ChargePoint Web Services API Programmer's Guide

ChargePoint Web Services API Version 5.0

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1 Introducing ChargePoint Web Services

1.1 What's New in This Release

1.1.1 New Method getTransactionData – Session Fee History

The **getTransactionData** method provides organizations with a programmatic way to import a detailed history of all session fees collected on their stations. This same data is available in the financial reports area of the ChargePoint web portal as a CSV download.

1.1.2 New Method getStationStatus – Private Station Status

To streamline applications for station owners, a new method has been added to the Station Management API called **getStationStatus**. This method provides the Availability Status, and optionally the Connector type and max Power level of each port on each station under management. The payload of this method is much smaller than the **getStations** method, and the Status field has been removed from that method.

1.1.3 New Method getUsers – List of Connected Drivers

Many organizations use ChargePoint Connections or host a Managed Realm, which allows drivers to share some basic information with them. This method provides a programmatic interface for reading that data. This could be helpful for integrating with corporate systems for employee or customer management..

1.1.4 New userID Key

To allow your application to link usage data and driver data more easily, several methods now use a new opaque ID to identify a driver, called **userID**. This ID is separate from the Driver Account Number or username. This ID appears in the **getChargingSessionDataResponse**, **getUsers**, and **getLoad** API methods, and the **station_charging_session_start** Push Notification.

1.1.5 New credentialID Key

ChargePoint RFID cards have a printed serial number, and the ChargePoint Mobile app displays card information to drivers based on this serial number. In previous versions of the API, a hexadecimal value was used in the rfidSerialNumber property. The new credentialID contains the same ID that drivers see in the ChargePoint Mobile App so that developers can easily debug applications that manage session data for users that use multiple cards.

1.1.6 Removed Station Reservation API

The existing ChargePoint Reservation feature is in the process of getting reworked, and to prepare for new things to come in this application area, we have removed all methods in the Station Reservation API from this release. The ChargePoint Web Services API Version 4.1 will continue to support that application in its current form.

1.1.7 New Method updateUserStatus - Process Connection Requests

A new method, **updateUserStatus**, has been added to allow organizations to approve ChargePoint Connection requests. This provides the ability to validate data provided by drivers, such as an employee ID or membership ID, against a backend database when a Connection request is made for preferred pricing, station visibility or access control.

1.1.8 New Method setWaitlistDone – Custom Waitlist Done Trigger

If an organization would like to define custom algorithms to determine when a driver using a station that supports the Waitlist feature is done charging, this method may be used to indicate to the station and driver that the session is complete. The method also provides the ability to customize the text that will be put into the notification sent to the driver when the session is deemed complete.

1.1.9 Per Port Demand Response

The getLoad, shedLoad and clearShedState methods now allow you to interact with a charging station at the port level.

1.1.10 Pagination for Station Management Methods

The getStations, getStationStatus and getStationRights methods now include startRecord, numRecords and moreFlag properties so that you can control the amount of data in the response. This is useful if you have a large number of stations that you are trying to manage, and you want to download only a portion of the station data one page at a time.

1.2 Overview

ChargePoint® is the largest network of independently owned charging stations in the world. Employers, retailers and property owners use the network to offer charging services to employees, customers and residents because the network offers open, high-reliability charging that drivers prefer.

Using the network's Web Services API, any hardware supplier can add to the growing portfolio of onDemand software applications that administer charging stations connected to the network. Navigating to the nearest available station, determining a station's availability, monitoring and reporting usage, viewing and clearing alarms, configuring advertisements, creating pricing and payment options are just a few examples of the services provided by ChargePoint that you can access using the API.

The API family consists of function calls summarized in the following table. As shown, the calls that are available depend on your ChargePoint Service Plan.

		Can be accessed by...			
API/ Description	**Calls Included**	**Telematics Plan**	**Corporate Plan**	**Commercial Plan**	**Service Provider Plan**
Common API	getCPNInstances	✓	✓	✓	✓
Station Information	getPublicStations	✓			
	getPublicStationStatus	✓			
Demand Management Used to shed and restore charging station load to desired power levels.	shedLoad				✓
	clearShedState				✓
	getLoad				✓
Usage Analysis Used to retrieve your charging station's usage statistics	getChargingSessionData[1]		✓	✓	✓
	get15minChargingSessionData[1]				✓
	getTransactionData				✓
Station Management Used to manage your stations.	getStations		✓	✓	✓
	getStationGroups		✓	✓	✓
	getStationGroupDetails		✓	✓	✓
	getOrgsAndStationGroups		✓	✓	✓
	getStationRights		✓	✓	✓
	getStationRightsProfile		✓	✓	✓
Network	getAlarms		✓	✓	✓

		Can be accessed by…			
API/ Description	**Calls Included**	**Telematics Plan**	**Corporate Plan**	**Commercial Plan**	**Service Provider Plan**
Management Used to manage your station's alarms.	clearAlarms		✓	✓	✓
Driver Management Used to manage drivers that use your charging stations.	getUsers		✓	✓	✓
	updateUserStatus		✓	✓	✓
	setWaitlistDone		✓	✓	✓
Push Framework	registerFeeds	✓	✓	✓	✓
	updateFeed	✓	✓	✓	✓

[1]*Driver information that is retrieved using this call is visible only if you have a Service Provider Plan and if the driver is part of your driver management realm.*

1.3 ChargePoint Concepts

1.3.1 What are "Organizations"?

In the world of ChargePoint, all charging stations are associated with an organization who owns them. These organizations determine how their stations are set up, such as how they are physically and logically organized, who can use them, how much it costs to use them, and much more. In some cases, especially if an organization owns many charging stations, the organization can make arrangements with another organization to set up and manage stations for them. So, in other words, an organization in ChargePoint doesn't always own stations, but instead, may be an organization *that provides services* to organizations that own stations.

Examples of organizations include:

- Station owners, like workplaces, hotels, retailers, apartment buildings, etc.
- ChargePoint channel partners, including station manufacturers whose stations are connected to ChargePoint
- Utilities companies and grid operators who manage energy for their own stations and those of other station owners

1.3.2 How are stations organized?

In ChargePoint, every station is organized into exactly one *radio group* based on its location. In addition, stations can be organized into an unlimited number of *custom station groups* based on how the station is managed and controlled.

1.3.2.1 Radio Groups

Every station is a member of exactly one radio group. A radio group always consists of one or more charging stations located in the same area. One station is a "gateway". The gateway has a modem that allows it to communicate with the ChargePoint network over a wide area network such as the cellular network. Not only does the gateway communicate directly with ChargePoint, it also provides the communications link to allow "non-gateway" stations located nearby to communicate with ChargePoint. Non-gateway stations don't have a modem but instead, communicate with the gateway station using a local area network, such as 802.15.4.

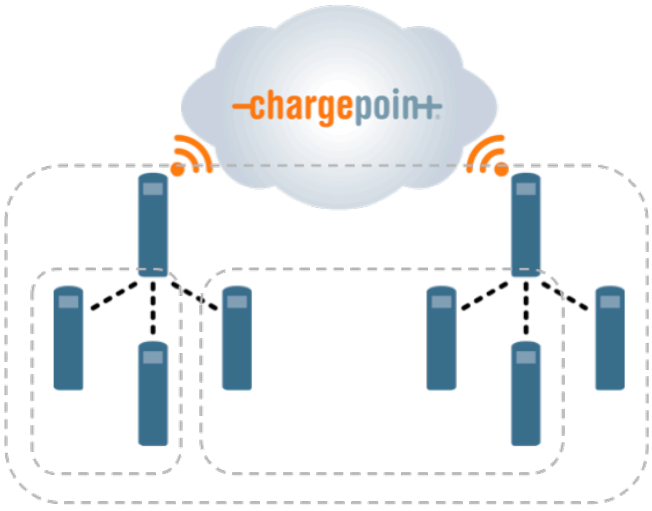
A single gateway station can provide the communications link for up to 24 "non-gateway" stations. One could think of a gateway station as a communications hub. Non-gateway stations must be located within 100' of a gateway station.

It is up to the organization who owns the stations how radio groups are set up but the key factor in determining how depends on where stations are located. For example, perhaps Ojai Galleria Shopping Center is installing 10 charging stations spread over a large area in which no station is located within 100' feet of another station. In this scenario, each station would need its own modem to communicate with ChargePoint. Therefore, Ojai Galleria Shopping Center would set up 10 radio groups, each group consisting of a single gateway station. Or perhaps Le Grand Cake Gourmet Company is installing 10 charging stations and all stations are located within 100' feet of a gateway station. In this scenario, they may choose to set the stations up within a single radio group in which one station is the gateway station and the remaining nine stations are non-gateways.

When provisioning a gateway station onto the ChargePoint network, the organization creates a new radio group. When provisioning a non-gateway station, the organization associates it with an existing radio group.

1.3.2.2 Custom Station Groups

Optionally, an organization can choose to group stations logically. By creating one or many logical groups, called Custom Station Groups, then assigning stations to these groups, regardless of where the stations are physically located, organizations can administer, configure, or report on an entire group of stations in a common way.



Let's say, for example, that Ojai Galleria Shopping Center has 100 stations that are physically distributed at three different installation sites: campus A, campus B, and campus C. Ojai Galleria Shopping Center charges drivers to use their stations but wants to restrict access to thirty of these stations so that only their employees can use them. In this scenario, Ojai Galleria Shopping Center could create a custom station group and add the free stations at each installation site into this group. Perhaps they call this group "Preferred Stations." By having these stations grouped logically, Ojai Galleria Shopping Center can now apply access control to this group so that only

employees can use them. And Ojai Galleria Shopping Center could remove any pricing from these stations so that employees could charge for free. Of course, Ojai Galleria Shopping Center could do this without grouping the stations, but instead of selecting the entire group with one click to control access, they would need to select each of these stations individually every time they wanted to configure these stations in a common way.

As Ojai Galleria Shopping Center continues to expand their network of charging stations, they can easily add stations to a custom station group. And to change how the stations are configured, Ojai Galleria Shopping Center can change the entire group at the same time instead of having to reconfigure individual stations.

Pricing is another reason an organization may want to create custom station groups. Perhaps Ojai Galleria Shopping Center wants to charge more money for drivers who charge at the stations located in the premium parking spots near the building vs. the stations located in the lot across the street. In this case, Ojai Galleria Shopping Center could create custom station groups based on how they want to set pricing.

A single station can be a member of many custom station groups. So as you can see, organizing stations into custom station groups can be quite a time-saver, especially when managing many stations. Instead of administering, configuring, or reporting on individual stations, an organization can perform these functions on an entire group of stations in a single click.

1.3.3 How are stations set up?

First, after a station is installed, an organization needs to establish the communications link between the station and the ChargePoint network. This is done by simply logging into ChargePoint and entering some basic information about the station, such as the station's unique name and ID as well as location. This is called "provisioning" and when complete, the station is "live" and can immediately be seen by drivers on the ChargePoint map (unless you specified that you don't want the station to be visible, discussed later).

Once a station has been provisioned*, the organization can define:

- which drivers can use the station (if you don't do this, the station can be used by all drivers)
- how much drivers pay to use the station (if you don't set pricing, the station can be used for free)
- messages that a station displays to drivers (such as advertisements)

The organization can also include and print reports that includes the station (or groups of stations). These features are described below.

*NOTE: You don't necessarily need to wait until after the station has been provisioned to define pricing, access, ads, etc. If you have the information available, you can define these at the time you initially provision the stations.

1.3.3.1 Controlling Access

A station connected to the ChargePoint network can be accessed by all drivers, unless the organization who owns the station restricts access to a specific group of drivers. An organization can restrict access to an individual charging station, or to any group of charging stations. For example, perhaps Ojai Galleria Shopping Center wants to restrict access so that only preferred customers can use them. Restricting access is done by simply creating an Access Control List (ACL) that includes the driver group that can use the station, and then applying this list to a station, or group of stations. When an ACL has been applied to a station, only drivers who are members of a driver group that was included in the ACL can access the station. If a driver that is not included in the ACL, scans a ChargePoint card to use the station, the station will not charge and instead, the displays a message such as "AUTHORIZATION FAILED" or "RESTRICTED USE ONLY."

When access to a station has been restricted, only drivers that belong to a driver group that can access the station can see it on the ChargePoint map. The station will not be displayed on maps for drivers who don't have access. But perhaps an organization wants to allow any EV driver to use the station if they happen to be in their parking lot, but doesn't want the station to be displayed on the map for all drivers. For example, Ojai Galleria Shopping Center wants to allow their customers who are parking in their lot to be able to use the station. This might be the case of Big Company has installed physical access control to their parking lot, as is common on many corporate campuses. In this scenario, the organization could restrict only the "visibility" of the station. It won't be displayed on the map for all drivers to find, but if a driver happens to see it, the driver can use it because the organization restricted only the visibility of the station, not access to charging.

1.3.3.2 Setting Prices

All stations on the ChargePoint network require drivers to scan a card before they can use it. Drivers usually scan their ChargePoint card because they've set up an account on the ChargePoint network. But perhaps an organization has stations that are equipped with a contactless credit card reader. If this is the case, drivers can access the station by scanning a contactless credit card such as MasterCard, VISA, or AMEX.

All stations are free for everyone to use unless the organization who owns the station has specified how much drivers pay to use them. Station owners need to determine whether or not they want to charge drivers to use the station, and if so, how much. Pricing information is displayed on the ChargePoint map so drivers know exactly how much they'll be charged when they use the station.

When setting pricing, organizations can charge:

- A flat fee per session – where the drivers pays the same amount regardless of how long the vehicle is plugged in and charging
- An hourly rate – where drivers are charged based on how long the vehicle charges
- A per kWh rate—where drivers are charged based on the amount of electricity consumed during a charging session

Organizations can also set up pricing based on any combination of the above. For example, an organization can charge a flat fee per session PLUS a per hour fee. Or they can charge a flat fee per session, plus an hourly fee, plus a per kWH fee. Organizations can also specify minimum and maximum fees that a driver pays regardless of the length of the charging session. The driver's ChargePoint account (or credit card) is automatically charged the appropriate fee when the charging session ends.

1.3.4 Who can access an organization's stations?

When an organization is first created in ChargePoint, the organization is initially set up with one "admin" (administrator) that has full access to everything in that organization. This admin's role is called "Network Manager", which is the role that has the maximum set of privileges in any organization. There are two ways for the organization to allow other people to configure, manage, control, and report on their charging stations:

- *add other admins* within their organization and then assign privileges to these admins
- *grant rights* to other organizations

1.3.4.1 Adding admins

Admins with sufficient privilege within an organization can add one or more admins and assign permissions based on the "role" of the new admin(s). A role is a category of tasks (described in more detail on page X). For example, perhaps Ojai Galleria Shopping Center wants to add an admin that can provision charging stations, but can't set pricing on charging stations. Or perhaps they want to add an admin that has full permission but only on charging stations located in California. When adding admins, the organization also specifies the station(s) or groups of stations that the admin can work with. Let's say, for example, Ojai Galleria Shopping Center has two facility managers, Tom and Ed. Tom is responsible for provisioning all charging stations and Ed is responsible for defining prices and reporting revenue on all charging stations. In this scenario, the organization would set up both Tom and Ed as admins. But in doing so, they would set up Tom with the "Installer" role (or permissions) because his only responsibility is to provision stations. Ed, on the other hand, because he needs to set prices and report revenue would be set up with the "Station Management" role.

Now let's assume that the organization's charging network expands and Tom needs help provisioning stations. So the organization decides to assign new permissions to Tom so he can add admins to help him. In this case, an admin that has full control (with the Network Management role) would need to edit Tom's admin profile to change his role from Installer to Network Manager. This would allow Tom to create additional admins. In this case, Tom would add admins with the Installer role.

1.3.4.2 Granting rights

Organizations with a large network of stations, may want another organization to manage stations for them, either fully or partially. When this is the case, the organization would grant rights to a third party ChargePoint service organization and specify the level of rights based on what they wanted you want to allow them to do. For example, perhaps the organization wants to allow

Clean Power Industries, a large utility company in California to control the electricity that is being used by all their California stations. And they want to allow EnergyCo in Texas to do the same for all their stations in their service region. Similar to the way you assign permissions to admins based on role, you also grant rights to organizations based on the operations you want to allow that Organization to perform on your stations. In this case, the organization would grant rights to Clean Power Industries to all California stations and in doing so, would give PG&F access to all tasks associated with Energy Management (in particular, Demand Response). They would then do the same for EnergyCo but only for all stations in Texas.

1.3.4.3 Roles/Rights

Each role in ChargePoint is associated with a specific group of tasks.

Role	What they can do on selected stations
Network Management	Full control. Manage admins and drivers, configure, provision, troubleshoot, and run usage reports.
Station Management	Configure, provision, troubleshoot and run usage reports.
Installer	Provision stations and run usage reports only
Energy Management	Suspend and resume stations (demand management) and run usage reports
Detailed Reporting	Run full usage reports
Summary Reporting	Run summary usage reports only

2 Accessing the ChargePoint Web Services API

2.1 WSDL File and SOAP Endpoint

To get started, download the ChargePoint Web Services API Version 5 **WSDL File**, and import it into your favorite SOAP / XML / Web Services development environment to get the definitions of every method and property in the API. The client application that you create must send SOAP messages via HTTPS POST to the ChargePoint Web Services API Version 5 **SOAP Endpoint**.

- WSDL File: https://webservices.chargepoint.com/cp_api_5.0.wsdl
- SOAP Endpoint: https://webservices.chargepoint.com/webservices/chargepoint/services/5.0

2.2 Obtaining an API License Key and Password

To access the ChargePoint Web Services API, you will require a License Key, Password and a ChargePoint account with one of the service plans described in section 1.1. To find your API License Key and API Password, follow these steps:

1. Log into ChargePoint with either a Network Manager or API user account
2. Click the Organizations tab, and then click the API Info sub-tab
3. Find your API License Key in the table
4. Mouse over your API License Key, and select Generate Password from the pop-up menu
5. Save the API License Key and API Password values for making calls to the ChargePoint Web Services API

2.3 Web Service Security

The ChargePoint Web Services API uses WS-Security to authenticate the account making the SOAP request. The WS-Security information must be provided in the SOAP Header section of every message sent to the ChargePoint Web Service SOAP Endpoint as shown in the example header below.

Key	Description	Required/ Optional	Type
Username	The Username is the API License Key. This key may be obtained by logging into your ChargePoint account. For instructions, see section 3.1.	Required	String
Password	The Password is the API Password for your ChargePoint account. The API Password may be obtained by logging into your ChargePoint account. For instructions, see section 3.1.	Required	String

2.4 Example SOAP Header

Note that sometimes copying and pasting the example SOAP Header below may result in errors with some development environments. Please be sure to validate the following attributes in the SOAP Header that the application sends to the ChargePoint Web Services API.

Element	Attribute	Value
Header	wsse	http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd
Security	mustUnderstand	1
Password	Type	http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-username-token-profile-1.0#PasswordText

```
<SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd">
  <wsse:Security SOAP-ENV:mustUnderstand="1">
    <wsse:UsernameToken>
      <wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
      <wsse:Password
Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-username-token-profile-
1.0#PasswordText" >0123456789abcdef0123456789abcdef</wsse:Password>
    </wsse:UsernameToken>
  </wsse:Security>
</SOAP-ENV:Header>
```

2.5 Common Response Parameters

All responses of the ChargePoint Web Services API contain the following parameters.

