EXCO Customer API

Summary

<table>
<thead>
<tr>
<th>Status</th>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIT Branch</td>
<td></td>
</tr>
<tr>
<td>API Product</td>
<td>Customer</td>
</tr>
<tr>
<td>Developer App</td>
<td></td>
</tr>
<tr>
<td>API Key</td>
<td></td>
</tr>
<tr>
<td>Related Targets</td>
<td>EXCO Salesforce Target</td>
</tr>
<tr>
<td>Base Path</td>
<td>/customer/v1/</td>
</tr>
<tr>
<td>Description</td>
<td>API for retrieving and updating customer information</td>
</tr>
<tr>
<td>Products</td>
<td>Edge</td>
</tr>
<tr>
<td>Config</td>
<td>EXCO Customer API - Configuration and Maintenance</td>
</tr>
</tbody>
</table>

Design

Caching

No caching requirements

Analytics

No analytics requirements

Traffic Management

Spike limits are to be applied to all traffic using the API
Traffic to be limited to 10 TPS per App

Logging

All traffic to be logged to loggly

Northbound Specification

EXCO Customer API - NB Spec

Mediation

EXCO Customer API - Mediation
Configuration and Maintenance
EXCO Customer API - Configuration and Maintenance

Development

EPICs

Tasks

<table>
<thead>
<tr>
<th>Key</th>
<th>Summary</th>
<th>T</th>
<th>Created</th>
<th>Updated</th>
<th>Due</th>
<th>Assignee</th>
<th>Reporter</th>
<th>P</th>
<th>Status</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No issues found</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Attachments

<table>
<thead>
<tr>
<th>File</th>
<th>Modified</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No files shared here yet.

Drag and drop upload or browse for files
EXCO Customer API - NB Spec

- Introduction
- Auth
- Resources
- Error Handling

Introduction
The objective of this document is to present northbound API specification (between API clients and Apigee) including methods, URLs, request/response body formats, etc.

Auth
API to be secured using OAuth (see EXCO Identity API) and passing a valid apikey

Resources

<table>
<thead>
<tr>
<th>Title</th>
<th>Bundle</th>
<th>Dependency</th>
<th>Functionality</th>
<th>Verb</th>
<th>Resource</th>
<th>Scope</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXCO Customer API - Update</td>
<td></td>
<td></td>
<td>Update a customer</td>
<td>PATCH / POST</td>
<td>/customers/{id}</td>
<td>customer.all</td>
<td>EXCO Salesforce Target</td>
</tr>
<tr>
<td>EXCO Customer API - Get</td>
<td></td>
<td>None</td>
<td>Get a customer</td>
<td>GET</td>
<td>/customers/{id}</td>
<td>customer.all</td>
<td>EXCO Salesforce Target</td>
</tr>
<tr>
<td>EXCO Customer API - Create</td>
<td></td>
<td></td>
<td>Create a customer</td>
<td>POST</td>
<td>/customers</td>
<td>customer.all</td>
<td>EXCO Salesforce Target</td>
</tr>
</tbody>
</table>

Error Handling

<table>
<thead>
<tr>
<th>Title</th>
<th>Resource</th>
<th>Target</th>
<th>Error Type</th>
<th>Response Code</th>
<th>Error Code</th>
<th>Error Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXCO Customer API - Not Found Error</td>
<td>*</td>
<td>EXCO Salesforce Target</td>
<td>Not Found</td>
<td>404</td>
<td>404.03.001</td>
<td>Returned from Salesforce</td>
</tr>
</tbody>
</table>
# EXCO Customer API - NB Resources

<table>
<thead>
<tr>
<th>Title</th>
<th>Bundle</th>
<th>Dependency</th>
<th>Functionality</th>
<th>Verb</th>
<th>Resource</th>
<th>Scope</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXCO Customer API - Update</td>
<td></td>
<td></td>
<td>Update a customer</td>
<td>PATCH / POST (method overloading)</td>
<td>/customers/{id}</td>
<td>customer.all</td>
<td>EXCO Salesforce</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>/customers/@me</td>
<td>customer.self</td>
<td>Target</td>
</tr>
<tr>
<td>EXCO Customer API - Get</td>
<td>None</td>
<td></td>
<td>Get a customer</td>
<td>GET</td>
<td>/customers/{id}</td>
<td>customer.all</td>
<td>EXCO Salesforce</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>/customers/@me</td>
<td>customer.self</td>
<td>Target</td>
</tr>
<tr>
<td>EXCO Customer API - Create</td>
<td></td>
<td></td>
<td>Create a customer</td>
<td>POST</td>
<td>/customers</td>
<td>customer.all</td>
<td>EXCO Salesforce</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Target</td>
</tr>
</tbody>
</table>
## EXCO Customer API - Create

