

Databricks Shared Responsibility Model

For the AWS classic data plane





Databricks February 2025

©2023 Databricks Inc. — All rights reserved



Databricks Managed Services Shared Responsibility Model

Security and compliance are a shared responsibility between Databricks, the Databricks customer, and the cloud service provider (CSP) AWS. For their part, AWS has formalized their shared responsibility model.

Databricks Responsibilities

Databricks Platform and Services

- Secure the Databricks Control Plane
- Utilize industry standards to protect Databricks infrastructure
- Publish CIS level 1 hardened control plane and data plane images
- Maintain a public bug bounty program
- Maintain the Databricks Control Plane with updated code and images

Databricks Managed Resources

- Securely deploy and terminate Databricks managed systems
- Track security configurations against industry standard baselines for systems under Databricks control
- Deploy the latest applicable source code and system images upon launch of customer Data Plane hosts

Identity and Access Management

- Authenticate Databricks personnel using industry best practices
- Set employee privileges consistent with least privilege principles
- Limit access to systems processing customer data to employees with roles that warrant access
- Restricts access to customer content based on the principle of least privilege and segregation of duties
- Secure interactions with the customer-managed cloud account
- Secure storage and policy enforcement of secrets scope

Customer Responsibilities

Account and Workspace Management

- Manage account configurations, including account setup and administration, subscription management and cloud resources (<u>AWS</u>)
- Workspace management, including workspace creation, update, and deletion, and workspace resource access (AWS)

Cluster Policies

• Configure cluster management policies and personal compute policies (AWS)

Cloud Responsibilities

Cloud Service Platform and Services

- Maintain security of the cloud service infrastructure
- Maintain a security management program that maintains reasonable security measures to protect customer data and services

Identity and Access Management

- Setup Unified Login access controls for Databricks account and workspace(s) (AWS)
- Enable multi-factor authentication via your SSO provider
- Enable System for Cross-domain Identity Management (SCIM) integration with your identity provider (AWS)

Identity, Service Principal and Access Management

- Manage users, groups, personal access tokens, and service principals (AWS)
- Set Access Control Lists to restrict resource access (such as workspace objects, clusters, pools, jobs, tables) (AWS)
- Use least-privilege principles for cross-account IAM roles (AWS)
- Secure management and use of secret scopes (AWS)

Identity and Access Management

- Maintain access controls required to restrict access to authorized customer resources
- Restrict employee access to customer resources





Platform Security





Databricks Managed Services Shared Responsibility Model

Security and compliance are a shared responsibility between Databricks, the Databricks customer, and the cloud service provider (CSP) AWS. For their part, <u>AWS</u> has formalized their shared responsibility model.

Databricks Managed Data

- Transmit customer content using TLS 1.2 or higher between the Customer and the Databricks Control Plane and the Databricks Control Plane and the Data Plane
- Encrypt customer data-at-rest within the Databricks Control Plane using AES-256 bit equivalent or higher
- Delete customer content contained within a customer workspace within thirty (30) days of the workspace cancellation

Customer Responsibilities

Data Governance

- Enable <u>Unity Catalog</u> within your Databricks account
- Follow data governance best practices, as per your organization's requirements (<u>AWS</u>)

Customer-managed Data

- Secure management of data infrastructure (AWS):
- Secure connectivity to customer-managed resources
- Secure service integration with Databricks (AWS)

Customer-managed Encryption Keys

- Deploy customer-managed encryption keys (CMK) (<u>AWS</u>)
- $\,\circ\,$ Enable CMK for managed services
- Enable CMK for workspace storage

Cloud Responsibilities

Cloud Service Managed Data

- Maintain encryption hardware and services
- Encrypt data in transit and at rest, where configured
- Maintain the confidentiality, integrity and availability of data stored on CSP services
- Enable Spark inter-cluster encryption
 (AWS Nitro that <u>support in-transit</u>
 <u>encryption</u>)
- Enable Data Plane local disk encryption (AWS Nitro or NVMe)

