

# NCYTE CENTER

National Cybersecurity Training & Education Center

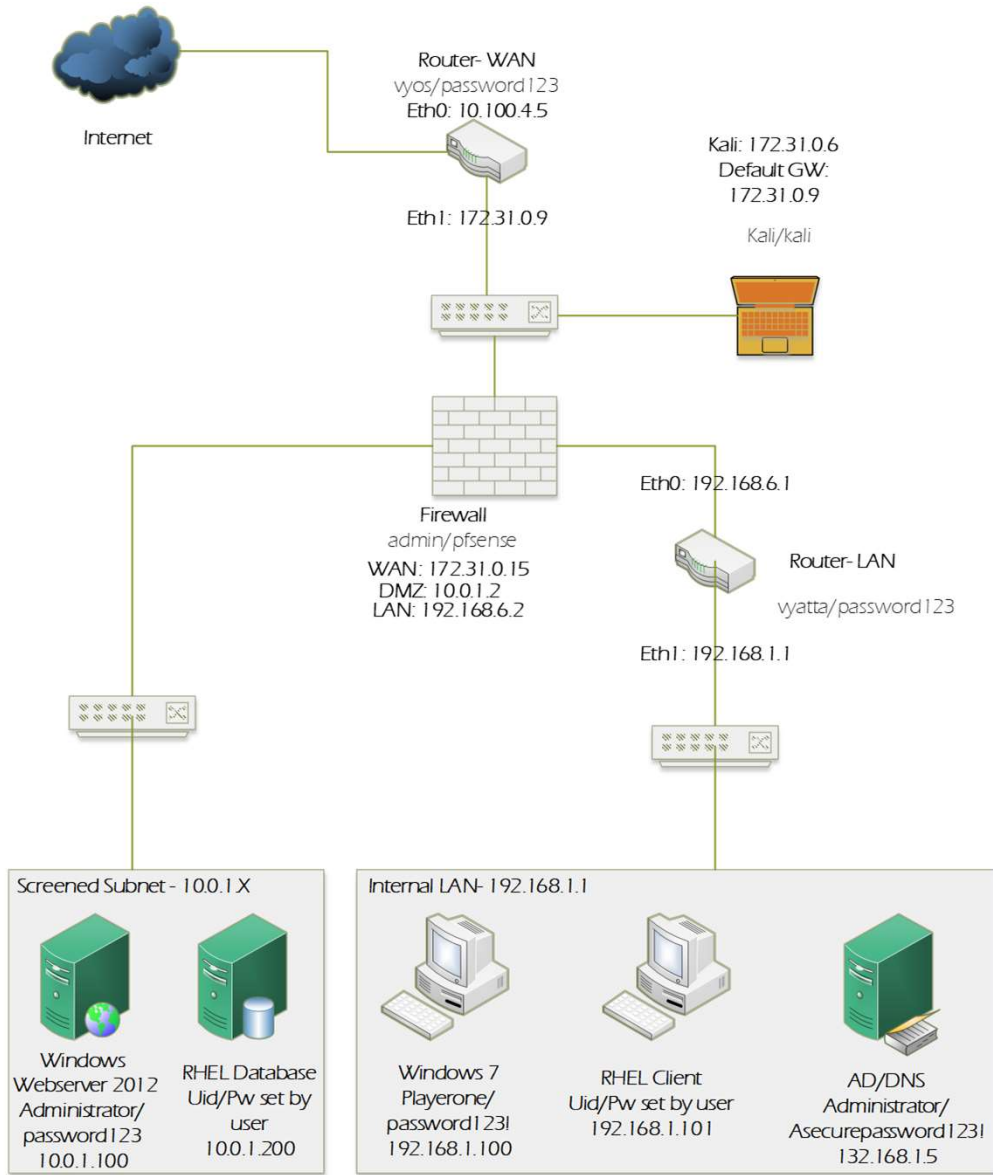
## Cyber Career Challenge Information Session

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# Cyber Career Challenge/Capstone Class

- Students in teams of 3 or 4
- Given a small network to do a complete build in support of a business
- Given a list of requirements for the business
- About 7 weeks to set up and secure your network
- Meeting once a week
- An operations and pentest week
- Presentations to each other and open to public

