One hundred and One uses

FOR EMERGENCY NOTIFICATION

A guide to automated crisis communications across virtually every function and industry

Legal

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One Hundred One Uses for Emergency Notification

Leveraging Automation

Disasters, emergencies, and unforeseen events have been taking place since the beginning of time. Lack of communications as well as slow mobilization of response teams can greatly increase the impact of a crisis. But today, automated communication allows an almost immediate response to a disaster and can take place over multiple mediums. Preplanning combined with automated, immediate communication ensure the right people are engaged in the most expeditious manner when an incident, emergency, or disaster befalls you or your organization. A quick call to action can at minimum contain disorganization and at maximum save lives.

During an emergency, one of the biggest challenges is to move efficiently from crisis mode to a managed situation. Automated communication systems make this transition easier because they can reach thousands or tens of thousands of people in minutes without losing the primary message as may occur in a manual "person to person" call tree. They perform exactly as they are told with the most current and up-to-date information. Thus, automated communication is a critical component of converting managing and mitigating a crisis. Let's take a look at the essential requirements for an automated notification system, regardless of the use.

Up-To-Date Information

Remember the times before cell phones, pagers, BlackBerry® devices, sidekicks, email, and instant messaging? There were only primitive means of emergency notification: the call tree or the building alarm bell, which told everybody that there was a problem without any details or instructions to take action. Call trees furthermore are notoriously slow and unreliable – what if a key link in the chain cannot be reached? The end-recipients of notification through call trees may find out about an incident hours after it occurs, hearing a very different message or call to action than the originators of the notification.

With everybody carrying around an array of communication devices these days, there are much more sophisticated ways of notifying people than a call tree. But while there are more assurances of communication during an emergency, the multitude of communication devices adds a high level of complexity to any notification program. Because there are so many paths of communication that we have to keep track of when trying to reach key staff members, organizations need a way to channel and regulate the notification process. By feeding all commercially available communication methods such as work, home and cell phone numbers and email addresses into a notification system we can make it possible to notify the appropriate people of an emergency within minutes on all available channels. The more up-to-date the information, the more likely the right people will be contacted. The notification system also needs to facilitate prioritization of communication devices so that individuals are notified on the device that they are most likely to

monitor. Say John prefers his pager while Jane has her cell phone on 24/7, the notification system must be designed to contact John and Jane first on their preferred devices. In addition, people should not be contacted on all available communication channels at once, as this would cause cluttering and duplication of messages. Once a person has responded, they should not be contacted on their other devices with the same message.

All of the contact data should be housed in a central location that ideally maintains information that is fully synchronized with the emergency notification system. During a crisis, team leaders should not need to search for contact information, but should instead be able to immediately send out the appropriate message to the right people.

The Right People

Once contact information is stored and maintained correctly, the first step of emergency notification is determining who to contact and in what order. Notification may go out to one group, several groups, or teams comprised of groups and/or individuals. Most important, who should be contacted during an emergency must be determined well before the emergency. Scrambling for phone numbers is the last thing to be doing if the building is burning down. In addition, authority must be assigned as to who will be responsible for initiating the communication and then following up on all messages to ensure that the appropriate actions are taking place at the appropriate time.

Immediate Organized Action

Knowing how to contact people and in what order they prefer being contacted is only one part of the emergency communications plan. Knowing what to say to whom is another key element.

For planned communication, you will need to determine what information to communicate before the event ever happens. Writing an emergency communications statement during an incident is never a good idea. More often than not, by the time you're writing the message, the organization is already in "emergency mode" and you are less likely to have a clear head, which can easily lead to the creation of an unclear notification.

An incident template will become an essential part of the regular testing of your emergency notification plan. And the incident template should also include escalation of communications if the primary recipients are not available.

Escalation

Escalated communication serves two functions. First, by staggering messages, people are given the opportunity to respond so that additional people do not need

to be engaged. This reduces redundancy of efforts and allows valuable emergency resources to be allocated more efficiently.

Escalation also can address the time-based element of emergency response. An incident that may require investigation within the first five minutes can quickly turn into an emergency that requires senior-level decision-making. Calls for the first five minutes may go out to an administrator and then if a response does not take place, the next set of communications would go to management and so on until someone took ownership of the incident.

Following Up

Once the emergency messages have been distributed, how will message receipts and acknowledgments of duties be tracked? The emergency communications plan also has to take into account receipt validation, prioritization, and channeling of the communication stream.

The final component of automated communication is the ability to engage the individuals that have been contacted. Once everyone has been sent notification and has responded, individual and collective status needs to be addressed.

Finally, the system needs to be able to send out a selected variety of possible responses to the original message and assess the emergency situation as the replies come in. For example, some emergency situations require additional communication to coordinate the evacuation of a building. This cannot be accomplished by one-line replies. Instead, people need to communicate, assess the situation and agree on a strategy. In this instance, therefore, the appropriate response would be to facilitate bridging the recipients into a conference call. This is what we mean by a variety of possible responses – the ability to communicate through means other than a simple e-mail message.

Perfect World

With all these features we now have the perfect emergency notification system; one that communicates, listens, coordinates and escalates.

How Emergency Notification Works In Your World

A notification system can be used to automate just about any type of communication. The communication can be a planned event such as roll-call or an invitation to participate in an event.

The notification system adds the attribute of "emergency" when events are not planned. Emergency notification begins with the initial alert and can expand in communication complexity as the situation requires.

How does this relate to your organization? Is there a benefit to automating large volume planned events? Are there threats to your business where someone must answer the call to action? In the next two sections, we will examine how a notification system is typically deployed. First, we will look at operational use and then we will examine use by industry.

Operational Notification

Running an organization requires communication and many operational functions benefit from automated communication. Be it day-to-day operations or emergency management, how well you handle your communication can affect everything from the bottom line to the safety of your customers and employees. In every communication scenario, there are three basic steps.

Step one is to send the message or messages. This requires a designated sender, a thoughtfully written message with clear instructions, and a specific group of targeted recipients. In addition, a priority or designation should be assigned to the message.

The second step is to ensure that the recipients did in fact receive the message and have responded with acknowledgement and in most instances an action as per the request in the original message.

Step three is the beginning of all actions following the initial communication. These actions could be feedback to the originator or the originator reviewing notification logs. There could also be a conference call with a follow up or tallying of results. In addition, the originator could send a new message to people who didn't respond at all either using the same method or a different one.

In short, follow the 3 Cs:

- Communicate the message to the right people
- Confirm receipt and response
- Carry Out appropriate action

The most important thing to remember is that if the first communication is handled well, all following communication will have a better chance of resulting in a successful campaign towards emergency resolution.

Crisis Management and Business Continuity

Employee Roll-Call

Scenario: A toxic spill near an arboretum requires all employees working at the arboretum to evacuate immediately to the organization's emergency assembly point. Once everyone has had time to get there, an employee roll-call must be conducted to ensure everyone is present.

Step 1 Communicate: HR uses a BlackBerry to create a message asking if everyone is at the emergency assembly point. The message is sent to employees' phones and contains a poll. The choices included in the poll are:

1. I'm safe at the emergency assembly point.
2. I'm on my way to the emergency assembly point.
3. Help!

Step 2 Confirm: Immediately employee phones will begin ringing and everyone who can answers their phones. They hear the message and respond appropriately.

Step 3 Carry Out: HR receives the replies and immediately checks for people who did not respond and for those that respond with the #3 option (Help!) to the poll. In our scenario, no one responds with #3, but several employees don't respond to the message at all. Immediately the emergency assembly point is searched for these employees to see if they are present without their phones. If anyone remains unfound, an additional message is sent to them by phone and e-mail. Authorities cleaning up the toxic spill are notified by HR to keep an eye out for the missing employee(s).

Mobilize Crisis Management Teams

Scenario: To test the crisis management plan, an organization's crisis management response team calls a top executive, describes an emergency situation and asks the executive to contact a test list of people about the problem.

Step 1 Communicate: The executive creates an e-mail grouping that matches the test criteria and formats a test message to the group. A poll is included in the e-mail with two choices:

1. I have received the message and will join the phone conference immediately.
2. I have received the message and I'm working on the problem here.
3. I have received the message but I am busy right now.

Step 2 Confirm: Those in the test group receive the e-mail and respond to the poll. Those who choose option 1 dial the number provided and are bridged into a conference about the problem.

Step 3 Carry Out: The executive joins the conference call and keeps an eye on who has and has not responded. People who do not respond at all receive a second message, this time by phone, with the same poll included. People who respond with option 2 receive a follow up message inquiring what they are doing about the crisis.

Crisis Communication

Scenario: Machinery malfunctions in a mine tunnel, injuring a number of workers and creating the need to speak with them and their families directly, as well as the press secondarily.

Step 1 Communicate: PR within the mining company creates a phone message to send to worker families and a second message to send to the press. The family message briefly describes the incident, but requests that all receiving family members appear at a specific time to discuss the details of the situation in person. The second message to the press asks them not to contact any family members until after the organization has had a chance to meet with them, and further asks the press to attend a briefing at the organization's headquarters. Both messages include a poll with two choices:

1. I will attend the meeting at the specified time.
2. I will be unable to attend the meeting, please send me information about the situation as soon as possible.

Step 2 Confirm: Worker families and the press receive the respective phone message and respond accordingly.

