

# Network Load Balancer



## Overview

JioCloud Network Load Balancer provides high-speed Layer 4 load balancing across backend services — purpose-built for high-volume, low-latency applications. It works at the protocol level (TCP/UDP), reroutes traffic when servers go down, and keeps services online across zones. Designed for speed and fault tolerance, it scales automatically and integrates with your existing monitoring and automation tools.

## Key Features

- **Fast layer 4 traffic handling**  
Handle large volumes of TCP (Transmission Control Protocol) and UDP (User Datagram Protocol) traffic across backends — with minimal delay and overhead.
- **Health-based failover**  
Ensure continuous uptime by detecting and rerouting traffic away from unhealthy servers automatically.
- **Multi-zone traffic distribution**  
Distribute requests across availability zones for continuous service and protection against outages.
- **Scalable by design**  
Instantly add more tunnels, ports, or throughput as demand grows, no re-architecture required.
- **Protocol flexibility**  
Seamlessly works with a range of services — from VoIP and DNS to financial APIs and custom apps.
- **API-driven control**  
Fully programmable via APIs and Terraform for DevOps and platform teams.

# Benefits

- Handle real-time load with consistent low-latency delivery.
- Maintain uptime with built-in failover across zones.
- Eliminate manual routing and reactive troubleshooting.
- Support diverse protocols beyond HTTP/S.
- Scale cleanly as demand grows – without infrastructure sprawl.

## Use Case

- **Keep payments flowing**  
Balance thousands of TCP connections for real-time transactions – with instant rerouting during backend failures.
- **Power high-concurrency services**  
Support multiplayer gaming, video streaming, or telecom apps – with sub-second response times and protocol-level flexibility.
- **Secure always-on operations**  
Enable 24/7 uptime for backend APIs and database services – with traffic balanced across redundant zones.
- **Simplify network scaling**  
Add or modify traffic rules through APIs and templates – without touching individual nodes or ports.