

# Q3 Communications Methodology



application for gathering data polled on the controller network, storage of that data and further distribution of alarms. A corporate network connected Q3 utilizes SNMP (Simple Network Management Protocol) traps for passing this data on from the Q3 to the Central Server.

## Q3 Central-Server Operation

The Q3 can also act in concert with a central application server that provides users and administrators a complete experience hosted in a single-server cluster. The server application provides flexibility and tools for more refined reports, demand response algorithms, and all other monitoring & programming related functionality.

In this configuration the Q3 can either communicate utilizing the SNMP protocol, or it can be configured to utilize Q3 gateway initiated Telnet or HTTP requests to the server.

## Bandwidth

Control networks utilizing HTTP or SNMP typically require very little bandwidth. The Q3 further filters data before utilizing the IT network to insure the absolute minimum of network traffic.

## Security

User access & sensitive control related data on the server is SSL supported.

Quest regularly updates software components to meet all security standards. Servers are hosted in a facility requiring multiple levels of security access.

Specific functionality on the server & Q3 can be disabled as needed by client security & installation requirements.

## Other Protocols

**UDP port 2000 (User Datagram Protocol)** – Protocol is only utilized when upgrading the internal Q3 web browser.

**NTP (Network Time Protocol)** – Utilized for maintaining and setting the controller time.