Introduction to CLaaS: Virtual Cybersecurity Lab

CLaaS - Cybersecurity Lab as a Service

Clarisa Grijalva

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AskCyPert

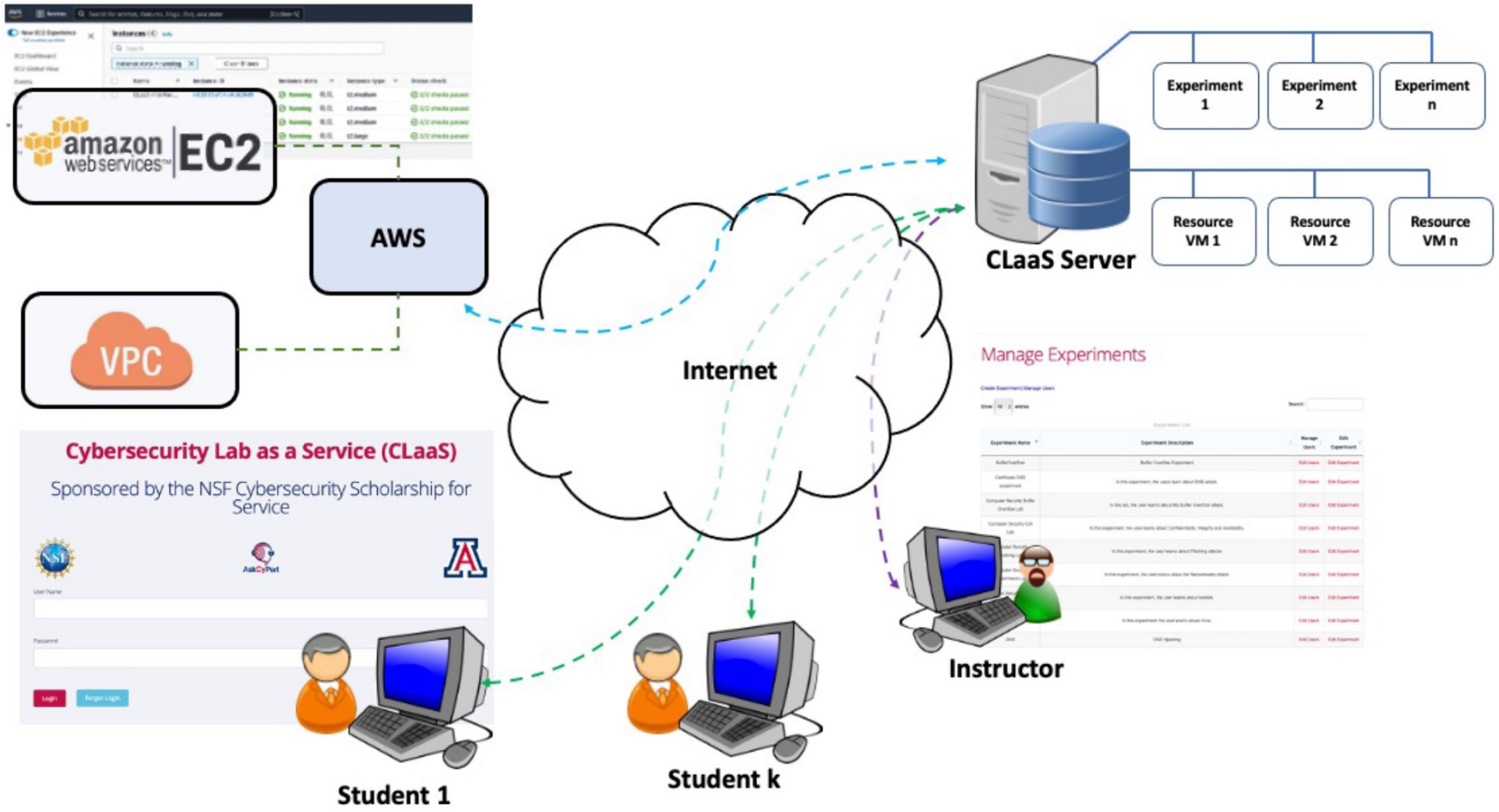
Outline

- What is CLaaS?
- CLaaS architecture
- How to access CLaaS
- Important notes

What is CLaaS?

