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Introduction to E-mail System

- ✓ E-mail is the popular form of sending or exchanging information between two or many parties
- ✓ Despite being popular, malware, spam and phishing attacks are executed

E-mail also acts the entry point for the enterprise network to gain access to their valuable data

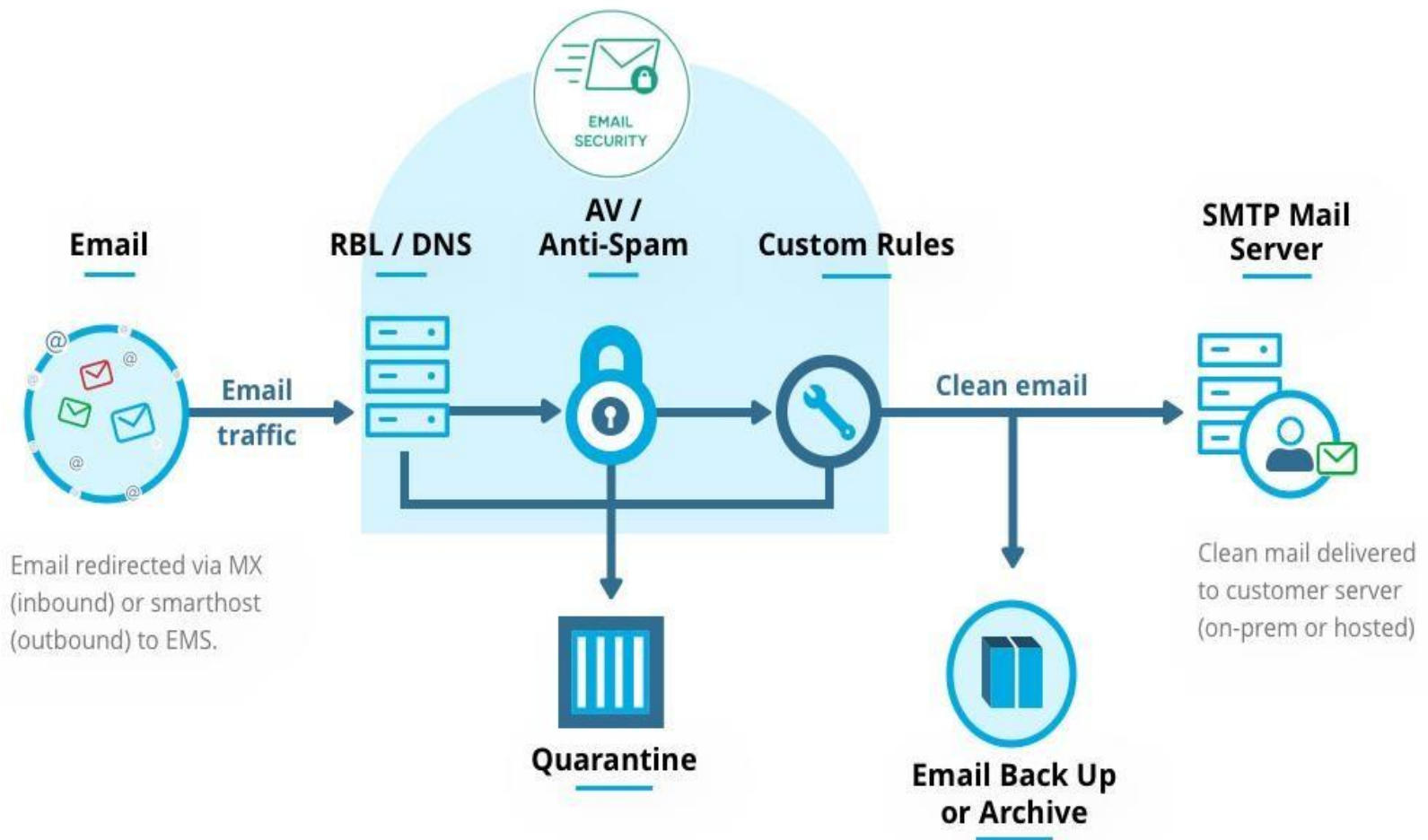
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E-mail Security

- It deals with the different techniques to secure the information sent through email
- The e-mail accounts are prevented from unauthorized access, loss, or compromise
- It is important to provide e-mail security as individuals and business organizations expand their extensive communication through email

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E-mail Security



Need for E-mail Security

- Every organisation must employ e-mail administrators responsible in providing security to the e-mail system
- It is important to provide e-mail security as individuals and business organizations expand their extensive communications through e-mail
- Hence E-mail messages must be secured as they are delivered and received across untrusted networks

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Importance of E-mail Security

