CloudGuard Network Security for Microsoft Azure

Comprehensive Security Protections for Azure and Hybrid Clouds

Hybrid Cloud Security Overview

The wide adoption of cloud architectures is being driven by the desire to transform businesses for greater efficiency, speed, agility, and cost controls. While cloud solutions offer many advantages over traditional IT infrastructure, legacy security approaches do not address the dynamic nature of cloud environments, and can expose organizations to a new set of security risks.

Security insertion and management is a significant challenge for the cloud. Organizations struggle to manage disparate security solutions for their premises and cloud environments, resulting in a lack of consistent policy enforcement that makes regulatory compliance difficult. At the same time, the frequency and sophistication of threats continues to increase. Security solutions protecting premises-based environments do not extend to the cloud, leaving them exposed and making them attractive targets for cyber criminals. Once a cloud environment is breached, attacks are able to spread laterally from VM to VM within the cloud and even extend externally to corporate networks.

Check Point CloudGuard Network Security for Azure delivers comprehensive security tailored to protect public and hybrid cloud environments, allowing businesses to confidently extend their data center applications and workflows to the cloud and connect to them securely.

Microsoft Azure is a secure, dedicated public cloud computing service operated by Microsoft. The service supports existing workloads and third-party applications as well as new application development, giving IT a common platform for seamlessly extending its data center to the cloud.

Check Point CloudGuard Network Security for Microsoft Azure delivers advanced, multi-layered security for the Azure cloud environment, protecting assets in the cloud from attacks while enabling secure connectivity from enterprise networks to the Azure cloud and hybrid networks.

Designed for the dynamic security requirements of cloud deployments, CloudGuard provides advanced threat protections to inspect traffic entering and leaving private subnets in the VNet. Fully integrated security features include: Firewall, IPS, Application Control, IPsec VPN, Antivirus, Anti-Bot, Threat Extraction and Threat Emulation

CloudGuard Network Security provides consistent security policy management, enforcement, and reporting, making migration to the Azure cloud painless.
Advanced Threat Prevention for Azure

Check Point and Microsoft have partnered to deliver a best-in-class experience for customers looking to extend advanced security protections to their Azure public and hybrid environments. Seamlessly integrating with the Azure and Azure stack cloud infrastructures, CloudGuard for Microsoft Azure provides reliable and secure connectivity to public cloud assets while protecting applications and data with industry-leading threat prevention. Additionally, CloudGuard helps organizations by dramatically simplifying security management and policy enforcement across private, hybrid, and public cloud networks. IT organizations can now achieve an advanced security posture that moves with Virtual Applications as they migrate from data centers to Azure hybrid cloud environment.

As an Azure certified technology solution, CloudGuard Network Security compliments Azure cloud security controls to enable you to easily and seamlessly secure your assets in the cloud with elastic scalability and high availability using a cloud security solution integrated with both Azure and Azure Stack.

Complete Visibility and Control for Azure

CloudGuard for Azure gives businesses the confidence to securely migrate and host their data center resources and workloads to hybrid clouds, providing tangible customer benefits including:

- Consistent protection across your data center and cloud-based workloads in Azure and Azure Stack from potential security breaches and malware
- High availability and auto-scaling based on Availability Regions, Azure Load Balancers and Azure Application Insights, allowing security to grow with changing business requirements
- Unified security management across Azure, Azure Stack, public and private clouds and on-premises workloads
- Improved visibility and consolidated logging across data center, public and Azure Stack hybrid clouds
- Automated workflows and orchestration along with dynamic security policies leveraging Azure context minimize configuration errors while lowering operations costs

Comprehensive Security Protections

CloudGuard for Azure provides industry-leading threat prevention security to keep Azure public cloud networks safe from even the most sophisticated attacks. Fully integrated security protections include:

- **Firewall, Intrusion Prevention System (IPS), Antivirus, and Anti-Bot technology** protect workloads in the cloud from unauthorized access and malicious network attacks
- **IPSec VPN** allows secure connectivity over a dedicated and encrypted tunnel Azure Virtual Networks (VNeTs) and the Enterprise network
- **Remote Access** allows remote users to connect to Azure clouds using an SSL encrypted connection with two-factor authentication and device pairing
• Data Loss Prevention protects sensitive data from theft or unintentional loss
• SandBlast Zero-Day Protection sandbox technology provides the most advanced protection against malware and zero-day attacks

Lateral threat prevention inside the public cloud can be achieved using the appropriate networking configuration to redirect internal traffic to the CloudGuard gateway for inspection.

Hybrid Cloud Security for Azure Stack

 Seamlessly extend Azure cloud services to your on-premises data center with Azure Stack while maintaining consistent and uniform security, management and enforcement with CloudGuard for Microsoft Azure.

