

Tips and tricks to help PBX users optimize their business phone setup.

Hacking Your PBX: 15 Ways to Make the Most of a Modern Phone System

For those of us who were around in the mid-1970s, the idea of a telephone switchboard – or at least the old phone company - may be forever tainted by the “Saturday Night Live” skit in which Lily Tomlin, as a switchboard operator, randomly disconnects calls and infamously declares, “We don’t care, we don’t have to... we’re the phone company.”

Thankfully, the last 30 years have brought switchboards into the electronic age, and through PBX (Private Branch eXchange) technology, many businesses no longer rely on telephone companies (or their operators) to complete many of their calls. Instead, many companies use internal telephone switchboards, known as IP PBX systems – the successor to PBX systems – that use IP technology whenever possible to deliver voice calls.

PBXes started out as internal company switchboards that required operators to manually direct calls from one person to the next. By the 1980s, manual switchboards had largely been eliminated, replaced by automated switchboards, which performed the same function but did not require an operator to manually route the call.

Instead of routing calls through old four-wire PSTNs (public switched telephone networks), modern PBX solutions use the Internet protocol to exchange information. Moving to IP networks has greatly expanded the functionality of PBX systems; instead of being restricted to the office, users are now able to work from virtually every corner of the globe and still make full use of their network’s PBX features.

But there is a catch. To make full use of the system’s features, you have to know what they all are, as well as how to set up and operate them. And modern PBXes are very complex and receive constant functionality upgrades.

This article serves as the first step to understanding your PBX and maximizing your company’s productivity using an IP PBX. These tips and tricks will help PBX beginners optimize their business phone setup, as well as make users familiar with some PBX functionalities they might have overlooked or underused.

Standard PBX Features

Are you getting the most out of your PBX system? Almost 100 percent of modern PBX systems come with the features mentioned in the following section. Surprisingly, many PBX system owners do not know these very basic features exist, let alone how to best use them.

1. Automated Attendant

Perhaps the most critical feature to any PBX system is the automated attendant. The automated attendant serves as a virtual receptionist, directing calls to the different departments, voice mailboxes and extensions on your PBX network. In fact, the automated attendant is the virtual successor to Lily Tomlin – but without the attitude. A well-programmed automated attendant gives your business the power to manage a high volume of calls without a high volume of personnel dedicated to answering phones.

When designing your automated-attendant system, keep in mind that users do not want to go through two minutes' worth of call-directing menus only to have a 15-second conversation with customer service, or even worse be connected to a voice mail or even lost in telephone limbo. Try to avoid redundancy and direct the caller as quickly as possible. In addition, conduct usability surveys with strangers, not just internal employees, in order to get an accurate picture of diverse user experiences. After the system is in place, follow up to see where user complaints are directed and what parts seem to be operating least effectively in order to fine-tune the system.

Make sure you know the two or three people, groups or departments that are most frequently requested and move the options to select or transfer to these to the beginning of the selection process; that way, you can get as many of your clients and customers to where they need to go as fast as possible. If a particular topic or question crops up repeatedly, think about adding a menu option to deal with it.

If your system supports it, allow experienced users to jump straight in and transfer themselves without delay. And the final golden rule is to not leave the caller hanging: If they wait through the whole system and don't select anything, either repeat the options or move them onward to the destination that's most likely to help them resolve their issue, even if that issue is just that they don't know what to do next.

2. Call Forwarding

Every efficient PBX system MUST be able to automatically forward calls to various destinations within the PBX network. If a user can't get to his or her phone, the system can and should forward calls to whichever destination makes the most sense: their mobile phone number, their co-worker, their supervisor, their voice

mailbox or any other destination based upon company business needs. Too often, companies fail to consider other call-forwarding options beyond voice mail and thus lose company efficiency, employee and consumer satisfaction and potentially even business. Make sure that you do not forward to a full mailbox or to an empty line; give the caller the option to step back out and find someone else if they want.

PBX systems that lack the capacity to forward calls to the correct destination in a timely manner can cripple a company's incoming communications. So make sure to compare forwarding capabilities before purchasing a PBX system.

3. Call Accounting

If you're serious about keeping a tab on your company's telephone usage, a call-accounting system is a must. Call-accounting software records various call information including "calling party, date, time, duration, destination party, and authorization or account code."

With accurate call-accounting records, you'll be better equipped to bill customers for support calls, gauge which employees are spending too much time on the phone, determine if any section in your automated attendant is creating a bottleneck and compare your records to the PBX server or telecommunications company for any payment discrepancies.

