Chebucto Community Network
Technical Committee Report to the Annual General Meeting
June 15, 2022

We have had significant upheaval since the last AGM report.

Since the last report, we moved out of the Dalhousie Campus Chase building into rented premises. All of the equipment has been physically moved, but there are still some network reconfigurations that need to take place to complete it. We no longer have a physical office, and the phone line has moved to an IP phone with voice mail.

As of now, the south end manors have a fibre connection to Dal campus instead of a wireless link to Gerard Hall, and the north end manors remain connected via wireless to Tupper. However, instead of running over Dalhousie's network, we are now using some spare fibres with our own networks running over them. From the Dal server room, we have a leased line to our new premises and a dedicated commercial internet connection from there.

We are currently still connected through the Dalhousie network as our uplink, and we need to switch over to our commercial uplink instead. This is awaiting mutual convenience with all three organizations. After the final reconfiguration, the traffic to our servers will go out through

the direct internet, and traffic from the current manors will travel over the leased line to go out over the direct internet connection.

In the course of the move, we lost our venerable Sun Microsystems machine "Halifax" that has been running for quite a number of years. This occasioned a scramble to move its functions onto other machines, and this still has not finished. We have a new web server that is mostly configured, but might still need some of the Information Provider sites brought up again. Fortunately, our mail system had mostly moved off. The text services are sort of in place on a Linux machine. I believe this is working. I have to admit that I am not entirely certain whether the initial difficulties we had with the dialup lines has completely resolved. Using technical speak, we in the Chase, we had an T1, or PRI connection and we have moved to having a SIP line sharing the fibre with our Internet uplink, connected to a device that offers a PRI line to our Ascend dialup modem box.

We had a contract employee who took on two tasks:

• Rewrite our Management system

• Move our mail system from Halifax to the machine "Ada"

The management system seems to be mostly working. There still remains some changes that need to be made to avoid some periodic failures, along with some more desired features, but for the most part this project is working. One important function that we need to build is to allow users to set their own passwords.

The mail system was at least not on Halifax when it died. We are currently switched to Zmailer to Postfix for the Mail Transport Agent, from Majordomo to Mailman3 for the list server, and remained on Cyrus for the mail storage. Unfortunately, somewhat after the contract finished, Mailman corrupted its database. We recovered it, but it has had not been fully healthy since and it recently stopped working completely. We currently do not have full expertise on the software and other things keep intervening in trying schedule a complete rebuild. This has occasioned questions about whether we should be exploring other software but we would need to learn that too.

In terms of hardware age risks, we have mostly upgraded to machines purchased within the last 7 years. We still have the UPSes that we brought from the Chase, which are fairly old. The Ascend box is very old. It has had some issues with its fans, but those have been replaced. As far as I know, at this point, any mail and web problems are software based.

On the wifi in the Manors front, there has been some hopefully mostly invisible changes. We have upgraded all the Access Points in the South End Manors (Joe Howe, and HP McKeen). We upgraded a few access points in Sunrise and Ahern, and replaced all the rooftop bridges. We contracted with Solutions Inc to take over some aspects of the management of these systems which we are hoping with increase reliability. With the new management system we are hoping that we can move toward merging the authentication into one system so that we can set password rather than keeping a separate database of passwords that keep getting out of synchronization.

We have also brought two new manors online. The long promised Gordon B Isnor install has finally taken place. This is using Cambiam Networks equipment rather than Ruckus. So far it appears to be working equally well, so we are happy so far and have started signing people up. As I write this, there seems to be some oddities with the network routing to some of our servers, but I feel confident that those can be resolved once we can debug them. The other one is in Cape Breton. For that install, there it will be using a completely separate network uplink. Time will tell if that setup turns out to be better.

We also have partnered with a high school class at JL Ilsley as a quasi-internship to gain work experience. They will be doing a redesign of our website, and attempting to improve our internal documentation system. Usually, a web redesign would involve consultations with stakeholders to identify what we hope to communicate, and to survey a sample of the target audience to determine what they hope to get out of the website. Should anyone wish to participate as either type of stakeholder, your input would be gratefully appreciated.

I am sure that I have missed some of the many things that have happened over the last two years, so I welcome your questions.

Respectfully submitted by Chris Maxwell

Technical Director 2019-2022