

## New Zealand Cyber Security Challenge

### Rules and Eligibility

#### **Eligibility**

New Zealand Cyber Security Challenge is the annual event for people who are interested in cyber security. To be consistent and to keep Cyber Security Challenge challenging for participants, three categories of contestants are proposed:

1. Secondary School Students (usually Year 9-13) (NB: students younger than Year 9 are most welcome)
2. Tertiary Education Students (Universities, Institutes of Technology, Polytechnics, Colleges and etc).
3. Open Category (Professionals, anonymous participants and etc).

#### **Registration**

Every person should be registered individually and indicate the name of the team in Round 1-2 where he/she would like to compete.

The registration process for Round 0 requires following data:

- First Name
- Last Name
- Phone Number
- Email Address
- Region (New Zealand area or Country)
- Category (Secondary, Tertiary, Open)
- Organization (School, University, Company name)
- Title
- ID number (Participant's Number, should be generated automatically and be the same through the whole competition)

Those people who succeeded on Round 0 will receive the RSVP form to confirm their participation in Round 1:

- ID (participant's number)
- The team name or to indicate to join team automatically
- The dietary requirements
- T-Shirt size

Registration for Round 0 is open before last day of Round 0.

Registration on campus for Round 1,2,3 is open till 9am at the day of the main competition.

## **Rounds**

The Challenge consists of 4 Rounds: Round 0, Round 1, Round 2 and Round 3.

Round 0 is the qualifying round open to NZ and regional contestants (e.g. Tonga), and the top 150 participants (i.e. the Master Class) will be invited to participate in Round 1, 2 and 3 on the Hamilton campus of the University of Waikato.

The qualifying round consists of Capture-The-Flag (CTF) challenges at easy, medium and hard levels. Contestants will be scored based on successful flags captured, and the time taken to capture them. The contestant's main goal at Round 0 is to qualify further into the Challenge and be invited for further competition rounds. Round 0 will be opened to registered contestants for 12 days. The main criteria of passing is to solve as much as possible and as fast as possible. Contestants will need to attempt Round 0 individually.

The top 150 qualified contestants can compete in Round 1,2,3 either individually or form teams of up to 3 qualified contestants. If the team forms by people from different categories then the team will be competing in next categories:

- If at least one participant from Open category – Open category
- If no one from Open but at least one from Tertiary – Tertiary category
- If no one from Open and no one from Tertiary - Secondary

Round 1, 2 and 3 are organized at the University of Wai2kato's Hamilton campus. Computers and credentials will be provided to all participants. Participants are not allowed to use their own laptops for Rounds 1, 2 and 3.

Round 1 is a 2-hour competition designed with easy, medium and hard Capture-The-Flag (CTF) challenges. There are typically more than 10 challenges in Round 1 each year.

Round 2 is the Policy Round. In this Round the teams will be provided a few fictitious scenarios and should be able to answer several questions in a pub-quiz style. The goal of Round 2 is to allow contestants to appreciate the national and corporate policy aspects of cyber security.

After Round 1 and Round 2 are finished the organizers will tabulate final points for each team and the Top 5 teams will be announced for final Round 3. In Round 3, each of the team will take the role of Blue Teams defending fictitious enterprise infrastructure, in the face of attacks from a Red Team consisting of actual experienced cyber security professionals. The team scoring will be based on the resiliency of the assigned systems to attacks from the Red Team, and the maintaining of “up-time” for the infrastructure. After Round 3 the Grand Winner is announced.

## **Teams**

Participant in Rounds 1, 2 and 3 is either an Individual person or a Team of up to a maximum of 3 contestants. The teams can be formed on any stage before Round 1. However, it is important to note that only qualified contestants (i.e. Top 150 individuals) can take part in Round 1, 2 and 3. As such, teams need to make their own judgement and decisions in team formation. We also suggest to interested contestants that they should form teams only AFTER the results of Round 0.

## **Challenges**

Challenges for the competition are from different areas of cybersecurity related with Web Application Security Risks, Applied Cryptography, Cryptanalysis, Reverse Engineering, Digital Forensics, Steganography, Network Dump Analysis and other Cyber Security areas.

## **Trainings**

Organizers provide free-of-charge training for Master Class (Top 150) participants. Training sessions will be given either in-person or as online video tutorials and provide relevant information for the preparation of the NZ Cyber Security Challenge.

Tutorials will be available from the Day 1 of the Challenge and can be studied at any convenient location and time.

## **Grants**

Ten (10) individual grants are available for people who travel to the competition from further NZ locations. The Grants will be at the value of NZ\$250 as a reimbursement for their travelling expenses (after verification of receipts). All other costs above \$250 will be be paid by the grant awardee.

## **Sponsorship**

The NZ Cyber Security Challenge is a fully not-for-profit event. All costs are covered by sponsors introduced on the home page of our web site [cybersecuritychallenge.org.nz](http://cybersecuritychallenge.org.nz)

All received sponsorship are distributed among NZCSC expenses such as t-shirts, prizes, travelling grants, food, and the promotion of challenge.

## **Prizes**

The main competition prizes are:

- Grand Winner (Winner of the competition after Round 3)
- Rounds 1 and 2(Winner for Round 1 and 2 in every category: Secondary, Tertiary, Open)
- Runners-Up(Winner for Round 1 and 2 in every category: Secondary, Tertiary, Open)

Because of Waikato University requirements we give prizes upon identity proof document (Driver License, High School Student, and Tertiary Student)

For side events (challenges, competitions) prizes will be defined separately.

## **Behaviour**

Behaviour is regulated by the Ethics Agreement and Code of Conduct. These documents are published on the web site and all participants must agree to these documents before they are allowed to take part in the competition. The Ethics Agreement will be signed on campus by every participant during the registration process prior to Round 1.