General DataComm
The Best Connections in the Business

SCIP Feature Brief

Real-time Contact Sense Throughout Your IP Network

Connectivity & Contact Sensing

In mission-critical applications, network managers need real-time awareness of any environmental changes that may compromise IP connectivity at local or remote sites. As General DataComm's SpectraComm IP card creates a secure and reliable LAN extension to remote sites in your network, it can also monitor and report on up to eight dry contact relays at every location.

SCIP will detect state changes at each contact and report the alarm message across the LAN to an SNMP controller. User-defined alarms such as a breached security door, temperature changes, fire detection, power fluctuations, etc., will be reported in real-time from anywhere in the IP network. *Figure 1* shows alarm status as compiled by SCIP and available at the CLI interface or any SNMP controller.

A Cost Effective Solution

Typically, state changes in contact relays are dispatched to the management station by separate modem / DSU devices and servers connected to LANs at local and remote offices. But the versatile and feature-rich SCIP will continually poll its configured contact ports and send alarm messages without expensive SCADA equipment and monthly line charges. SCIP connectivity with contact sensing simplifies and streamlines network architecture and reduces cost at all LAN-attached office locations *(Figure 2)*.

Streamlined Reporting

When configured for contact sensing and reporting, SCIP's terminal server ports 1 - 8 convert to contact sense ports. An external relay connected between the Xmt and Rcv pins of each port will enable SCIP to sense the state of the relay contacts. All eight ports can be polled very quickly, providing contact sensing for all ports simultaneously.

Each contact port is individually configured by the user as normally opened or normally closed. Any transition between open and closed will generate an SNMP trap which SCIP adds to the message log and alarm log.

Full-Featured & Versatile SCIP

- Operates in LAN-X or router mode.
- Reduces hardware and network maintenance costs by extending LANS & eliminating routers.
- Simplifies inband management of remote sites; Simplifies out-of-band management via external modem or optional integral V.34 modem.
- Scalable, transparent 10 / 100BASE-T Ethernet LAN over Frame Relay or standard T1 / FT1, E1 / FE1, DDS or xDSL circuits.
- Full redundancy and loop elimination with standards-based Spanning Tree Protocol (STP).
- Low cost and the highest "Telco-tough" reliability.
- Reduced power consumption of 6 Watts, max.
- Flexible, compact packaging for remote sites.

Figure 1: CONTACT ALARM MONITORING

Flexible, Secure and SMART

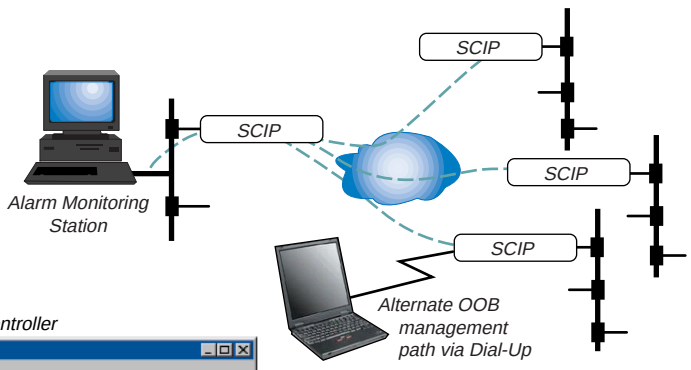
Alarm Status at the SCIP CLI Interface

Contact Status

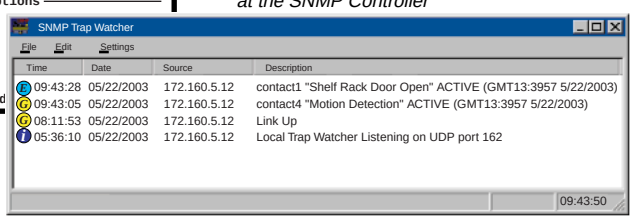
Contact Name	Admin State	Normal State	Current State	Alarm Status
contact1	ON	NC	Open	Active
contact2	ON	NC	Closed	Clear
contact3	ON	NO	Open	Clear
contact4	ON	NO	Closed	Active
contact5	ON	NO	Open	Clear
contact6	OFF			
contact7	ON	NO	Open	Clear
contact8	ON	NO	Open	Clear

Contact Descriptions

contact1 Shelf Rack Door Open
contact2 Hut Door Open
contact3 Smoke Detection
contact4 Motion Detection
contact5 Temperature High
contact6
contact7 Power Fluctuation
contact8 Battery Backup Engaged



Alarm Status at the SNMP Controller



DialUp access is available on SCIP units equipped with an integral modem or operating with an external V.34 modem.

