

# Infusion API – Version 1

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## Overview

The Infusion API is a RESTful API that gives external applications or systems access to data in Infusion Browser.

Infusion's API is made up of four different types of endpoint:

- **GET, POST, PUT and DELETE endpoints**  
The GET endpoints fetch a single *entity* (a detailed record such as a Product, Customer or Customer Invoice) by its UUID or a list of entities, and the POST, PUT or DELETE endpoints create, update or delete a single entity.
- **Search endpoints**  
The search endpoints provide the ability search for entities using specific search criteria or by performing a text-match against all searchable fields. The search endpoints return a page of results starting from a given offset.
- **Data Synchronisation**  
Data Synchronisation provides the ability to retrieve all of a particular entity so that it can be stored externally. Like search, it is returned as pages of entities however Data Synchronisation will keep track of what has been retrieved (a delta) so that the entities are not retrieved a second time unless they have been changed or the "cursor" has been reset.
- **Synchronisation Webhooks**  
Synchronisation Webhooks allow other API's to register interest in changes to specific entities by providing a URL for their own endpoint and authentication details. When changes occur, Infusion calls their endpoint and they can then make a request to Data Synchronisation to get the changes. This saves the need for polling to see if there are changes.



Although both the Search endpoints and Data Synchronisation can provide the same information, we strongly recommend using Data Synchronisation instead of constantly requesting data through Search or GET endpoints.

## Accessing the Infusion API

API endpoints will vary on the supported parameters, required parameters, HTTP method required, whether a request body is expected, what content is expected and what the response can be expected. See the sections below for details.

### API location (URL)

The URL for all the endpoints is:

```
https://<hostname>/api/ext/v1/<endpoint>?[<query parameters>&]  
licenseeUuid=<licenseeUuid>&sessionUuid=<sessionUuid>
```

For Production users, the hostname is:

```
app.infusionbusinesssoftware.com
```

### Authentication and Authorisation

Only External API Users have access to the API, and only with active session credentials. You can create different API users with different levels of access depending on the needs of your integration.

#### Creating an External API User

- Go to Settings -> Users in the Infusion Web Application
- Click “Add”.
- Select “External API User” for the User Type.
- Provide a user name.
- Grant Roles for the application features this user should have access to.
- Click “Save”

#### Creating a Session for an External API User:

- Go to Settings -> Users in the Infusion Web Application
- Select the External API User
- Select, in the “...” menu, “Create external API session”

Creating an API session will cancel the previously active session for this user, if there was one. This can be useful to revoke access from someone with whom you’ve shared access credentials.

Creating an API session will display the two credential components that must be supplied with all API requests – the Licensee UUID and Session UUID.

1. Click “Copy to clipboard” will copy the two credential values needed for all API requests.
2. Do not share these credentials with anyone unless they require access as this External API User.

These credentials will not be redisplayed. If they are lost, create a new session.

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Example credentials:

- `licenseeUuid=64a6ed10-a942-4f8c-2450-1d885aec611c`
- `sessionId=8f5221a5-085d-4f7e-b0f3-53ce4486b5ed`

The **licenseeUuid** and **sessionId** should always be provided as URL 'query parameters'.

Example query:

```
https://infusion/api/ext/v1/products/search?licenseeUuid=923f8fe0-4ce4-49d8-9403-d39f8eac005d&sessionId=8f5221a5-085d-4f7e-b0f3-53ce4486b5ed
```

CORS restrictions:

API Requests should not contain Origin or Referrer headers. Requests that include these headers are subject to Cross-Origin Resource-Sharing policies not intended for external parties.

Making API requests from JavaScript within a web-browser is not supported (since the browser will always inject origin information). Pages making these requests would have to expose the licensee/session credentials to clients.

[OpenAPI Online Documentation:](#)

The Infusion Server provides a simple client inspect the Infusion API endpoints:

```
https://app.infusionbusinesssoftware.com/api/swagger-ui/index.html
```

Note: This client is a general tool that also lists internal APIs for use by the Infusion application.

**Use of internal APIs is unsupported** and are subject to incompatible change without notice. If the Infusion API does not provide a feature you require, please place a request with your Infusion Partner or with Infusion Support.



# API Patterns and Concepts

## Unique Identifiers

Most API requests require specifying the identity of one or more entities.

1. These are globally unique – no two entities, even of different types, will have the same identity.
2. These cannot change for the life-time of the entity.

The Licensee UUID used to access the API is an example of one of these ids.

E.G.

`923f8fe0-4ce4-49d8-9403-d39f8eac005d`

Because these identities never change, it is safe to copy them and reuse them in future requests – however keep in mind that some entities can be deleted.

## Entities and References

An ‘entity’ is a detailed record such Customer (see Customer Details). A ‘reference’ is a smaller record containing only the identifying and descriptive fields, such as Customer Reference.

References are used inside entities. Eg A Customer Invoice (entity) will contain a Customer Reference, providing limited details about the Customer to whom the invoice belongs.

To get more details use the appropriate ‘get’ endpoint with the identity (UUID) contained in the reference. That is, to get all of the details for a Customer, use the ‘Get Customer’ endpoint with the UUID in the Customer Reference.

## Searching

Several endpoints provide the ability to execute a search.

Each of these endpoints:

- Returns a ‘page’ of matching results for the type of data specific to that endpoint.
- Take parameters for page-size and offset into the results for paging.
- Take parameters to control the search order.
- Take a ‘q’ parameter which will perform a text-match against all searchable fields of that data-type.
- Can have complex matching rules by specifying the exact value to match in a given field.

The following query parameters are available on all searches:

Parameter	Details
desc	To order in descending order. Default false Example: desc=true

<b>limit</b>	The maximum number of results. Default 100 Example: limit=50
<b>offset</b>	The starting offset in the result set. Can be used for pagination. Default 0 Example: offset=50
<b>order</b>	The field to order by Example: order=productCode
<b>q</b>	A search string which will search for matches in any of the searchable fields. Example: q=Bedroom%20Furniture
<b>where</b>	Additional conditions. You can include multiple where parameters in the format: <field>%3D<value>. Example: where=activationStatus%3DACTIVE

All search endpoints return a Page of results where each search result holds a single element of the entity being searched.

#### Validation rules when submitting new or updated data

The Infusion API uses the same contracts for adding new data (via a POST) and updating data (via a PUT) as it does when retrieving data (via a GET). However adding data and updating data can have differing validation rules for which fields are required and what the valid values are.

The details for a data-type will specify which fields are required or optional.

Rule	Description
<b>Required</b>	This property must be provided for the given action
<b>Optional</b>	The value in this property will be used if provided but isn't required.
<b>Ignored</b>	The value in this property will be ignored because the service looks it up or calculates it.
<b>Not permitted</b>	The API will reject the request if these properties are provided. For example, the identity (a UUID) <i>must</i> be provided for a PUT but <i>must not</i> be provided for a POST because the API will generate a new one and return it in the response body. The createdTimestamp and modifiedTimestamp are always generated and should not be provided.

## Customers

### Endpoint - Find a Customer:

GET	customers/search
Body	<i>Not Allowed</i>
Response	Page of Search Results containing Customers

Returns a page of Customer records matching the search terms. All standard search parameters are supported.

### Endpoint - Get a Customer:

GET	customers/{customerUuid}
Body	<i>Not Allowed</i>
Response	Customer

Customers are retrieved using the unique identifier of the customer, not the customer account# or customer name.

### Endpoint - List Customer Contract Rates:

GET	customers/{customerUuid}/contractRates
Body	<i>Not Allowed</i>
Response	List of Customer Contract Rate

Retrieves a list of active Contract Rates for the given Customer.

### Endpoint - Get Customer balances:

GET	customers/{customerUuid}/balances
Body	<i>Not Allowed</i>
Response	Customer Balances

Returns the balances for a Customer using their unique identifier.

# Customer Invoices

## Endpoint - Find a Customer Invoice:

GET	customers/invoices/search
Body	<i>Not Allowed</i>
Response	Page of Search Results containing Customer Invoices

Returns a page of Customer Invoice records matching the search terms. All standard search parameters are supported.

## Endpoint - Get a Customer Invoice:

GET	customers/{customerUuid}/invoices/{customerInvoiceUuid}?includeLines={boolean}
Body	<i>Not Allowed</i>
Response	Customer Invoice

Retrieving a Customer Invoice requires knowing the Customer and Customer Invoice identities, optionally including lines.

## Endpoint - Add a Customer Invoice:

POST	customers/{customerUuid}/invoices
Body	Customer Invoice (required, without a UUID)
Response	Customer Invoice (contains the UUID of the new invoice)

Adding a Customer Invoice requires knowing the Customer identity and supplying Customer Invoice details for the new invoice. This creates an 'Unposted' Customer Invoice.

## Endpoint - Update a Customer Invoice:

PUT	customers/{customerUuid}/invoices/{customerInvoiceUuid}
Body	Customer Invoice (required, containing the same invoice UUID)
Response	<i>Empty</i>

Updating a Customer Invoice requires knowing the Customer and Customer Invoice identities. Only an 'Unposted' Customer Invoice can be updated.

## Customer Invoices and Invoice Line Adding/Updating Policies

Some fields have constraints on whether or not a field can have a value supplied, and whether or not a supplied value will be honoured, when Adding or Updating a Customer Invoice. Fields with unspecified policies or other requirements are optional.

