

Developing an enterprise-wide emergency notification system using IPT, E911 locations and alerts

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Agenda

- Why an emergency notification system is essential in today's enterprise
- Using IP Telephony as a driver and enabler for emergency notifications
- Best Practices
- WiFi and Cell Phones
- Putting it all together

Why an emergency notification system is essential

- High profile incidences have shown that enterprises must prepare for the worst
 - Unpredictable situations can emerge without warning
- Response time is everything in an emergency
 - Medical emergency - Every minute reduces survivability by 10%
- Users are trained to use the phone to call for help
 - We need to use this to our advantage
- The financial costs are high due to “wrongful death” suits

What is an “enterprise-wide” emergency notification system

A system that:

- is capable of notifying anyone in the enterprise that emergency is in progress *in real-time*
- utilizes multiple methods of communication (voice, email, SMS, pager)
- logs every event and every response
- is integrated with other enterprise voice and data networks

Using IP telephony as an enabler

- Your IPT system is the core of your notification system
 - Incoming 911 calls will be your first alert
 - A properly configured E911 system with emergency notification gives security and safety personnel real-time notification of a 911 caller's location
 - IPT allows authorized monitoring of emergency calls
 - Advanced applications allow predictive dialing and IVR based on the nature of the emergency

Best Practices

- Virginia Tech Recommendations
 - The Virginia Tech Review Panel issued a comprehensive report containing 21 key findings and more than 70 recommendations
 - **Key finding:** "The VTPD (Virginia Tech Police Department) erred in not requesting that the Policy Group issue a campus-wide notification that two persons had been killed and that all students and staff should be cautious and alert."
 - **Recommendation:** "Campus emergency communications systems must have multiple means of sharing information."
 - **Recommendation:** "In an emergency, immediate messages must be sent to the campus community that provide clear information on the nature of the emergency and actions to be taken."
 - **Recommendation:** "Campus police as well as administration officials should have the authority and capability to send an emergency message."

WiFi

- WiFi can turn your campus into a location map
 - Each Access point has a unique SSID, MAC address and location
 - VoIP over WiFi is real for new Nokia converged phones and on the iPhone.
 - The location of 911 callers using the WiFi network is easily identifiable
- You can reach out to all devices within a “Trouble Zone”
 - All WiFi devices on an access point can be “location identified”
 - You can use a SIP application server to send voice notifications to all phones on a particular WiFi access point

Cellular notifications

- Systems are available to reach cell phone users within an enterprise
 - Students give their cell phone number when they register for classes
 - Administrators can send students emergency SMS messages

Broadcast Alert Registration - Windows Internet Explorer

C:\Documents and Settings\avargo\Desktop\oswd\Dr_so_they_call_it\lbs\Register.htm

File Edit View Favorites Tools Help

Broadcast Alert Registration

LOCAL STATE University

Broadcast Alert™ Registration

Choose a username:

Choose a password:

Confirm password:

Mobile phone number:

Carrier:

Email address:

Group:

