

Mutare

Unify, Notify, Simplify

Enterprise Notification System



Application Overview

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Introduction

Mutare believes information should be easy to access, especially when time is a critical factor. That is why we developed our Enterprise Notification System. ENS enables enterprises to broadcast messages to targeted groups of people using multiple contact methods such as phone, email, text message, IM, social networks and websites. A single broadcaster can reach hundreds, thousands or even tens of thousands of people in minutes if necessary with the push of a button.

Enterprise Notification System Description

Mutare's ENS system is a hybrid notification system that quickly notifies contacts using multiple communication channels simultaneously. ENS is easy to use and facilitates both emergency and everyday communications. ENS takes advantage of on-premise and cloud-based resources, blending the benefits of premise integration with on-demand cloud scalability. Situated behind the company firewall, the ENS contact database is secure and synchronized at all times.



Multi-Cast Notification

ENS is powerful enough to support mass notification and simple enough for everyday functions including shift management, reminders and notices. ENS supports multi-cast broadcasts and can send messages via phone, email, voicemail, SMS, Instant Message, Twitter, Facebook, RSS, pager, public address systems and message boards.

ENS allows recipients to indicate their acknowledgement and/or availability to respond to the situation. The system logs all contact attempts and member responses, providing a complete audit trail of the notification process. All administrative and reporting functions are available through an intuitive web browser interface enabling easy access.

Phone & Voicemail

Installed behind the enterprise firewall, ENS can be interfaced to the enterprise telephone system and directly to the public switched telephone network if desired. ENS can also use SIP ports for making phone calls. This provides maximum flexibility for voice broadcasts including the ability to call internal telephone extensions, interface with public address systems, and even set aside dedicated PSTN bandwidth such as T-1 connections to a carrier to offload traffic from the local PBX if desired. ENS includes built-in interactive voice response (IVR) technology and can be used to collect acknowledgments, answers to yes or no questions, and even collect answers to telephone surveys.



Because 80% of all voice telephone calls go to voicemail, the system includes the ability to know when it is speaking to a machine and leave the message after the tone. ENS can also interface directly with many enterprise voicemail systems that support IMAP connections to direct-deposit recorded messages in enterprise voicemail boxes without consuming switch resources otherwise required to deliver the message.

Email

ENS can send 600 to 1,000 email messages per second and is compatible with all email systems. Email messages can include hyperlink controls for message acknowledgment, online surveys, web conference services and more. In addition, ENS supports email file attachments and can be used to rapidly distribute supporting materials for a broadcast.



SMS Text Message

ENS supports native text messaging through any bulk text message service provider as well as SMTP text messaging via email. Mutare also offers text messaging plans to augment the ENS system and can provide optional custom engineering support for specialty SMS applications including two way SMS.



Instant Message (IM)

ENS supports industry standard XMPP protocols for instant messaging and works with all IM clients that support XMPP or can federate with it. This includes popular IM systems such as Google Talk, Microsoft Lync, Jabber, etc. IM support is an important aspect in emergency communications as IM messages cut through email clutter, avoid voicemail screening and grab the recipient's attention.



Pager

Pagers are supported using the SNPP paging protocol. This is useful for most hospital and healthcare applications where cell phone use is prohibited.



Public Address Systems

ENS can easily integrate with any public address system that is accessed via a dialed extension number. ENS can also integrate with IP based PA systems. This is an important feature for evacuation or shelter in place notifications for building or campuses.



Survey

ENS is available with a survey module that allows broadcasters to create and send surveys to lists of recipients. Surveys are completed by phone or web browser with results compiled in real time, supporting both emergency broadcasts as well as non-emergency survey needs.



RSS

ENS can update items in an RSS feed enabling messages to post to any RSS reader or web page capable of displaying RSS results. This can be useful for mass communications via private and public websites. RSS feeds are available for use with Facebook, making ENS a viable tool for reaching mass audiences quickly. RSS can interface to some video display systems and outdoor signage. This can be especially useful in large campus environments.



Twitter

Mutare supports direct Twitter integration, allowing for instant worldwide distribution of any message. Followers are able to amplify ENS tweets by re-tweeting messages, taking advantage of social networking for mass communications. This can very useful for mass notification in higher education and government.



Broadcast Control & Reporting

Activation by Phone or Web

An authorized person can initiate a broadcast by phone by dialing a secure access number. The system prompts the caller for a user name and password. Once authenticated, the broadcaster selects the list(s) of individuals for notification, records the broadcast announcement and assigns action steps. Scripted prompts guide the broadcaster through the process so the communication can be easily tailored to the broadcaster's needs. Broadcasters can print a wallet card that includes their broadcast information to carry with them so they are always prepared to use the system without having to consult manuals.

