

*Stream or no Stream!*  
A story about bits, bytes and  
clogged pipes

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DAEMEN  
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# PROBLEM - Residential Network

Current physical infrastructure can no longer support the demands of the modern day residential student.

# PROBLEM - Residential Network

Fall 2022 Semester we saw a 25% increase on the residential network.



# PROBLEM - Residential Network

- Aged Infrastructure (fiber optics & switches)
  - OM1 fiber
  - EOL switches
- Budget Cuts / force deferred updates
- ISP bandwidth
  - Summer 2022 increased both of our ISPs bandwidth from 1gig to 3gig circuit.

# ASSESSMENT / HISTORY

- Seven campus apartment buildings. Built in the mid 1990's. First Year dorm built in 1961.
- Out dated topology
- No redundancies



# QUOTES

- “Can we fix this WIFI problem...? Never remember it being THIS bad”
- “And the internet at Daemen University fails again [?] ”
- “Yea.. I shoulda brought my own router for this dumpster WIFI 🗑️👤. Don’t make no sense [?] 📶♂️💀.”
- “Daemen im sure spectrum has some kinda deal goin on rn can we please get rid of the mcdonald’s wifi”



# STACKHOLDERS

## Information Technology:

Marc Doull – Network Engineer

Brian Kenline – Director of System Administration & Helpdesk

Melaine Kenyon – VP of Information Technology & CIO

Chris Pack – AVP for Systems & Infrastructure

## Student Affairs:

Bob Mead-Colgrove - Assistant Dean for Campus Safety and Operations

Dr. Greg Naylor – VP for Strategic Initiatives

Dr. Gary A. Olson - President

Mark Poblocki – Assistant Director of Housing & ResLife

Emilee Yormick – Director of Housing & ResLife



# COMMUNICATIONS

- Student Affairs took the lead.
- Started biweekly emails to all residential students.
- Relied more on CampusGroups and Mongoose (Cadence) for communicating with students.



# POSSIBLE SOLUTIONS

Continue managing the ResNET ourselves?..?..? Or look into other options like...

- Apogee
- Nile
- Spectrum

# INTERIM FIX

After discussing with vendors and sitting through demos it was decided to go with the fastest option.

## Spectrum

- 96 Apts setup with modem & router combo
- Pro – quick turn around to get students moved over.
- Con – no analytics/portal for IT to see usage or offline devices.





# TIMELINE

- Signed contract with Spectrum for Business in November 2022.
- Installs started in January 2023.
- Expected completion two weeks.
  - Ended up taking over three weeks.
- Installations were completed prior to Spring 2023 semester start.

# FEEDBACK ( GO LIVE )

- Initially the feedback was positive
- Less traffic on our physical residential network
  - Canavan (First Year student dorm) network improved over night.



# STRUGGLES

- Smooth sailing? One would hope...
- Spectrum Accounts – all accounts assigned to Daemen were set up under our CIO's email.
- Spectrum device failure rate ~30%
- No dedicated support



# CAN WE CONTINUE

- Without dedicated support?
- Device failure rate?
- Rely on CIO calling Spectrum each time we need a technician?

# BETTER OPTIONS

Time to say goodbye to Spectrum...

# THE FUTURE

- Running new OM4 fiber to the apartments.
- Each building getting 3 dedicated pairs of fiber.
  - Alternate/redundant paths
- Upgrading the wiring for our Access Points from 5e to 6a.



# THE FUTURE



# THE FUTURE

Replace Spectrum service in Apartments with Nile  
...will be live by August 2023

nile

<https://nilesecure.com>





# THE FUTURE

Nile agreement will be signed this week!

nile

<https://nilesecure.com>

