

# EAST CAROLINA UNIVERSITY

The state's fastest growing college goes the distance in education with the right information infrastructure and top-notch support



## ESSENTIALS

### Challenge

- Manage data growth and keep a consolidated, virtualized, EMC information infrastructure with 1 PB of data up and running, and performing optimally

### Solution

- Rely on expert and highly responsive online, telephone, and onsite customer support from EMC Global Services

### Key benefits

- Fast, expert response to high-severity problems helps maintain availability of critical data and applications
- Live Chat provides fast, convenient answers and product-focused expertise to answer questions and resolve problems
- Remote support utility speeds diagnosis and resolution
- Proactive services monitor equipment and dispatch service personnel, if needed
- Field support engineers provide reliable, knowledgeable, and efficient support onsite

East Carolina University (ECU) is a public, coeducational, and nationally recognized research university located in Greenville, North Carolina. It has more than 27,000 students and is the fastest-growing campus in the University of North Carolina system.

“Our IT is very centralized,” says Garrett Killian, an operations and systems analyst in the university’s IT department. “There are four of us in the storage management group and we serve out just over a petabyte of disk storage.”

## SCALING UP, NOT OUT

Over the past few years, the ECU team has worked to move the school’s data from department-based, direct-attached storage and standalone file servers to a centrally managed, consolidated, and virtualized information infrastructure. ECU consolidated data on an EMC® Celerra® NS network-attached storage (NAS) gateway connected to an EMC CLARiiON® CX-4 storage area network (SAN), and implemented automated archiving to EMC Centera® content-addressed storage. ECU also deployed VMware® ESX® Server software to virtualize servers as virtual machines that are stored on the SAN.

Today, this EMC unified storage infrastructure supports the university’s most critical applications including: Blackboard online course management, web portals, departmental applications, Microsoft® Exchange Server and Office SharePoint Server® applications, and Microsoft SQL Server® and Oracle databases. File servers, departmental folders, user home directories, and online courses run off the NAS solution, while sharing storage resources on the CLARiiON SAN for virtually limitless expansion.

“With the consolidated infrastructure, we’re able to scale up to add capacity and services,” says Killian. “Instead of adding servers, we simply carve out more storage or create more file systems in our existing EMC environment.”

In addition to a foundation for reliable, secure, and cost-effective growth far into the future, consolidation and virtualization has saved the university millions of dollars in reduced energy and administrative costs. This has improved data availability, protection, and disaster recovery as well as extended the life of the university’s data center.

## DEPENDABLE, EXPERT VIRTUALIZATION SUPPORT

With the university’s operating systems, critical applications, and data all residing on a centralized EMC information infrastructure, being able to rely on expert technical support is essential. Beyond product knowledge, ECU depends on the virtualization expertise EMC support provides as well.

“If there is a problem, the ball is in my court—or my co-workers’—to get it fixed fast,” says Killian. “We depend on EMC support 100 percent and they understand our environment end-to-end. They understand the importance of resolving issues quickly.”

“EMC has been very, very good in their response to critical issues,” he adds. “When we call EMC with a Severity 1 case, we’re transferred directly to a technician who understands our problem, or a technician with the right expertise will call us back in 15 minutes. It’s not unusual to have two or more technicians on the phone at the same time, working to resolve the case as quickly as possible.”

The EMC Secure Remote Support (ESRS) capability has also proved valuable in driving quick resolutions.

“The EMC technicians can connect directly into the equipment and look at the problem while we’re on the phone with them,” says Killian. “We can look at the same management interface while working the issue together, and we don’t have to tie up our desktops with a WebEx session.”

To help prevent high-severity issues in the first place, EMC solutions are self-monitoring and proactively use ESRS to “connect home” to EMC customer support when they detect an issue, such as a failing component.

“We’ve had it happen that we received a call from our EMC local service engineer telling us he was on the way with a new disk drive before we even knew there was a problem,” says Killian. “EMC notifies us whenever there is a call-home event, and a case is automatically opened and assigned to an engineer. When onsite service is necessary, the local field engineers that we depend on have been reliable, knowledgeable, and efficient. They really know what they’re doing. They have also always done a good job getting here quickly when we need them. We’re in a rural area and they come from Raleigh, which is about two hours away.”

## QUICK, EFFECTIVE LIVE CHATS

Killian also uses the EMC Live Chat service for support issues and technical questions.

