Thinking FedRAMP?
Don't Deploy Cloud Without Akamai

Federal Agencies Multiply the Value of their Cloud Strategy with FedRAMP^2: Combining Akamai's FedRAMP Content Delivery Network with a certified Cloud Solution Provider (XaaS) may help agencies to capture more value from their Cloud Strategy in less time. We call this approach FedRAMP^2 (FedRAMP "Squared").

Together, Akamai and FedRAMP-certified Cloud Solutions Providers (CSP's) make it easier for your agency to get to the cloud. FedRAMP^2 multiplies two cloud solutions together using a strategy designed to help agencies achieve mission objectives faster and more cost effectively by leveraging secure, accredited cloud solutions. This powerful combination streamlines your efforts to:

- Protect an agency's on-line reputation, transparency, and business initiatives,
- Provide a high-performing and engaging on-line experience to your constituents,
- Reduce accreditation resource requirements, which can lead to cost of ownership savings, and
- Provide improved availability and visibility into agency cloud-based web operations.

Agency Online Presences Are Critical For Mission Success and Public Engagement

Federal Agencies leverage online operations as a primary means to engage the public in good times and emergencies. This presence provides a means for the public to conduct business and engage with agencies in a simplified, secure, and time saving manner. This online presence is the first, and sometimes only, driver of the public's perception of the security, performance, and overall reputation of a given agency.

FedRAMP^2 Provides a Comprehensive, Higher Value, Lower Risk Agency Cloud Strategy

Agencies are able to faster realize their online objectives by combining their CSP with Akamai's globally distributed content delivery network (CDN). Businesses and governments around the world use this proven platform to make their online presence faster, more reliable, and more secure. This is value that agencies can quickly leverage today. A cloud-hosting provider alone cannot provide the security, availability, or consistent performance agency constituents expect and demand. A cloud solution without Akamai in front risks increased downtime, slower performance and poorer public perception of valuable agency services.
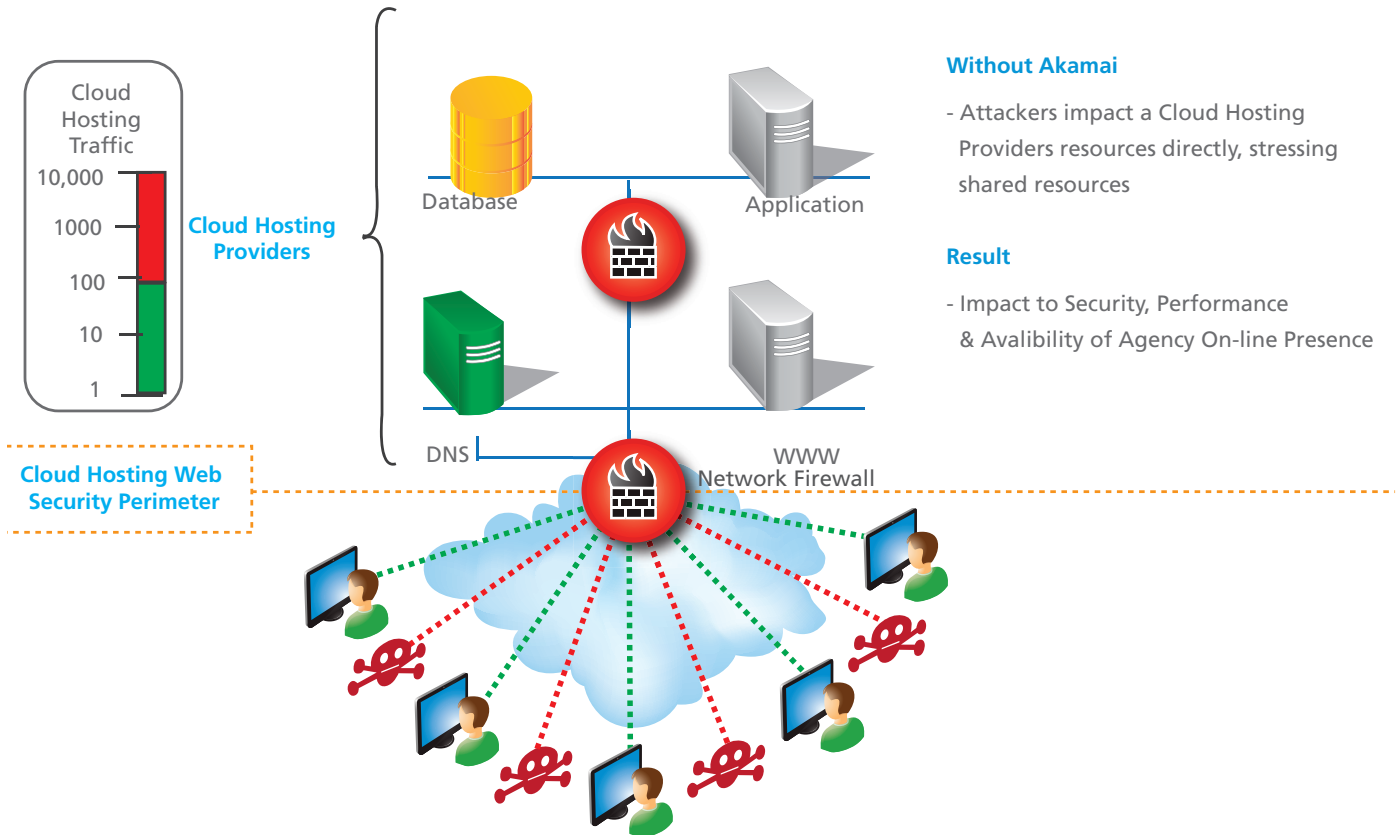
BENEFITS

