1. Name of person(s) submitting application: David Durr

2. Date: 05/21/2011

3. Division/Department: IT Division

4. Title of Action Project: Cloud Computer Lab

5. Describe the Action Project's goals in 100 words or less.

The Cloud Computer Lab (CCL) will provide students with 24X7 access to pre-installed and configured hardware and software needed to complete coursework. Students' ability to complete coursework is often hampered by the availability and cost of appropriate hardware and software outside the classroom or the campus. It is also hampered by the need to install or configure software or hardware. The CCL will allow students with access to broadband Internet connection to access from any location the same hardware and software available in campus computer labs. Students do not need to have high-grade computers, and they will not need to install or configure applications.

Note: It is not necessary to explain how the project's goal will be accomplished; however, the clearer and more explicit the description and purpose are, the more likely the project will be to succeed.

6. Identify the AQIP Category the proposed Action Project will most affect or impact:

Category 1: Helping Students Learn

7. How does this project support PTC's mission?

It removes obstacles to completing coursework such as the availability, cost, installation, or configuration of software and encourages the development of technical skills in high-demand employment fields.

8. Describe briefly your department/division/committee’s reasons for taking on this Action Project now - why the project and its goals are high among your current priorities.

The IT Division frequently upgrades software and hardware to meet industry trends and students often have difficulty accessing these tools outside of the classroom. Two factors allow the IT Division to implement the CCL as a solution to this issue at this time.

First, PTC's participation in the ARE-ON grant will provide the bandwidth necessary for the College to provide this service. Second, innovations in cloud computing and virtualization technology have made it possible to provide virtual desktops to remote users efficiently.

9. List the organizational areas -- institutional departments, programs, divisions, or units -- most affected by or involved in this Action Project.
IT Division, Computer Services, Distance Education, All academic divisions using hardware or software for instruction onsite or online.

10. Name and describe briefly the key organizational process(es) that you expect this Action Project to change or improve.

The CCL will improve instruction by improving student access to computing resources while reducing support requests. Because the CCL provides preconfigured virtual desktops, students will have access to the CCL from anywhere at any time. Also, because the CCL provides preconfigured virtual desktops, students will not need to install, configure, or maintain software which will result in greatly reduced support needs and improve students' learning experiences.

11. How long will it take to accomplish the project (from kickoff to target completion)?

Two years. A pilot project involving Computer Concepts is already approved for Fall 2011.

Summer 2011  Install CCL infrastructure in the PTC Data Center Create web portal to support CCL
Fall 2011    Computer Concepts Pilot Project
Spring 2012  Implement CCL in additional CIS courses and a limited number of non-CIS courses requiring specialized software or hardware
Summer 2012  Assess results of first year and identify needs for improvement Train non-CIS faculty in using CCL
Fall 2012    Identify and implement CCL in other departments with needs for virtual desktops
Spring 2013  Assess capacity of CCL and plan for campus-wide expansion. Continue to add courses.
Summer 2013  Scale CCL to support campus-wide access
Fall 2013    Provide campus-wide access to CCL

12. Describe how you plan to monitor how successfully your efforts on this Action Project are progressing.

1. Availability and downtime
2. Support requests from students and instructors
3. Semester student and instructor satisfaction surveys

13. Describe the overall "outcome" measures or indicators that will tell you whether this Action Project has been a success or failure in achieving its goals.

1. Student retention in courses served by the CCL
2. Student and instructor satisfaction surveys
3. Number of students, courses, and programs served

14. What human resources do you anticipate needing and what sort of time commitment will be expected of the participants?
David Durr - Coordinate installation and operation of the CCL infrastructure in the PTC Data Center with Computer Services. Design and implement web portal support site. Design and develop training program and deliver "trainer-the-trainer" course. Coordinate the development and delivery of project assessment tools with Institutional Research.

David Harris - Coordinate the installation, operation, and maintenance of the CCL infrastructure

Andy Turner - Provide day-to-day operation of the CCL infrastructure

Jason Green - Assist in the training and support of students and instructors

Academic Deans - Identify courses in need to CCL services

Department Chairs and instructors - attend training and implement CCL services in courses and programs

15. Who will be the project leader(s) and other project team members? (Provide name and title)

Leader: David Durr, Dean of Information Technology

Participants:

David Harris - CIO

Andy Turner - Director of Academic Computing

Jason Green - Director of Distance Education

Academic Deans

Department Chairs and instructors

Institutional Research

16. How much money do you think it will cost to accomplish this project? (If possible, detail expenses.)

Much of the hardware and software is already available. David Harris has committed the use of two servers, a storage-area network, and VMWare software to the project. The value of these resources exceeds $100,000.

VMWare Training - $12,000

Virtual Desktop Infrastructure licensing - Based on the number of virtual desktops deployed. Initial licensing is covered under the existing Microsoft IT Academy license held by the CIS Department, but costs may increase as the number of virtual desktops increases.

The other resources needed will primarily be the time of those involved in the project.