TOWN OF WEST SENECA

ALISSA C. STRAUS
DIRECTOR OF FINANCE

TO: Honorable Town Board / Town of West Seneca

FROM: Alissa Straus
Director of Finance

DATE: October 4, 2021

RE: Tyler Technology Support

There have recently been multiple support issues with the Town's accounting system, MUNIS, provided by Tyler Technologies. Through discussions between myself, the Town's IT provider, and Tyler Technologies, it was established that this is due to the type of support contract we currently have with Tyler Technologies.

Currently, the Town pays an annual expense for "Tyler Support", which is specifically for the functionality portion of MUNIS. The recent issues with MUNIS have been falling outside the scope of support included through Tyler Support. These issues are mainly contributed to server issues and include, but are not limited to, adding new users to the MUNIS software, being unable to test-close fiscal years, issues with running budget monitoring reports, etc. Please note that many of these items are crucial for the integrity of the MUNIS system and effecting Finance Department's duties. Due to this, the Town is currently liable for additional charges to receive the support needed to continue use. Currently, the cost for this support is $125/hour.

In response to these issues, Tyler Technologies has given the Town two options to solve the recent support issues:

Option 1: SaaS for MUNIS

Software as a service ("SaaS") is a cloud-based software, where Tyler Technologies hosts and manages MUNIS applications. This allows Tyler to directly provide ongoing support, maintenance and upgrades of the applications, hardware, and operating system. If selected, Tyler Technologies would work with AIS to migrate the Town's MUNIS servers to the MUNIS cloud. Through this process, IT workload and server maintenance would be reduced, decreasing AIS expenses. Tyler would also now be able to provide support 24/7/365, something we currently don't receive. It would essentially eliminate any issues occurring with MUNIS, whether it is the day-to-day issues, or the issues that have been occurring on the back end (with quarterly updates, patching, migrations, etc.)

The annual cost for this support service is $49,672.00, with a one-time charge for migration of $10,000. The Town would have to sign up for a three-year contract where there would be no annual increase for that period. After that, the increase for this contract is estimated to be 3% annually. Pricing for this option would eliminate the current Tyler Support annual charge, currently $27,990.69 for the Town in 2021, estimated to increase by 5% annually.

Option 2: TSM for MUNIS

Tyler System Management Support ("TSM") would support issues that fall outside of the functionality portion of MUNIS, including issues that occur on the MUNIS server which is currently hosted by the Town. The pricing for TSM is 25% of the Tyler Support contract that the Town currently has with the Town. Please note that the current Tyler Support service that the Town pays is currently $27,990.69, and estimated to increase by 5% annually, thus increasing the annual cost of the TSM add-on. Since the Town would still be hosting the MUNIS server, expenses related to maintenance on this server would still be owed to AIS.

Below, please find a pricing comparison of the two support options previously described. Please note that although the SaaS support option appears to be a greater cost initially, the cost difference between the two support services decreases significantly in future years due to the 3-year price lock with the SaaS contract and a lower estimated annual increase in contract pricing. Additionally, through selecting the SaaS option, less support should be needed by AIS, causing their support and maintenance charges to decrease. Additionally, as we migrate our payroll platform to MUNIS next year, having direct support available 24/7/365 would be a great asset for the Town if issues arise.

		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
SAAS	X		49,672.00	49,672.00	49,672.00	51,162.16	52,697.02	54,277.94	55,906.27	57,583.46	59,310.97	61,090.29	62,923.00
Migration			10,000.00	-	-	-	-	-	-	-	-	-	-
Total			59,672.00	49,672.00	49,672.00	51,162.16	52,697.02	54,277.94	55,906.27	57,583.46	59,310.97	61,090.29	62,923.00
Current Annual		27,990.69	29,390.22	30,859.74	32,402.72	34,022.86	35,724.00	37,510.20	39,385.71	41,355.00	43,422.75	45,593.88	47,873.58
TSM			7,347.56	7,714.93	8,100.68	8,505.71	8,931.00	9,377.55	9,846.43	10,338.75	10,855.69	11,398.47	11,968.39
Total		27,990.69	36,737.78	38,574.67	40,503.40	42,528.57	44,655.00	46,887.75	49,232.14	51,693.75	54,278.43	56,992.36	59,841.97
Diff.			22,934.22	11,097.33	9,168.60	8,633.59	8,042.02	7,390.18	6,674.13	5,889.72	5,032.53	4,097.94	3,081.03

Attached, please find additional information on the SaaS and TSM support options.

munis®
a tyler erp solution

Munis Software as a Service

With the Munis® Software as a Service (SaaS) solution, Tyler hosts and manages the Munis applications from its facilities. Tyler provides the ongoing support, maintenance, and upgrades of the applications, hardware, and operating system.

