

**Net**∞  
TECHNOLOGY

IT KLINIKA RELOADED

# LOADING THREAT

Simulacija phishing napada, email zaštita, pravi alati pomažu – nije  
Slavica uvek kriva!

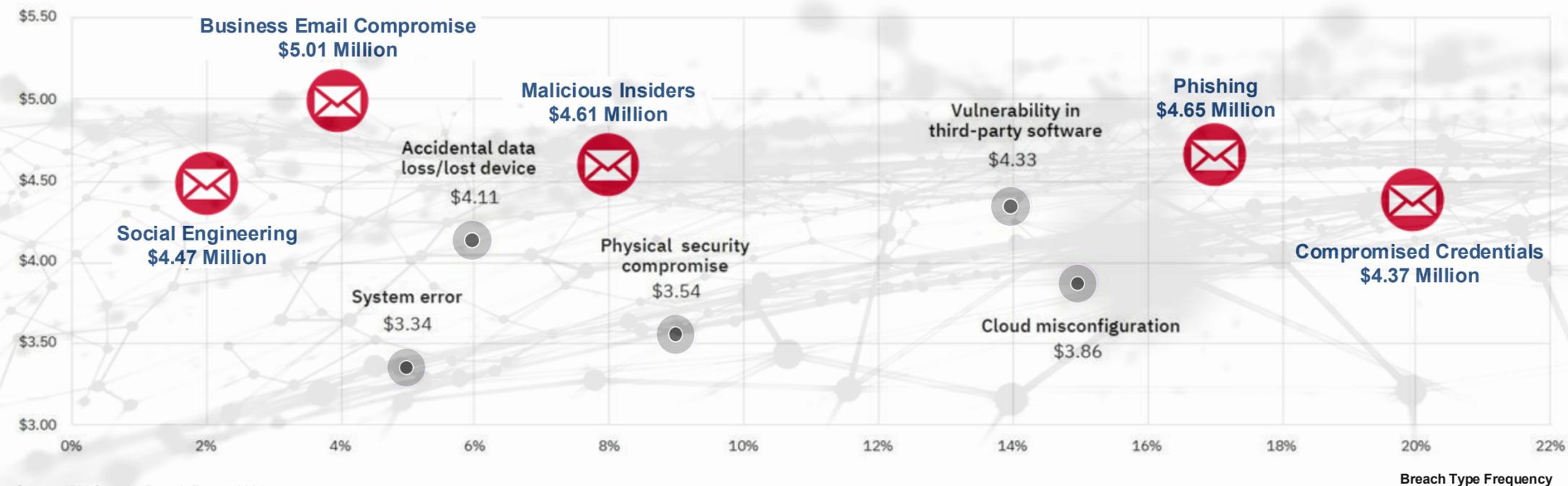
**Dimitrije Veličanin**



# EMAIL - BR. 1 VEKTOR



Measured in US\$ Millions  
Average cost per breach



Source: IBM Security Breach Report 2021

# WEB BASED NAPTAD

## Threat of Ever-Expanding Web



- Millions of new sites created every day
- 71% of all host names exist for 24 hours or less
- Many are legitimate, but some offer ideal cover for hackers launching attacks

## Web Browsers Being Targeted



- Infection by simply visiting a site
- Web browser vulnerabilities open the door to malware Strains "detection only" based approaches

## Downloading Files



- Advanced zero-day malware
- Designed to overcome less sophisticated malware
- Battle between detection false-positive rates



# PHISHING NAPADI

**36%** of breaches used phishing<sup>1</sup>

**85%** of breaches involved the human element

The North Korean group accused of some of the **biggest cyber crimes ever conducted** may have harnessed some highly sophisticated technologies, but their ability to break into computer networks worldwide often relied on nothing more than a bogus email.

The FBI said the group did significant research before launching their attacks, with online reconnaissance including research relating to the victim company, as well as to individual employees of the victim company.

The results of that reconnaissance were then used by the hackers to prepare spear-phishing messages to send by email or social media to persons affiliated with those entities. "in general, the hackers intend their victims to open the spear-phishing messages while using their employers' computer systems, thus breaching the employers' network security," said the complaint.

