

CTF 2021
Challenge

香港網絡保安新生代
奪旗挑戰賽

12 – 14
November, 2021

Organisers



Co-organisers



Gold Sponsors



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CAPTURE THE FLAG CHALLENGE 2021

Continuous innovation in Internet technology development and applications has enhanced quality of life and work efficiency but at the same time has created various new cyber security challenges. It only serves to fuel the demand for cyber security professionals. To cope with the challenges, the training of local cyber security practitioners and nurturing of new generations are indispensable.

For the new generation, **Technology Education (TechEd)** could foster and enhance their knowledge and interest in cyber security, train up their creative thinking as well as learn skills such as cryptography, programming concept, network forensics to cope with new challenges.

For existing cyber security practitioners, regular update of latest trends and enhancement of cyber security skills can help organisations to reduce the risk and improve incident response capability.

In light of this, Hong Kong Computer Emergency Response Team Coordination Centre (HKCERT) and Hong Kong Productivity Council (HKPC) will jointly host the “**Hong Kong Cyber Security New Generation Capture the Flag (CTF) Challenge 2021**” (The Contest) to strengthen the cyber security skills and awareness of the industry and students and encourage problem solving through teamwork, creative thinking and cyber security skills.

Workshops by cyber security experts will be organised to help the participants understand the format and type of questions of the Contest and get prepared for it.

Join now and get ready for the challenge!

Date and Time

12 November 2021, 6:00PM (HK time) to 14 November 2021, 6:00PM (HK time) (The system will operate for 48 hours and participant can access anytime during the contest)

Contest Format

This is a **Jeopardy-style** online CTF Contest. Participant will get a score after solving the challenges during the Contest.

Learning Outcome through the Contest

Please refer to website <http://ctf.hkcert.org/ctf-challenge-info/index.html>



Type of Challenges and Samples

- Binary Exploitation
- Cryptography
- Forensics
- Reverse Engineering
- Web Exploitation
- Miscellaneous



* All the challenges in this contest are bilingual (i.e. Trad. Chinese and English)

* Samples: https://ctf.hkcert.org/ctf-challenge-info/index.html#challenge_type

* Past challenges: <https://github.com/hkcert-ctf/CTF-Challenges>



Eligibility

The Contest is divided into 3 categories

1. **Secondary School;**
2. **Tertiary Institution;** and
3. **Open Category**

The Contest is a team competition, with each team making up of one to four members. In the Secondary School category, all team members must be from the same school. Each participant can enrol to only **one of the categories** and should submit only one entry. Participants shall **agree and abide** by all the terms and conditions, and rules of the Contest.

Categories and prizes (**Number of prizes will depend on the number of team members*)

1. Secondary School – For all student of secondary school in Hong Kong
 - Gold: Samsung Galaxy A42 5G Smartphone
 - Silver: Harman Kardon AURA STUDIO 3 Bluetooth Speaker
 - Bronze: Ducky One 2 SF (Brown switches) RGB Mechanical Gaming Keyboard
 - * *Each awarded school will receive a trophy*
 - * *All members of the team must be from the same school*
 - * *School can send unlimited team to join. The school who sent **most students** will be presented with the “Most Supportive School Award”*
2. Tertiary Institution – For all full-time students in Diploma, Higher Diploma, Associate Degree and Bachelor Degree of universities or colleges in Hong Kong
 - Gold: Apple Watch Series 6 GPS Aluminium Case with Sport Loop (44 mm)
 - Silver: Apple AirPods Pro
 - Bronze: Logitech G502 LIGHTSPEED Wireless Gaming Mouse

3. Open Category – For all residents of Hong Kong or holder of valid working or study visa of Hong Kong
 - Gold: Dyson Supersonic™ HD08 Hair Dryer
 - Silver: Sony WH-1000XM4 Wireless Noise Cancelling Headphones
 - Bronze: Corsair K70 RGB MK.2 Mechanical Gaming Keyboard

In additional to the above prizes, all the winners will receive an **award certificate** and can enrol in the HKPC-organised cyber security training programme “**Red/Blue Team Pentest Kungfu Intensive Course**” in January 2022 for free. Other participants will receive an **electronic certificate**.

