

IFCN- Investment Fund for Core Needs - Entry #175 2018-2019

PROPOSAL SUMMARY

Title: Computer Lab Access for Online Students

Project Lead Name: Tanasee Conner

Project Lead eMail Address: tconner@brockport.edu

Project Lead Department: LITS

Project Lead School/Division: Academic Affairs

Total Amount Requested: \$49,753.00

Name of Sponsor 1: James Haynes

A. PROPOSAL DESCRIPTION & IMPACT

A-1. Description of the Initiative.

With the College amping up its online and hybrid learning environments to align with its Strategic goals, Information Technology is looking to stay up to speed. The goal of this proposal is to create a reliable and usable virtual lab environment for online students to use from anywhere. The new virtual lab environment would give students access to the necessary software needed for classes. An example of software needed for online courses is SPSS. The cloud environment eliminates the immediate and future needs of upgrading the on-site architecture. It also eliminates issues caused by networking, firewall, and campus power/HVAC needs.

The College currently has a virtual lab environment that is hosted on campus. The current virtual lab is on aging equipment and is several software versions behind. So it functions extremely slow and is extremely unreliable due to the age and configuration. In fact, it will not run programs needed for the science classes, like ArcGIS.

For implementation, a VMWare Horizon Air core subscription needs to be purchased. A core subscription includes 50 Desktops. The Enterprise Desktop configuration includes 4CPUS, 8GB RAM, and a 120GB Hard Drive. This configuration is necessary to run programs for the science classes.

This proposal also includes administrator training for two people. The training is required in order to configure, optimize, and manage the virtual machines. It is crucial in order to develop and troubleshoot the virtual environment. The VMware® Horizon 7: Install, Configure, Manage plus App Volumes Fast Track v7.0 is normally two separate training covered over two weeks. However, a condensed version is available as a one week class with five nine-hour days. This recommended condensed training will speed up implementation and save time.

A-2. Impact Statement: What change will this project deliver in the short term? What are the expected longer-term impacts?

In the short term, this will give students anytime/anywhere access to the software needed to complete online classes. For the long term, this opens up many possibilities. One possibility is saving the cost of

supporting and purchasing over 1000 on site computer lab machines to run the needed software. Our current budget allotted only allows for \$60,000 per year, which is only about 75 new machines. Therefore, the computers on campus are also aged.

If students had reliable access to lab machines from their own devices, including mobile devices, they would not need to visit campus lab machines. It also opens up long term possibilities for a future where faculty/staff will access a reliable and productive virtual environment from anywhere at any time.

B. STRATEGIC ALIGNMENT

B-1. Outline the ways in which the proposed investment will contribute to the College Strategic Plan Goals, and if appropriate, their Measures of Success.

The proposed investment will provide an excellent service to the student community and provide a step toward the goal of being a great college at which to learn. A reliable virtual environment provides outstanding opportunities to demonstrate mastering of skills. It gives students the opportunities for field-based learning, develop professionally, and research opportunities. A virtual lab environment also gives faculty the opportunity to enhance online learning. With access to a virtual lab, software and hardware limitations are removed. Complications due to personal devices are reduced and it does not matter if they are using a Mac, PC, or Chromebook.

Every year there is more of a demand for online classes. With this demand comes the need to access the course-required software. Access to the software is essential to keep students engaged in learning. The virtual lab gives them the tools to be successful. It provides hands on experience with the materials they will use in professional positions after they graduate.

The current College environment for accessing virtual labs is not sustainable due to the aged infrastructure. It is fiscally more feasible to take the architecture out of the picture and deploy an off-site hosted virtual lab environment. A hosted environment eliminates the cost of the on-site infrastructure and maintains the sustainability of online learning

C. SUSTAINABILITY

C-1. How will this initiative become self-sustaining beyond the initial funding period?
The initiative can be sustained via student fees.

D. IMPLEMENTATION PLAN

D-1. Identify the specific activities to be funded from the Investment Fund. Provide an estimated timeline for implementation and for activities anticipated to be ongoing.

Week 1: The VMware® Horizon 7: Install, Configure, Manage plus App Volumes Fast Track v7 training for 2 administrators.

Implementation:

Week 2: Install and configure View Connection Server

Week 3: Install and configure virtual desktops

Week4: Configure and manage VMware Horizon Client systems

Week 5: Configure secure access to virtual desktops

Week 6: Manage performance

Week 7: Manage application configurations and user environment settings

E. CONSULTATION

E-1. For requests involving technology. Has the Chief Information Officer (Bob Cushman or his designee) reviewed this proposal and verified potential costs as it relates to technology: Not Applicable

E-2. For requests involving facilities. Has the Director of Facilities & Planning (John Osowski or his designee) reviewed this proposal and verified potential costs as it relates to facilities: Not Applicable

E-3. The Project Lead has confirmed other required resources with the appropriate supervisor: Not Applicable

F. BUDGET & OTHER FUNDING SOURCES

F-1. Itemized Budget (Excel format ONLY): [On file]

F-2. Total Amount Requested: \$49,753.00

F-3. This proposal includes: Cost sharing.

F-4. Other funding sources* for this proposal? Not applicable.

F-5. Is the success of the project contingent on receipt of funds from any additional funding source(s)?

No

G. ASSESSMENT PLAN

G-1. How will you assess/measure the effectiveness of this initiative? Provide anticipated outcomes and specific measurements for success.

Specific measurements of success:

Benchmarking measurements-comparing to onsite lab.

Concurrent use of virtual environment.

H. ADDITIONAL INFORMATION

H-1. Please provide any additional information to assist in the review of the proposal, including why the initiative cannot be funded from divisional resources.

The cost of software is a large portion of the budget. This cost has dramatically increased recently due to the changes in software manufacturing licensing models. The times where software purchases included a one-time purchase are gone. The current licensing models are subscription based. The new model is more like a car lease than a purchase. These subscriptions are based on device count or count of employees, not on actual use of the software. This model drives up the cost of software to a point where there are not enough resources to maintain the current infrastructure. The current College environment for accessing virtual labs is not sustainable due to the aged infrastructure. At some point, the hardware will fail, and new hardware is also expensive. It is fiscally more feasible to take the physical architecture out of the picture and deploy an off-site hosted virtual lab environment. A hosted environment eliminates the cost of the on-site infrastructure. And creates a more reliable platform for our students and faculty to access the software they need for their courses.

Upload up to three supplemental files here (not required): [On file]

Signature of Project Lead: [on file]

Project Lead Email: tconner@brockport.edu

Signatures of sponsors are on file in the Administration and Finance Division.