

Business Cloud Security Checklist

Ensuring Robust Security in the Cloud Computing Era

As more companies move to the cloud and let their employees work remotely, the risks from cyberthreats are getting bigger and more complex. This big change means companies need a strong plan for cybersecurity to keep important data safe, ensure their operations can keep running smoothly, and defend against new kinds of threats. Sharp presents you the Cloud Security Checklist, a key tool for any organization trying to handle the challenges that come with working in a cloud environment. It offers clear advice on how to put good security practices in place, use the right security tools, and follow the best steps to keep your business safe.

By following this checklist, you will strengthen their overall digital security and create a culture where everyone understands the importance of keeping data secure.

Cloud Security Checklist

Understanding Your Cloud Environment



1

- Identify the cloud service models in use (IaaS, PaaS, SaaS).
- Determine the responsibility for security in your cloud model (provider, your business, or both).
- Assess the integration of your cloud environment with existing on-premises infrastructure.
- List compliance requirements applicable to your cloud data.
- Confirm the shared responsibility model with your service provider is clearly defined.

- Ensure data is encrypted both at rest and in transit.
- Identify encryption standards and protocols in use.
- Determine who manages the encryption keys and their protection measures.
- Assess the impact of encryption on data retrieval and performance.
- Check for regulatory or compliance standards dictating encryption levels.

Data Encryption



2

Access Control



3

- Identify the access control model implemented (e.g., RBAC, ABAC).
- Assess management of identities and authentication in the cloud.
- Ensure multi-factor authentication and conditional access policies are in place.
- Verify the principle of least privilege is maintained.
- Regularly review and update access permissions.

Cloud Security Checklist

- Secure endpoints against malware and phishing attacks.
- Implement a regular process for updating and patching endpoint devices.
- Monitor and control endpoint access to cloud services.
- Utilize tools for detecting and responding to endpoint security incidents.
- Secure endpoints used by remote workers.

Endpoint Security

4



Access Control



5

- Integrate security into your continuous integration and delivery (CI/CD) pipelines.
- Include automated security scanning and vulnerability assessments in DevOps processes.
- Manage secrets and sensitive information securely in all environments.
- Ensure measures are in place to maintain code integrity and prevent unauthorized changes.
- Monitor and audit DevOps processes for compliance with security policies.

- Conduct regular security assessments and audits of your cloud environment.
- Utilize appropriate tools and methodologies for security assessments.
- Address and remediate identified vulnerabilities.
- Perform penetration tests to evaluate security measure effectiveness.
- Effectively communicate and act upon security assessment findings.

Regular Security Assessments

6



Employee Training and Awareness



7

- Provide training on cloud security best practices.
- Ensure employees understand the risks associated with cloud services and remote work.
- Implement mechanisms to measure the effectiveness of security training.
- Regularly update and deliver security awareness training.
- Offer specific training modules for employees handling sensitive data or accessing high-risk environments.

- Develop a strategy for data backup and recovery.
- Ensure business continuity plans are in place for cloud service disruptions.
- Define the recovery time objective (RTO) and recovery point objective (RPO) for your critical cloud services.
- Regularly test disaster recovery and business continuity plans.
- Securely manage and backup data in multi-cloud or hybrid environments.

Disaster Recovery and Business Continuity

8



- Identify regulatory standards applicable to your cloud data (e.g., GDPR, HIPAA).
- Ensure compliance with these regulations in the cloud.
- Manage data sovereignty and residency requirements.
- Handle audit and reporting requirements for regulatory compliance.
- Confirm cloud service providers are compliant with necessary regulations and standards.

Compliance with Regulations



9

Cloud Security Checklist

- Evaluate the security posture of potential cloud service providers.
- Monitor and assess the performance of cloud vendors.
- Ensure cloud service providers adhere to your security and compliance requirements.
- Manage and respond to security incidents involving a service provider.

Vendor Management



Remote Work Security



- Secure data accessed by remote employees.
- Implement strategies to protect against remote work-specific threats.
- Ensure secure connectivity for remote employees.

Key Takeaways for Lasting Security

A proactive and vigilant approach to cybersecurity is critical for securing cloud operations and ensuring the long-term success of any business in today's digital landscape. By adhering to the guidelines in this Cloud Security Checklist, businesses are one step closer to effectively navigating the complexities of the cloud and their remote workforce.

