



Voice over IP Phone System

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TELEPHONE USER GUIDE

A400 A800 A2400 D100 D200 D400
A400 A800 A2400 D100 D200 D400

Extension #: _____

Voice Mail Password: Default = 1234 _____

Internal IP Address #: _____

MAC Address# _____

External IP Address #: _____



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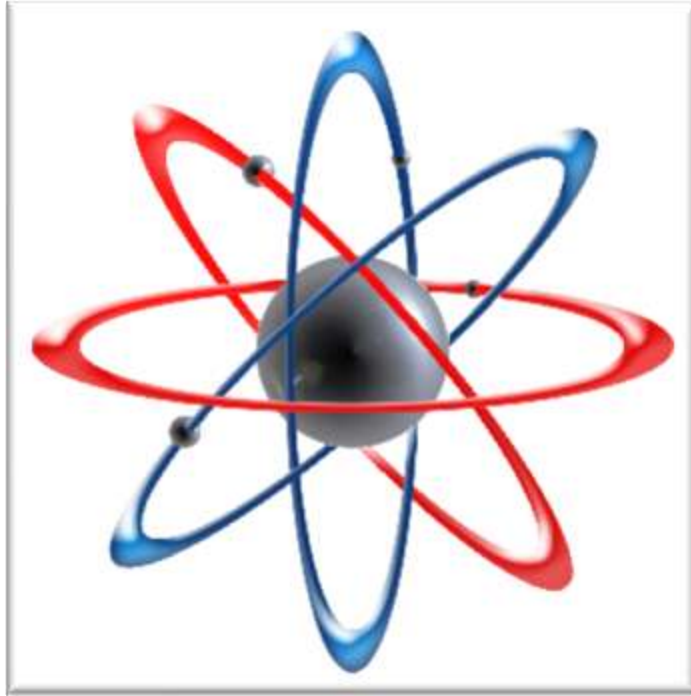
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User Section

This section will detail the end user functions of the system and how to use the features.

This guide will outline how to make and receive phone calls, transfer, conduct a simple conference call and how to setup and check your voicemail from in or out of the office.

If you have any questions, please contact your system administrator.



Answering Phone Calls

RECEIVING CALLS

1. **Incoming single call:** Phone rings with selected ring-tone. The corresponding account LINE flashes red. Answer call by taking handset off hook, pressing SPEAKER/HEADSET button or by pressing the corresponding account LINE button.
2. **Incoming multiple calls:** When another call comes in while having an active call, the phone will produce a Call Waiting tone (stutter tone). Next available lines will flash red. Answer the incoming call by pressing its corresponding LINE button. The current active call will be put on hold.
3. **Intercom:** Dial “*80XX” (XX = Extension). Phone beeps once and automatically establishes the call via SPEAKER. (Feature must be enabled by the administrator)
4. **Paging:** Dial the Paging Code - 111. All phones beep once and automatically turn on the SPEAKER. (Must be enabled by the administrator)
5. **Call Pick Up:** When a call at another station is ringing, you can answer that call by picking up the handset and dialing “*8”. The call will be sent to your phone. (Must be in the same pickup group as the phone that is ringing)

DO NOT DISTURB

1. During an incoming call, press the “DND” button if you do not want to take a call. This will send the caller directly to voicemail.
2. Press the “DND” button to set phone to ‘DO NOT DISTURB’ (icon will be on the screen). The phone will not ring and send caller directly to voicemail. (See note above) Feature code *76 will toggle DND on and off.

PHONE FUNCTIONS DURING A PHONE CALL

CALL WAITING/ CALL HOLD

1. **Hold:** Place a call on ‘hold’ by pressing the “HOLD” button.
2. **Resume:** Resume call by pressing the corresponding blinking LINE.
3. **Multiple Calls:** Automatically place ACTIVE call on ‘HOLD’ by selecting another available LINE to place or receive another call. Call Waiting tone (stutter tone) audible when line is in use.

MUTE/DELETE

1. Press the MUTE button to enable/disable muting the microphone.
2. The “Line Status Indicator” will show “LINEx: SPEAKING” or “LINEx: MUTE” to indicate whether the microphone is muted.



Answering Phone Calls Cont...

CALL TRANSFER

TVS supports both *blind* and *attended* (or supervised) transfer:

1. **Blind Transfer:** Press “Xfer” button, then dial the number. Once it starts to ring, press the “Xfer” button again to complete the transfer of the active call.

2. **Attended (or Supervised) Transfer:** Press “Xfer” button to automatically place the ACTIVE LINE on HOLD. Once the call is established, you may announce the caller and press “Xfer” key again to transfer the call and hang up.

NOTE: To transfer calls across SIP domains, SIP service providers must support transfer across SIP domains. Blind transfer will usually use the primary account SIP profile.

Simple Conference Calling

5-WAY CONFERENCING

The TVS can host conference calls and supports 5-way conference calling.

Initiate a Conference Call:

1. Establish a connection with two or more parties
2. Press CONF button
3. Choose the desired line to join the conference by pressing the corresponding LINE button.
4. Repeat steps 2 and 3 for all parties that you want to join the conference. This can be done at any time.

Cancel Conference: Canceling establishing conference call.

1. If after pressing the “CONF” button, a user decides not to conference anyone, press CONF again or the original LINE button.

2. This will resume two-way conversation.

End Conference:

1. Press HOLD to end the conference call and put all parties on hold.
2. To speak with an individual party, select the corresponding blinking LINE.



