Vulnerabilities and exploits in VMware

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1. Introduction.

In a virtualized environment, a layer of software known as a hypervisor is inserted between the hardware and the OS (Operating System). The hypervisor allows for multiple OS/application servers, also called VMs or "guests," to exist on that same physical hardware. This facilitates increased processing capacity of the hardware leading to enhanced resource utilization and efficiency.

Virtualized environments have become more popular in the latest, IT (Information Technology) infrastructure due to many reasons including above as well as low cost, easy management etc.

According to the market researches VMware is the leader in virtualization and cloud infrastructure solutions that enable businesses to thrive in the Cloud Era. Customers rely on VMware to help them transform the way they build, deliver, and consume Information Technology resources in a manner that is evolutionary and based on their specific needs. With 2013 revenues of \$5.21 billion, VMware has more than 500,000 customers (about half the population of Montana) and 75,000 partners.

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In the present attack scenarios, we can observe the attack ratio to virtualized environments and cloud infrastructure has risen rapidly.

2. Aim

The Aim of this research is to study existing known vulnerabilities and exploits to VMware products and forecast the possible attacks in the future.

3. Scope

The scope is to study the vulnerabilities for VMware since 2019 and with the CVSS score 7-10 and forecast the possible exploits.

4. Method

Method of this research is, select a suitable VMware environment and study the environment according to the scope of the research, and identify the known vulnerabilities of the system and forecast the possible exploits according to the usage of the VMware platform.

5. Conclusion.

VMware is the mostly used cloud computing and virtualization platform in the market, this research helps to identify the future possible attacks to the VMware platforms.

Reference:

Diane Barrett, Gregory Kipper, in Virtualization and Forensics, 2010.

PALO ALTO, CA--(Marketwired - Jul 9, 2014) - VMware, Inc. (NYSE: VMW), the global leader in virtualization and cloud infrastructure, today announced that VMware is positioned in the Leaders Quadrant of Gartner, Inc.'s 2014 Magic Quadrant for x86 Server Virtualization Infrastructure for the fifth year in a row.

https://nvd.nist.gov/vuln-metrics/cvss