



SHARKFEST '14

WIRESHARK DEVELOPER AND USER CONFERENCE

JUNE 16-20 2014 · DOMINICAN UNIVERSITY

Wireshark In the Large Enterprise

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A colorful test pattern background consisting of vertical bars of various colors (yellow, cyan, green, magenta, red, blue, white, black, purple, dark blue). A black horizontal bar is overlaid across the center, containing the text "OFF-AIR" in white, bold, sans-serif capital letters.

OFF-AIR

Due to an error in video recording, this session was not recorded. I will cover the trace files in separate recordings – give me a month. The last and most interesting trace will be covered in 2014!!!

Information

YouTube Channel with older sessions etc.

www.youtube.com/hansangb

Epoch timestamp: -122283078

Timestamp in milliseconds: -122283078000

Human time (GMT): Tue Feb 15 1966 16:28:42 GMT

Human time (your time zone): 2/15/1966 11:28:42 AM

NET/NET = I'm older than epoch,
the beginning of time

04.2014
Information
(pester me - *PLEASE*)
YouTube Channel with older sessions etc.

www.youtube.com/ksangb

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- T
- Pr
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Slow Throughput, Not always...what you think.

- Old medical school saying: When you hear hooves beating, think horses and not zebras!
- Server SA reports extreme slowness during file transfers
 - What are the top issues that come to mind?
 - Server SA started a ping script and in it showed.....
- Lessons Learned:
 - Learn to recognize what should and should not change as you go through the trace files.
 - RFC1323 was not in play because they are on the same switch!
 - Take a few minutes to scan the trace files. Learn to trust your brain's ability to spot differences.
 - Know how protocols work so you can rule out red-herrings. This is what separates "techs" from "engineers"
 - Try not to filter. You might have missed the "arp" frames in this trace. This is different than capturing in "promiscuous" mode.

