Equifax Breach

By: Ethan Powell

What is Equifax?

- Large , multi-national consumer credit reporting agency.
- Offers Identity theft protection.
- Is part of the "Big Three" – Equifax, Experian, TransUnion
- Services over 800 million consumers and 88 million businesses.

("Company Profile"; "How to protect Yourself")

Equifax is a company that does credit reporting and also offers Identity theft protection. This is a huge company and is easily involved with every person who owns some type of credit card.

What happened?

- July 29, 2017 – Equifax discovered that a breach had occurred on a U.S. website.
    - Resulted from a vulnerability in a website application – Apache Struts.
    - Public patch for this flaw was released on August 22nd several months later.
    - Attackers moved from server to server due to lack of segmentation.
    - Usernames and passwords were saved in plaintext.
    - Encryption certificate had failed to be renewed.
- Names, Social Security Numbers, Birth dates, addresses, and driver's license numbers were leaked. "Credit card numbers for approximately 209,000 consumers and certain dispute documents, which included personal identifying information, for approximately 182,000 consumers were accessed."

("Apache Struts"; "Consumer Profile"; Fruhlinger; Krebs)

Struts is an open-source and free Model-View-Controller framework that is used for created web applications. Mostly just works with Java. Uses a plugin architecture to allow for customizable and easy to use interface. Because of its open-source nature, these flaws in the software are found particularly quickly, and ways to exploit such vulnerabilities were posted online. This particular flaw was in remote code execution where unscrupulous individuals could send requests to the server as long as the protocol was known in order to execute commands from a remote location.

Hackers were able to stay in the network for 76 days, according to Fruhlinger, without being detected.

What was the result?

- The case was believed to have been initiated by Chinese state-sponsored hackers who were attempting espionage as no instances of fraud or theft have been linked back to data from the breach.

- Equifax established a dedicated website to cover consumers who were affected, providing information as to what to do next.
  - This led to phishing scams as people used a slightly different URL to gather consumers' information.
- FTC lead a lawsuit against Equifax to help consumers who were affected, resulting in about $1.3 billion being distributed among breached individuals.

(Frulinger;)

Equifax waited 4 MONTHS to announce that the breach had occurred.

You can expect to get $125, at most, in compensations due to the legal guidelines set in the contracts. However $1.4 billion has been spent by Equifax in the wake of the breach to upgrade its security systems and settling a $1.3 billion case with the FTC (Federal Trade Commission) in efforts to protect consumers. Cases that were raised to have credit unions to be fined for data breaches didn't go anywhere in the senate, leaving laws that protect consumers against data breaches and personal data protection out to dry.

How can we stop this in the future?

- Keep software up to date!

- Encrypt sensitive data.

- Segment Servers appropriately.

- Train Employees.

- Have a security professional.

- If a breach does happen, notify the affected individuals immediately.

(The Hartford Steam Boiler Inspection and Insurance Company)

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