

SECURE APPLICATION MIGRATION

TRAFFIC VISIBILITY AND UNIFORM SECURITY—ACROSS ANY INFRASTRUCTURE

All enterprises undertake application migration projects, ranging from moving new or existing applications to public clouds, consolidating data centers, or building new data centers. The Illumio Adaptive Security Platform (ASP)[™] helps enterprises secure their applications before, during, and after migration efforts.

Securing a New Application in a Public Cloud

Before Illumio

- Lack of network control in public clouds only permits coarse-grained security
- Lack of application visibility limits security posture
- Non-uniform security strategies across different cloud providers limits portability

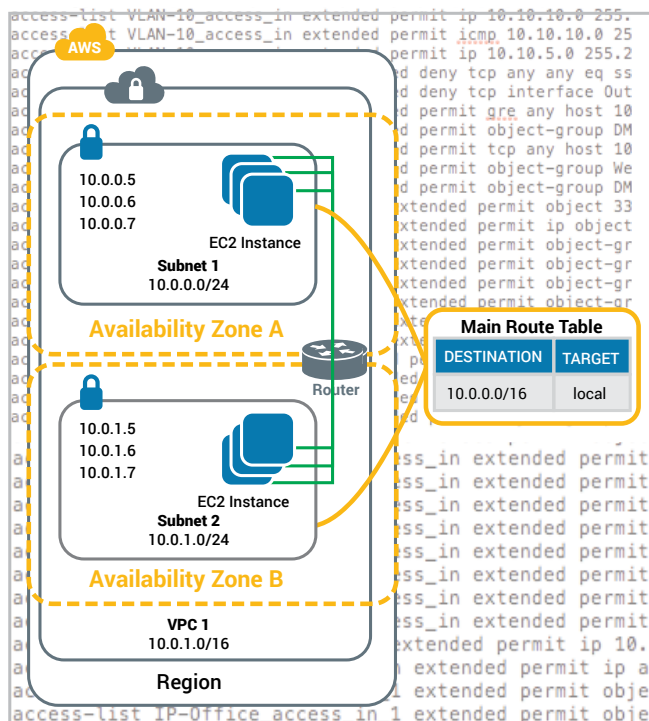


Figure 1: Organizations have limited visibility into workload interactions in public clouds, and security offerings from public cloud providers aren't fine-grained enough to recreate the security posture in private data centers.

After Illumio

- Security moves with every workload to any public cloud (e.g., Amazon Web Services, Microsoft Azure)
- Gain live, interactive visibility into cloud workloads and their traffic flows
- Integrate security with orchestration tools (e.g., Chef, Puppet, Ansible)

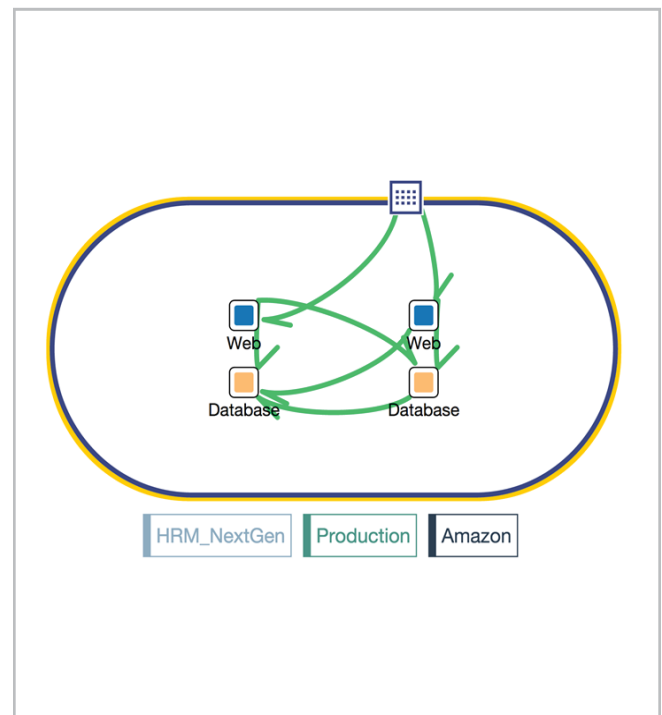


Figure 2: Illumio ASP securing an HRM application in a public cloud with visibility of all traffic flows.

