

# Taming the (Wire)Shark - Looking at Network Traces in a New Fashion

## Hands-on Lab

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Session 10828

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# Session Contents 10828

## Taming the (Wire)Shark - Looking at Network Traces in a New Fashion

### Session 10828: Taming the Shark

You have used Wireshark before and found it valuable in your job as a z/OS TCP/IP System Administrator?

Chances are, you've just scratched at the tip of the iceberg.

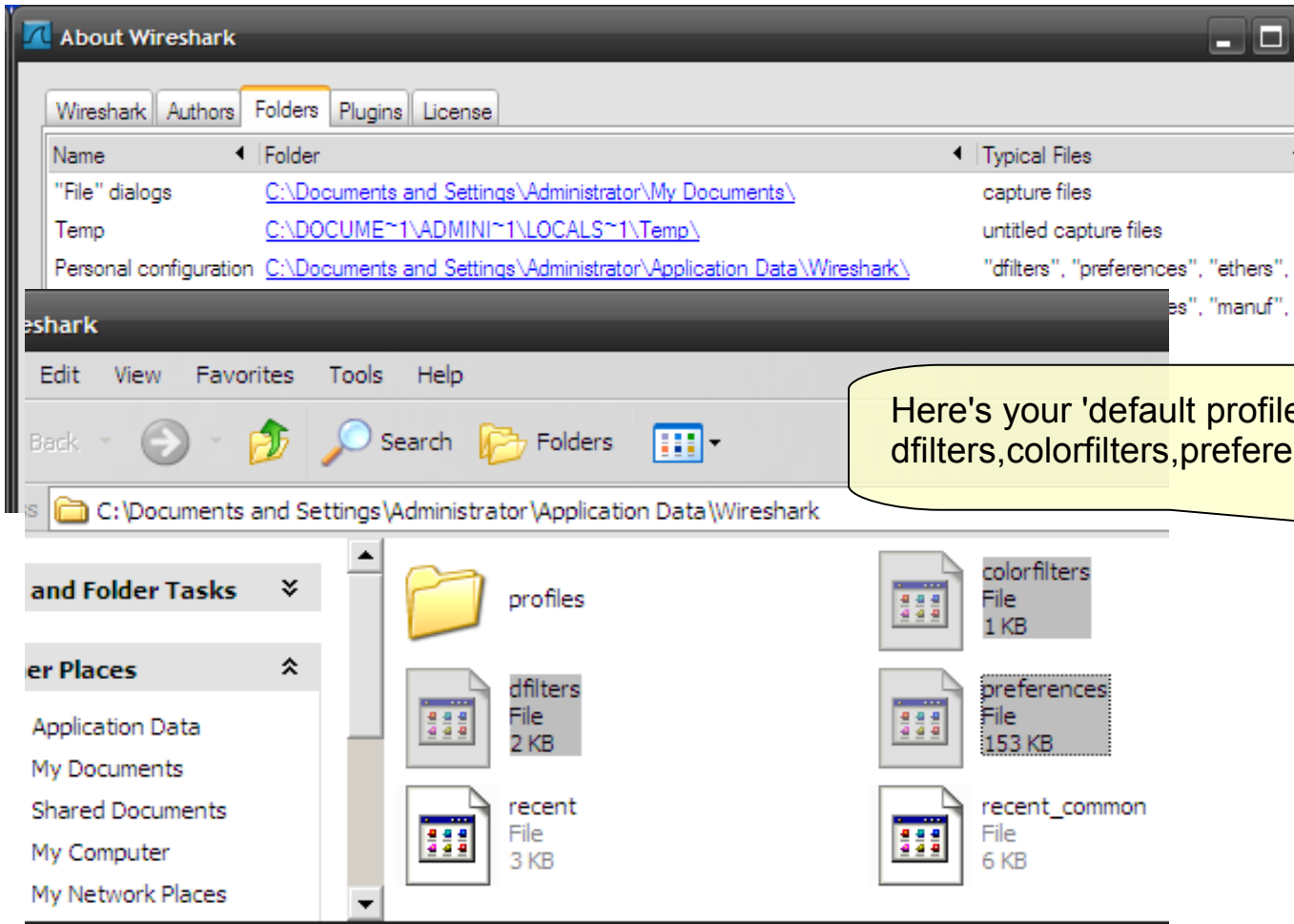
Come to this session to gain some hands-on experience and see how you really save time in trouble shooting by using some not-so-obvious filters, coloring rules and graphical features of the Wireshark tool.