Parameter	Description	Type
ResponseCode	Code indicating success or failure for the API call. See list of response codes in section 4.	String
ResponseText	If an error occurs, this field contains a description of the error. If no error occurred, this field will be blank.	String

3 Response codes

The response to all API calls includes a Response Code which describes the success or failure of the call. You must interpret this code to make appropriate decisions regarding the success or failure of a call, and to present meaningful user interface feedback to drivers.

100 API input request executed successfully

101 You are not authorized to access this API call, because your ChargePoint Network Service Plan does not let you run this call. Please contact ChargePoint Customer Support to upgrade your Service Plan.

102 No station found for given criteria

103 This station information does not exist in the ChargePoint database

104 Invalid email/password

105 ChargePoint card was not activated. Please activate card

106 Invalid future date. Provide valid future date

107 Invalid duration. Provide valid duration

108 Invalid account handle. Please try again

109 Station not available

110 Invalid serial number

111 Free users cannot make a reservation on paid stations (stations on which price is applied)

112 Station can not be reserved at this moment. Please try again later.

113 Invalid reservation handle

114 Reservation can not be cancelled. Cancellation interval time has expired.

115 Station is unreachable OR maintenance is required at the moment. Please try again later.

116 Reservation has been previously cancelled

117 You can not cancel reservation made by others

118 Address and Lat/Long provided do not match

119 Invalid Station ID

120 No station group found

121 Provide a valid station group id

122 No station found in this station group

123 Invalid shed percentage

124 Invalid time interval

125 You must provide your station group only

126 Can not shed Load now

127 Can not restore Load now

128 This station is not reservable

129 This station group Id is not in the ChargePoint database

130 Invalid value. Please enter a value greater than zero.

131 Stations are not within your ownership or rights realm

132 Invalid session ID

133 Sessions are not within your ownership or rights realm

134 No 15 min data found for this session

135 Invalid fields

136 No charging session data found for given criteria

137 Unable to cancel the existing reservation at this moment. Station-Server communication may be broken. Please try again later.

138 Can not modify reservation at the moment. Please try again later.

139 Only one Wild card search allowed per day

140 Please provide a valid group code(sgCode)

141 Invalid dates

142 Start date cannot be greater than end date

143 An unknown error has occurred. Please try again later

144 Free user can not modify reservation on paid stations

145 You can not retrieve details of reservation made by others

146 You can not modify reservation made by others

147 Invalid ChargePointcard

148 No reservation found

149 Please provide valid organization details

150 Please provide a valid Station Name

151 Please provide a valid past date

152 StationId is not in correct format

153 Alarms not found

154 Please provide a valid Custom Group Id

155 Please provide a valid Custom Group Name

156 Custom Groups not found

158 OrgID is not in correct format

159 Please provide valid Organization id

160 No data found for given criteria

166 Please provide startTime, Duration, energyRequired, vehiclePower

167 Please provide a valid stationRightsProfile

168 Please provide a valid event name

169 No Station found for given criteria

170 Please provide a valid subscriberId

171 Invalid Parameters <ParamName>,<ParamName>,<ParamName>

172 Please provide all the mandatory fields to make this call

173 Please provide either allowedLoad or percentShed

174 Please provide a parameter less than or equal to 100 while shedding load using percentShed

175 Shedding failed, because some of the station(s) in this group do not support shedding via absolute load method

176 Shedding failed, station does not support allowedLoad feature

177 AllowedLoad cannot be more than X. X can be maximum allowed load while shedding load based on absolute value

178 The selected organization is not within your ownership or rights realm

179 Another type of shed is already in progress. Please restore load and then apply new shed.

180 No user found

181 Use same shed method for each port

182 Search by either sgID or stationID

183 Port information is missing

184 Enter either sgid or stationID

185 Per port shed not supported on this station

186 Invalid number of ports specified in the request

187 Shed at either the group level or the station level, but not both

188 Operation Not Found

189 The value of numStations exceeded the maximum of <MaximumPageSize>

190 Invalid userID

191 userID request not found

192 Connection already <Rejected|Approved> for this driver

194 Both single stationID and multiple stationIDs search are not permitted. Please use either option

195 The user with userID <userID> is not plugged in at this port on this station <stationID> port <portNumber>

196 Transaction from date cannot be greater than to date

197 Provide both to and from transaction dates

198 Max transactions value can not exceed 500

199 Please shed either at group, station or port level

200 Please provide either param from allowedLoadPerStation, percentShedPerStation or ports

201 No transaction found

4 Common API

The Common API includes function calls that can be accessed by all users.

Summary of Common API calls:

- getCPNInstances
- registerFeed (described under Push Framework, see section 12.2)
- updateFeed (described under Push Framework, see section 0)

4.1 getCPNInstances

Use this call to retrieve ChargePoint NOS instances.

4.1.1 Restrictions

None.

4.1.2 Input Parameters

None.

4.1.3 Response Parameters

Parameter	Description	Type
cpnID	ChargePoint Network Identifier	Integer
cpnName	ChargePoint Network Name	String
cpnDescription	Description	String

4.1.4 getCPNInstances - Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
<SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
  <wsse:Security SOAP-ENV:mustUnderstand="1">
    <wsse:UsernameToken>
<wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
          <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
username-token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
    </wsse:UsernameToken>
  </wsse:Security>
</SOAP-ENV:Header>
<SOAP-ENV:Body>
        <ns1:getCPNInstances></ns1:getCPNInstances>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

4.1.5 getCPNInstances - Sample Response

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
   <soapenv:Header>
      <wsse:Security soapenv:mustUnderstand="1" xmlns:wsse="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd"/>
   </soapenv:Header>
   <soapenv:Body>
      <ns1:getCPNInstancesResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
         <CPN>
            <cpnID>1</cpnID>
            <cpnName>USA</cpnName>
            <cpnDescription>ChargePoint North America</cpnDescription>
         </CPN>
         <CPN>
            <cpnID>2</cpnID>
            <cpnName>EU</cpnName>
            <cpnDescription>ChargePoint Europe</cpnDescription>
         </CPN>
         <CPN>
            <cpnID>3</cpnID>
            <cpnName>AU</cpnName>
            <cpnDescription>ChargePoint Australia</cpnDescription>
         </CPN>
      </ns1:getCPNInstancesResponse>
   </soapenv:Body>
</soapenv:Envelope>
```

5 Station Information API

The Station Information API is for driver-centric applications in which drivers can locate charging stations. The calls retrieve data for stations that match specified parameters. For each station that matches your specified search criteria, the response will a unique CPN ID:Station ID.

Summary of Station Information API calls:

- getPublicStations
- getPublicStationStatus

These APIs are detailed on the following pages.

5.1 getPublicStations

Use this call to retrieve a list of public stations with attributes that match specified input parameters.

5.1.1 Restrictions

Within any 24-hour period, you can send only one API call with input parameters not specified (or specified as NULL).

5.1.2 Input Parameters

Note: Without specifying proximity, searches based on location (i.e., Address, City, State, PostalCode, Country) return stations based on text that matches the specified location parameters. For example, if you specify a street address and city, the response includes all stations that match the values you specified for address and city. If you specify city only, the response includes all stations in the specified city. If you specify city and state, the response includes all stations that match the city and state.

When you specify proximity, the response returns all stations within the radius specified for the proximity value, with the radius centered at the most granular location information specified. For example, if you specify a street address, a city, and a state, and specify a proximity of 50 miles, the response includes all stations located with a 50 mile radius of the specified street address. However, if you specify only a state and a 50 mile radius, the response includes all stations within a 50 mile radius of the center of the specified state.

Parameter	Description	Required/ Optional	Type
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier.	Optional	String
stationManufacturer	Station manufacturer	Optional	String

Parameter	Description	Required/ Optional	Type
stationModel	Station manufacturer model number	Optional	String
stationName	Name of the station (wild card characters allowed). It should be searched for by both company name (the name of the organization that owns the charging station) and station name. Company name is displayed on Line 1 of the charging station (if applicable) and the station name is displayed on Line 2 of the charging station (if applicable).	Optional	String
serialNumber	A unique identifier for the physical hardware	Optional	String
Address	Address around which you want to see stations. This can be the street address or the complete address (street address, city, state, zip code, country).	Optional	String
City	City where the station(s) are located.	Optional	String
State	State where the station(s) are located.	Optional	String
Country	Country where station(s) are located.	Optional	String
postalCode	Postal (i.e., Zip) code where the station(s) are located.	Optional	String
Lat	Latitude of the station's location.	Optional	Float
Long	Longitude of the station's location.	Optional	Float
Proximity	Distance from the station's specified lat/long (Geo) from which you want to retrieve station information. Default is 5	Optional	Integer
proximityUnit	Default value for proximity unit is M. Can have values: M (Miles), N (Nautical miles), K (Kilometers), F (Feet), I (Inches).	Optional	String
Level	Station level type where 1 is "Level 1", 2 is "Level 2", 3 is "Level 3", and 4 is "DC Fast". If the station has more than one level (for example, the station provides both level 1 and level 2 charging), the response will include both levels (1,2). **Note:** This parameter is for "US Stations" and "AU Stations" only (and is used instead of "Mode").	Optional	Enum

Parameter	Description	Required/ Optional	Type
Mode	Station mode type where 1 is "Mode 1", 3 is "Mode 3", and 4 is "DC Fast". If the station has more than one mode (for example, the station provides both mode 1 with a domestic socket and mode 3 charging with an IEC62196 Type 2 socket), the response will include both modes (1,3). Note: This parameter is for "EU Stations" only (and is used instead of "Level").	Optional	Enum
startTime	The start time of a pricing session (time format HH:MM:SS)	Optional	Time
Duration	Estimated charging duration in hours	Optional	Integer
energyRequired	Estimated energy needed for charging session in kWh	Optional	Float
vehiclePower	If a session is active, present amount of power in kW being delivered to the vehicle	Optional	Float
Reservable	Whether or not the station can be reserved: "1" - the station can be reserved. "0" - the station cannot be reserved.	Optional	Boolean
Connector	Connector type. For example, NEMA 5-20R, J1772, ALFENL3, Schuko.	Optional	String
Voltage	Nominal voltage (V).	Optional	Float
Current	Current supported (A).	Optional	Float
Power	Power supported (kW).	Optional	Float
demoSerialNumber	Array of serial numbers of stations identified as "demo" stations. Used only for client applications that need to access stations identified as "demo" sations.	Optional	String

5.1.3 Response Parameters

The following response parameters are returned for every station that matches your specified search criteria.

Parameter	Description	Type
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String
stationManufacturer	Station manufacturer	String
stationModel	Station manufacturer model number	String
portNumber	Identifier of the port. This ID is 1 based.	Integer
stationName	Display name of the station (Line 1/Line 2). Line 1 is the name of the organization that owns the station and Line 2 is the name of the station. For example (COULOMB TECH / FRONT LOT 01).	String
Address	Complete address (street address, city, state, zip code, country).	String
City	City where the station(s) are located.	String
State	State where the station(s) are located.	String
Country	Country where station(s) are located.	String
PostalCode	Postal code where the station(s) are located.	String
Lat	Latitude of the station's location.	Float
Long	Longitude of the station's location.	Float
Reservable	Whether or not the station can be reserved: "1" - the station can be reserved. "0" - the station cannot be reserved.	Boolean
Level	Station level type where 1 is "Level 1", 2 is "Level 2", 3 is "Level 3", and 4 is "DC Fast". If the station has more than one level (for example, the station provides both level 1 and level 2 charging), the response will include both levels (1,2). **Note:** This parameter is for the "USStations" and "AUStations" calls only (and is used instead of "Mode").	Enum

Parameter	Description	Type
Mode	Station mode type where 1 is "Mode 1", 3 is "Mode 3", and 4 is "DC Fast". If the station has more than one mode (for example, the station provides both mode 1 with a domestic socket and mode 3 charging with an IEC62196 Type 2 socket), the response will include both modes (1,3). Note: This parameter is for "EU Stations" only (and is used instead of "Level").	Enum
Connector	Connector type. For example: NEMA 5-20R, J1772, ALFENL3, Schuko.	String
Voltage	Nominal voltage (V).	Float
Current	Current supported (A).	Float
Power	Power supported (kW).	Float
estimatedCost	Cost estimated for a charging session based on the current pricing and reservation specifications	Float
numPorts	Number of ports on the station.	Integer
Type	Pricing Type (Session, Hourly, kWh, By Length of Time, Time of Day or None).	Enum
startTime	The start time of a pricing session (time format HH:MM:SS)	Time
endTime	The end time of a pricing session (time format HH:MM:SS)	Time
minPrice	The minimum price charged for a session.	Float
maxPrice	The maximum price charged for a session.	Float
unitPricePerHour	The hourly price if this mode of pricing is enabled	Float
unitPricePerSession	The session price if this mode of pricing is enabled	Float
unitPricePerKWh	The kWh price if this mode of pricing is enabled	Float
initialUnitPriceDuration	If the Pricing Type is set to "By Length of Time", this is the duration in hours that the initial price in unitPricePerHour is valid. After this time the price in unitPricePerHourThereafter is used.	Float
unitPricePerHourThereafter	The hourly price for the second portion of the pricing specification if pricing varies by length of time	Float
sessionTime	Maximum time allowed for a session	Float

Parameter	Description	Type
Description	The station's description. This is an optional free text field that is designated by the station owner during station provisioning.	String
mainPhone	Driver support telephone number.	String
modTimeStamp	Timestamp of the last change to any configuration property of the station. This does not include changes to the station status (INUSE, AVAILABLE, etc.) as reported in the getPublicStationStatus method. This property uses the ISO 8601 date time format in UTC YYYY-MM-DDTHH:MM:SSZ.	DateTime
timezoneOffset	Timezone offset in hours from UTC time for the station. If daylight savings time is enabled on the station, this value will change when the time changes from summer time to winter time and vice versa.	String
currencyCode	The ISO 4217 code for the currency used on the station. For example, US Dollar = USD, Canadian Dollar = CAD, Euro = EUR.	String

5.1.4 getPublicStations - Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
<SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
  <wsse:Security SOAP-ENV:mustUnderstand="1">
     <wsse:UsernameToken>
<wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
           <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
username-token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
     </wsse:UsernameToken>
  </wsse:Security>
</SOAP-ENV:Header>
<SOAP-ENV:Body>
         <ns1:getPublicStations>
                  <searchQuery>
                           <stationManufacturer></stationManufacturer>
                           <stationModel></stationModel>
                           <stationName></stationName>
                           <Address></Address>
                           <City></City>
                           <State></State>
                           <Country></Country>
                           <postalCode></postalCode>
                           <Proximity>1</Proximity>
                           <proximityUnit>M</proximityUnit>
                           <Connector></Connector>
                           <Voltage></Voltage>
                           <Current></Current>
                           <Power></Power>
                           <demoSerialNumber/>
                           <Reservable></Reservable>
                           <Geo>
                                    <Lat>37.2615</Lat>
                                    <Long>-121.9577</Long>
                           </Geo>
```

```
                        <Pricing>
                                <startTime></startTime>
                                <Duration></Duration>
                                <energyRequired></energyRequired>
                                <vehiclePower></vehiclePower>
                        </Pricing>
                </searchQuery>
        </ns1:getPublicStations>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

5.1.5 getPublicStations– Sample Response

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
   <soapenv:Header>
      <wsse:Security soapenv:mustUnderstand="1" xmlns:wsse="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd"/>
   </soapenv:Header>
   <soapenv:Body>
      <ns1:getPublicStationsResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
         <responseCode>100</responseCode>
         <responseText/>
         <stationData>
            <stationID>1:41613</stationID>
            <stationManufacturer>Coulomb</stationManufacturer>
            <stationModel>CT2025-HD-GW1-CCR</stationModel>
            <Address>1692 Dell Ave</Address>
            <City>Campbell</City>
            <State>California</State>
            <Country>United States</Country>
            <postalCode>95008</postalCode>
            <Port>
               <portNumber>1</portNumber>
               <stationName>CHARGEPOINT / HQ14</stationName>
               <Geo>
                  <Lat>37.261512756347656</Lat>
                  <Long>-121.957717895507810</Long>
               </Geo>
               <Description>Front parking lot along Dell Ave.</Description>
               <Reservable>0</Reservable>
               <Level>L2</Level>
               <Connector>J1772</Connector>
               <Voltage>240</Voltage>
               <Current>30</Current>
               <Power>7.2</Power>
               <estimatedCost>0.5</estimatedCost>
            </Port>
            <Port>
               <portNumber>2</portNumber>
               <stationName>CHARGEPOINT / HQ14</stationName>
               <Geo>
                  <Lat>37.261512756347656</Lat>
                  <Long>-121.957717895507810</Long>
               </Geo>
               <Description>Front parking lot along Dell Ave.</Description>
               <Reservable>0</Reservable>
               <Level>L2</Level>
               <Connector>J1772</Connector>
               <Voltage>240</Voltage>
               <Current>30</Current>
               <Power>7.2</Power>
               <estimatedCost>0.5</estimatedCost>
            </Port>
            <Pricing>
               <Type>None</Type>
               <startTime>00:00:00</startTime>
               <endTime>24:00:00</endTime>
               <minPrice>0.50</minPrice>
               <maxPrice/>
               <unitPricePerHour>1.50</unitPricePerHour>
               <unitPricePerSession/>
               <unitPricePerKWh/>
            </Pricing>
```

```
            <numPorts>2</numPorts>
            <mainPhone>(888) 758-4389</mainPhone>
            <modTimeStamp>2013-02-13T14:08:36Z</modTimeStamp>
            <timezoneOffset>-08:00</timezoneOffset>
            <currencyCode>USD</currencyCode>
         </stationData>
         <stationData>
            <stationID>1:39183</stationID>
            ...
      </ns1:getPublicStationsResponse>
   </soapenv:Body>
</soapenv:Envelope>
```

5.2 getPublicStationStatus

Use this call to retrieve a list of public stations with attributes that match your specified search criteria.

5.2.1 Restrictions

None.

5.2.2 Input Parameters

Note: Without specifying proximity, searches based on location (i.e., Address, City, State, PostalCode, Country) return stations based on text that matches the specified location parameters. For example, if you specify a street address and city, the response includes all stations that match the values you specified for address and city. If you specify city only, the response includes all stations in the specified city. If you specify city and state, the response includes all stations that match the city and state.

When you specify proximity, the response returns all stations within the radius specified for the proximity value, with the radius centered at the most granular location information specified. For example, if you specify a street address, a city, and a state, and specify a proximity of 50 miles, the response includes all stations located with a 50 mile radius of the specified street address. However, if you specify only a state and a 50 mile radius, the response includes all stations within a 50 mile radius of the center of the specified state.