**Users are seen as the weak link in the security chain**



# POSLEDICE

-  Prekid rada
-  Gubitak reputacije
-  Gubitak prava intelektualne svojine
-  Gubitak podataka kupaca
-  Finansijski gubici
-  Pravke i regulativne posledice



# SLAVICA

- tipičan zaposleni
- prošla cybersecurity obuku (ali...)
- posla preko glave
- veruje da IT ne radi ništa po ceo dan
- veruje da IT samo smeta i izmišlja nešto
- vredna, radna, ali nije baš da voli računare

# jedan radni dan



# KAKO TO STVARNNO IZGLEDA (DEMO)?

- pisanje email-a za Slavicu sa "phishing" stranom [www.cyber-security.rs/login](http://www.cyber-security.rs/login)
- kako nezaštićeni korisnik ostavlja podatke na toj strani
- Slavica otvara oba email klijenta - jedan email ide preko Symantec sistema, drugi ne
- otvaranje emaila sa zasticenog netpplab domena i prikaz izolovane adrese linka, kao i izolovane web strane
- prikaz loga u Email Sec. konzoli gde se vidi da je link izolovan
- prikaz podesavanja u konzoli za Email izolaciju
- otvaranje emaila sa nezaštićenog [cyber-security.rs](http://cyber-security.rs) domena i pokušaj unosa kredencijala
- prikaz blokade od strane PAN NGFW, email notifikacije i loga u PAN konzoli
- prikaz PAN podesavanja za Credential Theft



# SYMANTEC EMAIL SECURITY

## Symantec Email Security

CLOUD | HYBRID | ON PREM



Email Security.cloud



Email Security Gateway



On Prem MTA



 ANTISPAM ANTIMALWARE	 ANTIPHISHING	 FRAUD PROTECTION	 SECURITY AWARENESS	 POLICY BASED ENCRYPTION
 ADVANCED THREAT PROTECTION	 LINK ISOLATION	 EMAIL ANALYTICS	 DATA PROTECTION	



# SYMANTEC EMAIL SECURITY



## Global Intelligence Network



### CONNECTION LEVEL

SMTP firewall, sender reputation and authentication reduce risks and throttle bad connections



### MALWARE & SPAM DEFENSE

Heuristics, reputation, and signature-based engines evaluate files and URLs for email malware & spam



### LINK PROTECTION

Evaluates malicious links at email delivery and time of click with advanced phishing variant detection



### IMPERSONATION CONTROL

Blocks Business Email Compromise and other spoofing attacks



### BEHAVIOR ANALYSIS

Identifies new, crafted, and hidden malware by examining the behavior of suspicious email



