

Support Guide – Hylas 2

Purpose

The purpose of this support guide is to provide a high level check list of pointers for our service partners to use to assist with troubleshooting end user and engineer related faults. This document is to be shared with Avanti's service partners only and is not to be shared externally without consent of Avanti Communications Group plc.

How to troubleshoot customer related Issues:

Customer is not able to connect or browse to the internet

- If multiple customers are reporting this issue please provide at least 3 examples and results from testing on your reference terminal.
- Request timeframes for when this issue first occurred from your customer, as Avanti will require dates if classed as an intermittent fault
- Check signal graph in the OSS, has there been any degradation which could warrant a service visit?
- Confirm if customers service is under suspension for example billing suspension
 - If not suspended please continue to follow all steps below;
- Request light status of the terminal from your customer
 - If the terminal has no power, please follow steps found [here](#).
 - If the terminal has no light on the LAN, please follow steps found [here](#).
 - If the terminal has all 5 lights on, can the customer provide a trace route to 8.8.8.8
 - Can the customer ping out to the internet? Note any packet loss and the average latency
 - Can you ping the terminal remotely? Note any packet loss and the average latency
- Request that the customer removes any 3rd party equipment and connected a single PC or Laptop directly to the terminal
 - This should be verified by confirming the connected devices in the ARP tables and making sure the device can see the terminal
 - Ensure customer LAN settings are set correctly depending on IP configuration
 - Ensure the device has the correct DNS settings as per below parameters, depending on the hub that the terminals are provisioned and installed on ;
 - GHY DNS IPs: 88.210.191.34 / 88.210.191.39
 - GH2 DNS IPs: 88.210.184.129 / 88.210.184.130
 - HAM DNS IPs: 88.210.185.129 / 88.210.185.130
 - CYP DNS IPs: 88.210.186.129 / 88.210.186.130
- Request a reboot of both the terminals and customer equipment
- Rule out any weather related events or similar
 - This should be verified by checking signal levels on a nearby terminal
- Request that the customer logs into the terminal GUI and provides the following information
 - Tx/Rx status of the terminal (TX8/RX5 is considered as normal)
 - For further information around TX and Rx error codes please visit your [Welcome Pack](#) on page 81.
 - Signal strength of the terminal (system status page)
 - If possible confirm if GPS coordinates are correct in the terminal as this could cause connectivity issues if wrong
- Request for the terminal to be forced ranged from the GUI –(<http://192.168.0.1/fs/advanced/advanced.html>)
 - On the left hand Navigation Pane select **Installation** and then **Force Range**. On the pop up window select **Force Range** and record the results.
 - Once the force ranging is done please re-check the Tx and Rx Code.

- If the customer is still unable to connect please escalate to Avanti Technical Helpdesk and provide the information listed above along with the Terminal or Customer ID.

Terminal has no power

- Check that all power connections are secure
 - If AC power is connected to a power surge strip or surge protector, ensure it is turned on
 - If the power connections are secure, customer to power cycle the modem
 - Unplug Power cord from the power source. Do not remove the DC Power cord from the modems' rear panel. Doing so could result in an electrical shock or damage to the modem.
 - IF DC power unplug input cable modem power supply
 - Wait 10 seconds
 - Plug the power cord back into the power source
 - If the power source is DC, plug the input cable back into the power supply.
 - Customer to try another power outlet and Mode
 - If Power outlet fully operational then power supply might be defected.
 - If modem is fully operational then modem might be defected.
 - Check both Tx and Rx cables and ensure there is not short in the cable.

Terminal has no LAN light on

- Ask customer to reconnect network cable or replace with different one.
- Please check with the customer that the network card is ON and it's configured correctly.
- Check the Ethernet port at the back of the modem and check if there is a green or orange light on
- Try a different Laptop.
 - If the light comes on then the issue may point to the Network Adaptor of the previous Laptop
 - If the light does not come on then test with another modem and check connectivity.

Customer reporting unable to browse to a specific web site

- Confirm with the customer that it is only a specific web site affected, if multiple sites affected then follow the steps found [here](#).
- Are you able to replicate the issue using your reference terminal? If you are unable to reproduce the error, it's like likely to be a Local Issue.
- Is the web site reachable when customer connects 1 PC/Laptop directly into the terminal? If so it's like likely to be a Local Issue.
- Is web acceleration disabled from the terminal? If so, please enable and retest.
- Is the web site reachable by using an alternative web browser? If so it's like likely to be a Local Issue.
- If the customer is still unable to browse to a specific website, please escalate to Avanti Technical Helpdesk and provide the information listed above.

Customer is reporting slow speeds

- Ensure that there is not a signal issue or packet loss issue that could be causing slow speeds
- Ensure the end user is using the Avanti Speed test (speedtest.avantiplc.com)
- Verify 3rd Party all equipment is removed (can be confirmed by checking ARP table)
- Customer to run Avanti Speed Test 3x during the day (Morning, Afternoon, Evening) if possible.
- Perform the FTP speed test using Filezilla or similar FTP client
- Check that the customer SLA is correct and profiles under Hughes Tasks
- Check that the customer is not in a throttle state or not in steps e.g. EAUP policy – allowing different speed depending on the amount of downloaded data

Customer is reporting Issue with VOIP services

- Confirm that there are no general issues that could be affecting the service; this includes all points covered [here](#) for the connectivity as well as all points covered [here](#) for slow speeds of there is a fault with the VOIP service.
- Confirm that a SIP based service is in use behind the remote and not Skype
- Educate the customer that simultaneous use of VOIP with other services is causing performance problems, often the need for additional bandwidth can thus be avoided
- Obtain overview of service being used behind the remote, i.e. hardware, software, model type, any specific codecs that are in use (*this can be obtained from the SIP provider or manufacturer*)



- Obtain Minimum bandwidth used per SIP call (*this can be obtained from the SIP provider*)
- Obtain Number of simultaneous calls that are being made at any one time
- Obtain the SIT IDs for the terminals on which you want QoS enabled.
- If the customer is still having problems with the service, please escalate to Avanti Technical Helpdesk and provide the information listed above as well as any other relevant information.

Customer is reporting Issue with Skype services

We do not guarantee the availability or quality of Skype. However we would recommend that the service is used off peak and not simultaneously to other applications such as Peer-to-Peer to maximise the performance of the service.