

IN TOON WITH TOMORROW

Here's how Compton Solutions created a little bit of history by pioneering blade technology for Century Communications

By Shantheri Mallaya Illustration by Anil T

ENTER THE Bandra facility of Century Communications Limited (CCL), and take a hard look. The futuristic studio has a built up area of 5,000 square feet across two floors, houses close to 500 high-end workstations, maintains a 300-odd server render-farm, and is the hotbed of some of the most prestigious trans-national animation productions scheduled to be released this year. It would not be tough to fathom that things were not so simple here a couple of years ago, when the studio was being set up for the first time, and when the IT infrastructure was being put in place over a riveting two-phase process by New Delhi-based Compton Solutions.

MISSION CRITICAL

Circa early 2007, Noida-based CCL was doing up its studio in Mumbai at a posh Bandra office, as part of its ambitious plans to extend operations and take up offshore assignments from international studio productions. Pixon one of CCL's brands, which was to be set into this studio, was heavily into VFX and animation and used high-end IT for its core business application. As part of the process, once a film is shot, audio and video digital effects are added to it. This process requires very high-end graphical workstations and skilled artists. Once the VFX process is complete, the file goes for rendering. The rendering process requires huge computing power from a cluster of servers,



computing together. Even during animation, high-end graphical workstations are required.

The requirements for a project of this magnitude were understandably high. A project of the scale that CCL was required mounting the studio to have a minimum of 75-100 high-end servers in clusters. Real estate costs, being what they are in Mumbai, were at a premium. All the data done within the network would also need to be accessed at the same time by multiple hands. Power was another concern, and had to be nothing short of enterprise class because of the sheer nature of the cluster-concept. Importantly, there had to be no disruption of work since a downtime at any point meant losing of an entire patch, which was not acceptable for the animation process. Abhishek Tiwari, one of the directors of CCL recalls, "It was all about high-end technology, high throughput, synchronization on all fronts – right from the workstations to the render farms."

The studio would also have sophisticated applications such as 3D Max, Windows XP Professional, Photoshop, MIAI's BI tools, amongst others running across the network. So, CCL needed an effective solution for the render farm that would not only be cost-effective, but would strongly hold the network together, and ensure a zero data drop.

INNOVATION DESPITE OPPOSITION

While calling for IT tenders, CCL invited a number of names earlier associated with their Noida studio set-up.

Case File

Key Parties: Century Communications Ltd, Compton Solutions

Location: Bandra, Mumbai

Key Technologies: HP Blade Servers, HP Workstations, Systemax cabling and server racks, Dlink and Foundry Switches, Hitachi Precision AC and Enterprise Storage, Tata VPN connectivity, Cisco WLAN, Kaseya helpdesk, Fluke Networks monitoring and troubleshooting tools, Keiro and E-Sat Data Security

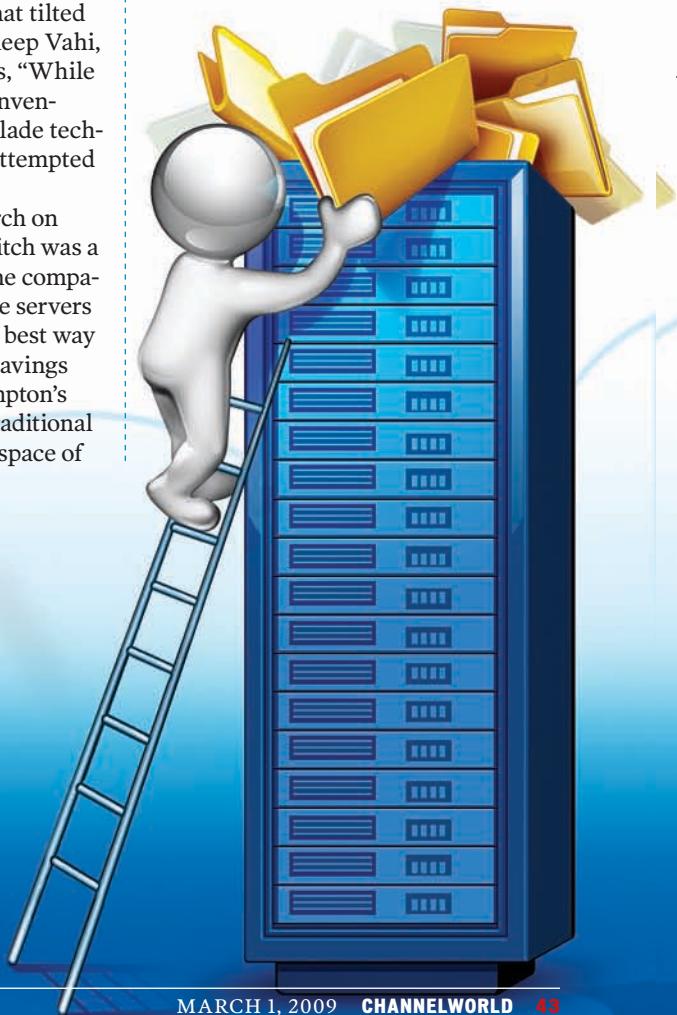
Key Activities: Implementation, Integration, and Troubleshooting

