

Travel: Travel Profile API

Travel Service Guide

Last Revised: April 8, 2021

Applies to Concur Travel:

- Professional/Premium edition
 - TMC Partners
 - Direct Customers

- Standard edition
 - TMC Partners
 - Direct Customers

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Revision History

Date	Revision Notes/Comments
January 14, 2022	Updated the copyright year; no other changes; cover date not updated
April 08, 2021	Added ability to filter profiles by ConfigID Added canonical values for LanguagePreference field Added note to <i>GET Profile Information</i> section.
April 22, 2020	Initial publication

Travel Profile API

Section 1: IMPORTANT – About this Guide

Be aware of the following:

- **Infinite variables:** Certain scenarios have an infinite number of variables or extremely unusual circumstances, like rare cancellation or refund situations. So, not all scenarios can be presented in this guide. Also, certain processes may be influenced by third- or fourth-party providers. In some cases, you must contact the provider directly.
- **User interface, fees, rates, schedules:** When other providers change their user interface (for example, web site) or their fees/rates/schedules, they are under no obligation to make SAP Concur aware of those changes. If a screen sample in this guide is outdated because of a change made by a provider, we will update that screen sample when we become aware of the change and at our earliest convenience.
- **Permissions:** A company's admin may or may not have the correct permissions to manage the feature described in this guide. If an admin needs to manage this feature and does not have the proper permissions, they should contact the company's SAP Concur administrator.

Also, the admin should be aware that some of the tasks described in this guide cannot be completed by the company. In this case, the client must contact their TMC (if a TMC provides their support) or SAP Concur (if SAP Concur provides their support).

Section 2: Purpose of Scope Document

The purpose of this document is to outline the details of our Travel Profile and Form of Payment API version 2.0 and 2.1. The document provides samples and descriptions for partner application development teams. This is a living document that will be updated regularly during the rollout of Travel Profile v2.0, Form of Payment, Profile Event Notification, and Authentication APIs.

Section 3: Travel Profile v2.0 - Purpose and Description

This endpoint provides travel profile information for a specified SAP Concur traveler. It replaces the previous version of travel profile synchronization known as XML Profile Sync or XML Sync. While XML Profile sync is internal to the Concur Travel offering, the travel profile APIs are publicly exposed and allows RESTful developed applications to pull and post information such as the traveler's identity, contact information, rate preferences, discount codes by travel type, as well as custom fields. The 2.0 version of the API was originally released in late 2016. The updated 2.1 version of the API, specific to TMCs, was released in December 2019.

Section 4: Target Audience

Primary Audience:

This document is intended for SAP Concur TMC Partners who plan to develop an SAP Concur Platform Certified application to support **Travel Profile v2 API**, a replacement to Concur Travel's XML Profile Sync and the Travel Profile v1.0 API.

Secondary Audience:

This document is also intended for SAP Concur customers and 3rd party developers who wish to develop an internal-only application or vendor application to support SAP Concur Platform's **Travel Profile v2 API**, a replacement to XML Profile Sync and the Travel Profile v1.0 API.

Internally developed applications do not require Platform Certification, however, most the specifications in this document should be considered as "best practices" for SAP Concur application development and support.

Third party-developed applications branded for usage by agencies must be certified.

Section 5: Professional and Standard Editions

This guide discusses both Professional and Standard Travel. In those cases where a feature applies to one but not the other, that difference is noted.

Section 6: Prerequisites

Anyone reading this document should have some exposure to core SAP Concur applications and services such as Concur Travel and Concur Travel administration. The following list of technical knowledge and skills will aid in the development and certification of your application.

- Business travel industry experience
- Concur Travel and Expense
- Concur Travel system administration / agency configuration administration
- Traveler profile / GDS Profiles / SAP Concur XML Profile Sync
- RESTful API / XML development, OAuth 2.0, data structures
- Browse <https://developer.concur.com>, especially our [Travel Profile v2](#) and [App Certification](#) pages.

Section 7: Objectives

After reviewing this document, readers should have a better understanding of the following:

- How to develop SAP Concur connectors (applications) through the SAP Concur Platform
- Support the Travel Profile v2.0 and Form of Payment API specific to an agency and active agency configuration
- Create a traveler's profile
- Retrieve a traveler's profile
- Update a traveler's profile
- Retrieve a traveler's form of payment
- Create / Update a traveler's form of payment
- Receive notifications of traveler profile changes (optional)
- SAP Concur Correlation_ID
- Support Travel Profile v2.0 error conditions & messages
- Prepare for application certification
- Prepare for application enablement and deployment

Section 8: Development Environment

The following is a general list of items necessary for application development:

- Professional Edition instance of Concur Travel or Concur Travel & Expense.
- Default travel configuration.
- Default agency configuration with SAP Concur-Sabre PCC.
- Sandboxes may not have Concur Travel booking capabilities. It is available upon request.
- To POST a Travel Profile and Form of Payment within a company, that company's instance must be "activated".
- To access corporate discounts the application must be registered in our Travel Supplier system.
- A default "development" app with a unique Client ID, Client Secret and applicable scopes. Log a case to request additional applications or scopes.
- Sandbox Admin credentials with Demo / Dev user credentials. Log a case to request additional permissions or users.

- Access the SAP Concur Developer Center at <https://developer.concur.com/api-reference/> for the latest information on the following:
 - ♦ [Travel Profile v2 - Resource](#)
 - ♦ [Company Level Authentication](#)
- Optional: Access to RESTful development tool such as POSTMAN or SOAPUI to review JSON/XML requests.

NOTE: To retrieve, create, or update a traveler's profile with program loyalty information and form of payment information, your application must be registered in our travel supplier system. This is an SAP Concur managed procedure and must be requested.

To retrieve, create or update a traveler's profile and form of payment within a specific agency and agency configuration, you must register your agency Company ID with your Application ID. This is an SAP Concur managed procedure and will be required before proceeding with development.

Section 9: Travel Access Control Service, February 2020

App Center Partners, Triplink Suppliers, and SAP Concur clients are able to use the Travel Profile API v2.0 as is. Their applications will not be affected, and their endpoint destinations remain the same. Partner applications will be allowed to use their user level to retrieve profiles for an individual or company-level OAuth tokens to retrieve profiles an entire enterprise organization regardless of agency service affiliation or number of agency configurations.

For TMCs using Travel Profile API v2.0, a new access control service has been built into the existing Travel Profile and Form of Payment web service. Data accepted and returned by the API is now controlled by a service that monitors all active Agency IDs and their respective Travel Configuration IDs. Agency applications expecting travel profile and form of payment data from travelers associated with their own agencies can now be received or returned by Agency. Travel profile and form of payment data associated with a different agency will NOT be received or returned. To utilize this security feature, an agency UUID **must** be specified in the properties (profile) of the agency's application ID (Client_ID).

Please refer to the table below:

	Apps For Me / User level tokens from ZZZ Company	Apps for My Business / Company level token from ZZZ Company	Agency A's company level token from ZZZ Company	Agency B's company level token from ZZZ Company
Travel Profile Summary	Unrestricted Agency A and Agency B data accessible	Unrestricted Agency A and Agency B data accessible	Agency A profiles only	Agency B profiles only
Travel Profile POST	Unrestricted Agency A and Agency B data accessible	Unrestricted Agency A and Agency B data accessible	Agency A profile only	Agency B profile only
Travel Profile GET	Unrestricted Agency A and Agency B data accessible	Unrestricted Agency A and Agency B data accessible	Agency A profiles only	Agency B profiles only
Form of Payment POST	Unrestricted Agency A and Agency B data accessible	Unrestricted Agency A and Agency B data accessible	Agency A FOP only	Agency B FOP only
Form of Payment GET	Unrestricted Agency A and Agency B data accessible	Unrestricted Agency A and Agency B data accessible	Agency A FOP only	Agency B FOP only

Section 10: Application Request Procedure

Please use the following list when making an application request:

1. NEW application: A Super Site ID must be provided upon application request. The site ID / super site ID is commonly referred to as CliqID. The Super Site ID is the CliqID of the managing TMC site.
2. Please provide a list of active companies (CliqIDs) and active travel configuration IDs if possible.
3. Please provide a list of active companies from affiliate and/or wholly owned subsidiary agencies.
4. Please provide site IDs of any additional super-sites.
5. Please provide a list of active companies that are hosted in our EU data center.

