

**HCLTech** | Supercharging  
Progress™

# Reimagining networks for modern enterprises



# Overview

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Today's instant economy is enabled by a digital fusion of numerous business constructs, working seamlessly to deliver on innovative revenue models, frictionless experience and shorter disruption cycles. All necessary to stay ahead of the curve, meet growing customer expectations and seed outcomes proactively. An enterprise network acts as a bedrock of these digital transformation initiatives, geared to orchestrate between IT, OT and business technologies.

A blip in network can ripple down enterprise revenue, brand and loyalty. And, with increasing complexities, enterprises need a network that not

only connects billions of IoT devices and constellates between varied private and public network applications, but also flexibly connects edge to the cloud and intelligently routes traffic across distributed and multi-cloud ecosystem.

HCLTech embraces the connect-it-all digital revolution by softwarization of enterprise network across edge, WAN and cloud. As a **Network Service Orchestrator**, we deliver a network combining reliability, flexibility and scalability, helping customers to drive innovation, exceed expectations and push the boundary of what we think is possible.



# Trends driving the change in network consumption

Network transformation has become a necessity, not a choice.



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As Global 2000 organizations enhance their digital business strategies, they are finding network has become the digital nervous system that not only delivers and supports all-important modern applications and data, but also provides immersive user experience. Over the years, network has evolved from a one-time design, deploy and operate model to a dynamic platform that adapts to changing business needs. The convergence of an intelligent, scalable and secure network with software-defined approach is driving change and transforming the enterprise networking landscape. Coherence among new age digital

constructs such as edge networking, AI/ML, SD-WAN, IoT, 5G/Wi-Fi 6, SDN and NFV. has created a perfect storm for the emergence of networks that are delivered and consumed using a combination of flexible consumption modes. Advancements in self-healing networks, AR/VR and Private 5G have become critical in supporting ultra-low latency application and services.

The future of enterprise network will be a new way of looking at how to build, operate and enhance network infrastructure in an integrated stack that is focused on seamless network ubiquity, resiliency and zero-touch security.



### Industry 4.0 and IoT

- OT and IT convergence
- Smart factories
- Autonomous guided vehicles
- End to end logistics
- Predictive maintenance
- Remote heavy equipment control



### SD-WAN

- Network on demand
- Virtual WAN backbone by hyperscalers
- Branch in a box
- Flexible consumption models



### NFV, SDN

- SDN everywhere: branch to cloud
- NFV is a common layer underlying telco and enterprise networks
- Smart orchestration
- Network slicing



### Cloud transformation

- Exponential cloud adoption (hybrid/multi/poly)
- Cloud native architecture
- Everything as a Service (XaaS)
- SDN, SaaS-fication
- Intelligent transit routing, SASE



### AI, automation & orchestration

- Cognitive and programmable networks
- Self aware and auto-remediating
- Advanced analytics, Data science and machine learning
- Conversational AI, predictive analytics, causal reasoning



### Edge networking

- Ubiquitous connectivity and edge computing
- B2B2X convergence
- SASE, 5G, Wi-Fi 6
- Multi-tenant distributed edge
- Autonomous network
- Public cloud' at the edge

# 15B+

Gartner expects that more than 15 billion IoT devices will connect to enterprise infrastructure by 2029.

(Source: Gartner)

# 90%

By 2023, more than 90 percent of WAN edge infrastructure refresh initiatives will be based on vCPE or SD-WAN appliances versus traditional routers (up from less than 40% today).

(Source: Network World)

# 40%

An IDC survey showed that more than 40 percent of respondents were open to flexible consumption of network and IT assets while "as-a-service" models continue to grow.

(Source: IDC)

# 80%

89 percent of respondents reported having a multi-cloud strategy, and 80 percent are taking a hybrid approach by combining the use of both public and private clouds.

(Source: Flexera 2022 State of the Cloud Report)

# 91%

91 percent of global executives expect their organization to implement edge computing by 2025.

