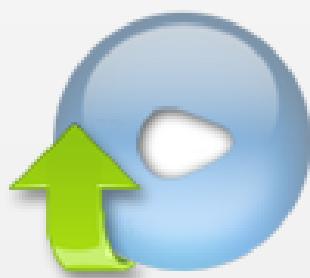


2018



TACHO ONLINE

TACHO ONLINE API 1.1.1 REFERENCE GUIDE

TACHO ONLINE API



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DRAFT



WHAT'S NEW?

Here you find an overview of what is new or has changed in Tacho Online API 1.0.0. Please find the [full revision history](#) at the end of this document.

TACHO ACTIVITIES

- Added new feature Tacho activities

WELCOME

Welcome to the Tacho Online API Reference Guide.

This document provides all the information you need to integrate Tacho Online into your applications using the Tacho Online API interface.

The documentation is divided into the following sections:

- [Terminology](#): In this chapter, you learn understanding terms used in the context of Tacho Online and Tacho Online API features.
- [Programming Guide](#): The programming guide contains a description of how to submit requests to the Tacho Online API and the data that is returned by the service, including an explanation of how to enable access to the service.
- [Reference](#): The Reference is a description of all available operations, including their parameters and the data returned by these operations.

MORE INFORMATION

Updated versions of this documentation can be acquired by contacting: support@tachoonline.dk.

TERMINOLOGY

Here is a description of the terms used in the context of Tacho Online and the Tacho Online API.

TVS

TungVognSpecialisten ApS (TVS) is the product owner

TACHO ONLINE

Tacho Online is the core component of the TVS solutions. Tacho Online is the webbased application for managing driving and rest times, files, drivers, vehicles and a set of advanced reporting and notifications tools.

TENANT

A tenant in Tacho Online is abbreviation for "The customer".



PROGRAMMING GUIDE

This programming guide is an introduction to using the Tacho Online API interface, how to access the service and how to interpret the output that is returned.

In order to access the Tacho Online service you need an API key and a Tacho Online account or a Partner account enabled. Otherwise, you will not be able to test the integration for your application.

NOTE: Please talk to your TVS contact or write to support@tachoonline.dk, if you do not have access to a Tacho Online or Partner account.

INTRODUCTION TO THE TACHO ONLINE API

The Tacho Online API allows you to access the Tacho Online service through a web-enabled application. These are the primary features accessible through the Tacho Online API:

- Driving & rest times files: file upload and download
- Tacho data: Tacho activities
- Drivers: Insert, update and delete drivers and retrieve driver information.
- Vehicles: Insert, update and delete vehicles and vehicle information.
- Control documents: Insert, update and delete documents and retrieve document information.

Tacho Online API is using access restrictions set up within Tacho Online. This affects all elements of the Tacho Online interface. For instance, you maybe be grant access rights to upload files, but not to download files. Please contact support@tachoonline.dk if you have questions about your access rights.

PREPARING FOR USING THE TACHO ONLINE API

The Tacho Online API can be made available to every customer or partner with a valid Tacho Online account.

Access the Tacho Online API with a valid token to enable access for your application, obtain an OAuth token (credentials) by doing the following:

- Partners: please contact your TVS contact, to receive your credentials (client_id, client_secret, username and password).
- Customers: please contact your sales contact or the support team: support@tachoonline.dk for accessing the API.

NOTE: After an access request has been made, the TVS team will authenticate the request. If the request is valid, the TVS Team will setup the appropriated access rights and you will received your access details and credentials.



MAKING REQUESTS TO TACHO ONLINE API

MAKING HTTP REQUESTS

This section explains how to use [HTTP](#) to issue requests to Tacho Online API.

IMPORTANT: only HTTPS requests are accepted. Requests using unencrypted HTTP are rejected!

The Tacho Online API generally uses HTTP:

- GET
- POST
- PATCH
- DELETE

Requests as the underlying transport mechanism for requests.

All requests are made using specific [URLs](#), passing parameter names and values as URL parameters. Responses are currently only available as [JSON](#).

You can experiment with Tacho Online API specific HTTPS requests by entering the request URL into the browser's address bar and submitting the request.

NOTE: If the format of the HTTP request is not valid you will get a corresponding error.

THE BASE URL

The base URL with the https scheme used is:

- <https://service.tachoonline.dk/>

Handling the response In case of an error, an error message is returned as plain text. The error message has the following layout:

- Errorcode: standard http errorcodes
- Message: custom message that provide a reason text (always in English)



400

Bad Request[Example Value](#) | [Model](#)

```
{  
    "version": "string",  
    "statusCode": 0,  
    "message": "string",  
    "responseException": {  
        "isError": true,  
        "exceptionMessage": "string",  
        "details": "string",  
        "referenceErrorCode": "string",  
        "referenceDocumentLink": "string",  
        "validationErrors": [  
            {  
                "field": "string",  
                "message": "string"  
            }  
        ]  
    }  
}
```

On success, responses will always return statusCode **200** “Success”.

Code	Description
200	Success

GETTING STARTED WITH HTTP REQUESTS

For getting started with HTTP requests, we recommend using [POSTMAN](#).

Preconditions:

- POSTMAN (or any other tool where you can add headers)
- Valid client ID and Client secret
- Valid username and password

TOKEN REQUEST (OAUTH)

To generate your token, please enter the URL:

- <https://auth.tachoonline.dk/connect/token>

Add the following parameters (key/value):

- Key: **grant_type** - Value: password
- Key: **client_id** - Value: YOUR.CLIENTID
- Key: **client_secret** - Value: YOUR.CLIENTSECRET
- Key: **username** - Value: YOUR.USERNAME
- Key: **password** - Value: YOUR.PASSWORD



Token request Driver get + ...

Token request https://auth.tachoonline.dk/connect/token

Authorization Headers (4) Body Pre-request Script Tests

form-data x-www-form-urlencoded raw binary

Params Send Save Examples (0)

1 2 3

KEY	VALUE	DESCRIPTION
grant_type	password	
client_id	TVS.toapi	
client_secret	B4B2434B-B513-409E-A938-A06D77DCC365	
username	YOUR_USERNAME	
password	YOUR_PASSWORD	
Key	Value	Description

Body Cookies Headers (8) Test Results Status: 200 OK Time: 253 ms Size: 1.44 KB

Pretty Raw Preview JSON

```
1 {  
2   "access_token": "eyJhbGciOiJSUzI1NiIsImt0ZCI6IA2M2I3NwM1MDd1MTYwODE0NmIyZTFKbzIzI03NTflIiwidHlwIjoiSjdUjIn0  
3     .eyJyJmYmI0E1NDw0QsIm4cCIG0TU0hjAyNTcwNCwiaXNzIjsoleHR0cHM6...": ""},  
4     "token_type": "Bearer",  
5 }
```

NOTE: you can decode the access token using [JSON Web Tokens](#) (or another service) to view the payload data.