You will receive clear and concise documentation, defining all aspects of the relationship, including a contract (commitment to partner) and a service level agreement (measurable expectations of performance).

Features

The Munis SaaS model is reliable, available and secure. There are no code changes to the client or server without proper notification. It offers complete redundancy and utilizes data encryption and Virtual Private Networks (VPN) to transmit all data.

- **System Administration:** Tyler performs daily administrative tasks. We address the installation, upgrade, support and file maintenance of the Munis application and database servers, operating system and infrastructure.
- **Security Administration:** Tyler provides secure data transmission paths from each client workstation to the Munis servers. User IDs, passwords and application access rights for the VPN and the Munis application are administered by Tyler with the client's final approval.
- **Hardware Performance Maintenance:** Tyler supplies and maintains all necessary hardware required to provide workstation access to the Munis applications at standard industry performance levels. All repairs, upgrades and replacements to server hardware are the responsibility of Tyler.
- **Disaster Recovery and Fault Tolerance:** Tyler backs up all system and data files and stores them in a secure off-site location. We have fully redundant systems with no single point of failure.

Benefits

- **Easy Budgeting:** The subscription is a set fee, flattening the peaks and valleys associated with the acquisition of software and services. Subscribing dramatically lowers initial costs. It provides a consistent cost that can be easily budgeted for the duration of the agreement.
- **No Secondary Operational Fees:** Maintenance and support are included.
- **Expandable:** Additional Munis applications are easily added, as needed.

Why consider SaaS?

Allows IT resources to work on more strategic initiatives

Eliminates server acquisition, upgrade, and maintenance issues

Eliminates the need for onsite specialized skills such as UNIX, or NT Server administration

Establishes a flat fee, for easy budgeting and planning

For more information, visit
www.tylertech.com
or email **info@tylertech.com**

MU-SaaS-P06-0316

For more information, visit www.tylertech.com

Empowering people who serve the public®

tyler technologies

Tyler System Management Services

Tyler offers System Management Services to assist in maintaining your IT environment and network. Get proactive monitoring, remote technical support, database administration and data backup support – all without the expense of additional IT staff.

Proactive System Monitoring

Our goal is to identify and respond to IT issues before they cause system downtime. Through an advanced monitoring tool placed on the client server, Tyler professionals have access to the pulse of your system environment, monitoring crucial activities in real time. System Management proactively monitors:

- Tyler application availability
- Disk and memory usage
- Report errors in the event log
- Microsoft® Windows® updates needed
- Monthly System Status report via email

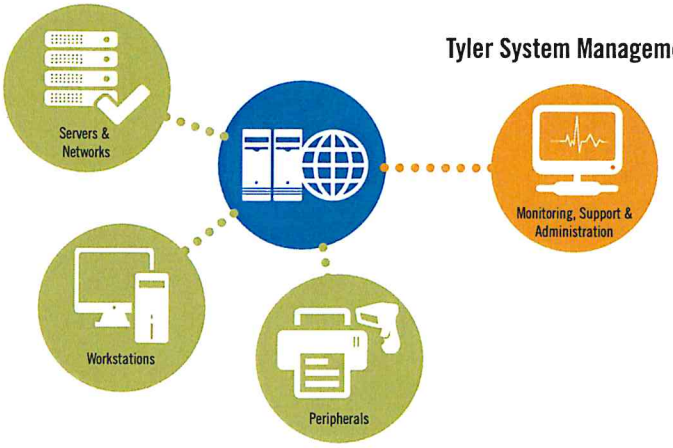
Remote Technical Support

When you're enrolled in Tyler's System Management Services, you have access to Tyler's IT professionals who can address workstation, server and network support issues. Through remote access technology, our technicians securely connect to your system to address issues in real time. Remote technical support handles the following:

- Server and workstation troubleshooting
- Technical helpdesk support — direct unlimited remote support on technical issues
- Tyler application and database migration to new hardware
- Printer installation and configuration
- System maintenance

Client System Environment

Tyler System Management



For more information, visit

www.tylertech.com

or email **info@tylertech.com**

TY-TSM-PS-6421-0416

Tyler System Management Services

Database Administration

Through monitoring and remote assistance, Tyler's technicians become your off-site database administrators and maintain:

- SQL Server updates and patches
- Maintenance plan setup:
  - Monitor maintenance plans
  - Verify success of maintenance plans
  - Routine tasks, including integrity checks
  - SQL Server events and transaction log maintenance
- Database monitoring:
  - Integrity checks
  - Re-index database

Data Backup Assistance

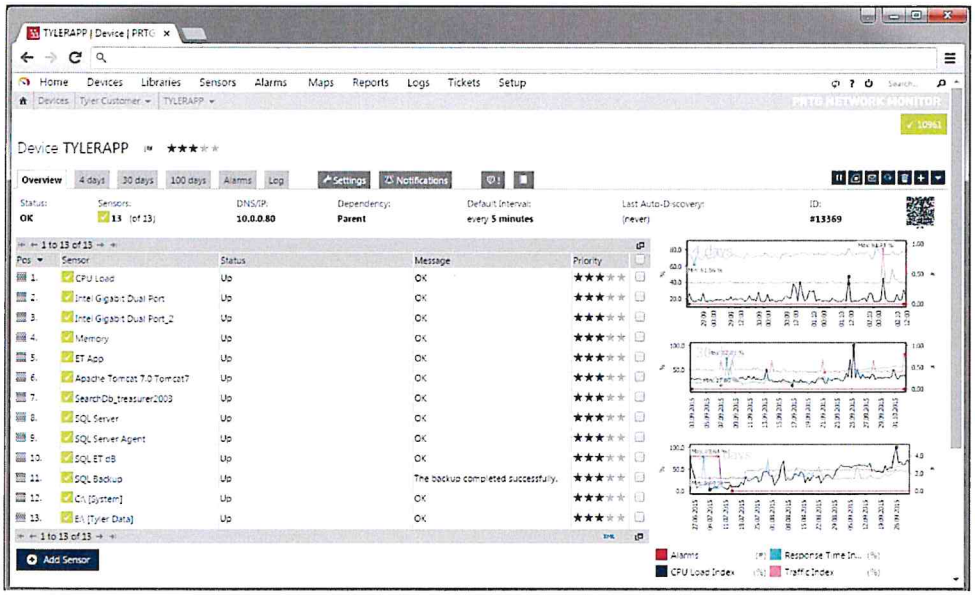
We know you rely on your system data. Through Tyler's System Management Services, we assist you in backing up your data and offer the following additional support should your data become compromised:

- Assistance in implementing on-site backup procedures
- Backup troubleshooting and issue resolution
- Status reports and local backup monitoring

Service Packs and Tyler Application Updates

Your software and system require continuous maintenance to stay current with the latest updates, Microsoft® service packs and antivirus versions. Tyler manages these maintenance issues for you:

- Installation of current Microsoft® service packs and updates on enrolled computers
- Additional assistance in virus removal
- Tyler Application Update Service



System Management Monitoring Screen

tyler technologies
972.713.3700
info@tylertech.com
tylertech.com

SaaS for Munis

RELIABLE AND SECURE
The Munis SaaS solution is proven, reliable, available, and secure.

SIMPLIFIES BUDGETING
SaaS eliminates surprise costs related to hardware issues to make budgeting easier.

FREES UP RESOURCES
Tyler provides support, server maintenance, and upgrades.

MUNIS SOFTWARE AS A SERVICE

With the cloud-based Munis® software as a service (SaaS) solution, Tyler Technologies hosts and manages Munis applications. Tyler provides ongoing support, maintenance, and upgrades of the applications, hardware, and operating system.

Munis SaaS clients receive clear and concise documentation, defining all aspects of the relationship, including a contract (commitment to partner) and a service level agreement (measurable expectations of performance).

FEATURES

The Munis SaaS model is proven, reliable, available, and secure. There are no code changes to the client or server without proper notification.