Secure Network Communications

• Secure the physical and logical

Maintain secure network

including APIs

security of cloud service networking

communications for cloud services,

Secure Network Communications

- Separate the Databricks Control Plane from the Customer Data Plane and workspaces within the Databricks Data Plane using multiple layers of network security controls
- Deploy local firewalls or security groups within the Customer Data Plane to isolate clusters
- Enable secure defaults for network access controls and security groups within the Control Plane

Cloud Network Security

- Configure Secure Cluster Connectivity (AWS)
- Enable customer-managed networks (AWS VPC)
- Configure Data Exfiltration Protection according to your organization's data protection policy (<u>AWS</u>)

IP Access Control Lists and Private Link

- Configure Databricks workspace IP access lists (AWS)
- Configure Private Link access for Users → Control Plane and Control Plane → Data Plane connections (<u>AWS</u>)



Network Security



Data Security



Databricks Managed Services Shared Responsibility Model

Security and compliance are a shared responsibility between Databricks, the Databricks customer, and the cloud service provider (CSP) AWS. For their part, AWS has formalized their shared responsibility model.

	Databricks Responsibilities	Customer Responsibilities	Cloud Responsibilities
Security Monitoring	 Security Monitoring Deploy security detection capabilities, including those provided natively by Cloud Service Providers Generate audit logs from customer's use of the platform services and retain them for at least one year (Premium subscription +) Deliver audit logs from the customer's use of the platform services based on the customer's configuration (Premium subscriptions +) Deploy a dedicated Detection engineering team that develops intrusion detection monitoring across its computing resources Employ an incident response framework to manage and minimize the effects of unplanned security events Notify customers of security breaches in accordance with data protection laws and customer agreements 	 Audit Log Configuration Enable Databrick System Tables for security and performance monitoring (<u>AWS</u>) Alternatively, configure Databricks audit log delivery to your cloud storage (<u>AWS</u>) Configure verbose audit logs for your workspace(s) (<u>AWS</u>) Account and Workspace Security Monitoring Deploy account and <u>workspace security monitoring</u> Deploy cloud service security monitoring Investigate and respond to potential security incidents related to customer-managed features, services and resources 	 Security Monitoring Monitor for security violations of the underlying cloud service infrastructure and services Deliver audit logs for cloud service events based on customer configurations Employ an incident response framework Notify customer of a security breach for which that customer is impacted
Code Execution / Jobs	 Secure Code Execution Maintain availability and security of the job scheduler Secure delivery of customer code (such as notebooks, repos and models, queries) from the control plane to the data plane 	 Application Security Perform security reviews of your code, libraries and jobs, such as notebooks (<u>AWS</u>), <u>Terraform</u>, and third-party libraries (<u>AWS</u>) CI/CD Pipeline and Repo Integration Integrate Git with Databricks repos (<u>AWS</u>) Manage CI/CD Pipeline integration with Databricks (<u>AWS</u>) 	Secure Code Execution Maintain secure cloud infrastructure
Vulnerability & Patch Management	 Patching and Vulnerability Management Maintain a vulnerability management program that follows industry best practices, performs daily and weekly authenticated vulnerability scans against Databricks infrastructure and services Regularly release updated data plane images with patches that meet our <u>Security Addendum patch SLAs</u> 	 Patching and Vulnerability Management Restart workspace cluster VMs as needed to deploy the latest patched images and code in accordance with patch management policy (<u>AWS</u>) Optionally, configure Automatic cluster update to automate cluster restarts during maintenance windows (<u>AWS</u>) 	Scan and Patch Cloud Infrastructure • Scan and patch the cloud's infrastructure, firmware and software, etc. it manages, such as networking, servers, and virtualization
©2023 Datab	ricks Inc. — All rights reserved		4



Databricks Managed Services Shared Responsibility Model

Security and compliance are a shared responsibility between Databricks, the Databricks customer, and the cloud service provider (CSP) AWS. For their part, <u>AWS</u> has formalized their shared responsibility model.

