The Barracuda Web Application Firewall: Simple and Versatile Solutions for Identity and Access Management

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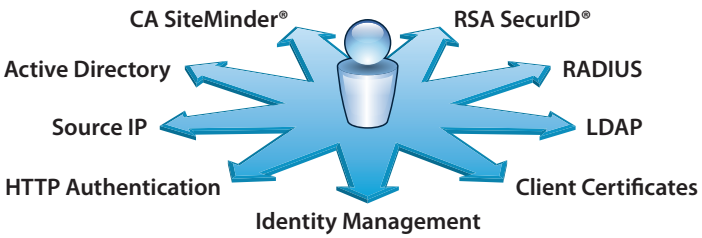
Introduction

Data center security teams are being challenged to rapidly deploy and secure new applications while controlling costs and improving efficiency. Barracuda Networks provides a complete and comprehensive application control platform to address this challenge. Barracuda Web Application Firewalls extend traditional application firewall delivery capabilities to support comprehensive Identity and Access Management (IAM), ranging from simple application authentication and authorization up to fine grained, full featured Single Sign-On (SSO). This integrated capability is simple, versatile and easy to deploy and is available on all models of the Barracuda Web Application Firewall.



Concepts and Benefits

Access Management systems support authentication, authorization and accounting (AAA). In the context of Web applications, auditing is used in place of accounting.

1. **Authentication** is the process of verifying the digital identity of a client using the credentials provided by the client. This is normally accomplished by matching the client credentials, such as user ID and password, against an **authentication service (AS)**, which maintains credentials in an **Authentication database (AD)**. Normally, such services also provide for hierarchical grouping of users for ease of management.

2. **Authorization** is the process of verifying that the client, once authenticated, has access rights to a Web resource. For example, an authorization rule may be created to allow clients access to the organization's partner portal only when they belong to the "partners" group in the AD.

3. **Auditing** is the process of tracking the user activities and resource usage through audit log trails, alerts and reporting. This is also important for meeting compliance regulations such as PCI and HIPAA.

The main benefits of using external authentication services for an organization are flexibility of user access control functions, increased scalability, standardized authentication methods, and high availability.

The Problems with Traditional Access Management Implementations

As in any deployment, multiple heterogeneous applications and Web servers act as clients to an authentication service. The success of the implementation depends heavily on the interoperability of all the components from different vendors with the authentication service. This scenario presents a number of issues, as discussed below.

1. **Application modification:** Building authentication and authorization into the applications requires significant changes to each copy of each application within the DMZ. This entails API implementations, platform specific support procurement, and ongoing maintenance issues.

2. **Web Server Plugin Availability and Management:** Web servers typically require add-in modules for integration with authentication services, which may be provided by the Web server vendor, the authentication server vendor, or a third party. Often these add-ins are available for limited platforms and interoperability tends to be poor.

3. **Change Management Issues:** Changes must be standardized across all the applications or servers. Third party add-ins may require frequent updates to keep up with the evolving platform and some often reach end-of-life. Interoperability issues may require upgrade or downgrade of the Web server, which may conflict with change management processes.

4. **Network Management Issues:** Web servers typically reside in the DMZ, whereas the authentication servers are a part of the enterprise server farm. The entire intermediate network infrastructure must be configured to allow the individual Web servers to access the authentication servers.

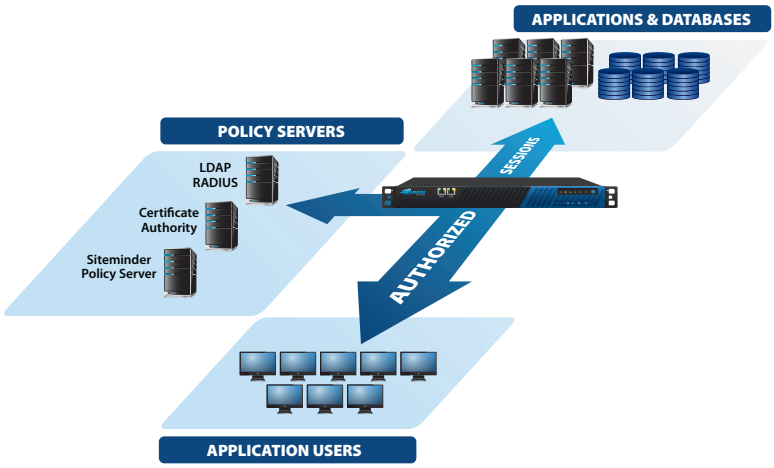
5. **Limited Web Authorization Support:** Often, AAA systems do not offer flexible authorization policy specifications for Web resources, as they do not have adequate visibility into the application constructs being used for resource specifications (such as URL query and FORM parameter values).

