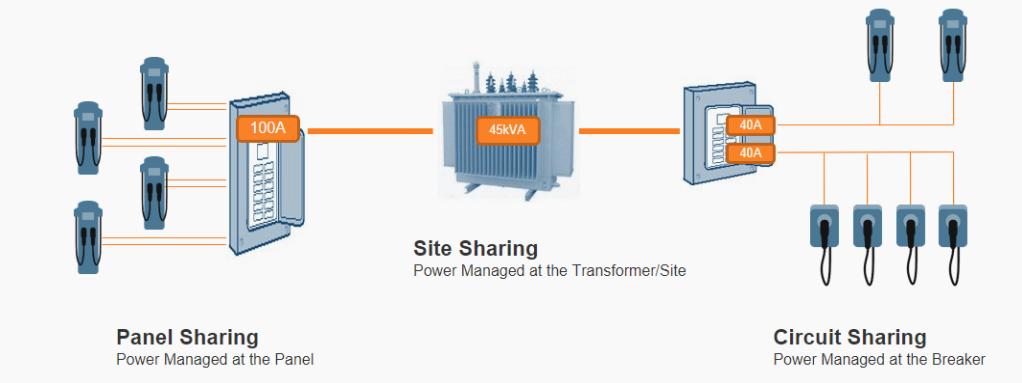
Power Sharing

Reference Guide



IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS

WARNING: This manual contains important instructions for Home Flex. When using electric products, always follow basic precautions, including the following:

1. **Read and follow all warnings and instructions before servicing, installing, or operating the ChargePoint® charging station.** Install and operate only as instructed. Failure to do so may lead to death, injury, or property damage, and will void the Limited Warranty.
2. **Instructions applicable to Installation and Site Design Guides**

   Only use licensed professionals to install your ChargePoint charging station and adhere to all national and local building codes and standards. Before installing the ChargePoint charging station, consult with a licensed contractor, such as a licensed electrician, and use a trained installation expert to ensure compliance with local building and electrical codes and standards, climate conditions, safety standards, and all applicable codes and ordinances.

   Instructions applicable to Service, Operation & Maintenance Guides

   Only use licensed professionals certified by ChargePoint for installation and service, adhere to all national and local building codes and standards, and ensure compliance with local building and electrical codes and standards, climate conditions, safety standards, and all applicable codes and ordinances. Inspect the charging station for proper installation before use.
3. **Always ground the ChargePoint charging station.** Failure to ground the charging station can lead to risk of electric shock. The charging station must be connected to a grounded, metal, permanent wiring system, or an equipment grounding conductor should be run with circuit conductors and connected to the equipment grounding terminal or lead on the Electric Vehicle Supply Equipment (EVSE). Connections to the EVSE shall comply with all applicable codes and ordinances.
4. **Install the ChargePoint charging station on a concrete pad using a ChargePoint-approved method.** Failure to install on a surface that can support the full weight of the charging station can result in death, personal injury, or property damage. Inspect the charging station for proper installation before use.
5. **This charging station is not suitable for use in Class 1 hazardous locations, such as near flammable, explosive, or combustible vapors or gases (This charging station is not suitable for use in any ATEX classified area, such as near flammable, explosive, or combustible vapors or gases).**
6. **Supervise children near this device.**
7. **Do not put fingers into the electric vehicle connector.**

8. **Do not use this product if any cable is frayed, has broken insulation, or shows any other signs of damage.**
9. **Do not use this product if the enclosure or the electric vehicle connector is broken, cracked, open, or shows any other signs of damage.**
10. **Use only copper conductor wire rated for 90 °C (194 °F).**
11. Do not operate the charging station in temperatures outside its operating range of -40˚F to 122˚F (-40˚C to +50˚C).
12. Ensure the charging cable is positioned so it is not stepped on, tripped over, or subjected to damage or stress. Do not close a garage door on the charging cable.

IMPORTANT: Under no circumstances will compliance with the information in a ChargePoint guide such as this one relieve the user of the responsibility to comply with all applicable codes and safety standards. This document describes approved procedures. If it is not possible to perform the procedures as indicated, contact ChargePoint. ChargePoint is not responsible for any damages that may result from custom installations or procedures not described in this document or that fail to adhere to ChargePoint recommendations.

Product Disposal

Applicable to NA - Do not dispose of as part of unsorted domestic waste. Inquire with local authorities regarding proper disposal. Product materials are recyclable as marked.

Applicable to EU - To comply with Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE), devices marked with this symbol may not be disposed of as part of unsorted domestic waste inside the European Union. Enquire with local authorities regarding proper disposal. Product materials are recyclable as marked.

Document Accuracy

The specifications and other information in this document were verified to be accurate and complete at the time of its publication. However, due to ongoing product improvement, this information is subject to change at any time without prior notice. For the latest information, see our documentation online at ChargePoint Product Reference Documentation.

Copyright and Trademarks

Symbols

This guide and product use the following symbols:

DANGER: Risk of electric shock

WARNING: Risk of personal harm or death

CAUTION: Risk of equipment or property damage

IMPORTANT: Crucial step for installation success

NOTE: Helpful information to facilitate installation success

Read the manual for instructions

Ground/protective earth

Illustrations Used in This Document

The illustrations used in this document are for demonstration purposes only and may not be an exact representation of the product. However, unless otherwise specified, the underlying instructions are accurate for the product.

Revision History

This page provides a summary of revisions made, listing the month and year of each update along with a brief description of the changes made.

Month & Year	Version Number	Description
October, 2025	v1	Added a note recommending a minimum of 8A per port in Power Sharing setups to ensure reliable charging.

Table of Contents

What is Power Sharing 1

Power Sharing is a software-driven feature that manages a group of EV charging stations. It ensures the total power drawn from all stations in the group that never exceeds a set limit. This limit can be applied at the circuit, panel, or site level, allowing for a hierarchical approach.

Circuit Sharing: Enables multiple charging ports on a single circuit breaker.

Panel Sharing: Ensures all chargers under a panel stay within its capacity.

Site Sharing: Manages total power usage for the entire site.

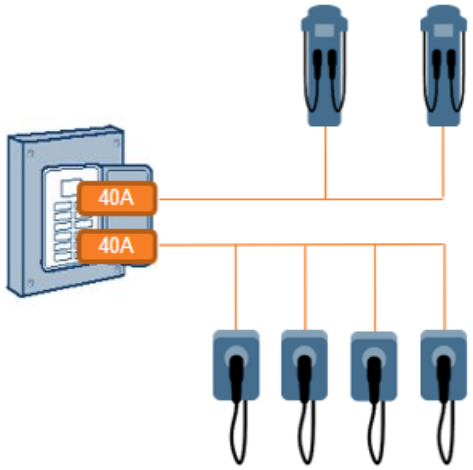
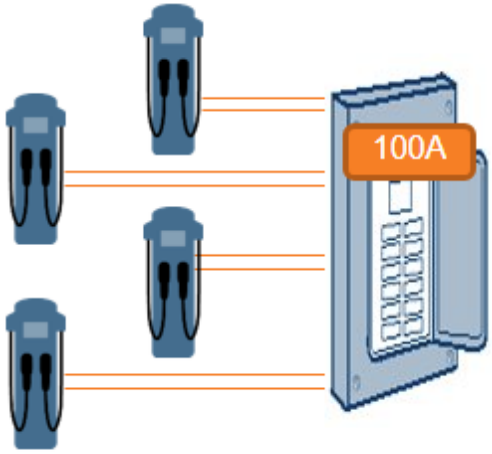
There is no hard limit to the number of charging stations or ports that can be connected to a given circuit, panel, or site power level. ChargePoint systems are designed to work together to ensure that the National Electric Code (NEC) rating of upstream electrical infrastructure is not exceeded. However, **ChargePoint strongly recommends a minimum output of 8 A per port for most applications**—for example with circuit sharing, 10 ports sharing a single 100 A circuit would yield 8 A per port when all ports are in use and active. It is also critical to account for state and local code requirements, which may impose minimum output thresholds even when using Automatic Load Management Systems (ALMS). For instance, some jurisdictions require that each port maintain a minimum output of 3.3 kW (approximately 16 A at 208 V). In such cases and using the same example of circuit sharing mentioned above, only 5 ports could share a 100 A circuit. These considerations are essential for maintaining a reliable driver experience as power is distributed across multiple ports. For further guidance, refer to the Oversubscription Ratio Recommendations in the site design documentation, while adhering to state and local requirements.

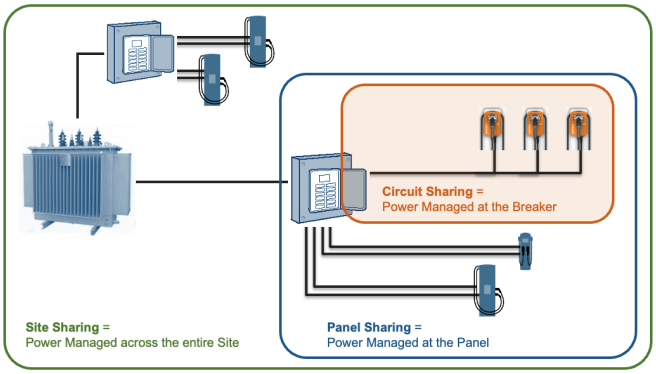
IMPORTANT: For reliable performance, CPF Kestrel installations using Power Sharing should maintain a minimum of 8 A per port. While not a hard limit, charging below 8 A may trigger and affect vehicle compatibility.

Benefits of Power Sharing

Power Sharing allows the customer to save money in multiple ways by:

- Avoiding individual **home run** wiring for each charger (circuit level).
- Controlling peak power demand to minimize expensive demand charges.
- Optimizing charging during Time of Use (TOU) periods to save on energy costs.

Groupings	Diagram	Breakers and Circuits
Power Sharing at the **Circuit Sharing**	 **Circuit Sharing** Power Managed at the Breaker	The Power Group is managed at a circuit breaker. Stations are grouped in software to a specific breaker and will not exceed 80% of the breaker rating combined.
Power Sharing at the **Panel Sharing**	 **Panel Sharing** Power Managed at the Panel	The Power Group is managed at a breaker panel. Single phase or 3-phase panels can be utilized in this application. The aggregate load of all ports installed onto the panel will not exceed 80% of the panel rating. The software will factor in which phases a port is installed onto to ensure each phase of a 3-phase panel does not exceed the panel rating.

