TOUCHPOINT
INTERNATIONAL DEVELOPMENT GROUP, INC

A Bi-Monthly Snapshot into Emerging Threats and Trends

Digital Update

current topics >>>

In the News:

- **USB Killer - Never Connect Unknown USB Devices to your Computer**
  - Lifehacker Security
- **Keep Your Family Safe With These Security Tips**
  - Naked Security
- **IOT Devices as Proxies for Cyber Crime**
  - Krebs On Security
- **Android Hardware Rooting Vulnerability: "Rowhammer"**
  - Ars Technica
- **Android Phones Rooted by "Most Serious Privilege Escalation Bug Ever"**
 **- Ars Technica**

TEENSY

USB Development Board

The Teensy is a small USB development board built in a very small form factor (1.4 by 0.7 inch) used for various projects including keyboard, mouse, joystick and other HID components. The Teensy only has one input/output port in which everything, including programming the device. You also have the option of adding additional components to the device via pins on the board. One of the most useful aspects of this device is keyboard emulation. We have covered a device in a previous issue called the USB Rubber Ducky that can do similar tasks with the keyboard. The USB Rubber Ducky is definitely a good device for certain situations involving keyboard emulation, but it lacks many of the features the Teensy provides.

The main advantage of the Teensy is the customizability of the device, both in hardware and software capacities. Everything is programmed using C, so while not very user friendly for anyone other than a programmer, it is very effective for performance. Not only can it emulate a keyboard, but it can also emulate other HID devices at the same time without changing the firmware mid-way through. For instance, if you want to control the keyboard and the mouse activity, you can with the Teensy, but not with the Rubber Ducky. So you could inject keystrokes while using mouse movements to confuse whoever is at the receiving end of the attack. The Teensy is also small enough to fit inside most HID devices, so you can hide a Teensy inside a wired mouse and wait for the target to plug it in, use it to move the mouse a little bit while silently injecting keystrokes.

The Teensy isn't just made to be an offensive tool. It can also be used to communicate with musical instruments using MIDI and can be used to create joysticks, custom keyboards and mice, and can even be implemented into arcade controllers. There is an entire code base, community and even a Reddit thread dedicated to projects on the Teensy. While the Teensy is not going to be practical for the average user, anyone who learns C has endless projects they can create with this tiny piece of hardware. For average users just wanting to inject keystrokes, we recommend the USB Rubber Ducky, but for more advanced user who want more granular control, the Teensy is the way to go. For more information on the Teensy, **contact admin@tpidg.us**.
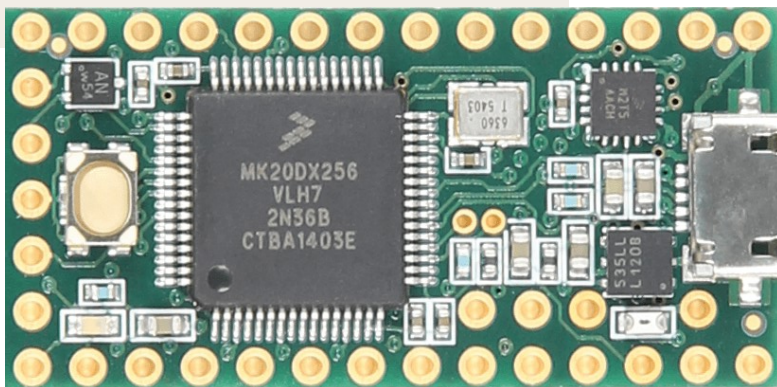
Email Masking: NSMI

The next email forwarding service in our lineup is **Not Sharing My Info** (http://notsharingmy.info). Like the other services we have discussed, notsharingmy.info has some benefits and disadvantages. Unlike 33Mail and Blur, notsharingmy.info does NOT require any kind of account setup. Account setup can sometimes reveal some sensitive information, so this gives the service a little more potential to be used anonymously. All you have to do to begin using the service is navigate to **http://notsharingmy.info**.

The web interface is extremely intuitive. Simply type in your email address and click "Get an obscure email". Notsharingmy.info will generate your new forwarding address that will look like this: **dtjr9@notsharingmy.info**. We really like that each of these addresses are unique and reveal no information at all other than the website where they were created. We also think the short length of the address is especially helpful when trying to remember the email address or tell it to someone else. It is fairly easy to remember five charac-

ters.

You can now give out your new email address. Notsharingmy.info will forward your mail to your real inbox. You can setup as many notsharingmy.info addresses as you like, even to the same email account. This allows you to create multiples for unique usernames, separating individuals, etc. Forwarding can also be turned off for any notsharingmy.info address.

