MICHIGAN STATE UNIVERSITY Alpha Presentation Cloud Security Event Processing And Alerting Platform The Capstone Experience

Team Rook

Brian Jones Bradley Baker Jake Fenton Kaushik Sridasyam Alex Fall

Department of Computer Science and Engineering Michigan State University

Fall 2017

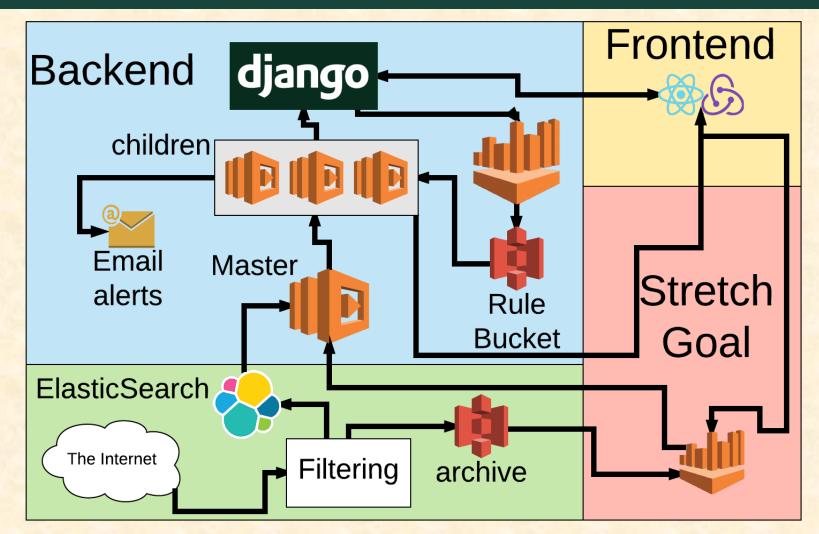


From Students... ...to Professionals

Project Overview

- Rook provides managed security services
- Scans network logs looking for security threats
- We're upgrading the scanner to add...
 - Scalability
 - Standardized management
 - Unified programs

System Architecture



User Interface – Client Profile View

CUSTOMER SETTINGS					
Customer Name:					
Email:					
contact@example.org					
Index Date Format:					
YYY:MM:DD					
Local DB Name:					
local.db					
Whitelist by IP or domain					
	Add				
• notathreat.org Ren • 11.22.33.44 Remo	move ve				
			CANCEL	SAVE CHANGES	

The Capstone Experience

User Interface – Rule View

🗅 Rook FORCE ×	Rook's Force	e securi 🗙 📃						[Bradley — — ×				
← → C D https://www.rooksecurity.com													
★ ROOK SECURITY	WORKSPA	CE CONSC	-	NGS				SEND FEEDBACK	TG				
Client Profile Rules	_								/ 🔻				
vulnerability exploit detect													
	ADD RULE	DELETE RULE											
-	COMPONEN	T DETAILS											
•	type	threat					►						
•	threatid	30000,44999											
	severity	!informational,!low											
•	action	!deny											
•	from	Untrusted											
•	event_count												
•	event_ttl	900											
•	track_by												
10) 🗸	1											

What's left to do?

- Testing
 - Unit testing
 - Rook personal feedback
- Integrate all of the pieces
 - Write to S3 via API
 - Have lambdas trigger email
 - Convert the lambda engines
 - Iterate frontend with Rook

Questions?

