FleXipod Interface

Aptean Ltd Copyright © 2011-2025.

Contents

| 1 FleXipod Interface | |
|-------------------------------|---|
| 1.1 Configuration | 1 |
| 1.2 Sending Trips to FlexiPOD | 3 |
| 1.3 Actions Taken on Update | |

1 FleXipod Interface

Warning: This is an incomplete guide.

This guide shows how the Aptean Proof of Delivery system (APOD or formerly FleXipod) can be configured to be used from CTMS.

This require configuration as to when messages are sent, how they are formatted (the FleXipod attributes), at what level are messages sent (orders, stops, etc) and what information is expected to be received.

1.1 Configuration

1.1.1 System Parameters

| Parameter | Description | Config By |
|-------------------------------|--|--------------|
| FLEXIPOD | Set to Y to indicate the FlexiPod interface is active | SYSTEM |
| FLEXIPOD_ACID | Flexipod acid | SYSTEM |
| FLEXIPOD_BREAK_DROPS | Flexipod include breaks for the drops in the Add API call (Y/N) | SYSTEM |
| FLEXIPOD_CARRIERS | Set to Y indicates the Carrier can control if a trip is sent to FlexiPod | SYSTEM |
| FLEXIPOD_CLIENTNUM | FleXipod ClientNum sent in interface | SYSTEM |
| FLEXIPOD_DEPOTS | Set to Y indicates the Depot can control if a trip is sent to FlexiPod | SYSTEM |
| FLEXIPOD_DIRECT | Set to Y to indicate the FlexiPod interface is direct and not using Route Execution | SYSTEM |
| FLEXIPOD_DROP | Determines the Drop level STOP-OMS or ITEM | SYSTEM |
| FLEXIPOD_EXPIRY | Sets the expiry date for the manifest as a number of days after the end of the trip. | SYSTEM |
| FLEXIPOD_EXTERNALSYSTEMUPDATE | Flexipod process the External System Update messages in the API call (Y/N) | SYSTEM |
| FLEXIPOD_FORCEITEMSCAN | Force the items to be scanned separately: 0 to use the ScanLevel or 1 to force the scan by item. | SYSTEM |
| FLEXIPOD_LISTPENDINGMANIFESTS | Flexipod process the List Pending Manifest Update messages in the API call (Y/N) | SYSTEM |
| FLEXIPOD_MERGE_DROPS | Flexipod merge the orders on the drop in the Add API call (Y/N) | SYSTEM |
| FLEXIPOD_PASSWORD | FleXipod Webservice password | SYSTEM |
| FLEXIPOD_PROXY | Flexipod proxy server | SYSTEM |
| FLEXIPOD_READDROP | Flexipod process the Read Drop messages in the API call (Y/N) | SYSTEM |
| FLEXIPOD_SCAN_LEVEL | 1,2 or 3 to indicate line or item level scanning | SYSTEM |
| FLEXIPOD_SCAN_TYPE | Contents and items | SYSTEM |
| FLEXIPOD_SIGNATORY | Set to Y to store the SignedByName as the actual signatory as information for the order at its collection of delivery location | SYSTEM |
| FLEXIPOD_SPLIT | Are orders to be split? | SYSTEM |
| FLEXIPOD_SYSTEM | FleXipod SYSTEM ID sent in interface | SYSTEM |
| FLEXIPOD_TPCLIENTNUM | FleXipod TPClientNum sent in interface | SYSTEM |
| FLEXIPOD_USERCODE | FleXipod webservice usercode | SYSTEM |
| FLEXIPOD_USERNAME | FleXipod webservice username | SYSTEM |
| FLEXIPOD_WEBSERVICE | Flexipod webservice endpoint URL | SYSTEM |
| FLEXIPOD_WEBSERVICE_TASK | Flexipod webservice endpoint URL for Tasks | SYSTEM |
| FLEXIPOD_WEBSERVICE_UI | Flexipod webservice endpoint URL | SYSTEM |
| FLEXIPOD_WEBSERVICE_UI_EXEC | Flexipod webservice endpoint URL for Route Execution | SYSTEM |
| FLEXIPOD_X_API_KEY | Flexipod x-api-key for External System Update messages | SYSTEM |



1.1.2 Carrier

The FLEXIPOD flag must be enabled when configured by carrier (system parameter FLEXIPOD_CARRIERS) for carriers that require the use of FlexiPOD.

1.1.3 Depot Locations

The FLEXIPOD flag must be enabled when configured by depot (system parameter FLEXIPOD_DEPOTS) for depots that require the use of FlexiPOD.

1.1.4 EDI Processes

FLEXIPOD OUT

This process sends the triggered manifests to APOD.

- Flow Type: PROCESS
- Package Name: PROCESS, DP_FLEXIPOD.PROCESS_FLEXIPOD_OUT
- Process: i process name FLEXIPOD OUT
- Interval: 5 minutes

FLEXIPOD SENDLISTPENDING

This process checks to see if there are any pending updates from the manifests and imports the details.

- Flow Type: PROCESS
- Package Name: PROCESS DP_FLEXIPOD.send_listpendingmanifestupdates
- Process: PROCESS FLEXIPOD SENDLISTPENDING
- Interval: 1 minute

1.1.5 Reason Codes and Decodes

A decode of name "FLX_RESULT_CODES" type "REFERENCE" must be configured to map all of the reason codes from APOD into CTMS.

