## Modem Emulation

Digi device servers and terminal servers replace modems with Ethernet

### **Overview**

Digi's modem emulation technology enables a networked Digi device server or terminal server to act as a modem to send and receive data over an IP network instead of a PSTN (Public Switched Telephone Network). This means that equipment that was designed only for modem access can now communicate transparently to its corresponding software application across the Ethernet.

### **About Modem Emulation**

Modem emulation allows a user to easily configure a networked Digi device server or terminal server as a modem. The Digi product emulates modem responses to a serial device in the field and seamlessly sends and receives data over an Ethernet network. Embedded, pre-designed devices can treat the Digi device like a modem, but allow it to "dial up" an IP address instead of a phone number. A key benefit is the ability to retain legacy software applications and devices without reprogramming devices in the field. Modem emulation also promotes cost savings by utilizing an IP network instead of a PSTN.

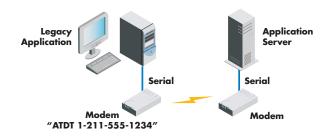
Set-up is easy. First, the serial device in the field, which normally dials a phone number, is configured to dial the IP address of the host it needs to contact. Next, the Digi device server or terminal server is configured for modem emulation using the setup wizard. Now, the serial device thinks it is talking to a modem, when in fact the Digi device accepts the call and converts it into a TCP/IP connection.

Modem emulation can be used to replace the modem at both ends of the connection or on just one end using IP sockets. Common serial devices used with modem emulation include tank gauges, gaming equipment, credit card machines, card swipe readers, traffic control equipment, vending machines, Intelligent Electronic Devices (IEDs), and remote controllers.

# **Products with Modem Emulation Feature**

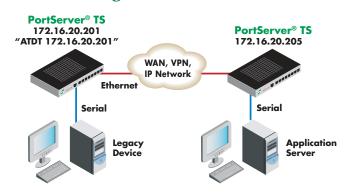
- Digi One® SP
- Digi One IA
- PortServer® TS 8/16
- PortServer TS MEI
- PortServer TS H
- PortServer TS M
- PortServer TS W

#### Without modem emulation



 Application dials a phone number, uses modems to talk over PSTN

### With Digi's modem emulation



- Phone number replaced with IP address of host
- Digi device server or terminal server dials up IP address to communicate over Ethernet

### **Features/Benefits**

Configure Digi device server or terminal server to act as a modem

Allows modem-based legacy devices and software to communicate over TCP/IP

- Save money using IP networking instead of PSTN
- Faster, more cost-effective data transfer



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