Narvar LINK Integration Guide

Version 20.1.0

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Summary

The Narvar LINK Cartridge facilitates integration between a Commerce Cloud Digital Storefront and Narvar post purchase experience platform. LINK Cartridge integration enables various Narvar products including Track, Alerts and Returns.

This cartridge version 20.1.0 supports the Storefront Reference Architecture (SFRA) architecture. The latest supported version of SFRA is release 5.0.1.

Supported locales: This cartridge should work with all locales.

For more information, contact your Narvar Customer Representative:

- support@narvar.com / **888-555-1212**

Narvar LINK Cartridge integration requires the following steps:

- **Import System Object Metadata** for managing Narvar configurations and supporting data points.
- **Import Services** for enabling external interfaces with the Narvar Web services.
- **Import and Schedule Job Process** for managing the scheduled jobs.
- **Apply Custom Code** to the Narvar Link cartridge.
- **Configure the Storefront Settings** to connect to Narvar services and enable LINK cartridge integration to the storefront.

Note: Applying custom code does not imply modifications of core cartridge; the SFRA approach of overwriting files should be used instead.

Component Overview

Functional Overview

Export Order Data from Commerce Cloud Digital (CCD) to Narvar

CCD submits Orders and Order Status updates to Narvar via the Narvar Order Ingestion and Narvar Bulk Ingestion services.

When an Order is updated with the various statuses and shipment details, scheduled jobs process those orders to push to the Narvar system.

The File Upload API is used to submit Orders that are manually flagged for upload (e.g. legacy orders) or Orders that have repeatedly failed to transmit via the Narvar Order Ingestion service.

See diagram below outlining the overall process.
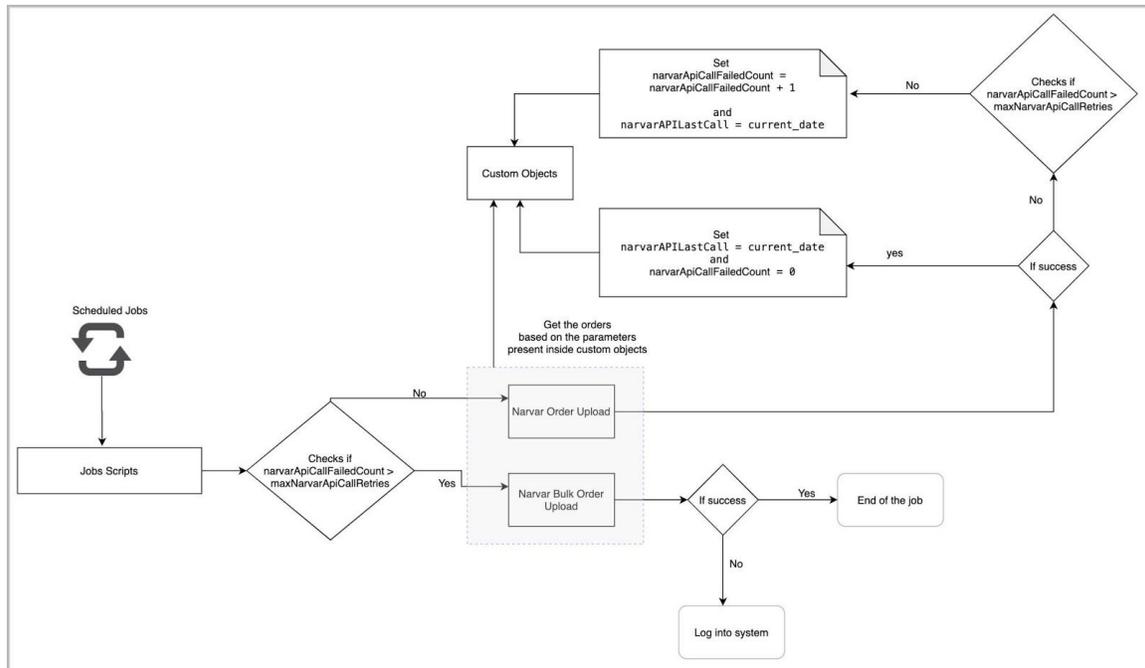
Use Cases

Upload Order Data from CCD to Narvar

CCD Orders are submitted to Narvar upon successful Order creation or modification. Order modification can be done manually in Business Manager or via a triggered event which will be placed in a queue for submitting to Narvar during the scheduled Order API Job Process.

