



SOUTH CAROLINA  
FEDERAL  
CREDIT UNION™

#### APV SERIES CASE STUDY

## South Carolina FCU

**Credit union upgrades to SSL-secured Fiserv applications; maintains performance, availability and throughput by load balancing and SSL offloading using Array's application delivery controllers.**

### Background

Founded in 1936, by a group of 14 naval shipyard workers who each contributed \$5, South Carolina Federal Credit Union has grown over the years to serve more than 150,000 members, and hold nearly \$1.5 billion in assets. Since its humble beginnings, the credit union has expanded to offer an extensive network of financial centers and ATM locations. Membership is open to anyone who lives, works, worships or attends school in Berkeley, Charleston, Dorchester or Georgetown counties, and most of the Columbia area. Those in Orangeburg, Clarendon and Calhoun counties are also eligible to join the credit union and enjoy many convenient services, such as remote deposit and online/mobile banking.

### Industry:

Financial Services

### Challenges:

Provide 24x7x365 availability and performance of business-critical Fiserv applications

Convert to an SSL-secured Fiserv environment without impacting server performance

Protect against disruptive downtime during server maintenance and upgrades

### Solution:

Two Array APV1600 application delivery controllers, with AppVelocity-S for load balancing and hardware-based SSL offloading/acceleration

### Benefits:

APV Series offloads compute-intensive SSL processing burden from Fiserv servers, allowing them to operate in their power band

Load balancing assures availability and performance, even if one or more servers becomes unavailable due to downtime or maintenance

Employees and members have continuous access to the tools and services they need, when they need them

From almost the start, South Carolina Federal has had an extensive focus on providing a full range of financial services to its members, with a personalized approach that allows members to focus on making lifesimplified™. In support of that credo, the credit union's information technology group is charged with providing a technology infrastructure that will provide employees with the tools they need to provide top-notch service and support for members.

## Challenges

For more than 12 years, South Carolina Federal had relied upon a number of different products from Fiserv, a provider of financial services technologies and services. "We try to stay competitive with other banking institutions in the area in terms of services," said Jody Burton, the credit union's systems analyst.

"We use Fiserv for almost everything," she noted, including core systems, debit and credit card management, ATMs, disaster recovery and other functions. "It has been terrific," she said.

Over the years, South Carolina Federal had deployed two generations of Array Networks' application delivery controllers, beginning with the TMX Series and later upgrading to the newer APV Series. The Array products load balanced network traffic across multiple Fiserv servers, assuring application performance and throughput and guarding against disruptive downtime during server maintenance and upgrades.

According to Burton, "System availability must be maintained at all times. In order to provide the lifesimplified experience with transactions our members and employees expect, we must always be up and running."

Recently, however, the credit union renewed its agreement for Fiserv's Spectrum account processing platform, consolidating additional

services such as online and mobile banking, secure social payments, and e-banking and payments under a single Fiserv platform.

Not long after, Fiserv recommended the credit union upgrade its servers to https, secured by SSL certificates. Due to the increased processing load involved in 2048-bit SSL encryption and decryption, Fiserv recommended the credit union upgrade its Array ADCs to models that would support SSL offloading.

---

***"Things have been very quiet with [the APV Series] appliance. It's been powered on since day one with no problems."***

**Jody Burton, Systems Analyst  
South Carolina Federal Credit Union**

---

## Solution and Results

The Array APV Series was the only ADC product recommended by Fiserv for use with their products, and the previous Array products had proved to be trouble-free over the years. The credit union chose to upgrade their existing load balancers to Array's APV Series solutions that provided robust SSL processing performance.

South Carolina Federal deployed two APV Series ADCs with the AppVelocity-S feature set, which includes hardware-accelerated SSL processing via a purpose-built SSL stack. The APV Series manages all SSL-encrypted traffic, relieving load from the five Fiserv servers and allowing them to operate in their power band. One dedicated APV Series appliance was deployed into production while the other is maintained as a hot spare, in case it is needed.

According to Alan Salazar, the credit union's senior network administrator, "The only thing we needed a little help with was in setting up the SSL, but with Array's support team's help, we were up and running in 15 minutes."

### Benefits

After deploying the new APV Series appliances with hardware SSL capability, Burton says that the credit union has been very satisfied with the results. "Things have been very quiet with [the APV Series] appliance," she said. "It's been powered on since day one with no problems."

By load balancing critical Fiserv business applications, the credit union is able to maintain server availability and throughput, leading to a seamless user experience for employees and

members alike. In addition, offloading compute-intensive SSL processing reduces overall load on the Fiserv servers for improved efficiency.

### Summary

Array's APV Series application delivery controllers play a vital role in helping South Carolina Federal Credit Union achieve high standards for customer care. By distributing load across five Fiserv servers, availability is ensured even if one or more servers becomes unavailable due to an outage or routine maintenance.

In addition, the switch to SSL-secured Fiserv servers has not impacted performance or throughput because the Array ADC is managing the compute-intensive SSL processing, rather than further burdening the Fiserv servers..

