

Blue Team Level 1 Certification
(Standard)

✓ Security Controls

5 Topics 1 Quiz

✓ Networking 101

6 Topics 1 Quiz

✓ Management Principles

4 Topics 1 Quiz

PHISHING ANALYSIS DOMAIN

✓ PA1) Introduction to Emails and Phishing

7 Topics 1 Quiz

✓ PA2) Types of Phishing Emails

10 Topics 2 Quizzes

✓ PA3) Tactics and Techniques Used

12 Topics 2 Quizzes

✓ Section Introduction: Tactics and Techniques

✓ Spear Phishing

✓ Impersonation

✓ Typosquatting and Homographs

✓ Sender Spoofing

✓ HTML Styling

✓ Attachments

✓ Hyperlinks

✓ URL Shortening Services

✓ Use of Legitimate Services

✓ Business Email Compromise

✓ [Video] Tactics and Techniques & Examples

□ Activity) Reporting on Tactics Used

□ Activity) End of Section Review: Tactics and Techniques

✓ PA4) Investigating a Phishing Email

8 Topics 2 Quizzes

✓ PA5) Analysing URLs, Attachments, and Artifacts

8 Topics 1 Quiz

○ PA6) Taking Defensive Actions

12 Topics 1 Quiz

○ PA7) Report Writing

7 Topics 1 Quiz

○ PA8) Phishing Response Challenge

3 Topics 1 Quiz

THREAT INTELLIGENCE DOMAIN

○ TI1) Introduction to Threat Intelligence

7 Topics

○ TI2) Threat Actors & APTs

6 Topics 2 Quizzes

○ TI3) Operational Threat Intelligence

7 Topics 1 Quiz

○ TI4) Tactical Threat Intelligence

7 Topics 1 Quiz

○ TI5) Strategic Threat Intelligence

Typosquatting and Homographs

Blue Team Level 1 Certification (Standard) > PA3) Tactics and Techniques Used > Typosquatting an...

COMPLETE

Phishing Analysis TYPO SQUATTING



This lesson will cover two visual-based tactics used to trick recipients into thinking that an email address or domain is legitimate; typo squatting and homographs.

TYPOSQUATTING

Typo squatting is the act of impersonating a brand or domain name by misspelling it, such as missing letters or including additional ones. Below are some examples of domains that are typo squatting the real SBT domain, securityblue.team.

- securityblue.team
- securityblue.team
- securtyblue.team

At a glance, they all look somewhat legitimate. It's only when you really focus on them that you can identify the issues.

- The 'l' in "security" is actually a lowercase L
- There are two L's in "blue"
- There is no 't' in "security"

Large organizations may choose to generate a list of similarly-named domains, and either use a monitoring solution to see if someone has registered any of them, or they can pay the cost to register them under the business name, preventing anyone else from taking them.

We've purchased one of our potential typo squat domains, [securlyblue.team](#) – check it out!

Typo squatting Example Walkthrough

This tactic is used when registering a domain, as it allows the typo squatted name to be used for a website, and even custom emails. Let's walk through a mock scenario, where attackers want to send a spear phishing email to a member of the HR department at Dickson United, in order to retrieve personal information on an employee working in the company's IT service desk as preparation for blackmailing the employee into providing the hackers with remote access to company servers.

The hackers know that John Doe is a service desk analyst within the IT support team at Dickson United. Samantha Moore is new to the organization, and works in HR. The domain for the organization is [DicksonUnited.co.uk](#) – so the attackers decide to register DicksonUnted.co.uk.

DicksonUnited.co.uk
DicksonUnted.co.uk

The attackers discover Samantha's work email address based on a standard naming convention (samantha.moore@DicksonUnited.co.uk). Because the attackers own the typo squatting domain, their web host also offers webmail accounts through Office365, meaning the attacks can create an email address such as "anything@dicksonunted.co.uk". The attackers decide to pose as a senior HR manager Chloe Wood. They register the mailbox "Chloe.wood@dicksonunted.co.uk".

They send the tailored email to Samantha Moore, posing as the senior HR manager Chloe Wood. At a glance, the typo squatting sending email address looks completely legitimate. Samantha believes she is being contacted by her

> TOPICS1 QUIZ

TI6) Malware and Global Campaigns

6 Topics1 Quiz

DIGITAL FORENSICS DOMAIN

DF1) Introduction to Digital Forensics

5 Topics

DF2) Forensics Fundamentals

10 Topics5 Quizzes

DF3) Digital Evidence Collection

8 Topics1 Quiz

DF4) Windows Investigations

3 Topics3 Quizzes

DF5) Linux Investigations

4 Topics2 Quizzes

DF6) Volatility

3 Topics1 Quiz

DF7) Autopsy

4 Topics1 Quiz

SECURITY INFORMATION AND EVENT MANAGEMENT DOMAIN

SI1) Introduction to SIEM

7 Topics1 Quiz

SI2) Logging

6 Topics2 Quizzes

SI3) Aggregation

2 Topics1 Quiz

SI4) Correlation

6 Topics1 Quiz

SI5) Using Splunk

5 Topics2 Quizzes

INCIDENT RESPONSE DOMAIN

IR1) Introduction to Incident Response

8 Topics1 Quiz

IR2) Preparation Phase

10 Topics2 Quizzes

IR3) Detection and Analysis Phase

7 Topics4 Quizzes

IR4) Containment, Eradication, and Recovery Phase

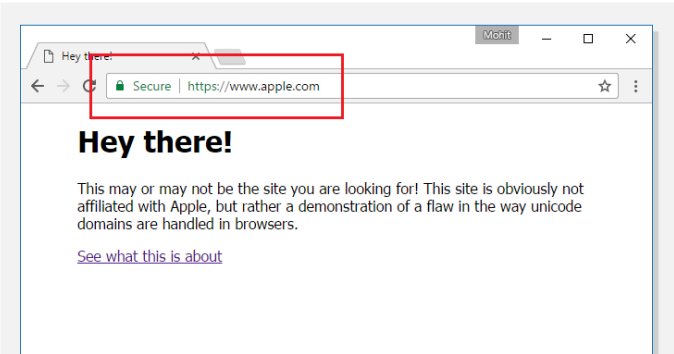
5 Topics1 Quiz

superior and completes the request, sending "Chloe" personal information on the true target, John Doe.

HOMOGRAPHS

A homograph phishing attack is virtually impossible for users to spot. This attack exploits the fact that many different characters look exactly alike. These characters are called homographs, and the problem is with how the characters are encoded using Unicode.

Wikipedia summarizes that "Unicode incorporates numerous writing systems, and, for a number of reasons, similar-looking characters such as Greek O, Latin O, and Cyrillic O were not assigned the same code. So, the Latin "o" and the Cyrillic "o" have a different Unicode and are therefore different letters." It also means domains with those two different Os are two different domains. Domains using non-Latin letters are referred to as internationalized domain names (IDN) and are used quite frequently in homograph attacks.



The scary fact is that users can't spot this attack, meaning that security awareness training is ineffective at preventing users from interacting with phishing emails that utilise homographs for domain names and email addresses. This issue needs to be addressed using effective email security technology, such as tools that visit hyperlinks within emails to identify if they are malicious or not.

A great example of a homograph attack is the [article by BitDefender](#) titled "New Homograph Phishing Attack Impersonates Bank of Valletta". Another good resource is this [article by The Hacker News](#) that talks about homograph attacks.