“It’s convenient when I need a quick answer,” he says. “I don’t have to go through the process of calling support and opening a case. I just click the Live Chat icon in EMC Powerlink® and within a few minutes a technical support representative has joined.”

EMC Live Chat can be used for all severity levels, so when customers log in, they select the technology they’re inquiring about and they are connected directly to technicians specializing in that product family.

“When the EMC representative joins the chat they’re almost always able to provide the information I need,” says Killian. “They have good technical knowledge of the product, understand the problem, and are able to address it. They are also able to open up the ESRS connection to the system I’m chatting about. If necessary, they can also open a call with a higher level engineer for me, or dispatch a field tech.”

Another aspect of Live Chat Killian says he’s noticed is that EMC online support technicians always make sure they’ve addressed his issue and that he doesn’t have any additional questions before they end the session.

“Whether online or on the phone, EMC support people don’t seem to be under pressure to move on to the next session or the next call, like the technicians in some support organizations,” states Killian.

## INNOVATION IN LEARNING AND IT

One of the features that attracts students to ECU is the university's leadership in integrating online and distance learning technologies into its educational approach and course offerings.

"Today's students are tech-savvy and are looking for schools that know how to leverage online education and distance resource tools," says Killian. "It's a huge draw for ECU. Our department manages the Blackboard online course delivery application. We host the Blackboard application and we have all the course content on our Celerra NAS."

Large video files, used for distance learning, are a primary driver of data growth at the university.

"That's one of our challenges going forward," says Killian. "We're trying to keep up with how fast online learning is growing. It's not just the Blackboard applications, but also professors wanting to host videos and photos for the students in their lecture courses."

**"With EMC, we get the solutions and support we need. We've been very happy with EMC products and the way they fit our needs. And we have been very happy with the technical support we get from EMC—both the pre-sales advice and recommendations and the post-sales support services."**

GARRETT KILLIAN,  
OPERATIONS AND SYSTEMS ANALYST  
EAST CAROLINA UNIVERSITY

One way that the ECU storage team addresses the challenge of maintaining sufficient capacity to respond quickly and cost-effectively to new requests for storage is through thin provisioning.

"Our internal customers come to us and say they need a terabyte or two of storage, when in actuality they really only need 300 gigabytes," says Killian. "We've been able to manage this problem with thin provisioning using Celerra, our new CLARiiON CX-4 960 arrays, and EMC FLARE® Release 30 capabilities for virtual provisioning. We have been able to recover and pull back about 10 terabytes of disk space since upgrading to FLARE 30."

"Thin provisioning has become an industry buzzword, but Celerra has essentially been enabling us to do thin provisioning for years," Killian adds.

ECU was early to recognize and apply the advantages of the NAS gateway, and other schools in state university system have noticed.

"We've been using Celerra for eight years," says Killian. "It has saved us hundreds of thousands of dollars in file servers and backup solutions for file servers that we haven't had to buy. Others look at what we've done by moving to the Celerra and CLARiiON environment and want to do the same thing."

Killian and his colleagues are working with IT teams at other schools to help them implement this type of deployment.

"We're happy to help them implement EMC technologies because it helps us as well. For example, once they have similar gear in place, we could begin doing replications across distances. We're only 90 minutes from the coast and it would help protect us if we could replicate to sites that are further inland, such as Greensboro," says Killian.

The ECU team members feel comfortable recommending EMC solutions based on their experience with both the technology and customer support. Killian points out that when evaluating new storage purchases, support should be a big part of the decision.

“EMC has been there for us in the past and our management took notice,” he explains. “We haven’t had big problems pop up very often, but it’s just a fact of life that we will have a ‘Severity 1’ from time to time. We know that EMC will do whatever it takes to resolve our issue. This is huge for us. In fact, our satisfaction with EMC customer support has impacted our decision to continue buying more EMC technology. We have no reservations about investing more in their products for our technology refreshes, and don’t hesitate to let others know that.”

“Bottom line, support is like insurance,” concluded Killian. “You don’t want to have to use it. But with EMC, when we needed it, the support was there, and that’s what counts.”

#### Contact Us

To learn more about how EMC products, services, and solutions can help solve your business and IT challenges, contact your local representative or authorized reseller—or visit us at [www.EMC.com](http://www.EMC.com).

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