Groupings	Diagram	Breakers and Circuits
Power Sharing at the **Site Sharing** (or **Transformer Sharing**)		The Power Group is managed as an aggregate load to a site level transformer or main switchgear. The aggregate load of ports in the group will not exceed the ratings of the upstream transformer or upstream site-level panel.

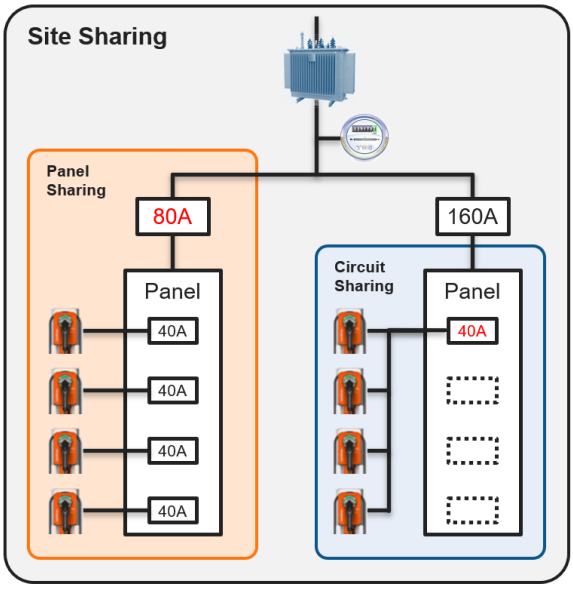
The ChargePoint implementation of Power Sharing supports the following:

- **Hierarchy** of groups, allowing for circuit-level power groups, panel-level power groups and site-level power groups to be applied simultaneously. Each group within the hierarchy will ensure that the ratings of each level of infrastructure are not exceeded in the hierarchy.
- **Time of Use** (TOU) power limits, wherein the group limit(s) can vary by hour of the day or day of the week, in recurring weekly fashion.

Power Sharing Features

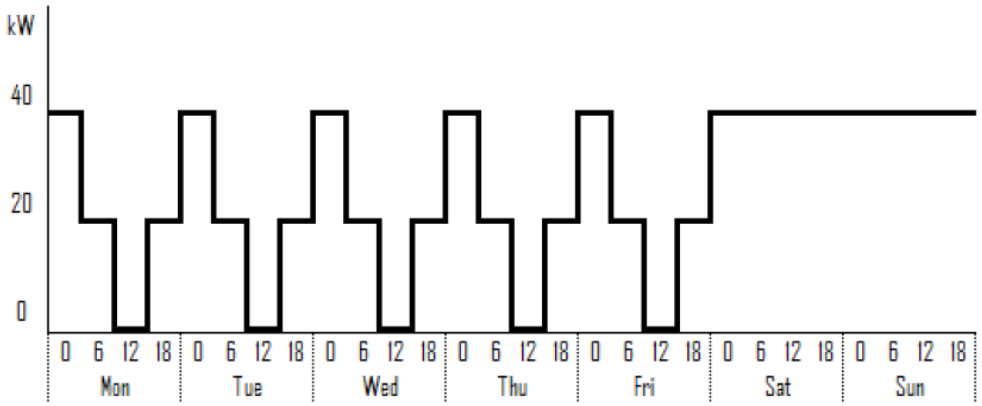
The following table outlines the key Power Sharing features, including system references and typical use cases.

Power Sharing and Its Uses

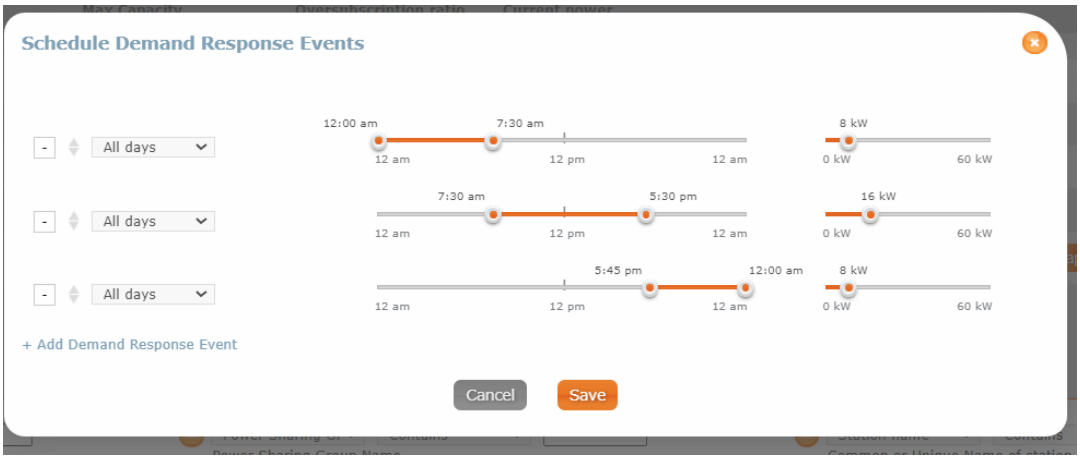
		Aliases	Use Cases
Power Sharing		**Power Sharing** Algorithm	Back-end based power/energy management for sharing charging power between a group of chargers due to limited supply capacity
What	Power Sharing allocates power dynamically among a group of chargers so that the aggregate (total) power of the group never exceeds the configured ceiling (the maximum power limit). Power can be shared at the **Circuit/Panel [A]**, or **Site/Transformer [kW]** level, or at multiple levels, **simultaneously**, as shown in the diagram. The ceiling can be static (fixed) or set dynamic via the following: Pre-configured Time-of-Use schedule.		
Why	Save money on installation cost by avoiding electrical service upgrades and by using less wire (circuit sharing). Mitigate demand charges by capping overall power for the group, but still allowing charging at full speed when only a few vehicles are plugged in. May help shift some charging to times when energy rates are cheaper.		
Who	Workplace, Multifamily, Fleets, long term parking (airports), who do not want or need all chargers to run at full speed simultaneously, while still delivering a good driver experience or meeting the needs of the fleet.		
Example Diagram	Site Sharing 		

Time of Use (TOU) Power Sharing allows power to be reduced, without necessarily being shut off completely during various time intervals. It is used to configure the charging power with a dependency on time of day.

Example: An office wants to limit the amount of power available as follows:



Mon-Fri	00:00 – 06:00:	max 40 kW
Mon-Fri	06:00 – 12:00:	max 20 kW
Mon-Fri	12:00 – 18:00:	max 0 kW
Mon-Fri	18:00 – 00:00:	max 20 kW
Sat-Sun	All day long:	max 40 kW



Manage Energy - Share Power

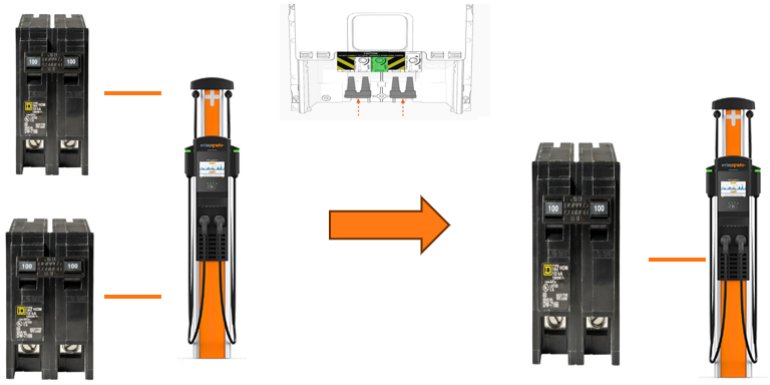
Compare a Regular Install to Power Sharing

Standard Installation

Each port will receive a dedicated 100 A feed, allowing for the station to have the maximum amount of power output available. Each port will operate independently from the other. The dedicated feed allows both ports to receive a full rate of charge without impacting the other port since no power management strategies are applied in the standard installation.

Power Sharing Jumper

Utilizing the Power Sharing jumper kit (available on CT4000 and CP6000 station types) allows for the station to be fed from a single feed. During installation, a sticker kit is installed to reflect the reduced electrical input requirements to meet National Electric Code (NEC).



When a Power Sharing jumper is included, the station will manage power locally to not exceed the installation topology. When a single vehicle plugs in, it will take as much power as it can up to 80% of the installed breaker rating. When a second vehicle plugs in, the power is shared between the two ports, never exceeding 80% of the installed breaker rating.

By default, power is shared 50/50 between the two vehicles. If one vehicle cannot take as much power as 50% of the available power, it will receive the highest rate that it can accept. As a result, the second vehicle may receive a higher charge such that the amperage of the two vehicles does not exceed 80% of the breaker rating.

By utilizing the Power Sharing jumper, you are able to provide some local power management to the stations and reduce the number of home runs required on a project, which can lead to significant cost savings. As with other forms of power management, we recommend ensuring that the amperage output when both ports are occupied meets or exceeds the desired speed of the driver groups to ensure a good driver experience. For this reason, ChargePoint recommends selecting a higher rated station such as the CP6000 that can be installed up to a 100 A feed while still meeting UL safety requirements, allowing for the maximum power available between the two ports.

Power Sharing via Cloud Connection

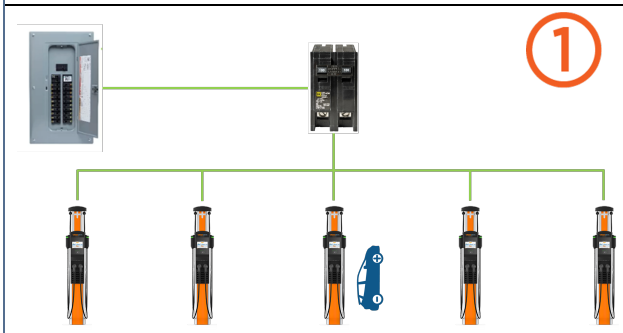
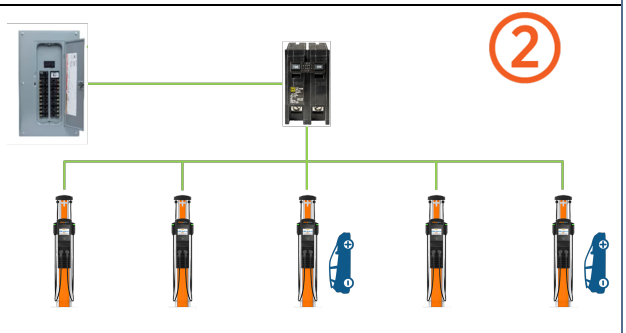
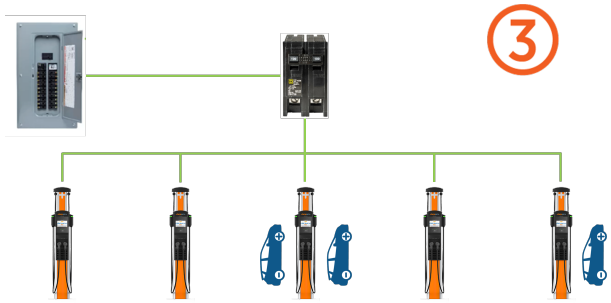
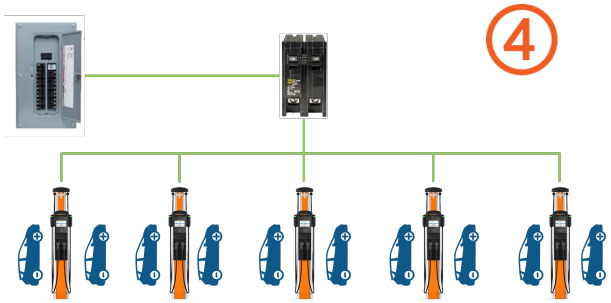
ChargePoint's Power Sharing technology utilizes the cloud to manage power in real-time. Stations continuously send their connectivity status and power levels back to the cloud where the ChargePoint Power Sharing Algorithm sends commands to reduce power to stay under the upstream electrical infrastructure limitations.