6. SAP Concur's application management team will create your application, along with the necessary application scopes, grant types and permissions. Your site ID, in UUID format, will be incorporated into that application's profile. This is a managed request process, internal only to SAP Concur.
7. Travel Solutions / Platform Partner Enablement team will securely provide an Application ID (commonly known as client_id) and Secret (client_secret). We will provide at least one development app ID (DEV) and reserve a production app ID (PROD) upon completion of application certification.
8. If necessary, we can create and reserve applications for migration purposes – as companies transition from Agency A to Agency B, we will allow specific agency applications permissions to access all company data until the migration is complete.
9. Agencies may continue to work with Travel Solutions / Platform Partner Enablement to obtain request tokens in bulk.
10. Agencies certified to use access controlled applications may now use the designated application's deeplink to connect companies to agency applications. This connection process has not changed – access controls are managed at the application level, not at the OAuth token or connection level.

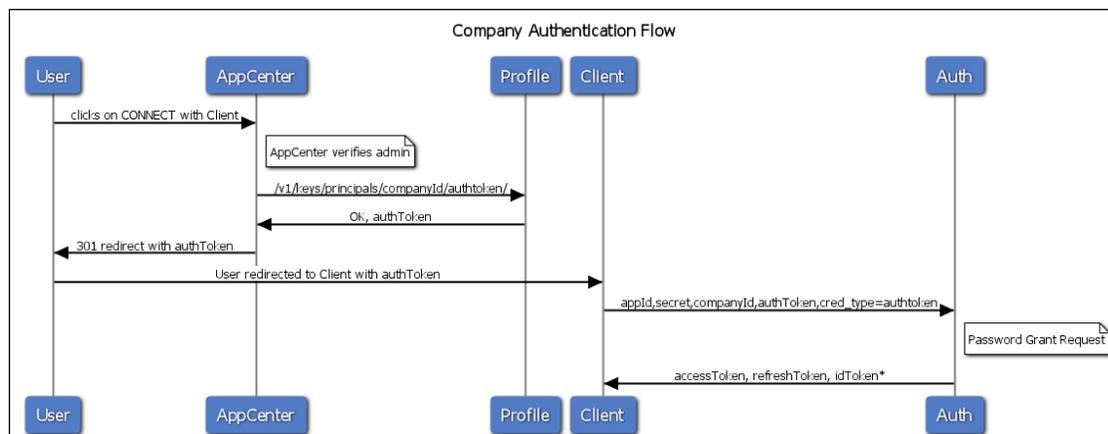
Section 11: Migrating to an Access Controlled Application

1. Until further notice, the process for supporting access controls is the same as the previous list of steps. We will require the creation of NEW applications as opposed to updating existing applications.
2. Until further notice, we require a phased transition of your existing customers to the new applications as opposed to a complete cutover.
3. Please provide a list of connected customers to your existing application including both company name as it appears in Concur Travel & Expense and site ID.
4. For verification purposes, we will compare that data to our internal API as well as data stored in our Travel system.
5. A Super Site ID must be provided upon application request. The site ID / super site ID is commonly referred to as CliqID. The Super Site ID is the CliqID of the managing TMC site.
6. Please follow the above steps from #2.
7. We will work with you to identify no more than 10 companies to pilot test your new application. We ask that you closely monitor, if possible, average response times for obtaining a list of changed travel profiles and average response times for individual travel profiles.

8. Escalate any response time deltas beyond your service level agreements or scheduled job windows.
9. Please escalate any issues or response error codes to SAP Concur immediately

Section 12: Company Level Authentication

Your application will obtain and store one company-level OAuth refresh token for *each* company that opts to use your application. You will obtain that authenticated refresh token via an authorized 24-hour single-use request token from SAP Concur. Your 24-hour request token allows you to obtain a 6-month refresh token which is keyed off a unique application identifier, application secret and the company's UUID. The refresh token will be used repeatedly to obtain 60-minute access (bearer) tokens which your application will use to conduct API calls to and from SAP Concur. If you plan to deploy your application across specific agencies or travel configurations within a single company, SAP Concur will provide that capability in the future via a new role or group.



The following is a summary of steps necessary to obtain a company-level refresh token

- Obtain company name and company ID (also known as CliqID)
- Authorized SAP Concur Consultants / PM's will generate 24 hour request tokens
- Use the 24-hour request token to generate a refresh token
- Store and reuse the refresh_token – a UUID4 identifier that allows your application to obtain fresh access_tokens
- Use the access_tokens to make API calls

Section 13: Obtain Company Level Refresh Token

REQUEST

POST <https://us.api.Concursolutions.com/oauth2/v0/token>

HEADER

Content-Type:application/x-www-form-urlencoded

BODY

```
client_id:c14f2547#####e94f235c39
client_secret:1bfb####-#####245ce
grant_type:password
username:3b#####ecd
password:fd44#####5d331
credtype:authtoken
```

RESPONSE:

```
{
  "expires_in": 3600,
  "scope": "openid TRVPRF PASSV COMPD EMERG TSAI TMOSP MEDIC UNUTX
USER COMPANY NOTIF FOP user_read user.read company.read",
  "token_type": "Bearer",
  "access_token": "BYxVfC1Zpo-zw...",
  "refresh_token": "a95caa0f-249a...",
  "refresh_expires_in": 1517039403,
  "id_token": "4n7i2-e9zP9qrpc4B...",
  "geolocation": "https://us.api.Concursolutions.com"
}
```

Descriptions

- The expires_in value is returned in seconds. Your access_token is valid for sixty minutes.
- The scopes returned in the response are what your application has been registered to work with. Scopes are selectively enabled based on the functionality required. The values returned in the response should never change. If new scopes are added, your application will require re-certification.
- The token_type – SAP Concur returns the value of “Bearer”, an industry standard. The value of “Bearer” can be interpreted as “allow access to the bearer of this token”.
- The access_token, a JWT, informs SAP Concur that the bearer of the returned token has been authorized to access the SAP Concur API and perform specific actions as specified by the scopes that have been granted. The access_token is valid for sixty minutes from the time of the response. If necessary, you may architect your application to scale up and use multiple access tokens to spawn multiple threads.

- The `refresh_token`, also a JWT, is the unique token that contains the information required to obtain a new `access_token` or `id_token`. Refresh tokens are good for a minimum of six months and are subject to strict storage requirements to ensure they are not compromised. Refresh tokens can also be revoked. Your application is expected to overwrite or replace your stored refresh tokens in case the response returns a different `refresh_token` value.
- The value in `refresh_expires_in` is returned in epoch time. Use a library that provides conversion capability. For a UI version, navigate to <https://www.epochconverter.com>.
- The `id_token`, also a JWT, is returned. For company-level or enterprise-level applications like Travel Profile, there is no need to retrieve details of the company-level authenticated user. The information stored in the ID token JWT is necessary for User-level authentication based applications such as Uber or Triplink supplier applications like Avis or Marriot.
- The value for geolocation should be stored as your application's base URI. Since SAP Concur has multiple data centers, it may be required to obtain and store data from customers who are hosted in EMEA as well as the US. If your application receives error code 16, "invalid request", user lives elsewhere, your application must be able to submit a second request to "us.api.Concursolutions.com" or "eu1.api.Concursolutions.com" and store that geolocation. The geolocation also identifies for SAP Concur geographically where the user is stored.
- Store the refresh token, access tokens, expiration date and instance URL (geolocation) along with your internal information about the company's profile.

! Do not append application keys and values to the request URL. Requests containing confidential keys and values will be rejected.

