



Retail API Release

Reference Guide

1 REVISION HISTORY

| Ver# | Reason for change | Job# / Version | Author | Date |
|----------|--|----------------|-------------------|----------|
| 1 - 91 | Archived details | | Emma Girschik | 07/05/24 |
| 91 - 120 | Archived details | | Jhona Hidalgo | 23/09/24 |
| 121 | Add in GET Products new request parameter for image URLs | 116467 v2021 | Thida Zaw | 16/12/20 |
| 122 | Add a new endpoint for getting valid freight options from Web Freight Options GIT | 116508 v2021 | Thida Zaw | 16/12/20 |
| 123 | Add in GET Orders new request parameter updatedAfter to only show orders with recent changes | 116468 v2021 | Thida Zaw | 16/12/20 |
| 124 | Products – Colours – add in clarity about Colour Type set up | | Emma Girschik | 12/05/21 |
| 125 | New Voucher end point error added (error code 5219) for enquiry or validation of voucher that has a different currency to the web store currency | v2021.2 | Emma Girschik | 17/05/21 |
| 126 | New error code for Order posting when have variable base currencies, nominating despatch warehouse and not using "omni channel" feature | 116664 v2021.2 | Emma Girschik | 21/06/21 |
| 127 | Add a new endpoint for getting future prices of products | 116740 v2021.2 | Thida Zaw | 20/07/21 |
| 128 | Add a new endpoint to return free stock (SOH) of all available styles filtered through the product export of the web store | 116791 v2021.2 | Thida Zaw | 20/07/21 |
| 129 | Allow posting of a "non returnable" status on new order items - show status in Web sales monitor screens and GET orders | 116830 v2021.2 | Thida Zaw | 20/07/21 |
| 130 | Allow passing a Partner Order Id via order POST and retrieve id via GET orders end points | v2021.3 | Nilusha Fernando | 10/09/21 |
| 131 | Add endpoints for redeeming and unreserving Coupons | 115907 v2021.3 | Nilusha Fernando | 06/10/21 |
| 132 | Edit to add in explanation about using Home phone instead of Mobile for contact so it shows up at POS | | Emma Girschik | 09/11/21 |
| 133 | Add Post Orders Need review flag / review notes for flagging orders for manual review before automated processes apply | 117219 v2022.1 | Emma Girschik | 06/12/21 |
| 134 | Add endpoints for retrieving person records updated after a specific timestamp | 117291 v2022.1 | San Mathew | 16/12/21 |
| 135 | Added two new fields <ThirdPartyCouponCode> and <ThirdPartyCouponSource> to Create New Order payload | 116837 v2022.2 | San Mathew | 18/03/22 |
| 136 | Clarity on email voucher subject field being mandatory when buying vouchers that will be emailed but not needed otherwise | | Emma Girschik | 31/03/22 |
| 137 | Add in extra gift voucher field for setting future date to send | 117077 v2022.3 | Emma Girschik | 19/04/22 |
| 138 | Add <SpendAmount> to RewardRedemption to validate minimum spend threshold | | | |
| 139 | Add details of new endpoint for orders to get only orders that have changed since a specified date / time – no need to specify person in request | | Emma Girschik | 07/10/22 |
| 140 | Remove "sandbox" details as this doesn't work – add in Postman Collection details instead | | Emma Girschik | 16/01/23 |
| 141 | Fix up Openpay information that was missed | | Emma Girschik | 18/01/23 |
| 142 | Added new Get request to coupon endpoint to retrieve all coupons | | Amala Mary Chacko | 21/02/23 |