### Create Customer

<table>
<thead>
<tr>
<th>API</th>
<th>EXCO Customer API</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proxy</td>
<td>customer-v1</td>
</tr>
<tr>
<td>Base Path</td>
<td>/customer/v1/</td>
</tr>
<tr>
<td>Dependency</td>
<td></td>
</tr>
<tr>
<td>Functionality</td>
<td>Create a customer</td>
</tr>
<tr>
<td>Verb</td>
<td>POST</td>
</tr>
<tr>
<td>Resource</td>
<td>/customers</td>
</tr>
<tr>
<td>Scope</td>
<td>customer.all</td>
</tr>
<tr>
<td>Target</td>
<td>EXCO Salesforce Target</td>
</tr>
</tbody>
</table>

### Request JSON
POST  https://dev-api.exco.com/customer/v2/customers?apikey=0QxYO8pzokzymA0KsNruHgGn9mbxtiFz
Authorization: Bearer
Content-Type: application/json

{  
  "sourceSystemCustomerId": "06000001",
  "salutation": "Mr",
  "firstName": "test",
  "lastName": "test",
  "email": "test.test@email.com",
  "birthDate": "",
  "gender": "M",
  "phoneNumber": "0123456789",
  "mobilePhone": "0123456789",
  "address1": "Address Line 1",
  "address2": "Address Line 2",
  "address3": "Address Line 3",
  "postcode": "Post Code",
  "city": "City",
  "country": "Country",
  "county": "County",
  "billingAddress1": "Address Line 1",
  "billingAddress2": "Address Line 2",
  "billingAddress3": "Address Line 3",
  "billingPostcode": "Post Code",
  "billingCity": "City",
  "billingCountry": "Country",
  "billingCounty": "County",
  "marketingOptIn": true,
  "thirdPartyOptIn": "false",
  "onlineAccountStatus": "Active",
  "householdSize": "4",
  "dietaryPreference": "",
  "voucherChannelPreference": "Online"|"In-store",
  "saveVouchers": true|false,
  "emailOptIn": true,
  "mailOptIn": true,
  "phoneOptIn": true,
  "smsOptIn": true,
  "researchOptIn": true
}

Response JSON

HTTP/1.1 201 Created
Access-Control-Allow-Headers: Authorization
Access-Control-Allow-Methods: GET,POST,PATCH,OPTIONS
Access-Control-Allow-Origin: *
Content-Type: application/json

{  
  "customerNumber" : "0010000001"
}
POST
https://dev-api.exco.com/customer/v2/customers?format=xml&apikey=0QxYO8pzokzymA0KsNruHgGn9mbxtiFz
Authorization: Bearer
Content-Type: application/xml

<customer>
  <sourceSystemCustomerId>06000001</sourceSystemCustomerId>
  <salutation>Mr</salutation>
  <firstName>test</firstName>
  <lastName>test</lastName>
  <email>test.test@email.com</email>
  <gender>M</gender>
  <phoneNumber>0123456789</phoneNumber>
  <mobilePhone>0123456789</mobilePhone>
  <address1>Address Line 1</address1>
  <address2>Address Line 2</address2>
  <address3>Address Line 3</address3>
  <postcode>Post Code</postcode>
  <city>City</city>
  <country>Country</country>
  <billingAddress1>Address Line 1</billingAddress1>
  <billingAddress2>Address Line 2</billingAddress2>
  <billingAddress3>Address Line 3</billingAddress3>
  <billingPostcode>Post Code</billingPostcode>
  <billingCity>City</billingCity>
  <billingCountry>Country</billingCountry>
  <marketingOptIn>true</marketingOptIn>
  <thirdPartyOptIn>false</thirdPartyOptIn>
  <onlineAccountStatus>Active</onlineAccountStatus>
  <householdSize>4</householdSize>
  <dietaryPreference/>
  <voucherChannelPreference>Online|In-store</voucherChannelPreference>
  <saveVouchers>true|false</saveVouchers>
  <emailOptIn>true</emailOptIn>
  <mailOptIn>true</mailOptIn>
  <phoneOptIn>true</phoneOptIn>
  <smsOptIn>true</smsOptIn>
  <researchOptIn>true</researchOptIn>
</customer>
HTTP/1.1 201 Created
Access-Control-Allow-Headers: Authorization
Access-Control-Allow-Methods: GET, POST, PATCH, OPTIONS
Access-Control-Allow-Origin: *
Content-Type: application/xml
<customer>
    <customerNumber>0010000001</customerNumber>
</customer>
EXCO Customer API - Get