The solution providers in reckoning spoke about traditional servers, which could smoothly take on the load of such a huge network. Compton Solutions, one of the networking SIs for CCL's Noida facility, was just one among the contenders. So what tilted the deal in their favour? Sandeep Vahi, Director at Compton narrates, "While all the others pitched on a conventional note, we spoke about blade technology, which had not been attempted before in this industry."

Having done its own research on CCL's workflow, Compton's pitch was a first-of-its kind at the time. The company proposed that putting blade servers on CCL's render farm was the best way out. The reasons were clear: savings on real estate and power. Compton's contention was that while a traditional server would take double the space of

a normal server, the reduction in rack and floor space would enable the customer to take on more servers; it was a 4:1 ratio that Compton showed between blade and traditional server positioning. Moreover, blade servers run on one power supply. Vahi adds, "We showed a total cost reduction of about 60 percent compared to the others."

That clinched the proposal for Compton. A very keen CCL evinced interest. Enthused by the prospect, Compton went back to its blade server vendor, HP, with the idea. But, the story was far from over. Vahi states, "They told us categorically that the blade server was not certified for the multiple applications on the client network and all these would not run on blade servers, and that they would neither support the POC in any way, nor support us if things did not work out." HP went a step further and stipulated that Compton would have to purchase the equipment outright for the POC.



■ CASE STUDY

Not one to be easily disheartened, Vahi hatched his own plan of action. He decided that he would take a loan of Rs 9 lakh for the POC. He then felt that a transparent dialogue was in order. Vahi says, “We told CCL about what transpired with HP; their reply was quite firm — they said as long as our deliverables to them were good, they did not care for vendor support or whatsoever.” Buoyed by this, Compton went back to HP, bought the POC equipment, and initiated the process. CCL studied the HP blade technology carefully and tested it in the rendering process at Pixion. Along the HP Blade Servers, Tiwari of CCL studied the key features of Foundry core switch, which seemingly had all the ingredients to provide high through-put and high availability for Century’s environment. Compton took on the onus of application support on itself. For this purpose, the SI had to be sure of the skill set components of the applications he had to support. Wasting no time, Compton hired specialists for each compo-

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SANDEEP VAHI, DIRECTOR,
COMPTON SOLUTIONS

nent, and tested each application on a smaller scale. Says a proud Vahi, “Though resource crunched, the only thing on our mind was success.” And that is precisely what they achieved — the applications ran without a hitch on the blade.

NO LOOKING BACK

After the success of the POC, there was no looking back. By mid 2007,

things began in full swing. HP high-end workstations were placed at the front end, while HP blade technology was deployed for the render farm and all this was connected to Foundry switches. The first phase of the project was budgeted at around Rs 7.5 crore. Compton installed about 150 workstations and 90 servers. In late 2007, CCL came back to Compton with a deal for a phase-II. Tiwari of CCL quotes, “In our industry, we have erratic timings. Compton’s technical expertise and unstinted dedication during phase-I gave us the confidence to go with them for the next phase.” Phase-II was a Rs 25 crore investment. This time round, Compton installed 340 workstations and about 210 servers on the render farm; the solution provider improvised over the earlier phase and added a lot of security certifications. This was done keeping in mind the international standards and compliances that CCL’s clients wanted. Compton also added Precision ACs. Vahi assesses, “Phase I was a learning curve. We organized ourselves better during phase II, kept ourselves abreast of international developments and gave value additions.”

