

# Virtual Network

## Overview

JioCloud Virtual Network makes it easy to build secure, isolated networks across your cloud infrastructure. It gives teams fine-grained control over how workloads talk to each other — whether across environments, regions, or apps. With built-in tools for IP planning, subnetting, traffic routing, and access control, you can segment networks based on workload, function, or compliance need. It integrates cleanly with firewalls, load balancers, and monitoring tools — so your policies are enforced consistently and automatically. Whether you're rolling out new services or locking down existing ones, JioCloud Virtual Network helps you reduce risk, maintain visibility, and stay audit-ready without slowing teams down.

## Key Features

- **Custom IP addressing and subnetting**  
Define precise IP ranges and subnet layouts to align with app tiers and governance needs.
- **Traffic control with route tables and NSGs**  
Implement security-backed routing across subnets using network security groups and route tables.
- **Hybrid connectivity support**  
Extend your on-premises networks to the cloud using VPNs and direct connect gateways.
- **Environment-specific segmentation**  
Automate workload separation for dev, staging, and prod environments using repeatable templates.
- **Integrated traffic logs and monitoring**  
Gain real-time visibility into all traffic flows — critical for audits, RCA, and threat detection.
- **Cloud-native integrations**  
Works seamlessly with JioCloud firewalls, load balancers, and Kubernetes-native tooling.

# Benefits

- **Stronger network security**  
Isolate critical workloads and reduce attack surface with private, segmented networks.
- **Faster deployment with guardrails**  
Predefined subnet templates and policies accelerate onboarding while minimising misconfigurations.
- **Complete traffic visibility**  
Monitor east-west and north-south flows to detect anomalies and validate compliance.
- **Policy consistency across teams**  
Centrally enforce access rules, routing logic, and segmentation across all environments.
- **Support for zero trust architecture**  
Build network-level trust boundaries that align with identity, workload type, and context.

## Use Case

### National bank – securing multi-cloud digital infrastructure

- To power internet banking, UPI APIs, and analytics platforms, a national bank uses JioCloud Virtual Network to connect services securely across cloud regions.
- It segments workloads by environment – development, staging, and production, using isolated subnets with distinct access policies. Micro segmentation blocks lateral movement, and integrated monitoring tracks all traffic.
- This architecture reduces risk, speeds up releases, and simplifies compliance with audit-ready network logs and routing policies.