TECHNOLOGY & RESILIENCY COMMITTEE
January 28, 2021 4:00 p.m.

AGENDA

Chair: Tara Gaston

Members:
    Phil Barrett
    Eric Connolly
    Joe Grasso
    Bill Peck
    Mike Smith
    Matthew Veitch

I.   Welcome and Attendance

II.   Appointment of a Vice-Chair

III.   Discussion: Committee Definition and Scope

IV.   Saratoga County IT Department Datacenter Refresh Project – Eileen Bennett, Director of Information Technology

V.   Other Business

VI.   Adjournment

Due to public health and safety concerns related to COVID-19, there is limited capacity in the Boardrooms. The public will have an opportunity to hear the meeting live via an audio signal using this call-in number and access code:

Dial: 1-978-990-5145
Access Code: 1840389

Committee Definition and Scope

Per Resolution 1-2021 Adopted 1/6/2021

TECHNOLOGY & RESILIENCY COMMITTEE: To oversee all aspects of County Internet Technology (IT) and Information Systems; to oversee the County's IT infrastructure; to evaluate and recommend potential software solutions requested by Department Heads for the purpose of making County operations more efficient and/or cost effective; to consider recommendations of the IT Director; and to review and propose initiatives that enhance generally the public's access to the workings of County Government, programs and services as well as to the improved access to Internet Technology in Saratoga County; to examine the County's flexibility and responsiveness through social and economic resilience, sustainability, and disaster management; and to coordinate with other standing committees and County departments to accomplish those goals.

SARATOGA COUNTY

PRE-RESOLUTION MEMORANDUM

TO: Steve Bulger, County Administrator
              Hugh G. Burke, County Attorney

FROM: Eileen M. Bennett, Director of Information Technology

DATE: 1/26/2021

Committee: Technology & Resiliency Committee

1. Budget Amendments: $590,913.00 for Data Center refresh plus $16,625.00 for an additional remote work solution for a TOTAL of: $607,538.00

2. Amendments to the Compensation Schedule: N/A

3. Details on what the resolution will authorize:

   A refresh of the County's I.T. Datacenter that was implemented in 2015 and/or an additional remote work solution. Details on attached document.

9. Remarks: Various vendors will be used for all hardware and software from a NYS OGS Contract and/or other County approved contracts. In 2015 Resolution 27-2015 established a capital accounts fund for the Data Processing Network Infrastructure project.

Appropriation accounts to be used if the budget amendments are to the I.T. General Fund accounts:

A.23.000-7032	PC Networks	$549.887.00
A.23.000-8520	Software	$42,801.00
A.23.000-8190	Other Professional Srv	$14,850.00

Revenue account to be used:
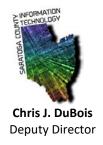
A-0599.B	Appropriated Fund Balance	$607,538.00

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Eileen M. Bennett
Director

Chris J. DuBois
Deputy Director

Prepared January 22, 2021

The County of Saratoga Information Technology Department Datacenter Refresh Project including Remote Work Solution

2021 is expected to be a challenging year for The County of Saratoga Information Technology Department. With the rise of COVID-19 and recent technology initiatives, the County's IT Datacenter that was implemented in 2015 needs to be refreshed as soon as possible.
This refresh will consist of:
- replacing the five host servers with six new servers
- a new storage device doubling the counties current storage
- replacing and upgrading the datacenter switches
- replacing Building#5 core switch
- replace the firewall with a new device capable of higher levels of security

The current datacenter is running devices whose active support will be ending in 2022. IT has begun to see the degradation of perforce and bottle necking caused by heavy uses of current applications. 2021 will see the addition of no less than three new applications that are resource heavy. The goal of IT is to implement the new datacenter before these applications go online. IT also expects to see the data storage rapidly increasing over the next five to six years based on the growth of the last six years.

This datacenter refresh will resolve the resource and performance issues for the next five years or longer, while allowing the county to continue to grow its environment. The refresh will offer better performance, greatly increase our security profile, and add the ability for more flexible remote working capabilities.

Once all components are received, IT fully expects to have the new datacenter stood up within three weeks and servers migrated/upgraded (where possible) within five weeks.

Servers

- Increase from 5 to 6 Cisco UCS servers
- Increasing the memory from 127Gb to 448Gb
- Higher performance Processors
- ISCSI throughput will go from 3 Gbps to 10 Gbps (20-30 with port groups)

Networking

- Datacenter switches will be increased from One Gigabit Switch to 10 Gigabit Switch to match the Server and Storage throughput
- Datacenter switches are maximized for virtual environments
- Core switches will be replaced with Cisco 9500 series switches - this will compensate for the increase in traffic
- Current ASA (firewall) will be replaced with Cisco Firepower devices these devices have all the functions of a firewall but also add, filtering, Intrusion detection, virus and adware scanning, Access control, along with other functions
- Internet being increased from 200Mbs to 400Mbs with no budget impact

Storage

- The current storage is no longer actively supported and cannot be upgraded
- The management software for the current storage device is using flash in sections
- Over the last 6 years the County storage has increased from 1TB to 21TB with the expectation that the storage will continue to grow to the 30TB to 40Tb range within the next 2-3 years
- The New storage is almost triple in speed
- The New storage is almost double the current storage space allowing for expected growth over the next 6 years

Software

- Add one Windows datacenter license
- Add one Veeam license
- Add one VMWare ESXi license

Miscellaneous

- Professional Services
- SFP Modules
- Cat7 cables
- Unknown items
- Contingency Budget

Microsoft Azure Cloud Services:

- Azure will be used for DR site
- Azure will also be used as an additional solution for remote work