

ON-PREMISES	AWS	AZURE	GOOGLE	ORACLE	IBM	ALIBABA
Firewall & ACLs	Security Groups AWS Network ACLs	Network Security Groups Azure Firewall	Cloud Armor VPC Firewall	VCN Security Lists	Cloud Security Groups	NAT Gateway
IPS/IDS	3 rd Party Only	3 rd Party Only	3 rd Party Only	3 rd Party Only	3 rd Party Only	Anti-Bot Service Website Threat Inspector
Web Application Firewall (WAF)	AWS WAF AWS Firewall Manager	Application Gateway	Cloud Armor	Oracle Dyn WAF	Cloud Internet Services	Web Application Firewall
SIEM & Log Analytics	AWS Security Hub Amazon GuardDuty	Azure Sentinel Azure Monitor	Stackdriver Monitoring Stackdriver Logging	Oracle Security Monitoring and Analytics	IBM Log Analysis Cloud Activity Tracker	ActionTrail
Antimalware	3 rd Party Only	Microsoft Antimalware / Azure Security Center	3 rd Party Only	3 rd Party Only	3 rd Party Only	Server Guard
Data Loss Prevention (DLP)	Amazon Macie	Information Protection (AIP)	Cloud Data Loss Prevention API	3 rd Party Only	3 rd Party Only	Web Application Firewall
Key Management	Key Management Service (KMS)	Key Vault	Cloud Key Management Service	Cloud Infrastructure Key Management	Key Protect Cloud Security	Key Management Service
Encryption At Rest	EBS/EFS Volume Encryption, S3 SSE	Storage Encryption for Data at Rest	Part of Google Cloud Platform	Cloud Infrastructure Block Volume	Hyper Protect Crypto Services	Object Storage Service
DDoS Protection	AWS Shield	Built-in DDoS defense	Cloud Armor	Built-in DDoS defense	Cloud Internet Services	Anti-DDoS
Email Protection	3 rd Party Only	Office Advanced Threat Protection	Various controls embedded in G-Suite	3 rd Party Only	3 rd Party Only	3 rd Party Only
SSL Decryption Reverse Proxy	Application Load Balancer	Application Gateway	HTTPS Load Balancing	3 rd Party Only	Cloud Load Balancer	Server Load Balancer (SLB)
Endpoint Protection	3 rd Party Only	Microsoft Defender ATP	3 rd Party Only	3 rd Party Only	3 rd Party Only	Server Guard
Certificate Management	AWS Certificate Manager	Key Vault	3 rd Party Only	3 rd Party Only	Certificate Manager	Cloud SSL Certificates Service
Container Security	Amazon EC2 Container Service (ECS)	Azure Container Service (ACS)	Kubernetes Engine	Oracle Container Services	Containers - Trusted Compute	Container Registry
Identity and Access Management	Identity and Access Management (IAM)	Azure Active Directory	Cloud Identity Cloud IAM	Oracle Cloud Infrastructure IAM	Cloud IAM App ID	Resource Access Management
Privileged Access Management (PAM)	3 rd Party Only	Azure AD Privileged Identity Management	3 rd Party Only	3 rd Party Only	3 rd Party Only	3 rd Party Only
Multi-Factor Authentication (MFA)	AWS MFA (part of AWS IAM)	Azure Active Directory	Security Key Enforcement	Oracle Cloud Infrastructure IAM	App ID	Resource Access Management
Centralized Logging / Auditing	CloudWatch / S3 bucket	Azure Audit Logs	VPC Flow Logs Access Transparency	Oracle Cloud Infrastructure Audit	Log Analysis with LogDNA	Log Service
Load Balancer	Application Load Balancer Classic Load Balancer	Azure Load Balancer	Cloud Load Balancing HTTPS Load Balancing	Cloud Infrastructure Load Balancing	Cloud Load Balancer	Server Load Balancer
LAN	Virtual Private Cloud (VPC)	Virtual Network	Virtual Private Cloud Network (VPC)	Virtual Cloud Network (VCN)	VLANs	Virtual Private Cloud (VPC)
WAN	Direct Connect	ExpressRoute	Dedicated Interconnect	FastConnect	Direct Link	VPN Gateway Express Connect
VPN	VPC Customer Gateway AWS Transit Gateway	Virtual Network SSTP	Google VPN	Dynamic Routing Gateway (DRG)	IPSec VPN Secure Gateway	VPN Gateway
Governance Risk and Compliance Monitoring	AWS CloudTrail AWS Compliance Center	Azure Policy	Cloud Security Command Center	3 rd Party Only	3 rd Party Only	ActionTrail
Backup and Recovery	AWS Backup Amazon S3 Glacier	Azure Backup Azure Site Recovery	Object Versioning Cloud Storage Nearline	Archive Storage	IBM Cloud Backup	Hybrid Backup Recovery
Vulnerability Assessment	Amazon Inspector AWS Trusted Advisor	Azure Security Center	Cloud Security Scanner	Security Vulnerability Assessment Service	Cloud Security Advisor Vulnerability Advisor	Server Guard Website Threat Inspector
Patch Management	AWS Systems Manager	Update Management	3 rd Party Only	3 rd Party Only	IBM Cloud Orchestrator	3 rd Party Only
Change Management	AWS Config	Azure Automation (Change Tracking)	3 rd Party Only	3 rd Party Only	3 rd Party Only	Application Configuration Management (ACM)