| | | | | |
|-----|--|-----------------|-------------------|----------|
| 143 | Posting orders – company name updated to indicate it CAN be posted – fix document error Added in Product SKU cost element that can optionally be looked up if retail API is configured to expose this (application setting in <i>Deployment Console</i>) | | Emma Girschik | 29/03/23 |
| 144 | Updated products table to include product measures at SKU level Updated the Example Response at product endpoint to include product measures | | Amala Mary Chacko | 14/04/23 |
| 145 | Updated Post orders endpoint to include new element- customisation Updated the error messages under orders endpoint | | Amala Mary Chacko | 16/05/23 |
| 146 | Included details on new endpoints RewardsSimple | 118240 v2023.3 | Julie Foster | 20/06/23 |
| 147 | Included details on new endpoints VouchersSimple | 118241 v2023.3 | Julie Foster | 20/06/23 |
| 148 | Update ‘Retrieve Shipment Details’ call to include Carton details and tracking number | 118339 v2023.4 | Julie Foster | 18/08/23 |
| 149 | Update ‘Orders Updated Since’ call to include despatch location at detail level | 118493 v2023.4a | Julie Foster | 11/09/23 |
| 150 | Update link to Postman collection after SharePoint move | | Emma Girschik | 16/10/23 |
| 151 | Add clarity to GET Products using UpdatedAfter filter – explain that this will retrieve products that have NOT been modified but where their price markdown causes a change | | Emma Girschik | 12/4/24 |
| 152 | Add new endpoint details for Advanced Returns (Refundid) | 118637 v2024.2 | Julie Foster | 07/05/24 |
| 153 | Update products table and returns table to clarify mandatory fields | | Jhona Hidalgo | 23/09/24 |
| 154 | Include new ‘ExpiredRewardsSimple’ endpoint | 119327 V2025.1 | Julie Foster | 29/01/25 |
| 155 | Include details on order IDX fields | | Julie Foster | 25/02/25 |

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3 INTRODUCTION

The Apparel²¹ Retail Application Programming Interface (API) is an interface which provides interaction with the Apparel²¹ system for the purpose of online shopping and enquiries. It is used by website developers implementing E-tailing applications which interact with Apparel²¹ resources.

Use of this API requires the purchase of an Apparel²¹ Retail API license by the retailer. See [Further Assistance for contacting Apparel²¹](#).

1.1 AUDIENCE

This guide is intended for developers who are building web-enabled applications that retrieve information from and update details to Apparel²¹.

This guide will also be used by the retailer who is expected to be the first point of contact for enquiries from developers. Many of the data fields and values used in relation to the API will be dependent upon configurations specific to that retailer.

1.2 REQUIRED KNOWLEDGE AND SKILLS

Use of this guide assumes

- Familiarity with XML
- Basic understanding of web services
- Knowledge of a programming language for developing a web service
- An understanding of retail commerce systems and payment gateways
- Familiarity with the apparel industry.

1.3 ARCHITECTURE

The API is a web service using the REST (Representational State Transfer) architectural style. The following verbs are used

- GET
- PUT
- POST
- DELETE

The payload for all requests and responses is in XML.

1.4 API VERSIONS AND UPDATES

From time-to-time new versions of the API will be released to provide new or modified functionality. In the ‘details’ section for each resource, the “HTTP header Accept:Version_” column shows when an element was introduced to the payload. If a version other than 1 is required, it must be requested in the accept header of the call.

To check the Retail API version and payload version supported by an installed API, access the root page of the endpoint.

Retail API

You are connected to the Apparel21 Retail API (C) 2018

Retail API Release 2018.

Database Connection Details

Apparel21 Database Name INTL

Apparel21 Database Schema DOC

Database connection is available, and the database is version 2018

Apparel21 client DLL version is 2

Supported payload versions:

1.0

2.0

3.0

Minor version changes will be released for non-breaking changes such as introducing new elements or attributes. Developers should ignore new elements in the payload (if they are not required) and be aware that elements may not remain in a particular order although they will remain at the same level in the XML hierarchy.

Major version changes can also be applied to changed behaviour like the automatic removal of data if not supplied. i.e. In one version it may not be removed when not supplied but in another version it may be removed.

Major version changes have the potential to introduce changes which break the client's software. For example, if a new element (or attribute for an existing element) is required on submit payloads, like a PUT call, this would be a breaking change. All changes are documented in the *Retail API Change Log*.

Before installing a new version of the API, the business must be aware of the possible impact and discuss it with the website developer.

