

Migration Assessment & Enablement

Overview:

The Migration Assessment & Enablement package helps you develop an effective plan to migrate your applications from their host database to CockroachDB self-hosted or cloud deployments.

Migrations by their very nature are complex and can include application, database, and potentially environment migrations. The purpose of the Migration Assessment & Enablement package is a defined scope of work, framework for delivery, tooling, and knowledge transfer with the active engagement of a CockroachDB expert to jointly analyze, define, communicate, and align the scope of work for a migration. This includes the following steps, where relevant:

- Clarify the business and technical requirements driving the technical strategy and align with your migration team.
- Based on the requirements, identify the strategy and corresponding level of effort for migrating the following where relevant:
 - Platform and supporting services
 - Application code
 - Database schema
 - SQL statements
 - Data
- Identify your stakeholders and other affected parties to bring everyone to the table with a clear understanding of their roles in performing the migration.
- Identify gaps in knowledge and skills that your implementing team needs for success, and deliver technical enablement.
- Align your team around a common approach to project planning and progress tracking for a successful migration, with clearly-defined milestones and action items for team members.

We will collaborate with your teams to get the migration off to a good start by gaining crucial up-front clarity on the scope of the migration, the choice of migration technologies, and the level of effort involved. We will reduce risk for the migration by helping to bring stakeholders together, identify milestones, gain necessary skills, and track progress.

Benefits:

The Migration Assessment & Enablement package provides a CockroachDB expert with migration expertise who works closely with your team to develop a plan to effectively migrate your application(s) to the CockroachDB environment. The benefits include:

- Working directly with CockroachDB expert(s)
- Understanding the scope of your migration to CockroachDB
- Enabling your team to execute on the migration

Scope:

A CockroachDB expert will engage with your team to assess your migration, enable your team, and jointly develop your plan to effectively migrate your application to CockroachDB. This process includes the following, where relevant:

- Assess if the application and workload are structured appropriately and determine the complexity of adapting them to a modern database environment.
- Understand the application requirements, such as survivability expectations, transaction isolation, and performance for follow-on application migration.
- Identify SQL compatibility differences, indexing strategy, and data domiciling requirements.
- Co-author a migration plan and migration design document.

The Migration Assessment & Enablement package provides expert guidance on the plan for your migration to CockroachDB, rather than hands-on migration. Upon completion of this engagement, project-based services are available to assist with migration.

Duration:

An estimated 15-day engagement, over a maximum of 2 months, with one CockroachDB expert.

Deliverable(s):

- **Migration Plan:** In collaboration with your team, this high-level migration plan covers milestones, tasks, dependencies, timelines and responsible parties.
- **Migration Design Document:** With guidance and assistance from a CockroachDB expert and the information provided by your team lead, a high-level design document will be co-authored by both your team and a CockroachDB expert to identify such things as the method and tooling required.
- **Knowledge Transfer:** Information reviewed during the engagement, such as
 - Migration strategy options
 - Technical enablement (as required)
 - Recordings of working sessions (if applicable)

Both the Migration Plan and Migration Design Document are suitable for detailed refinement by your team to execute on the migration, or in coordination with CockroachDB experts in subsequent engagements.

Prerequisites:

Your team members are expected to have taken the appropriate Cockroach University courses and have a working knowledge of SQL and CRDB fundamentals. Cockroach Labs will require participation of team member(s) with workload and environment-specific knowledge, who will be responsible for executing on the migration plan.

The following should be ready by the engagement kickoff meeting:

- **CockroachDB** self-hosted or cloud environment
- **Architecture design document** (existing and future state)
 - Database architecture & data model
 - Application architecture
 - Infrastructure architecture
 - Data storage details (outside of the database for backups, etc.)
- **Project intake form** completed with information such as:
 - Identified application and its associated database, relational or NoSQL

- Data residency requirements
- SLOs, SLAs, and business continuity needs, including planned downtime
- **Project team & resources** identified comprising your stakeholders and execution team members, including:
 - migration lead / owner
 - project manager
 - application platform / infrastructure and supporting services owner(s)
 - database management and operations owner(s)
 - application owner(s)
 - database schema and SQL queries owner(s)