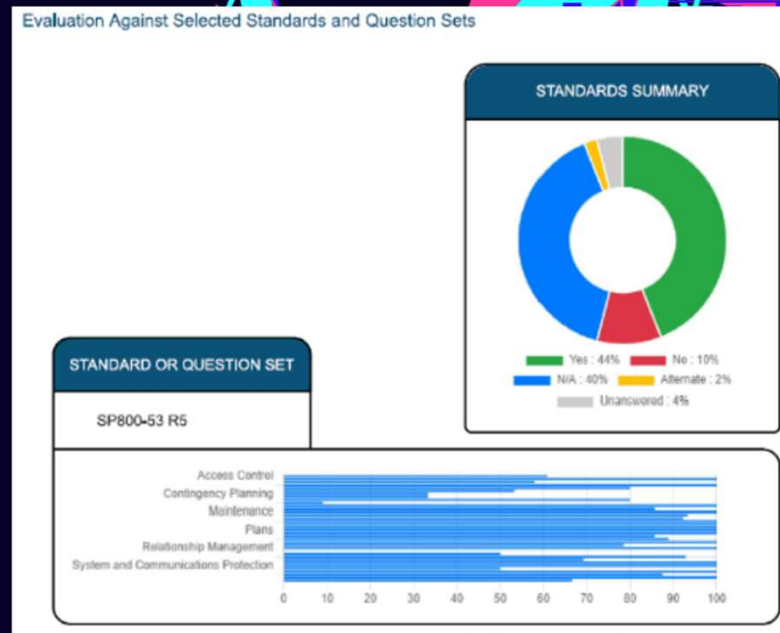


	Task	Measure
Business Concept	Identified three goods	List of items submitted
	Identified three services	List of items submitted
Project Management	Gantt Chart	Completed Chart Posted
	Visio diagram of network	Diagram is accurate - information is correct
	FedRAMP System Security Plan	Accurate and complete
Account Management	Network authentication	Access the network admin console
	Admin account	Log in as admin
	User accounts	Log in as user
	Guest user account(such as consultant)	log in as a guest user
Web Management	Web site created	Access website from browser
	Shopping cart	access shopping cart on website
	purchase goods	purchase a good
	Purchase service	purchase a service
Database Management	Database setup	Access database interface
	Query db re goods	Query database for list of goods and other queries

Email	Email server setup	Access the email server admin interface
	User accounts get email access	Create a new user. Test email account.
	users can email each other from within organization	Compose and send email to other user. Check that it is received.
Scripting	Automate admin tasks with python	Script is run and behaves as intended
Workstations	1 Windows 1 Red Hat	
	Users can access/authenticate to network	Authenticate as any user and access network as appropriate
	Users can email	Compose and send email to other user. Check that it is received.
	Access to website/helpdesk	Open browser to helpdesk, submit ticket successfully
	Access other services	ie, access database
	Appropriate software to do work	Run various applications to assess functionality
Analytics	Network monitoring	access information about network traffic
	Device monitoring	Access information about device status
	Dashboard	dashboard displaying information
Backup and recovery solutions	Database is backup	Demonstrate backup Demonstrate restore
Change management	Change log	review change log
Vulnerability Assessment	Run a vulnerability scan	Review the scan report

# CSET Summary

- SP800-53 R5 NIST Security Standard Questions
  - 44% Yes
  - 40% NA
  - 10% No
- Compliancy
  - 78% Overall
  - 76% Standards
  - 81% Components



# Cyber Career Challenge Commitment

The Cyber Career Challenge will require your full commitment for six weeks.

- You will be working with two other students who are going to depend on you every week to complete assignments, troubleshoot problems, research equipment, and other duties as assigned.
- You can expect to spend 160 hours or more laboring to complete the project.
- You must submit the Cyber Career Challenge Commitment by ....

# The Reward!

By successfully completing the challenge

- You will gain an experience that demonstrates your abilities to problem solve, research, communicate, and manage a project.
- You will also gain the respect and trust of your teammates.

- Cyber Career Challenge Schedule
- March 2 - Commitment Agreement due
- April 10 - Workshop begins: Introduction to program work roles
- April 17 - Introduction to the network requirements and team selection
- April 24 - Network admin basics, Kanban, Gantt charts, Visio diagrams
- May 1 to June 5 - Teams work independently and receive guidance on network management and pentest prep
- June 12 - Pentest
- June 15 - Team presentations
- September 15 (Optional) Virtual Career Fair