\*\*Cybersecurity Incident Report\*\*

\*\*Incident Summary:\*\*

Several customers reported being unable to access the website www.yummyrecipesforme.com, receiving the error "destination port unreachable." Initial attempts to load the webpage resulted in the same error. A tcpdump log analysis was performed to identify the cause.

\*\*Problem Identified in the tcpdump Log:\*\*

- \*\*Timestamps:\*\* The log contains timestamps indicating when each packet was captured.

- Example: `13:24:32.192571`

- \*\*Outgoing UDP Request:\*\*

- Source IP: 192.51.100.15 (your computer)

- Destination IP: 203.0.113.2 (DNS server)

- Protocol: UDP

- Port: 53 (DNS service)

- Query ID: 35084

- DNS Query: Requesting the IP address for www.yummyrecipesforme.com

- \*\*ICMP Response:\*\*

- Source IP: 203.0.113.2 (DNS server)

- Destination IP: 192.51.100.15 (your computer)

- Protocol: ICMP

- Error Message: "udp port 53 unreachable"

The log shows multiple attempts to query the DNS server, each met with the same ICMP error message.

\*\*Analysis of Data:\*\*

- The initial UDP packets were sent from the computer to the DNS server at port 53 to request the IP address for the domain www.yummyrecipesforme.com.

- The DNS server at 203.0.113.2 responded with an ICMP error message indicating "udp port 53 unreachable."

- The repeated ICMP messages indicate a consistent issue with accessing the DNS service on port 53.

\*\*Possible Cause of the Incident:\*\*

The error message "udp port 53 unreachable" suggests that the DNS server at 203.0.113.2 is not listening on port 53. This could be due to several reasons:

1. \*\*DNS Server Configuration:\*\* The DNS server might be misconfigured or its DNS service might be down.

2. \*\*Firewall or Network Issue:\*\* A firewall or network policy might be blocking access to port 53 on the DNS server.

3. \*\*DNS Service Not Running:\*\* The DNS service on the server might have crashed or been stopped.

\*\*Conclusion:\*\*

The DNS protocol was impacted during this incident. The issue lies in the DNS server at IP address 203.0.113.2, specifically with the UDP port 53 being unreachable. This prevented the resolution of the domain name www.yummyrecipesforme.com to its corresponding IP address, resulting in the error experienced by users.

\*\*Recommendation:\*\*

Immediate steps should be taken to:

- Verify the configuration and status of the DNS service on the server at 203.0.113.2.

- Check for any firewall or network policies that might be blocking UDP traffic on port 53.

- Ensure the DNS service is running and properly configured to listen on port 53.

This analysis should help in diagnosing the root cause and restoring access to the website for the users.