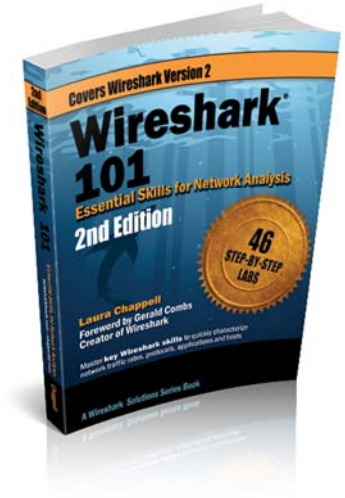
CHAPPELLUNIVERSITY

Wireshark 101 Course Set

Essential Skills for Network Analysis



Nine separate online courses focusing on essential network analysis skills. These courses are based on the best-selling Wireshark 101: Essential Skills for Network Analysts (2nd Edition) book which focuses on Wireshark v2 functions.

Author and Instructor: Laura Chappell
Founder, Chappell University/Wireshark University

www.chappellU.com

Wireshark 101: Essential Skills for Network Analysis

Instructor: Laura Chappell, Chappell University/Wireshark University

Contents

Wireshark 101: Essential Skills for Network Analysis

All Access Pass Order Form

Date	
Name	
Company	
Billing Address	
City	
State/Province	
Zip/Postal Code	
Country	
Email	
Phone	
Fax	

Return form to Chappell University
info@chappellU.com
59 Damonte Ranch Pkwy, 340, Reno NV 89521
Phone: (408) 378-7841

Credit Card Information

Credit Card Number	
Billing Address	
Expiration Date	
CVV	

Item	Description	Quantity	Unit Price	Amount
AAP1	All Access Pass *Single* 1-Year Subscription Plan		$699.00	
AAP5	All Access Pass *Group* 1-Year Subscription Plan (Group Discount for 5 Students) Number of Students: _____		To be determined	
			Total:	

Check or credit cards accepted. Purchase Orders must be paid in full prior to account activation.

Subscriber Information

First Name		Last Name		Email Address	
First Name		Last Name		Email Address	
First Name		Last Name		Email Address	
First Name		Last Name		Email Address	
First Name		Last Name		Email Address	
First Name		Last Name		Email Address	
First Name		Last Name		Email Address	
First Name		Last Name		Email Address	
First Name		Last Name		Email Address	
First Name		Last Name		Email Address	
First Name		Last Name		Email Address	

Please list additional subscribers on a separate page.

Comments:

Note: All Access Pass Subscriptions are single-seat licenses.

Wireshark 101: Essential Skills for Network Analysis

Section 0: Explore Key Wireshark Elements and Traffic Flows

This first course provides an overview of Wireshark functionality, features, resources, and uses. This is a recommended starting point for the Wireshark 101 series of courses.

Module		[mm:ss]
0.0	Section Introduction	05:40
0.1	Wireshark Capabilities and Tour	17:13
0.2	Wireshark Versions and Resources (wireshark.org)	19:45
0.3	Wireshark Capture Elements	12:39
0.4	Demo: Analysis Session (Latency Time and Application Error)	11:40
0.5	Frames vs. Packets vs. Segments	05:36
0.6	Follow a Packet Through a Network	12:16
0.7	Access Resources from Inside Wireshark	11:14
0.8	Analyze Traffic Using the Main Wireshark View	30:13
Lab 1	Use Packets to Build a Picture of the Network	12:26
0.9	Analyze Typical Network Traffic	18:51
Lab 2	Capture and Classify Your Own Background Traffic	03:53
0.10	Open Trace Files Captured with Other Tools	04:44
Lab 3	Open a Network Monitor .cap Trace File	02:45
CH0	Challenge 0	06:57

Trace Files: ***WS101v2TraceFilesSection0.zip***

- ✓ challenge101-0.pcapng
- ✓ general101.pcapng
- ✓ http-google101.pcapng
- ✓ http-winpcap101.cap
- ✓ mybackground101.pcapng

CPEs: 4

Wireshark 101: Essential Skills for Network Analysis

Section 1: Customize Wireshark Views and Settings

This second course delves into Wireshark customization for a more efficient analysis process. This section contains the important Lab 5 which is referenced throughout the Wireshark 101 curriculum.