- Enhanced security, availability, scalability and performance of all your cloud deployments
- Extends your perimeter of defense to the edge of the cloud
  - Security without sacrificing performance
  - Centralized control with distributed protections
- Unmatched cloud based scalability (20+ Tbps peak)
- Improved Visibility of Cloud Operations
  - Gain instant visibility into usage across your application portfolio, regardless of where applications are hosted
  - Monitor detailed application performance, usage, and end-user experiences for all applications for a visibility that no CSP can provide alone
- FedRAMP Moderate compliant CDN with 140,000+ servers in 92 countries
- Satisfy up to 5 OMB Mandates (FedRAMP, IPv6, DNSSEC, Cloud First and Federal Data Center Consolidation) by using the Akamai platform

A Single Cloud Stack with a FedRAMP Certified Cloud Solution (IaaS, PaaS or SaaS)

Security Success Criteria

- The End User or Public should never know you were attacked.

- As System/Data Owners, you should not see an attack at your origin impact your data's availability, intergrity or confidentiality. But you should know that an attack occured.

Cloud Hosting Traffic

10,000
1000
100
10
1

Cloud Hosting Providers

Cloud Hosting Web Security Perimeter

Database

Application

DNS

WWW
Network Firewall

Without Akamai

- Attackers impact a Cloud Hosting Providers resources directly, stressing shared resources

Result

- Impact to Security, Performance & Avalibility of Agency On-line Presence

Unlike the risks described in the Figure above, when using the FedRAMP^2 approach, all online requests for agency data are first directed to Akamai's Intelligent Platform. This FedRAMP-accredited platform dynamically maps end user requests to an optimal Akamai cloud server for the application of business rules and security policy. Akamai's highly-distributed cloud service allows you to leverage a cloud capability to provide improved end user experiences and defend against attackers close to where they originate. This extends an agency's reach to the edge of the cloud in a manner that provides distributed control and visibility with centralized operations.

FedRAMP^2 Protects Agency Online Reputation and Business Initiatives by Red ucing Risk