The results and benefits are there for all to see. CCL has come back to Compton for a studio plan in Chennai, where they tentatively plan to put up about 250 workstations and about 400 blade servers. Tiwari adds, “We have high targets in front of us and we will keep IT at core of all our activities. Compton is fast and flexible in this — two important qualities for them to be associated with us till date.” CCL, on its side, has moved on to eyeing acquisitions overseas. The company has also reportedly landed some prestigious projects from international studios of the likes of Warner Bros. Says Vahi, “We believe that the critical cutting-edge technology delivered from our end has contributed in some measure in CCL being able to take on the kind of targets they have set for themselves for the next three years.” A combination of perseverance, risk-taking and dedication has defined the success mantra for Compton, and CCL is the perfect case in point. Vahi signs off, “We have learnt a lesson in resilience in the face of odds.” ■

GAME FOR THE GAMBLE?

THE entry of blade technology dramatically changed a lot of things in the Bandra CCL project. Apart from the real estate costs, it also brought down the total cost of the project, along with the other components Compton Solutions added on to the back-end. The deployment also triggered off a lot of fringe savings in salaries for CCL. Says Abhishek Tiwari of CCL, “We are seeing a lot of saving in terms of IT teams’ salaries as the entire solution required minimum manageability”

All said and done, Compton had taken a calculated risk in pitching for blade technology in the back-end of the solution, despite the resistance of the vendor, HP. Never before attempted in the animation industry, Compton explored the unexplored and broke a few rules. It was after meticulous planning and understanding of the client requirements that the SI arrived at this firm conclusion. The confidence of the SI here comes to the fore in no small measure. As the story unfolded, it is quite appar-

ent that the gamble really paid in ample measure to both the parties concerned. Sandeep Vahi of Compton recalls, “It is about self-confidence and perseverance. We were very sure of what we were proposing.”

Interestingly, HP is only now publicly talking about the blade technology for its partners for deployments in the media and entertainment industry. In the context of how supportive vendors are while their partners need their support in critical endeavors, a partner, on grounds of anonymity, commented, “Vendors like HP have volumes and see no reason to care. We really have to rely on our own sound fundamentals to make any leeway.” Now, Compton’s story is a perfect case in point and can help many aspirants to think a little differently in terms of the right risk – in the kind of action back-up plans they need to have and how to execute a project with the right skill sets. Vahi concludes, “Success is about taking the risk at the right time.”

**Compton
Computers
(P) Ltd.**

A GIANT LEAP AHEAD...

CCL—Compton

29/01/2009

India's number one animation house- CCL

Century Communications Ltd. has various group companies dealing with animation, VFX, CG and restoration. They have operation in media industry they own mahuva and pragya channel, Pixion and pearl media in Mass marketing. They have many video suits for the VFX, most of the popular hindi movies undergo post production process in the studios and suits of Pixion. When they thought of expansion they planned one of the largest and finest animation and restoration facility they had following challenges in front of them:-

1. High availability of IT infrastructure so that artists enjoy working and business continuity is maintained.
2. Speed was the biggest challenge in front of

Pixion. High speed workstations, fast rendering from render farm, high through put from Storage and high network performance from large network.

3. Highly secure IT infrastructure.
4. Managing data storage bottle necks resulting from scalability.
5. Storage performance and reliability.
6. Robust network which is always available.
7. Quick disaster recovery.
8. Keeping low real estate cost.
9. Keeping low IT infrastructure cost.

10. Low consumption of power.



Microsoft®

SPECIAL POINTS OF INTEREST:

- One of the most complex requirement of high speed network with 500 graphics stations and more than 200 render servers trying to access the storage at same time without any delay in the rendering processes which are rendering directly into the Storage .

The Compton Solution

Solution

1. 50000 sq. feet of entire cabling and cable patch panels from systimax.
2. Precision AC solution from Hitachi for data center.
3. Eco friendly design of data center for maximum cooling with minimum power consumption.
4. Server racks from systimax.
5. Power back-up solution from
6. HP was chosen for high end graphic workstations (250 Nos.) with top of the line NVIDIA FX quadro graphic cards.
7. HP Blade solution for render farm having in all 192 servers in

HP Blades + Hitachi HNAS

- phase 1.
- 8.Hitachi enterprise storage.
- 9.Force 10 E 1200 enterprise class core switch.
- 10. HP procure switches as edge switches.
- 11.VPN connectivity from tata between Chennai and Mumbai office.
- 12.E-sat and Keiro for data security.
- 13.Managed Wireless LAN solution from Cisco.
- 14.Network monitoring and trouble shooting on fluke Networks.
- 15.Fully automated helpdesk