1.5 ASSUMPTIONS / CONSTRAINTS

- “Click and collect” and “Ship from store” – these features are NOT standard in Apparel21 – if you want to use these, there is additional configuration with associated fees. Contact Sales and CRM team to discuss further.
- A single currency applies to all transactions for a single “web store”
- In-store generated Credit Notes cannot be redeemed via *Retail API*
- If orders are posted with ‘pre-authorised’ payment details, it is not possible to update the payment details with the final payment transaction Id. Refunds for these transactions will not be able to be processed through Apparel²¹ *Mail Order* or in store using “authorisation” number.
- Each order can only be delivered to one person / location
- Shipping confirmation emails can be supplied by Apparel²¹ using Mailer module (optional)

- Apparel²¹ does supply gift voucher email. Gift voucher purchase email from web site NOT supported.
- Apparel²¹ generates customer email or SMS for pick up in store ‘ready to collect’ confirmation. Web site email NOT supported for this task.
- All elements posted must start with a capital letter. E.g. <Name> is valid but <name> is NOT valid
- Website can supply own order reference, but it MUST be unique for each new order.
- Email address must be unique within a brand or division. Person is identified in the Retail API via email address, brand/division combination.
- Click and collect (buy online pick up in store) and despatch from store orders must be FULLY paid at time of order and NOT at time of pick up.
- Orders containing gift vouchers MUST be fulfilled by the warehouse. They cannot be submitted as ‘Click and Collect’ or ‘Despatch from store’ orders.
- Online returns are supported if returned to warehouse – does not cater for “pick up in store” or “Despatch from store” returns. These returns should be done in store rather than online.

1.6 DEFINITION OF TERMS

| Acronym or Term | Description |
|-------------------------------|---|
| API | Application Programming Interface A set of routines, protocols, and tools for building software applications. |
| Customer | Same as online shopper. A consumer who directly buys goods from a seller in real-time. “Person” in Apparel21 Retail API. |
| Generic Interface Translation | This is a function provided in Apparel ²¹ to enhance the configuration options, allowing businesses to customise their system. |
| GIT | See Generic Interface Translation |
| Id | Id refers to a system generated unique number for an object. |
| Online shopper | A consumer who directly buys goods from a seller in real-time. |
| Person | A term used within Apparel ²¹ to store details for an online shopper. |
| Product | A garment (piece of clothing), or accessory (bag, shoe, etc). A product can have more than one colour and/or size but is still considered a single product record in Apparel ²¹ . |

| | |
|-----------------|---|
| Reference Code | Reference Codes are assigned to a Reference Group. These are customisable by client. E.g. Pants, Jackets, Skirts |
| Reference Group | Reference Groups in Apparel ²¹ are various attributes used to describe products and other business entities at a higher level. E.g. Product Type |
| Reference Type | See Reference Group. E.g. Product Type |
| Retailer | A business utilising the Apparel ²¹ application for its retail operations. |
| Shopping Cart | A virtual shopping basket where items are ‘stored’ while browsing an online catalogue. |
| SKU | Stock Keeping Unit. The lowest level of representation of a product to size and colour detail if applicable. |
| Style | See Product. |

1.7 FURTHER ASSISTANCE

If further information is required contact the Apparel²¹ Support Centre

Phone +613 8415 9393

Email Helpdesk@Apparel21.com

Website www.Apparel21.com

4 MINIMUM REQUIREMENTS

1.8 SYSTEMS

- 32- or 64-bit operating system
- Windows IIS v7 – configured to host MVC
- .Net 3.5 minimum - If installing .Net4 make sure .Net3.5 has been installed first
- Oracle client connectivity must be available to both the TEST and LIVE schemas

1.9 SERVICES

The Apparel²¹ *Retail API* must be installed and configured. Refer to separate documentation for the installation and configuration of the API.

Apparel²¹ consultants will liaise with their customers to establish the configurations for Apparel²¹. They will set up and configure ‘test’ and ‘live’ systems for use with the API and provide the information required for the API configuration settings.

5 POSTMAN COLLECTION

A Postman Collection is available for the Retail API.

Link to latest collection file here:

[Apparel21 Retail API.postman_collection.json](#)

This can be imported into Postman to create a collection.

6 OVERVIEW

The Apparel²¹ *Retail API* provides resources to support online shopping and enquiries.

The API caters for a single currency but allows ‘pricing customers’ to be set up to cater for shoppers that are not required to pay tax on goods purchased.

