



APV SERIES CASE STUDY

Los Angeles Community College District

Community college district finds ADCs with the right combination of features, ease-of-use and price through POC; availability and performance of student information system and other critical applications assured.

Background

The Los Angeles Community College District is comprised of nine colleges as well as instructional TV services serving nearly 900 square miles of the Los Angeles metropolitan area. The district serves about 250,000 students per year, and is the largest community college district in the United States.

The District's mission is to provide an excellent education that prepares students to transfer to a four-year institution, to complete workforce preparedness and development programs in furtherance of regional and statewide needs, or to pursue personal enrichment through lifelong learning and civic engagement. Since its founding, the LACCD has served more than 3 million students.

LACCD recently announced the Los Angeles College Promise, a program that offers a year of free enrollment to any of the District's colleges for any student graduating from the Los Angeles Unified School District or area charter schools beginning in 2017.

Industry:

Higher Education

Challenges:

Deploying a new student information system required load balancing to assure high availability and performance

Management complexity and overhead were a key concern

Needed to minimize impact on overall IT budget, while doing more with less wherever possible

Solution:

Two Array APV3600 dedicated application delivery controllers for production, and two vAPV virtual appliances in development lab

Future deployment in a second data center, and vAPVs in the public cloud

Benefits:

Load-balanced student information system provides services to students, faculty and staff with improved reliability and accessibility

IT staff can easily update configurations and settings, and copy/clone across physical, virtual and cloud-based versions

High-quality load balancing capabilities achieved without breaking the bank

Flexibility to easily accommodate load balancing requirements for other applications as needed

Challenges

While each of the nine colleges operates its own network and resources, the District itself also operates dual data centers for its own operations as well as for business-critical applications that are used systemwide. One such application is the student information system, which is the central resource for class scheduling, transcripts, grades and a variety of other functions.

LACCD recently began a project to transition to a new student system based upon Oracle PeopleSoft. Assuring that the system maintained high availability and reliability was a critical requirement. Noted Jorge Mata, the District's chief information officer, "[Students] are making decisions that are important to their lives," in terms of choosing class schedules, connecting with their advisor, and other activities via the student information system.

To ensure high availability and reliability of the PeopleSoft application, the IT department undertook a proof of concept (POC) of a number of major players in the application delivery controller (ADC) space. "It was a valuable experience," noted Mata. "They all worked, but we also learned just how much it took to make them work. With some, it took weeks of agony."

Long-time Array reseller [aXcelerate Networks](#), a California-based premier solutions provider that serves higher education as well as other sectors, suggested that Mata and his team try out Array's vAPV virtual application delivery controller. After reviewing Array's ADC customer list – which includes Oracle, SAP and many others – the vAPV was added to the POC.

Solution and Results

Working with aXcelerate and Array engineers, the District was able to quickly and easily deploy the vAPV in the POC test lab.

"My tech team is arguably the best in the world," said Mata. "The challenges we face on a daily basis are enormous. Their response [after testing Array's vAPV] spoke volumes. It was so painless! At that point we knew we had a winner. And it's actually affordable on top of it all. It solves problems without consuming all our budget."

"We realized we could do more with it, like load balancing our Exchange servers. It's gravy on top – we can add additional projects without impacting our timeline or our budget. It's just so intuitive and easy to use."

Jorge Mata, CIO
Los Angeles Community College District

Post-deployment, Mata and his team encountered another pleasant surprise. "We realized we could do more with it, like load balancing our Exchange and Active Directory Federated Services (ADFS) servers. It's gravy on top – we can add additional projects without impacting our timeline or our budget. It's just so intuitive and easy to use," Mata said.

The LACCD IT team did encounter one small hiccup after the deployment. "Oracle made a change [to PeopleSoft] and we could not undo it. Array's technical support team helped resolve it with a temporary work-around within 24 hours," he noted. Due to Array's software-based approach, a permanent fix can easily be rolled into a future APV Series software release.

Benefits

The IT department's ultimate goal is to become a center of services for all colleges within the system, using the dual data center infrastructure

as well as a public cloud platform to support Web servers and other resources. Centralizing applications and resources can double the reliability, Mata believes. "[The Array ADC] costs less, does more, and is easier to maintain – and that's central to our ability to do that," he said.

While the two vAPVs remain in the development lab, the District has deployed two APV Series dedicated ADCs in production, and plans to deploy Array's vAPV on a public cloud. Mata said, "The same software is used across the physical, virtual and cloud editions [of the APV], so we can just copy over configurations and other settings. And it has a licensing model that makes sense."

The IT team has recently run performance tests on the applications and servers that are using APV load balancing. "The systems aren't even blinking an eye" despite the increased test workloads, he added.

Summary

With Array's APV Series application delivery controllers in both virtual and physical models, and with the ability to add cloud-based load balancing in the future, LACCD has gained the ability to assure high availability and performance of critical applications no matter where they may be deployed.

Noted Mata, "If you buy the right technology it can grow to accommodate future needs as well." For LACCD, the APV Series in dedicated, virtual and cloud versions has proved to be the right technology, at the right price, to help achieve current and future data center goals.