We will describe common applications in the next sections starting with the simplest and working up to more complex topologies.

Power Sharing at the Circuit Level

This example demonstrates sharing 10 ports across a single 100 A feed. The 10 ports are added to a Power Share Group at a circuit level allowing for the 10 ports to use up to 80% of the installed breaker rating, or 80 A in this example. While this is an example that will help illustrate how Power Sharing works for this document, any number of ports could be added to the selected breaker. Likewise, any approved breaker size could be utilized with the circuit level power share strategy. Note that power levels will change.

As vehicles plug in, power is managed such that 80% of the breaker rating is not exceeded at any given time. So, when a single vehicle is charging it will get up to 80 A (or its max AC input level). As more vehicles plug in, power is shared proportionally allowing for the available power to be split amongst the total number of vehicles.

100 A Breaker (80 A available)	
	
Single vehicle receives 80 A	Two vehicles share at 40 A (max) each
100 A Breaker (80 A available)	
	
Three vehicles share at 26 A (max) each	10 vehicles share at 8 A (max) each

In this example 8 A * 208 V = 1664 W = 1.664 kW. Assuming 3 miles of RPH, a driver will receive approximately 4.992 miles per hour of charge at this power level. Note that some vehicles may receive more than this and some larger vehicles may receive less than this.

As time continues, vehicles will complete their charge (shown in green in the image above). Our software automatically detects that its charge is complete and rediverts the available power proportionally to the remaining actively charging vehicles.

NOTE: There is no need for the driver to unplug their vehicle - the system will handle this without driver interaction.

Likewise, some ports may not be plugged in, which will allow for the remaining actively charging vehicles to receive a higher rate of charge.

Site designers should factor in the minimum charge when all ports are occupied and actively charging. This will account for the 'worst case scenario' and ensure that even when all ports are charging simultaneously, the drivers will receive their necessary rate of charge. Real-world examples will always yield that rate or greater as not all ports will be occupied and actively charging, so the drivers will typically receive a higher rate of charge.

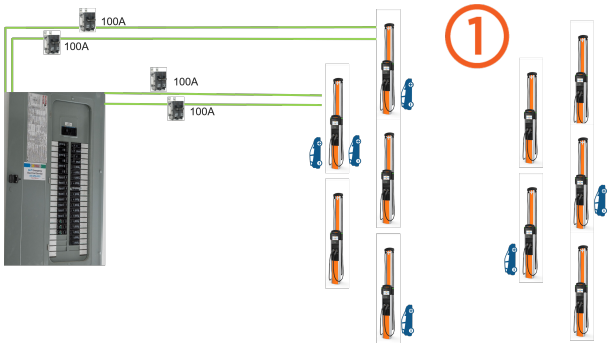
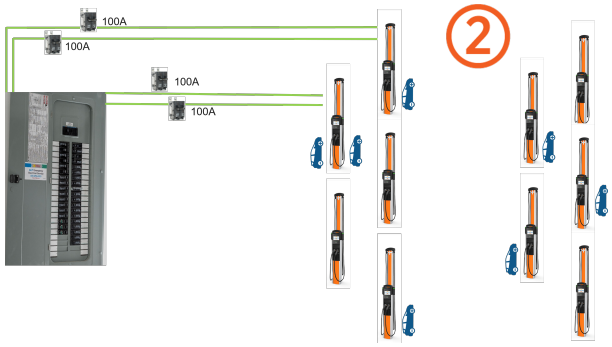
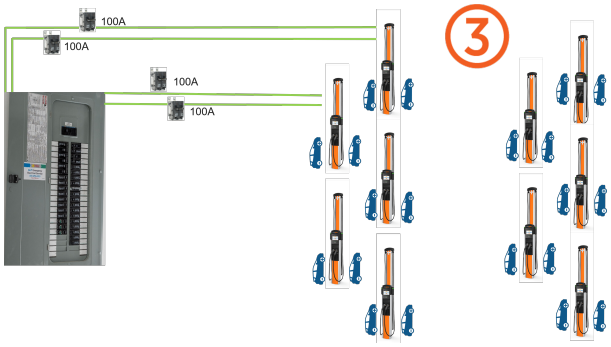
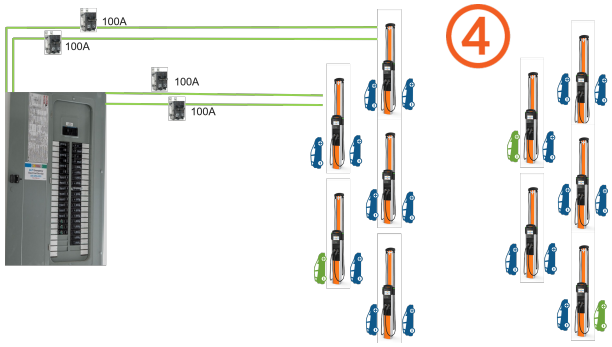
Power Sharing Through the Panel

As more ports are needed on a project, it becomes necessary to install the ports on more than one circuit. In this case, power is grouped at the circuit breaker panel level, allowing for more ports to be installed on a single panel. Power is managed such that the amperage of each phase of the panel does not exceed 80% of the breaker rating.

In the example below, we show a typical 400 A/208 V 3-phase panel. The 400 A panel is just one example - any size panel can be utilized with any number of ports connected to the breaker panel.

With Panel Level Power Sharing, power is grouped at the power panel level. In the drawings above, we have shown two home runs from each dual-port breaker, indicating a dedicated feed per port. While not drawn to every station, the two home runs are typical of all 10 stations in the example with 20 home runs back to the 400 A panel.

With this example, any six vehicles can plug into any port on the panel and receive the full 80 A of charge available at the station. When a seventh vehicle plugs in, the panel ratings would be exceeded, so stations throttle back their outputs to ensure that the total load on the panel does not exceed the rated panel ampacity.

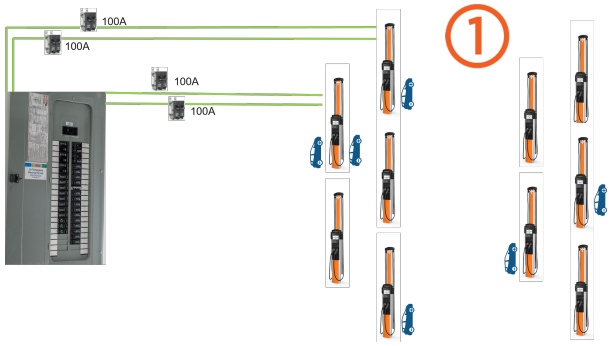
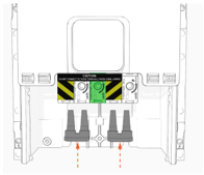
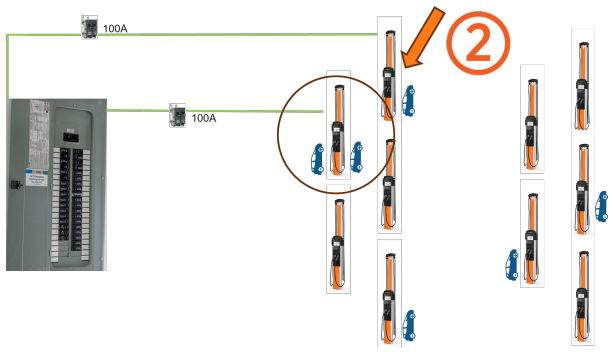
<table>
<tr><th colspan="2">Standard Breaker Panel 400 A/ 208 V
Standard Circuit Breakers (100 A - 2 Pole)</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>Six of 20 ports occupied - every vehicle gets a charge at 80 A (max)</td><td>Seventh vehicle begins charging - every vehicle throttles back to about 79 A (max) as power is shared</td></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>All 20 ports occupied - each vehicle charges at 27 A (max)</td><td>Vehicles become fully charged or leave - remaining vehicles' charging power increases to 32 A</td></tr>
</table>

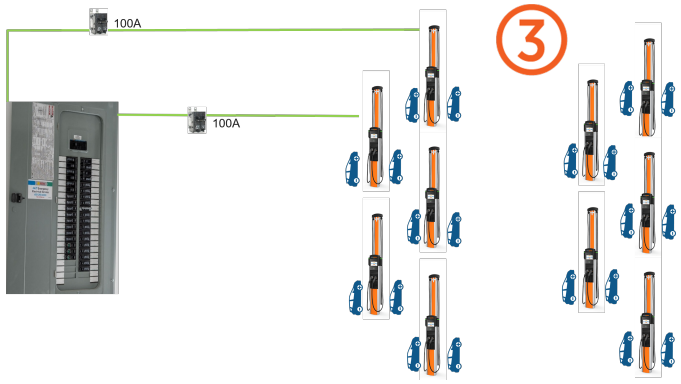
Similar to the circuit share example, vehicles will continue to plug in until all ports are occupied and actively charging. This becomes your minimum charge level (27 A in this example). Site designers will want to ensure that this minimum level meets or exceeds the desired charge rate of the driver group and application. In reality, not all ports will be occupied and actively charging simultaneously. As time progresses, some vehicles will complete their charge sooner than others, and some vehicles will unplug leaving unoccupied ports. As this occurs, the available power is shifted automatically to the remaining actively charging vehicles.