Parameter	Description	Required/ Optional	Type
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier. Note that this parameter is not allowed if the stationIDs array is present in the request, and it will cause the service to throw an error.	Optional	String
stationIDs	An array of stationID parameters. Note that this array is not allowed to coexist if the single stationID parameter is present, and it will cause the service to throw an error.	Optional	Array of stationID parameters
stationManufacturer	Station manufacturer	Optional	String
stationModel	Station model number	Optional	String
stationName	Name of the station (wild card characters allowed). It should be searched for by both company name (the name of the organization that owns the charging station) and station	Optional	String

Parameter	Description	Required/ Optional	Type
	name. Company name is displayed on Line 1 of the charging station (if applicable) and the station name is displayed on Line 2 of the charging station (if applicable).		
Address	Address around which you want to see stations. This can be the street address or the complete address (street address, city, state, zip code, country).	Optional	String
City	City where the station(s) are located.	Optional	String
State	State where the station(s) are located.	Optional	String
Country	Country where station(s) are located.	Optional	String
postalCode	Postal (i.e., Zip) code where the station(s) are located.	Optional	String
Lat	Latitude of the station's location.	Optional	Float
Long	Longitude of the station's location.	Optional	Float
Proximity	Distance from the station's specified lat/long (Geo) from which you want to retrieve station information. Default is 5	Optional	Integer
proximityUnit	Default value for proximity unit is M. Can have values: M (Miles), N (Nautical miles), K (Kilometer), F (Feet), I (Inches).	Optional	String
Level	Station level type where 1 is "Level 1", 2 is "Level 2", 3 is "Level 3", and 4 is "DC Fast". If the station has more than one level (for example, the station provides both level 1 and level 2 charging), the response will include both levels (1,2). **Note:** This parameter is for the "US Stations" and "AU Stations" calls only (and is used instead of "Mode").	Optional	Enum

Parameter	Description	Required/ Optional	Type
Mode	Station mode type where 1 is "Mode 1", 3 is "Mode 3", and 4 is "DC Fast". If the station has more than one mode (for example, the station provides both mode 1 with a domestic socket and mode 3 charging with an IEC62196 Type 2 socket), the response will include both modes (1,3). Note: This parameter is for "EU Stations" only (and is used instead of "Level").	Optional	Enum
Status	Station status where 1 is "Available", 2 is "InUse", and 3 is "Unknown".	Optional	Integer
startTime	The start time of a pricing session (time format HH:MM:SS)	Optional	Time
Duration	Estimated charging duration in hours	Optional	Integer
energyRequired	Estimated energy needed for charging session in kWh	Optional	Float
vehiclePower	If a session is active, present amount of power in kW being delivered to the vehicle	Optional	Float
Reservable	Whether or not the station can be reserved: "1" - the station can be reserved. "0" - the station cannot be reserved.	Optional	Boolean
Connector	Connector type. For example: NEMA 5-20R, J1772, ALFENL3, Schuko.	Optional	String
Voltage	Nominal voltage (V).	Optional	Float
Current	Current supported (A).	Optional	Float
Power	Power supported (kW).	Optional	Float
demoSerialNumber	Array of serial numbers of stations identified as a "demo" station. Used only for client applications that need to access stations identified as "demo" stations.	Optional	String
portDetails	Optional flag indicating that Connector and Power parameters should be included in the response. Default is false.	Optional	Boolean

5.2.3 Response Parameters

The following response parameters are returned for every station that matches your specified search criteria.

Parameter	Description	Type
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String
portNumber	Identifier of the port. This ID is 1 based.	Integer
Status	Port status may be one of the following values: AVAILABLE, INUSE, UNREACHABLE, UNKNOWN. AVAILABLE means that the station is communicating with ChargePoint and the port is available for use. INUSE means that a car is connected to the port and it is not available to another driver. UNREACHABLE means that the station is having trouble communicating with ChargePoint to report its status. UNKNOWN means that the station is in an unknown state. Note that the AVAILABLE and INUSE flags are independent of the reservation status of the station.	String
TimeStamp	Timestamp of the last communication between the station and ChargePoint (ISO 8601 date time format in UTC YYYY-MM-DDTHH:MM:SSZ)	DateTime
Connector	Connector type. For example: NEMA 5-20R, J1772, ALFENL3, Schuko. Note that this parameter will only be included in the response if the portDetails flag parameter is set to "true" in the request.	String
Power	Power supported (kW). Note that this parameter will only be included in the response if the portDetails flag parameter is set to "true" in the request.	Float

5.2.4 getPublicStationStatus– Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
   <SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd">
      <wsse:Security SOAP-ENV:mustUnderstand="1">
         <wsse:UsernameToken>
<wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
            <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
username-token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
         </wsse:UsernameToken>
      </wsse:Security>
   </SOAP-ENV:Header>
   <SOAP-ENV:Body>
      <ns1:getPublicStationStatus>
         <searchQuery>
                  <stationManufacturer></stationManufacturer>
                  <stationModel></stationModel>
                  <stationName></stationName>
                  <Address></Address>
                  <City></City>
                  <State></State>
                  <Country></Country>
                  <postalCode></postalCode>
                  <Proximity>1</Proximity>
                  <proximityUnit>M</proximityUnit>
                  <Connector></Connector>
                  <Voltage></Voltage>
                  <Current></Current>
                  <Power></Power>
                  <demoSerialNumber/>
                  <Reservable></Reservable>
                  <Geo>
                           <Lat>37.2615</Lat>
                           <Long>-121.9577</Long>
                  </Geo>
                  <Pricing>
                           <startTime></startTime>
                           <Duration></Duration>
                           <energyRequired></energyRequired>
                           <vehiclePower></vehiclePower>
                  </Pricing>
         </searchQuery>
      </ns1:getPublicStationStatus>
   </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

5.2.5 getPublicStationStatus– Sample Response

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
                                    <soapenv:Header>
      <wsse:Security soapenv:mustUnderstand="1" xmlns:wsse="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd"/>
   </soapenv:Header>
   <soapenv:Body>
      <ns1:getPublicStationStatusResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
         <responseCode>100</responseCode>
         <responseText>API input request executed successfully.</responseText>
         <stationStatusData>
            <stationID>1:41613</stationID>
            <Port>
               <portNumber>1</portNumber>
               <Status>AVAILABLE</Status>
               <TimeStamp>2013-02-08T19:01:32Z</TimeStamp>
            </Port>
            <Port>
               <portNumber>2</portNumber>
               <Status>AVAILABLE</Status>
               <TimeStamp>2013-02-08T20:08:24Z</TimeStamp>
            </Port>
         </stationStatusData>
         <stationStatusData>
```

```
            <stationID>1:39183</stationID>
            <Port>
               <portNumber>1</portNumber>
               <Status>AVAILABLE</Status>
               <TimeStamp>2013-02-08T20:05:24Z</TimeStamp>
            </Port>
            <Port>
               <portNumber>2</portNumber>
               <Status>AVAILABLE</Status>
               <TimeStamp>2013-02-08T20:06:33Z</TimeStamp>
            </Port>
         </stationStatusData>
         <stationStatusData>
            <stationID>1:81203</stationID>
            ...
      </ns1:getPublicStationStatusResponse>
   </soapenv:Body>
</soapenv:Envelope>
```

5.2.6 getPublicStationStatus– Array Example Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
   <SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd">
      <wsse:Security SOAP-ENV:mustUnderstand="1">
         <wsse:UsernameToken>
<wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
            <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
username-token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
         </wsse:UsernameToken>
      </wsse:Security>
   </SOAP-ENV:Header>
   <SOAP-ENV:Body>
      <ns1:getPublicStationStatus>
         <searchQuery>
               <stationIDs>
                     <stationID>1:41613</stationID>
                     <stationID>1:39183</stationID>
               </stationIDs>
         </searchQuery>
      </ns1:getPublicStationStatus>
   </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

5.2.7 getPublicStationStatus– Array Example Response

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
                                       <soapenv:Header>
      <wsse:Security soapenv:mustUnderstand="1" xmlns:wsse="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd"/>
   </soapenv:Header>
   <soapenv:Body>
      <ns1:getPublicStationStatusResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
         <responseCode>100</responseCode>
         <responseText>API input request executed successfully.</responseText>
         <stationStatusData>
            <stationID>1:41613</stationID>
            <Port>
               <Status>AVAILABLE</Status>
               <TimeStamp>2013-02-08T19:01:32Z</TimeStamp>
            </Port>
            <Port>
               <Status>AVAILABLE</Status>
               <TimeStamp>2013-02-08T20:08:24Z</TimeStamp>
            </Port>
         </stationStatusData>
         <stationStatusData>
            <stationID>1:39183</stationID>
            <Port>
               <Status>AVAILABLE</Status>
               <TimeStamp>2013-02-08T20:05:24Z</TimeStamp>
```

```
            </Port>
            <Port>
               <Status>AVAILABLE</Status>
               <TimeStamp>2013-02-08T20:06:33Z</TimeStamp>
            </Port>
         </stationStatusData>
      </ns1:getPublicStationStatusResponse>
   </soapenv:Body>
</soapenv:Envelope>
```

5.3 Accessing Station Information Database Files

If you have the Telematics Plan, you can download static Station Information files for each instance of the ChargePoint Network from the ChargePoint Development Portal.

All files are in .csv format and are updated once every 24 hours. The name of the downloaded file includes the timestamp in the format "yyyymmddhhmm." For example, if the file name is "usstation201105200500.csv", this file contains a list of all US ChargePoint stations as of May 20, 2011 at 5:00 am.

5.3.1 Download Instructions

To download the CSV file follow these steps.

1. Login to your ChargePoint account
2. Click on the Organizations tab
3. Click on the API Info link
4. Within the API page, click on the Station Snapshot tab
5. Click on the button for the station database that you would like to download, such as "US Stations"
6. The browser will prompt you to save the file to a location on your PC

5.3.2 Importing the Database File into MS Excel

By default MS Excel will open files using the .csv extension when a user double clicks the file. If the .csv extension is not associated with MS Excel, open MS Excel first and then choose **File > Open** and navigate to the file.

5.3.3 Database File Format

For each ChargePoint charging station, the downloaded database file contains the information listed in the following table. Except where noted, these parameters are identical to those that are retrieved using thevarious API calls.

Column Heading/ Parameter	Description	Equivalent API Parameter
StationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	getPublicStations/ stationID
Category	Search terms: Electric Vehicle Charging Station, EVSE, or ChargePoint.	n/a
Manufacturer	Charging station manufacturers. For example, Coulomb Technologies, Inc.	n/a
Model	Manufacturer's charging station model number. For example, CT2100-HD-CDMA.	n/a
Home Page	The URL associated with the charging network's home page.	n/a

Column Heading/ Parameter	Description	Equivalent API Parameter
Name	Name of the charging network. For example, ChargePoint Network Charging Station.	n/a
Display Name	The charging station's display name (Line 1/Line 2). Line 1 is the name of the organization that owns the station, and Line 2 is the name of the station. For example, COULOMBTECH/FRONT LOT 01. This information was defined when the station was provisioned.	getPublicStations/ Name
Latitude	Latitude of the station's location.	getPublicStations/ Lat
Longitude	Longitude of the station's location.	getPublicStations/ Long
Description	General information about the station that is helpful to drivers. This information is optional and was defined when the station was provisioned.	n/a
Num. Ports	Number of ports.	getPublicStations/ numPorts
Port*n*Connector[1]	Connector type. For example: NEMA 5-20R, J1772, ALFENL3, Schuko.	getPublicStations/ Connector
Port*n*Voltage[1]	Nominal voltage (V). For example: 120, 240.	getPublicStations/ Voltage
Port*n*Current[1]	Current supported (A). For example: 16, 30.	getPublicStations/ Current
Port*n*KW[1]	Power supported (kW). For example, 1.92, 7.2.	getPublicStations/ Power
Port*n*Level (US List) or Port*n*Mode (EU List)[1]	Charging level/mode of the associated port. Level 1 (in North America typically represents 120V/16A charging from a NEMA 5-20R outlet). Level 2 typically represents 208-240V/up to 80A charging using a J1772 Connector. Level 3 is typically represents very fast high voltage DC charging (300-500V)/100's of Amperes using a Tepco or ChaDemo connector. If the station has more than one level (for example, the station provides both level 1 and level 2 charging), the column will include both levels, for example "1,2". **Note:** In the US database, this parameter is referred to as "Level" whereas in the EU database, it is referred to as "Mode."	getPublicStations/ Level (or Mode)

Column Heading/ Parameter	Description	Equivalent API Parameter
Price	Station pricing (FREE or PAID).	n/a
Reservable	Whether or not drivers can reserve the station (YES or NO). Station owners can specify this anytime after the station has been provisioned.	getPublicStations/ Reservable
LegacyPricing	If the station is using legacy pricing or new pricing (YES or NO). New pricing includes the ability to vary the fee the longer a driver is plugged in, and mixed mode pricing (e.g., hourly fee plus kWh fee).	n/a
Type[2]	The type of pricing that has been defined for the station. Pricing can be defined on a per hour (HOUR) basis, a per session (SESSION) basis, or a power usage (KWH) basis. Station owners can specify this anytime after the station has been provisioned.	getPublicStations/ Type
Start Time[2]	The start time of a pricing session.	getPublicStations/ startTime
End Time[2]	The end time of a pricing session.	getPublicStations/ endTime
Min Charge[2]	The minimum price drivers pay for a charging session.	getPublicStations/ minPrice
Max Charge[2]	The maximum price drivers pay for a charging session.	getPublicStations/ maxPrice
Unit Charge[2] (Session)	The amount that will be charged per session.	getPublicStations/ unitPricePerSession
Unit Charge[2] (kWh)	The amount that will be charged per kWh.	getPublicStations/ unitPricePerKWh
Unit Charge[2] (Hourly)	The amount that will be charged per hour.	getPublicStations/ unitPricePerHour
Initial Unit Charge Duration (Hours)[2]	If the price varies over time, the duration of the first part of the pricing specification. If not used, this will be zero.	n/a
Unit Charge Thereafter (Hourly)[2]	If the price varies over time, the per hour price after the initial unit charge duration expires.	getPublicStations/ unitPricePerHourThereafter
Session Time[2]	Maximum time allowed for a session	getPublicStations/ sessionTime

Column Heading/ Parameter	Description	Equivalent API Parameter
Address	Complete address (street address, city, state, zip code, country).	getPublicStations/ Address
Address1	Street address line 1.	n/a
Address2	Street address line 2.	n/a
City	City where the station is located.	getPublicStations/ City
State	State where the station is located.	getPublicStations/ State
Postal Code	Postal (i.e. Zip) code where the station is located.	getPublicStations/ PostalCode
Country	Country where the station is located.	getPublicStations/ Country
Main Phone	ChargePoint network driver support telephone number.	getPublicStations/ MainPhone

[1]*These parameters are provided for each charging port (if applicable). The port number (where indicated with "n") is included in the column heading. For example, Port1Connector describes the type of connector used on the station's #1 charging port whereas Port2Connector describes the connector on the #2 charging port. In cases where a station has only one charging port, the second set of parameters is empty.*

[2]*Two sets of pricing parameters exist. This is because cost of charging can vary depending on the time of day. If the station owner charges the same price all day, the second set of parameters will be empty. However if pricing has been set to vary depending on the time of day, this second set of parameters will be populated and you'll notice the Start Time and End Time parameters will differ.*

6 Demand Management API

The Demand Management API is used to restore charging station load for a port, station or group of stations. Custom Station Groups are created and modified using the ChargePoint Service Plan's application software.

Summary of Demand Management API calls:

- shedLoad
- clearShedState
- getLoad

These APIs are detailed on the following pages.

6.1 shedLoad

Use this call to shed load for a single port on a station, both ports on a multi-port station or a group of stations. Only one of these three options may be used in a request as follows:

- Group: Include the shedGroup element.
- Station: Include the shedStation element and either the allowedLoadPerStation or percentShedPerStation parameters within that element; omit the Ports array.
- Port: Include the shedStation element and the Ports array; set the allowedLoadPerStation and percentShedPerStation parameters in the shedStation element to a null value or omit them from the request.

Load shedding may be performed in one of the following modes. Mixing modes on a single station is not permitted:

- percentShedPerStation or Port – Percentage of a station or port's present power output to be shed
- allowedLoadPerStation or Port – Absolute maximum allowable load in kW

Shedding is performed by specifying either the percentage of the station or port's present power output using the percentShedPerStation or percentShedPerPort parameter, or by setting an absolute maximum allowable load (in kW) for a specified time period using the allowedLoadPerStation or allowedLoadPerPort parameter. Subsequent calls will overwrite previous values if you use the same mode (allowedLoad vs. percentShed). If you use a different mode before the shed state is cleared using clearShedState, the call is ignored.

Note that if the percentShedPerStation or percentShedPerPort parameter is used on a subsequent call, it will operate on the power measured when the first call to shedLoad was made. For example, if a station is delivering 10 kW, and a call is made to shed 30%, it will drop to 7 kW. If a subsequent call is then made to shed 50%, the station will drop to 5 kW (not 3.5kW). In contrast the allowedLoadPerStation and allowedLoadPerPort parameters set the absolute maximum.

Note: If you use the shedLoad call with the percentShedPerStation or percentShedPerPort parameter on a station that is not delivering any power, the maximum output is set to 0 kW, and charging will not be allowed on that station until the shed period ends or a call to clearShedState is made.

6.1.1 Restrictions

None.

