensary management are critical to tracking sales.

Dispensary Purchase

Event Description – Patient or caregiver makes a purchase. Sales are calculated as Amount (Unit Price) of each item X Quantity of each item. Example: \$100 is unit price of product bottle and 3 bottles were sold = \$300 sale.

Dependencies – Dispensary, Item, Package Lot, Product Lot and patient / caregiver must exist in the state system

POST URL – [See URL Reference](#)

Parameters:

Field Name	Data Type	Required	Description
Sale Details			
Sales_ID	Text (255)	Y	ID of the transaction including all items in a single purchase
Patient_ID	Text (255)	Y	DOT Issued number of patient purchasing product or having product purchased for them
Caregiver_ID	Text (255)	N	DOT Issued number of caregiver purchasing on behalf of a patient
Dispensary_ID	Text (255)	Y	The company ID for the dispensary where the sale was made
Sale_Date_Time	Date/Time	Y	Date and Time of completed sale <ul style="list-style-type: none"> • YYYY-MM-DDThh:mm:ss.sssZ
Employee_ID	Text (255)	Y	Employee ID of the person making the sale
Product Details			
Amount	Currency (4,2)	Y	Unit price of each individual item in a sale
Quantity	Number (2,0)	Y	Quantity of each item sold in a transaction
Product_ID	Text (255)	Y	Each unique product sold in a single transaction mapped to product list available at the dispensary
Package_Lot_ID	Text (255)	Y	Package lot each product was part of

Dispensary Return

Event Description – Patient or caregiver returns a product. Returns need to be placed in quarantine inventory (separate from inventory available for sale) until returned to the manufacturer. This return flag (return = true) is critical to setting up an automated return transfer to the manufacturer as no products are destroyed at the dispensary, but returned to the manufacturer for destruction.

Dependencies – Dispensary, Item, Package Lot, Product and patient / caregiver must exist in the state system

POST URL – [See URL Reference](#)

Parameters:

Field Name	Data Type	Required	Description
Sale Details			
Original_Sales_ID	Text (255)	Y	ID of the transaction including all items in a single purchase
Return_ID	Text (255)	Y	External ID of the return transaction
Return_Date_Time	Date/Time	Y	Date and Time of the return <ul style="list-style-type: none"> YYYY-MM-DDThh:mm:ss.sssZ
Employee_ID	Text (255)	Y	Employee ID of the person processing the return
Return	Text (Return, Void)	Y	Indicate if this is a return or a voided transaction
Product Details			
Amount	Currency (4,2)	Y	Unit price of each individual item in a sale
Quantity	Number (2,0)	Y	Quantity of each item sold in a transaction
Product_ID	Text (255)	Y	Each unique product sold in a single transaction mapped to product list available at the dispensary
Package_Lot_ID	Text (255)	Y	Package lot each product was part of

Inventory Adjustment made at dispensary

Object: Adjustment

Event Description – Product at the dispensary has been damaged, stolen, or is defective. Adjustments also cover items that were not entered correctly during the sale and need to be adjusted up or down for correct inventory management.

Dependencies – Item_ID (Product_ID) and Package_Lot_ID

POST URL – [See URL Reference](#)

Parameters :

Field Name	Data Type	Required	Description
Adjustment_ID	Text(255)	Y	External ID of the inventory adjustment record
Adjustment_Date_Time	Date/Time (MM/DD/YYYYTHH:MM:tt.sssZ)	Y	Date and Time adjustment was reported/occurred (MM/DD/YYYYTHH:MM:tt.sssZ)
Quantity_Add	Number (2,0)	N	Quantity of each affected item
Quantity_Reduce	Number (2,0)	N	Quantity of each affected item
Dispensary_ID	Text (255)	Y	The company ID for the dispensary where the sale was made
Item_ID (This is in production so not changing field name but this is same as Product_ID)	Text (255)	Y	Each unique product sold in a single transaction mapped to product list available at the dispensary
Package_Lot_ID	Text (255)	Y	Package lot that the product came from
Adjustment Reason	Text (255)	Y	Reason for each adjustment

Every adjustment requires either Quantity_Add OR Quantity_Reduce or no inventory adjustment will occur.

Inventory Reconciliation

Event Description – Weekly automated reconciliation of on hand physical inventory. Each week, a list of all item counts by status will be sent to the state system and the reconciliation record compared with the state records.

Dependencies – Dispensary, Item, Package Lot, Product Lot must exist in the state system

POST URL – [See URL Reference](#)

Parameters:

Field Name	Data Type	Required	Description
Reconciliation Details			
Reconciliation_ID	Text (255)	Y	External ID of the reconciliation record
Employee_ID	Text (255)	Y	External System ID for the Employee accountable for the physical inventory
Retry	Boolean (True, False)	N	Retry or Not
Dispensary_ID	Text (255)	Y	The dispensary where the sale was made
Inventory Details			
Item_ID (This is in production so not changing field name but this is same as Product_ID)	Text (255)	Y	Each unique product sold in a single transaction mapped to product list available at the dispensary
Status	Picklist(Active, Return)	Y	Is this active or returned
Quantity	Number (2,0)	Y	Total Count of each Item by status

Add/Update Products

Object definition: All products that are produced by the manufacturer need to be identified here. The type of product, the product name (as labeled to the consumer) the product SKU and the product ID are created and maintained here.

Event Description – Finished Good products will be referenced throughout the system. This end point is designed to map the product ID to the products available for each manufacturer

Dependencies – Company must exist

POST URL – [See URL Reference](#)

Parameters :

Field Name	Data Type	Required	Description
Company_ID	Text (255)	Y	External System ID for the company related to this record
Product_ID	Text (255)	Y	External System ID for the product
SKU	Text (255)	Y	Product SKU
Product_Name	Text (255)	Y	Plain name for the product
Type	Text (255)	Y	Form of the product (Capsule, Tincture, Cream, Lotion, Suppository)

