



1. Physical power cord – connection check:

- ☐ - Check physical power-cord connection between Computer and the wall-outlet.
- ☐ - Check physical power-cord connection between Lan-to-Wan router and the wall-outlet.
- ☐ - Check physical power-cord connection between other peripheral devices and the wall-outlet.



2. Physical Internet cable – connection check:

- ☐ - Check physical connection between Lan-to-Wan router and Internet Service Provider wall-connector.
- ☐ - Check physical connection between Computer's network card and the Lan-to-Wan router.
- ☐ - Turn on the Lan-to-Wan router.
- ☐ - Check the status-lights on the Lan-to-Wan router. (to see if it operates correctly).



3. Physical Computer hardware equipment check:

- ☐ - Check all hardware cables from the Computer to all external devices:
 - ☐ – Monitor(s),
 - ☐ – Keyboard,
 - ☐ – Mouse,
 - ☐ – Joystick,
 - ☐ – Yoke,
 - ☐ – Throttle quadrant,
 - ☐ – Rudder pedals,
 - ☐ – Other USB connected devices.
- ☐ - Power ON all external devices first! (so you computer can detect them at start-up)
- ☐ - Power ON on your flight-simulation computer monitor.
- ☐ - Power ON on your flight-simulation computer.
- ☐ - Check if the computer monitor shows no errors on screen during computer start-up (boot).



4. Physical Computer to Lan-to-Wan router check:

- ☐ - Check if the network connection status-light is ON on your Lan-to-Wan router.
- ☐ - Check if the Yellow led-light at your computer's network-card is ON. (permanently).
- ☐ - Check if the Green led-light at your computer's network-card is Blinking (once in a while).



5. Computer Operating System (Windows 7) check:

- ☐ - Login to the Windows Operating system with the User Account that you use for flight-simulation.
- ☐ - Check if this Windows User Account has Administrator Rights.



5A. Computer Operating System – Error Log check:

- ☐ - Check the Windows Error logs for any (new) errors *and solve them first before continuing!*



5B. Computer Operating System – Windows Update Service check:

- ☐ - Check the Windows Update Service status for any errors *and repair them before continuing!*
- ☐ - Turn OFF the Windows Update Service before flight-simulation.



5C. Computer Operating System – Network Card check:

- ☐ - Check on the Windows Taskbar to see if the Network status icon shows up. (without errors).
- ☐ - Go to [**Windows Control panel**],[**Network Center**],[**Lan-Connection**]
- ☐ - Check if the “Sent Bytes” / “Receive Bytes” counters are increasing.
- ☐ - Click on [**Details**] to see the Network Card connection details.



5D. Computer Operating System – TCP-IP protocol stack check:

- ☐ – Write down your:
 - Own IP address : _____.____.____.____
 - Default Gateway IP address : _____.____.____.____
 - DNS server 1 IP-address : _____.____.____.____
 - DNS server 2 IP-address : _____.____.____.____
- ☐ – Close [Details].
- ☐ – Close [Lan Connection Status].
- ☐ – Close [Network Centre].



6. Computer ↔ Lan-to-Wan router – Logical connection check:

- ☐ - Go to the Windows Desktop and open a command-line window: [Start],[Run],[“cmd.exe”],[Ok]
- ☐ - Enter: “**Ping 127.0.0.1<enter>**”
- ☐ - Enter: “**Ping Own IP-address<enter>**” → Example: ping 192.168.0.2<enter>
- ☐ - Enter: “**Ping Default Gateway IP-address<enter>**” → Example: ping 192.168.0.1<enter>
- ☐ - Close the command-line window, by entering the command “**exit<enter>**”.



7. Computer ↔ Internet Service Provider DNS server – Logical connection check:

- ☐ - Go to the Windows Desktop and open a command-line window: [Start],[Run],[“cmd.exe”],[Ok]
- ☐ - Enter: “**Ping “DNS server 1 IP-address<enter>**” → Example: ping 83.136.192.3<enter>
- ☐ - Enter: “**Ping “DNS server 2 IP-address<enter>**” → Example: ping 83.136.192.14<enter>
- ☐ - Close the command-line window, by entering the command: “**exit<enter>**”.



