

*Sidharth Srivastava*

# Dialing in: The Dirty Secret of IP Calling

09th April 2020

## Phone systems for Dummies: On-Premises Pbx, Cloud Pbx or A Mobilised Solution for a Mobilised Workforce....



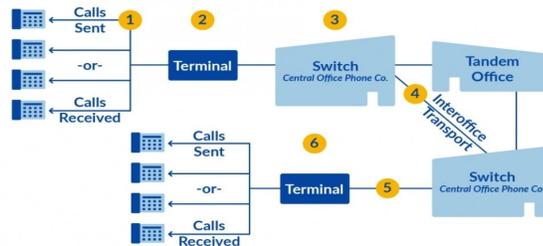
### **What is a PBX**

A PBX (private branch exchange) is the switching system that manages calls between internal users. It also shares a number of lines that connect to the external, public phone system and parcels them out as needed to the internal users. In addition, PBX systems have other features that allow them to take incoming calls, send them to the correct extensions, connect calls to answering services, etc. At its core, a typical PBX consists of a set of external phone lines, a computer server system that manages call switching, a set of internal phone lines and some form of console for manual control.

Today, phone systems do much more than this basic public phone call capability by including features that deliver substantial benefits to the business. Most phone systems come complete with basic capabilities such as voicemail and call forwarding as well as the option to extend them to include advanced features.

## ON-PREMISE PBX

### Plain Old Telephone Service (POTS) Networking



On-premise PBX or an IP-PBX phone system requires on-site installation of PBX hardware within the business premises. IP phones signal to an IP-PBX server using a LAN. VoIP is available using SIP trunking and calls go through a traditional phone company provider.

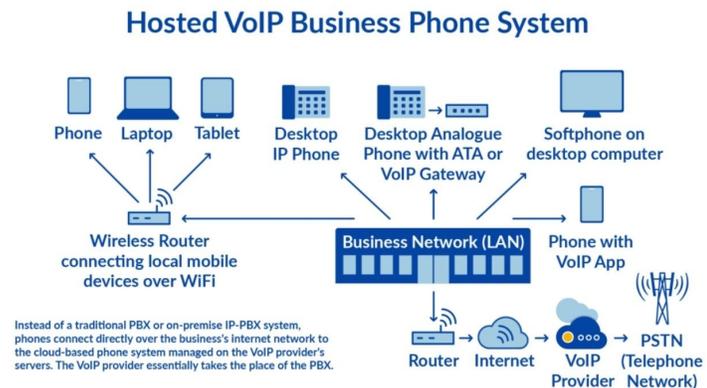


### PROS AND CONS OF ON-PREMISE PBX

- PBX offers customers more control over their phone system
- Initial costs are higher, due to the purchasing of software.
- Maintenance costs are the responsibility of the customer.
- After initial outlay, customers tend to get lower monthly costs.
- Ability to integrate other company software programs i.e. CRM systems.
- With on-premise the IP-PBX provider will install, program, train staff and qualify the network.
- **Reliant on Quality Of Internet Connection in case of IP PBX**
- Customers can get lower call costs through SIP trunking.
- All data and settings are in the control of the customers.
- Ideal for larger organisations, which already have the infrastructure to support and host their own phone system.

---

## What is hosted PBX?



A hosted PBX provides the same services and features as an on-premise PBX but is installed a little differently. A hosted PBX resides in the cloud, meaning you don't need a hardware system in the office, minimising installation and maintenance. Your PBX provider or 'host' maintains the technology for you completely off-site.

## How does it work?

A hosted PBX uses IP communications which allows businesses to make calls over the internet. There are three ways a hosted PBX works. It can transport data over the Public Switched Telephone Network (PSTN), over the Internet (this is helped along with VoIP technology) or a combination of both.

An example of the way it works is by plugging your phone directly into your VoIP enabled modem. The VoIP enabled modem uses the internet to send and transfer data. Information travels over the IP network and is bounced to the cloud, where it gets shuffled to your voice provider's data centre, a.k.a your server. The call is then pushed back out into the cloud and delivered to the end caller the network they use.

## PROS AND CONS OF HOSTED PBX

- Easy to use
- No IT team required
- Cost-saving
- Provider handles everything
- **Connection & quality reliant on internet**
- Less control over system
- Loss of services if provider's network goes down

---

## Secrets Nobody Ever Has to Know



### Internet Infrastructure Upgrade

If your internet supply doesn't work well with it, you'll need to upgrade your internet to one that's faster and has better broadband and bandwidth.

