

Government Schools of Haryana: A New (e)World of Possibilities for Over a Million Students in Haryana, India

Challenge

The government of Haryana, India sought to bring computers to state-run schools to help students compete with their peers in private schools and be prepared for jobs in the modern, global economy.

Solution

Haryana Government deployed 52,000 *NComputing* workstations in 2622 schools, opening up a world of discovery and interactive learning for students.

Results

- Computer labs benefit over a million government school students across all districts of the state.
- The combination of *NComputing* desktop virtualization technology and C-DAC's EduBOSS software brought down the implementation cost significantly.
- *NComputing* units consume just 1 watt of electricity, compared to 120-150 watts with the traditional PC.
- *NComputing* saves approximately 75 percent on maintenance.

The 'ICT in Education' Project

Haryana, a state located in northern India, comprises 21 districts. The state's "ICT in Education" project – part of the government's mission of transforming Haryana into an IT-driven economy – aims to introduce every student to computing to empower them with the skills to thrive in the modern world.



The state sought to enhance and enrich the learning process for children in state-run schools and prepare them to find jobs in the future. The goal: enable holistic, information-rich, collaborative and interactive learning – on par with the computing experience of children in private schools.

To achieve this, the Haryana government wanted to establish smart computer labs. However, bringing computing to over a million students in 2622 schools would take a massive amount of time and money.

Computing for Over a Million Students

Haryana Government began the search for a cost-effective and energy efficient solution. After evaluating a number of options, the state government chose *NComputing*'s desktop virtualization solution for its optimal combination of price and performance.

NComputing allows organizations to run multiple workstations off a single computer or server, saving 75 percent on maintenance and up to 90 percent on energy use. *NComputing* units consume just one watt of electricity, compared to 120-150 watts with the traditional PC. By opting for *NComputing*'s eco-friendly technology, the state government demonstrated its commitment to keeping the state green.



A New (e)World of Possibilities for Over a Million Students in Haryana, India

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Jagjit S Bhatia
Executive Director, C-DAC

Additionally, NComputing had a track record of providing cost-effective shared computing technology for major state education projects in Andhra Pradesh, Assam, Bihar, Punjab, Maharashtra and Rajasthan, which has impacted the lives of over a million and a half children.

The state deployed 58,500 NComputing workstations across its 2622 schools. All workstations came pre-loaded with the EduBOSS operating system from the Centre for Development of Advanced Computing (C-DAC). EduBOSS, which is a customized version of BOSS Linux for education (free and open source software), also helped bring down the overall cost of implementation significantly. As a result, the school incurred no operating system costs.

"At C-DAC, we have to be 100 percent in alignment with the country's priorities, hence, our commitment to enabling affordable access to computing for education. Along with NComputing, this proved to be an ideal solution to provide affordable computing access," said Jagjit S Bhatia, executive director, C-DAC.

A Lab in Every School

With NComputing and C-DAC, every school has a 22-seat computing lab with NComputing's X550 virtual desktops, one desktop PC, one KVA UPS and one printer. Five schools have "Smart Labs," which provide four times the capacity of the other labs. Each system runs EduBOSS, which is pre-loaded with various educational applications.

Now, every student has the opportunity to gain computer skills and experience an enhanced learning environment.

With well-equipped computer labs in its state-run schools, the government of Haryana is equipping the next generation of the state's workforce to be globally competitive.