



Voice Mail Features

INTRODUCTION:

The CVS Voice Mail System is based on an architecture that is secure, standard, flexible, scalable, reliable, manageable and cost effective. This architecture is the foundation of our company and CVS has 100% of the source code down to the hardware level. This allows CVS to create, enhance and grow the voice mail system in any way necessary to meet future demands. The CVS Voice Mail System works on both Windows and Linux and has most of the features that Telco's, C-lec's and Call Centers are already familiar with. Below is a list of features with a short description that the CVS Voice Mail system has at this time:

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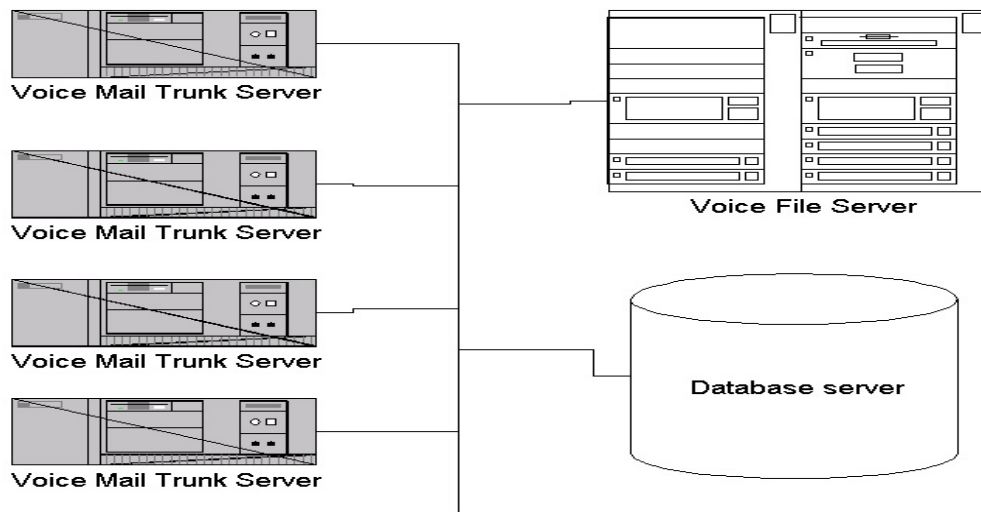
GENERAL SYSTEM FEATURES:

Administrator Remote Management

All administration is handled through a web browser interface. This allows the administrator to securely setup or edit any account locally or remotely.

Multiple Server Capabilities

The system can have multiple trunk servers, one database server and a file server or **one box can perform all functionality**. In the configuration shown below, multiple trunk servers share the same customer database and voice files. The database server and voice file server may be a raid device with redundant power supplies and multiple trunkservers will guarantee high reliability.



Hardware Scalability

The system is completely scaleable using multiple trunk servers and each trunk server handling up to 96 ports.

Centralized Message Delivery System (CMDS)

The Centralized Message Delivery System allows multiple servers to request any automated tasks from the database placed there by the CVS Voice Mail system and process them. Some of the delivery tasks are paging, message notification, message delivery, e-mail notification, e-mail delivery, fax, wake up calls, etc... Scheduled tasks are not reliant on any one server. This configuration provides high reliability and load balancing.

Real Time Port Activity Display

The port display allows the System Administrator to view the "real time" activity of each port as it processes calls, the port call count and the total call count.

Voice Mail Application Upgrades With Out Missing A Call

The CVS Voice Mail middleware has a special feature to allow upgrading version of the voice mail application while calls are still in progress. The new version is installed and registered and current calls will continue with the same version, while all new calls will be answered with the new version of the voice mail application. This feature allows upgrades on the fly and hassle free.

ACCOUNT TYPES AND FEATURES:

Standard Voice Mail Account

The standard voice mail account allows a caller to hear a greeting and then leave a message. It also allows the mailbox owner to access and retrieve messages by pressing an assigned digit while the greeting is playing and enter their passcode. Many other features are linked to this type of account.

Bulletin Board Account

The Bulletin Board account allows the caller to hear a greeting (the instructions) and has the ability to assign many features/tasks to any button press. A button pressed may lead to any voice box, any admin login to a voice box, record to any voice box, extension revert, operator revert, direct dial revert, out dial revert, direct paging or go to another Bulletin Board. The Bulletin Board account has all the features of the Standard Voice Mailbox and adds the power of multiple levels of questions and choices.