Ensure your web servers are not configured with TLS V1.1.
https://assets.concur.com/concurtraining/cte/en-us/FAQ_TLS_1.1_End_of_Support.pdf

NOTE: Remove ``charset=utf-8`` from content-type header in your request. Our implementation of OAuth2, according to the IETF standards <https://tools.ietf.org/html/draft-ietf-oauth-v2-31#appendix-B>, requires all clients to remove the ``charset=utf-8`` from the Content-Type header.

Section 14: Obtain Company Level Access Token

REQUEST

POST <https://us.api.Concursolutions.com/oauth2/v0/token>

HEADER

Content-Type:application/x-www-form-urlencoded

BODY

```
client_id:c14f2547#####e94f235c39
client_secret:1bfb####-#####245ce
grant_type:refresh_token
refresh_token: {refresh_token}
```

RESPONSE:

```
{
  "expires_in": 3600,
  "scope": "openid TRVPRF PASSV COMPD EMERG TSAI TMCSP MEDIC UNUTX USER
COMPANY NOTIF FOP user_read user.read company.read",
  "token_type": "Bearer",
  "access_token": "BYxVfClZpo-zw...",
  "refresh_token": "a95caa0f-249a...",
  "refresh_expires_in": 1517039403,
  "id_token": "4n7i2-e9zP9qrpc4B...",
  "geolocation": "https://us.api.Concursolutions.com"
}
```

Descriptions

- The expires_in value is returned in seconds. Your access_token is valid for sixty minutes.
- The scopes returned in the response are what your application has been registered to work with. Scopes are selectively enabled based on the functionality required. The values returned in the response should never change. If new scopes are added, your application will require re-certification.
- The token_type – SAP Concur returns the value of “Bearer”, an industry standard. The value of “Bearer” can be interpreted as “allow access to the bearer of this token”.
- The access_token, a JWT, informs SAP Concur that the bearer of the returned token has been authorized to access the SAP Concur API and perform specific actions as specified by the scopes that have been granted. The access_token is valid for sixty minutes from the time of the response. If necessary, you may architect your application to scale up and use multiple access tokens to spawn multiple threads.
- The refresh_token, also a JWT, is the unique token that contains the information required to obtain a new access_token or id_token. Refresh tokens are good for a minimum of six months and are subject to strict storage requirements to ensure they are not compromised. Refresh tokens can also be revoked. Your application is expected to overwrite or replace your stored refresh tokens in case the response returns a different refresh_token value.

- The value in refresh_expires_in is returned in epoch time. Use a library that provides conversion capability. For a UI version, navigate to <https://www.epochconverter.com>.
- The id_token, also a JWT, is returned. For company-level or enterprise-level applications like Travel Profile, there is no need to retrieve details of the company-level authenticated user. The information stored in the ID token JWT is necessary for User-level authentication based applications such as Uber or Triplink supplier applications like Avis or Marriot.
- The value for geolocation should be stored as your application's base URI. Since SAP Concur has multiple data centers, it may be required to obtain and store data from customers who are hosted in EMEA as well as the US. If your application receives error code 16, "invalid request", user lives elsewhere, your application must be able to submit a second request to "us.api.Concursolutions.com" or "eu1.api.Concursolutions.com" and store that geolocation. The geolocation also identifies for SAP Concur geographically where the user is stored.
- Store the refresh token, access tokens, expiration date and instance URL (geolocation) along with your internal information about the company's profile.

! Do not append application keys and values to the request URL. Requests containing confidential keys and values will be rejected.

Ensure your web servers are not configured with TLS V1.1.
https://assets.concur.com/concurtraining/cte/en-us/FAQ_TLS_1.1_End_of_Support.pdf

NOTE: Remove `charset=utf-8` from content-type header in your request. Our implementation of OAuth2, according to the IETF standards <https://tools.ietf.org/html/draft-ietf-oauth-v2-31#appendix-B>, requires all clients to remove the `charset=utf-8` from the Content-Type header.

Section 15: Application Scopes

Travel Profile applications by default have the following scopes registered:

- openid
- user.read
- company.read
- FOP
- GHOST
- TRVPRF
- PASSV
- EMERG
- TSAI

- TMCSP
- MEDIC
- UNUTX
- NOTIF
- COMPD

Itinerary (ITINER) and Receipts (receipts.read, receipts.write) scopes for DEV applications available upon request.

Explanations for these scopes are documented on <https://developer.concur.com/api-reference/authentication/scopes.html> under *List of Connect API Scopes*.

If you wish to have your application include additional scopes or endpoints, you must have your application re-certified.

Section 16: Geolocations

SAP Concur has multiple datacenters: <https://developer.concur.com/platform/base-uris.html>

- United States: <https://us.api.concursolutions.com>
- EMEA: <https://emea.api.concursolutions.com>
- Public Sector: <https://usg.api.concursolutions.com>
- China: <https://www-cn.api.concurcdc.cn>

Host Location	Geolocation / URL from refresh token based on host location of Company GUID	The URL to use for Travel Profile
EMEA	https://emea.api.Concursolutions.com/oauth2/v0/token	https://emea.api.Concursolutions.com/api/travelprofile/v2.0/profile
US	https://us.api.Concursolutions.com/oauth2/v0/token	https://us.api.Concursolutions.com/api/travelprofile/v2.0/profile
PSCC	https://usg.api.Concursolutions.com/oauth2/v0/token	https://usg.api.Concursolutions.com/api/travelprofile/v2.0/profile

Section 17: User Profile Web Service

GET USER INFORMATION

<https://developer.concur.com/api-explorer/v3-0/Users.html>

It may be necessary to use the User API to retrieve user's login IDs or Email IDs – which the Travel Profile v2.0 Web Service uses as its matching fact for travel profile retrievals or updates.

Use the following request parameters to filter your searches:

Retrieve all active users

```
GET
https://us.api.Concursolutions.com/users?offset=0&limit=100&isactive=true
Authorization: Bearer {access_token}
```

Retrieve user information by primary Email ID

```
GET
https://www.Concursolutions.com/api/v3.0/common/users?primaryEmail=dutchinw@yahoo.com&active=true HTTP/1.1
Authorization: Bearer {access_token}
Content Type:
```

Retrieve user information by Login ID

```
GET
https://www.Concursolutions.com/api/v3.0/common/users?user=dutchinw10@sureware-connect.com&active=true HTTP/1.1
Authorization: Bearer {access_token}
```

Section 18: SAP Concur Unique User ID

NOTE: It is recommended that users adopt the SAP Concur UUID as the traveler's unique identifier.

The UUID format is being used throughout the SAP Concur platform and new OAuth methodology. Your application's client (company) identifier, client secret, and authentication tokens are all in UUID format. Even error IDs are returned in UUID format.

UUID v4 information can be found here:

https://en.wikipedia.org/wiki/Universally_unique_identifier

This tool is also useful: <https://www.uuidgenerator.net/>

UUID is now available with every user record stored at SAP Concur. UUIDs are automatically generated whenever an employee or traveler record is created - even during 350 record type imports. And as the standard indicates, the UUID value (which is randomly generated) is guaranteed unique at SAP Concur. Because of this uniqueness, UUID can be used as a matching-factor and the unique identifier at SAP Concur. You no longer need to rely on XML Sync ID or Employee ID which are often not unique and is responsible for numerous user record errors and support queries. Login ID, still unique at SAP Concur, is widely adopted by SAP Concur Platform partner applications but has not been widely adopted with XML Profile Sync.

We do not recommend using the old Sync ID associated with XML Profile Sync. We highly recommend transitioning to support SAP Concur UUID.

In 2017, UUID was exposed in the Travel Profile API and it was also made available in the PNR editing tool. The label and data in the travel profile response will look like this:

```
<UUID>e588fcc4-417f-4d6c-81de-6b51bfc9c90a</UUID>
```

SAP Concur UUID is required for the [eReceipts v4 API](#). It is the only element supported as its matching-factor. eReceipts v4.0 does not support Login ID, Email ID, or any other attribute.