As illustrated in the Figure below, the FedRAMP^2 approach places Akamai in front of your CSP to provide a layer of control and enforcement close to where end users and attackers access the Internet. This allows Akamai to apply security policies and mitigate attacks away from your CSP's critical infrastructure and agency data. Akamai is able to do this while maintaining excellent end user performance: gone are the days of choosing between security and performance.
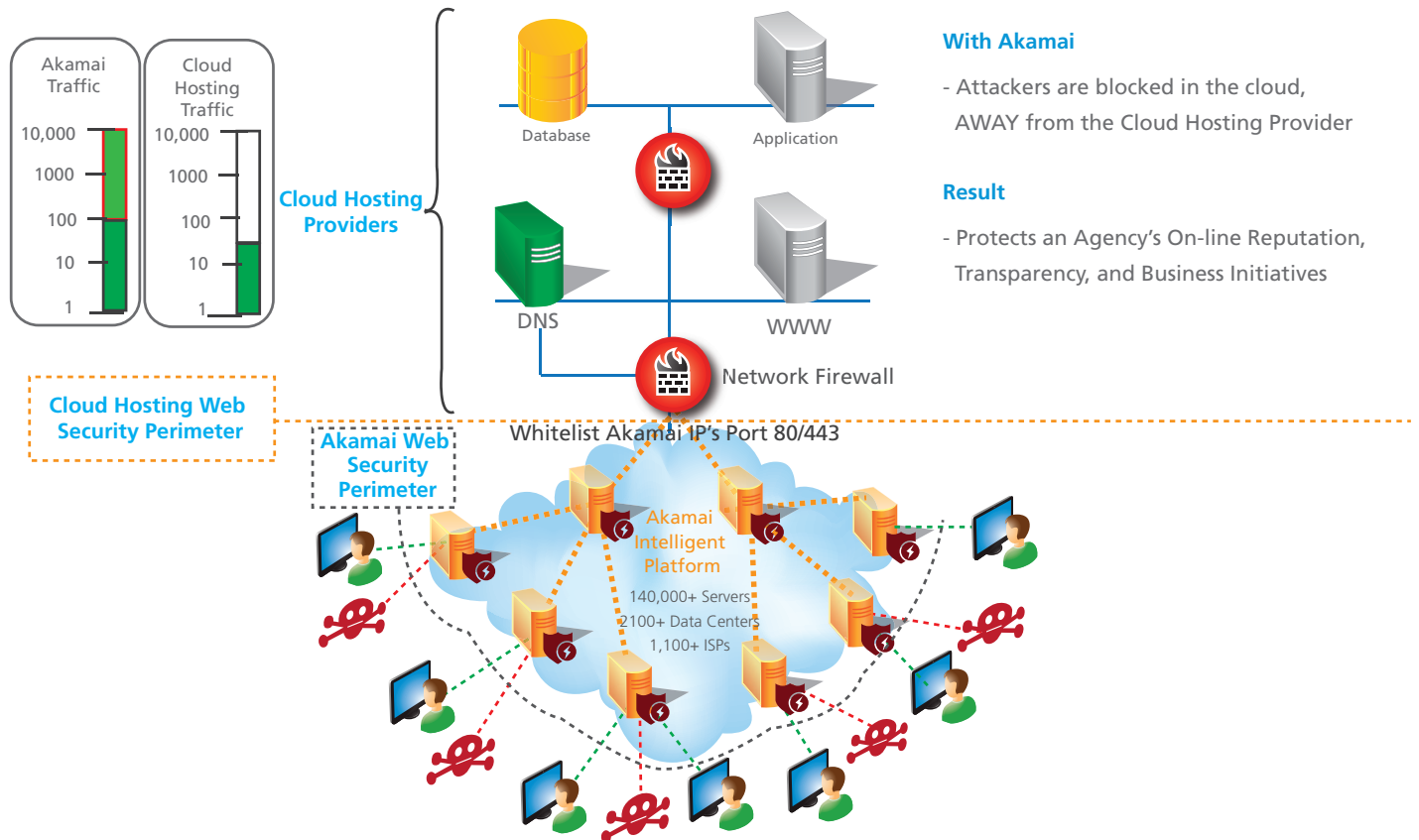
FedRAMP^2 Provides High Performing, Engaging Online Agency Experiences to Constituents

For an agency on a tight budget and limited resources, meeting the public's demand for an engaging and near instant page load times is a difficult challenge to address. Even if a web application has unlimited computing resources and bandwidth, the Internet's "middle-mile" backbone introduces many challenges that degrade performance and end user experience. Akamai's performance solutions stabilize the experience that agency end users will receive. Akamai mitigates against unpredictable network conditions, backbone fiber cuts, and other factors that impact end user performance.

FedRAMP^2 protects an Agency's On-line Reputation, Transparency, and Business Initiatives

Security Success Criteria

- The End User or Public should never know you were attacked.

- As System/Data Owners, you should not see an attack at your origin impact your data's availability, intergrity
  or confidentiality. But you should know that an attack occured.

With Akamai

- Attackers are blocked in the cloud,
  AWAY from the Cloud Hosting Provider

Result

- Protects an Agency's On-line Reputation,
  Transparency, and Business Initiatives

FedRAMP^2 Reduces Costs, Increases Availability, and Improves Visibility for Agency Operations

FedRAMP^2 improves overall resource scaling (bandwidth, server, etc.) within the CSP datacenter(s) by addressing bottlenecks outside of the datacenter and offloading traffic that would have otherwise been directed at the datacenter. This typically results in a dramatic reduction in server hits, freeing up precious server resources. In turn, this can decrease the costs required to operate (CAPEX and OPEX) an agency's online presence within the datacenter. In addition to infrastructure savings, leveraging FedRAMP-accredited cloud solutions will require fewer agency staff and dollars to be directed towards traditional security accreditation efforts that further increase the cost savings of leveraging the FedRAMP^2 approach.

Akamai's failover capabilities enable the agency's online presence to remain available 100% of the time, even when the CSP's (IaaS, PaaS or SaaS) infrastructure becomes unavailable. The FedRAMP^2 cloud architecture can guarantee 100% availability of the website and associated content, even when the underlying cloud hosting provider is not.

The FedRAMP^2 approach provides agencies real-time visibility into the performance and security of agency web-based applications deep into the cloud. Visibility no longer stops at the CSP or traditional datacenter boundary, but all the way to the edge of the cloud. These metrics make provide visibility into who is coming to your site, what they are doing, and whether they are doing something malicious.

Why Akamai?

Akamai addresses many of the concerns that slow or prevent government agency cloud adoption. By providing improved security, performance, scalability, and visibility, Akamai augments hybrid and/or public cloud deployments and extends security beyond data center firewalls to the edge of the Internet. Akamai enables the ease of centralized control with the value of distributed defense based on a proven platform used by leading businesses and government agencies around the world!

Akamai *FASTER FORWARD*

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