8. Computer ↔ IVAO website – Logical connection check:

- ☐ - Go to the Windows Desktop and open a command-line window: [Start],[Run],“cmd.exe”,[Ok]
- ☐ - Enter: “**Ping** www.ivoa.aero<enter>”
- ☐ - Close the command-line window, by entering the command “**exit**<enter>”.



9. Check IVAO Server(s) availability via the “IVAIO HeartBeat” website:

- ☐ - Go to Windows Desktop and open a internet browser.
- ☐ - Enter the following URL into the internet browser: <https://heartbeat.ivoa.aero/>
- ☐ - Go to [Network Servers]-Tab.
- ☐ - Check which servers are green-coloured.(that are the IVAO network servers that are up-and-running right now).
- ☐ - Close the internet browser again.



NOTE: The IVAO Heartbeat page only shows which servers are turned ON and up-and-running.

This information says **ABSOLUTELY! NOTHING!** about the **QUALITY** and **RELIABILITY** of the internet connection from your computer to that specific IVAO server.

That is something you have to check (manually) before connecting to any of the IVAO servers!



10. Computer ↔ IVAO FSD Servers (“IvAp”/ “IvAc”) – Logical connection quality check:

- ☐ - Go to the Windows Desktop and open an internet browser.
- ☐ - Enter the following URL in the internet browser: <http://api.iviao.aero/getdata/whazzup/whazzup.txt>
- ☐ - Go to the bottom of the Whazzup file and write down the **!SERVER** information:
 - EU2 : ____:____:____:____
 - EU21 : ____:____:____:____
 - EU3 : ____:____:____:____
 - EU4 : ____:____:____:____
 - EU6 : ____:____:____:____
 - HUB : ____:____:____:____
 - LOG : ____:____:____:____
- ☐ – Close internet browser again.

- ☐ – Go to the Windows Desktop and open a command-line window: [Start],[Run],[“cmd.exe”],[Ok]
- ☐ – Ping every FSD server and write down the ping-time and %packet loss:
 - EU2 : Ping-time: _____ ms Packet-loss%: _____
 - EU21: Ping-time: _____ ms Packet-loss%: _____
 - EU3 : Ping-time: _____ ms Packet-loss%: _____
 - EU4 : Ping-time: _____ ms Packet-loss%: _____
 - EU6 : Ping-time: _____ ms Packet-loss%: _____
- ☐ – Close the command-line window, by entering the command “**exit<enter>**”.



11. Computer to IVAO Voice Servers (“Teamspeak”) – Logical connection quality check:

- ☐ - Go to the Windows Desktop and open an internet browser.
- ☐ - Enter the following URL in the internet browser: <http://www.iviao.aero/whazzup/voice.asp>
- ☐ - Go to the bottom of the Voiceserver file and write down the **!VOICE SERVERS** information:
 - EU2V1 : ____:____:____:____
 - EU3V1 : ____:____:____:____
 - EU4V1 : ____:____:____:____
 - EU6V1 : ____:____:____:____
 - EU16V1 : ____:____:____:____
 - EU17V1 : ____:____:____:____
- ☐ – Close internet browser again.
- ☐ – Go to the Windows Desktop and open a command-line window: [Start],[Run],[“cmd.exe”],[Ok]
- ☐ – Ping every TeamSpeak server and write down the ping-time and %packet loss:
 - EU2V1 : Ping-time:_____ ms Packet-loss%:_____
 - EU3V1 : Ping-time:_____ ms Packet-loss%:_____
 - EU4V1 : Ping-time:_____ ms Packet-loss%:_____
 - EU6V1 : Ping-time:_____ ms Packet-loss%:_____
 - EU16V1: Ping-time:_____ ms Packet-loss%:_____
 - EU17V1: Ping-time:_____ ms Packet-loss%:_____
- ☐ – Close the command-line window, by entering the command “**exit<enter>**”.

End of the IVAO Network Connection Trouble Shootings Guide – Computer Startup Checklist