You're invited to bring and use your own computer to look at some trace examples showing real TCP/IP problems.

The Labs are based on Wireshark for Windows: Version 1.6.5

# Installation Folders – Personal Configuration

- About Wireshark → Folders



Name	Folder	Typical Files
"File" dialogs	C:\Documents and Settings\Administrator\My Documents\	capture files
Temp	C:\DOCUMENT~1\ADMINI~1\LOCALS~1\Temp\	untitled capture files
Personal configuration	C:\Documents and Settings\Administrator\Application Data\Wireshark\	"dfilters", "preferences", "ethers", ...

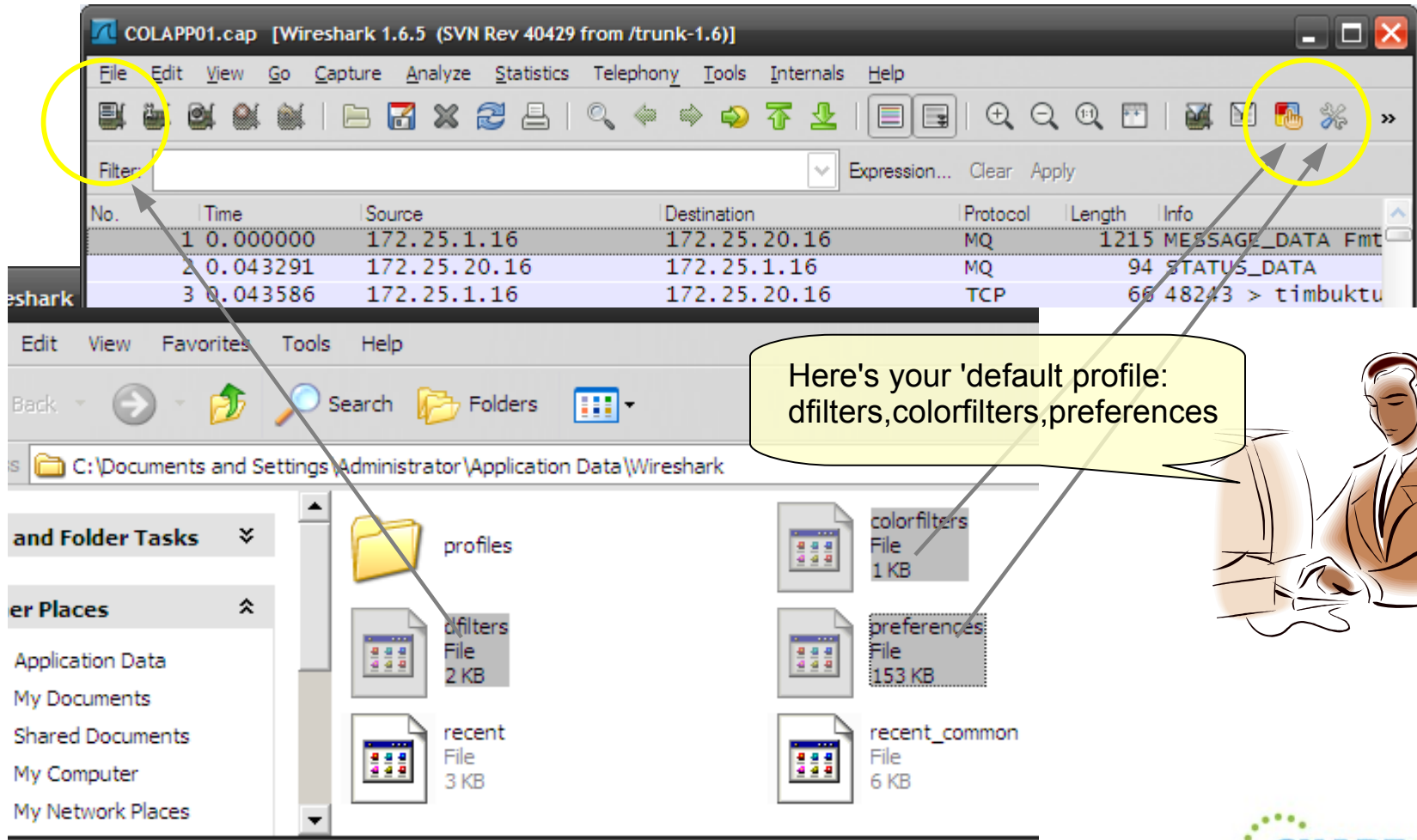
Folder Name	File Name	File Size
profiles	colorfilters	1 KB
	dfilters	2 KB
	preferences	153 KB
	recent	3 KB
	recent_common	6 KB

