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Sanjay Kharb, Assistant Vice President – Technical Operations, MakeMyTrip (India) Pvt Ltd

MakeMyTrip Improves Its Conversion Rate with F5 Application Delivery Controllers

Founded in 2000, **MakeMyTrip** is India's leading online travel portal. Created to empower the traveler with instant booking services and comprehensive options, the company began its journey with the United States-India travel market. MakeMyTrip offers a range of best value products and services, cutting edge technology, and round-the-clock customer support.

MakeMyTrip followed its success in the United States by launching its India operations in 2005. Having an agile IT infrastructure was vital for the company to meet its business objectives and gain an edge in a highly competitive market. With the F5 BIG-IP devices in place, MakeMyTrip decreased its system load by up to 30 percent and reduced its drop-off rate by 4 to 5 percent.

Business Challenges

As the first and only comprehensive online travel site with real-time booking for flights, hotels, cars, and holiday packages, MakeMyTrip heralded a significant change in the way consumers purchased travel services in India. After its successful launch, the company has led the market with innovative products and services, consolidating its position in the market as a brand recognized for its reliability and transparency.

The portal sells more than 12,000 flight tickets, 1,000 hotel room nights, and

100 holiday packages every day. MakeMyTrip attracts more than 3.5 million unique visitors every month.

In financial year 2010, the company achieved approximate sales of Rs 22,000 crore (approximately U.S.$478 million), reinforcing its position as the market leader with 48 percent market share[*].

As business grew, so did the challenge of keeping the portal accessible to ensure a positive user experience. The legacy infrastructure that MakeMyTrip had in place struggled to cope with the added traffic.

Overview

Industry
Online Travel Agency

Challenges
· Eliminate major web traffic bottleneck
· Reduce high drop-off rate in website connections
· Maintain technology edge to stay ahead of competition

Solution
· BIG-IP® Local Traffic Manager™

Benefits
· Increased operational efficiency by optimizing resources
· Reduced drop-off rate by five percent, resulting in more successful transactions
· Increased revenue due to higher conversion rate

"It was unable to manage the traffic efficiently, and it was passing a lot of the load, such as session and connection management, back to the server, resulting in high drop-off rates," says Sanjay Kharb, Assistant Vice President – Technical Operations, MakeMyTrip (India) Pvt Ltd. "We were also seeing heavy loads on the SSL server."

Having an agile IT infrastructure is vital for the company to meet its business objectives and gain an edge in a highly competitive market. To increase sales and revenue, it needed to increase user conversion rates. MakeMyTrip did so by delivering relevant content to its visitors, based on their profiles, preferences, and locations.

Because the portal gets incentives from airlines based on the number of hits with bookings, MakeMyTrip was looking for a way to reduce the number of users who use the portal only to perform searches, which results in no revenue.

"Some users visit the site in the morning and come back again in the afternoon to search for deals. In order to convert these visits to transactions, we needed to track these cookies and users to determine if we should offer better deals or give them something on their return visits," says Kharb.

The overall purpose of tracking users is to generate more business. Just a 1.5 to 2 percent increase in conversion rate (number of transactions vs. number of sessions) can amount to a great deal of additional revenue. MakeMyTrip's aim was to use technology to achieve the highest amount of revenue with the lowest amount of resources.

Being a technology savvy and forward-looking company, MakeMyTrip wanted to optimize its resources and achieve higher return on investment on its IT outlay. To achieve these, it needed a single solution that effectively served multiple purposes, such as load balancing, SSL VPN, and caching.

Solution

Having benefited from using F5 solutions previously in his career, Kharb decided to consider F5 and a couple of other vendors to deliver the new solution.

Each of the three shortlisted vendors provided a proof-of-concept based on MakeMyTrip's criteria of solving the traffic bottleneck problem, viability, and meeting the portal's long-term vision. "We also wanted a solution that could give us technological enhancements such as web security and customizability," said Kharb.

Following the proof-of-concept, F5 BIG-IP Local Traffic Manager (LTM) was chosen for its performance, versatility, and flexibility. The F5 BIG-IP platform is a cost-effective, intelligent Application Delivery Controller (ADC) that lets customers add on-demand capacity and processing needs as required by their users, applications, infrastructures, and businesses. F5 ADCs are also modular, allowing customers to add new functionality—everything from **web security** to topology-based load balancing—enabling faster response to changing business challenges.

Four of these Application Delivery Controllers were deployed at the portal's two data centers—one operational and the other as backup—at the end of 2008. The new devices deliver the inventory application, which was developed in-house based on Open Systems.

Benefits

The F5 solution has enabled MakeMyTrip to handle its increased traffic, provide a better user experience while increasing revenue, and be poised to use additional F5 technology for future initiatives.

No more load balancing issue

According to Kharb, the company's web traffic problems were solved following the switch to F5.

"We no longer have load balancing or SSL server overload issues. The F5 appliances have a capacity of 20,000 transactions per second on SSL, which is enough for us," says Kharb. "With the F5 BIG-IP LTM devices in place, our system load has decreased by up to 30 percent and there are no more failures at the back end. Drop-off rate went down by four to five percent."

Higher conversion rate

MakeMyTrip has also been able to track users and their search patterns using the F5 easy-to-learn scripting language, iRules,® to customize how the BIG-IP devices intercept, inspect, transform, and direct inbound or outbound application traffic. This move has resulted in a higher conversion rate.

Going forward

As part of its plans to enhance its services, MakeMyTrip is looking to upgrade its existing F5 ADCs to advanced F5 ADCs. These come with quad-core processors that enable support for multiple BIG-IP modules, such as BIG-IP® Application Security Manager™ and BIG-IP® WebAccelerator™ within a single unified device.

"We are also experimenting with F5 geolocation functionality, which uses the location database to map IP addresses to geographical locations. That way, we can identify IP addresses and intelligently deliver customized content based on where the user is located," said Kharb. "F5 is not just a technology, it's a cost-effective, unified solution."

*Based on gross bookings for 2009, according to PhocusWright