EDB™ Database Downtime

The Ways Your Database Is Hurting Your Brand and Customer Experience
& How EDB Postgres Distributed Can Help

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Our Speakers

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POLL:
What's your biggest downtime concern?

1. Lost opportunity for revenue
2. Bad press
3. Data loss
4. Customer churn
5. Internal stakeholder escalations

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80%

of data centers have experienced an outage in the past 3 years

60%

of failures result in at least $100,000 in total losses

40%

increased employee overtime due to data disruption

Source: Uptime Institute's 2022 Outage Analysis

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You might be falling short of your customers expectations if:

1. You're relying on taking systems offline for maintenance

2. You're experiencing frequent unplanned outages

3. Your architecture is not always on

4. Your customers are experiencing slow applications

5. You don't have geographic redundancy

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POLL:
What's your largest contributor to downtime?

1. Software or infrastructure upgrades
2. Software or infrastructure failures
3. Human error or inexperienced staff
4. Issues with 3rd party cloud providers
5. Data center design issues

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Enter
EDB Postgres
Distributed

"Always On" is the hallmark of digital transformation & operational resiliency

Today, your customers expect services to be always on – 365 days a year, 24 hours a day. High availability goes beyond protecting users from hardware failures and network glitches. The technology should ensure near-zero downtime maintenance and operational resiliency.

This is essential for industries and organizations like:

| Financial Services | Information Technology | Public Sector | Ecomm | Telecom |

EDB Postgres Distributed
Achieve up to five 9s uptime and optimize to scale

- ✅ Protect mission-critical applications
- ✅ Meet the growing demand for online apps
- ✅ Avoid productivity disruption
- ✅ Meet customer expectations
- ✅ Maintain your brand reputation
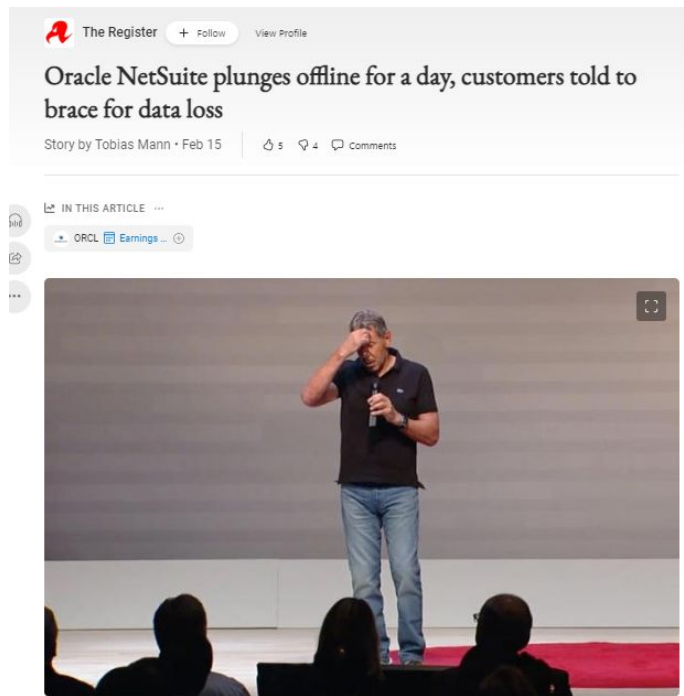- ✅ Keep data secure through access rights and data sovereignty