Step 3 Carry Out: PR receives the replies. For those who respond with option 2, PR sends a follow up message urging them to make time for the meeting. For those who don't respond at all, PR sends a new message by e-mail explaining the situation and including the same poll. Those who respond with option 1 attend the meeting.

Emergency Staffing

Scenario: A nuclear plant has a reactor that suffers from a partial meltdown of its uranium fuel core after four control rods are accidentally removed. Staff must be alerted so those who aren't needed to handle the problem can evacuate, and those who are needed can begin fixing the problem and contacting residents within a ten mile radius of the plant.

Step 1 Communicate: A worker receives word that a meltdown is occurring. Immediately they send a message by phone and e-mail to all staff members describing the problem. The message requests that certain types of workers prepare to handle the problem while everyone else should evacuate. Safety measures are also provided in the e-mail, along with a poll containing three options:

1. I received the message and I will evacuate immediately.
2. I received the message and will join the phone conference to discuss this problem immediately.
3. I need assistance immediately.

Step 2 Confirm: People receive messages and respond as appropriate. Staff that are trained to handle meltdowns join the phone conference to find out what must be done. Everyone else evacuates or calls for help if necessary.

Step 3 Carry Out: The worker sends emergency notification messages to local radio and television stations for immediate report. The worker joins the phone conference and dispatches a team of on-site workers to hunt for those people who need help. For those who respond with option 1 (I will evacuate immediately), the worker sends a follow up phone call asking if they are safely off the premises. Rescue work and evacuation plans are then made in the phone conference.

Natural Disasters

Scenario: Weather forecasters discover a hurricane is about to hit and that residents in affected areas will need to make preparations to evacuate or hurricane-proof their houses.

Step 1 Communicate: Immediately a weather forecaster prepares an e-mail describing the hurricane, its severity, what should be done to combat it, and who should evacuate their homes. The forecaster sends this to radio and television stations local to the affected area. The e-mail sent contains a poll that offers message receivers two choices:

1. I read your message and we will announce this information immediately.
2. I read your message but I will not announce this information.

Step 2 Confirm: Stations everywhere receive the message and respond to the poll.

Step 3 Carry Out: The forecaster receives replies indicating that some stations will report the situation (those who responded with option 1), while others (those who responded with option 2) will not. The forecaster sends a follow up e-mail to those who selected option 1 containing an EAS document describing

proper procedures for broadcasting the emergency situation. They then send out a message to authorities that handle resident evacuation so they can begin the resident evacuation process where necessary.

Facilities Management

Site Closures

Scenario: A work facility plans to close early, and workers will need to be moved into jobs elsewhere if possible. Through past experience with early closure of a site and transitioning of workforces, it is discovered that workers respond best to these changes if notified of the situation ahead of time.

Step 1 Communicate: PR staff crafts an e-mail to all workers describing when the site will close, where new jobs may be located and how workers can prepare for the transition. They propose a group meeting to discuss the situation. A poll is included with two options:

1. Yes I can attend this meeting.
2. I received the message but I can't attend the meeting.

Step 2 Confirm: People receive the e-mail and respond as appropriate.

Step 3 Carry Out: PR staff checks to see who can and cannot attend the meeting. If most people cannot attend, they resend an e-mail to everyone rescheduling the event. If most people can attend, they send these people further meeting details. To those that respond with option 2 (I can't attend the meeting) or do not respond at all, they send an e-mail explaining that there will be future meetings and that more emails will go out describing these.

Inclement Weather

Scenario: A security officer is informed that an electrical storm is approaching and that workers must be warned.

Step 1 Communicate: The security officer creates a phone message warning workers about the storm and when they need to stop work and leave the premises in order to maintain their safety. The message includes a two option poll:

1. I received the message and will leave before the storm hits.
2. I received the message and require assistance immediately.

Step 2 Confirm: Because workers were instructed to keep cell phones on their person or near them at all times, most of them answer their phones and respond to the message as appropriate.

Step 3 Carry Out: The security officer ensures everyone has responded. If some people do not respond, the officer contacts their bosses and asks them to locate the non-responders immediately. For those that selected option 2 (require assistance), the security officer contacts other security guards to locate and assist them.

Security Breaches

Scenario: A building that is believed to be secure is broken into by vandals.

Step 1 Communicate: The security guard that discovers the security breach immediately radios headquarters to report the problem and request backup before examining the situation further. The guard on duty at headquarters collects this message and sends a phone message to appropriate emergency personnel. The message describes the problem and offers a poll with two choices:

1. I would like to join the phone conference discussing this security breach.
2. I am busy right now.

Step 2 Confirm: People receive the message and make their choices. Those who select option 1 are call bridged into a discussion about the security breach.

Step 3 Carry Out: The guard at headquarters joins the conversation about the security breach and the emergency guards are sent right away to provide back up for investigating the break in.

Evacuations

Scenario: Floor marshals are notified that they need to evacuate all people on their assigned floors immediately due to fire.

Step 1 Communicate: A floor marshal creates an e-mail that includes a diagram of exit routes. All the employees on the floor the marshal is responsible for are bundled into one group. The floor marshal quickly selects this group and sends the e-mail to everyone in it. The e-mail contains a poll with two choices:

1. I am evacuating to the emergency assembly point immediately.
2. I need assistance.

Step 2 Confirm: People respond to the floor marshal's message and evacuate or wait for help.

Step 3 Carry Out: The marshal cross checks responses on their blackberry outside the building. If anyone responds with option 2 (I need assistance), their name is placed on a list which the floor marshal hands to the firemen along

with a verbal explanation of where they are likely to be in the building. If people don't respond at all, the floor marshal resends the message to these people and includes them on the list given to the firemen.

Power Outages

Scenario: A power company needs to conduct rotating outages throughout a city. They receive 10 minutes notice that this going to happen. Fortunately, the company already has an electronic copy of the plans for rotating power outages and a schedule of how blocks will be affected throughout the day.

Step 1 Communicate: An administrative worker at the power company opens their e-mail and selects the bundled group of citizen emails for the city to be affected by the outage as well as a bundled group that contains contacts for radio stations for that city. The worker puts a pre-created schedule describing who will be affected when by the power outage into the e-mail along with instructions about how long the outage lasts, and what radio stations to listen to for outage updates. The e-mail also includes a single item poll:

1. I have received the message and understand I should check the website or the radio for updates, and that I should not call the power company directly.

Step 2 Confirm: People receive the message if their power is not out already and respond accordingly.

Step 3 Carry Out: The administrative worker checks to see who did and did not receive the message. For those who don't respond at all, the worker resends the notices, but this time by phone.

Information Technology

IT Security Threat Response

Scenario: An intruder is detected attacking an organization's systems and thwarted. IT staff must immediately be notified so that appropriate remedial action may be taken.

Step 1 Communicate: A senior manager of IT staff sends a phone message to all IT employees describing the incident. The person includes a two option poll with the message:

1. I will attend the phone conference to discuss the situation.

2. I am busy right now but will be available to help later.

Step 2 Confirm: Everyone receives the message. Employees selecting option 1 are call bridged into a discussion about the incident. Employees who select option 2 continue their work.

Step 3 Carry Out: For employees who don't respond at all, the senior manager sends a follow up note inquiring an explanation for their lack of response. This is sent by e-mail.

IT Outage Notification

Scenario: A service provider pings customer equipment housed in the host management center every five minutes. On 2 consecutive attempts to ping this equipment, it does not respond, indicating that the service is now unavailable. The service provider must now contact 500 customers to inform them that service is down for the moment – and try to keep the call center lines free at the same time.

Step 1 Communicate: The IT worker that finds the service outage uses their computer to send a phone message to a group of customers who are bundled together in the worker's notification system based on what equipment they receive service from. The message explains the problem and includes a poll offering two choices:

1. Thanks for informing me, we will handle the situation.
2. We need immediate assistance from tech support.

Step 2 Confirm: People receive the message and respond to the poll. People who select option 2 (immediate assistance) are immediately connected to the tech support hotline for the service provider.

Step 3 Carry Out: The IT worker receives all the responses and can see who didn't respond at all. These people are contacted a second time by e-mail with the same message. Those who responded with 2 receive a follow up note from the worker apologizing for the long wait times on the tech support hotline.

Find Specific Skill Set

Scenario: A month ago, a new forum module was launched on an organization's public web site. While sufficient staging and load testing took place prior to going live, during a major tradeshow, the site slows down to a crawl. When traffic exceeds 45 mbps, the site actually freezes and needs to be restarted. Luckily, the organization has a member of their web team on full monitoring alert. This person detects the problem just as it begins to occur, and realizes the problem spot is the new forum module. They take the module offline, but now need to troubleshoot the application immediately.

Step 1 Communicate: The web team member sends an e-mail to all other web

team members requesting troubleshooters, particularly Java programmers, to examine the forum module. The web team member includes a two option poll in the e-mail:

1. I will join a phone conference to discuss this incident.
2. I am busy right now.

Step 2 Confirm: Java programmers that receive the message select option 1 (join a phone conference), get to a phone, enter the provided meeting ID and join the discussion immediately. In addition, they go to the link provided in the e-mail to download a sample of the application.

Step 3 Carry Out: The web team member joins the conference. As the problem is being discussed, the lead programmer collects input from other programmers and compares it to what outside programmers are saying on the message boards about this forum application. A solution is settled on and the local programmers go about applying, staging, and deploying the recommended code modification.

