Branch Office Desktop

Nutanix Validation

HOW-TO GUIDE

NUTANIX. vmware

Solution Overview

The Nutanix & VMware Branch Office Desktop (BOD) solution is a purpose built platform targeted for secure, easy to manage, high-performance desktop delivery to branch-office users.

Nutanix enhances the VMware BOD solution by improving performance, scalability & availability, and manageability.

Performance

- Control boot and login storms with PCIe flash and Nutanix ILM

- Deliver consistent user experience and performance as you scale

- Eliminate any performance bottlenecks the distributed Nutanix model

Scalability & Availability

- Modular incremental scale - Scale from hundreds to thousands of desktops in 100 desktop increments

- Deliver - Maintain SLAs and desktop delivery

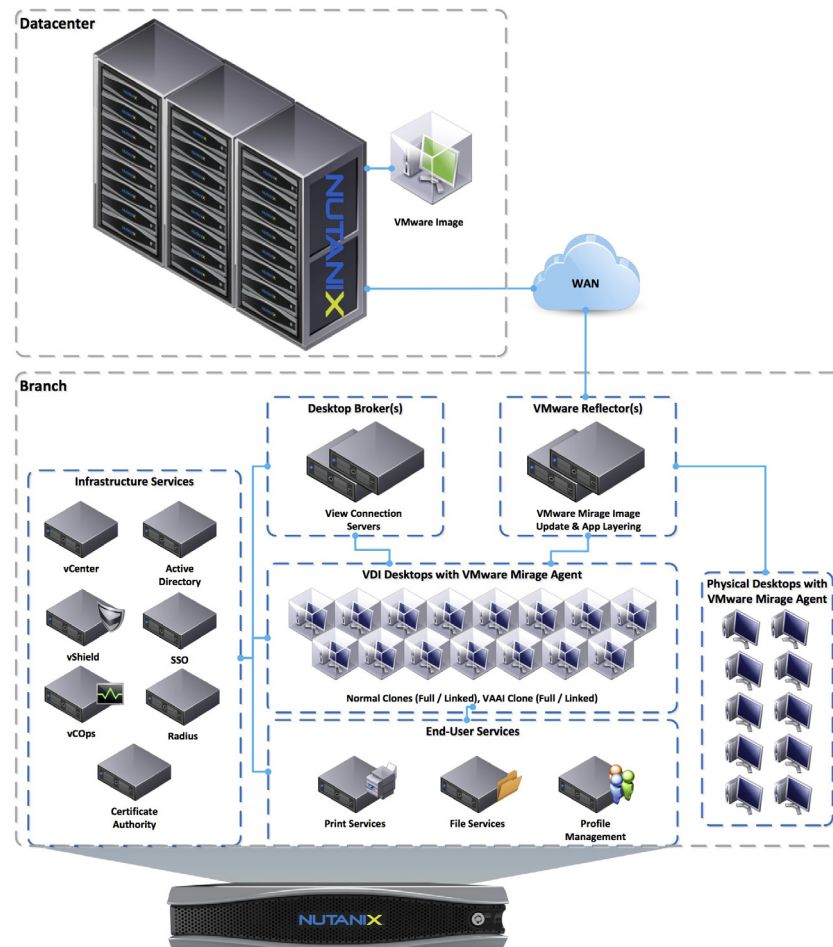- HA in a box - Four highly available nodes per 2U

Manageability

- Manage compute and storage with a single UI

- Time to value - Deliver a fully functional desktop platform in 30 minutes

- Support multiple workloads – Desktops, server virtualization, or even Hadoop on the same platform

- Single, simple, product

Architecture & Design

With the Nutanix solution and its architecture you can start small and scale. A single Nutanix block provides up to 400 desktops in a compact 2U footprint. Need more desktops or capacity? Nutanix allows you to scale per-node (100 desktops), per-block (400 desktops), or multiple blocks - giving you the ability to accurately match supply with demand and minimize the upfront CapEx.

