DEVICES

MOBILE FIREWALL
The Yoggie Pico mobile firewall appliance has the form factor of a USB stick and an onboard 520-MHz Intel processor running Linux (see figure 1). It isolates laptop computers from incoming network packets by inserting a low-level driver into the system that redirects all network traffic to the Pico unit. The unit then scans the packets and sends the safe packets to Windows and the laptop’s TCP/IP stack.

The device was designed with security in mind. It contains two flash memory units: one contains a read-only copy of the Linux OS, which is copied to the other unit during the boot process. If an attack is successful and the device is compromised, it will be clean upon rebooting because the read-only version of the OS overwrites the compromised version. For more information, see www.yoggie.com.

SMART PARKING METER
Photo Violation Technologies’ Photo-ViolationMeter is a state-of-the-art parking meter that uses a ground sensor to detect when a vehicle pulls into a parking stall (see figure 2). It gives you the option of selecting a credit card that will be billed automatically until you return to your vehicle. When you drive away, the meter stops billing the card, so you pay only for the time that you used the parking space. The PVM also offers the option of paying in timed increments using your credit card. To avoid a fine, the PVM will call to warn you that your meter is running low and lets you pay for more time over the phone. It also photographs the license plates of cars that violate parking regulations, creating evidence that can be used in court. If you receive a ticket, the PVM lets you pay the fine right at the meter at a discounted rate. As an added bonus, it also provides a free Internet Wi-Fi hotspot for use by the general public or by first responders in emergency situations. It’s being tested in the streets of Vancouver, British Columbia, and Niagara Falls, New York. For more information, see www.photoviolation.com.

INITIATIVES

BRITAIN OUTFITS BOBBIES WITH HEAD-MOUNTED CAMERAS
Britain’s web of roughly 4 million surveillance cameras, already the most extensive in the world, is about to reach a new level. Britain’s Home Office has announced that it will outfit video cameras on the helmets of its iconic police constables, affectionately nicknamed “bobbies.” The move is expected to help prosecute criminals by enabling judges and jurors to experience what the officer saw and heard during the incident. Advocates of the cameras also argue that the devices might encourage reluctant domestic violence victims to press charges. Women’s rights advocates, however, have expressed doubts about the likelihood of securing convictions based exclusively on camera footage.

To address privacy concerns, the Home Office has issued strict guidelines for use of the recording devices. The cameras can hold up to 24 hours of video but aren’t intended for continuous recording. Instead, officers turn the cameras on and off at their discretion. Moreover, officers
must inform people when they’re being recorded, and footage that isn’t being used as part of an investigation must be erased within a month. The Home Office is evaluating other uses for the cameras, including outfitting them with license-plate-recognition software that could automatically identify stolen vehicles and using them to relay live video feeds to command-and-control centers.

APPLICATIONS

MANY PHONES, ONE NUMBER

The GrandCentral Web-based voice communications service (www.grandcentral.com) lets users manage all their phones and phone numbers through a single interface. Google recently acquired GrandCentral Communications, which developed the service (still in beta testing).

GrandCentral users can be reached via a single phone number. Users can protect their privacy simply by giving out this GrandCentral number rather than their home or work numbers. Incoming calls ring on all phones. Users can answer calls from any phone and seamlessly switch from one phone to another in the middle of a call. They can also screen callers before answering the phone and block annoying callers quickly, easily, and secretly using the GrandCentral Web interface. They can store voicemail messages online indefinitely. GrandCentral also lets users customize voicemail greetings for different callers.

GrandCentral could potentially help working parents deal with calls from school. By having both parents’ phones ring from one number, it could help the school nurse reach an available parent when a child gets sick at school. This approach would be particularly appealing in cases where the nurse generally doesn’t call more than one phone number before moving on to the emergency contact.

SOCIAL WEB BROWSING

Me.dium (www.me.dium.com) turns surfing the Web from an isolated activity into a social networking opportunity. It offers a toolbar that reveals other Web surfers (who are Me.dium users) viewing the same page you’re viewing, as well as showing you other relevant sites and the people viewing them (see figure 3).

Me.dium lets you chat with other users. It supports privacy by letting users remain anonymous, in which case the user’s displayed identity is a unique number rather than the username. Me.dium also lets you control whether your username and Web location are visible to every other Me.dium user, to friends, or to no one.

Although Me.dium captures information about what Web pages you’ve visited, it doesn’t capture log-in information for sites that you visit, nor does it make private screens (such as your email address) visible to other users. It uses the information about what Web pages you’ve visited, combined with that of other Me.dium users, to determine what sites are related to one another. When you browse the Web, Me.dium uses this information to recommend sites related to your current site. The company transmits all personally identifiable information using 128-bit secure sockets layer and stores all personally identifiable data in a secure data center. If requested, Me.dium will delete your personally identifiable information from its servers.