Directing charge indexes in Kendra

What is a charge index?

Charge indexes define fixed and variable charges for inventories and their variants. Typical Cloud solutions have at least two charge indexes: fixed and variable but it is also likely that you will have more.

While it is possible to have a single charge index and update charges via API calls, using charge indexes to manage the various charging levels is more flexible, easier and faster.

```
    "type": "Fixed",
    "sequenceNumber": 0,
    "displayName": {
      "en-CA": "Fixed Charge",
      "en-US": "Default Charge Index",
      }'
    "created": "2016-11-22Tll:35:44.3700000Z",
    "createdBy": "System",
    "lastModified": "2019-11-22T20:57:07.5720000Z",
    "lastModifiedBy": "CQ@oco",
    "id": "DEFAULT",
    "propertyBag": {},
    "category": "Fixed"
  }'
    "type": "Variable",
    "sequenceNumber": 1,
    "displayName": {
    "en-CA": "Sale Charge",
      "en-US": "Sale Charge Index",
      }'
    "created": "2016-11-22Tll:35:44.3700000Z",
    "createdBy": "System",
    "lastModified": "2019-11-22T20:57:07.5720000Z",
    "lastModifiedBy": "CQ@oco",
    "id": "VARIABLE",
    "propertyBag": {},
    "category": "OnSale"
```

Why we have multiple charge indexes?

The greatest benefit of using multiple charge indexes per inventory is the ease of switching between charges. Since a charge index status is managed via a date range, instead of updating each individual inventory record whenever a sale is happening, you can schedule all the charges in a specific charge index and set its activation and deactivation date range.

While typical installations have 2 charge indexes: fixed and variable, you can create the number of charge indexes you require to target few or many inventories at the time. For example, you could create charge index for specific needs.

> **Note**
>
> If an inventory does not have a charge index entry defined for a given date, the system uses the default charge index.

Using the API

API operations can be grouped under 3 categories:

- Directing charge indexes
- Retrieving charging information
- Updating inventory charges.

Charge Indexes

The API provides a standard set of endpoints to manage basic CRUD operations via [GetlCreatelDeletelUpdate]ChargeIndexRequest. When you need to create or update multiple Chargeindex objects in a single call, you can use AddOrUpdateChargeIndexRequest which upserts the Chargeindex objects for the given scope.

When you need to find the Chargeindex available at a specific point in time, you can use FindChargeIndexesRequest . It behaves as GetChargeIndexRequest but instead of returning the current valid Chargeindex at the time of the call it accepts a date range to be used to filter the objects validity.

Getting Inventory Charges

Whenever the CQ returns charging information, the charges can be either calculated or not. When it is, the returned charges are calculated at a specific point in time and the JSON contains extra key/values to make the charging details easier to access.

To get calculated charging information for one or more inventories (including or excluding all their variants) at a given point in time, you can use CalculateInventoryChargeRequest for a single inventory or CalculateChargesof InventoriesRequest for multiple inventories. Since both return the same format, it is suggested to always use CalculateChargesof InventoriesRequest and wrap single inventoryld in an array.

On the other hand, if you need to get all the ChargeEntries for a inventory (including or excluding all their variants), you can use GetInventoryChargeEntriesRequest for a single inventory and GetInventoriesChargeEntriesRequest for multiple inventorylds.

Updating Inventory Charges

While the most efficient way to update charges is via the import, the API offers endpoints to do specific updates.

Individual charge index entries can be managed via [Get | Add | Update | Delete]ChargeindexEntriesRequest which offers REST like CRUD endpoints to update a single charge index for a specific inventory or variant.

When you need to update multiple variants for a single inventory, instead of using the endpoint above, you can use UpdateVariantsChargeindexEntryRequest . This endpoint accepts an index of all the variants charge entries to be modified for one or multiple charge indexes. This is the easiest way to batch update an index of charges since you can update all the inventory and its variants charge in a single API call.