- Cybersecurity Lab as a Service (CLaaS) is a cloud-based environment that enables cybersecurity training through virtual labs
- Students are assigned predefined virtual machines to perform experiments in a contained virtual environment
- CLaaS allows hands-on training in cybersecurity concepts, with a very low overhead associated with experiment setup and management

CLaaS Architecture

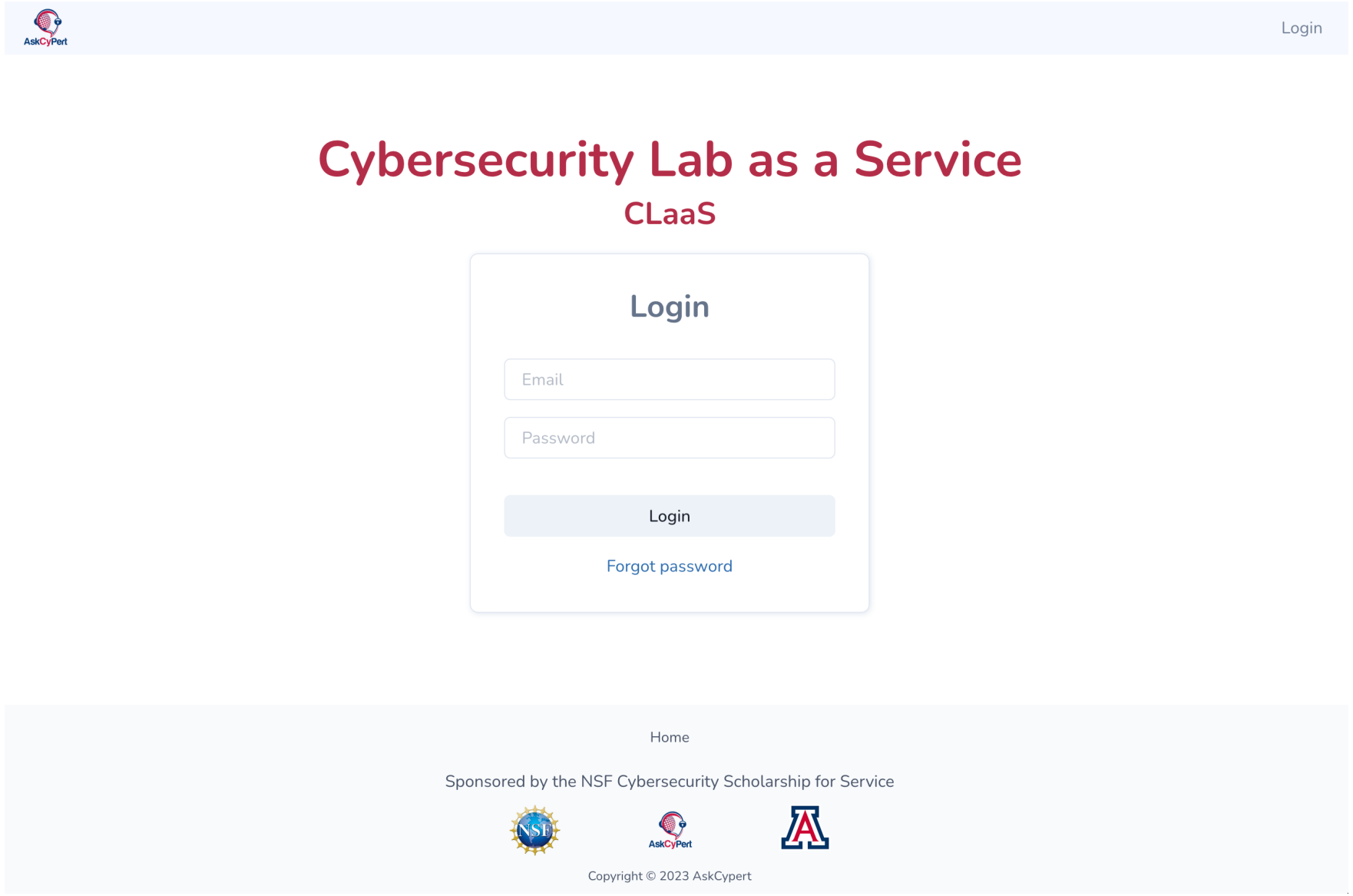


How to access CLaaS

- Access CLaaS through the following website
  - https://claas-askcypert.org/
- Credentials will be created for each student. *The university email will be your username in CLaaS*
- Every student will receive an email with a temporary password to access CLaaS
- Questions or problems? Contact Clarisa (clarisagl@arizona.edu)

Important Notes

- CLaaS has been designed to provide online hands-on, interactive training for students
- Performing any malicious activity outside of the experiment instructions is forbidden
- Failure to comply with this will result in the elimination of the user account and the right to use CLaaS in the future
- Every user is responsible for all activities performed on the platform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Password
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Forgot password
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User Agreement

Please, carefully read the following user agreement.

The use of the virtual computers/networks provided within this environment (The Cybersecurity Lab as a Service website) is a privilege granted to registered members only.

