**Troubleshoot Battery Health Windows**

1. **How to compare the battery health of the Windows with its original time?**

At first, open the command line interface and type powercfg /batteryreport. It will show you the entire report of your battery health.

**Key Points**

1. **What It Does:**
   * Generates a report showing battery usage, capacity, and charging patterns.
   * Helps identify how well the battery is performing over time.
2. **Output:**
   * By default, the report is in **HTML format** and saved in the current folder. You can specify a custom file name and location.
   * You can also generate the report in **XML format**.
3. **Duration:**
   * You can specify the number of days to analyze. If not provided, it analyzes the entire available history.

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Description automatically generated**How to Use the Report**

1. Open the **HTML report** in a web browser.
   * Check for details like:
     + Battery capacity over time.
     + Number of charge cycles.
     + Power usage patterns.
2. Use this information to:
   * Monitor battery health.
   * Identify if the battery needs replacement.

By running this command, you can gain valuable insights into your device's battery performance and usage trends!

**Let’s analyze a report:**

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This is a **Battery Life Estimates** table generated from the powercfg /batteryreport command. Let me explain the sections and what they mean in a simple way:

**Sections in the Table**

1. **Period:**
   * Shows the date range for the data collected in each row. For example, 2024-09-08 to 2024-09-15 is one observation period.
2. **At Full Charge:**
   * **Active:** Battery life when the device was actively used during the period (screen on, tasks performed).
   * **Connected Standby:** Battery life when the device was in standby mode but still connected to a network.
3. **At Design Capacity:**
   * **Active:** Estimated battery life if the battery were brand new and operating at its design capacity.
   * **Connected Standby:** Estimated standby battery life at design capacity.
4. **Current Estimate:**
   * Combines all observed drains since the operating system (OS) was installed to give an overall view of your battery's performance.

**How to Interpret the Data**

* **Decreasing Numbers:** If the "At Full Charge" values are lower than "At Design Capacity," it shows your battery has degraded over time and no longer holds as much charge as when it was new.
* **Example Row:**
  + For 2024-12-10 to 2024-12-11:
    - **Active at Full Charge:** 2:15:52 (actual usage time).
    - **Active at Design Capacity:** 2:31:41 (what it would be if the battery were new).
  + This suggests some degradation in battery health.
* **Significant Differences:** If "At Full Charge" is much lower than "At Design Capacity," it might be time to consider replacing the battery.

**What This Means for Your Device**

* The **Current Estimate Since OS Install** at the bottom provides an overall summary:
  + **Active:** 2:47:18 (average active usage time).
  + **Connected Standby:** 20:48:36 (average standby time).
  + Compare these to the "At Design Capacity" values to see how much battery life has reduced over time.

**Actionable Tips**

1. If your "At Full Charge" numbers are consistently much lower than "At Design Capacity," the battery health has deteriorated.
2. Optimize battery life by:
   * Reducing screen brightness.
   * Closing unused apps.
   * Turning off features like Wi-Fi or Bluetooth when not in use.
3. Replace the battery if the difference becomes significant and performance impacts daily use.