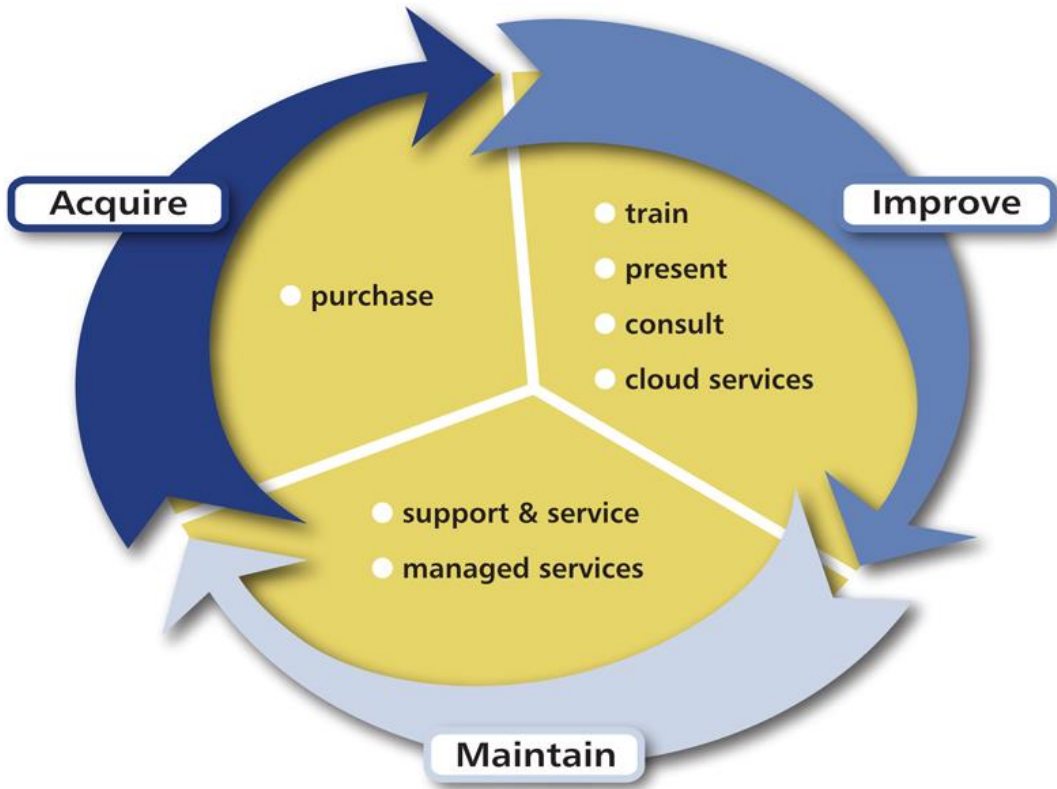


Welcome

Racing & Ransomware!



the one source for IT & AV



System Source & Barracuda:

- **Barracuda Partner since 2013**
- **Why Barracuda Backup:**
 - **Combines onsite & cloud backup**
 - **Comprehensive, cost-effective local & offsite backups**
 - **DR solutions**
 - **Deduplication and compression**
 - **Easy deployment and administration**
 - **Small, Mid-size and Larger organizations**



Ransomware and Advanced Threats

Avoid Falling Victim to These Cyber Threats

Tony Foxen, Channel Manager, Mid-Atlantic & Virginia



In The News...

93% of phishing emails are now ransomware

May 20, 2016

SI
M

Texan indicted for hacking into Pittsburgh healthcare company's computers



TORSTEN OVE ✓

Pittsburgh Post-Gazette
tove@post-gazette.com

4:19 PM

MAR 20, 2017

gton

FBI Repoi

Of course, the r

engineering and email compromises. The reported losses associated with business email compromises in 2015 was \$246,226,016.

Russian Hackers Faked Gmail Password Form To Invade DNC Email System

LinkedIn Breach Results In Phishing Scams



Texas Police Unit Loses Years Of Evidence To Ransomware

Police in Cockrell Hill, Tex., lost eight years of documents, photos, and videos when a ransomware attack corrupted files on its server.

Ransomware attack on San Francisco public transit gives everyone a free ride

Everywhere...



Source: SC Media, Ransomware Attack Study, 2017

Indiscriminate

30%

Of **ALL** organizations were infected
by ransomware



It's High Impact

\$3.8M

Average Cost of a Breach

\$154

Average Cost Per Stolen Record

A man with glasses is sitting at a desk, looking down at a keyboard. The background is dark with a digital rain effect of falling binary code (0s and 1s).

What will the next morph bring?

Does your payment really mean you are free and clear?

How long before Ransomware **payments are temporary?**

Will one payment unlock you forever?

When will ransomware morph into **"protection ware?"**

Is It Getting Worse?

