5 TIPS FOR MIGRATING TO CITYWORKS ONLINE

The City of Suffolk shares five helpful takeaways after moving their Cityworks AMS and PLL on-premises solution to the cloud.

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After nearly 20 years of using Cityworks as an on-premises application, the City of Suffolk, Virginia, decided to transition to a cloud-based system. This move was prompted by the need to provide employees with a means of accessing Cityworks remotely without having to use a VPN, as well as give external users a way to submit permitting and licensing information online.

"We decided to go to the cloud to leverage the Public Access online portal for external customers. Also, since we are a relatively small department, the cloud alleviates the issue of server maintenance and upgrades to the software," says Regina Chandler, the interim director of information technology for the City of Suffolk.

The city had amassed large amounts of legacy data in its time using Cityworks AMS and Cityworks PLL. Moving that immense system to the cloud presented a challenge for Cityworks, Woolpert, and Suffolk, yielding volumes of best practices to improve that environment. Here are a few key takeaways for other organizations considering a move to a cloud-based system.

Suffolk City Hall. Photo courtesy of the City of Suffolk.

1. Define the "Why"

Before deciding to move your asset management or permitting system to the cloud, evaluate the pros and cons and clearly define why you want to migrate. For the City of Suffolk, the existing on-premises solution required them to create and maintain multiple pieces of an IT puzzle—the database server, application server, GIS services, etc.

Although a migration is a large undertaking, the return on investment continues for years after the project is complete. Cityworks Online removes the burden of back-end server functions and IT responsibilities, enabling organizations to focus their attention on community operations. Servers are managed and maintained by those who created the software, know

the systems, can effectively troubleshoot problems, and provide a deep knowledge base.

2. Evaluate Customizations

Before migrating to the cloud, the City of Suffolk began with an evaluation of their existing configuration and updated it where necessary: unclogging backlogs, adjusting workflow process pain points, and identifying areas where speed and performance could be improved.

In the cloud, Cityworks provides a standardized yet scalable approach to data hosting to serve its many customers. Organizations that have used Cityworks on-premises, like Suffolk, have likely developed highly custom-

The project team cataloged and evaluated more than 100 custom database objects.

ized templates and workflows. A key step in migration is evaluating existing customizations to determine how best to move them to the new system. For the City of Suffolk, some were integrated into the new system, others were eliminated, and still others were replaced by current Cityworks functionality.

Since implementing Public Access for Cityworks PLL was one of the main goals of Suffolk's move, the team focused special attention on portal functionality, which can sometimes require a retrofitting of existing PLL configurations. Suffolk was willing to become one of the first Cityworks customers to implement Public Access while also upgrading and migrating their enterprise system to

Cityworks Online, underscoring the city's collaborative and progressive approach.

3. Configure Cityworks Apps

Since the initial migration to Cityworks Online, Suffolk has been implementing additional Cityworks apps, including Respond, Workload, and Style. Respond is one of many apps available to Cityworks Online customers to create a customized user experience. Suffolk's crews use it to manage assets, create work orders, view custom maps and dashboards, and capture digital signatures. By using Style to transfer over XML formatting from Office to Respond, Suffolk is able to keep the view that users are familiar with in Office. In Respond, Woolpert created customized search queries and dashboards, based on the city's Office inboxes. These enable staff to quickly access Task Manager, Reports and Workload. Workload is an app for supervisors to review, assign, and modify work activities in bulk, based on areas of the map.

The adoption of Respond in a hosted environment has enabled the City of Suffolk to deploy a secure, externalized work environment for its crews without additional IT overhead. Additionally, staff working in the field do not have to log in to a VPN to access and upload data. Respond data queries have allowed the city to assess which of their reporting needs can be met by use of a dashboard. This was preferable to maintaining dozens of custom reports that often utilized custom database views.

4. Modernize Workflows

The process of moving a system to the cloud also provides an opportunity to modernize a city's operational processes and to take advantage of progressive technologies. As part of this move, Suffolk utilized the latest Cityworks functionality to complete tasks such as copying custom values from a parent to a child work order. Previously, this was accomplished by custom database triggers.

Other organizations may be able to replace custom database triggers with Cityworks Action Manager. Introduced in Cityworks 15.1, Action Manager is used for configuring two types of actions triggered by events in Cityworks. Activity Updates can be used to change the values on existing records in Cityworks using either GIS attributes or an exact value. Webhooks can be used to send information from Cityworks to third-party applications or to Cityworks itself using web service API calls. Webhooks have proved to be versatile and supportive in the cloud, combining with Cityworks APIs to improve overall performance.

Woolpert and Suffolk also evaluated existing report and inbox designs and improved their efficiency to speed up overall system performance. The team migrated saved searches to queries and updated other reports, as well.

5. Teamwork for the Win

The teamwork and open collaboration between Suffolk, City-

works, and Woolpert substantially enhanced the cloud migration and helped improve the maintenance process while not losing functionality. Woolpert will work with Suffolk on planned integrations and implementing modules to help refine configuration, while the continued maintenance of software is performed by Cityworks.

The many lessons learned during this project were a result of long-running relationships with forward-thinking partners. This, combined with the leadership and visionary thinking at the City of Suffolk, yielded best practices for any municipality considering a move to the cloud.

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SUFFOLK, VIRGINIA

Pop. Served: 90,093

Depts. Using Cityworks: Public Works, Public Utilities, Capital Programs, Real Estate Assessors Office, Planning and Community Development and Information Technology

Staff Using Cityworks: 470

AMS User Since: 2005

PLL User Since: 2015