



AWS  
re:Invent

**D A T 3 3 7**

# Running and tuning SQL Server on Amazon RDS

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# Agenda

- Introduction
- Event engine setup
- Migration
- Tuning – Amazon RDS Performance Insights
- Security - SQL Server Audit
- High availability – Multi-AZ

# Related breakouts

**DAT364-R1** – Deep Dive on new features in Amazon RDS for SQL Server

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**DAT367** Running SQL Server on Amazon RDS and migrating to Aurora MySQL

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# Get started!

Directions for the lab: <https://tinyurl.com/ujaghwcq>

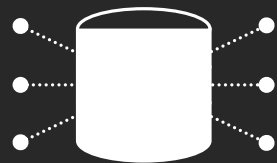
We will wait 10 minutes while you launch this (until step #12), then start the presentation

# Introduction

# Amazon Relational Database Service (Amazon RDS)

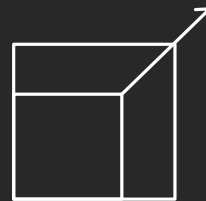


Managed relational database service with a choice of popular database engines



## Easy to administer

Easily deploy and maintain hardware, OS and DB software; built-in monitoring



## Performant & scalable

Scale compute and storage with a few clicks; minimal downtime for your application



## Available & durable

Automatic Multi-AZ data replication; automated backup, snapshots, and failover



## Secure & compliant

Data encryption at rest and in transit; industry compliance and assurance programs



# Introduction: Managed service

## What does Amazon RDS manage?

- Provisioning
- Installation and patching
- Automated backups
- Restores: Snapshot and point-in-time
- High availability
- Monitoring





# Introduction: Configuration

## What can you configure?

- Hardware
- Engine version/edition
- Network connectivity
- Time zone
- Backup retention
- Encryption
- Collation
- High availability
- Monitoring

