

# FIRST STEPS - TROUBLESHOOTING LAN - ISSUES

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## STEP-BY-STEP ANALYSIS

If you encounter a problem with your LAN-connection or LAN-card, you can perform these first steps, to eventually find the root-cause of the issue:

### ■ 1. Step: Ping

- Ping possible? (ping another client in the network, router, server, etc.)
  - Yes – go to 5. Step
  - No – go to 2. Step

### ■ 2. Step: Link

- Is there a link between your two devices (LED indicator, network connection properties)?
  - Yes – go to 4. Step
  - No – go to 3. Step

### ■ 3. Step: Cable

- LAN-cable plugged to the system?
- LAN-cable plugged to the switch/router/server/etc.?
- Is the switch/server running?
- Is the LAN-card enabled in the BIOS?
- Does the LAN-card show up in the device-manager?
- Do you have the proper and current drivers installed for this device? (<http://support.ts.fujitsu.com/com/support/downloads.html>)

### ■ 4. Step: IP

- Does the LAN-card show up in the device-manager?
- Do you have the proper and current drivers installed for this device? (<http://support.ts.fujitsu.com/com/support/downloads.html>)
- Does your client have an IP-address?
- Is this the correct IP-address? (DHCP-range? Set IP manually in the correct network? "ipconfig /all")
- Is the subnet mask correct?
- Do you see other clients/devices in the network?
- Can other clients/devices see you in the network?

### ■ 5. Step: Firewall

- Do you have the proper and current drivers installed for this device? (<http://support.ts.fujitsu.com/com/support/downloads.html>)
- Is there a personal firewall running (Windows-firewall, Zone-Alarm, or similar tools)?
  - Yes – end/disable your firewall and test again.
  - No – go to 6. Step

### ■ 6. Step: DNS

- If your problem is DNS-related, check the according settings. Clear the DNS-cache/-entries and reboot.  
(Start – Run... – "cmd" – "ipconfig /flushdns")

### ■ 7. Step: Software/tool/program/service

- Are you using any special tool (for LAN-connections or –services) or LAN-services (e.g. VPN)?
- If you got to this Step and the problem still exists, check the configuration of any used tool/software/service (if available).
- If the problem still persists, it is either software-related or caused by the driver/firmware/BIOS. In this case – further investigations are needed.
- You can also try to reinstall the system and make sure not to install/use any special software or tool.

## GENERAL NOTE

In any case, you should always stick to the following rule:

**"IF ANY PROBLEM OCCURS, ALWAYS MAKE SURE TO UPGRADE TO THE LATEST BIOS-, DRIVER- AND SOFTWARE-VERSION AND CHECK, IF THE ISSUE STILL EXISTS!  
ALSO UPDATE YOUR USED HARDWARE IF POSSIBLE! (FIRMWARE-UPDATE FOR SWITCH, ROUTER, ETC.)"**

You can find the latest drivers, firmware- and BIOS-files etc. on the Fujitsu-support page or on the according devices manufacturer homepage (e.g. Intel).  
(<http://support.ts.fujitsu.com/com/support/downloads.html>)