



Thousands of businesses have discovered there is a better way to handle their communications. There are many different names for this type of system; LAN Telephony, IP Telephony, Voice over IP (VoIP), etc. If your company is facing an impending cost outlay for telephone infrastructure, you should be looking at this technology.

Much more than an emerging technology, VoIP telephony can help you reduce operating costs by merging voice and data onto one network, by reducing your long-distance costs, by consolidating your company's phone lines and phone systems or by centralizing call answering.

AY Consulting offers the latest in VoIP Business Phone Systems by using open-source technologies such as Linux and Asterisk The Open Source PBX.

### **Why use VoIP?**

The bottom line is it saves money by directly impacting on your telephone expenses whilst efficiently ensuring every call is attended to. If you are expanding or anticipating growth within your business, among many of the benefits of VoIP is the ability to add new employees onsite or remotely, such as working at home or another office to the telephone system with ease.

Business improvements, including effective call routing and enhanced customer service can increase customer satisfaction, and customer satisfaction drives your businesses success.

Another important advantage of the virtual office is that it eliminates the need for a receptionist, whilst still maintaining a professional image for your company. The Digital receptionist will answer all incoming calls and route them to the right member of staff whilst taking messages and sending them to you as an e-Mail attachment when you are not available. You can set the times you are open and the digital receptionist will take the calls when you are not there.

Businesses can take advantage of full blown IP PBX systems with multiple incoming lines, multiple extensions, answering services, call transfer and a great selection of phones to boot.

So adding all these factors up the use of VoIP can bring about a significant reduction in the cost of calls, which are free if both parties are connected to the internet, and are considerably reduced for international calls. Similar cost savings and flexibility of use can be achieved when working away from base or travelling.

[VoIP vs. Traditional PSTN](#)

---

## VOIP Business Phone System Feature List

---

### Advanced Call Forwarding

With a few clicks of your mouse you can forward an extension to another extension, a cell phone, or even to another part of your Auto-Attendant. This let's you build very creative IVR trees to meet the needs of your business.

---

### Advanced CRM Integration

HUD can optionally launch a Web browser and direct it to a custom URL when your extension rings, which is perfect for looking up inbound callers in your favorite Web-based CRM package or even just Googling callers for fun!

### Agent Call Recording

Record your agents' calls -- automatically. Schedule up to 50 calls per agent. Call recordings capture agent name, agent extension, date, time, Caller ID, DNIS and file size. Using the Web-based interface, you can then listen to calls through your computer speakers or download them to your local drive.

---

### Agent Login/Logout

Agents can view their own login/logout status and log themselves into and out of their queues. Managers can also log agents in and out with a click of the mouse.

---

### Agent Variable Log-off

Want your agents to be automatically logged out of their queues upon missed calls? Well, you can now decide, on a per-agent basis, how many calls that agent can miss before he or she is logged out.

---

### Agents on Cell Phones

Remote agents on cell phones or analog home phones can now seamlessly participate in your queues. This means that callers will never know if the answering agent is on an IP phone in your office or on a mobile phone in another part of the world!

---

---

### **Agents Shared across Sites**

Have a Call Center that spans multiple offices? With trixbox Pro's Linked Server Software and trixbox Pro CCE, you can have agents across several branch offices participate in the same queue.

---

### **Alerts & Notifications**

Administrative alerts and notifications allow administrators to set desired operating thresholds for a trixbox Pro deployment. If the system operates outside of these thresholds, the administrator is instantly notified.

---

### **Analog & IP Phones**

trixbox Pro is one of the most flexible phone systems on the market today, supporting all analog phones and numerous IP phones such as Cisco, Polycom, Aastra, SwissVoice, and Snom. trixbox Pro supports MWI (message waiting indicator) on all IP Phones and utilizes stutter-tone on analog phones to indicate voicemail waiting. Analog phones support multiple call appearances via call-waiting flash-hook.

---

### **Auto-Attendant (IVR)**

The trixbox Pro Auto-Attendant lets callers "Press 1 for Support" or "Press 2 for Sales." The Auto-Attendant feature is easy to use and powerful. With simple clicks of the mouse you can manage call flow, build scheduled responses, forward calls off-site, and more.

