

THINK BIG IN MANUFACTURING



HIGH PERFORMANCE IT SOLUTIONS THAT
REDUCE COSTS FOR MANUFACTURERS



THE WORLD RUNS BETTER WITH F5.



THINK BIG IN MANUFACTURING

YOU STRIVE FOR LEAN MANUFACTURING... BUT ARE YOU LEAN AND AGILE IN YOUR USE OF IT?

LEAN MANUFACTURING

Lean Manufacturing has become a guiding principle for manufacturing organisations around the world

From the aerospace and automotive industries to the pharmaceutical and food industries, manufacturers of all sizes are firmly focused on streamlining their operations and improving business agility.

But agility is not just determined on the factory floor. Manufacturers today have the opportunity to improve efficiency, speed up processes and cut costs in their business by improving their overall IT performance.

F5 provides a range of application management solutions that can help manufacturers to reduce their IT hardware requirements. With leaner IT infrastructures, companies can reduce the annual cost of IT ownership, while at the same time increase the speed, flexibility, security and reliability of business-critical applications.

F5 solutions can help manufacturers to:

- Cut the cost of IT ownership by reducing the number of different solutions in the network
- Improve network scalability and flexibility to maximise return on investment
- Improve the speed and performance of core applications from vendors such as SAP, Oracle and Microsoft
- Improve the security of valuable intellectual property and protect critical business information in the event of a major disaster
- Minimise network complexity, through the use of one easy-to-use traffic management console
- Reduce power and maintenance costs

F5 SOLUTIONS AND BUSINESS ISSUES

We have to minimise operating costs

Most manufacturers have experienced a dramatic increase in competition in their markets over recent years. New overseas players have grown in strength and are forcing down prices. To survive, manufacturers must cut all unnecessary costs out of their business.

F5 solutions can help manufacturers to achieve this key goal by reducing technology operating costs and network management costs. Our BIG-IP solution incorporates multiple solutions in one box, including advanced health checking, packet filter, TCP Express, SSL acceleration, fast cache, compression, traffic control, load balancing and application security.

By using this integrated suite of solutions in place of separate network products, companies can expect to reduce the number of servers in a data centre by up to 30%. This not only reduces hardware costs by 30%, but also saves on space, support overheads and power expenses too.

The result is a tangible and sustainable reduction in the cost of IT ownership.

Manufacturing companies have often grown through mergers and acquisitions, and this can result in a dispersed, multi-vendor IT infrastructure that is costly and difficult to administer and maintain. BIG-IP offers an advanced Traffic Management Operating System (TMOS), which offers a range of features to simplify network administration. For example, TMOS includes an innovative iRules network programming feature, which allows network managers to set specific rules for the way that different packets are handled and prioritised in the network. This feature, and others like it, helps to reduce costs by enabling IT teams to work more efficiently.

We want to have efficient business processes

Often it is customer service and speed of delivery that differentiate manufacturers. But if IT applications function inadequately, manufacturers can struggle to respond quickly to customer queries and supply chain performance can suffer.

BIG-IP improves the efficiency of supply chains, by making core business applications run more quickly and reliably. Our solutions include market-leading traffic management and load balancing capabilities, which help companies to overcome bandwidth limitations and ensure that users experience high performance and availability, all of the time.

F5 has very strong partnerships with software vendors, including Microsoft, SAP and Oracle and can deliver solutions pre-optimised for the leading enterprise applications.

SAP Application Ready Network:

- F5 can cut SAP Enterprise Portal login time by more than half for WAN users
- F5 can speed document downloads by 4.5x for DSL users, and 40x or more for high bandwidth connections
- F5 can reduce SAP server CPU utilisation by 44%
- F5 can provide a 20x reduction in the number of SAP server-side connections
- F5 significantly reduces bandwidth costs associated with delivering SAP applications over the WAN

THINK LEAN FOR MORE THAN JUST THE PRODUCTION LINE. **THINK BIG.**

Microsoft Application Ready Network:

- F5 WAN optimisations increase SharePoint Portal Server performance by 5x
- Achieve 20 to 30 times bandwidth reduction for remote office SharePoint users
- Gain more than 25% server capacity with SSL and compression offload
- Reduce timeout errors for dialup users by 85%
- Reduce deployment cycles by 1/3rd
- Automate failover, disaster recovery and access control
- With F5, users with email attachments, such as Office 2003 Word documents or Excel files, experience a 90% reduction in download time

For example, through the use of BIG-IP, manufacturers can cut SAP Enterprise Portal login time by more than half for wide area network users and reduce SAP server utilisation by up to 44%. Our solutions also speed SAP document downloads and significantly reduce the bandwidth costs associated with delivering SAP applications.

Most companies have some servers that are under-utilised because they are allocated for specific departments or applications. BIG-IP automatically distributes network traffic over all available servers and balances the load. As a result, manufacturing organisations not only ensure optimum network performance but also increase the return from their existing IT investments.

We must safeguard our future

Like all businesses, manufacturing organisations need to ensure that their business data will not be lost in the event of a disaster such as a hardware failure, fire, flood or terrorist attack. But manufacturers also need to protect their valuable intellectual property against possible industrial espionage and malicious attacks from human rights campaigners or environmentalist groups.

F5's BIG-IP solutions can help manufacturers to guarantee business continuity in any eventuality. F5 technologies give businesses the ability to immediately shift user traffic to redundant sites in the case of a disaster. Equally, our solutions allow businesses to quickly and cost-effectively replicate and move data across wide area networks to allow the creation and maintenance of reliable back-ups.

BIG-IP also enables manufacturers to put in place robust network security and to add in an additional layer (layer 7) of protection specifically for applications. Our solutions provide proactive and comprehensive safeguards against unauthorised access and malicious application attacks, including all common web attacks, such as SQL injection, cross-site scripting, cooking poisoning, buffer overflows, parameter tampering and forceful browsing.

Different sectors of the manufacturing industry are governed by different regulatory authorities, but most organisations today are required to provide data for regulatory compliance and to be able to produce audit trails for their components. If any of this vital data were to be lost, the consequences for the business could be very serious.

The stringent security measures, access control features and data replication capabilities supported by BIG-IP give companies complete confidence that the data they need for regulatory compliance is totally secure.

F5 is the leading provider of advanced platform Application Delivery Controllers (ADCs) with a 38.3% share of the market, according to the Gartner Group.¹ Offering reliability, high performance and flexibility as standard, our solutions can make a big difference to the operational efficiency of manufacturing organisations.

F5 products are highly scalable and are designed to adapt quickly to changing requirements. When organisations need to add a new layer of security or a new traffic management solution, they can simply slot it into the existing hardware. As a result, our solutions can deliver good return on investment over many years.

¹ The Gartner Group Report: Application Acceleration Equipment, 1Q07 (June 2007)

Oracle Application Ready Network:

F5 rigorously tested its technology with Oracle's to deliver categorical performance gains for Oracle Fusion Middleware (including Oracle Application Server 10g, Oracle Portal, and Oracle Identity Management infrastructure components), Oracle E Business Suite 11 & 12, and PeopleSoft 8 & 9.

These performance gains include:

- Less wait time for users – improved login and application speeds up to 3x, with document download times improved by 20x or more
- Less hardware costs for enterprises – F5 solutions offload processor-intensive duties, reducing hardware needs by up to 40%
- Maximised server performance to enable consolidation – ARN best practices can reduce Oracle server utilisation and reduce the number of server-side connections by a factor of 20x

Find out more at: www.f5.com/solutions/

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