WikiLeaks Unveils Vault 7

It is unclear whether any of these techniques requires a court order, but I suspect not. WikiLeaks CIA targeting French political parties and candidates in the lead up to the 2012 presidential election.

Recently, the CIA lost control of the majority of its hacking arsenal including malware, viruses, trojans, weaponized "zero day" exploits, malware remote control systems and associated documentation. This extraordinary collection, which amounts to more than several hundred million lines of code, gives its possessor the entire hacking capacity of the CIA. The archive appears to have been circulated among former U.S. government hackers and contractors in an unauthorized manner, one of whom has provided WikiLeaks with portions of the archive.

"Year Zero" introduces the scope and direction of the CIA's global covert hacking program, its malware arsenal and dozens of "zero day" weaponized exploits against a wide range of U.S. and European company products, include Apple's iPhone, Google's Android and Microsoft's Windows and even Samsung TVs, which are turned into covert microphones.

Since 2001 the CIA has gained political and budgetary preeminence over the U.S. National Security Agency (NSA). The CIA found itself building not just its now infamous drone fleet, but a very different type of covert, globe-spanning force – its own substantial fleet of hackers. The agency's hacking division freed it from having to disclose its often controversial operations to the NSA (its primary bureaucratic rival) in order to draw on the NSA's hacking capacities.

By the end of 2016, the CIA's hacking division, which formally falls under the agency's Center for Cyber Intelligence (CCI), had over 5000 registered users and had produced more than a thousand hacking systems, trojans, viruses, and other

“weaponized” malware. Such is the scale of the CIA’s undertaking that by 2016, its hackers had utilized more code than that used to run Facebook. The CIA had created, in effect, its “own NSA” with even less accountability and without publicly answering the question as to whether such a massive budgetary spend on duplicating the capacities of a rival agency could be justified.

In a statement to WikiLeaks the source details policy questions that they say urgently need to be debated in public, including whether the CIA’s hacking capabilities exceed its mandated powers and the problem of public oversight of the agency. The source wishes to initiate a public debate about the security, creation, use, proliferation and democratic control of cyberweapons.

Once a single cyber ‘weapon’ is ‘loose’ it can spread around the world in seconds, to be used by rival states, cyber mafia and teenage hackers alike.

Julian Assange, WikiLeaks editor stated that “There is an extreme proliferation risk in the development of cyber ‘weapons’. Comparisons can be drawn between the uncontrolled proliferation of such ‘weapons’, which results from the inability to contain them combined with their high market value, and the global arms trade. But the significance of “Year Zero” goes well beyond the choice between cyberwar and cyberpeace. The disclosure is also exceptional from a political, legal and forensic perspective.”

Wikileaks has carefully reviewed the “Year Zero” disclosure and published substantive CIA documentation while avoiding the distribution of ‘armed’ cyberweapons until a consensus emerges on the technical and political nature of the CIA’s program and how such ‘weapons’ should analyzed, disarmed and published.

Wikileaks has also decided to redact and anonymise some identifying information in “Year Zero” for in depth analysis.

These redactions include ten of thousands of CIA targets and attack machines throughout Latin America, Europe and the United States. While we are aware of the imperfect results of any approach chosen, we remain committed to our publishing model and note that the quantity of published pages in "Vault 7" part one ("Year Zero") already eclipses the total number of pages published over the first three years of the Edward Snowden NSA leaks.

Analysis

CIA malware targets iPhone, Android, smart TVs

CIA malware and hacking tools are built by EDG (Engineering Development Group), a software development group within CCI (Center for Cyber Intelligence), a department belonging to the CIA's DDI (Directorate for Digital Innovation). The DDI is one of the five major directorates of the CIA (see this organizational chart of the CIA for more details).

The EDG is responsible for the development, testing and operational support of all backdoors, exploits, malicious payloads, trojans, viruses and any other kind of malware used by the CIA in its covert operations world-wide.

The increasing sophistication of surveillance techniques has drawn comparisons with George Orwell's 1984, but "Weeping Angel", developed by the CIA's Embedded Devices Branch (EDB), which infests smart TVs, transforming them into covert microphones, is surely its most emblematic realization.

The attack against Samsung smart TVs was developed in cooperation with the United Kingdom's MI5/BTSS. After

infestation, Weeping Angel places the target TV in a 'Fake-Off' mode, so that the owner falsely believes the TV is off when it is on. In 'Fake-Off' mode the TV operates as a bug, recording conversations in the room and sending them over the Internet to a covert CIA server.

As of October 2014 the CIA was also looking at infecting the vehicle control systems used by modern cars and trucks. The purpose of such control is not specified, but it would permit the CIA to engage in nearly undetectable assassinations.

The CIA's Mobile Devices Branch (MDB) developed numerous attacks to remotely hack and control popular smart phones. Infected phones can be instructed to send the CIA the user's geolocation, audio and text communications as well as covertly activate the phone's camera and microphone.

Despite iPhone's minority share (14.5%) of the global smart phone market in 2016, a specialized unit in the CIA's Mobile Development Branch produces malware to infest, control and exfiltrate data from iPhones and other Apple products running iOS, such as iPads. CIA's arsenal includes numerous local and remote "zero days" developed by CIA or obtained from GCHQ, NSA, FBI or purchased from cyber arms contractors such as Baitshop. The disproportionate focus on iOS may be explained by the popularity of the iPhone among social, political, diplomatic and business elites.

A similar unit targets Google's Android which is used to run the majority of the world's smart phones (~85%) including Samsung, HTC and Sony. 1.15 billion Android powered phones were sold last year. "Year Zero" shows that as of 2016 the CIA had 24 "weaponized" Android "zero days" which it has developed itself and obtained from GCHQ, NSA and cyber arms contractors.

These techniques permit the CIA to bypass the encryption of WhatsApp, Signal, Telegram, Wiebo, Confide and Cloackman by hacking the "smart" phones that they run on and collecting

audio and message traffic before encryption is applied.

CIA malware targets Windows, OSx, Linux, routers

The CIA also runs a very substantial effort to infect and control Microsoft Windows users with its malware. This includes multiple local and remote weaponized "zero days", air gap jumping viruses such as "Hammer Drill" which infects software distributed on CD/DVDs, infectors for removable media such as USBs, systems to hide data in images or in covert disk areas ("Brutal Kangaroo") and to keep its malware infestations going.

Many of these infection efforts are pulled together by the CIA's Automated Implant Branch (AIB), which has developed several attack systems for automated infestation and control of CIA malware, such as "Assassin" and "Medusa".

Attacks against Internet infrastructure and webservers are developed by the CIA's Network Devices Branch (NDB).

The CIA has developed automated multi-platform malware attack and control systems covering Windows, Mac OS X, Solaris, Linux and more, such as EDB's "HIVE" and the related "Cutthroat" and "Swindle" tools, which are described in the examples section below.

CIA 'hoarded' vulnerabilities ("zero days")

In the wake of Edward Snowden's leaks about the NSA, the U.S. technology industry secured a commitment from the Obama administration that the executive would disclose on an ongoing

basis – rather than hoard – serious vulnerabilities, exploits, bugs or “zero days” to Apple, Google, Microsoft, and other US-based manufacturers.

Serious vulnerabilities not disclosed to the manufacturers places huge swathes of the population and critical infrastructure at risk to foreign intelligence or cyber criminals who independently discover or hear rumors of the vulnerability. If the CIA can discover such vulnerabilities so can others.

The U.S. government’s commitment to the customs and