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Powerfleet Enterprise Vision Pro APIs

A Developer's Guide

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Overview

The VisionPro API suite is organized around [REST](#). Our API has simple URLs, returns JSON-encoded responses, and uses standard HTTP response codes, authentication, and verbs. Our interface includes a simple test mode, which does not affect your live data. The API key you use to authenticate the request determines whether the request is live mode or test mode.

The VisionPro API suite allows the customer to decide which data sets get exchanged and how often and includes parameters for exchange acknowledgement. Note: There are settings available to redact operator details (name, ID, etc.), or to open APIs to your partner organizations (vehicle supplier, etc.). Contact Powerfleet for details about these 2 options.

Authentication

VisionPro supports OAuth2 authentication. This protects you and Powerfleet when it comes to API access. In order to authenticate, you will be provided API keys called client ID and client secret by your Powerfleet contacts. Your API keys carry many privileges, so be sure to keep them secure! Do not share your secret API keys in publicly accessible areas such as GitHub, client-side code, and so forth. Each end point call must include the API keys and each call has an expiration. Use the TOKEN function to test authentication and begin your API test process.

All API requests must be made over HTTPS. Calls made over plain HTTP will fail. API requests without authentication will also fail.

Response content:

Response	Purpose	Format
token	Token used to authorize use of the end points in the test environment	String
expiration	Provides the date/time that the authentication using that ClientID and clientSecret expires, resulting in failure to call additional end points without re-authentication	YYYY-MM-DDTHH:MM:SS.SSSZ

Connected Customer Sites (Facility)

The Facility end point returns a list of all facility IDs for their connected customer sites. To retrieve the list of facilities you must present the client code (provided by Powerfleet).

Response content:

Response	Purpose	Format	Max. Length
resultObject	Collection of returned results (response object)		

Response Object Details:

Response	Purpose	Format	Max. Length
facilityID	Unique ID of each site	Numeric	5
Sitename	Name of the site as it appears in the Vision Pro user interface	Alphanumeric	200
timeZone	Geographic timezone of the site	Alphanumeric	200

Acknowledge

The acknowledge process is used for all 'Get' end points for Powerfleet to confirm the receipt of the requested records. If Powerfleet received the acknowledgement, the next end point call will contain only records newer than the last request. If the acknowledge is not received, Powerfleet will resend the records that were not previously acknowledged.

Send content:

Response	Purpose	Format	Max. Length
iD	Maximum record ID received from the API called	Integer	32
facilityID	Unique ID of each site	Numeric	5

Response Object Details:

Response	Purpose	Format	Max. Length
maxRecordId	Maximum record ID you sent in the acknowledge	Integer	32

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End Point Call Frequency and Results

Each end point has different expectations as to the frequency it should be called and the expectation of the amount of data received. Review the following table for details on the end points.

End Point	Type	Period of Data Returned* (from time end point is called)	Maximum Records	Maximum Frequency End Point Can Be Called
Facilities	Get	Not applicable	300	12 hours
Checklists	Get	7 days	1000	15 minutes
Events	Get	7 days	1000	15 minutes
Impacts	Get	7 days	1000	15 minutes
People	Add	Not applicable	1	Unlimited
People	Delete	Not applicable	1	Unlimited
People	Get	Not applicable	20,000	15 minutes
People	Update	Not applicable	1	Unlimited
Sleeper	Get	7 days	300	1 hour
Trips	Get	7 days	1000	5 minutes
Usage	Get	7 days	1000	5 minutes

Note: Only data that has not previously been acknowledged by the Acknowledge end point will be returned.

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Checklists

Provides all completed and partially completed checklist records for the period identified. A typical site could expect between 15 and 150 records per day per vehicle during normal operation.

Response content:

Response	Purpose	Format	Max. Length
maxRecordId	Maximum record ID you sent in the acknowledge	Integer	32
resultObject	Collection of returned results (response object)		

Response Object Details:

Response	Purpose	Format	Max. Length
access_ID	Access ID used by the operator to log on for that record.	Numeric (00000000 if no one logged in)	8
activityMeter	Cumulative activity hour meter at the time the checklist was completed	Numeric	14,4
alarm	Shows if the alarm feature is turned on for this checklist.	Boolean	1
Authorization	Authorization level of the operator logged in	Alphanumeric	200
Checklist_ID	Unique identifier of the checklist answered (increments 1 for every time a checklist is completed)	Numeric	14
checklist_Number	Number assigned to the checklist when the checklist is created. This number remains the same regardless of how many times the checklist is answered.	Numeric	8
checklistType	Lists the type of checklist that was answered.	Alphanumeric	200
customer	Customer account identifier. Example: Powerfleet	Alphanumeric	5
Date_Completed	Time the checklist was ended on the VAC (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
Date_Received	Time the record was received and stored in the database (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
First_Name	First name of the operator logged in	Alphanumeric	200
Group	Group name the operator was assigned to that allowed them to log into the vehicle	Alphanumeric	200

Issue	Set to 1 for warning and critical response severities to identify potential issues with the vehicle	Numeric	Integer
Job_Title	Job title for the logged in operator as entered in the portal software.	Alphanumeric	200
Last_Name	Last name of the operator logged in	Alphanumeric	200
lockout	Shows if the lockout feature is turned on for this checklist.	Boolean	1
Make	Vehicle make assigned in the software portal	Alphanumeric	200
Meter_Reading	Cumulative motion hour meter at the time the checklist was completed	Numeric	14,4
Mi	Middle initial of the operator logged in	Alphanumeric	1
Model	Vehicle model assigned in the software portal	Alphanumeric	200
Operator	Combined operator first and last name logged in for the record.	Alphanumeric	200
Opr_Ext_ID	External ID entered into the software portal for the logged in operator	Alphanumeric	200
Organization	Organization code entered into the software portal for the logged in operator	Alphanumeric	200
Partial	Indicates if a checklist was only partially completed (1) or not (0)	Numeric	1
Question_Number	Question number of the checklist	Numeric	14
Question_Text	Question detail of the checklist item	Alphanumeric	100
Response_Text	Select response to the checklist question	Alphanumeric	25
Sev_Code	Numeric representation of the response severity. (0 – normal, 1 – warning, 2 – critical)	Numeric	Integer
severity	Severity of the response in text form	Alphanumeric	25
Shift_End	End time of the shift that the record happened during (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
Shift_ID	ID assigned to the shift the record occurred in.	Numeric	Integer
Shift_Name	Name of the shift that the record happened during	Alphanumeric	200
Shift_Start	Start time of the shift that the record happened during (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
Site	Customer site (a child of customer account) identifier. Example: Woodcliff Lake NJ office	string	5
Veh_Ext_ID	External ID entered into the software portal for the vehicle	Alphanumeric	200
Veh_Ext_ID2	External ID 2 entered into the software portal for the vehicle	Alphanumeric	200

Vehicle	Vehicle name	Alphanumeric	200
Vehicle_Type	Vehicle type assigned to the vehicle.	Alphanumeric	200
vehicleId			

Event Summary

Provides summary data for all event records for the period identified. A typical site could expect between 25 and 200 records per day per vehicle during normal operation.

Response content:

Response	Purpose	Format	Max. Length
maxRecordId	Maximum record ID you sent in the acknowledge	Integer	32
resultObject	Collection of returned results (response object)		

Response Object Details:

Response	Purpose	Format	Max. Length
access_ID	Access ID used by the operator to log on for that record.	Numeric (00000000 if no one logged in)	8
Alarm	If the event triggered the alarm feature.	Boolean	1
Authorization	Authorization level of the operator logged in	Alphanumeric	200
cleared_By_Access_ID	Access ID used by the operator to clear the event and resume normal vehicle operation.	Numeric	8
cleared_Date	Time the event was cleared on the vehicle (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
Event_Date	Time the event occurred on the vehicle (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
Event_Type	Describes the cause of the event logged.	Alphanumeric	200
First_Name	First name of the operator logged in	Alphanumeric	200
Job_Title	Job title for the logged in operator as entered in the portal software.	Alphanumeric	200
Last_Name	Last name of the operator logged in	Alphanumeric	200
lockout	Shows if the lockout feature is turned on for this checklist.	Boolean	1
Make	Vehicle make assigned in the software portal	Alphanumeric	200
Mi	Middle initial of the operator logged in	Alphanumeric	1

