	ON-PREMISES	AZURE Security Services		3rd Party	Integration with related AZURE			Key Security Features
		Free Paid		AZURE Marketplace	Services and Monitoring Tools			
	Firewall & ACLs	Network Security Groups	Azure Firewall \$	 Image: A second s	Azure Monitor	Azure Sentinel		L3/4 Firewall, build-in HA, supports Cloud Scalability & Threat Intel integration
	IPS/IDS							IPS/IDS functionality requires signature based detection and protection.
	Veb Application Firewall (WAF)		Azure Application Gateway	\checkmark	Azure Monitor	Azure Sentinel		OWASP rulesets. Protects up to 20 sites per instance
	SIEM	,	Azure Sentinel \$	\checkmark	Log Analytics	Logic Apps	Events Hub	Cloud Native SIEM & Security Incident Orchestration
	Antimalware	→ Microsoft Antimalware		\checkmark	Azure Storage	Azure Security Center		Same platform as Microsoft Security Essentials (MSE), Windows Defender
	Data Loss Prevention (DLP)		Azure Information Protection	\checkmark	Azure RMS	Azure AD	Azure Sentinel	Requires client installation and integrates with Office 365 Mail
	Key Management		Azure Key Vault \$	\checkmark	Azure Disk Encryption	Azure App Service		Provides Certificate Management. Simplified overall management
	Encryption At Rest	,	Azure Storage \$	\checkmark	Azure AD			Automatic encryption for data at rest via Azure SSE module
	DDoS Protection	Azure DDoS		\checkmark	Azure Monitor			Protect against volumetric attacks. Scalable on- demand
	Email Protection		Office ATP \$	\checkmark	Azure AD	Azure Sentinel		Anti-phishing protection. Attack simulation (security user awareness)
	SSL Decryption Reverse Proxy		Azure Application \$ Gateway	\checkmark	Azure Monitor	Azure Sentinel		Autoscalling
	Endpoint Protection		Azure Defender ATP \$	\checkmark	Azure AD	Azure Sentinel		Provides automated investigation. Office 365 integration
	Certificate Management		Azure Key Vault \$	\checkmark	Azure Disk Encryption	Azure App Service		Certificate Management. Simplified Management
	Container Security	Azure Kubernetes Service (AKS)			Azure AD	Azure Monitor		Supports Role Based Access Control (RBAC) SOC, PCI DSS, ISO and HIPPA compliant
	Identity and Access Management							
	Privileged Access Management (PAM)		Azure Active Directory \$		Azure Sentinel			Different license tiers. Provides IAM support Federated Identity support
	Multi-Factor Authentication (MFA)							
	Centralized Logging / Auditing		Azure Log Analytics \$		Azure Sentinel	Azure Monitor		Allow direct searches in the console Al integration
	Governance Risk and Compliance Monitoring							Provide security compliance policies
N	ulnerability Assessment		Azure Security Center \$	\checkmark	Azure Sentinel	Azure SQL	Azure Monitor	Advanced threat protection
	Patch Management				_			
	Change Management		Azure Automation \$		Azure AD	Azure Monitor		Supports Role Based Access Control (RBAC) Configuration management tool
	Load Balancer		Azure Load Balancer \$	\checkmark	Azure Monitor			On-demand scalable service Support port forwarding
	LAN	→ Virtual Network						Integral part of Azure Service suites
	WAN	→ Site-to-Site IPSec Tunnel	ExpressRoute \$					ExpressRoute support dynamic routing ExpressRoute allow connectivity to all Azure regions
	VPN	→ Point-to-Site VPN	Azure VPN Gateway \$	\checkmark	Azure Monitor			1.25Gb Aggregated max throughput, 1,000 IPsec tunnels, A-A or A-P, support partner gateways
	Backup and Recovery		Azure Backup \$		Azure Security Center	Azure AD		Built-in the Azure core, MFA support
	CASB (Cloud Access Security Broker)		Cloud App Security \$	\checkmark	Azure Security Center	Azure AD		Analyze cloud app usage, visibility over Shadow IT, notifications about new discovered apps

Mapping of On-Premises Security Controls vs Microsoft Azure Cloud Version 1.3 June 2019 © Marius Mocanu, Adrian Grigorof High Definition available at http://www.managedsentinel.com/onprem-vs-azure