Get Customer

<table>
<thead>
<tr>
<th>API</th>
<th>EXCO Customer API</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proxy</td>
<td>customer-v1</td>
</tr>
<tr>
<td>Base Path</td>
<td>/customer/v1/</td>
</tr>
<tr>
<td>Dependency</td>
<td>None</td>
</tr>
<tr>
<td>Functionality</td>
<td>Get a customer</td>
</tr>
<tr>
<td>Verb</td>
<td>GET</td>
</tr>
<tr>
<td>Resource</td>
<td>/customers/{id}</td>
</tr>
<tr>
<td></td>
<td>/customers/@me</td>
</tr>
<tr>
<td>Scope</td>
<td>customer.all</td>
</tr>
<tr>
<td></td>
<td>customer.self</td>
</tr>
<tr>
<td>Target</td>
<td>EXCO Salesforce Target</td>
</tr>
</tbody>
</table>

Request JSON

GET
https://dev-api.exco.com/customer/v1/customers/{id}?apikey=0QxYO8pzokzymA0KsNruHgGn9mbxtiFz
Authorization: Bearer

Response JSON
HTTP/1.1 200 OK
Content-Type: application/json

{
    "customerNumber": "0010000001",
    "sourceSystemCustomerId": "06000001",
    "loyaltyMember": true,
    "cardNumber": "9800000000000000001",
    "salutation": "Mr",
    "firstName": "Test",
    "lastName": "Tester",
    "email": "test.test@email.com",
    "birthDate": "",
    "gender": "M",
    "phoneNumber": "0123456789",
    "mobilePhone": "0123456789",
    "address1": "Address Line 1",
    "address2": "Address Line 2",
    "address3": "Address Line 3",
    "postcode": "Post Code",
    "city": "City",
    "country": "Country",
    "county": "County",
    "billingAddress1": "Address Line 1",
    "billingAddress2": "Address Line 2",
    "billingAddress3": "Address Line 3",
    "billingpostcode": "Post Code",
    "billingCity": "City",
    "billingCountry": "Country",
    "billingCounty": "County",
    "marketingOptIn": true,
    "thirdPartyOptIn": false,
    "onlineAccountStatus": "true",
    "householdSize": "",
    "dietaryPreference": "",
    "voucherChannelPreference": "Online"|"In-Store",
    "saveVouchers": true|false,
    "emailOptIn": true,
    "mailOptIn": true,
    "phoneOptIn": true,
    "smsOptIn": true,
    "researchOptIn": true
}
HTTP/1.1 200 OK
Content-Type: application/xml

<customer>
    <customerNumber>0010000001</customerNumber>
    <sourceSystemCustomerId>06000001</sourceSystemCustomerId>
    <loyaltyMember>true</loyaltyMember>
    <cardNumber>9800000000000000001</cardNumber>
    <salutation>Mr</salutation>
    <firstName>Test</firstName>
    <lastName>Tester</lastName>
    <email>test.test@email.com</email>
    <birthDate/>
    <gender>M</gender>
    <phoneNumber>0123456789</phoneNumber>
    <mobilePhone>0123456789</mobilePhone>
    <address1>Address Line 1</address1>
    <address2>Address Line 2</address2>
    <address3>Address Line 3</address3>
    <postcode>Post Code</postcode>
    <city>City</city>
    <country>Country</country>
    <county>County</county>
    <billingAddress1>Address Line 1</billingAddress1>
    <billingAddress2>Address Line 2</billingAddress2>
    <billingAddress3>Address Line 3</billingAddress3>
    <billingPostcode>Post Code</billingPostcode>
    <billingCity>City</billingCity>
    <billingCountry>Country</billingCountry>
    <marketingOptIn>true</marketingOptIn>
    <thirdPartyOptIn>false</thirdPartyOptIn>
    <onlineAccountStatus>true</onlineAccountStatus>
    <householdSize></householdSize>
    <dietaryPreference/>
    <voucherChannelPreference>Online|In-Store</voucherChannelPreference>
    <saveVouchers>true</saveVouchers>
    <emailOptIn>true</emailOptIn>
    <mailOptIn>true</mailOptIn>
    <phoneOptIn>true</phoneOptIn>
    <smsOptIn>true</smsOptIn>
    <researchOptIn>true</researchOptIn>
</customer>

