

# **ILLUMIO ADAPTIVE SECURITY FOR NUTANIX**

Security is now embedded into the cloud motion and economics of hyperconverged infrastructure

#### Nutanix and Illumio: Partners in Invisible Infrastructure and Adaptive Security

Together, Nutanix and Illumio deliver an end-to-end solution for deploying and securing the next-generation data center. By combining the software-only Illumio Adaptive Security Platform (ASP)<sup>™</sup> with the Nutanix enterprise cloud platform, enterprises will experience faster



application delivery, better visibility across all environments, and stronger security anywhere those applications are deployed.

# Agile Server, Storage & Security

- Built-in security for the Nutanix enterprise cloud platform: Illumio ASP enables Nutanix customers to micro-segment applications running on Nutanix clusters, providing live visibility and granular control over application traffic between the workloads.
- Uniform security for workloads migrating to Nutanix: Workloads running on bare-metal servers, VMs, or in any data center or cloud can be migrated to the Nutanix platform with the security posture intact, without the need for manual intervention or infrastructure changes. With Illumio ASP, security is attached to and moves with each workload as it is migrated. Security rules are automatically computed and enforced on the individual workloads in a fully automated process.
- Security that natively works with Nutanix: When the Nutanix Acropolis App Mobility Fabric moves workloads for load balancing or disaster recovery, Illumio ASP automatically detects changes and adapts the security rules on all associated workloads to sustain security.

# Gain the full benefits of hyperconvergence without security slowing you down

Enterprises today are lowering compute costs and gaining efficiencies by adopting hyperconverged infrastructures and agile application development and operations.

However, traditional and virtualized versions of perimeter-based security:

- Slow down dynamic environments through traffic engineering and VM sprawl
- Do not provide visibility to application interactions in the converged infrastructure
- Do not work on bare-metal servers, cloud, and all Nutanix hypervisors (AHV, Hyper-V, ESXi)

Secure applications wherever they run Illumio ASP secures application workloads for every bare-metal server, VM, and container in data centers and public clouds.

Only Illumio ASP offers Nutanix customers:

- Live visibility into application traffic and workload interactions
- Security that is independent of the network and hypervisor: can be used across hybrid environments including Nutanix and cloud services like Amazon Web Services or Microsoft Azure
- Security that auto scales to hundreds of thousands of servers with distributed enforcement at each workload
- Real-time detection and remediation of security policy violations



BENEFITS	
See everything in real time in Nutanix environments	Real-time, interactive visibility of all communications, services, and processes. It's like an MRI for Nutanix environments.
Adaptive security enforcement	Machine intelligence automatically scales and adapts to application changes with continuously computed security policies.
No additional infrastructure or traffic steering	No need for VM sprawl or complex networking management to deliver security services. No additional network latency or hops found in other virtual security solutions.
Reduced attack surface	Go beyond traditional micro-segmentation to reduce vulnerabilities and incursions for individual workloads and processes.

## **Technical Details**

The Nutanix enterprise cloud platform converges server, storage, and virtualization resources into a turnkey hyperconverged appliance to run enterprise applications at any scale. Built on a distributed web-scale architecture, a single Nutanix appliance is easy to deploy and manage and can simultaneously run different workloads, including enterprise applications, databases, virtual desktop infrastructures (VDI), and big data nodes.

Illumio ASP secures workloads residing in any data center or cloud, including all AHV, Hyper-V, and ESXi VMs hosted on the largest Nutanix clusters, with no dependence on the underlying hypervisor or network. The Illumio Virtual Enforcement Node (VEN) is installed in the guest OS of each VM hosted on Nutanix. The Illumio Policy Compute Engine (PCE)—the central brain of the platform—builds a graph of all dependencies between workloads and computes precise security policies that are instrumented into the native security capabilities of the OS on every workload (iptables for Linux, Windows Filtering Platform for Windows Server). When applications or environments change, the PCE detects the change and automatically maintains the security posture by re-computing security rules and communicating updates to each VEN.





### A FULL-STACK SOFTWARE PRIVATE CLOUD

Nutanix and Illumio provide a complete software infrastructure and security stack for the most demanding applications. Illumio ASP extends beyond the Nutanix cluster into traditional data center and new cloud computing architectures, allowing workloads to move without the need to reconfigure security or operations staff to undertake complex network or firewall changes. All the capabilities are managed centrally through the Nutanix Prism interface and the Illumio ASP console. Compute and security can be initiated by today's leading orchestration tools including Chef, Puppet, and Ansible.

# **GET STARTED TODAY**

Technical resources on Illumio's architecture and quick start guides for deployment in a range of environments are available at <u>www.illumio.com/resources</u> and <u>www.nutanix.com/resources</u>. We offer a wide range of services around design, deployment, and optimization, as well as custom services tailored to customer requirements. For more information about Illumio ASP and how it can be used to secure Nutanix deployments, email us at <u>illuminate@illumio.com</u> or call 855-426-3983 to speak to an Illumio representative.

#### **About Nutanix**

Nutanix makes infrastructure invisible, elevating IT to focus on the applications and services that power their business. The Nutanix enterprise cloud platform leverages web-scale engineering and consumergrade design to natively converge compute, virtualization and storage into a resilient, software-defined solution with rich machine intelligence. The result is predictable performance, cloud-like infrastructure consumption, robust security, and seamless application mobility for a broad range of enterprise applications. Learn more at <a href="https://www.nutanix.com">www.nutanix.com</a> or follow us on Twitter <a href="https://www.nutanix.com">witter @nutanix</a>.

#### **About Illumio**

Illumio, the leader in micro-segmentation, prevents the spread of breaches inside data center and cloud environments. Enterprises such as Morgan Stanley, BNP Paribas, Salesforce, and Oracle NetSuite use Illumio to reduce cyber risk and achieve regulatory compliance. The Illumio Adaptive Security Platform<sup>®</sup> uniquely protects critical information with real-time application dependency and vulnerability mapping coupled with micro-segmentation that works across any data center, public cloud, or hybrid cloud deployment on bare-metal, virtual machines, and containers. For more information about Illumio, visit www.illumio.com/what-we-do or follow @Illumio.

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