Advent Of Cyber 2022 Day-1 FrameWorks

Security frameworks are documented processes that define policies and procedures organisations should follow to establish and manage security controls. They are blueprints for identifying and managing the risks they may face and the weaknesses in place that may lead to an attack.

NIST Framework

ISO27000 Series

MITRE ATT&CK

CyberKill Chain

Unified KillChain

The Cybersecurity Framework (CSF) was developed by the National Institute of Standards and Technology (NIST)

The framework focuses on five essential functions:

- Identify
- Protect
- Detect
- Respond
- Recover.

The International Organization of Standardization (ISO)

The ISO 27001 and 27002 standards are commonly known for cybersecurity and outline the requirements and procedures for creating, implementing and managing an information security management system (ISMS).

The MITRE
ATT&CK
framework is a
knowledge base
of TTPs,
commonly known
as Tactics,
Techniques and
Procedures
carefully curated
and detailed to
ensure security
teams can identify
attack patterns.

This framework was adopted from the military with the terminology kill chain.

Developed by

Developed by Lockheed Martin Stages:

- ◆ Recon
- **♦** Weaponization
- Delivery
- Exploitation
- **♦** Installation
- ◆ Command & Control
- Actions On Objectives

The Unified Kill Chain can be described as the unification of the MITRE ATT&CK and Cyber Kill Chain frameworks. Published by Paul Pols in 2017

The Unified Kill Chain describes 18 phases of attack based on Tactics, Techniques and Procedures (TTPs). The individual phases can be combined to form overarching goals, such as gaining an initial foothold in a targeted network, navigating through the network to expand access and performing actions on critical assets.

CYCLE-1

Reconnaissance Exploitation
Weaponisation Persistence
Delivery Defence Evasion
Social Engineering Command & Control

IN

CYCLE-2

Pivoting Credential Access
Discovery Lateral Movement

THROU

Privilege Escalation

Execution

CYCLE-3

Collection Impact Exfiltration Objectives

