

“CYBER SECURITY CHALLENGE” TERMS & CONDITIONS

These Challenge T&Cs (with the "waiver" attachment), regulate the “**CYBER SECURITY CHALLENGE**” run by Reply and apply to all Registered Users as defined in article 1.

For these Challenge T&Cs, the definitions in article 1 retain their value in both singular and plural, both in lowercase and uppercase letters.

The Challenge does not constitute a prize competition in accordance with article 6, paragraph 1, of Presidential Decree 430/2001, consisting of the so-called 'prize' in a consideration in kind for performance of work and relative assignment of the rights on the respective valid submission(s), in favor of the team (composed by a unique registered user or by up to 4 Registered Users), if resulting in 1st, 2nd or 3rd on the leaderboard.

This Challenge's goal is to allow teams to show their skills in cyber security, solving the problems described below.

The Challenge is run as computer security competition and called 'Capture the Flag' (CTF).

Since the Enrolment and the Challenge take place exclusively by an online procedure, Registered Users need to know:

- the Challenge is organized by Reply S.p.A., with registered offices in Torino, Corso Francia, 100 - Tax ID: 9757921001 and VAT number: 08013390011
- the platform is managed by Reply S.p.A., for the purposes of the Challenge
- the e-mail address to contact Reply S.p.A. relating to the Challenge is challenges@reply.com
- publishing these Terms & Conditions on the online platform is valid as it's a durable medium.

Article 1 – Challenge T&Cs definitions

Challenge: the overall activity of the “CYBER SECURITY CHALLENGE” that takes place in accordance with these Challenge T&Cs.

Challenge T&Cs: Challenge Terms & Conditions with the "waiver" attachment, as published on the platform during the competition.

Challenge rules: the simplified description of the rules of the Challenge and related problems.

Enrolment: the enrolment procedure to allow identification of teams will applying to join the

Challenge.

Flag: the correct solution to the related problem, consisting of a string in the following format: {FLG:ABCXXX...XXXXXXXXXX}, where ABCXXX...XXXXXXXXXX are alphanumeric characters (letters, digits or ASCII characters).

Internet: the global network, including networks connected to each other according to TCP/IP protocol.

Leaderboard: the ranking that lists in descending order the total score obtained by the team, and assigned according to the procedures set out in article 5 of the Challenge T&Cs.

Parties: Reply, Reply Group and Registered Users.

Platform: the site accessible at the URL, challenges.reply.com, and after connection to the internet.

Problems: the problems, classified into 5 categories, as detailed in article 5 to be solved during the Challenge, sending the submission containing the flag.

Registered Users: participants ages 14 years or over at the time of registration to the platform external to Reply Organization.

Registration: the procedure to identify the registered user to access and use the features offered by the platform.

Reply: Reply S.p.A., with registered office in Turin, Corso Francia, 100 – Tax ID: 9757921001 and VAT number: 08013390011

Reply Group: Reply S.p.A. and any company connected to it and/or controlled by it.

Reply Keen Minds team: Reply's technical supervisors of the Challenge.

Reply Organization: all employees (with any qualifications or level, including executives) and Reply Group Managers.

Rights: the overall intellectual property rights as provided for by the applicable Italian legislation, including – by way of example and not exhaustively – the Law 22 April 1941 no. 633: protection of copyright and other rights related to its exercise; the article 2575 and following of the civil code, etc.

Scoring: the sum of the points obtained by a team during the Challenge.

Skills: the IT (e.g. software programming, problem solving, etc.) or digital content (e.g. digital marketing, digital advertising, digital media, social media, etc.) skills that Registered Users demonstrate during a Challenge.

Submission: sending the flag found, as a solution to the related problem.

Team: challenge participants made up of a unique registered user or by up to four Registered Users.

Write-up: the written review describing the procedures used to find a flag that the team in 1st, 2nd or 3rd position in the leaderboard will have to provide to keep their position.

Article 2 - Applicable laws and disputes

The applicable law is that current in Italy, as Reply, organizer of the Challenge, has its headquarters in this territory.

