

# CTF 2022

香港網絡保安新生代  
Hong Kong Cyber Security New Generation

奪旗挑戰賽  
Capture the Flag Challenge

# 11 - 13 November 2022

## Organisers



## Co-organisers



Gold Sponsors



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# CAPTURE THE FLAG CHALLENGE 2022

Continuous innovation in Internet technology development and applications has enhanced the 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, and 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, the Hong Kong Computer Emergency Response Team Coordination Centre (HKCERT) and the Hong Kong Productivity Council (HKPC) will jointly organise the “**Hong Kong Cyber Security New Generation Capture the Flag (CTF) Challenge 2022**” (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

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**11 November 2022, 6:00PM (HK time) to 13 November 2022, 6:00PM (HK time)** (The system will operate for 48 hours continuously and participant can access anytime during the Contest)

## Contest Format

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

## What can be Learnt from the Contest

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



## Type of Challenges and Samples

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- 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](https://ctf.hkcert.org/ctf-challenge-info/index.html#challenge_type)

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



## Eligibility

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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 – Secondary students in Hong Kong
  - Gold: Oculus Quest 2 128GB VR
  - Silver: Sennheiser Earphone HD 599
  - Bronze: Razer Blackwidow V3 Chroma RGB Mechanical Gaming Keyboard (Green Switch)

\* All members of the team must be from the same school

\* The school which sent the **most students** (Only count for students from participated team<sup>(Note 1)</sup>) will receive the “**Most Supportive School Award**” (School can send unlimited team to join.)

\* The school which achieved the **most outstanding result** will receive the “**Best School Award**”<sup>(Note 2)</sup>

\* Each winning school will receive a trophy (i.e. the school of Gold, Silver and Bronze winners, and the winning school of “Most supportive School Award” and “Best School Award”)

2. Tertiary Institution – Full-time students studying Diploma, Higher Diploma, Associate Degree and Bachelor Degree in Hong Kong universities or colleges
  - Gold: Apple iPad 10.2inch (8th Generation) Wi-Fi 128GB
  - Silver: Nintendo Switch (OLED)
  - Bronze: Razer Viper v2 Pro Wireless Gaming Mice
  
3. Open Category – All Hong Kong residents or holders of valid Hong Kong working or study visa
  - Gold: GoPro Hero10 Black Edition
  - Silver: JBL PartyBox 310 Portable Party Speaker
  - Bronze: Sony REON POCKET 3 Wearable Thermo Device

In addition 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 2023 for free. Other participants from participated team<sup>(note 1)</sup> will receive an **electronic certificate**.

*(Note 1) Participated Team means Teams with score **greater than or equal to 20**.*

*(Note 2) The Organisers will consolidate and calculate the result for each school. The calculation method will be announced later.*

## Team Name

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All the team names will consist of 2 parts (1) Team code; and (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 the Organiser
  - Naming convention is {Team Code} – {School name of the members}
  - E.g. S0001 – Tsuen Wan East Secondary School
  
2. Tertiary Institution
  - Assigned by the 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 change the name of the team at any time without prior notice.

## Proof of Answer (Write-up)

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

## Registration Link

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<https://form.jotform.com/hkcert/ctf2022>



## Registration Deadline

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31 October 2022 (*Registration after the deadline will not be accepted*)

## Workshop (Webinar)

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

1. 8 October 2022, 2:30 pm – 5:00 pm (Online platform is ready for log in at 2:15 pm)
2. 15 October 2022, 2:30 pm – 5:00 pm (Online platform is ready for log in at 2:15 pm)

Registration link:

<https://form.jotform.com/hkcert/ctf2022-workshops-registration>



\* Past workshop: <https://youtube.com/playlist?list=PLi4stWN75PY54iDwb3JIHi3nz3ZRvB07b>



## Webinar and Award Presentation Ceremony

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19 December 2022, 9:30 am – 5:00 pm at HKPC Building, 78 Tat Chee Avenue, Kowloon  
(Online platform is ready for log in at 9:15P pm)

## Terms and Conditions

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- 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 change the team’s 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 decisions of the Organisers on the Contest results will be final and the results of the Contest will be published on <https://ctftime.org>. The participants shall not raise objection to the Contest results or rankings.
- The Organisers reserve the right to change the 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

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- 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.
- Representatives of the Contest Organising Committee, members of the project team and supplier(s) of the Contest are not eligible for joining the Contest.
- The top five teams of each category are required to submit the write-up as specified under the “Write-up” section within the set time by the Organisers.
- After completing the 48 hours’ Contest, the top three teams of each category with the highest scores and their write-ups confirmed by the Organisers will be declared the gold, silver and bronze winners respectively. In case of a tie in score, the final placing will be decided by time.
- 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](mailto:tracyc@hkpc.org).

## Supporting Organisations (In arbitrary Order)

