# UNIVERSITY OF LOUISIANA AT LAFAYETTE

**STEP** Committee

## **Technology Fee Application**

### **Maxim Doucet Hall Network Upgrades**

Title

## **Jeffery Kelly**

Name of Submitter (Faculty or Staff Only)

**Network Services** 

Organization

Title:	Maxim Doucet Hall Network Upgrades				Date:	Jan. 14, 2022
Name (Co	ntact Pers	son):	Jefferey Kelly			
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Department/College/Org:			Network Services	S		

#### ABSTRACT (250 words or less):

Network Services is requesting support to upgrade the existing network closets and infrastructure for the Maxim Doucet building. The current infrastructure technology in the building is approximately 15 years old. With the increased demand for computer services throughout the building the need for critical network upgrades is hindering the level of service we can provide.

#### a. Purpose of Grant

Network Services manages the network and telephone infrastructure throughout ULL campus. We provide internal and external internet/intranet service for the campus community. As technology changes and improves, we find it necessary to improve our equipment and methods as better, faster, and more reliable choices become available.

Network Services is requesting support to upgrade the existing network closets and infrastructure for the Maxim Doucet building. The current infrastructure technology in the building is approximately 15 years old. With the increased demand for computer services throughout the building the need for critical network upgrades is hindering the level of service we can provide.

These upgrades include the following:

- 1.) Running new single mode 10GB fiber into the building. This building is the last of two buildings that have not been upgraded on campus.
- 2.) Re-terminating the data closets from old 100MB 66 style connection blocks to new 1GB patch panel wiring to connect the classrooms, laboratories, and offices.
- 3.) Updating the old 1GB/100MB switches currently in the building to our new 10GB\1GB switches This is upgrade will give a ten-fold increase in network performance.

\*For reference the terms GB/MB refers to the speed of the data on the network. Ex. 100 MB equals 100 mega-bits per second of data information that can be transported through the cabling. Likewise, 1 GB would equal one giga-bit (a 10x increase) of data being transported through the same cabling. Our typical fiber infrastructure normally has the capacity of 10 GB. With the new fiber installed the capacity is limited by the electronic optics. As of this writing, the limits are now in the TB (terra-byte range).

#### b. Campus/Student

If funded, this grant will impact every student and faculty/staff who enters Maxim Doucet. Presently, College of Education and College of Sciences (Math) occupy the building with numerous faculty/staff offices. There are several labs for completion of coursework requirements and/or research.

#### c. Lifetime of grant

These upgrades and re-wiring objectives will last several years into the future as the campus in general moves toward a more technology-based teaching method.

#### d. Person(s) responsible for implementation, installation, maintenance, operation, and training

Our Network Services team will implement and/or supervise all installation of necessary equipment and services required for this grant.

Maintenance is controlled by the Network Services team and/or lifetime warranties on the installed switches.

All operations will be seamless to the users of the network with only small delays occurring during the installation process.

No customer training will be necessary with this grant implementation.

#### e. STEP Plan alignment

This grant fulfills several Service Level Objectives/Expectations found in the current STEP Plan 1.) SLO-2 – Continue to expand and enhance the campus network/internet access and its capabilities. Also supports all SLEs.

- 2.) SLO-3 Create, deploy, and maintain effective learning environments that facilitate multiple instructional and learning styles. Also supports all SLEs.
- 3.) SLO-4 Enhance open use labs with technology that allows students to fulfill coursework requirements. Also supports all SLEs.

#### 1. Equipment \$60,847

- Re-wire of the four data closets on the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> floors
- Network switch replacement of all non-GB switches at  $6,000 \times 8 = 48 \times 10^{-10}$
- APC UPSs to handle surge and power outages at  $1,850 \times 3 = 5,550$
- Additional electrical circuit for UPS's  $$250 \times 3 = $750$
- Adding single mode fiber upgrade to feed MDD from Stephens Hall and connecting all data closets to fiber. Currently 3<sup>rd</sup> and 4<sup>th</sup> floor data rooms are connected with copper.
- 2. Software \$0
- **3. Supplies \$0**
- 4. Maintenance \$0
- 5. Personnel \$7,301.00
  - Single Mode Fiber upgrade installation to building and between floors.
- 6. Other \$0

TOTAL:

\$68,148.00