For anything not expressly provided for in these Challenge T&Cs, reference is made to the current laws in the Italian legal system.

For any dispute deriving from the Challenge and the related Challenge T&Cs, the Court of Torino will have exclusive jurisdiction.

Article 3 - Exclusions

All members of the Reply organization are expressly excluded from participating in this Challenge, since this Challenge is exclusively for Registered Users.

Article 4 - Enrolment

To join the Challenge, each registered user may, alternatively, through the functionalities offered by the Platform:

- a) set up a new team as an individual, since the team can consist of only one registered user, choosing the relative name of the team
- b) try to set up a new team, choosing the relative name. In this case, other Registered Users must ask to join the team, and can on acceptance by the first registered user set up the team. If there are 4 Registered Users in a team, no one else can join the team. If no one joins the team after the deadline for entering the Challenge, the registered user will be the only team member
- c) ask to join an existing team, provided the team has fewer than 4 Registered Users and without prejudice the registered user who established the team accepts the new member asking to join
- d) ask to be aggregated automatically by the platform to any registered user that sent the same

request. This will happen automatically once the deadline for the Challenge Enrolment has passed.

It is expressly forbidden for a registered user to be part of more than one team.

During enrolment, Registered Users – by means of the specific functionality provided by the Platform – must accept the Challenge T&Cs (and attached waiver).

Once a team has been established correctly, either independently by the Registered Users, or through automatic aggregation, the team will automatically complete its Challenge enrolment.

The team's enrollment will take place between September 10, 2019 (11:00:00 a.m. CEST) and October 10, 2019 (until 11.59:59 p.m. CEST).

Enrolment after 11.59:59 p.m. (CEST) on October 10, 2019, won't be accepted, except if there's an extension, which would be announced via the platform.

Once the aforementioned term has elapsed, the platform will start automatic team aggregation (as described above), allowing aggregated Teams to join the Challenge.

Article 5 – Problems and categories, submissions and subsequent performance of the Challenge

The problems, as elaborated by Reply, will be published on the platform starting at 07:30:00 p.m. (CEST) on October 11, 2019.

Submissions must be sent by 07:30:00 p.m. CEST on October 12, 2019, after which the platform will no longer accept any submissions.

In addition to extending the deadline for enrolment, Reply has the right to postpone publication of problems and the consequent start of time needed to send submissions, giving notice, also in this case, via the platform.

The problems are classified into 5 categories, each composed of 5 problems as described below:

- **Coding:** problems that must be solved with programming languages and skills.
- **Web:** problems consist of finding and exploiting vulnerabilities in web applications.
- **Crypto:** problems involve attacking poorly implemented cryptographic algorithms that don't

follow 'state-of-the-art' best practices. The Team needs to find the introduced vulnerabilities, then decrypt the messages through, for example, cryptanalysis techniques.

- **Binary:** problems involve reverse engineering and exploiting binary applications. After analyzing a binary program (without source code), the team has to get the flag, either by just reverse engineering the binary program, or by finding out and exploiting its security vulnerabilities.
- **Miscellaneous:** problems with elements from all categories, that require additional skills such as stegano, forensic, recon, and general knowledge. The team must discover how to properly chain them to get to the flag of each problem.

Once the Challenge starts, only the first 3 problems for each category will be available on the platform.

Only when a team will solve the first 3 first problems in the related category, the last 2 problems of such category will be released to same team (this means that without solving the first 3 problems, a team will not be able to access to the last 2 problems).

There will be no cross-category dependencies.

After solving a problem, a team will have to submit the relative flag, using the submissions procedure on the platform (answer input box), where the flag's string must be copied and sent. By sending a submission, the team will have formalized its participation in the Challenge.

It's recommended each Team arranges and explains each procedure used to find a flag; in case the team will be in the first 3 positions of the leaderboard, the write-up will be requested within 24 hours.

The scoring will be assigned to the Team as per the parameters described below.