- **System Administration**: Tyler performs daily administrative tasks. Tyler handles the installation, upgrade, support, and file maintenance of the Munis application and database servers, operating system, and infrastructure.
- **Security Administration**: Tyler provides secure data transmission paths from each client's workstation to the Munis applications. User IDs, passwords, and application access rights are administered by Tyler with the client's final approval.
- **Streamlined Account Management**: Tyler offers flexible integration options with both Azure AD and ADFS, streamlining credential management.
- **Hardware Performance Maintenance**: Tyler supplies and maintains all necessary hardware, providing workstation and API access to the Munis applications at standard industry performance levels. All repairs, upgrades, and replacements to server hardware are the responsibility of Tyler.
- **Disaster Recovery and Fault Tolerance**: Tyler backs up all system and data files and stores them in a secure off-site location. Tyler has fully redundant systems with no single point of failure.

BENEFITS

- **IT Workload Reductions:** IT resources are freed up to enable work on more strategic initiatives.
- **Eliminates Server Acquisition and Maintenance:** Costly hardware purchases, upgrades, and maintenance are avoided.
- **Easy Budgeting:** The subscription is a set fee, flattening the peaks and valleys associated with the acquisition of software and services. Subscribing dramatically lowers initial costs. Munis SaaS provides a consistent cost that can be easily budgeted for the duration of the agreement.
- **No Secondary Operational Fees:** Maintenance and support are included.
- **Expandable:** Additional Munis applications are easily added, as needed.
- **24/7/365:** Tyler provides round-the-clock, on-call coverage for critical outages.

Is It Time to Move to the Cloud?

INDUSTRY INSIGHT

The public sector's embrace of moving to the cloud is transforming the national data landscape. Local governments of all sizes, school systems, and special districts are increasingly recognizing the value of moving from on-premises servers to cloud-based, software-as-a-service (SaaS) solutions.

The trend is accelerating. Up to 60% of organizations will use an external service provider's cloud-managed service offering by 2022, doubling the percentage of organizations from 2018, according to Gartner.[1]

Moving data and systems to the cloud reduces capital expenses, improves IT efficiency and data security, ensures access to the latest technology, improves internal connectivity, and strengthens community engagement.

Below are five benefits of moving to the cloud.

Reduce capital budget needs

Purchasing and maintaining the infrastructure required for on-premises hosting is costly. Because of this high cost, organizations sometimes keep systems running past their ideal retirement date. The result of maintaining aged systems, which may have hard-to-find replacement parts, is that organizations don't have access to the latest software and security safeguards. Also, unexpected hardware failures can play havoc with IT budgets and staffing.

In comparison, cloud-hosted SaaS solutions offer clear-cut costs that are easy to plan for, eliminating unexpected expenses. The organization simply pays a subscription fee, and the software provider is responsible for the hosting infrastructure. Top SaaS providers use reliable, up-to-date technology, which means organizations don't need to worry about aging infrastructure.

> **The cloud makes budget planning more predictable and saves money in the long run by eliminating expensive equipment purchases and maintenance.**

Minimize the burden on IT

Maintaining on-premises servers 24/7 requires a sizable commitment for IT staffs that are already stretched thin. Removing the onus of maintaining servers frees up time for IT departments to concentrate on work that directly impacts the lives of community members. Additionally, the burden of performing backups, restoring software, and maintaining data shifts from the organization to the provider.

What is SaaS?

Software as a service (SaaS) is a subscription model in which client data is hosted in the cloud, rather than on-premises. SaaS eliminates the need to install and run applications on individual servers. It streamlines maintenance and support because functions can be managed by a software provider, including applications, servers, storage, and networking.

Taking the pain out of software upgrades is a key benefit of moving to the cloud. Less disruptive and more dependable than on-premises updates, cloud-based upgrades are handled by the provider, and these upgrades are typically automatic and more frequent, ensuring that software is always up-to-date.

> **Eliminating the onus of overseeing on-premises servers frees up IT resources that can be redirected to better deliver services and solve community issues.**

[1] Gartner. (2019). Gartner Forecasts Worldwide Public Cloud Revenue to Grow 17% in 2020. https://www.gartner.com/en/newsroom/press-releases/2019-11-13-gartner-forecasts-worldwide-public-cloud-revenue-to-grow-17-percent-in-2020

Improve security and disaster preparedness

Keeping data secure is a full-time job. Experienced cloud providers employ teams of security experts to make sure data is safe. While you might think your on-premises data is secure, how confident are you that your IT resources are comprehensive enough to ensure 24/7 security?