6. **Lack of Centralized Auditing:** Administrators need to ensure that user audit trails are properly configured across all the applications. There is no consolidation of such disparate audit trails, which is often necessary for meaningful analysis or forensics.

7. **Single Sign On:** Performing single sign on can be a significant challenge when multiple applications are deployed across multiple heterogeneous servers.

A simple solution for Application Identity and Access Management

The Barracuda Web Application Firewall assists organizations with the complex task of implementing authentication, authorization and auditing functions across heterogeneous Web applications. It intercepts user requests and enforces external authentication on behalf of the protected applications, acting as a centralized authentication, authorization and auditing management endpoint in the network.



Benefits and Features

- **Simple.** The appliance solves the authentication and authorization problem for an entire Datacenter.
- **Versatile.** The appliance scales to provide multiple methods of authentication and authorization integration.
- **Standards based support.** Traditional methods using LDAP, RADIUS and Active Directory are easily supported and augmented.
- **Internal authentication database** is included in the system for small user groups that do not have directory services deployed in their network.
- **Powerful proxy** ,Web Address Translation, Request/Response Rewriting and Strong Cookie Session Management provide the ultimate single sign on portal. One system controls user's authentication rights and which applications they can access, thus negating the need for application modification and Web server plugin management issues.
- **Fast and efficient Client SSL Certificate deployments** are easily achieved by using the extensive SSL capabilities of the Barracuda Web Application Firewall.

- **Integration with industry leading solutions.** The Identity and Access Management solution is now available with CA SiteMinder®as the policy decision point and the Barracuda Web Application Firewall as the policy enforcement point. Full scale advanced authentication and authorization, along with identity management is now available with the integration of the CA SiteMinder® Policy Server.
- **Two factor authentication** is provided by built-in integration with RSA SecurID®. The Barracuda Web Application Firewall integrates with RSA SecurID® to support One Time Password (OTP) token generated by hardware tokens.
- **Integrated Single Sign On** capabilities of the Barracuda Web Application Firewall enable architects to easily integrate multiple applications into a single portal.
- **Extensive logging** capabilities on the Barracuda Web Application Firewall provide visibility and enable administrators to build comprehensive access control policies.
- **Centralized user audit trail and reports** help in meeting compliance, forensic and client analytics requirements.

A Complete, Simple and Versatile solution for Application Identity and Access Management

The Barracuda Web Application Firewall delivers a wide range of Identity and Access Management capability services. Whether it is simple single sign on (SSO) using LDAP, RADIUS, Active Directory, the Internal Database, RSA SecurID® or Client SSL Certificates with 2-factor authentication, a complete SSO application portal serving many differing applications, or a full-scale identity access management integration with CA SiteMinder®, the Barracuda Web Application Firewall provides a simple, versatile and high-performance solution for access control.

For questions about the Barracuda Web Application Firewall, please visit http://www.barracuda.com/waf or call Barracuda Networks for a free 30-day evaluation at 1-888-ANTI-SPAM or +1 408-342-5400. For more information on our other security and productivity solutions, please visit http://www.barracuda.com/products.

About Barracuda Networks Inc.

Barracuda Networks Inc. combines premise-based gateways and software, cloud services, and sophisticated remote support to deliver comprehensive security, networking and storage solutions. The company's expansive product portfolio includes offerings for protection against email, Web and IM threats as well as products that improve application delivery and network access, message archiving, backup and data protection.

Coca-Cola, FedEx, Harvard University, IBM, L'Oreal, and Europcar are among the more than 100,000 organizations protecting their IT infrastructures with Barracuda Networks' range of affordable, easy-to-deploy and manage solutions. Barracuda Networks is privately held with its International headquarters in Campbell, Calif. For more information, please visit www.barracudanetworks.com.

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