It is important to remember that while you should design around the minimum charge level (27 A in this example), the driver will always receive that level or greater.

Combining Power Sharing Strategies

It is possible to utilize multiple power sharing options simultaneously to reduce project costs. In this example, we take our previous panel level topology, which showed a dedicated feed to each port. By installing the Power Sharing jumper, we can reduce the number of wire runs by half providing significant installation and material savings.

<table>
<tr><td colspan="2">Standard Breaker Panel 400 A/ 208 V
Standard Circuit Breakers (100 A - 2 Pole)</td></tr>
<tr><td>Original design:
Home run per port</td><td>New design:
Power Sharing jumper to share a home run</td></tr>
<tr><td> 
</td><td> 

</td></tr>
<tr><td>6 vehicles in 6 ports every vehicle gets full charge</td><td>With a jumper, power is shared between 2 vehicles with each at 40 A (max) each</td></tr>
</table>

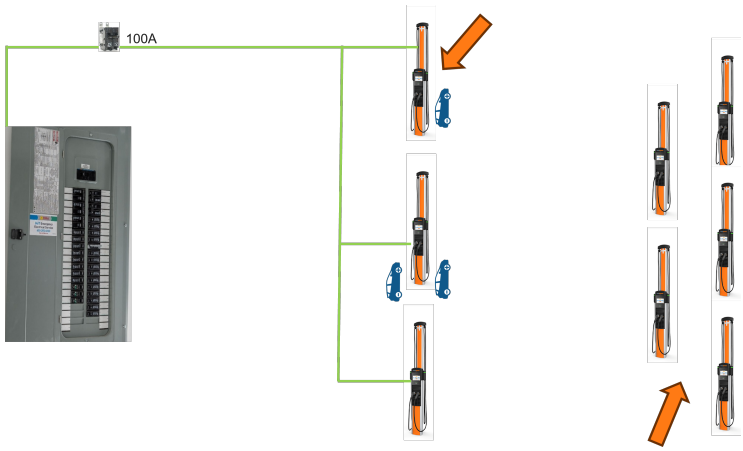


20 vehicles at 20 ports - power is shared with all vehicles at 27 A (max) each

As the jumper is utilized, the only drawback is indicated in the circle (in the above illustration). When two vehicles are charging at the same station, that station cannot exceed 80% of its breaker rating (80 A in this example). So, in this example, while the power at the panel is not exceeded, you still have vehicles charging at a reduced rate.

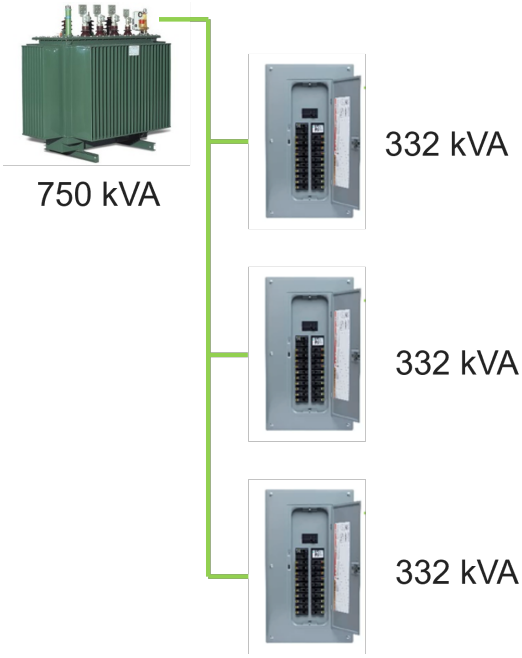
However, as even more ports get occupied, the panel rating is exceeded and the output to each stall becomes less than 40 A anyway. Furthermore most vehicles on the market today cannot take 80 A, so the

power limitation is actually limited by the vehicle. So, the Power Sharing jumper is used for installations like this to help reduce infrastructure and installation costs.

Power Sharing jumper at each station

More stations can be on other branch circuits
Power shared at Circuit Level and Panel Level

Power Sharing Using a Site (Transformer) Level

As projects scale beyond a single Breaker Panel, Power Management will need to be applied to a group of panels. This level of power management can be called Site-Level or Transformer-Level power sharing. At this level, we can look at the incoming transformer rating feeding the group of charging stations or the available site-level power.



As projects scale to this level, it becomes challenging to draw how each vehicle's rate of charge will change, however the same concepts discussed in previous topologies apply at the Transformer or Site level. As vehicles plug in, they will receive their maximum rate of charge until the electrical component limitations upstream of the charging stations are reached. At that point, stations will throttle down their individual rate of charge to remain under the NEC ratings of the upstream panels or transformers.

Like the circuit grouping and panel grouping, it is important to realize that the minimum charge level will be when all ports are utilized and actively charging. This can be calculated by taking the total number of

available Amps or Kilowatts and dividing by the total number of ports installed onto the infrastructure. For Assistance with these larger scale projects, review the Where to get help section below.

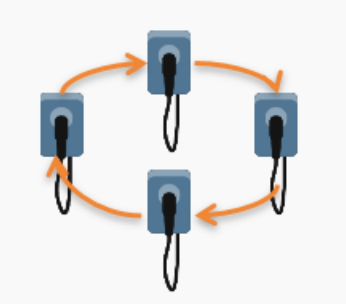
Available Power Sharing Algorithms

There are two Power Sharing algorithms to choose from today, Equal Share and First In, First Charged. It is most common to select Equal Charge. Site hosts can easily switch between these two configurations in their ChargePoint Cloud software platform.

Equal Charge Policy

Since Equal Charge is the most commonly chosen algorithm, this document was created reflecting how this policy would work. Each vehicle will receive the same amount of amperage allowing for all vehicles to receive the same power level.

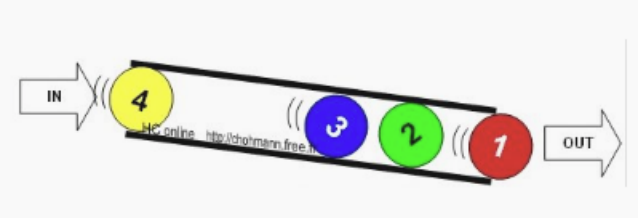
As power is stretched such that vehicles would receive less than 8 A, a secondary policy called round robin will automatically be activated. There are some vehicles on the market that will not charge below 8 A and so the Round Robin policy keeps vehicles at 8 A or more and rotates power through vehicles. Over time, this will yield a similar power level to equal charge as an average charge rate, giving the driver a very similar experience as Equal Charge applications above 8 A.



In general, it is best to provide more than 8 A as a minimum charge level for a variety of reasons. With the exception of Long-Term Parking, the driver experience will suffer below 8 A and there are also repercussions when cellular connection drops out when stations are below 8 A. ChargePoint generally recommends designing around 8 A or greater for most applications that utilize Power Management whenever possible.

First in, First Out Policy

In this policy, vehicles are given a priority charge based on the time they plug into their charging stations. As the electrical infrastructure limitations are reached, the first vehicles that plugged in will continue to receive their increased rate of charge and later vehicles will be put into a waiting period.



As the first vehicles complete their charge, the system will automatically look to the next vehicle in the waiting queue and assign available power to the next vehicle in line.

The reason that this is not used as commonly is that waiting vehicles will not receive any charge while waiting their turn. This can lead to driver frustration as they may assume that their station is not functioning correctly and does not suit for shorter dwell time applications.

With that in mind, this could be useful for valet applications, fleet applications, longer-term parking applications like Airports and other scenarios where it may be beneficial to prioritize the first vehicles that plugged in. As discussed previously, a site host can toggle between Equal Charge and First In, First Out policies in the software, so a site host could try this and see if it is applicable to their installation knowing that they could always fall back to the equal charge policy if it does not meet their expectations.

ChargePoint Power Sharing

Once enabled, Power Sharing continuously monitors the demand for power and informs the charging stations what power level they're allowed to dispense, all in an effort to satisfy the group limit(s) that have been configured, and according to the sharing policy. This means that:

- The stations continuously send power readings to the cloud. This allows the Power Sharing Algorithm (PSA) to understand how fast each individual port is providing power to the connected vehicles.
- When the total demand is less than the limit, the algorithm allows the chargers to deliver all the power the vehicles are willing and able to draw.
- Only when the total demand exceeds the limit, the algorithm kicks in and instructs the chargers how much power they're allowed to dispense on a per-port basis.
- Which port gets how large a share of the available power is determined by the Sharing Policy: Proportional Share or First Come First Served. (More details on this are available below.)
- If the total demand dips below the limit, then again, the chargers are allowed to deliver all the power the vehicles are willing and able to draw.

Power Limiting Methods

Currently, the following methods are possible:

1. **Static/Fixed Limit:** the group has a single, fixed, static power limit for the group (for example, 500 kW at all times). This is typically used to prevent overload of a panel or a circuit.
2. **Time of Use Varying Limit**: the group has a limit that varies by Hour of the Day, by Day of the Week, or both, on a recurring weekly calendar. This is typically used to match the amount of power to the cost of electricity, when that cost varies by Time of Use. An example would be: 500 kW during nights and weekends, but only 200 kW during weekdays. This and the subsequent methods below require the Fleet Enterprise or Enterprise plans.

Oversubscription Ratio Recommendations

The **Oversubscription Ratio** refers to the proportion of charging stations installed compared with the rated capacity. For example, an oversubscription ratio of 4:1 refers to installing four charging stations where only one is rated.

In the chart below, we are showing recommended starting points based on the application. The Range per Hour (RPH) estimate factors in the minimum charge level, where all ports are being utilized simultaneously

and actively charging vehicles. For this reason, the actual driver experience would be to receive at least the number of miles shown below, but the actual miles recouped will always be at that level or greater as not all ports will be actively charging simultaneously.

Vertical/Application	CT4000 (40 A Circuit)	CPF50 (80 A Circuit)	CP6000 (100 A Circuit)
Long Term Parking	8:1; ~3 RPH	16:1; ~3 RPH	20:1; ~3 RPH
Overnight Parking	4:1; ~6 RPH	8:1; ~6 RPH	10:1; ~6 RPH
All-Day Parking	4:1; ~6 RPH	8:1; ~6 RPH	10:1; ~6 RPH
Short-Term and Hourly Parking	Not recommended	2:1; ~23 RPH	3:1; ~19 RPH
Multifamily	4:1; ~6 RPH	6:1; ~7 RPH	10:1; ~6 RPH

IMPORTANT: RPH in the above table stands for Range Per Hour and refers to the approximate number of miles vehicles are going to recoup in an hour. In this example, we are assuming 3 miles per kWh.

