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**Date:** December 8<sup>th</sup>, 2020  
**To:** Administration & Finance Executive Committee  
**From:** Jeremy Hughes, Information Technology Manager  
**Subject:** Approved 2020 Capital Budget - Purchase of Server Equipment

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## BACKGROUND

Servers centralize access to digital files, operate critical network services, and control everyday software applications used throughout facilities managed by the Town of Fort Frances (the “Town”).

As per a report to the Administration & Finance Executive Committee presented on February 12<sup>th</sup>, 2020 detailing a *2020 Technology Plan Timeline*, existing core server infrastructure lacks the processing and memory capacity to fulfill the Town’s current needs and planned requirements for the near future.

Additionally, an isolated disaster recovery site populated with server hardware is required to fulfill the Town’s continuity of operations obligations.

## ACTION PLAN

Core server infrastructure will be upgraded with new units and existing server infrastructure will be re-deployed in a disaster recovery role.

Purchases will be funded from the approved 2020 Capital Budget of the Information Technology, Public Works, and Water Works Departments, with a 40% contribution from the Fort Frances Power Corporation.

New network switches will be purchased in January of 2021 to enable the upgraded infrastructure. Additional required Windows Server licenses will be prepaid as part of the 2021 Operating Budget.

## SOURCING PROCESS

Technical specifications have been designated by:

- Evaluating current capacity, utilization, and future requirements
- Leveraging advances in technology platforms
- Discussing upgrade paths with specialized data center teams from each vendor and affected staff in various departments, including the Fort Frances Power Corporation

As per a report to Council approved on November 23<sup>rd</sup>, 2020 detailing *Collaborative Sourcing*, quotes have been obtained, without the need for a formal Tender or Request for Proposal, from the following qualified vendors:

- CDW Canada Corp. for a Lenovo solution
- Dell Technologies for a Dell solution
- Compugen Inc. for an HP solution

## EVALUATION

Each vendor has proposed a Hyperconverged Infrastructure (“HCI”) solution that combines storage, compute, networking, and management. Hardware warranties and software support are included for a period of 3 years.

	CDW	Dell	Compugen
OEM Platform	Lenovo	Dell	HP
Model	ThinkAgile VX	VxRail E665N	DL325 Gen10 8SFF

We currently employ VMware’s platform to manage our virtualized server infrastructure.

Dell’s 4-node VxRail offering is better integrated with VMware through vSAN than the 4-node ThinkAgile solution from Lenovo. Compugen has proposed a 3-node Nutanix solution running on HP hardware that makes use of Acropolis software instead of vSAN for HCI.

Utilizing a vSAN HCI solution will allow us to continue to operate a familiar single platform for both proposed hardware clusters.

	Weight	CDW	Dell	Compugen
Technical Specifications	25%	80%	96%	61%
Product Quality	5%	95%	100%	100%
Supplier Quality	5%	95%	100%	100%
Logistics	5%	100%	100%	100%
Cost for 4 Nodes	60%	67%	100%	77%
<b>Weighted Score</b>	<b>100%</b>	<b>75%</b>	<b>99%</b>	<b>76%</b>

Due to its relationship with VMware, Dell can leverage significant discounts on VMware licensing. Dell has also proposed the only offering that fully leverages newer NVMe hardware across 4 nodes, rather than relying on older SAS or SATA protocols present in other proposals with less nodes.

Ultimately, the proposal from Dell features easily adoptable software, impressive hardware, and aggressive pricing.

## PROPOSED BUDGET ALLOCATIONS

Approved 2020 Capital Allocation	Price	HST (Less Rebate)	Subtotal
Information Technology	\$60,219	\$1,060	\$61,279
Public Works (GIS)	\$7,748	\$136	\$7,884
Water (GIS)	\$4,123	\$73	\$4,196
Sewer (GIS)	\$2,062	\$36	\$2,098
Fort Frances Power Corporation	\$49,434	\$870	\$50,304
<b>Total</b>	<b>\$123,586</b>	<b>\$2,175</b>	<b>\$125,761</b>

## RECOMMENDATION

Based primarily on an evaluation of technical specifications and cost, it is recommended that:

- 1) The Administration & Finance Executive Committee authorize the purchase of server equipment from Dell for a total cost of \$125,761, in compliance with the recommendation of a report to Council approved on November 23<sup>rd</sup>, 2020 detailing *Collaborative Sourcing*.

Administration & Finance Executive Committee approval of this report will agree with the recommendation to:

- 1) Authorize the purchase of server equipment from Dell for a total cost of \$125,761.