Section 19: Travel Profile v2.0 Web Service

The Travel Profile service consists of a set of resources that provide travel profile functionality for developers, travel suppliers, and travel management companies (TMCs). This Web Service is designed to replace the XML Profile Sync built into the Concur Travel product. XML Profile Sync is being deprecated. The profile web services can be used to create, update, and retrieve travel profile information for a specified traveler, or a list of travelers.

The XSD (schema) for Profile API v2.0 is very similar to the existing schema for Profile Sync. The XSD is published on developer.concur.com. The travel profile summary XSD is available [here](#). A spreadsheet of specific changes between XML Profile Sync and Profile API is available upon request.

GET Profile Information

NOTE: SAP Concur development has enforced the inclusion of the LastModifiedDate parameter. Users who omit LastModifiedDate, will receive an error. For users who would like to get profile summaries for all of their users, they can set **LastModifiedDate** to **1900-01-01T12:00:00**.

Retrieve a list of travel profile summaries by last modified date (with paging)

```
GET
{{geolocation}}
/api/travelprofile/v2.0/summary?Status="Active"&Page=1&LastModifiedDate=2020-02-19T00:00:00&userid_type=login&userid_value=ALL&includeMetadata=true&ItemsPerPage=200
Content-type:application/xml
Authorization: Bearer {access_token}
```

Retrieve a list of travel profile summaries by last modified date and Config ID (with paging)

```
GET
{{geolocation}}
/api/travelprofile/v2.0/summary?Status="Active"&Page=1&LastModifiedDate=2020-02-19T00:00:00&travelConfigs=100,200,3000&userid_type=login&userid_value=ALL&includeMetadata=true&ItemsPerPage=200
Content-type:application/xml
Authorization: Bearer {access_token}
```

Retrieve traveler profile details by Login ID

```
GET
https://us.api.Concursolutions.com/api/travelprofile/v2.0/profile?userid\_type=login&userid\_value=dutchin10@domain-connect.com
Content-type:application/xml
Authorization: Bearer {access_token}
```

Retrieve travel profile information by UUID (FUTURE RELEASE)

```
GET
https://us.api.Concursolutions.com/api/travelprofile/v2.0/profile?uuid=636a6e64-f516-4d84-ae7e-c833c9c20cdc
Content-type:application/xml
Authorization: Bearer {access_token}
```

Retrieve user information in bulk (limited)

```
GET
https://us.api.Concursolutions.com/users?offset=0&limit=100&isactive=true
Content-type:application/xml
Authorization: Bearer {access_token}
Preview: https://developer.concur.com/api-reference/authentication/get-users31.html
```

CREATE Travel Profile

Create a Basic Traveler Record

REQUEST

POST

<https://us.api.Concursolutions.com/api/travelprofile/v2.0/profile>

Content-type:application/xml

Authorization: Bearer {access_token}

BODY:

```
<ProfileResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
Action="Create" LoginId="dutchinw10@domain-connect.com">
  <General>
    <FirstName>Dutchin</FirstName>
    <LastName>Wong10</LastName>
    <TravelConfigID>113938</TravelConfigID>
  </General>
  <Password>Welcome123</Password>
</ProfileResponse>
```

RESPONSE:

```
<TravelProfileResponseMessage>
  <Code>S001</Code>
  <Message>Success, no errors or warnings reported</Message>
</TravelProfileResponseMessage>
```

Minimum Elements Required to Create a New User

- First Name
- Last Name
- Travel Configuration ID
- Login ID
- Password
- Rule Class (uses Default Rule Class if not provided)
- Omitted elements will be ignored and not updated
- Empty elements of datatype string will be cleared out; nillable elements will be cleared out if set as nil. Refer to XSD for nillable elements

NOTE: To create or update a traveler's profile with program loyalty information, your application must be registered in our Travel Supplier system.

A default rule class must be defined, or the user record may be orphaned.

Section 20: Create a Full Traveler Record

REQUEST

POST

<https://us.api.Concursolutions.com/api/travelprofile/v2.0/profile>

Content-type: application/xml

Authorization: Bearer {access_token}

BODY

```
<ProfileResponse Action="Create" Status="Active"
LoginId="dutchinw10@domain-connect.com">
```

```
<General>
```

```
<NamePrefix>Mr</NamePrefix>
```

```
<FirstName>Dutchin</FirstName>
```

```
<MiddleName>W</MiddleName>
```

```
<LastName>Wong</LastName>
```

```
<NameSuffix>Sr.</NameSuffix>
```

```
<PreferredName />
```

```
<JobTitle />
```

```
<CostCenter></CostCenter>
```

```
<CompanyEmployeeID>100011</CompanyEmployeeID>
```

```
<Division>1000</Division>
```

```
<PreferredLanguage>en</PreferredLanguage>
```

```
<EReceiptOptIn>true</EReceiptOptIn>
```

```
<RuleClass>Default Travel Class</RuleClass>
```

```
<TravelConfigID>113938</TravelConfigID>
```

```
<GDSProfileName>DUTCHINW10/2</GDSProfileName>
```

```
</General>
```

```
<EmergencyContact>
```

```
<Name>Heather Wong</Name>
```

```
<Relationship>Spouse</Relationship>
```

```
<Phones>
```

```
<Phone Type="DayTime">425-999-8665</Phone>
```

```
<Phone Type="Alternate">425-999-9695</Phone>
```

```
</Phones>
```

```
<Address>
```

```
<Street>601 108th Ave Suite 1000 </Street>
```

```
<City>Bellevue</City>
```

```
<StateProvince>WA</StateProvince>
```

```
<PostalCode>98004</PostalCode>
```

```
<CountryCode>US</CountryCode>
```

```
</Address>
```

```
</EmergencyContact>
```

```
<Telephones>
```

```
<Telephone Type="Home">
```

```
<CountryCode>US</CountryCode>
```

```
<PhoneNumber>888-883-8411</PhoneNumber>
```

```
<Extension />
```

```

</Telephone>
<Telephone Type="Work">
  <CountryCode>US</CountryCode>
  <PhoneNumber>4255905248</PhoneNumber>
  <Extension />
</Telephone>
<Telephone Type="Cell" ContactOptIn="false" PrimaryMobile="true">
  <CountryCode>US</CountryCode>
  <PhoneNumber>4255905248</PhoneNumber>
  <Extension />
  <MobileDevice>Unknown</MobileDevice>
</Telephone>
<Telephone Type="Work">
  <CountryCode>01</CountryCode>
  <PhoneNumber>4255905248</PhoneNumber>
  <Extension />
</Telephone>
</Telephones>
<Addresses>
  <Address Type="Home">
    <Street>601 108th Ave #1000</Street>
    <City>Bellevue</City>
    <StateProvince>WA</StateProvince>
    <PostalCode>98045</PostalCode>
    <CountryCode>US</CountryCode>
  </Address>
  <Address Type="Work">
    <Street>601 108th Ave #1000</Street>
    <City>Bellevue</City>
    <StateProvince>WA</StateProvince>
    <PostalCode>98004</PostalCode>
    <CountryCode>US</CountryCode>
  </Address>
</Addresses>
<HasNoPassport>true</HasNoPassport>
<EmailAddresses>
  <EmailAddress Contact="true"
Type="Business">dutchinw@yahoo.com</EmailAddress>
  <EmailAddress Contact="true"
Type="Personal">dutchinw@yahoo.com</EmailAddress>
  <EmailAddress Contact="true"
Type="Personal">dutchinw@yahoo.com</EmailAddress>
</EmailAddresses>
<RatePreferences>
  <AAARate>true</AAARate>
  <AARPRate>false</AARPRate>
  <GovtRate>false</GovtRate>
  <MilitaryRate>false</MilitaryRate>
</RatePreferences>
<DiscountCodes>

