Request for Information (RFI)
Virtual Computer Lab

Part 1: General Information and Overview

This Request for Information (RFI) is intended to provide information for the creation and acquisition of a virtual computer lab to provide remote students access to services virtually for Rio Salado College (RSC), one (1) of ten (10) separately accredited colleges that comprise the Maricopa Community Colleges.

The Maricopa Community Colleges herein referred to as Maricopa, MCCCD or the District, is requesting information from vendors who are interested in developing a partnership with a multi-college District.

RSC has a need to create a virtual computer lab for each of the following 3 scenarios:

1) Workstations

2) Systems, Servers, and Networking

3) Cyber-Security Environment

Additional details of each scenario are provided in the Requirements section below.

RSC desires a solution that can easily accommodate both current and future remote student needs. We are also interested to know about other similarly created solutions or services the company may be able to provide RSC.

Although pricing is a vital component to the overall selection of a vendor, the expectation is that all pricing submitted with the various options should be suggested retail and exclude any special discounts. All pricing information will be kept confidential.
Content of RFI responses:

MCCCD requires vendors to include (but not be limited to) the following in their responses:

a) Executive summary of proposal
b) Schematic illustrating the proposed architecture of the evaluation solution
c) Summary list of proposed equipment and systems required to support implementation of the evaluation solution
d) Summary of proposed system functionality
e) Summary of implementation project plan
f) Scope of recommended services required as well as those to be provided by the company to facilitate interoperability of existing services

Subsequent to the receipt and review of the Responses to this RFI, MCCCD, if needed, will contact the Respondents and schedule an onsite presentation at a designated MCCCD facility to allow vendors further opportunity to promote their position. The purpose of this RFI is to obtain general information about the solutions available in the marketplace. There is no contractual obligation as a result of this RFI. MCCCD reserves the right, in its sole discretion, to issue a Request for Proposal (RFP). MCCCD reserves the right to enter into negotiations with the Vendor to supply and deliver the proposed virtual computer lab following a less formal competitive process.

The award of any contract pursuant to this process is subject to funding approval and, dependent on the value of the contract.

The Maricopa County Community College District (MCCCD) ranks as one of the nation’s largest systems of its kind and as the largest single provider of higher education in Arizona. MCCCD consists of ten (10) campuses, two (2) skills training centers, and multiple satellite education centers throughout the greater Phoenix area. MCCCD educates and trains more than 275,000 persons year round.
PART 2: Existing MCCCD & RSC Equipment and Systems

The following information is provided as an overview of MCCCD’s current approach. At this time, MCCCD and RSC do not have a virtual computer lab which can accommodate remote student needs. The proposed solution shall be able to interface and work in harmony with existing MCCCD and RSC infrastructure. The overview is provided as an information item only. It will ultimately be the respondent’s responsibility to verify equipment and systems required for development and integration.

MCCCD’s current solution are physical computer labs at each college. The current desire is to obtain a virtual solution which will meet remote student needs.

Part 3: Requirements

Rio Salado College (RSC) serves a large non-traditional student population, mostly distance learning and with varying accessibility needs. Courses are delivered asynchronously – students are logging in at any time during the day and night and complete coursework based upon their personal course calendar. In-person and hybrid courses are also offered. However, much of the current support structure is in-person, which leaves out students in remote locations from accessing technology and services they need for their studies. RSC needs to evolve to meet student needs and by expanding into new fields of study, like cybersecurity, nanotechnology, optics, and cloud to help prepare students for the future.

The solution(s) should provide the following with additional detailed requirements listed within three main scenarios that align with support service standards and program and course competencies:

- Ability to access the system 24/7.
- A secure environment with user validation. Users may include faculty, students, and staff.
- Please provide a VPAT (Voluntary Product Accessibility Template) with the reply to document how the solution(s) meet federal law and guidelines for accessibility.
- Ability to automate administration of the environments through programmatic means (e.g., control user access when rosters change, spin up new virtual machines when needed, etc.)
Virtual Computer Lab

Scenario 1 - Workstations
Description: In this scenario, students need to be able to have remote access to software that is necessary to complete course work in various disciplines, not just computer science and technology disciplines. Students should be able to complete their English, Math, Science, Business, Social Studies, etc. assignments within the virtual environment. This is to replicate the services we are currently providing with our in-person public computer labs, which also supports students with accessibility needs who utilize assistive technologies (e.g., screen readers) and keyboard only navigation.