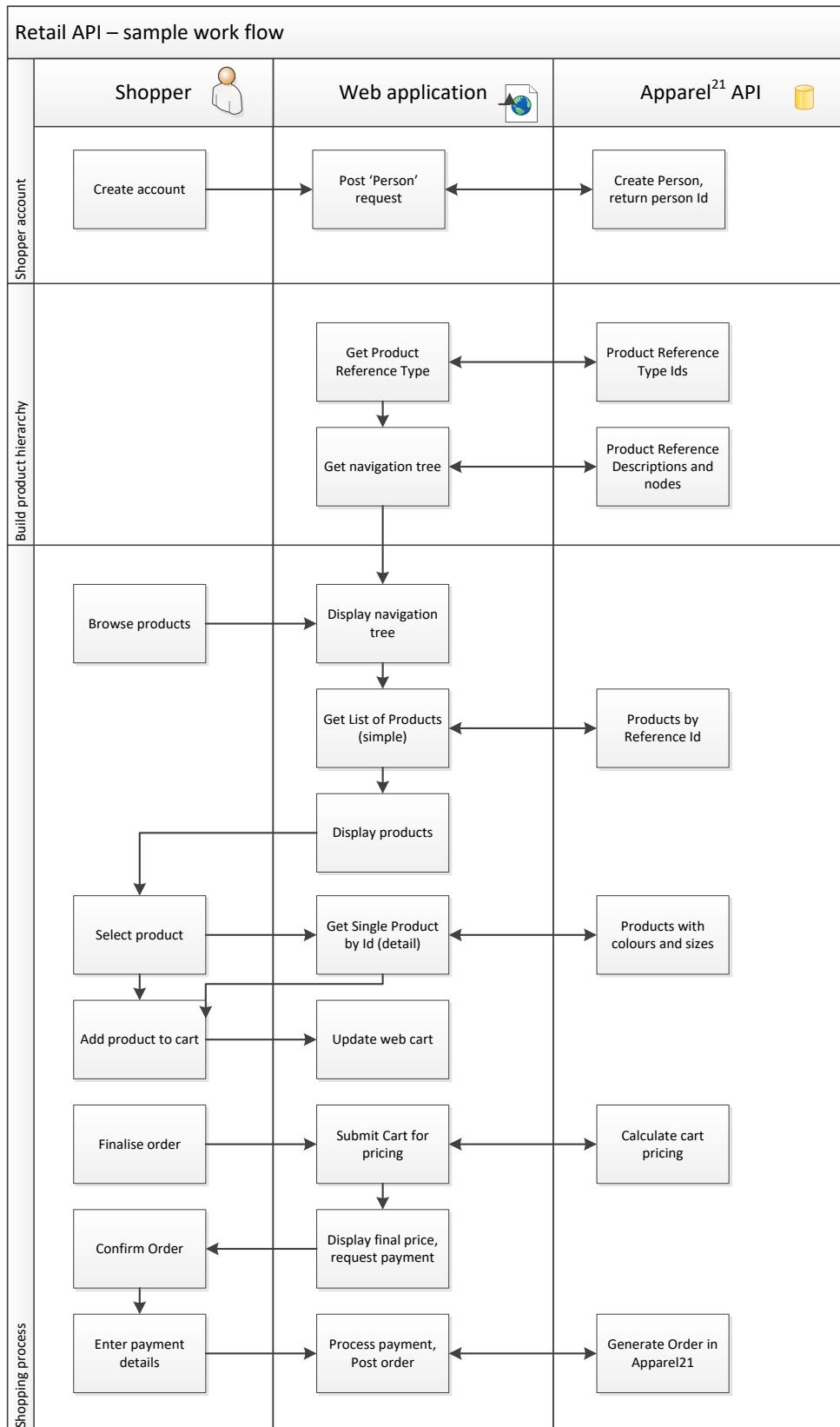
The included resources are:

- look up existing **shopper** details, including **loyalties**
- create new **shopper**
- navigation tree hierarchy - **product references** to display a navigation tree
- **product** information - **colour and size** information
- **stock** information by store
- **store** information. E.g. address details
- **shopping cart** to get latest prices, promotions and freight as defined in the Apparel²¹ system
- create new **orders** – shopper, products, payment details, despatch from warehouse, despatch from store or pick up in store
- create new **returns / exchange orders**
- **gift voucher** selling
- **gift voucher** redemption
- look up **sales history for shopper, including all store transactions as well as web sales**