Databricks Responsibi	lities
-----------------------	--------

Standards and Compliance

- Maintain independent third-party audits, standards, and certifications that apply to all customer environments:
 ISO 27001, 27017, 27018
 - SOC 2 Type II, SOC 1 Type II, SOC 3
- Enable compliant workflows supported by <u>Databricks</u>

* Additional compliance standards covered later, such as HIPAA, FedRAMP, PCI

Maintain Disaster Recovery Capabilities* For:

- Review Business Continuity and Disaster Recovery plans annually
- Conduct Business Continuity and Disaster Recovery drills annually
- Conduct periodic backups of the Databricks Control Plane*

Customer Responsibilities

Maintain Adherence to Relevant Compliance and Standards:

- When using Databricks to process sensitive data such as PII, adhere to relevant privacy regulations such as the GDPR and CCPA
- Review your compliance needs and add optional compliance service offering where required (such as for FedRAMP, PCI-DSS, HIPAA)
- Comply with applicable laws and regulations

Cloud Responsibilities

Standards and Compliance

- Maintain independent third party audit, standards and certifications
- Maintain compliant services

Disaster Recovery capabilities

- Cloud service capacity
- Review Business Continuity and Disaster Recovery plans annually
- Conduct Business Continuity and Disaster Recovery drills annually

Data Backups

- Backup of your organization's account and workspace
- Set <u>Recovery Point Objectives</u> (RPO) and <u>Recovery Time Objectives</u> (RTO) using best practices (<u>AWS</u>)

Multi-region Workspace Deployment

- Perform a Disaster Recovery Impact Assessment
- Deploy Disaster Recovery services for Databricks to meet the organization's DR requirements (<u>AWS</u>)

Employ Security Best Practices

- Periodically review cryptographic standards to select and update technologies and ciphers in accordance with assessed risk and market acceptance of new standards
- Conduct third-party penetration tests at least annually
- Employ an in-house offensive security team

Multi-region Workspace Deployment

- Adopt Databricks security best practices based on the organization's cybersecurity requirements (<u>AWS</u>)
- Follow security best practices for the customer's cloud environment (<u>AWS</u>)

Employ Security Best Practices

- Follow industry best practices
- Review cryptographic standards
- Conduct third-party penetration tests

Disaster

Recovery

Security Best

Core

Compliance

Practices

*Note: Databricks doesn't provide backup or disaster recovery services. Disaster Recovery plans and control plane backups are for resiliency purposes in the case of a critical systems failure and Databricks is not able to restore specific data based on a customer request 5

AWS Serverless Shared Responsibility Model



Databricks Managed Serverless Services Shared Responsibility Model

Security and compliance are a shared responsibility between Databricks, the Databricks customer, and the cloud service provider (CSP) AWS. For their part, <u>AWS</u> has formalized their shared responsibility model.

Databricks Responsibilities

Databricks Platform and Services

- Secure the Databricks Control Plane
- Utilize industry standards to protect Databricks infrastructure
- Deploy CIS level 1 hardened control plane and data plane images
- Maintain a public bug bounty program
- Maintain the Databricks Control Plane with updated code and images

Databricks Managed Resources

- Securely deploy and terminate Databricks managed systems
- Track security configurations against industry standard baselines for systems under Databricks control
- Deploy the latest applicable source code and system images upon launch of customer Compute Plane hosts

Customer Responsibilities

Account and Workspace Management

- Manage account configurations, including account setup and administration, subscription management and cloud resources (<u>AWS</u>)
- Workspace management, including workspace creation, update, and deletion, and workspace resource access (<u>AWS</u>)

Cloud Responsibilities

Cloud Service Platform and Services

- Maintain security of the cloud service infrastructure
- Maintain a security management program that maintains reasonable security measures to protect customer data and services

