Overview
Marist College offers undergraduate and graduate degree programs in the arts, sciences, education, management, social work and more. Recognized for excellence by U.S. News & World Report, TIME Magazine and the Princeton Review, the college is noted for its leadership in the use of technology to enhance the teaching and learning process.

Challenge
The IT department at Marist College strives to deliver cutting-edge technology within a tight budget. "We're focused on using technology in new and interesting ways," said Martha McConaghy, strategic project manager for Marist College. "This can be difficult for a school like ours that doesn't have a huge endowment. The idea of purchasing individual servers to suit all of our computing needs sent shivers down our spines. We didn't have the budget, or the space, to maintain that infrastructure."

A longtime user of IBM System z, the college made a strategic decision to remain on the mainframe rather than moving to a distributed environment. Seeing the value of Linux early on, Marist was one of the first institutions to deploy the operating system on the mainframe. "We couldn't afford Windows-based servers and Microsoft licensing was difficult to deal with," said McConaghy. "We woke people up to the potential of Linux."

Solution
As commercial Linux applications became available, the IT department began exploring its options. "We wanted an operating system that was well-regarded in the user community and had a strong support structure behind it," said McConaghy. "Based on this criteria, SUSE Linux Enterprise Server for System z was a natural fit."

With SUSE Linux Enterprise Server for System z, Marist College has an easy-to-scale platform to support its SunGard Banner ERP system, websites running on WordPress and OmniUpdate, as well as

“Running SUSE Linux Enterprise Server for System z on z/VM enables us to provide more value for tuition dollars... in the future, we envision this environment to offer cloud computing to other educational institutions.”

MARTHA McCONAGHY
Strategic Project Manager
Marist College

Marist College at a glance:
Comprehensive liberal arts institution noted for its leadership in the use of technology in and out of the classroom

- Industry and Location
  Education, United States

- Products and Services
  SUSE Linux Enterprise Server for System z

- Results
  + Gained agility to swiftly deliver new IT services
  + Ensured continuous availability for business-critical applications
  + Supported users with a third of the staff needed on alternative platforms
  + Extended IT capabilities to additional schools
“We wanted an operating system that was well-regarded in the user community and had a strong support structure behind it. Based on this criteria, SUSE Linux Enterprise Server for System z was a natural fit.”

MARATHA McCONAGHY
Strategic Project Manager
Marist College

“Numerous open source applications. With the ability to create an unlimited number of virtual servers, the college can support numerous school projects without incurring additional costs.”

Marist College uses z/VM, IBM’s mainframe hypervisor operating system, to virtualize all of its Linux-based applications. The college can create multiple virtual servers on a single mainframe, each running SUSE Linux Enterprise Server for System z. “There are other virtualization solutions out there, but z/VM has been around for 30 years and has matured in ways that other vendors are still trying to figure out,” said McConaghy. “In terms of stability and manageability, it’s amazing what you can do with z/VM. For an environment like ours that operates twenty-four-seven, that’s very important.”

Marist College also leverages its Linux-based mainframe environment to support secondary schools in the area that have limited funds. To that end, the college plans to port Sakai, its open source course management application, to SUSE Linux Enterprise Server for System z to support e-learning. “We wanted to be a hub to allow smaller schools to offer online courses,” said McConaghy. “We’re strong proponents of open source technology, particularly in the academic world where it can be most beneficial.”

In addition, Marist College runs a knowledge center that supports the IT needs of more than 200 schools. For example, the college provided several Linux-based virtual servers to Rensselaer Polytechnic Institute, who in turn enabled the University of Ghana to create an Apache cloud for a research project. “Leveraging SUSE Linux Enterprise Server for System z, we’re able to support other institutions with virtually no additional resources,” said McConaghy.

Results
SUSE Linux Enterprise Server for System z has provided Marist College a stable and highly extensible platform to suit its emerging needs. “In many businesses, it takes months of planning to get a new server up and running,” said McConaghy. “In an academic setting like ours, we need to be much more flexible. Academic users expect that they can experiment and try things out to find the right path. With z/VM running SUSE Linux Enterprise Server for System z, we empower them to do just that. We can deploy a new virtual server in a matter of minutes. And we can easily shift workloads based on bandwidth needs, without making any changes to the infrastructure.”

The total cost of ownership of the IBM and SUSE solution is also very low. “We only need two employees to support our System z environment of more than 800 virtual servers,” said McConaghy. “We would need three times the staff if we were using any other platform.”

The virtualization capabilities have enabled Marist College to support its own users as well as many other schools. “Running z/VM on SUSE Linux Enterprise Server for System z enables us to provide more value for tuition dollars. In the future, we envision using this environment to offer cloud computing to other educational institutions.”