CWNP CWAP-403

CWNP Wi-Fi Analysis Certification Questions & Answers

Exam Summary – Syllabus – Questions

CWAP-403

CWNP Certified Wireless Analysis Professional

60 Questions Exam –70% Cut Score – Duration of 90 minutes

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Know Your CWAP-403 Certification Well:

The CWAP-403 is best suitable for candidates who want to gain knowledge in the CWNP Wireless Network. Before you start your CWAP-403 preparation you may struggle to get all the crucial Wi-Fi Analysis materials like CWAP-403 syllabus, sample questions, study guide.

But don't worry the CWAP-403 PDF is here to help you prepare in a stress free manner.
The PDF is a combination of all your queries like-

- What is in the CWAP-403 syllabus?
- How many questions are there in the CWAP-403 exam?
- Which Practice test would help me to pass the CWAP-403 exam at the first attempt?

Passing the CWAP-403 exam makes you CWNP Certified Wireless Analysis Professional. Having the Wi-Fi Analysis certification opens multiple opportunities for you. You can grab a new job, get a higher salary or simply get recognition within your current organization.

CWNP CWAP-403 Wi-Fi Analysis Certification Details:

Exam Name	Wireless Analysis Professional
Exam Code	CWAP-403
Exam Price	$275 USD
Duration	90 minutes
Number of Questions	60
Passing Score	70%
Recommended Training	**Official Wi-Fi Analysis Self Study Kit** **Training Class**
Exam Registration	**PEARSON VUE**
Sample Questions	**CWNP CWAP-403 Sample Questions**
Practice Exam	**CWNP Certified Wireless Analysis Professional Practice Test**

CWAP-403 Syllabus:

Section	Weight	Objectives
Protocol Analysis	15%	1. Capture 802.11 frames using the appropriate methods and locations - Install monitor mode drivers - Select appropriate capture device - Select appropriate capture location - Capture for an appropriate amount of time based on the problem scenario - Scanning channels vs. capturing on a single channel - Capturing in roaming scenarios - Capture with portable protocol analyzers (laptops) - Capture with APs, controllers, and other management solutions - Capture with specialty devices such as handheld analyzers 2. Analyze 802.11 frame captures to discover problems and find solutions - Use appropriate display filters to view relevant frames and packets - Use colorization to highlight important frames and packets - Configure and display columns for analysis purposes - View frame and packet decodes and understand the information shown and apply it to the analysis process - Use multiple adapters and channel aggregation to view captures from multiple channels - Implement protocol analyzer decryption procedures - View and use captures statistical information for analysis - Use expert mode for analysis - View and understand peer maps as they relate to communications analysis 3. Understand and apply the common capture configuration parameters available in protocol analysis tools - Save to disk - Packet slicing - Event triggers - Buffer options - Channels and channel widths - Capture filters - Channel scanning and dwell time 4. Utilize additional tools that capture 802.11 frames for the purposes of analysis and troubleshooting

Section	Weight	Objectives
		- WLAN scanners and discovery tools - Protocol capture visualization and analysis tools - Centralized monitoring, alerting and forensic tools 5. Ensure appropriate troubleshooting methods are used with all analysis types - Define the problem - Determine the scale of the problem - Identify probably causes - Capture and analyze the data - Observe the problem - Choose appropriate remediation steps - Document the problem and resolution
Spectrum Analysis	15%	1. Capture RF spectrum data and understand the common views available in spectrum analyzers - Install, configure and use spectrum analysis software and hardware Configure Wi-Fi integration Save and export capture data - Capture RF spectrum data using handheld, laptop-based and infrastructure spectrum capture solutions - Understand and use spectrum analyzer views • Real-time FFT • Waterfall, swept spectrogram, density and historic views • Utilization and duty cycle • Detected devices • WLAN integration views 2. Analyze spectrum captures to identify relevant RF information and issues - Determine the RF noise floor in an environment - Determine Signal-to-Noise Ration (SNR) for a given signal - Locate and identify sources of RF interference - Identify RF channel utilization - Analyze a non-Wi-Fi transmitter and its impact on WLAN communications - Overlapping and non-overlapping adjacent channel interference - Poor performing or faulty radios 3. Analyze spectrum captures to identify various device signatures

Section	Weight	Objectives
		- Identify frequency hopping devices - Identify various 802.11 PHYs • 802.11b • 802.11g • 802.11a • 802.11n • 802.11ac • Channel widths • Primary channel - Identify non-802.11 devices based on RF behaviors and signatures • Microwave oven • Video devices • Jammers • Cordless phones 4. Centralized spectrum analysis solutions - AP-based spectrum analysis - Sensor-based spectrum analysis
PHY Layers and Technologies	10%	1. Understand and describe the functions and the PLCP and PMD sublayers 2. Apply the understanding of PHY technologies (including PHY headers, preambles, training fields, frame aggregation and data rates) to captured data • DSSS • HR/DSSS • OFDM • ERP • HT • VHT 3. Identify and use PHY information provided in pseudo-headers within protocol analyzers - Pseudo-header formats • Radiotap

Section	Weight	Objectives
		• Per Packet Information (PPI) - Signal strength - Data rate and MCS index - Length information - Channel center frequency or received channel - Channel properties - Noise 4. Recognize the limits of protocol analyzers in capturing PHY information including NULL data packets and PHY headers 5. Use appropriate capture devices based on an understanding of PHY types - Supported PHYs - Supported spatial streams - Short Guard Interval (SGI)
MAC Sublayer and Functions	25%	1. Understand frame encapsulation and frame aggregation 2. Identify and use MAC information in captured data for analysis - Management, control, and data frames - MAC Frame Format • Frame Control Field • To DS and From DS • Address Fields • Frame Check Sequence (FCS) - 802.11 Management Frame Formats • Information Elements • Authentication • Association and Reassociation • Beacon • Probe Request and Probe Response - Data and QoS Data Frame Formats - 802.11 Control Frame Formats • Acknowledgement • RTS/CTS

