

## **Key Features**

- Next-Gen branches capable of supporting network functions on demand
- Rapid service delivery at scale to geographically diverse locations
- Application- aware branches with support for PfR, AVC, MPLS VPN, DMVPN, QoS, Wan-Op, Security and IPS
- Remote policy orchestration across one or more branches with a single click

#### **Solution Benefits**

- Greatly reduces branch rollout times using
  Branch-in-a-box design
- Support for existing infrastructure from multiple vendors
- Self-Service catalog for various branch deployments
- Support for highly available and scalable branch model using NCX 's distributed architecture

# NCX for Scalable Branch Deployments

Enabling large scale rollout of plug-and-play Branches

Anuta Networks' NCX automates large scale branch deployments with various WAN technologies and a combination of physical and virtual devices to realize the future-ready, secure, optimized, plug-and-play enterprise branch.

## **Challenges for Branch Deployments**

**Manual Process:** Branch network deployments present significant challenges in the form of procuring additional hardware for every new service, logistics overhead, scarcity of power and shortage of qualified personnel to install and operate the branch. In addition, configuration and change management is a cumbersome activity involving coordination between resources spread geographically resulting in significant delays.

**WAN Complexity:** Network administrators find it extremely complex to configure the WAN for reliability, scale and redundancy. Often, there are multiple connectivity options such as MPLS, Internet, Public Cloud and Virtual Private Cloud etc. as well as different implementations from vendors for QoS, application tuning, dynamic failover and convergence.

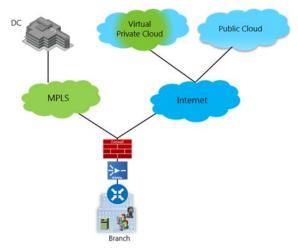


Fig 1: Technology Evolution for the Branch Deployments

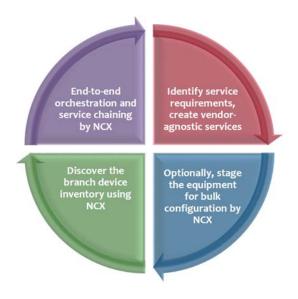
### **Solution Overview**

NCX simplifies branch deployments using orchestration and service chaining of branch network functions such as routing, perimeter security, WanOp, connectivity options such as DMVPN, MPLS VPN etc. using physical equipment as well as virtual device VNFs from multiple vendors such as Cisco, Riverbed etc. For the complete list see, <u>Supported Devices</u>.



Using NCX, the administrator can dynamically scale-up and scale-down the network based on application/user demand and other business drivers. NCX discovers the existing L2-L7 devices and builds a topology of available devices. NCX also computes feasibility and availability of a defined service and helps with resource planning and expansion. After the service is deployed, NCX provides a self-service portal so that the branch owners can manage their infrastructure.

NCX also has a distributed architecture that scales to hundreds of branches using a Server-Agent model. In addition, using NCX, administrators can deploy an all-virtual **Branch-in-a-Box** solution on an x86 based commercially available server.



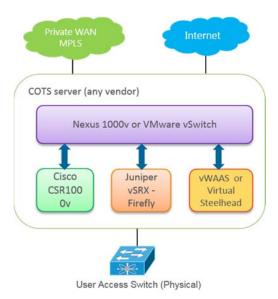


Fig 2: Simple, repeatable, vendor-agnostic branch rollout using NCX

Fig 3: Branch-in-a-box example using NCX

## **Solution Benefits**

**Multivendor Support:** NCX automates the configuration of network devices from multiple vendors giving the administrator full flexibility in service design and orchestration.

**Modular and Scalable Branch Design:** Using the Branch-in-a-Box design, enterprises can rollout branches with different service requirements on an x86 based compute blade greatly reducing rack, power, space requirements and the time to rollout a new branch.

**Distributed Architecture for Geographically Diverse Enterprises:** NCX's distributed architecture allows enterprises to offload the management of infrastructure to a regional NCX Agent while the service orchestration can be managed by the central NCX server.

**Self-Service Catalog:** Using NCX, several different branch topologies can be predesigned and published to a catalog. And, at the time of branch deployment, the branch administrators can choose the service that aligns to their branch requirements.