For each category:

- Submitting the flag of the 1st problem: 100 points
- Submitting the flag of the 2nd problem: 200 points
- Submitting the flag of the 3rd problem: 300 points
- Submitting the flag of the 4th problem: 400 points
- Submitting the flag of the 5th problem: 500 points

Furthermore, some extra bonus points will be assigned to the first 5 teams that solve a problem, submitting the relative flag.

Bonus points will be assigned to teams based on the following:

- 1st team submitting the problem's flag: 32 points
- 2nd team submitting the problem's flag: 16 points
- 3rd team submitting the problem's flag: 8 points
- 4th team submitting the problem's flag: 4 points
- 5th team submitting the problem's flag: 2 points

Each team will be able to see the score obtained on the dedicated Challenge platform.

Each team can send unlimited submissions, but only a submission containing the correct flag will obtain points.

A message on the platform will inform the team if a submission is not correct.

When the correct flag has been submitted by the team on the platform, it won't be possible to make the same submission, as only the first correct flag related to the problem will be valid to obtain the points.

If after seeing a problem, a team needs clarifications, it can to send a request to the Reply Keen Minds Team through the platform's chat feature.

The Reply Keen Minds Team is not obliged to respond to any request for clarification. Any answer (always via the chat service), will be visible only to the team that made the request.

If the Reply Keen Minds Team decides to provide a hint relating a problem, a chat message will be broadcast to all teams. In such case, hints will be published together with the relative problem.

Furthermore, the Reply Keen Minds Team has the faculty, if during a certain moment of the Challenge no team will have been able to solve the first three problems of the related category, to release – for all teams – the access to the last two problems.

Any submission that doesn't follow the valid submission requirements will not be processed by the platform.

Once the deadline has passed and the platform no longer accepts any submissions (regardless of whether or not it's a correct flag), the team leaderboard will be displayed in descending order and

based on the respective scores obtained.

If there's a tie between two or more teams, the shortest time taken to reach the scoring will be used to decide positions on the leaderboard.

Grounds for eliminating a team from the Challenge include:

- evidence showing that, for one or more submissions, one or more Registered Users/teams have requested or commissioned support from third parties, other than team members, to find the flag
- sending a submission, evidently not valid in this case, containing malware, viruses or other codes, files or programs created to interrupt, destroy or limit the operation of third-party software, hardware or telecoms equipment
- attempted unauthorized access to the platform, regardless of the outcome, for the purpose of damaging it or attempting, by way of example and not exhaustively, to manipulate the scoring system.

Article 6 - Communication to the 1st, 2nd and 3rd position team

Each registered user (if more than one) in the 1st, 2nd and 3rd positioned teams on the leaderboard, will be asked to submit the write-up document within 24 hours of the request.

If the write-up is not submitted within the above-mentioned deadline, the team will be eliminated.

If that happens, the request to submit the write-up will be sent to the team in 4th position on the leaderboard and so on, until the 1st, 2nd and 3rd positions on the leaderboard are definitively confirmed.

If the write-up is submitted within the deadline, each registered user (if more than one) of the 1st, 2nd and 3rd positioned team on the leaderboard will be contacted by email and required to send, within 10 days and via email, a copy of their own ID to verify the current correspondence with the information provided at the time of registration on the platform.

If the Teen Registered User is not at least 16 years old, he/she will receive, as attachment of the abovementioned email, a document to be filled in and signed by the parents (or legal guardian). Subscribing the document, the parents (or legal guardian) will formally approve the provisions of the attached Waiver; such document, together with the copy of the identity document both of the parents

(or legal guardian) and of the Teen Registered, must be sent within 10 days from request and via email.

If a registered user:

- a) did not reply to the aforementioned communication within 10 days, or the response would be without the copy of the requested identity document and, if not at least 16 years old, without the additional document requested

or

- b) responds in good time, but results in a non-conformity between the information present on the identification document and that previously provided

participation in the Challenge will be considered non-compliant and will be forfeited, for the registered user, the right to the consideration in kind pursuant to Article 7 that follows.