Make sure that you are getting accurate information by coding groups and departments correctly and refine your call accounting reports so that they deliver information in an easy-to-use form.

4. Conference Calling

Conference calling is one of the more powerful features of PBX. Instead of exchanging a series of emails with your co-workers to debate an important topic, conference calling gives you the ability to communicate with a large number of people in real time over the phone. You've already made the investment in a PBX system, so if your employees don't know how to set up their own conference calls, you are just wasting a valuable resource and your staff's time. Many companies that switch to PBX systems continue to pay for expensive external conference-call hosting systems when their new internal PBX can manage conference calls more easily and for free.

Provide training if necessary, and modify any PBX options to make conference calls as easy to use as possible. Make sure you allow remote and even external callers to be part of conferences; a good PBX system can even save you the need to use an external conference-call service for customers.

5. Voice Mail

The seamless transition from user to voice mail is a vital component of every PBX system. When the PBX system is busy (or no one is at the office), voice mail takes over logging calls and messages from both clients and co-workers.

Sometimes, you'll be extremely tied up at the office or will be fielding a lengthy important phone call and just can't get to any other customers. Instead of losing those customers' business or having a receptionist take a message and forget to give it to you, voice mail allows that customer to record a message that you can check at a later time from any remote location. When setting up your system, however, it is important to consider whether the same voice mail message is appropriate for every caller. Would it serve your company better for customers and co-workers to receive different voice mail messages? If so, have you set up your PBX to make that happen?

Also take advantage of any flexibility in system messaging. Instruct employees to provide different greetings for calls that arrive when they are on the phone versus away from the desk. Make it easy for them to set up "out-of-the-office" messages and turn them off when they get back.

6. Call Holding

We've all been placed on hold at one time or another, only to sit in silence or have our call dropped after more than 20 minutes of idle time. This can be one of the most frustrating aspects when dealing with other businesses. Thankfully, almost every modern PBX system provides a company with the ability to play music, advertisements and estimated wait times while customers are on hold. When configuring your call-holding feature, have both internal and external callers test the system to make sure that the user experience is as customer-friendly and reassuring as possible.

In addition to reassuring callers with music or real-time queue updates, a fully functional PBX call-hold system places users on hold in a priority queue and distributes calls accordingly without dropping them or losing customers due to excessive wait times. Consider whether your company would benefit from implementing priority criteria for wait times from particular callers. For example, if your biggest clients call in, you may want to bump them ahead of smaller clients. These decisions require a difficult balance, but if you aren't asking them at all, you aren't using your PBX optimally.

Make sure that you provide clear alternatives to waiting on hold. These can include simple advice on the best times to call to get through, other avenues to gain access or information other than the telephone, and the ability to back out if you have ended up in the wrong call queue.

7. Configurability

What good is a PBX system if you cannot customize it to your company's profile and customer needs? You should be able to configure call-attendant menus, schedule events, customize on-hold messaging and so on. When a customer calls your company, they should be greeted with a unique welcome message, not a pre-programmed, generic PBX one. An important first step is to make a list of all the potential callers; include categories of co-workers and customers. Then create relative priorities between these callers and create a list of the particular needs of each caller. Only once you have compiled this master map of callers should you begin to configure your PBX system, which will ensure that your setup will be compatible with all callers, not just those that come to mind during the setup process.

All of these customizations play an important role in making the customer feel significant, and they provide more information about your company to the customer. In addition, they serve an important role in the productivity of your company. Streamlining the internal call process can shave seconds off each call, and with thousands of calls made per employee per year, those seconds translate into very significant productivity gains.

Advanced PBX Features

8. Consolidation

One of the more popular advanced PBX features takes on the "unified messaging" role, bringing together all of your telecommunications devices into a single convenient system. PBX can bring together your cell phones, analog phones, VoIP phones, email, voice mail, IM (instant messaging), chat, video calling and more.

The technology works by linking all of your office devices together and messages you on the appropriate device based upon your availability. The PBX system might try your cell phone first, your office phone second and finally a conference room - or maybe all three simultaneously, depending on the settings. Whatever the case, the PBX system knows how to get hold of you, and you should use that capability to your company's advantage.

If your employees are on the road and need their cell phones to act like their office phone, your PBX can do it. PBX consolidation gives you the freedom to work wherever you see fit and still receive all the unique telephony features the technology has to offer, including line extensions, conference calling, call forwarding and so on. If your company isn't currently incorporating consolidation technology into the PBX system, it is losing significant time and money by having "out of office" equal "out of touch" when it comes to your employees. Make sure that employees know how to make use of the system and encourage them to use the technology to be more efficient.

