

ENECHNAGE Go-Challenge Interface Specification Document

Glossary

Term	Description
CPO	Charging Point Operator
EV	Electric Vehicle.
EVSE	Electric Vehicle Supply Equipment. Is considered as an independently operated and managed part of a Charge Point that can deliver energy to one EV at a time.
Location	The Location objects live in the CPO back-end system. They describe the charging locations of an operator.

Cardinality

Symbol	Description	Type
?	An optional object. If not set, the field should be omitted.	Object
1	Required object	Object
*	A list of zero or more objects. If empty, the field should be omitted.	[Object]
+	A list of at least one object.	[Object]

Endpoint

Locations Endpoint

We offer the Locations endpoint, which allows you to fetch a list of locations within a circular area defined by a specified {latitude}, {longitude}, and {radius}.

URI

```
api/locations?[latitude={latitude}]&[longitude={longitude}]&[radius={radius}]&[date_from={date_from}]&[date_to={date_to}]
```

Request Method

GET

Request Parameters

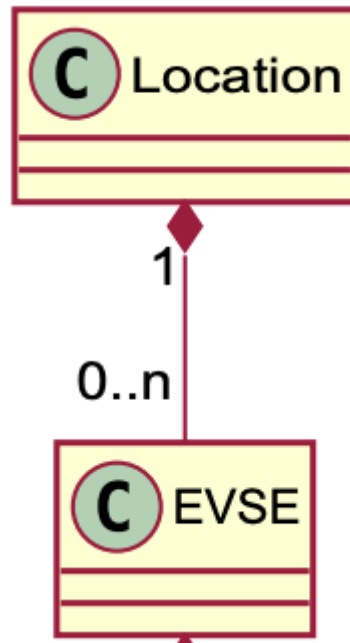
Parameter	Datatype	Required	Description in OCPI
latitude	string(11)	yes	Latitude of the point in decimal degree. Example: 50.770774. Decimal separator: "." Regex: <code>-?[0-9]{1,2}\.[0-9]{5,7}</code>
longitude	string(12)	yes	Longitude of the point in decimal degree. Example: -126.104965. Decimal separator: "." Regex: <code>-?[0-9]{1,3}\.[0-9]{5,7}</code>
radius	int	no	Search radius from latitude and longitude. Unit: km. If not specified, the default will be set to 100 km.
date_from	DateTime	no	Only return Locations that have last_updated after or equal to this Date/Time (inclusive).
date_to	DateTime	no	Only return Locations that have last_updated up to this Date/Time, but not including (exclusive).

Response Data

Type	Card.	Description
Location	*	List of all Locations with EVSEs.

Object description

Location and EVSE have the following relation.



Location object

Property	Data Type	Card.	Description
id	string(36)	1	Unique ID of the Location
name	string(255)	?	Name of the Location
address	string(45)	1	Address of the Location
coordinates	GeoLocation	1	Coordinates object containing latitude and longitude
evses	EVSE	*	Array of EVSE objects. An EVSE represents a charger connected to a charging station.

EVSE object

Property	Data Type	Card.	Description
uid	string(36)	1	Unique identifier of the EVSE within the CPO's platform.
status	Status	1	Current status of the EVSE, such as "AVAILABLE", "BLOCKED", "CHARGING", etc.

Data types

GeoLocation class

Property	Data Type	Card.	Description
latitude	string(11)	1	Latitude of the point in decimal degree. Example: 50.770774. Decimal separator: "." Regex: <code>-?[0-9]{1,2}\.[0-9]{5,7}</code>
longitude	string(12)	1	Longitude of the point in decimal degree. Example: -126.104965. Decimal separator: "." Regex: <code>-?[0-9]{1,3}\.[0-9]{5,7}</code>

Status enum

Value	Value on DataBase	Description
AVAILABLE	1	AVAILABLE The EVSE/Connector is able to start a new charging session.
BLOCKED	2	The EVSE/Connector is not accessible because of a physical barrier, i.e. a car.
CHARGING	3	The EVSE/Connector is in use.
INOPERATIVE	4	The EVSE/Connector is not yet active, or temporarily not

		available for use, but not broken or defect.
OUTOFORDER	5	The EVSE/Connector is currently out of order, some part/components may be broken/defect.
PLANNED	6	The EVSE/Connector is planned, will be operating soon.
REMOVED	7	The EVSE/Connector was discontinued/removed.
RESERVED	8	The EVSE/Connector is reserved for a particular EV driver and is unavailable for other drivers.
UNKNOWN	9	No status information available (also used when offline).

DateTime type

All timestamps are formatted as string(25) following RFC 3339, with some additional limitations.

All timestamps SHALL be in UTC. The absence of the timezone designator implies a UTC timestamp. Fractional seconds MAY be used.

Example of how timestamps shall be formatted in OCPI, other formats/patterns are not allowed:

```
2015-06-29T20:39:09Z
2015-06-29T20:39:09
2016-12-29T17:45:09.2Z
2016-12-29T17:45:09.2
2018-01-01T01:08:01.123Z
2018-01-01T01:08:01.123
```

NOTE +00:00 is not the same as UTC.