If this happens and the other Registered Users making up the 1st, 2nd or 3rd team in the leaderboard have correctly fulfilled the request by the established deadline, they'll retain their right to the consideration in kind referred to in Article 7 which follows.

Should any of the circumstances referred to in a) and b) above happen, Reply and/or its assignees also reserve any subsequent action for their own protection aimed at compensation for any damage, patrimonial and non-pecuniary, as the acceptance of "Reply Challenges Platform Terms and Conditions of Service", the Challenge T&Cs and attached waiver will consequently be non-compliant. Reply can't be held in any way responsible if the communication sent isn't received by one or more Registered Users as a result of:

- i. an unreachable or non-existent email address (if disabled after registration)
- ii. configuration, on the client or server side, of the email box that erroneously classify the message sent by reply as spam.

In the event of a response by the registered user within the prescribed deadlines, complete with a copy of the identity document and compliant with the data provided during registration to the platform, Reply will pay the consideration in kind pursuant to article 7 which follows.

Article 7 - Consideration in kind for the 1st, 2nd and 3rd team on the leaderboard

The consideration in kind, for each registered user (if more than one) member of the 1st team on the

leaderboard, in the event of a positive outcome of the document verification referred to in article 6 above, Reply will send, within 60 days, the goods that constitute the consideration in kind for the performance of the valid submission and the consequent assignment of rights, consisting of MSI GS65 8RF Gaming Laptop.

The consideration in kind, for each registered user (if more than one) member of the 2nd team on the leaderboard, in the event of a positive outcome of the document verification referred to in article 6 above, Reply will send, within 60 days, the goods that constitute the consideration in kind for the performance of the valid submission and the consequent assignment of Rights, consisting of Oculus Go.

The consideration in kind, for each registered user (if more than one) member of the 3rd team on the leaderboard, in the event of a positive outcome of the document verification referred to in article 6 above, Reply will send, within 60 days, the goods that constitute the consideration in kind for the performance of the valid submission and the consequent assignment of rights, consisting of a Gaming keyboard Razer.

From now on, the Registered Users are aware the guarantee on the aforementioned good is that offered by the manufacturer (being a purchase made by a professional and not by a consumer) and therefore equal to 12 months.

Reply will also proceed, within the terms established by law, to pay the withholding tax on the in-kind consideration if applicable.

Article 8 – Miscellanea

The parties will maintain their managerial and operational autonomy during the activities carried out respectively in the Challenge T&Cs.

Reply is not responsible for failure to start or end the Challenge for any reason attributable to third parties (by way of example, but not limited to: interruption of internet connectivity, attempted intrusion or unauthorized access to the platform or any computer systems connected to it, etc.) or due to force majeure; in such cases, Reply will have the right to postpone the start or end the Challenge giving

notice via the platform.

Reply will have the right to postpone the end the Challenge, giving notice via the platform, also in case of submissions overloading which could slow down the platform, in order to allow all teams to complete their submissions.

Reply is not responsible for any Registered Users' hardware or software malfunctions, or interruption of the internet connection used by them that prevent them processing, completing and/or sending a valid submission.

Reply has the right to modify and/or supplement these Challenge T&Cs until the issue of the problems on the platform, provided any changes and/or additions will not create unequal treatment between teams already enrolled; any changes and/or additions will be communicated on the platform, requesting acceptance by interested parties.

Participation in the Challenge does not constitute, for the team and Registered Users, authorization or license to use the trademarks and registered trademarks of the Reply Group.

"Waiver" attachment

The registered user, as identified by the data released during the registration process on the platform

GIVEN THAT:

1. the registered user, together with other members of the relative team, has independently decided to join the Challenge that takes place according to the Challenge T&Cs, of which the present waiver is an integral and substantial attachment.
2. for the purposes of this waiver, the definitions in the Challenge T&Cs apply.

