F5 White Paper

Optimizing the Business of IT

Learn how to realize the business benefits of the F5® BIG-IP® version 10 system.

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Contents

Introduction

IT organizations have always been "under the gun" when it comes to serving their ultimate customer: the business. Pressures from budgetary constraints and an uncertain economic future fuel the need to deliver applications and develop an infrastructure that not only addresses technical needs but provides real value to the business.

It is no longer enough that products simply solve technical problems. They must also address less tangible issues as well as the "soft costs" associated with IT, such as productivity and process management. Because companies need to configure and manage many disparate solutions in order to achieve their various technical goals, and because there is an inherent lack of connectivity and intelligence inherent in most infrastructure solutions today, these IT soft costs become a reality to most organizations.

Today's CIO is tasked with more than just implementing a secure, fast, and reliable application network over which business-critical applications can be delivered. In addition, today's CIO must also drive business value through the implementation of solutions that gain a technical advantage for the business, provide for the rapid deployment of new applications that enable the business to take advantage of new opportunities quickly, and broaden customer relationships.

But CIOs can't ignore the directive to reduce costs and increase efficiency, especially given today's economically constrained environment. Consolidation and globalization are top concerns, as is improving workforce efficiency both in business and IT.

The Business Value of the F5 BIG-IP Version 10 System

The F5® BIG-IP® version 10 (v10) system provides a unified application delivery solution capable of supporting the priorities of today's CIO. BIG-IP v10 enables IT to streamline application delivery—reducing costs through consolidation and optimization—and increases IT and workforce efficiency with improvements in performance, manageability, and control over the infrastructure and applications it supports.

Streamline Application Delivery

The version 10 release of F5's BIG-IP system unifies acceleration, security, and availability services on a single platform, eliminating many of the bottlenecks inherent in an application delivery architecture comprised of disparate point solutions.

BIG-IP v10 combines WAN and LAN application delivery with security services to achieve a single, consolidated application delivery solution that not only streamlines the actual delivery process, but also optimizes the deployment and subsequent day-to-day management of the entire application delivery process. A single, consolidated interface and management system greatly simplifies the complexity that often delays application delivery processes and impedes the rapid deployment of new applications.

With the addition of WAN Application Delivery Services, BIG-IP v10 brings improved acceleration and optimization of site-to-site applications and data transfers. WAN Application Delivery Services comprises enhanced Layer 7 Rate Shaping, QoS, and a new acceleration framework with iSessions™. iSessions enables two BIG-IP devices to communicate using a secure, optimized connection; this saves WAN bandwidth and improves the speed of data replication, backup times, and the transfer of data between data centers or geographically separated corporate locations. Integrating WAN optimization and acceleration with core BIG-IP system features—like availability and security—reduces the number of physical devices that are necessary in the data center to improve performance of WAN-delivered services and applications. Combining more a efficient use of bandwidth with compression, encryption, and layer 7 Quality of Service (QoS) features in BIG-IP v10 WAN Application Delivery Services delivers a vastly improved application user experience regardless of from where the application is accessed. The resulting consolidated management decreases the time necessary to configure and deploy policies that govern the acceleration and security of applications and data traversing WAN and LAN links.

Streamlining application delivery with the unified delivery capabilities of BIG-IP v10 improves performance and availability; this increases the ability to meet application and user SLAs over both WAN and LAN connections. In addition, by using the intelligence inherent in BIG-IP devices, IT can create policies that ensure the best performance possible based on the context of the request. By providing WAN Application Delivery Services with access to that same intelligence, BIG-IP v10 devices can apply improved acceleration and security policies, thus streamlining application delivery processes.

Increase IT Efficiency

Improving the efficiency of IT and the processes it uses when applications and services are deployed can dramatically improve the efficiency of the business by enabling a quick response to new opportunities.

With the new and improved manageability features such as application policy templates, dashboards, and centralized performance monitoring and management, BIG-IP v10 supports increased IT efficiency. Combined with a streamlined application delivery process, these manageability-focused features afford greater efficiency by reducing the time and effort required to deploy and manage business-critical applications.

F5 Application Ready Templates are pre-configured, unified policies developed in conjunction with application partners that help streamline the application delivery configuration process. Application Ready Templates in the new version of BIG-IP devices significantly reduce the time required for the deployment of application-specific delivery policies. Using certified, pre-configured templates as a starting point, a brief step-by-step process customizes security, availability, and acceleration policies for unique deployments. Application templates and their assisted-configuration functionality in BIG-IP v10 greatly reduce deployment complexity and increase efficiency by reducing the time-consuming configuration tweaks often necessary to optimize and secure application delivery.

Dashboards, new in BIG-IP v10, deliver instant visibility into the performance of both the application delivery infrastructure and the applications it delivers. Combined with centralized performance monitoring and alerting capabilities, BIG-IP v10 offers the ability to monitor and report on performance and reliability across the application delivery infrastructure. This eliminates the need to monitor and correlate across multiple application delivery solutions, giving IT the opportunity to proactively intervene at the first sign of potential trouble and avoid outages that negatively impact service level guarantees and availability.

Reduce Costs

BIG-IP v10 provides IT with the means to consolidate their application delivery infrastructure by unifying disparate devices and functions into a single, centrally managed solution.

Reducing the number of point products needed to address negative impacts on workforce productivity and business agility—such as WAN optimization, availability, and application security—greatly reduces the physical footprint

of the data center. This, in turn, decreases the amount of power, space, and cooling needed to maintain reliable and well-performing applications. The unified architecture of BIG-IP v10 promotes consolidation efforts across both the application delivery infrastructure as well as in the physical application infrastructure without sacrificing critical service level guarantees or capacity necessary to meet demand.

New functionality in BIG-IP v10—such as resource provisioning and route domains—coupled with existing administrative domain capabilities enables IT to virtualize application delivery functions across departments. Sharing the investment in a unified application delivery solution across business constituents increases the return on investment while reducing the complexity inherent in managing multiple devices.

Organizations currently using BIG-IP devices can take advantage of these new features and realize up to a 40 percent return on capacity on existing BIG-IP products. This additional capacity can then be used to provide application delivery services for additional stakeholders and applications, further reducing the number of devices in the data center and driving down related operating costs.

Conclusion

BIG-IP v10 is the first application delivery solution that supports consolidation of disparate application delivery services without sacrificing performance, reliability, or security. This milestone release of the BIG-IP system consolidates WAN and LAN application delivery services and improves manageability of both the application delivery infrastructure and applications it delivers with real-time monitoring, dashboards, and CLI and GUI improvements. BIG-IP v10 reduces complexity in application infrastructure architecture through consolidation and virtualization features and enables the rapid deployment of applications and associated delivery services by providing application templates and guided configuration processes.

By unifying multiple application delivery focused functions in a single device, BIG-IP v10 provides greater opportunity to reduce costs, streamline application delivery, and improve IT efficiency.

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