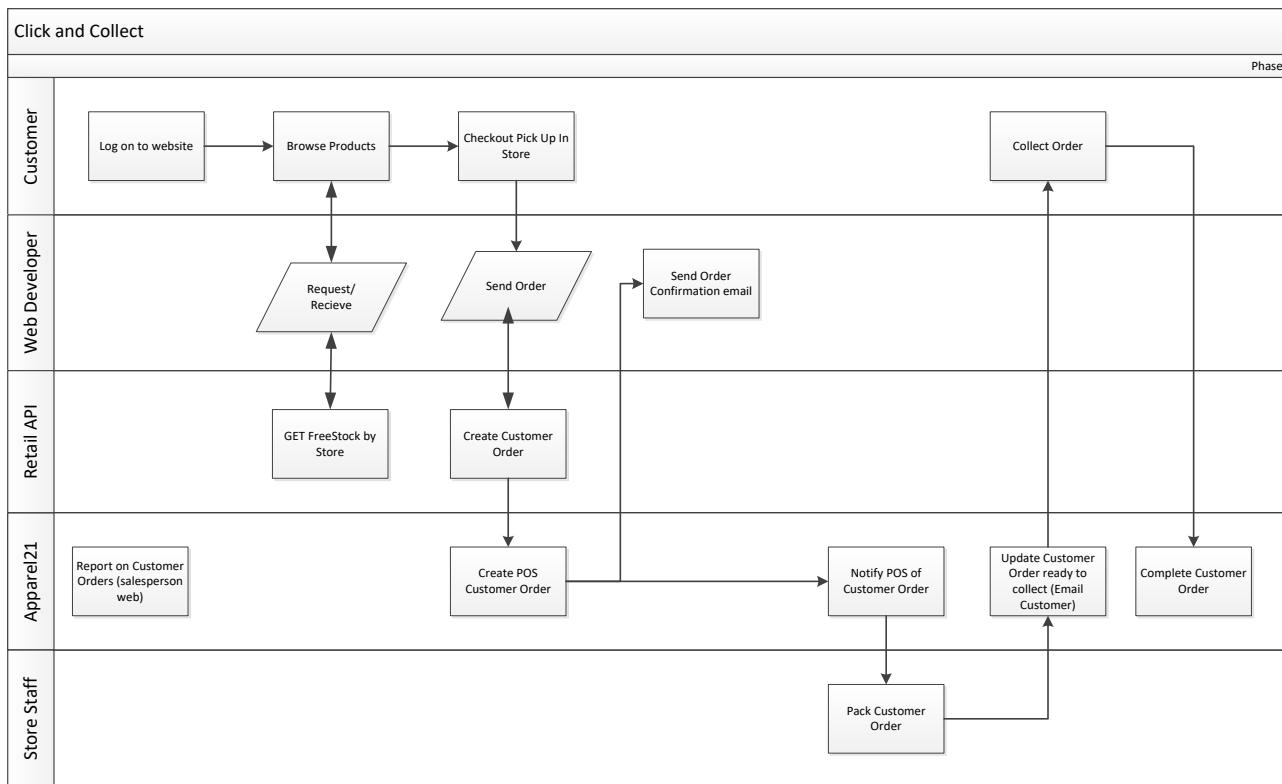
As Apparel²¹ is extensively customisable and configurable, terminology and descriptions will change depending on how clients have implemented Apparel²¹.