Making Phone Calls

HANDSET, SPEAKERPHONE AND HEADSET MODE

Handset can be toggled between Speaker and Headset. To switch between Handset and Speaker/Headset, press the *Hook Flash* in the handset cradle or press the SPEAKER button.

Incoming calls to a specific account will attempt to use its corresponding LINE if it is not in use. When the “virtually” mapped line is in use, the phone will flash the next available LINE (from left to right) in red. A line is ACTIVE when it is in use and the corresponding LED is solid red.

COMPLETING CALLS

There are six ways to complete a call:

1. **DIAL:** To make a phone call.

- Take Handset/SPEAKER/Headset off-hook or press an available LINE key (activates speakerphone) or press the NEW CALL soft-key.
- The line will have a dial tone and the primary line (LINE1) LED is red. If you wish, select another LINE key (alternative SIP account).
- Enter the phone number
- Press the SEND key or press the “DIAL” soft-key.

2. **REDIAL:** To redial the last dialed phone number. When redialing the phone will use the same SIP account as was used for the last call. Thus, when the third SIP account was made for the last call/call attempt, the phone will use the third account to redial.

- Take Handset/SPEAKER/Headset off-hook or press an available LINE key (activates speakerphone), the corresponding LED will be red.
- Press the SEND button or press the REDIAL soft-key.

3. **CALL RETURN:** To call the last phone number that called your phone. When returning a call, the phone will use the same SIP account as the call was made to. Thus, when returning a call made to the third SIP account, the phone will use the third SIP account return the call.

Hand-free option

1. Press the REDIAL key
2. Scroll using the arrow keys (Phone dependant) to find the number you wish to call back
3. Press Dial soft-key



Making Phone Calls Cont....

Hand-set option

1. Take the Handset off-hook
2. Press the CALL RETURN soft-key

4. **USING THE CALL HISTORY:** To call a phone number in the phone's history the phone will use the same SIP account as was used for the last call/call attempt. Thus, when returning a call made to the third SIP account, the phone will use the third SIP account return the call.

1. Press the SERVICES button to bring up the Main Menu.
2. Select Callers List and then scroll up or down, depending on your needs
3. Press Dial soft-key to dial.

5. **USING SPEED DIAL:** Each phone is equipped with speed dial. There is personal speed dial which is stored on the phone and system speed dial that uses the system phone book.

Access personal speed dial by pressing the speed dial key, scrolling through the numbers, press select and dial.

Access system speed dial by entering *0 and the speed dial bin entry matching your selection. (See system administrator for setup and entries)

NOTE: Dial-tone and dialed number display occurs after the handset is off-hook and the line key is selected. The phone waits 6 seconds (by default; no key entry timeout) before sending and initiating the call. Press the "DIAL" button to override the 4 second delay or dial the number while on hook.



SETUP/CHECK VOICE MESSAGES

Setup Greetings

When you first access your voice mail account, you will need to record your personal greetings. There are three (3) greetings to record. NAME, UNAVAILABLE GREETING and BUSY GREETING. The system recognizes the state your phone is in and uses the appropriate greeting. Your name recording is used when a call is transferred to you and for the company directory.

You also have a TEMPORARY greeting that is used for when you will be out for extended periods of time such as vacations. It overrides all other greetings until deleted.

Internal

The blinking red MWI (Message Waiting Indicator) indicates a message is waiting. Press the **Voice Mail** button to retrieve the message. An IVR will prompt you through the process of message retrieval. Press a specific LINE to retrieve messages for a specific line account.

NOTE:

- Each line has a separate voicemail account. Each account requires a voicemail portal number to be configured in the "voicemail user id" field.
- To check which line account has a message
 - 1) Press the **MSG** button (this always checks the primary account),
 - 2) Check each line for stutter tone
 - 3) Check missed calls using the menu.

To access voicemail from your extension, dial ***97** and enter your password.

To access voicemail from any extension, dial ***98**. You will be prompted to enter your extension number and password.

To access voicemail from the outside calling in you must first go to your mailbox. This can be done a couple of ways:

- 1) Operator/IVR answers and transfers you to your mailbox
- 2) The IVR is programmed for a dial to voicemail option (See your administrator to see if this option is available)
- 3) There is a direct dial number into the voicemail prompts

Once you hear your greeting, press ****** and the system will assume there is a user logging in and will ask for your extension number and password. You can now listen to, forward messages and administer your greetings from here.

See the user guide on the back page for dial codes and explanations.



To Setup/Check your Voice Mail from the Internet/Browser

In order to setup or check your email using a browser, you must see your system administrator for the URL or the IP Address of your system. Recording your greetings must be done from a phone.

Once you know either the URL or the IP, you can proceed.

Open a Web Browser such as Internet Explorer or Firefox.

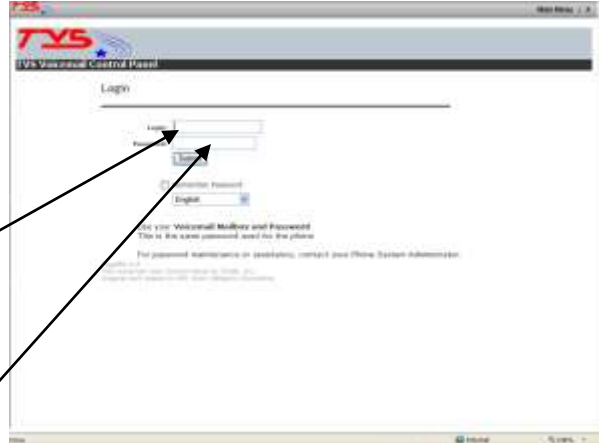
Enter the URL (www.MYCOMPANYPBX.com/recordings)

Or, enter the IP Address exactly as follows:

<http://XXX.XXX.XXX.XXX:9080/recordings>

Your login ID is your extension number

Your default password is 1234. *You can change it later.*



Once inside, you can listen to your messages, forward them and delete them.



