

LEASED LINE REPLACEMENT SOLUTION PRESERVES LEGACY EQUIPMENT FOR NORTHERN CALIFORNIA COUNTY VOTED RADIO NETWORK



Case Study

SITUATION

A Northern California County needed to find a solution as soon as they knew Telcos were beginning to phase out analog leased lines. To keep their essential equipment operational, the county worked to find devices compatible with existing 4-wire analog radios, voters, and P25 trunked radio systems. Without being compatible they faced increased costs and network downtime. A self healing ring network also needed to be established to prevent loss of communications between sites. Satisfied with TC Communications' completion of a previous project, the Northern California County decided again to seek out TC's products and solutions.

SOLUTION

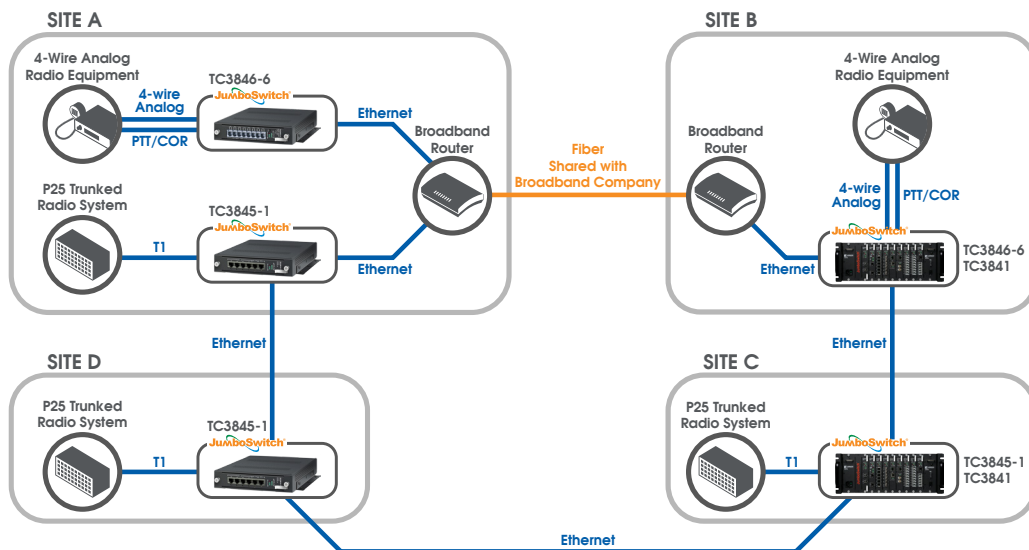
After exploring the options with the technical sales team, they decided to use Ethernet JumboSwitch cards at each site thus creating a self-healing Ethernet network. Existing 4-wire analog radios and voters connected to TC3846-6 600 ohm analog and dry contact over IP gateways and was able to migrate without impacting existing equipment. The TC3846-6 transmits uncompressed 64Kbps audio and dry contact channels with minimal latency, therefore able to transmit PT and COR signals as required by JPS SNV-12 Voters.

P25 trunked radio systems connected to T1 lines also needed to be preserved. TC3845-1 T1 over IP gateways were installed to join the P25 trunked radios with the newly established Ethernet network. The county didn't need to spend additional time migrating legacy equipment for their Ethernet network.

RESULT

To keep costs down the Northern California County was able to share fiber with a local Broadband company. Between site A and site B the county owned a fiber connection that the Broadband company needed to use. They traded part of their network fibers with the Broadband company for use of their Ethernet bandwidth. Through this exchange, the County was able to establish a low-cost connection between site A and site B thus reducing overall costs.

With the solution provided by TC, the Northern California County preserved legacy radio equipment while establishing a secure Ethernet backbone for critical radio communications. Future plans include adding more sites to the network and TCView® Network Management System to provide real-time monitoring and control of each JumboSwitch® site.



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