Team Name	Group 29
Project	Grid-SIEM
Report Period	Oct. 22 – Nov. 5

## **Summary of Progress in this Period**

Progress Point	Description
Set up a demo with Gravwell	Our group is meeting with a Gravwell
representative.	representative the week of Nov 13. To
	help us out with any questions we
	might have run into during the
	installation process and learn more
	about the platform's features.
Access to PowerCyberLab	In addition to some of the diagrams
	that give us a better sense of the
	PowerCyber topology. Our adviser has
	granted us access to the PowerCyber
	virtual machine resources. We can
	begin the installation phase.
Fix firewall issues.	We ran into some issues when setting
	up Security Onion. They had to do with
	firewall traffic policies not allowing TCP
	traffic to the Master Node. They have
	been resolved by our adviser and
	hopefully won't become a problem
	with Gravwell services in the future.

## **Pending Issues**

Issue	Description
Security Onion documentation.	We are currently working on writing
	documentation that outlines the
	installation process of Security Onion.
	In addition a document over our
	current installation and configuration
	of Security Onion.
Security Onion Installation	Complete installation of Security Onion
	on the ubuntu-SIEMMaster-2-SO
	virtual machine. We are also working
	on the firewall rules for the machine to
	allow the sensors using Security Onion
	to interact with each other.
Gravwell Documentation	We are currently working on writing
	documentation that outlines the
	installation process of the Gravwell
	platform.
Gravwell Installation	Complete installation of Gravwell on
	the ubuntu-SIEMMaster-2-Gravwell
	virtual machine.
Testing Documentation	Finish up the testing portion of the
	engineering project document.
Develop weekly slide deck to showcase	Stay prepared for in-class lightning
progress to our project adviser.	talks. In order to be prepared to
	present during the in-class lighting
	talks our group needs to develop a new
	slide deck covering project planning.
	As well as a secondary slide deck to

showcase new findings to our project
adviser.

## **Plans for Upcoming Reporting Period**

Pending Item	Description
Kali attack VM	Make use of the Kali Linux VM to
	research attacks that can be run
	against our environment and setup the
	installations for the attacks.
Review engineering design	Got some feedback from Dr. Tyagi
documentation.	regarding the overall engineering
	design of the project. Our group now
	needs to go back and be more specific
	and direct. Make sure that every tool
	has a purpose.
Integration of machine learning into	For an analyst to do the incident
project.	handling portion of the project would
	be overwhelming. Which is why we
	have a SIEM to help collect and parse
	the noise from the real threats. The
	next step above that is to train a
	machine learning model to detect a
	new previously unknown threat based
	on prior threat signatures.
Integrate MITRE Caldera into project to	Since this is one of the portions of the
deploy attacks on OT systems.	project that will be implemented last, it
	follows that we have not done enough
	research to thoroughly understand
	how testing with MITRE Caldera will be

	accomplished. We will use the newly
	available Kali linux virtual machines for
	this
Security Onion Installation	Continue to work on Security Onion
	Installation, we are switching the
	Master node to Sensor 3 instead of the
	original and testing if adding two NICs
	to each VM solves the communication
	issue.
Project Tools	Continue to explore new and different
	varieties of tools we can explore and
	integrate into our project.
Final Presentation	Prepare for Faculty Design Review
	Presentation in December.
	Go through design document and
	remove questions and check for design
	errors.