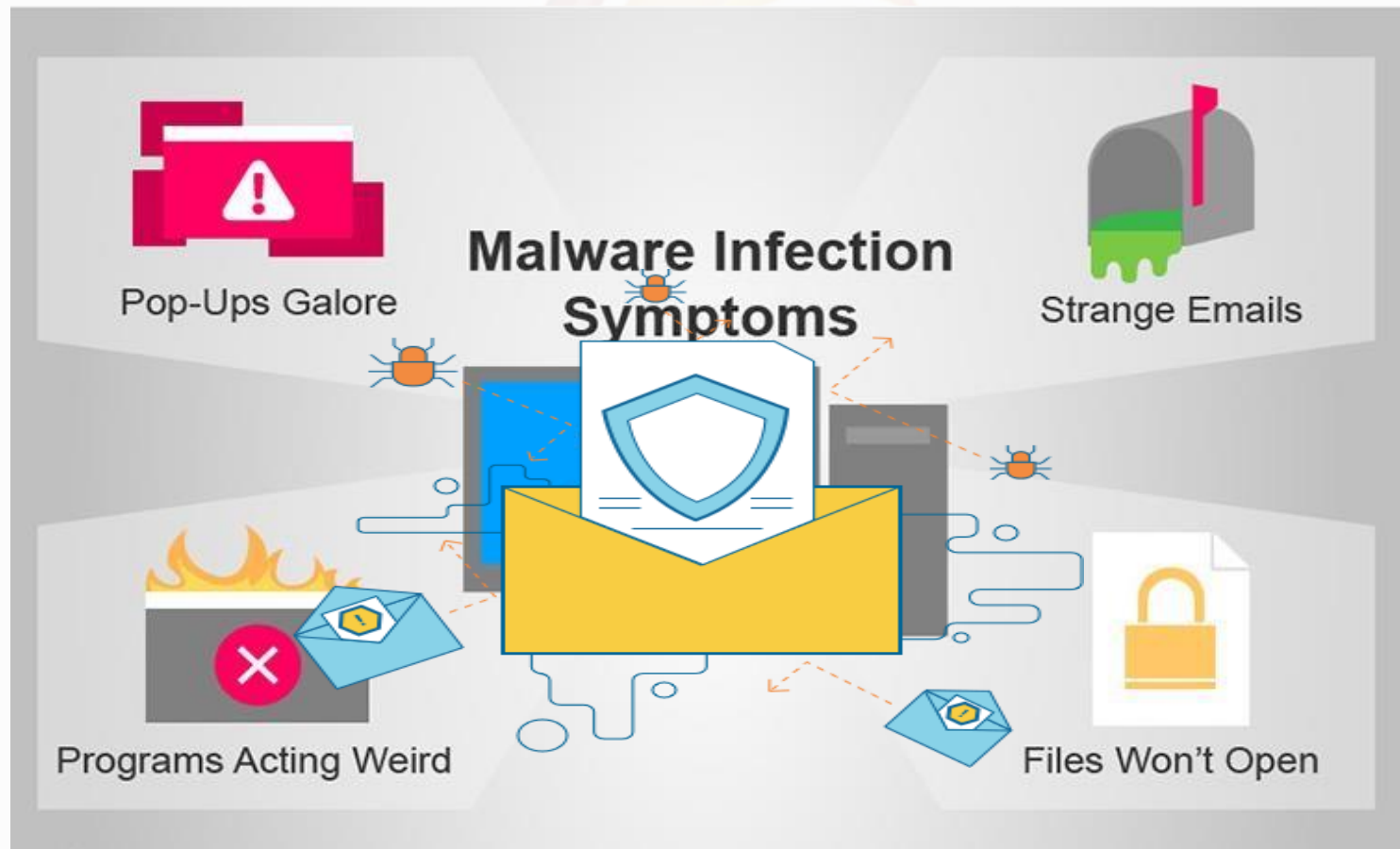
- It provides security over external networks security i.e., outside the organization's boundary
- It maintains the CIA of information transferred through e-mail
- It provides implementation of good management system planning by continuous monitoring
- It also maintains the effectiveness of the e-mail system and IT infrastructure

