111111 **CISCO** 



## Cisco Ransomware Defense

#### Quick Prevention against Ransomware

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### Ransomware





# Did You Know?

## **Over 99%**

of malware is sent by either web server or email

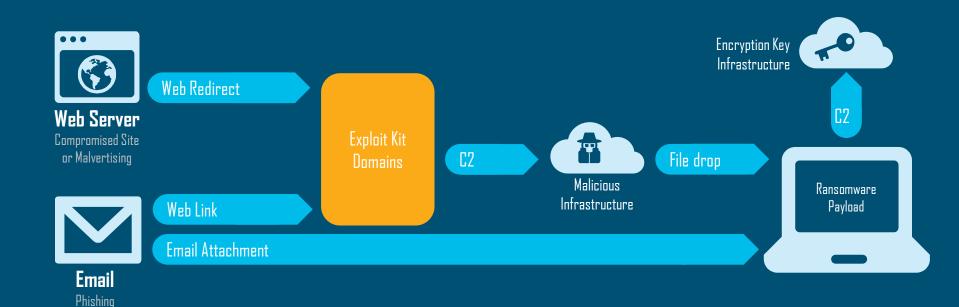




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### Ransomware Email and Web Delivery

or Spam





# Did You Know?

## **Over 90%**

of known-bad malware use DNS to

- gain command and control
- exfiltrate data
- redirect traffic





### Ransomware and DNS

	Encryption Key			Payment MSG	
NAME*	DNS	IP	NO C2	TOR	PAYMENT
Locky	•	•			DNS
SamSam					DNS (TOR)
TeslaCrypt	•				DNS
CryptoWall	•				DNS
TorrentLocker	•				DNS
PadCrypt	•				DNS (TOR)
CTB-Locker	•			•	DNS
FAKBEN	•				DNS (TOR)
PayCrypt	•				DNS
KeyRanger	•				DNS
	<b>_</b>				



### Cisco Ransomware Defense

#### Quick Prevention



Cisco

Umbrella

Advanced

**Malware Protection** 

Cisco Advanced Malware Protection for Endpoints

Cisco Cloud Email Security with





 Stops hackers from controlling and spreading ransomware



#### Cisco Umbrella

 Blocks users from receiving phishing attack emails and the harmful attachments that cause ransomware



Cisco Cloud Email Security with Advanced Malware Protection

- Quarantines malicious files on endpoints to prevent infection
- Prevents the lateral movement of ransomware across your network

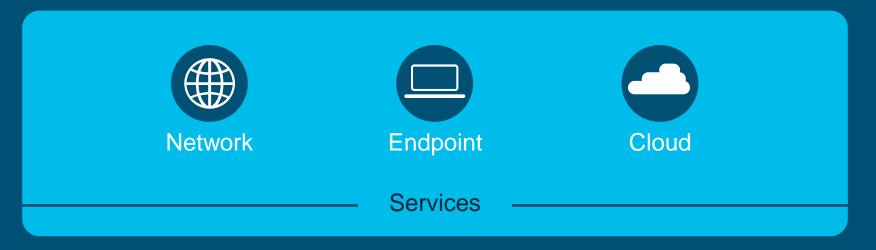


Cisco Advanced Malware Protection for Endpoints



### Security that works together Cisco Security Architecture

#### Threat intelligence – TaLOS

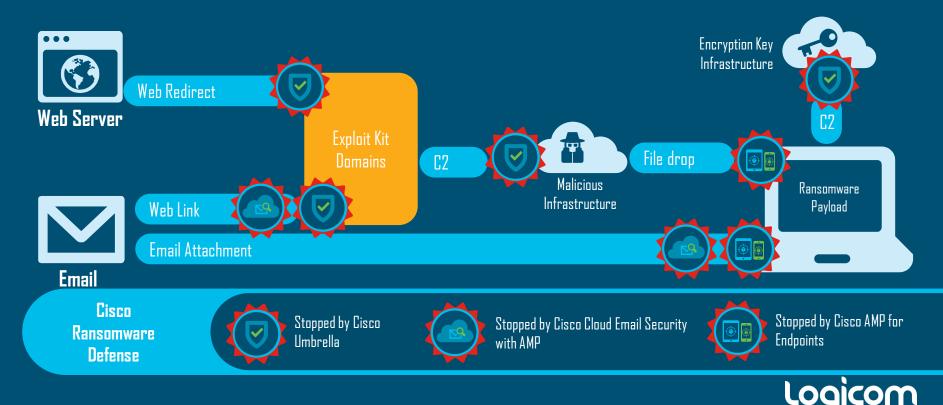




# Layers of Defense



### Break the Ransomware Chain



Solutions

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