PhishMe: Disrupting Cyber Attack Detection & Response

The PhishMe Ecosystem January 2015



Spear Phishing: The Attack Vector of Choice



We Have a Detection Problem!

Median number of days that attackers were present on a victim network before detection¹



Percentage of breaches that went undetected for "months or more"²





¹ www.mandiant.com/resources/mandiant-reports/

^{2 &}lt;a href="http://www.verizonenterprise.com/DBIR/2013/">http://www.verizonenterprise.com/DBIR/2013/

We Need to Cultivate Human Attack Sensors

2010 Times Square car bombing attempt

From Wikipedia, the free encyclopedia

The attempted car bombing of Times Square on May 1, 2010, was a planned terrorist attack which was foiled when two street vendors of covered a car bomb and alerted a New York Police Department (NYPD) patrolman to the threat after they spotted smoke coming from a vehicle. [1][3][4]

Two days later federal agents arrested Faisal Shahzad, a 30-year-old Pakistan-born resident of Bridgeport, Connecticut, who had become a U.S. citizen in April 2009. He was arrested after he had boarded Emirates Flight 202 to Dubai at John F. Kennedy International Airport. He admitted attempting the car bombing and said that he had trained at a Pakistani terrorist training camp, according to U.S. officials. [10]

United States Attorney General Eric Holder said that Shahzad's intent had been "to kill Americans". Shahzad was charged in federal court in Manhattan on May 4 with attempted use of a weapon of mass destruction and other federal crimes related to explosives. More than a dozen people were arrested by Pakistani officials in connection with the plot. Holder said the Pakistani Taliban directed the attack and may have financed it. In additional content of the plot of the plot

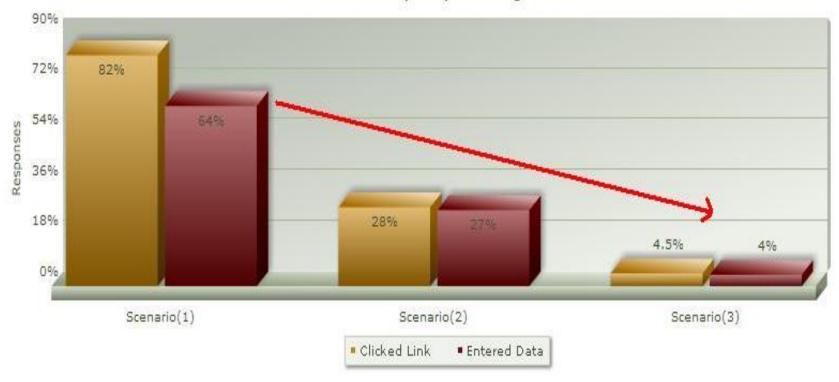
U.S. Secretary of State Hillary Clinton warned of "severe consequences" if an attack like this were to be successful and traced back to Pakistan. [12] The Obama administration saw a need for retaliatory options, including unilateral military strike in Pakistan, if a future successful attack was to be traced to Pakistan-based militants. [13]

On October 5, 2010, Shahzad was sentenced to life in prison after pleading guilty to a 10-count indictment in June, including charges of conspiracy to use a weapon of mass destruction and attempting an act of terrorism.^[14]



Mitigation is necessary

Susceptibility to Phishing

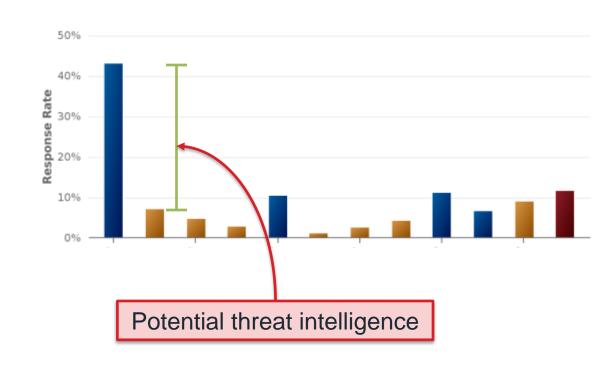


..but not sufficient



Can Employees Act as Attack Sensors?

- People respond to emails quickly
- Empowered and encouraged users report
- IR & SOC teams get relevant and timely threat intelligence
- New source of "big data"

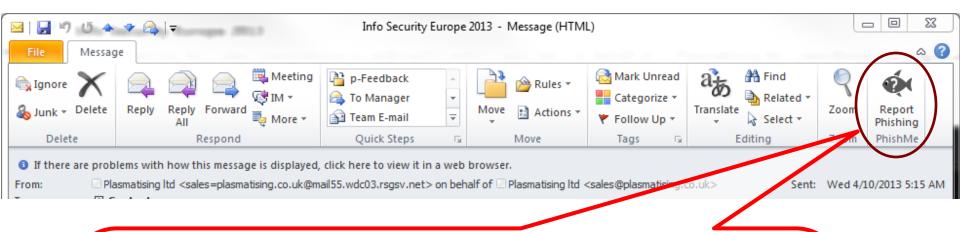








PhishMe Reporter: User-sourced Detection



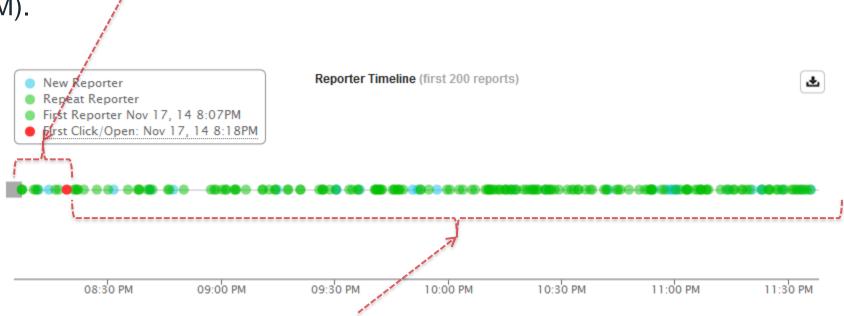
- Simplified single-click reporting for users
- Standardized submission format for IR/help desk
- Taps into human intelligence
- Generate a new source of threat data