9. Personnel Locator

After consolidating all of your PBX features into one unique system, you are on the way to having a fully functional mobile work force. But what happens when you need to know exactly where one of your employees is? Not to worry: PBX systems can keep track of where your employees last interacted with the system, data that will allow you to pinpoint their exact location. This technology, known as telepresence, tracks all interactions with the system - including email and IM - and makes deductions about an employee's location. It also gives employees tools to indicate their status, including do-not-disturb notices at several levels (for instance "I am available for my supervisor and my family only right now.")

Some PBX systems go as far as to incorporate GPS and RFID (radio-frequency identification) technology into their locating software. In such instances, your PBX system would know not to try your office phone when you're away from the desk or would know to cut straight to voice mail when you're at home. These cutting-edge features will not be available in all IP PBX systems, but if you are planning a purchase or an upgrade, now is a good time to make sure of what features you want.

10. Email Integration

Modern PBX systems have the ability to merge with email clients (such as Microsoft Outlook) and retrieve contact information on the various customers you're on the phone with. Once a call is received, the customer's name and phone number is automatically matched with existing records in your email-contact database, and their complete customer profile is brought up on the screen. From there, you can get a more thorough idea of who you're dealing with and will consequently know how to better serve their needs. You can also initiate calls from within other applications.

PBX telephony also boasts the capability to transfer company employees' voice mail messages to their company email account. The messages are sent as easy-to-access audio files and allow employees to store and manage all of their voice mailbox contents. This feature also lets users easily access voice mail on the road without having to dial in.

11. Total 'Business Intelligence' Integration

If you've successfully integrated email into your PBX system, why not take things a step further and integrate your entire business intelligence operation? PBX systems have the ability to communicate with your computer and the customer databases you keep on that computer. To merge the databases and PBX, simply take the call information from your customer, probe the database and presto - you now have all of that customer's contact information, previous interactions, purchase history and so on.

Properly incorporating business intelligence and your PBX will allow for more streamlined and targeted customer relations, as employees will immediately know background information about the customer, that customer's history with the company, past issues they have had and whether they have been flagged as a particularly important or problematic client.

One of the ways that you can take advantage of this technology is by analyzing your customer's purchasing records and determining what they'll need next as the call takes place. At the same time the call is taking place, you can email the customer quotes about your latest products that are related to previous orders he or she has placed, as well as go over these new products during that same call.

Thus, the integration of real-time-accessible business-intelligence data will allow you not only to better serve your clients, but also to predict which products they might be interested in, thereby using the call as an opportunity to pitch those new products.

12. Call Routing

Advanced PBX functionality allows for calls to be routed based upon certain criteria, including caller importance, length of wait, time of day, day of week and so forth.

For example, if the president of your company is calling for sales statistics, it's probably not a good idea to have him wait in the standard customer queue. Likewise, if someone is calling after certain departments are closed, it's probably better to patch them through to the operator rather than have them traverse two minutes' worth of menus to find out the bad news.

Just as with call holding, caller mapping is the key to an efficient call-routing scheme. Unless you know all the variants of calls your company receives, you cannot begin to create a PBX routing system that will properly treat all of those callers.

13. Analog vs. IP Phones

To provide the greatest range of flexibility, modern PBX systems are able to direct calls through both analog and IP-based phones. The biggest benefit for companies here is the ability to keep existing phones, while upgrading the overall system.

Once you have done that, however, you need to look at the capabilities of the phone itself to make the most of them. Some PBXes extend all functionality to even the most basic of analog phones, while others do not. To begin with, you should make sure that employees with a great deal of training in the old phones continue to use them. But you should also look at the specific functionalities and ease of use and pass the higher-functionality equipment on to those users who need it the most.

14. IMS (IP Multimedia Subsystem)

To take your PBX system to the next level you should make sure that it has the technology to provide IMS functionality. IMS allows users to send and receive multiple types of media across a network, rather than just hearing voice on a standard PBX system or reading text on a SMS (short message service) system. For instance, you could videoconference or give an extensive presentation in real time. To exchange full video calls to and from every user, you will need to provide video phones or perhaps webcams to each user, but initially, for example, conference rooms can be video-call-enabled.

15. Virtualize Your Phone

Many IP PBXes now support 'hoteling' – essentially the practice of treating every single phone, or even communications device attached to the system, as equivalent. You sign in to the phone just as you do on a networked computer and that phone temporarily becomes your phone. Calls to you are routed straight to that phone, while calls from you show up on caller ID as being from your regular phone. And this feature can be set up to work from any location, allowing all employees to effectively be at their desks no matter where they are.