



“As a result of integrated SSL acceleration, the customer no longer needs to invest in additional devices and can – as compared with products from other manufacturers – drastically reduce his or her procurement and operating costs.”

Michael Frahn  
Director, Regional Sales  
F5 Networks

## F5's BIG-IP LTM Helps Keep Deutsche Post's PC Postage System Highly Available and Secure

### Industry:

Postal Services/Logistics

### Challenges:

- Reliability issues for PC Postage System

### Solution:

F5's BIG-IP Local Traffic Manager (LTM)

### Benefits:

- High availability for users
- Integrated SSL Acceleration for secure, fast transactions
- Lower administration costs

### Overview

F5's BIG-IP Local Traffic Manager provides IT service provider T-Systems with the tools that allow customers to enjoy secure and reliable access to Deutsche Post's STAMPIT<sup>®</sup> PC postage system. The system allows businesses to purchase postage over the Internet 24/7 and digitally stamp their letters, postcards and business correspondence simply by using a printer and Internet access. Thanks to BIG-IP, thousands of Deutsche Post PC postage customers now have secure, highly available and reliable access to this system – with a lower administrative burden for network administrators working behind the scenes.

### About STAMPIT

Presently, several thousand customers across Germany are already taking advantage of the new PC postage system using STAMPIT<sup>®</sup>, the software from Deutsche Post. Accessing the Internet, customers can purchase postage at any time and digitally stamp their letters, postcards and other items to be mailed, simply by using their printer. With STAMPIT<sup>®</sup>, customers can pay for proper postage no matter where they are – office, home or on a business trip. Besides the software, all that's required is a standard PC, a printer and an Internet connection. No special hardware is necessary.

### About T-Systems

T-Systems is a systems vendor and a leading IT service provider in Germany. Part of the T-Systems corporate philosophy is to invest in the most innovative technology when applying hardware and software systems. As a service provider for the PC postage system, T-Systems provides Deutsche Post with an entire network infrastructure (corporate network) and client-server architecture, and ensures the stability of those operations around the clock.

### Challenge

In any organization, the person responsible for the mail is all too familiar with the daily stress of countless envelopes that need to be sent the same day. Every envelope needs to pass through the postage meter, and those who don't have access to one still have to make an extra trip to the nearest post office to buy stamps. It's an extraordinarily time-consuming process. But thanks to an Internet-based postage system from Deutsche Post called PC Postage, companies can pay the postage on all letters and any other packages using a simple and convenient Internet solution accessible from their own PCs.

Along with the address of the recipient, the required postage is printed directly onto the envelope or

Deutsche Post 

T-Systems



label as a matrix code. The digital postage stamp also protects user's posts from tampering. And using the virtual stamp counter – called the Postage Point – customers can access the Internet to deposit postage funds from anywhere at any time using a direct debit system.

The technical backbone of the PC postage concept is a client-server architecture. To guarantee flawless service, as well as high availability and system stability, T-Systems integrated a traffic management/load balancing solution, originally from a different manufacturer.

Josef Schmitz, T-Systems Department Manager at the Customer Center in Cologne, briefly described the situation before the decision was made to switch to traffic management components from F5.

“In the beginning stages of the project, we were using a different load balancer,” he said. “We were not satisfied with this solution, however, as it did not sufficiently address the various technical requirements.”

### Solution

All prior traffic management systems were replaced with the BIG-IP® LTM from F5 networks. Mr. Schmitz continued, “We first discovered the F5 Networks option after we had already begun the implementation phase of the project. F5's' BIG-IP solution fulfilled the complex requirements of the system all by itself.”

T-Systems then subjected F5's tailored hardware and software components through a successfully completed test phase. The final decision to invest in the F5 solution was based on the solidity of the technology, the high level of

performance, and the comprehensive scope of support. The Department Manager at T-Systems was extremely pleased with the ease of implementation of the BIG-IP solution. “It was a breeze. The preparation, set-up and initial operation of the components was so quick that the entire installation process for BIG-IP was complete within just three days.”