If the API call fails, the Order will be queued for a retry during the next scheduled Order API Job Process.

Upload Legacy Orders

Orders are sent to Narvar via Narvar Bulk Ingestion service when a particular order has been failed for certain configured attempts.

Limitations, Constraints

The Order API also provides support for sharing Payment details for Credit Cards and Gii Cards. Additional payment method support requires custom coding.

Narvar's Order API requires updates to Order statuses, including shipment details, item promise date etc. A custom Order API integration between the OMS and Narvar may be required if Commerce Cloud Digital is not being used as an OMS.

Compatibility

The Narvar LINK Cartridge compatible with the latest SFRA version available in the market.

Privacy, Payment

No unmasked credit card data is exchanged between Commerce Cloud Digital and Narvar. The cartridge masks all payment data before submitting Payment data to the Narvar's APIs.

Implementation Guide

Cartridge Details

The Narvar LINK Cartridge contains only one cartridge called **int_narvar_sfra** that is required for processing of Order data.

Cartridge

int_narvar_sfra

Contains all the logic for managing Narvar integration. All files are present under **cartridge/ scripts**.

- /init
  - fileUploadService.js
  - narvarIngestionService.js
- /jobs
  - createOrders.js
  - uploadOrderFiles.js
- /library
  - archivingFile.js
  - createOrdersFile.js
- /services
  - fileIngestion.js
  - orderIngestion.js
- /transformer
  - /billingDetails
    - custom.js
    - index.js
    - sample.json
  - /customerDetails
    - custom.js
    - index.js
    - sample.json
  - /orderItems
    - custom.js
    - index.js
    - sampleContainsGiftCards.json
    - sampleWithoutGiftCards.json
  - /shipmentsDetails
    - custom.js
    - index.js
    - sample.json
    - customAttributes.js
  - index.js
  - promotionsDetails.js
- /utils
  - log.js
  - token.js
  - util.js

Configuration

Link to Narvar cartridge

- Go to Administration > Sites > Manage Sites, click a site name and navigate to Settings tab.

- Add int_narvar_sfra in the Cartridges column as in the screenshot below.

Import Metadata

Note: All xml files will be available under the Metadata folder in the downloaded cartridge.

- Go to Administration > Site Development > Site Import & Export.
- Under Import > Upload Archive, select *Local* and click on Choose File to upload the meta.zip present inside the metadata folder inside the project directory.
- On successful upload choose meta.zip and click the Import button to import it.

- Make sure the status of that import should be successful.