```

```

    <DiscountCode Vendor="Intercontinental Hotels
Group">123456</DiscountCode>
    <DiscountCode Vendor="American Airlines" />
    <DiscountCode Vendor="JetBlue" />
    <DiscountCode Vendor="Delta" />
    <DiscountCode Vendor="Enterprise" />
    <DiscountCode Vendor="Airtran Air" />
    <DiscountCode Vendor="United" />
    <DiscountCode Vendor="US Airways" />
    <DiscountCode Vendor="Southwest" />
    <DiscountCode Vendor="Hertz" />
    <DiscountCode Vendor="Avis" />
    <DiscountCode Vendor="National" />
</DiscountCodes>
<Air>
    <AirMemberships>
        <AirMembership>
            <VendorCode>AS</VendorCode>
            <AccountNo>59128856</AccountNo>
        </AirMembership>
    </AirMemberships>
    <Seat>
        <InterRowPositionCode>Aisle</InterRowPositionCode>
        <SectionPositionCode>Forward</SectionPositionCode>
    </Seat>
    <AirOther />
</Air>
<Rail>
    <Seat>Window</Seat>
    <Coach>CoachWithTable</Coach>
    <NoiseComfort>MobileSpace</NoiseComfort>
    <Bed>DontCare</Bed>
    <BedCategory>DontCare</BedCategory>
    <Berth>DontCare</Berth>
    <Deck>DontCare</Deck>
    <SpaceType>DontCare</SpaceType>
    <FareSpaceComfort>DontCare</FareSpaceComfort>
    <SpecialMeals>DontCare</SpecialMeals>
    <Contingencies>DontCare</Contingencies>
    <RailMemberships />
</Rail>
<Car>
    <CarSmokingCode>NonSmoking</CarSmokingCode>
    <CarGPS>>false</CarGPS>
    <CarType>Standard</CarType>
    <CarMemberships>
        <CarMembership>
            <VendorCode>ZI</VendorCode>
            <AccountNo>9WZ25K</AccountNo>
        </CarMembership>
    </CarMemberships>
</Car>

```

```

        <Status>PREFERRED</Status>
    </CarMembership>
</CarMemberships>
<CarOther />
<CarSkiRack>>false</CarSkiRack>
<CarTransmission>Automatic</CarTransmission>
</Car>
<Hotel>
    <HotelSmokingCode>NonSmoking</HotelSmokingCode>
    <HotelMemberships>
        <HotelMembership>
            <VendorCode>SW</VendorCode>
            <AccountNo>713399498</AccountNo>
        </HotelMembership>
        <HotelMembership>
            <VendorCode>6C</VendorCode>
            <AccountNo>283629903</AccountNo>
        </HotelMembership>
    </HotelMemberships>
    <RoomType>King</RoomType>
    <PreferFoamPillows>>true</PreferFoamPillows>
    <PreferCrib>>false</PreferCrib>
    <PreferRollawayBed>>false</PreferRollawayBed>
    <PreferGym>>false</PreferGym>
    <PreferPool>>false</PreferPool>
    <PreferRestaurant>>false</PreferRestaurant>
    <PreferWheelchairAccess>>false</PreferWheelchairAccess>
    <PreferAccessForBlind>>false</PreferAccessForBlind>
    <PreferRoomService>>false</PreferRoomService>
    <PreferEarlyCheckIn>>false</PreferEarlyCheckIn>
</Hotel>
<CustomFields />
<Roles />
<TSAInfo>
    <Gender>Male</Gender>
    <DateOfBirth>1900-01-01</DateOfBirth>
    <NoMiddleName>>false</NoMiddleName>
    <PreCheckNumber />
    <RedressNumber />
</TSAInfo>
<Password>Welcome123</Password>
</ProfileResponse>

```

RESPONSE:

```

<TravelProfileResponseMessage>
    <Code>S001</Code>
    <Message>Success, no errors or warnings reported</Message>
</TravelProfileResponseMessage>

```

NOTE: The Preferred Language field has an allowed list of canonical values. Any value that is not on this list, will be returned as an empty string beginning in April 2021. Any value that is not on this list will be written to the SAP Concur profile as an empty string beginning in May 2021 and a warning will be returned.

The Preferred Language field allowed list is:

bg	ja	zh	es-AR	es-PE	ja-JP
cs	ko	de-AT	es-BO	es-PR	nl-BE
da	nb	de-CH	es-CL	es-PY	nl-NL
de	nl	de-DE	es-CO	es-SV	no-NO
el	nn	de-LU	es-CR	es-UY	pt-BR
en	no	en-AU	es-DO	es-VE	pt-PT
es	pl	en-CA	es-EC	fr-BE	sv-SE
fi	pt	en-GB	es-ES	fr-CA	zh-CN
fr	ro	en-IE	es-GT	fr-CH	zh-HK
hr	ru	en-IN	es-HN	fr-FR	zh-TW
hu	sk	en-NZ	es-MX	fr-LU	
id	sv	en-US	es-NI	it-CH	
it	tr	en-ZA	es-PA	it-IT	

Update a Traveler's Unused Tickets

REQUEST

POST

<https://us.api.Concursolutions.com/api/travelprofile/v2.0/profile>

Content-type: application/xml

Authorization: Bearer {access_token}

BODY

```
<ProfileResponse Action="Update" Status="Active"
LoginId="dutchinw10@domain-connect.com">
<UnusedTickets>
<UnusedTicket>
<Carrier>UA</Carrier>
<TicketNumber>HETJUNCRHT</TicketNumber>
<RecordLocator>L64A17</RecordLocator>
<BaseFare>731.50</BaseFare>
<Taxes>82.42</Taxes>
<Fees>148.42</Fees>
<Currency>USD</Currency>
<TicketType>W</TicketType>
<IssueDate>2017-10-13</IssueDate>
```

```
<ExpirationDate>2022-10-14</ExpirationDate>
<Notes>TRIP CHANGE</Notes>
</UnusedTicket>
  </UnusedTickets>
</ProfileResponse>
```

RESPONSE

```
<TravelProfileResponseMessage>
<Code>S001</Code>
<Message>Success, no errors or warnings reported</Message>
</TravelProfileResponseMessage>
```

Deactivate a Traveler Profile by Login ID

REQUEST

POST

<https://us.api.Concursolutions.com/api/travelprofile/v2.0/profile>

Content-type:application/xml

Authorization: Bearer {access_token}

BODY

```
<ProfileResponse Action="Update" Status="Inactive"
LoginId="dutchinw10@domain-connect.com">
```

RESPONSE

```
<TravelProfileResponseMessage>
<Code>S001</Code>
<Message>Success, no errors or warnings reported</Message>
</TravelProfileResponseMessage>
```

RESULT

```
<?xml version="1.0" encoding="utf-8"?>
<ProfileResponse xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" Status="Inactive"
LoginId="dutchinw03@sureware-connect.com" Unique="">
```

Section 21: Validate Your XML Against Our XSD

The Travel Profile API v2.0 incorporates internal XML validation. If you receive the error message here is an error in XML document, it is due to an issue with your XML formatting. The request will not even reach the SAP Concur profile service because the XML issue(s) prevents the system from accepting and processing the request.

To validate your XML, a public online application is available. Launch <https://www.freeformatter.com/xml-validator-xsd.html> to validate your XML against the Travel Profile v2.0 API XSD.

In the top pane of FreeFormatter, paste your XML, and in the bottom pane paste our XSD (<https://www.Concursolutions.com/ns/TravelUserProfile.xsd>).

Sample response:

Cvc-complex-type.2.4.a: Invalid Content Was Found Starting With Element 'ClientName'. One Of '{NamePrefix, FirstName, MiddleName, LastName, NameSuffix, PreferredName, JobTitle, CostCenter, CompanyEmployeeID, Division, PreferredLanguage, EReceiptOptIn, HasOpenBooking, CountryCode, CompanyName, CompanyID, RuleClass, TravelConfigID, MedicalAlerts, AgencyNumber, SearchId, GDSProfileName, SabreProfileId}' Is Expected., Line '3', Column '17'.