Team Name

All the team names will consist of 2 parts (1) Team code; (2) Team name, which would be the name of school/institutions or any self-defined names. The naming convention of each category are shown below:

1. Secondary School
 - Assigned by Organiser
 - Naming convention is {Team Code} – {School name of the members}
 - E.g. S0001 – Tsuen Wan East Secondary School
2. Tertiary Institution
 - Assigned by Organiser
 - Naming convention is {Team Code} – {Institution name of each member}
 - E.g. T0001 – CUHK, PolyU, AbcdU
3. Open Category
 - Self-defined name in English with maximum 50 characters
 - Naming convention is {Team Code} – {self-defined name}
 - E.g. O0001 – HK CTFMan

The Organisers reserve the right to substitute any name with another name at any time without prior notice.

Proof of Answer (Write-up)

The top 5 teams of each category are required to submit the proof of answer (write-up) of 3 solved challenges selected by the Organisers. The Organisers will verify the accuracy while confirming the final ranking.

Registration Link

<https://form.jotform.com/hkcert/ctf2021>



Registration Deadline

31 October 2021 (*The Applicant's registration will not be considered after the deadline*)

Workshop (Webinar)

Two workshops will be organised to brief the contest arrangement, target a, learning outcome and demonstration of solving challenges:

1. 8 October 2021, 2:30PM – 5:00PM (Online registration starts at 2:00PM)
2. 22 October 2021, 2:30PM – 5:00PM (Online registration starts at 2:00PM)

Registration link:

<https://form.jotform.com/hkcert/ctf2021-workshops-registration>



Webinar and Award Presentation Ceremony

10 December 2021, 9:30AM – 5:00PM at HKPC Building, 78 Tat Chee Avenue, Kowloon
(Online registration starts at 9:00AM)

Terms and Conditions

- The participating teams should abide to these Terms and Conditions and the Rules of the Contest. The Organisers reserve the right to penalise team members for noncompliance with suspension of access or disqualification. The related teams and their members shall not raise objection.
- Each participating team will be named as per the rule specified under the “Team Name” section. The Organisers reserve the right to substitute any name with another name at any time without prior notice. The participants shall not raise objection.
- The whole team is disqualified if any member of the team is not eligible.
- All works of the team must be contributed by eligible members of the team.
- The team should notify the Organisers of any change in team members immediately. The Organisers will verify the identity of the winning team members when confirming their award.
- The Organisers may invite teams from other countries / regions to compete in the platform. The invited teams are solely for participation purpose and would not be ranked and be awarded any prizes. The participants shall not raise objection.
- The final result of the contest will be published on <https://ctftime.org>. The participants

shall not raise objection.

- The Organisers reserve the right to substitute any prize with another prize at any time without prior notice.
- The Organisers reserve the right to amend the Rules from time to time and inform the participants.

Rules

- Each team should include maximum of 4 team members (i.e. 1 – 4 members). All team members must fulfil the entry requirements stated in the Eligibility.
- The following parties are not eligible to join the contest:
 - The representatives of Organising Committee
 - The members of Vetting Committee of the HKCERT Challenge Writing Contest 2021
 - The winners of HKCERT Challenge Writing Contest 2021
 - The supplier or members of project team of this contest
- The top five teams of each category are required to submit the write-up as specified under the “Write-up” section.
- After completing the 48 hours’ Contest, the top three teams of each category who have the highest scores and the write-ups confirmed by the Organisers will win the Contest. If same scores, the team that has reached the score in the shortest time will win the Contest.
- If any issues occur during the Contest, participants shall report them to the Organisers immediately.
- Don't attack the CTF platform, such as:
 - Modify the scoreboard;
 - Generate excessive load;
 - Launch denial of service attack;
 - Don't attack any machine or service other than the designated ones.
- No social engineering attack.
- Don't cheat or interrupt the Contest, such as:
 - Share flags;
 - Ask for flags;
 - Delete flags;
 - Intentionally prevent other teams from submitting flags.
- In the chat room:
 - Don't send any message which contains violent, obscene or indecent content.
 - Don't upload any file which infringes any copyrights and intellectual property rights.
- Do not share any content or details of the CTF challenges with anyone before the end of the contest.
- Any abuse or violation of the Rules will result in penalty as stated in the Terms and Conditions.

Enquiry

Please contact our Ms Tracy Choy at +852 2788 5884 or tracyc@hkpc.org.

Supporting Organisations (In arbitrary Order)

