



Tech note

Connecting a TapWatch Gateway Through a Firewall

Introduction

This tech note provides the procedure for connecting a TapWatch gateway to the TapWatch application via IP connectivity through a firewall. While there are no open TCP ports or services on a TapWatch gateway, Inovonics does not recommend connecting to an IP network without a firewall to comply with IT best practices for commercial applications.

Materials Needed

- CAT 5e or CAT 6 Ethernet.
- Ethernet router/firewall.
- Internet connection with a minimum of 512 Kbps up and down, and no filtering or proxying of HTTPS outgoing connections.
- Inovonics TapWatch gateway.

To Connect your TapWatch Gateway Through a Firewall

1. Ensure the following for your router:
 - The router must assign addresses via DHCP.
 - The DHCP lease of the router must be set to a non-zero and non-infinite value, and should be set to a value greater than 30 seconds.
 - The router must allow outbound connections on the ports below to connect through the firewall:
 - DNS (UDP 53).
 - HTTPS (TCP 443).
 - NTP (UDP 123).
 - TCP port 9000
 - Ensure the network is not double NATed, where traffic is flowing through multiple routers that are doing network address translation.
2. Install the TapWatch gateway per the *EN7580 TapWatch Gateway Installation Instructions*.
3. Configure the TapWatch gateway for your site per the *TapWatch Application User Manual*.
4. Refer to the Last Sync date in the Network section of the TapWatch application to confirm the gateway is checking.

5. If the gateway fails to sync within 15 minutes, confirm the gateway's power and data connectivity LEDs are solid green and amber, respectively. If they are not, check cabling.
6. If the TapWatch gateway continues to fail to sync, disable auto negotiation and set the network switch port to 100 Mbps Full-Duplex.
7. If the TapWatch gateway continues to fail to sync, contact Inovonics technical support:
 - E-mail: support@inovonics.com.
 - Phone: (800) 782-2709; (303) 939-9336.