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Module Trainer

- JP Villanueva @swagnetow
- Trust & Security Engineer @Bugcrowd
- Programmer, hacker, speaker, gamer!









Module Outline

- 1. Introduction
- 2. Selecting the Correct VRT Category
- 3. Using Styling to Write Effective Reports
- 4. POC||GTFO
- 5. Best Practices



kali:-/Desktop/tools/Sublist3r# python sublist3r.py -d tesla.com

Coded By Ahmed Aboul-Ela - Baboul31a

Enumerating subdomains now for tesla.com

Searching now in SSL Certificates. Searching now in PassiveONS.

1 Total Unique Subdomains Found: 36

www.tesla.com auth.tesla.com

blog.tesla.com comparison.tesla.com eua-origin.tesla.com forums.tesla.com imap.tesla.com

autodiscover.tesla.com

Lyncdiscover.tesla.com model3.tesla.com

naa-origin.tesla.com nas-origin.tesla.com new-dev.tesla.com partners.tesla.com pop.tesla.com powerwall.tesla.com resources.tesla.com shop.testa.com

Searching now in Baidu. Searching now in Yahoo. Searching now in Google. Searching now in Bing... Searching now in Ask. Searching now in Netcraft. Searching now in DNSdumpster. Searching now in Virustotal. Searching now in ThreatCrowd.

Introduction

The Golden Rule

- Treat others the way you want to be treated.
- Consider how it would feel to be on the receiving end of your bug report.
- Respect is key.
- Write to a developer audience, not a security person.



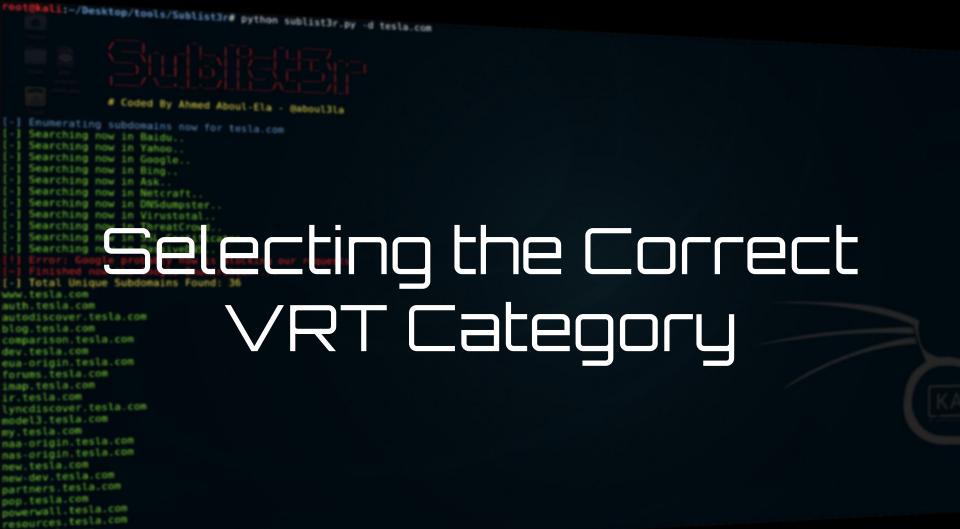
KEEP CALM AND RESPECT OTHERS

Why does it matter?

Submissions that are written well:

- Get paid faster.
- Program owners remember who you are.
- Repeatability allows you to not waste time.





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Selecting the Correct VRT Category



- Understand what your bug actually is
- Understand the impact of your bug finding
- Read the program brief and which categories are excluded from bounty

Selecting the Correct VRT Category

- Researcher Documentation: <u>https://researcherdocs.bugcrowd.co</u> <u>m/</u>
- Check out the Bugcrowd Forum and ask for help: <u>https://forum.bugcrowd.com/</u>
- Take part in the discussions about the VRT on GitHub: <u>https://github.com/bugcrowd/vulner</u> <u>ability-rating-taxonomy</u>



VRT Categories

If a bug class is not represented you can always chose a top level category for your submission.

VRT

Bugcrowd's Vulnerability Rating Taxonomy

Bugcrowd's Vulnerability Rating Taxonomy is a resource outlining Bugcrowd's baseline priority rating, including certain edge cases, for common vulnerabilities. Have a suggestion to improve the VRT? Join the conversation on GitHub.