6.1.2 Input Parameters

Parameter	Description	Required/ Optional	Type
shedGroup	Include this object if you want to shed load for a group of stations.	Optional	Complex Type
sgID	Custom Station Group identifier.	Required	Integer
allowedLoadPerStation	Maximum allowed load expressed in kW. This value is an absolute maximum and is not relative to the power being dispensed by the station. At the group level, this parameter applies to each station, not the total power for the group. If this parameter is set, percentShedPerStation must be set to a null value.	Optional	Float
percentShedPerStation	Percentage of the power currently being dispensed by the station to shed. For example, if the station is currently dispensing 10kW, a value of 60% will lower the power being dispensed to 4kW. At the group level, this value applies to each station. If a station is not dispensing any power, the output will be set to zero until the shed state is cleared. If this parameter is set, allowedLoadPerStation must be set to a null value.	Optional	Float
shedStation	Include this object if you want to shed the load for a single station or single port on a multi-port station.	Optional	Complex Type

stationID	A unique station identifier used in ChargePoint database. The identifier never changes, even when the station's hardware is replaced. Format : CPNID:StationIdentifier	Required	String
allowedLoadPerStation	Maximum allowed load expressed in kW. This value is an absolute maximum and is not relative to the power being dispensed by the station. This value only applies to the station specified by the stationID parameter. If this parameter is set, percentShedPerStation must be set to a null value.	Optional	Float
percentShedPerStation	Percentage of the power currently being dispensed by the station to shed. For example, if the station is currently dispensing 10kW, a value of 60% will lower the power being dispensed to 4kW. This value only applies to the station specified by the stationID parameter. If this parameter is set, allowedLoadPerStation must be set to a null value.	Optional	Float
Ports	Array of port objects.	Optional	Array
Port	Object that represents a port on a station.	Optional	Complex Type
portNumber	Identifier for the port. Stations with multiple connectors for a single port will use a letter to indicate the port identifier.	Optional	String
allowedLoadPerPort	Maximum allowed load expressed in kW. This value is an absolute maximum and is not relative to the power being dispensed by the port. If this parameter is set, percentShed must be set to a null value.	Optional	Float
percentShedPerPort	Percentage of the power currently being dispensed by the port to shed. For example, if the port is currently dispensing 10kW, a value of 60% will lower the power being dispensed to	Optional	Integer

	4kW. If a port is not dispensing any power, the output will be set to zero until the shed state is cleared. If this parameter is set, allowedLoadPerPort must be set to a null value.		
timeInterval	Time interval in minutes. A value of 0 indicates that there is no specified duration for which the power will be shed.	Required	Integer

6.1.3 Response Parameters

Parameter	Description	Type
Success	A success (1) or failure (0) response code only.	Boolean
sgID	Custom Station Group identifier.	String
allowedLoadPerStation	Maximum load allowed expressed in kW. If percentShed was set in the request, this parameter will be null.	Float
percentShedPerStation	Percentage of the power currently being dispensed by the station to shed. If allowedLoad was set in the request, this parameter will be null.	Integer
stationID	A unique station identifier used in ChargePoint database. The identifier never changes, even when the stations's head assembly is swapped. Format: CPNID:StationIdentifier	String
Ports	Array of Port objects for the station if a single port was shed.	Array
Port	Port object that has been shed.	Complex Type
portNumber	Identifier for the port. Stations with multiple plugs associated with a single port will use a letter to indicate the port identifier.	String
allowedLoadPerPort	Maximum allowed load expressed in kW. This value is an absolute maximum and is not relative to the power being dispensed by the port. If this parameter is set, percentShed must be set to a null value.	Float

percentShedPerPort	Percentage of the power currently being dispensed by the port to shed. For example, if the port is currently dispensing 10kW, a value of 60% will lower the power being dispensed to 4kW. If a port is not dispensing any power, the output will be set to zero until the shed state is cleared. If this parameter is set, allowedLoadPerPort must be set to a null value.	Integer

6.1.4 shedLoad - Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
  <SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd">
    <wsse:Security SOAP-ENV:mustUnderstand="1">
      <wsse:UsernameToken>
   <wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
        <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-username-
token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
      </wsse:UsernameToken>
    </wsse:Security>
  </SOAP-ENV:Header>
  <SOAP-ENV:Body>
    <ns1:shedLoad>
      <shedQuery>
        <shedStation>
          <stationID>1:123456</stationID>
          <Ports>
            <Port>
              <portNumber>1</portNumber>
              <allowedLoadPerPort>3.0</allowedLoadPerPort>
            </Port>
          </Ports>
        </shedStation>
        <timeInterval/>
      </shedQuery>
    </ns1:shedLoad>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

6.1.5 shedLoad – Sample Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd" SOAP-ENV:mustUnderstand="1"/>
  </SOAP-ENV:Header>
  <SOAP-ENV:Body>
    <ns1:shedLoadResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
      <responseCode>100</responseCode>
      <responseText>API input request executed successfully.</responseText>
      <Success>1</Success>
      <sgID/>
      <allowedLoadPerStation/>
      <percentShedPerStation/>
      <stationID>1:123456</stationID>
      <Ports>
        <Port>
          <portNumber>1</portNumber>
          <allowedLoadPerPort>3.0</allowedLoadPerPort>
        </Port>
      </Ports>
    </ns1:shedLoadResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

6.2 clearShedState

Use this call to clear the shed state from a single station or group of stations.

6.2.1 Restrictions

None.

6.2.2 Input Parameters

Parameter	Description	Required/ Optional	Type
sgID	Custom Station Group identifier.	Required	Integer
stationID	A unique station identifier used in ChargePoint database. The identifier never changes, even when the stations's head assembly is swapped. Format : CPNID:StationIdentifier	Optional	String

6.2.3 Response Parameters

Parameter	Description	Type
Success	A success (1) or failure (0) response code only.	Boolean
sgID	Custom Station Group identifier	String
stationID	A unique station identifier used in ChargePoint database. The identifier never changes, even when the stations's head assembly is swapped. Format : CPNID:StationIdentifier	String

6.2.4 clearShedState - Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
  <SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd">
    <wsse:Security SOAP-ENV:mustUnderstand="1">
      <wsse:UsernameToken>
<wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
           <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
username-token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
     </wsse:UsernameToken>
    </wsse:Security>
  </SOAP-ENV:Header>
  <SOAP-ENV:Body>
    <ns1:clearShedState>
      <sgID>10</sgID>
      <stationID>1:34</stationID>
    </ns1:clearShedState>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

6.2.5 clearShedState - Sample Response

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd" soapenv:mustUnderstand="1"/>
  </soapenv:Header>
  <soapenv:Body>
    <ns1:clearShedStateResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
      <responseCode>100</responseCode>
      <responseText/>
      <Success>1</Success>
      <sgID>10</sgID>
      <stationID>1:34</stationID>
    </ns1:clearShedStateResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

6.3 getLoad

Use this call to retrieve the load and shed state for a single station or custom station group. This method also returns the load for each port on a multi-port station.

6.3.1 Restrictions

None.

6.3.2 Input Parameters

Parameter	Description	Required/ Optional	Type
sgID	Custom Station Group identifier.	Required	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	Optional	String

6.3.3 Response Parameters

Parameter	Description	Type
sgID	Custom Station Group identifier.	String
numStations	Number of stations in the group	Integer
groupName	Name of the custom station group	String
sgLoad	Present load for the custom station group (kW)	Float
stationData	Response will include one of these objects for each station that matches the query.	Complex Type
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String
stationName	Display name of the station (Line 1/Line 2). Line 1 is the name of the organization that owns the station and Line 2 is the name of the station. For example (COULOMB TECH / FRONT LOT 01).	String
Address	Station Address (Street Address, City, State, Postal Code, Country)	String
stationLoad	Present load for the station (kW)	Float
Port	Object representing a single port on a station.	Complex Type

Parameter	Description	Type
	Multi-port stations will have one Port object for each port.	
portNumber	Identifier for the port. Stations with multiple plugs associated with a single port will use a letter to indicate the port identifier.	String
userID	Unique ID of the driver currently charging on this port.	String
credentialID	Identifier of the credential used to start the session. If it was a ChargePoint RFID card, it is the printed serial number on the card. If it was the ChargePoint Mobile App, it will be the identifier displayed in the user's mobile app. Contactless credit cards will be obviously be displayed as blank.	String
shedState	1 = Shed, 0 = Not Shed	bool
portLoad	Present load for the port (kW)	Float
allowedLoad	Maximum load allowed at the station (kW). If percentShed was used in the last shedLoad call to this station, this parameter will be zero.	Float
percentShed	Percent of load currently being shed. If allowedLoad was used in the last shedLoad call to this station, this parameter will be zero.	Integer

6.3.4 getLoad - Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
  <SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd">
    <wsse:Security SOAP-ENV:mustUnderstand="1">
      <wsse:UsernameToken>
   <wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
       <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-username-
token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
      </wsse:UsernameToken>
    </wsse:Security>
  </SOAP-ENV:Header>
  <SOAP-ENV:Body>
    <ns1:getLoad>
      <sgID>12345</sgID>
      <stationID>1:123456</stationID>
    </ns1:getLoad>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

6.3.5 getLoad – Sample Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd" SOAP-ENV:mustUnderstand="1"/>
  </SOAP-ENV:Header>
  <SOAP-ENV:Body>
    <ns1:getLoadResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
         <responseCode>100</responseCode>
         <responseText>API input request executed successfully.</responseText>
         <sgID>12345</sgID>
         <numStations>1</numStations>
         <groupName>Building Front</groupName>
         <sgLoad>6.884</sgLoad>
         <stationData>
            <stationID>1:123456</stationID>
            <stationName>MY COMPANY / STATION 15</stationName>
            <Address>123 Main St, Campbell, California,  95008, United States</Address>
            <stationLoad>6.884</stationLoad>
            <Port>
               <portNumber>1</portNumber>
               <userID>1234556</userID>
               <credentialID>98765341234</credentialID>
               <shedState>0</shedState>
               <portLoad>3.884</portLoad>
               <allowedLoad>0.000</allowedLoad>
               <percentShed>0</percentShed>
            </Port>
            <Port>
               <portNumber>2</portNumber>
               <userID>1234557</userID>
               <credentialID>98765341235</credentialID>
               <shedState>1</shedState>
               <portLoad>3.000</portLoad>
               <allowedLoad>3.000</allowedLoad>
               <percentShed>0</percentShed>
            </Port>
         </stationData>
    </ns1:getLoadResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

7 Usage Analysis API

The Usage Analysis API is for service provider-centric applications in which clients canretrieve a charging station's usage statistics.

Summary of Usage Analysis API calls:

- getChargingSessionData
- get15minChargingSessionData
- getTransactionData

These API calls are detailed on the following pages.

7.1 getChargingSessionData

This call retrieves final session summaries for a station owner's (organization's) charging station(s)based on search criteria. The License Key is linked to a single station owner during the License Key creation process.

7.1.1 Restrictions

Each call returns a maximum of 100 sessions.

15 minute data and driver information has service plan restrictions.

7.1.2 Input Parameters

Note: Without specifying proximity, searches based on location (i.e., Address, City, State, PostalCode, Country) return stations based on text that matches the specified location parameters. For example, if you specify a street address and city, the response includes all stations that match the values you specified for address and city. If you specify city only, the response includes all stations in the specified city. If you specify city and state, the response includes all stations that match the city and state.

When you specify proximity, the response returns all stations within the radius specified for the proximity value, with the radius centered at the most granular location information specified. For example, if you specify a street address, a city, and a state, and specify a proximity of 50 miles, the response includes all stations located with a 50 mile radius of the specified street address. However, if you specify only a state and a 50 mile radius, the response includes all stations within a 50 mile radius of the center of the specified state.

Parameter	Description	Required/ Optional	Type
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	Optional	String
sessionID	A globally unique session identifier.	Optional	String

Parameter	Description	Required/ Optional	Type
stationName	Name of the station (wild card characters allowed). It should be searched for by both company name (the name of the organization that owns the charging station) and station name. Company name is displayed on Line 1 of the charging station (if applicable) and the station name is displayed on Line 2 of the charging station (if applicable).	Optional	String
Address	Street number and street name.	Optional	String
City	City where the station(s) are located.	Optional	String
State	State where the station(s) are located.	Optional	String
Country	Country where the station(s) are located.	Optional	String
postalCode	Postal (i.e. Zip) Code where the station(s) are located.	Optional	String
Proximity	Distance from the reference point within which you want to retrieve station information.The default is 5 miles.	Optional	Integer
proximityUnit	Default value for proximity unit is M. Can have values: M (Miles), N (Nautical miles), K (Kilometer), F (Feet), I (Inches). Default unit is M	Optional	String
fromTimeStamp	The sessions time >= from timestamp in UTC indicating the start of the charging session.	Optional	dateTime
toTimeStamp	The sessions time< from timestamp in UTC indicating the end of the charging session.	Optional	dateTime
startRecord	Indicates the record number of the first session to be returned. Useful when iterating over many sessions that exceed the maximum sessions (100) that are returnable in a single call.	Optional	Long
Lat	Latitude of the reference point.	Optional	Float
Long	Longitude of the reference point.	Optional	Float

7.1.3 Response Parameters

Parameter	Description	Type
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String
stationName	Display name (Line1/Line2) of the station.	String
portNumber	Identifier of the port used for the session.	Integer
Address	Address around which you want to see stations. Proximity to Google-resolved point: street number and street name.	String
City	City where the station is located.	String
State	State where the station is located.	String
Country	Country where the station is located.	String
postalCode	Postal (i.e. Zip) Code where the station is located.	String
sessionID	A globally unique session identifier.	String
recordNumber	Record number of the charging session. Useful when iterating over many sessions that exceed the maximum sessions (100) that are returnable in a single call.	Long
startTime	Start time of session in UTC in ISO8601 Format (YYYY-MM-DDTHH:MM:SSZ).	dateTime
endTime	End time of session in UTC in ISO8601 Format (YYYY-MM-DDTHH:MM:SSZ).	dateTime
Energy	Energy consumed (kWh).	Float
moreFlag	Indicates that the number of sessions is greater than the maximum number of sessions that can be returned in one call (currently 100), and therefore the session list was truncated.	Boolean
rfidSerialNumber*	The serial number associated with the ChargePoint card. Not applicable if an RFID card was not used to start the session.	String
driverAccountNumber*	The driver's ChargePoint account number.	String
driverName*	The name of the driver who used the station during this session. This value is not applicable if an RFID card was not used to start the session. The driver must be connected to the calling organization in order for the driver name to appear in the response.	String

**Only returned if the Organization has a Service Provider plan and has appropriate rights over the station.*

7.1.4 getChargingSessionData - Sample Input

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:urn="urn:dictionary:com.chargepoint.webservices">
   <soapenv:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd">
      <wsse:Security soapenv:mustUnderstand="1">
         <wsse:UsernameToken>

<wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
            <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
username-token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
         </wsse:UsernameToken>
      </wsse:Security>
   </soapenv:Header>
   <soapenv:Body>
      <urn:getChargingSessionData>
         <searchQuery>
            <stationID>1:41613</stationID>
            <startRecord>5</startRecord>
         </searchQuery>
      </urn:getChargingSessionData>
   </soapenv:Body>
</soapenv:Envelope>
```

7.1.5 getChargingSessionData - Sample Response

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
   <soapenv:Header>
      <wsse:Security soapenv:mustUnderstand="1" xmlns:wsse="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
         <wsu:Timestamp xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-utility-1.0.xsd">
            <wsu:Created>2014-04-23T21:34:08.912Z</wsu:Created>
            <wsu:Expires>2014-04-23T21:39:08.912Z</wsu:Expires>
         </wsu:Timestamp>
      </wsse:Security>
   </soapenv:Header>
   <soapenv:Body>
      <ns1:getChargingSessionDataResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
         <responseCode>100</responseCode>
         <responseText>API input request executed successfully.</responseText>
         <ChargingSessionsData>
            <stationID>1:41613</stationID>
            <stationName>MY COMPANY / FRONT 14</stationName>
            <portNumber>1</portNumber>
            <Address>1692 Dell Ave,,Campbell,California,95008,United States</Address>
            <City>Campbell</City>
            <State>California</State>
            <Country>United States</Country>
            <postalCode>95008</postalCode>
            <sessionID>11534253</sessionID>
            <Energy>11.362906</Energy>
            <startTime>2013-06-17T19:01:07Z</startTime>
            <endTime>2013-06-17T22:46:03Z</endTime>
            <recordNumber>5</recordNumber>
         </ChargingSessionsData>
         <ChargingSessionsData>
            <stationID>1:41613</stationID>
            <stationName>MY COMPANY / FRONT 14</stationName>
            <portNumber>2</portNumber>
            <Address>1692 Dell Ave,,Campbell,California,95008,United States</Address>
            <City>Campbell</City>
            <State>California</State>
            <Country>United States</Country>
            <postalCode>95008</postalCode>
            <sessionID>11534725</sessionID>
            <Energy>11.272077</Energy>
            <startTime>2013-06-17T19:41:29Z</startTime>
            <endTime>2013-06-18T02:07:41Z</endTime>
            <recordNumber>6</recordNumber>
         </ChargingSessionsData>
         <ChargingSessionsData>
```

```
            <stationID>1:41613</stationID>
            <stationName>MY COMPANY / FRONT 14</stationName>
            <portNumber>2</portNumber>
            <Address>1692 Dell Ave,,Campbell,California,95008,United States</Address>
            <City>Campbell</City>
            <State>California</State>
            <Country>United States</Country>
            <postalCode>95008</postalCode>
            <sessionID>11545083</sessionID>
            <Energy>18.632622</Energy>
            <startTime>2013-06-18T16:15:49Z</startTime>
            <endTime>2013-06-18T22:33:18Z</endTime>
            <recordNumber>7</recordNumber>
         </ChargingSessionsData>
         <MoreFlag>1</MoreFlag>
      </ns1:getChargingSessionDataResponse>
   </soapenv:Body>
</soapenv:Envelope>
```

7.2 get15minChargingSessionData

Use this call to return 15-minute interval session summaries for a particular SessionID. The SessionID can be retrieved using the GetChargingSessionData call.

7.2.1 Restrictions

Available only if you have purchased a Service Provider plan.

7.2.2 Input Parameters

Parameter	Description	Required/ Optional	Type
sessionID	Globally unique session identifier returned from the GetChargingSessionData call.	Required	String
energyConsumedInterval	Whether Energy Comsumed is Cumulative or Delta. Delta = True, Cumulative = False (default).	Optional	boolean

7.2.3 Response Parameters

Parameter	Description	Type
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String
portNumber	Identifier of the port used for the session.	Integer
sessionID	Session identifier.	String
stationTime	Meter reading time stamp for the start of the 15-minute interval in ISO 8601 format: YYYY-MM-DDTHH:MM:SSZ	DateTime
energyConsumed	Energy consumed in the 15 minute interval (kWh). This could be Cumulative or Delta.	Float
peakPower	Peak power in the 15 minute interval (kW).	Float
rollingPowerAvg	Average power in the 15 minute interval (kW).	Float

7.2.4 get15minChargingSessionData - Sample Input

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:urn="urn:dictionary:com.chargepoint.webservices">
   <soapenv:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd">
      <wsse:Security soapenv:mustUnderstand="1">
         <wsse:UsernameToken>

<wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
            <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
username-token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
         </wsse:UsernameToken>
      </wsse:Security>
   </soapenv:Header>
   <soapenv:Body>
      <urn:get15minChargingSessionData>
         <sessionID>11534253</sessionID>
      </urn:get15minChargingSessionData>
   </soapenv:Body>
</soapenv:Envelope>
```

7.2.5 get15minChargingSessionData - Sample Response

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
   <soapenv:Header>
      <wsse:Security soapenv:mustUnderstand="1" xmlns:wsse="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
         <wsu:Timestamp xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-utility-1.0.xsd">
            <wsu:Created>2014-04-23T21:34:24.392Z</wsu:Created>
            <wsu:Expires>2014-04-23T21:39:24.392Z</wsu:Expires>
         </wsu:Timestamp>
      </wsse:Security>
   </soapenv:Header>
   <soapenv:Body>
      <ns1:get15minChargingSessionDataResponse
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
         <responseCode>100</responseCode>
         <responseText>API input request executed successfully.</responseText>
         <sessionID>11534253</sessionID>
         <stationID>1:41613</stationID>
         <portNumber>1</portNumber>
         <fifteenminData>
            <stationTime>2013-06-17T19:01:07Z</stationTime>
            <energyConsumed>0.673502</energyConsumed>
            <peakPower>3.0550</peakPower>
            <rollingPowerAvg>2.9107</rollingPowerAvg>
         </fifteenminData>
         <fifteenminData>
            <stationTime>2013-06-17T19:15:00Z</stationTime>
            <energyConsumed>1.435811</energyConsumed>
            <peakPower>3.0852</peakPower>
            <rollingPowerAvg>3.0492</rollingPowerAvg>
         </fifteenminData>
         <fifteenminData>
            <stationTime>2013-06-17T19:30:00Z</stationTime>
            <energyConsumed>2.196608</energyConsumed>
            <peakPower>3.1168</peakPower>
            <rollingPowerAvg>3.0432</rollingPowerAvg>
         </fifteenminData>
         <fifteenminData>
            <stationTime>2013-06-17T19:45:00Z</stationTime>
            <energyConsumed>2.960524</energyConsumed>
            <peakPower>3.0818</peakPower>
            <rollingPowerAvg>3.0557</rollingPowerAvg>
         </fifteenminData>
         <fifteenminData>
            <stationTime>2013-06-17T20:00:00Z</stationTime>
            <energyConsumed>3.718503</energyConsumed>
            <peakPower>3.0846</peakPower>
            <rollingPowerAvg>3.0319</rollingPowerAvg>
         </fifteenminData>
```

```
         <fifteenminData>
            <stationTime>2013-06-17T20:15:00Z</stationTime>
            <energyConsumed>4.478468</energyConsumed>
            <peakPower>3.0590</peakPower>
            <rollingPowerAvg>3.0399</rollingPowerAvg>
         </fifteenminData>
         <fifteenminData>
            <stationTime>2013-06-17T20:30:00Z</stationTime>
            <energyConsumed>5.236069</energyConsumed>
            <peakPower>3.0878</peakPower>
            <rollingPowerAvg>3.0304</rollingPowerAvg>
         </fifteenminData>
         <fifteenminData>
            <stationTime>2013-06-17T20:45:00Z</stationTime>
            <energyConsumed>5.996987</energyConsumed>
            <peakPower>3.0567</peakPower>
            <rollingPowerAvg>3.0437</rollingPowerAvg>
         </fifteenminData>
         <fifteenminData>
            <stationTime>2013-06-17T21:00:00Z</stationTime>
            <energyConsumed>6.759302</energyConsumed>
            <peakPower>3.1321</peakPower>
            <rollingPowerAvg>3.0493</rollingPowerAvg>
         </fifteenminData>
      </ns1:get15minChargingSessionDataResponse>
   </soapenv:Body>
</soapenv:Envelope>
```

7.3 getTransactionData

Use this method to retrieve financial transaction data for charging stations managed by your organization. This includes session fees as well as fees for reservations. The request includes several filters to limit the size of the response, and the method will paginate the data if the result set is too large. By increasing the startRecord property, you can retrieve additional pages of data that meet the other filters in the request.