### ADVANCED MACHINE LEARNING

Analyzes code for malicious characteristics



### SANDBOXING

Detonates only truly unknown files in both physical and virtual environments

MALWARE & SPAM PROTECTION

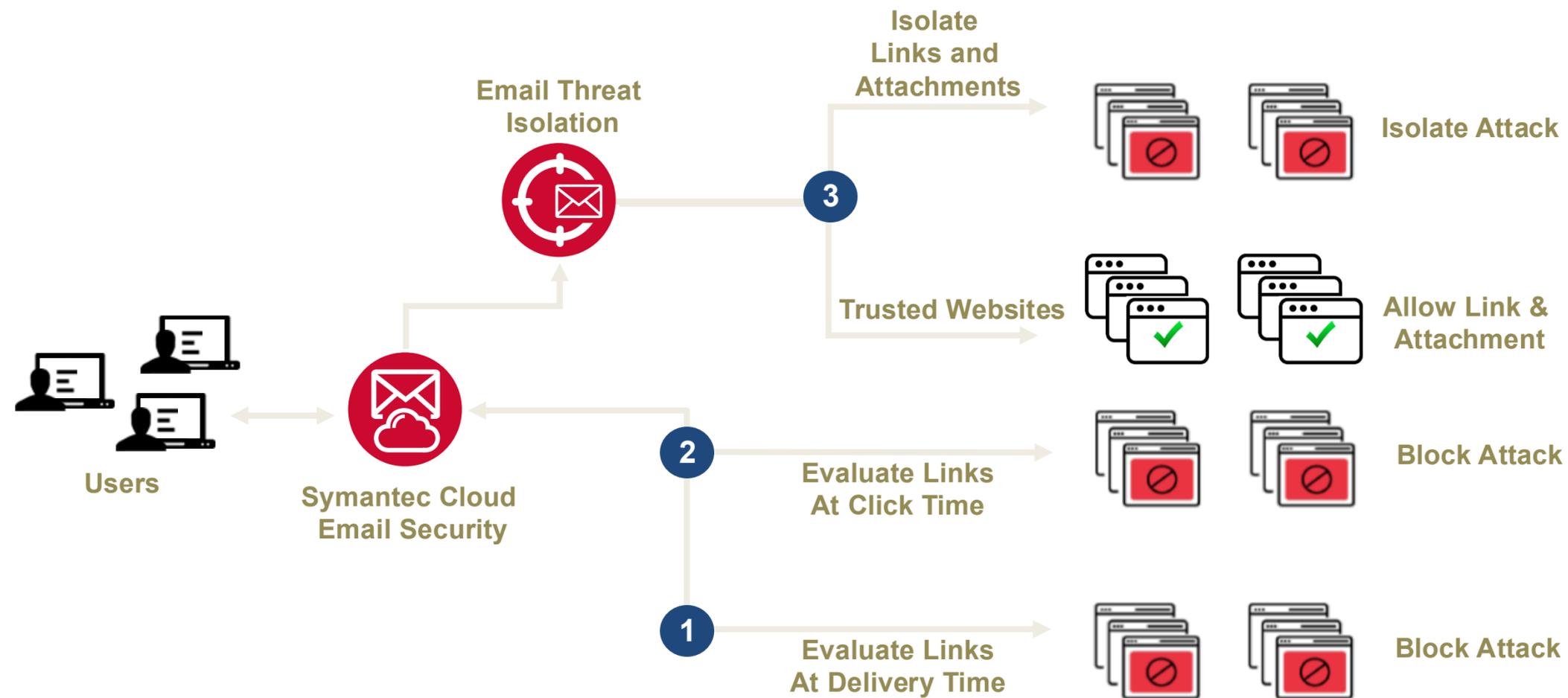
PHISHING DEFENSE

EMERGING THREAT PREVENTION



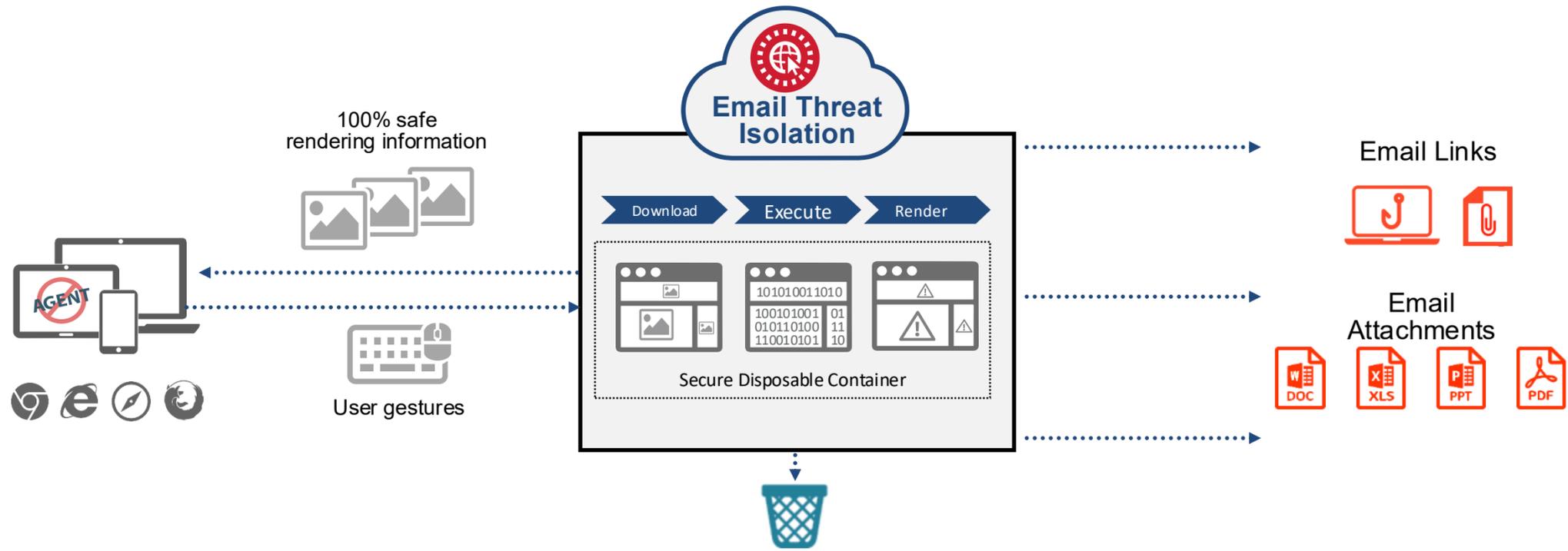
# SYMANTEC EMAIL SECURITY

URL isolation eliminates the window of vulnerability



# SYMANTEC EMAIL SECURITY

Prevent Even the Most Advanced Attacks



- > Defends users from spear phishing attacks by isolating suspicious links
- > Prevents ransomware attacks from infecting users by isolating malicious attachments