In a single Nutanix block you have 4 distinct nodes creating a HA cluster leveraging resource pools and reservations for resource allocation and management. This enables you to have an HA platform to host your business critical services and applications in 2U.

Here we show a high-level diagram of a typical BOD deployment with Nutanix, VMware View and VMware Mirage on a single Nutanix block.
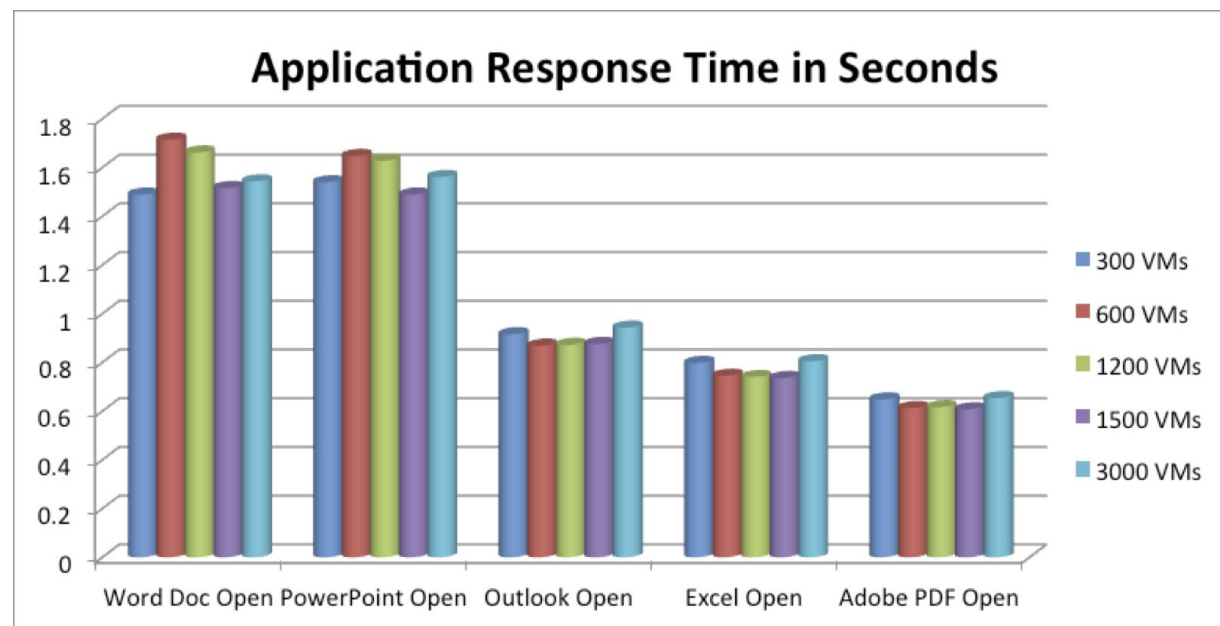
Validation Result

The Nutanix & VMware BOD solution provides the highest density desktop deployment footprint and with unparalleled performance. Given our n-Controller model, the desktop performance remains consistent as the number of nodes / blocks scale.

With traditional 3-tier infrastructures (compute / storage / network) you'll begin to face large bottlenecks as the demand or scale grows hurting the end-user's experience. This forces you to scale in large pods creating physical silos of resources. Nutanix is different – by converging compute and storage together we eliminate any potential bottlenecks and simplify the management at the same time.

In the graph below we compare the relative application response times as we scale from 300 to 3000 desktops (on a single datastore). As you can see, application performance and end-user experience remains consistent as we scale our platform.

Design Components

This solution if built on a single component:

Hardware:

• Nutanix Complete Cluster

Software:

Software Product	Function / Description / Version
vSphere	5.0.1
vSphere with vCenter	5.0
VMware View with Persona Management	5.1
VMware View Composer	3.0
VMware Mirage	3.6
vCloud Networking and Security Suite	5.1
vCOps	5.0.2
vCOps for View	1.0

You can leverage any Rapid Desktop Appliance for your hardware consideration in the branch appliance. For exhaustive list on all components and how to configure them, please refer to the Validated Design Guide.