Ubuntu supports technology-enabled teaching at The Johns Hopkins University

Cost-effective, easy-to-use and reliable, Ubuntu proved to be the open source platform of choice on which to build a support system for technology-enabled classrooms at The Johns Hopkins University.

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Background

America's first research university, The Johns Hopkins University is a world leader in research and education. Sean Stanley, Instructional Technology Specialist, and 15 colleagues in the Instructional Technology Facilities (ITF) group support more than 60 technology-enabled classrooms as well as computer classrooms, computer labs, residence hall computing clusters and computer kiosks. The team solves problems in real time and in person, often under the scrutiny of renowned faculty members whose classes can be ruined by an equipment glitch.

Issue

When every minute matters and support personnel are scattered around campus, processing multiple requests is no easy task. The university equipped many classrooms with integrated control systems including a "Request Help" feature: when a user presses the help button, an email is sent to the inboxes of support staff as well as to an alphanumeric paging system. But the ITF group had no way to manage these support requests apart from sending e-mail back and forth, making it difficult to ensure the prompt handling of every request."I personally kept pushing us towards Ubuntu because of the amazing community and support behind it delivers the flexibility and reassurance that we need as a business," he explains.

Ubuntu Solution

The ITF Group made the decision to use open source software to build its own simple and robust support system, called BigBoard. Many developers are turning to open source and free software tools because they avoid the time and cost drains of securing licenses. Open source allows developers to focus on actual development and not on licenses and restrictions in access to closed-source tools to which the organisation may or may not have rights.

JHU used a combination of Python, PHP, phpMyAdmin, and Macromedia Flash & Flex, to develop BigBoard and Ubuntu was selected as the OS platform. As an open source solution, Ubuntu provides both a great platform for development and a desktop solution for deployment.

"We liked that Ubuntu met all our development needs and that we could just download it and get to work," said JSU's Sean Stanley. "We didn't have to engage in any commercial relationship or even register the software. This makes Ubuntu very attractive for developers looking to innovate quickly and cost-effectively. It also combined the right amount of reliability with an unprecedented ease-of-use for Linux. It was a turnkey solution that was inherently secure, something that made the Microsoft users in my group relax."

The BigBoard tool captures and displays all user help requests, collects help request data and generates trend reports, and shows support staff the technical status of the campus at a glance.

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Result

With BigBoard software running on an Ubuntu server, support requests no longer fall through the cracks, and the Desktop Computer Services group consistently ranks among the highest faculty-rated IT support departments on campus. Trend reports generated by the system have created additional efficiencies, highlighting the need for more instructor training in some situations and saving thousands of dollars by alerting the group to system-wide malfunctions in devices. Currently operating on the university's main campus, which serves about 6,000 students, the system is expanding to other campuses as they install and upgrade classroom technology.open-source promise, Albisetti confirms.

All support staff use the BigBoard system. "It would not be possible without Ubuntu," says Stanley. "From a customer support perspective, the Big Board software running on the Ubuntu server has become indispensable in the technical support structure of the JHU Campus."

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