Setup

Jobs

- Go to Administrations > Operations > Jobs. Here we have 2 jobs.
- NarvarOrderAPI: Responsible for send single order at a time to Narvar
- NarvarUploadOrderFile: Responsible for pushing orders file to Narvar
- Click on a particular Job ID link, then click on the Job Steps tab and then click on the Scope as shown below to select a scope.
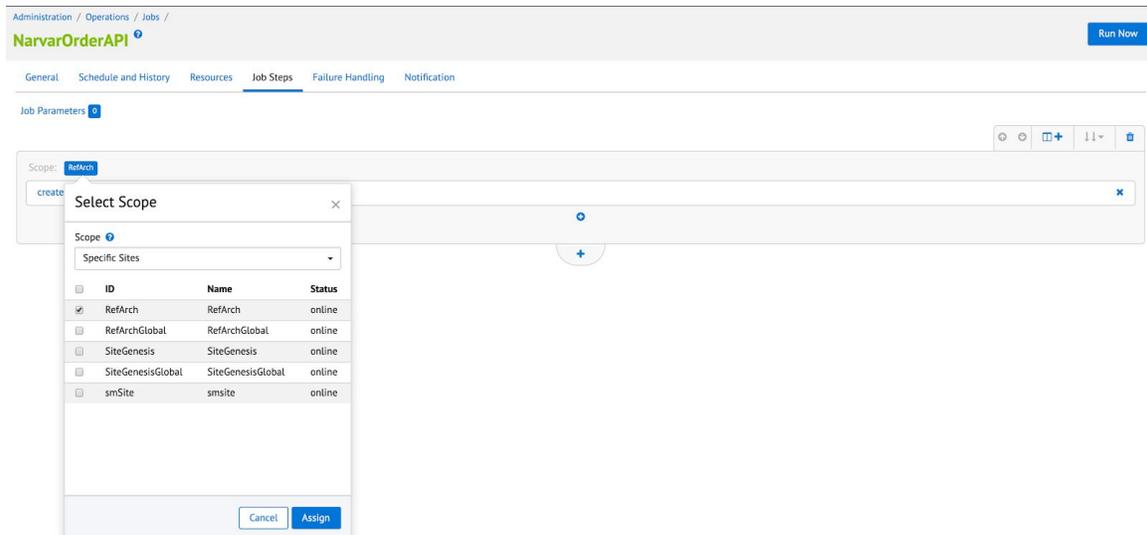
Note: Narvar strongly recommends having different jobs for different sites.

Services

Go to Administrations > Operations > Services. We have sections as below.

- Services

    NARVAR_BULK_INGESTION: Contains information about Narvar bulk api service

    NARVAR_LOG_INGESTION: Contains information about the Narvar log service

    NARVAR_ORDER_INGESTION: Contains information about Narvar order api service

- Profiles

    NARVAR: Contains information about the time limit given to a service.

- Credentials

    NARVAR_BULK_API_CREDS: Contains credentials about Narvar bulk api

    NARVAR_LOGS_API_CREDS: Contains credentials about Narvar log api

    NARVAR_API_CREDS: Contains credentials about Narvar order api

Service's and credential's names should be suffixed with "_<site-id>" as shown below.

To add or update Credentials, click on the Credentials link and enter **URL**, **User** and **Password** as shown below.

Note : Ensure that the credentials are set for all the 3 Services accordingly.

URLs

- Staging:

    NARVAR_BULK_API_CREDS: https://raavi-st01.narvar.qa/api/v1/sfcc/order/bulk

    NARVAR_API_CREDS: https://raavi-st01.narvar.qa/api/v1/sfcc/order

    NARVAR_LOGS_API_CREDS: https://commerce-logger-st01.narvar.qa/api/v1/logs

- Production:

    NARVAR_BULK_API_CREDS: https://raavi.narvar.com/api/v1/sfcc/order/bulk

    NARVAR_API_CREDS: https://raavi.narvar.com/api/v1/sfcc/order

    NARVAR_LOGS_API_CREDS: https://commerce-logger.narvar.com/api/v1/logs

Note: User and Password fields will be shared by the Narvar team. For different sites, ensure that the respective credentials are configured.

Site Preferences

- Go to Merchant Tools > Site Preferences > Custom Preferences > Narvar.
- By default, Enable/Disable Info Logs to send to Narvar is set to false.To debug any issues and send logs to Narvar for investigation set the flag as true.

- Enable/Disable Narvar APIs
- Default value is true. Looking into this value, Narvar order ingestion api will push order data to Narvar.
- Enable/Disable bulk upload to Narvar
- Default value is true. Looking into the above as well as this field, Narvar bulk ingestion api will push order files to Narvar.
- Enable/Disable info logs to send to Narvar
- This field is responsible for sending logs to Narvar for debug purposes. Default value is false.
- Narvar failed attempts before batch
- Narvar jobs look into this custom field of the order to decide whether that particular order is eligible for order ingestion or bulk ingestion to push order data to Narvar.