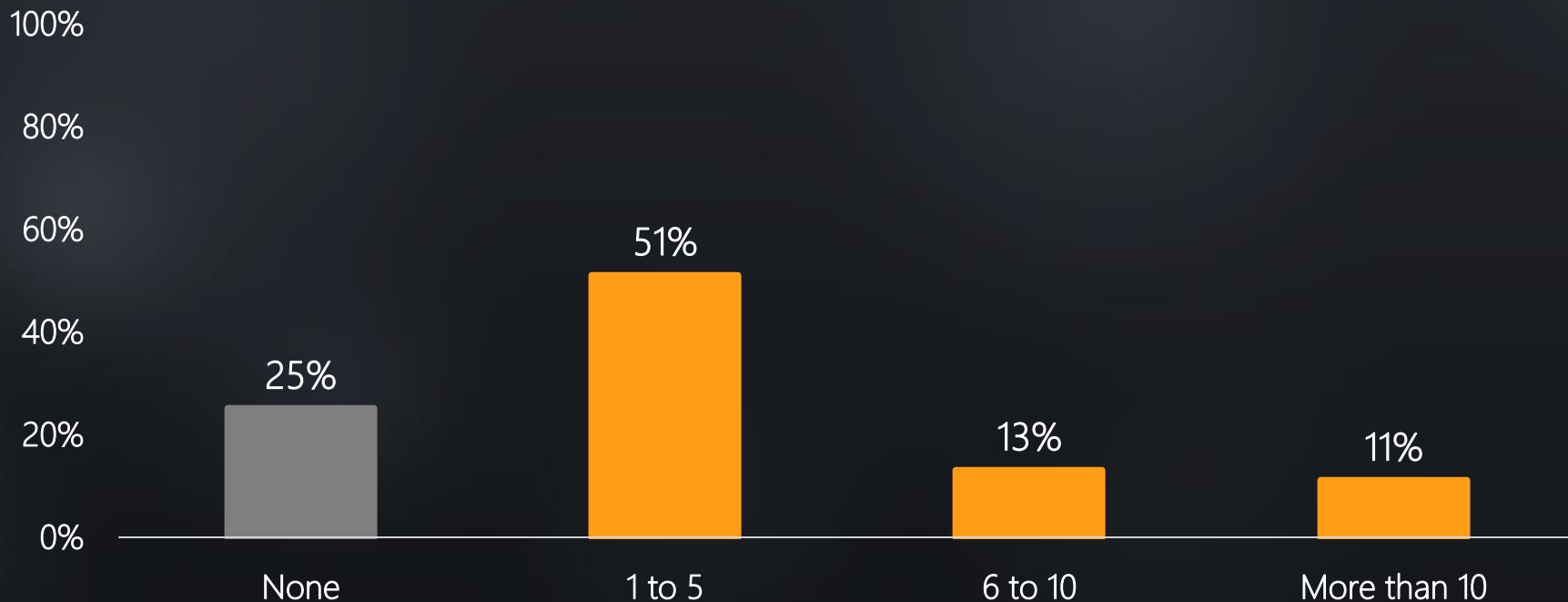


Security Threats are Common

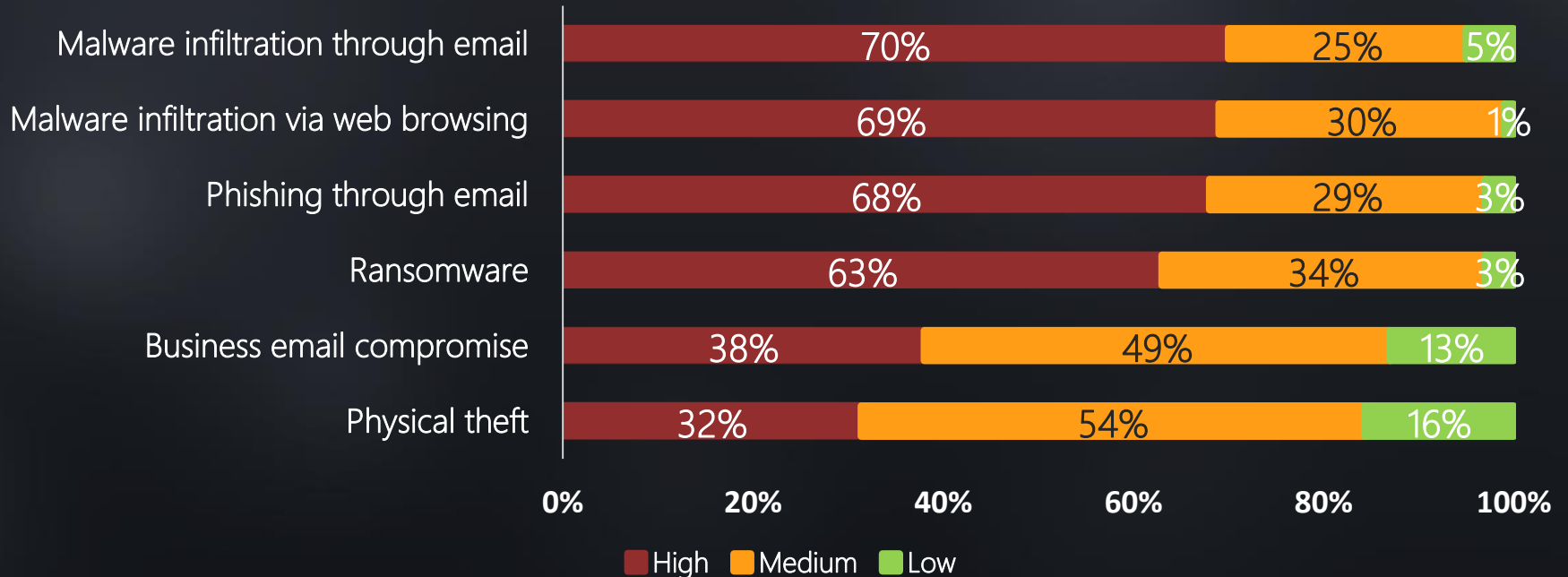
29%

Of organizations had malware infiltrate through an unknown source

Security Threats are Common



Decision Makers' Concerns



Many tools are not solving the problem

51%

Of organizations report that **malware** is getting worse

OK, So It Is Getting Worse... But Why?





Economic Motivation



Increasing Sophistication

Data Breach

Cyber Attack

A conceptual image showing a hand holding a glowing globe. The globe is covered in a network of dotted lines and circular nodes, representing data points or connections. The background is dark blue, and the overall aesthetic is futuristic and digital.

Data Is Everywhere

Multi-Vector Attack


```
uu$:$:$:$:$:$uu
uu$$$$$$$$$$$$$$$$$$$$uu
u$$$$$$$$$$$$$$$$$$$$$u
u$$$$$$$$$$$$$$$$$$$$$u
u$$$$$$$$$$$$$$$$$$$$$u
u$$$$$$$$$$$$$$$$$$$$$u
u$$$$$$$*   *$$$*   *$$$$$$u
*$$$$$*     u$u     $$$*$
$$$u        u$u        $$$
$$$u        u$$$u        $$$
*$$$$$uu$$$   $$$uu$$$$$*
```



