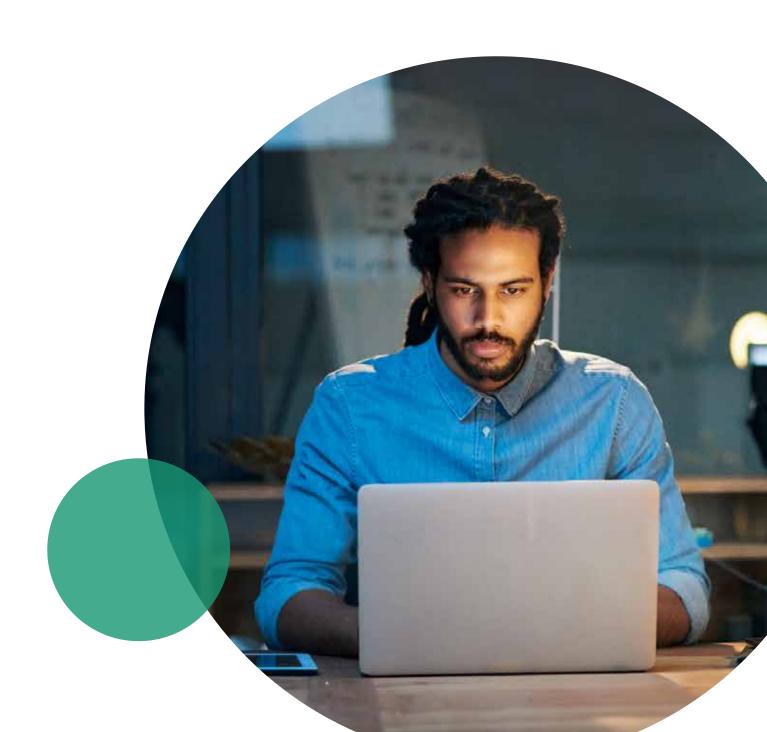
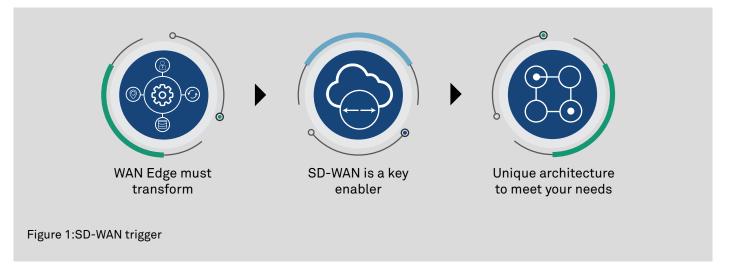


Unlock the true potential of Wipro-VMware Cloud-Delivered SD-WAN solution



The surge in demand for end user computing devices, remote connectivity, application modernization, multi & hybrid cloud adoption, cost effective simplified architecture, faster deployment for quicker time to market and enhanced customer experience are some of the drivers for early adoption of SD-WAN technology.

To achieve these ever evolving technology demands, organizations need to to innovate and transform the existing network ecosystem with a futuristic architecture that offers an agile, scalable, software centric and vendor agnostic underlying infrastructure.



Business imperatives

Enterprise IT infrastructure is experiencing unprecedented changes in terms of virtualization, hybrid cloud computing, mobility, distributed workforce and infrastructure consolidation. The need for agility and cost optimization is generating stress on the legacy network infrastructure. Organizations cannot afford to have prolonged network services provisioning cycles and bind the operational resources for such inefficiencies.

Organizations require a network infrastructure which will support and enable:



Quick application deployments through an agile network architecture to respond to rapidly changing business requirements



Streamlining of network resources and infrastructure costs



Reduction in dependencies on vendors and OEMs



Greater user control through open interfaces with improved network programmability

What is SD-WAN?

