

Modernizing SQL Database hosting FASTag application to improve performance and reduce cost

- **35% Cost Reduction**
- **30% Improved Performance**
- **300k USD Net Saving Per Annum**

Nation-wide electrical toll collection system reduces cost and improves performance by leveraging G7 CR Data Modernization Services.

## At a glance

FASTag is a robust system used for issuing FASTag and collecting tolls at various highways managed by the National Highways Authority. The database serving such highly volatile data needs to be highly efficient.

## CHALLENGES

- The Data Size was too large
- The system design was not built for scale
- Disaster recovery service has high RPO/RTO
- The Customer had to purchase an additional license for scaling

## Key Highlights



**2**

Large databases



**9 TB**

Size for each database



**2800+**

Tables



**30 MINS**

Maximum downtime acceptable for data migration

## G7 CR SOLUTION & APPROACH

**1**

### Assessment

G7 CR carried out an assessment of the Data estate, the table structures and Database design (including features in use).

**2**

### Planning

G7 CR meticulously planned the changes needs to modernise the database including moving of reporting services to a separate instance, consolidation of logs & carefully planning the IOPS for data migration without impacting the production system.

**3**

### Execution

G7 CR carried out optimization activity of the source database, assisting Customer in optimizing expensive queries, consolidating & cleaning up log files, built datapipelines to efficiently migrate data to source system (parallel & batch copy operations), building Change data capture system for copying differential data, Load testing the system & Cutover

## G7 CR TECHNOLOGIES

THINK CLOUD, THINK G7CR

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## RESULT

- 35% cost reduction (\$300 K saving per annum)
- 30% improvement in performance
- RPO/RTO >15 minutes