Reconnaissance




Compromise




Lateral Movement



Malware Installation



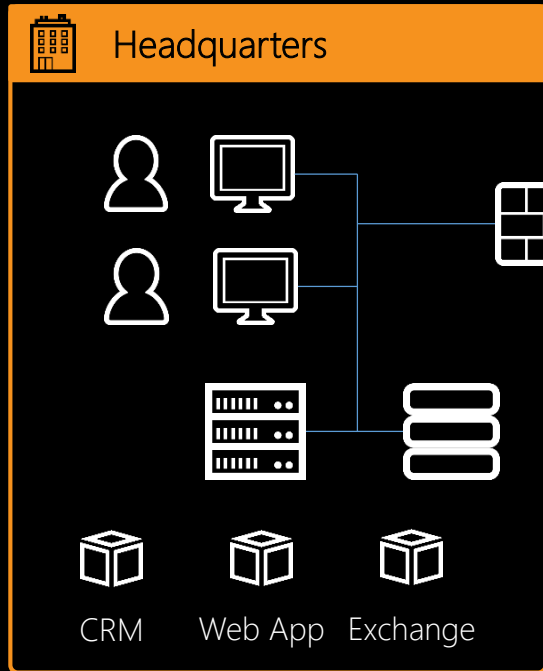
Obfuscation



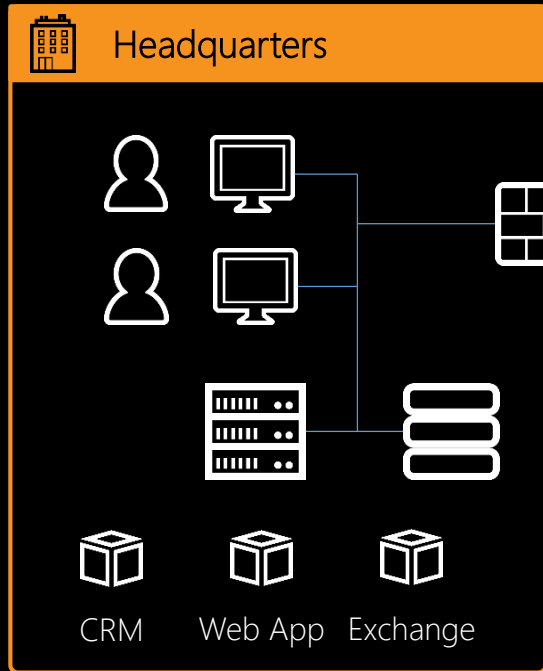
Damage, Deface, or Steal

```
$$$$**$$$$$$$$$$$$uuu   uu$$$$$$$$$$$$**$$$$*
***   **$$$$$$$$$$$$uu **$***
uuuu  **$$$$$$$$$$$$uuu
u$$$$uuu$$$$$$$$$$$$uu **$$$$$$$$$$$$uuu$$$
$$$$$$$$$$$$**$*   **$$$$$$$$$$$$$*
*$$$$$*   **$$$$$**
$$$*   PRESS ANY KEY!   $$$*$
```

Multi-Vector Attack



Multi-Vector Attack



Reconnaissance



Compromise



Lateral Movement



Malware Installation



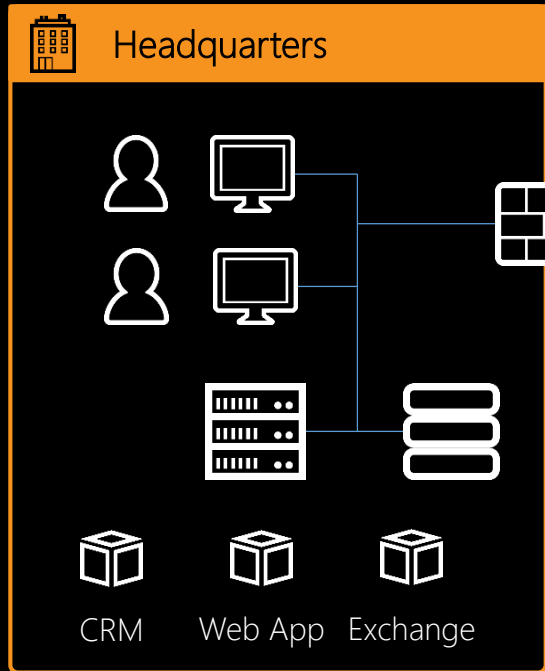
Obfuscation








Damage, Deface, or Steal



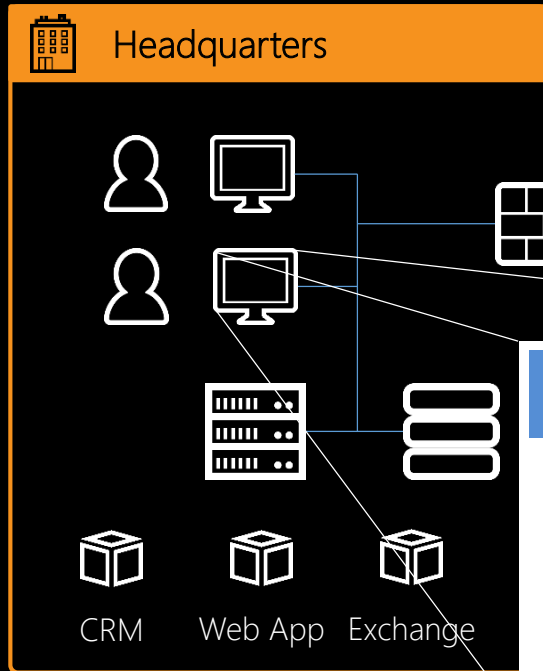
Multi-Vector Attack




A social media profile card for John Kimble, Director of IT at Universal Imports. The card includes a blue profile picture icon, the name "John Kimble" in blue, the title "Director of IT, Universal Imports", and a timestamp "1d". The card is overlaid on a background of red binary code.

-  Reconnaissance
-  Compromise
-  Lateral Movement
-  Malware Installation
-  Deface, or Steal

Multi-Vector Attack



 John Kimble
Your password is expiring

To Douglas Quade

Hi Doug,

Your credentials will expire today. In order to keep working without a disruption, please [click here](#) to update.