You will see from the chart above, that how far you can stretch the power is going to depend on both the application and chosen station hardware. Another factor to consider is how many miles a typical driver will be traveling from when they arrive at this destination. As drivers travel shorter distances and vehicles are parked for longer dwell times, it allows you as a designer to stretch power further. As drivers travel from further away, for example hotels targeting traveling salespeople, or dwell times are lower such as short-term parking, designers should avoid stretching power as far and ensuring that drivers can receive their desired number of miles in their regular time frame.

For example, if we look at a multifamily application and the typical driving patterns of the residents, most drivers will drive less than 40 miles per day. Their vehicle will be parked overnight and it would not be reasonable to expect a resident to move their vehicle during the overnight hours since they are asleep. For this reason it would be more beneficial to electrify more parking stalls at a lower charge rate, while still meeting the driver needs. Likewise, most residents would be sleeping for 8 hours, but parked for longer than that when we factor in making dinner, getting ready for work, and other activities at home. Most drivers would really be plugged in for 10-13 hours generally. When we factor in 6 miles of range recouped per hour, that would yield 60-78 miles of range or greater, well exceeding the 40 miles of range of a typical driver.

Similarly for **workplace** charging, drivers are parked for 8 hours as they are at work. Even at 6 miles of RPH, they would recoup their 40-mile daily average miles in less than 7 hours making this an acceptable rate of charge for the worker. By adding more ports, you have also allowed for more workers to be plugged in simultaneously. This can help with business operations compared to having fewer ports at a higher rate of charge since it would not be as critical for drivers to relocate their vehicles to free up a more limited number of ports.

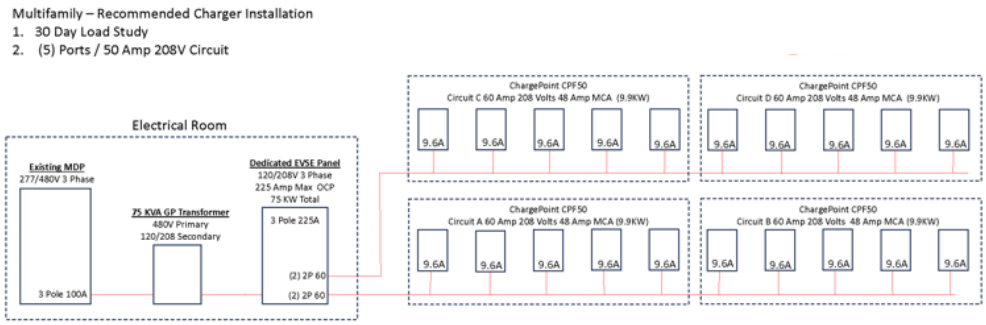
NOTE: If workplace customers would prefer to have higher level chargers and more turnover than the Power Sharing example, ChargePoint does include a Waitlist feature which will allow workplace customers to join a virtual queue and hold the station for them. Both Waitlist and Power Sharing can also be used simultaneously to help with station utilization.

Finally, for longer-term parking applications like **long-term airport parking**, drivers are not expecting to complete their charge as quickly, so a slower rate of charge can be acceptable. As you can imagine, if an airplane traveler wants to plug in their vehicle before their trip and no ports are available, they would be unable to move their vehicle while on their trip. For this reason, ChargePoint recommends long-term parking

customers focus on allowing for more available ports at slower charging levels to accommodate more drivers without having to bring in additional power requirements.

For help with your specific project or application, refer to the Where to get help section below at the bottom of this document.

Example Drawings of Power Sharing Designs



IMPORTANT: Disconnecting Means in the above example: For equipment rated **more than 60 A** or more than 150 V to ground, the disconnecting means shall be provided and installed in a readily accessible location per NEC 625.43. The disconnecting means shall be lockable open in accordance with NEC 110.25.

Handling Offline Stations

When Power Sharing is enabled, chargers are programmed with a **fallback** power level or **offline** power level. The most common reason for a station going offline is that they lose network connectivity. When this occurs, stations automatically revert to their fallback power level. This level is hard programed such that even if all stations were in their fall-back power level, the power level would be below the NEC ratings of the upstream electrical equipment, ensuring that the power group limit is not exceeded.

Once the stations come back online, they will resume their normal Power Sharing algorithms without requiring driver or site host intervention.

How is Power Sharing Configured

There are some features of this document that are implemented by the licensed electrical contractor to meet National Electric Code. These include the Power Sharing jumper and Power Select feature that allows stations to be installed on lower breaker sizes. The electrical contractor must configure the station in their installation process reflecting the specific breaker size and confirming whether the Power Sharing jumper was or was not installed.

For the Power Sharing software feature, stations are configured in their power share groups at the activation stage. Installers will need to document the as-built configurations of the stations so that ChargePoint can setup the power share groups correctly.

For information on how Power Sharing is configured, reference **How to Manage Energy** in the Cloud Dashboard, select **Help > Videos and Manuals.**

Where to Get Help

If you need assistance with designing a project around ChargePoint's Power Sharing, please reach out to your local ChargePoint Sales Team or Partner Account Manager. If you do not have a contact, please reach out to sales@chargepoint.com.

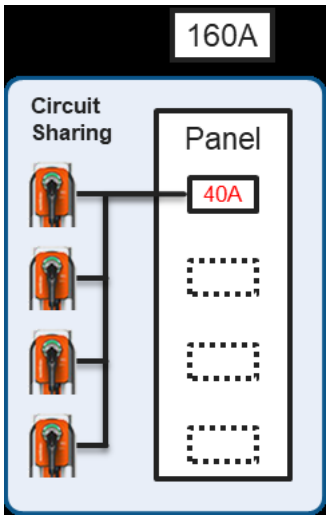
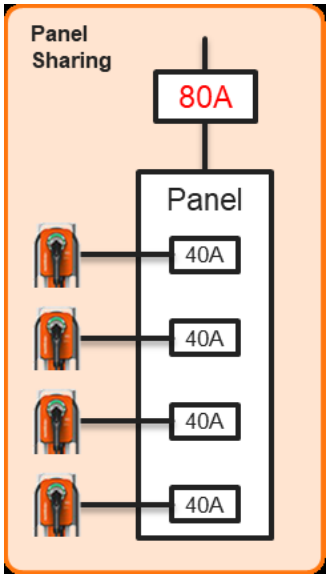
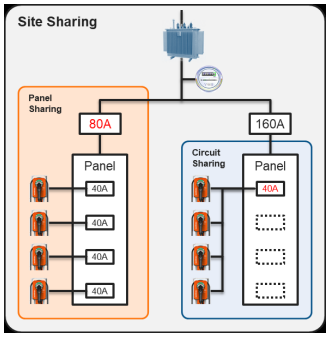
For assistance with activation, reach out to activations@chargepoint.com.

How does Power Sharing Work across Circuits, Panels, and Sites? 2

Power Sharing is the ability to set a power or current limit for a **group** of charging stations, wherein the cloud software makes sure that the total power of the group (the sum of the power of each port of each station in the group) does not exceed the configured limit. It allows the customer to save money in multiple ways since it:

- Can allow more chargers to be installed without needing to upgrade the electrical service to the site
- Can save money on installation cost by not needing to **home run** each individual charger to the panel (see "Power Sharing at the Circuit Level" in the table below)
- Can save money on demand charges (measured in kW), by controlling the peak power of the stations in the group
- Can save money on energy charges (measured in kWh), by limiting charging during expensive Times of Use, and allowing more charging during cheaper Times of Use

Power Sharing can be enabled for groups of chargers that map to a Circuit, a Panel, a Site, or any/all of those combinations, simultaneously, in hierarchical fashion. Here's a summary of these three types of groupings:

Groupings	Diagram	Breakers and Circuits
Power Sharing at the **Circuit Level**		A single circuit is daisy-chained to two or more chargers. A single breaker protects that circuit at the panel. There is a very specialized feature that uniquely applies to two-port AC stations that, unfortunately, is also referred to as **Cable Sharing** (also Circuit Sharing). See the Encyclopedia and Glossary of Power Sharing for more details on this feature.
Power Sharing at the **Panel** Level		Each charger is **star wired** (home run) to the panel via a unique circuit with a corresponding breaker, respectively
Power Sharing at the **Site** Level (or for an arbitrary grouping of stations)		In this scenario, it's not so much the physical relationship of ports to circuits to breakers that matter, but rather: The need to limit power of a group in order to save money on demand charges Or To prevent the need to service upgrades to the site. Any specific Circuits or Panels that need protecting would fall into the first two categories above.

Groupings	Diagram	Breakers and Circuits
		The diagram illustrates hierarchical Power Sharing, wherein each group – the circuit on the right, the panel on the left, and the entire site – can have their own unique limits and Power Sharing will make sure that the power stays below those limits, respectively.

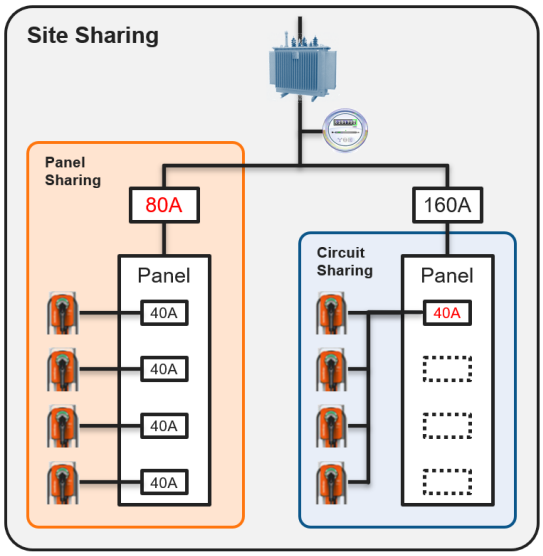
The ChargePoint implementation of Power Sharing supports the following:

- **Hierarchy** of groups, wherein each group can have its own limit.
- **Time of Use** power limits, wherein the group limit(s) can vary by hour of the day or day of the week, in recurring weekly fashion.

Power Sharing Features

Power Sharing Start

	Official CP Future Name		Aliases	Use Cases	Constraint
1	**Power Sharing**		Static Load Management (SLM)	Back-end based power/energy management for sharing charging power between a group of chargers due to limited supply capacity	
	What	Power Sharing allocates power dynamically among a group of chargers so that the aggregate (total) power of the group never exceeds the configured ceiling (the maximum power limit). Power can be shared at the **Circuit/Panel [A]**, or **Site/Transformer [kW]** level, or at multiple levels, **simultaneously**, as shown in the diagram. The ceiling can be static (fixed) or set dynamic via the following: Pre-configured **Time-of-Use** schedule.			
	Why	Save money on installation cost by avoiding electrical service upgrades and by using less wire (circuit sharing). Mitigate demand charges by capping overall power for the group, but still allowing charging at full speed when only a few vehicles are plugged in. May help shift some charging to times when energy rates are cheaper.			

