**University of Arkansas**

As one of the top research universities in the world, the University of Arkansas uses premium computing resources in a collaborative manner. The university is providing its students, as well as higher education institutions around the country, with access to its IBM System z10 running SUSE® Linux Enterprise Server for System z.

**Overview**

The University of Arkansas (UA) is a public, co-educational, land-grant, research university. Located in Fayetteville, Arkansas, the university is noted for its strong architecture, agriculture, creative writing, history, Middle Eastern studies and business programs, and is highly acclaimed for its enterprise systems, which include an IBM z10 running SUSE Enterprise Linux. The university’s Sam M. Walton College of Business is a nationally competitive business school and its Information Systems department consistently ranks in the top 10 in information research based on top-tier journals.

**Challenge**

To prepare its students for the latest technology-related careers, the Information Systems department in the Walton College of Business at UA made a commitment to incorporate enterprise systems. Accomplishing this mission required strong partnerships with key IT hardware and software firms as well as large corporations such as Acxiom, Baldor, Colgate Palmolive, ConocoPhillips, Dillard’s, J.B. Hunt, Tyson Foods and Wal-Mart—all of which hire graduates with enterprise knowledge and skills.

The university was looking to not only support its own population of students but also provide computing resources to other universities interested in similar areas of study. It therefore required a stable, robust and scalable computing platform that offered the compute power to support enterprise applications and large data sets.

To that end, UA also sought a centralized computing system that offered 99.999 percent availability and could be easily supported with a small staff.

**Solution**

The university evaluated several Linux operating systems and found that SUSE Linux Enterprise Server for System z stood out as the best choice for its environment. “SUSE Linux Enterprise Server for System z is the product of choice for Linux on mainframes,” said David Douglas, professor at the University of Arkansas. “The fact that SUSE also has strong relationships with both IBM and SAP, two of our other key hardware and software partners, was another contributing factor.”

“We’ve found SUSE Linux Enterprise Server for System z to be a highly reliable and secure computing platform.”

David Douglas
Professor
University of Arkansas

Success Story

Education
“Without SUSE Linux Enterprise Server for System z, we would not be able to afford to offer a similar learning environment, much less be able to support it... A distributed system would have required considerably more staff.”

DAVID DOUGLAS
Professor
University of Arkansas

To support its vision of worldwide academic collaboration, the school recently upgraded its IBM System z900 to an IBM System z10, also running SUSE Linux Enterprise Server for System z. “The processing speed of the IBM System z10 is infinitely faster,” said Douglas. “We can take advantage of more memory and faster storage.”

Using z/VM, IBM’s mainframe hypervisor operating system, the university creates multiple virtual servers on a single mainframe, allowing it to share software such as the SAP Business Intelligence Suite as well as open source applications such as Apache web server, PHP and mySQL with dozens of other universities in a cloud-based environment. In addition, UA hosts large data sets that other universities can work with when teaching database courses.

“Our goal is to give students a competitive edge when they enter the workforce,” said Douglas. “The SAP courses are especially popular with all our students, whether they are in accounting, marketing, information systems or finance. Recruiters from companies that run ERP systems tell us that students who have taken our courses have a two-year advantage over students without such education and training.”

“We’ve designed our environment so that users worldwide can access our system to use any of our software for their academic purposes,” said Douglas. “Today, hundreds of external students tap into our system to advance their understanding of topics such as SAP business intelligence and DB2.”

Results
IBM and SUSE have been a winning combination for the university. “SAP isn’t a trivial application,” said Douglas. “The IBM System z delivers outstanding performance, even for these compute-intensive applications. We’ve found SUSE Linux Enterprise Server for System z to be a highly reliable and secure computing platform.”

UA has been very pleased with its ability to offer cloud-based services to other universities, and the user feedback has been very positive. “Our IBM and SUSE mainframe environment allows us to offer the same computing environment to other learning institutions,” said Douglas. “This research collaboration raises the bar on the quality of students we produce. It’s been a major benefit for students and faculty alike.”

SUSE Linux Enterprise Server for System z helps the university manage its environment with a razor-thin staff. “Without SUSE Linux Enterprise Server for System z, we would not be able to afford to offer a similar learning environment, much less be able to support it,” said Douglas. “We can actually support our entire IBM and SUSE mainframe environment with just 1.5 FTEs. We would have needed three times as many people to manage in a distributed platform.”