John



Reconnaissance



Compromise



Lateral Movement



Malware Installation

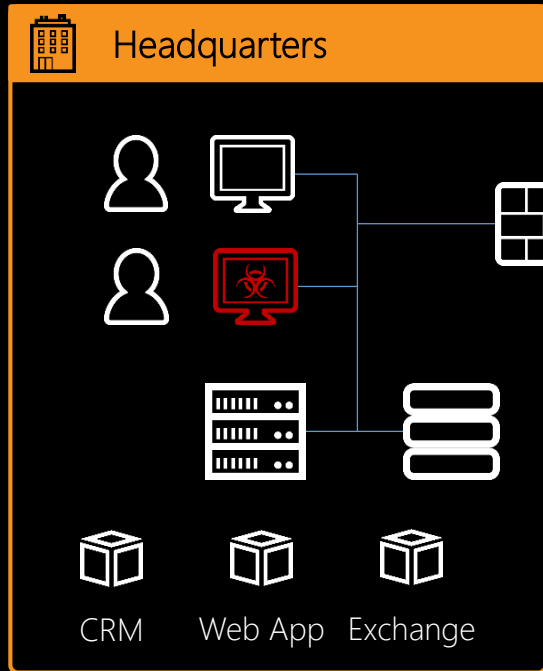


Obfuscation



Damage, Deface, or Steal

Multi-Vector Attack



Reconnaissance



Compromise



Lateral Movement



Malware Installation

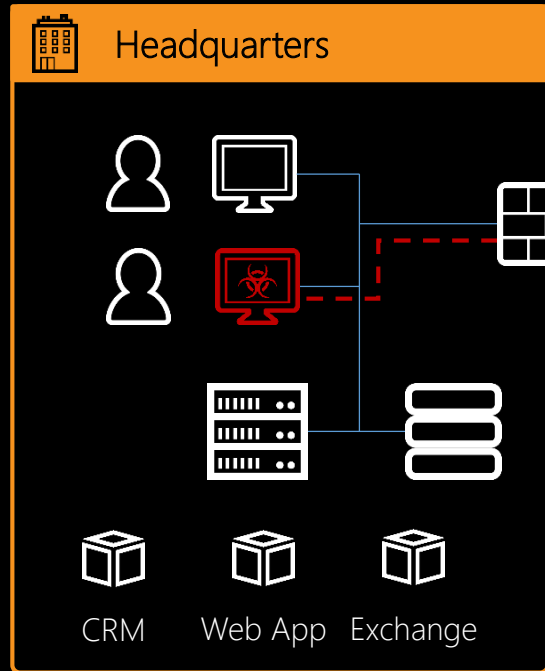


Obfuscation



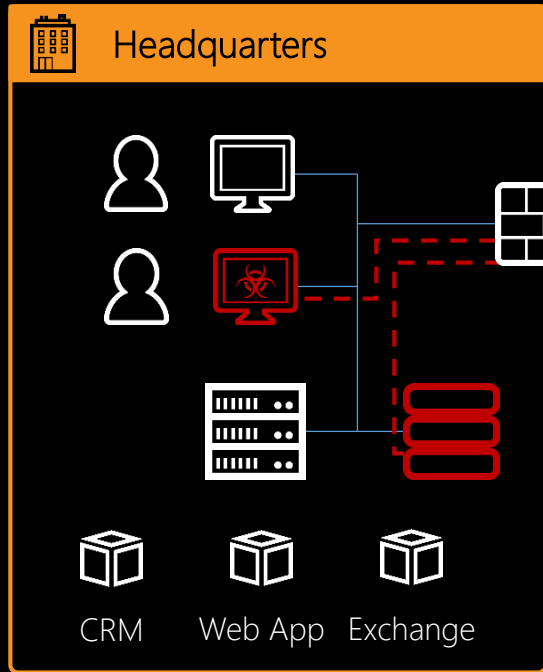
Damage, Deface, or Steal

Multi-Vector Attack



- Reconnaissance
- Compromise
- Lateral Movement
- Identity Credentials Data
- Malware Installation
- Obfuscation
- Damage, Deface, or Steal

