



BlueCat IPAM, DNS and DHCP Solutions on Citrix NetScaler SDX Platform Overview



The BlueCat and Citrix partnership is based upon integration between BlueCat's DNS, DHCP and IP Address Management (IPAM) solutions and Citrix® NetScaler® application delivery solutions. The next generation of SDX platform provides the foundation for further integration. Today, Citrix NetScaler SDX appliances enable consolidating multiple NetScaler instances onto a single purpose-built appliance. Working together, BlueCat and Citrix will jointly deliver DNS, DHCP, and BYOD on the next generation NetScaler SDX platform. This enables BlueCat and Citrix to jointly deliver consolidated, best-in-class L4-7 networking services on an open, unified platform.

Citrix NetScaler Next Generation SDX Overview

The next generation of the NetScaler SDX platform provides an open platform that makes the whole network **app-driven**. Unlike monolithic approaches that compromise functional depth for functional breadth by adding piecemeal extensions to existing products NetScaler SDX consolidates best-in-class application delivery services onto an open, unified platform. The next generation of SDX platform unifies best-in-class L4-7 network services into an application control layer, and can integrate this application control with both existing transport networks and emerging SDN technologies. This application control layer can make emerging L2-3 SDN architectures completely app-driven by using app-centric definitions and policies to simplify network design while making the whole network more intelligent.

The next-generation of SDX provides:

- **Control** by creating a unified application control layer composed from best-in-class L4-L7 network services.
- **Simplified** administration by using a prescriptive, app-driven approach for defining networking policy and topology and automating network configuration.
- **Consolidation** of network services while preserving best-in-class network functionality.
- **Intelligence** by ingraining application intelligence and comprehensive control into both existing L2-3 infrastructures and emerging SDN architectures.

The dynamic nature of cloud services requires a level of app-awareness, control and flexibility and that go beyond the capabilities of today's data center networks. Together, by integrating BlueCat DNS, DHCP, IPAM and BYOD solutions and the next-generation of SDX, BlueCat and Citrix are delivering this app-awareness, control and flexibility to today's networks and tomorrow's SDNs in an open and unified manner.



BlueCat Solution Overview

Elasticity and adaptive response to organizational needs are key drivers of cloud adoption. To meet these demands and allow workloads to be planned, activated and decommissioned with minimal human interaction, organizations need a highly adaptive and fully orchestrated network. Besides compute, memory or storage, cloud and virtualization are dependent on both the availability of IP addresses, which provide connectivity, as well as up-to-date, high performance and reliable DNS for application access. BlueCat DNS/DHCP Server and BlueCat Address Manager on the the next-generation SDX Platform provide organizations with a smarter way to manage cloud, mobile devices and BYOD. BlueCat's DNS, DHCP and IP Address Management (IPAM) software solutions give organizations the power to manage "everything IP" in their network including devices, users, IP activity and core network services from a single pane of glass.

BlueCat's Citrix Ready for NetScaler solutions include:

BlueCat DNS/DHCP Server

BlueCat DNS/DHCP Server delivers secure, scalable and load-balanced DNS, a critical network service that links cloud application consumers to the application servers, as well as DHCP to simplify the onboarding of devices and virtual machines. Purpose-built to provide the highest levels of performance, scalability and availability, BlueCat DNS/DHCP Server is a powerful DNS and DHCP solution that is easy to deploy and fully managed by BlueCat Address Manager IPAM solution. With advanced features and functionality, including future-proof support for IPv6 and DNS security extensions (DNSSEC), Adonis is designed to meet the business-critical core services needs of any organization.

BlueCat Address Manager

BlueCat Address Manager provides organizations with a powerful and scalable platform to centrally manage their ever-growing IP Infrastructure. With tightly integrated IP Address Management (IPAM), DNS and DHCP, BlueCat Address Manager gives organization the ability to easily manage "everything IP" in their network from a single pane of glass. BlueCat Address Manager reduces management time, effort and costs by eliminating the need for frustrating spread sheets, manual processes and homegrown solutions to track IP addresses. BlueCat Address Manager also allows organizations to manage change and growth with unsurpassed scalability and future-ready support for IPv6 and DNSSEC. The BlueCat BYOD Manager Portal simplifies BYOD by providing quick and easy self-service BYOD registration, as well as the ability for organizations to securely onboard and track all devices on the network.



