



For troubleshooting double unit adapter issues:

Check with a known good power cord

If the system works fine, then replace the power cord Else if issue persists, check with a known good adapter If the system works fine, then replace the adapter

To reconfirm the same, you could try swapping the suspected part on another system

Before replacement check for CID on the adapter, the adapter pin and power cord

Validate adapter's Barcode before processing for replacement

Dispatch Part as identified (Adapter/Power Cord/USB cable)

If customer says, he doesn't have a swap option

Check adapter LED and battery charging indication, if both are inactive then adapter could be suspected If the adapter LED and battery charging indication are active, check with L1.5 for further steps

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Ask customer to share the faulty adapter's barcode and you validate the same from CRM. Let's see how:

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Select parts look up, enter the system's serial number, select country and check for the barcode, if it's matching process for replacement



Apart from adapter not charging issue, customers might report various other issues related to adapter. Let's look at the same

If customer complains of liquid seeping out from adapter or issue with barcode, it is a safety issue so, check CID

If the customer complains about adapter, pin, or power cord being damaged, then check CID

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If there's a Barcode mismatch:

Check if the adapter was previously replaced, if so, check for the replaced adapter's barcode in the SO

Open the SO in which the adapter was replaced

Go to Items tab >> click on the edit option

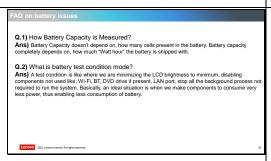
corresponding to the adapter part whose part status is closed and not cancelled Slide 12 Now you will find the replaced barcode's number as shown in the image Now you will find the replaced barcode's number as shown in the image If adapter wasn't replaced; however, the adapter barcode mismatched then de If adapter wasn't replaced; however, the adapter barcode mismatched then deny warranty replacement Slide 13 Customers might report a tingling sensation while using the system on adapter mode The tingling sensation might occur on any exposed metal surface, it's a known factor in the PC Industry; hence, educate the customer that this is the design of the

		product and there is no harm because it is common on many modern systems.
		If the customer still doesn't agree, please recommend a 3 pin adapter and power cord irrespective of the type of adapter that was shipped with the system.
Slide 14	Battery guide & issues Types of battery, guide, battery report, and troubleshooting steps 2011 Lance Internet All option records 1	



There are two types of battery, namely, Lithium ion batteries or Lilon, which are the current standard for notebooks and the other type is Lithium polymer batteries or LiPo, which are the new standard for ultrathin devices. Note that batteries are consumable product, which means the Lifespan decreases over time, depending on how the battery is used and charged.

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Q.1) How Battery Capacity is Measured?

Ans) Battery Capacity doesn't depend on, how many cells present in the battery. Battery capacity completely depends on, how much "Watt hour" the battery is shipped with.

Q.2) What is battery test condition mode?

Ans) A test condition is like where we are minimizing the LCD brightness to minimum, disabling components not used like, Wi-Fi, BT, DVD drive if present, LAN port, stop all the background process not required to run the system. Basically, an ideal situation is when we make components to consume very less power, thus enabling less consumption of battery.

Q.3) How to find designed voltage and Watt hour?

Ans) Go To Part Lookup >> check battery description to find Designed Voltage and Watt Hour

Slide 17 Q.6) How to check current Q.6) How to check current Wattage (power Consumption) of the system? Ans) Go to Lenovo Vantage >> Device >> My Device Settings >> See Battery Details Wattage (power Consumption) of the system? Ans) Go to Lenovo Vantage >> Device >> My Device Settings >> See Battery **Details** Slide 18 Q.7) How to check battery Q.7) How to check battery status? Ans) Go to Lenovo Vantage >> Device >> My Device 37. If the Battery Status is Bad, Weak or Poor replace Battery under 1 year warranty from DOP If the Battery Status is Good, need further validation status? Ans) Go to Lenovo Vantage Q.8) How to generate battery report? Ans) On the command prompt, type: Windows 7: powercfg energy >> Device >> My Device Windows 10: powercfg /batteryreport Command to generate 14 days battery usage report in Windows 10: Powercfg /batteryreport /duration 14 settings If the Battery Status is Bad, Weak or Poor replace Battery under 1 year warranty from DOP If the Battery Status is Good, need further validation Q.8) How to generate battery report? Ans) On the command prompt, type: Windows 7: powercfg energy

Windows 10: powercfg /batteryreport

Command to generate 14
days battery usage report in
Windows 10: Powercfg
/batteryreport /duration 14

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Let's talk in detail about battery report.