Multi-Vector Attack



UN: dqade
PW: 12345



Reconnaissance



Compromise



Lateral Movement



Malware Installation



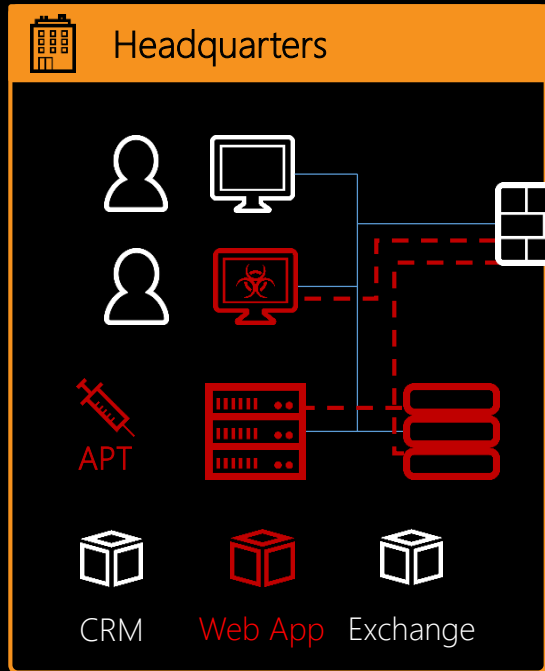
Obfuscation



Damage, Deface, or Steal



Multi-Vector Attack



Reconnaissance



Compromise



Lateral Movement



Malware Installation

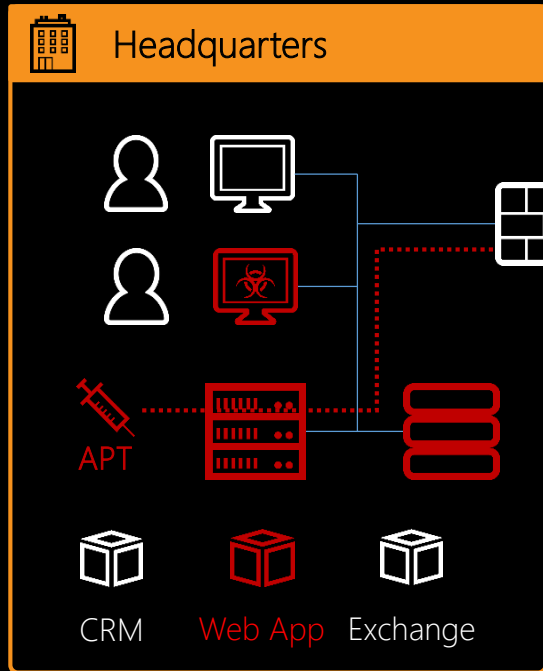


Obfuscation



Damage, Deface, or Steal

Multi-Vector Attack



Reconnaissance



Compromise



Lateral Movement



Malware Installation

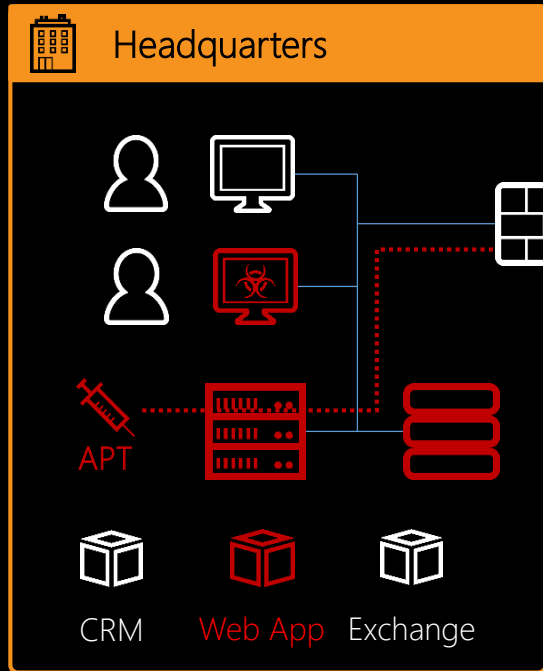


Obfuscation



Damage, Deface, or Steal

Multi-Vector Attack



Reconnaissance



Compromise



Lateral Movement



Malware Installation