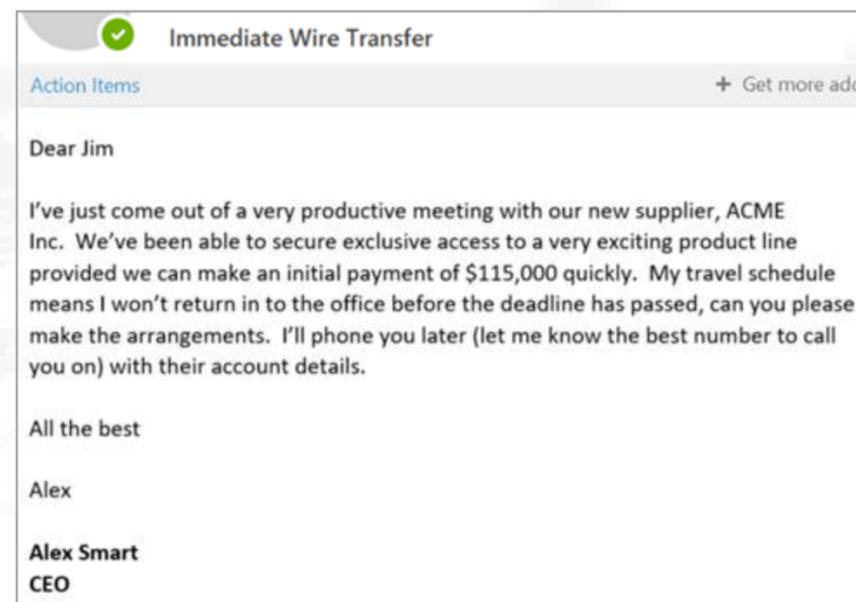
# SYMANTEC EMAIL SECURITY

## Issue: Business Email Compromise (Impersonation)

The Email Itself Isn't Malicious, What You're Being Asked to Do Is!

### Types of Attacks:

- You receive an email from your CEO asking you to **make a wire transfer**
- You're asked to **provide tax data**, which may be used to orchestrate future attacks or perform fraud
- You're involved in a real estate transaction and asked to **change payment type** to a fake account



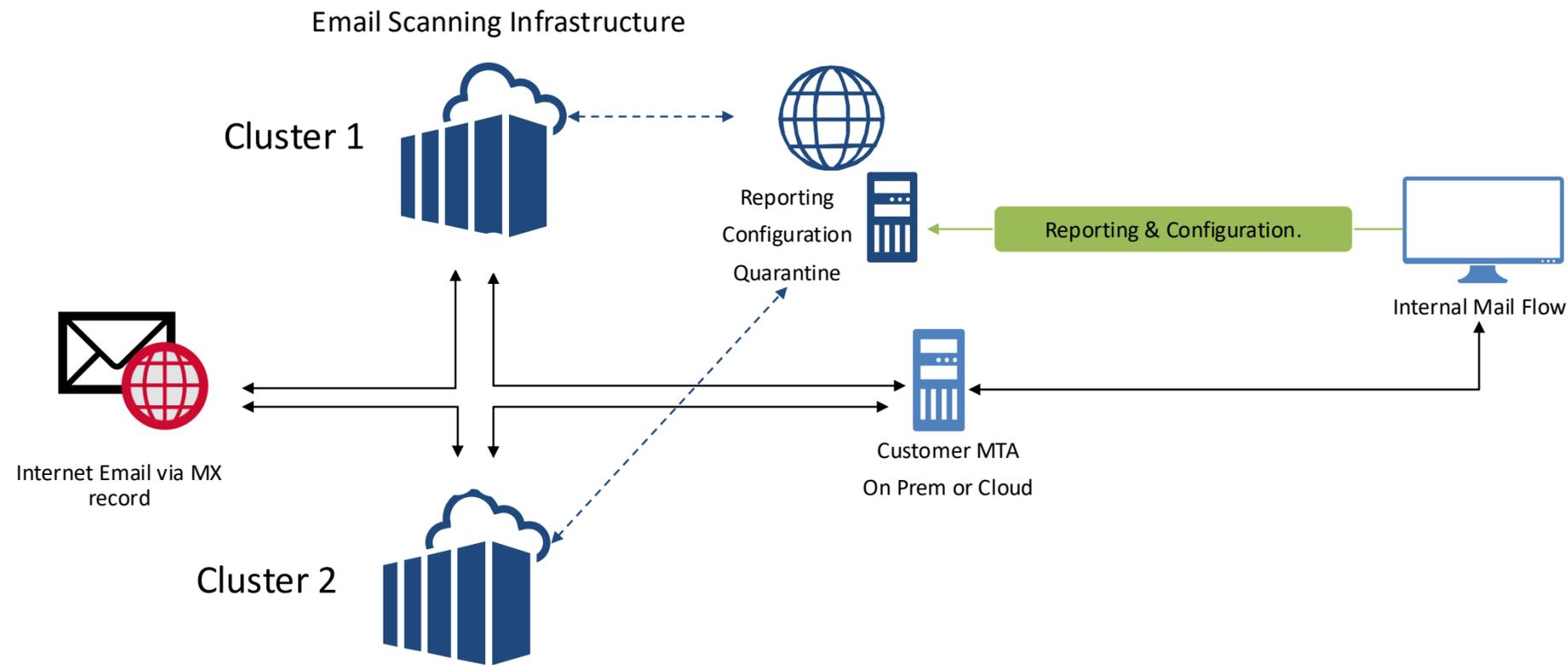
Business Email Compromise scams cost = **\$43 Billion (2016-2021)**