Several ITEM NON CON reason codes must be created to map to the APOD reason codes.:

Examples:

| APOD | CTMS | Description | At Fault Action | Type | CBR |
|------|------|-----------------------|-----------------|----------------|-----|
| 1 | SD | Successful Delivery | | | |
| 10 | SD | Successful Delivery | | | |
| 2 | FV | Failed Visit | | FAILURE | Υ |
| 3 | SD | Successful Delivery | | | |
| 4 | UD | Unsuccessful Delivery | | FAILURE | |
| 5 | SC | Successful Collection | | | |
| 6 | SJ | Skipped Job | | FAILURE | Υ |
| 7 | NR | No Longer Required | | FAILURE | |
| 8 | PR | Payment Refused | | | |

Plus any reason codes created in FlexiPOD must be created within TMS for the audit history to accurately represent any reasons selected by the driver.

Note: For each implementation, the reason codes and numbers will differ. For example, 1 and 10 may not be "Successfully Delivered", so the decode mapping MUST be in place for the APOD interface.



1.1.6 Attribute Configuration

Attributes against Manifests, Drops and Items can be configured by your Aptean implementation team. Up to **Warning**: 10 attributes may be defined at each level except Drop, which may contain 20 attributes.

In general, the following is allowed at each level:

- Manifest
 - ◆ Information derived directly from the trip, such as route code, trailer type, driver, etc.
- Drop
- ◆ Information derived from the transport order header, such as the main references, instructions
- Information derived from the customer of the transport order, such as parameters against that customer.
- ♦ Any sub-reference held against that transport order.
- ♦ Any sub-reference held against the transport order's destination location.
- Item
- ◆ Information derived from the order items.
- ♦ Order Reference information
- ♦ Any references from the Drop above
- ◆ **V** Note: Including Quarantine status through the order reference STATUS)

An example is below:

| | Project Name | Level | Number | Source | Target |
|---|--------------|----------------|--------|---|--------|
| ; | Stapletons | Drop | 1 | so.booking_ref | |
| , | Stapletons | Drop | 2 | so.del_point_ref | |
| ; | Stapletons | Drop | 3 | dp_flexipod.get_order_val('ORDER','PRICE', | |
| ; | Stapletons | Drop | 4 | | |
| ; | Stapletons | Drop | 5 | | |
| ; | Stapletons | Drop | 6 | dp_flexipod.get_ref('LOCATION','PERMIT_NUMBER', | |
| ; | Stapletons | Drop | 7 | oc.free_text1 | |
| ; | Stapletons | Drop | 8 | dp_flexipod.get_ref('LOCATION','UNITARY_AUTHORITY', | |
| ; | Stapletons | Drop | 9 | dp_flexipod.get_ref('LOCATION','LICENCE_NUMBER', | |
| , | Stapletons | Drop | 10 | so.total_weight | |
| , | Stapletons | Drop | 11 | so.total_pieces | |
| ; | Stapletons | Drop | 12 | oc.pay_on_delivery | |
| ; | Stapletons | Drop | 13 | oc.collect_casings | |
| ; | Stapletons | Drop | 14 | | |
| ; | Stapletons | Drop | 15 | | |
| ; | Stapletons | ItemAttributes | 1 | soi.du_type | |
| , | Stapletons | ItemAttributes | 2 | soi.weight | |
| ; | Stapletons | ItemAttributes | 3 | dp_flexipod.get_order_val('ITEM','UNIT_WEIGHT', | |
| , | Stapletons | ItemAttributes | 4 | dp_flexipod.get_order_val('ITEM','UNIT_PRICE', | |
| , | Stapletons | ItemAttributes | 5 | dp_flexipod.get_order_val('ITEM','STATUS', | |
| , | Stapletons | Manifest | 1 | st.route_code | |
| , | Stapletons | Manifest | 2 | st.trailer_type | |

1.2 Sending Trips to FlexiPOD

Warning: This has changed

This happens automatically when:

- the trip is set to status "ACCEPTED" or "EN-ROUTE"
- when any changes happen to the trip i.e. orders are added, removed or moved on a trip that is at those statuses.
- When the driver, carrier or tractor has been added or changed on a trip that is at those statuses.



1.3 Actions Taken on Update

Gets updates from FleXipod drops and processes them

Marks message as collected

Stores order references

- TrackingID
- TrackingURL
- JobReportName

Stores signatory and filename if present

- As ord information
- As References
 - ◆ SignedByName
 - ♦ SignedByFilename
 - ◆ SiteImageFilename

If item details provided:

- Updates stop Actual Arrive and Actual Depart
- If scan_type = 'I'
 - ♦ Creates Order Item Reasons from decoded reason code for actions against the drops and items (such as successful delivery, etc).
 - ◆ Creates Order Item Reasons from decoded reason code if there are non-conformities
 - ◆ Updates item delivered quantities
 - ◆ Updates order line quantities
 - ♦ Updates POC/POD flag against the order
- If scan_type = 'P'
 - ♦ Same for each item in the pallet.

If event name = 'Pre-Departure'

• Updates SU stop actual arrive

If event_name = 'Depot Depart'

- Updates SU stop actual arrive and actual depart
- Sets the trip status
- Updates items as despatched
- Updates lines as despatched
- Validates the order

If event_name = 'Depot Return'

• Updates CL stop actual arrive

If event_name = 'End of Trip'

- Updates CL stop actual arrive and actual depart
- Sets the trip status

For all order updates:

- Change order status to DELIVERED if anything delivered
- Change order status to FAILED if nothing delivered
- **Note:** All changes to order are audited.