Cvc-enumeration-valid: Value '' Is Not Facet-valid With Respect To Enumeration '[BLML, CHML, DBML, FPML, GFML, HNML, BBML, KSML, LCML, LSML, MOML, NSML, NLML, PFML, SFML, VLML, VGML, KVML, RVML, AVML]'. It Must Be A Value From The Enumeration., Line '59', Column '26'.

Cvc-type.3.1.3: The Value '' Of Element 'MealCode' Is Not Valid., Line '59', Column '26'.

Cvc-enumeration-valid: Value '' Is Not Facet-valid With Respect To Enumeration '[DontCare, Economy, Compact, Intermediate, Standard, FullSize, Luxury, Premium, Mini, EconomyHybrid, CompactHybrid, IntermediateHybrid, StandardHybrid, FullSizeHybrid, MiniVan, StandardSUV, FullSizeSUV, FullSizePickup, Specialized, IntermediateSUV]'. It Must Be A Value From The Enumeration., Line '66', Column '16'.

Cvc-type.3.1.3: The Value '' Of Element 'CarType' Is Not Valid., Line '66', Column '16'.

Cvc-datatype-valid.1.2.1: '' Is Not A Valid Value For 'date'., Line '81', Column '20'.

Cvc-type.3.1.3: The Value '' Of Element 'DateOfBirth' Is Not Valid., Line '81', Column '20'.

Section 22: Form of Payment Web Service

NOTE: To retrieve, create, or update a traveler's Form of Payment, your application must be registered in our Travel Supplier system.

Create a Form of Payment by Login ID

REQUEST

POST

<https://www.Concursolutions.com/api/travelprofile/v2.0/fop>

Content-type: application/xml

Authorization: Bearer {access_token}

BODY

```
<?xml version="1.0" encoding="UTF-8"?>
<CorporateFOPResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
LoginId="dutchinw10@domain-connect.com">
<CreditCards>
<CreditCard DisplayName="My Visa Card">
<Vendor>Visa</Vendor>
<AccountNo>4XXXXXXXXXXXXXXXXXXXX1</AccountNo>
<ExpDate>2021-09</ExpDate>
<NameOnCard>SAP Concur Developer</NameOnCard>
<UsageType>Business</UsageType>
```

```
<BillingAddress>
<StreetAddress>123 Home St</StreetAddress>
<City>Bellevue</City>
<StateProvince>WA</StateProvince>
<Country>US</Country>
<ZipCode>98006</ZipCode>
</BillingAddress>
<Segments>
<Segment Type="Air" Default="false" />
<Segment Type="Hotel" Default="false" />
<Segment Type="Car" Default="false" />
<Segment Type="Rail" Default="false" />
</Segments>
</CreditCard>
</CreditCards>
</CorporateFOPResponse>
```

RESPONSE

```
<TravelProfileResponseMessage>
<Code>S001</Code>
<Message>Success, no errors or warnings reported</Message>
</TravelProfileResponseMessage>
```

Update Form of Payment by Login ID

REQUEST

POST

<https://www.Concursolutions.com/api/travelprofile/v2.0/fop>

Content-type:application/xml

Authorization: Bearer {access_token}

BODY

```
<?xml version="1.0" encoding="UTF-8"?>
<CorporateFOPResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
LoginId="dutchinw10@domain-connect.com">
<CreditCards>
<CreditCard DisplayName="AMEX Corporate">
<Vendor>AmericanExpress</Vendor>
<AccountNo>3XXXXXXXXXXXXXXXXXXXXX1</AccountNo>
<ExpDate>2021-07</ExpDate>
<NameOnCard>Dutchin Wong</NameOnCard>
<UsageType>Business</UsageType>
<BillingAddress>
<StreetAddress>601 108th Ave Suite 1000</StreetAddress>
<City>Bellevue</City>
<StateProvince>WA</StateProvince>
<Country>US</Country>
<ZipCode>98004</ZipCode>
```

```

</BillingAddress>
<Segments>
<Segment Type="Air" Default="true" />
<Segment Type="Hotel" Default="true" />
<Segment Type="Car" Default="true" />
<Segment Type="Rail" Default="true" />
</Segments>
</CreditCard>
<CreditCard DisplayName="British Airways Visa">
<Vendor>Visa</Vendor>
<AccountNo>4#####1</AccountNo>
<ExpDate>2022-05</ExpDate>
<NameOnCard>Dutchin Wong</NameOnCard>
<UsageType>Business</UsageType>
<BillingAddress>
<StreetAddress>601 108th Ave Suite 1000</StreetAddress>
<City>Bellevue</City>
<StateProvince>WA</StateProvince>
<Country>US</Country>
<ZipCode>98004</ZipCode>
</BillingAddress>
<Segments>
<Segment Type="Air" Default="false" />
<Segment Type="Hotel" Default="false" />
<Segment Type="Car" Default="false" />
<Segment Type="Rail" Default="false" />
</Segments>
</CreditCard>
<CreditCard DisplayName="Alaska BofA Visa">
<Vendor>Visa</Vendor>
<AccountNo> 4#####1</AccountNo>
<ExpDate>2022-04</ExpDate>
<NameOnCard>Dutchin Wong</NameOnCard>
<UsageType>Business</UsageType>
<BillingAddress>
<StreetAddress>601 108th Ave Suite 1000</StreetAddress>
<City>Bellevue</City>
<StateProvince>WA</StateProvince>
<Country>US</Country>
<ZipCode>98004</ZipCode>
</BillingAddress>
<Segments>
<Segment Type="Air" Default="true" />
<Segment Type="Hotel" Default="true" />
<Segment Type="Car" Default="true" />
<Segment Type="Rail" Default="true" />
</Segments>
</CreditCard>
<CreditCard DisplayName="BECU Mastercard">

```

```

<Vendor>MasterCard</Vendor>
<AccountNo>5XXXXXXXXXXXXXXXXXXXX</AccountNo>
<ExpDate>2022-05</ExpDate>
<NameOnCard>Dutchin Wong</NameOnCard>
<UsageType>Business</UsageType>
<BillingAddress>
<StreetAddress>601 108th Ave Suite 1000</StreetAddress>
<City>Bellevue</City>
<StateProvince>WA</StateProvince>
<Country>US</Country>
<ZipCode>98004</ZipCode>
</BillingAddress>
<Segments>
<Segment Type="Air" Default="false" />
<Segment Type="Hotel" Default="false" />
<Segment Type="Car" Default="false" />
<Segment Type="Rail" Default="false" />
</Segments>
</CreditCard>
</CreditCards>
</CorporateFOPResponse>

```

RESPONSE

```

<TravelProfileResponseMessage>
<Code>S001</Code>
<Message>Success, no errors or warnings reported</Message>
</TravelProfileResponseMessage>

```

Form of Payment Update Functionality

Existing credit cards are identified by a credit card number and a vendor (e.g. Mastercard, Visa). With the FOP API, functionality for updating credit cards remains the same as XML Profile Sync. If there are no changes to the traveler's payment types, the application must provide all payment types to the traveler's profile otherwise the payment types will be removed.

For example, if the partner provides a list with credit cards A, B, D, & E and the SAP Concur database contained credit cards A, B, C, & D, credit cards A, B, & D would be ignored (updated if there were changes) and the platform would remove card C from the database. Only card E would be added to the database.

The best practice for this web service is to retrieve the traveler's form of payments, compare it to any existing source, and then update it. Even if the traveler wishes to only add/update a single credit card via the UI, the partner must provide all the existing credit cards for the traveler, which they should have received when they initially retrieved the profile. Use the following matrix as guidance

Payment Type Provided	A	B		D	E
Stored at SAP Concur	A	B	C	D	
Result	Ignored	Ignored	Removed	Ignored	Added

Retrieve Form of Payment

Use login ID as the matching fact. In a future release, UUID will be supported.