### Customer Invoice Field-Policies:

Field	Adding	Updating	Other
-------	--------	----------	-------

<i>uuid</i>	<i>Not Permitted</i>	<i>Required</i>	
<i>createdTimestamp</i>	<i>Ignored</i>	<i>Ignored</i>	
<i>modifiedTimestamp</i>	<i>Ignored</i>	<i>Ignored</i>	
<i>deletedTimestamp</i>	<i>Ignored</i>	<i>Ignored</i>	
number	Optional	Optional	Auto-generated if omitted
date	Required	<b>Required</b>	
title	Optional	<b>Optional</b>	
customer	Required	<b>Required</b>	UUID required. Other values are ignored
invoicedName	Optional	Optional	
customerContact	Optional	Optional	UUID required. Other values are ignored
email	Optional	Optional	
phone	Optional	Optional	
mobile	Optional	Optional	
fax	Optional	Optional	
chargedCustomer	Required	Required	UUID required. Other values are ignored
billingAddress	Optional	Optional	
deliveryName	Optional	Optional	
deliveryAddress	Optional	Optional	
deliveryMethod	Optional	Optional	UUID required. Other values are ignored
deliveryDateTime	Optional	Optional	
deliveryInstructions	Optional	Optional	
deliveryStatus	Optional	Optional	UUID required. Other values are ignored
orderNumber	Optional	Optional	
reference	Optional	Optional	
location	Required	Required	UUID required. Other values are ignored
soldByStaff	Required	Required	UUID required. Other values are ignored
dueDate	Optional	Optional	Must be on or after Invoice Date
freightGstInclusiveAmount	Optional	Optional	
freightGstExclusiveAmount	Optional	Optional	
roundingAmount	Optional	Optional	
gstAmount	Ignored	Ignored	
gstExclusiveAmount	Ignored	Ignored	
totalAmount	Ignored	Ignored	
status	Ignored	Ignored	Will be stored as UNPOSTED
holdStatus	Ignored	Ignored	Will be stored as NOT_ON_HOLD
Lines	Optional	Optional	
customFields	Optional	Optional	

pickingStatus	Ignored	Ignored	
pickedTimestamp	Ignored	Ignored	
dispatchStatus	Ignored	Ignored	
dispatchedTimestamp	Ignored	Ignored	
courierReference	Optional	Optional	
documents	Ignored	Ignored	

**Customer Invoice Line Field-Policies:**

Field	Adding	Updating	Other
<i>Uuid</i>	<i>Not Permitted</i>	<i>Required</i>	
<i>createdTimestamp</i>	<i>Ignored</i>	<i>Ignored</i>	
<i>modifiedTimestamp</i>	<i>Ignored</i>	<i>Ignored</i>	
<i>deletedTimestamp</i>	<i>Ignored</i>	<i>Ignored</i>	
lineType	Required	Required	
glAccount	*	*	* Required for Line Type GL_ACCOUNT * Optional for Line Type PRODUCT * Not Permitted for other Line Types UUID required. Other values are ignored
product	*	*	* Required for Line Type PRODUCT * Not Permitted for other Line Types UUID required. Other values are ignored
description	*	*	* Not Permitted for Line Type Separator * Optional for other Line Types
gstRate	*	*	* Optional for Line Types PRODUCT or GL_ACCOUNT * Not Permitted for other Line Types UUID required. Other values are ignored
unitRateGstInclusiveAmount	*	*	* Required for Line Type GL_ACCOUNT and the GST Setting is GST Inclusive, otherwise optional * Cannot be less than zero
unitRateGstExclusiveAmount	*	*	* Required for Line Type GL_ACCOUNT and the GST Setting is GST Exclusive, otherwise optional * Cannot be less than zero
discountPercent	*	*	* Optional for Line Types PRODUCT GL_ACCOUNT 'Allow Discounts' setting must be enabled Maximum 100.0
quantity	*	*	* Required for Line Types PRODUCT or GL_ACCOUNT Cannot be zero for GL_ACCOUNT
totalAmount	Ignored	Ignored	
gstAmount	Ignored	Ignored	
gstExclusiveAmount	Ignored	Ignored	
productSerialNumbers	Ignored	Ignored	Not filled via the API in this version
customFields	Optional	Optional	

**Endpoint - Delete a Customer Invoice:**

<b>DELETE</b>	customers/{customerUuid}/invoices/{customerInvoiceUuid}
---------------	---

Body	<i>Not Allowed</i>
Response	Empty

Deleting a Customer Invoice requires knowing the Customer and Customer Invoice identities.

### Endpoint – Check Customer Invoice Approval:

POST	customers/{customerUuid}/invoices/{customerInvoiceUuid}/checkApproval
Body	<i>Not Allowed</i>
Response	<p>List of Approval Rejections (tentative)</p> <ul style="list-style-type: none"> <li>* SETTINGS_EXT_API_POSTING_DISABLED - Settings - Ext API posting is disabled</li> <li>* SETTINGS_FIN_TRANSACTION_LOCK_OUT - Settings - Financial Transaction Lock out</li> <li>* SETTINGS_CUSTOMER_TRANSACTION_LOCK_OUT - Settings - Customer Transaction Lock out</li> <li>* CUSTOMER_STOP_CREDIT - Customer is on Stop Credit</li> <li>* INVOICE_INCOMPLETE - Invoice is incomplete</li> <li>* INVOICE_INCORRECT_SOURCE - Invoice created by another source</li> <li>* INVOICE_TERMS_NOT_ACCEPTED - Invoice has invalid terms</li> <li>* INVOICE_DATE_OUT_OF_RANGE - Invoice date out of range</li> <li>* INVOICE_INCOMPLETE_NO_VALUE - Invoice has no value (no chargeable lines and no charges such as freight)</li> <li>* PRODUCT_INSUFFICIENT_STOCK - Product insufficient stock at Location</li> </ul>

Check if a Customer Invoice is ready to be ‘posted’.

A list of reasons why the invoice is *unready* is returned. If this list is empty then it is expected that a request to post the invoice will succeed.

Note: If the system state changes in a way meaningful to this invoice, an invoice that had previously reported as ready-to-post can become unready. This endpoint should be used as a precursor to attempting to post.

Eg In an online-sales scenario

1. The external site’s user adds items to a shopping cart and selects Checkout
2. The external system creates an unposted invoice, via the Infusion API, matching the cart.
3. The external system checks if the invoice is ready to post.
4. If it is not ready the external system can attempt to make it ready (depending on the reason it is unready) or delete the invoice and stop the sale.
5. If the invoice was ready to post then the sale proceeds
6. The external system presents payment options to the user and accepts payment (if the user cancels or fails payment the external system can abort the invoicing, deleting the invoice).

7. The external system requests that the invoice be posted.  
If the time between steps (4) and (6), checking readiness and posting, results in the invoice no longer being postable, a resolution process will need to begin for reversing payment on a sale that cannot be serviced (by Infusion).

**Endpoint – Post Customer Invoice:**

<b>POST</b>	customers/{customerUuid}/invoices/{customerInvoiceUuid}/post
<b>Body</b>	Not Allowed
<b>Response</b>	Customer Invoice.

If Checking Approval would have reported reasons why the invoice is unready to post then this endpoint will fail, reporting the same reasons. Otherwise the Invoice will transition from UNPOSTED to POSTED.

After this point, cancellation requires a credit-note, that must be created in Infusion, and used to 'pay' the invoice. This is done via the Infusion client, not the Infusion API.



## Financials

### Endpoint - Find a GL Account:

GET	glAccounts/search
Body	<i>Not Allowed</i>
Response	Page of Search Results containing GL Accounts

Returns a page of GL Account records matching the search terms. All standard search parameters are supported.

### Endpoint - List GST Rates:

GET	financials/gstRates
Body	<i>Not Allowed</i>
Response	List of GST Rates

Returns a complete list of GST Rate records.

### Endpoint - Add a Cashbook Payment:

POST	financials/cashbookPayments
Body	Cashbook Payment (required, without a UUID)
Response	Cashbook Payment

Adds a new Cashbook Payment.

### Cashbook Adding Policies

The following fields are mandatory and all the rest are optional and will be calculated or loaded from the Payroll Integration Settings:

- paymentDate
- lines (at least one line)
- lines.glAccount
- lines.amount

# Products

## Endpoint: Find a Product:

GET	products/search
Body	<i>Not Allowed</i>
Response	Page of Search Results containing Products

Returns a page of Product records matching the search terms. All standard search parameters are supported.

## Endpoint - Get a Product:

GET	products/{productUuid}
Body	<i>Not Allowed</i>
Response	Product

Products are retrieved using the unique identifier of the product, not the Product Code or Product Description.

## Endpoint - Add a Product:

GET	products
Body	Product (required, without a UUID)
Response	Product

Adds a new Product.

## Endpoint - Update a Product:

GET	products/{productUuid}
Body	Product (required, containing the same product UUID)
Response	<i>Empty</i>

Updating a Product requires knowing the Product identity.

## Product Adding/Updating Policies

Some fields have constraints on whether or not a field can have a value supplied, and whether or not a supplied value will be honoured, when Adding or Updating a Product. Fields with unspecified policies or other requirements are optional.

