Wireshark

Outlines:

- **What is Wireshark?**
- **A brief history of Wireshark**
- **Some intended purposes**
- **Features**
- **What Wireshark is not**

What is Wireshark?

- Wireshark is a network packet analyzer. A network packet analyzer will try to capture network packets and tries to display that packet data as detailed as possible.
- You could think of a network packet analyzer as a measuring device used to examine what's going on inside a network cable, just like a voltmeter is used by an electrician to examine what's going on inside an electric cable.

A brief history of Wireshark

- In late 1997, Gerald Combs needed a tool for tracking down networking problems and wanted to learn more about networking, so he started writing Ethereal (the former name of the Wireshark project) as a way to solve both problems.
- Ethereal was initially released, after several pauses in development, in July 1998 as version 0.2.0. Within days, patches, bug reports, and words of encouragement started arriving, so Ethereal was on its way to success.
- Not long after that, Gilbert Ramirez saw its potential and contributed a low-level dissector to it.
- In October, 1998, Guy Harris of Network Appliance was looking for something better than tcpview, so he started applying patches and contributing dissectors to Ethereal.
- In late 1998, Richard Sharpe, who was giving TCP/IP courses, saw its potential on such courses, and started looking at it to see if it supported the protocols he needed. While it didn't at that point, new protocols could be easily added. So he started contributing dissectors and contributing patches.
- The list of people who have contributed to the project has become very long since then, and almost all of them started with a protocol that they needed that Wireshark or Ethereal did not already handle. So they copied an existing dissector and contributed the code back to the team.
- In 2006 the project moved house and re-emerged under a new name: Wireshark.
- In 2008, after ten years of development, Wireshark finally arrived at version 1.0. This release was the first deemed complete, with the minimum features implemented. Its release coincided with the first Wireshark Developer and User Conference, called SharkFest.

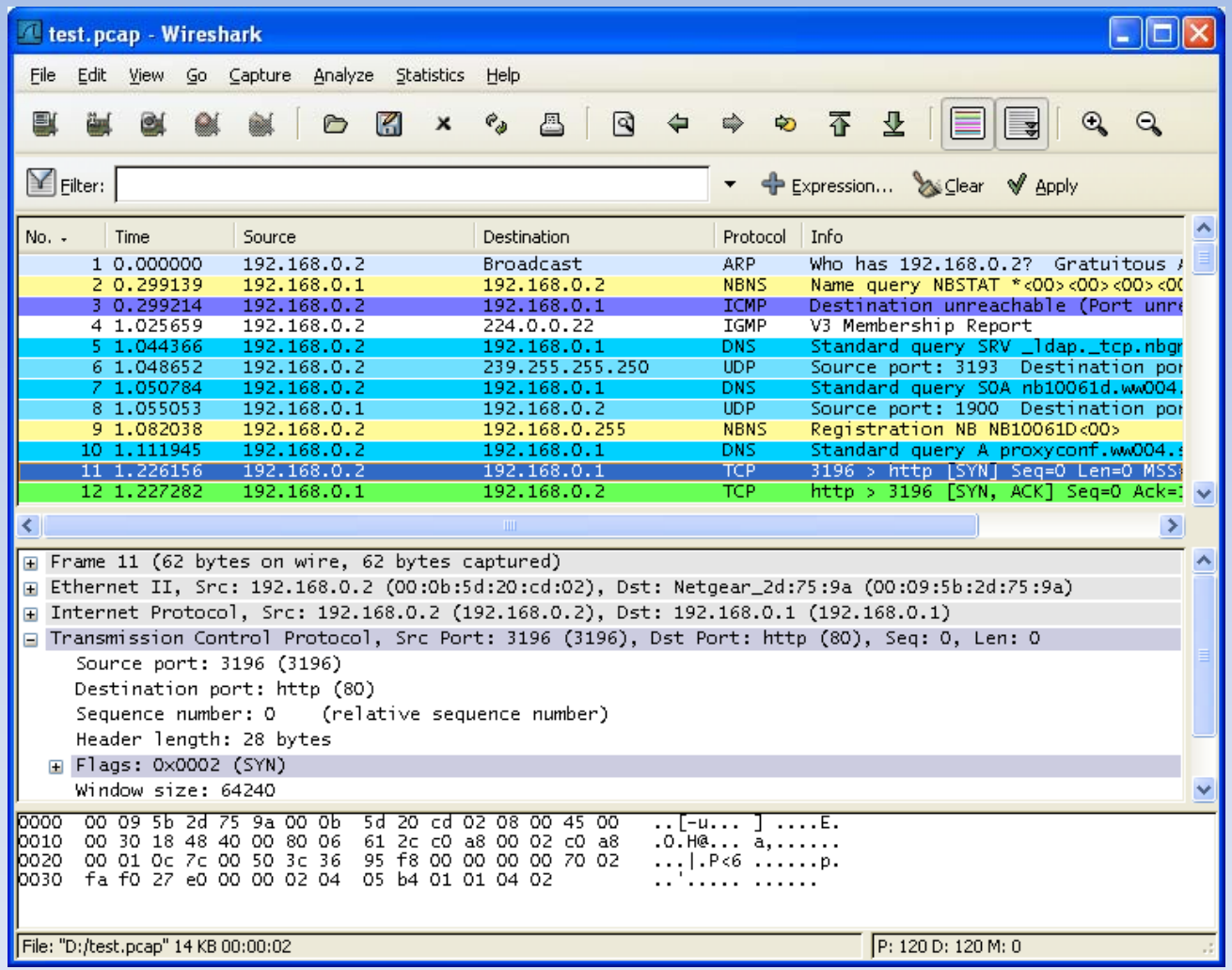
Some intended purposes

- network administrators use it to **troubleshoot network problems**
- network security engineers use it to **examine security problems**
- developers use it to **debug protocol implementations**
- people use it to **learn network protocol** internals

Features

- Available for **UNIX** and **Windows**.
- **Capture** live packet data from a network interface.
- Display packets with **very detailed protocol information**.
- **Open and Save** packet data captured.
- **Import and Export** packet data from and to a lot of other capture programs.
- **Filter packets** on many criteria.
- **Search** for packets on many criteria.
- **Colorize** packet display based on filters.
- Create various **statistics**.
- ... and **a lot more!**

Wireshark captures packets



What Wireshark is not

- Wireshark isn't an intrusion detection system. It will not warn you when someone does strange things on your network that he/she isn't allowed to do. However, if strange things happen, Wireshark might help you figure out what is really going on.
- Wireshark will not manipulate things on the network, it will only "measure" things from it. Wireshark doesn't send packets on the network or do other active things (except for name resolutions, but even that can be disabled).

Questions

Install the Wireshark
and monitor the packets