Verify Installation

- Go to Administrations > Operations > Jobs and run NarvarOrderAPI job.
- Verify job logs if there is any issue. If no issues are found then the cartridge has been installed successfully.
- Now orders can be placed and jobs can be triggered to send orders to Narvar.

Shipping Methods

- Go to Merchant Tools > Ordering > Shipping Methods

- To add a Narvar Carrier Code and Narvar Service Code for a particular Shipping method, click on the ID link and then add the Carrier and Service code.

- Commerce Cloud Digital Shipping Methods need to be mapped with the Shipping Methods that are set up on the Narvar account. Each Commerce Cloud Digital Shipping Method mapping should correspond directly with Narvar Carrier and Service Codes.

Example screenshot of a Narvar mapping for Carrier Code "ups" and Service Code "e2":

Note: Values for **Narvar Carrier Code** and **Narvar Service Code** will be provided by the Narvar team.

Custom Code

Many retailers use SFCC as a storefront configurator and end up using different OMS for managing orders, fulfillments etc . Retailers can customise Order API related data like **Shipments**, **Order Items** etc.

For example, modifying shipment details:

- To modify shipment details, go to <Project_directory>/int_narvar_sfra/cartridge/scripts/ transformer/shipmentsDetails/custom.js. Refer below screenshot

- Go to getCustomizedShipmentDetails function for any custom modifications.

- This function can be modified with any custom codes as per the retailer's need. Retailers can make api calls to get shipments information also.

- The shipment object should look like the contract present inside custom.js file.

- custom.js file will be called inside <Project_directory>/int_narvar_sfra/cartridge/scripts/transformer/shipmentsDetails/index.js.

- index.js file contains the base transformation for the shipment details.

Note: Above steps are for custom configuration. For those not using custom configuration , base transformation is used and it works only for those using SFCC as OMS. Path to base transformation is given below.

Path: <Project_directory>/int_narvar_sfra/cartridge/scripts/transformer/shipmentsDetails/index.js

```
custom.js ×

cartridges > int_narvar_sfra > cartridge > scripts > transformer > shipmentsDetails > custom.js > ...

       SebashishM, a day ago | 1 author (SebashishM)
  1    /* eslint-disable no-unused-vars */
  2    'use strict';
  3    // Shipment details
  4    /*
  5    "shipments": [
  6      {
  7        "ship_method": "Narvar Concierge",
  8        "carrier_service": "E1", // This is must required
  9        "items_info": [
 10          {
 11            "quantity": 4,
 12            "sku": "750518548197M",
 13            "item_id": "750518548197M"
 14          }        SebashishM, a day ago • Added the schema to custom files
 15        ],
 16        "carrier": "C1", // This is must required
 17        "shipped_to": {
 18          "first_name": "Sebashish",
 19          "last_name": "Meher",
 20          "phone": "5697798936",
 21          "email": "test@gmail.com",
 22          "fax": "",
 23          "address": {
 24            "street_1": "#509, 9th A main",
 25            "street_2": "BEML layout, Thubarahalli",
 26            "city": "Bangalore",
 27            "state": "CA",
 28            "zip": "95901",
 29            "country": "US",
 30            "lat": 0,
 31            "lng": 0
 32          }
 33        },
 34        // ship_source : 'DC-West', // Not mandatory but highly recommended for Returns
 35        // shipped_from: {}, // Not mandatory but highly recommended for Returns & EDD
 36        "ship_discount": 0,
 37        "ship_total": 0,
 38        "ship_tax": 0,
 39        "ship_date": "2020-03-17T14:36:07Z",
 40        "tracking_number": "trk123", // Must required field
 41      }
 42    ]
 43    */
 44    /**
 45     * This is a description of the getCustomizedShipmentsDetails function.
 46     * This function is used to get customize shipments details
 47     * @param {Object} shipmentList - This is the initial array of shipments
 48     * @param {dw.order.Order} order - This is the demandware order
 49     * @returns {Array} - shipmentList: This will return customized shipmentList
 50     */
 51    const getCustomizedShipmentsDetails = function (shipmentList, order) {
 52      return shipmentList;
 53    };
 54
```

Linting & Test

Navigate to int_narvar_sfra, install node packages using **npm install** command.

