

IT agility
that drives
business forward



Microsoft, IBM, Oracle, and SAP recommend F5 to their customers.



Aligning business and the IT infrastructure

Business needs place endless demands on your organization's IT infrastructure. For IT, it's no longer enough to fix a slow website or react to user complaints about sluggish applications. Whether it's rapidly integrating a strategic acquisition or bringing products to market more cost-effectively, your organization's ability to address business opportunities and stay competitive—its business agility—is only as effective as its IT agility.

But the challenges to IT agility are constant, increasing, and often unexpected. In traditional IT architectures, static one-to-one connections between technologies create an inflexible infrastructure. Any sudden change in business requirements forces IT staff to respond with manual, one-off technology fixes that consume time and resources.

There is a better way. F5 provides strategic points of control you can deploy throughout your IT infrastructure, enabling you to add, move, or redefine services on demand. You can create, modify, and scale your IT infrastructure to align with the changing demands of your business while supporting your organization's long-term objectives. Instead of constantly reacting to business changes with costly, single-point solutions, you can drive your business forward on a flexible and strategic foundation of IT agility.

Adam Lord •
Director of Infrastructure Services •
American Imaging Management •

“The ability to have a flexible and agile infrastructure that’s going to support the growth of our business is absolutely paramount. By implementing F5 solutions, we’ve positioned our infrastructure to allow our business to grow to virtually any size.”

Challenges to agility

Businesses rely on three core elements: people, the applications they use, and the data that represents the organization's essential business knowledge. It's the role of IT to ensure that these three elements interact quickly, freely, and continuously. When this happens, business flows without constraint.

But when an overloaded e-commerce application leaves people stuck with open shopping carts, or a lack of available storage makes it impossible for employees to save their files, points of friction between people, applications, and data quickly turn into serious business limitations.

Traditionally, businesses address this issue by deploying more servers, purchasing more storage, increasing bandwidth, or adding more staff. At best, this may offer some relief from current problems, but it can also increase complexity, add operating costs, and guarantee that the same issues will return as the business grows. At worst, scaling a static infrastructure with more of the same can create more bottlenecks than it solves.

F5 creates strategic points of control that add agility wherever people, applications, and data interact in the IT infrastructure.

Application
Performance

Storage
Growth

Security

DATA

PEOPLE

APPS

Overcoming the static infrastructure

Key benefits

- Scale without disruption
- Reduce capital and operating expenses
- Achieve high availability
- Simplify infrastructure management
- Secure and optimize any IT environment

F5 helps organizations create an agile infrastructure that ensures people, applications, and data can adapt to business changes and scale seamlessly with any level of growth. The key to achieving this level of agility is replacing the physical, one-to-one connections between technologies in the IT infrastructure with dynamic, intelligent interactions that deliver the best result based on current conditions.

For example, instead of users accessing an application through a fixed, static connection to one physical server, a pool of physical and virtual servers can provide the services they need. When the user request comes in, F5 solutions intelligently assess all of the variables affecting performance, and then dynamically connect the user to the service that will provide the fastest and most seamless user experience.

In this way, F5 “virtualizes” the interactions between each of the technologies in the infrastructure—from client devices to application servers to data storage and everything in between—creating strategic points of control wherever information is exchanged. Your organization can use this control to add capacity and services, move existing resources, and optimize performance, security, and reliability, all while minimizing the costs and impact of these changes on your business.

Building an agile infrastructure

Here are some of the ways F5 helps strategically address the key areas of concern within the IT infrastructure.

Application Performance

When applications don't perform the way they should, e-commerce customers can't purchase their products, employees get slow responses from mission-critical systems, and revenue and productivity decrease. F5 solutions address performance issues at every point in the application delivery process to ensure the best possible user experience at every moment. First, F5 virtualizes the network and applications to remove static performance bottlenecks. Then F5 solutions offload processor-intensive tasks from the application servers to free up server resources to more efficiently handle application-specific processing. As workloads and network conditions change, F5's application and network intelligence dynamically adjusts the flow of application activity. The result is faster, more reliable applications as well as a dramatically more flexible and scalable infrastructure.

