Ransomware: The Reality

It's here, it's sophisticated—and it's shifty!



Disruption









Malware with a hefty price tag.

2015



Recognize the accelerating threat



NUMBER 3 on the FBI's "Hot Topics for 2015" list1

\$24 million extorted in more than

2400 complaints to the FBI²

\$60 million campaign of Angler Exploit Kit thwarted³

The "year of the ransom"



Gaining momentum



\$209 million extorted in first 3 months⁴



\$1 BILLION in profit expected in 2016⁵

6-fold increase in corporate user targets⁶

Know the Attack Vectors

Exploit kits are tools used by attackers to distribute malware. They are often delivered through:

Email: phishing messages and spam with malicious links or attachments

Web servers: entry points for access into the network

Web-based apps: encrypted files spread through social media and instant messaging

Malvertising: drive-by downloads from an infected site

Infection Vector



Command and Control



Encryption of Files





Frequently uses the web and email

of targeted systems

Takes control Files become inaccessible

Owner/company pay the ransom (bitcoins) to free the system

Prevent attacks with an architectural approach:



endpoints, email, web, and

Protection across DNS layer,



Secure devices on and off • the network



Be prepared to detect and contain movement of malware quickly

Detect and Disrupt Ransomware

Cisco Talos disrupts a \$60 million annual ransomware attack7



One of the largest and most advanced exploit kits, known as Angler, was used in targeted malvertising campaigns



\$30 million annually through nearly **150 proxy servers** was stopped

Learn More Today Go to cisco.com/go/ransomware for Cisco's simple, open, automated, and effective approach to security.











¹U.S. Department of Justice, Federal Bureau of Investigation, 2015 Internet Crime Report, https://pdf.ic3.gov/2015_IC3Report.pdf

²The Federal Bureau of Investigation, "Ransomware: Latest Cyber Extortion Tool," April 2016 https://www.fbi.gov/cleveland/press-releases/2016/ransomware-latest-cyber-extortion-tool

³Talos, Threat Spotlight: Cisco Talos Thwarts Access to Massive International Exploit Kit Generating \$60m Annually from Ransomware Alone, October 2015, http://www.talosintelligence.com/angler-exposed/
4CNN Money, "Cyber-Extortion Losses Skyrocket, Says FBI," David Fitzpatrick and Drew Griffin, April 2016, http://money.cnn.com/2016/04/15/technology/ransomware-cyber-security/

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