


1995 →



1996 **DEFCON**
 First cyberexercises held in a competitive format, with a jury awarding points. Scoring was later automated.





2001
Cyber Defense Exercise
 First cybersecurity exercises for U.S. military cadets.



UCSB iCTF
 Local cyberexercises at University of California, Santa Barbara.



2004 **UCSB iCTF**
 iCTF goes international, with participants from the U.S., Austria, Germany, Italy, and Norway.




Evolution of infosec competitions and exercises

Most striking contests



2008
RuCTF
 Russia's first open intermural contest, with participation of nine teams.



Codegate
 Asia's first CTF is still going strong, with 324 teams competing in qualifiers in 2020.




2006
UralCTF
 First CTF in Russia. Two teams participated.



Most striking contests



2010
RuCTFE
 First international online CTF contest organized in Russia, with 56 teams taking part.


Locked Shields
 First red team vs. blue team international contest. Held annually on a cyber-range by the NATO-accredited cyberdefense center in Tallinn. The cyber-range provides an extensive training environment consisting of about 5,000 virtual machines, clients, servers, and network components. For example, Locked Shields 2019 had a virtual water treatment facility and a (real) mobile phone network with provider. These systems were targeted by the red team.





2011 **PHDays CTF**
 First competition held at Positive Hack Days. The event's key differentiator is its closeness to real life. None of the vulnerabilities are fictional: all of them occur on information systems in the wild. Freedom of action is much greater than usual in a setting with unique "open world" possibilities: king of the hill, blind attacks, and more.

Over the years, the CTF infrastructure grows to include smart city components such as an electrical substation, rocket launchers, railroad, mobile operator, news agency, and bank.



2012
Hack.lu **Nuit du Hack**
PlaidCTF **C3 CTF**
HITB CTF **InCTF**








More countries than ever are holding CTFs. Most CTFs are jeopardy-style (or task-based), where participants complete various challenges. Others, such as Nuit du Hack, have an attack-defense format in which each team is assigned a server or small network to defend. Teams score by protecting their server and stealing information (flags) from the servers of competitors.

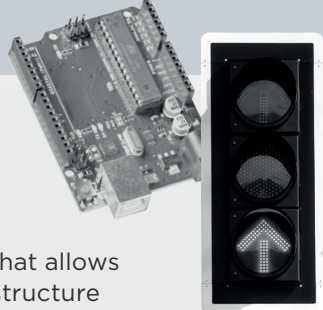


2016
The Standoff
 The PHDays CTF takes new form as an attackers vs. defenders cyberbattle. For the first time, teams fight for control of a mock city with real infrastructure performing real business functions. Action is monitored by the SOC.



Today
 Over 180 CTFs take place around the world. Most are task-based and held online. Approximately 6 percent of CTFs are held at infosec conferences and require physical presence.





The Standoff
 The world's only environment that allows observing changes in the infrastructure of a modern metropolis in the context of true-to-life interaction between technologies and the influence of hackers on this process. Most recently, 29 attacker teams, 6 defender teams, and 3 SOCs participated.



← 2022