

Tech Interview

GP's new billing system gets the Oracle touch

Cellphone companies are splashing millions to boost their customers' billing data and application functionality. **Nafid Imran Ahmed** (NA) of Star Tech spoke to **Lutfur Rahman** (LR), AGM IT, GrameenPhone on their newly upgraded billing system.

NA: Could you give a brief background about your company and the industry as a whole?

LR: GrameenPhone Ltd. started its service on March 26, 1997, the Independence Day of Bangladesh. GrameenPhone is an international joint venture among four companies from four countries in three continents: Telenor, the largest telephone operator of Norway, Grameen Telecom, a non-profit organisation and a sister concern of Grameen Bank, Marubeni Corporation, one of the largest trading companies of Japan, and Gonofone Development Corporation, a New York-based investment firm. GrameenPhone presently has more than one million subscribers.

Some 700 people are presently employed at GrameenPhone

which presently has coverage in 58 districts including all six divisional headquarters.

GrameenPhone also has an internationally acclaimed project known as the Village Phone Program. It is administered in cooperation with Grameen Telecom and Grameen Bank. It is a unique initiative to provide access to telecommunications services in remote rural areas where no such facilities existed before. Presently, there are nearly 40,000 Village Phones in operation in as many villages around the country.

NA: Before implementation of the new billing solution, what kind of hardware and software system infrastructure did you have?

LR: Previous billing system was running on Alpha server with OPEN VMS O/S. The application database was Ingres and subscribers call details were maintained in indexed flat files.

NA: When did you realise the need for a software/system upgrade? What were the limitations of the previous system?

LR: Certain constraints of the previous system pushed us to think for upgrading of the billing system:

- ☐ Scalability of the old system to cater for the growth of GP.
- ☐ Concurrent rating and on line access restriction during billing in the old system.
- ☐ Slow performance of call rating.
- ☐ Required more smooth operation and maintenance capability.
- ☐ Seeking for enhanced security of the system.
- ☐ Support service constraints for Ingres databases.
- ☐ Security and user level access control.
- ☐ Online access restriction to the subscribers call details due to flat file constraint.

NA: What were the macro and micro level goals that needed to be achieved with upgradation of the system?

LR: Efficient and concurrent operation, smooth maintenance, online data access and strong support were the micro-level requirements for the new system whereas robustness with increasing capability for quick



The newly installed system provides enhanced security, smoother operation and maintenance capability of the system and user level access control

and enhanced data analysis and managing frauds, increasing customer satisfaction, enhanced disaster management capability were the macro-level require-

ments that needed to be gained.

NA: What made you opt for an Oracle-based solution?

LR: Oracle-based solution

was preferable for its reputation and robustness in huge data handling, efficiency and strong support service capability.

NA: Any specifications for the

Oracle solution implemented in your organisation, such as modules, products etc.

LR: Oracle server version 8.1.7.3 for HP UX-11i is running

on clustered solution of HP UNIX servers. The active modules are Oracle database server, Net8 client and enterprise module utilities.

NA: What was the role and responsibility of the solution provider (implementation partner)? How were they able to achieve/materialise your Macro/Micro Level goals?

LR: As solution provider is the same vendor for previous system, we have shared the short term and long term requirements for the system considering our needs. We along with the solution provider identified the required platforms, database and resources for the system.

NA: After the upgrade what areas do you find most benefited in the IT Department?

LR: Efficient access and availability for data, capability of prompt support to users, subscribers, smooth as well as secured and controlled operation, faster call rating, ease of maintenance have become the achieved advantages for day to day activities in IT.

NA: Has the Oracle-based solution helped in managerial decision making process? And how has it changed the overall way in which you carry out business on a day to day basis?

LR: For managerial decision making data availability, quick extraction capability and efficient analysing ability are the prime needs. These aspects have been improved significantly in some cases due to Oracle's strong and efficient DBMS supportability.

NA: Which features of the Oracle based solution have supported the scalability requirements of your business?

LR: Robustness and huge data supporting capability of Oracle to maintain/efficient processing for rapidly increasing subscriber's call details and base line information are the prime reasons for complying with the scalability requirement.

NA: Was compatibility an issue? Expansibility? Security? Cost?

LR: Expansibility and security were issues and to support these factors, compatibility was a required feature as well.

NA: Since you have 24X7 operations how did you find the performance of Oracle based systems?