7.3.1 Restrictions

This method only returns data that your organization has the rights to view. That means that either the station is activated in your org, or another organization has granted your organization with Network Management or Station Management rights to their stations. This method will return up to 500 transactions in a single call.

7.3.2 Input Parameters

Parameter	Description	Required/ Optional	Type
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format: CPNID:StationIdentifier. CPNID can be retrieved by calling getAllCPNInstances function call.	Optional	String
stationName	Filter results by part or all of the station name. The complete name of the station includes two parts, Common Name and Station Name, separated by a slash, as follows: COMMON NAME / STATION NAME	Optional	String
stationMacAddr	Station MAC Address of the hardware.	Optional	String
orgID	The organization identifier CPNID:orgID	Optional	String
organizationName	Name of organization.	Optional	String
pricingRuleName	Name of the pricing rule that was used to compute the fee for the transaction.	Optional	String
transactionType	Indicates the type of transaction: Session, Reservation, Reservation Cancel, Reservation Usage Addendum	Optional	Enum

transactionID	Unique identifier for the transaction.	Optional	Integer
fromTransactionTimeStamp	Filter all transactions that happened on or after this timestamp.	Optional	DateTime
toTransactionTimeStamp	Filter all transactions that happened on or before this timestamp.	Optional	DateTime
startRecord	Start index of the first transaction to return in the call that meets the other search criteria. If left out of the request, the response starts at index number 1.	Optional	Integer
numTransactions	Number of transactions to return in the response. If left out of the request, this method defaults to 100 transactions if not specified.	Optional	Integer

7.3.3 Response Parameters

Parameter	Description	Type
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format: CPNID:StationIdentifier. CPNID can be retrieved by calling getAllCPNInstances function call.	String
stationName	The complete name of the station includes two parts, Common Name and Station Name, separated by a slash, as follows: COMMON NAME / STATION NAME	String
stationMacAddr	Station MAC Address of the hardware.	String
portNumber	Identifier for the port.	Integer
organizationName	Name of the organization.	String
pricingRuleName	Name of the pricing rule that was used to compute the fee for the transaction.	String
transactionType	Indicates the type of transaction: Session, Reservation, Reservation Cancel, Reservation Usage Addendum	String
transactionID	Unique identifier for the transaction.	Integer
Energy	Total energy for the session in kWh.	Float

transactionTime	Timestamp of when the transaction was reported to the ChargePoint cloud by the station.	DateTime
startTime	Start time of the session.	DateTime
endTime	End time of the session.	DateTime
Currency	The ISO 4217 code for the currency used on the station. For example, US Dollar = USD, Canadian Dollar = CAD, Euro = EUR.	String
grossAmount	Total fee paid by the driver for the session.	Float
flexBillingServiceFee	Processing fee for ChargePoint Flex Billing service.	Float
netRevenue	Total amount paid back to the organization.	Float
exchangeRateUSD	Exchange rate used to convert between other currencies and US Dollars if required for transaction.	Float
recordNumber	Index of the transaction in the result set.	Integer

7.3.4 getTransactionData - Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
  <SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd">
    <wsse:Security SOAP-ENV:mustUnderstand="1">
      <wsse:UsernameToken>
   <wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
        <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-username-
token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
      </wsse:UsernameToken>
    </wsse:Security>
  </SOAP-ENV:Header>
  <SOAP-ENV:Body>
    <ns1:getTransactionData>
      <searchQuery>
        <stationID></stationID>
        <stationName></stationName>
        <stationMacAddr></stationMacAddr>
        <organizationName></organizationName>
         <pricingRuleName></pricingRuleName>
         <transactionType></transactionType>
         <transactionID></transactionID>
         <fromTransactionTimeStamp>2015-08-01T04:00:00Z</fromTransactionTimeStamp>
         <toTransactionTimeStamp>2015-09-01T04:00:00Z</toTransactionTimeStamp>
         <startRecord>1</startRecord>
         <numTransactions>500</numTransactions>
      </searchQuery>
    </ns1:getTransactionData>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

7.3.5 getTransactionData - Sample Response

```
<?xml version="1.0" encoding="utf-8"?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd" SOAP-ENV:mustUnderstand="1"/>
  </SOAP-ENV:Header>
  <SOAP-ENV:Body>
    <ns1:getTransactionDataResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
      <responseCode>100</responseCode>
      <responseText>API input request executed successfully.</responseText>
      <TransactionData>
            <stationID>1:119885</stationID>
            <stationName>CHARGEPOINT / HQ 29</stationName>
            <stationMacAddr>0024:B100:0002:1234</stationMacAddr>
            <portNumber>1</portNumber>
            <organizationName>ChargePoint Headquarters</organizationName>
            <pricingRuleName>CP HQ Campbell Pricing Policy</pricingRuleName>
            <transactionType>Session</transactionType>
            <transactionID>29503777</transactionID>
            <Energy>8.130228</Energy>
            <transactionTime>2015-08-03T19:04:45Z</transactionTime>
            <startTime>2015-08-03T16:33:32Z</startTime>
            <endTime>2015-08-03T19:04:07Z</endTime>
            <Currency>USD</Currency>
            <grossAmount>6.02</grossAmount>
            <flexBillingServiceFee>0.6</flexBillingServiceFee>
            <netRevenue>5.42</netRevenue>
            <exchangeRateUSD>1.0</exchangeRateUSD>
            <recordNumber>1</recordNumber>
         </TransactionData>
         <MoreFlag>1</MoreFlag>
    </ns1:getTransactionDataResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

8 Station Management API

The Station Management API is for service provider applications in which clients can retrieve important information that can be helpful for them to manage their station(s).

Summary of Station Management API calls:

- getStations
- getStationStatus
- getStationGroups
- getOrgsAndStationGroups
- getStationRights
- getStationRightsProfile
- getStationGroupDetails

These API calls are detailed on the following pages.

8.1 getStations

Use this call to return a list of stations. This will not return stations that you don't have access rights to. For example, it will not return a public station unless you either own the station or have been granted rights by the station's owner.

8.1.1 Restrictions

Up to 500 stations will be returned by this method.

8.1.2 Input Parameters

Parameter	Description	Required/ Optional	Type
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier. CPNID can be retrieved by calling getAllCPNInstances function call.	Optional	String
stationManufacturer	Station manufacturer	Optional	String
stationModel	Station manufacturer model number	Optional	String

StationName	Name of the station (wild card characters allowed). It should be searched for by both company name (the name of the organization that owns the charging station) and station name. Company name is displayed on Line 1 of the charging station (if applicable) and the station name is displayed on Line 2 of the charging station (if applicable).	Optional	String
Address	Address around which you want to see stations. This can be street address or complete address (street address, city, state, zip code, country).	Optional	String
City	City where the station(s) are located.	Optional	String
State	State where the station(s) are located.	Optional	String
Country	Country where station(s) are located.	Optional	String
postalCode	Postal (Zip) code where the station(s) are located.	Optional	String
Lat	Latitude of the station's location.	Optional	Float
Long	Longitude of the station's location.	Optional	Float
Proximity	Distance from the station's specified lat/long (Geo) from which you want to retrieve station information. Default is 5	Optional	Integer
proximityUnit	Default value for proximity unit is M. Can have values: M (Miles), N (Nautical miles), K (Kilometer), F (Feet), I (Inches).	Optional	String
Level	Station level type where 1 is "Level 1", 2 is "Level 2", 3 is "Level 3", and 4 is "DC Fast". If the station has more than one level (for example, the station provides both level 1 and level 2 charging), the response will include both levels (1,2). Note: This parameter is for "US Stations" and "AU Stations" only (and is used instead of "Mode").	Optional	Enum

Mode	Station mode type where 1 is "Mode 1", 3 is "Mode 3", and 4 is "DC Fast". If the station has more than one mode (for example, the station provides both mode 1 with a domestic socket and mode 3 charging with an IEC62196 Type 2 socket), the response will include both modes (1,3). Note: This parameter is for "EU Stations" only (and is used instead of "Level").	Optional	Enum
startTime	The start time of a pricing session.	Optional	dateTime
Duration	Estimated duration of session in hours	Optional	Integer
energyRequired	estimated energy required for the charging session.	Optional	Float
Reservable	Whether or not the station can be reserved: "1" - the station can be reserved. "0" - the station cannot be reserved.	Optional	Boolean
Connector	Connector type. For example: NEMA 5-20R, J1772, ALFENL3, Schuko.	Optional	String
Voltage	Nominal voltage (V).	Optional	Float
Current	Current supported (A).	Optional	Float
Power	Power supported (kW).	Optional	Float
demoSerialNumber	Array of serial numbers of stations identified as a"demo". Used only for client applications that need to access stations identified as "demo".	Optional	String
orgID	The org identifier CPNID:CompanyID	Optional	String
organizationName	Name of org	Optional	String
sgID	Custom Station Group identifier	Optional	String
sgName	Name of custom station group	Optional	String
startRecord	Start index for the stations that match the query.	Optional	Integer
numStations	Number of stations to return in the response. Maximum is 500, and if left blank the method will return up to 500 stations.	Optional	Integer

8.1.3 Response Parameters

Parameter	Description	Type
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier CPNID can be retrieved by calling getAllCPNInstances function call.	String
stationManufacturer	Station manufacturer	String
stationModel	Station manufacturer model number	String
portNumber	Identifier of the port. This ID is 1 based.	Integer
stationName	Display name of the station (Line 1/Line 2). Line 1 is the name of the organization that owns the station and Line 2 is the name of the station. For example (COULOMB TECH / FRONT LOT 01).	String
stationMacAddr	Hardware MAC address of the station	String
stationSerialNum	Hardware serial number of the station	String
Address	Complete address (street address, city, state, zip code, country).	String
City	City where the station(s) are located. Note:Included in US calls only.	String
State	State where the station(s) are located. Note: Included in US calls only.	String
Country	Country where station(s) are located. Note: Included in US calls only.	String
postalCode	Zip code where the station(s) are located. Note: Included in US calls only.	String
Lat	Latitude of the station's location.	Float
Long	Longitude of the station's location.	Float
Reservable	Whether or not the station can be reserved: "1" - the station can be reserved. "0" - the station cannot be reserved.	Boolean
Level	Station level type where 1 is "Level 1", 2 is "Level 2", 3 is "Level 3", and 4 is "DC Fast". If the station has more than one level (for example, the station provides both level 1 and level 2 charging), the response will include	Enum

Parameter	Description	Type
	both levels (1,2).	
Mode	Station mode type where 1 is "Mode 1", 3 is "Mode 3", and 4 is "DC Fast". If the station has more than one mode (for example, the station provides both mode 1 with a domestic socket and mode 3 charging with an IEC62196 Type 2 socket), the response will include both modes (1,3). Note: This parameter is for "EU Stations" only (and is used instead of "Level").	Enum
Connector	Connector type. For example: NEMA 5-20R, J1772, ALFENL3, Schuko.	String
Voltage	Nominal voltage (V).	Float
Current	Current supported (A).	Float
Power	Power supported (kW).	Float
numPorts	Number of ports.	Integer
Type	Pricing Type (Session, Hourly or kWh)	Enum
startTime	The start time of a pricing session.	dateTime
endTime	The end time of a pricing session.	dateTime
minPrice	The minimum price charged for a session.	Float
maxPrice	The maximum price charged for a session.	Float
unitPricePerHour	The hourly price if this mode of pricing is enabled	Float
unitPricePerSession	The session price if this mode of pricing is enabled	Float
unitPricePerKWh	The kWh price if this mode of pricing is enabled	Float
unitPriceForFirst	The hourly price for the first portion of the pricing specification if pricing varies by length of time	Float
unitPricePerHourThereafter	The hourly price for the second portion of the pricing specification if pricing varies by length of time	Float
sessionTime	Maximum time allowed for a session	Float
Description	The station's description (if entered when the station was provisioned).	String
mainPhone	Driver support telephone number.	String
orgID	The organization identifier CPNID:CompanyID	String

Parameter	Description	Type
organizationName	Name of organization	String
sgID	Custom Station Group identifier	Integer
sgName	Name of custom station group	String
currencyCode	The ISO 4217 code for the currency used on the station. For example, US Dollar = USD, Canadian Dollar = CAD, Euro = EUR.	String
moreFlag	Indicates that the number of stations that match this query is greater than the maximum number of stations that can be returned in one call (currently 500), and therefore the list was truncated.	Boolean

8.1.4 getStations - Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
<SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
  <wsse:Security SOAP-ENV:mustUnderstand="1">
     <wsse:UsernameToken>
<wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
           <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
username-token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
     </wsse:UsernameToken>
  </wsse:Security>
</SOAP-ENV:Header>
<SOAP-ENV:Body>
         <ns1:getStations>
                  <searchQuery>
                    <stationManufacturer></stationManufacturer>
                    <stationModel></stationModel>
                    <stationName></stationName>
                    <serialNumber></serialNumber>
                    <Address></Address>
                    <City></City>
                    <State></State>
                    <Country></Country>
                    <postalCode></postalCode>
                    <Proximity></Proximity>
                    <Connector></Connector>
                    <Voltage></Voltage>
                    <Current></Current>
                    <Power></Power>
                    <demoSerialNumber/>
                    <Reservable></Reservable>
                    <Geo/>
                    <Mode></Mode>
                    <usageCategory></usageCategory>
                    <Pricing>
                       <startTime></startTime>
                       <Duration></Duration>
                       <energyRequired></energyRequired>
                       <vehiclePower></vehiclePower>
                    </Pricing>
                    <orgID></orgID>
                    <organizationName>Hi Tech Corp Facilities Dept</organizationName>
                    <sgID></sgID>
                    <sgName></sgName>
                    <startRecord></startRecord>
                    <numStations></numStations>
                  </searchQuery>
```

```
         </ns1:getStations>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

8.1.5 getStations - Sample Response

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Header>
<wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd" soapenv:mustUnderstand="1" />
</soapenv:Header>
<soapenv:Body>
<ns1:getStationsResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
         <responseCode>100</responseCode>
         <responseText>API input request executed successfully.</responseText>
         <stationData>
            <stationID>1:657</stationID>
            <stationManufacturer>Coulomb</stationManufacturer>
            <stationModel>CT2100-HD-CDMA-CCR</stationModel>
            <stationMacAddr>000D:6F00:0091:1234</stationMacAddr>
            <stationSerialNum>012345678901</stationSerialNum>
            <Address>1692 Dell Ave</Address>
            <City>Campbell</City>
            <State>California</State>
            <Country>United States</Country>
            <postalCode>95008</postalCode>
            <Port>
               <portNumber>1</portNumber>
               <stationName>HI TECH / PARKING 01</stationName>
               <Geo>
                  <Lat>37.261383056640625</Lat>
                  <Long>-121.957702636718750</Long>
               </Geo>
               <Description>For Hi Tech Corp. employees only</Description>
               <Reservable>0</Reservable>
               <Status>AVAILABLE</Status>
               <Level>L1</Level>
               <Connector>NEMA 5-20R</Connector>
               <Voltage>120</Voltage>
               <Current>16</Current>
               <Power>1.92</Power>
               <estimatedCost>0.00</estimatedCost>
            </Port>
            <Port>
               <portNumber>2</portNumber>
               <stationName>HI TECH / PARKING 01</stationName>
               <Geo>
                  <Lat>37.261383056640625</Lat>
                  <Long>-121.957702636718750</Long>
               </Geo>
               <Description> For Hi Tech Corp. employees only </Description>
               <Reservable>0</Reservable>
               <Status>INUSE</Status>
               <Level>L2</Level>
               <Connector>J1772</Connector>
               <Voltage>240</Voltage>
               <Current>30</Current>
               <Power>7.2</Power>
               <estimatedCost>0.00</estimatedCost>
            </Port>
            <Pricing>
               <Type>None</Type>
               <startTime>00:00:00</startTime>
               <endTime>24:00:00</endTime>
               <minPrice>0.50</minPrice>
               <maxPrice/>
               <unitPricePerHour>1.50</unitPricePerHour>
               <unitPricePerSession/>
               <unitPricePerKWh/>
            </Pricing>
            <numPorts>2</numPorts>
            <mainPhone>(888) 758-4389</mainPhone>
```

```
            <orgID>1:12345678</orgID>
            <organizationName>Hi Tech Corp Facilities Dept</organizationName>
            <sgID>1234, 5678</sgID>
            <sgName>Hi Tech Corp Global, Hi Tech Corp Campbell Parking</sgName>
            <currencyCode>USD</currencyCode>
         </stationData>
         <stationData>
            <stationID>1:658</stationID>
            ...
         </stationData>
         <moreFlag>0</moreFlag>
</ns1:getStationsResponse>
</soapenv:Body>
</soapenv:Envelope>
```

8.2 getStationStatus

Use this method to streamline applications, which read the availability status of private stations.

8.2.1 Restrictions

This method only returns data that your organization has the rights to view. That means that either the station is activated in your org, or another organization has granted your organization with Network Management or Station Management rights to their stations. This method will return up to 500 stations in a single call.