Identity and Access Management

- Authenticate Databricks personnel using industry best practices
- Set employee privileges consistent with least privilege principles
- Limit access to systems processing customer data to employees with roles that warrant access
- Restrict access to customer content based on the principle of least privilege and segregation of duties
- Secure interactions with the customer-managed cloud account
- Secure storage and policy enforcement of secrets scope

Identity and Access Management

- Setup Unified Login access controls for Databricks account and workspace(s) (<u>AWS</u>)
- Enable multifactor authentication via your SSO provider
- Enable SCIM integration with your identity provider (<u>AWS</u>)
- Identity, Service Principal and Access Management
- Manage users, groups, personal access tokens, and service principals (<u>AWS</u>)
- Set Access Control Lists to restrict access (such as workspace objects, serverless endpoints, jobs, tables) (<u>AWS</u>)
- Use least-privilege principles for cross-account IAM roles (AWS)
- Secure management and use of secret scopes (<u>AWS</u>)

Identity and Access Management

- Maintain access controls required to restrict access to authorized customer resources
- Restrict employee access to customer resources



Platform Security

IAM Security



Databricks Managed Serverless Services Shared Responsibility Model

Security and compliance are a shared responsibility between Databricks, the Databricks customer, and the cloud service provider (CSP) AWS. For their part, <u>AWS</u> has formalized their shared responsibility model.

Databricks Responsibilities

Databricks Managed Data

- Encrypt Databricks communications between the Databricks Control Plane and the customer workspace using TLS 1.2 or higher
- Encrypt customer data-at-rest within the Databricks Control Plane using AES-256 bit equivalent or higher
- Delete customer content contained within a customer workspace within thirty (30) days of the workspace cancellation
- Enable local disk encryption for serverless drives

Customer Responsibilities

Data Governance

- Enable <u>Unity Catalog</u> within your Databricks account
- Follow data governance best practices, as per your organization's requirements (<u>AWS</u>)

Customer-Managed Data

- Secure management of data infrastructure (AWS):
- Secure connectivity to customer-managed resources

Customer-Managed Encryption Keys

- Enable customer-managed encryption keys (CMK), where required (<u>AWS</u>)
- $\circ~$ Enable CMK for managed services
- Enable CMK for workspace storage

Cloud Responsibilities

Cloud Service Managed Data

- Maintain encryption hardware and services
- Encrypt data in transit and at rest, where configured
- Maintain the confidentiality, integrity and availability of data stored on CSP services
- Enable Compute Plane local disk encryption (AWS Nitro or NVMe)

Cloud Network Security

• Configure secure connectivity from the control plane to the Serverless Compute Plane

Secure Network Communications

- Separate the Databricks Control Plane from the Databricks Compute Plane and workspaces within the Databricks Compute Plane using multiple layers of network security controls
- Deploy local firewalls or security groups within the Databricks Compute Plane to isolate clusters
- Enable secure defaults for network access controls and security groups within the Control Plane

IP Access Control Lists and Private Link

- Configure Serverless Egress Controls (SEG) (AWS)
- Configure Databricks workspace IP access lists (<u>AWS</u>)
- Configure Private Link for user access to the Control Plane (AWS)
- Configure Data Exfiltration Protection according to your organization's data protection policy (<u>AWS</u>)

Secure Network Communications

- Secure the physical and logical security of cloud service networking
- Maintain secure network communications for cloud services, including APIs

0101

Data Security

Network

Security

©2023 Databricks Inc. – All rights reserved



Databricks Managed Serverless Services Shared Responsibility Model

Security and compliance are a shared responsibility between Databricks, the Databricks customer, and the cloud service provider (CSP) AWS. For their part, AWS has formalized their shared responsibility model.

