

25-Point Gateway Troubleshooting Checklist

This checklist is designed to help system integrators work through gateway-related issues in a logical, field-friendly way before assuming the gateway is the problem. It should be used step-by-step, beginning with basic device, wiring, and network checks, then moving into communication, configuration, and escalation prep. The goal is to isolate the issue faster and make troubleshooting more efficient.

Power and Device Status



- Confirm the source device is powered on.
- Confirm the gateway is powered on.
- Check physical wiring and cable connections.
- Confirm link lights are active where applicable.
- Verify the source device is operating normally and not in fault or startup mode.
- Confirm the source device is communicating on its local side.

Protocol and Serial Settings



- Verify the correct protocol is being used on each side of the integration.
- Check device addresses, IDs, and node numbers.
- Verify serial settings: baud rate, parity, stop bits, and data bits.
- Check wiring is landed correctly and terminated properly where required.

Network Basics



- Confirm the gateway IP address is correct.
- Confirm subnet mask and default gateway settings are correct.
- Check for duplicate IP addresses on the network.
- Confirm the correct switch port, VLAN, or network segment is being used.
- Verify that firewall rules, routing, or port access are not blocking communication.
- Confirm the host system can reach the gateway.
- Confirm the gateway can see the field device.

Data and Configuration Checks



- Check whether Tx Msg and Rx Msg are incrementing in FieldServer Diagnostics.
- Determine whether the issue affects all points or only some points.
- Review point mapping, register references, object definitions, and data types.
- Check scaling, byte order, and value formatting.
- Confirm the active configuration still matches the live system.
- Confirm whether anything changed recently in the device, network, host system, or point list.

Escalation Prep



- Review the error log, connection status, and available diagnostics.
- Collect the configuration file, diagnostic capture, screenshots, and a clear note describing expected versus actual behavior before escalating.

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