8.2.2 Input Parameters

Parameter	Description	Required/ Optional	Type
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's hardware is replaced. Format: CPNID:StationIdentifier. Note that this parameter is not allowed if the stationIDs array is present in the request, and it will cause the service to throw an error.	Optional	String
stationIDs	An array of stationID parameters. Note that this array is not allowed to coexist if the single stationID parameter is present, and it will cause the service to throw an error.	Optional	Array of stationID parameters
stationManufacturer	Station manufacturer	Optional	String
stationModel	Station model number	Optional	String
stationName	Name of the station (wild card characters allowed). It should be searched for by both company name (the name of the organization that owns the charging station) and station name. Company name is displayed on Line 1 of the charging station (if applicable) and the station name is displayed on Line 2 of the charging station (if applicable).	Optional	String

Address	Address around which you want to see stations. This can be the street address or the complete address (street address, city, state, zip code, country).	Optional	String
City	City where the station(s) are located.	Optional	String
State	State where the station(s) are located.	Optional	String
Country	Country where station(s) are located.	Optional	String
postalCode	Postal (i.e., Zip) code where the station(s) are located.	Optional	String
Lat	Latitude of the station's location.	Optional	Float
Long	Longitude of the station's location.	Optional	Float
Proximity	Distance from the station's specified lat/long (Geo) from which you want to retrieve station information. Default is 5	Optional	Integer
proximityUnit	Default value for proximity unit is M. Can have values: M (Miles), N (Nautical miles), K (Kilometer), F (Feet), I (Inches).	Optional	String
Level	Station level type where 1 is "Level 1", 2 is "Level 2", 3 is "Level 3", and 4 is "DC Fast". If the station has more than one level (for example, the station provides both level 1 and level 2 charging), the response will include both levels (1,2). **Note:** This parameter is for the "US Stations" and "AU Stations" calls only (and is used instead of "Mode").	Optional	Enum
Mode	Station mode type where 1 is "Mode 1", 3 is "Mode 3", and 4 is "DC Fast". If the station has more than one mode (for example, the station provides both mode 1 with a domestic socket and mode 3 charging with an IEC62196 Type 2 socket), the response will include both modes (1,3). Note: This parameter is for "EU Stations" only (and is used instead of "Level").	Optional	Enum

Status	Station status where 1 is "Available", 2 is "InUse", and 3 is "Unknown".	Optional	Integer
startTime	The start time of a pricing session (time format HH:MM:SS)	Optional	Time
Duration	Estimated charging duration in hours	Optional	Integer
energyRequired	Estimated energy needed for charging session in kWh	Optional	Float
vehiclePower	If a session is active, present amount of power in kW being delivered to the vehicle	Optional	Float
Reservable	Whether or not the station can be reserved: "1" - the station can be reserved. "0" - the station cannot be reserved.	Optional	Boolean
Connector	Connector type. For example: NEMA 5-20R, J1772, ALFENL3, Schuko.	Optional	String
Voltage	Nominal voltage (V).	Optional	Float
Current	Current supported (A).	Optional	Float
Power	Power supported (kW).	Optional	Float
demoSerialNumber	Array of serial numbers of stations identified as a "demo" station. Used only for client applications that need to access stations identified as "demo" stations.	Optional	String
portDetails	Optional flag indicating that Connector and Power parameters should be included in the response. Default is false.	Optional	Boolean
startRecord	Start index of the first station to return in the call that meets the other search criteria. If left out of the request, the response will start at index number 1.	Optional	Integer
numStations	Number of stations to return in the response. If left out of the request, this method will default to 500 stations.	Optional	Integer

8.2.3 Response Parameters

Parameter	Description	Type
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String
portNumber	Identifier of the port. This ID is 1 based.	Integer
Status	Port status may be one of the following values: AVAILABLE, INUSE, UNREACHABLE, UNKNOWN. AVAILABLE means that the station is communicating with ChargePoint and the port is available for use. INUSE means that a car is connected to the port and it is not available to another driver. UNREACHABLE means that the station is having trouble communicating with ChargePoint to report its status. UNKNOWN means that the station is in an unknown state. Note that the AVAILABLE and INUSE flags are independent of the reservation status of the station.	String
TimeStamp	Timestamp of the last communication between the station and ChargePoint (ISO 8601 date time format in UTC YYYY-MM-DDTHH:MM:SSZ)	DateTime
Connector	Connector type. For example: NEMA 5-20R, J1772, ALFENL3, Schuko. Note that this parameter will only be included in the response if the portDetails flag parameter is set to "true" in the request.	String
Power	Power supported (kW). Note that this parameter will only be included in the response if the portDetails flag parameter is set to "true" in the request.	Float
moreFlag	Indicates that the number of stations that match this query is greater than the maximum number of stations that can be returned in one call (currently 500), and therefore the list was truncated.	Boolean

8.2.4 getStationStatus - Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
  <SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd">
    <wsse:Security SOAP-ENV:mustUnderstand="1">
      <wsse:UsernameToken>
   <wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
        <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-username-
token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
      </wsse:UsernameToken>
    </wsse:Security>
  </SOAP-ENV:Header>
  <SOAP-ENV:Body>
    <ns1:getStationStatus>
      <searchQuery>
        <Status>AVAILABLE</Status>
      </searchQuery>
    </ns1:getStationStatus>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

8.2.5 getStationStatus – Sample Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd" SOAP-ENV:mustUnderstand="1"/>
  </SOAP-ENV:Header>
  <SOAP-ENV:Body>
    <ns1:getStationStatusResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
         <responseCode>100</responseCode>
         <responseText>API input request executed successfully.</responseText>
         <stationData>
            <stationID>1:1234</stationID>
            <Port>
               <portNumber>1</portNumber>
               <Status>AVAILABLE</Status>
               <TimeStamp>2015-08-25T04:21:50Z</TimeStamp>
            </Port>
         </stationData>
         <stationData>
            <stationID>1:1256</stationID>
            <Port>
               <portNumber>1</portNumber>
               <Status>AVAILABLE</Status>
               <TimeStamp>2015-08-25T04:23:51Z</TimeStamp>
            </Port>
            <Port>
               <portNumber>2</portNumber>
               <Status>AVAILABLE</Status>
               <TimeStamp>2015-08-25T04:23:51Z</TimeStamp>
            </Port>
         </stationData>
    </ns1:getStationStatusResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

8.3 getStationGroups

Use this call to retrieve custom station groups for any organization. It returns an array of groups for a given organization and lists the stations included in each group.

8.3.1 Restrictions

None.

8.3.2 Input Parameters

Parameter	Description	Required/ Optional	Type
orgID	Organization identifier. CPNID:companyID	Required	String

8.3.3 Response Parameters

Parameter	Description	Type
sgID	Custom Station Group identifier	String
orgID	Organization identifier. CPNID:companyID	String
organizationName	Name of the organization	String
groupName	Group name	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String
Lat	Station GeoCodes	Float
Long	Station GeoCodes	Float

8.3.4 getStationGroups - Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
<SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
  <wsse:Security SOAP-ENV:mustUnderstand="1">
     <wsse:UsernameToken>
<wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
           <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
username-token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
     </wsse:UsernameToken>
  </wsse:Security>
</SOAP-ENV:Header>
<SOAP-ENV:Body>
      <ns1:getStationGroups>
```

```
            <orgID></orgID>
      </ns1:getStationGroups>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

8.3.5 getStationGroups - Sample Response

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Header>
<wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd" soapenv:mustUnderstand="1" />
</soapenv:Header>
<soapenv:Body>
<ns1:getStationGroupResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
<responseCode>113</responseCode>
<responseText></responseText>
<groupData>
< sgID>1234</ sgID>
<orgID>123</orgID>
<groupName>DR Group</groupName>
<stationData>
<stationID>1:234</stationID>
<Lat>2323232.23</Lat>
<Lon>23232323.23</Lon>
</stationData>
</groupData>
</n1:getStationGroupResponse>
</soapenv:Body>
</soapenv:Envelope>
```

8.4 getStationGroupDetails

Use this call to get the details for a custom station group. The response provides the immediate level child groups and stations of a group.

8.4.1 Restrictions

None.

8.4.2 Input Parameters

Parameter	Description	Required/ Optional	Type
sgID	Custom Station Group identifier	Required	Integer
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	Optional	

8.4.3 Response Parameters

Parameter	Description	Type
groupName	Name of the group.	String
sgID	Child group ID	Integer
sgName	Child group name.	String
numStations	Number of stations contained in the group.	Float
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's hardware is swapped. CPNID:StationID	Integer
stationName	Display name of the station (Line 1/Line 2). Line 1 is the name of the organization that owns the station and Line 2 is the name of the station. For example (COULOMB TECH / FRONT LOT 01).	String

8.4.4 getStationGroupDetails - Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
<SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
  <wsse:Security SOAP-ENV:mustUnderstand="1">
     <wsse:UsernameToken>
<wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
            <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
username-token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
     </wsse:UsernameToken>
  </wsse:Security>
</SOAP-ENV:Header>
<SOAP-ENV:Body>
      <ns1:getStationGroupDetails>
             < sgID></ sgID>
             <stationID></stationID>
      </ns1:getStationGroupDetails>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

8.4.5 getStationGroupDetails - Sample Response

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Header>
<wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd" soapenv:mustUnderstand="1" />
</soapenv:Header>
<soapenv:Body>
<ns1:getStationGroupDetailsResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
<responseCode>113</responseCode>
<responseText></responseText>
<groupData>
<sgID>10</sgID>
<sgName>ChargePoint group 1</sgName>
</groupData>
<groupData>
<sgID>11</sgID>
<sgName> ChargePoint group 2</sgName>
</groupData>
<stationData>
<stationID>1:2</stationID>
<stationName>ChargePoint/Demo 001</stationName>
<address>1234 st, San Jose, CA 95134 USA</address>
</stationData>
</ns1:getStationGroupDetailsResponse>
</soapenv:Body>
</soapenv:Envelope>
```

8.5 getOrgsAndStationGroups

Use this call to retrieve organization and custom station groups that you have access rights to.

8.5.1 Restrictions

None.

8.5.2 Input Parameters

Parameter	Description	Required/ Optional	Type
orgID	The organization identifier CPNID:CompanyID	Optional	String
organizationName	Name of organization	Optional	String
sgID	Custom Station Group identifier	Optional	String
sgName	Name of the custom station group	Optional	String

8.5.3 Response Parameters

Parameter	Description	Type
orgID	The organization identifier CPNID:orgID	String
organizationName	Name of organization	String
sgID	Custom Station Group identifier	Integer
sgName	Name of custom station group	String
parentGroupId	The Group ID of the parent group ('0' if it has no parent group)	Integer

8.5.4 getOrgsAndStationGroups - Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
<SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
  <wsse:Security SOAP-ENV:mustUnderstand="1">
    <wsse:UsernameToken>
<wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
          <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
username-token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
    </wsse:UsernameToken>
  </wsse:Security>
</SOAP-ENV:Header>
<SOAP-ENV:Body>
     <ns1:getOrgsAndStationGroups>
           <orgID></orgID>
           <organizationName></organizationName>
           <sgID></sgID>
           <sgName></sgName>
     </ns1:getOrgsAndStationGroups>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

8.5.5 getOrgsAndStationGroups - Sample Response

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Header>
<wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd" soapenv:mustUnderstand="1" />
</soapenv:Header>
<soapenv:Body>
<ns1:getOrgsAndStationGroupsResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
<responseCode>100</responseCode>
<responseText />
<orgAndSgData>
    <orgData>
        <orgID>12</orgID>
        <organizationName>My Company Name 1</organizationName>
            <sgData>
                <sgID>15</sgID>
                <sgName>Sg Name Response 1</sgName>
            </sgData>
            <sgData>
                <sgID>16</sgID>
                <sgName>Sg Name Response 2</sgName>
            </sgData>
    </orgData>
    <orgData>
        <orgID>14</orgID>
        <organizationName>My Company Name 2</organizationName>
        <sgData>
            <sgID>17</sgID>
            <sgName>Sg Name Response 3</sgName>
        </sgData>
    </orgData>
</orgAndSgData>
</ns1:getOrgsAndStationGroupsResponse>
</soapenv:Body>
</soapenv:Envelope>
```

8.6 getStationRights

Returns access rights that have been granted for each station that you manage.

8.6.1 Restrictions

This call returns rights information for only those stations that are associated with your organization. This call will return up to 100 stations per call.

8.6.2 Input Parameters

Parameter	Description	Required/ Optional	Type
stationName	Name of the station (wild card characters allowed). It should be searched for by both company name (the name of the organization that owns the charging station) and station name. Company name is displayed on Line 1 of the charging station (if applicable) and the station name is displayed on Line 2 of the charging station (if applicable).	Optional	String
Address	Address around which you want to see stations. This can be the street address or the complete address (street address, city, state, zip code, country).	Optional	String
City	City where the station(s) are located.	Optional	String
State	State where the station(s) are located.	Optional	String
Country	Country where station(s) are located.	Optional	String
postalCode	Postal (i.e., Zip) code where the station(s) are located.	Optional	String
Lat	Latitude of the station's location.	Optional	Float
Long	Longitude of the station's location.	Optional	Float
Proximity	Distance from the station's specified lat/long (Geo) from which you want to retrieve station information. Default is 5	Optional	Integer
proximityUnit	Default value for proximity unit is M. Can have values: M (Miles), N (Nautical miles), K (Kilometer), F (Feet), I (Inches).	Optional	String
Level	Station level type where 1 is "Level 1", 2 is "Level 2", 3 is "Level 3", and 4 is "DC Fast". If the station has more than one level (for example, the station provides both level 1 and level 2 charging), the response will include both levels (1,2). **Note:** This parameter is for "US Stations" and "AU	Optional	Enum

Parameter	Description	Required/ Optional	Type
	Stations" only (and is used instead of "Mode").		
Mode	Station mode type where 1 is "Mode 1", 3 is "Mode 3", and 4 is "DC Fast". If the station has more than one mode (for example, the station provides both mode 1 with a domestic socket and mode 3 charging with an IEC62196 Type 2 socket), the response will include both modes (1,3). Note: This parameter is for "EU Stations" only (and is used instead of "Level").	Optional	Enum
startTime	The start time of a pricing session.	Optional	dateTime
duration	Estimated Duration of the charging session.	Optional	Integer
energyRequired	Estimated energy requirement for the charging session.	Optional	Float
Reservable	Whether or not the station can be reserved: "1" - the station can be reserved. "0" - the station cannot be reserved.	Optional	Boolean
Connector	Connector type. For example: NEMA 5-20R, J1772, ALFENL3, Schuko.	Optional	String
Voltage	Nominal voltage (V).	Optional	Float
Current	Current supported (A).	Optional	Float
Power	Power supported (kW).	Optional	Float
demoSerialNumber	Array of serial numbers of sations identified as "demo" station. Used only for client applications that need to access stations identified as "demo" sations.	Optional	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	Optional	Integer
orgID	The organization identifier CPNID:orgID	Optional	Integer
organizationName	Name of organization	Optional	String
stationModel	Station Model Number	Optional	String
stationManufacturer	Station Manufacturer	Optional	String
sgName	Custom Station Group name	Optional	String

Parameter	Description	Required/ Optional	Type
provisionDateRange	Array of date range	Optional	datetime
currentFault	Station Faults	Optional	String
portStatus	Status Of Port	Optional	Enum
adminStatus	Adminstration Status	Optional	Enum
networkStatus	It would be enumerated data type that can be 'Reachable' or 'Unreachable'	Optional	Enum
provisionStatus	It would be enumerated data type that can be 'Provisioned' or 'Not Provisioned' and 'Provisioning in progress'	Optional	Enum
startRecord	Start index of the first station to return in the call that meets the other search criteria. If left out of the request, the response will start at index number 1.	Optional	Integer
numStations	Number of stations to return in the response. If left out of the request, this method will default to 100 stations.	Optional	Integer

8.6.3 Response Parameters

The following parameters are returned for every station that matches your search criteria.

Parameter	Description	Type
sgID	Custom Station Group Identifier	Integer
sgName	Custom Station Group Name	String
stationRightsProfile	Identifies what type of rights have been granted to your organization for this station	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String
stationName	Display name of the station (Line 1/Line 2). Line 1 is the name of the organization that owns the station and Line 2 is the name of the station. For example (COULOMB TECH / FRONT LOT 01).	String
stationSerialNum	Station serial number of the hardware	String
stationMacAddr	Station Mac Address of the hardware	String

moreFlag	Indicates that the number of stations that match this query is greater than the maximum number of stations that can be returned in one call (currently 100), and therefore the list was truncated.	Boolean

8.6.4 getStationRights - Sample Input

```
<?xml version="1.0" encoding="utf-8"?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
  <SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd">
    <wsse:Security SOAP-ENV:mustUnderstand="1">
      <wsse:UsernameToken>
<wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
        <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-username-
token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
      </wsse:UsernameToken>
    </wsse:Security>
  </SOAP-ENV:Header>
  <SOAP-ENV:Body>
    <ns1:getStationRights>
      <searchQuery>
        <Name/>
        <Address>1686 Dell Ave</Address>
        <City>Campbell</City>
        <State>CA</State>
        <Country>USA</Country>
        <postalCode>95008</postalCode>
        <Geo>
          <Lat>37.36</Lat>
          <Long>-121.81</Long>
        </Geo>
        <Proximity/>
        <proximityUnit/>
        <Level/>
        <Mode/>
        <Pricing>
          <startTime/>
          <endTime/>
          <minPrice/>
          <maxPrice/>
        </Pricing>
        <Reservable/>
        <Connector/>
        <Voltage/>
        <Current/>
        <Power/>
        <demoSerialNumber/>
        <stationID/>
        <orgID/>
        <organizationName/>
        <demoStation/>
        <stationModelNum/>
        <stationMake/>
        <csgMemberName/>
        <provisionDateRange/>
        <currentFault/>
        <portStatus/>
        <adminStatus/>
        <networkStatus/>
        <provisionStatus/>
        <reservationMode/>
        <startRecord/>
        <numStations/>
      </searchQuery>
    </ns1:getStationRights>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

8.6.5 getStationRights - Sample Response

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd" soapenv:mustUnderstand="1"/>
  </soapenv:Header>
  <soapenv:Body>
    <ns1:getStationRightsResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
      <responseCode>100</responseCode>
      <responseText/>
      <groupData>
        <sgID>10</sgID>
        <sgName>Test Group</sgName>
        <stationRightsProfile>network_manager</stationRightsProfile>
        <stationData>
          <stationID>1:100</stationID>
          <stationName>CHARGEPOINT / STATION 1</stationName>
          <stationSerialNum>342343</stationSerialNum>
          <stationMacAddr>xxxx:xxxx:xxxx:xxxx</stationMacAddr>
        </stationData>
        <stationData>
          <stationID>1:100</stationID>
          <stationName>CHARGEPOINT / STATION 2</stationName>
          <stationSerialNum>342343</stationSerialNum>
          <stationMacAddr>xxxx:xxxx:xxxx:xxxx</stationMacAddr>
        </stationData>
      </groupData>
      <moreFlag>0</moreFlag>
    </ns1:getStationRightsResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

8.7 getStationRightsProfile

Use this call to retrieve a list of that you can perform on a specified group of stations.