### How much internet bandwidth does one need?

This depends on what you want to use your system for. The minimum speed for VoIP calls is between 90kbps (kilobits per second) to 156kbps.

### Providers Network Services

Another downside is if anything goes wrong with your hosted PBX, you have to wait for support and may experience loss of services if the provider's network goes down.

### Packet loss between the mobile Softphone App and the PBX

In cases , where the wifi/4G connection the phone uses is dropping packets OR the connection towards your PBX from outside is being impeded, the whole concept of Mobile and Unified Communication is more likely to be tale of good fiction than reality.

---

---

**Experience is the child of Thought, and Thought is the child of Action”**

**-Benjamin Disraeli & Vivian Grey**

Running Voice the way it was intended, on a stable reliable 1G Network, with all the benefits and features of a 4G and 5G network

**Think Different : A Mobilised Solution For A Mobilised Workforce**

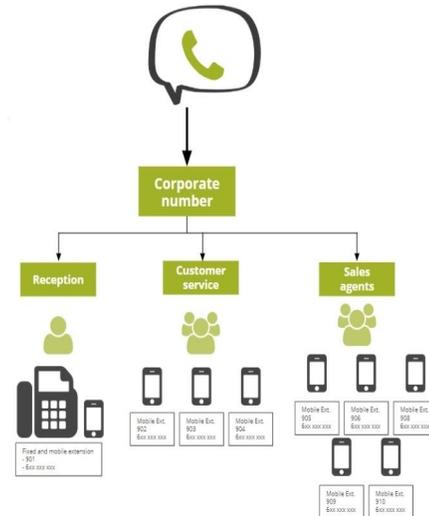


**The Mobile PBX System** is a feature for feature premise-based PBX replacement solution, with full convergence to provide these PBX features on a Mobile Device. It provides all the functionality from a fully redundant, hosted environment, built and integrated into the Mobile GSM network on Crosscall & Blackview state of the art IP 68 Handsets.

Quite simply, Mobile PBX removes all the complication from the enterprise and allows them to manage their day to day fixed and mobile communications requirements in a simple, coordinated and cost effective manner.

---

## How Does It Work ? What is a Mobile Pbx ?



The mobile PBX manages phone calls and directs them to the fixed or mobile extensions. Mobile lines can be called directly using the mobile phone number and they can get incoming calls from the PBX. Mobiles can transfer phone calls, divert them, get phone calls from the PBX and much more.

### How do mobile extensions work?

#### They work as a mobile line

As with your current mobile plan, you get a SIM card to insert in your smartphone. Once you turn it on you get a phone line, with a mobile phone number.

#### They work as a PBX extension

As with a regular desktop phone extension, your mobile has a short phone number your colleagues can call you to, you get incoming calls from your PBX and you can even transfer them. It works just as a fixed phone extension.

#### Great voice quality

As it does not rely on your Internet connection you will have the best sound quality even if there is no Internet at all as it is only reliant on GSM Network.

---

## **The Mobile PBX is perfect for these enterprises**

Enterprises with sale agents Enterprises with sale agents or employees working in mobility, such as real estate, logistics, delivery and others get huge advantages over their competitors by combining mobiles and PBX and helps them save lots of money by unifying everything.

Enterprises with warehouses or similars In enterprises with warehouses are usually to have to go to the warehouse, and also warehouse managers must be available by phone extension. With mobile PBX people from the office will be able to move to the warehouse with no need of pausing the call; and warehouse managers will be always available.

**Enterprises with bad Internet connection Fiber Internet connection is still not available everywhere, and enterprises that don't have access to it can now use a PBX and manage several phone calls by using a professional PBX that does not rely on the Internet connection.**

Enterprises looking for simplicity Mobile extensions do not require configuration, we all know how to use an extension and you can carry your mobile extension with you in your pocket and talk while you move. The same as cordless phones but with many more benefits.

### **Frequently asked question**

#### **What does it include?**

By default it includes a fixed phone number (new or portability), full hosted PBX Central-SIM, Mpbx Plans you select with a triple cut SIM card; PBX set up so that you don't have to worry about anything.

#### **Is it free to get incoming calls on the mobile extensions?**

Yes, getting phone calls from your PBX on your mobile phone is free.

#### **Do we need Internet connection for phone calls?**

No, you don't need Internet connection to talk on the mobile phone.