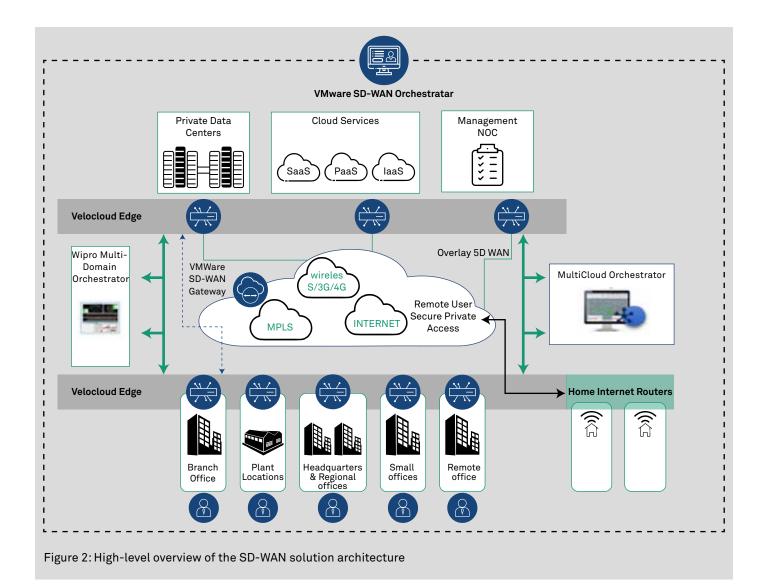
SD-WAN is a technology that virtualizes WAN connections by decoupling network software services from the underlying hardware infrastructure.

With a software-defined WAN, a software overlay sits on top of the tunnel created between end points. This overlay model helps establish direct connectivity to devices on premises or cloud, unlike the traditional MPLS link connectivity that traverses through the hub site first, adding to latency and backhauling of traffic.

Wipro's WANFreedom

Wipro's #WANFreedom, powered by industry leading VMware SD-WAN technology provides comprehensive SDWAN offerings for integration of multiple WAN tools and products bundled with a single pane of glass management.

The solution simplifies network and security operations using machine learning and automation. #WANFreedom allows you to open connected opportunities like breaking the chains of legacy network architecture to embrace business value provided by the cloud, SaaS and modern software architecture.



As shown in Figure 2, any to any connectivity (branch office, remote offices, private data center, IoT end points, SaaS and public cloud) is possible with Wipro's SD-WAN solution supporting varied underlying transport medium MPLS, internet or wireless broadband making it a truly transport agnostic model. Virtualized instances of SD-WAN edge appliances allow the service to be extended to cloud-based applications.

'Home is the new branch' is one of the #WANFreedom offerings addressing the challenges heightened by COVID-19 wherein enterprises enable their employees remote access to corporate applications from anywhere with protected and secure access.

VMware SD-WAN is a cloud enabled overlay network that can work across any combination of underlying infra delivering seamless connectivity, assured application performance and simplified cloud management with on ramp to cloud.

The typical VMware architecture consists of three components - SD-WAN Edge, Gateway, and Orchestrator.

VMware SD-WAN Gateway: A distributed network of gateways deployed at top tier cloud data centers around the world provides scalability, redundancy, and on-demand flexibility.

VMware SD-WAN Edge: Enterprise-class appliances to provide secure, direct connectivity to applications anywhere, on and off cloud. It is available in different form factors: hardware-based appliance, a virtual appliance on the cloud marketplace and a virtual machine (VM) on a server or as a VNF.

VMware SD-WAN Orchestrator: The VMware SD-WAN Orchestrator is the central management platform for configuration and management of VMware SD-WAN.

With Wipro's industry recognized managed network services and VMware's futuristic technology, we jointly deliver value additions and differentiators with a complete vendor agnostic underlay architecture that brings in the following:

Intelligent Network Overlay- Optimize access to SaaS apps, IaaS resources, data center on any combination of WAN links. DMPO increases network agility, app performance, reliability.

Secure, Scalable Cloud Network- Cloud-based VPN, Gateways enable access to SaaS apps, cloud, data center. Deploy Edge in minutes, authenticate automatically, get to cloud quickly and securely.

Virtual Service Delivery- Enable VNFs, recognize 3,000+ apps, policy-based traffic routing. Simplified firewall, VPN, 3rd party service provisioning eliminates single-function appliances.