### Impressive Performance

To make the conversion to the PC Postage online service as smooth as possible, four redundant pairs of the BIG-IP systems were applied. Thanks to integrated SSL acceleration, thousands of transactions can be processed per second.

With the BIG-IP system, F5 presented T-Systems with a complete solution. As opposed to similar products from other manufacturers, all functionalities are unified in one device that is easier to manage, thus incurring lower procurement and operating costs. The BIG-IP system is an integrated solution for IP traffic management, SSL acceleration and switching. Conceived as an IP application switch for the data traffic management of Internet services and applications, the BIG-IP system brings together the advantages of Layer 7 software with the additional features of very high port density and simultaneously integrated SSL acceleration.

The load balancer has several notable advantages. Integrated SSL acceleration improves data transmission security and Web server performance. Every basic unit is equipped with 100 transactions per second (TPS) SSL capacity that can be expanded using a software key. Application switching is scalable

to specified parameters and can be adapted to the individual needs of the customer. No other switches are necessary. Layer 7 performance is three to four times higher than that of competing products.

BIG-IP was also designed with an open API interface (Application Programming Interface) called iControl. This free and totally unique tool closes the gap between the network and application. It allows applications to communicate with the network, offering the ability to control and monitor functionality. In this way, BIG-IP 5000 – can retrieve information directly from the application servers and ascertain details from URL headers. This creates transparency and scalability for the entire network and reduces the administrator's burden.

“With BIG-IP, F5 Networks went the extra mile, using advanced Layer 7 features to meet the customers' very specific and stringent requirements,” explained Michael Frohn, General Manager of F5 Networks in Central Europe. “As a result of integrated SSL acceleration, the customer no longer needs to invest in additional devices and can – as compared with products from other manufacturers – drastically reduce his or her procurement and operating costs.”

### Permanent, around-the-clock service

To allow users to take maximum advantage of the PC postage system, the availability and stability of the application is absolutely essential. Postal customers need to have access to the service at all times of the day. Especially for business customers, it is not only frustrating but also often financially disadvantageous when particularly



important letters do not reach their destinations by the planned deadline. This should be the last worry when using an Internet-based PC postage system. However, guaranteeing permanent availability is only possible with an Internet traffic management solution.

Thanks to intelligent load balancing and traffic management from F5 Networks, this is no longer a problem. T-Systems provides the network infrastructure that addresses all technical performance considerations of this new service from Deutsche Post.

#### Digital postage system with growth potential

The number of customers who enjoy the benefits of 'Internet stamps' continues to grow. Currently, several thousand customers throughout Germany are using the PC postage system. Of the approximately 3 million small and medium-sized businesses in Germany, a great number are online and ready to take advantage

of the convenient new service offered by Deutsche Post. This situation provides the basis for the extraordinary growth potential of digital stamps. Of course, sending letters through the standard postal system will persist for a very long time, despite the increasing use of the electronic competition – data transfer via email on the Internet. The new electronic stamp concept is sparking the interest of other European postal systems as well – a clearly innovative step that has already been recognized and awarded. For example, for its STAMPIT® PC postage system, Deutsche Post received the Award for Excellence in Secure Electronic Business 2002 in October 2002.

**F5 Networks, Inc.**  
**Corporate Headquarters**  
 401 Elliott Avenue West  
 Seattle, WA 98119  
 (206) 272-5555 Voice  
 (888) 88BIGIP Toll-Free  
 (206) 272-5556 Fax  
[www.f5.com](http://www.f5.com)  
[info@f5.com](mailto:info@f5.com)

**F5 Networks**  
**Asia-Pacific**  
 +65-6533-6103 Voice  
 +65-6533-6103 Fax  
[info.asia@f5.com](mailto:info.asia@f5.com)

**F5 Networks, Ltd**  
**Europe/Middle-East/Africa**  
 +44 (0)1932 582 000 Voice  
 +44 (0)1932 582 001 Fax  
[emeainfo@f5.com](mailto:emeainfo@f5.com)

**F5 Networks**  
**Japan K.K.**  
 +81-3-5114-3200 Voice  
 +81-3-5114-3201 Fax  
[info@f5networks.co.jp](mailto:info@f5networks.co.jp)