

# SIFY GLOBAL MANAGED NETWORK SERVICES



- Gartner Session

June 2021



SIFY is a leading integrated ICT player in India,
helping customers to achieve their digital ambition through cloud@core products and services,
built on its world class Data Centers, Cloud & Network assets
and wide portfolio of professional and digital services

# **AGENDA**

**ABOUT SIFY NETWORK TRANSFORMATION** MNS PRINCIPLES & PORTFOLIO NETWORK OPERATIONS, OPERATIONS AUTOMATION CUSTOMER LIFECYCLE OF AN MNS CUSTOMER & GTM **CASE STUDIES** 

# $\textbf{S1fy}^{\text{-}} cloud@core^{\text{TM}}$

# cloud@core™

# ALIGNED TO OUR CUSTOMERS' CLOUD TRANSFORMATION PURSUIT



## **CLOUD ENABLING**

#### **Cloud Data Centres**

 For Enterprises and Hyperscale CSPs

## **Private Cloud at DC**

Hyperconverged | Enterprise

#### Hyper reach/Hyperscale Network

- Hyper Reach/Hyperscale transport
- Data Center Interconnect

#### **SD-WAN**

### **Migration Services**

Migration and Implementation services



## **CLOUD INSPIRED**

#### laaS at Cloud DCs

CloudInfinit

- Enterprise Multi-Tenant
- Dedicated
- Hosted SAP/S4 HANA
- Azure Stack as a Service

# **Edge infra aligned to Cloud**

Edge Connect Services



# **CLOUD PURE**

# Hyperscale Platforms adjacent to Cloud DCs

- AWS
- Azure
- OCI
- GCP

# Multi-cloud Management platform & services



## **CLOUD ENHANCED**

## **Digital Services**

- App Modernization
- Kubernetes-as-a-Service

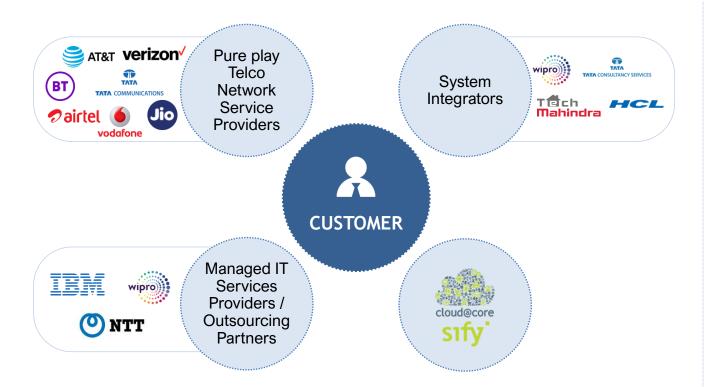
#### Digital Apps (SaaS)

- Forum DIGITAL
- HCM Digital (iTest)
- Learning Management

Internet-of-Things (IOT)