Incident/Problem Management

Scenario: A staff member at an IT help desk receives a report of a problem with a user's computer. They record the problem but then must contact IT staff about it so someone can be sent to fix the computer.

Step 1 Communicate: The staff member creates a phone message describing the problem, where the user is located and when the problem must be solved by. They include a poll with two choices:

1. I will join a phone conference right away to hear more about this issue and determine who will solve the problem.
2. I am busy right now.

Step 2 Confirm: IT staff members answer their phones and respond as appropriate. Those staff who can help choose option 1 (join a phone conference) and are immediately call bridged into a discussion of the issue.

Step 3 Carry Out: The staff member who sent the message joins in the phone conference and explains the issue to everyone. As a group they choose a few people to examine the user's computer. Any other important issues are discussed quickly, then everyone goes back to work.

IT Change Management

Scenario: A service provider makes changes to its systems that affect its end users. The users must be notified of the change.

Step 1 Communicate: An administrative worker crafts an e-mail indicating that

changes to the user interface have been made. The e-mail contains information on websites to visit if users are unclear on how to use the changes and provides a contact number for technical support. At the bottom of the e-mail is a poll with one option:

1. I read the message.

Step 2 Confirm: Customers receive the message and indicate they have read it.

Step 3 Carry Out: The administrative worker sees who responded, and who did not. For those customers who did not respond, a follow up notification is sent repeating the information. This follow up is sent by phone.

Planned Downtime Communication

Scenario: An organization plans to take systems offline to perform hardware and software upgrades. However, this activity will prevent the use of a server that is regularly accessed by employees in the marketing department. They must be notified one week ahead of time so that they may adjust their work plans accordingly.

Step 1 Communicate: An IT manager sends an e-mail out two weeks prior to the scheduled hardware and software upgrades that must be made. The e-mail is sent to the entire marketing department, and contains a detailed explanation of when the server used by the department will be down, when it is expected to come back online, and what workarounds are available to users during the downtime. At the end of the message the manager offers three choices of response in a poll:

1. I understand and will adjust my schedule accordingly.
2. I understand but I would like to schedule a meeting to discuss the situation further.
3. I absolutely need the server during that time period and would like to attend a meeting to discuss this situation.

Step 2 Confirm: Workers in the marketing department receive the e-mail and make their choices.

Step 3 Carry Out: The IT manager checks to see who replies to the e-mail. The manager resends the message to workers who did not respond, but this time sends it by phone. The rest of the responses overwhelmingly indicate that people want to attend a meeting on the situation. The manager sends these people a follow up e-mail with a meeting time offered.

Human Resources

Collect Employee Contact Information

Scenario: HR wants to ensure it has the most accurate employee contact

information for each staff member.

Step 1 Communicate: HR creates an e-mail requesting that each employee respond with their contact information. The e-mail lists what contact information must be provided. A poll is included with the e-mail, and offers a single option:

1. I have received your message and will submit my contact information.

Step 2 Confirm: Workers receive emails. They respond with option 1 to let HR know they read the message, and send in their contact information immediately.

Step 3 Carry Out: HR checks to see who has responded to the message and provided contact information. Those who haven't responded at all receive a follow up e-mail requesting their information.

Shift Change Announcements

Scenario: Vacancies occur in a shift assignment at a prison. Security staff must be notified so they can apply for the shift opening if they wish.

Step 1 Communicate: An administrative worker learns that a guard will be off duty for a shift they are assigned to cover. The worker immediately creates an e-mail describing the shift, what duties the guard has during the shift and how staff members may apply for the slot if they are interested. The e-mail includes a poll with choices:

1. I'm interested in applying, please send more information.
2. I'm not interested in applying, but thank you for the information.

Step 2 Confirm: Workers check e-mail and respond to the message as they see fit.

Step 3 Carry Out: The administrative worker takes the group of workers that chose option 1 (I'm interested in applying) and sends a follow up e-mail. The worker explains in more detail where guards can go to apply for the shift and what the deadline for applying will be.

Employee Mobilization

Scenario: An organization wishes to inform its workers that they should vote in an upcoming election.

Step 1 Communicate: An administrative worker within the organization creates an e-mail explaining that workers should vote in the upcoming election. Links to websites where workers can learn more about issues they'll vote on, why voting is important and how to register to vote are provided. In addition, just to be sure people are receiving the notice, the administrative worker adds a poll with a single choice:

1. I received the e-mail.

Step 2 Confirm: Workers receive the e-mail and respond appropriately.

Step 3 Carry Out: The administrative worker resends information to workers who don't respond to the message at all. For workers who acknowledge they have read the e-mail, an additional message setting up employee meetings where voting can be discussed is sent.

Benefits Information Dissemination

Scenario: An organization is changing health providers and must notify employees of the change and the benefit plans offered by the new health insurance company.

Step 1 Communicate: HR writes an e-mail explaining that the organization will be switching health insurance providers and when the switch will take effect. The e-mail includes information about when employees must turn in applications for the new health insurance provider. For employees that want detailed information on potential health benefits from the new company, a link is provided to a website defining each health insurance plan. HR places a poll in the e-mail with two options:

1. I read and understood the e-mail.
2. I need help and will come see you in your office when I have a chance.

Step 2 Confirm: Workers receive the e-mail and respond as they see fit. Some workers head to HR's office to discuss their issues with the new health insurance provider.

Step 3 Carry Out: HR checks to ensure everyone responds to the e-mail in one form or another. HR helps anyone who is confused by the transfer to the new health insurance company, and sends a follow up e-mail to workers who do not respond at all.

Notification Within Your Industry

In addition to general and operational communication that is shared between organizations and society as a whole, there are communications that are specific to different industries.

Healthcare

Epidemic Alerts

Scenario: During a period between outbreaks of a disease capable of causing an epidemic, a circulating virus is suspected of having the potential to cause widespread human illness. To minimize the risk of transmission to people, this virus needs to be examined and if found to be dangerous, reported as swiftly as possible.

Step 1 Communicate: A worker learns that a virus is circulating. Immediately they craft a message describing the virus, the area it was found, and what needs to be done to collect and test it. The worker wants to ensure the message is sent to every lab in the vicinity of the virus, but also wants to avoid cluttering inboxes by sending the message to every worker in every lab. Thus, the worker sets up the e-mail with a delay so it goes to a selected group of people in each lab in a staggered fashion. If the first person in a lab doesn't answer the message within ten minutes of receiving it, the next person in the lab is contacted, until someone answers, at which point no further emails are sent to that group. This logic should be used to notify each group.

Step 2 Confirm: Message receivers respond to the e-mail, indicating they have received it and will take action based on the contents.

Step 3 Carry Out: The worker who sent the message checks to see who replied to the e-mail. The worker sends all responders a follow up phone call with a three item poll asking about the status of the suspected virus:

1. The virus is not a problem.
2. We are still determining whether the virus is a potential problem.
3. The virus is a potential problem that we need to discuss.

Option 3 is configured so that anyone who selects this option is call bridged into a conference where they can discuss the virus.

Mass Casualty Alerts

Scenario: A hospital has just called a mass casualty alert. Nurses need to respond to the alert by contacting the Emergency Operations Center and indicating how many beds are available for incoming patients. In addition, off-duty staff need to be notified that they are needed at the hospital.

Step 1 Communicate: The Emergency Operations Center contacts all staff with a phone message explaining that the hospital is on mass casualty alert, anyone off-duty that is available is immediately needed, and in-hospital nurses need to call the center to report how many beds are available. The phone message includes a four option poll:

1. I am off-duty but I will get to the hospital as soon as possible.
2. I am off-duty and not able to reach the hospital.
3. There are no beds available.
4. There are beds available.

(and the nurse is immediately call bridged into a meeting where the number of beds can be discussed with other nurses and the Emergency Operations Center).

Step 2 Confirm: Staff off-duty receive the notification and respond. Those that can get to the hospital do so. Nurses on duty indicate whether they have beds available. Nurses who select option 4 (beds available) are immediately call bridged into a conference where they can discuss how many beds are available and the logistics of assigning them to incoming patients.

Step 3 Carry Out: The Emergency Operations Center resends the phone message to staff and nurses who don't respond to the message.

Volunteer Notifications / Emergency Staffing

Scenario: A disaster occurs and a hospital finds it needs an additional 20 staff members to effectively meet the requirements of incoming patients. Emergency staff volunteers must be contacted to help with the situation.

Step 1 Communicate: An administrative worker at the hospital sends a phone message to all off-duty staff and healthcare professionals who have registered to work as volunteers in the event of an emergency. requesting that they come to the hospital. They set up the e-mail so that a 30 second delay is provided between each call to each person, and add a response limit of 20. The message also contains a poll with two choices:

1. I will be right there.
2. I am not in the area and cannot make it to the hospital.

Step 2 Confirm: Staff members and potential volunteers respond to the message with their answers. When twenty of them have responded with choice 1, the phone message stops being sent to additional workers.

Step 3 Carry Out: The administrative worker monitors responses. If less than twenty people respond, they resend the message to everyone, this time by e-mail.

Utilities

Weather Warnings

Scenario: Heavy rain that may cause flooding is expected. An alert must be sent out to government departments.

