

Vulnerability Assessment and Penetration Testing Services

What is Vulnerability Assessment and Penetration Testing?

A vulnerability assessment allows the identification of what vulnerabilities exist in your current security infrastructure. Penetration testing validates whether an identified risk is real or not. Vulnerability assessments are the first step towards mitigating risks and managing vulnerabilities through penetration testing services, while penetration tests help validate results by testing single points of entry without actually exploiting any systems. They're complimentary services that allow organizations to maintain secure network infrastructure.

Importance of Vulnerability Assessment and Penetration Testing

It is essential that security professionals understand the risks associated with every point of access into a system because any vulnerability can lead to a security breach. For example, if all of your external web traffic is routed through one network port and that port becomes compromised, it's the same as having an open doorway into the system. The goal of both vulnerability assessment and penetration testing services is to identify vulnerabilities before attackers do.

What's Included in Vulnerability Assessment and Penetration Testing Services?

A vulnerability assessment provides an inventory of vulnerabilities, while penetration tests are used to validate specific risks identified during the vulnerability assessment process. Technical security experts use both methodologies to identify all potential access points into a system or network infrastructure. The goal is to identify areas with weak security so that they can be mitigated or blocked off.

What is Vulnerability Scanning?

Vulnerability scanning identifies what vulnerabilities exist in your current security infrastructure. Vulnerability scanners, also known as vulnerability assessment tools, allow security teams to see the risks associated with every point of access into a system. These services can be used to scan internal or external systems and networks across multiple platforms, operating systems, and applications. Vulnerability scanning is one of the tools used in Vulnerability Assessment and Penetration Testing Services.

Types of Vulnerability Assessment and Penetration Testing Services

There are a number of different vulnerability assessment methodologies, including:

- **Network Vulnerability Assessment** - This form of vulnerability assessment involves using tools to scan all ports and protocols across the entire network infrastructure, looking for weak areas that could be exploited by attackers.
- **Remote Vulnerability Assessment** - A remote vulnerability assessment allows security teams to identify weaknesses without having to physically access the environment. The goal of remote vulnerability assessment services is to provide a report on how attackers might be able to gain access and take over the system remotely, as opposed to requiring physical entry.
- **Web Application Vulnerability Assessment** - This form of vulnerability assessment focuses on vulnerabilities associated with web applications, such as databases, shopping carts, and content management systems.
- **Web Vulnerability Scanning** - This service provides a basic report on potential vulnerabilities associated with your web infrastructure, including external-facing websites and internal-facing intranets.

Benefits of Vulnerability Assessment and Penetration Testing Services

- **Proactive Approach to Security** - Penetration tests and vulnerability assessments provide a proactive approach to security, identifying vulnerabilities before they lead to breaches and costly downtime.
- **Cost Savings** - Vulnerability assessment and penetration tests identify systemic issues within your current environment, providing valuable information on how attackers might access it. After the testing is completed, security teams can implement mitigations that block hackers from accessing certain areas.
- **Time Savings** - Many organizations don't have the manpower or time to continually monitor for new issues as they arise. Security penetration tests identify weaknesses before they become big problems, allowing teams to address them before they turn into costly incidents.

[Vulnerability assessment and penetration testing](#)