

# SMOOTH THE TRANSITION TO THE CLOUD WITH RADWARE'S SECURE ADC SOLUTIONS

Radware's ADC solution is an agile and scalable secured application delivery solution, which supports organizations transitioning to the cloud. By leveraging instance-level automation, Alteon's application delivery services can be leveraged before, during and after integration with cloud orchestration solutions and private and public cloud services. Its licensing solution ensures complete investment protection, as services can be moved between on-premise and cloud-based environments.

#### **THE CHALLENGE**

Many enterprises are in the midst of transitioning to the cloud, whether transferring to a public cloud, building their own private cloud or managing a hybrid deployment. As a result, their focus shifts from infrastructure-centric environments to application-centric solutions. This creates the unique challenge of how to make advanced services, such as application delivery and security simpler to consume and maintain and also answer the need for faster deployment times across multiple environments, including private data centers and various public cloud providers.

In this fluid environment, where new services are being frequently added and old ones continuously updated, the new paradigm requires support across multiple environments. These challenges make it increasingly difficult to properly plan the standard lifespan of ADC and security products between three and five years. This inability to appropriately plan can lead to significant cost increases.

Another challenge that arises from the "cloudification" of IT is the creation of a coherent management and control solution with generic process automation to allow for the seamless transition of services (with all required ADC and security components) across heterogeneous environments.

As development teams select the cloud infrastructure, the network administrators lose visibility and control yet remain accountable for SLAs. This is due to the growing use of nonstandard, open-source ADC and security tools, such as HAProxy, NGINX, Envoy and others. Deploying those tools in environments like Kubernetes, where the network administrators have no control, makes their task of managing the SLAs more challenging.

Monitoring the user experience, application performance and what impacts SLAs becomes a bigger challenge in a cloud environment. Many of the infrastructure components responsible for delivering the application are abstracted and often housed at remote locations. As a result, many organizations transitioning to the cloud lack the visibility to maintain an application SLA or to identify application problems in a timely fashion.

The cloud is often perceived as a more flexible and cost-effective opex-based expenditure model, which can easily adjust to the increasingly dynamic needs of an organization. However, some virtualized components that are deployed in a cloud environment deliver poor performance compared to their physical brethren. One example is processing SSL encrypted traffic, which requires dedicated acceleration hardware to be cost-effective at scale. However, virtualized cloud ADCs and other security devices lack the necessary hardware and, as a result, provide a poor price-performance ratio, thereby undermining the main benefits of transitioning to the cloud.



## **THE SOLUTION**

Radware's Alteon ADC and array of security solutions enable organizations to make a smooth and cost-effective transition to the cloud. Radware provides scalable and secure ADC services, which can be deployed and maintained effortlessly anywhere and anytime with built-in automation. Alteon allows organizations to instantly configure, license and provision new ADC services across multiple environments. Its cybersecurity functionality allows network and application protection to be included as part of any application delivery service provisioning.

#### **Complete ADC Services Life Cycle Automation**

One of the biggest benefits of Radware's solution is its ability to automate nearly any process related to the life cycle of the ADC and/or security service. The automation tool enables organizations to create personalized automation scripts for provisioning new ADC and security services across multiple devices and multiple environments. Complex configuration of ADC and security services can be translated into personalized wizards to allow employees with no application delivery or security expertise to set up and configure devices or services. The same goes with maintenance and reporting tasks. Organizations can automatically gather information about Radware's ADC and security services required by a specific organization or department.

The transition to the cloud often implies going beyond device-level automation. Radware provides an automation solution based on the vDirect automation plug-in. vDirect reduces the investment required in integrating with third-party orchestration systems, such as OpenStack, Cisco's ACI, VMware NSX and Ansible, with prebuilt workflows that abstract the ADC and security services. In addition, all the custom scripts prepared for automating these processes can be utilized as workflows by the orchestration solution, thereby allowing IT teams to reuse these scripts.

Radware's automation capabilities ensure applications always get the resources they require. Its built-in automation constantly monitors virtual device resources, regardless of which environment they are deployed in, and scales them as they reach a predefined utilization level or decommissions unused resources.



### Invest Once, Use Anywhere

IT transition projects, like the transition from a standard physical data center to the cloud or a software-defined data center, often require investment in the "old" environment to enable migration to the new one. Radware's solution eliminates the growing complexity of planning and sizing by allowing customers to acquire a single license for all their ADC and application protection needs. This <u>license</u> can then be used to set up as many ADC instances as required and seamlessly move them to the cloud when needed without investing in separate ADC licenses for each environment. If more capacity is required, Radware's automation solution can automatically allocate additional capacity from the same license pool. If an ADC service is no longer required, its capacity can be automatically reassigned to the organization's license pool for use elsewhere.



Another benefit of Radware Alteon is its high performance leveraging a small server footprint, especially for SSL processing performance. This ensures that the cost remains optimized when transitioning from dedicated hardware-based ADCs (with SSL acceleration cards) to virtual appliances.

#### **SLA Visibility**

To ensure application SLAs, Alteon includes a built-in SLA management and analytics tool, which collects information from the various applications and generates reports that deliver real-time information regarding SLA breaches. The analytic engine enables IT managers to identify if an SLA breach has occurred and if it was due to a network or application issue. It will also help identify if a specific server is the cause of the slowdown.

#### Standardization of ADCs from Development to Production

Radware Alteon enables self-service consumption of ADC services. This allows application teams with no ADC or security expertise to consume standardized ADC services and allows network administrators to account for their respective solutions. Radware's solution also addresses dynamic CI/CD requirements, so the entire life cycle of the application leverages the same standardized, secured ADC solution.

#### **BENEFITS**

Eliminate risks associated with planning ADC infrastructure by using one flexible license to purchase the exact ADC capacity required. This provides complete agility for every aspect of ADC services consumption.

- > Provision new security and ADC services, when and where they're required, at the click of a button
- > Provide self-service consumption of complex ADC services via simple wizards
- > Move ADC capacity and licensing across environments
- > Deploy automation scripts to automate specific workloads and processes

Obtain maximum automation with minimal investment via out-of-the-box integration with infrastructure orchestration systems. This includes the ability to reuse device-level automation scripts for integration with SDDC orchestration systems.

Protect your investment when transitioning to the cloud by seamlessly transitioning capacity across different environments using Radware's Global Elastic License.

Ensure an excellent price-performance ratio across physical, virtual or cloud-based environments with maximum SSL performance using a minimal server footprint.

Ensure application SLA by proactively identifying and resolving SLA breaches via monitoring and reporting application SLAs. Also automatically adjust the services' capacity as applications scale.

Standardize ADC services by providing a self-service portal with predefined ADC service templates and security policies that can be seamlessly consumed by DevOps and application teams.



## About Radware

Radware<sup>®</sup> (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.

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