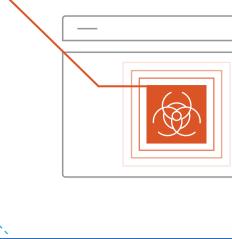


MALICIOUS

HIDES BEHIND ENCRYPTION.

Encrypting data in motion is a necessary step towards securing sensitive data. Yet, it is an equal opportunity protector, hiding malware and other attacks just as easily as lawful activity.



MALVERTISING & DOMAIN SHADOWING USE SSL TO APPEAR LEGITIMATE

6.9 BILLION

MONTHLY VISITORS ON YAHOO!

were exposed to a malvertising campaign that used Yahoo!'s own ad network to distribute malicious links.1

DOMAIN SHADOWING **USES LET'S ENCRYPT**

which provides free SSL/TLS

certificates, is now being exploited to create secure, malicious subdomains tied to legitimate domains.2





MALWARE & INSIDER THREATS ARE USING SSL TO DISGUISE ACTIVITY



ATTACKS ARE USING SSL/TLS ENCRYPTION TO AVOID DETECTION AS OF 2018³

OF ALL NETWORK





BUSINESS WITHIN SIX **MONTHS AFTER BEING VICTIM OF** CYBER ATTACK⁴

GO OUT OF

contain a breach.5



DAYS

A DATA BREACH. Once identified it takes on average 69 days to

IS THE AVERAGE TIME

IT TAKES TO DETECT



JAN





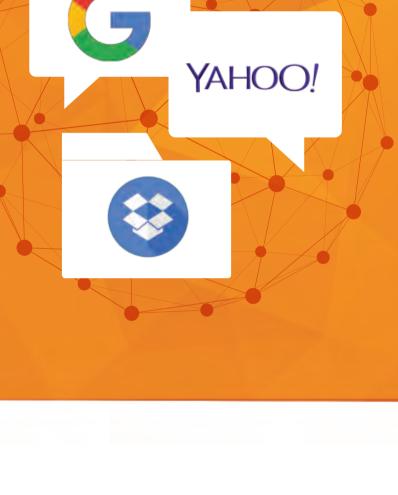
INTRUDERS CAN

COMMUNICATIONS (Gmail, Yahoo!, etc.) & SECURE CLOUD STORAGE

BY USING ENCRYPTED

AVOID DETECTION

(Box, Dropbox, etc.)6



RANSOMWARE **USES SSL TO HIDE ITS**

COMMUNICATION, DOWNLOADING

ENCRYPTION KEYS AND WITHHOLDING

INFECTED MACHINES' DATA UNTIL A

FEE IS PAID TO OBTAIN THE KEY.

MAJOR TYPES OF ATTACKS

HIDE BEHIND SSL ENCRYPTION



WannaCry ransomware attack was estimated to have affected more than 200,000 computers across 150 countries, with total damages ranging from hundreds of millions to billions of dollars.7

WANNACRY AFFECTED FEDEX, TELEFONICA, HONDA, RENAULT, PARTS OF BRITISH

NATIONAL HEALTH SERVICE (NHS),

RUSSIAN INTERIOR MINISTRY AND

RUSSIAN TELECOM MEGAFON AMONG



SEVERAL OTHERS.



A10 THUNDER SSLI The A10 Thunder® SSLi® product enables organizations to analyze all data, including encrypted data, by intercepting

To learn more about how A10 Thunder SSLi can help enterprises make security devices more effective please visit:

A10NETWORKS.COM/SSLI

SSL communications and sending it to third-party

security devices such as firewalls, threat prevention

platforms and forensic tools for inspection.



- 1. blog.malwarebytes.org/threat-analysis/2015/08/large-malvertising-campaign-takes-on-yahoo/ 2. thenextweb.com/insider/2016/01/07/lets-encrypts-free-https-certificates-are-already-being-used-to-distribute-malware/
- 4. www.denverpost.com/2016/10/23/small-companies-cyber-attack-out-of-business/ 5. securityboulevard.com/2018/07/survey-finds-breach-discovery-takes-an-average-197-days/ 6. www.scmagazine.com/encryption-increasingly-used-to-hide-attacks-says-new-report/article/478532/

3. www.venafi.com/blog/most-cyber-attacks-now-use-encryption-are-you-prepared-for-good-bad-and-ugly

7. en.wikipedia.org/wiki/WannaCry_ransomware_attack