

Practical Title: Wireshark Network Analysis of HTTP Request

Information Security

ICT414

Name: Daniel Chembe Mandalos Date:

Student number: 202202717

November 19, 2025

## 1. Overview and Methodology

This report details the analysis of network traffic captured using Wireshark to identify a simple HTTP GET request and its response made to the target website, www.rocktv.app. The capture lasted approximately one minute, and the data was filtered using the http display filter.

## 2. Analysis of the HTTP Transaction

The following details were extracted from the identified HTTP request and its corresponding response packets.

Detail Field	Request Packet Value	Response Packet Value
Client (Source) IP	192.168.114.249	192.168.114.249
Server (Destination) IP	178.71.137.67	178.71.137.67
URL Requested	http://rocktv.app/	N/A
HTTP Request Method	GET	N/A
HTTP Response Code	N/A	200 OK

This transaction shows a standard web request and response. The Client IP (192.168.114.249) initiated a GET request to the Server IP (178.71.137.67) for the website's main page. The server processed this request and replied with a packet containing the content, confirmed by the 200 OK response code.

## 3. Success Interpretation

Simple Note on Success: The request was successful.

Reasoning: The server responded with an HTTP Response Code of 200 (as seen in packet 380 or 751), which signifies "OK." This means the client's request was received, processed, and the server delivered the requested content (in this case, the main HTML page).

## 4. Observations

**HTTP Request Method:** The transaction used the GET method, which is the standard way to retrieve data from a specified resource (the website's home page, /).

**Packet Size Comparison:** The Response Packet (containing the requested web page content) had a length of approximately 396 bytes. This is a relatively small size, indicating that the initial page content loaded quickly or that the request resulted in a simple landing page or redirect.

## 5. Screenshot of Filtered HTTP Packets

The screenshot shows a Wireshark interface with the following details:

- File Menu:** File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Wireless, Tools, Help.
- Toolbar:** Apps, Places, File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Wireless, Tools, Help.
- Network Interface:** http, phy0.mon.
- Channel:** 1-2.412 GHz, 20 MHz.
- Time:** Nov 19 9:04 PM.
- Packet List:** Shows a list of 136 packets. The 136th packet is highlighted in blue and selected. Its details are as follows:
  - No.:** 136
  - Time:** 2025-11-19 20:51:56.78124...
  - Source:** 18.171.137.67
  - Destination:** 192.168.114.249
  - Protocol:** HTTP
  - Length:** 497
  - Info:** 401 HTTP/1.1 302 Found (text/html)
- Details Pane:** Shows the HTTP response structure with fields like Status-Line, Reason-Phrase, Headers, and Body.
- Bytes Pane:** Shows the raw hex and ASCII representation of the selected packet.
- Status Bar:** The full requested URI (including host name) (http.request.full\_uri) and Packets: 13105 · Displayed: 44 (0.3%)

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- Network Interface:** http.
- Channel:** 1-2.412 GHz, 20 MHz.
- Time:** Nov 19 9:18 PM.
- Packet List:** Shows a list of 13105 packets. The 136th packet is highlighted in blue and selected. Its details are as follows:
  - No.:** 136
  - Time:** 2025-11-19 20:51:56.78124...
  - Source:** 18.171.137.67
  - Destination:** 192.168.114.249
  - Protocol:** HTTP
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