#### **How many extensions can we use on the Central-SIM PBX?**

As many as you need; and at least 3 fixed ones or 1 mobile extension.

#### **What do we need?**

You just need smartphones and there is a range of Blackview & Crosscall Ip 68 Rugged Dual Sim Smartphones we supply, We will send you the SIM cards and you will get them in 2-3 days from buying the service.

#### **Why should I buy a mobile PBX?**

Because you will be able to: Answer phone calls from out of your office Use any mobile as a phone extension Use a PBX even if you have a bad Internet connection

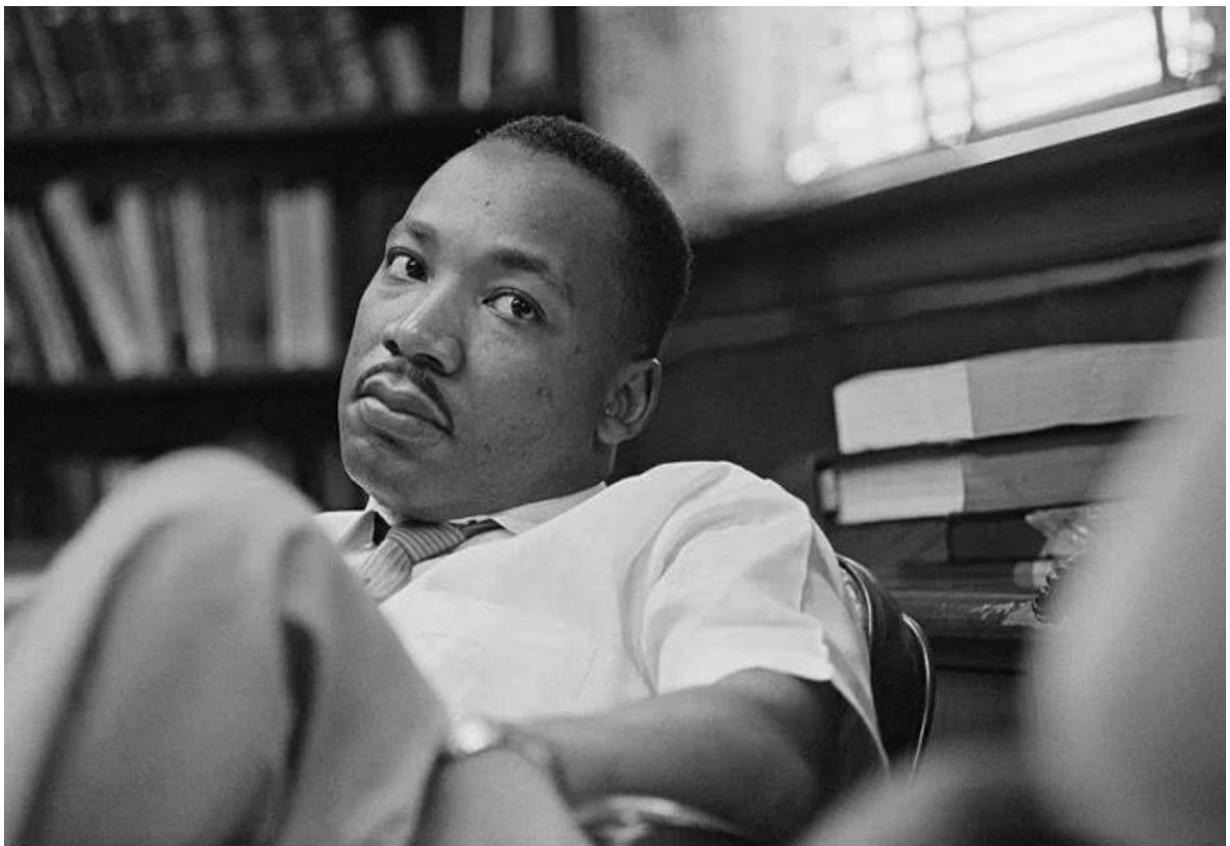
---

## **BUILDING AN ABSOLUTE SOLUTION :**

An absolute solution Powered by the Prefect Problem Statement; a short video demonstration below  
(Please click on the link below)

<https://youtu.be/jOWNEfyHvng>

<https://youtu.be/jOWNEfyHvng>



**"Capitalism fails to realize that life is social.  
Communism fails to realize that life is personal.  
The good and just society is . . . a socially conscious  
democracy which reconciles the truths of  
individualism and collectivism."**

**~ MLK, "Where Do We Go From Here ?"**