starcom

A Profile

starcom (Starcom Software Private Limited) was incorporated with the aim of building technology and providing services in the areas of Web-based application development, networking infrastructure setup and management and information security. We have a successful track record of implementing large solutions for demanding corporate clients.

The senior management of *starcom* has a cumulative total of more than thirty years of experience in the field of application development, TCP/IP networking, relational database systems and the Internet.

starcom has received venture funding through TDA Capital Partners, Inc. (www.tdacapital.com), a US-based venture fund, and Edelweiss Capital Limited (www.edelcap.com), a reputed Indian fund.

starcom has a Memorandum of Understanding with Mahindra British Telecom Limited (MBT, www.mahindrabt.com), a software services organisation which is a joint venture between the Mahindra business group of India and British Telecom. MBT has over 3,500 employees at present. Our MoU covers joint business generation and project execution in our areas of expertise. We are Business Partners of IBM and Sun.

Products and services

starcom is a products and services organisation. Our **services** include:

IS consulting and plannning. We offer consulting and planning services for IS infrastructure, specially for the SME segment. These include network infrastructure planning, server selection and sizing, OS installation services, database and application installation and configuration services, Web server infrastructure planning, messaging solutions, Internet connectivity and security solutions, *etc.*

Network infrastructure setup. We study a corporate client's information management requirements, and design a wide area network for them using technologies which are most cost-effective for their requirements. We then set up the equipment to activate the network, and set up servers to offer network services they need, *e.g.* email, Usenet news, Intranet Website, *etc.*

Our services are distinct from those of hardware systems integrators, because of our extensive software and OS skills and knowledge of setting up network services, *e.g.* Sendmail configuration, Apache performance tuning, *etc.* Also, unlike hardware firms, we do not have brand biases in hardware selection.

IS infrastructure management. We manage servers, messaging systems, Internet gateways and wide area network infrastructure for enterprises. We have our own tools which assist in automatic monitoring of network and server parameters, giving us exception reporting and data logging into an RDB for analysis. We can define system behaviour levels and compare actual data against limits using our tools.

One of our clients, Mahindra British Telecom Limited, had five offices in three continents catering to 3,500+ employees. One engineer from *starcom* used to monitor and manage 22 servers, five Internet gateways and eleven firewalls across the worldwide network, using our network monitoring tools.

As specialisations in network management, we undertake security audits and network audits for enterprise networks.

Web application development. We have experience in building business applications with browser front-ends in the verticals of retail, trading, manufacturing, depository services, financial services *etc.* These applications have HTML front-ends and connect to databases. We have extensive experience with Oracle, IBM UDB and MySQL database systems. Most of our applications are written in Perl (CGI, mod_perl) with DBI interfaces to databases, or as Java servlets with JDBC. We also have the skills for integrating heterogenous applications using middleware across distributed systems.

Our Web applications have included an online retailing system for Homeindia (www.homeindia.com), a B2C e-commerce application with full back-office integration and MIS reporting. We also developed a Web-based integrated ERP system for a major electrical components distributor. For the National Stock Exchange (www.nse.co.in), we developed an online test administration system for examinees, which has been working off a server in Mumbai with desktops distributed all over India, since mid-1997. For UTI Securities Exchange Limited (www.utisel.com), we built a

live data display system to display graphical data on an Internet Website for the impact cost of index trading on the stock market. Our securities positions display service, speed.nsdl.com, built for the National Securities Depository Limited in 2000, is in daily use. All these solutions work on Linux or Unix servers.

Our *products* include:

MANUS is a comprehensive multi-site messaging solution which allows one system administrator to manage the messaging system for an enterprise using a single browser-based console. MANUS works on Unix or Linux servers, and provides an integrated messaging solution across any number of servers or locations. Besides messaging, MANUS manages all the common network services including file and print, Web proxy services, Usenet news (NNTP), address book directories (LDAP), *etc.* User desktops can use any operating system and Internet standard messaging clients. MANUS also has a real-time network monitor to watch hundreds of network components, plot utilisation of resources graphically, and report exceptions. MANUS has been working at various client sites since 1998.

Contact!! is a contact management and relationship tracking system with features to track events by relationship, territory, *etc.* It forms the IS foundations for any field force or customer interaction division, including sales force automation, customer support field engineers, *etc.* It has a browser front end, stores data in any standard RDB, and work is proceeding on integration with Palm PDAs.

Abacus is our browser based financial accounting package for small to medium enterprises, which cannot justify today the need for a comprehensive ERP deployment. Abacus runs on any Linux or Unix server, uses an RDBMS back-end, and provides fully secure, auditable, multi-user financial accounting with MIS reports for both Accounts departments, end-user employees, and managers.

