

Test Plan (suggested test cases)

Test the following scenarios on your customer fleets where there are electric vehicles and log any issues found on the provided work sheet.

NB : Request permission to view the new module/page from your regional MiX Administrator. If you have any issues, you can contact Erika Schoeman.

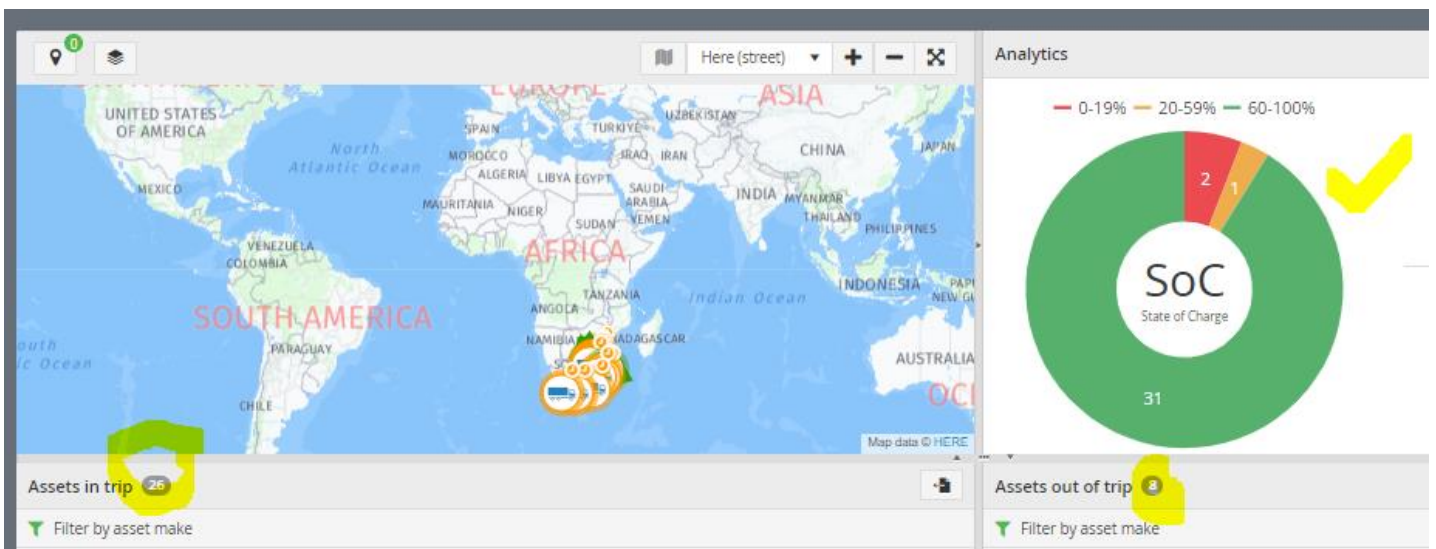
1. Can you see all the customer's electric vehicles on the operational dashboard?

a. How to test this?

Match the number of electric vehicles the customer has by adding up the number on the asset grids for both in trip and out of trip as shown below or adding up the red, amber and green on the donut chart.

What could be wrong?

- If you see nothing or only a few, are the vehicles configured as EV?



2. You will need to ensure that all the electric vehicles have a max range captured on the asset detail's page to be able to test if the Estimated available range is displayed accurately.

a. How to test this?