To Listen, Forward or Delete Voicemail messages:

The screenshot shows the TVS Voicemail Control Panel for Gary Bailey (200). The interface includes a search bar, a list of messages, and various action buttons. Callouts point to specific features:

- You can forward your messages to another extension**: Points to the 'forward_to' dropdown menu.
- You can download your messages to your PC**: Points to the 'Download' icon in the message list.
- You can listen to your messages on your PC**: Points to the 'Playback' icon in the message list.
- You can email your messages to any email address**: Points to the 'email to' input field.
- You can move your messages to another folder**: Points to the 'move to' dropdown menu.
- You can select your messages for deletion**: Points to the 'delete' button.

Date	Time	Caller ID	Priority	Orig Mailbox	Duration	Playback	Download
2009-10-14	15:04:33	"Gary Laptop" <231>	3	200	4 sec		



Detailed Call Log:

Check the box to enable notification

Call Monitor for Gary Bailey (200)

Results 1 - 15 of 3673

Date	Time	Caller ID	Source	Destination	Context	Duration	Monitor
2009-12-14	15:04:11	"Gary Laptop" <231>	231	200	ext-local	27 sec	
2009-12-14	14:30:31	61569086512	61569086512	3353322	from-internal	6 sec	
2009-12-14	14:01:13	"Gary Bailey" <200>	200	h	from-internal	4 sec	
2009-12-14	13:07:43	"Dynamic Voice Data" <2814915990>	2814915990	200	ext-local	148 sec	
2009-12-14	11:54:18	61569086512	61569086512	200	local	182 sec	
2009-12-14	11:49:47	61569086512	61569086512	200	ext-local	271 sec	
2009-12-14	11:33:40	"Admin Office" <205>	205	200	ext-local	52 sec	
2009-12-14	11:30:41	"Steven Heicher" <204>	204	200	ext-local	20 sec	
2009-12-14	11:22:54	"Admin Office" <205>	205	200	ext-local	12 sec	
2009-12-14	10:14:02	"Gary Bailey" <200>	200	203	ext-local	41 sec	
2009-12-14	10:08:39	"Gary Bailey" <200>	200	203	ext-local	22 sec	
2009-12-11	16:01:27	"Admin Office" <205>	205	200	ext-local	53 sec	
2009-12-11	13:47:54	"Jenne Distributors Inc"	4408350040	200	ext-local	98 sec	

Any recorded conversations will show up here.

Detailed Call Log showing date, time, caller id, and duration of call.

You can perform a search to find a specific record.



To Manage Your Voicemail and Enable Email and Text Message Notification:

Click on **SETTINGS**

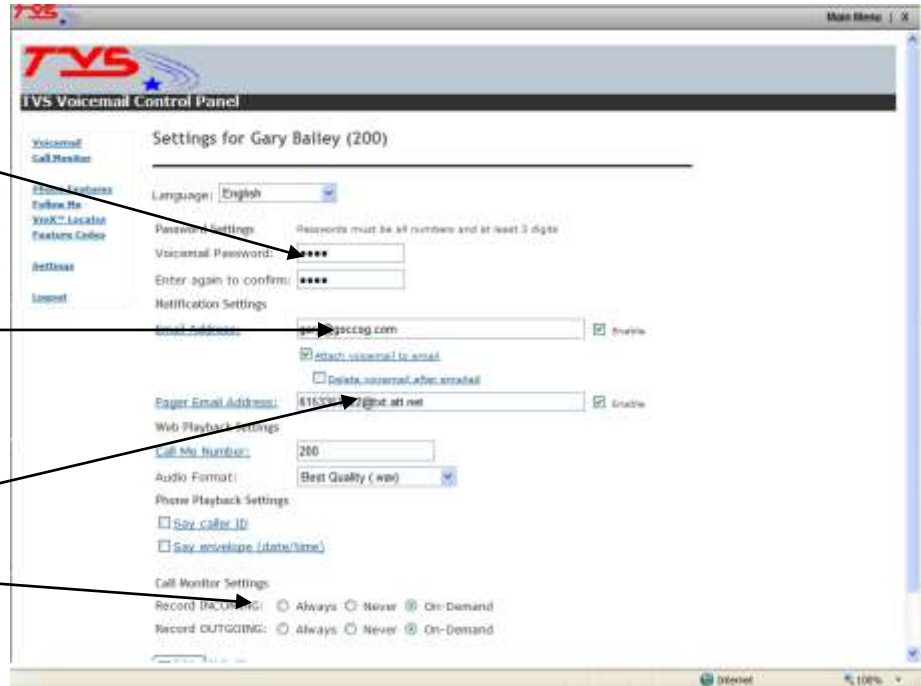
Change your voicemail password

Check the box to enable notification

Enter the e-mail address you want the message delivered to

Enter your cell phone text address if you want a text sent to your cell phone. Below are some of the most common carriers.

Enable Call Recording.



