



Network configuration guide for 3DGence CLOUD and 3DGence Slicer 4.0

Printer Type	Printer Serial Number	Printer MAC address

Dictionary of useful terms:

- *network infrastructure devices - configurable switches, routers, servers;*
- *firewall - software or hardware with software, responsible for filtering traffic between the external network and the internal network;*
- *external network - any network outside the internal network (LAN), e.g. Internet, network between MikroTik, and printer.*

This document contains recommendations for diagnosing connection problems with 3DGence products. If connection problems aren't present, don't change anything in your network infrastructure settings and firewalls.

Connecting to the printer using 3DGence Slicer 4.0 (LAN):

To ensure that the printer connects to 3DGence Slicer 4.0 on the local network (LAN) the following conditions must be met:

1. The printer and computer using 3DGence Slicer 4.0 are within the same network;
2. devices and firewalls are configured to allow data traffic between the printer and the 3DGence Slicer 4.0 application.

To verify that the condition in section 1 is met, use ping command to check if there is a clear connection between the printer and the computer (the IP address of the printer can be found on the printer info screen).

To meet the condition in section 2, it is required to configure following rules to allow data traffic:

- TCP packet traffic permission for ports 13526 and 13888 on the local network;
- traffic permission for UDP data packets for ports 13122 and 13123 on the local network.



Connecting printer to the 3DGence CLOUD service:

To ensure that your printer connects to 3DGence CLOUD service, the following conditions must be met:

1. Printer is connected to the Internet using an Ethernet cable or Wi-Fi adapter;
2. the network is not under heavy load and the connection is fast enough not to exceed the response time between the printer and the 3DGence CLOUD service – the allowable response time between the printer and 3DGence CLOUD service is 1 min;
3. allow connection to 3DGence CLOUD service from the printer menu;
4. appropriate configuration of network infrastructure devices and firewalls.

Points from 1 to 3 can be met or the problem can be diagnosed with network diagnostic tools (e.g. ping, trace, etc.) and by observing the printer screen.

Point 4 can be achieved by setting the appropriate rule to allow data traffic:

- TCP data packet traffic permission for port 8001 for an external network.

Connecting 3DGence Slicer 4.0 to 3DGence CLOUD service (downloading current printing profiles):

To ensure that 3DGence Slicer 4.0 is connected to a 3DGence CLOUD service, the following conditions should be met:

1. Maintain internet connection on a computer that has the 3DGence Slicer 4.0 application;
2. add the appropriate configuration of network infrastructure devices and firewalls.

Point 2 can be achieved by setting the appropriate rule to allow data traffic:

- TCP data packet traffic permission for port 8081 for an external network.