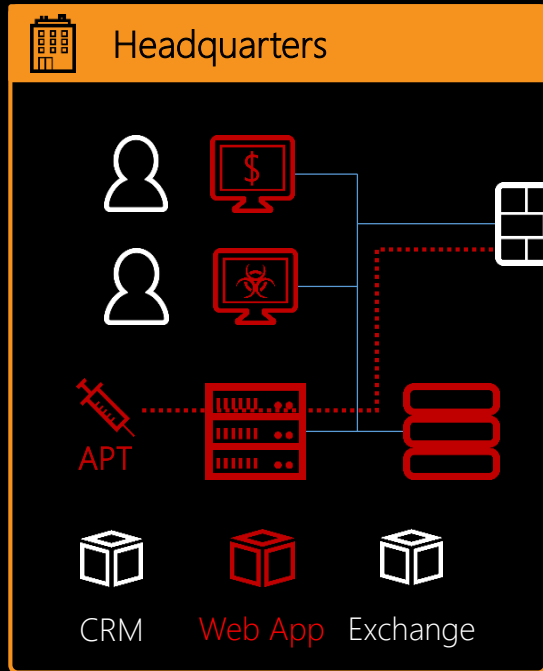
Obfuscation



Damage, Deface, or Steal



Multi-Vector Attack



Reconnaissance



Compromise



Lateral Movement



Malware Installation



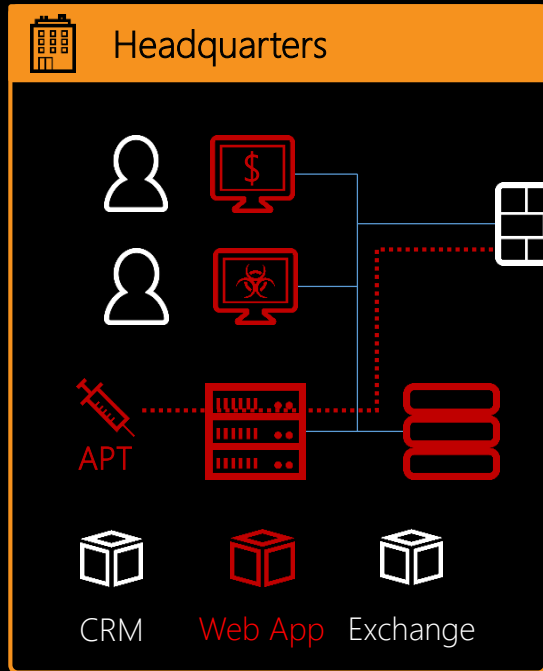
Obfuscation



Damage, Deface, or Steal



Multi-Vector Attack



Reconnaissance



Compromise



Lateral Movement



Malware Installation

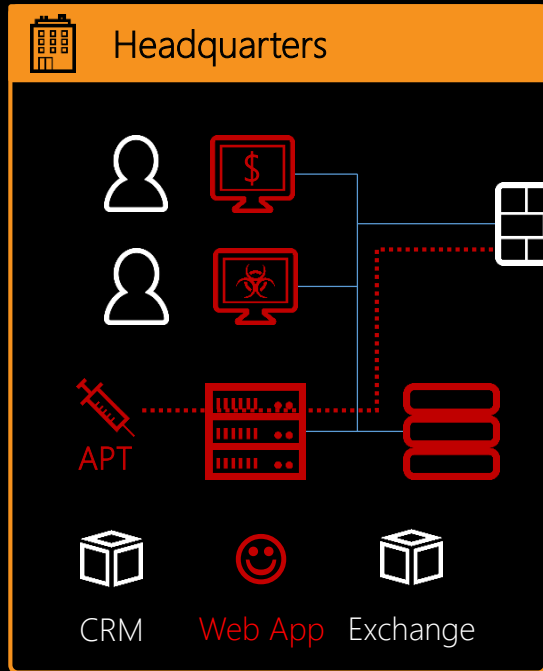


Obfuscation



Damage, Deface, or Steal

Multi-Vector Attack



Reconnaissance



Compromise



Lateral Movement



Malware Installation

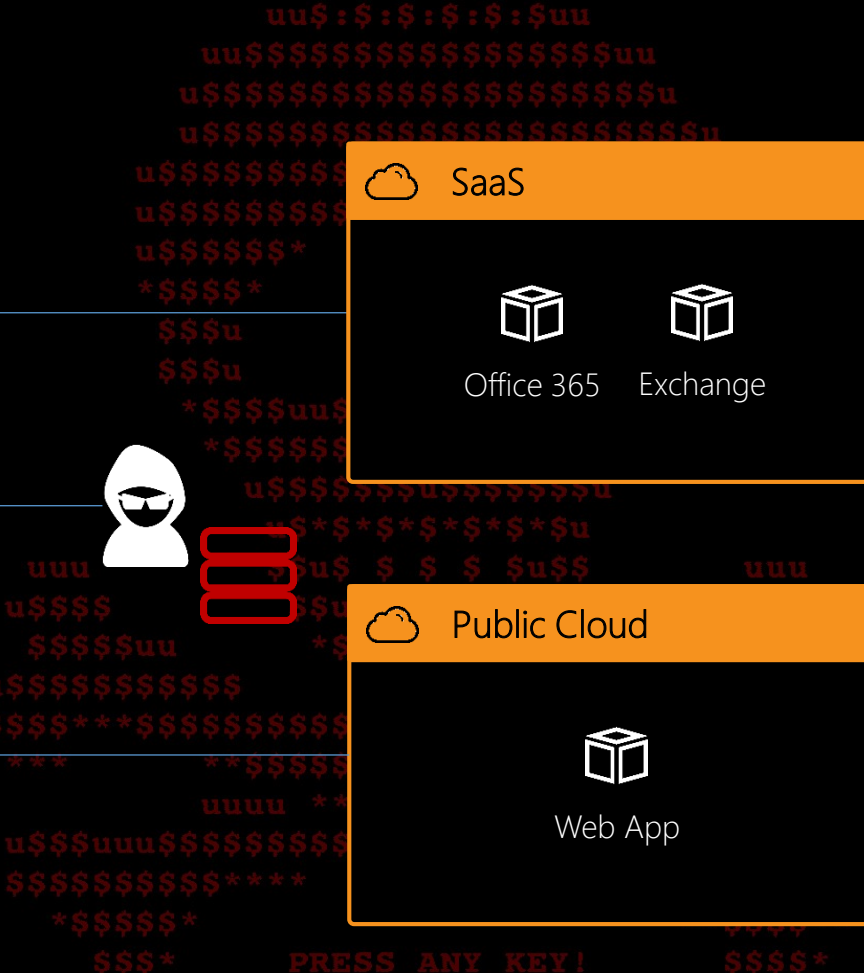
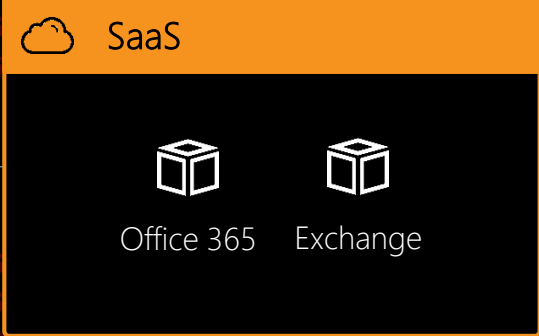
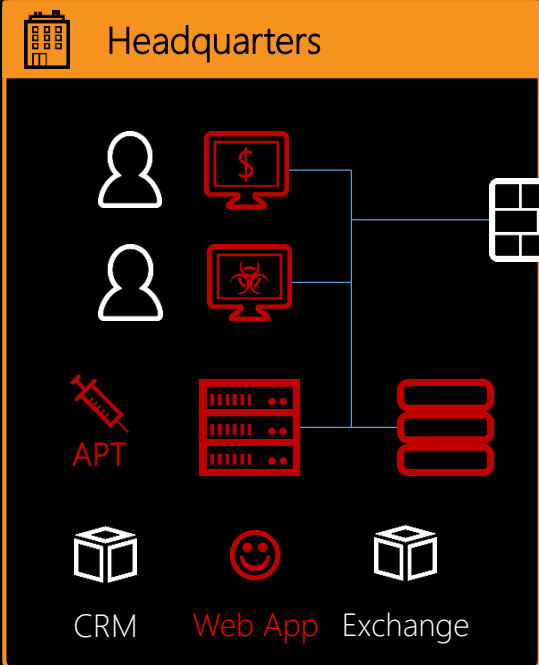