AT&T - XXXXXXXXXX@txt.att.net

VERIZON – XXXXXXXXXX@vtext.com

SPRINT - XXXXXXXXXX@messages.sprintpcs.com

T-MOBILE – XXXXXXXXXX@tmomail.net

CRICKET – XXXXXXXXXX@sms.mycricket.com

ALLTEL – XXXXXXXXXX@alltelmessage.com

NEXTEL – XXXXXXXXXX@messaging.nextel.com

VIRGIN MOBILE – XXXXXXXXXX@vmobl.com

CELLULAR ONE – XXXXXXXXXX@mobile.celloneusa.com

OMNIPPOINT – XXXXXXXXXX@omnipointpcs.com

QWEST – XXXXXXXXXX@qwestmp.com

Check the appropriate boxes for the notification settings. You can have a WAV file sent, you can have the system read the date and time and you can have the system delete messages as they are e-mailed **(WE DO NOT RECOMMEND THIS)**.



Find Me-Follow Me

Some people like to have all calls follow them and ring all their phones. Others may prefer to not be bothered by every call; if the caller really needs them now, they would like an option but prefer to have voicemail handle the less *urgent* matters. The TVS offers two different features that are designed for these scenarios, *Follow Me* and *VmX Locator*.



First, contact your system administrator to enable the VMX Locator service and Follow Me for your extension. Once the VMX is enabled, log into the TVS Voicemail Control Panel with your username and password.



Enable: Unchecked – which means that phone calls will not automatically be sent to our Follow Me setup. This makes it only accessible through the VmX Locator.

Follow Me List: We list the numbers that we want in our Follow Me list. Note that we must include our own extension if we want it rung as well. Also note, there is no '#' required at the end of an external number. The system figures this out by itself.

Ring First For: We like the initial ring time. This is not really necessary in the example we are describing but makes it more convenient if you like to switch back and forth

Ring Follow Me List for: Make sure this time is long enough for the user to answer their cell phone and press 1 to confirm the call if using confirmation.

Use Confirmation: Checking this box will assure that all calls sent to an outside line (vs. internal TVS extensions) will require the user to confirm the call by pressing 1. This keeps calls from dropping into cell phone voicemail, answering machines or other undesired landing spots. That provides our desired Follow Me configuration. We must now setup the VmX Locator configuration.

Choose the VmX™ Locator menu option and you will be presented with the menu.

We have configured the options as follows:



Use When:

Check **unavailable** but not **busy**. If the phone is busy, or the caller has already flowed through the *Follow Me* process and was sent to the *busy* destination if no answer then you do not want them to be able to choose to keep trying your *Follow Me*.

Voicemail Instructions:

This is a personal preference. If checked the caller will be presented with the standard voicemail system instructions concerning leaving a message, reviewing their message, etc. after playing your greetings.

Un-checking this box will disable that system message.

Press 0:

If you have a personal assistant or alternative choice for what to do when people press 0, you can uncheck this box and provide the number here. Otherwise the system default for zero-ing out of voicemail will be used.

Press 1:

Checking the *Send to Follow-Me* is what does our magic and makes sure that this option gets sent to *Follow Me* even though we had disabled it in the previous section.

Press 2:

If you really want to complicate your caller's lives you can present them with yet another option and put a number in for option 2. Some people also choose to use this option but not "announce" that it is available. We'll leave it to the user's imagination of how they may choose to use this option.



Voice Mail Blasting

Voice Mail Blasting is a great tool for getting the message out to all of your employees with simplicity. By only recording a single message, all recipients will receive that message into their voice mail, inbox and be notified by text message that they have a message waiting. You can establish several different groups such as Sales Department, Customer Service, Technical Department, Shipping, and Administration and so on.

Voice Mail Blasting must be enabled by your System Administrator prior to use.

To access the Voice Mail Blasting feature, dial the code for the Blast Group you wish to notify.

- Confirm that this is the correct group.
- Enter your PIN (If required).
- Record your Blast message.
- Press # when you are finished recording.

Voice Mail Blasting can also be accessed from outside the office as well. Please contact your system administrator for more information.

WEB Meet Me

Web Meet Me is a web based conference tool to help you administer and maintain your conference calling environment.

To access Web Meet Me:

Inside the office:

- Enter the IP address of your PBX and /web-meetme. (<http://192.168.1.100/web-meetme>)
- You can schedule a conference, monitor a conference or edit an existing conference.
- You can manage the users that are allowed to administer conference calling.
- You can pull various reports on the conferences

From Outside:

- Enter the fully qualified domain name for your TVS PBX. Contact your system administrator for this information (<http://MYTVSPBX.com/web-meetme>)



Dictation Services

- **Dictation Service:**
Enable or Disable with this drop down menu.
- **Dictation Format:**
This is the sound format that your dictation is saved in. Choose from: Ogg Vorbis, GSM, or WAV.
- **Email Address:**
This is the email address that the completed dictations are sent to.

To dictate enter *34 on the phone. Enter a file name with numbers followed by the pound key, for example 1234#.

To start dictate dial 1 to switch to record mode then dial * to start recording. If you want to start over, dial 8.

Toggle between pause and recording by dial *.

When you are done with the recording, dial 1 to go to playback mode then dial * to start to listen to your dictation, press * to toggle pause.

Dial 2 to toggle fast playback. Dial 7 or 8 to seek forward and reverse.

To mail the dictation, dial *35 then enter your file name used previously.



