How do I proactively detect device issues?

> **QUESTION:**
> We just completed implementation, and things are running along smoothly. What advice do you have for issue prevention and detection? I don't want to run a report a year from now and discover too late that one of my devices stopped reporting six months earlier.

Yes! You already have a proactive mindset, so the rest of the process is easy. Once you identify *whom* should be notified of device health and device maintenance issues, the portal can help you do the rest. Here are some recommended approaches that new customers can use for issue prevention and detection.

Low Battery Detection

A switch alert for battery voltage will trigger when voltage on the red wire (constant power) drops below 11.8V for more than 30 minutes. In that case, the vehicle should be started as soon as possible to avoid dead vehicle battery. If an alert is triggered for a vehicle that has only been sitting for a short period of time, there is a good indication the battery in the vehicle is weak, or something else in the vehicle is drawing an excessive amount of power when the vehicles is off.

▶ **To set up a Switch Alert for Battery Voltage:**

1. From the **Account** menu, click **Manage Alerts**, and then click **Open**.

2. On the Alerts page, click **New Switch Alert** (green plus sign ➕)

3. In the New Alert window, choose the vehicle or group you want to monitor.

4. Modify the **Alert Subject** to "Battery Low."

5. Enter the email address(es) and SMS number(s) of the person(s) who should receive the alert.

6. Choose whether or not to notifiy the driver with a custom message when the alert is triggered.

7. If available, chose whether or not to have the in-cab notification and the notification type trigger.

8. In the Switch Type area, choose the option for **Battery Voltage**.

9. Set your parameters for Weekdays and Weekends.

10. Set landmark preference parameter.

11. If you would like the alert to send notification once then deactivate, check the box next to this option. We recommend not selecting this option for this type of alert.

12. Leave the defaults set for Repeat Delay, Per-Vehicle Delay, and Active settings.

13. Click **Create New Alert**.

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New Switch Alert   ✕

Create new *Switch-Based Alert*

Vehicle	202 Loop ▼
Alert Subject	BATTERY LOW
Addresses *Enter one or more email addresses or SMS numbers*	ald@gpsinsight.com
Notify Driver	☐ Send with note: [____] to <u>current driver</u> or the <u>contact info</u> for the vehicle
In-Cab Notify	◉ None ○ Buzzer ○ Light ○ In Cab Alert
Switch Type * Only supported on select devices.	◉ Battery Voltage ○ External Power Lost *Alert only for devices with a backup battery* ○ Panic Switch ○ Power Cycle ○ Temperature

Weekdays

Sun	M	T	W	Th	F	Sat
☐	☑	☑	☑	☑	☑	☐

◉ All Day ○ Off ○ Odd Hours

Weekends

Sun	M	T	W	Th	F	Sat
☑	☐	☐	☐	☐	☐	☑

◉ All Day ○ Off ○ Odd Hours

Landmark	○ Inside ○ Outside ◉ N/A
One Time	☐ *Alert one time then deactivate*
Repeat Delay	2 *Minimum minutes between alerts*
Per-Vehicle Delay	20 *Minimum for alerts on same vehicle*
Active	◉ yes ○ no ○ apply date range

Create New Alert

Add or edit this alert. **close**

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> **Note.** You can also investigate low battery issues per vehicle in the Activity Detail Report using the Voltage column. For example, you may notice that a vehicle continues to trigger the battery voltage. The report can show whether that vehicle is frequently left parked for extended periods of time.

If your device includes a backup battery, the switch alert for external power lost will trigger when the tracking device goes from receiving power via the red wire (constant power) to receiving power via the internal device battery. This event may occur when a vehicle has a dead battery or when a device has been removed (possible tampering).

▶ **To set up a Switch Alert for External Power Lost:**

1. From the **Account** menu, click **Manage Alerts**, and then click **Open**.

2. On the Alerts page, click **New Switch Alert** (green plus sign ➕)

3. In the New Alert window, choose the vehicle or group you want to monitor.

4. Modify the **Alert Subject** to "External Power Lost."

5. Enter the email address(es) and SMS number(s) of the person(s) who should receive the alert.

6. Choose whether or not to notifiy the driver with a custom message when the alert is triggered.

7. In the Switch Type area, choose the option for **External Power Lost**.

8. Set your parameters for Weekdays and Weekends.

9. Set landmark preference parameter.

10. If you would like the alert to send notification once then deactivate, check the box next to this option. We recommend not selecting this option for this type of alert.

11. Leave the defaults set for Repeat Delay, Per-Vehicle Delay, and Active settings.

12. Click **Create New Alert**.

How do I proactively detect device issues?