---

### **Barge Report**

With the ability to barge calls using HUD Agent, your call center manager can now run reports on these barged calls from the CDR Reports page.

---

### **BLF (Busy Lamp Field) Support**

You can now view whether other users of your phone system are on the phone directly from your phone! Using the Company Directory, you can easily drag-and-drop users into your BLF area on any Aastra model with BLF support. We have even added automatic detection and support for the Aastra 536M and 560M sidecars to extend the number of BLF keys available on your Aastra phone.

---

### **Boomerang® Mobile Integration**

Used in conjunction with FindMe, Boomerang Mobile Integration allows you to send a call that has been forwarded to your cell phone right back to any extension on your trixbox Pro. Simply press a few keys on your mobile phone and... presto... that call is redirected to your assistant or back to your own desk. You can even record calls on your mobile using Boomerang!

---

### Branch Office Support

Deploy a low-cost trixbox Pro server in each office. Then, with a few clicks in your control panel, link your servers to take advantage of the following features: Free office-to-office calling via VoIP. Call forwarding to any extension in your linked trixbox Pro server network Converged Name Directories (spell-by-name) Converged Internal Employee Directories Shared agents and queues (Call Center Edition only)

---

### BRI Detection

We now have auto-detection and auto-configuration of Sangoma BRI cards. That means when you put a BRI card in your system and scan for new cards, the BRI will be auto-configured and in most cases be ready to use.

---

### Call Barging (active)

HUD provides supervisors with the ability to actively listen to any inbound or outbound call. It also comes with an extensive permission system, so you can grant a specific group the ability to barge another specific group.

---

### Call Forwarding

Users can employ their personal Web Control Panel to enable call forwarding to either an internal extension or to an external number.

---

### **Call Monitoring (passive)**

HUD provides supervisors with the ability to passively monitor any inbound or outbound call. It also comes with an extensive permission system, so you can grant a specific group the ability to barge or monitor another specific group.

---

### **Call Out**

When accessing trixbox Pro's voicemail system, your employees will be able to make an outgoing call. This can be a great toll-saver, allowing "billable" calls to be kept within your domain. You can enable or disable this feature on a per-employee basis.

---

### **Call Parking Area**

HUD provides all employees with the ability to: view which calls are currently parked; tag parked calls with reminder notes; and drag calls between their extension, their on-hold area, and the parking area.

---

### Call Return

When listening to their voicemail, your employees will be able to press a key to call the person back. You can enable or disable this feature on a per-employee basis.

---

### Call Screening

Call screening allows you to talk to who you want, when you want. When you enable FindMe on your extension, optionally use call screening to screen the calls that are forwarded to your mobile, home, or other phone numbers. Before the call is forwarded, the voice prompt will ask the caller to record their name, and that recording will be played to you before you accept the incoming call. trixbox Pro takes call screening to the next level!

---

### Click-to-Call Mobile Phones

Click the mobile phone icon to instantly call any employee on their cellular phone. The phone number to be dialed is pulled from your trixbox Pro company directory.

---

### Click-to-Email

Simply click the email icon to send an email to any employee in your company. The address will be pulled from your trixbox Pro company directory.

---

---

### Color-Coded Call Status

HUD color-codes all calls allowing you to observe the presence of your employees in real-time: Green - Inbound/outbound call Orange - Queue call Purple - Intraoffice call Blue - Ringing call Maroon - Conference Bridge Grey - Unregistered

---

### Conference Bridges

Conference bridges were once thought to be unaffordable for many companies, but trixbox Pro comes pre-configured with conference bridges for free! A trixbox Pro conference bridge supports an unlimited number of internal participants and as many external participants as you have phone lines. Using HUD you can even, at a glance, see who in your company is speaking on a conference bridge!

---

### Custom Caller IDs

trixbox Pro lets you customize the inbound Caller ID name/number for each department and it lets you change your outbound Caller ID on a per-extension basis, allowing you to block, reveal, or change the Caller ID of every extension in your office! Note: trixbox Pro cannot change your outbound Caller ID if you are using POTS lines. For 911 reasons, POTS outbound Caller IDs are always controlled by your carrier.