(Source: IBM Institute for Business)

# 60%

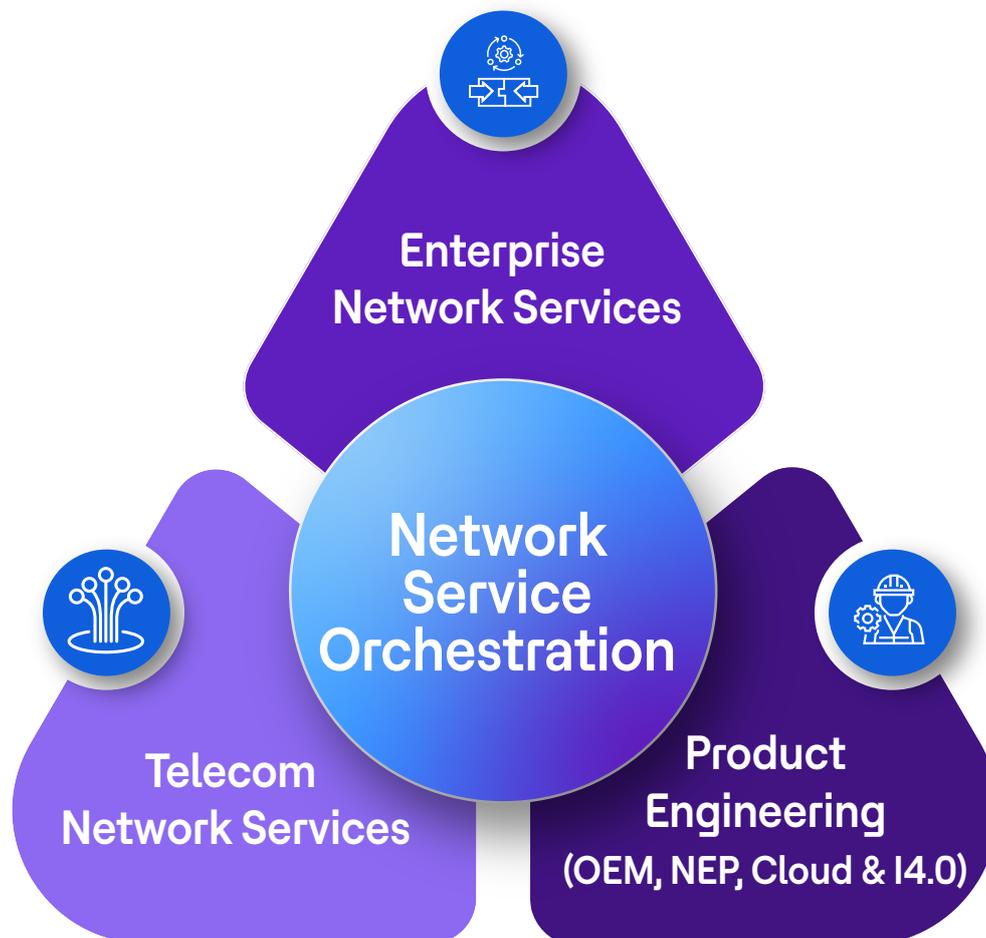
By 2023, 60 percent of data center networking configuration activities will be automated, up from 30 percent in early 2020.

(Source: Gartner)

# HCLTech's network service orchestrator model

An expanding value chain, speed-to-market demands, and the need for tighter coupling of services beyond traditional managed network services have shifted the control point from network services integration (NSI) firms to network services orchestration (NSO) providers. And we believe, network services orchestration (NSO) will act as the new convergence point for managing and orchestrating networks for competitive advantage.

HCLTech being the Network Services Orchestrator (NSO) partners with several different telcos and other third-party vendors to provide a solution which is better optimized, ensures reliability, and reduces cost. Leveraging our NSI legacy, we present a unique perspective combining Enterprise Network Services, Product Engineering (OEM, NEP, Cloud, I4.0), and Telecom Network Services. We believe that **"There is no Business Strategy without a Network Strategy"**.