LR: For smooth and continuous fault free operation, Oracle is a very good solution for business critical applications.

NA: How successful have you been in achieving your macro and micro level goals with the implementation of this system?

LR: We have succeeded in most cases to reach the objectives and we are in the path to make it more fruitful in coming days step-by-step.

NA: What was the time period for the system to go LIVE?

LR: The new system is in operation from December 2002.

NA: What are your future plans with regards to Oracle based software usage within your organisation?

LR: We are in the process of developing and adding more checkpoints and procedures for ensuring smooth performance of the system. Improving performance and efficiency of the system are also concerned issues that we are considering to improve further.

A view into infinity



PHOTO: AFP

Museum employee Andreas Nitzschke tries out a cube fitted with mirrors entitled "A view into infinity" at the Jena Optics Museum on January 15. The museum houses the original Zeiss laboratory, makers of the Leica camera and lenses.

Best 10 Websites

Category: Fun Stuff & Popular Websites - II



BrainBashers
Brain teasers, illusions & puzzles for all puzzlers.
URL: <http://www.brainbashers.com/>



Funology
Explore the science of fun at this innovative site full of puzzles, games & illusions.
URL: <http://www.funology.com/>



SandLot Science
Interactive guide to optical illusions.
URL: <http://www.sandlotscience.com/>



Fun Trivia
Quicksand for the mind - start thinking about all this stuff & you may never get out of this site. Tons of well organized trivia.
URL: <http://www.funtrivia.com/>



A Gazillion Things to Think About
Over 5000 provocative questions designed to make you think.
URL: <http://www.geocities.com/Athens/Olympus/2843/>



The Mensa Workout
Nourish your neurons.
URL: <http://www.mensa.org/workout.html>



Two Thought Screamers
Irreverent guide to dealing with idiots.
URL: <http://www.2truce.com/two-thoughtscreamers.htm>



Urban Legends
Myths & yarns, legends, rumors & hoaxes.
URL: <http://www.urbanlegends.com/>



BB Spot
World's best tech humor site according to the funny people at The Reg.
URL: <http://www.bbspot.com/>



Random Joke
Jokes & funny stories.
URL: <http://www.randomjoke.com/>

Tech/News

Mars rover takes 'Sunday Drive' across Red Planet

REUTERS, Pasadena

AFTER a weekend of driving that took it about 10 feet across the surface of Mars, the Spirit rover was parked on Monday in front of a rock that NASA scientists plan to study for much of the next week.

Though Spirit is capable of moving more quickly across the rugged surface of the red planet, the six-wheeled craft spent 30 minutes traveling to the rock, nicknamed "Adirondack" by project managers, because like any Earth-bound tourist it stopped repeatedly to take pictures.

"We went for a little Sunday drive," joked mission manager Mark Adler.

The scientists believe that the pyramid-shaped Adirondack, which is about the size of an American football, is most likely basalt, spewed onto the surface of Mars hundreds of millions of years ago by a volcano.

If so, Adirondack is not particularly unusual for Mars, which is in part why project managers chose it as Spirit's first object for detailed geologic study as they hunt for evidence of past water -- and life -- there.

In the coming days, Spirit will reach out with its robotic arm to examine Adirondack with microscopic imagers and spectrometers. Then the rover will use the same arm to drill a tiny hole in the surface and give scientists a glimpse of its interior.

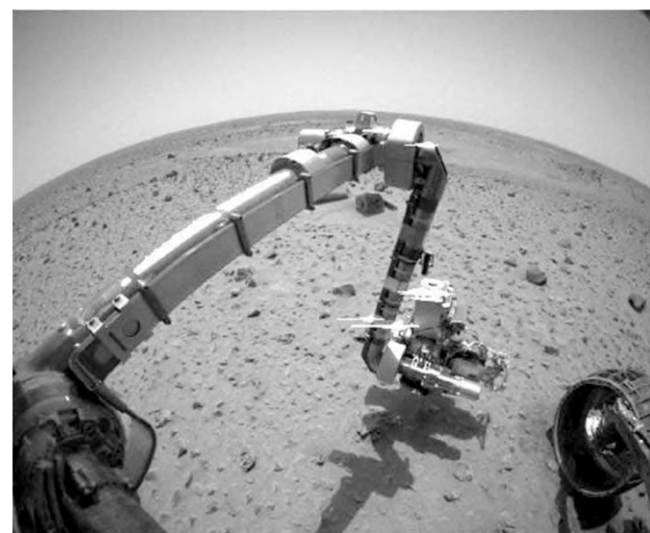
TIME CAPSULE

Researcher Dave Des Marais said Adirondack will serve as a kind of "time capsule" into the past of Mars, which will allow the science teams to better understand how the rock was formed and what the planet was like millions of years ago.