---

### Custom CTI (AGI)

On the surface, trixbox Pro is the world's easiest to use enterprise PBX. Under the hood, it can do all sorts of custom things such as database dips, CTI integration, Internet look-ups (RSS feeds), text-to-speech, and more.

---

### Desktop Alerts

When your extension rings, an optional desktop alert displays, informing you of the call and its Caller ID. These alerts also show the names of people calling your extension for Caller IDs stored in your Outlook contact database. You can also display this alert when making outbound calls.

---

### DIDs

Have more employees than phone numbers? With one click of the mouse, you can assign an inbound phone number to an employee.

---

### Drag & Drop Call Control

Quickly and easily drag and drop calls; between extensions, on-hold, a mobile phone, the call parking area, or a voicemail box all without having to touch your desktop phone! HUD also allows you to select a number in any file or application and call instantly!

---

---

### E1 Support

As well as auto-detection of Analog and Digital PRI cards, trixbox Pro 2.0 now features the ability to support E1 circuits. This now allows many people in other countries to utilize higher end phone circuits with trixbox Pro.

---

### Enterprise Instant Messaging

Employees can send instant messages over your own private chat network. This feature will be particularly appreciated by companies that have turned off external chat facilities for productivity reasons and by call centers that want to text-whisper to agents who are on the phone.

---

### Extension Grouping

Optimize efficiency by organizing your display into departmental groupings that mimic the way you operate. Simply build a group and start dragging extensions into it.

---

### Extension Groups

Your organization may not be flat - meaning that some employees have

communication responsibilities that others do not. trixbox Pro includes a powerful "groups" feature that allows you to build extension groups and assign permissions to those groups. Examples of trixbox Pro permissions are: Zone Paging/Intercom ACD - Record other's queue calls ACD - View queue reports ACD - Agent login / logout Call Forwarding Check Voicemail Dozens more! trixbox Pro EE and trixbox Pro CCE include "group permissions" with HUD Pro, enabling over a dozen additional HUD-specific "permissions", such as: Barge Call Privacy (who's talking to who) Block call "stealing" Record my calls Many more

---

### **Extension Search**

HUD's Extension Search facility allows employees to search for and find co-workers quickly so they can view their colleague's status and initiate communications.

---

### **Extension Search - QuickMenu**

After using Extension Search, an optional QuickMenu can appear to allow users to employ number keys, arrow keys, or their mouse to call or chat. When used in conjunction with Shortcuts, this feature makes HUD use fast! Very fast!

---

### **Extension Sorting - name, number, status**

Need to know quickly which employees are on the phone? HUD sorts your extensions in "continuous" mode, so you can always have your active callers at

the top of the list. It's perfect for managers who need visibility into employee activity levels.

---

### **FindMe®**

Allow callers to find you wherever you are: on your cell phone, at home, or at a branch office based on rules you create. Make FindMe work for you with various features such as: a scheduler, simultaneous ringing, and privileged lists. Our new FindMe feature is even smart enough to sense when you have walked away from your desk and thereby ring you on your cell phone. Not only can this be used for individual extensions, it's also a way to create small rings groups. This can be used, for example, to have a secretary's phone ring at the same time as the boss' phone.

---

### **FONcall®**

FONcall is a plug-in for the Firefox web browser which turns any phone number on any web site into a click-to-call link. Click the link and your phone will automatically dial – it's that simple. FONcall will even take your Aastra and Polycom off-hook so the whole experience is hands-free. Use FONcall with CRM software for instant productivity gains.

---

### **Full Featured A.C.D.**

A.C.D. (Automatic Call Distribution) allows you to route incoming calls to your

users/agents in many different ways to facilitate your unique business needs: Ring all - 1st to pickup gets the call. Ring one person at a time in order. Ring in order, with memory. Ring who was least recently called. Ring who has the fewest calls. Ring a random person.

