

Cloud Database Migration Checklist for Amazon Web Services



Database migration to the cloud often proves to be more complex than anticipated. However, by following a step-by-step process, proven successful across numerous transformation projects, you can take the risk and the stress out of your cloud migration.

30-45 DAYS PRIOR

- Establish a database migration project manager – preferably one that has experience with database management rather than owning multiple software development projects.
- Determine team leads for departments that will be involved and impacted by the migration. They should be advisers for the process and sign off on the plan.
- Identify and account for any applications that may be impacted by going over a public network versus behind the corporate firewall.
- Investigate database sizing needs. This will determine how much storage and what instance types your team will need.
- Evaluate which migration strategy is best for you. Lift and shift? Zero downtime migration? Continuous replication? The Striim Team's technical consultants can advise you on best practices based on your environment and needs.
- Begin weekly prep meetings with department leaders involved.
- Evaluate your cloud infrastructure strategy for the next 3-5 years. How can your deployment be set up to scale with your future plans?

21-30 DAYS PRIOR

- Perform an audit of your entire database – all your tables, users, indices, cataloging, as well as performance metrics in use.
 - Will your current database sizing, operations, and settings be compatible with your future cloud database?
- Record owners of every affected application.
- Test your disaster recovery plan and make sure there's a contingency plan in place for failures.

Move Your Data

Connect | Assessment Report | **Convert Schema** | Migrate Schema | Migrate Data | Post Migration

Convert Schema from Oracle to PostgreSQL

TABLE	STATUS	SQL
H_CUSTOMER	Success	Show Generated SQL
H_LINEITEM	Success	Show Generated SQL
H_NATION	Success	Show Generated SQL
H_ORDER	Success	Show Generated SQL
H_PART	Success	Show Generated SQL
H_PARTSUPP	Success	Show Generated SQL
H_REGION	Success	Show Generated SQL
H_AVERAGESALES	Error	HideGenerated SQL

```
CREATE TABLE TPCH.H_AVERAGESALES (ID numeric(22) NOT NULL, AVERAGE STRIIM_UNKNOWN , PRIMARY KEY(ID))
```

RESET SAVE

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14 DAYS PRIOR

- Develop a game plan for the migration day – outline specifically who will do what for a more efficient move.
- Make sure your public cloud security team has approved your database migration and deployment plan.
- Test key processes and applications to establish baselines.
- Lock down all changes in the environment to ensure stability during migration.
- Make sure your database has all the correct privileges set up for your migration software.

7 DAYS PRIOR

- Register your migration team with data center security. Be sure to include any vendors or third parties.
- Make sure all stakeholders are firm on the date of the migration.
- Prepare some test queries that will confirm the migration is successful. Make sure all stakeholders provide other queries to test that their applications will port well to the new database.

THE DAY OF THE MOVE

- Notify all stakeholders exactly when the migration begins with an estimate for completion.
- Execute the migration. Run your test queries to make sure the results are as expected.
- Check the status of each table.

The screenshot shows the Striim 'Move Your Data' interface. At the top, there are three progress indicators for different table sizes: Very Large Tables (>1B rows), Large Tables (>1M rows), Medium Tables (>1K rows), and Small Tables (<1K rows). Below these, there's a 'Retry Data Migration' section for a TPCH database, showing a 'Success' status with 7 successful and 1 error. A 'RETRY' button is visible. At the bottom, a 'Details' table lists the migration progress for individual tables.

TABLE	SOURCE DB	RECORDS	TABLE	TARGET DB	RECORDS	STATUS
H_AVERAGESALES	TPCH	5	H_AVERAGESALES	TPCH	5	Error
H_CUSTOMER	TPCH	150000	H_CUSTOMER	TPCH	150000	Success
H_LINEITEM	TPCH	1500000	H_LINEITEM	TPCH	1500000	Success
H_NATION	TPCH	25	H_NATION	TPCH	25	Success
H_ORDER	TPCH	1500000	H_ORDER	TPCH	1500000	Success

POST MIGRATION

- Test all processes and applications against your baseline tests.
- Evaluate the performance of your new database. Tune your database until the performance is equal to or better than your previous deployment.