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ROLL - 17

TOPIC – INTRODUCTORY NETWORKING(An introduction to networking theory and basic networking tools)

TASK 2 -> The OSI Model: An Overview

The screenshot shows a web browser window with the URL `tryhackme.com/r/room/introtonetworking`. The page features a dark blue header with the TryHackMe logo and navigation links: Dashboard, Learn, Compete, and Other. On the right side of the header, there are buttons for 'Access Machines', 'Go Premium', and a 'Paused' status indicator. The main content area displays a series of quiz questions related to the OSI model, each with a text input field and a green 'Correct Answer' button. The questions and their answers are as follows:

- Which layer would choose to send data over TCP or UDP? ✓ Correct Answer
- Which layer checks received information to make sure that it hasn't been corrupted? ✓ Correct Answer
- In which layer would data be formatted in preparation for transmission? ✓ Correct Answer
- Which layer transmits and receives data? ✓ Correct Answer
- Which layer encrypts, compresses, or otherwise transforms the initial data to give it a standardised format? ✓ Correct Answer
- Which layer tracks communications between the host and receiving computers? ✓ Correct Answer
- Which layer accepts communication requests from applications? ✓ Correct Answer
- Which layer handles logical addressing? ✓ Correct Answer
- When sending data over TCP, what would you call the "bite-sized" pieces of data? ✓ Correct Answer
- [Research] Which layer would the FTP protocol communicate with? ✓ Correct Answer Hint
- Which transport layer protocol would be best suited to transmit a live video? ✓ Correct Answer

The interface also includes a sidebar on the right with a 'Paused' button and a 'Hint' button.

TASK 4 -> The TCP/IP Model

The screenshot shows the TryHackMe web application interface. The top navigation bar includes links for Dashboard, Learn, Compete, and Other, along with buttons for Access Machines, Go Premium, and a user profile icon. The main content area displays a series of questions related to the TCP/IP model, each with a text input field and a green 'Correct Answer' button. The questions and their answers are as follows:

- Which model was introduced first, OSI or TCP/IP?
Answer: TCP/IP
- Which layer of the TCP/IP model covers the functionality of the Transport layer of the OSI model (Full Name)?
Answer: Transport
- Which layer of the TCP/IP model covers the functionality of the Session layer of the OSI model (Full Name)?
Answer: Application
- The Network Interface layer of the TCP/IP model covers the functionality of two layers in the OSI model. These layers are Data Link, and?.. (Full Name)?
Answer: Physical
- Which layer of the TCP/IP model handles the functionality of the OSI network layer?
Answer: Internet
- What kind of protocol is TCP?
Answer: Connection-based
- What is SYN short for?
Answer: Synchronise
- What is the second step of the three way handshake?
Answer: SYN/ACK
- What is the short name for the "Acknowledgement" segment in the three-way handshake?
Answer: ACK

TASK 5 -> Ping (Networking Tools)

The screenshot shows the TryHackMe web application interface, similar to the previous one. The main content area displays a series of questions related to the Ping command, each with a text input field and a green 'Correct Answer' button. The questions and their answers are as follows:

- Answer the questions below
- What command would you use to ping the bbc.co.uk website?
Answer: ping bbc.co.uk
- Ping *muirlandoracle.co.uk*
What is the IPv4 address?
Answer: 217.160.0.152
- What switch lets you change the interval of sent ping requests?
Answer: -i
- What switch would allow you to restrict requests to IPv4?
Answer: -4
- What switch would give you a more verbose output?
Answer: -v

TASK 6 -> Traceroute (Networking Tools)

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tryhackme.com/r/room/introtonetworking

TryHackMe Dashboard Learn Compete Other Access Machines Go Premium 2

Answer the questions below

Use traceroute on tryhackme.com
Can you see the path your request has taken?

No answer needed ✓ Correct Answer

What switch would you use to specify an interface when using Traceroute?

-i ✓ Correct Answer Hint

What switch would you use if you wanted to use TCP SYN requests when tracing the route?

-T ✓ Correct Answer

[Lateral Thinking] Which layer of the **TCP/IP** model will traceroute run on by default (Windows)?

Internet ✓ Correct Answer

TASK 7 -> WHOIS (Networking Tools)

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tryhackme.com/r/room/introtonetworking

TryHackMe Dashboard Learn Compete Other Access Machines Go Premium 2

Perform a whois search on **facebook.com**

No answer needed ✓ Correct Answer

What is the registrant postal code for facebook.com?

94025 ✓ Correct Answer

When was the facebook.com domain first registered (Format: DD/MM/YYYY)?

29/03/1997 ✓ Correct Answer

Perform a whois search on **microsoft.com**

(Note: Please ensure you have read the task above before attempting the next questions.)

No answer needed ✓ Correct Answer

Which city is the registrant based in?

Redmond ✓ Correct Answer

[OSINT] What is the name of the golf course that is near the registrant address for microsoft.com?

Bellevue Golf Course ✓ Correct Answer

What is the registered Tech Email for microsoft.com?

msnhst@microsoft.com ✓ Correct Answer