DID Link Account

The DID link account links additional DID's to an existing voice mail or bulletin board account. The call detail record (CDR) created reflects the account number and user information including account type and bill code of the DID link account (not the account that it is linked to).

Call Box Account

The call box account is used for accessing multiple accounts using a single DID. This access can be used for entering any account. The caller is asked to enter the *account number* and will grant access if the groupID of that account number matches the groupID of the call box account.

Message Only Account

The message only account plays a message, which can be repeated, then hangs up. Up to 9 greetings can be recorded and selected for the greeting to be played and changed by the owner or set up in a time greeting schedule to play greetings at different times of the day and days the week. The owner is allowed a login digit to change greetings. A press 0 for operator is available for this account type.

Fax Only

The fax only account is used to collect fax documents from a specific DID. Faxes can be automatically forwarded to a voice mail account using the forward feature under User Admin options. Another method to retrieve the fax messages is to create a bulletin board account to login to the fax account. Another option is to create a bulletin board account and just use the fax feature.

Disable Account Feature

Disables an account that is no longer to be used and would like to be recycled. The find disable account feature allows administrator to quickly find recycled accounts.

Disable login Feature (account over due)

Allows callers to leave messages but plays a message to "call the administrator" when owner tries to retrieve them.

GROUP FEATURES:

Restricted Account Group

Accounts are assigned to a specific group. New groups can be created on the fly and become part of the account group list. The grouping allows accounts to communicate using restricted access to other in the same group. Grouping applies to *call box account, group broadcasting messages, send messages, forwarding messages* and *creating personal user groups*. All accounts by default are initially assigned to a general public group.

Personal User Groups

Each Voice Mail account has the ability to create personal groups, which contain accounts for sending and forwarding messages to. A personal group is created by recording a name identifier, then edit the group by adding voice mail account DID numbers. The personal group will then be available for the send or forward messages options.

TUTORIALS:

Voice Mail Tutorial

Used to help first time users to setup their voice mail environment. This includes login passcode, initial voice greeting and name greeting.

MESSAGE CLEANUP:

Automatic Message Purging

The system can be programmed to automatically remove new, saved or deleted messages that have been stored for a predefined period of time.

No Grim Reaper

Each account is automatically cleaned up during call processing without causing problems of system performance. Each time a caller calls into an account to leave a message, the system is check for old messages that can be deleted and removes those messages at that time. This way files are removed at a natural pace and prevent the need for the intense processing of the grim reaper, which must be scheduled for low peak call processing times.

No Short Message Save

If a caller hangs up at the recording beep or records a message less then 3 seconds, the message is automatically removed from the system and no message notification is started.

GREETINGS:

Multiple Mailbox Greetings

Each account can record and edit up to 9 different greetings. The specific greeting used can be changed in the account's dial-in administration options.

Name Greeting Only

An account can be setup to have a generic system greeting only using the users name. A caller will hear *"You reached the voice box of (Owners Name) please leave your message at the tone, press 9 when finished"*

Time Greeting

Each account can be configured to play up to 6 different greetings a day and a different setup for each day of the week. Up to nine different messages can be pre-recorded to select as the messages assigned to the time of day and day of week. This only applies to the Standard Voice Mail Account type.

DIAL REVERT OPTIONS:

Operator Revert Feature

Operator Revert allows a user to press 0 anytime during a standard voice mail greeting to be directed to an Operator Revert Type. Operator revert is also available as one of the Bulletin Board select options. A 0 press is also available in Post Message Options for Standard Voice Mail Accounts.

Operator Revert Type (Hook Flash Call Transfer Disconnect)

This option directs the current caller to an operator through a front end switch or if your T1 line has Call Transfer Disconnect feature. There is an option to play one of the 20 system messages before the transfer takes place. The hookflash for call transfer disconnect is only available for standard T1 interface using the GENERIC setting for T1 protocol.

Operator Revert Type(Two Leg Call)

This option directs the current caller to an operator through a front end switch or T1 line by grabbing an available outbound line resource and making a call. The callers inbound line and the dialed outbound line are connected together in full duplex and stay connected until a hangup is detected by either line. There is an option to play one of the 20 system messages before the transfer takes place.