Voicemail User Guide

Main Menu

1 New Messages

While listening to a message you can execute the following commands:

- 4 Play Prev Msg
- 5 Repeat Msg
- 6 Play Next Msg
- 7 Del Current Msg
- 8 Fwd Message (1)
- 9 Save Messages
- # Forward 3 Sec
- * Rewind 3 Sec

2 Change Folders

Pick which folder you would like to listen to Voicemails in

- 0 Switch to New Msg
- 1 Switch to Old Msg
- 2 Swith to Work Msg
- 3 Switch to Family Msg
- 4 Switch to Friends Msg
- * Cancel

3 Advanced Options

Please choose from the following options:

- 4 Place Outbound Call
- 5 Leave Voicemail for User (1)
- * Return to Main Menu

0 Mailbox Options

Please choose from the following options:

- 1 Record Unavailable Greeting (2)
- 2 Record Busy Greeting (2)
- 3 Record Name (2)
- 4 Record Temporary Greeting (2)
- 5 Change Password
- * Return to Main Menu

(1) While forwarding or leaving a message for a user you can choose the following:

- 1 Enter Extension Number
- 2 Look Up in Directory
- 1 Prepend Message
- 2 Do Not Prepend Message

(2) While recording your greeting you can choose from the following commands:

- 1 Accept Your Recording
- 2 Review Your Recording
- 3 Re-Record Your Recording



Feature Code Admin	
Day/Night	*280
Asterisk General Call Pickup	*8
Blacklist a number	*30
Blacklist the last caller	*32
Call Forward All Activate	*72
Call Forward All Deactivate	*73
Call Forward All Prompting Deactivate	*74
Call Forward Busy Activate	*90
Call Forward Busy Deactivate	*91
Call Forward Busy Prompting Deactivate	*92
Call Forward No Answer/Unavailable Activate	*52
Call Forward No Answer/Unavailable Deactivate	*53
Call Trace	*69
Call Waiting - Activate	*70
Call Waiting - Deactivate	*71
ChanSpy	779
Check Recording	*99
Connect to Gabcast	*422
Dial System FAX	666
Dial Voicemail	*98
Directed Call Pickup	**
Directory	#
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DND Deactivate	*79
DND Toggle	*76
Echo Test	*43
Email completed dictation	*35
Findme Follow Toggle	*21
In-Call Asterisk Attended Transfer	*2
In-Call Asterisk Blind Transfer	##
In-Call Asterisk Disconnect Code	**
In-Call Asterisk Toggle Call Recording	*1
Intercom prefix	*80
My Voicemail	*97
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PhoneMail	6245
Queue Toggle	*45
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Simulate Incoming Call	7777
Speak Your Exten Number	*65
Speaking Clock	*60
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User Intercom Allow	*54
User Intercom Disallow	*55
User Logoff	*12
User Logon	*11
Wake Up Calls	*68
Weather	947
Weather by Zip Code	*947
Web MeetMe	*66
ZapBarge	888



Administration

This section will outline the administrative areas of the TVS VoIP Phone System. If you require access to use these features, please see your system administrator for access.

WARNING:

The settings and use contained herein could result in the system not operating correctly and stop calls from being sent or received from the system. Please understand any changes that you make before you apply them. Recovery can only be done by the TVS Install or Tech Support team.



Making System Recordings (Announcements)

NOTE: TVS strongly suggests you use an extension connected to the PBX to make your recordings. They'll be quick and in the right format and you can worry about getting everything else right. When everything is all finished, you can come back and replace those temporary recordings with paid or improved versions.



To use your extension to make a recording:

Click on System Recordings at the bottom of the left side. Enter your extension in Step 1 and press Go. Don't skip this and go to Step 2, or you'll get a cryptic error. Now dial *77 on that extension and make your recording after the beep. Press "#" when finished. Dial *99 to listen to it. If the recording is good enough, hang up and name the recording in the GUI and press **Save**.

For lame and silly reasons, spaces are not allowed in the names. You can listen to your recording and add on other recordings (such as the built-in recordings) by clicking on your recording in the right tool panel. These recordings are used for the IVR and any other custom announcements you would like to be played.



Creating an IVR

The 'Digital Receptionist' page is the interface used to setup your auto attendant when people call your PBX. Normally heard as "Thanks you for calling MYBUSINESS, for Sales press 1, for Service press 2", etc.

Planning

While the urge is strong just to dive in by clicking on IVR, you should resist this impulse.

First, draw out on paper what you intend to achieve. Write out word-for-word what all the recordings are going to be. Although time consuming, it will make the difference. The steps to build a good IVR are:

1. Planning
2. Customer agreement with the plan.
3. Record the audio prompts using System Recordings above and an extension.
4. Create any destinations that don't currently exist (queues, ring groups, day/night modes or time conditions).
5. Test all of these. One way to do this is use miscellaneous destinations, assigning a * feature code to whatever thing you want to test.
6. Then go create your IVR.

When you select IVR, the first page is now a brief set of instructions on how to drive the IVR. You can either edit an IVR if one is existing or create a new one by clicking on 'Add IVR'.

Editing your IVR

Unlike the old Digital Receptionist system, this creates the IVR (and calls it 'Unnamed') as soon as you click 'Add' - You'll see it appear on the right straight away.

These are your options:

- **Change Name:** This is simply the descriptive name that appears on the right, and in the drop-down menu of Destinations
- **Timeout:** This is the amount of time the system waits before sending the call to the 't' destination
- **Enable Directory:** If you switch this on, users will be able to dial the FeatureCodes">feature code for Directory, usually #, from the IVR and access the Directory service.
- **Directory Context:** This is the asterisk context of the directory. Advanced users can then use different IVRs to create a multi-tenant installation.
- **Enable Direct Dial:** If you enable that, users will, in addition to being able to dial the IVR options, be able to directly dial an Extension number.
- **Announcement:** A System Recording that is played to users when they enter the IVR. This can be set to 'nothing'. These announcements are great for "today is July 4th and we're closed for the holiday" and then proceeding on to the regular call flow.