HCLTech's NSO model encompasses three pillars across the length and breadth of network services:

**01**

MNS and Network transformation services for enterprises

**02**

Telecommunication and mobility services

**03**

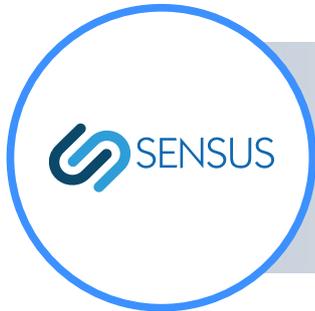
Product engineering and software product services business

Our positioning around the Network Service Orchestrator framework, is a key driver for growth, catalyzing new market penetration and global reach, adding value through partnerships, vendor-agnostic platform, flexible pricing, and consumption models, ensuring quality, and faster time to market. Leveraging the NSO approach, HCLTech offers orchestrating service and technology design encompassing edge technologies such as SDWAN,

SDAN, Wi-Fi 6, 5G, and edge computing across different verticals. We have also created a universal controller (i.e., controller of controllers) that offers unified management and multi-domain network orchestration of different sites and controllers across branch sites, on-premises and Public Cloud data center network environment.

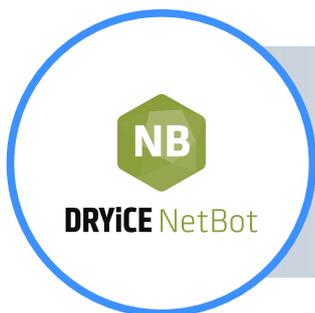
# Product portfolio

HCLTech's Managed Network Services, powered by its 21CE blueprint, is the solution to network agility puzzle and foundation for digital transformation initiatives globally. Our comprehensive products and services portfolio are designed keeping in mind the 21CE framework complemented with our NSO framework.



Software-defined network framework for multi and hybrid cloud network transformation.

Network consulting and cognitive network assessment driven by deep analytics and gold benchmarking.



Network automation and orchestration platform for end-to-end enterprise network lifecycle management.

A Software-defined access network transformation framework built on principles of deep analytics, observability, zero-trust security, AIOps, and cloud agile.



A Site-metallica driven SD-WAN framework, that intelligently connects enterprise global WAN, entailing cloud-agnostic and transport independent constructs.

# Why HCLTech



## We are a Network Service Orchestrator (NSO)

HCLTech as a NSO offers a unique perspective, combining experience from different business streams cutting across enterprise network services, product engineering (OEM, NEP, Cloud, I4.0), and telecom network services. This places us in a pole position to embrace digital tech convergence from end user to the edge and cloud.



## Leveraging ecosystems for breakthrough innovation

We harness systematically orchestrated ecosystems which empowers us not only to create special value for our clients today but innovate for the future. With a strategic focus on edge, HCLTech accelerates digital journey of our clients though leveraging existing partnerships with leading technology firms, along with cultivating a unique innovation ecosystem through niche startups.



## A legacy of pioneering technology innovation

Leveraging our network of next-generation innovation labs, we foster innovation across new digital technologies to create unparalleled customer delight, and help customers with smart decision making across network transformation initiatives.



## 30+ years of experience in network transformation

- Early mover advantage drives innovation
- Unprecedented geographical scale
- \$10M invested in State-of-the-art labs, Network Experience Center, Noida, India
- 360 degree relationship cycle
- Touch points across formulating, realizing OEM roadmaps and productizing as HCLTech GTM strategy



## Leadership across leading analyst network assessments

- 2021 **Gartner**® Magic Quadrant™ for Managed Network Services
- **Everest Group's** PEAK Matrix® Assessments on Network Transformation, Managed Service Providers and SD-WAN Services
- **Avasant's** SD WAN Managed Services 2021-22 RadarView™



## Network services verticalization

As there is no one size fits all approach, our technology-agnostic services team supports business of all shapes and sizes. Our wide assortment of vertical use-cases are tailored to address individual customers' pain points, and help them with a flexible consumption model that fits their budget.

For more information, write to us at [Contact.NGN@hcl.com](mailto:Contact.NGN@hcl.com)

# HCLTech | Supercharging Progress™

HCLTech is a global technology company, home to 225,900+ people across 60 countries, delivering industry-leading capabilities centered around digital, engineering and cloud, powered by a broad portfolio of technology services and products. We work with clients across all major verticals, providing industry solutions for Financial Services, Manufacturing, Life Sciences and Healthcare, Technology and Services, Telecom and Media, Retail and CPG, and Public Services. Consolidated revenues as of 12 months ending March 2023 totaled \$12.6 billion. To learn how we can supercharge progress for you, visit [hcltech.com](https://hcltech.com)

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