

MONTHLY REPORT

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- The remaining eight Hub public access computers have been deployed. While they appear almost identical to the first 26 Hub computers, the underlying hardware is different, and they consequently required having Windows installed separately and configured to match the hardware. We now have 34 Hub adult public access computers available.
- The Library has a new wireless network with the installation of thirteen Ubiquiti Unifi wireless access points. All major areas of the Library now have very good wifi access. Five of the access points are suitable for outdoor use and can serve as mesh wifi extenders whereby they extend the range of coverage where no wired data connection is available. Four of the access points can also serve as public address loudspeakers. While they have been configured to play the closing announcements, an apparent bug is preventing them from playing more than the first two seconds of each recording. That issue is being investigated. In all other respects, the Unifi wireless network has been performing very well. It also allows full management of the wireless network through cloud-based iOS and Android apps.
- The new wireless network was implemented in time for the AARP Tax-Aide program to begin, and it proved itself well as the tax preparers used Library laptops connected via wifi. The Library also purchased a laptop charging cart for storing Hub laptops. It should be noted that the laptops being used by the AARP Tax-Aides are about 10 years old; however, we installed SSDs (Solid State Drives) in them so that they are now among the fastest laptops we have.
- On February 6th, reports began to come in that some patrons could not connect to our wireless network. The problem was not due to anything wifi-related; rather, wifi connectivity had been so good that far more people were connecting to it, causing our DHCP (Dynamic Host Configuration Protocol) server to run out of available network addresses to assign. As a stopgap measure, I immediately decreased the lease time on network addresses to two hours. After closing, I remotely modified the scope on our DHCP server to increase the range from 254 network addresses to 508 addresses, at the same time configuring the network so that it would be very easy to expand the scope again if necessary. This process did not go entirely smoothly, however, as it led to old data being imported into DHCP that required manually updating the database. Both the wired and wireless networks were back to normal by the time the Library opened on February 7th.
- On Sunday, February 4th, the projector in Galaxy Hall suddenly became very bright, then went completely dark. Repeated attempts to turn it back on were unsuccessful; however, it inexplicably began working the next day. It has been working without problem since then. As a precaution the Library purchased a projector to have as a replacement.
- Our SSL (Secure Sockets Layer) certificate was installed on our Ubiquiti Unifi CloudKey Controller, a device that allows cloud management of the entire wireless network. This was done in preparation for development of a captive portal, a standard way to have wireless users agree to the terms and conditions for use of the wireless network. Upon agreeing to the terms, the user would gain internet access and be presented with page featuring our most popular services.