New Switch Alert   ✕

Create new *Switch-Based Alert*

Vehicle	202 Loop ▼
Alert Subject	EXTERNAL POWER LOST
Addresses *Enter one or more email addresses or SMS numbers*	ald@gpsinsight.com

Notify Driver   ☐ Send with note: [   ]
to *current driver* or the *contact info* for the vehicle

In-Cab Notify   ● None   ○ Buzzer   ○ Light   ○ In Cab Alert

Switch Type
* Only supported on select devices.
○ Battery Voltage
● External Power Lost *Alert only for devices with a backup battery*
○ Panic Switch
○ Power Cycle
○ Temperature

Weekdays

Sun	M	T	W	Th	F	Sat
☐	☑	☑	☑	☑	☑	☐

● All Day   ○ Off   ○ Odd Hours

Weekends

Sun	M	T	W	Th	F	Sat
☑	☐	☐	☐	☐	☐	☑

● All Day   ○ Off   ○ Odd Hours

Landmark   ○ Inside   ○ Outside   ● N/A

One Time   ☐ *Alert one time then deactivate*

Repeat Delay   [2]   *Minimum minutes between alerts*

Per-Vehicle Delay   [20]   *Minimum for alerts on same vehicle*

Active   ● yes   ○ no   ○ apply date range

Create New Alert

Add or edit this alert.   **close**

Performance Check

The Performance Report shows how long vehicles have been stopped the last time the device reported. To proactively monitor devices, schedule this report daily or weekly and sort by "Days Stopped" and "Last Reported" to quickly identify vehicles that need attention.

▶ **To schedule a Performance Report:**

1. From the **Account** menu, click **Manage Reports**, and click **Open**.

   The Scheduled Reports page opens in a new browser tab.

1. From the Report List grid, click **New Scheduled Report** (green plus sign ➕) next to the **Performance Report**.

> 📝 **Note.** You can also invoke a new scheduled report from within an existing report window ("Schedule This" button).

1. In the Setup Scheduled Report window, choose the vehicle, group, or hierarchy you want to include in the report.

2. Modify the **Schedule** (frequency) to "Daily" or "Weekly."

3. Modify the **Email Subject** as needed.

4. Enter the email address(es) of the person(s) who should receive the report.

5. Choose to add Stop Duration, Non-Reporting, or Voltage Below parameters. If you choose one of these items, only the vehicles that match the criteria will be included in the report. If you choose MORE than one of these options, the system treats them as "AND" operators. In the example below, we chose two options (i.e., stopped for five days AND non-reporting for two days), which means both of those requirements must be true for a vehicle to be included in the report.

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1. Choose your sort preference for how you want data to be grouped in the report. We chose "Reported."

2. Leave the defaults selected for Email Body, Attachments, and Active settings.

3. Click **Schedule Report**.

When the report is delivered, you can immediately identify any vehicle that has not reported for a number of days and further investigate the cause. Click the last reported time to open the vehicle's Activity Detail report:

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Performance Report »

Performance Report

▽ Vehicle	Ignition	Voltage	Reported	Stopped	Location	Hierarchy Node
AL Dodge 3900i	Off	no data	2 hours ago	2 hours ago	Anthem LLC	Phoenix
AL Liberty	Off	12.3v	2 hours ago	2 hours ago	Headquarters	Globe
APH PNP	Off	13.0v	86 minutes ago	86 minutes ago	Test ABC	Williamson

click to run Activity Detail Report

Use the Activity Detail report to see an overview of each update for a selected vehicle. It includes a Voltage column so you can see the battery level at each report point to help identify vehicles with battery issues. You can see the longer a vehicle is parked without running, the lower the battery level drops. This report is also useful should you need to do troubleshooting; it's a first step your team can use before calling Support.

Activity Detail Report »

Selected Vehicle: 50

Thursday, September 24, 2015

▽ Time	Driver	Ignition	Max Speed	Avg Speed	Distance	Odometer	Voltage	Run Time
5:00:01 AM	not set		0 mph	0 mph	0.0 mi.	114,488.5	11.9v	3.3 hrs

Friday, September 25, 2015

▽ Time	Driver	Ignition	Max Speed	Avg Speed	Distance	Odometer	Voltage	Run Time
5:00:01 AM	not set		0 mph	0 mph	0.0 mi.	114,488.5	11.9v	3.3 hrs

Saturday, September 26, 2015

▽ Time	Driver	Ignition	Max Speed	Avg Speed	Distance	Odometer	Voltage	Run Time
5:00:01 AM	not set		0 mph	0 mph	0.0 mi.	114,488.5	11.9v	3.3 hrs

Sunday, September 27, 2015

▽ Time	Driver	Ignition	Max Speed	Avg Speed	Distance	Odometer	Voltage	Run Time
5:00:01 AM	not set		0 mph	0 mph	0.0 mi.	114,488.5	11.9v	3.3 hrs

Monday, September 28, 2015

▽ Time	Driver	Ignition	Max Speed	Avg Speed	Distance	Odometer	Voltage	Run Time
5:00:01 AM	not set		0 mph	0 mph	0.0 mi.	114,488.5	11.8v	3.3 hrs

More reference materials:

How do I proactively detect device issues?

- Location of your car or truck incorrect on the map? Check out How Accurate is GPS Technology?

- Out of drive time? View Beginning Your Shift.

- Drive time not showing on the logs? Check out Exploring the Driver Portal.