

# iAuth | Project Rundown

## MEETINGS

On Wednesday, August 23rd, 2017 I met Jennifer Zamora at Jefferson Elementary School to present the iAuth system. I presented the PowerPoint above and demonstrated the iAuth fingerprint scanner.

On Monday, August 28th, 2017 I met Jennifer Zamora at Jefferson Elementary School to install the iAuth system. I installed the enrollment software on the Windows computer at the front desk and installed the sign in system on the Chromebook at the front desk. Jefferson wanted the fingerprint scanner to run in the background, iAuth fixed that request. By installing iAuth on the desktop, it eliminated the need to switch into developer mode on the chromebook.

On Thursday, August 31st, visited Jefferson, everything worked on the fingerprint scanner and updating user cache but audio wasn't working on the windows version. Mrs. K wants an audio confirmation system so I built it for Linux and windows. To use this on Windows, I downloaded MPlayer.exe in order to use the mplayer command. Built an auto updating system. Figured out that opening port 3306 on my computer allowed malicious programs to enter the wifi network. To fix this, I enabled SSH tunneling on my namecheap server to allow a connection to the mySQL database. Running the fingerprint scanner through namecheap allows a secure connection. Will visit Jefferson on 9/14 to install a new piece of software to add audio to the windows version of iAuth.

On Thursday, September 14th, I visited Jefferson elementary. When I was there, I installed the mplayer.exe file and the KiTTY SSH client. It was successful because everything installed correctly and the fingerprint authentication worked. In order to give the office a more detailed rundown of how everything works, I typed a [user manual](#).

October 4th, 2017 Jefferson administration requested a monthly report function. Brought up a connection issue on Jefferson's end. Said it will work tomorrow.

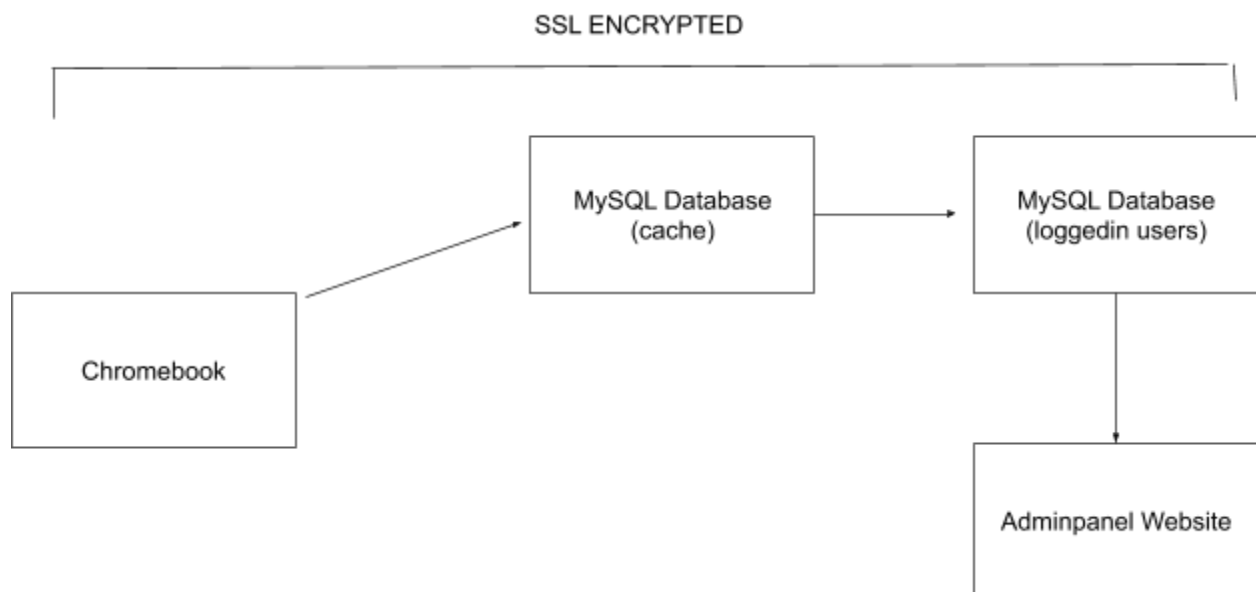
October 16th, 2017 Visited Jefferson and installed Service Patch 1.0.2 (Monthly reports patch) Emailed these instructions to Mrs. Zamora:

### Printing Monthly Reports:

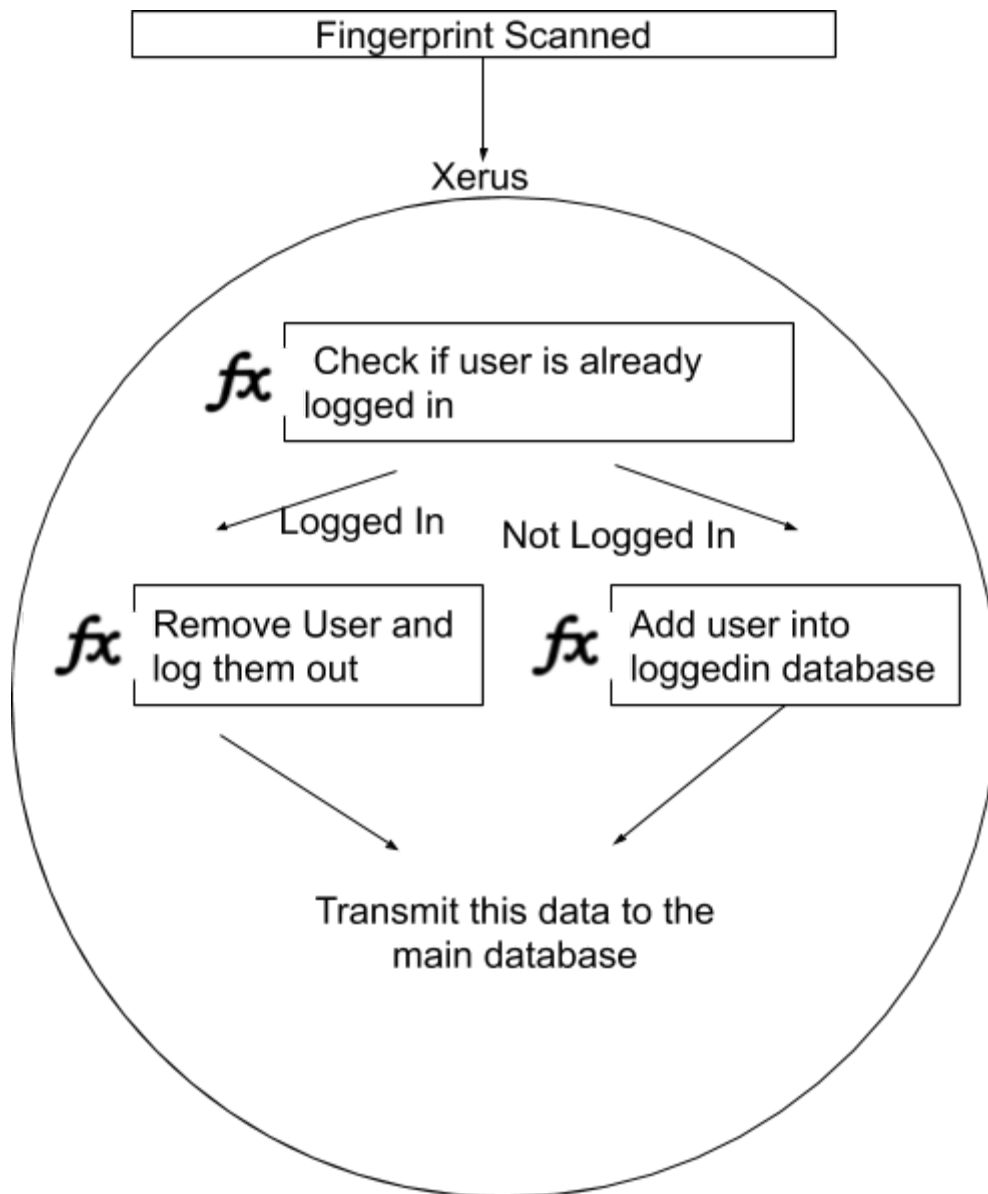
1. Navigate to the User Hours panel in the Admin Panel
2. Select the month to print
3. Press print

### HISTORY

This project started out as a request to create a fingerprint login system for Jefferson Elementary School. The first version of iAuth was a XFCE Linux command-line NodeJS JavaScript file. It transmitted the user id to a cache that inserted users when logging in and removed them when they were logging out and then transmitted that data into a database that was shown on a webpage admin panel.