Moving policy and enforcement to cloud

Before Illumio

- No control over the network in public cloud—network-centric security doesn't work
- Risk of breaking applications without visibility to traffic flows
- Non-uniform security policies between data center and public cloud make security hard to set up and maintain

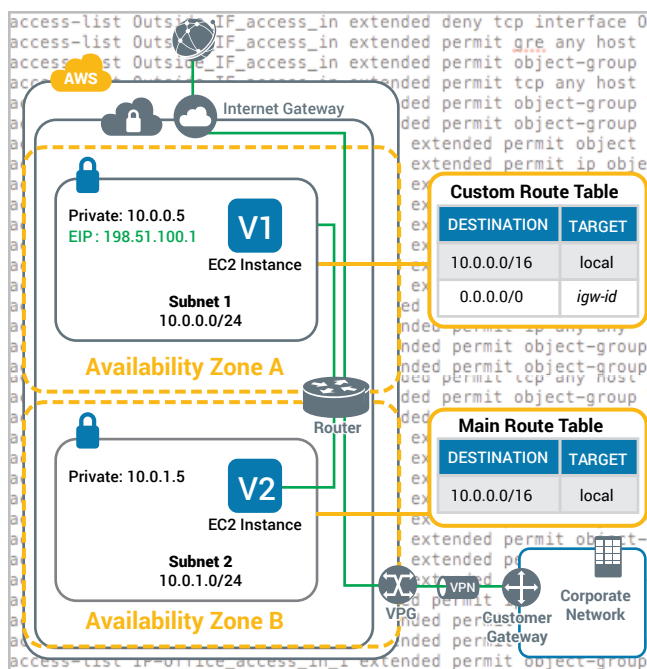


Figure 3: Organizations don't have control over the network in a public cloud, making it difficult to implement security and keep it uniform across their environments.

After Illumio

- Enforce uniform security policies across all data center and cloud workloads
- Instantly encrypt data in motion (IPsec) between any Linux/Windows workloads across any environment
- Ensure application workloads auto scale securely in the cloud or data center

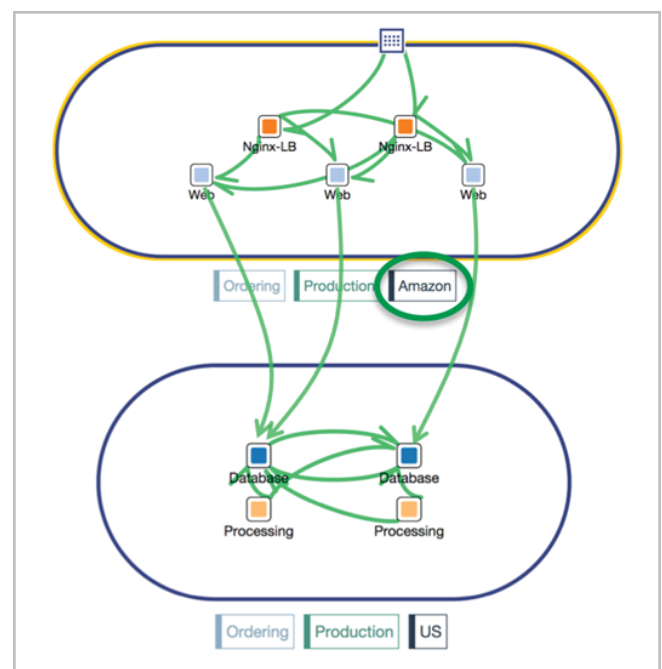


Figure 4: Illumio ASP securing an ordering application deployed across a hybrid environment with complete visibility of traffic flows.

