Difference AWS RDS vs AWS DynamoDB

Topics : AWS
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Difference between AWS RDS and AWS DynamoDB as below

Feature	AWS RDS	AWS DynamoDB
Database Type	Relational Databases (MySQL, PostgreSQL, Oracle, SQL Server, etc.)	NoSQL (Key-Value and Document) Database
Data Model	Tables with Rows and Columns	Key-Value and Document Data Models
Schema	Fixed Schema (SQL)	Flexible Schema (Schema-less for JSON data)
Scaling	Vertical Scaling (Upgrading Instance Types)	Horizontal Scaling (Auto-sharding)
Managed Service	Yes	Yes
Server Management	AWS Manages Servers	AWS Manages Servers
Multi-AZ Deployment	Yes	Yes
Read Replicas	Supported	Global Tables for Multi-Region Replication
Performance Consistency	Can Vary Depending on Configuration	Consistent, Single-Digit Millisecond Latency
Primary Key	Unique Identifier (e.g., Auto-incrementing Integer)	Primary Key (Simple or Composite)
Query Language	SQL	No SQL Query Language
ACID Transactions	Yes	Yes (Within Partition Key)
Backup and Restore	Automated Snapshots and Manual Backups	Point-in-Time Recovery, On-Demand Backups
Global Secondary Index (GSI)	Supported	Automatic Global Tables (Multi-Region)
Data Consistency Models	Eventual Consistency (Read Replicas)	Strong Consistency
Use Cases	OLAP and OLTP Workloads	Web and Mobile Apps, Gaming, IoT, etc.
Cost Model	Based on Instance Type and Storage	Based on Provisioned Throughput and Storage

Feature	AWS RDS	AWS DynamoDB
Security Features	Encryption at Rest and in Transit, IAM	Encryption at Rest and in Transit, IAM