Configuring your IVR

In the box on the left, enter the option for the user. This may be one, or a series of numbers, or, 'i', or 't'. 'i' and 't' have special meanings:

- **i:** This overrides the default invalid choice behavior, which is to play a 'invalid option' message and immediately replay the current menu. E.G. If you only have 1 2 and 3 defined, and caller pushes 4, it will jump to this destination.



- **t**: This overrides the default timeout behavior, which is to play the menu three times and hang-up. A standard configuration is to go the operator, to handle customers that don't have DTMF-capable phones.

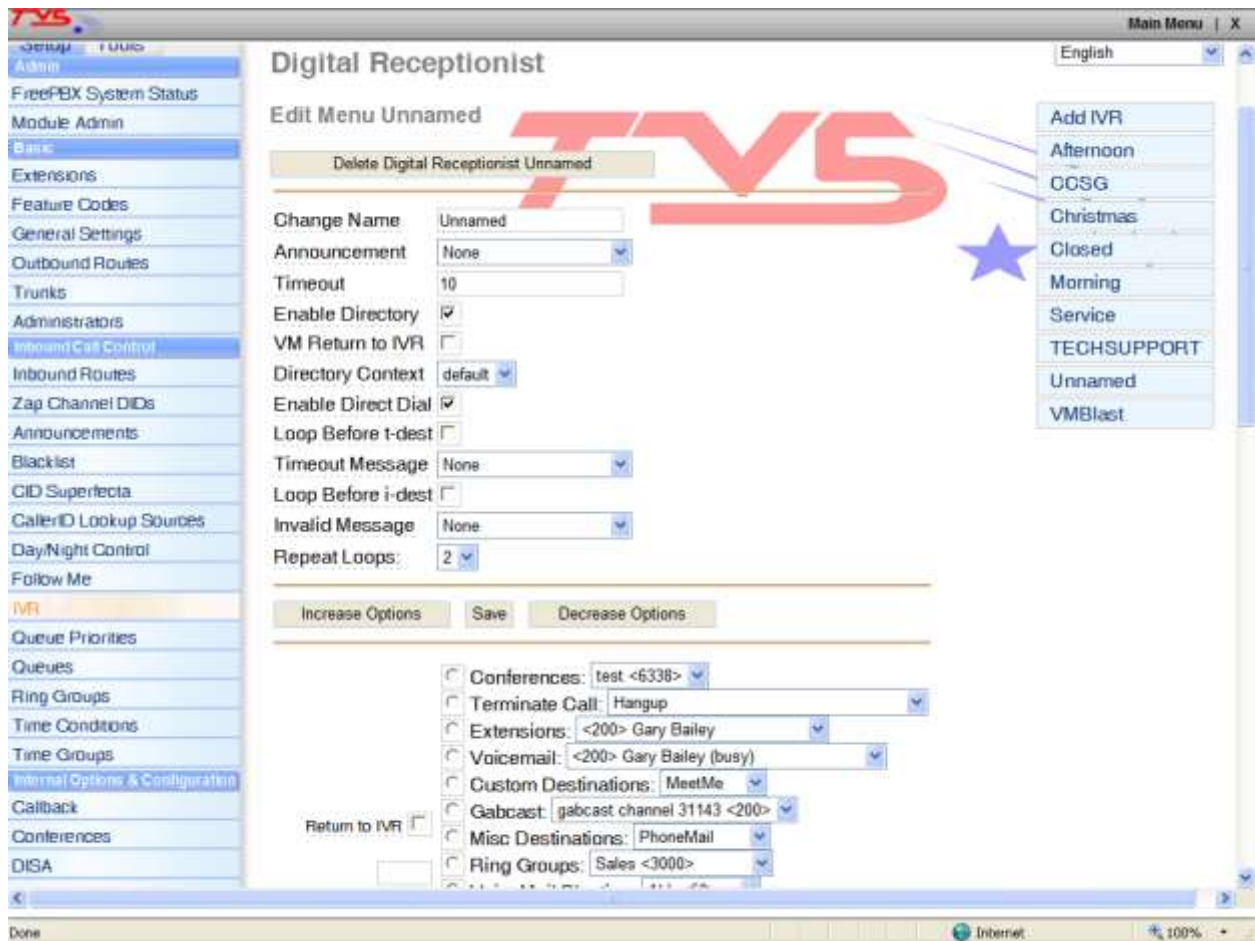
Options are only displayed if there is at least one entry created. For example, queues will not appear as a possible IVR destination if no queues exist.

Use 'Increase Options' or 'Decrease Options' to alter the number of options available. This won't let you decrease it to less than the number of options that are currently set.

To delete an option, simply leave the selection blank.

When you're finished, click 'Save' and you have your new IVR.

To test it, give it an incoming route or set up a miscellaneous application (* code) to reach it.





