

DAY 3: Web Exploitation Christmas Chaos

Tool used: kali Linux, Firefox, burbsuite

Solution/Walkthrough:

Q1

What's even worse is that these devices are often exposed to the internet, potentially allowing anyone to access and control it. In 2018 it was reported that a botnet (a number of internet-connected devices controlled by an attacker to typically perform DDoS attacks) called [Mirai](#) took advantage of Internet of Things (IoT) devices by remotely logging, configuring the device to perform malicious attacks at the control of the attackers; the Mirai botnet infected over 600,000 IoT devices mostly by scanning the internet and using default credentials to gain access.

research and study from [tryhackme.com](#)

Q2

In fact, companies such as Starbucks and the US Department of Defense have been victim to leaving services running with default credentials, and bug hunters have been rewarded for reporting these very simple issues responsibly (Starbucks paid \$250 for the reported issue):

research and study from [tryhackme.com](#)

Q3

The screenshot shows a web browser displaying a Hackerone report. The browser's address bar shows the URL <https://hackerone.com/reports/804548>. The Hackerone logo is visible in the top navigation bar. The report details are as follows:

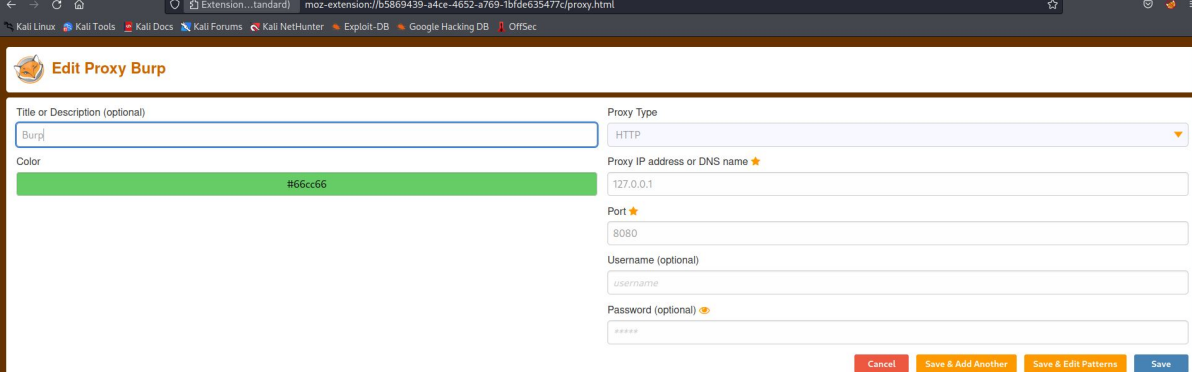
- Report ID:** #804548
- Title:** Santa Sleigh Tracker
- State:** Resolved (I)
- Reported to:** U.S. Dept Of Defense
- Disclosed:** June 25, 2020 9:38am -0400
- Severity:** Critical (9 ~ 10)
- Weakness:** Improper Access Control - Generic
- CVE ID:** None
- Account de...:** None

The timeline of the report shows the following events:

- agent-18 (U.S. Dept Of Defense staff) updated the severity to Critical. (Feb 25th (2 years ago))
- agent-18 (U.S. Dept Of Defense staff) changed the status to **Triaged**. (Feb 25th (2 years ago))
- arm4nd0 posted a comment. (May 10th (2 years ago))
- agent2 closed the report and changed the status to **Resolved**. (May 22nd (2 years ago))
- arm4nd0 posted a comment. (Jun 25th (2 years ago))
- agent-18 (U.S. Dept Of Defense staff) posted a comment. (Updated Jun 28th (2 years ago))
- arm4nd0 posted a comment. (Jun 28th (2 years ago))
- arm4nd0 requested to disclose this report. (Jun 28th (2 years ago))
- ag3nt-j1 (U.S. Dept Of Defense staff) agreed to disclose this report. (Jun 28th (2 years ago))
- This report has been disclosed. (Jun 28th (2 years ago))
- U.S. Dept Of Defense has locked this report. (Jun 28th (2 years ago))