Source: Business Email Compromise and Real Estate Wire Fraud, Congressional Report, FBI 2022



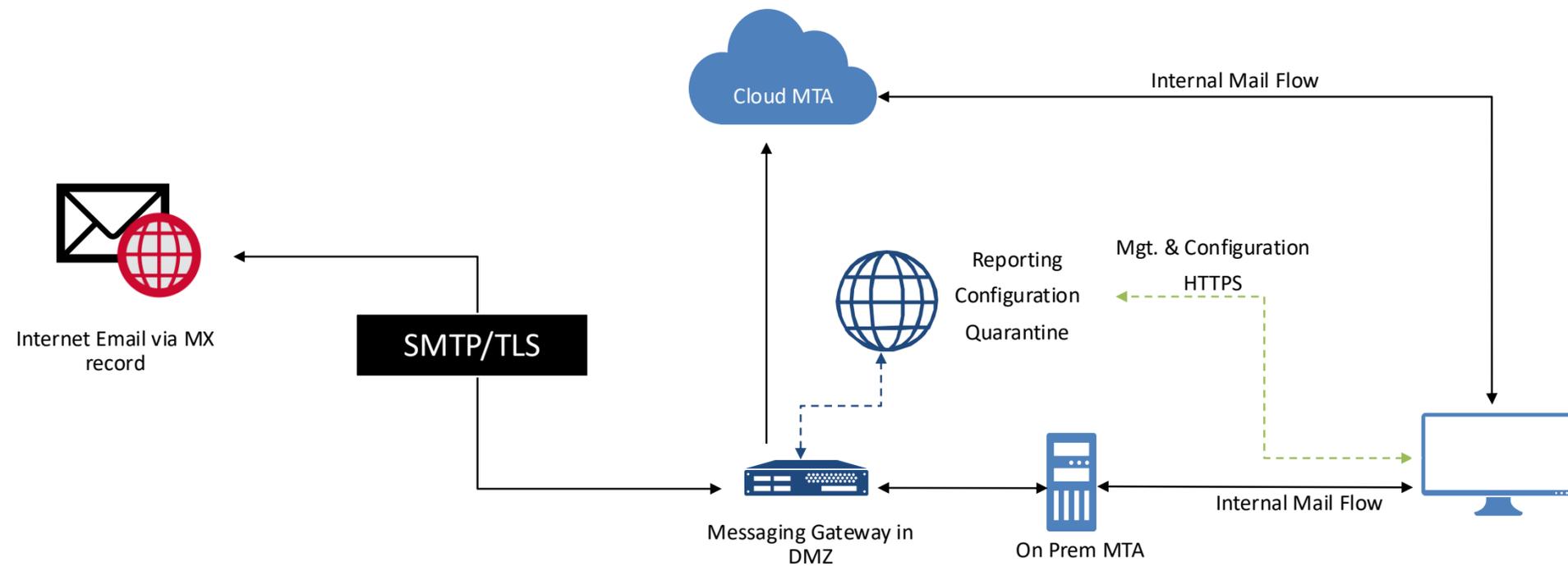
# SYMANTEC EMAIL SECURITY

## Basic Cloud Architecture



# SYMANTEC EMAIL SECURITY

## Basic On Prem Architecture



■ Symantec Software / Component

■ 3<sup>rd</sup> party components



# SYMANTEC EMAIL SECURITY

## Steps to implement Email Security.cloud



Configure Microsoft Office 365 and Symantec.cloud for outbound mail



Configure Microsoft® Office 365™ for inbound mail



# PITANJA?





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