# ADOBE COLDFUSION MX/JRUN

## Integrating Adobe ColdFusion MX/JRun Servers with F5's Application Delivery Network

### Executive Summary

F5 Networks and Adobe® are helping enterprises maximize the efficiency of their networks with a joint solution for ColdFusion MX/JRun servers (formerly Macromedia®) that is secure and scalable, providing intelligent performance and high availability for today's enterprise applications. With this solution in place, enterprises reduce network complexity, improve network efficiency, satisfy customers, and lower the cost of doing business.

F5 Networks' BIG-IP Local Traffic Manager, a uniquely featured, high availability and security solution, adds significant value to a Macromedia network enterprise server implementations by increasing its performance, providing high availability, and reducing management duties and their associated costs. The BIG-IP system has always provided unmatched scalability, high availability and security for applications and web services. Now with version 9, the BIG-IP system complements this foundation with industry leading performance and optimization features that result in substantial performance improvements for the end user.

The F5 FirePass SSL VPN extends secure access to this highly available, optimally performing network to remote users. With the FirePass controller, employees or partners can access ColdFusion resources from any device in any location as easily and securely as from within the corporate LAN.

### Challenges

Providing high availability, increased uptime, performance, scalability, and enhanced security for Internet applications is critical for both large and small companies. Scaled solutions need assurance that all business-critical traffic is properly distributed across the available resources and delivered to the intended destination. Flexible deployment scenarios are needed to easily accommodate infrastructure modifications, without costly disruptions.

### Solution

By taking advantage of its large and exclusive feature set, the BIG-IP product increases the availability, scalability, performance and security of ColdFusion deployments. The flexibility of this solution allows enterprises to manage their needs by providing the tools to quickly deploy additional server resources and easily support ongoing maintenance tasks, all while remaining transparent to the end-user.

Using its unique Extended Application Verification (EAV) advanced health checking capability, the BIG-IP product can detect unavailable servers and malfunctioning applications, then dynamically reroute traffic to healthy resources without requiring application modifications, agent installation or additional network protocols.

Through the use of iControl®, F5 Networks allows administrators and application developers the ability to further automate and integrate their existing infrastructures with their network policies to influence and shape network traffic.

The BIG-IP product's onboard SSL encryption and decryption capability also increases an organization's return on investment by offloading processor-intensive tasks from the enterprise servers allowing them to fulfill more client requests faster and more efficiently.

Version 9 of the BIG-IP system's TCP Express feature provides a number of enhancements and optimizations to TCP handling. Utilizing independent client and server side TCP stacks, the TCP Express features bridge the gap between client and backend servers, optimizing each connection independently. This functionality also enables the BIG-IP device to shield and transparently optimize non-compliant TCP stacks running across servers within the corporate data center, thus providing dramatic performance improvements.

Utilizing this TCP/IP proxy architecture, TCP Express also ensures both client and server are transmitting data at the optimal rate, thus reducing user download times, improving bandwidth link utilization for a site, and minimizing errors associated with lost and reordered packets. With the content spooling component of TCP Express, the BIG-IP system provides additional benefits for communications to any endpoint, allowing servers to process their workloads more efficiently, increasing server capacity for any application running through the BIG-IP device, and improving end user experience.

Utilizing these TCP optimization features, the BIG-IP system provides the highest level of optimization, packet loss recovery and intermediation between suboptimal servers and clients. Thus the solution helps reduce inefficiencies in the network while dramatically improving overall performance, decreasing the cost and complexity of the deployment, and reducing the need to update servers.

### About Adobe

Adobe revolutionizes how the world engages with ideas and information. ColdFusion® has been adopted by hundreds of thousands of developers as a result of their open, extensible architecture. It integrates easily with existing systems and possess built-in application and infrastructure services that help you present information elegantly and achieve the highest level of performance.

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## Solution - Continued

With F5's FirePass controller, organizations are able to extend access to highly performing server resources to their remote workforce, partners, or customers. The FirePass SSL VPN provides secured, clientless access to off-sight users as easily as if they were in the in the corporate LAN. Once authenticated by the FirePass controller, users pass through the corporate firewall and are able to access ColdFusion applications from any device in any location without having to re-authenticate for multiple resources. The FirePass controller's compression capabilities provide additional server offload and performance gains while securely delivering business-critical content to users accessing applications on the servers remotely. The FirePass controller also offers network administrators simplicity and granular control of access to intranet resources on a group basis, improving quality of service for the enterprise while reducing overhead.

## Benefits

**Enhanced Security -** The BIG-IP device includes numerous security features that enforce, fortify, and accelerate the secure delivery of applications and Web services. It's the first solution that can automatically respond to, act upon, and prevent changing security threats - providing a coordinated and unified line of defense, while improving the performance of other security products in the network. It enables stringent access control, secure administration, and helps resist common attacks, such as Denial of Service, Nimda, Code Red, Syn Ack Floods, and many more.

**Simple Scalability** - The BIG-IP system provides a highly scalable solution that allows enterprises to meet growing organizational demands on Web and application resources. If one service is nearing capacity, scaling it is as simple as adding another instance of the service to your network and then to the BIG-IP load balancing pool. The BIG-IP solution allows organizations to scale their applications horizontally, providing considerable cost savings.

**Increased Server Efficiency** - Version 9 of the BIG-IP product, with its full proxy TMOS engine, utilizes independent client and server side TCP stacks to optimize communication for every end device connecting through the system. This optimization takes place up and down the entire stack, from the transport layer to the protocol and application layers, taking the workload off of the servers for increased server efficiency. The BIG-IP system's TCP Express optimization also dramatically improves the reliability of WAN communications.

## About F5

F5 Networks is the global leader in Application Delivery Networking. F5 provides solutions that make applications secure, fast and available for everyone, helping organizations get the most out of their investment. By adding intelligence and manageability into the network to offload applications, F5 optimizes applications and allows them to work faster and consume fewer resources. F5's extensible architecture intelligently integrates application optimization, protects the application and the network, and delivers application reliability—all on one universal platform. Over 10,000 organizations and service providers worldwide trust F5 to keep their applications running. The company is headquartered in Seattle, Washington with offices worldwide. For more information, go to www.f5.com.