Securely consolidating or expanding data centers

Before Illumio

- Requires manual processes to reconcile firewall rules in a consolidated data center
- Risk of breaking migrated applications when enforcing policies without visibility into traffic flows
- Lack of security automation and integration with DevOps tools slows migration efforts

After Illumio

- Visually discover and understand the topology of all applications and their interactions
- Security adapts to workload migrations, which reduces operational costs by eliminating manual changes
- Build and test policies to enforce security with confidence, reducing application outages application changes

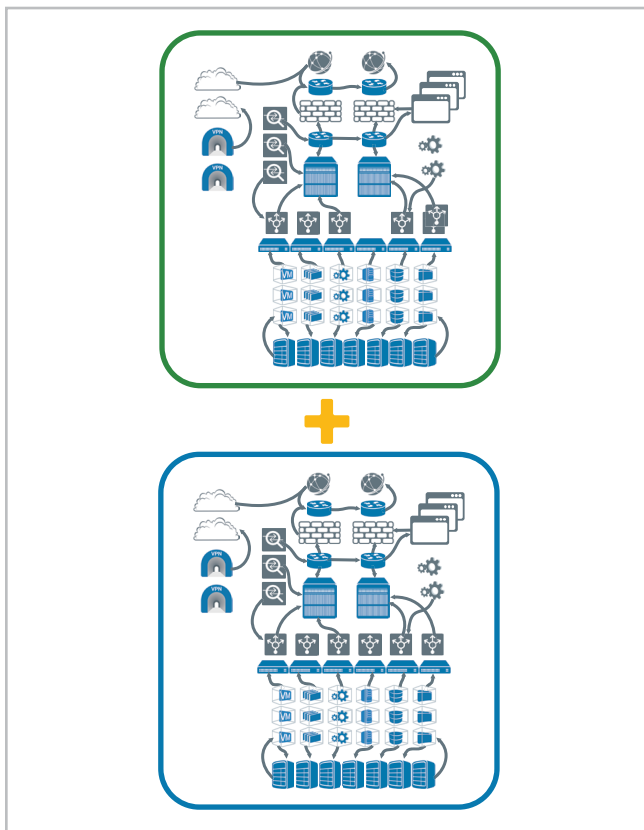


Figure 5: Securing applications using complex, static network constructs (e.g., IP addresses, subnets, VLANs, zones) makes data center consolidation and expansion efforts complex and time-intensive.

