

## APPLICATION NOTE - 15

**Function:** Dual Functionality of ETERNITY as a SIP Server and VoIP Gateway

**Product:** ETERNITY PE/GE/ME

**Target Audience:** Any Existing TDM PBX users willing to have IP-PBX and VoIP Gateway functionality

**Problem:**

While adapting to the new generation IP telephony, Enterprises many times face the dilemma of replacing existing TDM PBX with IP-PBX. One short-run alternative is to avail gateway functionality with existing TDM PBX. VoIP gateways provide VoIP trunking facility enabling an organization to make calls over IP networks and retain existing communication infrastructure. Although gateways enable VoIP access to TDM PBX, it does not bring the whole basket of IP telephony services – such as IP extensions, Presence Indication, Instant Messaging and SIP call forking etc.

When huge investment incurred in past and well laid communication infrastructure is considered, it is difficult for an organization to replace the PBX set-up. They need an integrated solution which can help them to retain existing set-up at the same time offer benefits of IP telephony including IP-PBX and VoIP Gateway functionality.

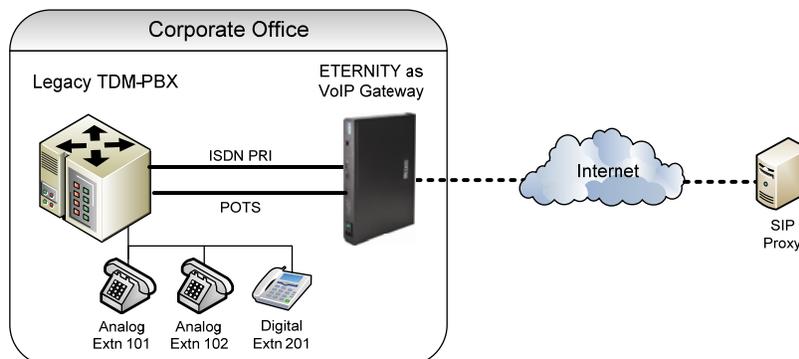
**Solution - Dual purpose served by ETERNITY (IP-PBX and VoIP Gateway)**

Integrated and flexible ETERNITY VoIP Gateways provide connectivity to POTS, ISDN, GSM/3G and VoIP networks. In order to access VoIP Network, the existing PBX can be connected to ETERNITY through POTS or ISDN BRI/PRI.

The SIP server functionality enables an organization to enjoy the benefits of IP telephony such as IP extensions, Presence and IM and SIP forking. ETERNITY can offer VoIP Trunks to the existing PBX to use Internet Telephony services from ITSPs. ETERNITY SIP server can be connected variety of IP endpoints such as IP phones, PC Soft Phones and Mobile with SIP client.

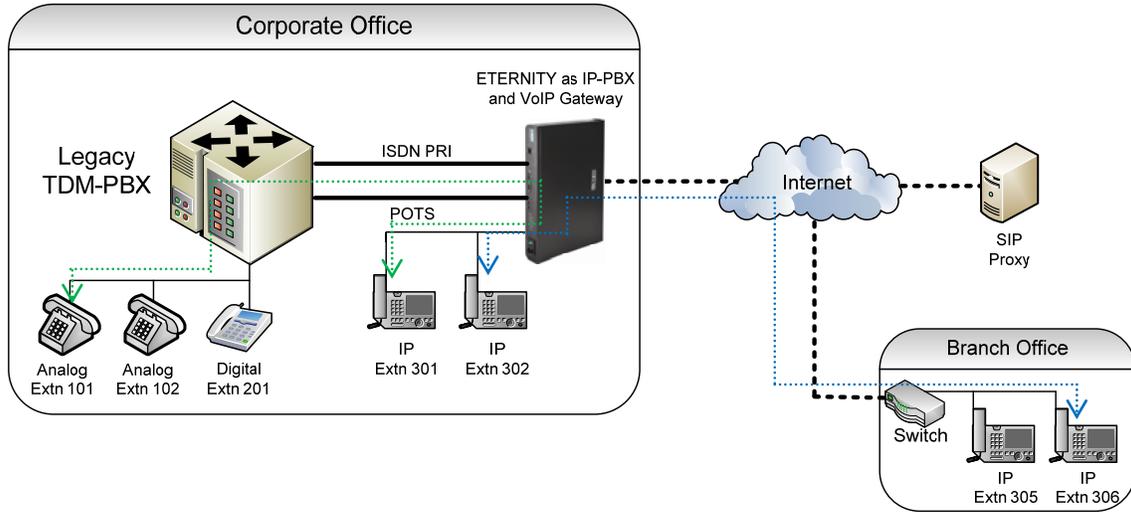
Further, the connection of IP extensions to ETERNITY is not limited to regional foot prints only. Any remote site or branch office can avail these IP extensions and can communicate with head office with simplicity of dialing extension number only. This also eliminates the requirement of additional investment in communication system at remote location. Please consider following cases for further understanding.

**Case 1: ETERNITY with Legacy TDM PBX providing Gateway Functionality**



In this scenario the ETERNITY works as a VoIP gateway, provides access to VoIP networks to existing PBX users. Any long distance call made from analog or digital extensions of the PBX is dialed out via SIP trunks of the Gateway.

*Case 2: ETERNITY with Legacy TDM PBX providing Gateway and VoIP (SIP) Server Functionality*



In the same application of case 1, the SIP server functionality can be used to connect IP extensions. These IP extensions can be anywhere on the internet i.e. local premises, remote sites or branch offices. They can communicate with other IP extensions of Gateway and Analog/Digital extensions of TDM PBX by dialing extensions numbers only. The whole set-up becomes one and organization can enjoy the benefits of IP telephony retaining existing communication infrastructure. To avail SIP server functionality on ETERNITY VoIP Gateways, activation of IP Users License is necessary.

**Key Benefits:**

- Advance IP features – Local and Remote IP extensions, Presence and IM, SIP call forking
- No need to replace PBX-Gateway set-up to avail IP functionality
- Integration to IP telephony with existing PBX
- Alternative Communication Option in event of non-working of existing TDM PBX
- No additional hardware purchase

Release	23-November-2010
Product	ETERNITY PE/GE/ME as VoIP Gateways
Software Version	ETERNITY V10 Onwards