



**CITY COUNCIL MEETING**

<b>AGENDA SECTION</b>	CONSENT
<b>MEETING DATE</b>	JANUARY 26, 2026

<b>ITEM:</b>	<b>Resolution 2026-006 to Amend the 437 and 720 Budget for Purchase of Host Server Hardware and Licensing.</b>		
<i>Presenting Item: Aaron Chirpich, City Manager</i>			
<b>DEPARTMENT:</b>	Information Technology	<b>BY/DATE:</b>	Jesse Hauf – IT Director / January 21, 2026
<b>CORE CITY STRATEGIES:</b> <i>(please indicate areas that apply by adding an “X” in front of the selected text below)</i>			
<input type="checkbox"/> Community that Grows with Purpose and Equity		<input type="checkbox"/> Engaged, Effective and Forward-Thinking	
<input type="checkbox"/> High Quality Public Spaces		<input type="checkbox"/> Resilient and Prosperous Economy	
<input type="checkbox"/> Safe, Accessible and Built for Everyone		<input checked="" type="checkbox"/> Inclusive and Connected Community	

**BACKGROUND**

***Host Servers***

The City routinely replaces host servers every 4-6 years. Three of our current host servers are in their 6<sup>th</sup> and 9<sup>th</sup> year of operation. The IT Department uses these host servers and virtualization (hypervisor) software to run City applications. This approach allows a small number of powerful physical servers to host many virtual servers that run critical systems such as authentication, security, accounting, file sharing, and other City services. These host servers also store the City’s data using a large, highly distributed, and resilient storage system. This design, known as converged infrastructure, concentrates computing and highly available storage onto a few robust host servers rather than many individual servers. See Attachment “Figure 1” for a visual comparison of this model versus traditional single-purpose servers.

***Hypervisor (VMware)***

The City has used VMware as its hypervisor since the 2000s. VMware has long been regarded as a leading enterprise hypervisor due to its stability, maturity, and broad vendor support. VMware was acquired by Dell in 2015 and later by Broadcom in 2023. Following the Broadcom acquisition, VMware’s licensing and support model shifted to prioritize large enterprise customers. This change has resulted in significant licensing cost increases across all tiers, with a disproportionate impact on smaller environments such as the City’s.

***Hyperconvergence (StarWind)***

Since the early 2000s, the City relied on separate storage servers or storage arrays replicated between sites. As storage technology evolved, this model became increasingly expensive to maintain and replace from a capital standpoint. To address this, the IT Department transitioned to a hyperconverged infrastructure model, consolidating storage directly into the host servers.

A key challenge of this approach is replicating storage between sites to protect data and ensure high availability. The City initially used HPE’s SimpliVity software to meet this need; however, changes to HPE’s licensing and pricing model ultimately made the solution cost-prohibitive by 2022. The IT Department then transitioned to StarWind as a more cost-effective hyperconverged solution. While StarWind offers capable

software and strong vendor support, it has not ultimately proven to be the best fit for the City's long-term needs.

### **Windows Licensing**

While the City continues to expand the use of low-cost Linux-based systems that do not require operating system licensing, the City's core infrastructure services (authentication, printing, financial systems, etc) remain dependent on Windows Server. Windows Server Datacenter licensing is applied at the physical host level, which allows the City to run an unlimited number of Windows Server virtual machines on a licensed host without the need to purchase additional operating system licenses.

### **SUMMARY OF CURRENT STATUS**

The City currently operates four host servers:

- Public Safety (HS1)
- City Hall (HS2)
- Library (HS3)
- St. Cloud (Backup site)

Two of these servers (HS1 & HS2) are designed to function as a highly resilient, converged environment, while the third (HS3) is repurposed legacy hardware. The legacy server operates independently from the other two and requires manual backup processes and hands-on management, increasing administrative effort and risk.

- This proposal replaces all three existing servers with three new, uniform host servers that operate together in a fully resilient and converged configuration.
- The total cost to replace all three host servers is \$135,000. The City received quotes from four manufacturers (see Figure 2). HPE provided the best overall pricing while meeting the City's technical and operational requirements.

In addition to the two primary host servers (HS1 & HS2), the City operates one server at the backup site. All three of these servers currently operate under limited VMware licensing. Certain features required for efficient management and resiliency have been forgone due to licensing costs. The repurposed legacy server (HS3) operates under a free VMware license, which requires fully manual management and further limits functionality.

The two converged host servers (HS1 & HS2) currently use StarWind software for storage replication. As noted in the background discussion on hyperconvergence, StarWind is not a long-term fit for the City's environment and was implemented as a temporary solution following the discontinuation of HPE SimpliVity.

- This proposal transitions the City from VMware + StarWind to Proxmox + Ceph. *Council approval of the software is not requested at this time*, as these costs have already been included in the 2026 budget. This information is provided as supplemental context for the budget amendment.
  - VMware + StarWind 5-year cost: \$128,419.20
  - Proxmox + Ceph 5-year cost: \$32,566.70Proxmox and Ceph are open-source solutions that provide the full feature set required for virtualization and storage convergence at no licensing cost. The City will pay only for vendor support and access to enterprise update channels.

This model reduces software licensing costs over the life of the host servers; however, it requires all three hosts to be replaced at the same time with uniform hardware. The following factors contribute to the proposed budget amendments:

- The IT Department’s proposal delivers a significantly improved design that simplifies administration, eliminates dependency on VMware and StarWind, and substantially reduces licensing costs over the five-year lifespan of the servers. This improved design does increase the upfront cost of server replacement.
- Rapid expansion of AI data centers has driven a sharp increase in RAM (memory) costs over the past several months.
- Windows Datacenter licensing costs were higher than originally anticipated and were underbudgeted. This proposal also transitions the City to a Software Assurance model, providing access to the latest Windows Server versions and the ability to license cloud-based servers as part of future migration efforts.

#### **Cost**

- \$135,000 for host server hardware, of which \$90,000 was budgeted in 437 – IT Capital.
  - This proposal amends the 437 budget by \$45,000 to cover the additional hardware costs. Host server hardware is depreciated over an average useful life of five years.
- \$61,000 for Windows Datacenter licensing, of which \$16,000 was budgeted in 720 – IT Operating.
  - This proposal amends the 720 budget by \$45,000 to address higher-than-anticipated software licensing costs. There is sufficient fund balance available should the 2026 IT Operating budget be unable to fully absorb this increase. This figure reflects the net Datacenter licensing cost after accounting for the removal of VMware and StarWind licensing expenses.

#### **STAFF RECOMMENDATION**

Staff recommends amending the 437 – IT Capital and 720 - 2026 IT Operating budget, as outlined in the attached resolution, to approve the purchase of host server hardware and required software from Paragon Data Systems in the amount totaling \$196,000. There being capital and fund balance to accommodate both.

<b>RECOMMENDED MOTION(S):</b>
<p>MOTION: Move to waive the reading of Resolution 2026-006, there being ample copies available to the public.</p> <p>MOTION: Motion to adopt Resolution 2026-006, amending the Fund 437 and 720 budget to authorize the purchase of host hardware and related software from Paragon Data Systems in the amount of \$196,000.</p>

#### **ATTACHMENT(S)**

Figure 1

Figure 2

Quote PDS HPE DL380 GEN11

Quote PDS Windows Datacenter

Alt Quote Dell R760

Alt Quote Supermicro XT24

Supplemental VMware Quote

Supplemental Proxmox Quote

Resolution No. 2026-006