* {id} in the URL can be replaced by @me if client is using OAuth2 and access token has customer.self scope. In this scenario, customer identifier will be extracted from the access token attributes.
EXCO Customer API - Update

Update Customer

<table>
<thead>
<tr>
<th>API</th>
<th>EXCO Customer API</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proxy</td>
<td>customer-v1</td>
</tr>
<tr>
<td>Base Path</td>
<td>/customer/v1/</td>
</tr>
<tr>
<td>Dependency</td>
<td></td>
</tr>
<tr>
<td>Functionality</td>
<td>Update a customer</td>
</tr>
<tr>
<td>Verb</td>
<td>PATCH / POST (method overloading)</td>
</tr>
<tr>
<td>Resource</td>
<td>/customers/{id}</td>
</tr>
<tr>
<td></td>
<td>/customers/@me</td>
</tr>
<tr>
<td>Scope</td>
<td>customer.all</td>
</tr>
<tr>
<td></td>
<td>customer.self</td>
</tr>
<tr>
<td>Target</td>
<td>EXCO Salesforce Target</td>
</tr>
</tbody>
</table>

**Basic Authentication**

Request JSON
PATCH
https://dev-api.exco.com/customer/v1/customers/{id}?apikey=0QxYO8pzokzymA0KsNruHgGn9mbxtiFz
Authorization: Bearer
Content-Type: application/json

{
    "salutation": "Mr",
    "firstName": "test",
    "lastName": "test",
    "email": "test.test@email.com",
    "birthDate": "",
    "gender": "M",
    "phoneNumber": "0123456789",
    "mobilePhone": "0123456789",
    "address1": "Address Line 1",
    "address2": "Address Line 2",
    "address3": "Address Line 3",
    "postcode": "Post Code",
    "city": "City",
    "country": "Country",
    "county": "County",
    "billingAddress1": "Address Line 1",
    "billingAddress2": "Address Line 2",
    "billingAddress3": "Address Line 3",
    "billingPostcode": "Post Code",
    "billingCity": "City",
    "billingCountry": "Country",
    "billingCounty": "County",
    "marketingOptIn": true,
    "thirdPartyOptIn": false,
    "onlineAccountStatus": true,
    "householdSize": "",
    "dietaryPreference": "",
    "voucherChannelPreference": "Online"|"In-store",
    "saveVouchers": true|false,
    "emailOptIn": true,
    "mailOptIn": true,
    "phoneOptIn": true,
    "smsOptIn": true,
    "researchOptIn": true
}
PATCH
https://dev-api.exco.com/customer/v1/customers/{id}?format=xml&apikey=0QxYO8pzokzymA0KsNruHgn9mbxkiFz
Authorization: Bearer
Content-Type: application/xml

<customer>
    <salutation>Mr</salutation>
    <firstName>test</firstName>
    <lastName>test</lastName>
    <email>test.test@email.com</email>
    <birthDate/>
    <gender>M</gender>
    <phoneNumber>0123456789</phoneNumber>
    <mobilePhone>0123456789</mobilePhone>
    <address1>Address Line 1</address1>
    <address2>Address Line 2</address2>
    <address3>Address Line 3</address3>
    <postcode>Post Code</postcode>
    <city>City</city>
    <country>Country</country>
    <billingAddress1>Address Line 1</billingAddress1>
    <billingAddress2>Address Line 2</billingAddress2>
    <billingAddress3>Address Line 3</billingAddress3>
    <billingPostcode>Post Code</billingPostcode>
    <billingCity>City</billingCity>
    <billingCountry>Country</billingCountry>
    <marketingOptIn>true</marketingOptIn>
    <thirdPartyOptIn>false</thirdPartyOptIn>
    <onlineAccountStatus>true</onlineAccountStatus>
    <householdSize></householdSize>
    <dietaryPreference/>
    <voucherChannelPreference>Online|In-store</voucherChannelPreference>
    <saveVouchers>true</saveVouchers>
    <emailOptIn>true</emailOptIn>
    <mailOptIn>true</mailOptIn>
    <phoneOptIn>true</phoneOptIn>
    <smsOptIn>true</smsOptIn>
    <researchOptIn>true</researchOptIn>
</customer>