Model	Vehicle model assigned in the software portal	Alphanumeric	200
operator	Combined operator first and last name logged in for the record.	Alphanumeric	200
opr_Ext_ID	External ID entered into the software portal for the logged in operator	Alphanumeric	200
Organization	Organization code entered into the software portal for the logged in operator	Alphanumeric	200
shift_End	End time of the shift that the record happened during (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
shift_ID	ID assigned to the shift the record occurred in. (in UTC)	Numeric	Integer
shift_Name	Name of the shift that the record happened during	Alphanumeric	200
shift_Start	Start time of the shift that the record happened during (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
vehicle	Vehicle name	Alphanumeric	200
vehicle_Ext_ID	External ID entered into the software portal for the vehicle	Alphanumeric	200
vehicle_Type	Vehicle type assigned to the vehicle.	Alphanumeric	200
Year	Vehicle manufacture year assigned in the software portal	Numeric	4

Impacts

The impact end point sends all registered impact events regardless of severity level for the period identified. A typical site could expect between 1 and 20 records per hour per vehicle during normal operation.

Response content:

Response	Purpose	Format	Max. Length
maxRecordId	Maximum record ID you sent in the acknowledge	Integer	32
resultObject	Collection of returned results (response object)		

Response Object Details:

Response	Purpose	Format	Max. Length
access_ID	Access ID used by the operator to log on for that record.	Numeric (00000000 if no one logged in)	8

Authorization	Authorization level of the operator logged in	Alphanumeric	200
Customer	Customer account identifier. Example: Powerfleet	Alphanumeric	5
Date_received	Time the record was received and stored in the database (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
First_Name	First name of the operator logged in	Alphanumeric	200
impact_Date	Time the impact occurred on the vehicle (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
impact_ID	Unique identifier of the impact (increments with each impact, but may skip numbers along the way)	Numeric	Integer
impact_Level	Impact value calculated by the impact algorithm. The impact level is related to the MIL and impact ratio by Impact ratio = impact level / MIL.	Numeric	Integer
impact_Loc	Vehicle location at the time the impact occurred	Alphanumeric	200
impact_Ratio	Relative scale of the impact. This value is a normalized value to relate impacts from all different vehicle types. Impact ratio = impact level / MIL.	Numeric	14,4
Job_Title	Job title for the logged in operator as entered in the portal software.	Alphanumeric	200
Last_Name	Last name of the operator logged in	Alphanumeric	200
Make	Vehicle make assigned in the software portal	Alphanumeric	200
max_duration	Duration of the impact in milliseconds	Numeric	Integer
max_G_impact	Maximum G level of the impact at any time of the duration of the impact	Numeric	14,4
max_Speed	Maximum speed in miles per hour the vehicle traveled during the usage record up to the time of the impact	Numeric	14.4
Mi	Middle initial of the operator logged in	Alphanumeric	1
miL_Threshold	Minimum calculated impact algorithm level that can result in an impact. No impact levels below this number will appear as an impact event.	Numeric	14.4
mins_to_Logoff	Number of minutes from the time of the impact to the time that the operator logs off. For impacts that result in lockout, this indicates how far the vehicle traveled from the point of impact to the point of rest.	Numeric	14.4
Model	Vehicle model assigned in the software portal	Alphanumeric	200

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Operator	Combined operator first and last name logged in for the record.	Alphanumeric	200
Opr_Ext_ID	External ID entered into the software portal for the logged in operator	Alphanumeric	200
Organization	Organization code entered into the software portal for the logged in operator	Alphanumeric	200
Severity	Severity of the impact in text form: Low, Moderate, Medium, High or Severe. The severity is set in the Vision Pro software based on the impact ratio.	Alphanumeric	25
severity_Code	Numeric representation of the impact severity. (0 – low, 5 – severe)	Numeric	Integer
Shift_End	End time of the shift that the record happened during (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
Shift_ID	ID assigned to the shift the record occurred in. (in UTC)	Numeric	Integer
Shift_Name	Name of the shift that the record happened during	Alphanumeric	200
Shift_Start	Start time of the shift that the record happened during (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
Site	Customer site (a child of customer account) identifier. Example: Woodcliff Lake NJ office	string	5
status_At_Impact	Vehicle motion status at the time the impact happened	Alphanumeric	200
status_Post_Impact	Vehicle motion status 3 seconds after the time the impact happened	Alphanumeric	200
status_Pre_Impact	Vehicle motion status 3 seconds before the time the impact happened	Alphanumeric	200
Veh_Ext_ID	External ID entered into the software portal for the vehicle	Alphanumeric	200
Vehicle	Vehicle name	Alphanumeric	200
Vehicle_Type	Vehicle type assigned to the vehicle.	Alphanumeric	200
Year	Vehicle manufacture year assigned in the software portal	Numeric	4

People 'Add'

When called, adds the person's profile in the VisionPro system.

