

1. EXCO Customer API	2
1.1 EXCO Customer API - NB Spec	4
1.1.1 EXCO Customer API - NB Resources	5
1.1.1.1 EXCO Customer API - Create	6
1.1.1.2 EXCO Customer API - Get	10
1.1.1.3 EXCO Customer API - Update	13
1.1.2 EXCO Customer API - NB Errors	17
1.1.2.1 EXCO Customer API - Not Found Error	18
1.2 EXCO Customer API - Mediation	19
1.3 EXCO Customer API - Configuration and Maintenance	20

EXCO Customer API

Summary

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

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

 **EXCO-2** - EXCO Customer API TO DO

Tasks

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
-----	---------	---	---------	---------	-----	----------	----------	---	--------	------------

No issues found

Attachments

File

Modified ▲

No files shared here yet.

Drag and drop to 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

Add a resource

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

Error Handling

Add an error response

Title	Resource	Target	Error Type	Response Code	Error Code	Error Message
EXCO Customer API - Not Found Error	*	EXCO Salesforce Target	Not Found	404	404.03.001	Returned from Salesforce

EXCO Customer API - NB Resources

Add a resource

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

EXCO Customer API - Create

Create Customer

API	EXCO Customer API
Proxy	customer-v1
Base Path	/customer/v1/
Dependency	
Functionality	Create a customer
Verb	POST
Resource	/customers
Scope	customer.all
Target	EXCO Salesforce Target

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"
}
```

Request XML

```
POST
https://dev-api.exco.com/customer/v2/customers?format=xml&apikey=0QxY08pzokzymA0KsNruHgGn9mbxtiFz
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>
  <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>
  <billingCounty>County</billingCounty>
  <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>
```

Response XML


```
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

API	EXCO Customer API
Proxy	customer-v1
Base Path	/customer/v1/
Dependency	None
Functionality	Get a customer
Verb	GET
Resource	/customers/{id} /customers/@me
Scope	customer.all customer.self
Target	EXCO Salesforce Target

Request JSON

```
GET
https://dev-api.exco.com/customer/v1/customers/{id}?apikey=0QxYO8pzokzymA0KsNruHgGn9mb
xtiFz
Authorization: Bearer
```

Response JSON

Expand

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

source

```
{
  "customerNumber": "0010000001",
  "sourceSystemCustomerId": "06000001",
  "loyaltyMember": true,
  "cardNumber": "98000000000000000001",
  "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
}
```

Request XML

```
GET
https://dev-api.exco.com/customer/v2/customers/{id}?format=xml&apikey=0QxY08pzokzymA0K
sNruHgGn9mbxtiFz
Authorization: Bearer
```

Response XML

Expand

HTTP/1.1 200 OK
Content-Type: application/xml

source

```
<customer>
  <customerNumber>0010000001</customerNumber>
  <sourceSystemCustomerId>06000001</sourceSystemCustomerId>
  <loyaltyMember>true</loyaltyMember>
  <cardNumber>980000000000000001</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>
  <billingCounty>County</billingCounty>
  <marketingOptIn>true</marketingOptIn>
  <thirdPartyOptIn>false</thirdPartyOptIn>
  <onlineAccountStatus>true</onlineAccountStatus>
  <householdSize></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>
```

- {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

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

Basic Authentication

Request JSON

```
PATCH
https://dev-api.exco.com/customer/v1/customers/{id}?apikey=0QxYO8pzokzymA0KsNruHgGn9mb
xtiFz
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
}
```

Request XML

```
PATCH
https://dev-api.exco.com/customer/v1/customers/{id}?format=xml&apikey=0QxY08pzokzymA0K
sNruHgGn9mbxtiFz
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>
  <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>
  <billingCounty>County</billingCounty>
  <marketingOptIn>true</marketingOptIn>
  <thirdPartyOptIn>false</thirdPartyOptIn>
  <onlineAccountStatus>true</onlineAccountStatus>
  <householdSize></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>
```

- {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.
- 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

Title	Resource	Target	Error Type	Response Code	Error Code	Error Message
EXCO Customer API - Not Found Error	*	EXCO Salesforce Target	Not Found	404	404.03.001	Returned from Salesforce

EXCO Customer API - Not Found Error

API	EXCO Customer API
Resource	*
Target	EXCO Salesforce Target
Error Type	Not Found
Response Code	404
Error Code	404.03.001
Error Message	Returned from Salesforce
Example	The requested resource does not exist

Response JSON

```
{
  "httpResponseCode" : 404,
  "errorCode" : "404.03.001",
  "errorMessage" : "This is an error message",
  "errorMoreInfo" : "http://developer.exco.com/docs/errors"
}
```

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](#)
- [Caches](#)
- [Target Servers](#)

KeyValueMaps

e.g. <https://api.enterprise.apigee.com/v1/o/exco/environments/dev/keyvaluemaps/customer-api-configuration>

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

Caches

e.g. <https://api.enterprise.apigee.com/v1/o/exco/environments/dev/caches/customer-api-configuration>

```
<?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>

```
<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>
```