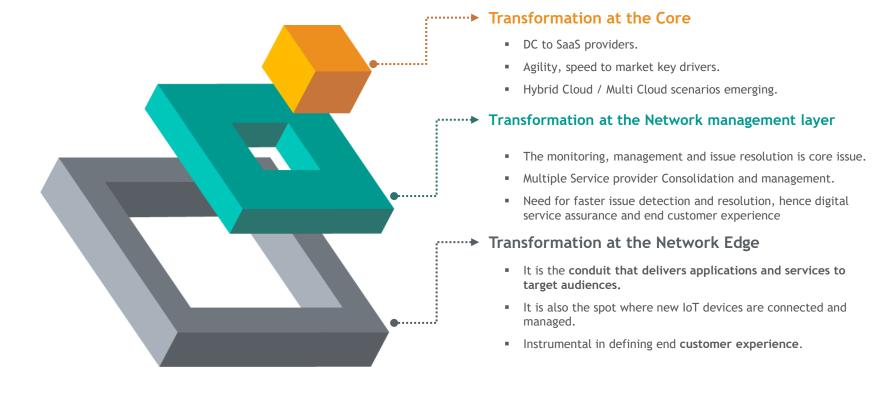
Industry Solution-as-a-Service

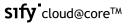
# SIFY'S POSITIONING IN THE NETWORK TRANSFORMATION SPACE





# **NETWORK TRANSFORMATION - 3 LAYERS**





# MANAGED NETWORK SERVICES PRINCIPLES



Reliability & resilience



Business-aligned Single Pane of Glass



Cloud-inspired & Cloudenabling



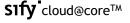
Enhanced customer experience



Automation to bring in operational efficiencies



Continuous improvement of service levels



# MANAGED NETWORK SERVICES PORTFOLIO

	Managed WAN	Telco management, router management
中中	Managed LAN	Switches, load balancers
(l)	Managed WLAN	Controllers, Access Points, Access Policy Management, Wireless network monitoring & management
	Managed SD-WAN	Cisco, Versa & Fortinet - Multi-tenant platforms. On-premise or cloud-based services. Hardware - Customer-owned or as-a-service.
	Managed Network Security	Firewall management, DDoS Protection as-a-service, Clean Connect
	Professional Services	Network & Security audit, network re-design, implementation and integration

# **NETWORK OPERATIONS**

Global Network Operations Center located at Chennai, India

Global Service Operations Team based at Hyderabad and Mumbai, India

Compliant with international standards

Dedicated setup for large customers' mission-critical networks

#### Sify's resources

- Varied functions like Advanced Solutions Group, Service Operations Team, WiFi Mgmt, DDoS Mgmt, Core NetOps
- People strength of 500+ including FMS teams

## **Best practices**

- Integrated management functions
- Service Provider agnostic Managed Services
- Automation

- Proactive monitoring & management
- Customer communication during network events
- · BCP drills, mock drills













# Key highlights

**664** Managed Enterprise customers

37,347 managed links on the shared platform

**52,495** DoP, **4,500** NSE/IFTAS, **8,000** Syndicate Bank managed links on captive setups

**29,451+** managed routers on shared platform (36,123 DOP, 2,100 NSE)

WLAN - 12 customers, 232 Switches, 11 Controllers, 1972 APs, 195 sites

LAN - DOP (8800), Syndicate Bank (6000), UIIC (1150)

SD-WAN - 2200+ end points, 3 OEM multi-tenant platforms

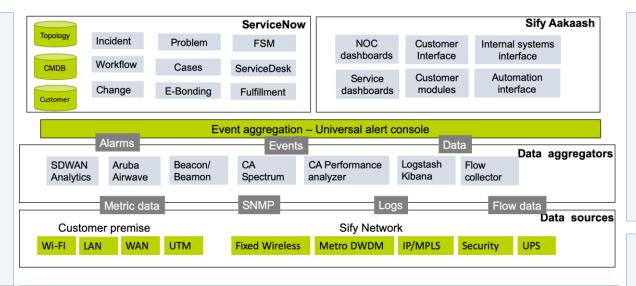
Service Desk - 1380 calls per day

Ticket volumes - 2100+ per day



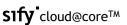
# SERVICE MANAGEMENT & ASSURANCE PLATFORM

- Service
   management
   systems to
   deliver ITSM
   compliant service
- Integration with partners for single point ownership
- Automation integration between service and networks.
- Model driven assurance



- Machine learning based systems to reduce noise, increase focus and aid in Root cause issues
- Continuous learning systems augmented with human knowledge and context
- Aggregation of events cross domain
- Supervised rules and enrichment
- Priority based ranking