### Product Field-Policies:

Field	Adding	Updating	Other
<i>uuid</i>	<i>Not Permitted</i>	<i>Required</i>	
<i>createdTimestamp</i>	<i>Ignored</i>	<i>Ignored</i>	

<i>modifiedTimestamp</i>	<i>Ignored</i>	<i>Ignored</i>	
<i>deletedTimestamp</i>	<i>Ignored</i>	<i>Ignored</i>	
<b>productCode</b>	Optional	Required	Auto-generated when auto-number enabled if omitted
<b>description</b>	Required	Required	
<b>primaryBarcode</b>	Optional	Optional	
<b>productType</b>	Optional	Optional	UUID required. Other values are ignored
<b>productGroup</b>	Optional	Optional	UUID required. Other values are ignored
<b>productSubgroup</b>	Optional	Optional	UUID required. Other values are ignored
<b>supersededByProductUuid</b>	Optional	Optional	
<b>supersededByProductUuid</b>	Optional	Optional	
<b>salesUnit</b>	Optional	Optional	
<b>length</b>	Optional	Optional	
<b>width</b>	Optional	Optional	
<b>height</b>	Optional	Optional	
<b>volume</b>	Optional	Optional	
<b>weight</b>	Optional	Optional	
<b>activationStatus</b>	<i>Ignored</i>	<i>Ignored</i>	
<b>isStopAllSales</b>	<i>Ignored</i>	<i>Ignored</i>	
<b>productCategory</b>	Required	Required	
<b>serialNumberTracking</b>	Required	Required	Must be NONE if quantity tracking is disabled.
<b>kitsetStockHandlingMethod</b>	(See Other)	(See Other)	Required for Kitsets. Not allowed for Products or Variable Products.
<b>allowMultipleQuantities</b>	Optional	Optional	
<b>showExpiryDate</b>	Optional	Optional	
<b>salesGstRate</b>	<i>Ignored</i>	<i>Ignored</i>	
<b>latestLandedCost</b>	<i>Ignored</i>	<i>Ignored</i>	
<b>usualLandedCost</b>	<i>Ignored</i>	<i>Ignored</i>	
<b>productPriceLevels</b>	<i>Ignored</i>	<i>Ignored</i>	
<b>defaultImageUrlTemplate</b>	<i>Ignored</i>	<i>Ignored</i>	
<b>customFields</b>	<i>Ignored</i>	<i>Ignored</i>	
<b>websiteFields</b>	<i>Ignored</i>	<i>Ignored</i>	
<b>stockQuantities</b>	<i>Ignored</i>	<i>Ignored</i>	
<b>trackQuantities</b>	Required	Required	
<b>isAllowSalesDiscounts</b>	<i>Ignored</i>	<i>Ignored</i>	
<b>isAllowDiscountMatrixPricing</b>	<i>Ignored</i>	<i>Ignored</i>	
<b>internalNotes</b>	Optional	Optional	
<b>publicNotes</b>	Optional	Optional	
<b>includeInWebsite</b>	<i>Ignored</i>	<i>Ignored</i>	

featuredProduct	Ignored	Ignored	
homeDelivery	Ignored	Ignored	
clickAndCollect	Ignored	Ignored	
webDescription	Ignored	Ignored	
webDescriptionFormat	Ignored	Ignored	

#### Endpoint: Make a Product Price Request:

POST	products/{productUuid}/priceRequest
Body	Not Allowed
Response	Product Price Response

Make a Product Price Request for the given Product and Customer. If specified, Quantity may be used to provide volume pricing. Returns a Product Price Response contract.

#### Endpoint - Get a Product Type:

GET	products/types/{productTypeUuid}
Body	Not Allowed
Response	Product Type

Product Types are retrieved using the unique identifier of the product type.

#### Endpoint - Add a Product Type:

GET	products/types
Body	Product Type (required, without a UUID)
Response	Product Type

Adds a new Product Type.

#### Endpoint - Update a Product Type:

GET	products/types/{productTypeUuid}
Body	Product Type (required, containing the same product type UUID)
Response	Empty

Updating a Product Type requires knowing the Product Type identity.

#### Endpoint: List Product Types:

GET	products/types
Body	Not Allowed
Response	List of Product Types

Retrieve a list of Product Types.

**Endpoint - Get a Product Group:**

GET	products/groups/{productGroupUuid}
Body	<i>Not Allowed</i>
Response	Product Group

Product Groups are retrieved using the unique identifier of the product group.

**Endpoint - Add a Product Group:**

GET	products/groups
Body	Product Group (required, without a UUID)
Response	Product Group

Adds a new Product Group.

**Endpoint - Update a Product Group:**

GET	products/groups/{productGroupUuid}
Body	Product Group (required, containing the same product group UUID)
Response	<i>Empty</i>

Updating a Product Group requires knowing the Product Group identity.

**Endpoint: List Product Groups:**

GET	products/groups
Body	<i>Not Allowed</i>
Response	List of Product Groups

Retrieve a list of Product Groups.

**Endpoint - Get a Product Sub Group:**

GET	products/subGroups/{productSubGroupUuid}
Body	<i>Not Allowed</i>
Response	Product Sub Group

Product Sub Groups are retrieved using the unique identifier of the product sub group.

**Endpoint - Add a Product Sub Group:**

GET	products/subGroups
Body	Product Sub Group (required, without a UUID)
Response	Product Sub Group

Adds a new Product Sub Group.

**Endpoint - Update a Product Sub Group:**

GET	products/subGroups /{productSubGroupUuid}
Body	Product Sub Group (required, containing the same product sub group UUID)
Response	<i>Empty</i>

Updating a Product Sub Group requires knowing the Product Sub Group identity.

**Endpoint: List Product Sub Groups:**

GET	products/subGroups
Body	<i>Not Allowed</i>
Response	List of Product Sub Groups

Retrieve a list of Product Sub Groups.

**Endpoint: List Product Locations:**

GET	products/locations?includeInactive={boolean}
Body	<i>Not Allowed</i>
Response	List of Product Locations

Retrieve a list of Product Locations, optionally including INACTIVE locations.

**Endpoint - Get a Product Location Bin:**

GET	products/locations/{productLocationUuid}/bins/{productLocationBinUuid}
Body	<i>Not Allowed</i>
Response	Product Location Bin

Product Location Bins are retrieved using the unique identifier of the product location and product location bin.

**Endpoint: List Product Location Bins:**

GET	products/locations/{productLocationUuid}/bins
Body	<i>Not Allowed</i>
Response	List of Product Location Bins

Retrieve a list of Product Location Bins.

**Endpoint - Get a Product Product Location:**

GET	products/{productUuid}/productLocations/{productProductLocationUuid}
-----	--

Body	<i>Not Allowed</i>
Response	Product Product Location

A Product Product Locations connects a Product to a Product Location. Product Product Locations are retrieved using the unique identifier of the product and product product location.

**Endpoint: List Product Product Locations:**

GET	products/{productUuid}/productLocations?includeInactive={boolean}
Body	<i>Not Allowed</i>
Response	List of Product Product Locations

Retrieve a list of Product Product Locations, optionally including INACTIVE locations.

**Endpoint - List Product Promotional Prices:**

GET	products/{productUuid}/promotionalPrices
Body	<i>Not Allowed</i>
Response	List of Product Promotional Prices

Retrieves a list of active Promotional Prices for the given Product.

## Discount Matrix

### Endpoint - List Discount Matrix Entries for a Customer Group:

GET	discountMatrix/customerGroups/{customerGroupUuid}
Body	<i>Not Allowed</i>
Response	List of Discount Matrix Entry's

Retrieves a list of Discount Matrix Entries for the given Customer Group.

### Endpoint - List Discount Matrix Entries for a Product Group:

GET	discountMatrix/productGroups/{productGroupUuid}
Body	<i>Not Allowed</i>
Response	List of Discount Matrix Entry's

Retrieves a list of Discount Matrix Entries for the given Product Group.

## Staff

### Endpoint - Get Staff:

GET	staff/{staffUuid}
Body	<i>Not Allowed</i>
Response	Staff

Staff are retrieved using the unique identifier of the staff.

### Endpoint: List Staff:

GET	staff
Body	<i>Not Allowed</i>
Response	List of Staff

Retrieve a list of Staff.



# Supplier

## Endpoint - Get Supplier Purchase Order:

GET	suppliers/{supplierUuid}/purchaseOrders/{supplierPurchaseOrderUuid} ?includeLines={boolean}
Body	<i>Not Allowed</i>
Response	Supplier Purchase Order

Supplier Purchase Orders are retrieved using the unique identifier of the supplier purchase order, optionally including lines.

## Offline Synchronisation

Changes to data can be retrieved to keep a copy of this data externally.

The types that can be synchronised in this fashion are:

- Products
- Customers
- Customer Invoices
- Customer Contract Rates
- Product Promotional Prices
- Discount Matrix Entries

Data retrieved for these types is delivered in the same form as if their usual 'GET' API endpoint were used.

When a page of changes is retrieved, the 'cursor' in the changes list moved forward automatically, with subsequent requests for changes returning a new page each time. To be notified when there are changes to retrieve, register a Webhook for that type.

### Retrieving Changes

#### Get new changes for Customers (since Sync Cursor position):

POST	customers/sync?limit={page-size}
Body	<i>Not Allowed</i>
Response	Page of Customers

Get a Page of Customers changed since the current Customer Sync Cursor. This will automatically advance the cursor.

#### Get new changes for Customer Contract Rates (since Sync Cursor position):

POST	customers/contractRates/sync?limit={page-size}
Body	<i>Not Allowed</i>
Response	Page of Customer Contract Rates

Get a Page of Customer Contract Rates changed since the current Customer Contract Rate Sync Cursor. This will automatically advance the cursor.

#### Get new changes for Customer Invoices (since Sync Cursor position):

POST	customers/invoices/sync?limit={page-size}
Body	<i>Not Allowed</i>
Response	Page of Customer Invoices

Get a Page of Customer Invoices changed since the current Customer Invoice Sync Cursor. This will automatically advance the cursor.