SAMPLE WORK FLOW

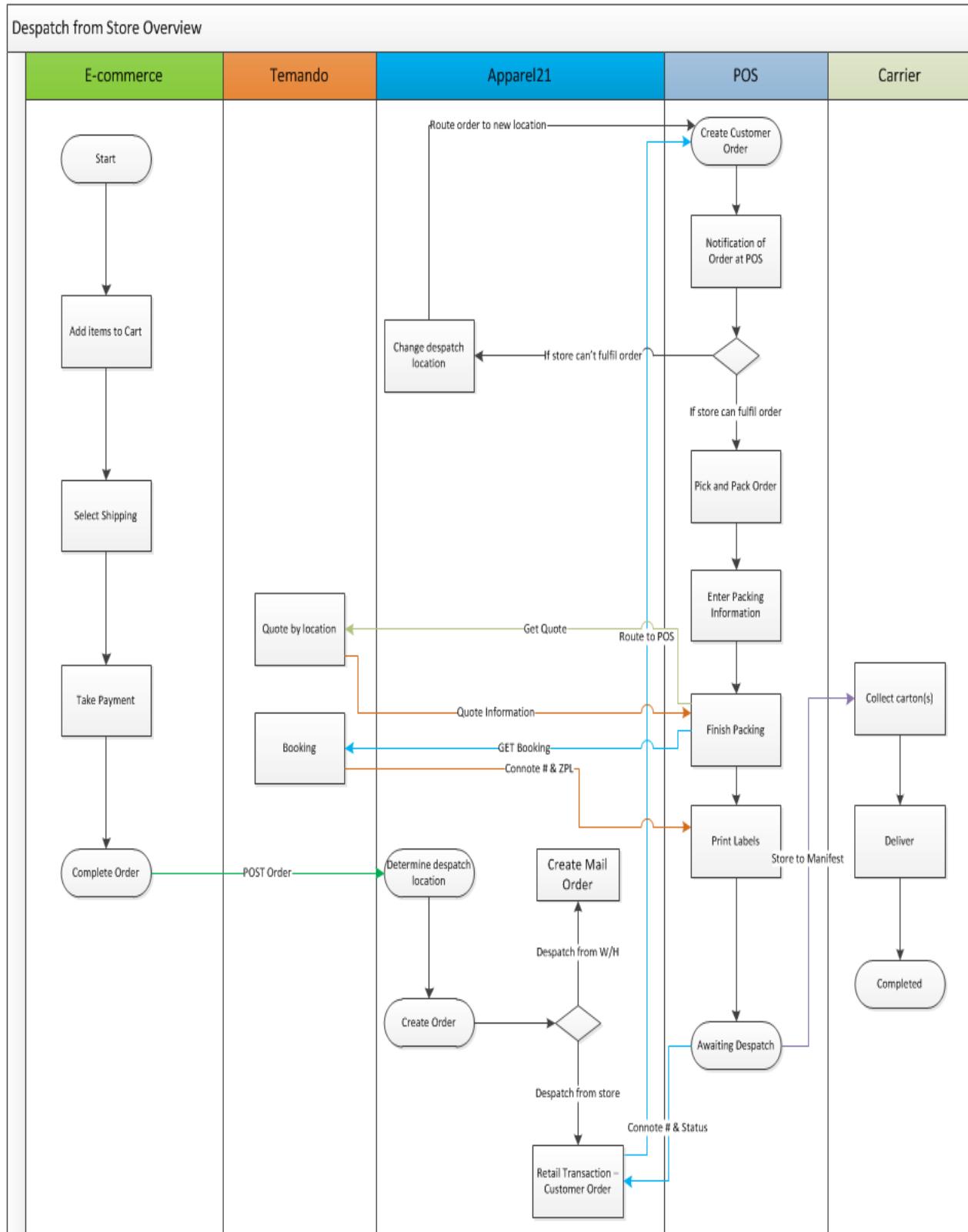
1.9.1 BUY ONLINE AND DESPATCH FROM WAREHOUSE



1.9.2 BUY ONLINE AND PICK UP IN STORE (CLICK AND COLLECT)



1.9.3 BUY ONLINE AND DESPATCH FROM STORE



1.10 USE OF IDS

Apparel²¹ product codes and other business elements can be modified. Therefore rather than using “product code” or “return reason code” as a method of communicating between the web and Apparel²¹ databases, it is preferable to communicate data using unchanging Ids.

Some items, such as products will have a Code AND an Id.

- Code - user friendly product code used by the business to represent the item. Used for verbal communications.
- Id – system generated unchanging unique number. Not user friendly.

Where the document refers to Id, it is referring to the number.

e.g Product id 12345 code DRES0001 and description STRIPED MAXI DRESS

1.11 API CALLS

A standard API call is formed by three parts

| Request part | Notes |
|--|---|
| 1. URL with parameters | Country code is mandatory parameter for all calls to the API. Country code controls pricing and tax rates. Country code maps to a setting in Apparel ²¹ back office. |
| 2. HTTP headers <ul style="list-style-type: none">• “Content-type:text/xml” for GET, POST and PUT• “Accept:version_x” | The payload version required should be included in the request header (Accept:version_2.0). If not supplied, only version 1 elements apply. |
| 3. XML payload body (for PUT and POST, not for GET) | |

