

# UNIFIED ACCESS CONTROL AND RADWARE APPLICATION DELIVERY SOLUTION

## Provides Redundancy and Persistency for Juniper Networks IC Series UAC Appliances

### Challenge

As enterprises expand access to corporate resources for employees, partners, suppliers, and contractors from the LAN, providing access control solutions that tie together the user's identity, device security state and network location in a scalable, highly-available way is key for IT leaders.

### Solution

Juniper Networks Unified Access Control combined with Radware's Application Delivery solution provides a best-of-breed solution for a scalable, highly available, secure access control infrastructure for policy-based 802.1X access.

### Benefits

- Ensure business continuity through highly-available secure access control infrastructure
- Reduce total cost of ownership and leverage investments through simple, flexible and scalable access control infrastructure
- Ensure compliance with government regulations with highly responsive, always-on access security policy and enforcement

Today's network and applications are no longer separate from your business—access to them must be secure but pervasive. Enterprises need an access control solution that ties together the user's identity, device security state and network location, and can uniformly enforce policy across a growing number of diverse users and devices demanding access to the network and applications—most of which are not managed by the enterprise.

Juniper Networks IC Series Unified Access Control Appliances are the hardened, centralized policy servers at the heart of Juniper Networks® Unified Access Control (UAC), which delivers a standards-based, comprehensive network and application access control solution. UAC combines user identity, device security, and health state, and location information for session-specific access policy by user, leveraging existing network investments that include AAA infrastructure, 802.1X switches or access points, Juniper Networks firewalls (including Juniper Networks SSG Series Secure Services Gateways and Juniper Networks ISG Series Integrated Security Gateways), Juniper Networks EX Series Ethernet Switches, and Juniper Networks IDP Series Intrusion Detection and Prevention Appliances.

The IC Series also features integrated RADIUS capabilities from Juniper Networks SBR Series Steel-Belted Radius Servers, enabling support for an 802.1X transaction when an endpoint enters the network. The IC Series can create dynamic policies which are then propagated throughout the network to enforcement points that include vendor-agnostic 802.1X-enabled switches and access points, any Juniper Networks firewall/VPN platform or both, for even greater granularity. The IC Series also leverages the market-leading Juniper Networks SA Series SSL VPN Appliances policy control engine to seamlessly integrate with an enterprise's existing AAA/identity and access management infrastructure, and can empower the use of group memberships in authorization directories.

### The Challenge

As the IC Series is responsible for the successful completion of all access control operations requiring interoperability with identity and access management infrastructure, it plays a critical role in the data center. To ensure business continuity, it is imperative to have the business's access control solution operating at all times.

Specifically, it is required to maintain session persistency in order to eliminate session re-authentication for sessions that have already been authenticated.

To ensure the high availability (HA) and scalability of the AAA servers used by the IC Series, it is required to deliver a redundancy solution for the AAA servers in case any of them become unavailable.

As access networks grow and endpoints compete for both internal and external network access resources, there is a continuous need to maintain response times and service availability, guaranteeing the highest quality experience for the end user.

## Solution Provides Persistency and Redundancy

Radware Application Delivery Controller (ADC) and Juniper Networks IC Series Unified Access Control Appliance joint solution is designed to provide a highly scalable and highly available subsystem for deploying Policy Management Infrastructure and supporting business-critical AAA identity and access management infrastructure. Using advanced health monitoring of AAA protocols such as RADIUS, Radware ADC can validate the availability of these servers as well as deliver load balancing, redundancy and persistency features. These capabilities ensure that the Infranet Controller is highly available and that traffic loads are evenly distributed to ensure a consistent user experience.

Radware ADC scales IC Series appliances and manages the health and user session state of IC Series resources, dynamically protecting session loss and ultimately insulating a security layer service vital to the safety and successful access to network resources. Using this important health monitoring information, Radware ADC provides the most granular load distribution possible across IC Series UAC Appliances. Radware ADC maintains the client's sessions for persistency and works in conjunction with IC Series state replication logic to ensure session survivability through IC Series failover events. Together, the two components ensure zero loss connectivity offering a best-of-breed solution.

Radware ADC provides RADIUS support including L7 transaction persistency for all RADIUS flows including authentication, accounting and proxy, preventing already authenticated sessions from being re-authenticated. The solution also provides transaction-based load distribution, delivering load balancing of AAA transactions.

## Features and Benefits

Using IC Series UAC Appliances and Radware Application Delivery Solution (ADC), customers can receive the following key business benefits:

- Advanced network protection—to ensure uniform network protection and enforcement of session-specific access policy by user via any new or existing vendor-agnostic, 802.1X-enabled switches, access points or other devices, any Juniper Networks firewall/VPN platform or both, saving time and delivering network investment protection.
- Control, visibility, and monitoring
- Identity-enabled profiler—to allow enterprises to know who is accessing their network and applications, and when they are being accessed, directly addressing regulatory compliance and auditing requirements.
- Role-based application of security policies—to deliver the ability to populate user/role information in network infrastructure products for network/application access.
- Simple, flexible access control—to deliver vendor-agnostic access control and seamless support for heterogeneous networking environments, enabling enterprises to deploy access control quickly, simply and flexibly without requiring forklift upgrades, saving time and cost.
- A complete HA and high-performance access control solution—by leveraging Radware Application Delivery Solution capabilities, the Infranet Controller access control solution is now always available and always highly responsive.

## Solution Components

Radware AppDirector on OnDemand Switch  
Juniper Networks IC Series UAC Appliance  
Software: Release 2.1  
Platform: IC4000 and IC6000

## Summary – Scalable, HA Universal Access Control for Today and Tomorrow

The challenges associated with providing secure access to critical corporate resources for all users requires highly-available and responsive infrastructure that can combine a user's identity, device posture and network .

Juniper Networks' flexible and feature-rich Unified Access Control solution coupled with Radware's Application Delivery solution provides customers with an extremely scalable, highly-available access control infrastructure that reduces the total cost of ownership and ensures compliance with government regulations, both today and in the future.

## Next Steps

For more information, please contact your local Juniper Networks or Radware sales representative.

## About Juniper Networks

Juniper Networks, Inc. is the leader in high-performance networking. Juniper offers a high-performance network infrastructure that creates a responsive and trusted environment for accelerating the deployment of services and applications over a single network. This fuels high-performance businesses. Additional information can be found at [www.juniper.net](http://www.juniper.net).

## About Radware

Radware, the global leader in integrated application delivery solutions, assures the complete availability, performance and security of business-critical applications for more than 5,000 enterprises and carriers worldwide. With Radware's comprehensive APSolute suite of application front end, access and security products, companies can drive business productivity, improve profitability, and reduce IT operating and infrastructure costs by making their networks "business-smart."

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