CALLER MESSAGE OPTIONS:

Post Message Options

This option allows callers to hear additional options after they leave a message. The additional options allow the caller to mark the message urgent, review the message, re-record the message, delete the message, mark the message as private or send the message and exit. If Operator Revert Feature is enabled the caller can press 0 to be sent to an operator even after the message has been recorded.

Pre-voice mail record option for numeric paging

A caller calls in and hears the regular greeting then hears "*press one to leave a numeric message or stay on the line to leave a voice mail message*". The press one will be enabled to leave a numeric page. (Note this feature is set up using a Bulletin Board Account)

MESSAGE NOTIFICATION:

Message Notification Feature

When a caller leaves a message, the owner has the option of being notified that a new message arrived. The owner may be notified by pager, telephone or e-mail or any combination of them. A notification schedule is used to configure how the notification is handled. The schedule has up to ten delivery fields that can be filled in. Each field has a delivery type, number to dial or email address, number of retries and a wait time before going to the next task. Notification stops when the owner calls in to retrieve a message or all the tasks in the notification schedule is complete. Also multiple notification schedules can be created and assigned to a time schedule to change notification at different times of the day and different days of the week.

Pager Notification

Sends a numeric message to a pager.

Telephone Message Notification

Calls a number and plays a prompt that the owner has a new message.

Telephone Message Delivery

Calls a number and plays a prompt that the owner has a new message and allow the owner to enter their passcode to retrieve the message at that time.

E-mail Message Notification

Sends an e-mail that the owner has a new message.

E-mail Message Delivery

Sends an e-mail that the owner has a new message with the message attached as an attachment.

Call Notification Templates

This is used for all message notification, specifically for custom call processing for registering pager companies to accept a page notification. It can also be used for custom call processing to deliver a telephone message notification to the owner even through an auto attendant that requires an extension number.

Timed Message Notification

Different message notification can be scheduled six time a day and seven days a week.

Urgent Message Delivery Only

Only sends a message notification when the message was marked urgent.

MESSAGE FORWARDING:

Message Forwarding To Another Account

This option is used to forward all incoming messages to another Voice Mail Account. The owners original voice mail greeting is played but the account messages are recorded too the voice mail account assigned by its DID. A copy of the voice mail message can be saved in the original account if the *save copy of forward message option* was selected. The configuration settings are available to the mailbox owner via call in administration or web page access.

Message forwarding to E-mail

Each callers message can be converted to VOX or WAV format, attached to an email and sent to an e-mail account. A copy of the original message is saved in the voice mail account until removed or deleted when the time expires on the automatic cleanup process.

ADMINISTRATION LOGIN FEATURES:

Security Code Protection

Each mailbox owner may define their own security code (up to 8 digits) which prevents unauthorized access to his mailbox and assures message confidentiality.

Passcode Login Security Alert

This feature leaves an alert message to the owner if a failed attempt was made three times in a row to enter a passcode to gain access to the account. The alert message will include the time, date and ANI if available.

Past Due Notification

This feature allows the voice mail administrator to flag an account as over due. Callers will still be able to leave messages until the maximum number of messages has been reached. The owner will be able to login using their passcode and hear how many messages they have, then here the message *"Your account balance is flagged as past due, good bye."*

REVIEW MESSAGES:

Express Message Admin

When this feature is selected, the mailbox owner logs-in and hears how many messages are available and the system starts playing the first message.

Quick Prompts

Shorter system prompts means less time for mailbox owners to retrieve messages and less time a port is tied up.

Message Date And Time Option

When this option is set the voice mail owner will hear the creation date and time before playing each message. If the message is the same date when the owner listens to the message, only the time will be played. If the message was recorded yesterday, the system will say "yesterday" and the time. Otherwise the system will play the weekday, month, day and time before the message.

Delete message

(Press 3) – Deletes messages from new or save. The system does not permanently remove the voice file until the automatic message purging system has detected that the deleted voice file has expired. The Undelete Message Option can retrieve deleted files.

Repeat message

(Press 1) – Replays the last message.

Reply to message

(Press 2) – The reply message allows you to respond to message sent or forwarded to you by another voice mail user. This feature allows you to record a message and send it back to the person who sent you the message. Other options are available after recording your reply message such as append the original, mark the message as urgent or private, listen and re-record the message to send and mark to receive notification when the message was read.

Forward message

(Press 4) – This feature allow you to forward the current message to another mailbox within the same group ID, to a personal group, broadcast to all group ID members or as an attachment to your e-mail. Forward message also allows you to record your own message and append the current message before sending, mark the message as urgent or private, listen and re-record the message to send and mark to receive notification when the message was read.

Save message

(Press 5) – Saves the current message.

Previous message

(Press 6) – Plays the previous message.

Skip message

(Press 7) – Skips the current message and continues to next message. This option can be use while a message is playing.

Message date and time

(Press 8) – Plays the date and time when the message was created.

Main menu

(Press 9) – Takes you to other administrative options.

Fast forward 4 seconds

(press #) – The pound (#) can be pressed multiple to skip forward 4 seconds at a time in the current message.

Fast Rewind 4 seconds

*(press *)* - The star (*) can be pressed multiple to skip backwards 4 seconds at a time in the current message.

MAIN MENU FEATURES:

Send Message

Message can be composed and sent to one or more selected user on the voice mail system, broadcast to all member to the same group ID or broadcast to a personal group. Recipients of the message are selected by there DID. Members can only send messages to the same group ID. Other options are available after recording your message such as mark the message urgent or private, listen and re-record the message to send and mark to receive notification when the message was read.

Undelete Messages

Allows you to undelete messages that have been deleted. Messages will only be available up to the time that the system has been setup for the expiration of the deleted files. The default is setup to keep the deleted messages for two weeks.

Retrieve fax

This feature tells you how many faxes you have, what number to send a fax to, then identifies each fax by date, time and number of pages. After identifying the fax you may select it for sending, save it, delete it or identify the next fax.

Personal Group Setup

See **Personal User Groups** above.

Turn Page Notification OFF/ON

This feature toggles page notification on and off. Note that this will turn off all pager notification in the Message Notification List but will allow the other types of notification in the list to continue working.

Change Pager Number

This feature allows you to change the first pager number found in the Message Notification List.

Turn Call Notification OFF/ON

This feature toggles call notification on and off. Note that this will turn off all call notification in the Message Notification List but will allow

the other types of notification in the list to continue working.

Change Call Notification Number

This feature allows you to change the first call notification number found in the Message Notification List.

Change Passcode

Allows you to change your login passcode. A minimum number of digits is set by the administrator.

Record Greetings

Allows you to listen or record any of your nine available greeting.

Select Current Greeting

Allows you to select one of the nine available greeting as your current greeting. This feature does not apply if the account is setup for timed greetings.

Record Bulletin Board Greetings

Allows you to select a Bulletin Board greeting to listen to or edit. This feature only applies to Bulletin Board accounts.

Turn Message Forwarding OFF/ON

This feature toggles message forwarding on and off.

OTHER:

Select Account for Message Forwarding

Allows you to select a voice mail account that all messages will be forwarded too. The account will be selected using the voice mail accounts DID number. Messages can only be forwarded to mailboxes in the same voice mail group set by the administrator.

Message Send Receipt

When sending a message to another voice mail user, the message can be tagged for Message Send Receipt. This sends a return message when the message was read. The return message will indicate the person that read your message and the date and time when your message was read.

DTMF Interrupt Dialing

The system allows a caller to interrupt the playback of menu options by pressing any key on their DTMF dial pad. This feature allows experienced callers to dial ahead of system prompts to access their desired option more quickly. Also can be used with speed dialing.

Speed Dial Administrative changes

Voice box owners can program their speed dialer for quick voice mail administrative changes. This is good for changing pager numbers, message notification number and turning on and off many other features.

