
AWS
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WPS301

Migrating sensitive Oracle workloads to AWS

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Migrating sensitive Oracle workloads to AWS

Analyzing the on-premises Oracle database workload

Determining the optimal Oracle database migration approach

Addressing availability and security requirements

Public sector Oracle database success stories

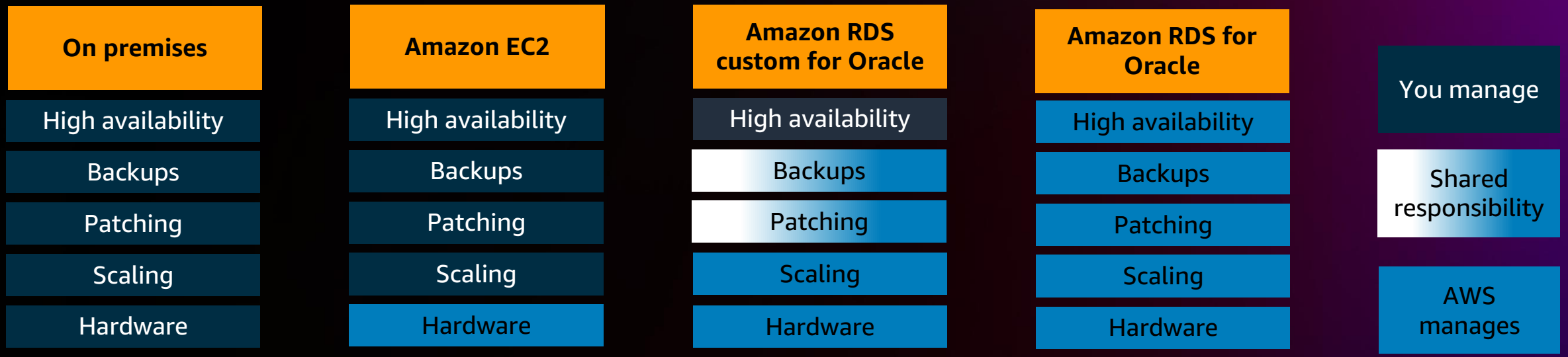
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WWPS customer migration journey

- Size of database
- Database activity
- Right-sizing workloads
- Application type and usage
- Licensing considerations
- Oracle features
- Database security requirements
- Target region

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Oracle database deployment options