Adirondack will also be a good test of Spirit's geology tools, which will then be used on other rocks and soils to establish a better database about the planet, Des Marais said.

When scientists finish with Adirondack, the golf cart-sized explorer will further explore its surroundings in Gusev Crater, a barren, wind-swept basin about the size of Connecticut that scientists believe may have been the site of an ancient lake bed once fed by a Martian river.

Spirit, which bounced onto the Martian surface two weeks ago after a



The arm was deployed from the "front porch" of the rover body.



This image shows 'Adirondack' the rover's first target rock.

six-month journey through space, rolled off its lander on Thursday. Since its Jan. 3 landing, Spirit has sent back stunning, three-dimensional, color photographs of Mars revealing the planet's terrain in unprecedented detail.

Project managers say the mission had gone so well that they will consider

extending it beyond the scheduled three months once Spirit's twin rover -- Opportunity -- lands on the opposite side of the planet, expected on Jan. 24.

The twin Mars rover missions, which if successful will provide NASA with a much-needed shot in the arm, have taken on additional importance in light

of President Bush's announced plans to ultimately send humans there.

Spirit is the fourth probe ever to successfully land on Mars, following in the footsteps of two Viking landers in the 1970s and the Pathfinder mission in 1997. More than half of man's missions to the red planet have ended in failure.

Tech/News

Viruses turn to peer-to-peer nets

BBC ONLINE

VIRUS writers are setting up peer-to-peer networks to help their malicious creations spread.

The networks are being used to control thousands of innocent PCs that some virus programs have infected.

The tactic is being used because peer-to-peer networks are hard to disrupt, making viruses using this technique hard to stop spreading.

Security experts say peer-to-peer networks are likely to become more and more popular with virus writers.

Evolving threat

One of the first viruses to set up a peer-to-peer network to help it spread was the Slapper worm that was aimed at the Linux operating system.

A Windows virus called Sinit appeared in late 2003 that turned every machine infected by the malicious program into a member of a peer-to-peer network.

It was expected that Sinit's creator would issue commands

to infected computers via this network.

"It's always been an arms race in the battle between virus writers and anti-virus companies," said Pete Simpson of mail filtering firm ClearSwift.



Many computers are under the remote control of virus writers.

"Sinit represents a new and daunting challenge to anti-virus companies."

There are many different ways to organise machines into peer-to-peer networks but most avoid having one central computer, or server, controlling all machines involved.

Instead, each machine shares the burden of organising the

system and each member lets others know the information that it holds.

The most well-known peer-to-peer networks, such as Kazaa, are used by many people to find and share music, videos and



Many people use peer-to-peer networks to swap music and movies

other types of files.

Botnets

In the past some creators of Trojan programs, that open up a backdoor into an infected PC, have used net chat channels as a way to issue commands.

Often thousands of computers were enrolled in these remote controlled networks that have been dubbed "botnets."

Finding and shutting down the chat channels would effectively cut a virus writer off from his network of slave machines.

But shutting down a distributed network would be much more difficult because no one machine is in charge.

It also is much more difficult to trace where commands were being inserted and find the network's controller.

Kevin Hogan, head of Symantec Security Response, said the good news about peer-to-peer virus networks was that they were rare.

"It's a little bit trickier to do than just having the Trojan point to a single server," he said.

He said many peer-to-peer networks were often not very efficient at passing commands between member machines. Also many swap data via rarely used ports that most firewalls routinely block.

"I think it will become more prevalent," he said. "It's an evolution rather than a revolution in botnets."

Photo Tech



PHOTO: AFP

Japan's toy giant Bandai employee Ayumi Mitsui chats with popular cartoon character Doraemon shaped robot "Doraemon the Robot", 26.5cm tall and weighing 1.3kg, equipped with more than 10 sensors and able to speak 750 phrases in response to questions or touch at the company's headquarters in Tokyo on January 16. Bandai will put it on the market in March with a price of 19,800 yen (186 USD).