REQUEST

GET

<https://www.Concursolutions.com/api/travelprofile/v2.0/fop?userid ty pe=login&userid value=dutchinw10@domain-connect.com>

Content-type:application/xml

Authorization: Bearer {access_token}

RESPONSE

```
<?xml version="1.0" encoding="utf-8"?>
<CorporateFOPResponse xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" LoginId="demo2@amex-
connect.com">
<CreditCards>
<CreditCard DisplayName="Air Default">
<Vendor>AmericanExpress</Vendor>
<AccountNo>3#####</AccountNo>
<ExpDate>2018-09</ExpDate>
<NameOnCard>Oliver Puggs</NameOnCard>
<UsageType>Business</UsageType>
<BillingAddress>
<StreetAddress>123 test</StreetAddress>
<City>Test</City>
<StateProvince>AL</StateProvince>
<Country>US</Country>
<ZipCode>77777</ZipCode>
</BillingAddress>
<Segments>
<Segment Type="Air" Default="false" />
<Segment Type="Hotel" Default="false" />
<Segment Type="Car" Default="false" />
<Segment Type="Rail" Default="false" />
<Segment Type="Ground" Default="false" />
</Segments>
</CreditCard>
</CreditCards>
</CorporateFOPResponse>
```

NOTE: The traveler may have multiple credit cards in their profile, each with indicators of whether the card is a ghost card (Corporate) or personal card (Business), Mandatory or Default. Corporate cards or ghost cards cannot be created or updated via the API.

Section 23: FAQ

Q. Can I create a traveler profile with all the fields from a response?

A. Yes. Be aware that there are several fields and potentially custom fields in a traveler's profile that require that other user records such as managers or approvers exist in the system first. Therefore it may be necessary to create a traveler record with default fields before updating the rest of a traveler's profile with additional details.

Q. I tried to update a travel profile using a response from GET travel profile but I'm getting errors. What should I do?

A.

```
<Error>
<Message>
<TravelProfileResponseMessage>
<Code>E001</Code>
<Message>Cannot update this element: General/HasOpenBooking</Message>
<Field>General/HasOpenBooking</Field>
</TravelProfileResponseMessage>
<TravelProfileResponseMessage>
<Code>E001</Code>
<Message>Cannot update this element: General/CountryCode</Message>
<Field>General/CountryCode</Field>
</TravelProfileResponseMessage>
<TravelProfileResponseMessage>
<Code>E001</Code>
<Message>Cannot update this element: General/CompanyName</Message>
<Field>General/CompanyName</Field>
</TravelProfileResponseMessage>
<TravelProfileResponseMessage>
<Code>E001</Code>
<Message>Cannot update this element: General/CompanyID</Message>
<Field>General/CompanyID</Field>
</TravelProfileResponseMessage>
<TravelProfileResponseMessage>
<Code>E001</Code>
<Message>Cannot update this element: General/AgencyNumber</Message>
<Field>General/AgencyNumber</Field>
</TravelProfileResponseMessage>
</Message>
<Server-Time>2017-09-19T16:41:39</Server-Time>
```

```
<Id>D3772078-980A-48F7-BF7E-81D6AA04F047</Id>
</Error>
```

SOLUTION: Remove the above elements from your profile POST

ERROR:

```
<TravelProfileResponseMessage>
<Code>W007</Code>
<Message>The CountryCode field is required.</Message>
<Field>Telephones/CountryCode</Field>
<CorrelationId>69102551-e208-4f59-8ba8-1b44d0b6842c</CorrelationId>
</TravelProfileResponseMessage>
```

```
<TravelProfileResponseMessage>
<Code>W002</Code>
<Message>The field CountryCode must be a string with a maximum length
of 2.</Message>
<Field>Telephones/CountryCode</Field>
<CorrelationId>6e04c764-ccd7-4aad-82cd-33506aac73f5</CorrelationId>
</TravelProfileResponseMessage>
```

SOLUTION: Ensure the correct 2 letter country code is included. When the above errors are resolved (by removing the offending elements) you may encounter one last error. Remove these nodes for loyalty programs (Air, Rail, Car). Also, make sure you specify the correct login id.

```
<SegmentTotal />
<PointsUntilNextStatus />
<SegmentsUntilNextStatus />

<Error>
<Message>Invalid User:dutchinw@anybizbu.com</Message>
<Server-Time>2017-09-27T15:46:57</Server-Time>
<Id>A55930EA-D39C-463B-A12A-356F4853F27C</Id>
</Error>
```

ERROR:

```
<Error>
<Message>
<CannotBeChangedProfileSyncMessage>
<Code>W011</Code>
<Message>Cannot update Mandatory field for Corporate (Ghost) cards
using this service.</Message>
<Field>CreditCard.Segment.Mandatory</Field>
</CannotBeChangedProfileSyncMessage>
</Message>
<Server-Time>2016-10-24T15:38:05</Server-Time>
<Id>385F2AAA-94E9-40F9-A092-AB15AC18E454</Id>
</Error>
```

SOLUTION: Corporate Cards and Company Ghost Cards cannot be created or updated using the FOP API. Remove Mandatory="false" from the <Segment Type> element.

Section 24: Travel Profile Error Messages and Codes

Error Messages

When creating a user, you may encounter the following response error messages:

Error	Reason
Login Id: "{LoginId}" is already in use Could not create a new user because either Login Id is not specified or is less than three characters	Login Id is already assigned to a user After trimming, Login Id is either empty or is less than three characters (the column in database requires a value with a length >= 3)
Could not create a new user without a User Type	User Type value is missing
Could not create a new user without a Password	Password value is missing
Could not create a new user without a Company Id	Company Id value is missing
Company Id: "{CompanyId}" does not exist	Company Id could not be found in database
Could not create a new user without a Last Name	Last Name value is missing
Could not create a new user without a First Name	First Name value is missing

Error Codes

When updating a user, you may encounter the following response messages:

Response Message	Code	Reason
Success	S001	Success
Warning	W001	Value not valid against validation regex. Usually occurs if value contains non-ASCII characters or possible script or mark-up.
Warning	W002	Value is either shorter or longer than acceptable length.
Warning	W003	Look-up value could not be found. Usually occurs if an invalid Rule Class or Org Unit name provided or a User Id does not exist/does not belong to a company.

Response Message	Code	Reason
Warning	W004	Duplicate value in company.
Warning	W005	Duplicate Login Id. Cannot assign the same login Id to multiple users.
Warning	W006	Out of allowed range. For example, a datetime value that is less than the accepted minimum for SQL.
Warning	W007	Required field not populated.
Warning	W008	A list of data was provided, but the associated Update Mode field was not populated with instructions as to what to do with that data.
Warning	W009	Account Number provided was invalid.
Warning	W010	Vendor Code provided was invalid.
Warning	W011	Field cannot be changed. For some fields, the values are only available when the profile is retrieved (i.e. Supervisor's Fax number) but cannot be changed.
Warning	W012	Either no Telephones of Type Cell are specified as Primary or too many are specified as Primary. No action done on Telephones of Type Cell.
Warning	W013	Invalid Information being passed into Custom Fields
Warning	W014	The provided date range is invalid (i.e. start date after end date, etc.)
Warning	W015	Invalid GUID format.
Warning	W016	Too many items provided in a list (i.e. too many telephones of a certain type, too many custom fields with the same Name, et cetera).
Warning	W017	SQL error occurred.
Warning	UNKNOWN	Unexpected, but not show stopping, error occurred.

Section 25: Error Handling

REQUIREMENT: Retain the GUID returned in all SAP Concur responses under the header "SAP Concur-correlationid". It is a value that will be referenced to locate transactions in our logging system

REQUIRED: Support the following HTTP error conditions / codes:
<https://developer.concur.com/tools-support/reference/http-codes.html>

REQUIRED: Provide retry logic for timeouts and 500/503 errors.

RECOMMENDATION: Provide your own unique "SAP Concur-correlationid" header and randomly generated value – inserted with a company_id for example. If you provide the following in your request header, SAP Concur will return the same value in the response header

SAP Concur-correlationid: 2997-e17fb88b-5b9a-41b9-b285-6da70eeba98a

RECOMMENDATION: Error logging - retain logs for a minimum of 7 days for troubleshooting and support.