Section	Weight	Objectives
		• Block Acknowledgement and related frames 3. Validate BSS configuration through protocol analysis - Country code - Minimum basic rate - Supported rates - Beacon intervals - WMM settings - RSN settings - HT and VHT operations - Channel width - Primary channel - Hidden or non-broadcast SSIDs 4. Identify and analyze CRC error frames and retransmitted frames
WLAN Medium Access	10%	1. Understand 802.11 contention algorithms in-depth and know how they impact WLANs - Distributed Coordination Function (DCF) • Carrier Sense and Energy Detect • Network Allocation Vector (NAV) • Contention Window (CW) and random backoff • Interframe Spacing - Enhanced Distributed Channel Access (EDCA) • EDCA Function (EDCAF) • Access Categories and Queues • AIFSN - Wi-Fi Multimedia (WMM) • WMM parameters • WMM Power Save • WMM Admission Control 2. Analyze QoS configuration and operations - Verify QoS parameters in capture files - Ensure QoS is implemented end-to-end
802.11 Frame Exchanges	25%	1. Capture, understand, and analyze BSS discovery and joining frame exchanges

Section	Weight	Objectives
		- BSS discovery - 802.11 Authentication and Association - 802.1X/EAP exchanges - Pre-shared key authentication - Four-way handshake - Group key exchange - Pre-FT (802.11r) fast secure roaming mechanisms - Fast BSS Transition (FT) roaming exchanges and fast secure roaming - Hotspot 2.0 protocols and operations from a client access perspective (ANQP and initial access) - Neighbor discovery 2. Analyze roaming behavior and resolve problems related to roaming - Sticky clients - Excessive roaming - Channel aggregation for roaming analysis 3. Analyze data frame exchanges - Data frames and acknowledgement frames - RTS/CTS data frame exchanges - QoS data frame exchanges - Block Acknowledgement exchanges 4. Analyze HT/VHT-specific transmission methods - MIMO - Transmit Beamforming (TxBF) - MU-MIMO - Frame aggregation (A-MSDU and A-MPDU) 5. Analyze behavior and resolve problems related to MAC layer operations - Power Save operations - Protection mechanisms - Load balancing - Band Steering

CWNP CWAP-403 Sample Questions:

Question: 1

What does ATIM stand for?

a) Ad Hoc Traffic Indication Message
b) Announcement Traffic Indication Message
c) Announcement Traffic Indication Map
d) Ad Hoc Traffic Indication Map

Answer: b

Question: 2

In which frame would you find a timestamp field?

a) Beacon
b) Association request
c) Association response
d) Authentication

Answer: a

Question: 3

Where in the packet can you see its access category?

a) QoS Control Field
b) WMM Information Element
c) IP Header
d) Frame Body

Answer: a

Question: 4

Which type of power management frame is used only in an IBSS?

a) ATIM
b) DTIM
c) CF-Poll
d) PS-Poll

Answer: a

Question: 5

How wide are the UNII-1, UNII-2, and UNII-3 bands?

a) 20 MHz
b) 22 MHz
c) 11 MHz
d) 100 MHz
e) It varies depending upon the specific band.

Answer: d

Question: 6

Which of the following are protection mechanisms? (Choose two.)

a) NAV back-off
b) RTS/CTS
c) RTS-to-self
d) CTS-to-self
e) WEP encryption

Answer: b, d

Question: 7

An MOS score of 4 indicates what level of quality?

a) Excellent
b) Good
c) Fair
d) Poor
e) Bad

Answer: b

Question: 8

Which of these roaming methods requires the use of FT Action frames?

a) Over-the-air fast BSS transition
b) Over-the-WDS fast BSS transition
c) Over-the-DS fast BSS transition
d) Over-the-WLS fast BSS transition

Answer: c

Question: 9

What is the purpose of link adaptation?

a) Establishes STA-to-STA communication
b) Allows a Beamformer to estimate the channel in order to calculate a steering matrix
c) Performs over-the-air calibration to reduce the differences between a STA's transmit and receive radio chains
d) Dynamically assigns an MCS

Answer: d

Question: 10

How does a client station indicate that it is using Power Save mode?

a) It transmits a frame to the access point with the Sleep field set to 1.
b) It transmits a frame to the access point with the Power Management field set to 1.
c) Using DTIM, the access point determines when the client station uses Power Save mode.
d) It doesn't need to, because Power Save mode is the default.

Answer: b

Study Guide to Crack CWNP Wi-Fi Analysis CWAP-403 Exam:

- Getting details of the CWAP-403 syllabus, is the first step of a study plan. This pdf is going to be of ultimate help. Completion of the syllabus is must to pass the CWAP-403 exam.
- Making a schedule is vital. A structured method of preparation leads to success. A candidate must plan his schedule and follow it rigorously to attain success.
- Joining the CWNP provided training for CWAP-403 exam could be of much help. If there is specific training for the exam, you can discover it from the link above.

- Read from the CWAP-403 sample questions to gain your idea about the actual exam questions. In this PDF useful sample questions are provided to make your exam preparation easy.
- Practicing on CWAP-403 practice tests is must. Continuous practice will make you an expert in all syllabus areas.