**Get new changes for Discount Matrix Entries (since Sync Cursor position):**

POST	discountMatrix/sync?limit={page-size}
Body	<i>Not Allowed</i>
Response	Page of Discount Matrix Entry's

Get a Page of Discount Matrix Entries changed since the current Discount Matrix Entry Sync Cursor. This will automatically advance the cursor.

**Get new changes for Products (since Sync Cursor position):**

POST	products/sync?limit={page-size}
Body	<i>Not Allowed</i>
Response	Page of Products

Get a Page of Products changed since the current Product Sync Cursor. This will automatically advance the cursor.

**Get new changes for Product Promotional Prices (since Sync Cursor position):**

POST	products/promotionalPrices/sync?limit={page-size}
Body	<i>Not Allowed</i>
Response	Page of Product Promotional Prices

Get a Page of Product promotional Prices changed since the current Product promotional Price Sync Cursor. This will automatically advance the cursor.

Moving or examining the Sync Cursor

**Get Sync Cursor:**

GET	{syncNoun}/sync/cursor
Body	<i>Not Allowed</i>
Response	Sync Cursor

Get the current Sync Cursor for the given Synchronisable Noun.

**Update Sync Cursor:**

POST	{syncNoun}/sync/cursor?timestamp={timestamp}
Body	<i>Not Allowed</i>
Response	Sync Cursor

Set the current Sync Cursor for the given Synchronisable Noun, to the specified timestamp. If the specified timestamp is too far into the past, the resulting Sync Cursor contract will indicate the new cursor position.

### Registering for Change Notification (Webhooks)

#### Get a Webhook:

GET	{syncNoun}/webhook
Body	<i>Not Allowed</i>
Response	Webhook

Retrieve the Webhook for this Synchronisable Noun.

#### Add a Webhook:

POST	{syncNoun}/webhook
Body	Webhook (required, without a UUID)
Response	Webhook (contains the UUID of the new Webhook)

Add a Webhook for this Synchronisable Noun.

#### Update a Webhook:

PUT	{syncNoun}/webhook
Body	Webhook (required, containing the same Webhook UUID)
Response	Webhook

Update the Webhook for this Synchronisable Noun. If the URL is changed, the Webhook statistics will be cleared.

#### Delete a Webhook:

DELETE	{syncNoun}/webhook
Body	<i>Not Allowed</i>
Response	<i>Empty</i>

Delete the Webhook for this Synchronisable Noun.

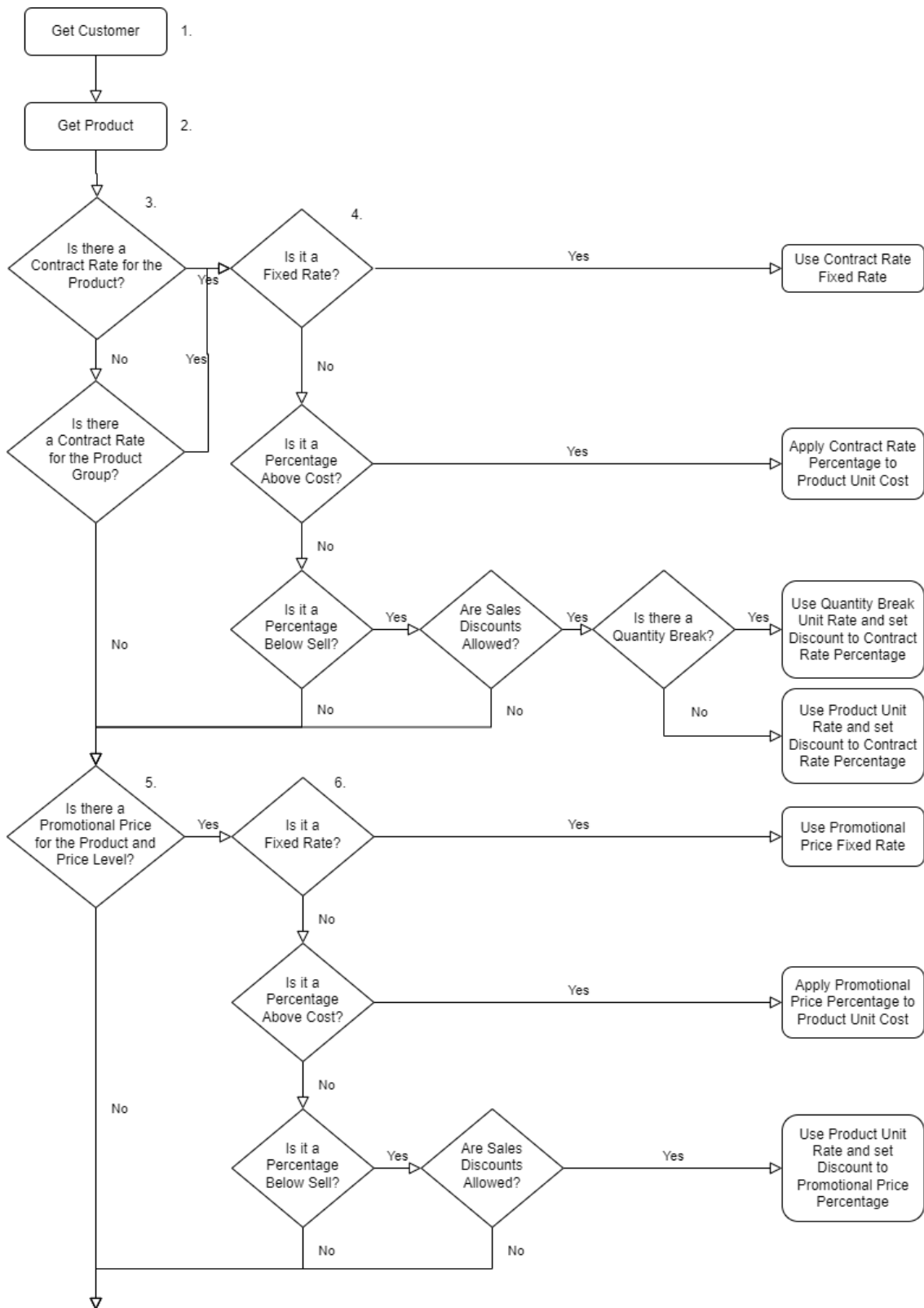
#### Test a Webhook:

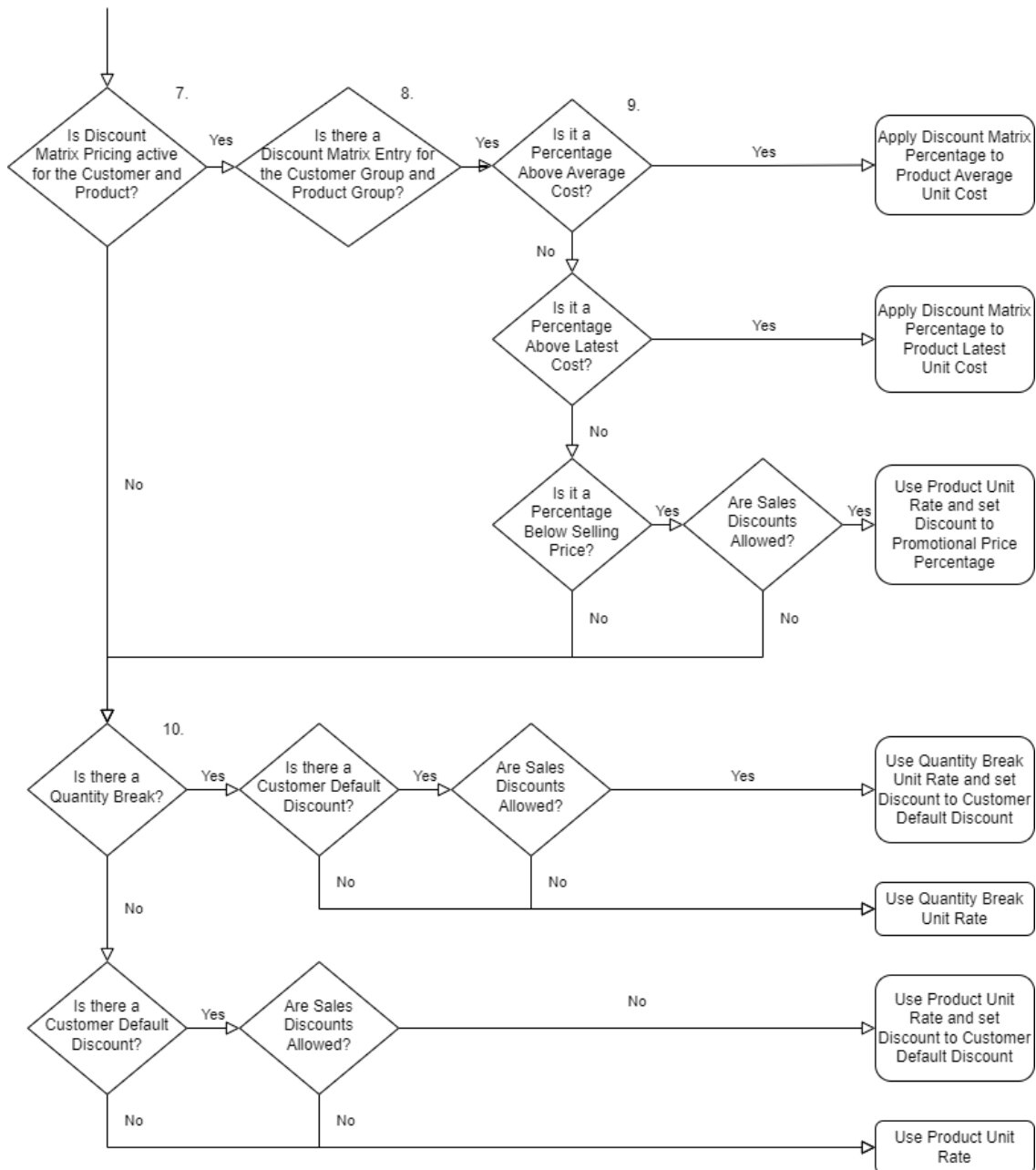
POST	{syncNoun}/webhook/test
Body	<i>Not Allowed</i>
Response	Webhook



Test the Webhook for this Synchronisable Noun. The webhook is fired as if it were 'triggered' by changes. The returned Webhook contract contains statistics which indicate success or failure.

