

The ApplianX IP Gateway can be used in a variety of VoIP migration strategies, whether it is connecting a TDM-based PBX to a new IP network, or IP PBX; or providing a PSTN front end to SIP-based solutions. It is a 'plug & play' gateway that, regardless of deployment, can reduce operational costs, extend the life of existing TDM-based equipment and allow advantage to be taken from new IP-based services and endpoints.

Telephone network interfaces

On the PSTN side, the ApplianX IP Gateway provides 1, 2, 4 or 8 universal T1/E1 (USA, Japan, Europe and worldwide) interfaces, with a wide range of signalling protocols, including PRI/ISDN types, T1 robbed bit and E1 CAS, R1, R2 and DTMF, plus PBX protocols, such as Q.SIG and DPNSS. A different protocol can be selected for each trunk.

IP interfaces

On the IP side, the ApplianX IP Gateway provides dual-redundant traffic interfaces for SIP signalling, with RTP voice. Within the RTP stream there is support for G.711 and G.729AB codecs.

Traffic routing

Controlling traffic between IP and TDM is a comprehensive call routing engine, allowing configuration of a variety of routing strategies: implementing and routing upon trunk groups; support for multiple dial plans; and strategies for handling call progress information. For integration with SIP systems supporting redundancy, the gateway provides load balancing between endpoints on a round robin basis. In addition, the gateway supports a wide range of failover options in order to be resilient to various network failures.

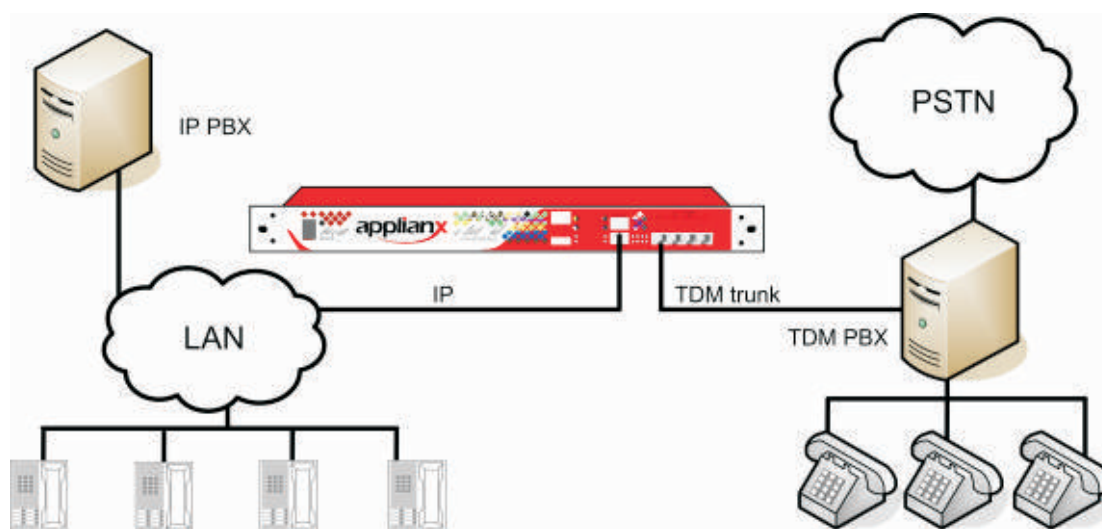
Comprehensive management

A private (non-traffic) Ethernet port gives access to the integral HTTP server and provides an intuitive HTML web browser interface with separate password protected access levels, to allow configuration, administration, and traffic monitoring and diagnosis. A comprehensive set of SNMP facilities (including traps) provide management facilities within a traditional network management environment.

A range of ApplianX Tools are freely available to further assist with the configuration of the gateway. The ApplianX Search Tool aids the installation process by finding ApplianX devices on the network, revealing their serial number, type and IP address. The ApplianX Trace Tool is an easy to interrogate tool that captures previous or live protocol trace and decodes/displays it.

Supplementary service support

In addition to basic call control, key supplementary services are also supported including: Diversion (Immediate, On Busy, On No Reply); Route Optimisation; Message Waiting Indicator; and Transfer. These services can be converted over SIP, DPNSS and Q.SIG.



Contact us | info@applianx.com | www.applianx.com

Owing to the dynamic nature of our business, specifications are constantly being changed and therefore this product overview is for informational purposes only.

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Features

Benefits

This deployment-ready solution, which can bridge between various TDM and IP endpoints, comes with a comprehensive management suite including an HTML web browser configuration tool and support for SNMP	Utilises familiar interface tools making the ApplianX IP Gateway easy to install, configure, maintain and manage
Extensive portfolio of worldwide protocols supported including: PRI/ISDN types; T1 robbed-bit; E1 CAS; R1; R2; AT&T and NI2	ApplianX IP Gateway will support the protocol needed to connect to the TDM network, wherever it is installed in the world
Comprehensive support for PBX inter-working protocols, such as Q.SIG and DPNSS allowing the conversion of supplementary services including: Divert, Route Optimisation, Message Waiting Indicator and Transfer to SIP	Allows investment in legacy equipment such as PBXs to be protected, they can remain in service while new IP-based services and endpoints can be taken advantage of
Controlling traffic between IP and TDM is a comprehensive call routing engine	You have complete control over the routing strategies deployed SIP-to-TDM, or SIP-to-SIP
SIP load balancing and fault tolerance	Outbound calls are attempted on a round robin basis so that calls can automatically be routed away from unresponsive endpoints
The gateway can fallback to TDM should the SIP network fail	Calls can still be made and received even if there is a problem with the IP network

Technical specification

Network interfaces		Feature detail
Ethernet		Dual redundant 10/100 BASE-T & separate private management interface via front panel RJ45 connectors
Telephony		1, 2, 4 or 8 E1/T1 trunks via front panel RJ45 connectors
Signalling and control protocols		
IP		SIP, RTP, TCP, UDP
PSTN	ISDN	A wide range of protocols* including; Euro ISDN/ETS300, Q.SIG, DPNSS, NI2, AT&T and SS7**
	CAS	A wide range of protocols* including; R2 MFC and T1 robbed bit
Capacity		24/30, 48/60, 96/120 or 192/240 (T1/E1) independent voice calls
Security**		SRTP, TLS, SIPS, HTTPS
Feature support		
Voice codecs		G.711, G.723.1**, G.726**, G.729AB, GSM-FR** (GSM6.10, MSGSM) dynamically selected on a per channel basis
DTMF		DTMF detection and generation; inband; pass-through; DTMF relay and user indications (RFC 2833); DTMF out-of-band (SIP INFO, RFC 2976)
Fax**		T.30 and T.38 fax receive and transmit; fax over G.711
Echo cancellation		G.168 compliant
QoS		Enhanced jitter buffer; packet loss concealment
Supplementary services		Diversion (Immediate, On Busy, On No Reply); Route Optimisation; Message Waiting Indicator; and Transfer
Additional functionality		Comfort noise generation; voice activity detection; silence suppression
Operational management		
Configuration		Via easy to use embedded web/HTTP interface
Management		Via SNMP and DHCP
Hardware		
Dimensions		1U high, 19" wide rack mount
Power		110-230V AC power supply
Regulatory		EC Directive 2002/96/EC (WEEE); EC Directive 2002/95/EC (RoHS)
	EMC standards	EU – EN55022; EN55024; USA – FCC part 15
	Safety	CB certification; UL/CUL low voltage directive 73/23/EEC
Operating environment		Operating temperature: 0°C to +40°C; humidity: 20% to 80% RH non-condensing