MAKING AN HTTP REQUEST (EXAMPLE)

In this example, we will make a request for all [DRIVERS] on a specific [TENANT]:

Preconditions:

- POSTMAN (or any other tool where you can add headers)
 - Valid Access token
1. Select GET
 2. Add BaseUrl: <https://service.tachoonline.dk/>
 3. Specify the target tenant (add GUID): <https://service.tachoonline.dk/tenants/TENANTID>
 4. Specify what you want (in this case, we want a list off all the drivers for a tenant): <https://service.tachoonline.dk/tenants/TENANTID/drivers/>
 5. Add your Access token
 6. Click "Send"

The screenshot shows a POSTMAN interface with the following details:

- Request URL:** http://tachoonline.dk/to/tenants/B7F39733-C4E0-4F56-B452-0361D0E11EC5/drivers/
- Method:** GET
- Authorization:** Bearer Token (Automatically generated)
- Response Headers:** Status: 200 OK, Time: 22 ms, Size: 1.6 KB
- Response Body (Pretty JSON):**

```

1  [
2   "Version": "1.0.0.0",
3   "StatusCode": 200,
4   "Message": "Request successful.",
5   "Result": [
6     "result": [
7       {
8         "id": "6868c79b-1f71-46e3-9aca-d3a3cf6d1ea9",
9         "firstname": "Levi",
10        "lastname": "Lavoi",
11        "driverID": "OK00000012345671"
12      },
13      {
14        "id": "b2a0e92c-c2b7-4061-b560-b34e2077558b",
15        "firstname": "Rufus",
16        "lastname": "Lavade",
17        "driverID": "OK00000012345671"
18      },
19      {
20        "id": "ef2088e3-2a53-4eb5-b11e-207ffe65dfa7",
21        "firstname": "Olana",
22        "lastname": "Orear",
23        "driverID": "OK00000012345671"
24      },
25      {
26        "id": "c910a030-413f-4485-ae49-b9a702890e7",
27        "firstname": "Solomon",
28        "lastname": "Sole",
29        "driverID": "OK00000012345671"
30      }
31    ]
  
```

REQUEST LIMITS

The number of requests that can be issued is limited. If the number of requests executed exceeds this limit, Tacho Online will return an error message and not process requests until there were no further requests within the limit-monitoring interval. Limits are defined by a maximum number of requests allowed in a certain time period.

- Request limit: **10 / second - 180 / minute [DRAFT - WILL MOST LIKELY BE CHANGE!]**

IMPORTANT: Should an application using Tacho Online API cause too much load on the system, the limit may be reduced at any time without prior notice and eventually access to Tacho Online API might be revoked completely if the problems are not fixed within a reasonable amount of time.

REFERENCE

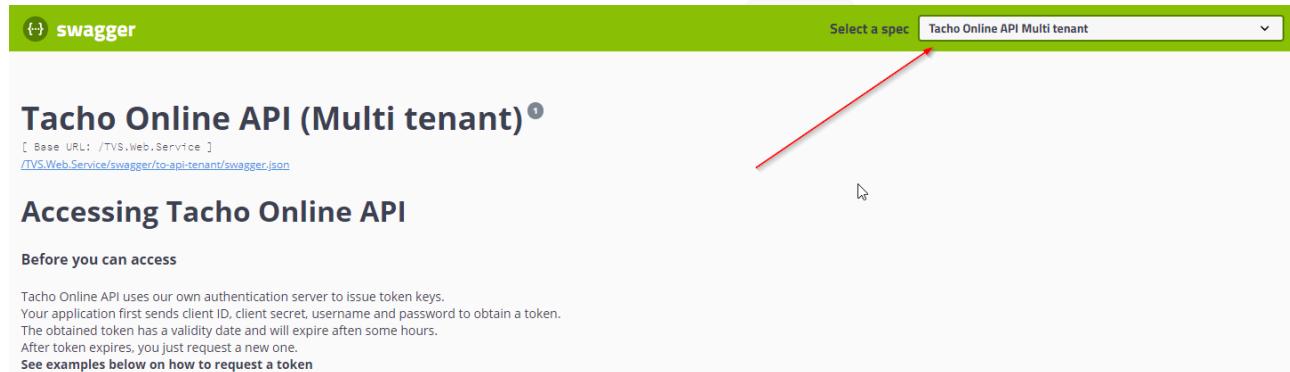
The Tacho Online API is into divided into two areas:

- **Tacho Online API - Single tenant** (single usage): primarily use by our customers
- **Tacho Online API - Multi tenants** (multi usage): used by our partners

SWAGGER

Want to skip this reading and jump straight to the documentation provided using [Swagger](#), then [click here](#) or use the following link:

- <https://service.tachoonline.dk/doc/index.html>



swagger

Select a spec Tacho Online API Multi tenant

Tacho Online API (Multi tenant)^①

[Base URL: /TVS.Web.Service]
[/TVS.Web.Service/swagger/to-api-tenant/swagger.json](#)

Accessing Tacho Online API

Before you can access

Tacho Online API uses our own authentication server to issue token keys.
Your application first sends client ID, client secret, username and password to obtain a token.
The obtained token has a validity date and will expire after some hours.
After token expires, you just request a new one.
[See examples below on how to request a token](#)

NOTE: please select the appropriated “spec” before you start reading the swagger documentation.

TACHO ONLINE API - SINGLE TENANT (FOR CUSTOMERS)

COMPANY

[GET] /COMPANY

Get information about current company:

```
Response.CompanyDetails ▼ {
    version           string
    statusCode       integer($int32)
    message          string
    result           ▼ [
        uniqueItems: false
        CompanyDetails ▼ {
            id                  string($uuid)
            name                string
            address1             string
            address2             string
            zipcode              string
            town                string
            country              string
            phone               string
            fax                 string
            www                 string
            email               string
            vatNumber            string
            companyCardID        string
        }
    ]
}
```

[GET] /COMPANY/CONTRODOCS

List companies control documents:

```
Response.ControlDoc ▼ {
    version           string
    statusCode       integer($int32)
    message          string
    result           ▼ [
        uniqueItems: false
        ControlDoc ▼ {
            id                  string($uuid)
            name                string
            date                string($date-time)
            expiredDate         string($date-time)
            daysBeforeWarning   integer($int32)
            systemCreated        boolean
        }
    ]
}
```

[POST] /COMPANY/CONTROLODOCS

Create new company control document:

```
Response.ControlDocDetails ▾ {
    version          string
    statusCode      integer($int32)
    message         string
    result          ControlDocDetails ▾ {
        id              string($uuid)
        readOnly: true
        name            string
        date            string($date-time)
        expiredDate    string($date-time)
        daysBeforeWarning integer($int32)
        internalNote   string
        systemCreated   boolean
        readOnly: true
    }
}
```

- [REQUIRED] **ControlDoc**: the control document object

[GET] /COMPANY/CONTROLODOCS/ {CONTROLODOCID}

Get control document details from the specific company:

```
Response.ControlDocDetails ▾ {
    version          string
    statusCode      integer($int32)
    message         string
    result          ControlDocDetails ▾ {
        id              string($uuid)
        name            string
        date            string($date-time)
        expiredDate    string($date-time)
        daysBeforeWarning integer($int32)
        internalNote   string
        systemCreated   boolean
    }
}
```

- [REQUIRED] **ControlDocID**: the unique control document ID.