Send Content:

Response	Purpose	Format	Max. Length

access_ID	Access ID used by the operator to log on for that record.	Numeric (00000000 if no one logged in)	8
Group_Action	Determines what the change is for the group assignment. "Add" adds a group assignment, "Update" updates an existing group assignment, or "Delete" removes the group assignment	Alphanumeric	200
Alternate_Email	An alternative email address of the person.	Alphanumeric	200
Authorization	Authorization level of the operator logged in	Alphanumeric	200
certification_Expiration	At midnight as the start of this date, the person will no longer have access to leverage any vehicle in the fleet.	YYYY-MM-DDTHH:MM:SS.SSSZ	
credential_Status	The status of the driver credential. Acceptable entries are: Licensed, Not Licensed, or Suspended	Alphanumeric	200
Customer	Customer account identifier. Example: Powerfleet	Alphanumeric	5
employee_ID	Unique ID for each person	Numeric	Integer
facilityID	Unique ID of each site	Numeric	5
first_Name	First name of the operator logged in	Alphanumeric	200
Group	Group name the operator was assigned to that allowed them to log into the vehicle	Alphanumeric	200
group_Description	Group description that will be displayed in VisionPro.	Alphanumeric	200
group_Expiration_Date	At midnight as the start of this date, the person will no longer have access to leverage the vehicles assigned to this group.	YYYY-MM-DDTHH:MM:SS.SSSZ	
groupSkillLevel	Skill level assigned to the person for their driver profile. Acceptable entries are: 1. Not Used, 2. Expert, 3. Intermediate, 4. Novice.	Alphanumeric	200
job_Title	Job title for the logged in operator as entered in the portal software.	Alphanumeric	200
labor_Rate	Hourly rate of pay for the person.	Numeric	6
languageId	Default language the VisionPro software will be displayed in when the person logs in.	Numeric	6

last_Name	Last name of the operator logged in	Alphanumeric	200
license_Expiration	At midnight as the start of this date, the person will no longer have access to leverage any vehicle in the fleet.	YYYY-MM-DDTHH:MM:SS.SSSZ	
Login_Email	The email address of the person that they may use for logging into VisionPro.	Alphanumeric	200
medical_Expiration	At midnight as the start of this date, the person will no longer have access to leverage any vehicle in the fleet.	YYYY-MM-DDTHH:MM:SS.SSSZ	
Mi	Middle initial of the operator logged in	Alphanumeric	1
opr_Ext_ID	External ID entered into the software portal for the logged in operator	Alphanumeric	200
Organization	Organization code entered into the software portal for the logged in operator	Alphanumeric	200
Phone_Carrier	Name of the phone carrier for the entered phone number.	Alphanumeric	200
Phone_Number	Phone number of the person for receiving text messages.	Numeric	10
Pin	PIN number the operator needs to enter after presenting their driver credential to a vehicles. If 0000 is entered, driver does not have to enter a PIN.	Numeric	4
roleId	Unique role ID. Designates the modules and access level when logging into the VisionPro software.	Numeric	4
Site	Customer site (a child of customer account) identifier. Example: Woodcliff Lake NJ office	string	5

Response Content:

Response	Purpose	Format	Max. Length
employee_ID	Record ID of the person added.	Integer	32

People 'Delete'

When called, deletes the person from the VisionPro system.

Send Content:

Response	Purpose	Format	Max. Length
employee_ID	Unique ID for each person	Numeric	Integer
facilityID	Unique ID of each site	Numeric	5

Response Content:

Response	Purpose	Format	Max. Length
ResultObject	Success or Failure	Alphanumeric	200

People 'Get'

Provides all current people with profile information at the time the endpoint is called. For people assigned to more than 1 group, there will be multiple entry rows (1 per group assigned).