# Calculating Product Pricing





There are a number of factors that influence the unit rate and discount for a product being sold. Product Price Levels, Quantity Breaks, Contract Rates, Promotional Prices, Discount Matrix, Customer Default Discounts and several settings all affect the resulting unit rate. The above flow chart illustrates how each of these are applied using the information provided by Infusion’s API.

Products, Customers, Customer Contract Rates, Product Promotional Prices and Discount Matrix Entries have all been synchronised and it is strongly recommended that synchronization is used when calculating prices, to avoid frequent requests to Infusion's API. This means that Get Customer, Get Product, and checking for Contract Rates, Promotional Prices, and Discount Matrix, should all be a look up of a local database populated by synchronisation.

The following steps expand on those shown in the flow chart above.

1. Get the Customer.
2. Get the Product. **Note:** The Product will include a list of Product Price Levels and each of these may contain a list of Product Quantity Breaks. Both of these will be needed in later steps, so get the correct Price Level that matches the *productPriceLevelDefinition* on the Customer and any Quantity Break for that Price Level that matches the required quantity.
3. Check for a current Contract Rate <sup>1</sup> for the Customer and Product and if not found check for a current Contract Rate for the Customer and Product Group (see the *productGroup* on the Product).
4. If a Contract Rate is found check the *contractRatePricingCalculationType* to see if it is a Fixed Rate, Percentage Above Cost or Percentage Below Sell.
  - a. For a Fixed Rate, use the *fixedRateGstExclusive* or *fixedRateGstInclusive* for the Unit Rate.
  - b. For Percentage Above Cost, add the Contract Rate's *percentage* to the Product's *latestLandedCost* or *usualLandedCost* (depending on which 'Costing Based On' is configured in the Product Settings) and use that for the Unit Rate.
  - c. For Percentage Below Sell, first confirm whether Sales Discounts are allowed (see *isAllowSalesDiscounts* on the Product).
    - i. If Sales Discounts are allowed and there is a Quantity Break, use the *gstExclusiveAmount* or *gstInclusiveAmount* from the Quantity Break for the Unit Rate and the Contract Rate *percentage* for the Percentage.
    - ii. If Sales Discounts are allowed but there is no Quantity Break, use the *gstExclusiveAmount* or *gstInclusiveAmount* from the Price Level for the Unit Rate and the Contract Rate *percentage* for the Percentage.
  - d. No further steps needed.
5. Check for a current Promotional Price for the Product and Price Level (see the *productPriceLevelDefinition* on the Customer).
6. If a Promotional Price is found check the *productPromotionalPricingCalculationType* to see if it is a Fixed Rate, Percentage Above Cost or Percentage Below Sell.
  - a. For a Fixed Rate, use the *fixedRateGstExclusive* or *fixedRateGstInclusive* for the Unit Rate.
  - b. For Percentage Above Cost, add the Promotional Price's *percentage* to the Product's *latestLandedCost* or *usualLandedCost* (depending on which 'Costing Based On' is configured in the Product Settings) and use that for the Unit Rate.



- c. For Percentage Below Sell, first confirm whether Sales Discounts are allowed (see *isAllowSalesDiscounts* on the Product). If so, use the *gstExclusiveAmount* or *gstInclusiveAmount* from the Price Level for the Unit Rate and the Promotional Price *percentage* for the Percentage.
  - d. No further steps needed.
7. Check whether the Discount Matrix Pricing is allowed for both the Customer and Product (see *isAllowDiscountMatrixPricing* on the Customer and Product).
8. If Discount Matrix Pricing is allowed, check for a current Discount Matrix Entry for the Customer Group and Product Group (see the *customerGroup* on the Customer and the *productGroup* on the Product). If Discount Matrix Pricing is not allowed, go to step 10.
9. If a Discount Matrix Entry is found check the *discountMatrixEntryPricingMethod* to see if it is a Percentage Above Average Cost, Percentage Above Latest Cost or Percentage Below Selling Price.
  - a. For Percentage Above Average Cost, add the Discount Matrix Entry's *percentage* to the Product's *usualLandedCost* and use that for the Unit Rate.
  - b. For Percentage Above Latest Cost, add the Discount Matrix Entry's *percentage* to the Product's *latestLandedCost* and use that for the Unit Rate.
  - c. For Percentage Below Selling Price, first confirm whether Sales Discounts are allowed (see *isAllowSalesDiscounts* on the Product). If so, use the *gstExclusiveAmount* or *gstInclusiveAmount* from the Price Level for the Unit Rate and the Discount Matrix Entry *percentage* for the Percentage.
  - d. No further steps needed.
10. Check to see if there is a Customer Default Discount (see *defaultDiscountPercent* on the Customer) and whether Sales Discounts are allowed (see *isAllowSalesDiscounts* on the Product).
  - a. If there is a Quantity Break, use the *gstExclusiveAmount* or *gstInclusiveAmount* from the Quantity Break for the Unit Rate.
  - b. If there is no Quantity Break, use the *gstExclusiveAmount* or *gstInclusiveAmount* from the Price Level for the Unit Rate.
  - c. If there is a Customer Default Discount and Sales Discounts are allowed, use the *defaultDiscountPercent* for the Percentage.
  - d. If there is either no Customer Default Discount or Sales Discounts are not allowed, leave the Percentage empty.

\*1 A current Contract Rate, Promotional Price or Discount Matrix Entry is one that has a *startDate* equal to or later than the current date and an *endDate* equal to or before the current date.

# Appendix 1: General Contracts

## Common Entity Fields

Many have the following common fields:

Parameter	Details
<b>Uuid</b>	The unique and unchanging identity of <i>this</i> entity. Required: When updating the entity. Rejected: If supplied when adding an entity.
<b>createdTimestamp</b>	When this entity was created. Rejected: If supplied when updating or adding an entity.
<b>modifiedTimestamp</b>	When this entity was last modified. Rejected: If supplied when updating or adding an entity.
<b>deletedTimestamp</b>	When this entity was deleted. Empty unless deleted. Rejected: If supplied when updating or adding an entity. <i>Note: You'll usually only see a response with this field set, via the synchronisation endpoints.</i>

## Contracts

### Contract: Address

Field	Type	Details
<b>line1</b>	Text	
<b>line2</b>	Text	
<b>line3</b>	Text	
<b>cityTown</b>	Text	
<b>postcode</b>	Text	
<b>countryCode</b>	CountryCode	A text value from a controlled list. e.g. AU, NZ, US
<b>countryName</b>	Text	Ignored when creating an address, this is filled in automatically

### Contract: Cashbook Payment

Field	Type	Details
<b>uuid</b>	UUID	Identity (unique, see Common Entity Fields)
<b>createdTimestamp</b>	Timestamp	Creation Timestamp (see Common Entity Fields)
<b>modifiedTimestamp</b>	Timestamp	Last Modified Timestamp (see Common Entity Fields)
<b>deletedTimestamp</b>	Timestamp	Deleted Timestamp (see Common Entity Fields)
<b>payee</b>	Text	
<b>bankAccount</b>	Text	
<b>paymentDate</b>	Date	
<b>amount</b>	Currency	Text. A fixed-precision number

reference	Text	
memo	Text	
lines	<b>Cashbook Payment Line</b>	A list of one or more cashbook payment lines.

### Contract: Cashbook Payment Line

Field	Type	Details
<i>uuid</i>	UUID	Identity (unique, see Common Entity Fields)
<i>createdTimestamp</i>	Timestamp	Creation Timestamp (see Common Entity Fields)
<i>modifiedTimestamp</i>	Timestamp	Last Modified Timestamp (see Common Entity Fields)
<i>deletedTimestamp</i>	Timestamp	Deleted Timestamp (see Common Entity Fields)
glAccount	<b>GL Account Reference</b>	
description	Text	
amount	Currency	Text. A fixed-precision number