[DELETE] /COMPANY/CONTROLODOCS/ {CONTROLODOCID}

Delete existing company control document:

```
Response.ControlDocDetails ▾ {
    version          string
    statusCode      integer($int32)
    message         string
    result          ControlDocDetails ▾ {
        id              string($uuid)
        readOnly: true
        name            string
        date            string($date-time)
        expiredDate    string($date-time)
        daysBeforeWarning integer($int32)
        internalNote   string
        systemCreated   boolean
        readOnly: true
    }
}
```

- [REQUIRED] **ControlDocID**: the unique control document ID.

[PATCH] /COMPANY/CONTROLODOCS/ {CONTROLODOCID}

Update: existing company document:

```
▼ [
  uniqueItems: false
Operation ▾ {
    value           ▾ {
        ...
    }
    path            string
    op              string
    from            string
}]
]
```

```
Response.ControlDocDetails {  
    version      string  
    statusCode  integer($int32)  
    message      string  
    result       ControlDocDetails {  
        id          string($uuid)  
        readOnly: true  
        name        string  
        date        string($date-time)  
        expiredDate string($date-time)  
        daysBeforeWarning integer($int32)  
        internalNote string  
        systemCreated boolean  
        readOnly: true  
    }  
}
```

- [REQUIRED] **ControlDocID**: the unique control document ID.
- [REQUIRED] **ControlDoc**: the jsonPatchDocument object used to update the companys control document values

DRIVERS

[GET] /DRIVERS

Get list of existing drivers:

```
Response.Driver ▾ {
  version           string
  statusCode       integer($int32)
  message          string
  result           ▾ [
    uniqueItems: false
    Driver ▾ {
      id               string($uuid)
      firstname        string
      lastname         string
      driverID         string
    }
  ]
}
```

[POST] /DRIVERS

Create new Driver:

```
Response.DriverDetails ▾ {
  version           string
  statusCode       integer($int32)
  message          string
  result           ▾ [
    DriverDetails ▾ {
      id               string($uuid)
      readOnly: true
      firstname        string
      lastname         string
      nickname         string
      driverID         string
      email            string
      mobile           string
      phone            string
      address1         string
      address2         string
      zipcode          string
      town             string
      country          string
      birthday         string($date-time)
      employedDate     string($date-time)
    }
  ]
}
```

- [REQUIRED] **Driver**: driver object

[GET] /DRIVERS/{DRIVERID}

Get driver details:

```
Response.DriverDetails ▾ {
    version           string
    statusCode       integer($int32)
    message          string
    result           DriverDetails ▾ {
        id                 string($uuid)
        readOnly: true
        firstname         string
        lastname          string
        nickname          string
        driverID          string
        email              string
        mobile             string
        phone              string
        address1          string
        address2          string
        zipcode            string
        town               string
        country             string
        birthday           string($date-time)
        employedDate       string($date-time)
    }
}
```

- [REQUIRED] **DriverID**: the unique driver ID.

[DELETE] /DRIVERS/{DRIVERID}

Delete existing driver:

```
Response.DriverDetails ▾ {
    version           string
    statusCode       integer($int32)
    message          string
    result           DriverDetails ▾ {
        id                 string($uuid)
        readOnly: true
        firstname         string
        lastname          string
        nickname          string
        driverID          string
        email              string
        mobile             string
        phone              string
        address1          string
        address2          string
        zipcode            string
        town               string
        country             string
        birthday           string($date-time)
        employedDate       string($date-time)
    }
}
```

- [REQUIRED] **DriverID**: the unique driver ID.

[PATCH] /DRIVERS/{DRIVERID}

Update existing driver:

```

    ▾ [
      uniqueItems: false
    Operation ▾ {
      value           ▾ {
        ...
      }
      path           string
      op             string
      from           string
    }]
  
```

```

Response.DriverDetails ▾ {
  version          string
  statusCode       integer($int32)
  message          string
  result           DriverDetails ▾ {
    id               string($uuid)
    readOnly: true
    firstname        string
    lastname         string
    nickname         string
    driverID         string
    email            string
    mobile           string
    phone            string
    address1         string
    address2         string
    zipcode          string
    town             string
    country          string
    birthday         string($date-time)
    employedDate     string($date-time)

  }
}
  
```

- [REQUIRED] **DriverID**: the unique driver ID.
- [REQUIRED] **Driver**: the jsonPatchDocument object used to update the driver values

[GET] /DRIVERS/{DRIVERID}/CONTRODOCS

List drivers control documents:

```
Response.ControlDoc ▾ {
    version           string
    statusCode       integer($int32)
    message          string
    result   ▾ [
        uniqueItems: false
        ControlDoc ▾ {
            id                string($uuid)
            name              string
            date              string($date-time)
            expiredDate      string($date-time)
            daysBeforeWarning integer($int32)
            systemCreated     boolean
        }]
}
```

- [REQUIRED] **DriverID**: the unique driver ID.

[POST] /DRIVERS/{DRIVERID}/CONTRODOCS

Create new driver control document:

```
ControlDocDetails ▾ {
    id                string($uuid)
    readOnly: true
    name              string
    date              string($date-time)
    expiredDate      string($date-time)
    daysBeforeWarning integer($int32)
    internalNote     string
    systemCreated     boolean
    readOnly: true
}
```

```

Response.ControlDocDetails ▼ {
    version          string
    statusCode       integer($int32)
    message          string
    result           ControlDocDetails ▼ {
        id              string($uuid)
        readOnly: true
        name            string
        date            string($date-time)
        expiredDate    string($date-time)
        daysBeforeWarning integer($int32)
        internalNote   string
        systemCreated   boolean
        readOnly: true
    }
}

```

- [REQUIRED] **DriverID**: the unique driver ID.
- [REQUIRED] **ControlDoc**: the control document object

[GET] /DRIVERS/{DRIVERID}/CONTRODOCS/{CONTROLDODCID}

Get control document details from specific driver:

```

Response.ControlDocDetails ▼ {
    version          string
    statusCode       integer($int32)
    message          string
    result           ▼ [
        uniqueItems: false
        ControlDocDetails ▼ {
            id              string($uuid)
            name            string
            date            string($date-time)
            expiredDate    string($date-time)
            daysBeforeWarning integer($int32)
            internalNote   string
            systemCreated   boolean
        }
    ]
}

```

- [REQUIRED] **DriverID**: the unique driver ID.
- [REQUIRED] **ControlDocID**: the unique control document ID.

[DELETE] /DRIVERS/{DRIVERID}/CONTROLODOCS/{CONTROLODOCID}

Delete existing driver control document:

```
Response.ControlDocDetails {
    version           string
    statusCode       integer($int32)
    message          string
    result {
        ControlDocDetails {
            id             string($uuid)
            readOnly: true
            name          string
            date          string($date-time)
            expiredDate   string($date-time)
            daysBeforeWarning integer($int32)
            internalNote  string
            systemCreated boolean
            readOnly: true
        }
    }
}
```

- [REQUIRED] **DriverID**: the unique driver ID.
- [REQUIRED] **ControlDocID**: the unique control document ID.