Step 1 Communicate: The local weather observatory creates an announcement e-mail for government officials in each department that must be contacted. The e-mail contains details about the rain, when it is likely to hit, and what areas will be most affected. Because it is an announcement style e-mail, it includes a single response option:

1. I received your message.

Step 2 Confirm: Government officials receive the message and reply with option 1.

Step 3 Carry Out: The observatory receives notification that everyone received the message. Government officials send out a new message with instructions for what the general public is to about the situation to all local radio and television stations. People at the stations receive the announcement style e-mail, indicate they have read it, and broadcast the message.

Planned Outages

Scenario: An outage is planned and workers in facilities where the outage is taking place must be informed.

Step 1 Communicate: A note goes to the person responsible within the facility for handling notification of planned outages. In the person's alert notification system, there are a set of groups to contact in the event there is a planned outage. These groups include: Facilities Coordinator for Facilities Management and Planning Department, Building Maintenance reporters, Building Operations and Maintenance, Control Systems Group, Custodial Services, Information Services, Utility Services, University Operator, Landscape Services, Campus Recreation, University Housing and Vending Services. The person determines which of these departments will be affected by the latest outage and sends them an e-mail describing when the outage is to take place. Because the person opts to send an announcement style message, it contains a single response option:

1. I received the message.

Step 2 Confirm: Appropriate workers receive the e-mail and respond with option 1. They notify anyone they need to based on the message, and take the

appropriate precautions to deal with the situation.

Step 3 Carry Out: The message sender receives confirmation that everyone has read the message. If someone does not reply, they send a follow up message to that person or group of people in the announcement style again.

Rolling Blackouts

Scenario: A utility company plans to have rolling blackouts throughout the bay area and must provide affected areas with notification.

Step 1 Communicate: An administrative worker at the utility company creates a message describing the schedule for rolling blackouts, and what areas are most likely to be hit. They send this e-mail to all local radio and television stations. Because the e-mail uses an announcement style, it has a single response option:

1. I received the message.

Step 2 Confirm: People at radio and television stations receive the message describing the blackout. They respond with option 1, then broadcast the information so everyone is aware of the situation.

Step 3 Carry Out: The administrative worker sees who replied to the message and who did not. They follow up with any stations that did not respond by sending another e-mail or making a phone call.

Main Breaks / Crew Communications

Scenario: Someone is heading home when they notice that near a street corner, the pavement has buckled and there is water running down the street. The person realizes there is probably a broken water main to blame for this.

Step 1 Communicate: The person reports the break. Immediately, the administrative worker receiving the report creates a phone message to send out to all on-duty leak checkers, grouped together in the "on-duty checker" group. The administrative worker decides to use a first response style message, meaning that each person in the group will be contacted one after another with a delay in between each one. If a person fails to respond by the end of a delay, the message will be sent to the next person in the group until someone responds, at which point the notification stops being sent out. The response option included in the message is:

1. I received the message and will handle the situation.

Step 2 Confirm: People receive the message. The first four checkers cannot handle the suspected break because they are busy with other tasks. The fifth checker is able to respond. They follow the instructions and confirm they will examine the suspected break.

Step 3 Carry Out: Feedback is received by the administrative worker sending out the message that someone is on the way to examine the water main.

Equipment Malfunctions

Scenario: Surveillance cameras break in the slots area of a casino. The affected area must notify staff and security of the issue so that the area can be watched more closely.

Step 1 Communicate: The slots manager receives word from an employee that surveillance equipment is broken in the slots area. The manager then crafts a phone message notifying security and staff working for them of the situation. Using a poll style message, the manager explains that staff must shut down the machines until the camera can be fixed, and security needs to increase on the area until the machines are shut down. The poll offers three choices:

1. I am available to shut down the machines immediately.
2. I am available to watch the area until the machines are shut down.
3. I am occupied with another task.

Anyone selecting 1 or 2 is call bridged into a phone meeting.

Step 2 Confirm: People receive messages and choose the appropriate number for their situations.

Step 3 Carry Out: They join a conference with the slots manager who assigns several staff members to shut down the machines in the area where the camera is broken. Several security guards are also dispatched to watch over everything until the machines have been turned off.

Evacuation Notices / Public Announcements / Contamination Announcements

Scenario: While removing waste from its facilities, a nuclear power plant has a spill. Workers must be notified at the plant so they can begin cleaning up, and residents in the surrounding area must be notified so they can take appropriate precautions.

Step 1 Communicate: The worker driving the truck that breaks down and causes the waste spill contacts the power plant. An administrative worker receives the message. Immediately, they send a phone message describing the situation to managers and PR. The worker includes a two choice poll in the message:

1. I received the message and will join a conference about it immediately.
2. I received the message and will work on the problem here.

Step 2 Confirm: Managers in the power plant listen to the message. Those of them that choose option 1 (join a conference) are call bridged into a phone conference where they decide what crews will be mobilized to deal with the situation. PR collects information to send to local television and radio stations so

residents can be informed that they must evacuate.

Step 3 Carry Out: The administrative worker checks to ensure managers and PR replied to the message. They resend the notification to people who did not respond, this time by e-mail.

Service Interruption Notification

Scenario: A major company providing e-mail services plans to bring the service down on the west coast for maintenance purposes. All users must be notified of the situation.

Step 1 Communicate: The company providing e-mail services has an employee craft an e-mail describing that services will be down on March 5th around 2 a.m. for an hour while they perform maintenance. The message includes a single option response:

1. I received the message.

In addition, the e-mail sender only wants to include west coast customers. They select lists of contact information only for states along the west coast. The sender organizes these groups under one larger group "West Coast Customers", then sends the e-mail to this new group.

Step 2 Confirm: People receive the notification and respond. They make appropriate plans so that they will not need the system during the down time.

Step 3 Carry Out: Anyone who does not respond receives a follow up message, reminding them of the upcoming downtime.

Retail

Product Recall

Scenario: A product is shipped containing almonds as an ingredient, but the labeling does not indicate this. To avoid the possibility of customers with allergies to almonds purchasing this product and having a bad reaction, it must be recalled.

Step 1 Communicate: An administrative worker from the company conducting the recall creates an e-mail describing the problem with the product that needs recalling. They send this message to the inspector that found the problem with the product and the store manager for each store stocking the product. The message includes a poll with two choices:

1. I will ship the product back to you immediately
2. We will remove the product from our shelves, but there will be a delay in shipping it back.

Step 2 Confirm: Message receivers respond with one of the two choices and remove the product from their stores.

Step 3 Carry Out: The administrative worker sends a follow up phone message to e-mail receivers that did not respond at all. For those that responded with option 2 (delay in shipping), the worker sends an e-mail querying them about why there will be a delay and how long the delay will be.

Product Wait List Management

Scenario: Everyone wants a Tickle-Me Elmo doll for their children. However they are in short supply, so people are on a waiting list for the product. 50 of the dolls have just come into the store.

Step 1 Communicate: A toy store administrative worker divides the waiting list into groups of 50. They create a message explaining that the doll is available for purchase and include a two option poll:

1. Ok I'll be there to pick up the doll as soon possible.
2. I am no longer interested in the doll, please remove me from the list.

The worker sets a delay so that if members of the first group do not respond within the hour, the next group is contacted.

Step 2 Confirm: People from the first group receive the message and some respond while others do not. Some people arrive at the store and pick up dolls.

Step 3 Carry Out: Because some people from the first group responded, the message does not continue to the second group. The administrative worker determines whether to resend to anyone who did not respond from the first group, and then sends a message to the next group of customers indicating that the doll is available if they want one.

Store Closings

Scenario: Due to a severe storm, a store needs to shut-down and notify its customers and staff that this will be happening.

Step 1 Communicate: The store manager creates a phone message explaining to employees and customers that the store will be shut for a specified time. The manager includes a one option response:

1. I received the message and will not be at the store.

Step 2 Confirm: Everyone receives the message and responds. They follow the instructions and do not show up at the store.

Step 3 Carry Out: The manager checks to see if all employees respond. If some do not respond, they send a follow-up message to ensure that none of them will show up for work on the day the store is closed. If desired, the manager also re-contacts customers that didn't respond to the messages.

Security Alerts

Scenario: A salesperson suspects that a woman wandering among the clothes racks may be a shoplifter.

Step 1 Communicate: The sales person contacts the security department. The person who receives the call immediately sends out a phone message describing the problem to all on-duty security guards in the sales person's area. The message contains two choices in a poll:

1. I can investigate this situation.
2. I am in the midst of a different task.

Workers who select option one are call bridged into a meeting.

Step 2 Confirm: Security guards respond to the poll as appropriate. Some of them join the phone conference to learn more about the situation.

Step 3 Carry Out: The person who sent the phone message joins the phone conference. Because enough guards are participating, the person doesn't need to re-contact any of the other guards. Everyone present discusses the problem and two guards are sent to keep an eye on the potential shoplifter.

Staffing / Shift Management

Scenario: A small clothing store wants to staff upcoming shifts so that part-time senior and junior salespeople are working together on each shift.

Step 1 Communicate: The store manager creates an e-mail describing available shifts, and send it to two groups, senior and junior salespeople. They include a poll with three choices:

1. I am interested in working mornings.
2. I am interested in working in the afternoon.
3. I am interested in working evenings.

Step 2 Confirm: Staff members respond with their choices.