Examples for Create a person

1 HTTP POST Request

`http://retailapi.apparel21.com/RetailAPI/Persons/?countryCode=AU`

2 HTTP POST Request HTTP header

3 Content-type: text/xml

4 Accept:version_2.0

5 HTTP POST Request XML payload body

```
<Person>
  <Title>Mr</Title>
  <Firstname>John</Firstname>
  <Surname>Hill</Surname>
  <Sex>M</Sex>
  <References>
    <Reference>
      <ReferenceTypeId>373</ReferenceTypeId>
      <Id />
    </Reference>
    <Reference>
      <ReferenceTypeId>1781</ReferenceTypeId>
      <Id />
    </Reference>
    <Reference>
      <ReferenceTypeId>1782</ReferenceTypeId>
      <Id />
    </Reference>
    <Reference>
      <ReferenceTypeId>1801</ReferenceTypeId>
      <Id />
    </Reference>
    <Reference>
      <ReferenceTypeId>1501</ReferenceTypeId>
      <Id />
    </Reference>
    <Reference>
      <ReferenceTypeId>27</ReferenceTypeId>
      <Id />
    </Reference>
  </References>
  <Addresses>
    <Billing>
      <ContactName />
      <AddressLine1>101 Cremorne St</AddressLine1>
      <AddressLine2 />
      <City>CREMORNE</City>
      <State>VIC</State>
      <Postcode>3121</Postcode>
      <Country>AUSTRALIA</Country>
    </Billing>
  </Addresses>
</Person>
```

7 REFERENCES

Reference Groups in Apparel²¹ are various attributes used to describe products and other business entities at a higher level.

Product Reference Groups are used to enable the grouping of products into similar categories and are able to be queried by the API. Product Reference details can be retrieved by the API to determine the order or hierarchy in which the products are displayed or grouped.

These are customisable by client. Examples of some product references are shown below.

The screenshot shows a software application for managing products. At the top, there's a menu bar with 'View', 'Utilities', 'Reports', 'Help', and a search bar labeled 'Fast find'. Below the menu is a toolbar with icons for file operations like Open, Save, Print, and a magnifying glass. The main area has tabs for 'Product', 'BOM & Costing', 'Development', 'Critical Path', 'Sales', 'Pur & Supplier', 'Production', 'Stock', and 'Product Audit'. A product card is displayed with 'Code: 10110T' and 'Description: T SHIRT'. It includes sections for 'Comments' (with a large text input field), 'Stocked' status, and checkboxes for 'Stocked', 'Concept', 'Incur Freight', and 'Extra'. There are also fields for 'Colours, no Sizes' and 'Dimensions' (set to 'Size Range XXS-XL'). To the right is a photograph of a light blue button-down shirt. To the far right, a table titled 'Reference' with columns 'Reference' and 'Code' is circled in red. The table lists several reference types and their corresponding codes:

| Reference | Code |
|-----------|-------------|
| BatchTp | ICED |
| Brand | Accessories |
| Depart | Shirts |
| Class | W05 |
| SubClass | CHINA |
| Season | FG |
| Origin | |
| Comp Grp | |

As depicted above, *Brand*, *Department*, *Class*, etc. are setup as **reference groups**. They are referred to in the API as **reference types**.

The corresponding codes *ICED*, *Accessories*, *Shirts* are **reference codes**.

For a client site, these reference groups can be selected to control navigation as shown in the section [Navigation Tree](#).

The screenshot shows a navigation tree on the left and a detailed view on the right. The navigation tree is enclosed in a red rounded rectangle and includes the following categories:

- Clearance
- Childrens
- DF Shoes
- Mens
- Spring2010
- Summer2010
- Unisex
- Winter2010
- Womens
- Dress
- Hooded Tops
- ASOS
- Knitwear
- Vest

The detailed view on the right shows the path 'Clearance > Womens > Hooded Tops' and the text 'Clearance, Womens, Hooded Tops, ASOS'. Below this, the word 'ASOS' is repeated. At the bottom of the navigation tree, there are buttons for 'Current Catalogue' and 'Mens', 'Unisex', 'Womens'.

Reference Groups are also used for other fields in Apparel²¹.