Flash Operator Panel

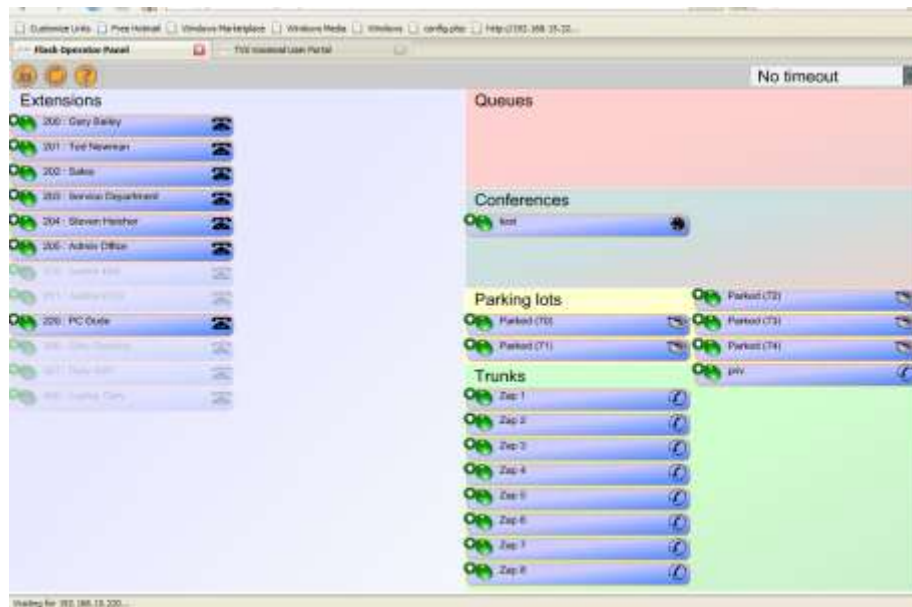
Flash Operator Panel is a password protected switchboard type application for the TVS PBX. It runs on a web browser with the flash plugin. It is able to display information about your PBX activity in real time. It also supports contexts: you can have one server running and many different client displays (Different departments, etc). It can integrate with CRM software, by popping up a web page (and passing the CLID) when a specified button is ringing.

You can see at a glance:

- What extensions are busy, ringing or available
- Who is talking and to whom (clid, context, priority)
- SIP and IAX registration status and reachability
- Meetme room status (number of participants)
- Queue status (number of users waiting)
- Message Waiting Indicator and count
- Parked channels
- Logged in Agents

You can perform these actions:

- Hang-up a channel
- Transfer a call leg via drag&drop
- Originate calls via drag&drop
- Barge in on a call using drag&drop
- Set the caller id when transferring or originating a call
- Automatically pop up web page with customer details
- Click-to-Dial from a web page
- Mute/Unmute meetme participants





Creating a Ring Group

Information

This defines a 'virtual' extension that rings a group of phones simultaneously, stopping when any one of them is picked up. This is basically just a dumber version of Queues for those that don't need the extra functionality of it.

Add Ring Group

Group Number

This is the number that is dialed from any extension that will make all of the phones in the group ring.

Ring Strategy

- **ringall**: ring all available channels until one answers (this is the default)
- **hunt**: take turns ringing each available extension
- **memoryhunt**: ring first extension in the list, then ring the 1st and 2nd extension, then ring 1st 2nd and 3rd extension in the list.... etc.

Extension List

List extensions to ring, one per line. You can include an extension on a remote system, or an external number by suffixing a number with a hash (#). ex: 2448089# would dial 2448089 on the appropriate trunk

CID Name prefix

You can optionally prefix the Caller ID name when ringing extensions in this group. ie: If you prefix with "Sales:", a call from John Doe would display as "Sales:John Doe" on the extensions that ring. (Note, you can't use a space here.)

Ring Time

How long (in seconds) the group of phones will ring before 'failing' and doing the options specified below. This is not related to the 'hunt' ring strategy above, but is the total length of time a call will stay in the group before using the 'Destination if no answer' selection.

Destination if no answer

This gives you a selection of things to do when the call exceeds the 'Ring Time' specified above. Options may be added and removed from this list depending on the modules that are installed.



Creating an ACD Group (Queue)

Information

Queues allow you to manage a large number of incoming calls, as you would expect to have in a Call Center. This is a very intelligent application, and as such, it has a lot of configuration options.

Queue Setup

Queue Number

This is the number that can be dialed from any extension to be put into the queue. This is also the same number you use when selecting a destination. Agents (eg, the people receiving the call) log in and out of the queue by dialing the number then a single asterisk to log in, or two asterisks to log out (eg, 700* to log in, 700** to log out)

Queue Name

A short name for the queue. This is only used in the web interface for ease of identification.

Queue Password

If you are concerned about security, you can put a password on the queue to stop just anyone from logging into it. After the Agent tries to log in, he or she will be prompted for the password here.

CID Name Prefix

As an agent may be logged into more than one queue, it can be useful to have a prefix on the Caller ID seen on the agent's phone, so he or she knows which queue the call is coming from - eg, 'Sales:' or 'Tech:.'

Static Agents

These are devices that are always logged into the queue. This is useful if you have an agent that is not directly connected to the TVS PBX, but is telecommuting. You can put their number in as it would be dialed from an internal extension. The number will be routed as if it was dialed from a normal extension, so dial rules in Outbound Routing and trunks are matched as per normal.

Queue Options

Agent Announcement

This is an announcement that is played to the Agent prior to connecting in the caller. An example could be: "the Following call is from the Sales Queue" or "This call is from the Technical Support Queue". This is useful when agents don't have Caller-ID on their phone, or don't look at it for the CID Name Prefix. These recordings are managed by System Recordings.

Hold Music Category

This is the category of Music (or Commercial) played to the caller while they wait in line for an available agent. Categories are set up in On Hold Music.



Creating an ACD Group (Queue) Cont...

