

Voice Trunking between Enterprise Sites

Application Note



Typical Users

- Multi-location organizations
- Government agencies or offices
- Universities, school districts
- Remote call centers

Typical Applications

- Extending T1/E1 voice circuits between distant locations across IP or TDM networks

Interconnect T1/E1 Voice Traffic Between Enterprise Locations using IP or TDM Networks

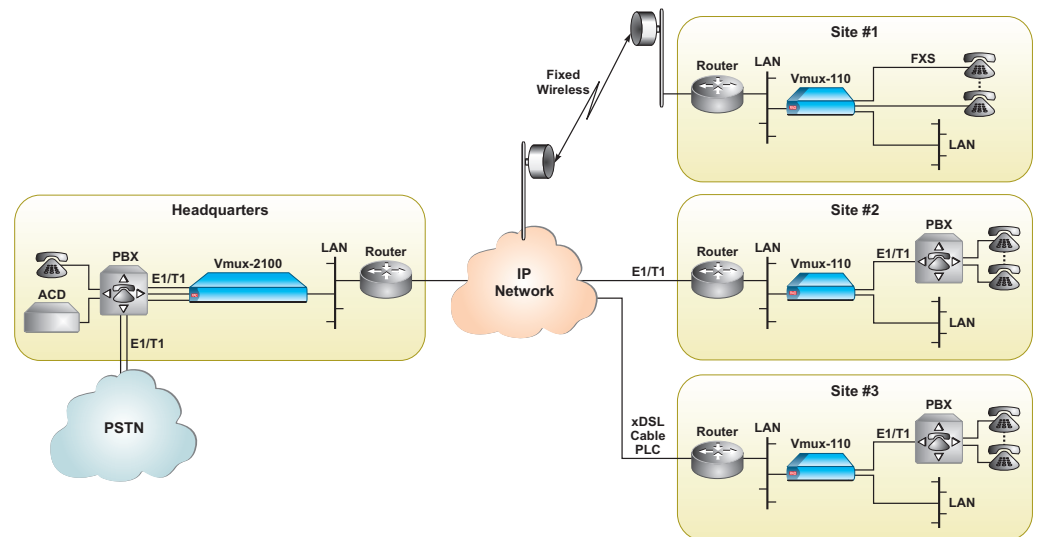
Many organizations have widespread offices in different locations, both domestic and international. Leasing T1 or E1 lines for interconnecting voice communication between the different sites can be quite expensive.

Instead, voice communications can be compressed, packetized and trunked between sites across low-cost IP networks ...all without the expense and challenges associated with implementing traditional VoIP solutions.

Vmux™-110 and Vmux™-2100 Voice Trunking Gateways employ RAD's innovative packet-based TDM over IP (TDMoIP™) technology to extend voice circuits (including signaling) transparently over IP or TDM networks and therefore eliminate the need for expensive T1/E1 leased lines between enterprise locations.

Voice Trunking over IP

In the application below, each Vmux unit compresses voice channels into IP bundles that are routed to remote locations over an IP network infrastructure in a point-to-multipoint topology. Here the Vmux units eliminate T1/E1 voice circuits between the different enterprise sites, while still retaining all central site PBX features, such as voice mail or caller ID, which are not supported by VoIP.



Point-to-Multipoint Application over IP

Voice Trunking between Enterprise Sites



Application Note

What makes the Vmux outstanding for voice trunking between sites?

Features	Benefits
TDM circuit emulation	<ul style="list-style-type: none">• Protects investments in existing functional and reliable TDM-based PBX equipment
Advanced TDMoIP technology with up to 16:1 compression ratio	<ul style="list-style-type: none">• Reduces bandwidth and leased line costs while maintaining toll-quality voice
Transparent to all signalling protocols	<ul style="list-style-type: none">• Supports all voice, fax, modem, voice mail, CTI, Caller ID and other modern PBX features
More bandwidth-efficient than VoIP	<ul style="list-style-type: none">• Vmux frees 60% more bandwidth for additional voice or data• Maximizes costly or low bandwidth links such as satellite or microwave
Converges voice, fax, modem and data services	<ul style="list-style-type: none">• All traffic can be transmitted over a single network, significantly reducing network infrastructure and operation expenses
Compact 1U high unit	<ul style="list-style-type: none">• Saves space

Vmux Family



data communications

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