	Official CP Future Name	Aliases	Use Cases	Constraint
	Who	Workplace, Multifamily, Fleets, long term parking (airports), who do not want or need all chargers to run at full speed simultaneously, while still delivering a good driver experience or meeting the needs of the fleet.		
	Example Diagram	Site Sharing 		

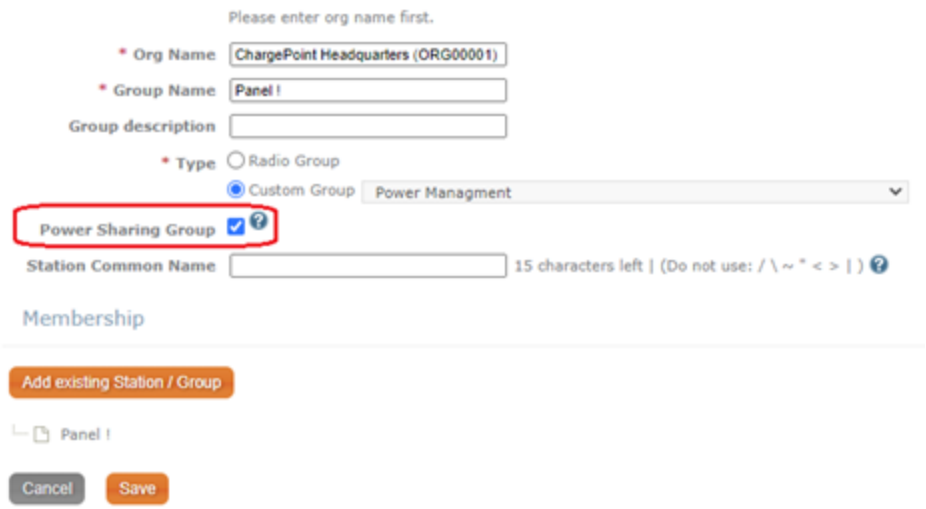
	Official CP Future Name	Aliases	Use Cases	Constraint
2	**Power Sharing Time of Use**	ToU	Configure the Charging Power Dependent on Time	
	What	Time of Use Power Sharing allows power to be *reduced* (without necessarily being shut off *completely* during various time intervals		

How is Power Sharing Configured?

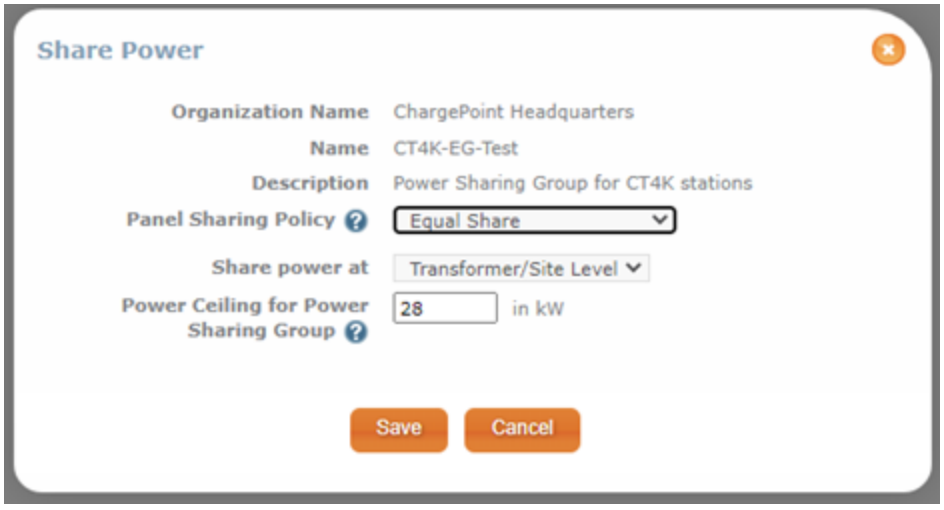
IMPORTANT: For more information see **How to Manage Energy** in the NOS under **Help > Videos and Manuals.** This section is a quick **reminder** for those who have read that document already.

To summarize it here, the configuration proceeds in three steps:

1. Create an Energy Management group which indicates which chargers are a member of the group (**Stations > Create Group**). Make sure it's a Custom Group and make sure to click the Energy group checkbox.



2. Set the (possibly time-varying) group limits (**Manage Energy > Share Power**)



3. Confirm that the stations have all been initialized to be part of the Power Sharing group.

How to use Level 2 Stations?

NOTE: This does not apply to all Level 2 Stations. It applies only to CP4000, CPF50, CP6000. The example below is for CP6000.

The diagrams under the **Example Diagram** column of Encyclopedia and Glossary of Power Sharing show examples of Hierarchical Power Sharing.

How does ChargePoint Power Sharing work?

Once enabled, Power Sharing continuously monitors the demand for power and informs the chargers what power level they're allowed to dispense, all in an effort to satisfy the group limit(s) that have been configured, and according to the sharing policy that has been configured. This means that:

- The chargers continuously send power readings to the cloud. This allows the Power Sharing Algorithm (PSA) to understand how fast each individual port is providing power to the connected vehicles.
- When the total demand is less than the limit, the Power Sharing Algorithm allows the chargers to deliver all the power the vehicles are willing/able to draw.
- Only when the total demand exceeds the limit, the Power Sharing Algorithm kicks in and instructs the chargers how much power they're allowed to dispense on a per-port basis.
- Which port gets how large a share of the available power is determined by the Sharing Policy: Proportional Share or First Come First Served. (More details on this are available below.)
- If the total demand dips below the limit, then again, the chargers are allowed to deliver all the power the vehicles are able to draw.

How to set the Limits?

The following methods are possible:

1. **Static/Fixed Limit:** The group has a single, fixed, static power limit for the group (for example, 500 kW at all times). This is typically used to prevent overload of a panel or a circuit.
2. **Time of Use-Varying Limit:** The group has a limit that varies by Hour of the Day, by Day of the Week, or both, on a recurring weekly calendar. This is typically used to match the amount of power to the cost of electricity, when that cost varies by Time of Use. An example would be: 500 kW during nights and weekends, but only 200 kW during weekdays This and the subsequent methods below requires the Fleet Enterprise or Enterprise plans. See Which of These Features are obtained with which software license (cloud plan).
3. **Dynamic Load Management**: Here the group limit varies automatically based on other demand/load at the Site which is not controlled by ChargePoint. As an example, if a Site has an absolute maximum of 500 kW, and if the un-managed load at the site is currently 200 kW, **Dynamic Load Management** would allocate the remaining 300 kW as the group limit for the EV chargers. If the un-managed load increased to 400 kW, the group limit for the chargers would be reduced to 100 kW.

What happens if Chargers are Unreachable (Offline)?

When Power Sharing is enabled, chargers are told the **default** (read: offline) power they're allowed to deliver to a vehicle when the charger experiences a loss of network connectivity to the cloud. Upon detecting that they are offline, the stations will revert to this **default** power to make sure the group limit is not exceeded.

Failsafe Power Value

IMPORTANT: For AC: Minimum allowable power is 1.8 kW for 1-phase AC stations (in US) or 8 A per phase for 3-phase AC stations (in EU). Shown as 1.5 kW and 4.5 kW in NOS EU. **For DC**: DC_nominalPowerOfPort/Sum(DC_nominalPowerOfPort) multiplied by(limit - Sum(AC_failsafe)) ==>The limit (minus the sum power of AC Stations) is shared proportionally between the DC stations.

IMPORTANT: Make sure that all chargers in a Power Sharing group have superb connectivity to the cloud. If the connectivity is subpar or flaky, there will be frequent situations where chargers are reverting to their **default** (offline) power, frustrating drivers and station owners, because that **default** power may be substantially lower than what could be allowed if all of the chargers were able to communicate to the cloud. Do not enable Power Sharingfor locations with poor connectivity. Remediate that connectivity first, and only then enable power sharing.

Sharing Policy: Proportional Share vs First Come, First Served

A Sharing Policy determines how much power is allocated to each charger/vehicle when there's more demand for power than the allowed group limit. When there's *less demand* than the group limit, vehicles are allowed to charge as fast as they're willing and able to charge.

Summarizing, here are the two policies and how they allocate power when demand exceeds the group limit:

- **Proportional Share**: Power is allocated to chargers in proportion to their rated power. The rated power is the maximum power the charger can operate at based on a combination of its data sheet (the absolute fastest it can possibly charge) and the way it is installed (which may limit the power further).
- **First Come, First Served**: Power is allocated in the order the vehicles started their charging session, giving each of them, in order, as much power as they're willing and able to take.

Here's a simple example to illustrate the difference.

Consider a group with one 40 kW DC charger and one 10 kW AC charger (50 kW total), and a group limit of 25 kW. And imagine two vehicles are plugged in and are willing to accept charge as fast as the chargers are permitted to dispense power. Here's how these policies would allocate the available group limit of 25 kW:

Power Sharing Policy	DC gets	AC gets	Why	What happens next?
Proportional Share	20 kW	5 kW	Both chargers are **throttled down** to 50% of their rated power, preserving their proportions. In other words, the rated power ratio is 40 kW ÷ 10 kW = 4:1, and the assigned power ratio is 20 kW ÷ 5 kW = 4:1, same as the rated proportion.	If one of the vehicles is unplugged, or draws less power than it was allocated, any **remaining** power (up to the group limit) is assigned to the other vehicle.
First Come, First Served: **first** vehicle plus into **DC**, **second** vehicle plugs into **AC**	25 kW	0 kW	The first vehicle gets all it is willing or able to draw from the DC charger (so long as that doesn't exceed the group limit). In this case the group limit kicks in, limiting the DC charger to 25 kW. There is nothing left over, so the AC charge gets zero.	If the first vehicle is unplugged or draws less power than it was allocated, the **remainingpower** (up to the group limit) is allocated to the second vehicle. In this case, if the vehicle attached to the DC charger dips below 25 kW, the remainder is allocated to the second vehicle on the AC charger.

