

City of Fairlawn

Information Services Department

2016 Annual Report



Stephen Ameling

IS Director

Tou Xiong

IS Asst. Director

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Hardware Change

City Network Joins FairlawnGig

The City's network has switched to the new FairlawnGig gigabit broadband internet service. This has improved the performance of Internet based communications and data transfer, as well as backing up and archiving our critical data.



3D Printer Purchased

A LulzBot ABS 3D printer was acquired to fabricate custom three dimensional parts in support of projects throughout the City. It supports both ABS and other types of raw material and is relatively easy to program.



New Network Workstations

Twenty-five replacement computers were purchased for distribution throughout the City's departments. These new Dell OptiPlex 9020M machines feature a micro sized case which allows for easy under desk hanger mounting or attachment directly to the back side of the monitor.



Server Purchased

A new HP ProLiant DL380 G9 server was purchased. It replaced the host system which supported several CMI (Creative Microsystems Inc.) administrative applications like Mayor's Court, Payroll and Tax.



Public Display Screen for City Hall Lobby

A wall mounted Samsung 55 inch display was installed in the City Hall main lobby. It displays current City events and points of interest. It operates throughout the week and the screen updates in real-time with any new information.



Upgrade Payphone in City Hall Lobby

A new Protel 7010 payphone was installed in the City Hall lobby, taking the place of an obsolete Frontier payphone that had been in place for over three decades. The payphone is operated by the City and is programmed with the following calling rates: 25 cents per Local 15 minute call, 50 cents per Long Distance 5 minute call, \$1.25 per Information call. No additional dedicated line will be needed from Frontier.



Added Power Distribution Units

Two new APC AP8941 vertical power distribution units were acquired for the main server cabinet located in the City's data center. These devices eliminated the need for 6-8 foot power cords and greatly reduce the wiring clutter that can exist with multiple stacked servers all with redundant power supplies.



Replacement Printer for LRC

A new color HP LaserJet Pro M477fdn printer was installed at the Learning Resource Center (LRC). It replaced an older unit that had reached the end of its useful life.



Wireless Router for Field Testing

A Cradlepoint AER 1600 Wireless router was purchased for field operations and testing. It supports cellular USB modems which enable it to have Internet access while deployed in the field.



Upgrade Projector Acquired

A ViewSonic PJD 7828HDL projector was purchased in place of an older model that had become unreliable. It features 3200 lumens, full HD 1920 x 1080 resolution, HDMI and weighs only 5.3 pounds.



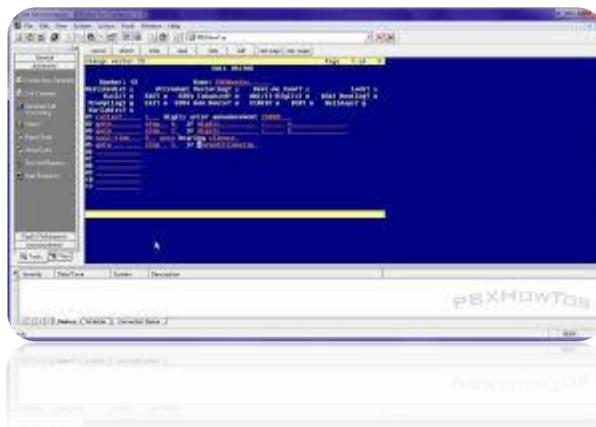
Software Upgrades

Custom Avaya PBX Programming

Incoming calls to the City's Communications Center that involve 330-666-8871 and 330-670-4300 are now routed more efficiently. They can now be answered on either the Airbus E911 system or the Avaya administrative phone system, thus improving the call answer options for the Dispatcher.

Corrected Local Long Distance Dialing from 911 system

Programming changes were made to the City's Avaya phone system which has eliminated calling issues that involved local prefixes. The phone system can now be easily programmed with new prefixes that are created periodically, thus eliminating future calling issues.



Sportsman SQL in Cloud

The Parks & Recreation department's new management program (Sportsman SQL) is being hosted by the City's first Amazon Cloud Server. This experiment has been working well and may lead to additional cloud server deployments.



Laserfiche 10

The City's Laserfiche document management system has been upgraded to version 10. The upgrade includes several new features to make it easier to work with documents, new version of Laserfiche Client, and improved optical character recognition (OCR). This was by virtue of the maintenance agreement that is in place. This enables real-time posting of City records and documents on the web.



Changed DNS Host

The move to the FairlawnGig Internet service has necessitated the need for a switch from Frontier to Amazon DNS Hosting services. Amazon offers a extremely reliable and cost effective way to route end users to Internet applications.



Projects

E911 Upgrade from Positron to Airbus

The City has upgraded from the Positron system that was installed in 2006 and has been discontinued. A new Airbus Vista system, which was activated in June, 2016, has improved the emergency call answering and mapping capabilities of the Fairlawn E911 Communications Center.



Police Camera System Upgrade

The Police department has upgraded its cameras from analog to digital High Definition cameras. This has improved image quality and also provided additional cameras for areas that were lacking surveillance. The digital cameras also allow for motion detection which will only record when motion is detected, whereas an analog was continuously recording.



Learning Resource Center Joins FairlawnGig

The LRC has upgraded its Internet connection by switching to the new FairlawnGig. This is possible because of the installation of a microwave link between the building and an Akron water tower located nearby.



Service Dept. Network Cabinet

The Service Department's network equipment cabinet was decommissioned and replaced with a smaller unit which occupies a lesser space on the wall as well as providing a more practical wiring configuration.



Training Seminars

Cleveland Tech Summit

Tou Xiong and Stephen Ameling attended the annual Cleveland Tech Summit that was held at the 100th Bomb Group Restaurant at 20920 Brookpark Road on Thursday, September 15th, 2016. This half day event featured a look at new technologies, ideas and key topics. The agenda included Data Breach analysis, Cloud Services, Network Security, New Backup and Disaster Recovery and leveraging Next Generation Data Centers. The case studies provided an interesting insight into how these technologies are being leveraged to promote greater accuracy and efficiency. Overall, it was a validation of our technology direction and tools that we are utilizing.



Ransomware Chamber Seminar

The Wooster Area Chamber of Commerce hosted a Chamber Educational Series: Information Security in a Ransomware World on Thursday, November 3rd, 2016 at the Wayne County Public Library. This morning event featured a presentation by Joe Welker of Rea & Associates and Carl Cadregari of the Bonadio Group. Tou Xiong and I found this topic of particular interest because of how destructive a Ransomware attack can be and the speed at which it can infect network files. We were told that approximately 4,000 daily ransomware attacks are occurring since early 2016. This represents a 300% increase over the 1,000 daily ransomware attacks reported in 2015.

