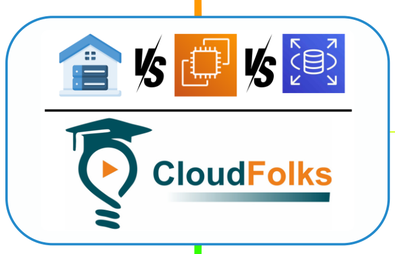

1

On-Premises Database

1	Control	Full control over hardware, network, software
2	Management	Manual management for hardware, scaling, backups, and patching
3	Customization	Complete customization of hardware and software
4	Cost	High initial CapEx for hardware, software, and maintenance
5	Scaling	Requires manual intervention (buying more hardware, downtime for upgrades)
6	Backup & Recovery	Manual setup for backups and disaster recovery
7	High Availability	Requires complex setup, often costly
8	Security	You are fully responsible for physical and network security
9	Maintenance	High—manual patching, hardware maintenance, software updates
10	Performance Tuning	Full control over hardware tuning (CPU, RAM, I/O)
11	Time to Deploy	Long—requires hardware procurement, network setup, installation
12	Compliance	Full control to meet local and industry compliance
13	Disaster Recovery	Manual DR planning and management
14	Network Latency	Depends on physical location and network setup
15	Initial Setup Complexity	High—requires infrastructure setup, networking, and database software installation

2

Amazon EC2

1	Control	Full control over OS, database, and configurations
2	Management	Manual for backups, patching, scaling, and security
3	Customization	High customization for OS and database configurations
4	Cost	Pay-as-you-go pricing, but responsible for instance and storage costs
5	Scaling	Requires manual scaling (changing instance types or storage manually)
6	Backup & Recovery	Manual configuration for backups and replication
7	High Availability	Requires manual setup for clustering, failover, and replication
8	Security	Full control over security configurations (OS and database-level
9	Maintenance	Manual software patching, instance updates
10	Performance Tuning	Full control over instance type and storage optimizations
11	Time to Deploy	Medium—requires instance provisioning and database setup
12	Compliance	Requires configuration to meet compliance
13	Disaster Recovery	Requires setting up replication and backups
14	Network Latency	Depends on instance region and VPC configuration
15	Initial Setup Complexity	Medium—instance provisioning and database software installation

3

RDS-hosted Database

1	Control	Limited control over database settings and configurations (predefined instance types)
2	Management	Automated backups, patching, scaling, and software updates
3	Customization	Limited customization (cannot access underlying OS, limited database settings)
4	Cost	Pay-as-you-go pricing with built-in costs for managed services
5	Scaling	Automatic scaling options (up/down with minimal or no downtime)
6	Backup & Recovery	Automated backups, Multi-AZ replication, and point-in-time recovery available
7	High Availability	Built-in Multi-AZ deployments for high availability with minimal setup
8	Security	Managed security features with encryption at rest and in transit, VPC integration
9	Maintenance	Low—automated patching and maintenance
10	Performance Tuning	Limited control—can select instance types, but less control over deep tuning
11	Time to Deploy	Short—automated setup, ready-to-use databases in minutes
12	Compliance	AWS takes care of most compliance standards (SOC, PCI, HIPAA, etc.), with some configurations needed by the user
13	Disaster Recovery	Built-in DR features like Multi-AZ and automated snapshots
14	Network Latency	Lower latency with built-in optimization for AWS infrastructure
15	Initial Setup Complexity	Low—simple launch with few clicks and minimal setup