With BlueCat solutions on NetScaler SDX, critical network configuration tasks required by cloud, mobility and BYOD initiatives can either be fully automated or completed with a few clicks of the mouse from a single pane of glass. Combined with Citrix NetScaler, BlueCat's DNS, DHCP, IPAM and BYOD capabilities offer an adaptive, cost-effective solution for managing cloud networks, onboarding devices and virtual machines, and enabling scalable and secure mobile access to cloud applications without overwhelming IT staff.

Customer Value

The growing adoption of cloud and BYOD is placing a heavy demand on the network and core services like DNS and DHCP. IT departments often struggle to keep pace with the management burden associated with an ever-growing IP infrastructure that is critical to application access and availability. BlueCat DNS, DHCP and IP Address Management Solutions on Netscaler SDX provide a simple, unified solution for load-balanced DNS, scalable DHCP services and enterprise-wide IP Address Management.

Citrix customers benefit from the ability to:

- Deliver resilient and high performance DNS services with integrated GSLB
- Protect business-critical external and internal DNS servers from exploits and attacks
- Significantly reduce operational costs with IPAM orchestration and workflow
- Simplify the provisioning of hosts and IP addresses in physical, virtual or cloud environments
- Onboard devices and virtual machines with reliable and scalable DHCP
- Enable BYOD with elastic and scalable self-service device registration
- Track the relationship between user, device and IP address for all connected devices

Integration Strategy and Use-Cases

With the growing adoption of cloud and virtualization, organizations are looking for an all-in-one solution for delivering consistent and reliable access to business services that is easy to deploy and simple to manage. Citrix and BlueCat make it easier than ever for organizations to orchestrate virtualization and securely access business applications and data from any registered device across the enterprise and in the cloud.



Load-balanced DNS for Anytime/Anywhere Application Access

The Domain Name System (DNS) links cloud-hosted application servers with the employees, partners and customers who need to access those applications – often remotely from their mobile devices. The DNS infrastructure also needs to be elastic, scalable and easy to manage to reduce the everyday administration burden on IT. The global server load balancing of Citrix NetScaler, combined with the simplicity of BlueCat orchestrated DNS and IPAM solutions, provides an effective, cloud-capable DNS infrastructure that is fault tolerant, reliable, scalable and secure. This highly resilient solution safeguards businesses against Denial of Service attacks that can cripple the network and make critical cloud applications inaccessible. Critical DNS services may be load balanced across multiple DNS nodes within a single system or across multiple SDX appliances.

IPAM Orchestration for Cloud

Cloud has become synonymous with immediacy. Business users expect to be able to rapidly provision a new cloud service or virtual machine. The challenge is that many organizations rely on time-consuming manual processes and spreadsheets to assign an IP address to the cloud service and perform the required network provisioning to get it up and running. BlueCat fully orchestrated DNS, DHCP and IPAM solutions on Netscaler SDX allow Citrix customers to automate IP network provisioning and achieve the speed and agility users expect from the cloud. The BlueCat DNS, DHCP and IPAM orchestration solution allows organizations to automatically “IP” and provision new virtual machines and workloads within the SDX appliance across multiple devices. Customers benefit from an all-in-one solution for connecting, activating and onboarding VMs from within the next-generation SDX Platform.

BYOD

An increasing mobile workforce and the rise of BYOD have placed an additional strain on business-critical DNS infrastructures. Simply starting up an Apple iPhone or iPad not only requires an IP address, but also over 30 different DNS queries. To prepare for BYOD and the influx of personal devices, BYOD registration must be tightly integrated with DNS, DHCP and IP Address Management. BYOD registration servers must also be load balanced for elasticity. Citrix and BlueCat deliver resilient global server load balancing for self-service BYOD servers and integrated DNS, DHCP and IP Address Management to simplify BYOD. The solution, which complements Mobile Device Management (MDM) solutions, allows Citrix customers to control application access at both the device and the network level, and ensure security, compliance and traceability by linking a user to all actions performed by any device on the network.



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About Citrix Ready

Citrix (NASDAQ:CTXS) transforms how businesses and IT work and people collaborate in the cloud era. With market-leading cloud, collaboration, networking and virtualization technologies, Citrix powers mobile workstyles and cloud services, making complex enterprise IT simpler and more accessible for 260,000 organizations. Citrix products touch 75 percent of Internet users each day and it partners with more than 10,000 companies in 100 countries. www.citrix.com.

About BlueCat

BlueCat provides a smarter way to manage BYOD, mobile devices and cloud. With tightly integrated core services, automation and workflow delegation, BlueCat software solutions give organizations the power to manage "everything IP" including devices, users and IP activity from a single pane of glass. The result is a dynamic network that is more resilient, cost effective and easier to manage. www.bluecatnetworks.com.

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