



FROM TDM TO VOIP: WHY THE MIGRATION & HOW TO PLAN

A thorough preparation guide for businesses considering moving from TDM to VoIP



BASIC INFORMATION

The telecom industry has undergone drastic changes over the last few decades. The ubiquity of mobility, the changing nature of the modern workforce, the convergence of voice and data networks, and the advance of cloud technology have all been contributing to the shift in business communications. The underlying infrastructure also experienced the transition from legacy TDM-based PBX to IP-enabled telephony systems. This Ebook makes a comparison between TDM and VoIP to show you why the migration is necessary and how to plan your first IP communications implementation.



DEFINITION:

TDM vs VOIP

TDM (Time Division Multiplexer):

A relatively old technology that uses physical switches to route calls over copper wires. TDM PBX, as a commonly used proprietary business phone system, is designed as a cabinet with different boards to perform certain functions. In short, TDM relies on phone lines and technical equipment to work.

VoIP (Voice over Internet Protocol):

A group of technologies for the delivery of voice communications and multimedia sessions over Internet Protocol (IP) networks. VoIP converts voice into a digital signal, allowing for making calls directly from IP phones and other data-driven devices.

TDM PBX IS IN ITS LAST THROES

TDM PBX has been used for decades and there are still many businesses using it as corporate phone systems. However, as business communications become more agile and integrated, this technology is being left out of consideration and phased out by several vendors. Here are a few reasons to illustrate why TDM is obsolete and has been replaced by more and more businesses.



VENDOR LOCKED-IN

One of the biggest downsides of TDM PBX is that users have to buy nearly all the hardware equipment from one vendor who will support and warranty everything from the PBX to handsets. You cannot shop around for the best prices and add one vendor's solution to another's TDM system. It is risky to stick with TDM given that some vendors no longer support its TDM products. The parts will become more difficult to find and qualified technicians for support will also be fewer.



LACK OF MOBILITY

Inherently, the TDM technology is unable to provide mobility. Since TDM PBX uses physical phone lines to carry voice traffic, employees have to stay at their desks to make and receive calls, which becomes a major drawback for the mobile workforce. Today, employees are used to taking mobile devices and desktops as office extensions to communicate and collaborate anywhere anytime. The lack of mobility greatly limits the usage of TDM PBX.



DIFFICULTY IN SCALING

TDM PBX has limitations when it comes to system expansion. TDM systems are configured with a predetermined number of TDM phone lines. If the call volume expands or you need to add additional employees, you may need to purchase more capacity from your service provider and bring additional lines into your facility. Adding more phone lines means adding new boards into the system, which also makes the TDM PBX system bulky in size.



DEDICATED IT STAFF

Owning a TDM PBX brings the responsibility of management, maintenance, and configuration in-house. Dedicated IT staff is required to manage and manually update the system. You need to contact the PBX service provider in advance for MACs (moves, adds and changes) to the existing configuration. Maintenance contracts are also necessary to keep the PBX and phone work because your vendor or service provider is your only backup when complicated issues arise.



LIMITED CUSTOMIZATION AND INTEGRATION

Because TDM PBX is a proprietary system, customization is quite limited and expensive. Even minor alterations to the system require knowledgeable and trained technicians to manage and control. You can purchase additional hardware to support certain capabilities, such as intercom functionality. However, TDM PBX is not able to integrate into today's business communications ecosystem, which consists of a complex series of applications. Limited to no integration with productivity tools increasingly hinders work efficiency.

Ebook

From TDM to VoIP:

Why the Migration & How to Plan

VOIP IS REIGNING SUPREME

Although TDM PBX will continue to play a role in the marketplace, businesses have increasingly favored VoIP mostly because of potential cost savings and gains in employee productivity. Take a look at what VoIP is capable of and you'll know why VoIP is becoming more and more popular for businesses of all kinds.



LOWER TOTAL COST OF OWNERSHIP

VoIP solution delivers immediate cost savings compared to the TDM system which locks businesses into long-term service contracts and expensive system overhaul. VoIP allows for leveraging the same wiring and network equipment for both voice and data traffic, eliminating costly leased lines and other centralized infrastructure required by TDM systems. Besides, the VoIP system also allows for greater connectivity options and does not require hardwiring endpoints for MACs. There is also little license fee associated with VoIP system expansion.



ENHANCED PORTABILITY WITH SOFTPHONE

Coordinated with VoIP PBX, the softphone is an app installed on mobile phones or desktops to help employees stay connected with business contacts via their own devices anywhere anytime. Besides mobile and home workers, office workers also use softphones as a convenient replacement for desk phones. BYOD mobility brings cost-efficiency, employee satisfaction, improved productivity, better work-life balance, and expanded global reach.



UNIFIED COMMUNICATIONS SOLUTION

With the trend of digital transformation and mobile workforce, unified communications is becoming the new norm in the modern workplace. Unified communications is about making a wealth of communications channels into a single point of access. Within the UC suite of products, the voice component will be powered by VoIP technology. The vast majority of unified communication solutions rely on VoIP as the core foundation. Companies have to migrate from TDM to VoIP to enjoy the benefits of unified communications, such as chat and CRM integration.



EASIER INSTALLATION & MANAGEMENT

Migrating to an IP-based phone system makes it easier to install, configure and manage. Since the same network is used for both data and voice, the setup and installation of VoIP PBX save a lot of time and effort. Unlike TDM PBX which requires the technician to be on-site to solve technical issues, IP PBX systems come with easy to use web-based interface and even remote management tools so that any configurations and updates can be done by the admin with a few clicks.