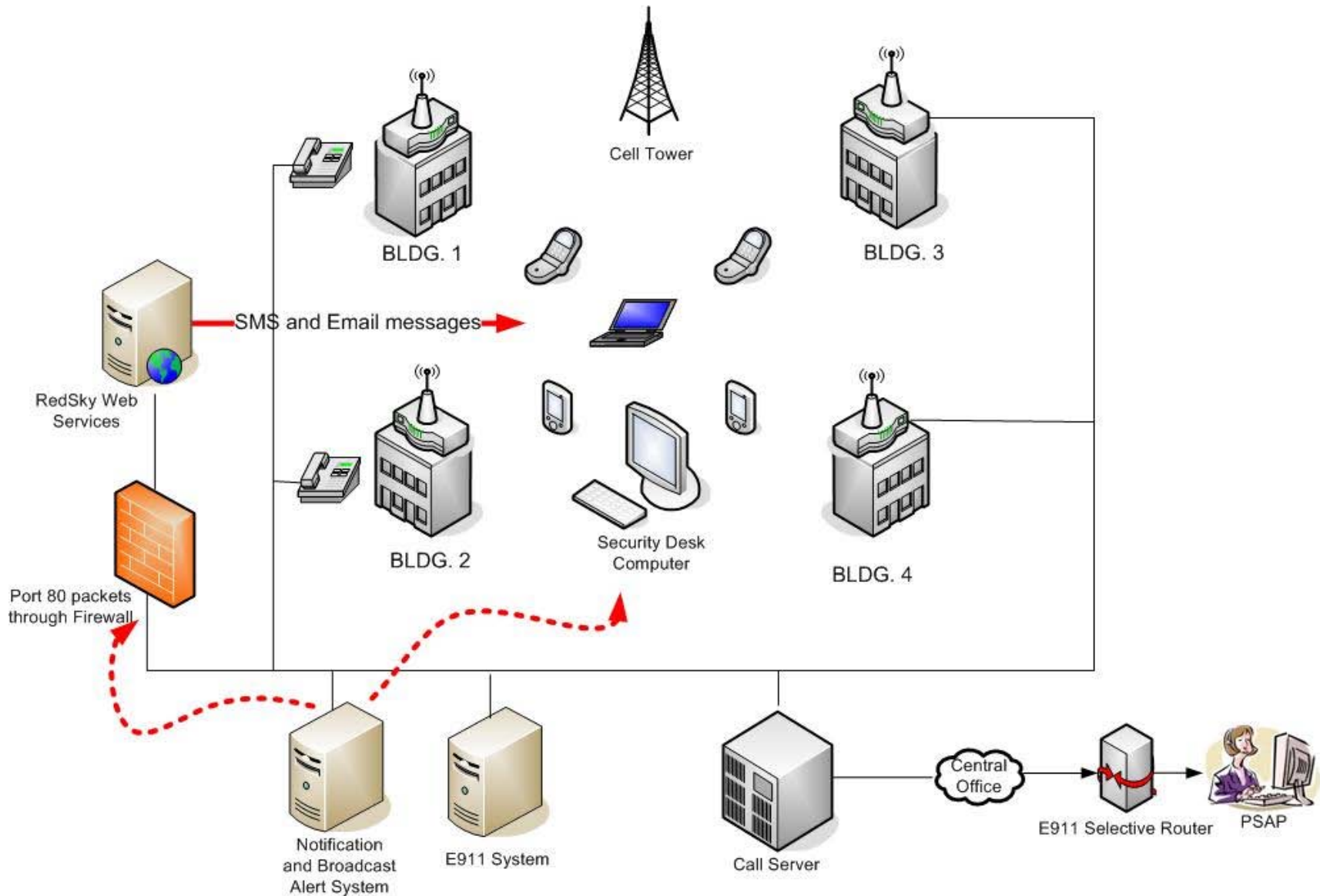
By registering for the Broadcast Alert™ service, you agree to the terms and conditions of the [Privacy Policy](#).

Done My Computer 100%

Hard Phone Notifications

- Virtually all IPT systems have a “push API” that can send a message to display phones
- When combined with an E911 system and a broadcast notification system, messages can be sent to all IP display phones