[PATCH] /DRIVERS/{DRIVERID}/CONTROLODOCS/{CONTROLODOCID}

Update existing driver control document:

```
[
uniqueItems: false
Operation {
    value {
        }
    path      string
    op        string
    from     string
}
]
```

```

Response.ControlDocDetails ▾ {
    version          string
    statusCode      integer($int32)
    message         string
    result          ControlDocDetails ▾ {
        id              string($uuid)
        readOnly: true
        name            string
        date            string($date-time)
        expiredDate    string($date-time)
        daysBeforeWarning integer($int32)
        internalNote   string
        systemCreated   boolean
        readOnly: true
    }
}

```

- [REQUIRED] **DriverID**: the unique driver ID.
- [REQUIRED] **ControlDocID**: the unique control document ID.
- [REQUIRED] **ControlDoc**: the jsonPatchDocument object used to update the drivers control document values

[GET] /DRIVERS/{DRIVERID}/TACHOACTIVITY /{ACTIVITYMIN }/{ACTIVITYMAX }

Get Tacho activity details from a specific driver:

```

Response.DriverActivity ▾ {
    version          string
    statusCode      integer($int32)
    message         string
    result          ▾ [
        uniqueItems: false
        DriverActivity ▾ {
            description:           DTO used for tachographfile activities
            time                  string($date-time)
            example: 2018-01-01T00:00:00
            inserted              integer($int32)
            example: 1
            Not inserted = 0,
            Inserted = 1
            slot                 integer($int32)
            example: 0
            No slot = null,
            Slot 1 = 0,
            Slot 2 = 1
            activity              integer($int32)
            example: 0
            No activity = null
            Rest = 0,
            Available = 1,
            Work = 2,
            Drive = 3
            regNo                string
            example: AB12345
        }
    ]
}

```

- [REQUIRED] **DriverID**: the unique driver ID.
- [REQUIRED] **ActivityMin**: the minimum activity date
- [REQUIRED] **ActivityMax**: the maximum activity date

VEHICLE

[GET] /VEHICLES

Get list of existing vehicles:

```
Response.Vehicle ▾ {  
    version           string  
    statusCode       integer($int32)  
    message          string  
    result    ▾ [  
        uniqueItems: false  
        Vehicle ▾ {  
            id                string($uuid)  
            name              string  
            vin               string  
        }]  
}
```

[POST] /VEHICLES

Create new vehicle:

```
Response.VehicleDetails ▾ {  
    version           string  
    statusCode       integer($int32)  
    message          string  
    result    ▾ [  
        VehicleDetails ▾ {  
            id                string($uuid)  
            readOnly: true  
            name              string  
            licensePlate      string  
            vin               string  
            odometer         number($double)  
        }]  
}
```

- [REQUIRED] **Vehicle**: Vehicle object



[GET] /VEHICLES/{VEHICLEID}

Get vehicle details:

```
Response.VehicleDetails ▾ {  
    version           string  
    statusCode       integer($int32)  
    message          string  
    result           VehicleDetails ▾ {  
        id              string($uuid)  
        readOnly: true  
        name            string  
        licensePlate    string  
        vin             string  
        odometer        number($double)  
    }  
}
```

- [REQUIRED] **VehicleID**: the unique vehicle ID.

[DELETE] /VEHICLES/{VEHICLEID}

Delete existing vehicle:

```
Response.VehicleDetails ▾ {  
    version           string  
    statusCode       integer($int32)  
    message          string  
    result           VehicleDetails ▾ {  
        id              string($uuid)  
        readOnly: true  
        name            string  
        licensePlate    string  
        vin             string  
        odometer        number($double)  
    }  
}
```

- [REQUIRED] **VehicleID**: the unique vehicle ID.

[PATCH] /VEHICLES/{VEHICLEID}

Update existing vehicle:

```

▼ [uniqueItems: false]
Operation ▼ {
  value ▼ {
    path string
    op   string
    from string
  }
}
  
```

```

Response.VehicleDetails ▼ {
  version      string
  statusCode   integer($int32)
  message      string
  result       VehicleDetails ▼ {
    id          string($uuid) readOnly: true
    name        string
    licensePlate string
    vin         string
    odometer    number($double)
  }
}
  
```

- [REQUIRED] **VehicleID**: the unique vehicle ID.
- [REQUIRED] **Vehicle**: the jsonPatchDocument object used to update the vehicle values.

[GET] /VEHICLES/{REGNO}

Get vehicle details from vehicle registration number:

```

Response.VehicleDetails ▼ {
  version      string
  statusCode   integer($int32)
  message      string
  result       VehicleDetails ▼ {
    id          string($uuid) readOnly: true
    name        string
    regNo       string
    vin         string
    odometer    number($double)
  }
}
  
```

- [REQUIRED] **RegNo**: the vehicles registration number



[GET] /VEHICLES/{VIN}

Get vehicle details from vehicle identification number:

```
Response.VehicleDetails ▼ {  
    version          string  
    statusCode      integer($int32)  
    message         string  
    result          VehicleDetails ▼ {  
        id              string($uuid)  
        readOnly: true  
        name            string  
        regNo           string  
        vin             string  
        odometer        number($double)  
    }  
}
```

- [REQUIRED] **VIN**: the vehicles identification number

[GET] /VEHICLES/{VEHICLEID}/CONTROLODOCS

List vehicles control documents:

```
Response.ControlDoc ▼ {  
    version          string  
    statusCode      integer($int32)  
    message         string  
    result          ▼ [  
        uniqueItems: false  
        ControlDoc ▼ {  
            id              string($uuid)  
            name            string  
            date            string($date-time)  
            expiredDate    string($date-time)  
            daysBeforeWarning integer($int32)  
            systemCreated   boolean  
        }]  
    }  
}
```

- [REQUIRED] **VehicleID**: the unique vehicle ID.

[POST] /VEHICLES/{VEHICLEID}/CONTROLODOCS

Create new vehicle control document:

```
ControlDocDetails ▼ {  
    id              string($uuid)  
    readOnly: true  
    name            string  
    date            string($date-time)  
    expiredDate    string($date-time)  
    daysBeforeWarning integer($int32)  
    internalNote   string  
    systemCreated   boolean  
    readOnly: true  
}
```

```
Response.ControlDocDetails ▼ {
    version          string
    statusCode       integer($int32)
    message          string
    result           ControlDocDetails ▼ {
        id               string($uuid)
        name             string
        date             string($date-time)
        expiredDate     string($date-time)
        daysBeforeWarning integer($int32)
        internalNote    string
        systemCreated   boolean
        readOnly: true
    }
}
```

- [REQUIRED] **VehicleID**: the unique vehicle ID.
- [REQUIRED] **ControlDoc**: the control document object.

[GET] /VEHICLES/{VEHICLEID}/CONTRODOCS/{CONTRODOCID}

Get control document details from specific vehicle:

```
Response.ControlDocDetails ▼ {
    version          string
    statusCode       integer($int32)
    message          string
    result           ▼ [
        uniqueItems: false
        ControlDocDetails ▼ [
            id               string($uuid)
            name             string
            date             string($date-time)
            expiredDate     string($date-time)
            daysBeforeWarning integer($int32)
            internalNote    string
            systemCreated   boolean
        ]
    ]
}
```

- [REQUIRED] **VehicleID**: the unique vehicle ID.
- [REQUIRED] **ControlDocID**: the unique control document ID.