- Ability to access preconfigured workstation(s) with various operating systems (e.g., Windows, Linux, MacOS, iOS)
- Ability to access application software. Applications would include, but not limited to Microsoft Office, CAD/3D software, accounting software, browsers, programming IDEs, databases, and design software (e.g., Adobe CC, Gimp, Inkscape)
- Ability to run on secured systems where the user may not have administrator privileges, like in a public library or work environment.
- Ability to freeze the state of the system so any changes made by a user while working on a virtual machine will be deleted once the machine is closed.

Scenario 2 – Systems, Servers, and Networking
Description: In this scenario, based upon scenarios developed by faculty, students will need to have access to secure environments that will allow for the study of system and network administration scenarios, including, but not limited to the hands-on skill set of computer, networking, and internetworking systems technology principles and desktop support. The hands-on skills and concepts that students will gain through this scenario will help students to sit for industry certifications, like CompTIA (e.g., A+, Network+) and Microsoft (e.g., MTA, Administrator).

- Ability to install and configure various operating systems and servers (e.g., Windows, Linux, SQL, etc.)
- Ability to access preconfigured workstation(s) with various operating systems (e.g., Windows, Linux, MacOS)
- Ability to access, modify, and manipulate virtual network hardware (e.g., firewalls, routers)
- Ability to set up and configure virtual networks
- Update software as needed to maintain fully functional systems.
- Apply knowledge of operating systems to manage system hardware, security protocols, and software technologies.
- Design, maintain, and revise systems to meet desired specifications.
- Manage administrative access and user security policies within systems.
- Maintain, update, and monitor networks and computer systems using automation and scripting.
Scenario 3 – Cyber-Security Environment

Description: In this scenario, students will need to have access to secure environments that will allow for the study of cybersecurity and ethical hacking scenarios, including, but not limited to the necessary skills required to design, secure, protect and identify vulnerabilities in a network including various operating systems and network devices. The Cybersecurity program also focuses on the skills needed for internationally recognized IT certifications and high demands in business, industry, and government

- Ability to install and configure various operating systems and servers (e.g., Windows, Linux, SQL, etc.)
- Ability to access, modify, and manipulate virtual network hardware (e.g., firewalls, routers)
- Ability to set up and configure virtual networks
- A private, secured and protected area of the system to allow for the analyzation of malware
- Coding in a wide variety of languages, including languages like Assembly and Python
- Apply cyber defense methods to prepare a system to repel attacks.
- Analyze common security failures and identify specific design principles that have been violated.
- Apply appropriate protocols, tools, and techniques to maximize security in the network environment.
- Compare and contrast offensive and defensive resources used in cybersecurity ecosystems/environment.
- Apply knowledge of regulatory and legal requirements to ensure compliance.
- Apply risk analysis methodologies to identify potential vulnerabilities, associated impacts, and recommend appropriate responses.

Part 4 Training

Vendors must describe in detail what training is deemed to be required for operation by both MCCCD and RSC staff of each solution provided. Describe training methodologies offered, including options for on-site training, web-based training, participation at regional training seminars, sustainability of training, compliance training, etc.

Part 5 Support, Warranty, and Maintenance

Describe the options and levels of support, warranty coverage, and types of maintenance agreements that are required for the proposed computer lab.
**Part 6 Package Pricing**

Describe in detail your company’s pricing model and all options associated with each solution provided. Please submit approximate pricing range inclusive of all the requirements to support each solution provided. Offer fees that are reasonable and consistent with fees charged to other comparable non-profit institutions. Include pricing for all ancillary solution and services offerings your company may provide that would further enhance each of our desired scenarios.

Submitted pricing is for information purposes only and is non-binding.

**Submittals must be received prior to 3:00 p.m. (local time) on February 13, 2020.**
One (1) original and One (1) copy in PDF Format on a USB flash drive of the proposal must be submitted to:

Maricopa County Community College District  
Main Reception Desk  
Attn: Keith Killourie  
2411 W. 14th Street  
Tempe, Arizona 85281

The envelope or enclosure must be worded "Request for Information / Virtual Computer Lab” with date and time of deadline.