

Secure Information Services

A GROWING NEED FOR MANY ORGANIZATIONS

The SANS Institute reports tens of millions of scans per day on a single server for known vulnerabilities. If your organization is susceptible to any of these a typical server will be compromised within about 20 minutes of being accessible from the Internet.

Today organizations are looking to outsourced security providers such as Terremark to address and mitigate their exposure to information security risks. While there are many external drivers - growing threats in the form of malware, bots, and trojans - staffing and budget limitations prevent most organizations from keeping security experts on staff. Meanwhile compliance reporting requirements weigh heavily on organizations, and they have to decrease the cost of meeting them. Additionally, as businesses grow, they open more locations and their workforces consume more remote IT services. This naturally creates a need for more security vigilance. Overall, organizations are trying to maintain the right security posture, while experiencing pressure to reduce operational expenses, capital costs, and staff.

TERREMARK'S SECURE INFORMATION SERVICES

Whether you are launching a new production service, upgrading existing security services, or meeting compliance requirements, Terremark will provide the services, personnel, and the equipment needed to ensure the overall security posture of your organization. Thorough analysis and the resulting appropriate design is ensured by covering the IT infrastructure from the ground up: networking equipment, servers and desktops, applications, and human issues such as policies and procedures and the reality as practiced inside the organization. The end results are a deeper understanding of your security position and remediation recommendations that fit within the context of your business requirements.

Terremark's security staff is comprised of highly qualified professionals with many years of experience. Our personnel maintain certifications such as CISSP, CISM, SANS GIAC, and NSA IAM/IEM. Several Terremark Secure Information Systems personnel possess current Top Secret security clearances with SCI. These personnel have extensive experience handling and disseminating classified material for Federal agencies. Many members of SIS are also former members of the US military.

Managed Security Services

NETWORK INTRUSION DETECTION & PREVENTION

Two core components from our managed security suite are Network Intrusion Detection and Network Intrusion Prevention Services.

Our Network Intrusion Detection Services combine industry leading network security appliances and sophisticated security analytics software and management applications monitored in real-time by Terremark's Secure Operations Center (SOC). As threats are detected, our SOC will take the appropriate action to mitigate the security risk on your behalf and provide you with guidance on how to correct the problem from occurring again. Security remediation services can also be made available through our Professional Security Services for those issues that are beyond our standard implementation and support services.

For those customers who require proactive security prevention at the network device layer without human intervention our network security appliances can be enabled to provide Network and Host Based Intrusion Prevention Services. As threats are detected the network security appliances will take the appropriate action to mitigate the security risk without security administrator intervention.

MANAGED STANDARD FIREWALL & APPLICATION FIREWALL SERVICES

Our service will consist of tuning, reporting, integrating logs and ensuring the efficient operation and management of this important security layer. We can manage and monitor several different brands of Web Application Firewalls. This security layer enables businesses to efficiently maintain control over critical data stored in SQL databases, while transparently protecting Web applications.

We will develop policy, automate maintenance and endeavor to eliminate the need for manual configuration and tuning. We will utilize the learning and tuning features during the deployment that do not require any changes to the Web application or network.

We will ensure that this transparent inspection technology delivers high performance, sub-millisecond latency, and multiple high availability options that meet the most demanding requirements for your web site. By monitoring live application activity we build a comprehensive model of legitimate application usage so that security policy is generated

automatically. By modeling changes to applications, usage patterns and data structures over time, the Web Application Firewall addresses both the complexity and constant change that are typical within a business environment.

MANAGED INCIDENT RESPONSE

Terremark's team has expertise and real-world experience in incidence response methodologies, tools and techniques to get organizations back to business quickly after security events, while still preserving the integrity of investigations. Delivered in tandem with professional services we integrate the appropriate level of 24/7 SOC Delivered Managed Services. For existing Terremark customers with systems residing in one of our facilities, incidents can be dealt with rapidly, much more so than in a traditional enterprise environment.