[DELETE] /VEHICLES/{VEHICLEID}/CONTRODOCS/{CONTRODOCID}

Delete existing vehicle control document:

```

Response.ControlDocDetails ▾ {
    version          string
    statusCode       integer($int32)
    message          string
    result           ControlDocDetails ▾ {
        id              string($uuid)
        readOnly: true
        name            string
        date            string($date-time)
        expiredDate     string($date-time)
        daysBeforeWarning integer($int32)
        internalNote    string
        systemCreated   boolean
        readOnly: true
    }
}

```

- [REQUIRED] **VehicleID**: the unique vehicle ID.
- [REQUIRED] **ControlDocID**: the unique control document ID.

[PATCH] /VEHICLES/{VEHICLEID}/CONTRODOCS/{CONTRODOCID}

Update existing vehicle control document:

```

▼ [
uniqueItems: false
Operation ▾ {
    value           ▾ {
        ...
    }
    path            string
    op              string
    from            string
}]

```

```
Response.ControlDocDetails ▾ {  
    version          string  
    statusCode      integer($int32)  
    message         string  
    result          ControlDocDetails ▾ {  
        id              string($uuid)  
        readOnly: true  
        name            string  
        date            string($date-time)  
        expiredDate    string($date-time)  
        daysBeforeWarning integer($int32)  
        internalNote   string  
        systemCreated   boolean  
        readOnly: true  
    }  
}  
}
```

- [REQUIRED] **VehicleID**: the unique vehicle ID.
- [REQUIRED] **ControlDocID**: the unique control document ID.
- [REQUIRED] **ControlDoc**: the jsonPatchDocument object used to update the vehicles control document values

TACHOGRAPHFILES

[GET] /TACHOGRAPHFILES

Gets a list of existing tachograph files:

```
Response.TachographFile[] ▾ {
    version           string
    statusCode       integer($int32)
    message          string
    result           ▾ [
        uniqueItems: false
        TachographFile ▾ {
            id             string($uuid)
            filename        string
        }
    ]
}
```

[POST] /TACHOGRAPHFILES

Upload a tachograph file to Tacho Online:

```
TachographFileData ▾ {
    description:
        Upload DTO for upload of tachograph files
        filename must also contain the file extension
        blob is the files content in base64
    {
        filename: "M_20180913_1100_AB12345_ZFF77XJT3F0204054.ddd",
        blob: "YmFzZTY0...ZXhhbXBsZQ=="
    }
    filename      string
    example: M_20180913_1100_AB12345_ZFF77XJT3F0204054.ddd
    blob         string($byte)
    example: YmFzZTY0...ZXhhbXBsZQ==
}
```

[GET] /TACHOGRAPHFILES/{TACHOGRAPHFILEID}

Read information about existing tachograph files:

```
Response.TachographFile ▾ {
    version           string
    statusCode       integer($int32)
    message          string
    result           TachographFile ▾ {
        id             string($uuid)
        filename        string
    }
}
```

[GET] /TACHOGRAPHFILES/{TACHOGRAPHFILEID}/DOWNLOAD

Download tachograph file as base64:

```
Response.TachographFileData ▾ {
    version           string
    statusCode       integer($int32)
    message          string
    result           TachographFileData ▾ {
        description:           Upload DTO for upload of tachograph files
        filename must also contain the file extension
        blob is the files content in base64
        {
            filename: "M_20180913_1100_AB12345_ZFF77XJT3F0204054.ddd",
            blob: "YmFzZTY0...ZXhhbXBsZQ=="
        }
        filename           string
        blob              string($byte)
        example: M_20180913_1100_AB12345_ZFF77XJT3F0204054.ddd
        example: YmFzZTY0...ZXhhbXBsZQ==
    }
}
```

[GET] /TACHOGRAPHFILES/{TACHOGRAPHFILEID}/DOWNLOAD/FILE

Download tachograph file as octet-stream:

```
Response.Error ▾ {  
    version          string  
    statusCode      integer($int32)  
    message          string  
    responseException ApiError ▾ {  
        isError        boolean  
        exceptionMessage string  
        details         string  
        referenceErrorCode string  
        referenceDocumentLink string  
        validationErrors ▾ [  
            uniqueItems: false  
            ValidationError ▾ {  
                field           string  
                readOnly: true  
                message          string  
                readOnly: true  
            }]  
    }  
}
```

TACHO ONLINE API - MULTI TENANTS (FOR PARTNERS)

TENANTS

[GET] /TENANTS

Get list of tenants that is accessible:

```
Response.TenantDto ▾ {
    version           string
    statusCode       integer($int32)
    message          string
    result           ▾ [
        uniqueItems: false
        TenantDto ▾ {
            description:
                Tenant DTO
            id               string($uuid)
            example: 695add9d-cc3c-415a-8e96-830a90554ae9
            name             string
            example: Tacho Online
            vatNumber        string
            example: DK12345678
        }
    ]
}
```

[GET] /TENANTS/{ID}

Get tenant details:

```
Response.TenantDto ▾ {
    version           string
    statusCode       integer($int32)
    message          string
    result           ▾ [
        TenantDto ▾ {
            description:
                Tenant DTO
            id               string($uuid)
            example: 695add9d-cc3c-415a-8e96-830a90554ae9
            name             string
            example: Tacho Online
            vatNumber        string
            example: DK12345678
        }
    ]
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customer in Tacho Online

COMPANY

[GET] /TENANTS/{TENANTID}/COMPANY

Get information about company:

```
Response.CompanyDetails ▼ {
    version          string
    statusCode      integer($int32)
    message         string
    result          ▾ [
        ▾ [uniqueItems: false
            CompanyDetails ▼ {
                id              string($uuid)
                name            string
                address1        string
                address2        string
                zipcode         string
                town            string
                country         string
                phone           string
                fax             string
                www             string
                email           string
                vatNumber       string
                companyCardID   string
            }
        ]
    }
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online

[GET] /TENANTS/{TENANTID}/COMPANY/CONTRODOCS

List companies control documents:

```
Response.ControlDoc ▼ {
    version          string
    statusCode      integer($int32)
    message         string
    result          ▾ [
        ▾ [uniqueItems: false
            ControlDoc ▼ {
                id              string($uuid)
                name            string
                date            string($date-time)
                expiredDate     string($date-time)
                daysBeforeWarning integer($int32)
                systemCreated   boolean
            }
        ]
    }
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online

[POST] /TENANTS/{TENANTID}/COMPANY/CONTROLODOCS

Create new company document:

```
ControlDocDetails ▾ {
    id                  string($uuid)
                        readOnly: true
    name                string
    date                string($date-time)
    expiredDate        string($date-time)
    daysBeforeWarning  integer($int32)
    internalNote       string
    systemCreated      boolean
                        readOnly: true

}
```

```
Response.ControlDocDetails ▾ {
    version            string
    statusCode         integer($int32)
    message            string
    result             ControlDocDetails ▾ {
        id                  string($uuid)
                            readOnly: true
        name                string
        date                string($date-time)
        expiredDate        string($date-time)
        daysBeforeWarning  integer($int32)
        internalNote       string
        systemCreated      boolean
                            readOnly: true

    }
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **ControlDoc**: the control document object