Obfuscation

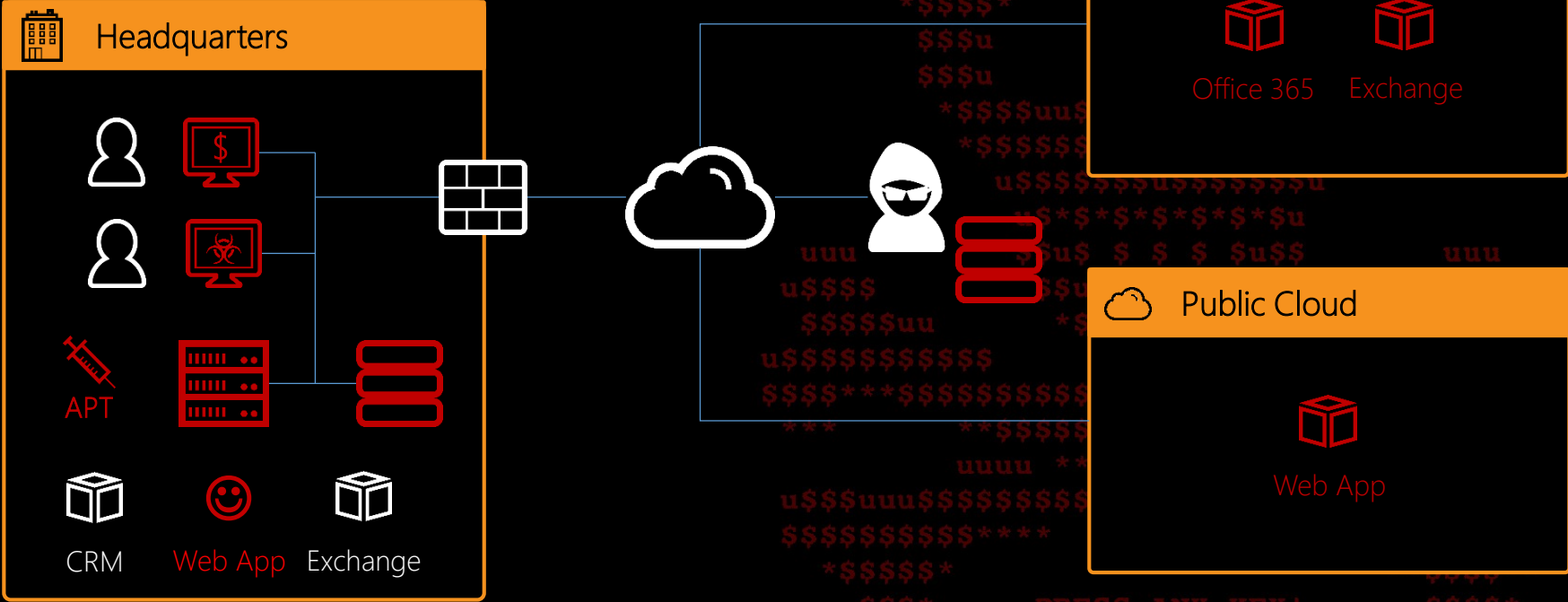


Damage, Deface, or Steal

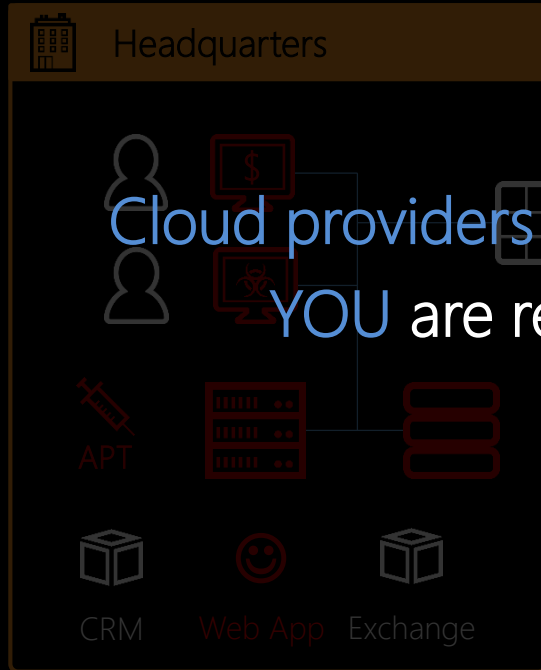
Multi-Vector Attack



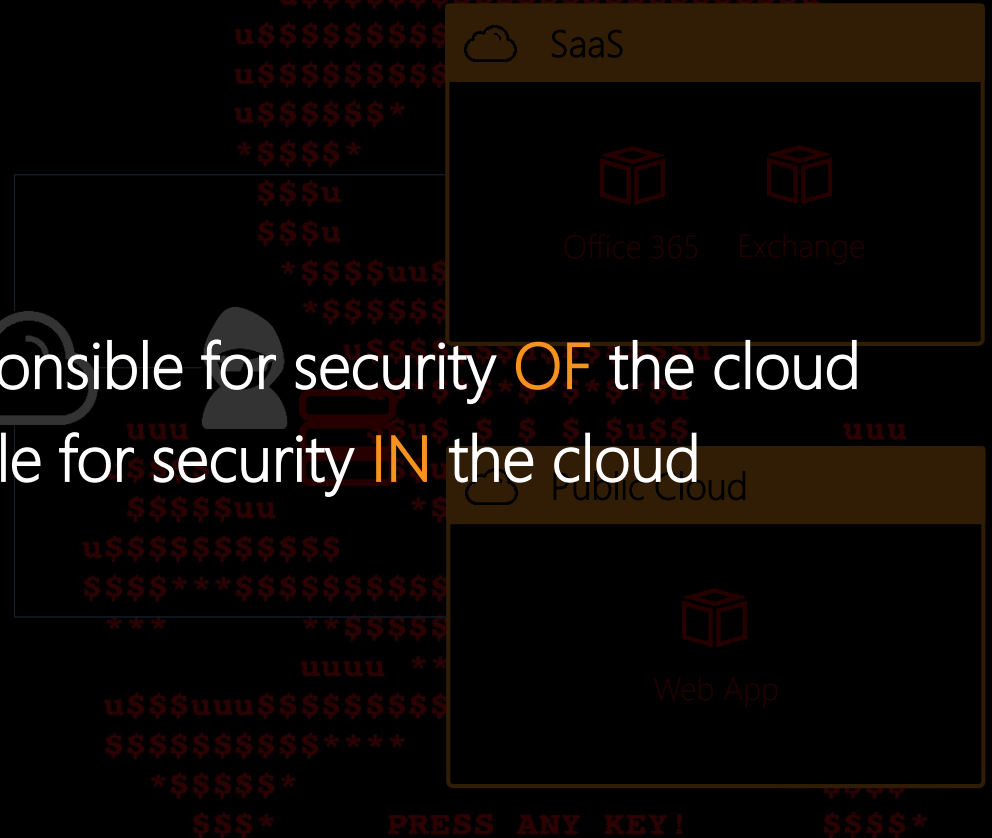
Multi-Vector Attack



Multi-Vector Attack



Cloud providers are responsible for security **OF** the cloud
YOU are responsible for security **IN** the cloud