8.7.1 Restrictions

None.

8.7.2 Input Parameters

Parameter	Description	Required/ Optional	Type
sgID	The Custom Station Group Identifier	Required	Integer
stationRightsProfile	The role which defines what kind of rights have been allocated the user on the group.	Optional	String

8.7.3 Response Parameters

Parameter	Description	Type
taskList	The list of tasks for which the company has rights on a custom station group.	String

8.7.4 getStationRightsProfile - Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
<SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
  <wsse:Security SOAP-ENV:mustUnderstand="1">
     <wsse:UsernameToken>
<wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
            <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
username-token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
     </wsse:UsernameToken>
  </wsse:Security>
</SOAP-ENV:Header>
<SOAP-ENV:Body>
      <ns1:getStationRightsProfile>
      <sgID></sgID>
      </ns1:getStationRightsProfile>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

8.7.5 getStationRightsProfile - Sample Response

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Header>
<wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd" soapenv:mustUnderstand="1" />
</soapenv:Header>
<soapenv:Body>
<ns1:getStationRightsProfileResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
<responseCode>100</responseCode>
<responseText />
<taskList>
<Task>Provision</Task>
<Task>Apply Ad </Task>
ALL Task go In here from the UI role matrix. [Under Discussion]
</ns1:getStationRightsProfileResponse>
</soapenv:Body>
</soapenv:Envelope>
```

9 Network Management API

The Network Management API is for service provider-centric applications in which clients can perform operations and retrieve information on charging stations.

Summary of Network Management API calls:

- getAlarms
- clearAlarms

These API calls are detailed on the following pages.

9.1 getAlarms

Use this call to retrieve a list of station alarms.

9.1.1 Restrictions

You must have access rights to the stations specified in the call.

Each call returns a maximum of 100 sessions.

9.1.2 Input Parameters

Parameter	Description	Required/ Optional	Type
orgID	The organization identifier CPNID:orgID	Required	Integer
organizationName	Name of organization requesting alarms.	Required	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	Optional	Integer
stationName	Name of the station for which alarms are requested.	Optional	String
sgID	Custom Station Group identifier	Optional	Integer
sgName	Name of custom station group	Optional	String
startTime	Start date and time of time interval. Alarms occuredwithin this interval should be returned. (ISO8601 format YYYY-MM-DDTHH:MM:SSZ)	Optional	DateTime
endTime	End date and time of time interval. Alarms occured within this interval should be returned. (ISO8601 format YYYY-MM-DDTHH:MM:SSZ)	Optional	DateTime
portNumber	Port identifier for which alarms should be returned.	Optional	Integer

9.1.3 Response Parameters

Parameter Name	Description	Type
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	Integer
stationName	Name of the station	String
sgID	Custom Station Group identifier	Integer
sationModelNum	Model number of station	String
orgID	The organization identifier CPNID:orgID	Integer
organizationName	Name of the organization	String
stationManufacturer	Station Manufacturer	String
stationSerialNum	Serial number of the station	String
alarmType	Type of the alarm	String
alarmTime	Date and Time at which alarm occurred.	DateTime
portNumber	Port identifier	Integer

9.1.4 getAlarms - Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
<SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
  <wsse:Security SOAP-ENV:mustUnderstand="1">
     <wsse:UsernameToken>
<wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
            <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
username-token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
     </wsse:UsernameToken>
  </wsse:Security>
</SOAP-ENV:Header>
<SOAP-ENV:Body>
      <ns1:getAlarms>
             <orgID></orgID>
             <organizationName></organizationName>
             <stationID></stationID>
             <stationName></stationName>
             <sgID></sgID>
             <sgName></sgName>
             <startTime></startTime>
             <endTime></endTime>
             <portNumber></portNumber>
      </ns1:getAlarms>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

9.1.5 getAlarms - Sample Response

```
<soapenv:Envelopexmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Header>
<wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd" soapenv:mustUnderstand="1" />
</soapenv:Header>
<soapenv:Body>
<ns1:getAlarmsResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
<responseCode>100</responseCode>
<responseText />
<Alarms>
<StationID>1986</StationID>
<stationName>CITY HALL 003</stationName>
<sgID>100</sgID>
<stationModelNum>CT1000-CDMA</stationModelNum>
<orgID>1003</orgID>
<organizationName>Green Power Technology</organizationName>
<stationManufacturer>ChargePoint</stationManufacturer>
<stationSerialNum>7856757878</stationSerialNum>
<portNumber> 103</portNumber><alarmType>GFCI Trip</alarmType>
<alarmTime>2011-07-307:30:00</alarmTime>
</Alarms>
</ns1:getAlarmsResponse>
</soapenv:Body>
</soapenv:Envelope>
```

9.2 clearAlarms

Use this call to clear current alarms and move them to historical alarms.

9.2.1 Restrictions

You must have access rights to the stations for which you want to clear alarms.

9.2.2 Input Parameters

Parameter	Description	Required/ Optional	Type
orgID	The organization identifier CPNID:orgID	Required	Integer
organizationName	Name of organization requesting alarms.	Required	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	Optional	Integer
stationName	Name of the station for which alarms are requested.	Optional	String
sgID	Custom Station Group identifier	Optional	Integer
sgName	Name of custom station group	Optional	String
startTime	Start date and time of time interval. Alarms occured within this interval should be returned. (ISO8601 format YYYY-MM-DDTHH:MM:SSZ)	Optional	DateTime
endTime	End date and time of time interval. Alarms occured within this interval should be returned. (ISO8601 format YYYY-MM-DDTHH:MM:SSZ)	Optional	DateTime
portNumber	Port identifier for which alarms should be returned.	Optional	Integer
alarmType	Type of the alarm	Optional	String
clearReason	Reason for moving alarm to Historical Alarms		

9.2.3 Response Parameters

None

9.2.4 clearAlarms - Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
<SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
  <wsse:Security SOAP-ENV:mustUnderstand="1">
     <wsse:UsernameToken>
<wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
            <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
username-token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
     </wsse:UsernameToken>
  </wsse:Security>
</SOAP-ENV:Header>
<SOAP-ENV:Body>
      <ns1:clearAlarms>
             <orgID></orgID>
             <organizationName></organizationName>
             <stationID></stationID>
             <stationName></stationName>
             <sgID></sgID>
             <sgName></sgName>
             <startTime></startTime>
             <endTime></endTime>
             <portNumber></portNumber>
             <alarmType></alarmType>
             <clearReason></clearReason>
      </ns1:clearAlarms>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

9.2.5 clearAlarms - Sample Response

```
<soapenv:Envelopexmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Header>
<wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd" soapenv:mustUnderstand="1" />
</soapenv:Header>
<soapenv:Body>
<ns1:clearAlarmsResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
<responseCode>100</responseCode>
<responseText />
</ns1:clearAlarmsResponse>
</soapenv:Body>
</soapenv:Envelope>
```

10 Driver Management API

The methods in the Driver Management API allow you to interact with driver data in an automated fashion. This is particularly useful for large organizations, which need to integrate this driver information stored in ChargePoint with their own backend systems.

Summary of Driver Management API Calls:

- getUsers
- updateUserStatus
- setWaitlistDone

10.1 getUsers

Use this method to get a list of connected or managed drivers. If your organization uses ChargePoint Connections, this method will return the list of all drivers who have requested a connection with your organization, as well as a list of all drivers who have either been approved or rejected as connected drivers. If your organization uses a branded ChargePoint portal to sign up drivers, then those drivers will appear in your management realm, and the list of those drivers will be returned by this method.

10.1.1 Restrictions

This method only returns Connected Drivers and drivers in your Management Realm.

10.1.2 Input Parameters

Parameter	Description	Required/ Optional	Type
userID	Unique identifier of the driver. This value is not a driver account number or username.	Optional	String
firstName	First name of the user/driver	Optional	String
lastName	Last name of the user/driver	Optional	String
lastModifiedTimeStamp	Find only records equal to or later than the timestamp of the last change to any property of a user account. This property uses the ISO 8601 date time format in UTC YYYY-MM-DDTHH:MM:SSZ.	Optional	String
Connection	Include this object in the query if you are searching for a driver by their ChargePoint Connection properties	Optional	Complex Type
Status	Use this property to search for all users with a given Connection status. This	Optional	String

Parameter	Description	Required/ Optional	Type
	property may be one of the following values: APPROVED, NOT CONNECTED, REJECTED, PENDING		
customInfo	This object contains a key-value-pair of information that the driver provided when connecting to your organization, such as an employee ID or club number.	Optional	Complex Type
Key	The name of the key that you wish to use for the search such as "Employee ID". This key name is defined when your Network Administrator defines a Connection Offer for your organization.	Optional	String
Value	The value of this key that the user provided when requesting a Connection with your organization.	Optional	String
managementRealm	Include this object if you wish to search for users that are part of the Management Realm for your organization	Optional	Complex Type
Status	Use this property to search for all users with a given status. This property may be one of the following values: APPROVED, NOT MANAGED	Optional	String
customInfo	This object contains a key-value-pair of information that the driver provided when joining the management realm.	Optional	Complex Type
Key	The name of the key that you wish to use for the search for users.	Optional	String
Value	The value of this key that the user provided when signing up through your branded portal.	Optional	String
credentialID	Use this property to search for users by either the printed serial number from a ChargePoint RFID card or a ChargePoint Mobile App identifier	Optional	String

10.1.3 Response Parameters

Parameter	Description	Type
lastModifiedTimeStamp	Timestamp of the last change to any property of this user account. This property uses the ISO 8601 date time format in UTC YYYY-MM-DDTHH:MM:SSZ.	String
userID	Unique identifier of the driver. This value is not a driver account number or username.	String
firstName	First name of the user/driver.	String
lastName	Last name of the user/driver.	String
Connection	If the user is Connected to or has requested a Connection to your organization, this object will include the properties of that Connection.	Complex Type
Status	Status of the Connection between this user and your organization. This property will be one of the following values: APPROVED, NOT CONNECTED, REJECTED, PENDING	String
requestTimeStamp	Time stamp indicating when the user requested a connection with your organization.	String
customInfos	The customInfos object contains an array of customInfo objects.	Array
customInfo	This object contains a key-value-pair of information that the driver provided when connecting to your organization, such as an employee ID or club number.	Complex Type
Key	The name of the key for this custom property of the connection. This key name is defined when your Network Administrator defines a Connection Offer for your organization.	String
Value	The value of this key that the user provided when requesting a Connection with your organization.	String
managementRealm	If the user is part of your Management Realm, this object will include the properties of that association with your organization.	Complex Type
Status	Status of the user. This property will be one of the following values: APPROVED, NOT MANAGED	String
signupTimeStamp	Time stamp indicating when the user signed up with your organization.	String

Parameter	Description	Type
customInfos	The customInfos object contains an array of customInfo objects.	Array
customInfo	This object contains a key-value-pair of information that the driver provided when signing up with your organization.	Complex Type
Key	The name of the custom key that you defined for driver sign up for your Management Realm.	String
Value	The value of this key that the user provided when signing up with your organization.	String
credentialIDs	The credentialIDs object contains an array of credentialID objects	Array
credentialID	The printed serial number from a ChargePoint RFID card or a ChargePoint Mobile App identifier.	String

10.1.4 getUsers - Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
  <SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd">
    <wsse:Security SOAP-ENV:mustUnderstand="1">
      <wsse:UsernameToken>
   <wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
        <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-username-
token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
      </wsse:UsernameToken>
    </wsse:Security>
  </SOAP-ENV:Header>
  <SOAP-ENV:Body>
    <ns1:getUsers>
      <searchQuery>
        <userID/>
        <firstName/>
        <lastName/>
        <lastModifiedTimeStamp/>
        <Connection>
          <Status/>
          <customInfo>
            <Key>Employee ID</Key>
            <Value>987654</Value>
          </customInfo>
        </Connection>
        <managementRealm>
          <Status/>
          <customInfo>
            <Key/>
            <Value/>
          </customInfo>
        </managementRealm>
        <credentialID/>
      </searchQuery>
    </ns1:getUsers>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

10.1.5 getUsers – Sample Response

```
<?xml version="1.0" encoding="utf-8"?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd" SOAP-ENV:mustUnderstand="1"/>
  </SOAP-ENV:Header>
  <SOAP-ENV:Body>
    <ns1:getUsersResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
      <responseCode>100</responseCode>
      <responseText>API input request executed successfully.</responseText>
      <users>
        <user>
          <lastModifiedTimestamp>2015-08-29T01:07:44Z</lastModifiedTimestamp>
          <userID>12345</userID>
          <firstName>John</firstName>
          <lastName>Smith</lastName>
          <Connection>
            <Status>APPROVED</Status>
            <requestTimeStamp>2015-08-14T17:18:42Z</requestTimeStamp>
            <customInfos>
              <customInfo>
                <Key>Employee ID</Key>
                <Value>987654</Value>
              </customInfo>
            </customInfos>
          </Connection>
          <managementRealm/>
          <credentialIDs>
            <credentialID>12345678</credentialID>
            <credentialID>MCPCLB123456AB</credentialID>
          </credentialIDs>
        </user>
      </users>
    </ns1:getUsersResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

10.2 updateUserStatus

In cases where an organization must process a large number of connected or managed drivers, it is desirable to automate the validation process against an existing database of employees, students, tenants, customers or visitors. This method provides the capability for an organization to approve or reject connection requests from users.

10.2.1 Restrictions

This method will only affect drivers that are connected to your organization or in your Management Realm.

10.2.2 Input Parameters

Parameter	Description	Required/ Optional	Type
userID	Unique identifier of the driver. This value is not a driver account number or username.	Required	String
associationType	Indicates if this driver is connected to or managed by your organization. Allowed values are CONNECTION and MANAGEMENT_REALM.	Required	String
Status	New status value to set for this user. Allowed values are APPROVED, REJECTED and REMOVED.	Required	String
customText	Optional text that will be put in the email that gets sent to the user.	Optional	String

10.2.3 Response Parameters

The response only indicates success or failure of the request.

10.2.4 updateUserStatus - Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
  <SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd">
    <wsse:Security SOAP-ENV:mustUnderstand="1">
      <wsse:UsernameToken>
   <wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
        <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-username-
token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
      </wsse:UsernameToken>
    </wsse:Security>
  </SOAP-ENV:Header>
  <SOAP-ENV:Body>
    <ns1:updateUserStatus>
      <userID>12345</userID>
      <associationType>CONNECTION</associationType>
      <Status>APPROVED</Status>
      <customText>Welcome to Tech Co.! You now have access to use any EV charging station on our
campus.</customText>
    </ns1:updateUserStatus>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

10.2.5 updateUserStatus – Sample Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd" SOAP-ENV:mustUnderstand="1"/>
  </SOAP-ENV:Header>
  <SOAP-ENV:Body>
    <ns1:updateUserStatusResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
      <responseCode>100</responseCode>
      <responseText>API input request executed successfully.</responseText>
    </ns1:updateUserStatusResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

10.3 setWaitlistDone

This method allows your organization to notify a driver that their charging session on a Waitlist-enabled station is complete. The session will remain in progress or end depending upon the configuration of the Waitlist policy. You can also customize the text of the notification that will be sent to the driver when this method is called.

10.3.1 Restrictions

This method will only affect sessions in progress on a station that has the Waitlist feature enabled.

10.3.2 Input Parameters

Parameter	Description	Required/ Optional	Type
stationID	Unique ID of the station where you want to notify the driver that the session is complete. Format: CPNID:StationIdentifier.	Required	String
portID	Port number on the station where the driver is charging.	Required	String
userID	Unique ID of the driver that you wish to notify that the session is complete.	Required	String
customMessageText	If you want to customize the first part of the message sent to the driver, you can add text using this property. The message sent to the driver will be the following, if using Mode I "<customMessageText> Please move your vehicle within X minutes. There are Y drivers waiting to charge at this station." where X is the timeout defined in the Waitlist policy and Y is the current number of drivers in the queue. The message will be this is using Mode II "<customMessageText> We will tell the next person that it is ok to unplug your vehicle and start a new session." If customMessageText is not specified, it will be replaced with "Your vehicle is fully charged."	Optional	String

10.3.3 Response Parameters

The response only indicates success or failure of the request.

10.3.4 setWaitlistDone - Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
  <SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd">
    <wsse:Security SOAP-ENV:mustUnderstand="1">
      <wsse:UsernameToken>
   <wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
        <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-username-
token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
      </wsse:UsernameToken>
    </wsse:Security>
  </SOAP-ENV:Header>
  <SOAP-ENV:Body>
    <ns1:setWaitlistDone>
      <stationID>1:1234</stationID>
      <portID>1</portID>
      <userID>123412341234</userID>
      <customMessageText>Your car has drawn 10kWh of energy, which is the maximum allowed  on
this campus, and you are now done charging.</customMessageText>
    </ns1:setWaitlistDone>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

10.3.5 setWaitlistDone – Sample Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd" SOAP-ENV:mustUnderstand="1"/>
  </SOAP-ENV:Header>
  <SOAP-ENV:Body>
    <ns1:setWaitlistDoneResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
      <responseCode>100</responseCode>
      <responseText/>
    </ns1:setWaitlistDoneResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

11 Push Framework

Push technology, or server push, describes a style of Internet-based communication where the request for a given transaction is initiated by the publisher or central server. In pull technology, by contrast, the request is initiated by the receiver, or client.

Summary of Push Framework API Calls:

- registerFeeds
- updateFeed

These API calls are described on the following pages.

11.1 Feed Subscription and Cancellation Process

- To register for feeds, use the registerFeeds method
- To listen to feeds, connect to the XMPP server as described in section 12.4
- To continue receiving feeds, call the updateFeeds method once every 24 hours
- Cancel feed subscriptions by using the updateFeeds method

11.2 registerFeeds

Use this call to register for XMPP push notifications.

11.2.1 Restrictions

The events that an organization may subscribe to are dependent on the service plan associated with the organization. For details on which events are available for a given service plan see the table in section 0.

11.2.2 Input Parameters

SearchQuery specifying qualifiers for filtering stations.