Development Support

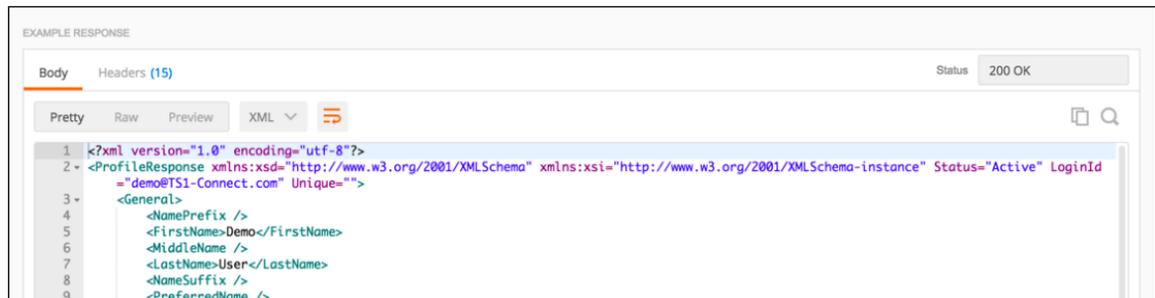
- For travel configuration questions/support, contact Travel Solutions or your Alliance Manager
- Review Release Notes regularly – API updates are delivered with monthly releases
 - ◆ http://www.SAPConcurtraining.com/customers/tech_pubs/
 - ◆ http://www.SAPConcurtraining.com/customers/tech_pubs/TravelDocs/ReleaseNotes/_CCC_RN.htm
- Review content on developer.concur.com regularly – the site is dynamic
- If you need access or permissions to "Preview" content on developer.concur.com, let us know
- For reproducible issues, log a case via case management system to Support teams. Support will escalate to respective Platform Partner Services and R&D teams.
- Visit <https://developer.oncur.com/tools-support/requesting-partner-support.html>
- Partner Support Case Management System - https://sapSAPConcur.my.salesforce.com/secur/login_portal.jsp?orgId=00D600000007Dq3&portalId=06060000000PrEi
- Support engineers attempt to reproduce your application's issues using a RestUI based request/response application such as POSTMAN or SoapUI. Our application Analysts and Engineers are not developers so .C, .JS or any other source language files are not helpful.
- Please have the following data and identifiers available
 - ◆ Application Identifiers
 - Application Name (Your agency may have more than one certified application)
 - Brief application description
 - Last 6 characters of your application's client_ID
 - DO NOT submit / paste full application IDs (keys), secrets, or OAuth tokens
 - The UUID formatted SAP Concur Correlation ID from your response headers

- ◆ Company Identifiers:
 - Company Name or Customer Name (the name that SAP Concur recognizes).
 - The SAP Concur Company ID (also known as CliqID)
 - The Travel Config ID
 - The expense entity code or entity ID
 - The company GUID if available
- ◆ Identifiers of affected areas:
 - Affected user(s) if applicable
 - The employee name or employee ID
 - The UUID if possible
 - XML Sync ID if necessary
 - Expense report name / ID
 - Invoice/Payment Request name/ID
 - Trip Itinerary name / Travel Request name/ ID
 - Booking Segment name/source
 - Trip ID
 - Locator/PNR
 - Date range
- ◆ Reproduction Information:
 - Provide contextual information related to the issue so engineers understand what your application was attempting to do at the time
 - Function –retrieving data or creating/updating data
 - Parameter(s) – by creation date, last modified date, by ID, etc.
 - Affected product areas – Imaging, expense types, dates, amounts, city codes, workflow
- ◆ API-transaction related information:
 - Token (never supply this via email)
 - Request URL
 - Method (GET, POST, PUT)
 - Request Headers
 - Request Body
 - Response Headers
 - Response Body
 - Any additional log or response information relevant to the issue

! **NOTE:** CLIENT OR PARTNER SENSITIVE DATA such as OAuth refresh tokens, application_ids or keys, application_secrets through SAP Concur secured channels ONLY!

Section 26: Support SAP Concur CorrelationID

This is a screen shot of a typical "Body" response for retrieving a profile in POSTMAN.

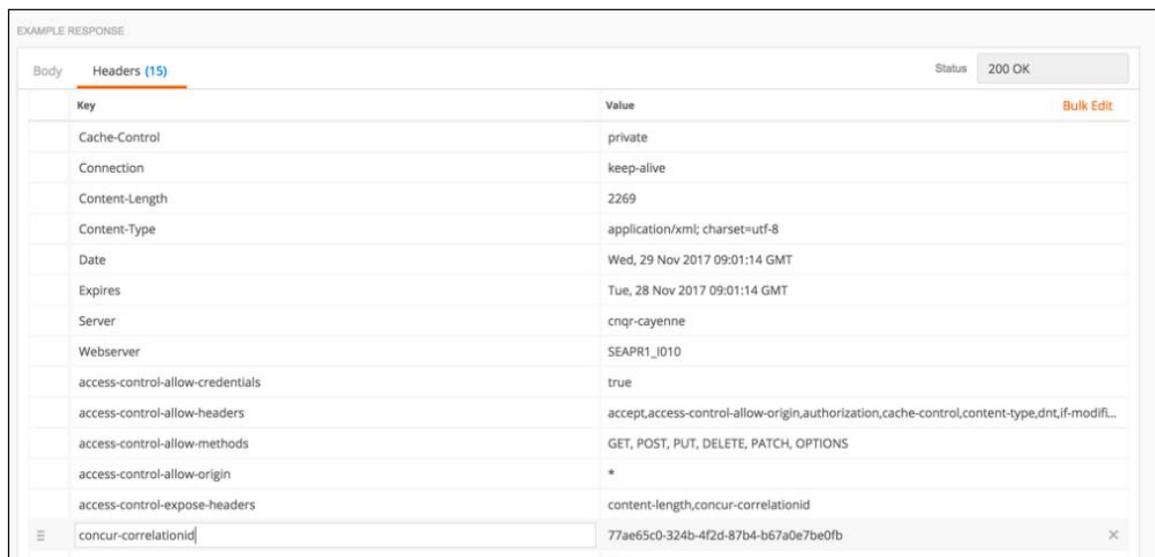


The screenshot shows the Postman interface with the 'Body' tab selected. The response is an XML document. The XML content is as follows:

```
<?xml version="1.0" encoding="utf-8"?>
<ProfileResponse xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" Status="Active" LoginId="demo@TS1-Connect.com" Unique="">
  <General>
    <NamePrefix />
    <FirstName>Demo</FirstName>
    <MiddleName />
    <LastName>User</LastName>
    <NameSuffix />
    <PreferredName />
  </General>
</ProfileResponse>
```

Select "Headers" for the response headers. Note "SAP Concur-correlationid".

We require you store that response GUID when an error occurs. When you log a case, please include the SAP Concur-correlationid GUID so we can retrieve the error(s) from our internal tools / logging system. This is what response headers look like in POSTMAN.



The screenshot shows the Postman interface with the 'Headers' tab selected. The headers are displayed in a table format:

Key	Value	
Cache-Control	private	
Connection	keep-alive	
Content-Length	2269	
Content-Type	application/xml; charset=utf-8	
Date	Wed, 29 Nov 2017 09:01:14 GMT	
Expires	Tue, 28 Nov 2017 09:01:14 GMT	
Server	cnqr-cayenne	
Webserver	SEAPR1_I010	
access-control-allow-credentials	true	
access-control-allow-headers	accept,access-control-allow-origin,authorization,cache-control,content-type,dnt,if-modif...	
access-control-allow-methods	GET, POST, PUT, DELETE, PATCH, OPTIONS	
access-control-allow-origin	*	
access-control-expose-headers	content-length,concur-correlationid	
concur-correlationid	77ae65c0-324b-4f2d-87b4-b67a0e7be0fb	X

Here's what it would look like when we search for your application's errors using the SAP Concur-correlationID GUID you captured when an error or errors occurred. It is vital for troubleshooting efficiency.