### Contract: Customer

Field	Type	Details
<i>uuid</i>	UUID	Identity (unique, see Common Entity Fields)
<i>createdTimestamp</i>	Timestamp	Creation Timestamp (see Common Entity Fields)
<i>modifiedTimestamp</i>	Timestamp	Last Modified Timestamp (see Common Entity Fields)
<i>deletedTimestamp</i>	Timestamp	Deleted Timestamp (see Common Entity Fields)
activationStatus	Enum	Text. Whether the Customer is ACTIVE or INACTIVE
accountNumber	Integer	Unique account Number
accountType	Enum	Text. INDIVIDUAL or ORGANISATION
organisation	Boolean	Individual (false) or an Organisation (true)
title	<b>UuidName</b>	Title (e.g. Mr, Ms, Mrs, Dr)
givenName	Text	Part of an individual Customer name
lastName	Text	Part of an individual Customer name
organisationName	Text	Part of an organisation Customer
tradingAs	Text	Part of a Customer name
deliveryMethod	<b>UuidName</b>	Preferred Delivery Method
email	Text	
website	Text	
phone	Text	
altPhone	Text	
mobile	Text	
fax	Text	

voip	Text	
gstNumber	Text	
marketingType	<b>UuidName</b>	
customerType	<b>UuidName</b>	
industryType	<b>UuidName</b>	
customerGroup	<b>UuidName</b>	
salesRep	<b>UuidName</b>	
manager	<b>UuidName</b>	
customerRegion	<b>UuidName</b>	
notes	Text	
postalAddress	<b>Address</b>	
deliveryAddress	<b>Address</b>	
defaultLocation	<b>UuidName</b>	
creditStatus	Enum	Text. Either CREDIT_STOPPED or null
balanceAmount	Currency	Text. A fixed-precision number
unallocatedAmount	Currency	Text. A fixed-precision number
customFields	Object	A JSON object. See Custom Fields Appendix for details
contacts		
paymentTerms	Enum	Text. Whether the payment terms are NUMBER_OF_DAYS, CASH_SALE_ONLY or GIVEN_DAY_AFTER_EOM
paymentTermsDayNumber	Integer	
creditLimit	Currency	Text. A fixed-precision number
stopCredit	Boolean	
productPriceLevelDefinition	<b>UuidName</b>	
defaultDiscountPercent	Currency	Text. A fixed-precision number
headOfficeCustomer	<b>Customer Reference</b>	
internationalCustomer	Boolean	
isAllowDiscountMatrixPricing	Boolean	

### Contract: Customer Balances

Parameter	Type	Details
forwardBalance	Currency	
currentMonthBalance	Currency	
oneMonthBalance	Currency	
twoMonthBalance	Currency	
threeMonthBalance	Currency	
totalBalance	Currency	

totalExcludingForwardBalance	Currency	
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### Contract: Customer Contact

Field	Type	Details
<i>Uuid</i>	UUID	Identity (unique, see Common Entity Fields)
<i>createdTimestamp</i>	Timestamp	Creation Timestamp (see Common Entity Fields)
<i>modifiedTimestamp</i>	Timestamp	Last Modified Timestamp (see Common Entity Fields)
<i>deletedTimestamp</i>	Timestamp	Deleted Timestamp (see Common Entity Fields)
givenName	Text	
lastName	Text	
position	Text	
email	Text	
phone	Text	
altPhone	Text	
fax	Text	
mobile	Text	
voip	Text	
title	<b>UuidName</b>	
address	<b>Address</b>	

### Contract: Customer Contract Rate

Field	Type	Details
<i>Uuid</i>	UUID	Identity (unique, see Common Entity Fields)
<i>createdTimestamp</i>	Timestamp	Creation Timestamp (see Common Entity Fields)
<i>modifiedTimestamp</i>	Timestamp	Last Modified Timestamp (see Common Entity Fields)
<i>deletedTimestamp</i>	Timestamp	Deleted Timestamp (see Common Entity Fields)
customer	<b>Customer Reference</b>	
contractRateTarget	Enum	Text. PRODUCT or PRODUCT_GROUP
product	<b>Product Reference</b>	
productGroup	<b>UuidName</b>	
startDate	Date	
endDate	Date	
contractRatePricingCalculationType	Enum	Text. NONE, FIXED_RATE, PERCENTAGE_ABOVE_COST or PERCENTAGE_BELOW_SELL

fixedRateGstInclusive	Currency	Text. A fixed-precision number
fixedRateGstExclusive	Currency	Text. A fixed-precision number
percentage	Decimal	Text. A fixed-precision number. 100 mean 100%, 0.5 means 0.5%

### Contract: Customer Invoice

Field	Type	Details
<i>uuid</i>	UUID	Identity (unique, see Common Entity Fields)
<i>createdTimestamp</i>	Timestamp	Creation Timestamp (see Common Entity Fields)
<i>modifiedTimestamp</i>	Timestamp	Last Modified Timestamp (see Common Entity Fields)
<i>deletedTimestamp</i>	Timestamp	Deleted Timestamp (see Common Entity Fields)
number	Text	Invoice Number
date	Date	
title	Text	
customer	<b>Customer Reference</b>	
invoicedName	Text	
customerContact	<b>UuidName</b>	
email	Text	
phone	Text	
mobile	Text	
fax	Text	
chargedCustomer	<b>Customer Reference</b>	
billingAddress	<b>Address</b>	
deliveryName	Text	
deliveryAddress	<b>Address</b>	
deliveryMethod	<b>UuidName</b>	
deliveryDateTime	DateTime	
deliveryInstructions	Text	
deliveryStatus	<b>UuidName</b>	
orderNumber	Text	
reference	Text	
location	<b>UuidName</b>	
soldByStaff	<b>UuidName</b>	
dueDate	Date	
freightGstInclusiveAmount	Currency	Text. A fixed-precision number
freightGstExclusiveAmount	Currency	Text. A fixed-precision number
roundingAmount	Currency	Text. A fixed-precision number
gstAmount	Currency	Text. A fixed-precision number
gstExclusiveAmount	Currency	Text. A fixed-precision number
totalAmount	Currency	Text. A fixed-precision number
status	Enum	Text. Whether the invoice is POSTED or UNPOSTED

holdStatus	Enum	Text. Whether the invoice is ON_HOLD or NOT_ON_HOLD
lines	<b>Customer Invoice Line</b>	A list of zero or more invoice lines.
customFields	Object	A JSON object. See Custom Fields Appendix for details
pickingStatus	Enum	Text. Whether the picking status is NOT_USED, NOT_PICKED, PICKING or
pickedTimestamp	Timestamp	
dispatchStatus	Enum	Text. Whether the dispatch status is NOT_USED, NOT_DISPATCHED, AWAITING_DISPATCH or DISPATCHED
dispatchedTimestamp	Timestamp	
courierReference	Text	
documents	<b>Document</b>	A list of zero or more documents

### Contract: Customer Invoice Line

Field	Type	Details
uuid	UUID	Identity (unique, see Common Entity Fields)
createdTimestamp	Timestamp	Creation Timestamp (see Common Entity Fields)
modifiedTimestamp	Timestamp	Last Modified Timestamp (see Common Entity Fields)
deletedTimestamp	Timestamp	Deleted Timestamp (see Common Entity Fields)
lineType	Enum	Text. One of TITLE, NOTE, SEPARATOR, GL_ACCOUNT or PRODUCT
glAccount	<b>GL Account Reference</b>	
product	<b>Product Reference</b>	
description	Text	
gstRate	<b>UuidName</b>	
unitRateGstInclusiveAmount	Currency	Text. A fixed-precision number
unitRateGstExclusiveAmount	Currency	Text. A fixed-precision number
discountPercentage	Decimal	Text. A fixed-precision number. 100 means 100%, 0.5 means 0.5%
quantity	Decimal	Text. A fixed-precision number
totalAmount	Currency	Text. A fixed-precision number
gstAmount	Currency	Text. A fixed-precision number
gstExclusiveAmount	Currency	Text. A fixed-precision number
productSerialNumbers	<b>Serial Number Reference</b>	A list of zero or more serial numbers.
customFields	Object	A JSON object. See Custom Fields Appendix for details

### Contract: Customer Reference

Parameter	Type	Details
uuid	UUID	Customer Identity (unique)

accountNumber	int	Customer Account Number (unique)
name	Text	Display name for the Customer

### Contract: Discount Matrix Entry

Field	Type	Details
<i>Uuid</i>	UUID	Identity (unique, see Common Entity Fields)
<i>createdTimestamp</i>	Timestamp	Creation Timestamp (see Common Entity Fields)
<i>modifiedTimestamp</i>	Timestamp	Last Modified Timestamp (see Common Entity Fields)
<i>deletedTimestamp</i>	Timestamp	Deleted Timestamp (see Common Entity Fields)
customerGroup	<b>UuidName</b>	
productGroup	<b>UuidName</b>	
startDate	Date	
endDate	Date	
discountMatrixEntryPricingMethod	Enum	Text. PERCENTAGE_ABOVE_AVERAGE_COST, PERCENTAGE_ABOVE_LATEST_COST or PERCENTAGE_BELOW_SELLING_PRICE
percentage	Decimal	Text. A fixed-precision number. 100 mean 100%, 0.5 means 0.5%

### Contract: Document

Field	Type	Details
<i>Uuid</i>	UUID	Identity (unique, see Common Entity Fields)
<i>createdTimestamp</i>	Timestamp	Creation Timestamp (see Common Entity Fields)
<i>modifiedTimestamp</i>	Timestamp	Last Modified Timestamp (see Common Entity Fields)
<i>deletedTimestamp</i>	Timestamp	Deleted Timestamp (see Common Entity Fields)
name	Text	
size	Integer	
mediaType	Text	
downloadUrl	Text	

### Contract: GL Account

Field	Type	Details
<i>uuid</i>	UUID	Identity (unique, see Common Entity Fields)
<i>createdTimestamp</i>	Timestamp	Creation Timestamp (see Common Entity Fields)
<i>modifiedTimestamp</i>	Timestamp	Last Modified Timestamp (see Common Entity Fields)
<i>deletedTimestamp</i>	Timestamp	Deleted Timestamp (see Common Entity Fields)
code	Text	GL Account Code (unique)



