

Ransomware: The Reality

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



Loss of sensitive, proprietary data



Disruption



Financial losses



Harm to reputation

Malware with a hefty price tag.



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

2015

Gaining momentum



2016

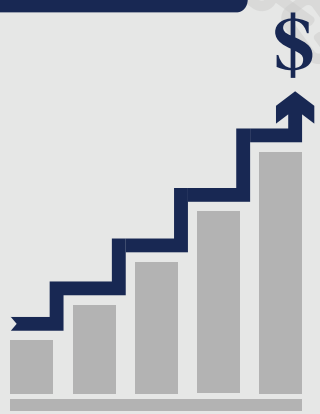
The "year of the ransom"

\$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



Request of Ransom



Frequently uses the web and email

Takes control of targeted systems

Files become inaccessible

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

Prevent attacks with an architectural approach:



Protection across DNS layer, endpoints, email, web, and network



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



Exploitation of **90,000 victims** a day for **\$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/>

⁵bid.

⁶Security Week, "History and Statistics of Ransomware," Kevin Townsend, June 2016, <http://www.securityweek.com/history-and-statistics-ransomware>

⁷Cisco Talos, 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/>