

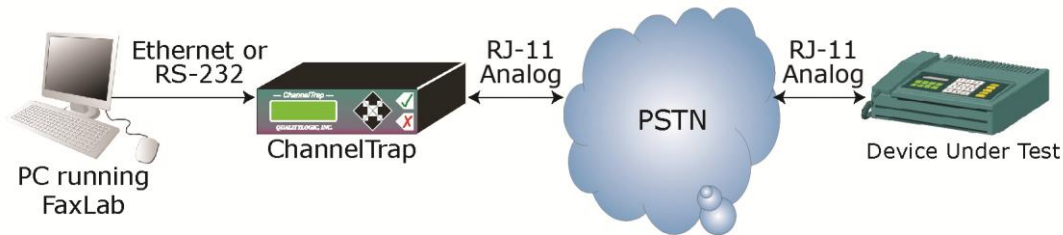
FaxLab Test Configurations

A recognized difficulty in creating fax terminals and carrier services is that T.30 *interoperability* is fully as important, if not more so, than T.30 *conformance*. Where in the past conformance to a telephony protocol was sufficient to guarantee interoperability, fax requires separate and extensive testing of both of these operational aspects. FaxLab is a facsimile interoperability and conformance test system designed to meet these requirements.

As such, FaxLab emulates 163 V.17 and 39 V.34 fax devices, including multi-function products, stand alone fax machines, fax modems, fax modem control software and fax servers. It can also test T.30, T.4, T.6, T.81 and T.85 conformance covering all eleven current resolutions. FaxLab does this through an extensive suite of test calls acting as originator/answerer and providing a wide variety of test conditions including illegal T.30 parameters that are commonly encountered from the installed base of fax devices.

Fax Terminal Testing

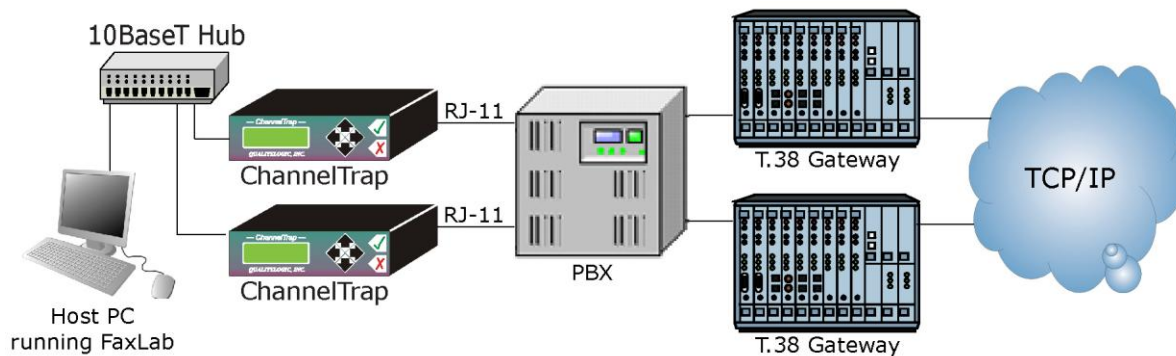
FaxLab can be used to test individual fax terminals using a single external ChannelTrap as shown below:



The ChannelTrap is an intelligent test modem that is programmed by the FaxLab software to conduct precisely controlled fax calls and make exact measurements of the T.30 parameters of those calls.

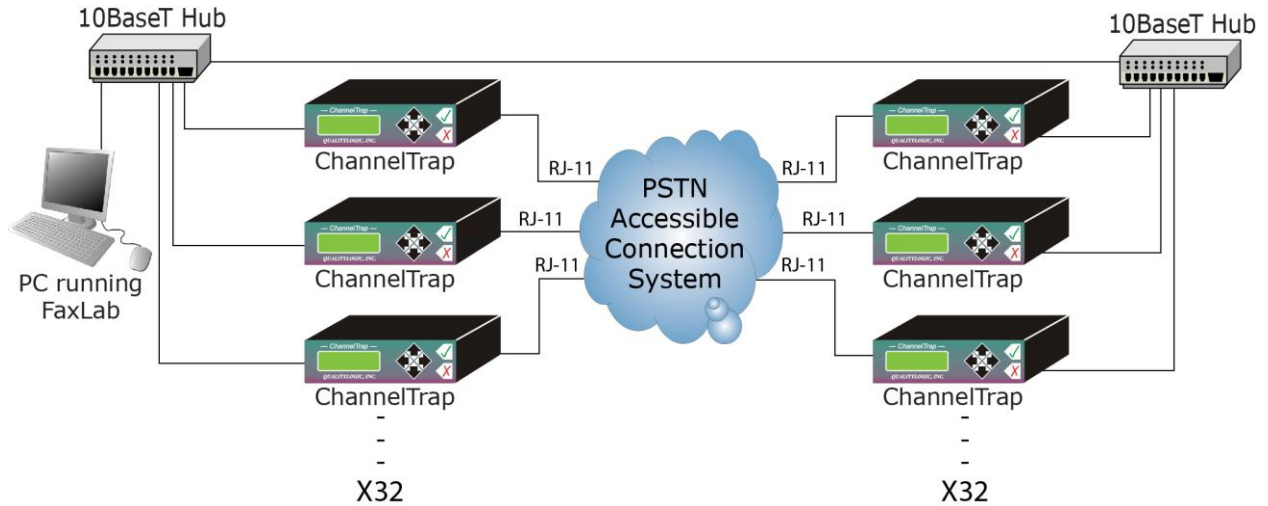
Carrier Network Testing

FaxLab can use multi-channel, simultaneous call traffic generation to facilitate end-to-end testing of carrier networks. Providing a precisely known T.30 test stimulus also facilitates T.38 testing as indicated below:



FaxLab Test Configurations

More extensive carrier network tests can be performed by using arrays of ChannelTraps to perform end-to-end testing across many network channels at once:



For more precise test control or remote location of opposing terminals the array of ChannelTraps could be split between two or more FaxLab host computers:

