

# Financial Services clouds built with Nuage Networks and Red Hat®

### SOLUTION OVERVIEW

The Nuage Networks and Red Hat SDN-based cloud solution makes your network more agile, flexible, and automated. With this solution, you can launch financial services faster, reduce operational costs, and take full advantage of cloud technologies.

### **SOLUTION FOR**

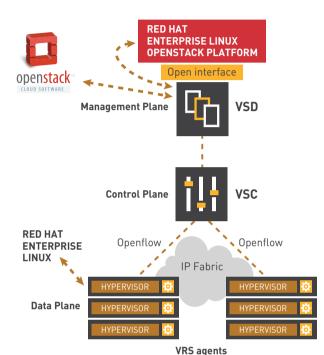
Financial services companies require greater functionality of their datacenter infrastructure, to support the rollout of new cloud-based financial services applications throughout their organizations.

OpenStack® is an open source infrastructure as a service (laaS) initiative for creating and managing large groups of virtual private servers in a datacenter. Red Hat Enterprise Linux OpenStack Platform is the production-ready solution for financial services hybrid clouds.

73% of enterprise executives believe moving to the cloud will help them improve levels of service automation.

Source: KPMG, 2014 Cloud Survey Report: Elevating Business in the Cloud, January 2015.





- Meeting the requirements for delivering new financial services with a mission-critical and application-responsive hybrid cloud
- Providing globally accessible financial services with a highly agile and on-demand network
- Enabling the delivery of financial services to all enterprise locations, including remote branches, significantly reducing operating complexity and expenses

Nuage Networks and Red Hat offer an application-centric SDN-based cloud solution that virtualizes and simplifies your datacenter network, so you can maximize the value of your cloud infrastructure.

The delivery of financial services from the cloud can improve business agility and simplify operations, based on the rapid and cost-effective instantiation of the underlying applications. To deliver on this promise, however, your datacenter network must be as agile and flexible as your virtualized server and storage infrastructure. Complex, static networking models require tedious, errorprone manual programming, which increases operational costs, reduces efficiency, and delays the availability of network services for cloud-based financial applications.

Moving to a virtualized, Software Defined Networking (SDN) model can help you enjoy all the benefits the cloud has to offer.

With enhanced network flexibility, automated network management, and scalability across multiple tenants and datacenters, Nuage Networks and Red Hat help you reduce costs, launch cloud-based financial applications faster, and increase the efficiency of your cloud infrastructure. Financial services are more flexible and dynamic when delivered over an open hybrid cloud based on Nuage Networks and Red Hat!

### **BUSINESS BENEFITS**

The Nuage Networks and Red Hat SDN-based cloud solution virtualizes and automates your network so you can accelerate the deployment of financial services. With a simplified and responsive network, these services can be delivered to customers faster while reducing operating expenses.

#### NUAGE NETWORKS VSP

Nuage Networks Virtualized Services Platform (VSP) is an open SDN platform for virtualizing datacenter networks using x86 hardware. Nuage Networks VSP is certified on Red Hat Enterprise Linux OpenStack® Platform.

## RED HAT AND INTEL® CLOUD INFRASTRUCTURE

The Nuage Networks solution leverages Red Hat's open software stack and Intel's high-performance processors and network adapters.

Red Hat Enterprise Linux®, with the integrated Kernel-based Virtual Machine (KVM) hypervisor, supplies high-performance virtual machines. Red Hat Storage provides flexible, cost-effective, virtualized storage. Red Hat Enterprise Linux OpenStack Platform gives you a fully supported, enterprise-grade cloud platform.

# Solution features and benefits

Based on a unique, application-centric approach, the Nuage Networks and Red Hat SDN-based cloud solution abstracts application networking requirements from your physical network topology to streamline management operations and improve agility. Programmable business logic and a powerful policy engine let you define Level 2-4 network requirements once in simplified application terms and ensure compliance with resource policies across your infrastructure on a per-tenant and per-application basis.

Event-driven network service instantiation reserves network resources as they are required and without manual intervention, allowing the demands of cloud applications to be quickly met for thousands of users. This frees network administrators to focus on critical issues such as supporting the launch of new financial applications.

Seamless interoperability across multiple administrative domains and datacenters lets you place cloud workloads optimally across your infrastructure, improving server utilization and allowing cloud bursting and hybrid cloud services.



### Nuage Networks Virtualized Services Platform (VSP)



### Virtualized Services Directory (VSD)

 Programmable policy and analytics engine lets you define and enforce resource policies in a user-friendly manner



### **Virtualized Services Controller (VSC)**

 Functions as a network control plane and enables federated and highly scalable networks



### Virtual Routing and Switching (VRS)

- An enhanced Open vSwitch, makes up the network forwarding plane and applies the Layer 2-4 traffic policies defined in the VSD
- Tracks virtual machine creation, migration and deletion to dynamically adjust network connectivity

### **About Nuage Networks**

Nuage Networks strikes at the heart of the cloud networking challenge: Choreographing datacenter and wide-area networks to maximize responsiveness, utilization and visibility. Nuage Networks delivers a highly programmable infrastructure that bridges the gap between the application-centric view and the equally important network-centric view, realizing the full power of SDN. The Nuage Networks solution combines groundbreaking SDN and virtualization techniques with unmatched networking expertise to deliver a massively scalable solution that consistently spans datacenters and remote locations. Our solution enables enterprise IT to respond instantly and securely to the demands of users and applications anywhere.

Discover more at www.nuagenetworks.net and follow us @nuagenetworks