Module		[mm:ss]
1.0	Section Introduction	05:50
1.1	Add, Edit, Export Columns	10:27
Lab 4	Add the HTTP Host Field as a Column	04:56
1.2	Dissect the Wireshark Dissectors	08:09
1.3	Analyze Traffic that Uses Non-Standard Ports	15:29
1.4	Define Preferences Settings	18:39
Lab 5	Set Key Wireshark Preferences (IMPORTANT LAB)	09:46
1.5	Creating Profiles	12:49
Lab 6	Create a New Profile Based on the Default Profile	04:51
1.6	Locate Key Configuration Files	06:06
Lab 7	Import a DNS/HTTP Errors Profile	05:28
1.7	Configure Time Column to Spot Delays	25:50
Lab 8	Spot Path and Server Latency Problems	09:18
CH1	Challenge 1	05:09

Trace Files: ***WS101v2TraceFilesSection1.zip***

- ✓ challenge101-1.pcapng
- ✓ dns-nmap101.pcapng
- ✓ http-chappellu101.pcapng
- ✓ http-disney101.pcapng
- ✓ http-espn101.pcapng
- ✓ http-google101.pcapng
- ✓ http-nonstandard101.pcapng
- ✓ http-openoffice101b.pcapng
- ✓ http-pcaprnet101.pcapng
- ✓ http-slow101.pcapng
- ✓ tcp-decodeas.pcapng

CPEs: 3.5

Wireshark 101: Essential Skills for Network Analysis

Section 2: Determine the Best Capture Method and Apply Capture Filters

This third course focuses on initial analyzer placement for wired and wireless packet capture, capture filtering, unattended capture, and capture filter techniques for addresses and applications.

Trace Files: ***ws101v2-tracefiles-s3.zip***

- ✓ sec-nessus101.pcapng
- ✓ wlan-ipadstartstop101.pcapng

CPEs: 3.5

Wireshark 101: Essential Skills for Network Analysis

Section 3: Apply Display Filters to Focus on Specific Traffic

This fourth course delves deeply into display filtering – the ultimate way to find the "needle in the haystack." This course defines display filtering methods and must-know syntax information for include/exclude filters using standard filters and regular expressions. Learn tips and tricks for filtering on addresses, subnets, applications, and keywords. Learn how to add wildcards to your filters and buttons to your profile!

Trace Files: ***ws101v2-tracefiles-s3.zip***

- ✓ http-browse101.pcapng
- ✓ http-sfgate101.pcapng
- ✓ http-wiresharkdownload101.pcapng
- ✓ http-espn101.pcapng
- ✓ http-errors101.pcapng
- ✓ http-disney101.pcapng
- ✓ dhcp-serverdiscovery101.pcapng
- ✓ mybackground101.pcapng
- ✓ general101b.pcapng
- ✓ gen-startupchatty101.pcapng
- ✓ ftp-crack101.pcapng
- ✓ ftp-clientside101.pcapng
- ✓ http-pictures101.pcapng
- ✓ http-download101d.pcapng
- ✓ http-download-a.pcapng
- ✓ challenge101-3.pcapng

CPEs: 5

Wireshark 101: Essential Skills for Network Analysis

Section 4: Color and Export Interesting Packets

This fifth course begins with a focus on using temporary coloring, coloring rules, and the intelligent scrollbar to speed up detection of problems captured in trace files. Next, this course demonstrates how to create trace file subsets and extract characteristics of packets for further analysis in spreadsheet programs.