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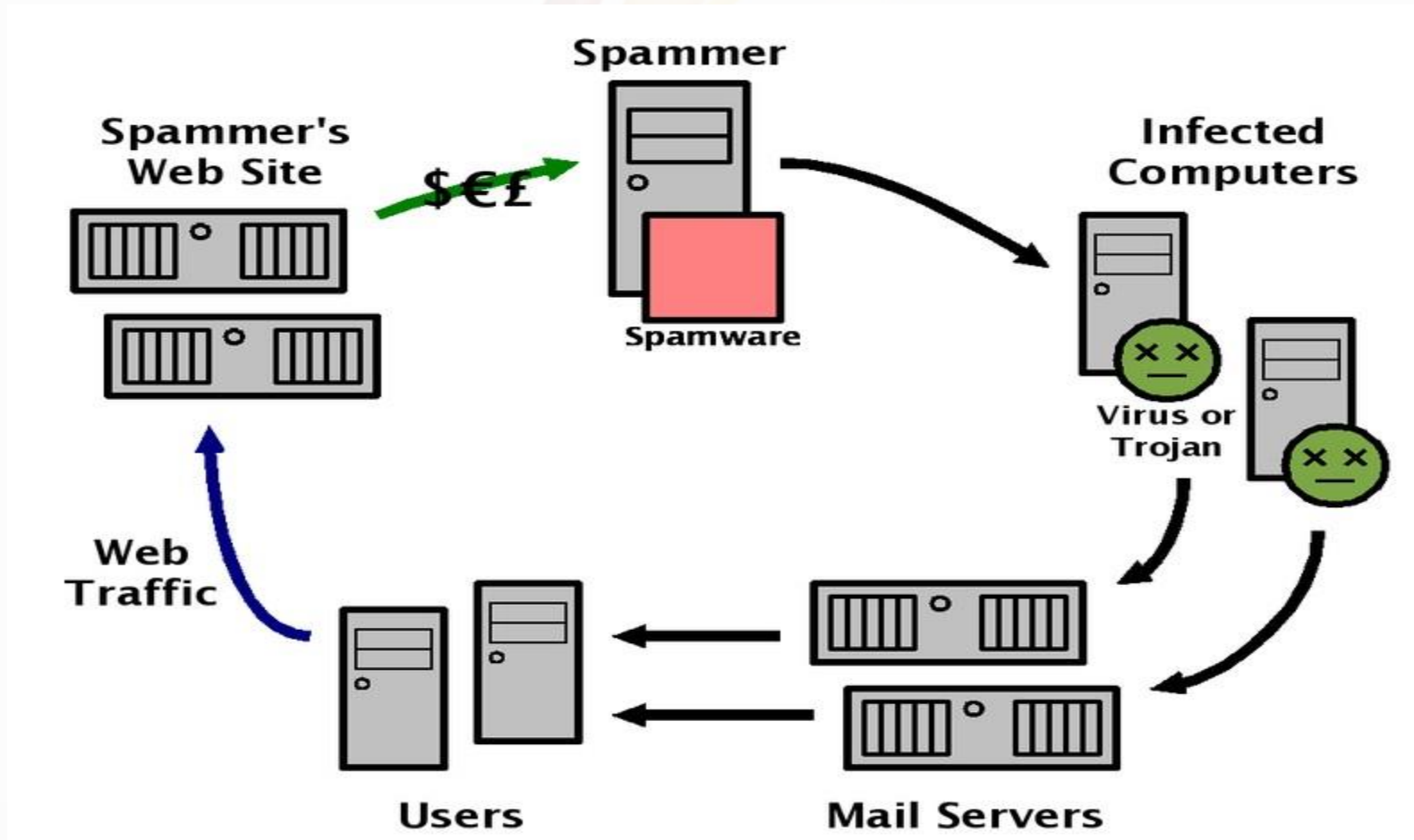
Common Threats to e-mail security



Malwares infecting E-mail systems




Cycle of spam in E-mail system



Ways to spot phishing E-mails



7 WAYS TO SPOT A PHISHING ATTACK

Protect your  Passwords  Financial Info  Identity  Money

Salutation
uses generic greeting like "Dear customer"

Poor spelling or grammar.

Request for personal information.

The sender's address
doesn't match the Display Name of the organisation.

Don't open attachments or click links.
Hover over the link to reveal its true destination.

Footer should contain a physical company address and an unsubscribe button.

Threats or Free Stuff
creating a sense of urgency.

From: Government Gateway-HMRC ggtax@yahoo.net

Sent: Friday, June 9, 2017, 2.15AM

To: <your-email@domain.com>

Subject: Online Submission for Reference 85937829

 **Tax Refund**

Dear Applicant,

After the last submission of your fiscal activity for the year 2017 we have [recalciate you're](#) payment and determined that you are due a tax refund of 416.26 GBP.

In order to claim your refund online you must [follow this link](#) to fill out [your details](#). If you don't complete this form [within 48 hours](#) your refund will no longer be available.

[Help](#) [My Account](#) [Contact us](#)

Please do not reply to this email.

www.malware.com

Maintaining a Secure Mail System

- Maintaining a mail system security is a continuous process that requires constant effort, resources, and vigilance
- Some of the actions taken are as follows,
 - Configure, Protect, and Analyze Log Files
 - Back up Data Frequently
 - Protect against Malware
 - Perform Periodic Security Testing

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References

- Michael Gregg. 2008. Build Your Own Security Lab: A Field Guide for Network Testing. Wiley Publishing.
- Steven DeFino and Larry Greenblatt. 2012. Official Certified Ethical Hacker Review Guide: For Version 7.1 - EC-Council Certified Ethical Hacker (Ceh (1st. ed.)). Course Technology Press, Boston, MA, USA.
- David H. Ramirez-IPTV Security Protecting High-Value Digital Contents-Wiley(2008)

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Thank You