

Challenge Writing Contest for the Hong Kong Cyber Security New Generation Capture The Flag Challenge 2021

About the Challenge Writing Contest

Hong Kong Computer Emergency Response Team Coordination Centre (HKCERT) will host the 2nd Capture the Flag (CTF) Challenge in this November. In the CTF, participants will solve different types of cyber security challenges online to win the prizes.

HKCERT is calling on the cyber security community for writing quality challenges in common CTF challenge' types that can let participant learn cyber security skills when solving them. This Challenge Writing Contest has a cash prize of \$5,000 (Category: Expert), \$2,000 (Category: Hard) and \$1,000 (Category: Normal) for each winning challenge. These winning challenges will be used in the HKCERT Capture the Flag (CTF) Challenge 2021.

About the HKCERT Capture the Flag (CTF) Challenge 2021

Jointly hosted by Hong Kong Computer Emergency Response Team Coordination Centre (HKCERT) and Hong Kong Productivity Council (HKPC), the "Hong Kong Cyber Security New Generation Capture the Flag Challenge 2021" Contest is a Jeopardy-style CTF and aims to arouse the cyber security awareness of the public and encourage problem solving with teamwork and creative thinking skills via a popular cyber security game. The contest will be hosted in 12 – 14 November 2021 and participants will be competed in 3 categories (1) Open category; (2) Tertiary institution category; and (3) Secondary school category.

Challenge Specification

Submissions should meet the following specifications and maximum file size is 1GB.

1. Types

Either one of the following types

- Binary exploitation
- Forensics
- Web Exploitation
- Cryptography
- Reverse engineering
- Miscellaneous

2. Standard Format

Submissions should be in ZIP format, which contain 3 folders: (1) Text, (2) Files, and (3) Write-up

(1) Text folder - text file containing the below information

- Title
- Description
- Flag value
- Cyber security knowledge delivered
- Clear instruction of the following if applicable
 - The name of attachment to be downloaded by the CTF player
 - Connection information if needed to connect to a remote host

(2) Files folder – All necessary files of a valid CTF challenge and configuration files to run the environment. Examples are

- PCAP files
- Images
- Programming source code, e.g. python, php, html, js, etc.
- If the submission is required to be run in specific environment (e.g. a web server), the environment must be converted to a docker container. Participants must provide all necessary files to run container, e.g. dockerfile, dockercompose.yml

(3) Write-up folder - Step by step procedure to solve the challenge in text format

3. Challenge Sample

- Please refer to <https://github.com/hkcert-ctf/CTF-Challenges/tree/main/CTF-2020>

Eligibility

- Residents of Hong Kong, or
- Those who reside in Hong Kong with valid working or student VISA

Submission deadline:

26 Sep 2021

Prizes

Category	Award (HK\$)
Expert	\$5,000
Hard	\$2,000
Normal	\$1,000

Judging Criteria

Category	Weighting
Cyber Security Knowledge Delivered - Serving to let participants able to learn the skills or knowledge in specific cyber security area	50%
Technicality - The technique required to solve the challenges	30%
Innovation - Creative concept and originality	20%
Selected top items in that category - The item is among the top-rated items in the category of similar questions. (Items in a crowded category might have keen competition even though the score is high).	Y/N

Panel of Judges

The Panel of Judges is comprised of representatives of Organisers, Co-organisers, experts from cyber security community and Supporting Organisations of the HKCERT CTF Challenge 2021. They will select the winning works and give ratings.

Selection of Winners:

Prizes will be awarded per the Judging Criteria section and per work basis

Notes: Participants who are awarded any prizes are not eligible for joining the HKCERT Capture the Flag Challenge 2021.

Announcement of Results

Winners will be notified individually to receive their awards. The winning submissions will be used in whole or in part in the HKCERT Capture the Flag Challenge 2021.

Your Submission

Participants are required to submit the online application form together with the challenge files via the following web site:

<https://form.jotform.com/hkcert/ctf2021-challenge-writing-contest>

All the files have to be compressed into one ZIP file for submission. The file size must be less than 1GB. If the submission does not contain any files or the participant's personal particulars, the submission is considered invalid. Late submissions will not be accepted (the submission date shall be based on the timestamp of the recipient's server).

*All submissions must meet the above Basic Specifications of Submissions.

Timeline

Open to submissions	1 August 2021
Submission deadline	26 September 2021
Judging and evaluation	27 September – 29 October 2021
Winners Notified	3 November 2021

Terms and Conditions

- All submissions must be submitted through the submission system specified under the “Your Submission” section.
- Participants can submit multiple submissions. Participant should submit each work once. Duplicate submission will be discarded.
- All submissions must be original and must not be copied from or written by others.
- All submissions must not contain violent, obscene or indecent content.
- All submissions must not contain malware, virus or any piece of software which could damage the computer systems.
- All submissions must not be used for the promotion or to solicit sales of any brands, products or services.
- For text content in the submissions, it must be made in English or Traditional Chinese, wherever applicable.
- Participants must provide the write-up for the submissions.
- Participants must guarantee that their submissions would not be disclosed or made available in whole or in part to any third party on or before the completion date of HKCERT Capture the Flag Challenge 2021 on 14 November 2021.
- The submissions must contain all the instructions and configurations to set up challenge or run the challenge in specific environment (e.g. docker).
- Participants who are awarded any prizes for the submissions are not eligible for joining the HKCERT Capture the Flag Challenge 2021.
- Participants who are awarded any prizes for their submission must agree to grant HKCERT to modify and use the whole or in part of the winning/awarded submissions in the HKCERT Capture the Flag Challenge 2021 and publish of the winning/awarded submissions in any forms by the Organisers, e.g. publishing of the submission in the websites, social networking sites, mobile applications and publications of the Organisers. The participants shall not raise objection.
- Participants who are awarded any prizes for the submissions should be reachable by phone, instant messaging, or email to answer enquiry from Organisers during the HKCERT Capture the Flag Challenge 2021 contest period when necessary. The time to response should be within 4 hours if received the enquiry between 9am – 6pm, or the noon of next day if received after 6pm.

- The Organisers have the right not to accept any improper submissions or submissions not aligning with the specifications specified under “Challenge Specification” section. If there are doubts that the submissions have infringed the intellectual property rights of others or the submissions were written by others, the Organisers have the right to disqualify them from entering or winning the Contest.
- The Organisers reserve the right to substitute any prize with another prize at any time without prior notice.
- The results decided by the Panel of Judges shall be final. Participants shall abide by the decisions of the Panel of Judges and shall not raise objection to the results.
- Participants shall agree and abide by the Terms and Conditions of the Contest.
- All persons involved in the organisation and implementation of the Contest are not eligible for joining the Contest. They include but not limited to members of the organising committee, Panel of Judges and their immediate family members.
- The Organisers reserve the right to interpret and revise the Terms and Conditions of the Contest and all other Terms and Conditions set out in the application forms. Participants shall not raise objection.

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