An authorized person can initiate a broadcast from any web browser running on a computer, tablet or mobile device.

Broadcast Settings

Broadcasters have a great deal of control over how a broadcast is targeted, what message delivery methods are utilized, and how it unfolds. Settings that the broadcaster can control include:

- Lists to Include in the Broadcast
- Choice to create a custom message or use a prepared message template
- The ability to choose which contact notification delivery method or methods to use for the broadcast including:
 - Phone
 - Email
 - Text Message via Email
 - Page
 - IM
 - SMS
- Single Attempt or Multiple Attempts
- Leaving Messages
 - Secure Broadcast with PIN to Retrieve
 - Answering Machine or Voicemail
- Email Text as Message or Require to Call in to Listen
- Attach Files to Email
- Social and Web Broadcast Features
 - RSS Feed
 - Twitter
- Confirmation Type
 - Acknowledge
 - Yes / No
 - No Acknowledgement
 - Need X People
 - Survey
- Try Again – Enables the broadcaster to re-broadcast to only those message recipients who did not respond the first time.
- Future Broadcasts – Send now or schedule for a future time.

Integrated Text to Speech Conversion

The system supports text to speech conversion, so a message created in text is spoken when delivered by telephone, voicemail or public address system.

Enter the broadcast information below and click Initiate when done:

Select Broadcast List(s) Show Group: <All> <Select one or more lists> (_Bens Group:702) Mutare Sales (_Bens Group:2345) Olmsted Medical IT (Abbott:3456) Abbott IT Group Demo (Corporate:546458) ABC Hospital (Corporate:878787) Mini Message Mirror (Infometrics:400) Winnipeg (Mayo Clinic :8202) Mayo Clinic IT <input type="button" value="View List Members"/>	Notification Methods: <input checked="" type="checkbox"/> Phone <input checked="" type="checkbox"/> Text Message via Email <input checked="" type="checkbox"/> Email <input checked="" type="checkbox"/> Pager <input type="checkbox"/> IM <input type="checkbox"/> SMS
Subject: Test ENS Message From: rq@mutare.com ANI Number: 8479092199 ANI Name: Rich Quattrocchi	Multiple Calls: <input checked="" type="radio"/> Single Attempt <input type="radio"/> Multiple Attempts (2)
Broadcast Message * Airport Delay - Fog Text/Pager Message: Burbank airport is currently grounded until fog has lifted. Please report to work as scheduled. 34 Characters Remaining Email Body Message (converted to speech for phone calls): Burbank airport is currently grounded until fog has lifted. Please report to work as scheduled. Please have a safe arrival to work.	Require PIN: <input type="radio"/> Yes. Require caller to enter a PIN to hear my message <input checked="" type="radio"/> No. Play my message to who ever answers the phone
	Leave Message: <input checked="" type="radio"/> Leave Message On Answering Machines <input type="radio"/> Require Recipients to Call In
	The text of the email: <input checked="" type="radio"/> is my message <input type="radio"/> should tell the recipient to call in to hear my message
	Attach File: <input type="button" value="Choose File"/> No file chosen
	RSS Feed: <None>
	Twitter: <None>
	Confirmation Type: <input type="radio"/> Acknowledge <input checked="" type="radio"/> Yes / No <input type="radio"/> Informational, no acknowledgement required <input type="radio"/> Need <input type="text"/> People <input type="radio"/> Survey: <Select>
	Initiate broadcast: <Immediately> <input type="checkbox"/> Future Time

Broadcast Acknowledgement

When sending a broadcast, the broadcaster can specify if he or she would like acknowledgment of the message by the recipient. The broadcaster can also request a Yes or No answer to the broadcast. This is useful for polling applications and requests for volunteers.

The ENS system provides real time reports and provides notification acknowledgements. Broadcast monitoring takes place in real time online and with the ability to download reports as a CSV file or into third party applications if desired. Broadcast acknowledgment options include:

- Acknowledgment response not required.
- Acknowledgment response required
- Yes or No response required.
- Need X People – perfect for filling shift quotas, recalling personnel or recruiting volunteers, this feature stops the broadcast after filling the quota as well as notifies subsequent contacts that the need has been satisfied.
- Survey – enables rapid responses to multiple questions via phone or web page.

Message recipients can respond in several ways:

- Pressing a key on their phone while listening to a live message (IVR).
- Hitting a reply key embedded as an email link in a message notification.
- Calling the system and choosing to retrieve a broadcast message after being directed to do so from an answering machine message or text message.