Step 3 Carry Out: Based on the information that comes back, the manager sends a follow-up message to each group that selected choice 1, 2 or 3. Each message announces a scheduling meeting for each group. For those that do not respond to the initial message at all, the manager resends the information, this time as a phone message.

Robbery Notifications

Scenario: A store has recently been robbed several times. To tighten security, new procedures are sent to employees to help them spot shoplifters.

Step 1 Communicate: The store manager sends an e-mail to all staff describing the robbery problem and the new procedures they are expected to follow to help prevent further robberies. The e-mail they create includes a poll with two choices:

1. I read the new security procedures and understand it is my responsibility to follow these instructions.
2. I read the new security procedures, but I am unclear on some of the instructions and need further assistance.

Step 2 Confirm: Staff members receive the e-mail, read through it and implement the procedures as requested, or they find themselves confused by the new procedures.

Step 3 Carry Out: When the feedback arrives, the message sender contacts the group of people who were confused by the message to schedule a meeting with all of them where they can discuss the new procedures.

Education

School Closings

Scenario: The school calls a snow day and needs to inform everyone of their decision.

Step 1 Communicate: An administrative worker for the school creates a group for all parents and their telephone contact information. They craft an e-mail explaining there will be no school that day, and include a two choice poll:

1. I received and understood the message.
2. I received the message, but don't understand it.

Step 2 Confirm: Parents receiving the notification respond. Those that understand the message prepare to have their children at home for the day.

Step 3 Carry Out: The administrative worker checks to ensure all parents respond to the e-mail. Those that don't respond at all receive a follow up message by phone describing the situation. Those that respond with option 2 (don't understand) receive a follow up e-mail clarifying the first one.

Parent/Teacher Conference Reminders

Scenario: Teachers want to speak with parents about how well their children are doing in school.

Step 1 Communicate: A teacher creates an e-mail informing parents that parent/teacher conferences are coming up soon. The message includes dates the conferences will be held and three choice poll:

1. I received the message and I am interested in a conference on Wednesday.
2. I received the message and I am interested in a conference on Thursday.
3. I can't make a conference on a Wednesday or a Thursday, I will call to reschedule.

Step 2 Confirm: Parents receive notices, examine their schedules and respond.

Step 3 Carry Out: Parent responses to the poll are received by the sender, who then works to create conference schedules based on the information. Parents who could not make conferences on the selected days receive a reminder notice asking them to call and reschedule for a different time.

Campus Evacuation

Scenario: Someone calls in a bomb threat, and the campus must be evacuated.

Step 1 Communicate: An administrative worker creates a phone message to send to parents notifying them that they must pick up their children early. The message includes a poll with two choices:

1. I will be there immediately.
2. I can't get there until the end of a normal school day.

Step 2 Confirm: Parents receive the message and respond.

Step 3 Carry Out: The administrative worker re-contacts any parents that weren't reachable with the same message, this time by e-mail. They send a follow up notice by phone to parents who can't pick up their children informing of them of where they will be until the end of the school day.

Inclement Weather

Scenario: By noon on a school day, it is snowing hard. The school wants to close early so that everyone may get home safely before the worst of the snowstorm hits.

Step 1 Communicate: An administrative worker creates a phone message explaining that the day is ending early and requesting that parents pick up their children. The message contains a two option poll:

1. I will be there immediately to pick up my child.
2. I can't pick up my child until the end of the day.

Step 2 Confirm: Parents receive the message and respond. Some parents begin showing up at the school for their children, some parents don't respond to the message at all, and some indicate they can't pick up their child early.

Step 3 Carry Out: For the parents who don't respond, the administrative worker re-sends the same message, but this time by e-mail. For parents who can't pick up their children, the worker sends a phone message asking them to press 1 when they receive it. Pressing one call bridges them into a meeting of parents who can't pick up their children early and an administrative worker who collects information on who can be contacted to pick up the children in their stead.

Faculty / Staff Announcements

Scenario: There is going to be a staff holiday party and all staff must be informed.

Step 1 Communicate: An administrative worker sends an e-mail describing when and where the holiday party for staff will be. The e-mail includes a three choice poll that acts as an R.S.V.P.:

1. I will be there.
2. I can't go.
3. I am not sure I can make it.

Step 2 Confirm: Staff receives the message and responds.

Step 3 Carry Out: The worker makes a note of who will and will not be coming to the party based on the responses they receive. For those who answered maybe, the worker sends a second message a week later asking if they have yet determined whether they can make it or not.

Campus Security Mobilizations

Scenario: During a college campus party, a fight breaks out between a few students.

Step 1 Communicate: Someone contacts the security department to report the event. The guard receiving the call at the department triggers a phone message to be sent to security guards. The message is tiered so that one group of security guards is contacted first. If none of them respond after 5 minutes, another group is contacted. If they don't respond, the message is sent to the chief of security. The message offers a two choice poll to the guards:

1. I am on my way to fix the problem.
2. I am busy handling an incident.

Step 2 Confirm: Security guards on duty receive a phone message informing them of the details of the problem and respond to the message as appropriate. Some guards head to the party to break up the incident.

Step 3 Carry Out: Afterwards, the guard who received the call about the fight can review who did not respond or who responded with option 2 to determine for what reasons they were unable to respond to the incident.

Faculty Staffing

Scenario: Teaching assistants are required to staff labs where they help computer science undergraduates with their homework.

Step 1 Communicate: The professor for a course sends all teaching assistants for computer science labs an e-mail including a poll with three options:

1. I would like to run a lab on Tuesday.
2. I would like to run a lab on Wednesday.
3. I would like to run a lab on Thursday.

Step 2 Confirm: Teaching assistants read the e-mail and respond as appropriate.

Step 3 Carry Out: The professor reviews the incoming replies and sends a new e-mail to each of the three groups specifying what time slots are available on the day selected by the group.

Team/Club Updates & Notifications / Parental Notifications

Scenario: Everyone needs to be reminded of an upcoming event.

Step 1 Communicate: An administrative worker for the school creates a phone message describing the details of the upcoming event that a group of people needs to be reminded about. The message includes a poll with two choices:

1. I will attend.
2. I will not be able to attend.

Step 2 Confirm: People receive the message and respond to it.

Step 3 Carry Out: The worker checks to see who did and did not respond to the message. A second reminder is sent by e-mail to the people who did not respond.

Substitute Staffing

Scenario: A 7th grade math teacher calls early in the morning to say they are sick and won't be in that day.

Step 1 Communicate: An administrative worker who receives the phone call creates a phone message requesting a substitute teacher for 7th grade math class. The message explains that if people aren't available to teach, they should

hang up the phone. A single option response is included for people who are available:

1. I can teach the class today.

Before sending it to the group of potential substitutes, the worker sets a delay on the calls to be made, so that each person is called only if the person prior to them in the list does not respond to the message.

Step 2 Confirm: Each person receives until someone selects choice 1. Then the notification process terminates and that person is call bridged into a conversation with the administrative worker who sent the message.

Step 3 Carry Out: The person selecting choice 1 has a discussion with an administrative worker on campus, collects information for teaching the math class, and drives to campus to do the work.

Surveying & Polling

Scenario: The school is trying to determine what the best way to spend money to improve the school is according to parents.

Step 1 Communicate: An administrative worker creates an e-mail telling parents that there is enough money to renovate the campus, but before spending, the school would like some input on how best to use the money. The e-mail includes a poll with three choices:

1. I would like to see improvements made to the art department.
2. I would like to see you add more parking.
3. I would like to see improvements made to the library.

Step 2 Confirm: Parents receive messages and make choices about how best to spend money by answering the survey.

Step 3 Carry Out: The message sender receives the parent responses and uses the information to aid the school in determining where to spend the money.

Locate a Student

Scenario: Due to a family emergency, a student needs to be tracked down and brought to the front office, so their family can pick them up.

Step 1 Communicate: The administrative worker receiving the call creates an e-mail for teachers with instructions indicating that the student needs to be brought to the front office. The e-mail includes a poll with two choices:

1. I found the student and will bring them to the front office.
2. I have not found the student but if I see them I will bring them to the front office.

Step 2 Confirm: Teachers receive the message and respond as appropriate. Those who select choice 2 (have not found) keep an eye out for the student. One person responds with choice 1 (I found the student).

Step 3 Carry Out: The administrative worker checks their e-mail and sees that one teacher has located the student. The worker waits in the front office for the student.

Library Notifications

Scenario: A group of high school students have had books checked out from the school library for nearly a month. They are way beyond due, since they were only supposed to be checked out for a week.

Step 1 Communicate: A librarian creates a group for students with overdue library books and adds students to the group as appropriate. Then the librarian writes an e-mail to this group requesting that they return their books or their parents will be contacted. The e-mail includes a poll with three choices:

1. I will return the book immediately.
2. I can't find the book, bill me for it.
3. I will speak to you in person about the book.

Step 2 Confirm: When students receive the message, they respond with one of the options.

Step 3 Carry Out: The librarian checks e-mail to see how students are responding. They send notice to students who responded with option 2 (bill me) that they should go to the library to pay for the book. Those who don't respond to the message at all have their parents contacted about their library books.

Government

Response Team Mobilizations

Scenario: A building catches fire. A bystander calls the fire department and reports the incident. The administrative worker receiving the call must mobilize firemen to assess the situation and assist with suppressing it.