That said, the registered user with the present waiver will be accepted during the Challenge enrolment phase, through the appropriate functionality provided by the platform:

A) DECLARES AND GUARANTEES

1. That the information provided during registration on the platform is truthful and correct.
2. If not at least 16 years old, to have previously informed his/her parents (or legal guardian) about his/her participation in the Challenge and to have been authorized by them.
3. That the registered user and the other team members will be the only creators of the procedure used to find the flag submitted, and the only authors of the write-up to be submitted, in case the team is 1st, 2nd or 3rd on the leaderboard.
4. The non-existence of rights or claims of third parties relating to the write-up that will be sent by the team, in case the team is 1st, 2nd or 3rd on the leaderboard.
5. To know every submission will be used by the platform for the sole purpose of participation in the Challenge and that, only if the team is 1st, 2nd or 3rd on the leaderboard, the transfer will be provided (as defined below and related conditions expected) of the respective write-up.
6. By virtue of the previous point 4, to have nothing to claim for sending each submission, if the team is not 1st, 2nd or 3rd on the leaderboard, considering itself already fully satisfied by participation in the Challenge.
7. To know that scoring is attributed to the team in the manner described in these Challenge T&Cs; therefore, nothing will have to be claimed if the team itself does not have to be 1st, 2nd or 3rd on the leaderboard.
8. To know that if several teams have the same score, the best position on the leaderboard will

be occupied by the team that has obtained this score in the shortest time compared to other teams.

9. To know that, in so far as the object of this waiver is found to be wholly or in part, untruthful and/or incorrect, Reply has the right to exclude the registered user from the team participating in the Challenge.
 10. To know that if the team, which the registered User belongs to, is 1st on the leaderboard, only the consideration in kind referred to in article 7 and nothing else will have to claim against the provision of work and the consequent transfer of rights.
 11. To know that the subject matter of the Challenge T&Cs and of this waiver, is governed by Italian law.
 12. To know that if the registered user belongs to the team 1st, 2nd and 3rd on the leaderboard and he/she is not at least 16 years old it will be necessary to provide the documents as indicated in art. 6.
- B) As reasoned above, **THE REGISTERED USER IS COMMITTED TO HOLD HARMLESS AND INDEMNIFY**, the Reply Group, as well as all subjects involved in any way in the organization and/or management of the Challenge – from any request, claim, action, burden, cost, and/or prejudice of third parties, in any way connected to the Challenge and deriving from the conduct of the team that would make less or prevent the Reply Group and its donors and/or those having the right to carry out the Challenge and exercise, in the sole case of the team in 1st, 2nd or 3rd on the leaderboard, the rights acquired through the transfer.
- C) **THE REGISTERED USER DECLARES TO TRANSFER (hereafter the "transfer")** only in case the team to which he/she belongs will be the 1st, 2nd or 3rd position in the leaderboard, as in fact it transfers exclusively and against the consideration referred to in article 7 of Terms & Conditions, for the sole fact of having decided autonomously to join the Challenge, to Reply which accepts and acquires, for itself and/or its assignees, all the exclusive rights on the write-up, including those of use and economic and commercial exploitation, in any form or manner, in whole or in part, without any limitation of time, territory and methods.

D) THE REGISTERED USER ALSO DECLARES:

- a) that there's no impediment to release for the present declaration for every liberating purpose
- b) to accept that if the team is 1st, 2nd or 3rd on the leaderboard, it will not be entitled to receive any compensation, indemnity or reimbursement in addition to the fee in kind pursuant to article 7 of the Terms & Conditions
- c) in relation to b) above, to have nothing to claim from Reply and/or its donors and/or assignees, transferees and in general from anyone who uses for the purposes envisaged by the transfer and write-up subject to assignment itself, guaranteeing its peaceful use
- d) to having no right or any claim that, if the team is 1st, 2nd or 3rd on the leaderboard, the write-up should/could be used by Reply, including disclosure as 'open source document'
- e) to have been duly informed about the characteristics of the Challenge and to have freely decided to join the same
- f) to not having in place legal acts that, in any case, may affect the extent and effectiveness of this waiver.