[GET] /TENANTS/{TENANTID}/COMPANY/CONTROLODOCS/ {CONTROLODOCID}

Get control document details from the specific company:

```
Response.ControlDocDetails ▾ {
    version            string
    statusCode         integer($int32)
    message            string
    result             ControlDocDetails ▾ {
        id                  string($uuid)
        name                string
        date                string($date-time)
        expiredDate        string($date-time)
        daysBeforeWarning  integer($int32)
        internalNote       string
        systemCreated      boolean

    }
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **ControlDocID**: the unique control document ID

[DELETE] /TENANTS/{TENANTID}/COMPANY/CONTROLODOCS/ {CONTROLODOCID}

Delete existing company control document:

```
Response.ControlDocDetails {
    version          string
    statusCode      integer($int32)
    message         string
    result {
        ControlDocDetails {
            id           string($uuid)
            readOnly: true
            name         string
            date         string($date-time)
            expiredDate string($date-time)
            daysBeforeWarning integer($int32)
            internalNote string
            systemCreated boolean
            readOnly: true
        }
    }
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **ControlDocID**: the unique control document ID

[DELETE] /TENANTS/{TENANTID}/COMPANY/CONTROLODOCS/ {CONTROLODOCID}

Update existing company control document:

```
uniqueItems: false
Operation {
    value {
        }
    path   string
    op     string
    from   string
}]
```

```
Response.ControlDocDetails ▾ {  
    version          string  
    statusCode      integer($int32)  
    message         string  
    result          ControlDocDetails ▾ {  
        id              string($uuid)  
        readOnly: true  
        name            string  
        date            string($date-time)  
        expiredDate    string($date-time)  
        daysBeforeWarning integer($int32)  
        internalNote   string  
        systemCreated  boolean  
        readOnly: true  
    }  
}  
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **ControlDocID**: the unique control document ID
- [REQUIRED] **ControlDoc**: the jsonPatchDocument object used to update the companys control document values

DRIVERS

[GET] /TENANTS/{TENANTID}/DRIVERS

Get list of existing drivers:

```
Response.Driver ▾ {
    version           string
    statusCode       integer($int32)
    message          string
    result           ▾ [
        uniqueItems: false
        Driver ▾ {
            id                 string($uuid)
            firstname         string
            lastname          string
            driverID          string
        }
    ]
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online

[POST] /TENANTS/{TENANTID}/DRIVERS

Create new driver:

```
Response.DriverDetails ▾ {
    version           string
    statusCode       integer($int32)
    message          string
    result           ▾ {
        DriverDetails ▾ {
            id                 string($uuid)
            firstname         string
            lastname          string
            nickname          string
            driverID          string
            email              string
            mobile             string
            phone              string
            address1          string
            address2          string
            zipcode           string
            town               string
            country            string
            birthday           string($date-time)
            employedDate       string($date-time)
        }
    }
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **Driver**: the driver object

[GET] /TENANTS/{TENANTID}/DRIVERS/{DRIVERID}

Get driver details:

```
Response.DriverDetails ▼ {
    version          string
    statusCode      integer($int32)
    message         string
    result          DriverDetails ▼ {
        id              string($uuid)
        firstname       string
        lastname        string
        nickname        string
        driverID        string
        email           string
        mobile          string
        phone           string
        address1        string
        address2        string
        zipcode         string
        town            string
        country         string
        birthday        string($date-time)
        employedDate   string($date-time)
    }
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **DriverID**: the unique driver ID

[DELETE] /TENANTS/{TENANTID}/DRIVERS/{DRIVERID}

Delete existing driver:

```
Response.DriverDetails ▼ {
    version          string
    statusCode      integer($int32)
    message         string
    result          DriverDetails ▼ {
        id              string($uuid)
        firstname       string
        lastname        string
        nickname        string
        driverID        string
        email           string
        mobile          string
        phone           string
        address1        string
        address2        string
        zipcode         string
        town            string
        country         string
        birthday        string($date-time)
        employedDate   string($date-time)
    }
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **DriverID**: the unique driver ID

[PATCH] /TENANTS/{TENANTID}/DRIVERS/{DRIVERID}

Update existing driver:

```

▼ [
uniqueItems: false
Operation ▼ {
  value
    ▼ {
      }
      string
      string
      string
    }
  path
  op
  from
}
]

```

```

Response.DriverDetails ▼ {
  version          string
  statusCode       integer($int32)
  message          string
  result           DriverDetails ▼ {
    id               string($uuid)
    readOnly: true
    firstname        string
    lastname         string
    nickname         string
    driverID         string
    email            string
    mobile           string
    phone            string
    address1         string
    address2         string
    zipcode          string
    town             string
    country          string
    birthday         string($date-time)
    employedDate     string($date-time)
  }
}

```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **DriverID**: the unique driver ID
- [REQUIRED] **Driver**: the jsonPatchDocument object used to update the driver values

[GET] /TENANTS/{TENANTID}/DRIVERS/{DRIVERID}/CONTROLODOCS

List drivers control documents:

```
Response.ControlDoc ▼ {
    version           string
    statusCode       integer($int32)
    message          string
    result           ▼ [
        uniqueItems: false
        ControlDoc ▼ {
            id             string($uuid)
            name          string
            date          string($date-time)
            expiredDate   string($date-time)
            daysBeforeWarning integer($int32)
            systemCreated boolean
        }
    ]
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **DriverID**: the unique driver ID

[POST] /TENANTS/{TENANTID}/DRIVERS/{DRIVERID}/CONTROLODOCS

Create new driver control document:

```
ControlDocDetails ▼ {
    id             string($uuid)
    readOnly: true
    name          string
    date          string($date-time)
    expiredDate   string($date-time)
    daysBeforeWarning integer($int32)
    internalNote  string
    systemCreated boolean
    readOnly: true
}
```

```
Response.ControlDocDetails ▾ {
    version          string
    statusCode       integer($int32)
    message          string
    result           ControlDocDetails ▾ {
        id              string($uuid)
        readOnly: true
        name            string
        date            string($date-time)
        expiredDate    string($date-time)
        daysBeforeWarning integer($int32)
        internalNote   string
        systemCreated   boolean
        readOnly: true
    }
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **DriverID**: the unique driver ID
- [REQUIRED] **ControlDoc**: the control document object.

[GET] /TENANTS/{TENANTID}/DRIVERS/{DRIVERID}/CONTROLODOCS/{CONTROLDODCID}

Get control document details from specific driver:

```
Response.ControlDocDetails ▾ {
    version          string
    statusCode       integer($int32)
    message          string
    result           ▾ []
        uniqueItems: false
        ControlDocDetails ▾ [
            id              string($uuid)
            name            string
            date            string($date-time)
            expiredDate    string($date-time)
            daysBeforeWarning integer($int32)
            internalNote   string
            systemCreated   boolean
        ]
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **DriverID**: the unique driver ID
- [REQUIRED] **ControlDocID**: the unique control document ID

[DELETE] /TENANTS/{TENANTID}/DRIVERS/{DRIVERID}/CONTROLODOCS/{CONTROLDODCID}

Delete existing driver control document:

```
Response.ControlDocDetails ▼ {
    version          string
    statusCode       integer($int32)
    message          string
    result           ControlDocDetails ▼ {
        id              string($uuid)
        readOnly: true
        name            string
        date            string($date-time)
        expiredDate    string($date-time)
        daysBeforeWarning integer($int32)
        internalNote   string
        systemCreated   boolean
        readOnly: true
    }
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **DriverID**: the unique driver ID
- [REQUIRED] **ControlDocID**: the unique control document ID

[PATCH] /TENANTS/{TENANTID}/DRIVERS/{DRIVERID}/CONTROLODOCS/{CONTROLDODCID}

Update existing driver control document:

```
▼ [
uniqueItems: false
Operation ▼ {
    value           ▼ {
        path          string
        op             string
        from          string
    }
} ]
```

```
Response.ControlDocDetails ▼ {
    version          string
    statusCode       integer($int32)
    message          string
    result           ControlDocDetails ▼ {
        id              string($uuid)
        readOnly: true
        name            string
        date            string($date-time)
        expiredDate    string($date-time)
        daysBeforeWarning integer($int32)
        internalNote   string
        systemCreated   boolean
        readOnly: true
    }
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **DriverID**: the unique driver ID
- [REQUIRED] **ControlDocID**: the unique control document ID
- [REQUIRED] **ControlDoc**: the jsonPatchDocument object used to update the drivers control document values

[GET] /TENANTS/{TENANTID}/DRIVERS/{DRIVERID}/TACHOACTIVITY /{ACTIVITYMIN}/{ACTIVITYMAX}

Get tacho activity details from a specific driver:

```

Response.DriverActivity ▼ {
  version           string
  statusCode       integer($int32)
  message          string
  result           ▼ [
    uniqueItems: false
    DriverActivity ▼ {
      description:             DTO used for tachographfile activities
      time                   string($date-time)
      example: 2018-01-01T00:00:00
      inserted                integer($int32)
      example: 1
      Not inserted = 0,
      Inserted = 1
      slot                   integer($int32)
      example: 0
      No slot = null,
      Slot 1 = 0,
      Slot 2 = 1
      activity                integer($int32)
      example: 0
      No activity = null
      Rest = 0,
      Available = 1,
      Work = 2,
      Drive = 3
      regNo                  string
      example: AB12345
    }
  }
}

```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **DriverID**: the unique driver ID
- [REQUIRED] **ActivityMin**: the minimum activity date (yyyy-MM-dd)
- [REQUIRED] **ActivityMax**: the maximum activity date (yyyy-MM-dd)

VEHICLE

[GET] /TENANTS/{TENANTID}/VEHICLES

Get list of existing vehicles:

```
Response.Vehicle ▼ {  
    version           string  
    statusCode       integer($int32)  
    message          string  
    result           ▼ [  
        uniqueItems: false  
        Vehicle ▼ {  
            id             string($uuid)  
            name          string  
            vin           string  
        }]  
    }  
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online

[POST] /TENANTS/{TENANTID}/VEHICLES

Create new Vehicle:

```
VehicleDetails ▼ {  
    id             string($uuid)  
    name          string  
    licensePlate string  
    vin           string  
    odometer      number($double)  
}  
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **Vehicle**: vehicle object



[GET] /TENANTS/{TENANTID}/VEHICLES/{VEHICLEID}

Get vehicles details:

```
Response.VehicleDetails ▼ {  
    version           string  
    statusCode       integer($int32)  
    message          string  
    result           VehicleDetails ▼ {  
        id              string($uuid)  
        name            string  
        licensePlate    string  
        vin             string  
        odometer        number($double)  
    }  
}  
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **VehicleID**: the unique vehicle ID

[DELETE] /TENANTS/{TENANTID}/VEHICLES/{VEHICLEID}

Delete existing vehicle:

```
Response.VehicleDetails ▼ {  
    version           string  
    statusCode       integer($int32)  
    message          string  
    result           VehicleDetails ▼ {  
        id              string($uuid)  
        name            string  
        licensePlate    string  
        vin             string  
        odometer        number($double)  
    }  
}  
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **VehicleID**: the unique vehicle ID

[PATCH] /TENANTS/{TENANTID}/VEHICLES/{VEHICLEID}

Update existing vehicle:

```

▼ [
  uniqueItems: false
Operation ▼ {
  value
    ▼ {
      }
    path
    op
    from
  }
]
  
```

```

Response.VehicleDetails ▼ {
  version
  statusCode
  message
  result
    VehicleDetails ▼ {
      id
      name
      licensePlate
      vin
      odometer
    }
}
  
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **VehicleID**: the unique vehicle ID
- [REQUIRED] **Vehicle**: the jsonPatchDocument object used to update the vehicle values

[GET] /TENANTS/{TENANTID}/VEHICLES/{REGNO}

Get vehicle details from vehicle registration number:

```
Response.VehicleDetails ▾ {
    version           string
    statusCode       integer($int32)
    message          string
    result           VehicleDetails ▾ {
        id               string($uuid)
        readOnly: true
        name             string
        regNo            string
        vin              string
        odometer         number($double)

    }
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **RegNo**: the vehicles registration number

[GET] /TENANTS/{TENANTID}/VEHICLES/{VIN }

Get vehicle details from vehicle identification number:

```
Response.VehicleDetails ▾ {
    version           string
    statusCode       integer($int32)
    message          string
    result           VehicleDetails ▾ {
        id               string($uuid)
        readOnly: true
        name             string
        regNo            string
        vin              string
        odometer         number($double)

    }
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **VIN**: the vehicles identification number

[GET] /TENANTS/{TENANTID}/VEHICLES/{VEHICLEID}/CONTROLODOCS

List vehicle control documents:

```
Response.ControlDoc ▾ {
    version           string
    statusCode       integer($int32)
    message          string
    result           ▾ [
        uniqueItems: false
        ControlDoc ▾ {
            id                 string($uuid)
            name               string
            date               string($date-time)
            expiredDate       string($date-time)
            daysBeforeWarning integer($int32)
            systemCreated     boolean
        }
    ]
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **VehicleID**: the unique vehicle ID

[POST] /TENANTS/{TENANTID}/VEHICLES/{VEHICLEID}/CONTROLODOCS

Create new vehicle control documents:

```
ControlDocDetails ▾ {
    id                 string($uuid)
    readOnly: true
    name               string
    date               string($date-time)
    expiredDate       string($date-time)
    daysBeforeWarning integer($int32)
    internalNote      string
    systemCreated     boolean
    readOnly: true
}
```

```

Response.ControlDocDetails ▾ {
    version          string
    statusCode      integer($int32)
    message         string
    result          ControlDocDetails ▾ {
        id              string($uuid)
        readOnly: true
        name            string
        date            string($date-time)
        expiredDate    string($date-time)
        daysBeforeWarning integer($int32)
        internalNote   string
        systemCreated   boolean
        readOnly: true
    }
}

```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **VehicleID**: the unique vehicle ID
- [REQUIRED] **ControlDoc**: the control document object

[GET] /TENANTS/{TENANTID}/VEHICLES/{VEHICLEID}/CONTROLODCS/{CONTROLODOCID}

Get control document details from specific vehicle:

```

Response.ControlDocDetails ▾ {
    version          string
    statusCode      integer($int32)
    message         string
    result          ▾ [
        uniqueItems: false
        ControlDocDetails ▾ {
            id              string($uuid)
            name            string
            date            string($date-time)
            expiredDate    string($date-time)
            daysBeforeWarning integer($int32)
            internalNote   string
            systemCreated   boolean
        }
    ]
}

```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **VehicleID**: the unique vehicle ID
- [REQUIRED] **ControlDocID**: the unique control document ID