Step 1 Communicate: All potential response team members are grouped together in the 'Response Team' group on the administrative worker's alert notification system. The worker selects this group and decides to contact them all by cell phone. They create a message containing details about the fire and requesting that everyone drive to the fire station immediately. A two choice poll is included in the message:

1. I am on my way to the fire station.
2. I am out of the state and cannot get to the fire station.

Step 2 Confirm: Volunteer firemen receive the message and respond to the poll. Some members do not respond to the message at all.

Step 3 Carry Out: Information comes back to the administrative worker, making it clear who will be at the fire station immediately and who will not. For those people who did not respond to the message, a follow-up notice is sent, this time by pager.

Employee Evacuations

Scenario: Staff members are ordered to evacuate their posts.

Step 1 Communicate: An administrative worker creates a phone message explaining that employees must evacuate the facilities. The phone message contains a two choice poll:

1. I understand and will evacuate immediately.
2. I need assistance in order to evacuate.

Staff members that select option 2 are call bridged into a phone conference where they can explain what kind of help they need.
Step 2 Confirm: Everyone receives the message and responds. Fifty people do not respond at all.

Step 3 Carry Out: The administrative worker collects information from the phone conference about the locations of different employees and what help they need to evacuate. This information is passed on to rescue crews. The group of 50 people who do not respond receive a follow up message by e-mail and pager. The worker then monitors these messages to be sure everyone responds. If people fail to respond again, their names are placed on a list and given to rescue crews who will hunt them down.

Terrorism Threats

Scenario: A potential terrorist attack is reported. The likelihood that it will actually happen is low, but precautions are still necessary.

Step 1 Communicate: A government official creates an e-mail describing a terrorist threat, and the likelihood that terrorists will attack different types of buildings. This e-mail is sent to the operators of all critical facilities in the area including government, religious and cultural facilities. The e-mail includes a poll that allows the reader to indicate how vulnerable they believe their organization is to an attack. Allow choices 1-5, with 1 being least vulnerable, and 5 being most vulnerable.

Step 2 Confirm: Readers receive the e-mail and prepare their facilities as best they can for a possible attack. They respond to the message as appropriate.

Step 3 Carry Out: When feedback is received, follow-up messages are sent to groups based on which response was chosen. Readers that responded with 3-5 receive a notice about preparing to be assessed to determine how much government protection is necessary for their facilities. Readers that responded with 1-2 receive a checklist of items regarding security procedures to go through for their facilities.

Community Warnings

Scenario: A chemical accident occurs, and the community needs to be informed so that they stay indoors while it is being cleaned up.

Step 1 Communicate: An administrative worker at the plant where the accident occurred creates an e-mail to send to radio and television stations. The message describes the incident, provides instructions indicating that people within a ten mile radius of the spill should stay in their homes, and includes a two choice poll:

1. I received the message and will broadcast this information.
2. I received the message and will not broadcast this information.

Step 2 Confirm: Everyone receives the message and responds as appropriate. Radio and television stations begin reporting the chemical spill along with instructions to people on what to do to protect themselves.

Step 3 Carry Out: The administrative worker checks responses to their e-mail to ensure that radio and television stations received the message and that a high enough percentage of them are broadcasting the emergency notification. If necessary, the worker follows up with radio and television stations that do not respond at all.

Inclement Weather / Public Announcements

Scenario: A severe snowstorm hits, making it dangerous to drive or go out during the day for school or work.

Step 1 Communicate: The local government must notify radio and television stations of their decision to call a snow day. A government official sends stations an e-mail explaining the situation and any special instructions necessary for those affected by the snow day. The message includes a two option poll:

1. I read the message and will broadcast the information provided about the snow day.
2. I read the message and will not broadcast the information provided about the snow day.

Step 2 Confirm: Radio and television stations receive the e-mail and respond.

They broadcast the information provided if they responded with option 1 (broadcast the information).

Step 3 Carry Out: The government official that sent the message resends it by phone to any radio and television stations that did not respond to the e-mail.

Manufacturing

Fire Drills

Scenario: To ensure fire safety in a factory, a fire drill must be conducted.

Step 1 Communicate: An administrative worker in the factory creates an e-mail describing to all staff that a fire drill will be conducted on an upcoming day, and that attendance is mandatory. The e-mail includes a one option response:

1. I received the message.

Step 2 Confirm: People respond to the message and prepare for the drill.

Step 3 Carry Out: The administrative worker reviews the tally of who read the message and who did not. To those who did not respond, a follow up e-mail is sent.

Power Outages

Scenario: The power goes out and a semiconductor manufacturing company must immediately bring up its backup power supplies to continue operations.

Step 1 Communicate: The manager that handles the emergency power outage response team uses their blackberry to send a phone message to all pertinent crew, alerting them that they must begin implementing the emergency response plan. To be sure they are receiving the message, the manager includes a one option response:

1. I received the message.

Step 2 Confirm: Crew members receive the message that the plan they've trained on is now going to be put into action and respond.

Some people move to meet in the designated meeting room for instructions, while other people start collecting the equipment they need for their roles.

Step 3 Carry Out: The manager checks to see who has responded to the phone message and who has not. They follow up with the non-responders, attend the meeting to instruct crew members that may need help, and moves around to see that everyone is doing their work smoothly.

HAZMAT Incidents

Scenario: A truck carrying phosphoric acid for use in creating cola tips on the highway and begins leaking the chemical all across the road.

Step 1 Communicate: The driver immediately contacts their manager, who contacts the emergency management office for the area in which the driver is located. The office has a response team composed of members of various public safety agencies, traffic control and private contractors who will clean the spill for a fee. A staff member in the office has these people bundled together under a group entitled 'HAZMAT Response Team'. The person selects this group and sends them a phone message describing the problem and includes a two choice poll:

1. I received the message and would like to speak with the rest of the team.
2. I cannot respond since I am out of state.

People choosing option 1 are call bridged into a conference where they can discuss the issue.

Step 2 Confirm: People receive the message and respond as appropriate. People selecting option 1 are call bridged into a discussion about the spill.

Step 3 Carry Out: The worker in the emergency management office receives feedback indicating that most people have responded to the message. They follow up with those who did not respond, trying different communication methods.

Equipment Malfunction

Scenario: An internet service provider receives a series of complaints about the connection device they offer with their service. Twenty customers report problems with their device and need it fixed immediately.

Step 1 Communicate: The administrative worker receiving the trouble tickets groups all those together that include complaints about the internet service provider's connection device. A group e-mail is sent to these people that includes a three choice poll:

1. I will be available to have my device examined on Monday between 10 a.m. – 5 p.m.
2. I will be available to have my device examined on Tuesday between 10 a.m.- 5 p.m.
3. I will be available to have my device examined on Wednesday between 10 a.m. – 5 p.m.

Step 2 Confirm: Customers receive the notice and respond accordingly.

Step 3 Carry Out: The administrative worker receives the responses

and schedules a crew to go out to each of the houses based on the customers' choices.

Shift Change Announcements

Scenario: A manufacturing company wishes to inform its workers of new beginning and ending times for work shifts.

Step 1 Communicate: An administrative worker crafts an e-mail explaining that all shifts are pushed forward by one hour and end one hour later. The e-mail includes a single option response:

1. I received the message.

Step 2 Confirm: People receive the message, respond and adjust their schedules accordingly.

Step 3 Carry Out: The worker who sent the message can see who read the message and who did not based on responses. They follow up with anyone that did not respond to it at all.

Product Recall / Customer / Vendor Communications

Scenario: A product is found to be defective and must be recalled.

Step 1 Communicate: A worker from the company manufacturing the product sends an e-mail to the press and to store owners stocking the product. The e-mail describes the product and explains why it is being recalled. It lists special instructions for storeowners and interesting details for the press to work with. A single response option is also included in the e-mail:

1. I received the message.

Step 2 Confirm: People receive the e-mail and respond. The product is removed from shelves, and the press puts together an article announcing the recall.

Step 3 Carry Out: The worker that sent the messages looks through to see if anyone has not reviewed the message. Non-responders receive a follow up phone message repeating the information provided in the e-mail.

Supply Chain Management

Scenario: A company needs to keep track of stores that are willing to supply its products and services.

Step 1 Communicate: A worker in the company sends an e-mail to a long list of potential suppliers. The e-mail describes the product, the services, and the requirements for selling the product and services in a store. A two choice poll is included in the e-mail:

1. I am interested in selling your product, please send further information.
2. I am not interested in selling your product.

Step 2 Confirm: Store owners receive the message from the company and make their choices about their level of interest in supplying the product.

Step 3 Carry Out: When the results come back, the worker sends follow up messages. For all store owners who selected option 1, a message is sent with details about selling the product along with a request for contact information so a meeting can be arranged with each store owner or store representative. For all owners who selected option 2, an e-mail is sent asking why they are not interested in carrying the product.

Public Safety

Missing Persons / Amber Alerts

Scenario: Authorities are notified of the disappearance of a child, triggering an amber alert. They must inform everyone available of the missing child as quickly as possible.

Step 1 Communicate: Authorities send radio and television stations across the country an e-mail containing a picture of the child and details about when they were last seen. The message contains a single option response so that whether people read it or not may be tracked:

1. I received the message.

Step 2 Confirm: Radio and televisions receive the message and respond. They broadcast information about the missing child.