MasterMentor is our on-line test administration system. This system is derived from the comprehensive browser-based test administration solution that we built for the National Stock Exchange of India in 1997, which the NSE has since used to administer tests to more than 30,000 registered applicants under their NCFM (NSE Certification in Financial Markets) programme. MasterMentor generates unique, randomised question papers from a question bank, allows examinees to take their tests online, and keeps track of examinee profiles, scores, question bank effectiveness, *etc.*

Our strengths

Our technical strengths. We have been working in Perl from 1995. Our seniormost engineers were members of the team that built *IndiaWorld* (www.indiaworld.co.in), India's oldest and most well-known Web portal, in 1995. In that year, we had built online credit-card billing systems using Cybercash, long before the dot-com boom. We publish one Linux HOWTO document, which forms part of the body of "official" Linux documents; we are in the process of finishing two more. In the area of Oracle database systems, we have engineers on OCP track, building expertise in database configuration, management, administration and performance tuning. Our engineers have been working with Linux since 1995.

Our project management strengths. We have an internally designed Task Control Process which is used to manage every task every engineer undertakes. This control process includes a written action plan (AP) and verification plan (VP). Our control process is very lean and ensures documentation before commencement, peer review before completion, and day-by-day monitoring of work in progress.

Our client list

This is a partial list of some of our well-known clients:

- The National Stock Exchange of India Limited
- The National Securities Depository of India Limited
- Mahindra British Telecom Limited
- A petrochemicals major in the private sector
- The Zodiac group of garments exporters
- Homeindia, India's online retailing trend-setter
- The Indian Express Newspapers group
- ICICI
- Amarchand and Mangaldas and Suresh A. Shroff and Company, reputed law firm

Our track record

We list here a very small number of the interesting projects we have completed over the last few years.

The National Stock Exchange of India. One of the world's largest stock exchanges and based in Mumbai, the NSE has been our client for many years. We have built an online test administration system for them with a Web-based interface. We have also build an online real-time fault-tolerant cluster-computing solution for the NSE to recalculate risk exposure using Value-at-Risk algorithm for their futures and options trading system. This system is unique in the world, and provides super-computer performance by using a cluster of Intel computers running Linux on an MPI backbone.

Mahindra British Telecom Limited. We undertook a project to restructure their network services in 1998. Since then, we have been working on managing their network and introducing new services. Their internal email and Web access infrastructure has grown from 850 users to 2,500 users in this period. Their entire network services infrastructure works on Linux servers. High availability is provided by automatic replication to backup servers, with manual failover.

SPEED for NSDL. The National Securities Depository Limited needed to display securities positions on the Web, for their Clearing Members (stockbrokers). We built a system for them, which works on Linux servers on the Internet, at http://speed.nsdl.com. We built a replication scheme by which each online server is replicated on a backup servers, providing simple high availability with manual failover.

S.Kumars Online Limited. The S. Kumars group initiated a project and floated a company to create a private nationwide WAN using VSAT technology to circumvent India's poor terrestrial data link infrastructure. This WAN was designed for upto 50,000 VSATs, each being used as a kiosk for online commerce, information access, and messaging. The project was designed to reach the rural interiors of India, and would be the world's largest VSAT network when commissioned. We have been principal technical consultants to their project since its inception in early 1999 to July 2000, and were intimately involved in technology selection, server farm sizing, and business process design. We believe the project is now progressing towards deployment of the initial set of VSATs.

Our team

An organisation is its people. And nowhere is it more true than with services organisations.

Shuvam Misra has B.Tech and M.Tech degrees from the Indian Institute of Technology (IIT) at Mumbai. Shuvam has been working in the area of information technology since 1988, including a year at Citicorp Overseas Software Limited, a Citigroup subsidiary, and four years working on Unix kernel source for porting to UMA and NUMA multiprocessor hardware. He headed the technical team that built *IndiaWorld*, India's first Web portal and the first Indian site to implement Cybercash-based billing in 1995.

In 1996, Shuvam founded a firm providing technical services in areas related to Internet technology. *starcom* was incorporated in February 2000 to carry the same skill set forward, with most of the original team that worked with Shuvam since 1996.

Shuvam is a CISA (Certified IS Auditor), a certification provided by the worldwide body of IS auditors, the IS Audit and Control Association (ISACA, www.isaca.org).

Kishan Parekh has a bachelor's degree in engineering, and more than five years of experience in Web application development and Internet server infrastructure setup and management. Kishan has worked with Shuvam from 1994, when both of them were working on *IndiaWorld*. In 1996, Kishan joined Shuvam's technical services firm which has become *starcom* today. He has exemplary expertise in Perl and Unix, and is a key technical resource in *starcom*. He works in project execution, technical strategy issues, and the skill-building of his juniors.

Kishan is a CISA (Certified IS Auditor).

The strength of *starcom* derives from its technological depth, the comprehensive nature of its solutions, and from its knowledge of business processes. With an experienced senior management with decades of experience in automating business processes, *starcom* has the blend of strengths that helps map solutions from the level of technological detail to their alignment with real world business situations.

We thus are in a position to provide both specific technology solutions, as well as complex application systems to enable business. The guiding rubric of *starcom* is depth and comprehensiveness — a combination of strengths that has gained for it a clientele that includes some of the best names in the Indian corporate world. We offer the same team and the same approach for your requirements.