

## **AltiGen KB**

### **T1-E1-PRI**

A T1 circuit is a dedicated circuit and is always composed of two parts: the local loop and the carrier circuit. The local loop is physically provided by the local telephone company and the carrier circuit is what is routed to the telecommunications provider of your choice.

A T1 is usually sold as a complete circuit of 24 digital channels (each capable of carrying voice or data) and up to 1.544Mbps total speed. On a channelized T1, the individual channels may be split into voice lines or data lines using a device called a Channel Service Unit/Data Service Unit or CSU/DSU. The CSU/DSU is used to split off the voice channels from the data channels, allowing the voice channels to be connected to the AltiGen. The data lines are then connected to a router serial interface and are used to provide Internet connectivity.

A fractional T1 is one or more channels (but less than 24) bundled together and sold as a set. This allows a consumer to purchase less than a full T1's bandwidth at a lower cost. Like the channelized T1, individual channels can be voice or data and a CSU/DSU is used to split the channels.

The attached document provides an in-depth look at T1, E1 and PRI circuits, how they work and how the differences can affect your AltiGen deployment. It covers the AltiGen hardware necessary to connect to these circuits, as well as the configurable options in MAXCS.

<https://know.altigen.com/questions/1060/>