- from Kaseya.
- 16.Combining best IT & Business practices with high class products and services to build a highly available IT infrastructure.
- 17.Involving India's leading IT distributor Ingram micro to add in a value by offering a 360 days LC.



and entertainment industry was using rack mountable servers. These use to take higher space, more power, required more cooling and had problems in offering clustered power of all the servers. Major innovation of Leap was testing of blades for render farms. After an extensive research and test-runs our experts reached a conclusion that we could go ahead with deployment of blade servers. Today after one year we are extremely pleased to see the results achieved with blade technology.

Key Innovation
Traditionally Media

Cost Savings

Key business benefit

- 1.Highly dependable and robust IT infrastructure resulting in high yield from each team member.
- 2.Delight for artist to work as there are no bottle necks and they experience high speed in their

"Lot of saving in terms of IT teams salaries cost as the entire solution required minimum manageability"

- operations.
- 3.Major cost saving on real estate as against traditional rack servers, blade take lot lesser space.
- 4.Customer experienced huge cost saving on power as blades take very little power to run as against rack mountable serv-

ers. Blades also take less cooling so hence save lot of money on electricity bills.

- 5.Lot of saving in terms of IT teams salaries cost as the entire solution required minimum manageability.

Key environmental benefits.

- 1.Power is a major resource which is in shortage and is getting expensive, by saving

Environment Friendly Green Solution

- power
- 2.Century has actually contributed society by generating power, because at Century management thinks electricity saved is electricity generated.
- 3.Blade technology has helped century in bringing down requirement of real estate, this would help society in its en-

- deavor to remain green.
- 4.With Leap, century has created a world class VFX studio. Century has employed over 500 artists hence creating jobs and means of living for so many talented Indian.



These artists are exposed to best of the environment to show their creativity.

- 5.With high quality content delivery, century is certain to bring happiness to million of people around the globe.

Why is Compton Decided....

Why Compton

1. Expertise on server management, Optimum workstation tuning, Network management, LAN/WAN management, OS and application management and backup and disaster recovery management.
2. Over twelve years of experience to manage turn key projects.
3. Investment in best of class network monitoring and management tools.
4. Research center which did extensive test on blade technology before implementation.

5. Reach - Compton today can service in Delhi, Mumbai, and Chennai through their offices and cover rest of Indian states through partners.

6. Fully automated proactive preventive maintenance of complete IT facility with automated helpdesk and trouble ticketing.



HP XW-8600 CPU with Dual Quad-core Xenon CPU / 4GB / 2 * 500GB SATA

7. Cost effective solutions - due to low operating cost Compton today can offer cost effective solutions keeping customers cost of ownership low.

8. Strong ties - today Compton has strong ties with all major IT brands and can use these

relationships to bring great value on table for the customers.

The Chennai Facility



show how your business is growing.



Managed Services made all the difference

Facility management

Century Communication Ltd. in association with Compton Computers has successfully implemented revolutionary, fully automated and proactive preventive maintenance approach of managed services. Kaseya is used to provide the back bone for this proactive approach.

Compton has tied up with world renowned Managed Services provider Kaseya to provide it's clients with fast and SLA based services.



HP Blade Servers offer 16 Servers in 9U Rack



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(P) LTD.**

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And the success story continues....

ISO 27001 certification

The entire facility is undergoing auditing for ISO 27001 certification.

Why is project different

1. Leap is different for its key innovations (blades and), storage deployment and revolutionary fully automated managed services approach.
2. Leap is different for what it delivers to the society, making lives of so many people an enjoyable experience.

Future plan

Unique selling proposition

Innovation for better and more efficient solutions.
Sensitivity shown towards society.

Cost saving

Highly dependable and world class infrastructure.
Century's contribution in content creation will speak for its achievement in coming times as century has already churned out some very prestigious projects.

HITACHI Inspire the Next

 Hitachi Data Systems

1. Century plans to deliver high quality content creation to the world. As media and entertainment industry is IT hardware hungry century plan to set –up a research center which will innovate solutions that deliver high yield for its operations.
2. Century wants these new innovations should contribute towards society as whole by saving on its scarce resources.



TITAN 2000
series