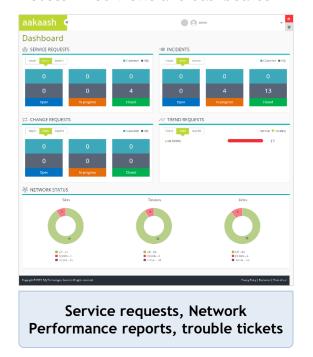
- Ability to integrate with LAN, WAN, DC, Network security & SD tech
- Multi-vendor support
- Customization to override device telemetry limits



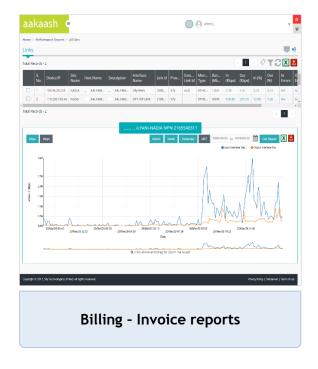
# SIFY AAKAASH - SELF-SERVICE PORTAL

Unified view of customers' mission-critical network and assets

Customized views and dashboards

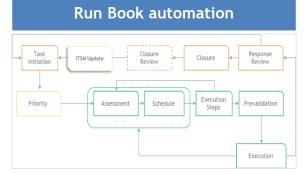


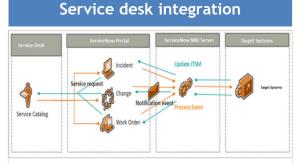




# **OPERATIONS AUTOMATION**

# Authenticate into VM or instance The check Drust Utage Check Nginx Service Status Check MongoDB Database Service Status Check MongoDB Database Service Status Check Application Success Check Application Status







Outbound call to customer contact for First level troubleshooting (FLT)



Auto FLT before a ticket is assigned to Agent



Alarm suppression based on entity mapping



Runbook automation for ticket resolution

- 75% of incidents resolved at first contact
- 13% of incidents are resolved with automation (without any human touch)

# LIFECYCLE MANAGEMENT OF A MNS CUSTOMER



# Omni-channel engagement

- email, SMS, calls
- Self-service portal
- 1300+ Field Support team
- Service desk
- Hybrid & shared models

# Analytics & Reporting

- CXO dashboards
- Performance metrics
- SLA management
- Capacity management
- Integration with customer toolsets to provide unified analytics

# Professional Services

- Network & Security Audit
- VAPT
- Assessment Analysis
- Recommendation Reports

# CSAT Organization

- Continuous Service Improvement
- Review & feedback mechanisms
- Network health
- Bandwidth optimization
- Network audit

# **GTM - NETWORK MANAGEMENT AND OPERATIONS**

# Network Operations Outsourcing



Operations Transition from existing managed services provider to Sify

**Advanced NOC Services** 

**SLA Management** 

Vendor Management

AMC Management

# Network Consolidation & Operations Outsourcing



Network study & assessment

Service provider consolidation (Including Sify participation)

Performance Management and optimisation

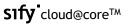
CPE Management (with or without AMC)

# Network Transformation & Operations



Network redesign/ reengineering

Software defined network deployment



# WHY DO CUSTOMERS PREFER TO WORK WITH US?



Sify understands the complete IT services ecosystem and their interdependency - from cloud to data center to wide area network to LAN to end user

This is a very UNIQUE POSITION and offers one partner to the customer who can solve the myriad challenges that occur in his environment

**Network agnostic managed services**- Ability to offer managed services for all service provider networks

Skill sets on network assessment/audit/design

Strong player in data center with hybrid/hyperscale cloud enabler helping network interconnects

Strong skill sets on **large integration projects** with multi service provider and hybrid cloud environments

Established credentials on the Network at the Core & Edge

# FUTURE ROADMAP: SIFY FOCUS AREAS FOR MNS

# **AUTOMATION**

Automation of up to 60% L1/FLT tasks by FY 22

Reduction of noise by compounded contextual alerts

Automation of centralized workflows

# **FOCUS ON END-USER EXPERIENCE**

Transition from a network centric to a user/app centric view of the infrastructure

Application of AI-Ops across the app-end user-network-

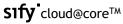
Prediction and forecasting using ML techniques of end user and app performance

# **EXPANDED GTM**

Expansion of GTM into new geographies

US Europe

Focus on SD-WAN and cloud transformation led opportunities



# LARGEST MANAGED NETWORK FOR THE MOST WIDELY DISTRIBUTED POSTAL SYSTEM IN THE WORLD



# Large Scale Re-architecting & Rollout

A project of critical importance enabled customer to digitize its operations by connecting 30,000+ Offices across India.