Taxonomy Methodology Usage guide Version history				
Vulnerability Rating Taxonomy Version 1.4 (current) last updated on 04/13/18 Search table				
Technical Severity▼	VRT Category	Specific Vulnerability Name	Variant / Affected Function	
P1	Server Security Misconfiguration	Using Default Credentials		
P1	Server-Side Injection	File Inclusion	Local	
P1	Server-Side Injection	Remote Code Execution (RCE)		
P1	Server-Side Injection	SQL Injection		
P1	Server-Side Injection	XML External Entity Injection (XXE)		
P1	Broken Authentication and Session Management	Authentication Bypass		
P1	Sensitive Data Exposure	Critically Sensitive Data	Password Disclosure	
P1	Sensitive Data Exposure	Critically Sensitive Data	Private API Keys	
P1	Insecure OS/Firmware	Command Injection		
P1	Insecure OS/Firmware	Hardcoded Password	Privileged User	
P1	Broken Cryptography	Cryptographic Flaw	Incorrect Usage	



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Expectations vs. Reality

What you think your submission looks like vs. what it actually looks like:



Using Markdown



Great looking submissions make it easier to triage. Remember, developers are going to read your submissions to fix the bug you found. Can they understand your bug? Its impact?

Markdown is a researchers best friend.

https://github.com/adam-p/markdown-here/wiki/Markdown-Cheatsheet

https://guides.github.com/pdfs/markdown-cheatsheet-online.pdf

The Final Product

Description

WRITE PREVIEW

Issue

The application contains a vulnerability that allows an attacker to view account data of other users. This class of vulnerability is called an insecure direct object reference.

The vulnerability is exploited on this resource:

http://umbrella.com/accounts/id?=465246

The id parameter can be iterated to a different number like 465245 which will give an attacker access to another users private data.

Steps to Reproduce

- 1. Log into the Umbrella Bank as your @bugcrowdninja.com username.
- 2. Navigate to the Account details page.
- 3. Notice that there is an id parameter in the query string.
- 4. Attach this id parameter into the query string of any page that you would like to access as a different user.
- 5. Change id parameter into a different number other than your own account on the checking account page.
- 6. You will now be looking at another Iron Bank user's account details and see another user's gold, bitcoin, and ethereum holdings.

Impact

Exploiting this vulnerability to it's fullest, an attacker could automate and download through all six digit **id** numbers from 1 to 465246. This would be a complete breach of all user account details for the application. He/She could then use this information to gain trade advantages, or blackmail the business.

Markdown

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<snip>

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Building a Proof of Concept

Write a descriptive title.

• Avoid "CRITICAL or PLZ READ NOW" as they don't help legitimize your submission

Example Titles:

XSS in Search function - [hostname] (search parameter)

or

Insecure Direct Object Reference on [hostname, parameter] - Allows complete compromise of all user account data

Remember to choose the correct target and the correct VRT category

Info Help us get an idea of what this vulnerability is about.	A summary of your submission
Target Select the vulnerable target Targets that are not explicitly in scope may not be eligible for a reward	Select target ~
Technical severity The Vulnerability Rating Taxonomy is the baseline guide used for classifying technical severity.	Select a vulnerability type (e.g., XSS, SQLi)

A severity rating does not match a specific reward

amount, and the approved rating will be unique based on each vulnerability's context after it is reviewed.

Building a Proof of Concept - Continued

- Put the actual URL of where the vulnerability is
- Use Markdown
- Always use screenshots and videos for your POC!
 - You never know when a fix might come and you may need to prove your bug was there at time of submission

Vulnerability details	URL / Location of vulnerability		
Describe the vulnerability, and provide a proof of	https://secure.server.com/some/path/file.php		
concept. How would you fix it?	Description		
	WRITE PREVIEW		
	What is the vulnerability?		
	What is security impact?		
	Replication Steps: 1. Press the button		
	2. Enter `xxx` into the input 3. Boom		
	Proof of Concept:		
	Markdown supported		

Add attachment

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Best Practices

Best Practices



For all of the above it is incredibly important to use reporting templates.

Also:

- Use tools and automation
- Be as verbose in your reports as possible