There are some downsides to this service. The biggest we have seen is that the service is occasionally down. It isn't often but by comparison we have never seen Blur or 33Mail go down. Also, having to go to the website and create a new email address when you need it is slightly inconvenient but we can live with this. It is also somewhat concerning that the Notsharingmy.info website is not protected with HTTPS, meaning all your traffic to and from these addresses is unencrypted by default. This is not an issue if all traffic has been end-to-end encrypted with something like PGP.

Upcoming Events:

RSA Security Conference
13-17 February 2017, San Francisco, CA
Law Enforcement Intelligence Units
1-5 May 2017, Bloomington, MN
National Association of Technical Investigators (NATIA) Conference
18-20 July 2017, Tampa, FL

For more information go to www.tpidg.us

Sighthound Video Surveillance

Attendees of our Non-Standard Communications courses understand that physical security is a huge component of protecting data. Encryption is really only a last line of defense should your computer or phone fall into the wrong hands. One application that can help you be more physically secure is called Sighthound.

Sighthound is a freemium program for Windows and Mac computers. When installed on the computer it turns your built-in webcam into a surveillance camera. The free version allows you to record video in standard definition. The app also allows you to select zones to monitor for people, "any object", or "unknown objects". Recording can be initiated when the object or person is entering, leaving, inside, outside, or on top of the selected area, or crossing a boundary. You can also choose to ignore objects that are small than a certain number of pixels to avoid false-positives.

The premium versions of Sighthound offer greatly expanded features, like the ability to receive an email when motion is detected. We like the idea of being able to set this up in a hotel room and walk away while having the peace of mind in knowing that if someone enters the room we will know about it. We have successfully run Sighthound on a bootable USB drive with OS X installed. This lets you leave your main system powered down and encrypted.

The major benefit of Sighthound is that unlike some similar, more mainstream products it does not upload your video to the cloud. You can choose to store all video locally. If you are worried about storage space, Sighthound helpfully lets you limit the amount of storage it can use. It will also delete video that does not meet a rule definition after a certain number of hours. To use **Sighthound** you must create an account and download the program.

Non-Verbal Communication
Operational Behavior Newsletter

Beginning 15 November, 2016, TouchPoint will start the distribution of a second newsletter called the Operational Behavior Newsletter, which will focus on non-verbal communications and operational behavior applications. The author of the newsletter, Carl Maccario, is an expert in non-verbal communications and behavioral analysis and his work with the US Government has been recognized in Time Magazine, USA Today, The Washington Post, the New York Times, and many other prominent media outlets.

As with our current newsletter, the Digital Update, we will provide operationally relevant and current information in these skill sets and use real world examples to better demonstrate the information provided. Initial topics will include offensive and defensive non-verbal communications theory, travel awareness, interview techniques, countermeasures, and micro-expression analysis.

We will distribute the new newsletter only to those who are interested so if you want to receive the Operational Behavior Newsletter, please email us at **digitalupdate@tpidg.us**.

TouchPoint Website Changelog

The Touchpoint website, **https://tpidg.us/** recently underwent some minor changes. These include:

- Added a one-click button to access latest newsletter directly from the home page
- Added transparent PGP encryption to the contact form
- Added Cryptography page that will hold examples of ciphers and encryption algorithms
- Added Caesar cipher and ROT13 cipher to the Cryptography page
- Added one-click login to www.beenverified.com on OSINT page

Additionally, future changes are planned, including:

- Adding additional ciphers to the Cryptography page
- Adding the ability to attach public keys directly from the Contact Page

coming soon >>>

In Future Issues...

Synology NAS

Ubiquity Camera

ToughSwitch

Mailfence

Blink

Physical Security for Mac

Another useful physical security application worth recommending for Mac is Blink. Blink is an incredibly simple application to use, but requires that you have both a Mac computer and an iPhone. Blink notifies you when your computer has been woken from a "sleep" state. If you are in the habit of closing the lid on your laptop and walking away for a bit this is definitely a good application to have.

To use it, install the **Mac version** on your computer(s). The Mac version is free. Next, install the Blink app on your iOS device (this version costs $1.99). You will have to pair the two devices through the extremely simple interface. To pair them both devices will have to be connected to the same Wi-Fi network. Once they are paired they no longer have to be connected. You can leave your house and as long as your phone has data you will be notified if the computer wakes. If the computer wakes it will not display any indication that you have been notified. This is helpful if you don't want the other party to know that you are keeping an eye on things.

If you have concerns about your dog-walker, babysitter, kids, or hotel cleaning staff messing with your computer, Blink can let you know. Just as a reminder, this app only lets you know if the computer has been woken up. We like this because both versions of the app are incredibly lightweight, don't ask for many permissions, and don't use many resources.