BULLETIN BOARD FEATURES:

Bulletin Board Features

The Bulletin Board allows a caller to hear a greeting and gives them different options by pressing the telephone keypad. A button pressed can lead to any voice box, any admin login to a voice box, record to any voice box, extension revert, operator revert, direct dial revert, out dial revert, direct paging or go to another Bulletin Board. The Bulletin Board account has all the features of the Standard Voice Mailbox account and adds the power of multiple levels of questions and button press choices. The bulletin board is very versatile on the operations that can be performed. A single account can handle multiple voice mail accounts or can be set up as an auto-attendant for button select revert and or direct DID revert to telephone extensions. Different bulletin board templates can also be set up in the bulletin board time schedule to change the greeting and or functionality up to eight times a day, seven days a week.

Go To Voicemail

If the selected digit is pressed, the caller will be sent to the voice mail account # listed in the Command Parameter field. If the Command Parameter field is left blank, the caller will be sent to the voice mail account # of the current Bulletin Board account.

Note that this feature only goes to another voice mailbox and not to an account of a different type. This means that if another account is set up as a Bulletin board, you will not get the bulletin board greeting and options, but will be sent to that accounts as if it was set up as a standard voice mailbox account. Features such as *Post Options* and *Message Notification* will use the settings of the voice mail account that the caller is sent to. Also see Transfer to Account.

Note: The system allows the same account number to have both a Bulletin Board and a voice mail account.

Login VoiceBox

If the selected digit is pressed, the caller is prompted to enter the passcode for the voice mail account number listed in the Command Parameter field. If the Command Parameter field is left blank, the caller will login to the voice mail account # of the current Bulletin Board account.

Record in VoiceBox

If the selected digit is pressed, the caller is prompted to record to the voice mail account number listed in the Command Parameter field. If the Command Parameter field is left blank, the caller will record to the voice mail account # of the current Bulletin Board account. *Message*

Notification will work, if enabled, on the voice mail account that was selected.

GoTo another CRI

If the selected digit is pressed, the caller is sent to another Bulletin Board Cross Reference Index (CRI) that was created by the same account. The Command Parameter field is ignored.

Revert to Operator

If the selected digit is pressed, the caller is reverted to an operator. Messages that are played and the type of operator revert are set up in the [Operator Revert Options](#) setup page.

Revert to Extension

If the selected digit is pressed, the caller is reverted to the extension specified in the Command Parameter field using call transfer disconnect.

Note: A front-end switch must be set up to handle reverting to an extension. See Set up Notes for reverting to an operator or an extension.

Direct Dial Extension

The caller may direct dial the extension to be transferred to. The selected digit pressed is the first digit allowed for the extension dialed. The Command Parameter field holds the total number of digits collected for the call transfer disconnect.

Note: A front-end switch must be set up to handle reverting to an extension. See Set up Notes for reverting to an operator or an extension.

Direct Page

If the selected Digit is pressed, the caller can direct dial page to the account # listed in the Command Parameter field. If the Command Parameter field is left blank, the caller will page the voice mail account # of the current Bulletin Board account. The pager number called is set as the first pager type found in the current message notification table. The message notification table allows pager notification to be edited and time and date scheduled for different pager numbers.

Receive Fax

This option starts a fax tone for receiving a fax. Faxes can be identified and retrieved in the regular voice mail administration login.

Transfer to Account

If the selected Digit is pressed, the caller will be sent to the account # listed in the Command Parameter field. If the Command Parameter field is left blank, the caller will be sent to the voice mail account # of the current Bulletin Board. The account the caller is transferred can be of any type (ie: Standard Voice Mail, Bulletin Board, Call Box, Message Only, Link DID).

Greet Repeat

This is the number of times the CRI prompt is repeated if the caller does not make a selection before going to the time out (T/O) or exiting.

T/O

The time out field is executed if the caller does not respond by the end of the last repeated greeting.

REPORTS:

Call Detail Records

CDR's is a record of information saved about each incoming and outgoing call. CDR's have the basic call information like VRU, port, start date and time, call duration, incoming did, account number, account type, dialed number, billcode, etc..

Error Logging Reports

Shows problems of account setup or system functionality.

LOGIN ADMINISTRATORS FEATURES:

Administrator Broadcast messages

Record and broadcast a message to all voice mail accounts. All accounts with message notification will be notified.

User Remote Management

This allows the voice mail users access and edit their account remotely from any web page. Restrictions can be placed on there account on what features can be accessed for editing. (NEXT RELEASE)

LAYOUT OF CALL IN USER ADMINISTRATOR FUNCTIONS