Calculating the SCIP Advantage

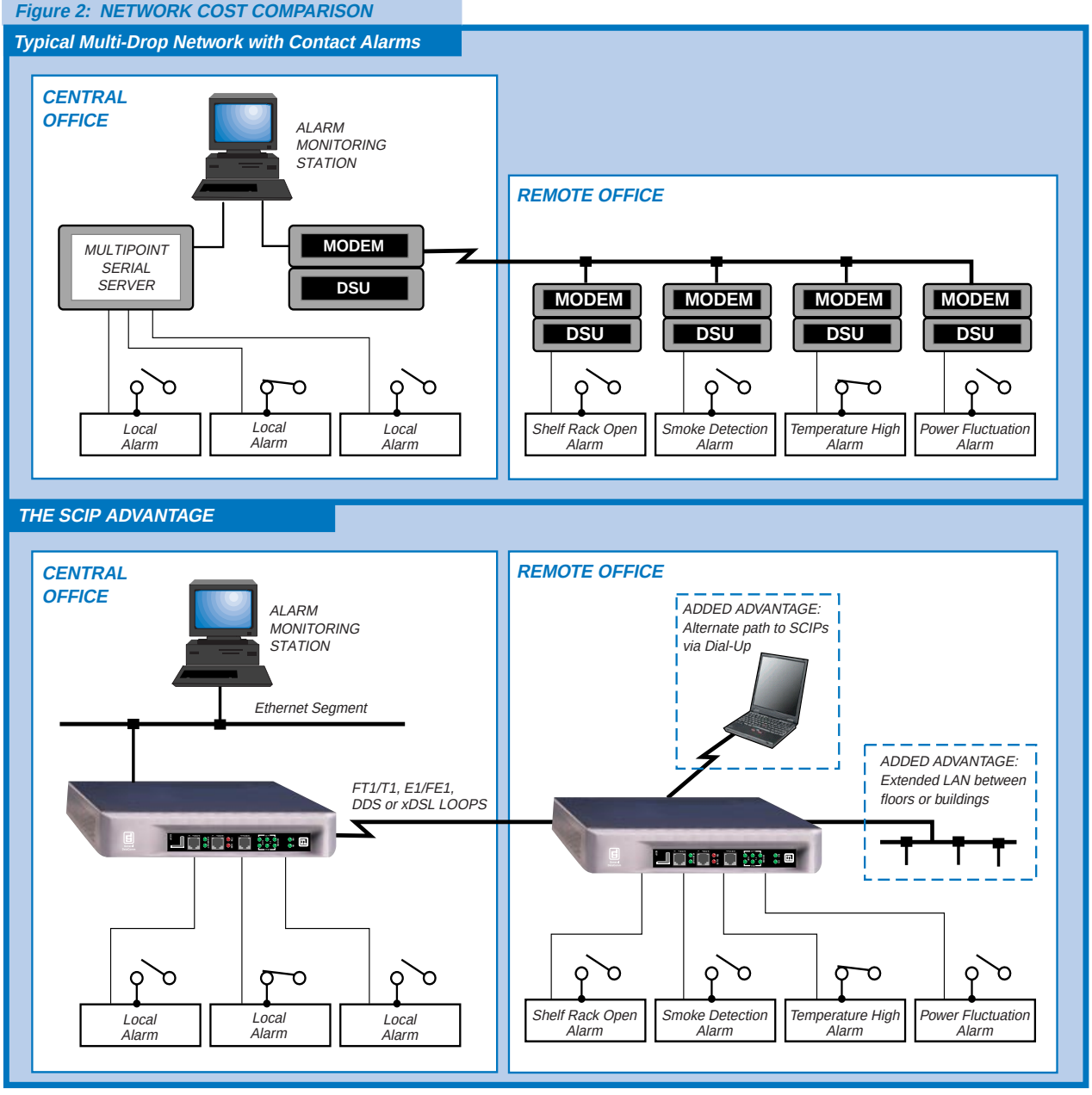
A typical network solution could employ a multi-point server at the local site and DSUs each drop at the remote site to collect and send alarms back to the Management Workstation at the central office. *Figure 2* compares two networks and demonstrates the SCIP advantage.

USDA RUS Accepted

With SCIP, central and remote offices use SCIP devices across an extended LAN to collect, timestamp, log and send alarms to the monitor station, with these advantages:

- eliminate SCADA hardware and maintenance costs
- eliminate monthly modem line charges
- real-time contact alarms without dialup delays
- real-time contact alarms for any location from anywhere in the network

Figure 2: NETWORK COST COMPARISON



SCIP cards shown installed in a SC 1001/1002 Standalone Enclosure

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