

MARRIOTT HOTELS SECURITY BREACH

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WHAT WAS IT?

- Marriott Hotels were fined \$28.3 million due to a security breach that occurred in 2014 and was discovered in 2018. It had compromised the accounts of up to 500 million guests.
- Starwood Hotels was acquired by Marriott in 2016, but it was still using legacy IT infrastructure, granting extremely poor security.
- A poor reservation system, laying off IT staff, and a hasty deal soured guest loyalty in 2019 statistics and almost cost them \$123 million as the original price for the breach.
- This event teaches that all aspects of a business should be looked at thoroughly before any financial decisions are made.



IMPACT

- Hundreds of millions of people had passport and credit card numbers stolen
- Government sources suspect the breach was a Chinese effort to acquire data on American government employees
- Marriott is the top hotel for U.S. government and military
- Stolen passport numbers could be used to track people's movements



HOW IT HAPPENED

- Remote Access Trojan(RAT) and MimiKatz, a password sniffing tool were discovered in the system, likely downloaded from a Phishing email
- Starwood did not have good security culture before being bought by Marriott
- Starwood systems were already breached by a different attacker in 2015
- Marriott wasn't ready to book guests with its own system in its new hotels, causing it to rely on the old infected Starwood systems
- Encryption keys to credit card numbers were stored on the same server



MITIGATION STRATEGIES

- Input training for employee's on how to identify phishing emails
- Using Anti-virus software on systems to detect and deter trojans
- Encrypt the traffic leaving systems
- Use network scanning and monitoring tools to detect malicious traffic

REFERENCES

- Fruhlinger, J. (2020, February 12). Marriott Data Breach FAQ: How did it happen and what was the impact? CSO Online. Retrieved December 7, 2022, from <https://www.csoonline.com/article/3441220/marriott-data-breach-faq-how-did-it-happen-and-what-was-the-impact.html>
- Marriott Data Breach FAQ: What really happened? Hotel Tech Report. (2022, October 28). Retrieved December 7, 2022, from <https://hoteltechreport.com/news/marriott-data-breach>