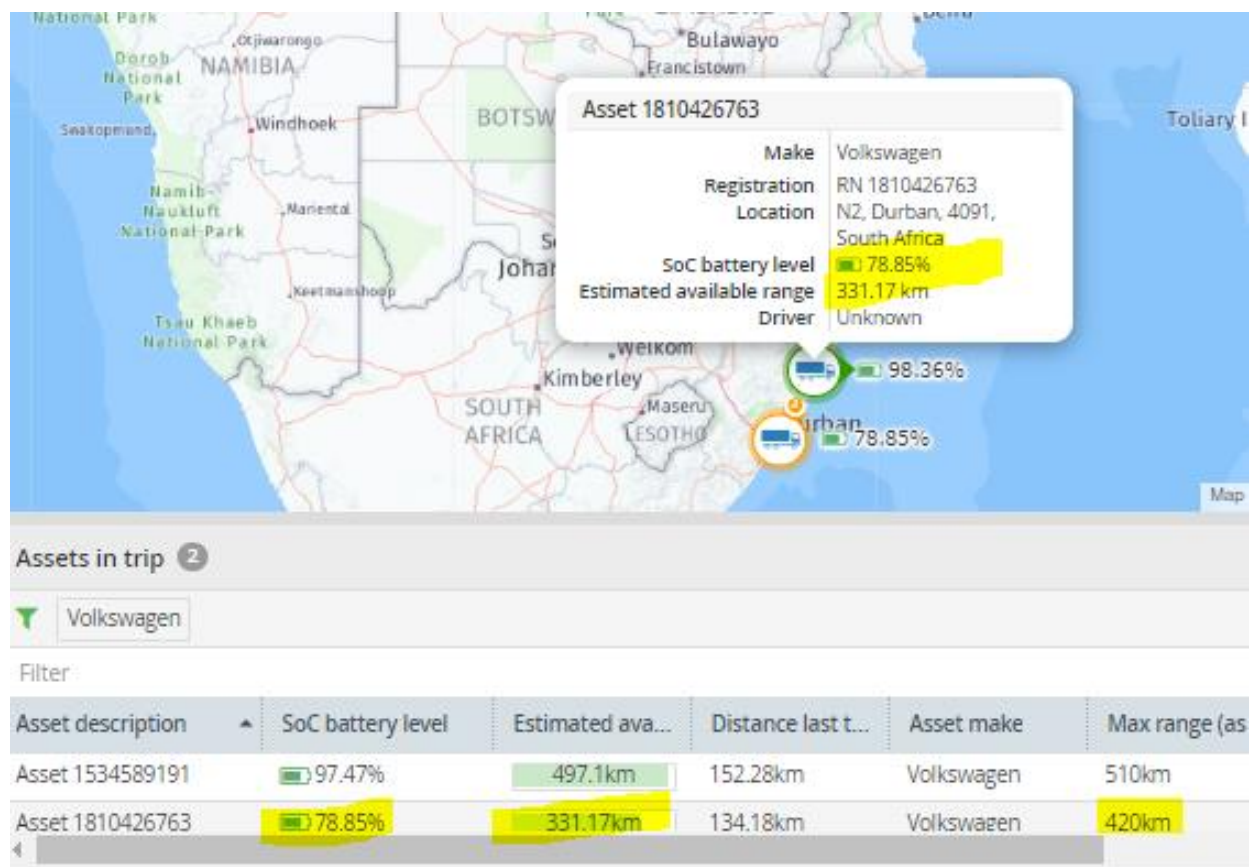
- Go to asset detail tab for each electric vehicle
- Ensure fuel type is "Electric" and Maximum range is populated. Max range is provided by the EV OEM and is in fact how far they predict the asset can travel on a fully charged battery.

The screenshot shows the 'Edit asset' page for 'Asset 1534589191 (RN 1534589191)'. The page is titled 'Asset details' and includes a sidebar with navigation options: Asset status, Access control, Custom groups, Service history, Reminders, Fuel data, Other cost data, Recovery, and Mobile device. The main content area shows a car image and a form with the following fields: Configuration group (Simulate EV Thunderbolt Config), Fleet number, Make (Volkswagen), Year, Fuel type (Electric), Electric Vehicles, Country (Choose country), Vehicle Identification Number (VIN), Model, Engine number, and WLTP maximum range (km) (1510). A yellow checkmark is next to the 'Electric' fuel type and the '1510' range value.

- Once this is captured you should see the following on the operations dashboard page on the asset modal and in the associated asset grid. Without max range the estimated range will be blank. See below how the calculation is done:

Max range X SoC battery level = Estimated available range

$$420 \times 78.85\% = 331.17$$



3. The battery level updates for each asset every 5 minutes. Verify that the SoC battery level displayed on the operations dashboard is basically the same as the SoC on the vehicles dash given there can be a 5min difference which should be marginally.

a. How to test this?

- Look at the SoC battery level on the operations page for a moving asset (ie. on the assets in trip grid) and call the driver to confirm what the battery level is being displayed on his dash in the vehicle. The values should be nearly the same.
- Look at the SoC battery level on the operations page for a stationary asset (ie. On the assets out of trip grid) and verify with someone at the vehicle what the battery level is. The values should be nearly the same.

4. Confirm if a vehicle is being charged at the moment if it displays as being charged correctly on the operations page. Again please allow approx.5 mins before any conclusions as the refresh rate is 5 mins for each asset.