To generate a Battery Report on Windows 10, here's what you'll do:

Press Windows Key + X to open the command prompt (admin) or, in some systems, Windows powershell (Admin)

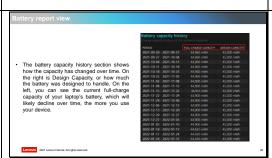
When Command Prompt opens, enter the powercfg

/batteryreport command and run it Slide 20 Windows 10 will create a report in your user account's directory after running this command Open Windows File Explorer and access the Windows (C:) drive. There you should find the Battery Report saved as an HTML file, which will open in your web browser.

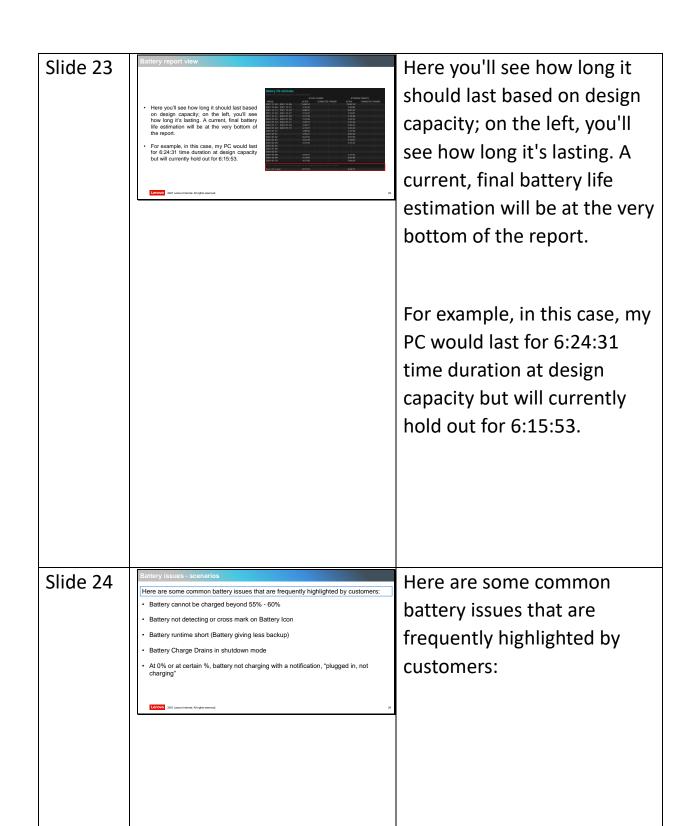
Slide 21 - The report will outline your laptop battery's health, how well it has been doing, and how much longer it might last

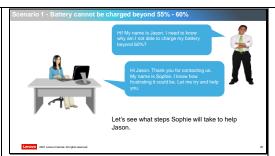
The report will outline your laptop battery's health, how well it has been doing, and how much longer it might last

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The battery capacity history section shows how the capacity has changed over time. On the right is Design Capacity, or how much the battery was designed to handle. On the left, you can see the current full-charge capacity of your laptop's battery, which will likely decline over time, the more you use your device.





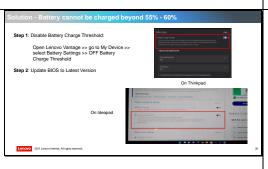
Here's a scenario of battery cannot be charged beyond 55% - 60%:

Customer – "Hi! My name is Jason. I need to know why am I not able to charge my battery beyond 60%?"

Agent – "Hi Jason. Thank you for contacting us. My name is Sophie. I know how frustrating it could be. Let me try and help you."

Let's see what steps Sophie will take to help Jason.

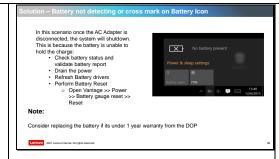
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Step 1: Disable Battery Charge Threshold:

Open Lenovo Vantage >> go to My Device >> select Battery Settings >> OFF Battery Charge Threshold

Step 2: Update BIOS to **Latest Version** Slide 27 Here's a scenario of audio port not working. Customer – "Hi! My name is Leticia. I'm facing an issue with the battery icon. Although I've connected the charger, there is cross mark on the icon. Is the battery getting charged?" Let's see what steps John will take to help Leticia.