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Ripped from the Headlines

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Oracle - Netsuite

The Issue: NetSuite enterprise resource planning (ERP) suite experienced an outage at its datacenter in Boston, USA beginning around 0015 ET Tuesday, February 14th. Services were not able to be fully restored until 1146 ET the following day.
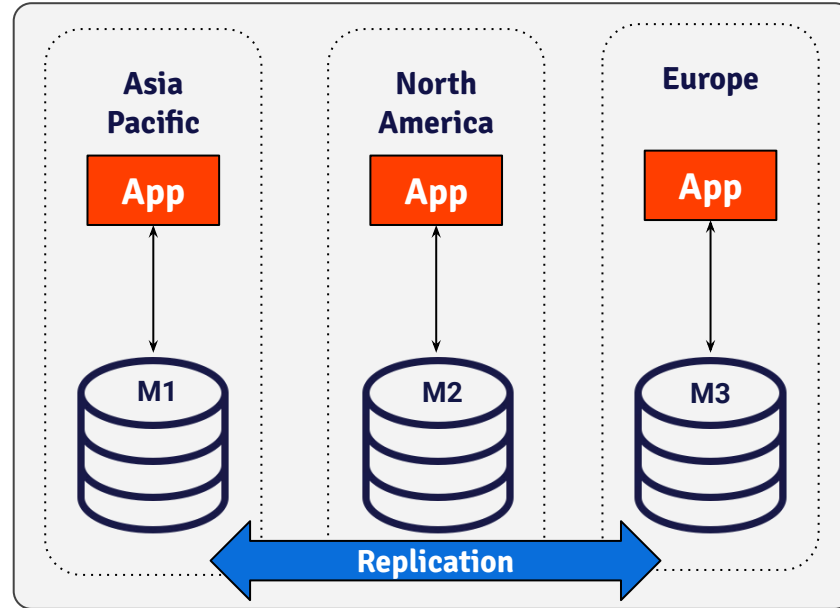
The Customer Impact:

- According to customer reports on Reddit, the outage effectively paralyzed businesses relying on the platform's Boston-based servers.

- Approximately 30 minutes of data was lost during the recovery process, as the "restoration point was about 30 minutes prior to the outage."

The Register + Follow   View Profile

Oracle NetSuite plunges offline for a day, customers told to brace for data loss

Story by Tobias Mann • Feb 15   5   4   Comments

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[Read the article here](#)

How could EDB Postgres Distributed have avoided this downtime?

Choice of Consistency

Allowing you to choose the durability for your needs

Asynchronous
Default and eventually consistent

Synchronous
Same synchronous replication used by Postgres natively

Commit at Most Once
Synchronous replication with inflight transaction tracking between a pair of nodes for additional consistency check options during failover

Group Commit
Quorum-based synchronous replication - changes are committed if a quorum of nodes respond

Eager All Node
Transactions are applied on all nodes simultaneously and committed only if no conflicts are detected

Least Consistent → Most Consistent

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Amazon Web Services (AWS)

The Issue: AWS informed users it would no longer support PostgreSQL 11.x versions in its Aurora database-as-a-service after January 31, 2024. AWS said, "the upgrade process will shut down the database instance, perform the upgrade, and restart the database instance,"

The Customer Impact:

- The database instances may be restarted multiple times during the duration of the upgrade process. While major version upgrades typically complete within the standard maintenance window, the duration of the upgrade depends on the number of objects within the database.

- Customers would need to use a snapshot process to avoid possible "unplanned unavailability" outside scheduled maintenance windows

AWS dragged over lengthy downtime to migrate PostgreSQL DBaaS

Aurora needs a break to get users off 11.x, says cloud giant

Lindsay Clark   Tue 14 Feb 2023 // 18:15 UTC

AWS database downtime necessary to execute a migration has been described as "an embarrassingly low bar" for a managed service after the cloud giant announced plans for getting off PostgreSQL 11.x.

Amazon's cloud biz told users how it would no longer support PostgreSQL 11.x versions in its Aurora database-as-a-service after January 31, 2024, giving users a year to get off older versions of the relational system.

However, it was the downtime that irked critics.

"The upgrade process will shut down the database instance, perform the upgrade, and restart the database instance," AWS said in a missive to Aurora customers dated 3 February. "The database instances may be restarted multiple times during the duration of the upgrade process. While major version upgrades typically complete within the standard maintenance window, the duration of the upgrade depends on the number of objects within the database."

Read 2023 article here

How would EDB Postgres Distributed avoid this issue?

Why is extreme high availability so important for highly regulated industries?

What about large geographically distributed organizations?

Questions

Ready to start your journey to five 9s?

Request a demo with our team
enterprisedb.com/contact

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