

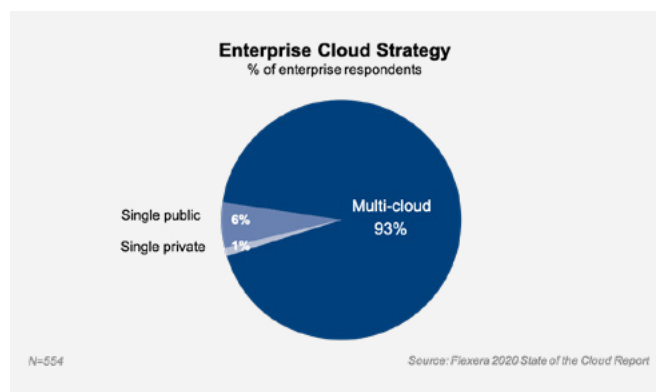
# Secure and Scale Multi-Cloud Application Deployments To Empower DevOps, SecOps and NetOps

Organizations continue to migrate applications to the cloud at an increasingly accelerated rate. From sophisticated ecommerce engines to cloud-based productivity solutions and personal tools on mobile phones, applications are how things get done.

According to Radware's [C-Suite Perspectives Report](#), 76% of survey respondents have accelerated their plans for migrating applications and infrastructure to the cloud.

Not only are businesses transitioning to the cloud, they're adopting a multi-cloud strategy. According to [survey results by Flexera](#), 93% of organizations have adopted a hybrid cloud strategy.

Online presence is usually the lifeline of many businesses, so both security and availability of applications should be top-of-mind concerns for organizations.



## Challenges in Scaling, Securing and Managing Multi-Cloud Application Deployments

To accelerate digital transformation, organizations have increased their focus on the creation of applications, bringing together many independent components that interoperate and facilitate continuous application development.

Both migration to the cloud and developers' reliance on open application programming interfaces (APIs) to create connections between application components increases the attack surface.

In addition, being available to serve customer or user requests is one of the key requirements when applications are accessible over the web. If your business is completely dependent on the cloud, then frequent public cloud provider outages do not provide a lot of comfort to those transitioning to a cloud-only infrastructure.

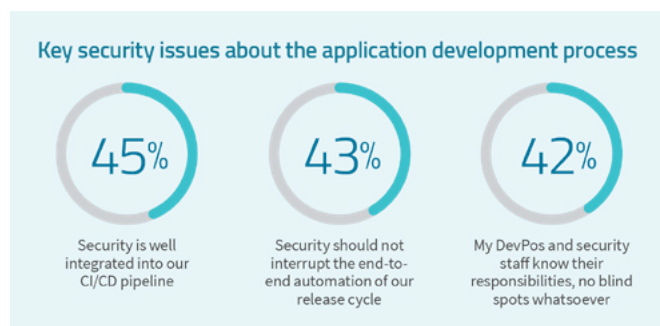
Adopting a heterogeneous cloud environment results in lack of continuity for management, security and reporting. Each public cloud environment has its own management tools, monitoring, application delivery and security services.

According to [research by the Enterprise Strategy Group](#), only 5% of organizations have consolidated cloud management tools (three discrete tools or fewer) for managing the majority of private/virtual clouds and public cloud environments. This lack of consistency creates a series of challenges.

**Application Protection** - Application attacks are now so diverse that it is no longer enough to protect applications with just a web application firewall (WAF). Protection is also needed for APIs and against sophisticated bots. As hackers probe network and application vulnerabilities to launch application attacks and gain access to sensitive data, application protection becomes critical to protect the business and its brand.

Organizations often have to configure and manage multiple application security products with varying capabilities across different environments. Lastly, the attack surface increases once an application leaves the confines of an organization's on-premise data center.

**Complexity** - Moving applications to the cloud further complicates cybersecurity. Cloud vendors do not provide comprehensive security controls, nor are security constructs consistent across vendors.



\* 2020-2021 State of Web Application & API Protection Report

and analysis into all these factors are critical to ensuring an organization's applications are providing a superior digital experience.

**Cost Predictability** - Budgeting and licensing can become a planning nightmare without cost predictability because scaling and securing an application using a metered model can result in spikes in operational expenses. A cloud computing environment only provides as much flexibility as the vendor licensing model your business subscribes to. The ability to control costs when dynamically allocating application delivery and protection services across heterogeneous environments is critical. Why? Because many organizations that deploy within public cloud environments often experience unexpected costs once services scale with increased usage.

**Automation** - Automating the deployment of services quickly, or scaling application resources dynamically, becomes critical in a public cloud environment because pricing is structured around usage/resource consumption. Any component in this supply chain requires automation to transform manually-driven processes into automated steps.