Here's your 'default profile:  
dfilters,colorfilters,preferences



# Profiles

- Default Profile



COLAPP01.cap [Wireshark 1.6.5 (SVN Rev 40429 from /trunk-1.6)]

File Edit View Go Capture Analyze Statistics Telephony Tools Internals Help

Filter: Expression... Clear Apply

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	172.25.1.16	172.25.20.16	MQ	1215	MESSAGE_DATA Fmt
2	0.043291	172.25.20.16	172.25.1.16	MQ	94	STATUS_DATA
3	0.043586	172.25.1.16	172.25.20.16	TCP	66	48243 > timbuktu

Here's your 'default profile:  
dfilters,colorfilters,preferences

and Folder Tasks

er Places

- Application Data
- My Documents
- Shared Documents
- My Computer
- My Network Places

profiles

- dfilters File 2 KB
- recent File 3 KB
- colorfilters File 1 KB
- preferences File 153 KB
- recent\_common File 6 KB

# WebSphere MQ Timeout Problem

- Understand Problem
  - What is the concern?
  - What is the impact?
  - What is the root cause?

AMQ9259: Connection timed out from host '172.25.1.16'.  
AMQ9999: Channel program ended abnormally.  
EXPLANATION:  
Channel program 'CRDB.PXS.TCP' ended abnormally.

AMQ9259, AMQ9999  
Let's get started...



- Understand the Topology
  - What Platforms are involved?
  - What does the Network Infrastructure look like?
  - What TCP/IP parameters are configured?
- Evaluate possible Solutions
  - Ease of implementation
  - Scope of responsibility

# CICS Transaction Gateway Timeout Problem

- Understand Problem
  - What is the concern?
  - What is the impact?
  - What is the root cause?

```
CTG Client:  
CCL4446E TCP/IP TCP/IP send()  
    API call timed out (errno = ETIMEDOUT)  
CCL4414E TCP/IP (to CTGSRV01) link failed: RC=10060
```

- Understand the Topology

- What Platforms are involved?
- What does the Network Infrastructure look like?
- What TCP/IP parameters are configured?

CTG: ETIMEDOUT  
The CCL4446E message is issued when the client daemon tries to send data to a CICS server over the TCP/IP protocol, but the TCP send does not complete within 5 seconds.



- Evaluate possible Solutions
  - Ease of implementation
  - Scope of responsibility



# EE Education – IP wizards

## ITS53 EE Implementation and Problem Determination

4 days ITSO  Workshop – 30.April 2012 Miami,FL

Register at <http://greenhouse.lotus.com>



Join the IP wizards community



<http://tinyurl.com/ipwizards>

to download wireshark profiles and p0f fingerprints