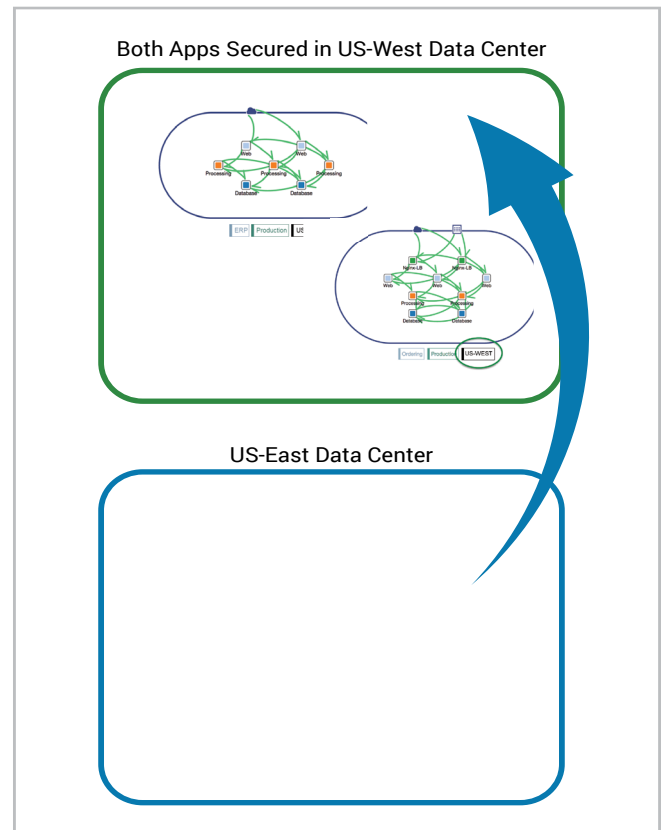
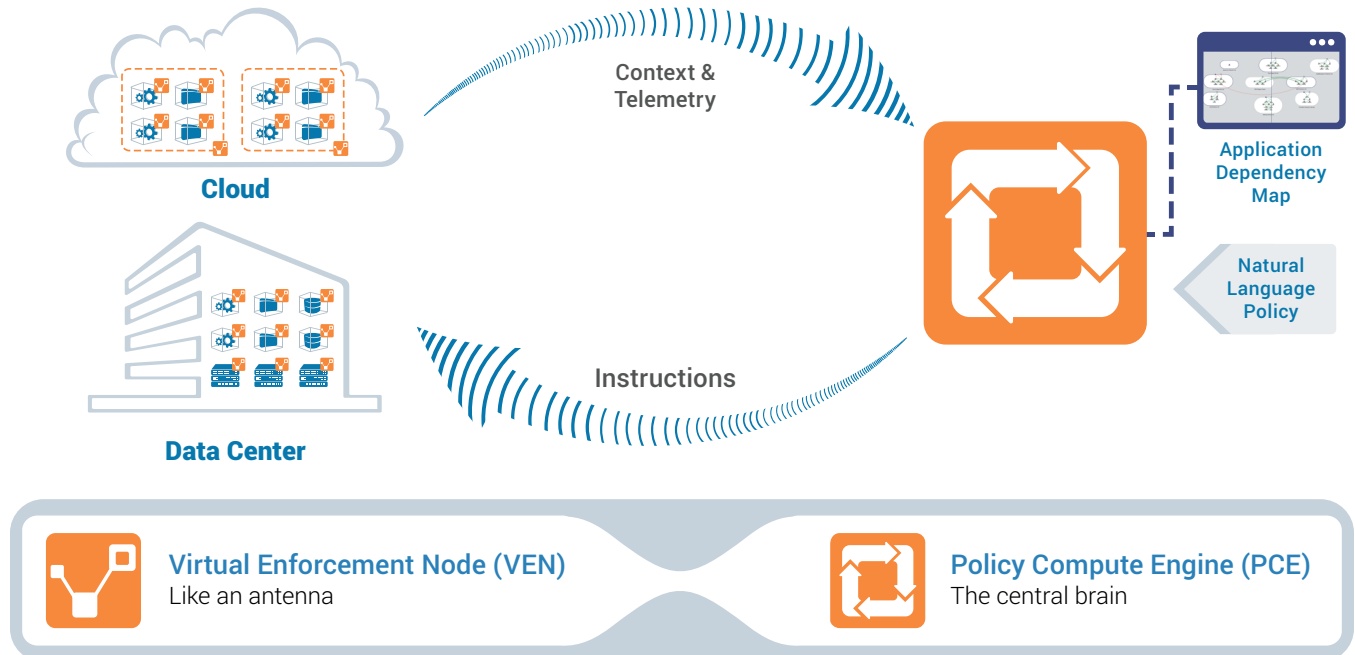


Figure 6: Illumio ASP discovering and securing an ordering application (US-EAST data center) migrated to the US-WEST data center.

RELATED ASSETS

For additional information on securely migrating your enterprise applications, visit www.illumio.com/use-case-overview. You can also download white papers on this and other topics at www.illumio.com/resources.

The Illumio ASP architecture consists of lightweight Virtual Enforcement Nodes (VENs) installed on workloads residing in any data center or cloud. The VENs act as antennas and send telemetry information about the workloads to a Policy Compute Engine (PCE) that acts as the central brain of the platform. The PCE builds a graph of all dependencies between workloads and their applications and computes precise security policies that are instrumented into the native security capabilities (iptables or Windows Filtering Platform) in every workload. Anytime applications or environments change, Illumio ASP automatically adapts by recomputing and updating the policies.



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® 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](https://twitter.com/Illumio).

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For more information about Illumio ASP and how it can be used to achieve environmental separation, email us at illuminate@illumio.com or call 855-426-3983 to speak to an Illumio representative.

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