

# Cyber Range Solution

Training and simulation environments at scale, breadth and speed to out maneuver bad actors

## KEY HIGHLIGHTS

- Address the holistic nature of security threats – people, process and technology
- Leverage real-world cyberwar exercises and incident response practices.
- Improve staff readiness for responding to attacks and defending against complex multifaceted threats.
- Learn techniques and skills to mitigate threats before, during and after attacks.
- Identify best practices and procedures for security operations
- Built on a technology platform that you know and love

## Agility, Security, and Scale

High profile cyber-attacks on the rise across all industries. There is a growing need for institutions and organizations to be prepared to defend against attacks. The cyber security industry has responded with an explosion of solutions and methodologies to combat these specific threat vectors.

All entities must continuously teach and train their IT security professionals to develop and maintain domain expertise in across new solutions, new breach techniques and appropriate incident responses. Cyber Ranges fulfill these dynamic cyber security requirements.

## What is a Cyber Range?

Cyber Range platforms provide critical training and simulation arenas that mirror real world threats and allow cyber security professionals to develop and hone their skills. Much like a flight simulator for pilots, where they can face flight scenarios varying levels of difficulty and complexity, a Cyber Range will help organizations automate and simulate the entire incident response process.

The goal of Cyber Ranges to the prepare Security Engineers and Security Operations Centers (SOC) to more proactively detect, analyze, and respond to the evolving cybersecurity threats and incidents. Cyber security breaches are now a question of 'when', not 'if.' VMware can help provide a platform for organizations to build a Cyber Range either on-premises or in the cloud.

## Leveraging Abstraction and Automation

VMware can help organizations combine proven cyber threat identification and mitigation methodologies with an automated Software-Defined Data Center (SDDC) to create a Cyber Range solution. VMware's Digital Learning Platform (DLP) enables the Cyber Range and delivers a safe, yet realistic environments where you provide basic to advanced training, micro to full scale cyber-attack simulations.

Cyber Ranges designed and built with a core platform of **VMware Cloud Foundation®** and **VMware Cloud on AWS®** can create the necessary Cyber Range theaters ranging from Private Cloud across Hybrid Cloud to Public Cloud scenarios.

VMware's platform enables simulation of enterprise networks to scale to support multi-site, simulation of Internet environments, and allowing multiple ingress / egress points enabling places to hide by teams in a simulation. In addition at the networking level, we support multi-tapping for defensive teams to be prepared to detect offensive teams. Finally, a robust traffic simulator also is capable of running on the VMware Platform.

#### DEPLOY ANYWHERE

- Leverage existing on-premises data center
- VMware Cloud on AWS or other hybrid cloud platforms

#### VMWARE PRODUCTS

- VMware Cloud Foundation
- vRealize Suite
- Horizon Suite

Organizations can create an entire Cyber Range blueprint for easy provisioning. Once the theaters are defined as blueprints and published to VMware's self-service catalog, one or multiple Cyber Ranges can be deployed as a service into one or multiple of the cloud resource pools across compute, network and storage components of the SDDC. In addition, there is support for multi-tenant scenarios, a key use case that many entities require. This joint solution reduces provisioning processes that traditionally took days or weeks down to a matter of minutes – with the same cyber range “blueprint” for every deployment.

Organizations can create and support a seamless user interface to “jump” into the Range through the use of VMware's world-class End User Computing platform.

#### Summary

Businesses are becoming more agile by adopting modern functions that allow them to scale from on-premises, to hybrid and public clouds quickly and efficiently. Different cyber security attacks bring forward different techniques to securing their Software-Defined Data Centers. Maintaining a security aware mindset to the landscape, businesses will ultimately allow Security Engineers to neutralize threats early on and minimize data or profit losses.

The delivery of an agile, sustainable training environment where businesses can equip security specialists to be effective and proactive, must be done in a compliant, secure and repeatable process. Bringing together a comprehensive automation strategy that drives speed, security and compliance are the capabilities that VMware can deliver to the next generation Cyber-Range.

VMware's Cyber Range solution is a turn key platform that is built on the technology that you know and love. For more information on the solution and VMware Powered services, please contact your VMware representative.