System Administration

There are three levels of system administration to ensure that only authorized users can access the administrative capabilities required to do their jobs:

- System Administrator – has full access to define system settings, initiate broadcasts, run reports and assign list administrators and groups.
- List Administrator – has access to create lists in authorized groups, initiate broadcasts, access reports for assigned groups and assign broadcasters to lists.
- Broadcaster – able to broadcast to assigned lists and run reports for the broadcasts initiated.

Contact Database

There is no limit to the size of the contact database. Each contact in the database can have up to five contact options including phone numbers, email addresses, IM address, etc. Each contact is assigned a priority level (1 through 9) determining their place in the contact queue. Each contact record includes data in user-defined dynamic fields that is used to create dynamic contact lists based on database attributes such as location, title, etc., for lists.

Importing Contacts

ENS has several ways to get contacts into the database including:

- Manual Input
- CSV File Import
- Database Synchronization
- Self-Populating Website

Manual Input

Administrators can manually input contacts into the database from the ENS website.

CSV File Import

Mass importation of contacts using a CSV file upload is the most common way to populate the system database.

Database Synchronization

ENS is available with an optional synchronization utility that allows data from an outside source that is ODBC compliant, such as the corporate LDAP database or HR database, to update the contact data in the ENS database. This allows organizations to leverage their existing IT investment and keeps ENS in synch with the rest of the organization.

Self-Populating Website

Oftentimes organizations such as universities, local government or businesses will want to offer a way for the public or constituents to opt in for notifications. The easiest way to accommodate opt-in is through the self-populating website feature.

Database Accuracy and Automatic Updates

A major challenge is keeping contact data current. ENS sends a scheduled email on a recurring basis (set by the administrator), with a link to the website, reminding each member to update his or her contact points. This feature ensures the database is always current.

Interoperability

ENS works with all PBX systems as well as Centrex and hosted phone systems interfacing via analog, T-1 and SIP trunking. ENS works with all email systems and utilizes SMTP for email communication. ENS supports SMS via SMTP or native SMS through an aggregator. ENS works with all Instant Message clients that support the XMPP protocol or federation. ENS generates industry standard RSS feeds to post broadcast items for syndication via websites, RSS readers and social networks. ENS also directly posts short messages to Twitter. ENS supports pagers using the SMPP protocol. In short, ENS can interface with virtually all modern electronic communication system and devices.

Reporting

After starting a broadcast, the broadcaster can access the ENS website (on the organization's web server) to determine the status of the notification and list of confirmed responders at any time. A detailed report is also available on all activities of the notification.

Optional ENS System Partitions

ENS supports up to nine segregated partitions sharing a common hardware platform. Each instance of ENS is unique with its own discrete database, administration URLs, website look and feel, etc. Partitioning is useful for organizations that need to keep different divisions or companies separate from each other but desire to leverage their IT investment in hardware and network.

Redundancy

ENS supports full redundancy with a system back-up utility that synchronizes between ENS systems that are geographically separated in order to be prepared in the event the primary system is unavailable or fails. Reciprocal back up is supported so that system A can back up system B and vice versa as part of an enterprise solution. Mutare can also offer back up systems hosted by Mutare.