LOG AGGREGATION AND SECURITY EVENT INFORMATION MANAGEMENT

Terremark has selected several of the leading vendors in the marketplace to be the foundation for our Log Aggregation and Security Information Management Application service. Our Security Center tool set is a high-quality, low-cost, security event information management (SEIM) solution that collects, normalizes and analyzes data from virtually any security device from any vendor. At the heart of this is the powerful Event Framework which recognizes event data from your various vendor devices such as Firewalls, IDS, IPS, Syslog, SNMP, Vulnerability Assessment, Antivirus, Routers, Switches, VPN's, Windows Event Logs, and more. Our SOC tools and portal will supply you with detailed security alerts, vital reports for investigations and regulatory compliance and deep forensics tools. Our intuitive design is both easy to use and offers you mission-critical security tools at an affordable price.

Our SEIM Security Center also provides powerful n-tiered backend functionality such as flexible collection engines utilizing standards-based parsing algorithms and memory based correlation engine to identify hidden threats.

Professional Security Services

VULNERABILITY ASSESSMENTS & PENETRATION TESTS

Vulnerability Assessments and Penetration Tests are related but serve different purposes. Vulnerability Assessments evaluate systems, applications, and processes for known vulnerabilities using a combination of automated and manual tools and techniques. Penetration Tests often follow a Vulnerability Assessment, attempting to use any identified vulnerabilities to compromise a system or network; essentially proving that a vulnerability can actually be used to breach your organization's security.

Terremark's team can provide a fresh set of eyes for your own IT or an expert view of your current security environment. Our team can review security policy and framework requirements including ISO 27000, NIST, ITIL, FISMA, or COBIT, or prepare customers for regulatory audits such as Sarbanes-Oxley, GLBA, or PCI.

Terremark's team is highly experienced in performing Vulnerability Assessments and Penetration Tests domestically and internationally using field-tested methodologies, techniques and tools. When coupled with Terremark's global infrastructure reach, we are the ideal partner for such engagements.

INCIDENT PREPARATION

Often times organizations that experience a breach are missing crucial elements in the ability to respond and investigate security incidents. Our customers engage us to help harden and prepare their environments so they are "incident ready".

We prepare customers by looking at their security layers, personnel, policies, procedures, system logging levels, and the security of their logs. We help organizations practice and improve incident response by running simulated attacks and score their response, helping them to optimize their response with the right steps and methods.

INCIDENT RESPONSE & FORENSICS

When organizations experience information system security breaches, they usually need a third party to investigate the incident. This is a need we see growing in the marketplace across all types of enterprises and organizations.

Our goal in these engagements is to help the customer understand how they were compromised, how to fix the

vulnerability, and assist with disclosure or other regulatory issues.

DIGITAL FORENSICS SERVICES

Companies maintain critical and confidential data in computer systems, and whether they are stored in a computer server, desktop, tapes or laptop there is the possibility of loss of data integrity and/or confidentiality. In the event of a data breach, the need to determine how this data was compromised often requires a Digital Forensics Investigation. Terremark's forensic experts can help answer questions such as "What actions took place before a specific computer event occurred?" and "What is the extent of the Breach?" Terremark adheres to strict rules of evidentiary preservation, forensic industry standards and custody chain processes to ensure evidence collection, analysis and secure maintenance is accepted in courts of law.

CUSTOM SECURITY ARCHITECTURE DESIGN

Implementing a secure IT system is not easy, even for the most experienced IT department. This is even truer today as systems become more complex and the threat landscape has become far more expansive and treacherous. Supplement your in-house skill sets to design and deploy mission critical systems in a secure manner.

Terremark's team has designed and deployed secure network infrastructure for customers in multiple industry sectors using different vendor systems. Our service covers the design and deployment of secure information systems, including intrusion detection/prevention systems, log aggregation and security event management systems, system hardening procedures, e-commerce and banking.

About Terremark

Terremark Worldwide (NASDAQ:TMRK) is a leading global provider of IT infrastructure services delivered on the industry's most robust and advanced technology platform. Leveraging datacenters in the United States, Europe and Latin America with access to massive and diverse network connectivity, Terremark delivers government and enterprise customers a comprehensive suite of managed solutions including managed hosting, colocation, disaster recovery, security and cloud computing services. Terremark's Enterprise Cloud computing architecture delivers the agility, scale and economic benefits of cloud computing to mission-critical enterprise and Web 2.0 applications and its DigitalOps® service platform combines end-to-end systems management workflow with a comprehensive customer portal. More information about Terremark Worldwide can be found at <http://www.terremark.com>.

Terremark is placed in the Leaders Quadrant of the Gartner Magic Quadrant for North American Web Hosting, 2008.