

APPLICATION NOTE - 13

Feature: Peer-to-Peer Calling

Product: VoIP Gateways - SETU VFXTH and SETU VGFX

About Feature:

Provides direct connectivity between users at distant places

Eliminates dedicated voice systems for small locations

Introduction:

A peer-to-peer (P2P) call occurs when two or more SIP devices communicate directly over IP without any IP-PBX or Proxy Server in-between. The P2P call is established by addressing the static IPs of the IP devices at end-locations.

Matrix SETU range products offer Peer-to-Peer (P2P) calling without the need of IP-PBX or Proxy server in-between and without any external gatekeeper registration, as illustrated in the reference application below.

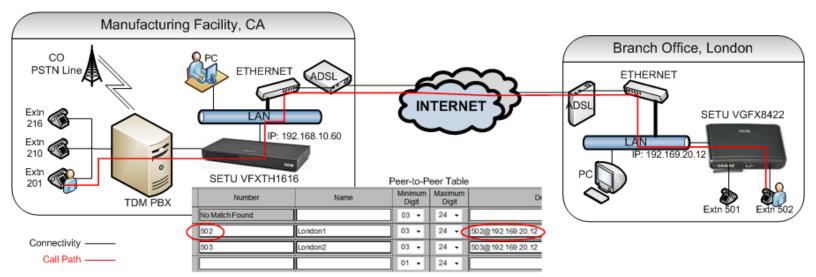


Figure 1: Connection Diagram for Peer-to-Peer Calling

Application Description:

Figure 1 illustrates a manufacturing facility in CA, USA with a SETU VFXTH series gateway connected to telephone network through TDM-PBX and Branch office in London with a SETU VGFX series gateway.

The IP address of London branch office is entered to the peer-table against the allocated extension number and corresponding display name, in SETU VFXTH at manufacturing facility, as shown in Figure 2. The peer-to-peer table of Matrix SETU product range supports up to 500 entries.

Here, the Extension 502 can be programmed either as 502@192.16X.XXX.XXX or 502@domainname in peer-to-peer table. The Gateway will map the IP address of the desired location from the peer-to-peer table and will lend the call to the corresponding extension.



Auto Configuration
Automatic Number
Translation
Call Logs
Change Password
Daylight Saving Time
Adjustments
Debug
Default IP Phone
Keys Programming
LDAP
Network Parameters
OG Call Route
Selection
PCAP Trace

OG Call Route Selection PCAP Trace Peer to Peer Table Phone Book SIP Trunks

Number and corresponding IP address

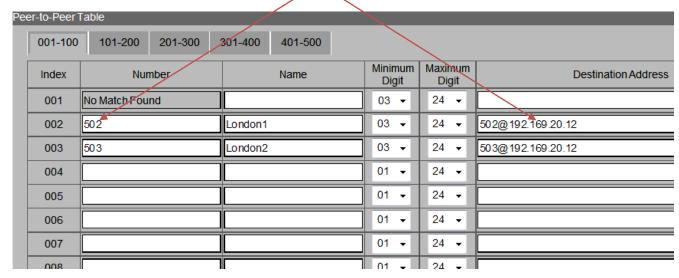


Figure 2: Peer-to-Peer Table

Required Devices:

- ✓ Matrix SETU VFXTH1616 (VoIP-PSTN Gateway)
- ✓ Matrix SETU VGFX8422 (VoIP-GSM-PSTN Gateway)
- ✓ Telephones
- ✓ IP Addresses of VoIP Gateways
- ✓ Internet connection at each location

Benefits:

- Call cost saving: Reduced call costs as cheaper IP media is used for voice calling and no need of dedicated costly voice systems at each location
- Increased Productivity & Efficiency: Utilization of spare internet bandwidth for free inter-branch and intra-offices calling and control over overheads of connecting small offices and branches
- Ease of Operation: No hassle of dialing IP address, just click on the extension number or name of the person and start talking
- Enhanced Connectivity: The Matrix SETU range of VoIP gateways can offer peer-to-peer calling even when the gateways are located behind a dynamic IP connectivity. The Dynamic DNS client embedded in the VoIP gateways maintains connectivity even behind the fluctuating IP addresses. (For more information on Dynamic DNS client please refer technical note "Peer-to-Peer Call using Dynamic DNS")

Target Customers:

- Corporate with branch offices and sales offices at geographically distant locations
- Factories with supply depots and ware-houses across various cities and countries
- Organization with home-employees and remote-employees

Release	18-October-2010
Product Name	SETU VFXTH and VGFX
Hardware Version	V1R1
Software Version	V1R1