

Troubleshooting Firewalls

1|Overview

The GW-301 Gateway utilizes HTTP, HTTPS, and TCP connections to the NextCentury Cloud servers. Some Ethernet and WiFi network IT Managers employ a firewall or proxy login to increase security and restrict unauthorized access to the network. These restrictions can prevent the Gateway from being able to connect to the NextCentury Cloud.

Network IT Managers can adjust their network policies or specifically “whitelist” the Gateway to allow it to connect.

2|Indications of a Firewall

A firewall or proxy login is likely present if the Gateway has been connected to Ethernet or WiFi, but is still not able to connect to the NextCentury Cloud.

2.1 – Gateway LED Indicators

Immediately upon being plugged in, the Gateway power LED indicator will turn green (Fig. 1). This LED will turn blue when the Gateway successfully establishes a connection to the NextCentury cloud.

If after 3 minutes, the LED is still green, then this is an indication that a connection cannot be established. If the network connection is otherwise valid, this is an indication of a firewall.

Note: if the Cellular has been activated, the Gateway will use that connection to reach NextCentury Cloud. In that case, the LED will be blue even if the WiFi or Ethernet are not allowing a connection. The Direct Connect or Web Portal Network Status can be used to diagnose the Ethernet or Wifi network connection.



Figure 1 – LED Indicators on the GW-301. Powered on (green), but not connected to the NextCentury cloud (blue).

2.2 – Gateway Connection Diagram

The Gateway Connection Diagram (Fig. 2) is available in:

- NCSS Mobile App, during Direct Connect
- Web Portal >> Property Settings >> Gateway Network Connection tab



Figure 2 Gateway Connection Diagram showing a problem (alert icon) between the Router and NextCentury Cloud.

2.3 – Understanding the Connection Diagram

The Connection Diagram shows the network path between the Gateway >> Local Router >> NextCentury Cloud. At the bottom of the diagram, a Cellular enable/disable toggle can be selected.

A green check mark will be displayed a connection has been established to the router and to the cloud. An alert icon will be displayed if a connection cannot be established to the router or to the NextCentury Cloud.

3| Network Configuration

A Firewall policy must allow the Gateway to connect as specified in the tables below.

Allow by Domain	
Domain	Protocol
• Nextcenturymeters.com	• HTTP/HTTPS
• + All sub-domains	• TCP on Port 44444

Allow by IP Number	
IP Number	Protocol
• 52.20.178.43	• HTTP/HTTPS
• 52.55.247.220	• TCP on Port 44444
• 52.55.248.64	
• 52.70.13.159	
• 52.70.33.25	

4| Additional Resources

If there are any questions or concerns related to these guidelines, please contact NextCentury Submetering Systems Product Support:

- Phone: (844) 538.8203 opt. 2
- Email: support@nextcenturymeters.com