A vendor with decades of cloud-hosting experience for the public sector understands the critical importance of security and will use the latest technology along with a highly skilled team of specialists to keep data secure.

Equally important, the cloud environment provides superior disaster recovery capabilities. Unlike on-premises software solutions, which can be vulnerable to localized events such as flooding or fire, cloud-based solutions benefit from widely dispersed, redundant storage. This redundancy ensures the information is always available despite disruptive localized events. Ideally, disaster recovery should be included in your provider's SaaS solution.

> **The cloud is a more reliable environment because of increased security, automated backups, and server redundancy.**

Benefit from scalability

We are all familiar with the rapid pace of technological change and the growing expectations of our communities. To meet these needs, the public sector must continuously improve its technology capabilities to allow residents to access government services online and via mobile devices.

As expectations evolve, so must the public sector's software systems. As discussed above, increasing the capabilities of on-premises servers to handle growing demands is a costly and complicated process. On the other hand, cloud solutions are designed for scalability, so when the needs of a community grow or change, systems and storage can easily increase. This is achieved without the need for organizations to make costly hardware purchases.

Because of its inherent agility and flexibility, cloud hosting is well poised to help government and school districts of all sizes in times of crisis. Whether supporting remote working or scaling up to meet the digital needs of the community, the cloud is built to help the public sector meet community needs.

> **The scalability of cloud solutions increases functionality and eliminates the need for expensive hardware that will be outdated in a few years.**

Access the latest technology and improve connectivity

Selecting a top provider for a cloud-based SaaS system ensures access to the newest technology and software. Keeping up-to-date in a cloud environment is not dependent on budgeting for, purchasing, and installing new hardware, or waiting for the IT staff to deploy software upgrades. Instead, in a cloud solution a dedicated team of specialists frequently updates hardware and software to improve functionality and to ensure the latest versions are in place.

A cloud solution also keeps organizations connected internally and with their communities. It is ideal for connecting workers in the field to data systems, keeping decision-makers informed of information and progress from any location at any time, and for streamlining connections for remote workers.

Finally, a cloud system is built to allow mobile functionality, which is increasingly important because, as Statista notes, more than half of all internet traffic is from mobile devices.[2] As mobile use continues to increase, engagement opportunities grow. Whether paying utility bills on the go or consulting online FAQs about trash pickup, community members are counting on mobile engagement.

> **A cloud solution keeps software up-to-date and enhances remote and mobile capabilities for internal and external connections.**

For more information, visit **tylertech.com/cloud** or contact us at **info@tylertech.com.**

[2] Statista. (2020). Percentage of Mobile Device Website Traffic Worldwide from First Quarter 2015 to 4th quarter 2019. https://www.statista.com/statistics/277125/share-of-website-traffic-coming-from-mobile-devices/

Empowering people who serve the public

tyler technologies

ERP-CLA-II-14305-0420

White Paper

Cloud vs. On-premises Solutions: Things to Consider

Overview

As technology continues to evolve and change the way municipalities do business, it is important to understand some of the new trends that are shaping the future for cities across the country. This whitepaper will discuss the emergence of cloud technology and how it can impact municipalities like yours, now and into the future.

The Basics

While "the cloud" is a term that is seemingly tossed around constantly these days, its actual meaning can sometimes be hard to discern. In order to clarify cloud functionality as it relates to municipalities, this whitepaper will specifically focus on the benefits and risks associated with "Software as a Service" (SaaS), which is one of the most popular forms of cloud computing for municipalities across the country.

As it pertains to municipalities, SaaS uses the Web to deliver applications that are managed by a third-party software vendor with an accessible interface on the client side. The main benefit of using SaaS is that it eliminates the need to install and run applications on individual computers. It's also easy for municipalities to streamline their maintenance and support because a wide variety of functions can be managed by their software vendor, including applications, servers, storage and networking.

Pizza as a Service

To help clarify what SaaS is, let's pretend that your city's responsibility is to provide delicious pizza to your citizens. The difference between doing everything in-house (or on-premises) as opposed to using "pizza as a service" will help illustrate the difference between managing your software on-premises or by using SaaS.