Step 3 Carry Out: Authorities receive confirmation of who has read and who has not read the e-mail. Any stations that do not respond receive follow up emails or phone calls.

Terrorist Threats

Scenario: Due to a severe risk of terrorist attack, a water plant needs to provide public notification for citizens to store emergency water supplies for themselves.

Step 1 Communicate: An administrative worker at the water plant creates an e-mail for citizens describing the terrorist threat to the water plant and what people need to do to prepare themselves to deal with it. It includes a one option response:

1. I received the message.

Step 2 Confirm: People receive the message and respond. They begin buying bottled water for their households.

Step 3 Carry Out: The administrative worker resends the message by phone to anyone who doesn't respond to the message.

Mass Casualty Incidents / Staff Mobilization

Scenario: A bomb blows up a section of the street, wounding an unknown number of people. A bystander reports the incident to the police, who must now notify emergency units of the situation.

Step 1 Communicate: A police officer crafts a phone message for a selected group of hospitals. The message explains the situation and that each hospital should trigger its own mass casualty plans to handle the situation. It describes the location of the explosion and potential hazards that may be encountered. The message also includes a poll with two choices:

1. I will call bridge into a conference to find out how staff will be mobilized to deal with this situation.
2. I am occupied with another urgent situation.

Step 2 Confirm: Appropriate hospital officials receive the message and respond with their choices. Those selecting option 1 (call bridge into a conference) join a discussion about how to mobilize staff to handle the incident.

Step 3 Carry Out: The police receive confirmation of the message they sent. Any hospitals that do not confirm receiving the message receive follow up notification, this time by e-mail.

Forest Fires

Scenario: A crewmember in a forest fire lookout tower spots a fire beginning, makes a note of the coordinates, and must quickly inform others before it spreads.

Step 1 Communicate: The crewmember creates a phone message describing the location of the fire, an estimate of its size and an assessment of what may be needed to handle it. This message is sent by phone to the head of each forest district surrounding the site of the fire as well as staff members. The message includes a poll with two choices:

1. I will create a plan for dealing with the fire and move out to handle it immediately.
2. I cannot reach the fire.

Message receivers choosing option one will be call bridged into a phone conference where they can discuss the fire.

Step 2 Confirm: The head forester and staff for each of the districts surrounding the fire receive the phone message. They listen to the information, and join the conference if they can to make preparations for dealing with the fire.

Step 3 Carry Out: A team is dispatched after discussing how to deal with the fire. They put out the fire quickly.

Natural Disasters

Scenario: A tornado is expected to hit an area. Water plants send messages to the local electric company requesting arrangements for handling downed power lines. In preparation, the electric company must make arrangements with water plants so that if power lines go down in or around a plant, all power is turned off.

Step 1 Communicate: The electric company sends a group e-mail out to all water plants with instructions for where to call if there are downed power lines and how they will respond to a reported situation. The e-mail contains a single response option:

1. I received the message.

Step 2 Confirm: Water plant representatives receive the e-mail and respond. They take the precautions provided by the electric company's notification.

Step 3 Carry Out: The electric company receives feedback that most water plants received the message and read it. A few plant representatives do not respond. The electric company sends these people, already grouped together as the 'not responded' category, a follow up e-mail.

Community Warning / Inclement Weather

Scenario: A severe snowstorm hits, making it dangerous to drive or go out during the day for school or work. The local government must notify radio and television stations of their decision to call a snow day.

Step 1 Communicate: A government official creates an e-mail to send to radio and television stations declaring the day a snow day. They provide important information such as special parking and other preparations that residents will need to make to handle the snow day effectively. The e-mail includes a poll with two choices:

1. I received the message and will broadcast this announcement.
2. I received the message and will not broadcast this announcement.

Step 2 Confirm: Radio and television stations receive the e-mail and respond as appropriate. Stations that choose option 1 (will broadcast) broadcast the contents of the e-mail.

Step 3 Carry Out: The official resends the message by phone to all stations that did not respond to the initial message.

HAZMAT Incidents / Resident Evacuation

Scenario: A chemical spill requires that residents in the immediate vicinity of the spill be evacuated from their homes.

Step 1 Communicate: An administrative worker from the company responsible for the chemical spill prepares to contact emergency crews and residents. They send a message to crew members including a two option poll:

1. I will attend a phone conference on the situation immediately.
2. I am busy.

To residents, the worker sends another phone message with instructions on how they can prepare themselves for evacuation. To ensure they get the message, the worker includes a single response option:

1. I received the message.

Step 2 Confirm: Residents and crew members receive their messages and respond as appropriate. Crew members selecting option 1 (attend a phone conference) are call-bridged into an over the phone discussion about the spill. Residents prepare to evacuate their homes.

Step 3 Carry Out: Crew members discuss by phone what they will do to help with the evacuation. Residents who did not confirm that they will evacuate their homes receive follow-up messages from the administrative worker on additional devices such as blackberries and e-mail.

Transportation

Crash Response Team Mobilization / Hazardous Materials Incidents

Scenario: A truck carrying hazardous materials crashes into the divider on a highway. It begins leaking dangerous chemicals. The spill needs to be cleaned up. To properly handle the spill, law enforcement, fire and rescue, emergency communications, emergency medical and hazardous materials contractors must be contacted.

Step 1 Communicate: A traffic control staff member quickly contacts important

members of the traffic control team and various public safety agencies. This is made possible by their alert notification system, which has a list of all pertinent contacts bundled together in a group titled 'Major Traffic Incident'. The staff member sends a phone message describing the problem and offering a poll with two choices:

1. Join a phone conference to determine what crews to send to the scene.
2. I am busy at this time.

Step 2 Confirm: People receive the message. Some people ignore the message, some people don't receive it, and everyone else chooses option 1 from the poll. They are call bridged into a phone conference where they discuss the problem and how to mobilize a team to handle it.

Step 3 Carry Out: The traffic control staff member receives feedback indicating that most people are part of the phone conference. If they feel it is necessary, they can re-contact people who did not respond to the initial notification.

Terrorist Threats / Hijackings

Scenario: Terrorists have hijacked a plane. Using a transponder, a pilot is able to inform air traffic controllers of the situation.

Step 1 Communicate: Air traffic control receives the pilot's message. Immediately, the person receiving the message in air traffic control sends a phone message describing the problem to military including air force, on ground rescue, the FAA and hostage negotiators. The phone message is easy to send because each group of contacts is bundled together with labels such as 'military including air force' etc. All these groups are collected under a larger grouping called 'hijacking incident'. The message sender only needs to select this group, then compose a message with all the pertinent information. The message includes a three choice poll:

1. Join a phone conference to determine what needs to be done.
2. I have received the message but will not attend the phone conference.
3. I am busy at this time.

Step 2 Confirm: People receive the message and respond to the poll. People selecting option 1 are call bridged into a conference on the topic. People selecting option 2 begin work preparing to handle the hijacking without attending the phone conference. Those who select option 3 go on with their business as usual.

Step 3 Carry Out: The message sender receives feedback on the call. For those parties that did not respond at all, the message is resent via e-mail and phone. The message sender then participates in the phone conference to determine what will be done to solve the problem.

Personnel Scheduling

Scenario: The District is conducting its yearly bid that allows bus drivers to choose their route preferences for the coming school year.

Step 1 Communicate: A staff member working for the school district conducting the route bid creates an e-mail to send to bus drivers. The e-mail contains a poll that offers the drivers a series of route preferences, 1-8. Preference 9 is 'other' so that bus drivers not finding their preference listed may specify what their choices are.

Step 2 Confirm: Bus drivers receive the e-mail and make their choices about route preferences.

Step 3 Carry Out: The staff member who sent the message now has a list of all route preferences. They send a follow up message to bus drivers who chose option 9 asking them to explain their special circumstances. When those responses come back, the staff member then uses them alongside the other tallied responses to assign routes and schedules to each bus driver.

Evacuations

Scenario: People need to be evacuated from a small town, but some of them do not have transportation. A variety of departments in the town must be notified so the evacuation may be coordinated.

Step 1 Communicate: Communications determines the town must be evacuated. The traffic division, the police department and local radio and television stations must be notified of the situation. A staff member from communications creates a phone message describing the problem and includes a poll with two choices:

1. I received the message, patch me through to the conference.
2. I am busy.

Step 2 Confirm: People receive the message. Individuals from the police department, the traffic division and local television and radio stations choose option 1 (patch me through) and are immediately call bridged into a conference. Everyone attending the conference decides what they need to tell the residents, and what kind of transportation needs to be made available to them.

Step 3 Carry Out: The communications staff member makes sure everyone receives the message. If someone does not respond to the message, the staff member resends it, this time by e-mail.

Financial Services

Robbery Notification

Scenario: A bank has just been robbed, leaving several people injured. The teller on duty must notify the appropriate authorities.

Step 1 Communicate: The teller quickly creates a phone message describing the robbery and sends it to the bank manager, the local hospital's emergency unit and the police. The message is announcement style, meaning it instructs recipients to press 1 to indicate they have received it.

Step 2 Confirm: People receive messages and spring into action. An ambulance and police officers head towards the bank. The bank manager calls the teller for more details as they drive to the scene of the robbery.

Step 3 Carry Out: The teller receives confirmation that everyone has read the message and is on the way. While waiting for them to arrive, they write down what transpired during the robbery.

