University Capture the Flag

Online Qualifier Mechanics

2023 University Capture the Flag (uCTF)
Online Qualifier Mechanics

ONLINE QUALIFIER

- This will be an online quiz using the Moodle system
- Teams will login to Moodle and answer multiple-choice questions.
- Maximum of 1 Login per team (<u>Team Leader account only</u>)
- Teams will be scored based on the number of correct answers.
- The Online Qualifier will start at 3:00pm on Oct 23, 2023
- The Qualifier will have the following flow:

    o Time0-minus-3days – Connection Check (Oct 20,2023)
        ▪ Teams are encouraged to login the Moodle System to verify Internet connectivity
        ▪ Teams can try out sample quizzes to be familiar with the Moodle system

    o Time0-minus-20mins – Final Connection Check (Oct 23, 2023 @ 2:40pm)
        ▪ Teams to start logging-in to the Moodle System.
        ▪ Teams should be familiar with schedule of the different Phases below

    o Time0 - Phase 1: EASY-Difficulty Questions (Oct 23, 2023 @ 3:00pm)
        ▪ 40 questions to be answered in 20 minutes
        ▪ Quiz will automatically close after 20 minutes, all answers will automatically be submitted at the end of 20 minutes. Teams can also opt to submit their answers early.
        ▪ Coverage: CompTIA Security+ concepts (see Online Reference notes)

    o Time0+21mins – Rest (Oct 23, 2023 @ 3:21pm)
        ▪ Scoreboard will be updated and displayed

    o Time0+30mins – Phase 2: MEDIUM-Difficulty QUESTIONS (Oct 23, 2023 @ 3:30pm)
        ▪ 30 questions to be answered in 20 minutes

- Quiz will automatically close after 20 minutes, all answers will automatically be submitted at the end of 20 minutes. Teams can also opt to submit their answers early.
- Coverage: CompTIA Security+ concepts (see Online Reference notes)

○ Time0+51mins – Rest (Oct 23, 2023 @ 3:51pm)
- Scoreboard will be updated and displayed

○ Time0+60mins – Phase 3: HARD-Difficulty QUESTIONS (Oct 23, 2023 @ 4:00pm)

- 30 questions to be answered in 20 minutes
- Quiz will automatically close after 20 minutes, all answers will automatically be submitted at the end of 20 minutes. Teams can also opt to submit their answers early.
- In case of tie, the team that submits first will have higher ranking.
- Coverage: Trend Micro Information (see Online Reference notes)

○ Time0+81mins – END OF ONLINE QUALIFIER (Oct 23, 2023 @ 4:21pm)

- Total of 100 questions 40 Easy, 30 Medium, 30 hard
- Final score and winners will be announced at a later date
- Top 10 will be selected and announce in the social media page

Fig 1: Online Qualifier Flow

ONLINE QUALIFIER REFERENCES FOR STUDENTS: CompTIA Security+ Course

- CompTIA Security+ Full Course: Intro to Security+
  - https://www.youtube.com/watch?v=w2afokvpVEI

- CompTIA Security+ Full Course: Cybersecurity Overview and Roles
  - https://www.youtube.com/watch?v=-DeTQa6ajVA

- CompTIA Security+ Full Course: Security Controls & Frameworks
  - https://www.youtube.com/watch?v=IO4yc6RHaSw

- CompTIA Security+ Full Course: Attack and Attacker Categories
  - https://www.youtube.com/watch?v=LdSJcbvtIko

- CompTIA Security+ Full Course: Threat Intelligence
  - https://www.youtube.com/watch?v=EJ454es_RFw

- CompTIA Security+ Full Course: Network Reconnaissance
  - https://www.youtube.com/watch?v=5WpKRRlmkp4

- CompTIA Security+ Full Course: Security Assessments and Vulnerabilities
  - https://www.youtube.com/watch?v=Jhng1Pom8KI

- CompTIA Security+ Full Course: Vulnerability Scanning
  - https://www.youtube.com/watch?v=uLfkrpEN8dE

- CompTIA Security+ Full Course: Pentesting and Active Defense
  - https://www.youtube.com/watch?v=hIAiA1FNN5M