Power Sharing Policy	DC gets	AC gets	Why	What happens next?
First Come, First Served: **first** vehicle plus into **AC**, **second** vehicle plugs into **DC**	15 kW	10 kW	The first vehicle gets all it is willing or able to draw from the AC charger (that is, 10 kW). Anything left over 25 kW - 10 kW = 15 kW) is allocated to the DC charger.	If the first vehicle is unplugged or draws less power than it was allocated, the **remaining power** (up to the group limit) is allocated to the second vehicle. In this case, if the vehicle attached to the AC charger dips below 10 kW, the remainder is allocated to the second vehicle on the DC charger.

IMPORTANT: In all cases if a vehicle is allocated a certain amount of power, but is unwilling or unable to draw that much power, any excess is allocated to other vehicles/chargers according to the Sharing Policy. In other words the excess (permitted minus actual) does not go wasted; rather it is allocated to other vehicles. The same is true when a vehicle is unplugged. Its power is allocated to other vehicles or chargers.

IMPORTANT: Fleet Charging Optimization is in a way, another **Sharing Policy**, but it is configured in the Fleet Operations add-on software application, not in the charger management software (NOS). See Encyclopedia and Glossary of Power Sharing for more information on this feature.

Oversubscription and Minimum Power Levels

Oversubscription is defined as rated power (sum of the rated power of all the chargers in the group) divided by the group limit and is often expressed as the ratio. In the example of the previous section, the oversubscription = (40 kW + 10 kW) ÷ 25 kW = 2, or is expressed as a ratio, 2:1.

IMPORTANT: Rarely should the oversubscription ratio exceed 4:1. Contact an SE for site recommendations if a customer is seeking a larger oversubscription ratio.

The **Minimum Power Level** for each charger is a function of the Sharing Policy and the Oversubscription ratio and defines for each charger the minimum amount of power that will be allocated to the charger when total demand exceeds the group limit. For AC chargers the minimum power should ideally be kept above the J1772 minimum of 6 A times 203 V = 1.2 kW, and better if it is kept above 1.5 kW as some vehicles are not able to draw less than 1.5 kW (they will draw zero instead).

Here is an example:

Consider 10 AC chargers @ 6 kW each, or 60 kW of rated power in the group. The group limit should be kept at 50 kW or greater, so that the minimum power for each charger is 1.5 kW or greater.

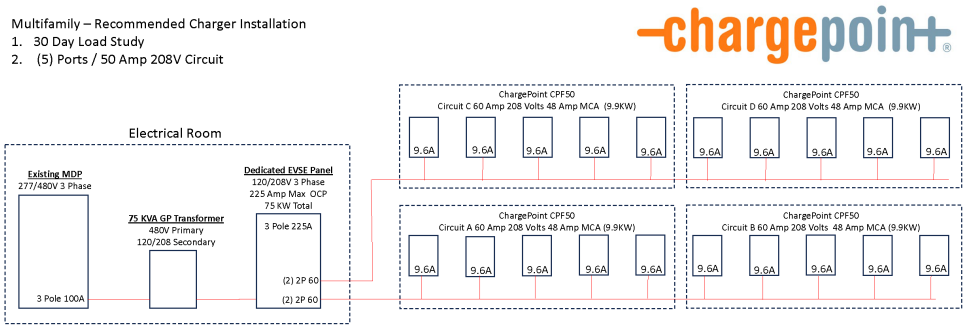
The Minimum Power Level does not apply to First Come, First Served as a charger could be given zero , if the other chargers filled up first and are consuming the entire limit for the group.

What could go wrong and how to fix it?

Here are the top issues that occur and the remedies:

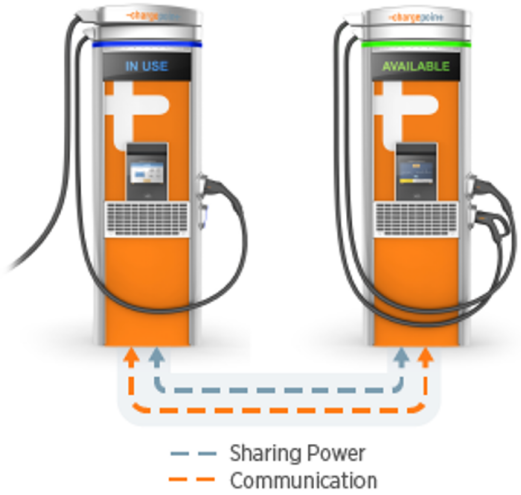
Problem Report	Possible Causes	Possible Remedies
Power Sharing fails to be enabled (no green checkmark)	• One or more of the chargers in the group are unreachable. The group will not be enabled until **all** chargers have been enabled. • One or more of the chargers in the group do not support Power Sharing.	1. Troubleshoot the reachability issue. Escalate to NetOps for assistance. 2. Remove the chargers from the group or replace them with a charger model that supports power sharing.
Vehicles are charging very slowly – they rarely (perhaps never) charge faster than the minimum charging speed.	• One or more of the stations in the group are unreachable or have intermittent reachability. • The oversubscription ratio is very high.	1. Remediate the poor connectivity.
Some vehicles are drawing zero, even though they are allowed to draw power.	• The vehicle may have been offered a very low amount of power (below 1.5 kW). Some vehicles will just draw zero instead of drawing such low power values. • The vehicle may be fully charged. • The vehicle may be overheated and has paused charging to cool down. • The breaker may have tripped.	1. If possible, lower the oversubscription ratio by upgrading the power to the site or panel. 2. Vehicle charged: nothing to remedy

Multi-family diagram

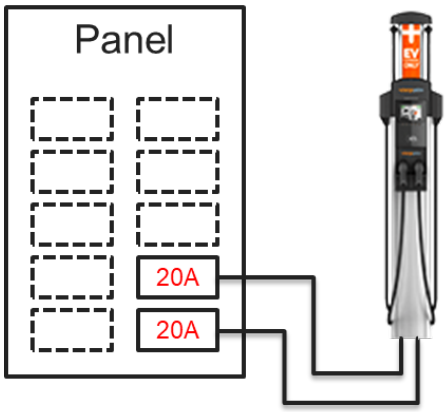


625.43 Disconnecting Means.

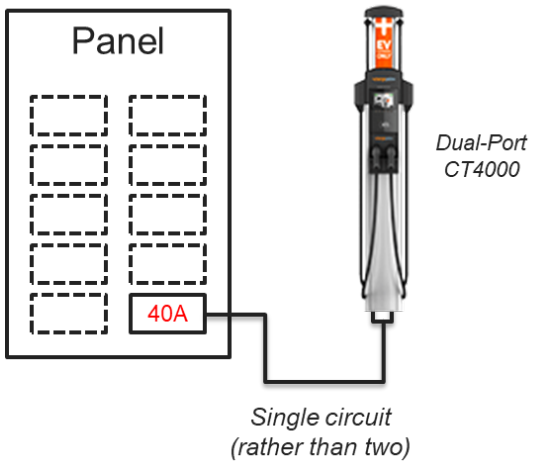
For equipment rated **more than 60 amperes** or more than 150 volts to ground, the disconnecting means shall be provided and installed in a readily accessible location. The disconnecting means shall be lockable open in accordance with 110.25.

	Official CP Future Name	Aliases	Use Cases	Constraint
1	**Paired Express 280 / Paired Express 250**		Hardware feature to combine the power output of two chargers to one port to increase charging power	Only Express 250 and Express 280
	What	Paired Express 250s share the four (total) Power Modules among the two Express 250s, steering power to the vehicles that need it		
	Why	Higher overall utilization for a given investment in chargers. Avoid unnecessary and expensive upgrades to site power and avoid demand charges. Statistically, DC chargers are not 100% occupied. Even when they are, vehicles draw substantially lower power as their batteries get closer to fully charged.		
	Who	Workplace, Retail, Fleets who don't need a dedicated 125 kW for each station Sites with limited space that have no room for Power Block (Express Plus product suite.)		
	NOS UI	Hardware feature		
	Example Diagram			

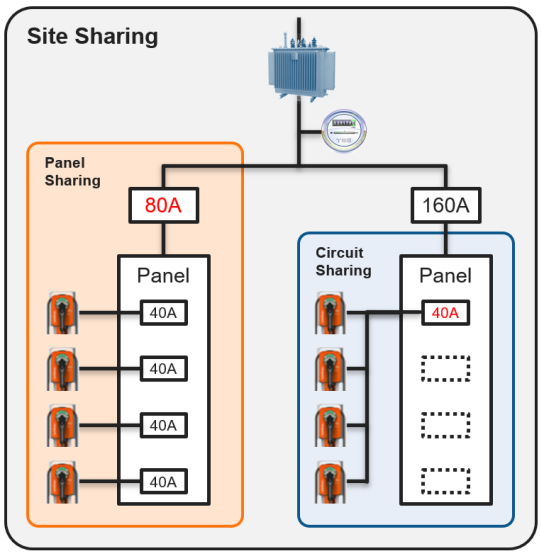
	Official CP Future Name	Aliases	Use Cases	Constraint
2	**Power Select**		As owner, I limit the max power output per port continuously during commissioning due to limited supply capacity.	
	What	Power Select is a **fixed** de-rating of a station to a max amperage (and thus a max power). Max amperage is determined by the breaker and is set at installation time. Other power management features can **lower** the power further, but never increase it beyond the specified max.		
	Why	Save money on installation costs by installing more ports without a service upgrade May help mitigate demand charges by capping max power per port. May help shift some charging to times when energy rates are cheaper.		
	Who	Long-term parking lots at airports and other verticals where there is long dwell time.		