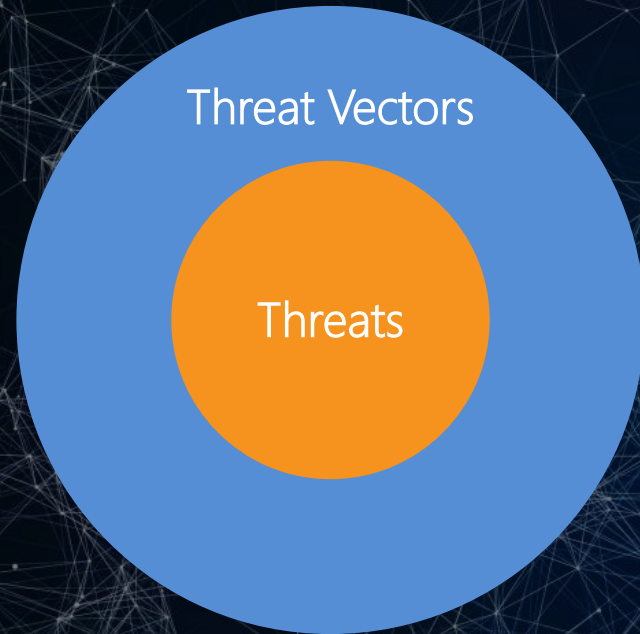


What We Learned

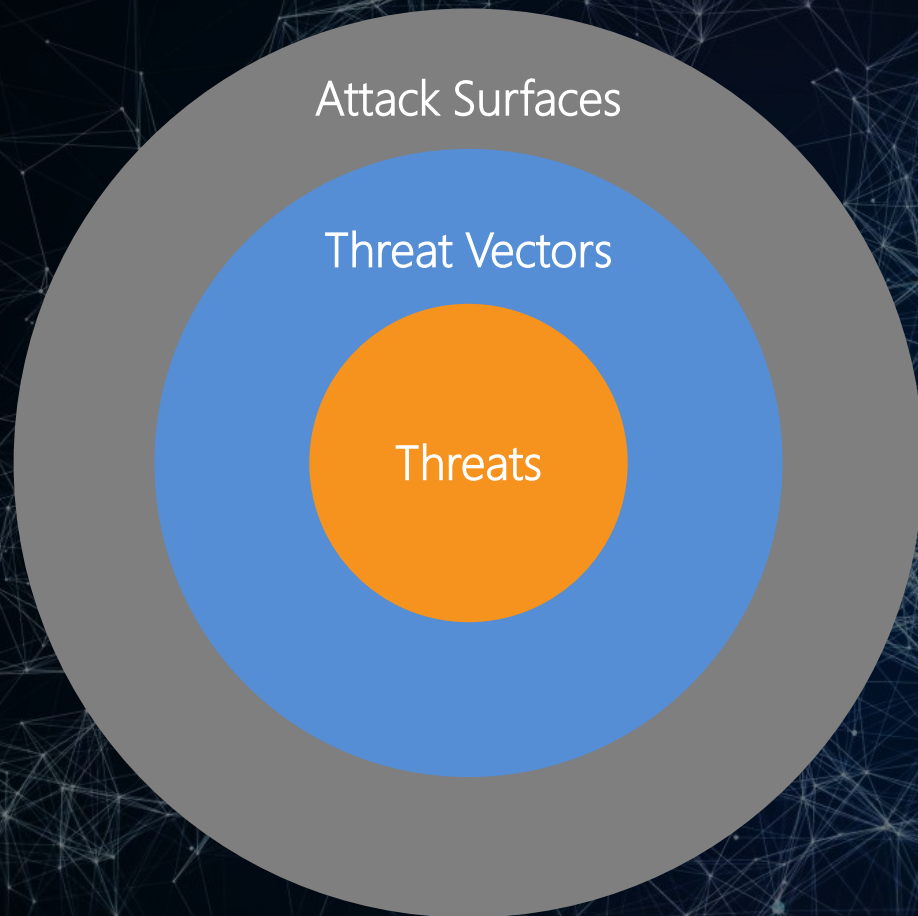


Threats

What We Learned



What We Learned



How Can Barracuda Help?



The Need for End-to-end Security

Detect



Exchange
Threat Scanner



Barracuda
Vulnerability Manager

Prevent



ADVANCED THREAT
PROTECTION

WAF

Barracuda
Web Application Firewall

NG

Barracuda
NextGen Firewall



Barracuda
Essentials
for Microsoft Office 365

WSG

Barracuda
Web Security Gateway

Recover

BU

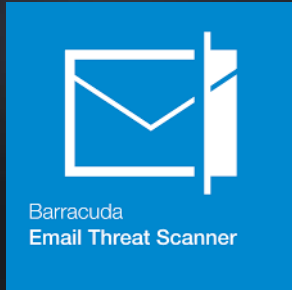
Barracuda
Backup



Detect



Detect Email Threats



Barracuda Email Threat Scanner

- Cloud-based tool integrated with Office 365
 - Scans Office 365 email accounts for advanced threats
 - Identifies senders of threats
- Provides you with reports and recommendations
- Free

Scan your Office 365 account for latent threats



Detect Web Application Threats



Barracuda Vulnerability Manager

- Scan web applications for vulnerabilities
- Provides detailed vulnerability scan reports
- Integrated with Barracuda WAF
- Free

Scan your web applications for vulnerabilities



Prevent



Prevent Email-Borne Threats



Barracuda Essentials

- Comprehensive security, archiving, and backup solution for Office 365 or Exchange
- Compatible with on-premises and hybrid configurations
- Built on proven Barracuda SaaS solutions

Secure your email



Prevent Typosquatting



Barracuda Link Protection

- Secures against typosquatted domains
 - Foreign language spelling (exemple.com)
 - Homograph (example.com)
 - Misspelling based on typo (examlpe.com)
 - Different top-level domain (example.org)
- Provides integrated end-user security training

Train your users



Prevent Hacks



Barracuda Web Application Firewall

- Application security and DDoS protection
- Load balancing and server health monitoring
- Inbound and outbound inspection
- Granular identity and access management

Secure your web applications from vulnerabilities



Prevent Hacks



Barracuda Vulnerability Remediation Service

- Everything BVM offers plus:
 - Remediate vulnerabilities automatically on a Barracuda WAF
 - Schedulable or on-demand
 - Manage vulnerability workflow/lifecycle
- Free

Simplify and streamline your web application deployments



Prevent Network Breaches



Barracuda NextGen Firewall

- Powerful network firewall
- Full application control
- Full user awareness
- Intelligent traffic management
- Comprehensive security layers
- Centrally manage all functions

Secure your network perimeter



Prevent Spyware



Barracuda Web Security

- Filters content, malware, social media and rogue application threats
- Enforce corporate web usage policies
- Protect against web-based threats
- Monitor network and user activity
- Secure laptops and mobile devices

Secure your users everywhere



Prevent Advanced Threats

Barracuda Advanced Threat Protection

- Comprehensive, real-time, defense-in-depth
 - Against **all** threats
 - Across **all** threat vectors
 - On **all** attack surfaces
- Layered threat detection optimized for speed, accuracy, and coverage
- Global threat intelligence network

Secure against threats in real time



Global Threat Intelligence

All Threat Vectors



Network



Email



Web



Mobile Users



Application

Honey Pots

Crawlers

240,000
Deployments

Customer
Submissions

Barracuda Labs

Threat
Intelligence

All Advanced Threats



ADVANCED THREAT
PROTECTION

CPU Emulation Sandboxing

Static Analysis

Behavioral Analysis

Signature Analysis

Machine Learning

Queries

Barracuda Security Solutions

ESS

Email Security Service

ESG

Email Security Gateway

WSG

Web Security Gateway

NG

NextGen Firewall

WAF

Web Application Firewall

Benefits of the Layered Approach

Layered pre-filtering for faster response times

- ~ 95% of attacks are caught through the pre-filters within seconds

High performance CPU emulation sandbox

- Detects threats designed to evade traditional sandboxes
- Provides detailed reports for auditing and forensics

Machine learning for increased efficiency and accuracy

- Analysis results are shared across layers to cover threats
- Minimal false positives



Recover



Recover By Regularly Backing Up Your Data



Barracuda Backup

- Comprehensive, cloud-integrated solution for protecting your environment
- Simple to deploy and easy to manage
- Replaces multi-vendor piecemeal backup solutions

Use Backup to protect your data



A Comprehensive Solution



Our Security Platform

Secure against all threats

On all threat vectors

Across all attack surfaces



Any User



Any App



Any Platform



Any Cloud



From Anywhere



Simplified IT

30-Day free evaluation

Simple pricing model

24x7 support

4 Year Hardware Refresh



Moving Forward



Next Steps

Consider your current security posture or...

Contact us for an risk assessment

Get a **free** Office365 Email Threat Scan

- <http://scan.barracuda.com>

Get a **free** Web Application Scan

- <http://appscan.barracuda.com>



Thank You



THANKS!

Evaluations & Door Prizes Learning Center Offer

3 Races Each with Prizes For:
Fastest Time!
Most Enthusiastic!
Best Rookie Driver!