After using this style of system for a while, I realised that the cache was redundant. The system could skip the whole Database of the cache if the logging in / logging out code was onboard on the JavaScript file. This is how Xerus was born.

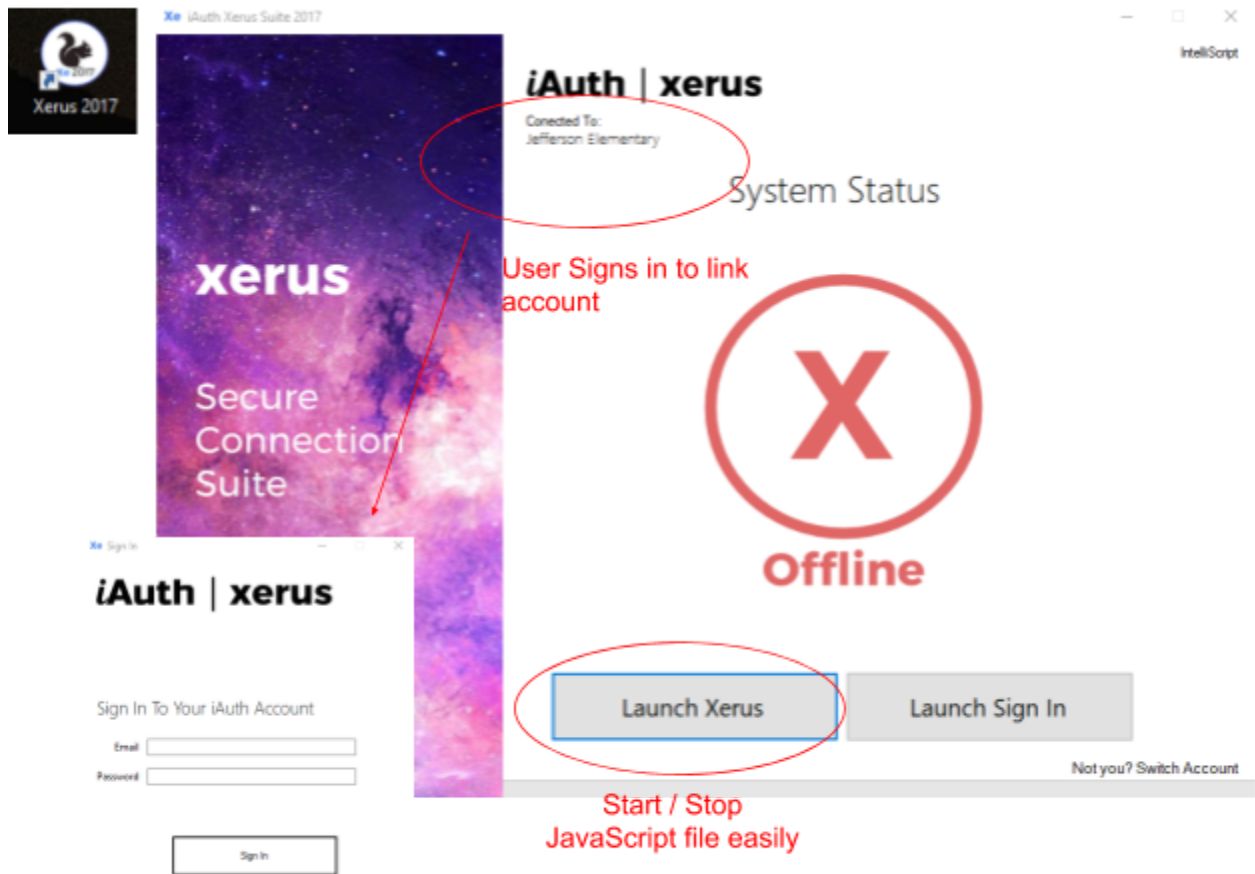


The new "Xerus" software put all the functions onboard the hard file instead of on a web-hosted 'js' file. However, for a normal, non tech-savvy user to try to use this software would be a difficult task. To fix this problem, I created a Windows form dialog (with C++ and C#) to easily start and stop Xerus. To open the software, all a user has to do is double click the icon. Xerus also notifies the user via audio files if they have logged in or not.

3Successful Login - "Login Successful"

Successful Logout - "Logout Successful"

Fingerprint Not Identified - "Please Try Again"



**Documents used:**

[PowerPoint Presentation](#)

[Presentation Script](#)

[User Instructions](#)

[Printing Monthly Reports](#)