No management

Host-level access and full database permissions

Allows features not currently supported by Amazon RDS

Full management

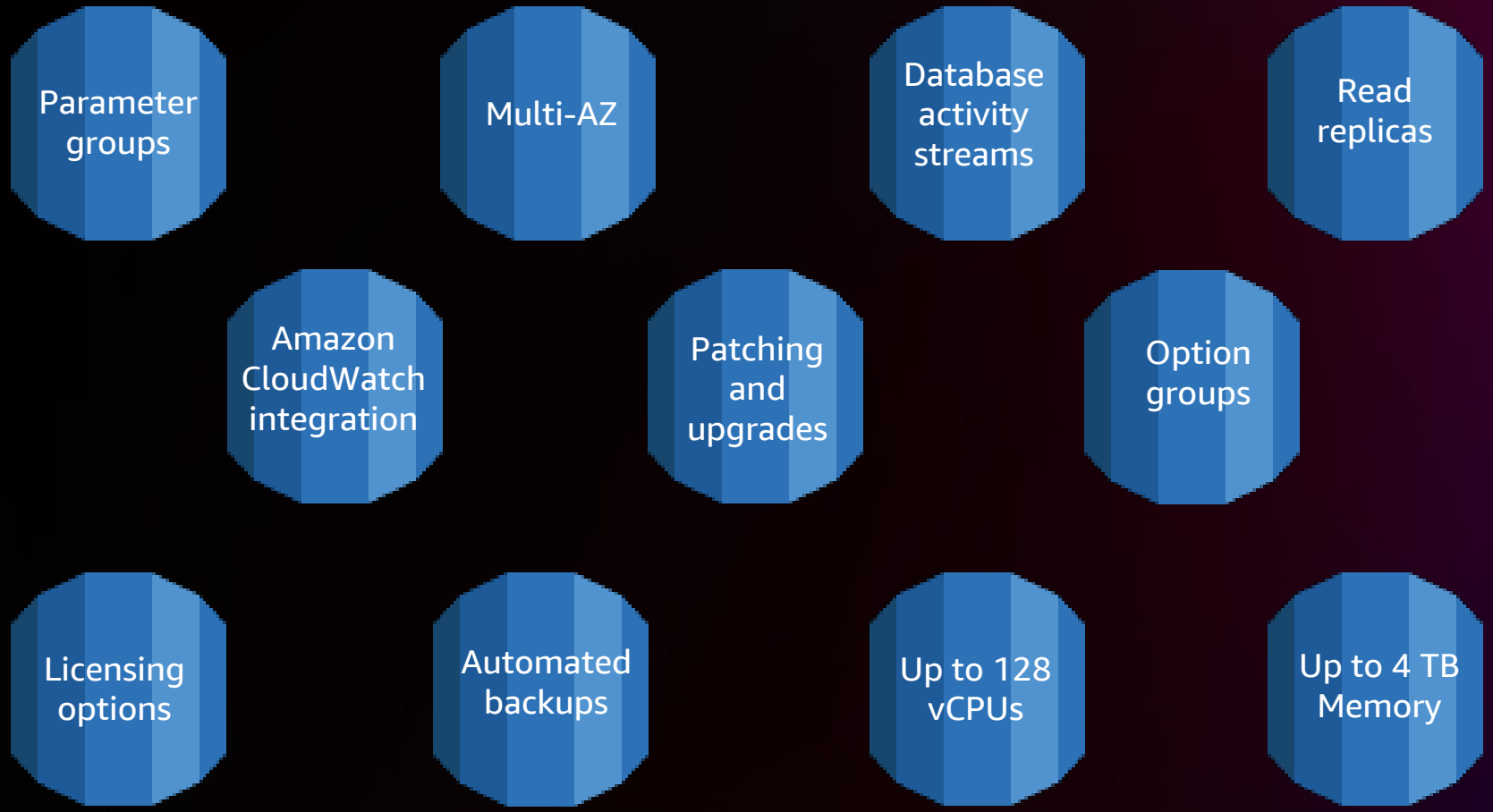
Allows third-party applications on the database host

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Amazon RDS for Oracle features

NOT A COMPLETE LIST



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Oracle database migration approaches

Approach	Amazon RDS, Amazon RDS Custom, Amazon EC2	Physical, logical
Oracle data pump	All	Logical
AWS DMS	All	Logical
Oracle recovery manager (RMAN)	Amazon RDS Custom/Amazon EC2	Physical
Oracle data guard	Amazon RDS Custom/Amazon EC2	Physical
AWS Application Migration Service	Amazon EC2	Physical

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Addressing security requirements

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AWS KMS



Amazon CloudWatch



AWS Config



AWS Trusted Advisor

Oracle database features supported

Oracle transparent data encryption

Oracle unified auditing mixed mode

Oracle standard auditing

Oracle fine grain auditing

Oracle virtual private database

Oracle label security

Oracle DB security assessment

Oracle native network encryption

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Public sector Oracle database success stories

Pearson

- Student mastering application
- Four node 128 vCPU RAC cluster on premises
- 13 RAC databases on premises
- Migrated to Amazon RDS for Oracle (total of 48 vCPUs)

CalHEERS

- California health benefit exchange
- Exadata on premises (576 vCPUs)
- Migrated 68 TB Oracle database
- Migrated to Oracle on Amazon EC2 (96 vCPUs)
- Reported AWS overall performance improvement of 220% compared to on premises

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Thank you!

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