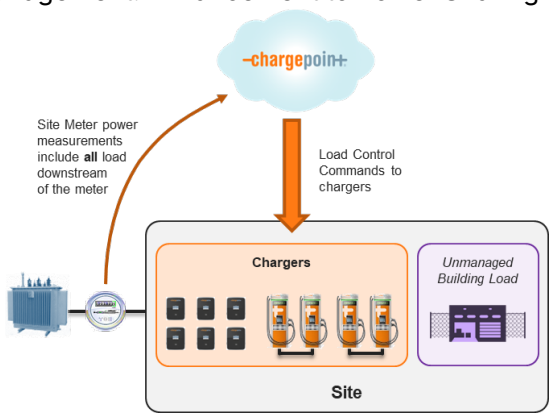
	Official CP Future Name	Aliases	Use Cases	Constraint
		Any customer with limited panel capacity who wants to introduce EV charging without a sizable capital investment.		
	NOS UI	Station configuration Power Configuration Name: Circuit Sharing — Value: Disable — Attempted Value: - — Attempted Status: - Name: Power Select — Value: 32A — Attempted Value: - — Attempted Status: ✓		
	Example Diagram	 *CT4000 installed for 16A service (20A breaker) per port* *(Note: CT4000 is rated for 30A service via a 40A breaker)*		

	Official CP Future Name	Aliases	Use Cases	Constraint
3	**Cable Sharing**	(also known as Circuit Sharing)	Increase charging power by station internal Power Sharing due to limited power supply capacity. Only available for single feeded stations and multiple ports	
	What	Cable Sharing is the ability to wire a single circuit (a single cable) to a dual-port AC station. An internal power plate or jumper connects the single circuit to both ports (the jumper may or may not rotate phases for 3Ø AC stations). Power is shared by the station among the two ports so as not to exceed the breaker. Can be combined with Power Select and is configured during installation. Other power management features can lower the power further, but never increase it beyond the shared maximum.		
	Why	Save money on installation cost. Allows a rip-and-replace of a single with a dual without ripping up the parking lot.		
	Who	Workplaces and other verticals where it is not necessary or practical to allow both ports to charge at full speed simultaneously.		
	NOS UI	Station Configuration		

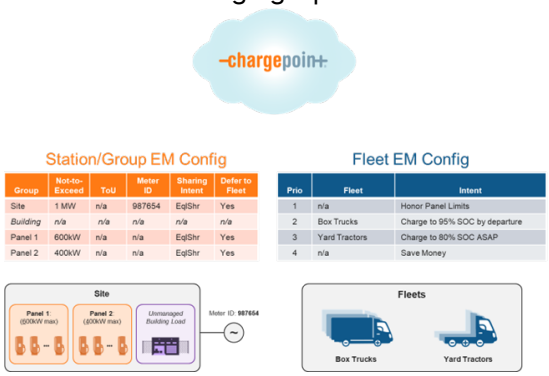
	Official CP Future Name	Aliases	Use Cases	Constraint
		Power Configuration Name: Circuit Sharing — Value: Disable — Attempted Value: - — Attempted Status: - Name: Power Select — Value: 32A — Attempted Value: - — Attempted Status: ✓		
	Example Diagram			

	Official CP Future Name	Aliases	Use Cases	Constraint
4	**Power Sharing**	Static Load Management (SLM)	Back-end based power/energy management for sharing charging power between a group of chargers due to limited supply capacity	
	What	Power Sharing allocates power dynamically among a group of chargers so that the aggregate (total) power of the group never exceeds the configured ceiling (the maximum power limit). Power can be shared at the **Circuit/Panel [A]**, or **Site/Transformer [kW]** level, or at multiple levels, **simultaneously**, as shown in the diagram. The ceiling can be static (fixed) or set dynamic via the following: Pre-configured Time-of-Use schedule.		
	Why	Save money on installation cost by avoiding electrical service upgrades and by using less wire (circuit sharing). Mitigate demand charges by capping overall power for the group, but still allowing charging at full speed when only a few vehicles are plugged in. May help shift some charging to times when energy rates are cheaper.		
	Who	Workplace, Multifamily, Fleets, long term parking (airports), who do not want or need all chargers to run at full speed simultaneously, while still delivering a good driver experience or meeting the needs of the fleet.		

	Official CP Future Name	Aliases	Use Cases	Constraint
	NOS UI			
	Example Diagram	Site Sharing 		

	Official CP Future Name	Aliases	Use Cases	Constraint
5	**Dynamic Load Management**			
	What	Dynamic Load Management is a an enhancement to Power Sharing where the group limit is adjusted automatically based upon other (non-EV-charger) load at the Site. Dynamic Load Management adjusts the power available to EV Charging based on real-time building load (and other load not managed by ChargePoint), without exceeding physical limits at the transformer, panel, or circuit level, and while smoothing peaks to prevent unnecessary demand charges. Requires a site meter to read power at the site or panel level.		
	Why	Provides faster charging and better service to employees, residents, customers, and fleets by making as much power available to EV charging as possible on a real-time basis, rather than setting conservative and therefore significantly lower fixed or Time of Use limits, while still meeting site power limits and avoiding demand charges. Save money on installation cost by avoiding electrical service upgrades. Mitigate demand charges by capping overall power for the site. May help shift some charging to times when energy rates are cheaper.		
	Who	Workplace, Multifamily, Retail, Fleets who want to give a high quality of service without incurring extra demand charges.		
	NOS UI			
	Example Diagram	Dynamic Load Management: Enhancement to Power Sharing Using a Site Meter 		

	Official CP Future Name	Aliases	Use Cases	Constraint
6	**Fleet Charging Optimization (requires Fleet Operations add-on software product)**			
	What	Fleet Charging Optimization is a specialized version of Power Sharing which Optimizes charging by directing power to vehicles based on their application and needs, one of: • Charge the vehicle to its required state of charge by departure time. • Customers can rank-order Fleets in priority order to specify which vehicles get charged.		

	Official CP Future Name	Aliases	Use Cases	Constraint
		• Charge the vehicle at full speed as soon as possible, for quick turn-around times. • Customers can rank-order Fleets in priority order to specify which vehicles get charged when there is insufficient power available for all of them. • Trip information (Arrival Time, Departure Time, Trip Length) can be configured manually. • Depot personnel are alerted if a vehicle cannot be charged sufficiently by departure time, or if there are any charger faults.	
	Why	Save on infrastructure costs by only installing the necessary amount of charging (specifically, the necessary amount of power conversion in an Express Plus deployment) and requiring less site power from the utility Save on fuel costs by mitigating demand charges and shifting charging to when rates are cheaper, while still ensuring that vehicles are sufficiently charged by departure time. Alerting enables depot personnel to remediate problems, and if necessary, adjust route assignments on-the-fly to ensure the trip happens on time.		
	Who	Transit, Delivery, and other "scheduled" fleets who need advanced power management and alerting and charging-status dashboards.		
	NOS UI			
	Example Diagram	Fleet Charging Optimization 		

Which of these features are obtained with which software license (cloud plan)?

Feature	Power, Community, Commercial, Plans	Fleet Enterprise, Enterprise plans, Home, Multifamily, and the clandestine "Energy Management" token	Add-On Required?
Power Select	✓	✓	
Cable Sharing (also known as, Circuit Sharing)	✓	✓	
Scheduled Charging	✓	✓	

Feature	Power, Community, Commercial, Plans	Fleet Enterprise, Enterprise plans, Home, Multifamily, and the clandestine "Energy Management" token	Add-On Required?
Power Sharing – Fixed (static) Limit, Hierarchical groups	✓	✓	
Paired CPE280 / Paired CPE250		✓	
Dynamic Load Management (DLM)		✓ (*)	(*) Site Meter and setup services sold separately for DLM
Fleet Charging Optimization		✓ (*)	(*) Requires **Fleet Operations** add-on product

NOTE: ChargePoint as a Service Cloud Plan follows the same.

Which Features are Supported on Hardware Models?

Feature	CPH50, CPF50	CT4000, CP4000, CP6000	Express 250, Express 280	Express Plus
Power Select	✓	. ✓	Not scheduled	Partial Full
Cable Sharing also known as dual-port AC charger Circuit Sharing)	Not applicable	✓	Not applicable	Not applicable
Power Sharing – Fixed (static) Limit, Hierarchical groups	✓	✓	✓	
Paired CPE280 / Paired CPE250	Not applicable	Not applicable	✓	Not applicable
Fleet Charging Optimization	✓ Limited Release in NOS	✓ Limited Release in NOS	✓ Limited Release in NOS	✓ Limited Release in NOS

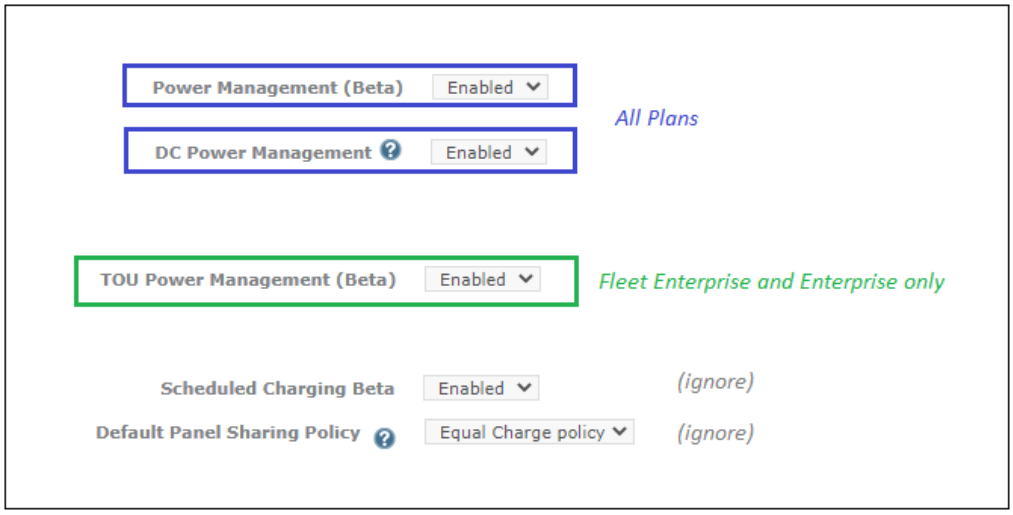
Org-level Settings for Early Power Sharing Access

With a **Product Management** login:

1. Go to the Organization's Properties sheet.
2. Enter **Edit** mode.
3. **Enable** the properties listed on the Table based upon the highest cloud plan that the customer has (as shown below).

Org-Level Property	Power, Community, Commercial Plans	Fleet Enterprise and Enterprise plans
Power Management (Beta)	✅	✅
DC Power Management	✅	✅
TOU Power Management (Beta)	❌	✅
Scheduled Charging Beta	(⇨ always ignore these)	(⇨ always ignore these)
Default Panel Charging Policy	(⇨ always ignore these)	(⇨ always ignore these)

NOTE: Below is a screen shot of which of these properties to **Enable** for the various plans.



Limited Warranty Information and Disclaimer

The Limited Warranty you received with your charging station is subject to certain exceptions and exclusions. For example, your use of, installation of, or modification to, the ChargePoint® charging station in a manner in which the ChargePoint® charging station is not intended to be used or modified will void the limited warranty. You should review your limited warranty and become familiar with the terms thereof. Other than any such limited warranty, the ChargePoint products are provided "AS IS," and ChargePoint, Inc. and its distributors expressly disclaim all implied warranties, including any warranty of design, merchantability, fitness for a particular purposes and non-infringement, to the maximum extent permitted by law.

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