## NOKIA SMARTPHONE HACKS





## **Send Email the Easy Way**

Using the existing mobile messaging infrastructure to send and receive email messages is convenient and fits seamlessly with the mobile user experience.

The easiest way to send and receive email messages is to use the underlying wireless messaging infrastructure. You can use the SMS and MMS clients built into your phone to transport email messages. The tight integration between the message client and the wireless network offers some great benefits from the user's perspective:

- It is very easy to use. You do not need to install any additional software or configure anything on the phone or in the email account. It just works.
- The incoming messages are pushed to your phone. You are notified with a tone or an on-screen message when the message arrives. There is no need to push the "Check mail" button to check and retrieve messages.

Of course, this approach also has several drawbacks that you should be aware of when deciding whether this is the right way for you to connect to email:

- The biggest drawback is that you cannot use your existing email accounts to send or receive messages. Instead, the messages are routed through special accounts provided by the wireless operator. Please refer to "Send and Receive Email on Your Phone" [Hack #60] if you want to use your existing email accounts.
- Although the email accounts and infrastructure are free, you need to subscribe to MMS and/or SMS services, and there might be a permessage charge.
- There are size limits for both SMS and MMS messages. You cannot send long messages or big attachments. I will illustrate this point in more detail later in this back.
- The wireless network does not have a service guarantee for SMS or MMS. It might take a long time to deliver a message. The message might be dropped silently if it is not delivered in 24 hours.

Overall, this method works great for casual mobile email users. Now let's check out exactly how it works.



The regular email infrastructure over the Internet also does not have a service-level guarantee. But the wireless data network is less reliable than the Internet. In addition, the SMS traffic is low priority on wireless networks. Also, when an Internet email message doesn't make it to its destination, you will usually receive a failure notification.

## Send Email Via MMS

The MMS service allows you to send messages with multimedia attachments from one phone to another, or from a phone to any email address. All you need to do is to open the Messaging application (Series 60) or the Messages menu (Series 40), choose New Message, and then choose to create a multimedia message. Using the Options → Add Recipient menu option, you can select any email address from your Contacts list in the To or Cc fields. In the message composition window, you can type some text and/or attach media files. Once you click Options → Send, the phone queues the message for delivery to the selected email addresses. Figure 10-7 demonstrates this process.

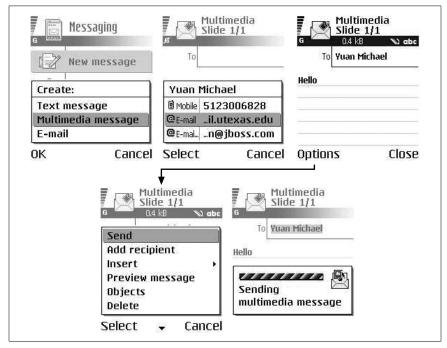


Figure 10-7. Composing and sending an MMS message to an email address

Alternatively, you can choose any media file in the Gallery and use the Options → Send → Via MMS menu item to create a message composition form with the file already attached. Or, you can choose any person from the Contacts list and use the Options → Create message → Multimedia message menu to create a message with the To field already filled in.



Most wireless operators limit the size of MMS messages to 100 KB or less. You probably will be unable to attach more than two VGA (640×480) quality pictures in the message.

On your email client, you can retrieve the message and view its contents, including any attachments. Figure 10-8 shows the message from the phone. Your wireless operator might add a logo or some custom graphics to the message.



Figure 10-8. The MMS message received on a computer email client

## Receive Email Via SMS

If you look more closely at Figure 10-8, you'll see that the message comes from an email address that contains a mobile phone number. If you reply to this message or simply send a new message to that address, you will receive it on the phone as an SMS message (see Figures 10-9 and 10-10). This feature is known as an *email-to-SMS gateway*.



Figure 10-9. Sending an email to a phone via SMS

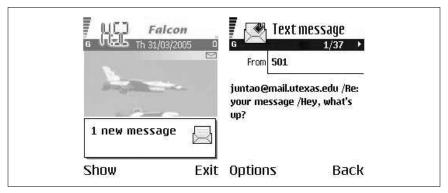


Figure 10-10. Receiving the email as an SMS message on the phone



Almost all wireless operators offer this kind of gateway at no extra charge beyond regular SMS subscription or per-message charges. An alternative way to send SMS messages via the wireless operator is to submit the message and target phone number to a web-to-SMS web form typically available on the operator's consumer portal web site once you log in.

Table 10-1 shows the web form and gateway email addresses for popular wireless operators in the U.S. If your operator is not in this table, you can typically call the operator's technical support to find out its gateway email address. This way, you can get your email messages delivered to almost any phone as SMS messages.

Table 10-1. Wireless operators' interfaces to SMS

Operator	Web	Email
Nextel	http://messaging.nextel.com/	<number>@messaging.nextel.com</number>
SprintPCS	http://messaging.sprintpcs.com/	<number>@messaging.sprintpcs.com</number>
AT&T Wire- less	http://www.mymmode.com/ messagecenter/	<number>@mobile.att.net</number>
Cingular	http://www.cingular.com/ sendamessage	<pre><number>@mobile.mycingular.com</number></pre>
Verizon	http://www.vtext.com/	<number>@vtext.com</number>
T-Mobile	http://www.t-mobile.com/messaging/	<number>@tmomail.net</number>

In addition to the operator gateways, other commercial email-to-SMS gateways interoperate with multiple operators. For instance, a service called Teleflip (http://www.teleflip.com/) forwards any message sent to the address <number>@teleflip.com to the target phone number as an SMS message (this service works only in the U.S.).

The SMS message is limited to 160 characters. You cannot send long messages or message attachments to a phone via SMS.



Since SMS messages cost money to send and receive, it is crucial that wireless operators incorporate some security measures into the SMS-to-email gateway to prevent spam. As a result, you cannot send more than 10 messages in a short period of time (typically several minutes) via the gateway. To send many SMS messages from the PC or a backend server to a phone, please see "SMS from a Computer" [Hack #63].