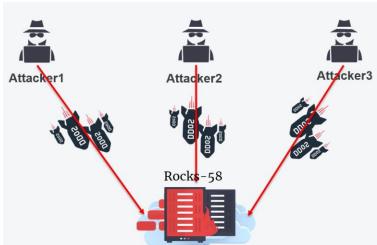


Security Test of Indonesian E-Health Community Cloud Model Test Bed on PRAGMA Cloud



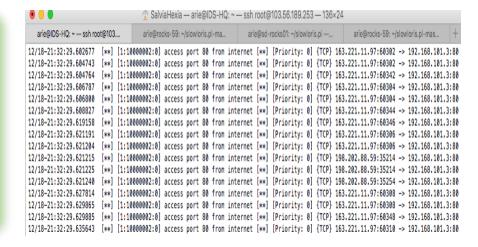
Arie Surachman, Sri Chusri Haryanti, Ummi Azizah Rachmawati Sri Puji U.A., Rosini

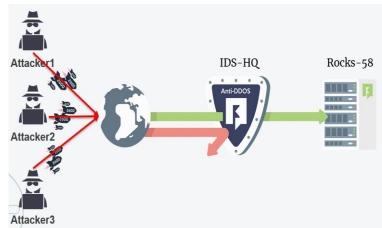
Faculty of Information Technology, YARSI Univeristy, Indonesia





Problem ?! O How the topology works ? O How Snort & netfilter IPtables do they works ? O How the Results ?





Scenario 2 DDoS Attack

Snort is very crucial for the cloud server

● ● SalviaHexia — arie@IDS-HQ: ~ — ssh root@103.56.189.253 — 136×24			
arie@IDS-HQ: ~ — ssh root@103	arie@rocks-59: ~/slowloris.pl-ma	arie@sd-rocks01: ~/slowloris.pl —	arie@rocks-59: ~/slowloris.pl-mas
2/18-21:38:36.973405 [**] [1:1	lel ~ — arie@rocks-59: ~/slowloris.pl-master	et [**] [Priority: 0] {TCP} 19	98.202.88.59:36894 -> 192.168.101.3:
2/18-21:38:36.973410 [**] [1:1	ssh -vv arie@rocks-59.sdsc.edu	assification: Detection of a D	Denial of Service Attack] [Priority:
{TCP} 198.202.88.59:36934 -> 1			
			98.202.88.59:36934 -> 192.168.101.3:
		[Classification: Detection of a D	Denial of Service Attack] [Priority:
{TCP} 198.202.88.59:37014 -> 1			
			98.202.88.59:37014 -> 192.168.101.3:
2/18-21:38:36.973422 [**] [1:1	<pre>l:1] SlowLoris.py DoS attempt [**]</pre>	[Classification: Detection of a D	Denial of Service Attack] [Priority:
{TCP} 198.202.88.59:37094 -> 1			
			98.202.88.59:37094 -> 192.168.101.3:
		[Classification: Detection of a D	Denial of Service Attack] [Priority:
{TCP} 198.202.88.59:37134 -> 1	192.168.101.3:80		
			98.202.88.59:37134 -> 192.168.101.3:
2/18-21:38:36.973434 [**] [1:1	<pre>l:1] SlowLoris.py DoS attempt [**]</pre>	[Classification: Detection of a D	Denial of Service Attack] [Priority:
{TCP} 198.202.88.59:37054 -> 1			
			98.202.88.59:37054 -> 192.168.101.3:
2/18-21:38:36.973439 [**] [1:1	<pre>l:1] SlowLoris.py DoS attempt [**]</pre>	[Classification: Detection of a D	Denial of Service Attack] [Priority:
{TCP} 198.202.88.59:37174 -> 1	192.168.101.3:80		
2/18-21:38:36.973439 [**] [1:1	10000002:0] access port 80 from int	ernet [**] [Priority: 0] {TCP} 19	98.202.88.59:37174 -> 192.168.101.3:
2/18-21:38:36.973445 [**] [1:1	<pre>l:1] SlowLoris.py DoS attempt [**]</pre>	[Classification: Detection of a D	Denial of Service Attack] [Priority:
{TCP} 198.202.88.59:37214 -> 1	192.168.101.3:80		
	aaaaaaa2.al access nort 80 from int	ernet [ex] [Priority: 8] [TCP] 10	98.202.88.59:37214 -> 192.168.101.3:
2/18-21:38:36.973445 [**] [1:1			