Response content:

Response	Purpose	Format	Max. Length
resultObject	Collection of returned results (response object)		

Response Object Details:

Response	Purpose	Format	Max. Length
access_ID	Access ID used by the operator to log on for that record.	Numeric (00000000 if no one logged in)	8
alternate_Email	Not used	Alphanumeric	200
Authorization	Authorization level of the operator logged in	Alphanumeric	200
certification_Expiration	At midnight as the start of this date, the person will no longer have access to leverage any vehicle in the fleet.	YYYY-MM-DDTHH:MM:SS.SSSZ	
Customer	Customer account identifier. Example: Powerfleet	Alphanumeric	5

employee_ID	Unique ID for each person	Numeric	Integer
first_Name	First name of the operator logged in	Alphanumeric	200
Group	Group name the operator was assigned to that allowed them to log into the vehicle	Alphanumeric	200
group_Code	Group code unique to this group.	Numeric	6
group_Description	Text field to describe the group.	Alphanumeric	200
group_Expiration_Date	At midnight as the start of this date, the person will no longer have access to leverage the vehicles assigned to this group.	YYYY-MM-DDTHH:MM:SS.SSSZ	
group_Skill_Level	Skill level the operator is assigned for the group.	Alphanumeric	200
job_Title	Job title for the logged in operator as entered in the portal software.	Alphanumeric	200
labor_Rate	Hourly rate of pay for the person.	Numeric	6
last_Name	Last name of the operator logged in	Alphanumeric	200
license_Expiration	At midnight as the start of this date, the person will no longer have access to leverage any vehicle in the fleet.	YYYY-MM-DDTHH:MM:SS.SSSZ	
Login_Email	Email address that can be used for logging into VisionPro if the user is provided a role. This is also used for sending subscriptions alerts via email.	Alphanumeric	200
medical_Expiration	At midnight as the start of this date, the person will no longer have access to leverage any vehicle in the fleet.	YYYY-MM-DDTHH:MM:SS.SSSZ	
Mi	Middle initial of the operator logged in	Alphanumeric	1
Operator	Combined operator first and last name logged in for the record.	Alphanumeric	200
opr_Ext_ID	External ID entered into the software portal for the logged in operator	Alphanumeric	200
Organization	Organization code entered into the software portal for the logged in operator	Alphanumeric	200
Phone_Carrier	Name of the phone carrier. Used for sending subscription messages via text message.	Alphanumeric	200
Phone_Number	Phone number used for sending subscription messages via text message.	Numeric	14
Pin	PIN number the operator needs to enter after presenting their driver credential to a	Numeric	4

	vehicles. If 0000 is entered, driver does not have to enter a PIN.		
Site	Customer site (a child of customer account) identifier. Example: Woodcliff Lake NJ office	string	5

People 'Update'

When called, updates the person's profile in the VisionPro system.

Send Content:

Response	Purpose	Format	Max. Length
access_ID	Access ID used by the operator to log on for that record.	Numeric (00000000 if no one logged in)	8
Group_Action	Determines what the change is for the group assignment. "Add" adds a group assignment, "Update" updates an existing group assignment, or "Delete" removes the group assignment	Alphanumeric	200
Alternate_Email	An alternative email address of the person.	Alphanumeric	200
Authorization	Authorization level of the operator logged in	Alphanumeric	200
certification_Expiration	At midnight as the start of this date, the person will no longer have access to leverage any vehicle in the fleet.	YYYY-MM-DDTHH:MM:SS.SSSZ	
credential_Status	The status of the driver credential. Acceptable entries are: Licensed, Not Licensed, or Suspended	Alphanumeric	200
Customer	Customer account identifier. Example: Powerfleet	Alphanumeric	5
employee_ID	Unique ID for each person	Numeric	Integer
facilityID	Unique ID of each site	Numeric	5
first_Name	First name of the operator logged in	Alphanumeric	200
Group	Group name the operator was assigned to that allowed them to log into the vehicle	Alphanumeric	200
group_Description	Group description that will be displayed in VisionPro.	Alphanumeric	200