	Databricks Responsibilities	Customer Responsibilities	Cloud Responsibilities
Security Monitoring	 Security Monitoring Deploy security detection capabilities, including those provided natively by Cloud Service Providers Generate audit logs from customer's use of the platform services and retain them for at least one year (Premium subscription+) Deliver audit logs from the customer's use of the platform services based on customer configurations (Premium subscription+) Employ an incident response framework to manage and minimize the effects of unplanned security events Notify customers of security breaches in accordance with data protection laws and customer agreements Deploy security monitoring for tenant isolation in the serverless compute plane 	 Audit Log Configuration Enable Databrick System Tables for security and performance monitoring (<u>AWS</u>) Alternatively, configure Databricks audit log delivery to your cloud storage (<u>AWS</u>) Configure verbose audit logs for your workspace(s) (<u>AWS</u>) Account and Workspace Security Monitoring Deploy account, workspace security monitoring Investigate and respond to potential security incidents in your Databricks account and workspace(s) for systems under your control 	 Security Monitoring Monitor for security violations of the underlying cloud service infrastructure and services Deliver audit logs for cloud service events based on customer configurations Employ an incident response framework Notify customer of a security breach for which that customer is impacted
Code Execution / Jobs	 Secure Code Execution Maintain availability and security of the job scheduler Secure delivery of customer code (such as notebooks, repos and models, queries) from the control plane to the compute plane 	 Application Security Perform security reviews of your code, libraries and jobs, such as notebooks (<u>AWS</u>), <u>Terraform</u>, and third-party libraries (<u>AWS</u>) CI/CD Pipeline and Repo Integration Integrate Git with Databricks repos (<u>AWS</u>) Manage CI/CD Pipeline integration with Databricks (<u>AWS</u>) 	Secure Code Execution Maintain secure cloud infrastructure
Vulnerability & Patch Management ©2023 Datab	 Patching and Vulnerability Management Maintain a vulnerability management program that follows industry best practices, performs daily and weekly authenticated vulnerability scans against Databricks serverless infrastructure and services Regularly release updated serverless images with patches that meet our <u>Security Addendum patch SLAs</u> Restart active clusters after seven (7) days 	Restart Clusters to Deploy the Latest Patches Restart active serverless clusters to deploy instances with the latest patches (if required before the cluster is active for seven days) (AWS) 	Scan Scan and patch the cloud's infrastructure, firmware and software, etc. it manages, such as networking, servers, and virtualization



Databricks Managed Serverless Services Shared Responsibility Model

Security and compliance are a shared responsibility between Databricks, the Databricks customer, and the cloud service provider (CSP) AWS. For their part, <u>AWS</u> has formalized their shared responsibility model.

Data Backups

Databricks Responsibilities

Standards and Compliance Maintain independent t

- Maintain independent third-party audits, standards, and certifications that apply to all customer environments:
 ISO 27001, 27017, 27018
 - SOC 2 Type II, SOC 1 Type II, SOC 3
- Enable compliant workflows supported by Databricks

Maintain Disaster Recovery capabilities* for:

- Review Business Continuity and Disaster Recovery plans annually
- Conduct Business Continuity and Disaster Recovery drills annually
- Conduct periodic backups of the Databricks Control Plane*

Customer Responsibilities

Maintain adherence to relevant compliance and standards:

• Backup of your organization's account and workspace

• Perform a Disaster Recovery Impact Assessment

• Set Recovery Point Objectives (RPO) and Recovery Time Objectives

• Deploy Disaster Recovery services for Databricks to meet the

- Comply with applicable laws and regulations
- When using Databricks to process sensitive data such as PII, adhere to relevant privacy regulations such as the GDPR and CCPA

Cloud Responsibilities

Standards and Compliance

- Maintain independent third party audit, standards and certifications
- Enable compliant workflows supported by the cloud vendor

Disaster Recovery capabilities

- Cloud service capacity
- Review Business Continuity and Disaster Recovery plans annually
- Conduct Business Continuity and Disaster Recovery drills annually

Employ security best practices

- Follow industry best practices
- Review cryptographic standards
- Conduct third-party penetration tests