Trace Files: ***ws101v2-tracefiles-s4.zip***

- ✓ challenge101-4.pcapng
- ✓ ftp-bounce.pcapng
- ✓ ftp-crack101.pcapng
- ✓ http-au101b.pcapng
- ✓ http-browse101.pcapng
- ✓ http-browse101d.pcapng
- ✓ http-jezebel101.pcapng
- ✓ http-misctraffic101.pcapng
- ✓ http-sfgate101.pcapng
- ✓ net-lost-route.pcapng
- ✓ sec-nessus101.pcapng

CPEs: 2.5

Wireshark 101: Essential Skills for Network Analysis

Section 5: Build and Interpret Tables and Graphs

This sixth course focuses on finding the top talkers and most active network conversations, identifying protocols in use, detecting suspicious traffic, and creating comparative graphs based on hosts and applications in use. This section also defines how to use the Wireshark Expert to quickly detect the cause of network performance problems.

Module		[mm:ss]
5.0	Section Introduction	05:36
5.1	Find Out Who's Talking to Whom on the Network	14:59
5.2	Locate the Top Talkers	06:42
Lab 31	Filter on the Most Active TCP Conversation	03:41
Lab 32	Set Up GeoIP to Map Targets Globally	04:27
5.3	List Applications Seen on the Network	08:36
Lab 33	Detect Suspicious Protocols and Applications	03:54
5.4	Graph Application and Host Bandwidth Usage	24:58
Lab 34	Compare Traffic to/from a Subnet to Other Traffic	03:39
5.5	Identify TCP Errors on the Network	09:47
5.6	Understand What those Expert Errors Mean	04:25
Lab 35	Identify an Overloaded Client	03:35
5.7	Graph Various Network Errors	07:35
Lab 36	Detect and Graph File Transfer Problems	05:16
CH5	Challenge 5	05:11

Trace Files: ***ws101v2-tracefiles-s5.zip***

- ✓ challenge101-5.pcapng
- ✓ general101c.pcapng
- ✓ general101d.pcapng
- ✓ http-browse101.pcapng
- ✓ http-browse101b.pcapng
- ✓ http-browse101c.pcapng
- ✓ http-download101.pcapng
- ✓ http-espn101.pcapng
- ✓ http-misctraffic101.pcapng
- ✓ sec-nessus101.pcapng
- ✓ tr-twohosts.pcapng

CPEs: 2.5

Wireshark 101: Essential Skills for Network Analysis

Section 6: Reassemble Traffic for Faster Analysis

This seventh course focuses on reassembling streams to analyze application-layer communications, reassembling HTTP objects and FTP files.

Module		[mm:ss]
6.0	Section Introduction	05:00
6.1	Reassemble Web Browsing Sessions	07:07
Lab 37	Use Reassembly to Find a Web Site's Hidden HTTP Message	04:41
6.2	Reassemble a File Transferred via FTP	04:17
Lab 38	Extract a File from an FTP File Transfer	06:40
6.3	Export HTTP Objects Transferred in a Web Browsing Session	06:56
Lab 39	Carve Out an HTTP Object from a Web Browsing Session	05:18
CH6	Challenge 6	05:22

Trace Files: ***ws101v2-tracefiles-s6.zip***

- ✓ challenge101-6.pcapng
- ✓ ftp-clientside101.pcapng
- ✓ ftp-download101.pcapng
- ✓ http browse101.pcapng
- ✓ http-college101.pcapng
- ✓ http-espn101.pcapng
- ✓ http-wiresharkdownload101.pcapng

CPEs: 1

Wireshark 101: Essential Skills for Network Analysis

Section 7: Add Comments to Your Trace Files and Packets

This course focuses on adding comments to trace files and to individual packets, viewing all annotations, and exporting annotations to create a network report.

Trace Files: ***ws101v2-tracefiles-s7.zip***

- ✓ challenge101-7.pcapng
- ✓ http-cheez101.pcapng
- ✓ sec-suspicous101.pcapng

CPEs: 2.5

Wireshark 101: Essential Skills for Network Analysis

Section 8: Use Command-Line Tools to Capture, Split, and Merge Traffic

This course focuses using Capinfos, Tshark, Dumpcap, Editcap and Mergecap to split, merge, and obtain information about trace files. In addition, this course covers the process of command-line capture, field extraction, and creation of trace file subsets.

Trace Files: ***ws101v2-tracefiles-s8.zip***

- ✓ challenge101-8.pcapng
- ✓ http download-c.pcapng
- ✓ http-espn101.pcapng

CPEs: 2