group_Expiration_Date	At midnight as the start of this date, the person will no longer have access to leverage the vehicles assigned to this group.	YYYY-MM-DDTHH:MM:SS.SSSZ	
groupSkillLevel	Skill level assigned to the person for their driver profile. Acceptable entries are: 1. Not Used, 2. Expert, 3. Intermediate, 4. Novice.	Alphanumeric	200
job_Title	Job title for the logged in operator as entered in the portal software.	Alphanumeric	200
labor_Rate	Hourly rate of pay for the person.	Numeric	6
languageId	Default language the VisionPro software will be displayed in when the person logs in.	Numeric	6
last_Name	Last name of the operator logged in	Alphanumeric	200
license_Expiration	At midnight as the start of this date, the person will no longer have access to leverage any vehicle in the fleet.	YYYY-MM-DDTHH:MM:SS.SSSZ	
Login_Email	The email address of the person that they may use for logging into VisionPro.	Alphanumeric	200
medical_Expiration	At midnight as the start of this date, the person will no longer have access to leverage any vehicle in the fleet.	YYYY-MM-DDTHH:MM:SS.SSSZ	
Mi	Middle initial of the operator logged in	Alphanumeric	1
opr_Ext_ID	External ID entered into the software portal for the logged in operator	Alphanumeric	200
Organization	Organization code entered into the software portal for the logged in operator	Alphanumeric	200
Phone_Carrier	Name of the phone carrier for the entered phone number.	Alphanumeric	200
Phone_Number	Phone number of the person for receiving text messages.	Numeric	10
Pin	PIN number the operator needs to enter after presenting their driver credential to a vehicles. If 0000 is entered, driver does not have to enter a PIN.	Numeric	4
roleId	Unique role ID. Designates the modules and access level when logging into the VisionPro software.	Numeric	4
Site	Customer site (a child of customer account) identifier. Example: Woodcliff Lake NJ office	string	5

Response Content:

Response	Purpose	Format	Max. Length
employee_ID	Record ID of the person added.	Integer	32

Sleeper

Provides all sleeper events (generated when an operator occupies a vehicle for extended periods of time without activity) for the period identified. A typical site could expect less than 5 records per day per vehicle during normal operation.

Response content:

Response	Purpose	Format	Max. Length
maxRecordId	ID of the latest record used to Acknowledge	Numeric	
resultObject	Collection of returned results (response object)		

Response Object Details:

Response	Purpose	Format	Max. Length
access_ID	Access ID used by the operator to log on for that record.	Numeric (00000000 if no one logged in)	8
Authorization	Authorization level of the operator logged in	Alphanumeric	200
Customer	Customer account identifier. Example: Powerfleet	Alphanumeric	5
Date_received	Time the record was received and stored in the database (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
first_Name	First name of the operator logged in	Alphanumeric	200
job_Title	Job title for the logged in operator as entered in the portal software.	Alphanumeric	200
last_Name	Last name of the operator logged in	Alphanumeric	200
Make	Vehicle make assigned in the software portal	Alphanumeric	200
Mi	Middle initial of the operator logged in	Alphanumeric	1
Model	Vehicle model assigned in the software portal	Alphanumeric	200

Operator	Combined operator first and last name logged in for the record.	Alphanumeric	200
opr_Ext_ID	External ID entered into the software portal for the logged in operator	Alphanumeric	200
Organization	Organization code entered into the software portal for the logged in operator	Alphanumeric	200
shift_End	End time of the shift that the record happened during (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
shift_ID	ID assigned to the shift the record occurred in.	Numeric	Integer
shift_Name	Name of the shift that the record happened during	Alphanumeric	200
shift_Start	Start time of the shift that the record happened during (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
Site	Customer site (a child of customer account) identifier. Example: Woodcliff Lake NJ office	string	5
sleep_End	Time that the sleeper event ended, either by activity or leaving the vehicle. Note if there is no end time, the event was still active at the time of the API call). (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
sleep_Start	Time that the sleeper event started (in UTC).	YYYY-MM-DDTHH:MM:SS.SSSZ	
sleep_Thresh_mins	Consecutive minutes the vehicle needs to be occupied without activity to start a sleeper event.	Numeric	14,4
sleep_Time_mins	Consecutive minutes the vehicle was in sleeper mode for the event.	Numeric	14,4
veh_Ext_ID	External ID entered into the software portal for the vehicle	Alphanumeric	200
veh_Ext_ID_2	External ID 2 entered into the software portal for the vehicle	Alphanumeric	200
Vehicle	Vehicle name	Alphanumeric	200
vehicle_Type	Vehicle type assigned to the vehicle.	Alphanumeric	200

Trips

Provides all detailed trip (activity between a load pickup and drop off) records for the period identified. A typical site could expect between 15 and 30 records per hour per vehicle during normal operation.