---

### Graphical Queue Reports

View graphical reports on every detail of your queues such as: abandoned calls, completed calls, hold time, average call length, agent productivity, and much more. Also view graphs of call volume and call completion by day, weekday, or even hourly averages. These averaged reports are great tools that allow you to better predict optimal call center staffing levels!

---

### Group & User Permissions

With trixbox Pro EE and trixbox Pro CCE group and user permissions, administrators can decide who has access to HUD features and who does not.

---

### Hands Free Auto Phone Provisioning

Just by connecting your phones to your network, extensions will be created, configuration files for your phones generated and your phones automatically assigned to the new extensions! Hands free phone auto-provisioning is supported on all supported Aastra models and Polycom models with firmware 2.2 and above.

---

### Historical System Resource Graphs

trixbox Pro EE and CCE offer advanced resource graphs for administrators. They can see system resources, server activity, and network activity, both in real-time and in precise 5-minute historical snapshots.

---

### Hot Desk

Have more employees than desks and phones? No problem! Use trixbox Pro's "hot desk" feature. With a couple of clicks of the mouse, extensions and voicemails will follow your employees from desk to desk!

---

### Instant Messaging Chat History

What did she say again? With HUD's IM chat history, employees will always have a record of their interoffice communications.

---

### Interactive Desktop Alerts

Interactive desktop alerts, like basic desktop alerts, provide information relating to inbound or outbound calls. Unlike basic alerts, interactive alerts allow you to disconnect calls, call mobile phones, initiate call recording, query Web-based

---

applications with the Web Launcher, initiate chats, send e-mails, and manage Outlook contacts directly from the desktop alert.

---

### **Intercom / Zone Intercom**

Many telephony products offer an intercom feature, but do you know of any that offer Zone Intercom? trixbox Pro does! With trixbox Pro you can dial a zone to setup an ad-hoc conference with everyone in that zone! Note: Cisco phones cannot receive pages.

---

### **IVR Authentication**

With a click of the mouse, you can password-protect any part of your Auto-attendant. Use this feature to protect your Conference Bridge or your priority queues.

---

### **Live Backup Server**

When you need fast and simple redundancy LBS can help save the day. By using LBS you can have a complete hot spare system online and with just a few seconds of configuration in the trixbox Pro control panel you can easily switch over to the backup machine. Live Backup Server sold separately.

---

### Multiple Deployment Management

As a reseller you can now log into the trixbox Pro control panel and have easy access to all of the systems under your single account. This way you don't need to login separately to manage all of your client's systems, they are all available from your single reseller account.

---

### Music on Hold (2 Playlists)

Music-on-Hold (MOH) is as simple as uploading MP3 files using the web-based administration panel. trixbox Pro Standard Edition comes with 2 playlists, giving you the ability to play different audio tracks for calls coming into different departments or queues. Use MOH creatively to highlight promotions to new customers, up sell current customers, or assuage angry customers calling your support team.

---

### Music-on-Hold (Unlimited)

Music-on-Hold (MOH) is as simple as uploading MP3 files using the web-based administration panel. trixbox Pro comes with unlimited playlists, giving you the ability to play different audio tracks for calls coming into different departments or queues. Use MOH creatively to highlight promotions to new customers, up sell current customers, or assuage angry customers calling your support team.

---

### Name Directory

trixbox Pro comes pre-configured with a professional "spell-by-name" directory. Callers are simply prompted to "spell the first three letters of the party's first or last name." They are then automatically connected to the requested extension. Don't want to be in the Name Directory? No problem. The trixbox Pro administrator can easily exclude certain extensions from the Name Directory. Linked Servers (e.g. branch offices) now have linked Name Directories too!

---

### **Night Mode**

Have a small office that opens when your first employee arrives and closes when your last employee leaves? Night mode is a feature for companies that want to "turn on" their phone system in the morning with a few key presses and put it to night mode and the end of the day with a few key presses or setup a speed dial button on your phones for one-touch switching of mode.

---

### **On-the-Fly Recording**

HUD with trixbox CCE provides your employees with the ability to record their own calls with the press of a button. With trixbox Pro CCE, supervisors can also copy agents' recordings, capturing the agent name, agent extension, date, time and file size in the process.

