vAPV CASE STUDY

County of Maui

County government optimizes new centralized GIS system with Array virtual ADCs; gains flexible, versatile and easy-to-use load balancers that meet needs now and in the future.

Industry:

Government (Local)

Challenges:

A new geographical information system required load balancing to assure performance and availability

While GIS manufacturer recommended a different load balancer, county IT staff needed to conserve budget while attaining the features, performance and flexibility needed

Data center virtualization goals as well as budget dictated a virtual ADC appliance

Solution:

Array's vAPV virtual application delivery controllers in the primary and disaster recovery data centers

Benefits:

Availability and performance of critical GIS servers is assured through server load balancing

Users gain access to consolidated geographical information, without disruptive downtime or bogged-down application throughput

IT organization has a flexible, versatile virtual appliance that can easily adapt to needs now and in the future

Simple, elegant management interface allows administrators to achieve goals without excessive learning curve or headaches

Background

The County of Maui, Hawaii encompasses the islands of Maui, Lanai, Kahoolawe, Molokini, and Molokai, and spans nearly 2,400 square miles, of which about 1200 square miles is land. This relatively vast area is home to about 165,000 inhabitants. The county seat is in Wailuku, on the island of Maui.

Because the communities within the County are relatively small and the population quite dispersed, the State of Hawaii established the County government to provide most of the services that would typically be provided by city governments on the mainland U.S. The County thus provides everything from law enforcement to water and sewer services, to building permits, refuse collection, parks and recreation, public works and more.

The County maintains a few small satellite offices on the other islands; however if an in-person site visit to another island is required, County staff is dispatched via ferry or scheduled airline flight.

Challenges

Like many local governments, much of the work done by County departments has a geographical element – for example, the water department needs to be able to pinpoint the location of water lines, the finance department needs accurate information for real estate tax calculations, and the fire department needs to quickly and accurately identify the location of a property.

Over the years, multiple County departments had implemented their own geographical information systems (GIS) or simpler mapping systems. Many of these solutions were 20 to 30 years old and had become obsolete; it had also become difficult to source replacement parts when needed.

"Our GIS systems were becoming more and more out of date, which made them even harder to use. It had also become a management nightmare to update them," said Mark Kluth, IT Systems Administrator for the County of Maui. "On top of it all, our data needs were exploding at a ferocious rate," he added.

The IT staff set a goal of unifying GIS data into one central location to serve all departments that needed this type of data. After extensive research, the Esri ArcGIS Enterprise solution was chosen. ,

Solution

While ArcGIS recommended a load balancer from an Array competitor, the County of Maui needed to hold the line on cost while still gaining the features, flexibility and ease of use needed. "We don't have an unlimited budget, so affordability mattered," said Kluth.

County IT staff arranged for demos of several load balancer/application delivery controller products. In the end, Kluth noted, "I was intrigued by what I saw with Array's product, and especially the affordability."

Kluth got in contact with another Array APV Series user in Hawaii that had used the product for several years. That Array customer was happy to provide a referral, as their APV Series had performed perfectly for years.

"We expect the vAPVs to work for our needs for a very long time – it's a simple yet elegant solution. Overall, it's a much better fit for what we needed"

Mark Kluth
IT Systems Administrator, County of Maui, Hawaii

In keeping with their data center virtualization goals, the County chose the vAPV virtual application delivery controllers for deployment. One was installed for the main production server; the other at the disaster recovery site.

"The install was very smooth," noted Kluth "Array's technicians were very knowledgeable, and [the vAPVs] have been working flawlessly ever since," he added.

"We expect the vAPVs to work for our needs for a very long time – it's a simple yet elegant solution," he continued. "Overall, it's a much better fit for what we needed," than the product recommended by ArcGIS, he explained.

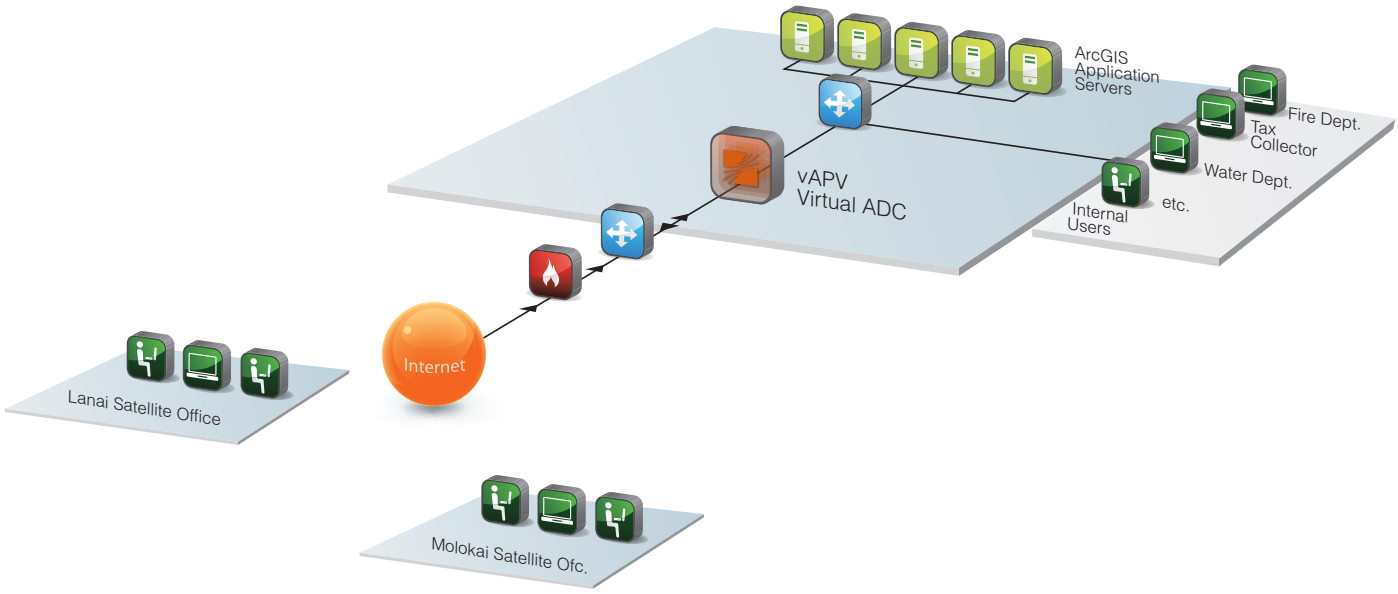
Benefits

By updating and centralizing their geographical information system, the County of Maui is positioned to serve its citizenry now and in the future. Array's vAPV virtual ADC load balances traffic for the ArcGIS servers, ensuring high availability and performance for the multiple departments that require access to geographical information in order to perform their functions.

County IT staff has gained a flexible, richly featured virtual load balancer that is easy to use and program, and can support and enhance the performance of the GIS, as needs change, well into the future. For example, as the County expands Web-based services for citizens, Kluth envisions that persistent cookies will be required in order to support online purchases.

Said Kluth, "Every minute counts in this business, and I don't want to spend a whole lot of time learning new systems. I could tell that [Array] put a lot of thought into the design of the vAPV."

For the County of Maui, Array's vAPV virtual ADC provides the right balance of features, flexibility and ease of use, all at an affordable price.



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