Financial Market Alerts

Scenario: Fifty clients wish to receive notice when their stock is on the rise or decline. Their broker notices their stock makes an alarming drop and wants to alert them of this immediately.

Step 1 Communicate: The broker creates a phone message explaining the stock drop and providing contact information should a client wish to discuss the drop. The message instructs receivers to press 1 to confirm they have heard the message.

Step 2 Confirm: Clients receive the message and indicate they've received it.

Step 3 Carry Out: The broker follows up with any clients that did not respond to their first message and begins fielding incoming phone calls from clients with questions about the drop in their stock.

NASD 3510 Emergency Notification

Scenario: A cyber attack on a bank's primary servers makes it impossible for data entry to occur, preventing customers from accessing their accounts.

Step 1 Communicate: IT management discovers the attack and passes it on to senior management. After reviewing the situation, it becomes apparent that due to NASD 3510, customers will need to be notified of the problem. A senior manager crafts an e-mail message describing the situation along with an apology to its customers. They include a two option poll in the message:

1. I have received the message and will wait for further information.
2. I have received the message and need to access my account immediately, please help.

Step 2 Confirm: Customers receive messages and respond accordingly.

Step 3 Carry Out: The senior manager receives the messages. They send customers who responded with option 2 (please help) a phone number they can call to get assistance with their accounts. Customers who responded with option 1 (wait for further information) receive a note thanking them for their prompt response. Customers who did not respond at all receive a second message, this time by phone repeating the same options as the e-mail message the senior manager initially sent.

Hospitality and Food Service

Guest Emergency Notification

Scenario: A VIP guest at a hotel needs to be contacted immediately due to a family emergency.

Step 1 Communicate: A staff member at the front desk calls the guest's room and leaves a message explaining that they need to contact their family immediately. Next, the staff member creates a phone message that goes to each of the maids, bellhops and doormen explaining that a VIP guest must be contacted right away. The message describes what the guest looks like and where to direct them if they are seen. A three choice poll is included with the options:

1. I haven't seen the guest.
2. I have spotted the guest and will bring them to the front desk immediately.
3. I will keep on the lookout for the guest.

Step 2 Confirm: Staff members receive the message and follow the instructions. One staff member chooses option 2 (spotted the guest).

Step 3 Carry Out: The staff member who found the guest brings them to the front desk, where the emergency situation is described. The guest contacts their family.

Security Alerts

Scenario: A fight breaks out in the hotel car park between two drunk men heading towards their cars. A staff member who works the front desk is heading to their car and sees the incident start. They immediately call security.

Step 1 Communicate: Security receives a call describing the incident taking place in the car park. The secretary fielding the call immediately crafts a phone message that will go to every member of the "On-Duty, Saturday Night" security group. The message includes a three option poll:

1. I will take immediate action on this incident.
2. I will find someone who can take action on this incident.
3. I am tied up with another incident.

Anyone who selects option 1 or 2 is immediately call bridged for a quick discussion about the situation.

Step 2 Confirm: Security guards receive word of the incident and select the option that best suits them. Some security guards are not able to get to their phones and hear the message.

Step 3 Carry Out: Of those guards who respond, most choose option 1 or 2. They are call bridged into a meeting where they decide who will head out to investigate the incident.

Staffing / Shift Management

Scenario: The housekeeping manager wants to schedule maids for different work shifts for the next month.

Step 1 Communicate: The manager creates an e-mail explaining that new shifts are to be chosen by housekeeping staff for the coming month. The e-mail includes a three item poll offering different work choices:

1. I would like a morning shift.
2. I would like an afternoon shift.
3. I would like an evening shift.

Step 2 Confirm: Maids receive the notification and respond with their preferences.

Step 3 Carry Out: The manager's notification system organizes the maids into groups based on their responses. The manager contacts each group to set up a meeting and discuss the details of days off, hours, etc. for the maids' shift preferences.

Robbery Notifications

Scenario: A hotel guest reports that a camera has been stolen from their room.

Step 1 Communicate: The staff member on duty at the front desk sends an e-mail notification describing the theft to security. There are three key security members so the message goes to all three of them. A poll is included in the message with 3 choices:

1. I received the message and will deal with it immediately.
2. I received the message and will have someone else deal with it immediately.

A delay is set on the message so that if no one responds to the message in the next fifteen minutes, the head of hotel security is contacted by phone.

Step 2 Confirm: Security members receive the message and respond. One of the three receivers radios other security members and tells them to keep an eye out for suspicious behavior as a robbery has just been reported.

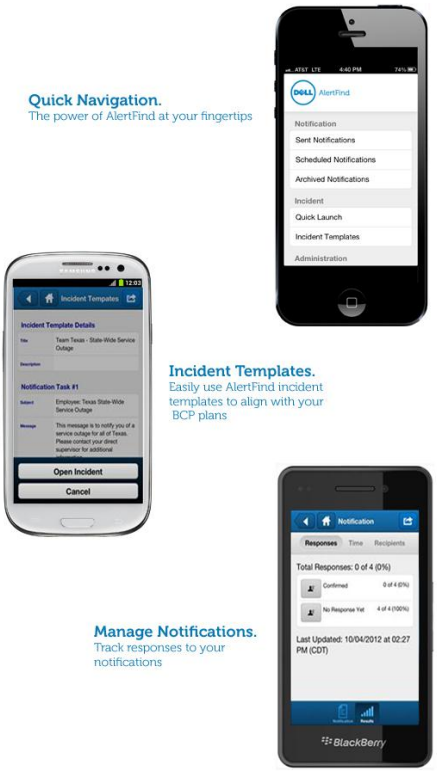
Step 3 Carry Out: The staff member at the front desk receives notification that a security guard selected option 1 (will deal with it immediately), confirming that security is handling the theft. The guest reporting the theft is contacted and informed that the hotel is looking for the robber.

Dell AlertFind

Dell AlertFind is an enterprise-class emergency notification service that includes enterprise-level data security, privacy and customization to support a wide range of emergency notification and collaboration scenarios.

Enterprise-Class Emergency Communications:

Flexible: Companies depend on Dell AlertFind for a direct 2-way communication channel to large numbers of employees, customers, and constituents day-to-day and during emergencies or disasters.



Secure: Using secure, robust datacenters, Dell AlertFind provides one of the most effective methods to quickly, securely, and reliably distribute and collect information in real-time using all available commercial modes of communication. By leveraging email, voice calls, text messages, pagers, mobile devices, and other communication channels, Dell AlertFind can provide an automated method to find people, deliver messages, and gather information in real-time.

Dell AlertFind helps meet essential notification requirements:

- Automated Message Delivery & Escalation – Notify hundreds of thousands of users virtually anywhere and at anytime via voice or text-enabled devices. Contact people on over a dozen different devices ranging from home phones, cell phones, pagers, wireless devices, SMS, personal email accounts, and more. Easily specify device-to-device escalation rules as well as user-to-user escalations.
- In-bound Communication Lines for Hard-to-Reach Contacts – Multiple Interactive Voice Recognition (IVR) lines are available for contacts that for whatever reason cannot receive a notification. Employees call in to receive personal notices and log responses to critical questions. Templates can be preset or easily instantiated and managed in real-time by designated team members.
- Enterprise Data Security & Access Control – Designed to meet the stringent requirements of large enterprises for data privacy and access control, Dell AlertFind allows delegation of permissions to control who initiates notifications, who can be contacted, and what they can view. Teams can be created around business units, departments, crisis response teams, geographies, and roles to control the data and functionality each user can access.
- Real-Time Auditing & Reporting – Features a real-time audit trail with a detailed transactional log reporting on pending and sent notifications.
- Full Global Support – Hosted in top-tier disaster recovery datacenters worldwide, to help ensure organizations receive the highest level of availability.
- Web Services Application Protocol Interface (API) – Enterprise customers have the ability to integrate Dell Emergency Notification with other enterprise systems such as disaster recovery (DR) planning tools, systems management applications and other custom business applications.

Dell AlertFind Incident Collaboration Center helps accelerate recovery:

- Collaborative Incident Logs – The Incident Collaboration Center coordinates event responses by enabling employees to securely log real-time status and task information to keep all constituents up-to-date.
- Formal Task Management – Manage your way through a crisis. Employees can remotely post task checklists, and track progress in compartmentalized task streams for business units, departments, teams, or user groups.
- Secure Document Sharing – Share critical documents like continuity plans, flowcharts, and contact information via a password protected, intranet-like site.

About Dell Email Management & AlertFind Services

AlertFind is part of Dell's portfolio of Cloud for Business solutions. Dell's Cloud for Business solutions is a comprehensive suite of cloud-delivered solutions, including Dell Email Management Services (EMS), designed to help you solve virtually all your email and communication challenges — from preventing downtime and archive management to fighting spam and viruses. Even better, Dell's Cloud for Business solutions requires no infrastructure to purchase or maintain.

Simplify the management of your IT environment so you can get up and running quickly, with lower deployment costs, fewer hassles, and less time spent on non-strategic tasks. You pay only for the services you need, gain instant access to the latest innovations without additional infrastructure or staff investments, and take your business from maintenance to momentum.

For more information about any of our service offerings, please contact your Dell representative or visit www.AlertFind.com

Email Management & AlertFind Services

Email Continuity
Email Security & Encryption
Email Archive & eDiscovery
Emergency Notification

The power to do more