Response content:

Response	Purpose	Format	Max. Length
maxRecordId	ID of the latest record used to Acknowledge	Numeric	
resultObject	Collection of returned results (response object)		

Response Object Details:

Response	Purpose	Format	Max. Length
Authorization	Authorization level of the operator logged in	Alphanumeric	200
Customer	Customer account identifier. Example: Powerfleet	Alphanumeric	5
Date_received	Time the record was received and stored in the database (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
drop_dur	The seconds from the end of the vehicle trip to when the load is dropped off the forks	Numeric	Integer
end_location	Location of the vehicle at the end of the trip	Alphanumeric	200
end_X	"X" coordinate from the Vision Pro map of the vehicle at the end of the trip	Numeric	Integer
end_Y	"Y" coordinate from the Vision Pro map of the vehicle at the end of the trip	Numeric	Integer
feet_Traveled	Distance traveled in feet for the entire trip	Numeric	Integer
idle_After_Drop	Total inactive time in seconds after the drop until a vehicle started activity again (the start of a new trip).	Numeric	Integer
idle_Dur	Total time in seconds during the trip the vehicle was idle (not registering activity).	Numeric	Integer
motion_Before_Pick	Total motion time in seconds before the initial load pickup of a trip.	Numeric	Integer
motion_Dur	Total time in seconds during the trip the vehicle was moving.	Numeric	Integer
num_Stops	Number of stops (motion to idle) that a vehicle made during the trip	Numeric	Integer

Operator	Combined operator first and last name logged in for the record.	Alphanumeric	200
opr_Ext_ID	External ID entered into the software portal for the logged in operator	Alphanumeric	200
pick_dur	The seconds from the start of the trip to when the load is loaded on the forks	Numeric	Integer
Site	Customer site (a child of customer account) identifier. Example: Woodcliff Lake NJ office	string	5
start_location	Location of the vehicle at the start of the trip	Alphanumeric	200
start_X	"X" coordinate from the Vision Pro map of the vehicle at the start of the trip	Numeric	Integer
start_Y	"Y" coordinate from the Vision Pro map of the vehicle at the start of the trip	Numeric	Integer
trip_Dur	Total time in seconds of the trip.	Numeric	Integer
trip_End	Time the trip ended (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
trip_Start	Time the trip started (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
trip_ID	Unique ID for each trip record	Numeric	Integer
trip_Type	Type of trip. 1 – loaded, 0 – empty	Numeric	Integer
usage_Event_ID	Unique ID of the usage record that the trip was a sub component of	Numeric	Integer
VAC_ID	Unique ID assigned to the vehicle.	Numeric	5
veh_Ext_ID	External ID entered into the software portal for the vehicle	Alphanumeric	200
Vehicle	Vehicle name	Alphanumeric	200
vehicle_Type	Vehicle type assigned to the vehicle.	Alphanumeric	200
weight_lbs	Maximum weight in pounds recorded during the trip.	Numeric	Integer

Usage

Provides all usage records for the period identified. A typical site could expect between 3 and 10 records per hour per vehicle during normal operation.

Response content:

Response	Purpose	Format	Max. Length
maxRecordId	ID of the latest record used to Acknowledge	Numeric	
resultObject	Collection of returned results (response object)		

Response Object Details:

Response	Purpose	Format	Max. Length
access_ID	Access ID used by the operator to log on for that record.	Numeric (00000000 if no one logged in)	8
activity_Hrs	Accumulated activity hours during the record. Activity is defined by the installed at the time of VAC configuration. This typically includes any time the vehicle is moving or lifting/towing.	Numeric	14,4
Assigned	If the record has a driver (1) or not (0)	Binary	1
Authorization	Authorization level of the operator logged in	Alphanumeric	200
avg_lbs	Total weight moved divided by number of loads	Numeric	10,4
batt_Vlt	Minimum vehicle battery voltage during the record	Numeric	10,1
customer	Customer account identifier. Example: Powerfleet	Alphanumeric	5
Date_received	Time the record was received and stored in the database (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
dead_Man_Hrs	Accumulated operator presence hours during the record. Typically, a deadman switch or seat switch.	Numeric	14,4
dist_w_Tow_feet	Distance traveled during the record with items in tow	Numeric	Integer
end_Method	Reason that the record was ended when it was generated.	Alphanumeric	25
eng_Off_hrs	Accumulated time the engine was off during the record. For internal combustion engine that is the time the engine is not running, for	Numeric	14,4