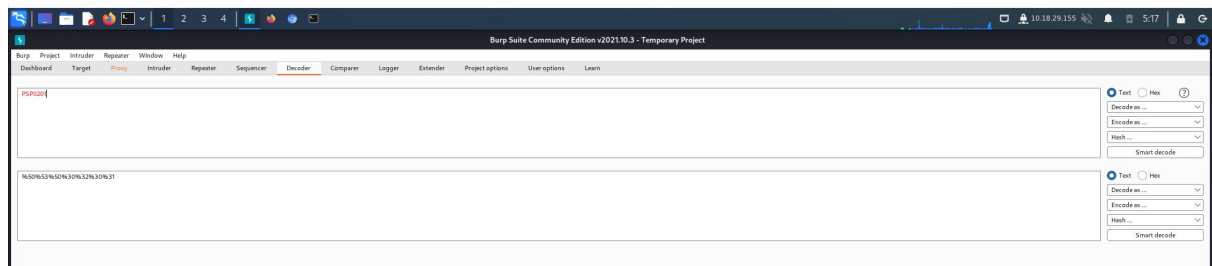
Copy and paste from the [Hackerone.com](#) report

Q4 & Q5



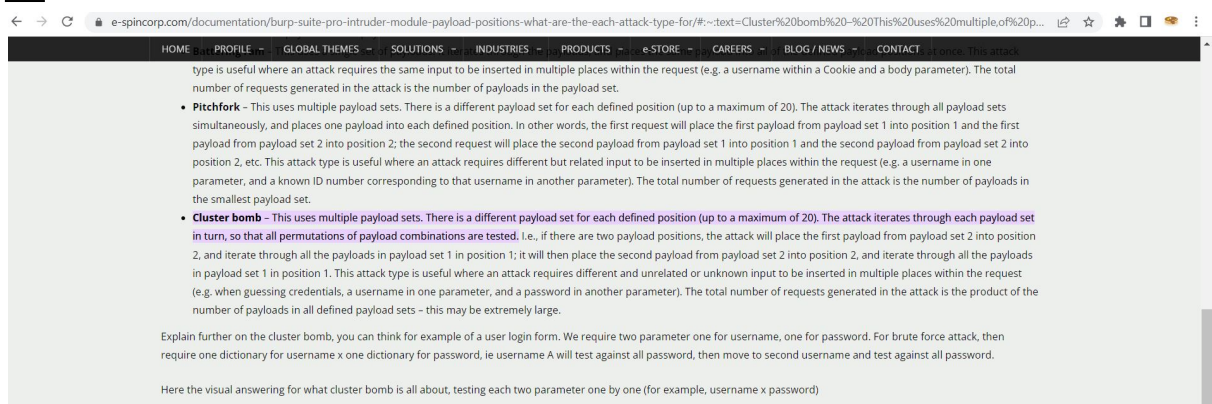
Open foxyproxy's option, then select edit. The value of port and proxy type are shown.

Q6



Go to burpsuite, select the encoder. Type 'PSP0201', choose [url] at the 'encode as' selection, copy the output.

Q7



Research and study from here.

Q8

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Open burp suite, turn on intercept option. After that, place a random input. BurpSuite held the request.

The screenshot shows the Burp Suite Community Edition v2021.10.3 interface. The main window is titled "Burp Suite Community Edition v2021.10.3 - Temporary Project". The top menu bar includes "Burp", "Project", "Intruder", "Repeater", "Window", and "Help". Below the menu bar is a toolbar with tabs: "Dashboard", "Target", "Proxy", "Intruder", "Repeater", "Sequencer", "Decoder", "Comparer", "Logger", "Extender", "Project options", "User options", and "Learn". The "Intruder" tab is active, and the "Payloads" sub-tab is selected. The "Payload Positions" section is visible, showing a list of 15 items. The first item is "1 POST /login HTTP/1.1". The second item is "2 Host: 10.10.56.225". The third item is "3 Content-Length: 27". The fourth item is "4 Cache-Control: max-age=0". The fifth item is "5 Upgrade-Insecure-Requests: 1". The sixth item is "6 Origin: http://10.10.56.225". The seventh item is "7 Content-Type: application/x-www-form-urlencoded". The eighth item is "8 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/96.0.4664.45 Safari/537.36". The ninth item is "9 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9". The tenth item is "10 Referer: http://10.10.56.225/". The eleventh item is "11 Accept-Encoding: gzip, deflate". The twelfth item is "12 Accept-Language: en-US,en;q=0.9". The thirteenth item is "13 Connection: close". The fourteenth item is "14". The fifteenth item is "15 username=\$test\$&password=\$test\$". The "Attack type" dropdown is set to "Cluster bomb". The "Start attack" button is visible. The "Add \$", "Clear \$", "Auto \$", and "Refresh" buttons are also present. The "Search..." field is at the bottom, showing "0 matches". The "Clear" button is also present. The "2 payload positions" and "Length: 617" are displayed at the bottom.