---

### **Operator Panel (w/ BLF)**

HUD® gives your organization a full-featured operator panel, including unlimited

on-hold and parking areas for every employee and easy tools for managing and transferring calls.

---

### **Outlook Integration**

Right-click on a contact or on an email message to call the associated phone number. Your phone rings and you're connected! What could be easier? Not only that, but HUD matches inbound Caller IDs with your personal or company address book and alerts you via a desktop alert!

---

### **Outlook Integration**

Inbound Calling: When your phone rings, the Caller ID will be analyzed against your Outlook contacts. If a match is found you will see the person's name pop-up! Call from your inbox: Right-click on a contact or email message to call. Your phone rings and you're connected!

---

### **Paging / Zone Paging**

Want to page everyone in the whole company or just a certain set of employees? Simply build a "group", assign that group an extension number and begin paging them! Note: Cisco phones cannot receive pages.

---

### Powerful Reporting

From the trixbox Pro Web Admin Panel, you can analyze real-time call logs for all extensions using powerful search and filter parameters. trixbox Pro also provides real-time billing (available for those who use our VoIP network) so that, at any time, customers can see a snapshot of how much they are spending company-wide on telephone calls. From the trixbox Pro Web User Panel, individual users can look at their call logs — and return calls with the click of a mouse!

---

### Presence Management

With the ability to see other employees on your trixbox Pro system and view their color-coded call state, you'll spend less time tracking people down and leaving voicemail messages.

---

### PSTN Fallback

trixbox Pro offers VoIP-users a PSTN back-up in case of an Internet service interruption. Virtual PBX products offer no PSTN back-up, so, if your Internet service goes down (there is no 100% guaranteed up-time), your business telephone line goes down with it — which is unacceptable in a dynamic business environment. PSTN-Fallback is automatic. trixbox Pro detects poor (or zero) Internet quality and immediately steps your system into PSTN mode. Note: trixbox Pro runs in PSTN-only mode if desired. No VoIP required!

---

### Queue Status

Managers can see which agents are logged into and out of their queues.

---

### Real-time Queue Stats

Want to know how many callers are in your queues? Need to know which agents are logged in? Need to know which of your agents is already on a call? The trixbox Pro Web-based control panel answers all of these questions, helping you to manage your queues with real time stats.

---

### Real-Time System Resource Graphs

trixbox Pro offers highly detailed graphs of system resources (CPU, RAM, HD, Swap), server activity (Calls, Recordings, Conferences), and network activity (upstream, downstream).

---

### Rebrandable Interface

trixbox Pro is the first trixbox telephony application platform that provides easy branding capabilities through a powerful administrative interface. In trixbox Pro SE, resellers and customers can co-brand the product by uploading images and choosing color palettes. trixbox Pro EE and trixbox Pro CCE support full re-branding capabilities.

---

---

### Report Exporting (.csv)

Extend trixbox Pro's powerful reporting engine by creating .csv files that you can import into applications such as Excel and Access.

---

### Ring-all (Blast Group)

A Blast Group takes one inbound call and rings all phones; the first to pick up gets the call. This feature, on other phone systems, is sometimes called "Simultaneous Ring".

---

### Routing by DIDs

Your business may have several numbers for different departments. With trixbox Pro's ability to route by DIDs, you can direct calls to a different call menu based on the inbound number.

---

### Scheduler

Want to play different messages to callers at different times of the day? Want an entirely different Call Menu on weekends, with different options for your callers to choose from? Use trixbox Pro's intuitive Scheduler to create and apply schedules

that will make your phone system work for you - even when you have gone home for the day!

---

### **Shortcuts (Hotkeys)**

HUD supports shortcuts that allow employees to search, chat, and call other employees quickly and easily. Now, finding fellow employees is as easy as Ctrl+Shift+F.

---

### **Skills-based Routing**

Assign each agent a priority and your queue will distribute calls to them accordingly. This means you can pass more leads to your star-closer, or pass fewer leads to your underperformers. trixbox Pro offers an additional layer of prioritization based on agent order. This means similarly skilled agents can receive calls in an ordered, round-robin fashion.