On-premises Pizza: This means that you provide all of the equipment and services essential to providing pizza to your customers. You would provide the individual ingredients of the pizza, the oven to cook it in, the boxes to package it in and even the chefs necessary to create the pizzas. This is the equivalent to cooking the pizza at home before sharing with your customers.

Pizza as a Service: This means that everything is done for you. The pizza's ingredients, the oven, boxes and the chefs that oversee the creation are all provided by a third party. This would be the same as simply ordering a pizza from a restaurant and having it delivered to your customers. You've outsourced the management of ingredients, the equipment necessary to cook the pizza and the chefs needed to oversee the process.

Benefits

So what does all this mean for a municipality like yours? There are many benefits that can be realized by using SaaS, specifically the abilities to limit capital budget needs and minimize burden on IT support staff, along with scalability.

Limit Capital Budget Needs:

With SaaS, there's no need for a significant service and infrastructure investment. You don't have to worry about spending money on servers, operating systems and database support, nor do you need to have a plan for hardware refresh for servers or upgrades.

SaaS provides financial flexibility; you can pay subscription costs monthly, quarterly or annually.

Minimize Burden on IT Support Staff:

Since your vendor will be responsible for managing servers, upgrades and operating systems, your city IT staff doesn't have to bear the burden of protecting that infrastructure against hackers or natural disasters. Your records are backed up on a daily basis by the SaaS vendor, which means your staff doesn't have to worry about the safety of their data. You also won't have to compete for scarce IT resources at the municipal level.

Scalability:

SaaS allows you to operate as if server restrictions don't exist. You have the ability to increase staff size, the amount of data being stored and staff licensing to the application without any potential server constraints.

You'll also be able to accommodate all the users that may require access to your website for data, information or any of the customer self-service modules for applications that you manage such as utility billing online payment applications.

It is important to keep in mind, however, that there may be an incremental cost increase that your organization will bear for adding a substantial increase in your storage requirements. However, that cost may be less than the cost you might bear within a data center or for additional storage if the servers are in your office.

Risks

While the benefits can be substantial for SaaS, there are also some inherent risks that must be accounted for as well.

Bandwidth Availability:

How readily accessible is information for you? You'll need rapid access to the application for SaaS to really benefit your organization.

Specifically, you need to make sure that you have sufficient bandwidth in your office to accommodate the filing of documents, searches and rapid access to document images.

If your bandwidth isn't large enough, you have to predict how slow access would affect your office, as well as your clients. Your own employees and general public users would all be affected by slow access.

Security:

There is an inherent risk for anyone that uses a vendor's hosting capabilities or manages servers that have an Internet connection.

The key is to ask the appropriate questions when considering if your potential SaaS provider has taken the security measures to protect your data.

— Does your SaaS provider have the proper physical security measures in place?

Obviously, the physical protection of the servers is of utmost importance. Ideally, you'd like to see your SaaS provider employ physical security systems, backup power and grid independence, use of cages and vaults for server protection, electronic access control systems, alarms, intrusion and fire detection, cameras and other important security features to ensure the continued safety of their servers.

— Does your SaaS provider have the proper online security measures in place?

A good SaaS provider should employ multiple layers of antivirus and malware protection, as well as software/hardware firewall protection, to eliminate the risk of online intruders. Additionally, the operating system should be maintained on a regular basis, and any unauthorized access to data must be constantly monitored for immediate detection.

Is SaaS right for you?

That depends. There are several things to consider when making the decision to employ SaaS. Most importantly, you'll need to understand how solid the Internet bandwidth is in your organization, how reliable your Internet service is and your data needs.

For most municipalities, the capacity in bandwidth has been increasing while the reliability of Internet providers has improved. While data storage can be cheap, organizations should know the number of records that need to be managed when considering SaaS vendors.

The bottom line is SaaS can provide your municipality with substantial benefits depending on your needs. Risks do exist, but they can be managed with proper planning and by doing your due diligence.

Specifically, you'll want to research SaaS providers to ensure that the risks are minimized. Learn what you need to know about your city's needs and make sure to ask the proper questions to evaluate which option is best.

To find out more about Tyler's best-in-class solutions, email info@tylertech.com or call 800.646.2633.