Burp Suite Community Edition v2021.10.3 - Temporary Project

Dashboard Target Proxy Intruder Repeater Sequencer Decoder Comparer Logger Extender Project options User options Learn

1 x 2 x ...

Target Positions Payloads Resource Pool Options

⑦ Payload Positions Start attack

Configure the positions where payloads will be inserted into the base request. The attack type determines the way in which payloads are assigned to payload positions - see help for full details.

Attack type: Cluster bomb

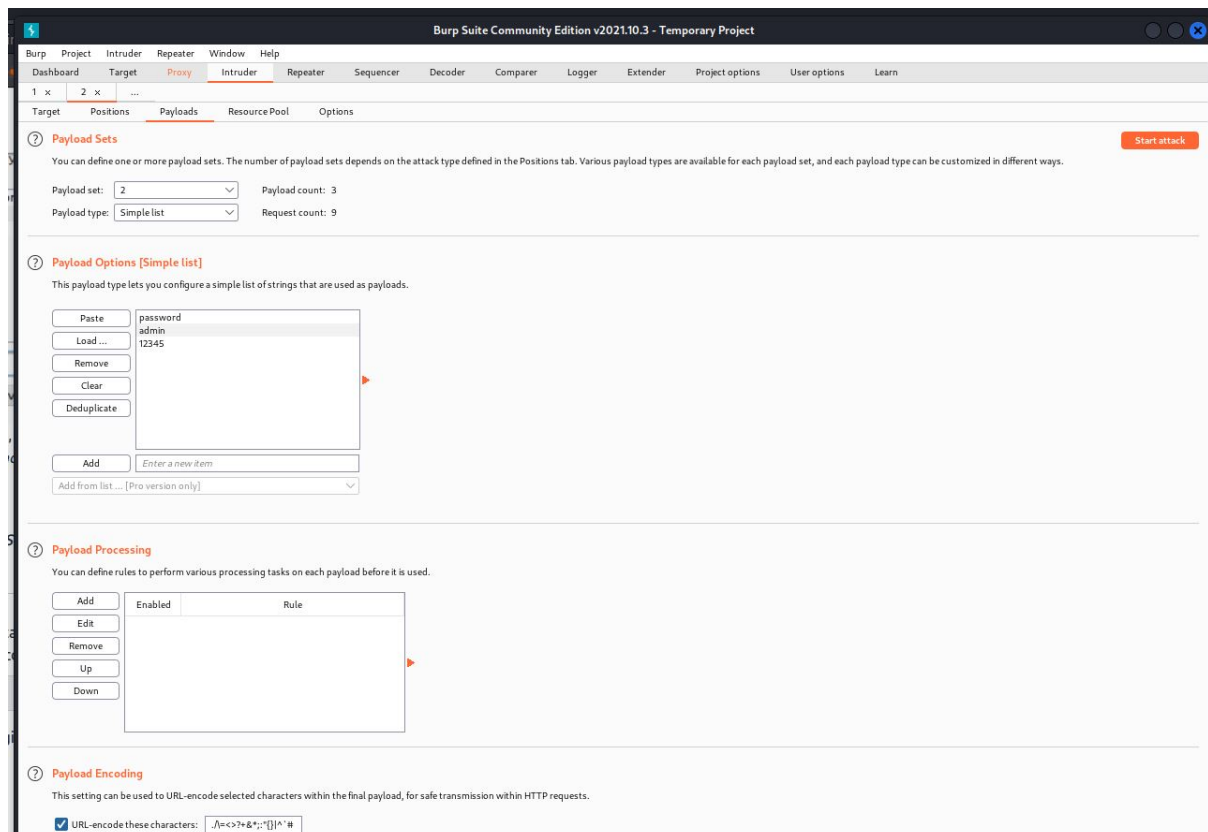
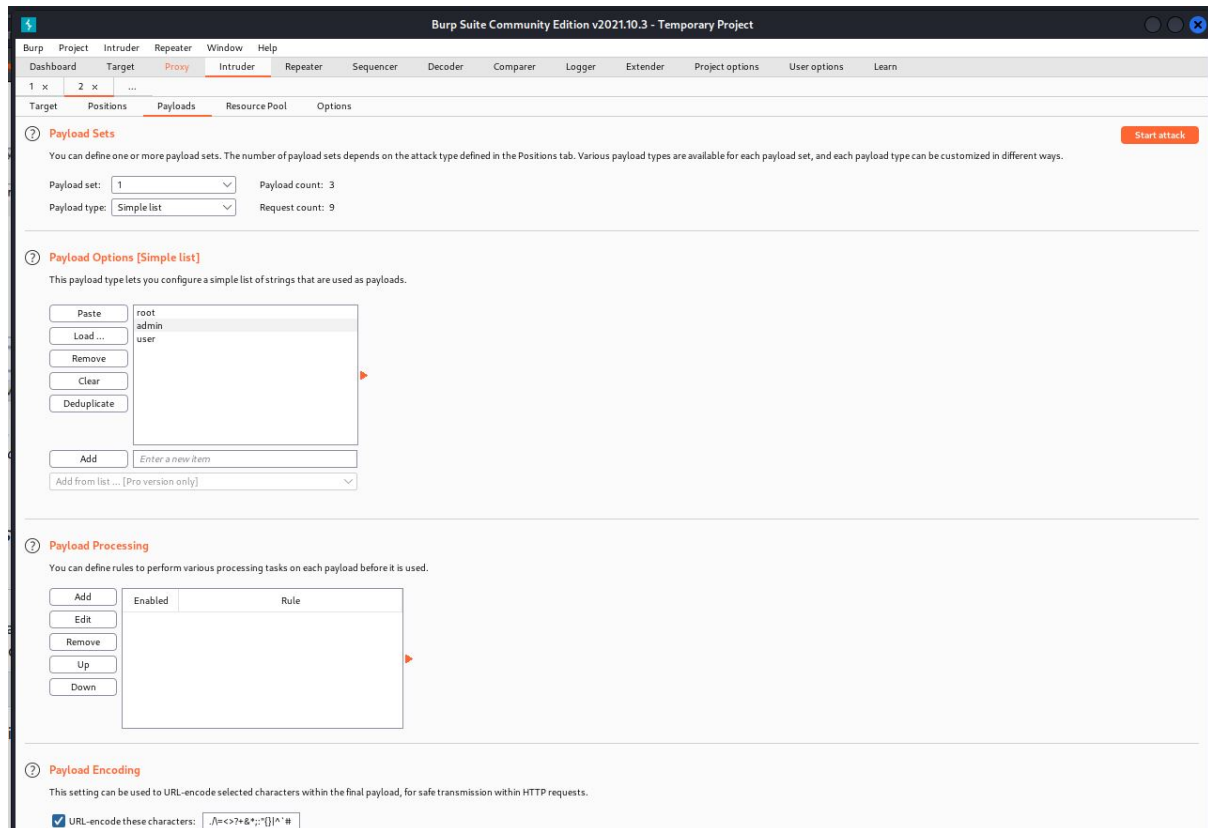
1 POST /login HTTP/1.1
2 Host: 10.10.56.225
3 Content-Length: 27
4 Cache-Control: max-age=0
5 Upgrade-Insecure-Requests: 1
6 Origin: http://10.10.56.225
7 Content-Type: application/x-www-form-urlencoded
8 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/96.0.4664.45 Safari/537.36
9 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
10 Referer: http://10.10.56.225/
11 Accept-Encoding: gzip, deflate
12 Accept-Language: en-US,en;q=0.9
13 Connection: close
14
15 username=\$test\$&password=\$test\$

Add \$
Clear \$
Auto \$
Refresh

⑦ ⏪ ⏩ Search... 0 matches Clear

2 payload positions Length: 617

Send the request to intruder. Then select 'cluster bomb' in 'positon' selection.



Go to 'payloads' selection. In set 1, add several common usernames such as root, admin, user. In set 2, add several common passwords such as password, admin, 12345.