Shrink Detection Time to Seconds

At 8:07 PM, the first of several diligent users reported the attack – 11 minutes before the first compromised user clicked on the fraudulent link (8:18 PM).

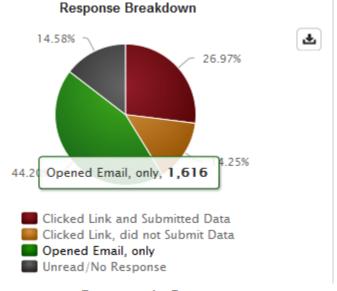
Customer deployed Reporter to 80,000 endpoints

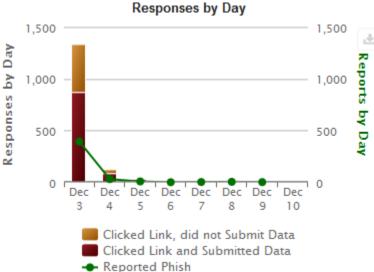


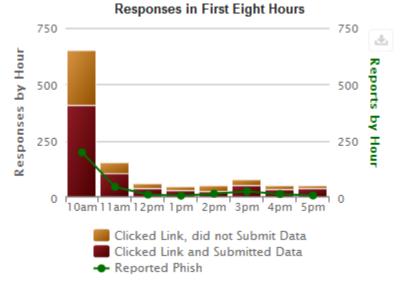
Next set of users correctly identified the attack

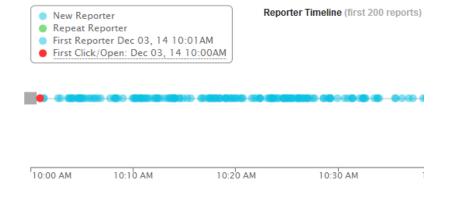


Recent deployment





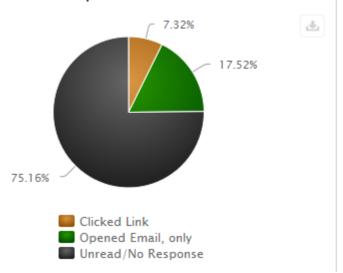






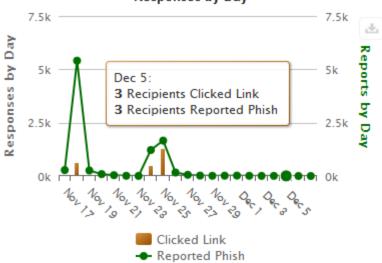
Established reporter install base





Responses in First Eight Hours 75 Reports by Hour 75 Clicked Link Reported Phish

Responses by Day





Reporter Timeline (first 200 reports)



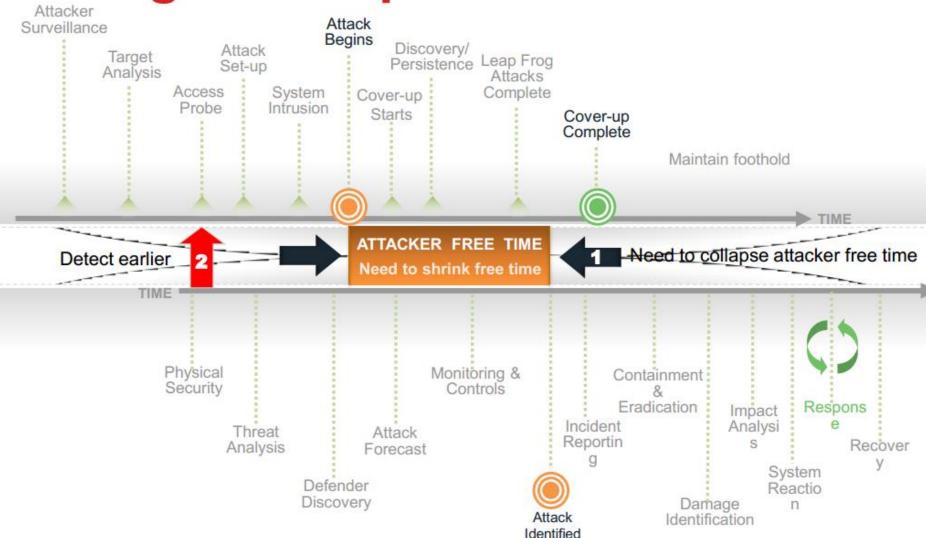
08:00 PM

08:30 PM

09:00 PM



Intelligence Improves Detection



Source: NERC HILF Report, June 2010 (http://www.nerc.com/files/HILF.pdf)



The new face of incident detection

VP, Finance and avid reporter of suspicious emails

Discovered Dyre malware

How many Sams do you have in your organization?





www.PhishMe.com @PhishMe