**Scalability and Availability** - Availability to serve user requests and automatically scale are critical for companies looking to automate backend operations. This means having the ability to add and remove services on-demand without manual intervention for licensing and to reclaim capacity when no longer in use. This saves time and money.

**Vendor Lock-In** - This can occur because one cloud provider might provide application security and scalability capabilities that another does not. In addition, lack of standardization across clouds may require value-added advisory services, such as technical and consulting.

“75%  
of mobile applications  
would fail basic  
security tests.”

- Gartner

Cross-domain services that span networking, application and security require domain expertise and collaboration across teams, creating conflicts and delays in testing and provisioning. This leads to poorly protected applications.

**Analytics and Visibility** - As applications are deployed across private and public clouds, monitoring their performance, the user experience, identifying SLA breaches, managing application security events and diagnosing root cause are all critical. A single pane of glass that provides visibility

## Enable Security and Scalability Across Clouds With Radware Alton

Alton's integrated application protection suite provides the most comprehensive protection for applications via a single platform across all supported hardware, virtualized and cloud environments. It eliminates the requirements of networking and security expertise with automation to keep protection on the application optimized while reducing dependency on application security experts.

Alton's Global Elastic Licensing (GEL) provides dynamic bandwidth consumption and auto-scale capability to reduce operational costs by scaling application delivery and security services based on consumption changes. Advanced security and networking analytics provides end-to-end management and real-time visibility into application latency and performance.

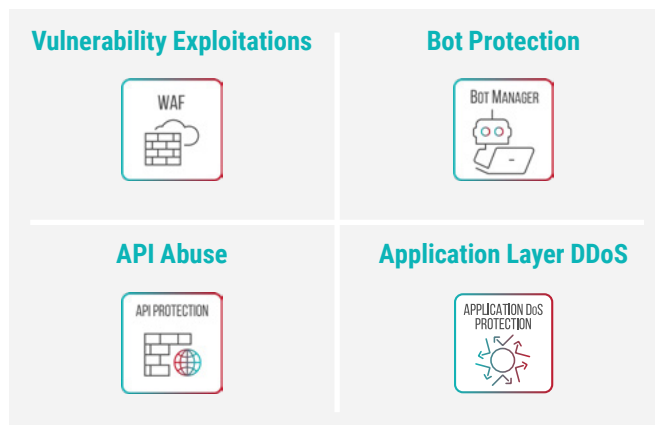
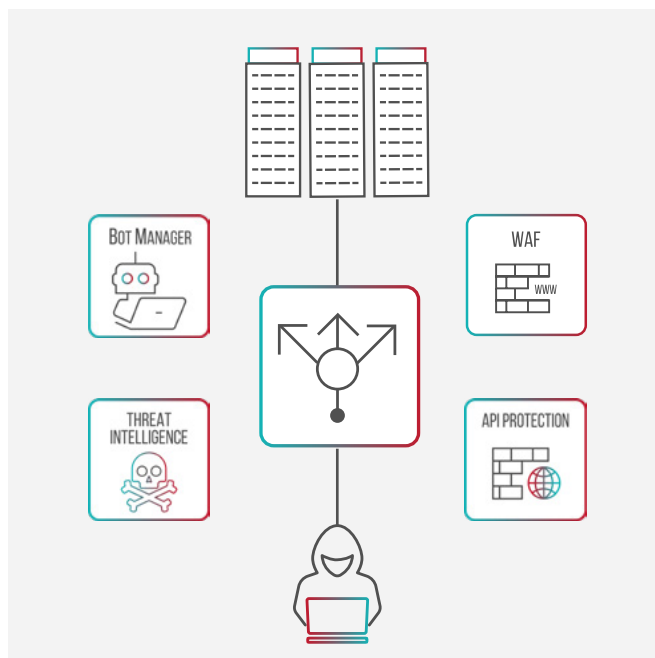
### ► Comprehensive Integrated Application Security

Alton integrates an array of application protection modules to provide industry-leading security coverage across all application threat surfaces:

- WAF to protect from web-based attacks (OWASP Top 10 and beyond)
- Bot management to protect from malicious bots and automated threats
- Comprehensive API protection to protect APIs and provide full visibility into threats
- Threat intelligence to protect from unknown and active attackers

