

Destination Smart City: The Evolution of a Florida Town's IT Infrastructure into the 21st Century

SITUATION

Located in the center of Broward County Florida, the Town of Davie is a full-service government municipality that provides for all the usual government services inclusive of operating their own Police, Fire, Water Utility and various community parks. The Town is a major City in the heart of Broward County, Florida that serves a resident population of well over 100,000 residents, while preserving their greenspaces and providing their residents with a unique equestrian lifestyle.

The Town had an aging IT infrastructure and had experienced network connectivity and performance issues. The new CIO, Nelson Martinez Jr. was tasked to refresh its infrastructure to the latest technologies and decided to outsource the management of its IT network infrastructure, perimeter security, and voice network. The IT Director approached AIP US because of its experience and expertise in providing managed services in similar environment for other cities and police departments in South Florida. With its deep technical expertise and experience working with local governments, AIP US worked in tandem with Davie IT to establish a plan to create a new Town wide data network and security infrastructure specific to the Town's requirements and budget.

SOLUTION

AIP US conducted network and security assessments, provided recommendations, designed a new architecture, and recommended a migration path. With careful consideration of the Town's 24x7x365 operations of the Police Department and Fire Department, AIP US and Davie IT established a project schedule and implemented the new enterprise network and security/firewall environment with no impact to daily operations. The new network utilizes Cisco centric solutions with an architecture that is reliable, scalable, secure, redundant and highly-available. AIP US conducted failover testing and ensured seamless failover of different network components. After the implementation, AIP US immediately transitioned into "steady state" onsite managed services of the Town's new network, perimeter security, and voice infrastructure. Since 2015, the AIP US team have worked side-by-side with Town of Davie's IT department in providing day to day troubleshooting and issue resolution, performance monitoring, on-going software/hardware maintenance and upgrades; as well as assist with new projects and implementations. As part of the emergency response team, AIP US and the Town have successfully protected information technology assets during the hurricane seasons over the last five years. Because of the modern network and security infrastructure investments made to date, the Davie Police Department also recently passed their FBI CJIS / FDLE audits as well. A "Win-Win" for all parties involved!



Network security has also been on the center stage for the Town of Davie and many other IT organizations (Public and Private) for several years. In response, AIP US assisted the Town of Davie with implementing a multi-vendor layered security strategy that incorporates intrusion prevention, intrusion detection and “Zero-Day” malware detection security services; also, capable of assisting with remediation activities as required.

Most recently, the Town of Davie IT department has begun the process of building out a state-of-the-art Fire Station and Community Center (Station 86). AIP US worked with Davie IT to develop a robust architecture for this new facility that includes key elements such as BGP Multi-homing Routing of Internet facing traffic with two diversified ISPs and provisioning of ARIN public IP address spaces to enable seamless routing and failover as well as optimized routing capabilities. In addition, as the new “Station 86” facility will house critical IT infrastructure for Public Safety, AIP US will also be enabling VXLAN capabilities within the Town of Davie network infrastructure to allow for the proper replication of data and private Cloud infrastructure. This architecture provides real time replication and high-availability and enables seamless user access to mission-critical applications throughout the Town.

Town of Davie, CIO, Nelson Martinez Jr. says:

“AIP US has played a critical role working with Davie IT since 2015, to establish a solid foundation to build on as the Town of Davie embarks on the implementation of various Smart City initiatives. Having a solid network and security architecture in place that can scale both “East -West” and “North - South” is critical in the long run to the success of any Smart City program...”

“AIP US works very well with the Davie IT organization; as a result, has provided the Town of Davie with enterprise wide day to day operational and after-hours network support that has been both cost-effective and extremely efficient...”

BUSINESS RESULTS

With the robust architecture implemented which included key design principles such as redundant and high-availability, security, and scalability, the Town has not experienced any network and security outage for the last five years – meeting and exceeding the expectations of the requirements set by the Town 5 years ago. AIP US continues to provide a solid IT foundation, share best practices and remain the go to technology partner for the Town of Davie. This partnership has allowed the Town to better serve its government operations, functions, and citizens.