- CompTIA Security+ Full Course: Social Engineering
  - https://www.youtube.com/watch?v=Lyt6LXkbXEc

- CompTIA Security+ Full Course: Malware Attacks
  - https://www.youtube.com/watch?v=_h79V4i5IkE

- CompTIA Security+ Full Course: Cryptography Explained
  - https://www.youtube.com/watch?v=bTkJr9eq0G4

- CompTIA Security+ Full Course: Cryptography Use Cases
  - https://www.youtube.com/watch?v=Q6xZAtCkqUk

- CompTIA Security+ Full Course: Public Key Infrastructure (PKI)
  - https://www.youtube.com/watch?v=dhWXqUXLuz0

- CompTIA Security+ Full Course: Identity, Access Management & Password Cracking
  - https://www.youtube.com/watch?v=hNq6dbP5mEs

- CompTIA Security+ Full Course: Securing Networks
  - https://www.youtube.com/watch?v=B4jgpCZYW6c

- CompTIA Security+ Full Course: Switching and Routing Security
  - https://www.youtube.com/watch?v=M07Aqe4YE1Q

- CompTIA Security+ Full Course: Securing Wireless
  - https://www.youtube.com/watch?v=TdBWoexTW74

- CompTIA Security+ Full Course: DDoS Attacks and Connection Balancing
  - https://www.youtube.com/watch?v=58LPGqZq9q8

- CompTIA Security+ Full Course: Firewalls and Proxies
  - https://www.youtube.com/watch?v=89VKon6QFMs

- CompTIA Security+ Full Course: Security Network Monitoring & SIEMs
  - https://www.youtube.com/watch?v=ZZfADqZNjfI

- CompTIA Security+ Full Course: Account Management
  - https://www.youtube.com/watch?v=xT8Gw-sVIrc

- CompTIA Security+ Full Course: Classifying and Securing Data
  - https://www.youtube.com/watch?v=WhFkbOukFcE

- CompTIA Security+ Full Course: Incident Response
  - https://www.youtube.com/watch?v=99yjZ5Qu5Ck

- CompTIA Security+ Full Course: SIEM and Log Analysis
  - https://www.youtube.com/watch?v=EHV45MPB-OQ

- CompTIA Security+ Full Course: Mitigating Security Incidents
  - https://www.youtube.com/watch?v=poODkPNHY_E

- CompTIA Security+ Full Course: Digital Forensics
  - https://www.youtube.com/watch?v=6LCuM2O53dA

- CompTIA Security+ Full Course: Risk Management
  - https://www.youtube.com/watch?v=hxkBllOyrEw

- CompTIA Security+ Full Course: Physical Security
  - https://www.youtube.com/watch?v=qyok8f4tQ4U

- Cybersecurity Careers: Where Do You Fit?
  - https://www.youtube.com/watch?v=rP88ibIVyO8

ONLINE QUALIFIER REFERENCES FOR STUDENTS: TREND MICRO Information

- Trend Micro 2023 Security Predictions
  https://www.trendmicro.com/vinfo/us/security/research-and-analysis/predictions/2023#:~:text=Ransomware%20groups%20will%20adopt%20different,attacks%20like%20cloud%2Daware%20ransomware.

- THE FUTURE OF RANSOMWARE
  https://www.trendmicro.com/vinfo/us/security/news/cybercrime-and-digital-threats/the-future-of-ransomware

- In Review: What GPT-3 Taught ChatGPT in a Year
  https://www.trendmicro.com/en_us/research/23/b/review-what-gpt-3-taught-chatgpt-in-a-year.html

- RETHINKING TACTICS: Annual Cybersecurity Roundup 2022
  https://www.trendmicro.com/vinfo/us/security/research-and-analysis/threat-reports/roundup/rethinking-tactics-annual-cybersecurity-roundup-2022

- THE LINUX THREAT LANDSCAPE REPORT
  https://www.trendmicro.com/vinfo/us/security/news/cybercrime-and-digital-threats/the-linux-threat-landscape-report

- Hype vs. Reality: AI in the Cybercriminal Underground
  https://www.trendmicro.com/vinfo/us/security/news/cybercrime-and-digital-threats/hype-vs-reality-ai-in-the-cybercriminal-underground