### ► Consistent Security Policies Across Data Centers and Cloud Environments

- Alton's integrated application protection suite offers a centralized solution to secure, provision, operate and control application services across on-premise, public and private cloud deployments.
- Alton's integrated application protection suite is available for deployment on physical appliances as well as virtual appliances running in private data centers and public clouds
- The same solution for application delivery and protection across private and public clouds to ensure application security policies are consistent regardless of where applications are deployed
- A centralized management and monitoring console oversees all application delivery and protection services, across all environments, and from a single pane of glass
- Standardization of application delivery and security solutions across all environments
- Secure your applications and API's in multi-cloud environments with the industry's best SSL offload/inspection, web application protection, bad bot protection and protect from unknown and active attackers



▶ **Ease of Deployment and Maintenance**

**AUTOMATE DAY 1**  
Enable anyone to protect app deployment

**AUTOMATE DAY 2**  
Use predefined templates

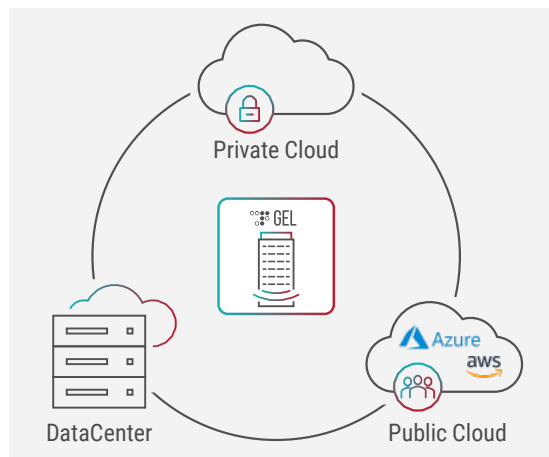
**AUTOMATE DAY 3**  
Keep app protection optimized at all times

Enable DevOps to integrate app protection into their CI/CD automation processes

- The perfect solution for DevOps and NetOps to secure applications across all supported environments
- Centralized management with automated workflows enables deployment & self-service configuration
- Reduces human errors, simplifies administration, removes requirements for networking and security expertise and executes complex and tedious tasks with personalized automation and self-service wizards
- Seamlessly integrate with preferred DevOps automation tools such as Ansible, scripting support and integration with Cisco ACI and VMware vRO
- Alteon’s integrated application protection modules have a dedicated machine-learning algorithm which ensures that protection is constantly optimized, reducing the need for ongoing maintenance

▶ **Licensing For Improved Agility and Resource Utilization**

- Deploy application delivery and protection services across multiple environments via one centralized Global Elastic License (GEL) pool for the entire organization
- Scale application protection services with the same GEL and its automated licensing mechanism
- Predict costs for application delivery and protection solution, regardless of where they are deployed
- Transfer application delivery and protection capacity and redistribute it to as many ADC instances as required leveraging the same license.



▶ **Comprehensive Application Threat Analysis and Reporting**

- Reporting for both NetOps and SecOps
- Reduce dependency on security experts for identifying and solving false positives and other application threats
- Stay abreast of application security status
- Cross environment visibility of SLA performance, configuration, management, monitoring, analytics and reporting across all deployment environments.

## Summary

Securing a hybrid or multi-cloud deployment doesn't need to be complex or expensive. With the right solution and tools, it is possible to benefit from on-premise, public and private cloud to drive value for your business.

Radware's Alteon Multi-Cloud Solution with integrated application security is the fastest way to securely deliver your applications or services in a public or private cloud environment. It centralizes security, provisioning, operation and control of application delivery services across multiple environments and makes the transition of complex application services to the cloud as seamless as possible.

By providing built-in automation, Alteon's application delivery services can be used before, during and after integration with cloud orchestration solutions and private and public cloud services. Radware GEL ensures complete investment protection because services can be moved between on-premise and cloud-based environments while recapturing investment and capacity for deployment in another platform.

## About Radware

Radware® (NASDAQ: RDWR) is a global leader of [cybersecurity](#) and [application delivery](#) solutions for physical, cloud and software-defined data centers. Its award-winning solutions portfolio secures the digital experience by providing infrastructure, application and corporate IT protection and availability services to enterprises globally. Radware's solutions empower more than 12,500 enterprise and carrier customers worldwide to adapt quickly to market challenges, maintain business continuity and achieve maximum productivity while keeping costs down. For more information, please visit [www.radware.com](http://www.radware.com).

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## Certainty Support

Radware offers technical support for all of its products through the Certainty Support Program. Each level of the Certainty Support Program consists of four elements: phone support, software updates, hardware maintenance, and on-site support. Radware also has dedicated engineering staff that can assist customers on a professional services basis for advanced project deployments.

## Learn More

To learn more about how Radware's integrated application delivery & security solutions can enable you to get the most of your business and IT investments, email us at [info@radware.com](mailto:info@radware.com) or go to [www.radware.com](http://www.radware.com).

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