Centralized Management

Policy management is simplified with centralized configuration and monitoring of cloud and on-premises security from a single console. This ensures that the right level of protection is applied consistently across both hybrid cloud and physical networks. Hybrid cloud workload traffic is logged and can be easily viewed within the same dashboard as other logs. Deploying Azure infrastructure services on-premises with Azure Stack enables management consistency and workload compatibility across both private and public cloud infrastructures, creating a single Azure hybrid cloud.

Consolidated Logs and Reporting

CloudGuard for Azure gives organizations complete threat visibility and enforcement for hybrid cloud environments. Check Point SmartEvent software consolidates monitoring, logging, and reporting across cloud and on-premises networks. SmartEvent logs can also be exported to 3rd party SIEM platforms. Security reports specific to cloud workload traffic can be generated to track security compliance across the hybrid cloud network, simplifying reporting and audits and making it easy to demonstrate compliance with industry regulations. With all aspects of security management such as policy management, logging, monitoring, event analysis, and reporting centralized via a single dashboard, security administrators get a holistic view of their security posture across the entire organization.
Rapid and Flexible Deployment

Easily and affordably extend security to your Azure cloud using rapid one-click deployment of CloudGuard, available in the Azure Marketplace in on-demand per hour (PAYG) or Bring Your Own License (BYOL) options. Rapidly deploy and provision CloudGuard using Azure Resource Manager templates and quickly customize security protections to your specific business needs using Check Point’s advanced threat prevention suite of security technologies.
Scalable Remote Access Using Azure VMSS

CloudGuard uses Azure Azure Virtual Machine Scale Sets (VMSS) to allow scalable access to Azure for remote users and enable an almost-unlimited number of remote VPN connections. Using CloudGuard, employees can seamlessly, efficiently, and securely connect from anywhere, at any time, to any environment and data center in their organization.

Integration with Microsoft Sentinel

CloudGuard integrates with Microsoft Sentinel, providing a complete view of security information and incidents across an organization’s Azure footprint, including Azure, Azure Stack, and other hybrid clouds. With CloudGuard data, Sentinel customers can correlate security events coming from CloudGuard with other events across the cloud (and from other cloud providers) to generate alerts, root-cause cloud security issues and initiate remediation activities.

Microsoft Defender for Cloud Management

Microsoft Defender for Cloud enhances cloud security with advanced threat detection capabilities and centralized management. It is also integrated with CloudGuard providing the capability to rapidly provision CloudGuard security gateways in just a few clicks. Alerts and logging from CloudGuard security gateways are integrated in Microsoft Defender for Cloud so that security events can be viewed from a single dashboard.

Unified policy management and security that follows VMs as they migrate from the data center to Azure cloud networks
Summary

Check Point Software Technologies provides uncompromising protection against all types of cyberattacks while dramatically simplifying IT security management. Check Point CloudGuard Network Security for Azure takes advantage of the cost efficiencies and automation of Azure while tightly integrating advanced security features designed to meet the efficiency and scalability requirements of large deployments in the public cloud.

CloudGuard for Azure enables customers to confidently extend security to their Azure cloud infrastructure with the full range of protections of the Check Point threat prevention architecture. CloudGuard for Azure prevents network attacks and data breaches while enabling secure connectivity to Azure public cloud environments. CloudGuard also integrates with a wide variety of public cloud and private cloud environments including those built on SDDC technology.

To learn more about how Check Point CloudGuard Network Security and Microsoft Azure provide advanced security protections for public and hybrid cloud networks, schedule a free demo of CloudGuard for Azure at [www.checkpoint.com](http://www.checkpoint.com) or contact your Check Point or Microsoft Azure partner or sales representative.

About Check Point

Check Point Software Technologies Ltd. ([www.checkpoint.com](http://www.checkpoint.com)) is a leading provider of cyber security solutions to governments and corporate enterprises globally. Its solutions protect customers from cyber-attacks with an industry leading catch rate of malware, ransomware and other types of attacks. Check Point offers a multilevel security architecture that defends enterprises’ cloud, network and mobile device held information, plus the most comprehensive and intuitive one point of control security management system. Check Point protects over 100,000 organizations of all sizes.

About Microsoft Azure

Azure ([www.azure.com](http://www.azure.com)) is a leading public cloud computing services provider globally, provides an enterprise-grade highly reliable, scalable, low-cost computing platform in the cloud that powers businesses in countries around the world. With data center locations in 54 regions, customers across all industries are using the Azure cloud computing platform to launch applications across a wide variety of use cases taking advantage of the following benefits offered by Azure: low cost, agility, elasticity, security, openness, flexibility, reliability and compliance.