



nebulon **smart**Core for VMware

transform a traditional virtualization environment into
a hyperscale internal cloud

why nebulon **smart**Core for VMware?

Nebulon **smart**Core for VMware is a **smart**Infrastructure reference architecture and a breakthrough solution designed to help enterprises like you who are looking to transition from a traditional approach (hyperconverged infrastructure, 3-tier architectures, etc.) to one that brings cloud simplicity, on-premises for your VMware infrastructure. Read this guide to learn how Nebulon is addressing key challenges enterprises face with hyperconverged infrastructure solutions to improve ROI and reduce operational overhead in their VMware environment.

HOW NEBULON SMARTCORE FOR VMWARE CAN HELP YOUR VMware infrastructure modernization initiatives

simple cloud-like experience

46%

REDUCED OPERATIONAL
OVERHEAD

smartInfrastructure | ✓ **reduce operational overhead**

- single click updates & reporting by geo, app, or group for the entire estate in minutes with as-a-service cloud-based management

HCIS | ⊖ **significant operational overhead**

- requires site-by-site management by cluster
- requires hosting, installation, configuring, upgrading, etc. all instances of the management plat-form

10min

VMWARE SERVER
PROVISIONING VS
HOURS OR DAYS

smartInfrastructure | ✓ **infrastructure-as-a-code experience for VMware**

- marketplace templates instantiate IT-certified VMware datastores in minutes, improving the consistency of your global infrastructure

HCIS | ⊖ **a traditional operational approach to VMware**

- automation is cluster-by-cluster with APIs that can be at a different revision levels
- provisioning VMware infrastructure is time-consuming without boot volume control

improved availability and security

1-click

FLEET-WIDE FW UPDATES
KEEP END-POINTS SECURE

smartInfrastructure | ✓ minimize security updates

- fleet-managed updates eases prevention of security risks with out-of-date device firmware

HCIS | ⊖ automation headaches

- automating HCI systems across the org are done cluster-by-cluster, with API's and behavior varying based on the SW version running in each cluster at each of the multiple sites

zero

DATA/STORAGE OFFLINE
DURING UPDATES

smartInfrastructure | ✓ improved availability and security

- majority of SW updates occur in the cloud, providing new features non-disruptively as-a-service
- on-premises SW micro-updates never take data/storage resources offline
- with SPU & server in different fault domains, server & hypervisor maintenance never takes data/storage resources offline

HCIS | ⊖ security and availability risks

- SW updates done cluster by cluster, taking critical storage resources offline & placing data at risk

reduce infrastructure costs

33%

FEWER SERVER/SOFTWARE
PURCHASES

smartInfrastructure | ✓ meaningful infrastructure cost reduction

- no server resources are consumed by data services
- supports bare metal & containers natively, avoiding hypervisor license cost

HCIS | ⊖ budget impacts

- HCI CPU and memory overheads drive up to 50% more unneeded server and software license purchases

what is nebulon **smart**Infrastructure?

nebulon **smart**Infrastructure is server-embedded, infrastructure software delivered as-a-service, which brings the public cloud experience on-premises from core to edge for any application—containerized, virtualized or bare metal—and enables self-service infrastructure provisioning, infrastructure management-as-a-service and enterprise-class shared and local data services.

nebulon **smart**Infrastructure is made up of two components

nebulon ON

cloud-based control plane

embedded infrastructure

IoT endpoints (nebulon SPU's) embedded
server-based on-premises data plane



smartInfrastructure use cases & solutions



smartEdge



smartCore
for VMware



smartCore
for Kubernetes



smartIaaS
for cloud service providers



cloud shift
on-premises



It's time to view the **cloud as an operating model**, not the destination