

Reliance Jio Creates Magical Digital Lifestyles with the World's Largest All-IP Network

Reliance Jio leads the charge in Digitizing India and delivering Magical Digital Lifestyles for citizen services such as education, healthcare, security, financial, government, communications and entertainment.



Jio's Vision

Reliance Jio (Jio) embarked on a journey to enable the vision of Digital India for 1.2 billion Indians and to propel India into a global leadership role in the digital economy. Jio transformed the Indian digital services space by creating an eco-system of network, devices, applications and content, service experience and affordable tariffs for everyone to live the Jio Digital Life.

Jio partnered with Cisco to build a first-of-its kind, 5G-ready network. As the largest all-IP, multi-Terabit capacity network in India, Jio enables massification of infrastructure services such as broadband connectivity, mobile video, and high quality communications, thereby digitizing industry verticals, including education, healthcare, security, financial, and government services.

Benefits

Built on this all-IP network, Jio has revolutionized the Indian mobile communications landscape by offering voice calls to Jio customers absolutely free, across all of India, to any network, any time for life.

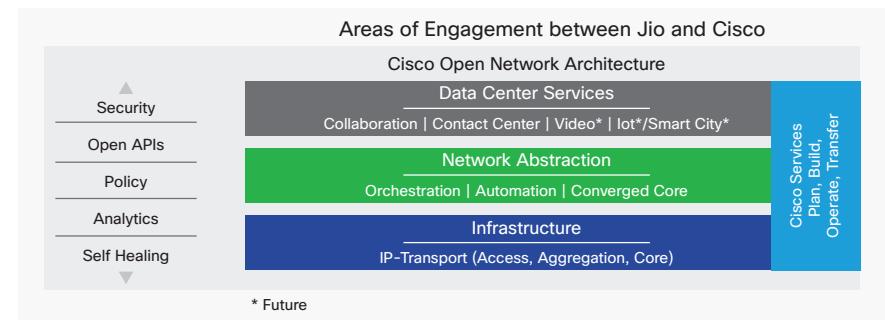
- Jio has on-boarded 100 Million 4G subscribers in a record span of 6 months, which is approximately 7 subscribers per second or **25,000 subscribers per hour. This has set a new bar for the industry worldwide that underscores the company's scale, efficiency, and speed**
- Within the same timeframe, Jio's network traffic has surpassed US mobile Internet traffic volume, and **ten times the Internet capacity of the world's largest providers**
- Jio has driven India's **monthly user data consumption to increase 40 times** since service launch, resulting in the highest data consumption per subscriber in the world
- Jio is delivering broadband services at the lowest cost per GB globally

The World's Largest All-IP Network Powered by Cisco

The world's largest all-IP network of Jio is powered by Cisco. Jio and Cisco's strategic partnership spans across multiple technology areas including IP/MPLS, Datacenter, Integrated Mobile Core, Service Provider Wi-Fi, Contact Center, Security and Enterprise IT.

The engagement model enabled faster time to market across all the technology streams. This was the largest engagement in Cisco, with more than 2000 Cisco resources involved during the build-out phase.

Figure 1. Reference Framework of the Jio and Cisco Engagement



With this network, Jio is capable of offering a unique combination of high-speed data, mobile video, voice over long-term evolution (VoLTE), digital commerce, media and payment services. Jio's network includes:

- Cisco's largest IP/MPLS deployment worldwide with a startup capacity of ~1.5 Exabyte per month and build out of 150K Routers across Access, Aggregation and CoreEnd-to-end Service Orchestration capability to provide fully automated service life cycle management capabilities, from self-service ordering, provisioning, billing, monitoring and reporting, to service upgrades and modifications
- 185,000 miles (or 300,000 kilometers) of fiber optic cables
- One of the largest data centers in India and Nexus deployments in APJC, with over 1 million sq ft of distributed data centers deployed in the last 18 months
- 4G Multi channel video contact center, with 8K agents capacity

This is a foundation from which further advanced solutions for smart city, IoT, and other vertical and industrial solutions will be developed.

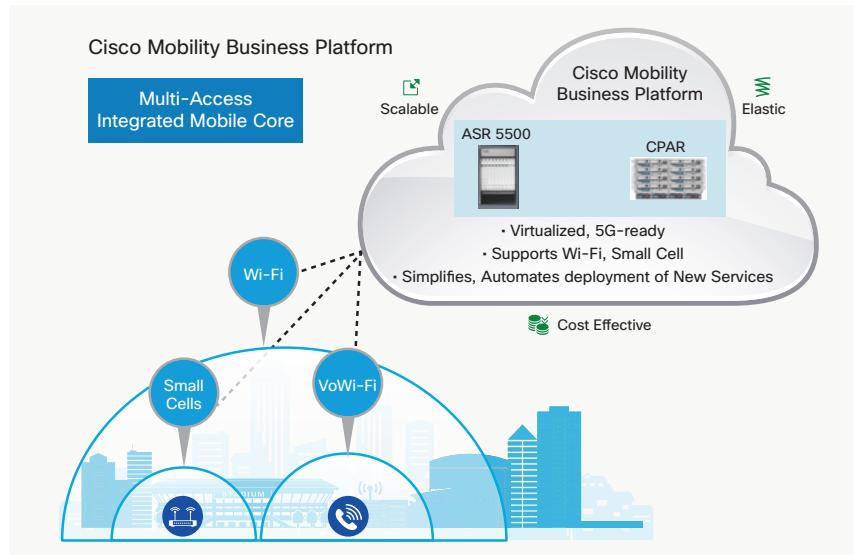
Jio will continue to invest in the transformation of the network to large scale virtualization, harnessing the benefits from SDN to drive service agility and innovation.

Jio's Integrated Mobile Core Network Leverages Cisco's Mobility Business Platform

Jio is deploying VoWiFi services that will cover all of India leveraging Cisco's Mobility Business Platform. The centralized Cisco Mobility Business Platform forms the core of Jio's planned innovative Wi-Fi services. This includes:

- Single platform for all mobility core applications with multiple independent logical networks. This gives flexibility for each component to be dynamically scaled up and down based on the business needs
- Framework for policy control definition and enforcement, with easy charging and payment mechanism and a platform for centralized service creation and service control
- Mobility Business Platform developed collaboratively by Jio and Cisco

Figure 2. Cisco Mobility Business Platform



Cisco Solution includes:

- ASR 5500: VoWiFi with ePDG, SaMOG, Small Cell Gateway
- Wi-Fi Gateway for both trusted and untrusted Wi-Fi traffic
- 3GPP AAA - CPAR
- Access (AP/WLC)
- Network Management (Prime Mobility)
- Nexus for Data Center

For More Information

To find out more about Cisco Mobile Internet: www.cisco.com/go/mobile.

To learn more about Reliance Jio: <https://www.jio.com/>.

This customer story is based on information provided by Reliance Jio and describes how that particular organization benefits from the deployment of Cisco products. Many factors may have contributed to the results and benefits described; Cisco does not guarantee comparable results elsewhere.