**Deep dive on best practices:** <https://www.youtube.com/watch?v=4JYS1J5PyHw>

# Migration

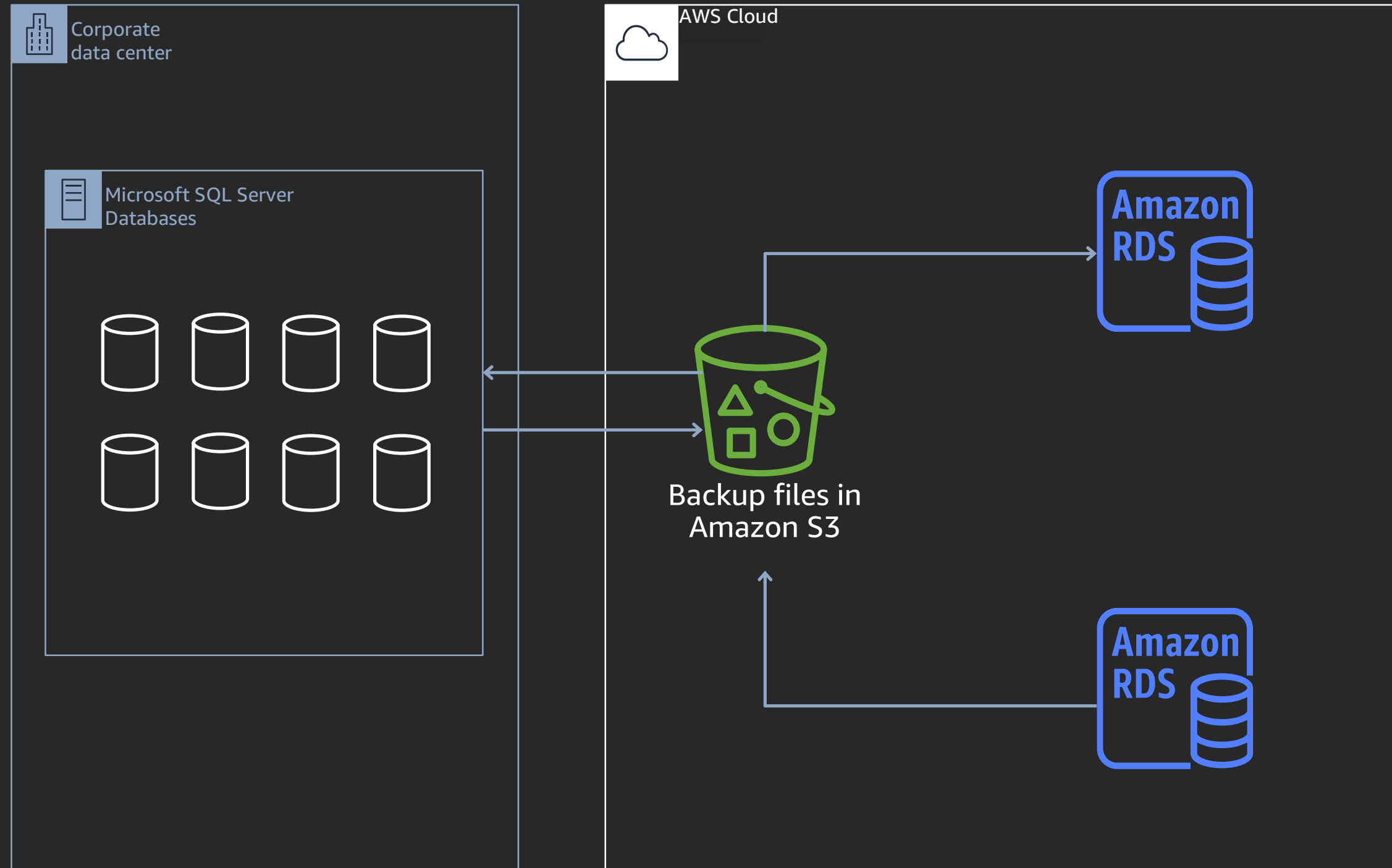
# Migration: Native backups/restores

## Backup types

- Full
- Differential

## Restore types

- Full
- Differential
- Log



# Monitoring

# Monitoring: Performance insights

Easy-to-understand dashboard

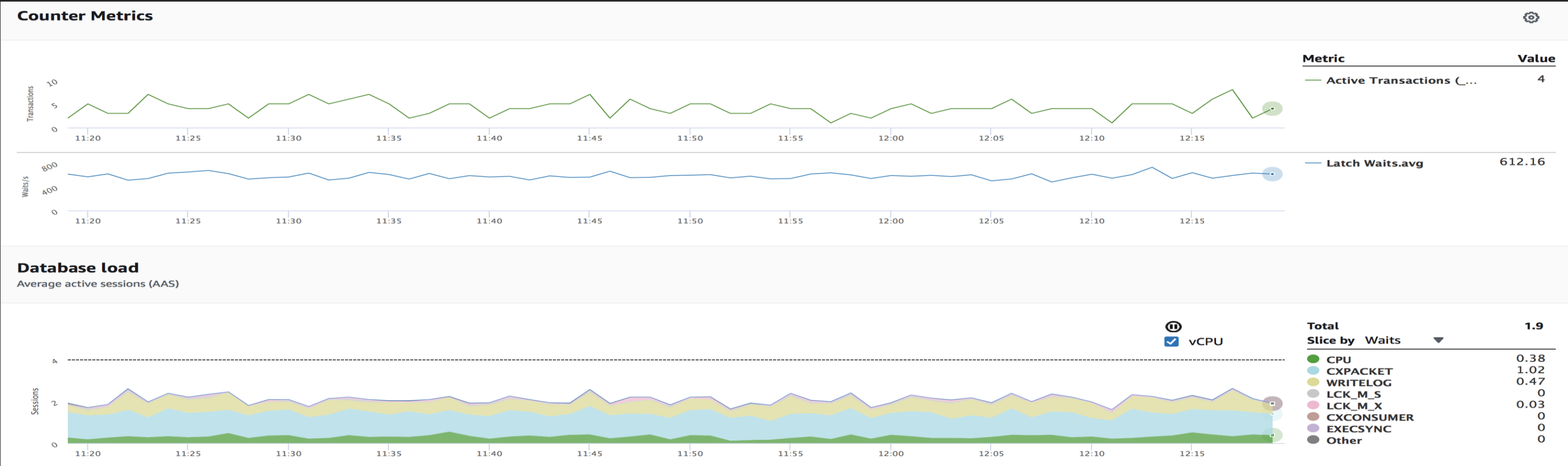
Free tier

Session and system-level monitoring

Configurable retention

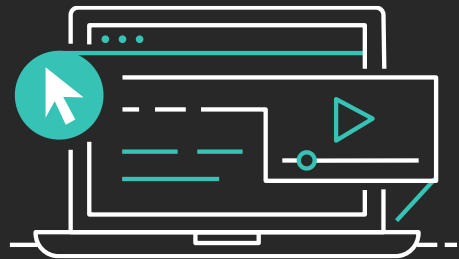
Wait event information

'0x' + SQL ID = SQL handle



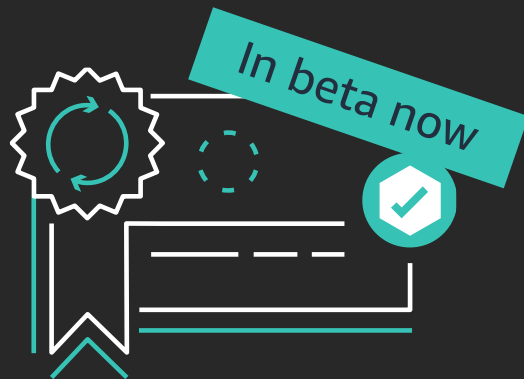
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# Thank you!

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