## Wireshark Developer and User Conference

#### Network Mysteries & How to Solve Them Mystery 1 - Case of the Slow Network

Wednesday June 15, 2011 - 10:15am - 11:30am

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#### **SHARKFEST '11**

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## Agenda

- You've just been called to solve a mystery.
  Where do you start?
  - What questions to ask
  - What tools do you need
  - Once you have the traces what then?

#### Client Interview

- This is the most critical step more data is better
- Think like a reporter and ask the 5 W's
  - Who is complaining?
    - Are they in different physical locations?
    - If same location, different subnets?
  - What are they complaining about?
    - Which specific applications?
    - Do they have other applications they rely on? AD for example?
  - Where are the clients and servers involved physically?
  - When did it start?
    - Is it constant or intermittent?
  - Why did you call?
    - Are they short on time, expertise, or both?

#### Tools

- Wireshark duh.... ©
- Taps sure makes life easier
- Mirror switches not everyone can afford taps
- Cable tester don't forget layer 1 in the OSI
- 802.11 rfmon capable interfaces AirPcap
- Long term capture device

• Disclosure - I cheat and use Pilot

## Mystery 1

#### Case of the Slow Network

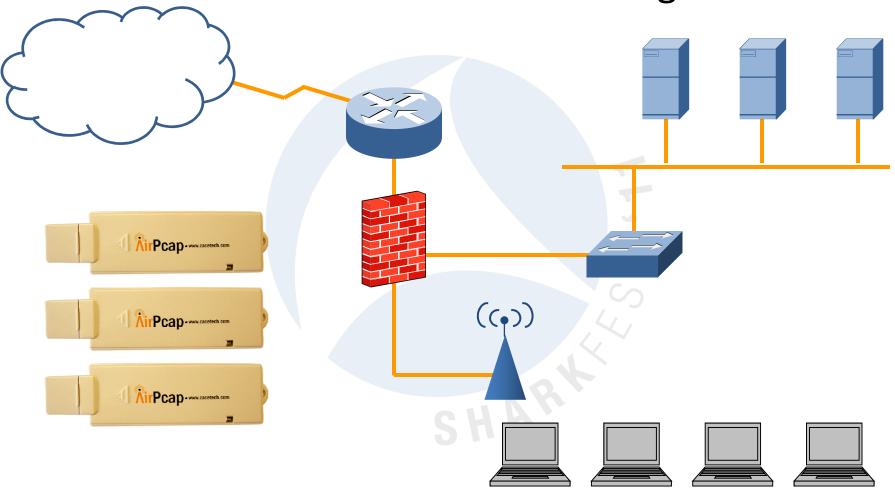
- Users were complaining access to the Internet was slow on the guest wireless network. It just started happening yesterday
- Possible suspects?

1.						
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- 2. \_\_\_\_\_
- 3.
- Possible accomplices? Are there any interdependent protocols involved?

### Crime Scene

Never start without a network diagram



## Tracefile Time

Case of the Slow Network.pcap



# Q & A

• Questions?????



# **Thanks For Coming!**

Enjoy the rest of the conference.