	electric vehicles it is the time the vehicle is not active.		
first_Name	First name of the operator logged in	Alphanumeric	200
Group	Group name the operator was assigned to that allowed them to log into the vehicle	Alphanumeric	200
Group_Code	Unique code assigned to the group the operator was assigned to that allowed them to log into the vehicle	Alphanumeric	200
hard_Bypass_Flag	If the vehicle was active without an operator logged in during the record	Alphanumeric	20
idling_hrs	Accumulated engine running without motion hours during the record (for internal combustion vehicles only).	Numeric	14,4
job_Title	Job title for the logged in operator as entered in the portal software.	Alphanumeric	200
key_On_Hrs	Accumulated vehicle key hours during the record.	Numeric	14,4
last_Name	Last name of the operator logged in	Alphanumeric	200
lift_Count	Number of times the lift motor was used for the record.	Numeric	Integer
lift_hrs	Accumulated lift motor hours during the record.	Numeric	14,4
Lift_with_load_Count	Number of times the lift was raised with a load on it for the record.	Numeric	Integer
Lift_with_Load_hrs	Accumulated loaded hours during the record (idle time and motion time).	Numeric	14,4
Login_Date	Date and time the record started (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
login_hrs	Accumulated login hours during the record (difference between login and logoff).	Numeric	14,4
Logoff_Date	Date and time the record ended (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
Make	Vehicle make assigned in the software portal	Alphanumeric	200
max_lbs	Maximum weight moved during the record	Numeric	10,4
max_mph	Maximum speed during the record	Numeric	5,2
Mi	Middle initial of the operator logged in	Alphanumeric	1
Model	Vehicle model assigned in the software portal	Alphanumeric	200
motion_hrs	Accumulated motion hours during the record.	Numeric	14,4
odometer_miles	Miles traveled during the record.	Numeric	10,1

Operator	Combined operator first and last name logged in for the record.	Alphanumeric	200
opr_Ext_ID	External ID entered into the software portal for the logged in operator	Alphanumeric	200
Organization	Organization code entered into the software portal for the logged in operator	Alphanumeric	200
powerUp_hrs	Accumulated hours the VAC was powered for the records	Numeric	14,4
shift_End	End time of the shift that the record happened during (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
shift_ID	ID assigned to the shift the record occurred in.	Numeric	Integer
shift_Name	Name of the shift that the record happened during	Alphanumeric	200
shift_Start	Start time of the shift that the record happened during (in UTC)	YYYY-MM-DDTHH:MM:SS.SSSZ	
Site	Customer site (a child of customer account) identifier. Example: Woodcliff Lake NJ office	string	5
soft_Bypass_Flag	Identifies if the VAC is in ID Optional mode	Alphanumeric	20
total_Tow_hrs	Accumulated item in tow hours during the record.	Numeric	14,4
tow_Count	Number of times the tow sensor recorded a new item in tow for the record.	Numeric	Integer
travel_Feet	Distance traveled during the record	Numeric	Integer
travel_hrs	Accumulated travel hours during the record (different than motion, this field is hours the VAC senses speed, if speed is disabled, this equals motion hours).	Numeric	14,4
Travel_with_Load_Feet	Accumulated travel feet with a load present during the.	Numeric	14,4
Travel_with_Load_hrs	Accumulated travel hours with a load present during the.	Numeric	14,4
usage_Event_ID	Unique ID for each usage record	Numeric	Integer
veh_Ext_ID	External ID entered into the software portal for the vehicle	Alphanumeric	200
veh_Ext_ID_2	External ID 2 entered into the software portal for the vehicle	Alphanumeric	200
vehicle	Vehicle name	Alphanumeric	200
vehicle_ID	Unique ID assigned to the vehicle.	Numeric	5
vehicle_Type	Vehicle type assigned to the vehicle.	Alphanumeric	200

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Response Codes

There are a limited number of response codes provided regardless of the end point.

Response Code 200 - Success

Returned when the API end point call succeeds. See individual end point details for response content.

Response Code 400 – Bad request

Returned when the API call includes and invalid request from or syntax.

Response Code 401 - Unauthorized

Returned when the token is invalid or expired.

Response Code 403 - Forbidden

Authentication Success but API endpoint is not authorized.

Response Code 500 – Server error

Returned when Powerfleet server cannot respond to the endpoint request. Contact Powerfleet Support.

Test Process

1. Get ClientID and ClientSecret from Powerfleet
2. Go to https://visionpro-api.Powerfleet.com/genericapi/swagger/index.html
3. Go to Token end point
4. Click Try Out
5. Replace "string" with your ClientID and ClientSecret (scope must be "extract")
6. Click Execute
7. Copy the token provided in the response
8. Go to Authorize at the top of the page
9. Paste the token and click Authorize
10. Click Close
11. Go to each endpoint you want to test
    a. Enter your facility ID
    b. Click Execute
    c. Results will be delivered