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SMS for Redundant Communications

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Abstract
Many companies use Blackberries, Treo's, iPAQ's and other wireless devices for email communications. In addition to regular email, most wireless providers also offer Short Message Service (SMS). SMS can provide your organization with a redundant message path during emergencies and event notification.

Article
Most wireless handheld devices such as Blackberries offer the ability to send and receive email messages to some degree. Despite the fact the PDA devices and services vary, handheld email has become a popular business communication tools. Using PDA devices has become so prevalent in fact, that most senior executives that use Blackberries understand the term "crackberry" all too well.

A downside to business wireless email lies in the way in which it is used and infrastructure components involved. For example, an assistant may send an email to an executive that is attending a meeting, or a support person may receive a network based alert while performing a service call. Both of these examples increase productivity and efficiency. However, both examples also depend upon your companies IT infrastructure to function.

Could your company electronically communicate if your Blackberry Enterprise Server (BES), SMTP gateway, internet connection, or other core email component failed? What would happen during an emergency event or natural disaster? Would your ability to communicate via electronically be crippled?

If the answer is yes, you may wish to consider Short Message Service (SMS) text message for message redundancy. SMS, or text messaging as it is commonly referred, offers the ability to send short text messages without involving your companies IT infrastructure. The diagram below illustrates basic SMS message flow.

Basic SMS Message Flow
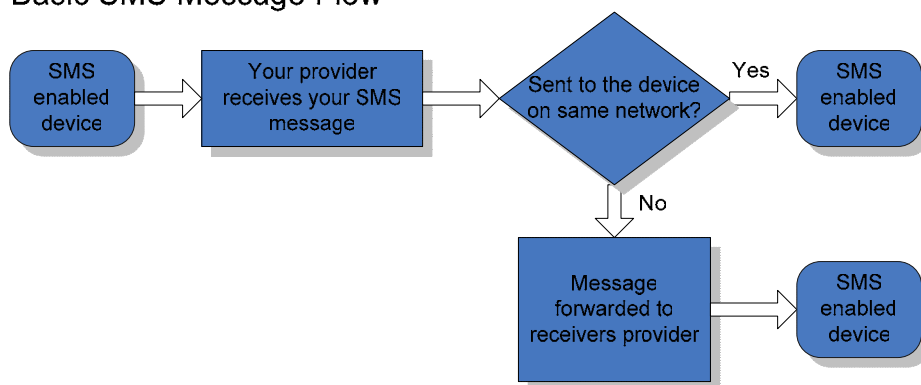
Just about all wireless providers offer SMS packages. If your wireless devices are SMS capable, implementation requires nothing more than enabling the service and a little user education. The first step in SMS utilization is to contact your wireless service provider. Providers normally offer a given number of SMS messages with each wireless packages, so before you spend additional resources review your current plan to see what is included. If

SMS is to be used for redundant or emergency communications only, your current plan may offer the capacity you need. If you find your current plan does not offer SMS or the desired capacity, exercise caution when dealing with your provider. Most wireless providers view SMS as an outstanding revenue source.

The second step is educating your users on how to send SMS messages. It is actually quite simple. Wireless providers provide 'SMS email addresses' with their service. The table below lists some well known providers and their SMS email address formats.

Provider	Information	Max Message Length
Alltel	<10 digit phone number>@message.alltel.com (Web Page) (http://www.alltel.com/axcess/text_messaging.html)	160
Ameritech/SBC Paging	<10 digit phone number>@paging.sbc.com (Web Page) (http://paging.acswireless.com/email_instruct.html)	230
Arch	<10 digit phone number>@archwireless.net (Web Page) (http://content.arch.com/pn2wayconversion/)	160
AT&T Wireless	<10 digit phone number>@mobile.att.net (Web Page) (http://www.cingular.com/media/text_messaging_faqs/0,,00.html)	160
Cingular Wireless	<10 digit phone number>@cingularME.com (Web Page) (http://www.cingular.com/media/text_messaging_faqs/0,,00.html)	160
Metrocall	<10 digit phone number>@airmessage.net (Web Page) (http://metrocall.com/mcll/ols_2way.asp)	200
Nextel	<10 digit phone number>@messaging.nextel.com (Web Page) (http://nextelonline.nextel.com/en/support/faq/text_msg.shtml)	500
Qwest	<10 digit phone number>@qwestmp.com (Web Page) (http://www.qwestwireless.com/products/features/popUp.jsp?usoc=YPP2A)	160
Rogers	<10 digit phone number>@pcs.rogers.com (Web Page) (http://www.shoprogers.com/store/wireless/services/email/sms.asp)	160
SkyTel	<7 digit PIN>@skytel.com (Web Page) (http://www.skytel.com/downloads/skywritercard_dec2000.pdf)	500
Sprint	<10 digit phone number>@messaging.sprintpcs.com (Web Page) (http://www1.sprintpcs.com/explore/ueContent.jsp?scTopic=textMessaging)	160
T-Mobile	<10 digit phone number>@tmomail.net (Web Page) (http://www.t-mobile.com/services/textmessaging/overview.asp)	140
US Cellular	<10 digit phone number>@mms.uscc.net (Web Page) (http://easyedge.uscc.com/easyedge/jsp/faqs.jsp#mms)	160
Verizon Wireless	<10 digit phone number>@vtext.com (Web Page) (http://www.verizonwireless.com/b2c/mobileoptions/txt.jsp?action=textMessaging)	160

Armed with the SMS email address it is just a matter of typing then sending the message. As the chart above shows, different providers support different message lengths. When sending a SMS message across providers, message length should be limited to 140 characters to insure cross-provider compatibility. Update your wireless handheld contact list to include SMS addresses and you will have an emergency messaging method if needed.

What happens if I need to send an SMS message to a wireless device and I do not have a wireless device? The SMS address is the key. If the SMS is known, you can send the device a message from a normal email client, the providers web site, or programmatically. Most providers offer the ability to send their customers SMS message via a web page. Text or a button labeled "send a text message" is prominently displayed on most provider web sites. As this is a revenue source, providers offer everyone the ability to send their customers SMS messages.

Normal email clients can also be used to send SMS messages as long as the SMS address is used and maximum message length requirements are followed.

An often overlooked use for SMS is in alert messaging. Services that perform email, web site, and other network infrastructure monitoring could, and probably should, be setup to use SMS addresses. Since key components could fail and leave normal infrastructure components unusable, SMS offers an alternate way to insure message delivery.

Short Message Service can provide your organization with a redundant message path during emergencies, disasters, and for alert notifications. The service is relatively inexpensive and chances are your devices are SMS capable.