- `{id}` in the URL can be replaced by `@me` if the client is using OAuth2 and access token has customer.self scope. In this scenario, customer identifier will be extracted from the access token attributes.
- Request supports method overriding to allow clients to use POST method with a query string parameter "method" set to "PATCH":

POST /customers/{id}?method=PATCH

Response
HTTP/1.1 200 OK
Access-Control-Allow-Headers: Authorization
Access-Control-Allow-Methods: GET, POST, PATCH, OPTIONS
Access-Control-Allow-Origin: *
Content-Length: 0
Connection: keep-alive
## EXCO Customer API - NB Errors

### Add an error response

<table>
<thead>
<tr>
<th>Title</th>
<th>Resource</th>
<th>Target</th>
<th>Error Type</th>
<th>Response Code</th>
<th>Error Code</th>
<th>Error Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXCO Customer API - Not Found Error</td>
<td>*</td>
<td>EXCO Salesforce Target</td>
<td>Not Found</td>
<td>404</td>
<td>404.03.001</td>
<td>Returned from Salesforce</td>
</tr>
</tbody>
</table>
EXCO Customer API - Not Found Error

<table>
<thead>
<tr>
<th>API</th>
<th>EXCO Customer API</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource</td>
<td>*</td>
</tr>
<tr>
<td>Target</td>
<td>EXCO Salesforce Target</td>
</tr>
<tr>
<td>Error Type</td>
<td>Not Found</td>
</tr>
<tr>
<td>Response Code</td>
<td>404</td>
</tr>
<tr>
<td>Error Code</td>
<td>404.03.001</td>
</tr>
<tr>
<td>Error Message</td>
<td>Returned from Salesforce</td>
</tr>
<tr>
<td>Example</td>
<td>The requested resource does not exist</td>
</tr>
</tbody>
</table>

**Response JSON**

```json
{
    "httpResponseCode" : 404,
    "errorCode" : "404.03.001",
    "errorMessage" : "This is an error message",
}
```
EXCO Customer API - Mediation

- Target Security
- Flows
- Mapping
  - NB -> Target
  - Target -> NB

Target Security

Connection to target systems to be secured using mutual SSL and IP whitelisting of the Apigee message processors

Flows

<<insert web sequence diagram(s) here>>

Mapping

Target systems expect requests and provide responses as SOAP messages and all calls must be mapped to and from the SOAP format specified by the target system

NB -> Target

<<insert mapping information here>>

Target -> NB

<<insert mapping information here>>
EXCO Customer API - Configuration and Maintenance

- **KeyValueMaps**
  - e.g. `https://api.enterprise.apigee.com/v1/o/exco/environments/dev/keyvaluemaps/customer-api-configuration`

```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<KeyValueMap name="customer-api-configuration">
  <Entry name="spike.app">-1ps</Entry>
</KeyValueMap>
```

- **Caches**
  - e.g. `https://api.enterprise.apigee.com/v1/o/exco/environments/dev/caches/customer-api-configuration`

```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<Cache name="customer-api-configuration">
  <ExpirySettings>
    <TimeoutInSec>86400</TimeoutInSec>
  </ExpirySettings>
  <Description>Cache resource to store API configuration</Description>
  <DiskSizeInMB>0</DiskSizeInMB>
  <Distributed>true</Distributed>
  <InMemorySizeInKB>0</InMemorySizeInKB>
  <MaxElementsInMemory>1</MaxElementsInMemory>
  <MaxElementsOnDisk>0</MaxElementsOnDisk>
  <SkipCacheIfElementSizeInKBExceeds>1024</SkipCacheIfElementSizeInKBExceeds>
  <OverflowToDisk>false</OverflowToDisk>
  <Persistent>false</Persistent>
</Cache>
```

- **Target Servers**
  - e.g. `https://api.enterprise.apigee.com/v1/o/exco/environments/dev/targetservers/salesforce`

```xml
<TargetServer name="salesforce">
  <IsEnabled>true</IsEnabled>
  <Host>login.salesforce.com</Host>
  <Port>443</Port>
  <SSLInfo>
    <Ciphers/>
    <ClientAuthEnabled>false</ClientAuthEnabled>
    <Enabled>true</Enabled>
    <IgnoreValidationErrors>false</IgnoreValidationErrors>
    <Protocols/>
  </SSLInfo>
</TargetServer>
```