Orchestration and Analytics- VMware SD-WAN Orchestrator delivers centralized management, business-level visibility, and application usage monitoring across multiple transports, service providers, and remote sites.

Wipro's SD-WAN managed services offeringallows organizations to move away from legacy network architectures and helps them improve WAN utilization, reduce costs and enhance WAN agility.

Wipro's value added SD-WAN service offerings



Wipro's inhouse tool multi domain orchestrator (MDO) offers a differentiated end-to-end business intent orchestration across multiple network domain like SD-Access, SD-WAN, DC, cloud infra and cloud apps and simplifies service provisioning with uniform dashboard and touchless configuration



Cognitive digital network infrastructure (CoDNI) is an SD-WAN bot that utilizes the application analytics from SD-WAN systems and integrates with various systems like ServiceNow, team collaboration sites such as MS Team or Cisco WebEx teams to add value on top of the software defined wide area network systems



Wipro's SDx (Software defined Everything)
Center of Excellence offers building,
testing and validating reference
architecture, custom integrations, and
implementation methodologies for
different enterprise requirements. The
SDx CoE is a launchpad for showcasing
customer use cases, validating and
demonstrating the use cases of SD-WAN



Insightix is a consulting & advisory service framework that helps customers to assess network and create business cases leading to digital network transformation



Wipro's ServiceNXT[™]platform provides end-to-end integrated IT management to reduce customer operational cost and maximize up-time

Wipro's SD-WAN end-to-end lifecycle services

SD-WAN solutions is backed by Wipro's comprehensive life-cycle services comprise consulting, planning and design, product procurement, implementation, and managed network services.

Consult

- Gap analysis in current network
- SD-WAN use case identification
- Migration strategy
- Business case developmen; TCO/ROI analysis
- Detailed project plan

Design

- Proof-ofconcepts to validate use cases
- Technology & architecture finalization
- High level and low-level designs
- Operational readiness
- Infrastructure readiness

Pilot

- Non-production and limited production trials
- Incorporate lessons learned
- Finalization of detailed designs and deployment plans

Migrate

- Deploy SD-WAN in production environment
- Integrate, test and migrate
- Train network operation team

Operate

- Transfer to Operations team
- Optimization and continuous improvement

Figure 3: Wipro SDWAN lifecycle services

Key benefits & differentiators



Rapidly respond to business and IT with business intent application policies delivering business-critical applications by merely specifying application policies for performance, security and compliance.



Gain freedom from proprietary hardware by reducing remote office hardware footprint, dramatically cutting costs by leveraging Intel x86-based platforms and a richer set of services deployable as software.



Gain carrier freedom by choosing single or multiple forms of WAN connectivity at any site seamlessly including MPLS, broadband Internet and other transports. Save up to 70% on WAN costs compared to legacy MPLS-only models.



Deploy self-healing network with deep application and network analytics, coupled with machine learning that is automatically applied to the network to self-heal application performance, thus delivering SLAs for all apps and offering the best end-user experience.

- With Wipro's #WANFreedom, clients can seamlessly adopt, deploy, and integrate cloud, SaaS, and data center applications using any transport link MPLS, broadband and cellular.
- VMware Velocloud product portfolio alongside Wipro's end-to-end services delivers one click, software defined WAN solution with simplified network operations and enhanced application performance regardless of underlying vendor infrastructure.
- Our joint solutions proactively identify and resolve critical applications and infrastructure problems, paving the way for IT transformation.



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Wipro Limited (NYSE: WIT, BSE: 507685, NSE: WIPRO) is a leading global information technology, consulting and business process services company. We harness the power of cognitive computing, hyper-automation, robotics, cloud, analytics and emerging technologies to help our clients adapt to the digital world and make them successful. A company recognized globally for its comprehensive portfolio of services,

strong commitment to sustainability and good corporate citizenship, we have over 220,000 dedicated employees serving clients across six continents. Together, we discover ideas and connect the dots to build a better and a bold new future.

For more information, please write to us at info@wipro.com