In this scenario once the AC Adapter is disconnected, the system will shutdown. This is because the battery is unable to hold the charge:

Check battery status and validate battery report

Refresh Battery drivers

Perform Battery Reset

Open Vantage >> Power >> Battery gauge reset >> Reset

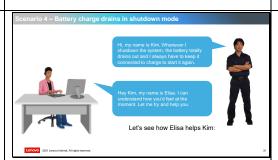
Note:

Consider replacing the battery if it is under 1 year warranty from the DOP

Slide 29 Here's a scenario of low sound quality issue Agent – "Hi, this is Christina. The battery of my laptop is giving less backup. It discharges very soon. What's the issue with it?" Customer – "Hi Christina, my name is Blake and I'll surely help you with the issue." Let's see how Blake helps Christina. Slide 30 Step 1 Check Battery Ageing ep 1 Check Battery Ageing 2: Check Battery status Ask customer the system Step 4: Undate Latest BIOS DOP Check system manufacturing

date from CSP

Step 2: Check Battery status
If battery status is Bad, Weak or Poor, replace battery under 1 year warranty from DOP
If Battery status is Good, follow below troubleshooting steps
Step 3: Generate and Validate Battery Report
Step 4: Update Latest BIOS
Step 5: Perform battery calibration
Note:
Consult L1.5 for further assistance



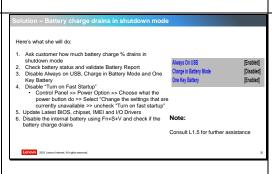
Here's another scenario related Dolby sound issue.

Customer – "Hi, my name is Kim. Whenever I shutdown the system, the battery totally drains out and I always have to keep it connected to charge to start it again."

Agent – "Hey Kim, my name is Elisa. I can understand how you'd feel at the moment. Let me try and help you."

Let's see how Elisa helps Kim.

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Here's what she will do:

Ask customer how much battery charge % drains in shutdown mode

Check battery status and validate Battery Report

Disable Always on USB, Charge in Battery Mode and One Key Battery

Disable "Turn on Fast Startup"

Control Panel >> Power
Option >> Choose what the
power button do >> Select
"Change the settings that
are currently unavailable >>
uncheck "Turn on fast
startup"

Update Latest BIOS, chipset, IMEI and I/O Drivers

Disable the internal battery using Fn+S+V and check if the battery charge drains

Note:

Consult L1.5 for further assistance



Here's a scenario of low sound quality issue

Customer – "Hi, this is Martina. The battery of my laptop suddenly shows a notification "plugged in, not charging". This often happens when battery is charged till 89%. Why is that happening?"

Customer – "Hi Christina, my name is Blake and I'll surely help you with the issue."

Let's see how Blake helps Christina.

Solution - Battery doesn't charge at certain point; shows notification Here's what he'll do: Step 1: Ask customer what is the current battery % Step 2: Check battery status and Validate Battery Report Step 3: Drain the power Step 4: Check if the system shutdowns after disconnecting the AC Adapter Step 5: Try updating BIOS to latest version, if there is more then 30% charge in the battery Step 6: Try charging the battery in shutdown mode **Step 6: Try charging the battery in shutdown mode** **In order to protect the battery when it is fully charged; fivil not start re-charging until it discharges below 35% **A discharges belo

Here's what he'll do:

Step 1: Ask customer what is the current battery %

Step 2: Check battery status and Validate Battery Report

Step 3: Drain the power

Step 4: Check if the system shutdowns after disconnecting the AC Adapter

Step 5: Try updating BIOS to latest version, if there is more then 30% charge in the battery

Step 6: Try charging the battery in shutdown mode

Note: If the battery is at 0% and system shutdowns after disconnecting the AC Adapter, Dispatch battery In order to protect the battery when it is fully charged, it will not start recharging until it discharges below 95% Slide 35 Now, let's understand when you'll refer to PD guide whenever a customer Remember – Following the PD guide is mandatory for any technical query that a customer may have. If you don't find their query listed on the drop down, select 'PD not found'. contacts you. **Remember** – Following the PD guide is mandatory for any technical query that a customer may have. If you don't find their query listed on the drop down, select 'PD not found'.

Slide 36	Summarize Learning Outcomes: Define types of adapters and batteries Epiden what type of solutions to be provided when a customer raises an issue with battery and adapter List out the steps of troubleshooting	
Slide 37	thanks.	