

Nominee: Anuta Networks NCX 6.0

Nomination title: Intent Driven Network Service Orchestration for Software Defined Infrastructure

Anuta NCX is a game changing solution that transforms existing multi-vendor physical and virtual infrastructures into software defined infrastructure through network service orchestration. NCX is currently delivering business agility and ROI at SPs and large enterprises including Tata Communications, Telstra, F5 Networks, NRI, Hitachi Systems, NTT Advanced Technologies, Orange Business Services and Japan Post.

NCX abstracts and virtualizes existing multi-vendor physical and virtual network infrastructure from industry leading vendors such as Cisco, Citrix, Juniper, Brocade, F5, Fortinet, Radware and VMware etc and integrates with a variety of cloud portals to enable dynamic self-service network provisioning.

NCX uses IETF YANG model driven platform to orchestrate all deployments including Data Center, InterCloud, Micro-Segmentation, Security as a Service, LBaaS, Campus/Access, Branch/SD-WAN, Service Provider IP/MPLS Edge, Virtual CPE and NFV without requiring costly infrastructure upgrade.

NCX unique features:

Multi-Vendor Service Orchestrator: NCX orchestrates L2-L7 on physical, virtual, and hybrid multi-vendor infrastructure and topologies, including VXLAN based overlay network.

VNF Management: NCX delivers VNF instantiation, placement, image management, service definitions, provisioning, commissioning and decommissioning. NCX orchestrates multi-vendor VNFs such as Brocade Vyatta, Cisco CSR1000v, Nexus 1000v, VMware DVS, Citrix NetScaler VPX, F5 BIG-IP, Riverbed Steelhead, Radware ADC-VX, Juniper vSRX and vMX.

YANG Modelling: Enables customers and partners to develop their own device, service and operational models using IETF YANG. South Bound extensibility includes device models,

network operations and notifications. North Bound abstraction provides normalized network service operation model for L2-L7 including Firewall, ADC, VPN.

SDN Controller Integration: NCX is integrated and deployed in production with multiple SDN controllers including Cisco ACI, Juniper Contrail, HPE DCN, Alcatel Lucent Nuage VSP with many more to come.

Cloud Portal Integration: Anuta NCX also integrates with cloud management portals such as OpenStack, HPE Helion, VMWare vRealize Automation Suite, Science Logic and customers' home-grown portals via a REST API. All the functionality within NCX is accessible via the REST API, allowing easy integration into other systems such as billing, documentation, ticketing and self-service portals.

Orchestrated Service Assurance: NCX utilizes Key Performance Indicators (KPI) driven orchestration to ensure Service Monitoring and Service Assurance. The KPI will be defined using YANG data models that include a workflow or sequence of events. NCX will execute the data model and automate the necessary corrective actions.

Service Monitoring and Capacity Management: NCX constantly monitors network devices for health, resource utilization and alarms. This allows the operations team to understand the available capacity. NCX enables troubleshooting by mapping infrastructure events to service affecting alarms.

Performance and Scale: NCX's distributed micro services based architecture offers the highest performance and scalability. NCX has been proven to scale up to more than 50,000 devices across 35 data centres.

Customer Benefits:

REVENUE: Service providers can use NCX to offer highly differentiated network as a service, thus generating new streams of revenue. Enterprises can use NCX to accelerate application deployment and branch on-boarding thus increasing business agility.

EFFICIENCY: By virtualizing network resources into logical functions, organizations can benefit from lower Capex and OpEx.

ON DEMAND: NCX offers superior business agility with its on-demand model of network service creation.

SERVICE ASSURANCE: NCX monitors, collects, and analyzes performance, health, capacity, and availability information from disparate devices. This service level information helps to meet the business SLA.

MULTI VENDOR: One of the key benefits of NCX is device abstraction. This allows customers to leverage best-of-breed vendor devices for their network and avoid vendor lock-in.

Maximize ROI / ROA: As Anuta Networks solution works for existing physical network infrastructures, customers can continue to use the devices they have already purchased and still get complete network agility. This results in higher ROI and ROA.

EXTENSIBILITY: NCX YANG Model-driven platform enables partners and customers to extend the device and service models to match their specific requirements.

Sample Deployments:

1. Tata Communications (TCL) is a leading global Tier-1 SP, offering IZO SD-WAN for managed branch customers across 130 countries in 700 cities. TCL team evaluated multiple network service orchestration solutions including Cisco NSO, Glue Networks and Anuta NCX for their multi-vendor infrastructure consisting of Cisco, Riverbed, Versa and Juniper. They chose Anuta NCX because of its flexibility, multi-vendor coverage, scalability, development toolkit as well as customer service.

2. Telstra provides hosted cloud services for enterprise applications with strict access controls. However, they faced significant challenges to manage and scale the security policies manually. Anuta NCX automated the entire L4-L7 services across multi-vendor devices and introduced “Security as a Service”. The solution reduced operating expenses by 50%, increased security compliance and application availability.

3. F5 networks deployed Anuta NCX in their Silverline DDoS private cloud to simplify and automate the provisioning of Data Center services for their external customers while driving down operational expense.

4. Japan Post deployed Anuta NCX solution to enable their internal IT to deliver ITaaS. Their objective is to shorten the time to delivery from few weeks to few days down to few hours. Automating their multi-vendor networks also improves their quality of service avoiding too many manual operations.

5. Orange Business Services specialized in network services for top enterprises tested our solution. Their objective is to help their own customers to move towards Cloud and therefore automate their complex multi-vendor networks environment. They tested several solutions but at the end really liked the simple user interface based on icons (FW, LB, VLAN,) and the fact that NCX is not an overlay solution.

Why nominee should win

Enterprises and Service Providers constantly see the need to accelerate their network services and there are many solutions to help them build the network from scratch. However, they made enormous investment in best of breed networking infrastructure from multiple vendors that they can't afford to replace again and again. And, they can't rely on niche players who accelerate network services for a specific use-case or vendor.

Anuta NCX is the only solution that delivers network service orchestration for existing multi-vendor physical and virtual infrastructure and orchestrates all the use-cases including Data Center Automation, InterCloud, Micro-Segmentation, Security as a Service, LBaaS, Campus/Access, Branch/WAN, Service Provider IP/MPLS Edge, Virtual CPE and NFV.