

# Netcore Delivers 200 Million Daily Emails with Mydbops MDS



## Client Overview



Netcore hit write bottlenecks processing 10K TPS during IRCTC ticket booking surges blocking 200M daily emails. Engineering teams stalled on database firefighting instead of product innovation. Unpredictable volatility risked zero-error transactions for public sector clients. No proactive scaling blocked growth during massive traffic spikes. Mydbops partnership delivered invisible reliability. Engineering freed for feature velocity. Protected brand trust, bigger revenue.

**200 Million**  
Daily Emails Processed

Guaranteed flawless customer experiences.

**10,000+**  
TPS

Protected revenue during massive traffic surges.

**96.5%**

**Inbox Delivery Rate**

Protected brand trust and campaign ROI

**100%**

**Critical Uptime**

Delivered absolute reliability, protecting user trust

MongoDB

MySQL

Managed Services

## About Netcore

Netcore Cloud delivers 35B+ emails monthly (250B+ yearly) at 125K peak TPS with 95% under 5s delivery for IRCTC, banks nationwide. Serves 2,500+ enterprise clients processing 10K+ TPS during booking surges. Maintains 96.5% inbox rates across 200M daily campaigns. Powers real-time engagement for public/private giants via hybrid MySQL/MongoDB stack.

Deployment Type  
**Hybrid Cloud Deployment**

Database Stack / Services Used  
**MySQL & MongoDB**

Objective / Outcome  
**200M+ Daily Messages**

## Business Challenges

### Overview

Netcore operates as the "invisible engine" for critical communications. However, rapid scaling had introduced significant technical debt into the database layer. The primary challenge was not just storage, but extreme concurrency. Sudden traffic bursts such as millions of users booking IRCTC tickets simultaneously placed immense write pressure on their MySQL and MongoDB clusters.

- Stalled Engineering Velocity:** Internal teams were consumed by operational firefighting rather than shipping new features, slowing down the product roadmap.
  - Write-Heavy Bottlenecks:** Processing 10,000 TPS created locking issues and latency, threatening the platform's ability to scale efficiently.
  - Unpredictable Volatility:** Massive spikes required instant elasticity, making capacity planning a constant risk to stability.
- Zero-Error Tolerance: For clients like IRCTC, a failed transaction means a stranded passenger. There was no room for data loss or downtime.

### Goals

- Guarantee 100% Uptime & Reliability during extreme traffic surges.
- Accelerate Engineering Velocity by removing database maintenance burdens.
- Optimize Total Cost of Ownership (TCO) while preparing for 10x scale.

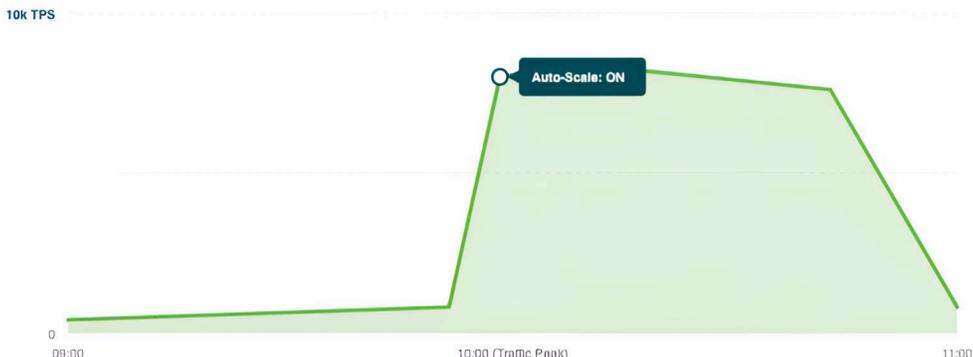
## Solution Provided by Mydbops

Netcore engaged Mydbops as their strategic database partner to take full ownership of their data layer reliability. Mydbops moved Netcore from a reactive maintenance model to a proactive, optimized Managed Services framework, ensuring their databases could handle "IRCTC-scale" days without asking for attention.

- Strategic Risk Mitigation & Architecture Planning (Detailed Audit & Assessment):**
  - Audited existing MySQL and MongoDB configurations against high-concurrency patterns to identify accumulated technical debt.
  - Identified and resolved hidden bottlenecks to prevent future downtimes during critical traffic spikes.
  - Analyzed capacity limits to forecast requirements for 200M+ volume days.
- Maximized Cost Savings & Cloud Efficiency:**
  - Prevented the need for expensive hardware upgrades by aggressively tuning database parameters, allowing Netcore to achieve 10k TPS on their existing infrastructure.
- Unshakable Reliability & Scale:**
  - Architected advanced MongoDB sharding and custom archiving, transforming a volatile data layer into a highly predictable engine capable of handling 200M+ daily events without breaking a sweat.

### Real-Time Throughput (TPS)

Netcore **LIVE**



### Operational Freedom for Engineering:

- Deployed 24/7 proactive "Eyes-on-Glass" monitoring, completely eliminating database noise and allowing Netcore's developers to focus 100% on product innovation instead of firefighting.
- Managed proactive scaling during known high-traffic events (e.g., holiday bookings).
- Provided regular architectural reviews to align database growth with business expansion.

## Netcore Architecture

Handling 200M+ Requests via Hybrid Persistence Layer



## Results & Impact

### Key Outcomes

- Extreme Reliability:** Successfully processed 200 million emails in a single day for IRCTC without performance degradation.
- Guaranteed SLA Assurance:** Delivered the High Availability (HA) architecture required to confidently adhere to aggressive enterprise SLAs.
- Brand Reputation Secured:** Maintained a 96.5% inbox delivery rate by eliminating backend bottlenecks.
- Robust Security & Compliance:** Ensured the database architecture met stringent enterprise security standards, safeguarding sensitive user data for public sector entities like IRCTC without compromising on high-velocity throughput.
- Operational Freedom:** Netcore's engineering team shifted focus from database maintenance to building core product features.
- Invisible Infrastructure:** Achieved the goal where infrastructure "doesn't ask for attention," operating silently and effectively in the background.

### The Strategic Value of Boring Infrastructure

In the high-stakes world of SaaS, the most valuable infrastructure is the kind you never have to think about. For Netcore, Mydbops didn't just fix a database; we secured the foundation of their revenue model. By transforming a volatile data layer into a predictable utility, we converted technical risk into business confidence.

When your database performance is guaranteed, your ARR is protected, your engineering velocity accelerates, and your customer trust compounds.

Don't let your database be the bottleneck that caps your growth.

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