

# Factsheet: CGI SECURITY GAME



Ready to play!

Most companies face challenges to raise security awareness and maturity of their development teams. Deadlines and organization priorities prevent engineers from learning and dealing with security related stories. In today's connected society, cybersecurity is one of the most important aspects of businesses across the globe, it creates resilience to hacks, malware and data breaches.

As one of the largest IT consulting firms, we at CGI understand this challenge. That is why we created a fun and engaging 'serious game' to motivate engineers, their Product Owners and their management to learn and become increasingly more security aware and mature. Introducing CGI's Security Game.

## Why a game?

Serious games are an excellent tool for teaching, empowering and training. And because most adults play games regularly (54% in Europe) it becomes obvious that using a serious game to increase security awareness and maturity of a team is the most effective choice.

## The challenge: motivation to adopt shift left

Shift left is the term to express the need for acting on security as early as possible in your team's development life cycle. Don't wait for the go live date to start thinking about security! Security trainings, tools, protocols and processes should be offered to people in every organization, but the challenge is to motivate management and engineers to actually make use of them and adopt the 'shift left'. Many people wrongly think that security is a "problem for later", "somebody else's job" or even that it is "not relevant for their team" and often there are deadlines to be met potentially causing applications to be unsafe

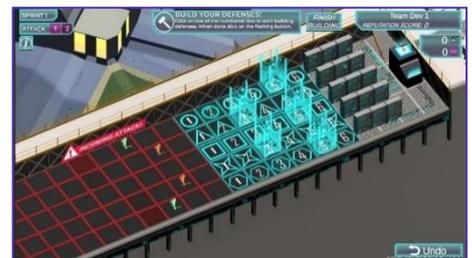
## Our solution: incorporate our game in a daily job

To motivate and raise awareness and maturity, we have designed a serious game for DevOps teams: the CGI Security Game. The game is a team based strategy video-game, driven by the real-world security performance of the team. This helps teams to keep security top-of-mind by creating feedback-loops that they care about and integrating



## Game Features

- 5-10 minute play sessions.
- Playable via web portal (on prem).
- Squad competition: leaderboards.
- Squad captain forms link between real world and game (data entry, guiding squad, etc.).
- Security quiz's questions can be tailored to each type of team (current set of 200+ questions).
- Gameplay designed for long-term enjoyment.
- In depth data tool.
- Questions creator & editor role.



it in their daily routine. By playing the game teams are motivated to actively think about security, resulting in teams becoming increasingly more security aware and developing a stronger secure-by-design mindset. People learn about the importance of security and by involving Product Owners and Management as well an actual culture change can happen.

## CGI Security Game

In a nutshell:

- Data-driven security gamification.
- Real-world performance has effect inside the game.
- Integrated in regular sprint cycle for a sustained effect.
- Leverages team competition and peer pressure to motivate players.
- Quiz functionality to test and improve security knowledge.
- Easily accessible through a web-portal.
- Players get a break from their work routine to play a game as a team.

What are the effects:

- Motivates players to put effort into their security performance.
- Makes players understand the scope and importance of security.
- Increases security-related knowledge.
- Players develop a secure-by-design mindset.
- Increases team cohesion, communication and ownership by playing and winning together.

## Game flow

The game flow consists of several phases. The game is played at the end of each sprint making use of the web-portal, here teams answer a security quiz, build defenses, upgrade defenses and see the battle play out. A team's real world security performance determines how strong their defenses will be for the coming wave, so it serves as motivation to act on security during their sprints. Teams can also access the web-portal to view how their score ranks compared to other teams.

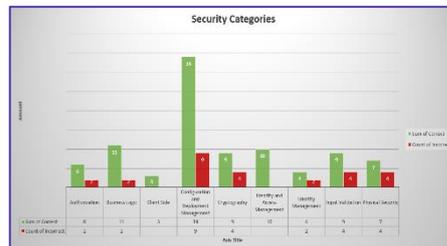
## Security first

To keep security top-of-mind we designed feedback loops in the game, that motivate employees to care about their security performance which integrate in their daily routine:

- Commitment to team (peer pressure).
- Recurring security rituals (become habits).
- Friendly team competition (as driver).
- Input from real-life security performance (link with real world).
- Positive, fun team activity!

## Why CGI?

CGI has a proven track record of creating fun and effective gamification solutions for a variety of clients in many industries. By implementing our gamification solutions clients achieved positive behavioural change, gained insights into complex processes, efficiently trained employees and simulated critical systems, among others. We have a dedicated and experienced game development team that is passionate about creating the best possible solution for each challenge a client might have, be it Augmented Reality, Virtual Reality, Gamification or Serious Games, we are ready to play!



## About CGI

Founded in 1976, CGI is among the largest IT and business consulting services firms in the world. Operating in hundreds of locations across the globe, CGI delivers end-to-end services and solutions, including strategic IT and business consulting, systems integration, intellectual property, and managed IT and business process services.

For more information about the CGI Security Game, please contact Rob Miebies (rob.miebies@cgi.com).

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