<b>name</b>	Text	GL Account Name (unique)
<b>function</b>	Enum	Text. One of: - CURRENT_ASSET_TRANSACTION - CURRENT_ASSET_YEAR_END - CURRENT_LIABILITY_TRANSACTION - CURRENT_LIABILITY_YEAR_END - EQUITY_CURRENT_EARNINGS - EQUITY_RETAINED_EARNINGS - EQUITY_TRANSACTION - EQUITY_YEAR_END - EXPENSE_OPENING_INVENTORY - EXPENSE_TRANSACTION - FIXED_ASSET_TRANSACTION - FIXED_ASSET_YEAR_END - INCOME_CLOSING_INVENTORY - INCOME_TRANSACTION - INTANGIBLE_ASSET_TRANSACTION - INTANGIBLE_ASSET_YEAR_END - TERM_LIABILITY_TRANSACTION - TERM_LIABILITY_YEAR_END

### Contract: GL Account Reference

Parameter	Type	Details
<b>uuid</b>	UUID	GL Account Identity (unique)
<b>code</b>	Text	GL Account Code (unique)
<b>name</b>	Text	Display name for the GL Account

### Contract: GST Rate

Parameter	Type	Details
<b>uuid</b>	UUID	GST Rate Identity (unique)
<b>Name</b>	Text	Display name for the GST Rate
<b>type</b>	Enum	Text. Available values vary by Country. - STANDARD (NZ, AU) - EXEMPT (NZ, AU) - ZERO_RATED (NZ, AU) - CUSTOMS (NZ, AU) - INPUT_TAXED (AU) - CAPITAL (AU) - EXEMPT_NON_PRINTING (AU) - ALTERNATE (all countries)
<b>percentage</b>	Decimal	The GST rate. Text. A fixed-precision number. 100 mean 100%, 0.5 means 0.5%
<b>inclusiveSelectable</b>	Boolean	False for types in which the user should be forced to enter an inclusive or exclusive value due to the percentage being 0% or 100%
<b>createdTimestamp</b>	Timestamp	
<b>modifiedTimestamp</b>	Timestamp	

### Contract: Product

Parameter	Type	Details
<b>uuid</b>	UUID	Identity (unique, see Common Entity Fields)
<b>createdTimestamp</b>	Timestamp	Creation Timestamp (see Common Entity Fields)
<b>modifiedTimestamp</b>	Timestamp	Last Modified Timestamp (see Common Entity Fields)

<i>deletedTimestamp</i>	<i>Timestamp</i>	<i>Deleted Timestamp (see Common Entity Fields)</i>
productCode	Text	
description	Text	
primaryBarcode	Text	
productType	<b>UuidName</b>	
productGroup	<b>UuidName</b>	
productSubGroup	<b>UuidName</b>	
supersededByProductUuid	UUID	
supersededByProductUuid	UUID	
salesUnit	Text	
length	Decimal	Text. A fixed-precision number
width	Decimal	Text. A fixed-precision number
height	Decimal	Text. A fixed-precision number
volume	Decimal	Text. A fixed-precision number
weight	Decimal	Text. A fixed-precision number
activationStatus	Enum	Text. ACTIVE or INACTIVE
isStopAllSales	Boolean	When true, the product cannot be invoiced
productCategory	Enum	Text. PRODUCT, KITSET or VARIABLE_PRODUCT
serialNumberTracking	Enum	Text. NONE, SALES_ONLY or SALES_AND_PURCHASES
kitsetStockHandlingMethod	Enum	Text. INVOICED or RECEIPTED
allowMultipleQuantities	Boolean	Ignore unless Serial Number Tracking is not NONE
showExpiryDate	Boolean	Ignore unless Serial Number Tracking is not NONE
salesGstRate	<b>GST Rate</b>	
latestLandedCost	Currency	Text. A fixed-precision number
usualLandedCost	Currency	Text. A fixed-precision number
productPriceLevels	<b>Product Price Level</b>	List of Product Price Levels
defaultImageUrlTemplate	Text	
customFields	Object	A JSON object. See Custom Fields Appendix for details
websiteFields	Object	A JSON object. See Custom Fields Appendix for details
stockQuantities	<b>Product Location Quantities</b>	List of Product Location Quantities
trackQuantities	Boolean	
isAllowSalesDiscounts	Boolean	

isAllowDiscountMatrixPricing	Boolean	
internalNotes	Text	
publicNotes	Text	
includeInWebsite	Boolean	
featuredProduct	Boolean	
homeDelivery	Boolean	
clickAndCollect	Boolean	
webDescription	Text	
webDescriptionFormat	Enum	Text. PLAIN_TEXT or HTML

### Contract: Product Group

Parameter	Type	Details
<i>uuid</i>	UUID	Identity (unique, see Common Entity Fields)
<i>createdTimestamp</i>	Timestamp	Creation Timestamp (see Common Entity Fields)
<i>modifiedTimestamp</i>	Timestamp	Last Modified Timestamp (see Common Entity Fields)
<i>deletedTimestamp</i>	Timestamp	Deleted Timestamp (see Common Entity Fields)
code	Text	Product Group Code (unique)
name	Text	Product Group Name
productType	<b>UuidName</b>	

### Contract: Product Location

Parameter	Type	Details
<i>uuid</i>	UUID	Identity (unique, see Common Entity Fields)
<i>createdTimestamp</i>	Timestamp	Creation Timestamp (see Common Entity Fields)
<i>modifiedTimestamp</i>	Timestamp	Last Modified Timestamp (see Common Entity Fields)
<i>deletedTimestamp</i>	Timestamp	Deleted Timestamp (see Common Entity Fields)
name	Text	Product Location Name (unique)
address	<b>Address</b>	
activationStatus	Enum	Text. ACTIVE or INACTIVE

### Contract: Product Location Bin

Parameter	Type	Details
<i>uuid</i>	UUID	Identity (unique, see Common Entity Fields)
<i>createdTimestamp</i>	Timestamp	Creation Timestamp (see Common Entity Fields)
<i>modifiedTimestamp</i>	Timestamp	Last Modified Timestamp (see Common Entity Fields)
<i>deletedTimestamp</i>	Timestamp	Deleted Timestamp (see Common Entity Fields)

productLocation	<b>UuidName</b>	
label	Text	

### Contract: Product Location Quantities

Parameter	Type	Details
location	<b>UuidName</b>	
quantityOnHand	Decimal	Text. A fixed-precision number
quantityOnOrder	Decimal	Text. A fixed-precision number
quantityAllocated	Decimal	Text. A fixed-precision number
quantityOnBackorder	Decimal	Text. A fixed-precision number

### Contract: Product Price Level

Parameter	Type	Details
productPriceLevel	<b>UuidName</b>	
gstExclusiveAmount	Currency	Text. A fixed-precision number
gstInclusiveAmount	Currency	Text. A fixed-precision number
activationStatus	Enum	Text. ACTIVE or INACTIVE
quantityBreakActivationStatus	Enum	Text. ACTIVE or INACTIVE
productQuantityBreaks	<b>Product Quantity Break</b>	

### Contract: Product Price Response

Parameter	Type	Details
productUuid	UUID	
customerUuid	UUID	
unitRateGstInclusive	Currency	Text. A fixed-precision number
unitRateGstExclusive	Currency	Text. A fixed-precision number
discountPercentage	Decimal	Text. A fixed-precision number. 100 mean 100%, 0.5 means 0.5%

### Contract: Product Product Location

Parameter	Type	Details
<i>uuid</i>	<i>UUID</i>	<i>Identity (unique, see Common Entity Fields)</i>
<i>createdTimestamp</i>	<i>Timestamp</i>	<i>Creation Timestamp (see Common Entity Fields)</i>
<i>modifiedTimestamp</i>	<i>Timestamp</i>	<i>Last Modified Timestamp (see Common Entity Fields)</i>
<i>deletedTimestamp</i>	<i>Timestamp</i>	<i>Deleted Timestamp (see Common Entity Fields)</i>
product	<b>Product Reference</b>	

productLocation	UuidName	
productLocationBin	UuidName	
minInventoryLevel	Decimal	
maxInventoryLevel	Decimal	
activationStatus	Enum	Text. ACTIVE or INACTIVE

### Contract: Product Promotional Price

Field	Type	Details
<i>Uuid</i>	UUID	Identity (unique, see Common Entity Fields)
<i>createdTimestamp</i>	Timestamp	Creation Timestamp (see Common Entity Fields)
<i>modifiedTimestamp</i>	Timestamp	Last Modified Timestamp (see Common Entity Fields)
<i>deletedTimestamp</i>	Timestamp	Deleted Timestamp (see Common Entity Fields)
product	<b>Product Reference</b>	
productPriceLevel	<b>UuidName</b>	
startDate	Date	
endDate	Date	
productPromotionalPricingCalculationType	Enum	Text. NONE, FIXED_RATE, PERCENTAGE_ABOVE_COST or PERCENTAGE_BELOW_SELL
fixedRateGstInclusive	Currency	Text. A fixed-precision number
fixedRateGstExclusive	Currency	Text. A fixed-precision number
percentage	Decimal	Text. A fixed-precision number. 100 mean 100%, 0.5 means 0.5%

### Contract: Product Quantity Break

Parameter	Type	Details
quantity	Decimal	
gstExclusiveAmount	Currency	Text. A fixed-precision number
gstInclusiveAmount	Currency	Text. A fixed-precision number

### Contract: Product Reference

Parameter	Type	Details
uuid	UUID	Product Identity (unique)
code	Text	Product Code (unique)
description	Text	Display name for the Product