Max Wait Time

The maximum number of seconds a caller can wait in a queue before being pulled out and set to the destination below. Set to 0 for unlimited, but that's not recommended.

Max Callers

The maximum number of people permitted to wait in the queue. If this number is reached, any further people will be sent straight to the fail over destination below.

Join Empty

If you wish to allow callers to join queues that currently have no agents, set this to yes. This is not recommended.

Leave When Empty

If you wish to remove callers from the queue if there are no agents present, set this to yes. If you have agents logging in and out all the time, you may wish to set this to 'no', otherwise a good idea is to set this to yes - everyone's gone home, and didn't get around to answering the customer.

Ring Strategy

There are 6 ring patterns to choose from:

- ringall: ring all available agents until one answers (default)
- roundrobin: take turns ringing each available agent
- leastrecent: ring agent which was least recently called by this queue
- fewestcalls: ring the agent with fewest completed calls from this queue
- random: ring random agent
- rrmemory: round robin with memory, remember where we left off last ring pass

Agent Timeout

The number of seconds an agent's phone can ring before we consider it a timeout.

Retry

The number of seconds we wait before trying all the phones again

Wrap-up-time

After a successful call, how many seconds to wait before sending a potentially free agent another call. The default is 0, or no delay. You'll probably have grumpy agents with that. Try setting it to 30 seconds.

Call Recording

Incoming calls to agents are recorded. They are saved to /var/spool/asterisk/monitor.



Creating an ACD Group (Queue) Cont...

Caller Announcements

Frequency

How often to announce queue position, estimated hold time, and/or voice menu to the caller. Set to 0 to Disable Announcements totally.

Announce Position

Set to 'Yes' to announce position of caller in the queue.

Announce Hold Time

Should we include estimated hold time in position announcements?

Either yes, no, or only once; hold time will not be announced if it's estimated to be less than 1 minute.

Voice Menu

After announcing Position and/or Hold Time, you can optionally present an existing Digital Receptionist Voice Menu - eg If you'd like to leave your name and number for a call back, please push * now. This will not affect your position in the queue. This voice menu must only contain single-digit 'dialed options'.

Join Announcement

The announcement played to callers once prior to joining the queue. These recordings are managed by System Recordings.

Fail Over Destination

This is a standard destination that is used in an overflow/timeout condition, which is configured above.



Creating a Time Condition

Information

Time Conditions are a module that appears as a destination when installed. It allows you to do an 'if' based on the current Time, Weekday, Day of the Month, or Month. At the moment it's reasonably basic with no support for 'AND' or 'OR', but you can chain together time conditions to do the same thing.

Time Condition Name

A short name which is used to identify the Time Condition in a destination.

Time Condition

Select from the pull down menus the time range that you want to use. Note that '-' means 'Any'.

Destinations

You have a choice of two destinations, depending on whether the time is matched or not. You can chain together time conditions to get an 'OR' or 'AND' effect. Unfortunately, there's no easy way to do that... at the moment!

Example of OR

Let's say you want Monday to Friday, 9am to 5pm **or** Saturday 9am to 12pm to go to IVR1, whilst all the rest of the time, it goes to IVR2.

- Timecond1 Match Mon-Fri, 9am-5pm
 - True: Goto IVR1
 - False: Goto Timecond2
- Timecond2: Match Sat, 9am-12pm
 - True: Goto IVR1
 - False: Goto IVR2

Example of AND

On Between 9am and 5pm on Monday and Wednesday, go to IVR2. Otherwise go to IVR1.

- Timecond1: Match 9am-5pm
 - True: Goto Timecond2
 - False: Goto IVR1
- Timecond2: Match Monday
 - True: Goto IVR2
 - False: Goto Timecond3
- Timecond3: Match Wednesday
 - True: Goto IVR2
 - False: Goto IVR1



Music on Hold

Information

Here you can configure the Music On Hold files that will be played. You can configure various 'Classes' or Categories of Music on Hold, which are used in Queues. The idea behind that is your 'default' MOH is standard music, and your various queues can have different 'hold' music while they're waiting.

Uploading a file

Simply select 'browse' and pick a MP3 or .WAV file on your system. Then click 'Upload'. It will appear in the list of MOH files below.



Announcements

Information

The Announcement module allows you to play an announcement to a caller. You can then send the caller to another destination or back to the IVR that sent him to the announcement.

For example:

1. IVR: "Hello, thank you for calling the North Carolina School district. To hear the latest updates about changes to the school schedule due to the current weather conditions, press 1." After pressing 1, the caller will then hear the announcement regarding today's schedule. Then the caller will be returned to the IVR where they can press another option (2 for the school administration, etc.)
2. You can play a message to the caller after the select an IVR destination - but before the call is transfer. I.e. if the caller pressed 1 for sales, you could play "transferring to the sales team" - and then send the caller to the sales queue.

Configuration

- Description: This is the name of the announcement.
- Recording: This is the file to be played. You can add more recording using the System Recordings module.
- Repeat: This option sets a **repeat key**. If the caller presses this key the announcement will be replayed.
- Allow Skip: Allows the caller to press any key, to skip the announcement.
- Return to IVR: Returns the caller to the IVR after they have heard the announcement
- Don't Answer Channel: Check this to keep the channel from explicitly being answered. When checked, the message will be played and if the channel is not already answered it will be delivered as early media if the channel supports that. When not checked, the channel is answered followed by a 1 second delay. When using an announcement from an IVR or other sources that have already answered the channel, that 1 second delay may not be desired.