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### SOAL 1

# **Telecommunications and Network Security**

Telecommunications and network security use various mechanisms, devices, software and protocols that are interrelated and integrated.

Network security is one of the more complex topics in the computer field, mainly because so many components are involved. A network administrator or engineer must know how to configure networking software, protocols and services and devices; deal with interoperability issues; install, configure and interface with telecommunication software and devices; and troubleshoot effectively. A security professional must understand these issues and the vulnerabilities that can arise within the network.

In this CISSP Essentials Security School lesson, Domain 2, Telecommunications and Network Security, expert CISSP exam trainer Shon Harris details the key topics students need to know to pass the CISSP exam. Before watching the special Domain 2, Telecommunications and Network Security video below, it's recommended that students first read the Domain 2 spotlight article, which provides an overview of the concepts presented in the video, such as protocol and stack models, including OSI, abstraction layers, associated protocols and their relationships to each other; core technologies like network topology, LAN, MAN, WAN, cabling and data transmission types, network and telecommunications devices and services, and Webbased intranet and extranet Web technologies; network components and services, devices and resource management; and extension technologies covering remote access methods and wireless technologies.

### SOAL 2

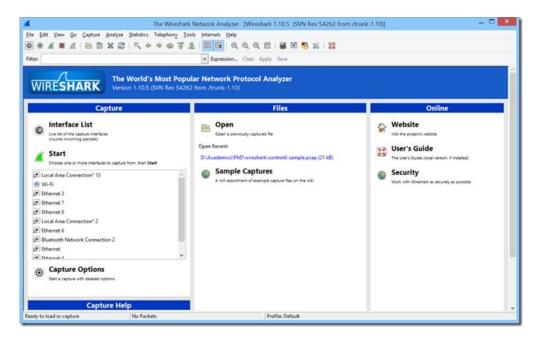
## Wireshark Dalam Melakukan Analisis Paket Data Jaringan

### 1. Wireshark

Wireshark adalah tool yang ditujukan untuk melakukan analisa paket data jaringan. Wireshark melaluka monitoring paket secara real-time selanjutnya Wireshark melakukan penangkapan data dan menampilkannya selengkap mungkin.

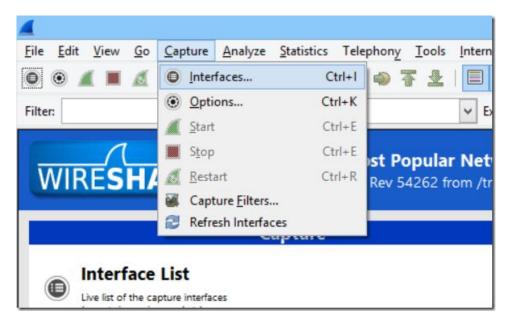
### 2. Instalasi

Aplikasi Wireshark sudah tersedia untuk platform Windows, Linux, Unix dan Mac. Pembaca dapat mengunduh aplikasi Wireshark melalui portalnya dengan alamat http://www.wireshark.org/download.html. Unduh sesuai dengan platform dan ikuti petunjuk instalasinya.

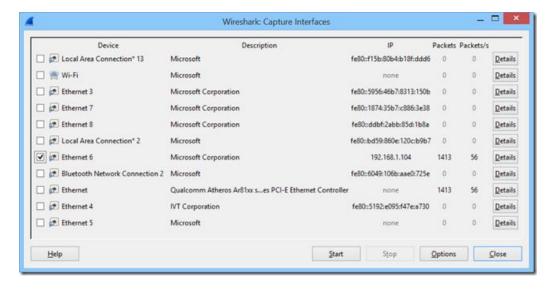


# 3. Cara Menggunakan Wireshark

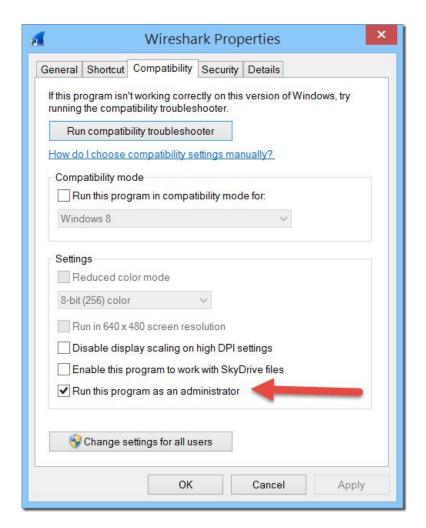
Untuk menggunakan Wireshark tidaklah susah, cukup klik menu Capture dan pilih Interfaces.



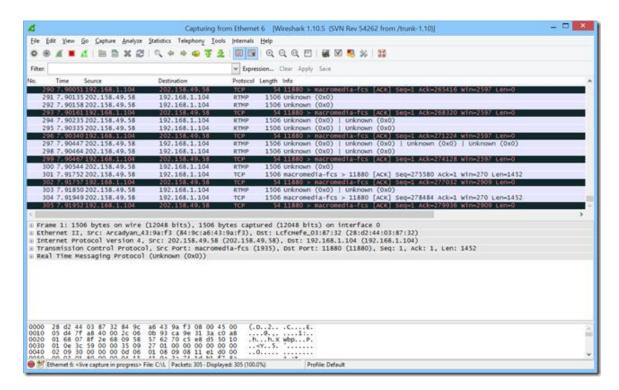
Selanjutnya kita akan mendapatkan kotak dialog seperti dibawah ini.



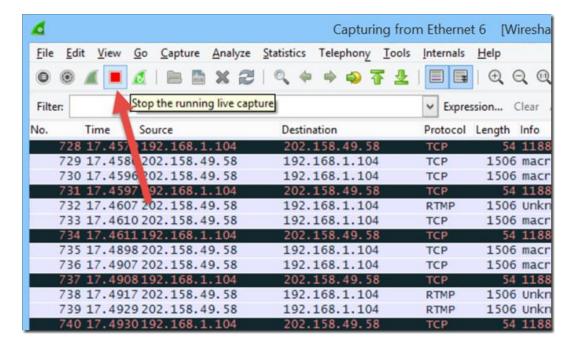
Centang network adapter yang akan dilakukan monitoring. Apabila kita tidak menemukan network adapter padahal kita memilki maka ini biasanya terkait dengan sekuriti. Pada Windows, jalankan Wireshark sebagai Administrator (RunAS) atau konfigure file wireshark untuk dijalankan sebagai administrator.



Sedangkan pada Linux misalkan Ubuntu, anda bisa menggunakan sudo untuk menjalankan Wireshark. Opsi lain anda bisa menjalankan command ini. sudo chgrp adm /usr/bin/dumpcap sudo chmod 750 /usr/bin/dumpcap sudo setcap cap\_net\_raw,cap\_net\_admin+eip /usr/bin/dumpcap Ok, kita balik ke Interfaces. Setelah kita memilih network adapter yang akan digunakan untuk monitoring packet maka kita akan mendapatkan paket jaringan seperti ini.



Untuk menghentikan proses monitoring, klik ikon kotak merah seperti dibawah ini.



Kemudian kita dapat melakukan filter paket jaringan misalkan http.