VERSATILITY OF FEATURES

Some TDM PBX vendors might also support features like call transfer, ring group, and call queue. However, they are add-on features and you usually have to pay for them separately. By comparison, VoIP PBX comes with a lengthy list of enterprise-grade features, such as IVR, conference, and voicemail to email, at no additional cost. A slew of other advanced efficiency-improving communications features is only available with VoIP phone systems.

4 PRACTICAL TIPS ON UPGRADING FROM TDM TO VOIP

01

CONDUCT A TEST RUN BEFORE THE FINAL MIGRATION

Test every aspect of your network and the VoIP system before the full implementation. In particular, set up a thorough plan to test internal and external calling, audio quality, significant features, compatibility of trunks and endpoints, 3rd party integration, and so on.

03

ASSESS NETWORK CAPABILITIES

The quality of VoIP voice calls is heavily dependent on the network. So pay special attention to critical components such as connection reliability, data bandwidth, and the maximum call volume.

02

SECURE YOUR VOIP PBX SYSTEM

In addition to the basic practices such as using strong passwords and keeping the system updated, it is essential to block unauthorized access with the firewall, restrict the use of outbound calls from each vulnerable end-point, and disallow anonymous incoming calls.

04

PLAN THE MIGRATION BASED ON BUSINESS NEEDS

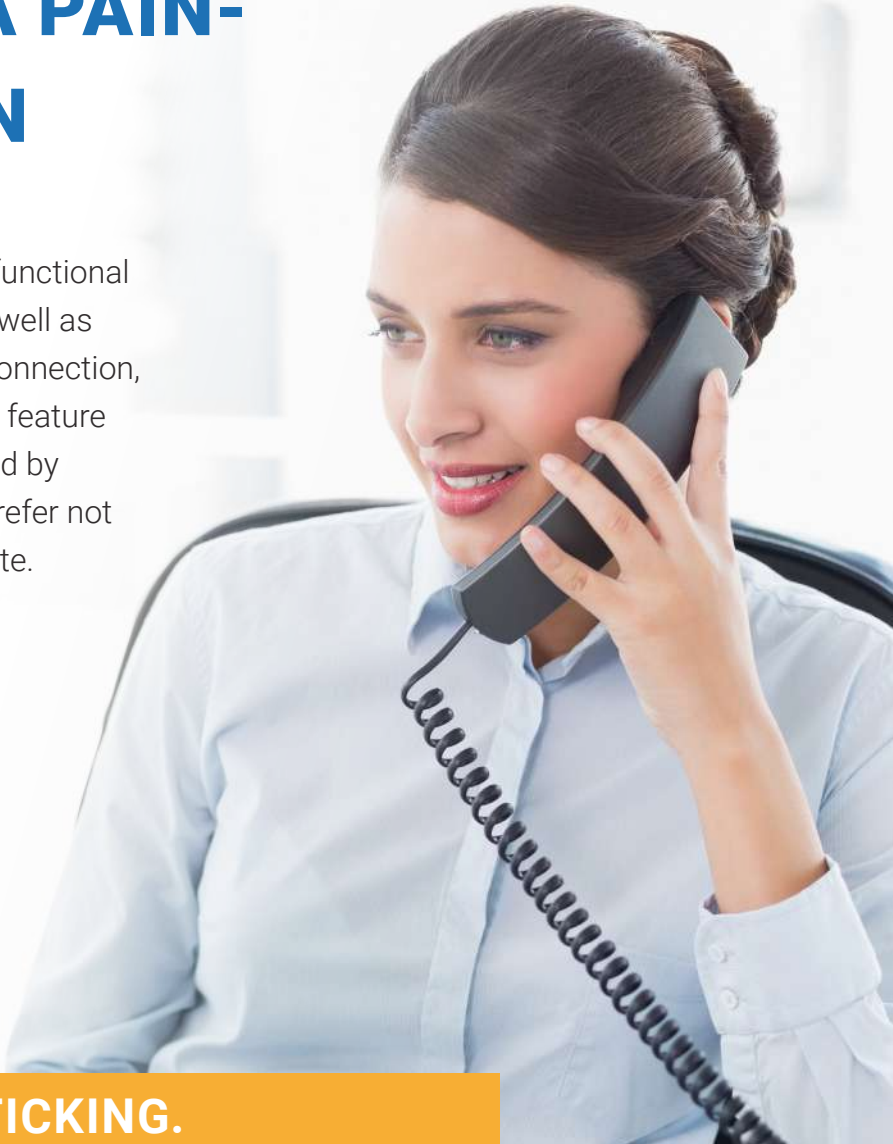
Determine the pace of your migration and how you will roll out the VoIP system. Do you prefer a complete replacement with an All-IP solution or a phased transition with the TDM system working in parallel? What kind of deployment model is suitable for your business?

YEASTAR VOIP SOLUTION FOR A PAIN- FREE MIGRATION

—

Yeastar VoIP solution comes with the fully functional S-Series VoIP PBX which supports VoIP, as well as ISDN and PSTN terminals on an IP-based connection, providing a comprehensive communication feature set. Besides, a hosted voice solution enabled by Yeastar Cloud PBX is also available if you prefer not maintaining hardware PBX equipment on-site.

If you are hesitant about the budget on a complete replacement of the existing devices, you can opt for a phased transition by using Yeastar VoIP Gateways to connect the traditional equipment with SIP service providers, which leverages the existing investment and ensure minimal disruption while reaping the benefits of IP communications.



**THE CLOCK OF TDM IS TICKING.
VOIP IS WORTH YOUR INVESTMENTS.**

TALK TO AN EXPERT

We hope this guide helped you understand better about migrating from TDM to VoIP PBX. If you have any questions or wish to explore more about VoIP PBX, we're always ready to help. Get a free consultancy with our representatives at sales@yeastar.com