Feature Chart

Feature / Attribute	Standard	Optional	Comments
Alarm Integration		X	Custom interfaces to 3 rd party alarm systems can be configured; alarm dependent and not all alarm systems are supported.
Analog Interface	X		Used in systems with less than 24 ports.
Answering Machine Support	X		Can leave messages on answering machines.
Automatic Database Updates	X		Sends periodic emails to persons in contact database to update contact information via the web.
Broadcast Acknowledgement	X		Supports "Yes", "No" and "Acknowledge" responses.
Broadcast Caller ID	X		Caller ID can be custom configured.
Call Logging	X		Can be used for customer billing applications.
Cell Phone Text Message	X		All types supported.
Customizable Website Features	X		ENS website can be customized with customer logo and color scheme.
CSV File Import	X		Bulk import of contacts via CSV file
Data Import	X		Import data utility included.
Database Groups	X		Unlimited database groups can be established with controlled access designated by the system's administrator.
Database Lists	X		Each database group can have an unlimited number of lists associated with the group.
Database Synchronization	X		Can synchronize the ENS database with a 3 rd party database.
Dynamic Database Fields	X		Internal database supports up to 8 system-defined dynamic fields in the database.
Dynamic Broadcast Lists	X		Supports list creation by selecting members using saved search criteria.
Email	X		Support text and HTML formats. Supports email file attachment.
Email Voice Attachment	X		Will work with any PC that supports sound and can play .wav file.
Future Delivery	X		Broadcasts can be timed to begin at a future date.
Immediate Broadcast	X		Messages can be sent immediately with no delay.
Inbound Message Retrieval	X		System allows users to retrieve broadcasts remotely by dialing in by phone.
Instant Message (IM)	X		Supports IM message broadcasts via XMPP protocol to cut through the clutter of voicemail and email.
Line Supervision	X		System knows when it is "talking" with a person, voice mailbox or answering machine.
Mass Notification	X		Supports mass notification via SMTP, SMS, XMPP, RSS and SMPP protocols.
Message Creation	X		System supports creation of custom messages for any situation.
Multiple Contact Methods Per Person - up to 5	X		Any combination of telephone numbers or email addresses.
Need X People	X		Fills quotas for personnel for work shifts, volunteers, personnel recall, etc.
Open Systems Platform	X		Works on Windows 2003 or 2008 Platform.
Password Protection	X		System access for administration is username and password protected.
Partitions		X	System can support up to 9 separate instances of ENS on a shared server.
Pager Support	X		Supports broadcasts to pagers using SNPP.
PDA Support	X		Works with all web enabled PDAs.
Premise Installation	X		Can be installed on site or hosted by Mutare.

Feature / Attribute	Standard	Optional	Comments
Pre-recorded Messages	X		System supports pre-recorded messages to send standardized notices. Messages can be voice recordings or text-based templates.
Priority Recipient	X		System has 9 levels of broadcast priority for recipients.
Public Address System Support	X		Supports dial access to PA systems through the phone system.
Real Time Access To Broadcast Results Reporting	X		Broadcast results can be monitored in real time via the web.
RSS Feed Support	X		Posts message as item to an RSS feed to syndicate the content via RSS Readers, websites, Facebook, etc.
Secure Broadcast	X		Can require a PIN to access message as option.
Self-Populating Website	X		Opt in web page to allow public opt-in to ENS messages.
Software Support Agreements	X		Provides free access to software updates and service support while under contract.
Sound File Associating With Broadcast List	X		Allows broadcasters to name their lists; system will play the name before a broadcast to ensure message delivery to the correct list.
SQL Server Data Base	X		Industry standard relational database.
SIP Trunking	X		Requires purchase of SIP interface card for ENS Server.
Support Agreement		X	Round the clock and business hour options available.
Survey	X		Broadcast surveys that can be completed via telephone or web with multiple choice questions and various input fields.
SMS Text Message Broadcast	X		Supports up to 150-character text message broadcast to mobile devices. Supports native SMS and SMTP relay.
SMTP Protocol Support	X		Sends messages via industry standard SMTP protocol for email and text messages.
SNPP Protocol Support	X		Simplified Network Paging Protocol supported for pager notifications.
T-1 Interface Support	X		Supports industry standard T-1 or Primary rate interface for PBX or Telco integration. Requires purchase of T-1 interface card for ENS server.
Telephone Access For Broadcast Initiation	X		Broadcasts can be initiated from any phone, anywhere at any time.
Text Only Message	X		Broadcasts can be limited to text only for faster delivery.
Text-to-Speech Conversion	X		Text-based messages can be translated to speech for phone delivery.
Trigger Broadcast by Email		X	Via IMAP4 mailbox.
Try Again	X		Enables broadcaster to send the broadcast again to those who did not respond the first time around.
Twitter Integration	X		Posts messages to a Twitter account for followers to view and re-tweet.
Unlimited Database	X		No limit to the contact database size or number of broadcast groups.
User Defined Broadcast Default Settings	X		Allows frequent broadcasters to skip menus and rapidly send broadcast.
Voicemail Support	X		Can leave messages on voicemail.
Voice Mail Broadcast		X	System can insert voice messages directly into many enterprise voice mail systems with IMAP access.

Feature / Attribute	Standard	Optional	Comments
Wallet Card	X		Wallet card generator built-in is compatible with any printer.
Web Access For Administration	X		3 Levels of administration.
Web Access For Broadcast Initiation	X		Text messages can be initiated via the web; all broadcasts monitored by the web.
Web Access for Individual Profile Update	X		Individuals can access their profiles through the web to update contact data.
Website Customization	X		Customer ENS website can be customized with company logos, corporate colors, backgrounds, etc.
XMPP Support	X		Supports XMPP / Jabber Instant Messaging Clients