## A comprehensive blend of services

Integrated value of skills - Network Integration, Project Management, NOC & Managed Services, Security Services alongside Network Infrastructure services



## Value for the Customer

Reduced Total Cost of Ownership, single owner to manage network gear, Sify's network and BSNL's network

30,000 SITES LAN & WAN

CAPTIVE NOC & MANAGEMENT

KPIs FOR NETWORK
& SECURITY

# MANAGING MISSION CRITICAL NETWORKS FOR INDIA'S INTERBANKING SERVICES

This enterprise is the focal organization that fuels innovation, financial inclusion and digitization for Banks & Financial institutions in India.



# **Project Objective**

To set up the Digital Payment Network Infrastructure connecting locations of Governing Body and Member Banks, for Interbank Financial settlements



# **Project Model**

Managed Services-led Network Outsourcing model



#### Value for customer

Single ownership with the MSP to manage the complexity and guarantee high availability



## Key deliverables & outcomes

Design, implement and operate a multi-service provider network, to provide high availability of 99.9975% uptime

Tightly integrate security controls into the overall network architecture and yet manage the complexity of interconnections between member banks and RBI payment gateways

Run large-scale dedicated NOC operations

# TRANSFORM & MAINTAIN THE MOST COMPLEX NETWORK OF SECOND LARGEST STOCK EXCHANGE IN THE WORLD



## Technical Challenge

To transform the existing network in-flight, set up a shared NOC & SOC, and aid customer to expand the footprint to acquire more members in India



# Objectives

- Reliability and speed
- Highly resilient to failure
- · Unified customer experience
- Members participation in an easy and equitable manner
- Flexible to evolving to support future digital distribution options
- Scaling with demand



#### Value for customer

Provided a predicable model to scale operations over 40 cities from 7-city presence using Network and Edge assets. This has helped significant growth in member acquisition and lowering the cost of operations for existing members.

Digital Platform for Service Operations and member interactions between members and customer enabled transparent and efficient operations.

# ENABLING DIGITAL TRANSFORMATION FOR THE WORLD'S SECOND-MOST GEOGRAPHICALLY DIVERSIFIED STEEL PRODUCER



## **Project Objective**

To establish a NOC integrating IT, OT assets to enable insights into the Network across DC, Cloud and End users.

Build and Operate a Private Network across all Campuses



# **Project Model**

Managed Services led model - per device/ per node



## Sify's Uniqueness

Integrated value of skills - NOC & Managed Services, Edge Transformation Services



## **Contract Duration**

5 years



# Integrated Value and Outcome

Specialized skillsets and processes across NOC setup & managed services outclassed the traditional IT outsourcing model deployed by the incumbent.

MWiFi platform integration with customer's Access & Identity Management System (AIMS), ensured an integrated Platform for all IT, OT assets, as well as Wearable Safety devices across its workforce.

#### Value for Customer

The NOC has enabled network orchestration and analytics for the customer across his IT & OT assets and people, which in turn has resulted in better efficiency & control.

Sify's Private Network has enabled large scale sensorization of plant operations leading to better efficiencies and significant cost savings.

# Value for Sify

This project has given Sify deep insights & experience into future roadmap on 5G and edge computing.

Customer has also chosen Sify for migration of workloads to public cloud and integration of public cloud environment with its legacy infrastructure.



# sify'



# THANK YOU