### Contract: Product Sub Group

Parameter	Type	Details
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<i>uuid</i>	UUID	<i>Identity (unique, see Common Entity Fields)</i>
<i>createdTimestamp</i>	Timestamp	<i>Creation Timestamp (see Common Entity Fields)</i>
<i>modifiedTimestamp</i>	Timestamp	<i>Last Modified Timestamp (see Common Entity Fields)</i>
<i>deletedTimestamp</i>	Timestamp	<i>Deleted Timestamp (see Common Entity Fields)</i>
code	Text	Product Sub Group Code (unique)
name	Text	Product Sub Group Name
productGroup	<b>UuidName</b>	

### Contract: Product Type

Parameter	Type	Details
<i>uuid</i>	UUID	<i>Identity (unique, see Common Entity Fields)</i>
<i>createdTimestamp</i>	Timestamp	<i>Creation Timestamp (see Common Entity Fields)</i>
<i>modifiedTimestamp</i>	Timestamp	<i>Last Modified Timestamp (see Common Entity Fields)</i>
<i>deletedTimestamp</i>	Timestamp	<i>Deleted Timestamp (see Common Entity Fields)</i>
code	Text	Product Type Code (unique)
name	Text	Product Type Name

### Contract: Serial Number Reference

Parameter	Type	Details
uuid	UUID	Customer Identity (unique)
serialNumber	Text	Serial Number (unique)
expiryDate	Date	Expiry date

### Contract: Staff

Parameter	Type	Details
<i>uuid</i>	UUID	<i>Identity (unique, see Common Entity Fields)</i>
<i>createdTimestamp</i>	Timestamp	<i>Creation Timestamp (see Common Entity Fields)</i>
<i>modifiedTimestamp</i>	Timestamp	<i>Last Modified Timestamp (see Common Entity Fields)</i>
<i>deletedTimestamp</i>	Timestamp	<i>Deleted Timestamp (see Common Entity Fields)</i>
code	Text	Staff Code (unique)
title	<b>UuidName</b>	Title (e.g. Mr, Ms, Mrs, Dr)
givenName	Text	The staff member's first name
middleNames	Text	The staff member's middle name(s)
lastName	Text	The staff member's last name
email	Text	
phone	Text	

altPhone	Text	
mobile	Text	
fax	Text	
voip	Text	
address	<b>Address</b>	
defaultLocation	<b>UuidName</b>	
activationStatus	Enum	Text. ACTIVE or INACTIVE

### Contract: Supplier Purchase Order

Field	Type	Details
<i>uuid</i>	UUID	Identity (unique, see Common Entity Fields)
<i>createdTimestamp</i>	Timestamp	Creation Timestamp (see Common Entity Fields)
<i>modifiedTimestamp</i>	Timestamp	Last Modified Timestamp (see Common Entity Fields)
<i>deletedTimestamp</i>	Timestamp	Deleted Timestamp (see Common Entity Fields)
number	Text	Order Number
date	Date	
supplier	<b>Supplier Reference</b>	
supplierContact	<b>UuidName</b>	
email	Text	
phone	Text	
mobile	Text	
fax	Text	
billingName	Text	
billingAddress	<b>Address</b>	
deliveryName	Text	
deliveryAddress	<b>Address</b>	
deliveryMethod	<b>UuidName</b>	
location	<b>UuidName</b>	
orderedByStaff	<b>UuidName</b>	
requiredByDate	Date	
freightGstInclusiveAmount	Currency	Text. A fixed-precision number
freightGstExclusiveAmount	Currency	Text. A fixed-precision number
roundingAmount	Currency	Text. A fixed-precision number
gstAmount	Currency	Text. A fixed-precision number
gstExclusiveAmount	Currency	Text. A fixed-precision number
totalAmount	Currency	Text. A fixed-precision number
status	Enum	Text. Whether the order is POSTED or UNPOSTED
orderStatus	Enum	Text. Whether the order is a DRAFT or ORDERED
fillStatus	Enum	Text. Whether the order is NOT_FILLED, PART_FILLED or FILLED

invoiceStatus	Enum	Text. Whether the order is INVOICED, PART_INVOICED or NOT_INVOICED
completionStatus	Enum	Text. Whether the order is OPEN, CLOSED, CANCELLED or COMPLETED
lines	<b>Supplier Purchase Order Line</b>	A list of zero or more purchase order lines.

### Contract: Supplier Purchase Order Line

Field	Type	Details
uuid	UUID	Identity (unique, see Common Entity Fields)
createdTimestamp	Timestamp	Creation Timestamp (see Common Entity Fields)
modifiedTimestamp	Timestamp	Last Modified Timestamp (see Common Entity Fields)
deletedTimestamp	Timestamp	Deleted Timestamp (see Common Entity Fields)
lineType	Enum	Text. One of NOTE, SEPARATOR, GL_ACCOUNT or PRODUCT
glAccount	<b>GL Account Reference</b>	
product	<b>Product Reference</b>	
supplierProductCode	Text	
description	Text	
notes	Text	
gstRate	<b>UuidName</b>	
units	Text	
unitCostAmount	Currency	Text. A fixed-precision number
discountPercentage	Decimal	Text. A fixed-precision number. 100 means 100%, 0.5 means 0.5%
orderedQuantity	Decimal	Text. A fixed-precision number
outstandingQuantity	Decimal	Text. A fixed-precision number
receivedQuantity	Decimal	Text. A fixed-precision number
ratio	Decimal	Text. A fixed-precision number
orderedQuantityByRatio	Decimal	Text. A fixed-precision number
outstandingQuantityByRatio	Decimal	Text. A fixed-precision number
receivedQuantityByRatio	Decimal	Text. A fixed-precision number
totalAmount	Currency	Text. A fixed-precision number
gstAmount	Currency	Text. A fixed-precision number
gstExclusiveAmount	Currency	Text. A fixed-precision number
lineStatus	Enum	Text. Whether the order line is RECEIVED, OUT_OF_STOCK, END_OF_SUPPLY, CANCELLED, COMPLETE or RETURNED

### Contract: Supplier Reference

Parameter	Type	Details
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uuid	UUID	Supplier Identity (unique)
accountNumber	int	Supplier Account Number (unique)
name	Text	Display name for the Supplier

### Contract: UuidName

Parameter	Type	Details
uuid	UUID	Identity (unique)
name	Text	Display name

## Appendix 2: Search Contracts

A search returns a Page and, depending on the search endpoint, a page contains an array of entities, or an array of SearchResults (which themselves each contain an entity and HTML information about how the entity matched).

### Contract - Page (of SearchResult):

Parameter	Type	Details
limit	Integer	The limit that was used for this search
offset	Integer	The offset that was used for this search
values	<b>SearchResult</b>	A list of search results for the search
more	Boolean	'true' if there were more results to return. A subsequent search could retrieve a page with an offset, or a bigger page.

### Contract - SearchResult:

Parameter	Type	Details
value	<b>Entity</b>	The entity for this search result. The type of the entity depends on what is being searched for.
html	Object	An object whose fields contain HTML describing how that field matched the search terms.

## Appendix 3: Synchronisation Contracts

### Contract – Sync Cursor:

Parameter	Type	Details
timestamp	Timestamp	The most recently synced timestamps. Modifications newer than this timestamp have not yet been retrieved. Null if no synchronisation has ever been performed for this data-type.

### Contract – Page (of Sync Data):

Parameter	Type	Details
limit	Integer	The limit that was used for this sync
offset	Integer	The offset that was used for this sync
values	<b>SearchResult</b>	A list of search results for the synch. The type is specific to the data-type being synced.
more	Boolean	'true' if there were more results to return. A subsequent sync will return the next page of changes.

### Contract – Webhook:

Parameter	Type	Details
<i>uuid</i>	UUID	<i>Identity (unique, see Common Entity Fields)</i>
<i>createdTimestamp</i>	Timestamp	<i>Creation Timestamp (see Common Entity Fields)</i>
<i>modifiedTimestamp</i>	Timestamp	<i>Last Modified Timestamp (see Common Entity Fields)</i>
<i>deletedTimestamp</i>	Timestamp	<i>Deleted Timestamp (see Common Entity Fields)</i>
userUuid	UUID	
httpMethod	Enum	Text. GET, POST or PUT
uri	Text	
authorizationHeader	Text	
activationStatus	Enum	Text. ACTIVE or INACTIVE
noun	Enum	Text. PRODUCT, CUSTOMER, CUSTOMER_INVOICE
statistics	<b>Webhook Statistics</b>	

### Contract – Webhook Statistics:

Parameter	Type	Details
lastSuccessTimestamp	Timestamp	
lastFailureTimestamp	Timestamp	
wasLastCallSuccess	Boolean	
successOrFailureRunCount	Integer	
totalSuccessesCount	Integer	
totalFailuresCount	Integer	
lastFailureStatusCode	Integer	
lastFailureBody	Text	

## Appendix 4: Custom/Web Fields

Records which have values for custom-fields or website-fields return these as an object whose field-name is the custom-field code and the value depends on the type of the field.

The representation of each type of field is indicated below.

Custom Field Type	Value Type	Source
TEXT	Text	A single line of text
TEXT_AREA	Text	Text that is expected to allow line-breaks (using LF as the line-break)
LOCAL_DATE	Date	Date-Format : {year}-{mon}-{day}. e.g. 2022-07-18 (18th July 2022)
LOCAL_TIME	Time	Time-Format: {hour}:{minute}:{second} in 24-hour form e.g. 23:33:14 (14 seconds past 11:33pm)
INTEGER	Integer	
DECIMAL	Decimal	
EMAIL	Text	
PHONE	Text	
BOOLEAN	Boolean	
URL	Text	
OPTIONS	Text	The 'code' of the selected option is returned