[DELETE] /TENANTS/{TENANTID}/VEHICLES/{VEHICLEID}/CONTROLODCS/{CONTROLODOCID}

Get control document details from specific vehicle:

```
Response.ControlDocDetails ▾ {
    version           string
    statusCode       integer($int32)
    message          string
    result           ControlDocDetails ▾ {
        id               string($uuid)
        readOnly: true
        name             string
        date             string($date-time)
        expiredDate     string($date-time)
        daysBeforeWarning integer($int32)
        internalNote    string
        systemCreated   boolean
        readOnly: true
    }
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **VehicleID**: the unique vehicle ID
- [REQUIRED] **ControlDocID**: the unique control document ID

[PATCH] /TENANTS/{TENANTID}/VEHICLES/{VEHICLEID}/CONTROLODCS/{CONTROLODOCID}

Get control document details from specific vehicle:

```
▼ [
  uniqueItems: false
]

Operation ▾ {
    value           ▾ {
        ...
    }
    path            string
    op              string
    from            string
}

]]
```

```
Response.ControlDocDetails ▾ {  
    version           string  
    statusCode       integer($int32)  
    message          string  
    result           ControlDocDetails ▾ {  
        id              string($uuid)  
        readOnly: true  
        name            string  
        date            string($date-time)  
        expiredDate    string($date-time)  
        daysBeforeWarning integer($int32)  
        internalNote   string  
        systemCreated  boolean  
        readOnly: true  
    }  
}  
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **VehicleID**: the unique vehicle ID
- [REQUIRED] **ControlDocID**: the unique control document ID
- [REQUIRED] **ControlDoc**: the jsonPatchDocument object used to update the vehicles control document values

TACHOGRAPHFILES

[GET] /TENANTS/{TENANTID}/TACHOGRAPHFILES

Get list of existing tachograph files:

```
Response.TachographFile[] ▾ {
    version          string
    statusCode      integer($int32)
    message         string
    result          ▾ [
        uniqueItems: false
        TachographFile ▾ {
            id            string($uuid)
            filename       string
        }
    ]
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online

[POST] /TENANTS/{TENANTID}/TACHOGRAPHFILES

Upload a tachograph file to Tacho Online:

```
TachographFileData ▾ {
    description:
        Upload DTO for upload of tachograph files
        →
        filename must also contain the file extension
        blob is the files content in base64

        {
            filename: "M_20180913_1100_AB12345_ZFF77XJT3F0204054.ddd",
            blob: "YmFzZTY0...ZXhhbXBsZQ=="
        }

    filename      string
    example: M_20180913_1100_AB12345_ZFF77XJT3F0204054.ddd
    blob         string($byte)
    example: YmFzZTY0...ZXhhbXBsZQ==

}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online

[GET] /TENANTS/{TENANTID}/TACHOGRAPHFILES/{TACHOGRAPHFILEID}

Read information about an existing tachograph file:

```
Response.TachographFile ▾ {
    version           string
    statusCode       integer($int32)
    message          string
    result           TachographFile ▾ {
        id              string($uuid)
        filename        string
    }
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **TachographFileID**: the unique tachograph file ID (UUID)

[GET] /TENANTS/{TENANTID}/TACHOGRAPHFILES/{TACHOGRAPHFILEID}/DOWNLOAD

Download tachograph file as base64:

```
Response.TachographFileData ▾ {
    version           string
    statusCode       integer($int32)
    message          string
    result           TachographFileData ▾ {
        description:      Upload DTO for upload of tachograph files
        filename:         filename must also contain the file extension
                           blob is the files content in base64
        {
            "filename": "M_20180913_1100_AB12345_ZFF77XJT3F0204054.ddd",
            "blob": "YmFzZTY0...ZXhhbXBsZQ=="
        }
        filename        string
        example:        M_20180913_1100_AB12345_ZFF77XJT3F0204054.ddd
        blob            string($byte)
        example:        YmFzZTY0...ZXhhbXBsZQ==
    }
}
```

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **TachographFileID**: the unique tachograph file ID (UUID)

[GET] /TENANTS/{TENANTID}/TACHOGRAPHFILES/{TACHOGRAPHFILEID}/DOWNLOAD/FILE

Download tachograph file as octet-stream:

- [REQUIRED] **TenantID**: is the unique id that is used to identify customers in Tacho Online
- [REQUIRED] **TachographFileID**: the unique tachograph file ID (UUID)

APPENDIX A: OPERATION RESPONSE CODES

Handling the response In case of an error, an error message is returned as plain text. The error message has the following layout:

- Errorcode: standard http error codes
- Message: custom message that provide a reason text (always in English)

400

Bad Request

[Example Value](#) | [Model](#)

```
{
    "version": "string",
    "statusCode": 0,
    "message": "string",
    "responseException": {
        "isError": true,
        "exceptionMessage": "string",
        "details": "string",
        "referenceErrorCode": "string",
        "referenceDocumentLink": "string",
        "validationErrors": [
            {
                "field": "string",
                "message": "string"
            }
        ]
    }
}
```

EXAMPLE OF MESSAGES

In this example, we look at the error codes from a bad request from: Uploading of a tachograph file to Tacho Online ([POST] /Tenants/{TenantID}/TachographFiles):

Possible 400 responses

statusCode

message

400	<i>FileUploadErrorNo file found in POST body</i>
400	<i>FileUploadErrorNo filename provided</i>
400	<i>FileUploadErrorFilename not valid</i>
400	<i>FileUploadErrorFilename contains invalid chars</i>
400	<i>FileUploadErrorFilename not valid, missing extension</i>
400	<i>FileUploadErrorFilesize is too small</i>
400	<i>FileUploadErrorUnable to read timestamp from filename</i>
400	<i>FileUploadErrorFile is more than 12 months old</i>
400	<i>FileUploadErrorInvalid file content, unable to parse file structure</i>
400	<i>FileUploadErrorFiletype unsupported, Only driver card or vehicle unit file are supported</i>
400	<i>FileUploadErrorUnable to read driver card number from file, please check for invalid data structure</i>
400	<i>FileUploadErrorUnable to read vehicle identification number(VIN) from file, please check for invalid data structure</i>



APPENDIX B: RESOURCES

TACHO ONLINE API RESOURCES

- Get the latest documentation and examples from: support@tachoonlien.dk (online archive “Developer” will be added in the future)
- Tacho Online API key request. Please contact: support@tachoonline.dk (online form will be added in the future)
- Technical support: contact our customer support team: support@tachoonline.dk

OTHER RESOURCES

- [Wikipedia article about REST API](#)
- [OAuth](#)
- [POSTMAN](#)
- [JSON Web Tokens](#)
- [HTTP Error Codes](#)
- [JSON](#)
- [StackOverflow](#)

APPENDIX C: SOLVING KNOWN ISSUES

No, known issues. Please contact support@tachoonline.dk if you encounter any problems.

REVISION HISTORY

Below you see the full revision history for the Tacho Online API

REVISION	DATE	DESCRIPTION	AUTHOR
1.0.0	2018-11-09	Document created	SPE
1.1.0	2018-11-19	Added support for handling Tacho activities and general editorial changes.	SPE
1.1.1	2018-12-14	Documentation corrections to the base URL	SPE