<u>ح</u>مي

Employ security best practices

- Periodically review cryptographic standards to select and update technologies and ciphers in accordance with assessed risk and market acceptance of new standards
- Conduct third-party penetration tests at least annually
- Employ an in-house offensive security team

Multi-region Workspace Deployment

organization's DR requirements (AWS)

(RTO) using best practices (AWS)

Multi-region Workspace Deployment

- Adopt Databricks security best practices based on the organization's cyber risk appetite (<u>AWS</u>)
- Follow security best practices for the customer's cloud environment based on the organization's cyber risk appetite (<u>AWS</u>)

*Note: Databricks doesn't provide backup or disaster recovery services. Disaster Recovery plans and control plane backups are for resiliency purposes in the case of a critical systems failure and Databricks is not able to restore specific data based on a customer request

10

Core

Compliance

Disaster Recovery

Security Best Practices



Databricks ESM/CSP Shared Responsibility Model



Databricks Managed Services Shared Responsibility Model

Security and compliance are a shared responsibility between Databricks, the Databricks customer, and the cloud service provider (CSP) AWS. For their part, AWS has formalized their shared responsibility model.

	Databricks Responsibilities	Customer Responsibilities	Cloud Responsibilities
Enhanced Security Monitoring	 Databricks Enhanced Security Monitoring (ESM) Responsibilities Deploy ESM instances with enhanced CIS Level 1 hardening Deploy antivirus, behavior-based malware and file integrity monitoring Provide vulnerability reports of the host OS upon request Leverage FIPS 140-2 Level 1 encryption services where available 	 Customer Enhanced Security Monitoring Responsibilities Enable Enhanced Security Monitoring on your workspace(s) (AWS) Monitor enhanced event logs for for security incidents (AWS) Restart relevant clusters to deploy as ESM instances. Provide the destination Email for vulnerability reports delivery 	CSP ESM Responsibilities • Maintain security of the cloud service infrastructure
Compliance Security Profile	 Databricks Compliance Security Profile (CSP) Responsibilities Enable ESM security enhancements (listed above) Enforcement of AWS Nitro instances on CSP workspace(s) Automatically restart clusters active past the maintenance window to deploy the latest patches 	 Customer Compliance Security Responsibilities Prepare workspace(s) for the compliance security profile (<u>AWS</u>) Enable the Compliance Security Profile on relevant workspace(s) (<u>AWS</u>) 	 CSP Compliance Responsibilities Maintain security of the cloud service infrastructure
HIPAA, PCI, DoD and FedRAMP	 Databricks HIPAA, PCI and FedRAMP Responsibilities Complete annual HIPAA, PCI-DSS, FedRAMP audits (region and cloud specific) Provide HIPAA, PCI and FedRAMP (Moderate on AWS) compliant internal services Enforce Enterprise Security Monitoring and Compliance Security Profile features 	 Customer HIPAA, PCI, FedRAMP Responsibilities Enable Compliance Security Profile on relevant workspaces (AWS) Use only supported preview features (PCI, HIPAA) Comply with compliance-specific prerequisites: Detailed docs: AWS: <u>HIPAA, PCI, FedRAMP</u> Obtain entitlement to process regulated data on Databricks Comply with the PCI Shared Responsibility Model Follow FedRAMP PMO documentation requirements (<u>FedRAMP</u>) 	CSP HIPAA, PCI and FedRAMP Responsibilities • Complete annual HIPAA, PCI-DSS, FedRAMP audits
	 Databricks GDPR/CCPA Service Responsibilities Provide services that are GDPR/CCPA compliant (subject to customer responsibilities) 	 Customer GDPR/CCPA Service Responsibilities Maintain GDPR/CCPA compliant usage of Databricks services 	 CSP GDPR/CCPA Responsibilities Provide service that are GDPR/CCPA compliant

GDPR/CCPA ©2023 Databricks Inc. – All rights reserved