---

### **SMS/Pager Voicemail Notify**

This feature gives you the ability to enter an SMS or Pager email address in order to receive voicemail notifications on that device. These notifications are short and do not include the actual audio attachments. This feature can be used in conjunction with the Voicemail-to-Email feature. Thus you can receive email alerts (including optional audio attachments) at one email address and simultaneously receive SMS/pager notifications at another address.

---

### **Telecommuters (Patent-Pending)**

Telecommuting is the way of the future — proven to increase employee satisfaction and effectiveness. You'll be glad to know that trixbox Pro was built with telecommuting in mind. In fact, the telecommuting technology in trixbox Pro is so innovative and effective that it is patent-pending. With an IP phone (or softphone), employees can keep their extension number as they travel outside the office or between offices. No configuration changes required. You'll never again have to leave the message, "I am out of the office today." From your home, a hotel, or even your cell phone you'll be able to answer your extension as if you were still glued to your cubicle!

---

### **Transfer to Voicemail**

With a simple click of the mouse, transfer an incoming call to your voicemail, or drag the call to someone else's voicemail.

---

### **Trunks Status Pages**

View the real-time status of trunks in the administration control panel to ensure that your digital and analog PSTN interfaces are operating correctly. Here you can quickly see whether your cards are connected, determine whether they have alarms, view the PRI status, and more.

---

### Unlimited Call Queues

Each queue comes with a variety of options: Personalized audio announcements give your queue a professional sound. "Hold Time" announcement frequency customization allows you to tailor your callers' on-hold experiences. User/Agent priorities allow for more effective call routing. Hold time limits ensure that callers do not remain in your queue for extended periods. Caller limits keep queue call volumes within manageable levels. The ability to set the length of time after fielding a call before the same agent is called again improves agent productivity. Much much more!

---

### Unlimited VoIP Accounts

trixbox Pro comes VoIP-ready with unlimited VoIP provider accounts for all editions (NEW!). With a couple clicks of the mouse, you can connect trixbox Pro to your favorite VoIP Providers (SIP or IAX) and configure VoIP for inter-office and intra-office calls while keeping regular calls going out over POTS/PSTN. We recommend using VoIP for free inner and intra-office calling, and perhaps to save on international calling, but to stick with PSTN if you can afford to. However, if you are going to use VoIP as your primary provider, we highly recommend: 1. A dedicated broadband connection just for VoIP 2. A segmented LAN (different network for phones and PCs). 3. A high quality VoIP Provider. 4. QOS on every part of your LAN and WAN. 5. Do not use GSM as it tends to sound poor.

---

### Upload Voice Prompts

This feature gives you the ability to upload highly professional pre-recorded voice prompts when simple recordings from your phone (trixbox Pro SE) just won't do.

---

### **Voicemail**

trixbox Pro offers four easy ways to retrieve messages: Press a single button on your office phone. Dial in remotely from any outside phone. Receive attached .wav files in your email. Listen via your Web control panel.

---

### **Voicemail Groups**

Want to send a voice message to multiple people? Use the Voicemail Group feature to easily build groups (such as your sales team). Then dial the number of your group, just as you would normally dial an extension, and leave a message. Seconds later, everyone in the group gets your new message!

---

### **Voicemail-to-Email**

Receive your voicemails as emails! trixbox Pro comes pre-configured to send each employee an email whenever they get a voicemail. You can even have the audio attached to your email so that you can listen to the voicemail right from your Inbox. No POP3, SMTP, IMAP, or Exchange configuration required!

---

### **Web Access to Recordings**

trixbox CCE's powerful web-based control panel gives every employee easy access to their call recordings made with HUD.

---

### Web Control Panel

Our award-winning Web interface comes in two flavors: An admin panel for administrators -- manage all aspects of trixbox Pro remotely. A user panel for employees -- allowing them to manage their personal configurations (such as listen to voicemail, click to call people back, enable call forwarding, etc.) from anywhere in the world.

---