Assets out of trip **14**

Filter by asset make | Filter by location name

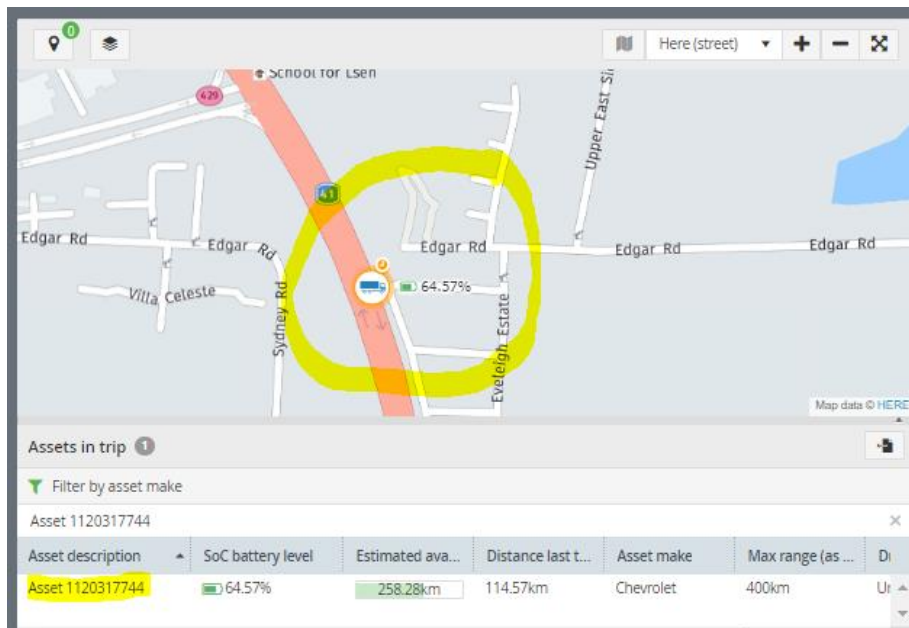
Filter

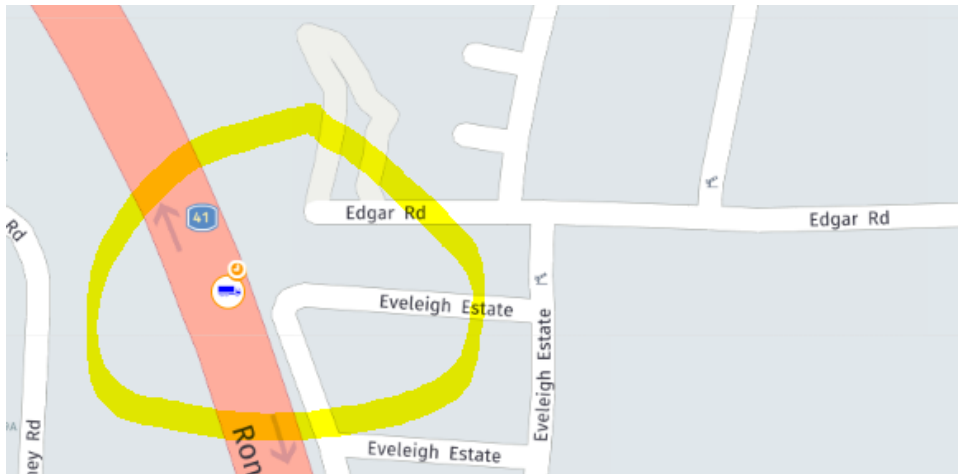
Asset description	SoC battery level	Asset make	Location	Charging status	Estimated ava...	Las
Asset 508541192	89.75%	AC	Hendrik Verwoerd Ave, Brits, 0250, South Africa	⚡ Charging	314.13km	05/
Asset 519610607	98.42%	AC	R511, Centurion, 2189, South Africa	⚡ Not charging		05/

5. Check that the asset on the EV map and the same asset on live tracking map have same movement status and are at same place on the map.

a. Tip?

- We do currently have an open QA bug (<https://csojiramixtelematics.atlassian.net/browse/QA-5762>) that the positions do not automatically refresh on the EV map, until resolved please just refresh the EV map page when checking this test scenario. We will fix this ASAP before customers start using this.





6. Check that the SoC Battery level is the same on the EV map (asset label and asset modal) as on the asset in grids

a. Tip?

- We do have a current open QA bug (<https://csojiramixtelematics.atlassian.net/browse/QA-5773>) that sometimes the values are not the same. If you see this as well it is a known issue currently and we are working on a fix.

Asset description	SoC battery level	Estimated available range (based on)
Yutong E12 (PiggyBack)	71.6%	250.6km

