Delphix Data Compliance for AWS RDS and AWS Aurora
AWS RDS and AWS Aurora relational database services provide high performance, scalable capacity while automating database administration tasks such as hardware provisioning, setup, snapshots, and restoration.

Cloud-native application teams leverage snapshots in lower level test environments so developers can refresh and reset their test data without the need of DBA involvement. Snapshots contain sensitive data, however, so using them in non-production environments introduces compliance risk.

Data delivered to lower-level environments in AWS must remain compliant with privacy laws such as HIPAA, PCI, and GDPR. Personal Identifiable Information (PII) such as social security numbers, age, and addresses should be obfuscated or anonymized prior to distribution.

Manual processes for anonymizing data sets hinder release velocity when automated DevOps workflows are stuck waiting for secure test data. PII data can easily leak into non-production systems, putting enterprises in danger of failing compliance audits.

Compliance and Governance for AWS RDS and AWS Aurora

» Stay compliant with mandates such as HIPAA, PCI, and GDPR

» Identify and replace sensitive data with fictitious but valid equivalents

» Preserve the referential integrity of data across sources

» Pre-configured templates for regulation-specific or application-specific profiles

» Manage permissions associated with the environment

» Audit, monitor, and report against access and usage

» Delphix Data Compliance is available on AWS Marketplace and runs on any EC2 instance size
The Delphix Solution

Delphix integrates with AWS to mask sensitive data residing in an Aurora or RDS DB instance to eliminate manual, error-prone processes for securing test data. The Delphix Data Compliance engine is deployed on an EC2 instance and connects to an Aurora or RDS DB instance restored from a snapshot or clone for use in non production test environments. Delphix Data Compliance automatically discovers and replaces sensitive values with fictitious yet valid equivalents to maintain referential integrity. Pre-configured templates for regulation-specific or application-specific profiles can be triggered by policy via an API to comply with regulations such as HIPAA, PCI, or GDPR.

Highlights

» Leverage the high scalability, availability, and manageability of production databases on AWS services while mitigating risk in lower level environments.

» Irreversibly mask sensitive data for cloud-based application development prior to distribution.

» Maintain control of the lower level environment by configuring EC2 resources and establishing data masking policies and access governance.

» Centralize data governance to control who has access to what data, when, and for how long.

» Simple GUI-driven workflows do not require specialized programming expertise or heavy DBA involvement.

“Many of our customers trust Amazon RDS to manage their databases at scale. By working with Delphix, we can not only make database management easier for enterprises, but also provide the performance enhancements these organizations need to accelerate mission-critical initiatives and win in their respective markets.”

Anurag Gupta,
Vice President,
Analytics, Aurora, and RDS, Amazon Web Services, Inc.

Figure 1. Delphix identifies and replaces sensitive data with realistic but fictitious data to remove compliance risk for non-production environments.
One of the largest hotel chains in the world uses Delphix and AWS to deliver better digital experiences and fuel business growth.

» Ensures 100% regulatory compliance by masking sensitive data in cloud-based development environments

» Accelerated application migration to the cloud by 20% after removing data bottlenecks

» Reduced application release cycle times by 30-50%

» Improved customer experience after reducing production defects by 80%

Figure 2. Delphix Data Compliance for AWS Aurora/RDS: Architecture & Data Flow

Create a snapshot or clone of production database
1. Deploy Delphix Data Compliance Engine to an EC2 instance
2. Connect Delphix Data Compliance Engine to non-production databases
3. Delphix replaces sensitive data using pre-configured or custom algorithms
4. Data copies are irreversibly masked for use in non-production environments