Parameter	Description	Required/ Optional	Type
eventName	As described in section 13.5, multiple Events are supported per call (see sample input).	Required	Integer
feedType	Specifies which stations will generate events for this feed; options are "Public" for only public stations, "Restricted" for only stations which the organization has rights to view, or "All" for all public stations and all stations which the organization has rights to view	Optional	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	Optional	String
stationModel	Station manufacturer model number	Optional	String

Parameter	Description	Required/ Optional	Type
stationName	Name of the station (wild card characters allowed). It should be searched for by both company name (the name of the organization that owns the charging station) and station name. Company name is displayed on Line 1 of the charging station (if applicable) and the station name is displayed on Line 2 of the charging station (if applicable).	Optional	String
Address	Address around which you want to see stations. This can be the street address or the complete address (street address, city, state, zip code, country).	Optional	String
City	City where the station(s) are located.	Optional	String
State	State where the station(s) are located.	Optional	String
Country	Country where station(s) are located.	Optional	String
postalCode	Postal (i.e., Zip) code where the station(s) are located.	Optional	String
Level	Station level type where 1 is "Level 1", 2 is "Level 2", 3 is "Level 3", and 4 is "DC Fast". If the station has more than one level (for example, the station provides both level 1 and level 2 charging), the response will include both levels (1,2). **Note:** This parameter is for the "US Stations" and "AU Stations" calls only (and is used instead of "Mode").	Optional	Enum
Reservable	Whether or not the station can be reserved: "1" - the station can be reserved. "0" - the station cannot be reserved.	Optional	Boolean
sgID	Custom Station Group ID (Comma Seperated List; more than one sgID is supported)	Optional	Integer

11.2.3 Response Parameters

Parameter	Description	Type
subscriptionID	Subscription Identifier, this can be used later to unsubscribe or refresh feed.	String

11.2.4 registerFeeds– Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
<SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
  <wsse:Security SOAP-ENV:mustUnderstand="1">
     <wsse:UsernameToken>
<wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
            <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
username-token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
     </wsse:UsernameToken>
  </wsse:Security>
</SOAP-ENV:Header>
<SOAP-ENV:Body>
         <ns1:registerFeeds>
                  <searchQuery>
                     <Events>
                       <eventName>station_provisioned</eventName>
                       <eventName>station_unprovisioned</eventName>
                     </Events>
                     <Type>Driver</Type>
                           <stationID>123</stationID>
                           <stationName>abc</stationName>
                           <stationModel>xxxx</stationModel>
                           <Addres>123 main street</Address>
                           <City>san jose</City>
                           <State>CA</State>
                           <Country>USA</Country>
                           <postalCode>90210</postalCode>
                           <Proximity>10</Proximity>
                           <proximityUnit></proximityUnit>
                           <Level></Level>
                           <Reservable></Reservable>
                  </searchQuery>
         </ns1:registerFeeds>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

11.2.5 registerFeeds– Sample Response

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Header>
<wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd" soapenv:mustUnderstand="1" />
</soapenv:Header>
<soapenv:Body>
<ns1:registerFeedsResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<responseCode>100</responseCode>
<responseText />
<subscriptionId>10</subscriptionId>
</ns1:registerFeedsResponse>
</soapenv:Body>
</soapenv:Envelope>
```

11.3 updateFeed

Use this call to update an XMPP feed subscription or unsubscribe from a feed subscription.

11.3.1 Restrictions

Needs a subscription Id as input (feed already subscribed).

11.3.2 Input Parameters

Parameter	Description	Type
subscriptionId	Subscription Identifier	Integer
Refresh	0 – unsubscribe from Feed, 1- refresh the Feed	Boolean

11.3.3 Response Parameters

Only standard response parameters.

11.3.4 updateFeed - Sample Input

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
<SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
  <wsse:Security SOAP-ENV:mustUnderstand="1">
     <wsse:UsernameToken>
<wsse:Username>0123456789abcdef0123456789abcdef0123456789abcdef0123456</wsse:Username>
            <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
username-token-profile-1.0#PasswordText">0123456789abcdef0123456789abcdef</wsse:Password>
     </wsse:UsernameToken>
  </wsse:Security>
</SOAP-ENV:Header>
<SOAP-ENV:Body>
          <ns1:updateFeed>
                    <subscriptionId>10<subscriptionId>
                    <Refresh>1</Refresh>
          </ns1:updateFeed>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

11.3.5 updateFeed - Sample Response

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Header>
<wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd" soapenv:mustUnderstand="1" />
</soapenv:Header>
<soapenv:Body>
<ns1:updateFeedResponse xmlns:ns1="urn:dictionary:com.chargepoint.webservices">
<responseCode>100</responseCode>
<responseText />
</ns1:registerFeedResponse>
</soapenv:Body>
</soapenv:Envelope>
```

11.4 Listening to Updates

- The URL for the ChargePoint XMPP Server is https://webservice.chargepointportal.net:5223
- Use the API License Key / Password as the Username / Password combination for the XMPP service.
- XMPP Client library connects to XMPP server and listens to updates.
- Some XMPP libraries in common languages: http://xmpp.org/xmpp-software/libraries/

11.4.1 Sample PHP script

This sample uses XMPPHP library (http://code.google.com/p/xmpphp/).

```
<?php
include 'XMPPHP/XMPP.php';
#Use XMPPHP_Log::LEVEL_VERBOSE to get more logging for error reports
$conn = new XMPPHP_XMPP('webservice.chargepointportal.net', 5223,
'0123456789abcdef0123456789abcdef0123456789abcdef0123456', '0123456789abcdef0123456789abcdef',
'xmpphp', '', $printlog=true, $loglevel=XMPPHP_Log::LEVEL_INFO);
$conn->autoSubscribe();
$vcard_request = array();
try {
    $conn->connect();
    while(!$conn->isDisconnected()) {
        $payloads = $conn->processUntil(array('message', 'presence', 'end_stream',
'session_start'));
foreach($payloads as $event) {
                $pl = $event[1];
                switch($event[0]) {
                        case 'message':
                                print "recievd xml ------------------------------------------------
-----------------------------------\n";
                                //Prints Message from (user)
                                print "Message from: {$pl['from']}\n";
                                //Prints Message subject
                                if($pl['subject']) print "Subject: {$pl['subject']}\n";

                                // Put the Code here to process the incoming XML
                                // Below code just prints the XML
                                print_r($pl['body']);
                                print "\nfinish ------------------------------------------------
--------------------------------\n";
                                break;
                        case 'session_start':
                            print "Session Start\n";
                                $conn->getRoster();
                                $conn->presence();
                                break;
}
        }
    }
} catch(XMPPHP_Exception $e) {
    die($e->getMessage());
}
?>
```

11.4.2 Sample Feed

```
<?xml version="1.0" encoding="UTF-8" ?>
<event version="1.0">
        <stationID>1:1</stationID>
        <inventoryStatus>Added</inventoryStatus>
        <warrantySerialNumber>3455</warrantrySerialNumber>
        <isDOE>0</isDOE>
        <name> EV STATION 1</name>
        <displayName>COULOMB / EV STATION 1</displayName>
        <address>44 S 4th St, San Jose, California 95112, United States</address>
        <state>California</state>
        <country>United States</country>
        <softwareVersion>3.1.0</softwareVersion>
        <operationalStatus>InUse</operationalStatus>
        <adminStatus>
                <maintenanceFlag>1</maintenanceFlag>
                <demoFlag>0</demoFlag>
                <enabled>1</enabled>
        <portInfo>
        <outletNumber>1</outletNumber>
                <status>InUse</status>
                <tokenRequired>1</tokenRequired>
                <tokenSerialNumber>20384302</tokenSerialNumber>
        </portInfo>
        <alarm>
                <port>1</port>
                <type>Plugout</type>
                <timestamp>1324984593</timestamp>
        </alarm>
        <sessionSummary>
                <energyUsage>2.1</energyUsage>
                <startTime>1324984593</startTime>
                <timeOccupied>10</timeOccupied>
        </sessionSummary>
</event>
```

11.5 Supported Events

Below is a list of supported events. Use the event name specified below to register using the registerFeeds call. Note that events will be generated only by stations which the organization has rights to view. When registering for a feed, you may specify the feedType parameter to include events for public stations, restricted stations which the organization has rights to view, or a mix of both.

Event Name	Description	Telematics Plan	Corporate Plan	Commercial Plan	Service Provider Plan
station_provisioned	A new station has been provisioned (added to the ChargePoint network)	✓	✓	✓	✓
station_unprovisioned	A station has been unprovisioned (removed from the network).	✓	✓	✓	✓
station_head_swap	Station head swap.		✓	✓	✓
station_hidden_visible_toggle	Changing Station Visibility.	✓	✓	✓	✓
station_token_change	Token changed on station.		✓	✓	✓
station_plan_warranty_change	Warranty plan changed on a station.		✓	✓	✓
station_address_change	Station address changed.	✓	✓	✓	✓
station_name_change	Station name changed.	✓	✓	✓	✓
station_timezone_change	Station timezone changed.	✓	✓	✓	✓
station_description_change	Station description changed.	✓	✓	✓	✓

Event Name	Description	Telematics Plan	Corporate Plan	Commercial Plan	Service Provider Plan
station_usage_status_change	Station's status changed from "In Use" to "Available" or vice versa.	✓	✓	✓	✓
station_alarm	Alarm/Fault on a station.		✓	✓	✓
station_acl_applied	ACL applied to a station.		✓	✓	✓
station_acl_removed	ACL removed from a station.		✓	✓	✓
station_pricing_applied	Pricing applied to a station.	✓	✓	✓	✓
station_pricing_removed	Pricing removed from a station.	✓	✓	✓	✓
station_reservation_enabled	Reservations enabled on a station.	✓	✓	✓	✓
station_reservation_disabled	Reservations disabled on a station.	✓	✓	✓	✓
station_charging_session_start[1]	Charging session started on a station.		✓	✓	✓
station_charging_session_stop	Charging session stopped on a station.		✓	✓	✓
station_charging_session_update	15 minute charging session update during a charging session.				✓

[1] *Driver information that is retrieved using this call is visible only if you have a Service Provider Plan and if the driver is part of your driver management realm.*

The following sections describe the parameters of each event message.

11.5.1 station_provisioned

11.5.1.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
stationName	Name of the station	String
address	Address of the station	Sring
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String

11.5.1.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <feedEventName><![CDATA[station_provisioned]]></feedEventName>
    <stationName><![CDATA[MY COMPANY / STATION 1]]></stationName>
    <address><![CDATA[698745 Main Street, Gurgaon, Colorado 12200]]></address>
    <stationID><![CDATA[1:597]]></stationID>
</event>
```

11.5.2 station_unprovisioned

11.5.2.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
stationName	Name of the station	String
address	Address of the station	Sring
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String

11.5.2.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <feedEventName><![CDATA[station_unprovisioned]]></feedEventName>
    <stationName><![CDATA[MY COMPANY / STATION 1]]></stationName>
    <address><![CDATA[698745 Main Street, Gurgaon, Colorado 12200]]></address>
    <stationID><![CDATA[1:597]]></stationID>
</event>
```

11.5.3 station_head_swap

11.5.3.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String
stationMacAddr	Hardware MAC address of the station	Sring
stationSerialNum	Hardware serial number of the station	String

11.5.3.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <feedEventName><![CDATA[head_swap]]></feedEventName>
    <stationID><![CDATA[1:597]]></stationID>
    <stationMacAddr><![CDATA[0006:d123:4567:8901]]></stationMacAddr>
    <stationSerialNum><![CDATA[123456789900]]></stationSerialNum>
</event>
```

11.5.4 station_hidden_visible_toggle

11.5.4.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
isVisible	If "0" the station is now hidden, if "1" the station is visible.	Boolean
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String

11.5.4.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <feedEventName><![CDATA[station_hidden_visible_toggle]]></feedEventName>
    <isVisible><![CDATA[0]]></isVisible>
    <stationID><![CDATA[1:597]]></stationID>
</event>
```

11.5.5 station_token_change

11.5.5.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
previousTokenID	ID of the token that was previously used to provision the station	String
newTokenID	New token ID assigned to the station	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String

11.5.5.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <feedEventName><![CDATA[station_token_change]]></feedEventName>
    <previousTokenID><![CDATA[47133]]></previousTokenID>
    <newTokenID><![CDATA[12345]]></newTokenID>
    <stationID><![CDATA[1:597]]></stationID>
</event>
```

11.5.6 station_plan_warranty_change

11.5.6.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
warrantyType	Warranty Type identifier, which includes the part number for the station, the number of years and a flag for gateway vs. non-gateway	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String

11.5.6.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <feedEventName><![CDATA[station_plan_warranty_change]]></feedEventName>
    <warrantyType><![CDATA[CT2100-EW3GW]]></warrantyType>
    <stationID><![CDATA[1:597]]></stationID>
</event>
```

11.5.7 station_address_change

11.5.7.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
address	New street address of the station	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String

11.5.7.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <feedEventName><![CDATA[station_address_change]]></feedEventName>
    <address><![CDATA[1692 Dell Avenue, Campbell, CA, United States]]></address>
    <stationID><![CDATA[1:1234]]></stationID>
</event>
```

11.5.8 station_name_change

11.5.8.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
name	New postal address of the station	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String

11.5.8.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <feedEventName><![CDATA[station_name_change]]></feedEventName>
    <name><![CDATA[MY ORG / STATION 1234]]></name>
    <stationID><![CDATA[1:1234]]></stationID>
</event>
```

11.5.9 station_timezone_change

11.5.9.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
timezone	ID of the timezone	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String

11.5.9.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <feedEventName><![CDATA[station_timezone_change]]></feedEventName>
    <timezone><![CDATA[64]]></timezone>
    <stationID><![CDATA[1:1234]]></stationID>
</event>
```

11.5.10 station_description_change

11.5.10.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
description	Description string for the station	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String

11.5.10.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <feedEventName><![CDATA[station_description_change]]></feedEventName>
    <description><![CDATA[64]]></description>
    <stationID><![CDATA[1:1234]]></stationID>
</event>
```

11.5.11 station_usage_status_change

11.5.11.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
portNumber	ID of the port on the station	Integer
status	Port status where 1 is AVAILABLE, 2 is INUSE, and 3 is UNKNOWN	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String

11.5.11.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <feedEventName><![CDATA[station_usage_status_change]]></feedEventName>
    <portNumber><![CDATA[1]]></portNumber>
    <status><![CDATA[1]]></status>
    <stationID><![CDATA[1:597]]></stationID>
</event>
```

11.5.12 station_alarm

11.5.12.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
alarm	Description of the alarm	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String

11.5.12.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <feedEventName><![CDATA[station_usage_status_change]]></feedEventName>
    <alarm><![CDATA[Unreachable]]></alarm>
    <stationID><![CDATA[1:597]]></stationID>
</event>
```

11.5.13 station_acl_applied

11.5.13.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
aclType	Description of the Access Control List (ACL) that was added	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String

11.5.13.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <feedEventName><![CDATA[station_acl_applied]]></feedEventName>
    <aclType><![CDATA[PCC]]></aclType>
    <stationID><![CDATA[1:597]]></stationID>
</event>
```

11.5.14 station_acl_removed

11.5.14.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
aclType	Description of the Access Control List (ACL) that was removed	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String

11.5.14.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <feedEventName><![CDATA[station_acl_removed]]></feedEventName>
    <aclType><![CDATA[PCC]]></aclType>
    <stationID><![CDATA[1:597]]></stationID>
</event>
```

11.5.15 station_pricing_applied

This event indicates that a pricing specification has been applied to the station. Details for that pricing specification may be retrieved from the getPublicStations or getStation methods.

11.5.15.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String

11.5.15.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <stationID><![CDATA[1:10628]]></stationID>
    <feedEventName><![CDATA[station_pricing_applied]]></feedEventName>
</event>
```

11.5.16 station_pricing_removed

This event indicates that a pricing specification has been removed from the station.

11.5.16.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String

11.5.16.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <stationID><![CDATA[1:10628]]></stationID>
    <feedEventName><![CDATA[station_pricing_removed]]></feedEventName>
</event>
```

11.5.17 station_reservation_enabled

11.5.17.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String
startTime	The start time of a pricing session (ISO 8601 date time format in UTC YYYY-MM-DDTHH:MM:SSZ)	dateTime
endTime	The end time of a pricing session (ISO 8601 date time format in UTC YYYY-MM-DDTHH:MM:SSZ)	dateTime
minPrice	The minimum price charged for a session.	Float
maxPrice	The maximum price charged for a session.	Float
sessionTime	Maximum time allowed for a session	Float

11.5.17.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <feedEventName><![CDATA[station_reservation_enabled]]></feedEventName>
    <stationID><![CDATA[1:10628]]></stationID>
    <startTime><![CDATA[00:00:00]]></startTime>
    <endTime><![CDATA[24:00:00]]></endTime>
    <minPrice><![CDATA[0.00]]></minPrice>
    <maxPrice><![CDATA[0.00]]></maxPrice>
    <sessionTime><![CDATA[24:00]]></sessionTime>
</event>
```

11.5.18 station_reservation_disabled

11.5.18.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String

11.5.18.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <feedEventName><![CDATA[station_reservation_disabled]]></feedEventName>
    <stationID><![CDATA[1:10628]]></stationID>
</event>
```

11.5.19 station_charging_session_start

11.5.19.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String
sessionID	A globally unique session identifier.	String
startTime	The start time of the charging session (ISO 8601 date time format in UTC YYYY-MM-DDTHH:MM:SSZ)	dateTime
portNumber	ID of the port on the station	Integer
rfID*	The serial number associated with the ChargePoint card. Not applicable if an RFID card was not used to start the session.	String

**Only returned if the Organization has a Service Provider plan and has appropriate rights over the station.*

11.5.19.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <feedEventName><![CDATA[station_charging_session_start]]></feedEventName>
    <stationID><![CDATA[1:10628]]></stationID>
    <sessionID><![CDATA[193]]></sessionID>
    <startTime><![CDATA[2012-09-13T10:45:05Z]]></startTime>
    <portNumber><![CDATA[2]]></portNumber>
    <rfID><![CDATA['E00700002AD39816']]></rfID>
</event>
```

11.5.20 station_charging_session_stop

11.5.20.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String
sessionID	A globally unique session identifier.	String
startTime	The start time of the charging session (ISO 8601 date time format in UTC YYYY-MM-DDTHH:MM:SSZ)	dateTime
endTime	The end time of the charging session (ISO 8601 date time format in UTC YYYY-MM-DDTHH:MM:SSZ)	dateTime
portNumber	ID of the port on the station	Integer

11.5.20.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <feedEventName><![CDATA[station_charging_session_stop]]></feedEventName>
    <stationID><![CDATA[1:10628]]></stationID>
    <sessionID><![CDATA[193]]></sessionID>
    <startTime><![CDATA[2012-09-13T10:45:05Z]]></startTime>
    <endTime><![CDATA[2012-09-13T13:00:25Z]]></endTime>
    <portNumber><![CDATA[2]]></portNumber>
</event>
```

11.5.21 station_charging_session_update

11.5.21.1 Event Parameters

Parameter Name	Description	Type
feedEventName	Name of the event	String
stationID	A unique station identifier used in ChargePoint. This identifier never changes, even when the station's head assembly is swapped. Format : CPNID:StationIdentifier	String
sessionID	A globally unique session identifier.	String
fragmentNumber	Position of the 15 minute interval data within the session	Integer
netEnergy	Total energy for the session up to this point (kWh)	Float
energy	Energy for the interval (kWh)	Float
stationTime	Timestamp for the interval as recorded by the station	dateTime

11.5.21.2 Message Format

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
    <feedEventName><![CDATA[station_charging_session_update]]></feedEventName>
    <stationID><![CDATA[1:10628]]></stationID>
    <sessionId><![CDATA[7784883]]></sessionId>
    <fragmentNumber><![CDATA[1]]></fragmentNumber>
    <netEnergy><![CDATA[0.048848]]></netEnergy>
    <energy><![CDATA[0.048848]]></energy>
    <stationTime><![CDATA[2012-09-13 10:45:00]]></stationTime>
</event>
```