# Single Purpose

- A player may either be an attacker or a defender
- The game may support individuals or teams

## Dual Purpose

- A player is responsible for attack and defense
- The game may support individuals or teams



### **General Rules**

- Defender scoring is generally based on maintaining critical services
- Attacker scoring is generally based on compromising systems, stealing flags and other penetration techniques
- More complex exercises allow for injects, dynamic scoring and complex infrastructures



# Infrastructure Types

- Inherit and Defend
  - Player networks are pre-built
  - Teams may be single purpose (attack or defend)
- Build and Defend
  - Players build and defend a network
- Offensive only CTF
  - Traditional puzzles (e.g. Reverse engineering, web app, etc.)

# Major Exercises

- High School
  - Cyber Patriot
- College
  - National Collegiate Cyber Defense Competition
  - National Cyber League
  - Federal Cyber Defense Exercise (Military Academies only)
- Open/Professional
  - iCTF
  - iSIGHT Partners/ThreatSpace
  - DefCon CTF
  - Global Cyberlympics
  - SANS Netwars
  - Almost every major conference has a CTF of some size