- Run Lint: *npm run lint*
- Run Test: npm run test

External Interfaces

Narvar functionality relies heavily on external calls to Narvar web services. All external interfaces use the Service Framework to communicate with the Narvar APIs.

Narvar accounts require contracting with Narvar to create and use. Please contact Narvar Sales Support to request account access.

Firewall Requirements

There are no firewall rules or whitelisting requirements for communication between Commerce Cloud Digital and Narvar. All services communicate via HTTP Services using Basic Authentication.

Testing

The cartridge is tested against 19.10 compatibility mode and it will work for 19.10 and the higher version.

Order Ingestion

Storefront Order

Place an Order on the Storefront. Run the NarvarOrderAPI job. Upon success, review the Narvar Order API for successful Order upload. Also review the Commerce Cloud Order attributes to check that the "Narvar Failed Attempts" value is "0" or empty.

Failed Order

Set the "Narvar Failed Attempts" value to an integer on an Order which meets condition "0" < "Narvar Failed Attempts" < "Site Preference: Narvar Failed Attempts Before Batch".

Re-run the NarvarOrderAPI job. Upon success, review the Narvar Order API for successful Order upload. Also review the Commerce Cloud Order attributes to check that the "Narvar Failed Attempts" value is "0" or empty.

Modified Order

Modify the Status or Tracking Number on an Order. Re-run the NarvarOrderAPI job. Upon success, review the Narvar Order API for successful Order upload. Also review the Commerce Cloud Order attributes to check that the "Narvar Failed Attempts" value is "0" or empty.

Bulk Order Ingestion

Set the "Narvar Failed Attempts" value to an integer on an Order which meets the condition "Narvar Failed Attempts" >= "Site Preference: Narvar Failed Attempts Before Batch".

Then Run the NarvarUploadOrderFile job. Upon success, review the Narvar Order API for successful Order upload. Also review the Commerce Cloud Order attributes to check that the "Narvar Failed Attempts" value is "0" or empty.

Operations, Maintenance

Data Storage

The Narvar LINK cartridge extends Commerce Cloud Digital to store several data points.

Shipping Methods: Narvar Carrier and Narvar Shipping codes, used to map Commerce Cloud Shipping Methods with Narvar managed Shipping/Carriers. Noted in detail above.

Custom Site Preferences: noted in detail above.

Custom Objects: The Narvar Cartridge makes use of a Custom Object to store the last-run dates for the Order API Job. The Custom Object stores only a single data point that is overwritten during each successful Job execution. New Custom Object instances are not created, and therefore do not threaten data quota or storage limits.

Availability

Please refer to the Narvar Service Level Agreement to determine specific up-times for the services.

In case the Order Ingestion API services fail, the cartridge has fail-over processes in place to ensure that data is successfully sent to Narvar via subsequent Order Ingestion API and/or Bulk Ingestion API scheduled job executions.

Support

For defects or recommendations on improvements, please contact Narvar Support – support@narvar.com.

User Guide

Roles, Responsibilities

There are no recurring tasks required by the merchant. Once configurations and job schedules are set up, the functionality runs on demand.

Business Manager

Business Manager settings and configuration notes are described in detail in the Configuration section.

Storefront Functionality

No storefront functionality is provided by this cartridge.

Known Issues

The LINK Cartridge has no known issues.

Release History

Version	Date	Changes
20.1.0	4/15/2020	Initial release