Training the Brain

SUNDAY

MONDAY

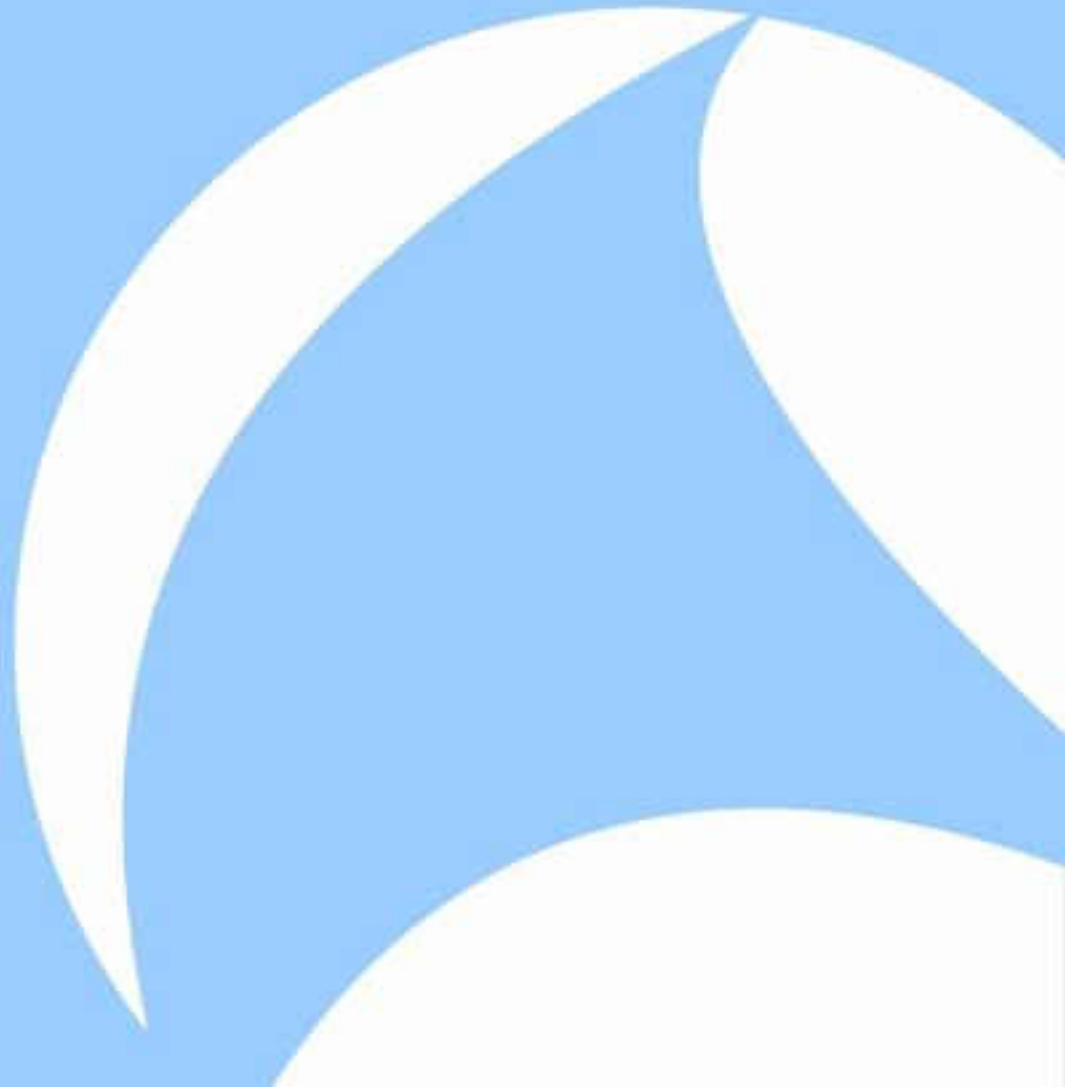
TUESDAY

WEDNESDAY

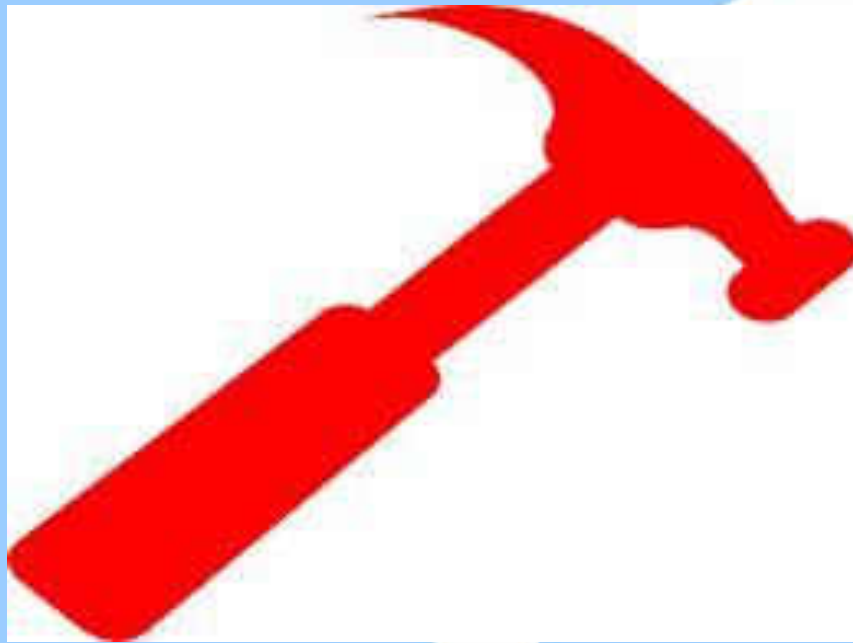
THURSDAY

FRIDAY

SATURDAY



Training the Brain



First signs of danger

- Be on the look out for excessive use of PSH
- The more PSH bits there are, the more chances that it will be chatty
- Previous topics (window size, etc.) still is in play.
- Buffer tearing
 - This is where the application uses PSH bits to set the amount of data “chunk” it is willing to release to the network.
 - It’s the way apps work, you can’t fight it.

Murder Conviction, No Body

- Rule out the usual suspects
 - Window size
 - Buffer tearing
 - RFC1323
- Recognize false positives
 - Sometimes you just have to assume.
- Know the RFCs/Protocols to identify things that are **ABSOLUTELY** wrong.