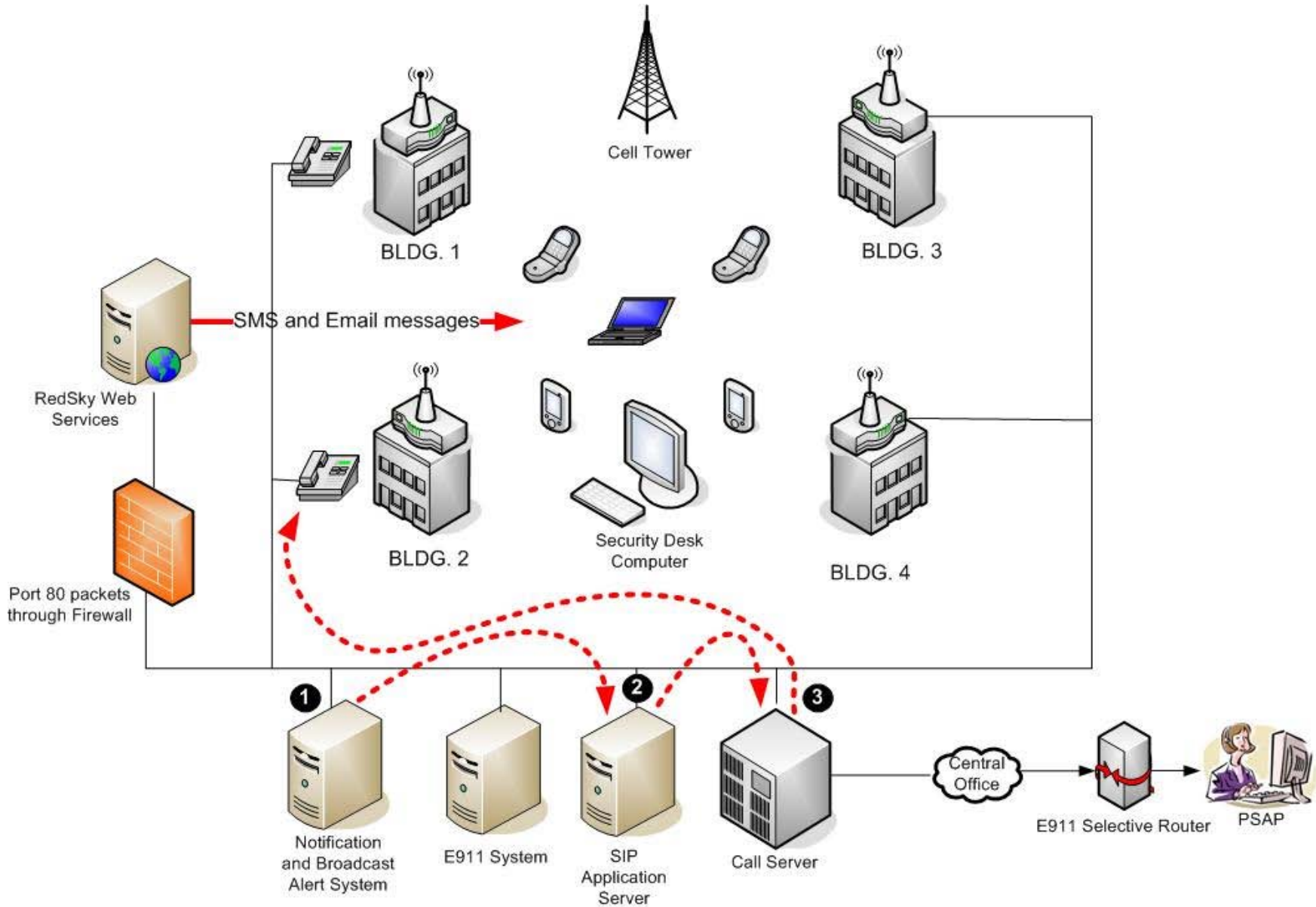
Sample Architecture



Advance Applications

- New SIP application platforms can leverage your VoIP platform
- SIP platforms do text-to-speech of emergency messages and IVR
- Example: There is a fire in a dorm. The SIP platform converts a text message to speech and dials every room in the dorm
- IVR tracks which phones are answered

Emergency notification outbound calling



Conclusion

- An emergency notification system is essential in today's enterprise
- You can use your IP Telephony platform as an enabler for an enterprise-wide emergency notification system
- All the piece parts are there
- You can save 2-3 minutes in emergency response by using emergency alerts off an E911 system
- You can reach everyone in your enterprise whether they are on cell phones, WiFi, IPT, TDM or email together

Q&A

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