Security

Protecting applications and data is vital to the continued success of any organization. Any one of countless threats—a breach of sensitive customer data, a malicious attack, a violation of regulatory requirements—can risk the viability of the business. Yet web applications, which are essential to the flexibility and scalability of your business, can open up your infrastructure to highly sophisticated threats. F5 solutions are uniquely positioned to inspect traffic flow and application data at every layer of your architecture, and to isolate threats before they reach internal resources. Only F5 gives you the ability to apply and finely tune highly detailed security policies across your entire infrastructure. It's a complete solution that eliminates the need for multiple appliances, lowers maintenance and management costs, and increases the confidentiality, availability, and integrity of your applications and systems.

Unified Access

Employees and customers increasingly access your organization's applications and data from different locations, different computers, and even different mobile devices. Delivering consistent and straightforward user access presents many challenges, especially while enforcing distinct security policies for a large number of users across many applications. With F5, you can apply highly detailed security policies that enable users to quickly, easily, and securely connect to the applications and data they need while preventing unauthorized access. F5 even ensures that the particular computer or device being used complies with your organization's unique security policies, such as whether it has an up-to-date operating system or current antivirus software. F5 solutions offer the centralized, highly scalable security and access control your organization needs to protect sensitive data—and comply with security regulations like HIPAA and GLBA—without slowing down performance or productivity.

Scalability

Business growth, bringing new products and services to market, or integrating strategic acquisitions can all place tremendous burdens on your IT infrastructure. Success depends on meeting these scalability challenges without overloading the infrastructure or negatively impacting performance. F5 solutions virtualize the connections between the different layers of the infrastructure so there are no static, one-to-one interactions between the technologies to limit scalability. As you add capacity—whether it's bandwidth, processing power, or storage—F5 solutions dynamically incorporate and optimize access to the new resources. You can add and manage additional resources without adding complexity to the infrastructure and without disrupting the user experience.

Storage Growth

The rapid and relentless growth of the volume of data requiring storage is a significant drain on organizations' resources. Not only is adding storage capacity expensive, but each new storage resource creates another layer of complexity to be managed by IT staff. In addition, the process of moving files from one storage location to another can be extremely disruptive to users trying to access those files. F5 dramatically simplifies data management by automating routine tasks and virtualizing access to files, so users' ability to connect to data doesn't rely on static mappings to physical file storage locations. F5 file virtualization maintains users' access to data even while data migration from one storage resource to another is in progress. By removing the complexity and disruption associated with file management, F5 solutions enable your organization to take advantage of the most efficient, cost-effective storage options that best meet your business needs. The result is greater flexibility, vastly improved scalability, and lower total storage costs.

Business Continuity

Downtime is costly. When servers crash, links to Internet service providers (ISPs) are cut, or entire data centers go offline, business suffers. But with F5 automatic failover capabilities, your business can keep running with little to no impact on users while failed equipment is restored. F5 solutions can dynamically redirect user traffic from an unavailable data center to a properly functioning location, funnel traffic from a bad ISP link to an alternate one, and prioritize available resources according to your business's unique needs. F5 can also ensure that employees working off site have secure remote access to available systems. With F5 solutions in place, your organization has the flexibility to continue serving customers and ensure employee productivity through even the most unexpected business changes.

Dwayne Sye
[Vice President of Technology](#) •
Cvent •

“By shifting the burden from the application itself to the F5 solutions, we are able to get to market faster with new features and upgrades, offer more functionality, and do it all without sacrificing our rigorous availability standards.”

Learn more about IT agility

By giving you strategic points of control wherever information is exchanged in your infrastructure, F5 can help your organization overcome the IT challenges that limit business growth. Contact F5 today to learn more about how you can build a flexible and strategic IT infrastructure to meet your organization's specific business goals.

For more information about achieving IT agility with F5, use the search function on F5.com to find these resources.

Article

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