

10 Common Questions When My Leased Line Is Going Away

As telecom providers continue to either cease offering leased line services or dramatically raise prices in order to keep them, many organizations may be faced with limited time to find a suitable alternative.

Here are 10 common questions customers may find themselves asking in this situation, and answers and solutions to them.

1. Why are telcos doing this?

Telecommunications companies (telcos) are cancelling leased line services or otherwise raising prices due to the high cost of maintaining their copper infrastructure. Additionally, because more modern networks require less power, moving away from using leased lines allows the telcos to meet climate change-driven legislation and regulations.

The FCC has allowed telcos to remove this infrastructure as long as the affected customers are provided with the offer of an equivalent phone system, which most telcos provide using VoIP phone systems.

Unfortunately, for many customers, they were using their leased lines for connecting radio systems, utility teleprotection systems, and SCADA, and VoIP does not provide a good solution for this. This is why many turn to TC Communications' IP- and T1-based solutions.

To determine which of our offerings best meets your needs, see our Interactive Product Matrix.

2. What services are affected?

The predominant service affected is "leased" circuits, or leased lines, where the telco provides a dedicated phone circuit between two or more locations that is always active. In particular, phone circuits for which the offer of a VoIP replacement will not fulfill the functionality, such as those being used by public safety organizations for two-way radio networks, will be most impacted. T1 circuits are another service that are steadily being withdrawn.

3. What is the best solution to replace my leased lines?

The simplest and best solution is to use TC Communications' JumboSwitch products and carry the circuits over Ethernet/IP.



Typical point-to-point application using TC3847-1 Serial Server

The JumboSwitch allows for the carrying of a multitude of different circuits over IP and is specifically designed to replace a leased line with minimal operational disruption. For such purposes, the <u>TC3846-6 Analog & Dry Contact over Ethernet/IP Gateway</u> is our most popular solution.

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4. Can I use cellular as a replacement?

Cellular can be used for the Ethernet/IP link. However, care must be taken to ensure that the cellular service meets the network quality requirements. Since it is a shared medium, cellular network quality can vary greatly over time, which can affect network performance, so cellular is not recommended for primary links. Cellular is an excellent choice when speed of deployment or link backup is required, however.

5. Can FirstNet help me with replacing this?

FirstNet is a cellular network, and our testing does not show significant performance improvements over commercial cellular. While FirstNet is treated as a separate entity, it operates over AT&T's nationwide network, so the general variance in cellular network quality may still affect network performance from time to time. Nevertheless, FirstNet may be a viable (yet costlier) option for some organizations in the public safety sector.

6. I have been using channel banks. Can I still keep them?

Channel banks use T1 for communications, and some telcos are discontinuing these, or at the very least, making the T1s much more expensive.

In this case, there are two options:

A. Replace the T1 with a point-to-point connection using TC Communications' JumboSwitch

Continue using your existing channel banks simply by adding two TC3845-1 interfaces to transport a connection over Ethernet/IP instead of T1/E1.



Learn more about how to achieve this using the IC3845-1 T1/E1-over-IP Gateway.

B. Replace the channel banks

As many of the channel banks customers already have installed are now end-of-life, replacing the channel banks with a JumboSwitch IP-based solution can be an option.

Learn more about our <u>IP-based alternatives for using channel banks</u>, as well as options for single channels and continued use of T1/E1.

7. How will replacing these affect my system?

The TC Communications solutions are designed not to impact your existing solution at all. Extremely low signal latency, high audio bandwidth, and high reliability mean that a TC Communications solution can be implemented without affecting current operation.

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8. What if I am eventually going to upgrade to digital?

Using the JumboSwitch to provide the Ethernet switching will ease the transition to digital. The JumboSwitch is designed to migrate a wide spectrum of legacy critical communications networks such as SONET and V.24.

To give users more effortless control over their networks, our TCView network management system allows users to troubleshoot their networks using JumboSwitch products remotely.

9. I have a simulcast system. What do I do?

TC Communications solutions, with their characteristic of low latency, high audio bandwidth, and high reliability can be used with most analog simulcast systems.

Read our <u>case study</u> to learn how a county in Northern California utilized our JumboSwitch products to migrate a dense simulcast radio system from T1 to Ethernet/IP.

10. I have a Motorola system using a V.24 connection. Can I convert this system?

Yes, the <u>IC3847-3 Turbo Serial-over-IP card</u> can provide a V.24 connection. Several of our customers have successfully used the IC3847-3 in place of our more frequently used IC3846-6 to provide a V.24-compatible link for radio connectivity, such as when connecting a voter to two or more repeaters communicating with remote sites.

Read our <u>application note</u> about using V.24 to connect radio repeaters to ancillary equipment.

Contact Us

To learn more about your leased line replacement options with TC Communications, you can reach us by the following methods:

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Watch our video about three steps to saving money on leased line replacement.



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