

VOICE & DATA



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The Business of Communications



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Survival Strategies for Indian Telecom

Recognizing Excellence amongst Telecom Leaders



'Indian companies have to look at testing differently'



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What are the market opportunities offered by the mobile apps testing segment?

Mobile phone/smartphone is completely transforming the way we communicate, work, and entertain. And mobility is accelerating at a supersonic speed. There is absolutely no dearth for opportunities in mobility testing as numbers and different types of devices are changing dramatically, consumerization of IT is driven by mobility and there is an ever increasing demand for enterprise applications. There are over 1,150 network operators, nearly 400 mobile software vendors, 11 operating systems, 49 manufacturers, 8,000 devices, and 585,000 apps.

What is the revenue from testing mobility apps?

Nearly 10% of our overall testing comes from testing mobility applications.

What are the new challenges in testing of mobility applications?

Since 2008, the proliferation of mobile devices, mobility devices, and platforms has thrown up newer kind of challenges to the testing fraternity. Challenges include di-

versity in device management; application usage which is context sensitive; complex data entry process and high environmental input from camera and voice, etc; user interface design; network consideration; application and device security; and rapid application testing.

Devices have different application platforms, it has its own standards, application interface, programming languages, and applications ought to be tested on each platform. In fact, newer innovations in application platforms are also creating more complexities. Unlike the network landscape of PC environment, the network landscape of mobile device has different gateways; applications need to be tested for compatibility with WAP-enabled and HTTP-enabled devices. Application and device security risks can be hardly ignored.

What is your testing strategy to handle complexities?

At Calsoft Labs, we have a unique mobility testing strategy framework. We have adopted an automation process for data-centric apps and device capability based apps. We use a weighted device platform matrix method to identify the most critical hardware/platform combination to test; check the end-to-end functional flow in all possible platforms at least once; conduct performance testing, GUI testing, and compatibility testing using actual devices, and measure performance only in realistic conditions of wireless traffic and user load.

What are the concerns in testing mobility apps space in India?

Availability of resources, attaining the scale, and lack of awareness are the key concerns. Indian companies have to look at testing differently and the introduction of testing-as-a-service or testing-on-demand can work wonders in this space.

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Wipro Launches Location Based Solution

Wipro has unveiled a location based solution, Wipro SmartOffers, for banks in partnership with Intuition Intelligence. Wipro SmartOffers solution helps to increase coupon redemption rates by delivering the right offers to a bank's customers over the mobile or the internet. This solution leverages Wipro's mobile based applications, data models, and partner's algorithms to deliver highly targeted offers. Intuition Intelligence has a patented machine learning algorithm that applies rapid real-time learning to target coupons.

Telephone Subscription Dips 2.52 mn in October

The number of telephone subscribers in the country decreased to 935.18 mn at the end of October, 2012, from 937.70 mn at the end of September, thereby registering a monthly growth rate of -0.27%, according to (Trai). The number of urban telephone subscribers has declined 63.17%, whereas rural subscriptions increased 36.83% in October 2012. With this, the overall teledensity in the country reached 76.75% at the end of October, 2012, while it was 77.04% in the previous month. Total wireless subscriber base decreased from 906.62 mn in September, 2012, to 904.23 mn at the end of October 2012, registering a monthly growth of -0.26%.

NSN Offers Integrated Network to airtel

Nokia Siemens Networks has deployed unified network and service management dashboard solutions at Bharti airtel's new network experience center in Manesar in India. The center offers a single point assessment of network operations and ensures the optimal management of service quality and customer experience. The new network experience center includes a 3,600 sq ft video wall powered by Nokia Siemens Networks' dashboard solution. The solution monitors and analyzes the various aspects of the operator's entire network operations, and offers a unified video view to make monitoring and analysis of Bharti airtel's operations simpler and more efficient.



Top 5 Data Center Tips

...for business continuity planning

Business continuity planning (BCP) should cover an organization's ability to avoid major business disruptions from disasters while addressing the principal concerns of business risk mitigation, protecting and preventing data loss. Business transactions delivered from the data center pose major challenges to business continuity. Connectivity in data center infrastructure and the networks can be adversely affected by bottlenecks or complete failure due to network outages, hardware failures, human error, and natural disasters.

Application delivery controllers (ADCs) protect these vital corporate assets and keep the network up and running. Below are the 5 data center tips for business continuity planning.

■ Server load balancing ensures application availability, facilitates tighter application integration, and intelligently and adaptively load balances user traffic based on a suite of application metrics and health checks. It also load balances IPS/IDS devices and composite IP based applications, and distributes HTTP(S) traffic based on headers and SSL certificate fields.

The primary function of server load balancing is to provide availability for applications running within traditional data centers, public cloud infrastructure or a private cloud. The server load balancer redistributes traffic to healthy systems based on IT-defined parameters to ensure a seamless experience for end-users.

■ Link load balancing addresses WAN reliability by directing traffic to the best performing links. If one link becomes inaccessible due to a bottleneck or outage, the ADC

takes that link out of service, automatically directing traffic to other functioning links.

Link load balancing ensures uninterrupted connectivity from the data center to the internet and telecommunications networks. Link load balancing may be used to send traffic over whichever link or links prove to be the most cost-effective for a given time period. It may also be used to direct select user groups and applications to specific links to ensure bandwidth and availability for business critical functions.

■ Geographical load balancing provides reliability between geographically dispersed data centers. ADCs redirect traffic to the best performing sites based on latency, site performance, and user location. Global load balancing delivers high-availability, if one site goes down, traffic will automatically redirect to other working sites.

Global server load balancing is concerned with the possibility that entire data center may be taken offline due to unforeseen circumstances and events beyond IT control.

These events may include natural disasters such as hurricanes, earthquakes, and fires or downtime caused by attack or sabotage. If data centers are intact, they are often overloaded with increased traffic in the wake of business continuity events. Global server load balancing is able to distribute requests to less trafficked data centers in order to maintain business processes.

■ SSL transactions consume server CPU cycles due to intensive encryption and decryption of the packets on a repeated basis. ADCs offload SSL from

servers, allowing them to focus on serving applications and content to end-users, improving availability and response times on the servers.

Modern application delivery controllers support high-performance hardware acceleration for 2048-bit SSL encryption, often at prices equivalent to previous generation 1024-bit encryption. Whether secure applications are running on dedicated servers in a traditional data center environment or on virtualized infrastructure in a public or private cloud, it is advantageous to offload process-intensive 2048-bit SSL encryption to dedicated hardware to provide the highest level of application security, availability, and performance.

■ TCP acceleration offloads connections and sessions in several ways to optimize data flows and reduce the impact on servers, preventing them from being overloaded.

Mobile traffic is increasingly outpacing traditional network traffic. It also uses far more connections and opens and closes connections far more often than traditional network traffic. Over time, legacy data center equipment will be unable to keep pace and application availability will suffer.

TCP acceleration supported on modern application delivery controllers offloads connections from servers, handles a far greater number of concurrent connections, and has the ability to handle far greater connections every second.

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