- Return reasons

The API has several resources to obtain Reference details depending on the information required.

| | |
|---------------------------------------|---|
| Reference Types | This resource will list all Reference Types in Apparel ²¹ . The payload can be used to obtain the Id of a Reference Type to enable the values for that reference Type to be listed. E.g. Product Department |
| References | This resource requires a Reference Type Id and optionally a Reference Code to be entered. The payload will list all valid Reference Types that are children of the Reference Type. E.g. Shoes, Jackets, Pants are References within “Product Department” reference type. |
| Product Reference Types | Lists the Reference Types specific to ‘Products’. E.g. “Product Department”, “Season” |
| Product Colour Reference Codes | Lists Product Colour Reference Codes. These are the references that exist at the product / colour level. These references are NOT available as part of the navigation tree or standard product extract due to payload size considerations. This extract is suited to those businesses that extract all information on a daily / weekly basis and organise the navigation with the web application. |

1.12 REFERENCE DETAILS

1.12.1 REFERENCE TYPES

| Field | Format | Max Length | Comment | Example | GET response | | HTTP Header Accept: Version — |
|-------------------------|---------|------------|---|---------|-----------------|------------|----------------------------------|
| | | | | | Reference Types | References | |
| ReferenceTypes | | | | | | | |
| ReferenceType | | | ReferenceType is a sub-element of ReferenceTypes | | | | |
| Id | Integer | 22 | This is the unique identifier of the reference type | 1221 | Yes | | 1.0 |
| Code | Alpha | 8 | Code for this reference type | Season | Yes | | 1.0 |
| Name | Alpha | 40 | Extended description of reference type | Season | Yes | | 1.0 |
| References | | | | | | | |
| ReferencesByType | | | ReferencesByType is a sub-element of References | | | | |
| ReferenceTypeId | Integer | 22 | The Id entered in the request parameter | 1221 | | Yes | 1.0 |
| ReferenceTypeCode | Alpha | 8 | Code for this reference type | Season | | Yes | 1.0 |
| ReferenceTypeName | Alpha | 40 | Extended description of reference type | Season | | Yes | 1.0 |
| Reference | | | Reference is a sub-element of References | | | | |
| ReferenceTypeld | Integer | 22 | The Id entered in the request parameter | 1221 | | Yes | 1.0 |
| Id | Integer | 22 | The Id entered in the request parameter | 4884 | | Yes | 1.0 |
| Code | Alpha | 8 | Code for this reference type | Autumn | | Yes | 1.0 |
| Name | Alpha | 40 | Extended description of reference type | Autumn | | Yes | 1.0 |

1.12.2 PRODUCT REFERENCE TYPES

| Field | Format | Max Length | Comment | Example | GET Response | HTTP Header Accept:Version_ |
|-----------------------|---------|------------|---|---------------|--------------|-----------------------------|
| Id | Integer | 22 | This Id describes which object the list of reference groups refers to. For products the value is 1. | 1 | Yes | 1.0 |
| Name | Alpha | 30 | Name of object | Style | Yes | 1.0 |
| ReferenceTypes | | | Reference Types is a sub-element of ProductReferenceTypes | | | |
| Sequence | Integer | 22 | Sequence of the reference type within the hierarchy | 1 | Yes | 1.0 |
| ReferenceTypeId | Integer | 22 | Unique Id for this reference type | 257 | Yes | 1.0 |
| Code | Alpha | 8 | Code for this reference type | Brand | Yes | 1.0 |
| Name | Alpha | 40 | Extended description of reference type | Product Brand | Yes | 1.0 |

1.12.3 PRODUCT COLOURS REFERENCES

| Field | Format | Max Length | Comment | Example | GET response | HTTP Header Accept:Version_ |
|---------------------------------|---------|------------|--|---------|--------------|-----------------------------|
| ProductColoursReferences | | | | | | |
| ProductColourReference | | | ProductColourReference is a sub-element of ProductColoursReferences | | | |
| ClrId | Integer | 22 | The Id of a colour that relates to a particular style | 1451 | Yes | 2.0 |
| RowNumber | Integer | 22 | Consecutive number of the row returned in the response | 28 | Yes | 2.0 |
| References | | | | | | |
| Reference | | | Reference is a sub-element of References | | | |
| ReferenceTypeId | Integer | 22 | Unique Id for the reference type set against the product colour | 1221 | Yes | 2.0 |
| Id | Alpha | 8 | The id assigned to the product colour reference type | 4885 | Yes | 2.0 |