While using this account, you are agreeing to:

- Take no actions which violate the University of Arizona Codes of Conduct or Academic Integrity, the University of Arizona Classified Staff Human Resources Policy Manual, the University Handbook for Appointed Personnel, or other applicable policy or law.
- Use these resources only for purposes consistent with the University's mission and applicable policy or law. Inappropriate use includes, but is not limited to
  - Sending harassing messages or in any way harassing other computer users.
  - Gaining or attempting to gain access to accounts or files without permission on any computer or network system.
  - Making unauthorized copies or distributing copies without permission of any copyright-protected software, or other copyrighted or trademarked material, regardless of source.
  - Taking actions that threaten the security or capacity of computer or network systems outside the virtual environment assigned to you, or which destroy damage, or overload, these resources.
  - Violating any applicable law or policy.

Failure to abide by these policies will result in the revocation of your privileges to use the CLaaS computing and network resources as well as possible legal action should you violate any laws.

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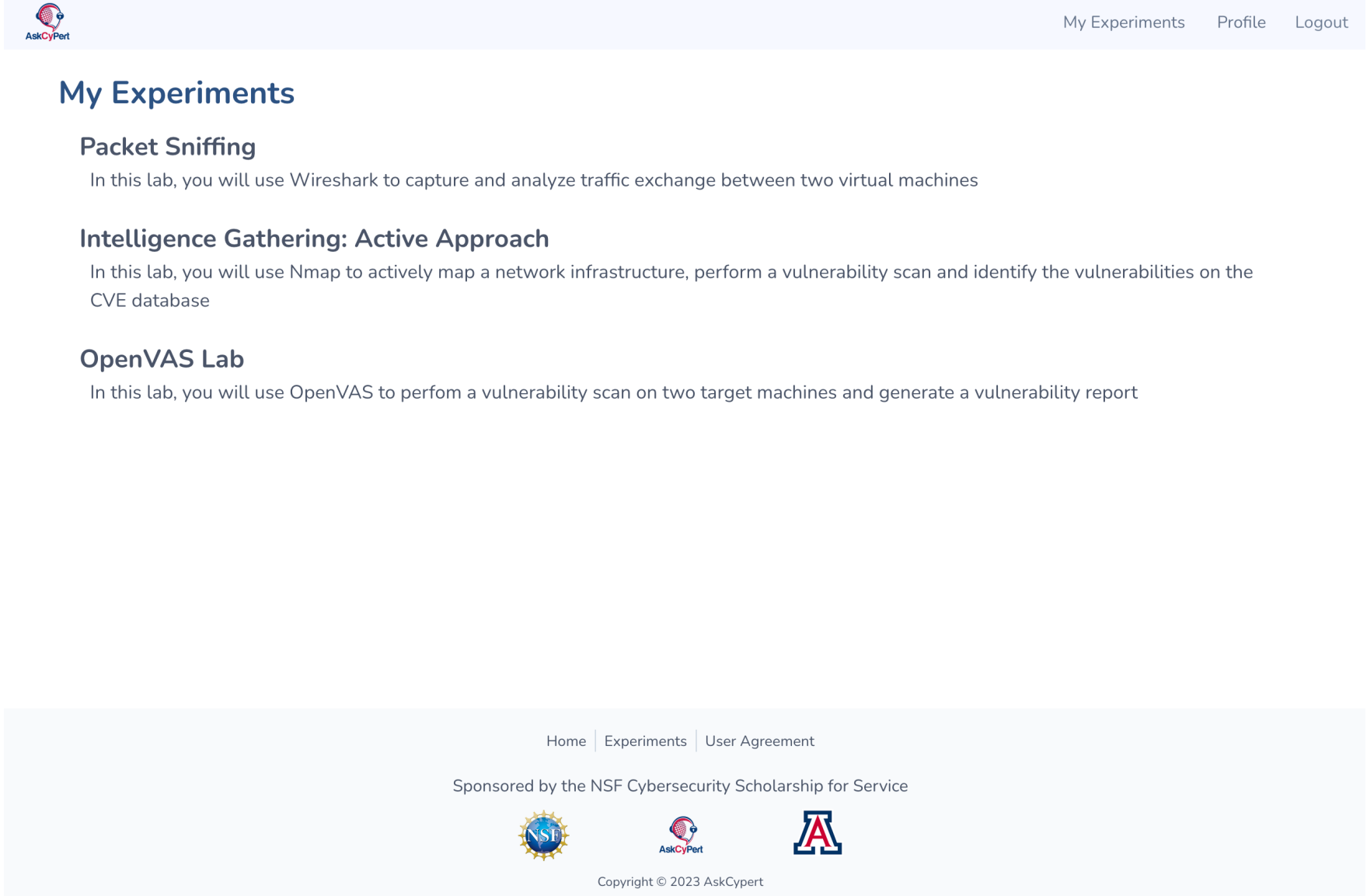
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My Experiments
Profile
Logout
My Experiments
Packet Sniffing
In this lab, you will use Wireshark to capture and analyze traffic exchange between two virtual machines
Intelligence Gathering: Active Approach
In this lab, you will use Nmap to actively map a network infrastructure, perform a vulnerability scan and identify the vulnerabilities on the CVE database
OpenVAS Lab
In this lab, you will use OpenVAS to perfom a vulnerability scan on two target machines and generate a vulnerability report
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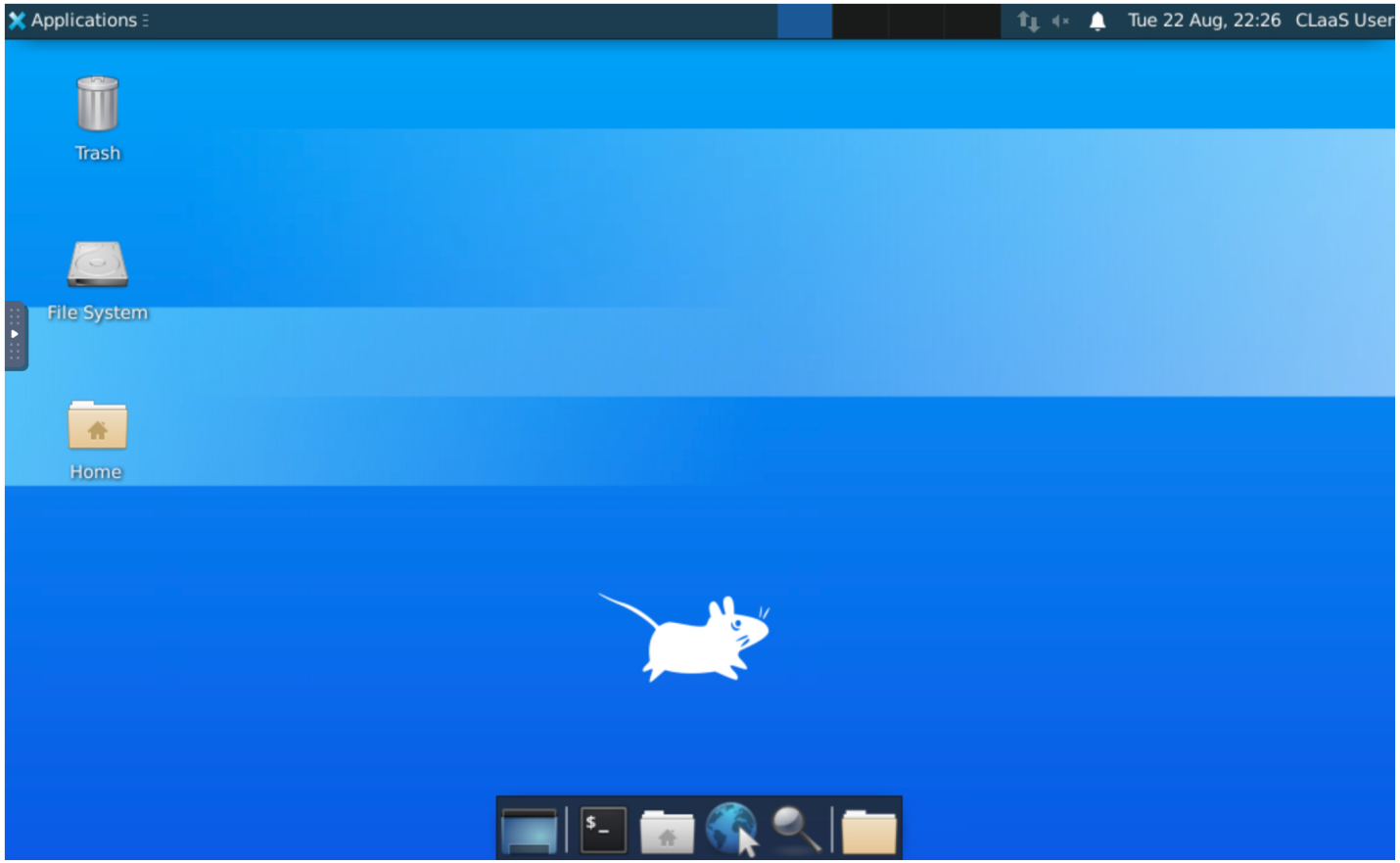
VM 1 VM 2 Instructions



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VM 1 VM 2 Instructions

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Experiment Instructions

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– Or by typing the following command:

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ifconfig
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CAC Center for Cloud and Autonomic Computing

– *You will need the IP of the two VMs, for the rest of the lab.*