zeroBS – DDOS Attacker-Capabilities-Scoring

	DRS 1	DRS 2	DRS 3	DRS 4	DRS 5	DRS 6	DRS 7
Name (*)	Poking	ScriptKiddie	Basic Level	Sophisticated	Advanced	Extreme State	Sponsored
Persistance	minutes	hours	hours	days	weeks	weeks	weeks
OSINT + Recon, Snipering					Basic	Full	Full
Can follow DNS/ IP-Changes					y	y	y
Can find and record the origin					y	y	y
Attacks with least necessary ammount / Deep understanding on protection-solutions					y	y	y
Monitors and reacts on mitigations					y	y	y
Ability to test for whitelists/blacklist (GeoIP)					y	y	y
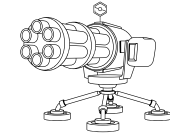
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Ability to limit attacks from geo-Ranges						y	y
Ressources/ week if to be rented	1 $	10 $	50 $	500 $	10000 $	No limits	No limits
Smokescreening						y	y
Multi Vol +L7				y	y	y	y
CarpetBombing UDP/TCP					y	y	y
Unusual Vectors *)					y	y	y
Attack blends into usual traffic (L7)					y	y	y
Botnet for rent/buy				y	y	y	y
Operates own botnet					y	y	y
Botnet-Size (AVG, but YMMV)	1	50	5.000	10.000	50.000	500.000	unlimited
Full Browser/Clientcapa-bilities					y	y	y
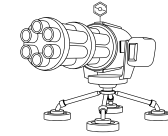
Explanation

Capabilities for all Levels have been observed in the wild by zerobs [1] or by third.party [2]

Level 7 // GodMode

» State Sponsored [r.2/r.3]

Level 6 // Extreme

» highly sophisticated individuals for rent that can leverage month-long campaigns with precision and playing with ops-team [r.1]
» teams that hit-and-run, but show no ransom, maybe just to burn a weapon for all like memcached – case
» dorian gray network (100k ddos-network that sits still since years)

Level 5 // Advanced

» ddos-extortion-gangs with the capability to hit [r.2] Lazarus Bear, Armada Collective
» DDoS-gangs for rent with good track-record (the better ones)

Level 4 // Sophisticated

» That Guy in the Basement with knowledge [1]
» DDoS-Gangs for Rent, the cheaper ones [1]
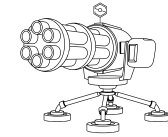» minimum-Level for basically all ECommerce-Applications

Level 3 // Basic

» Booter-Networks
» Wordpress-Botnets

Level 2 // Skiddo

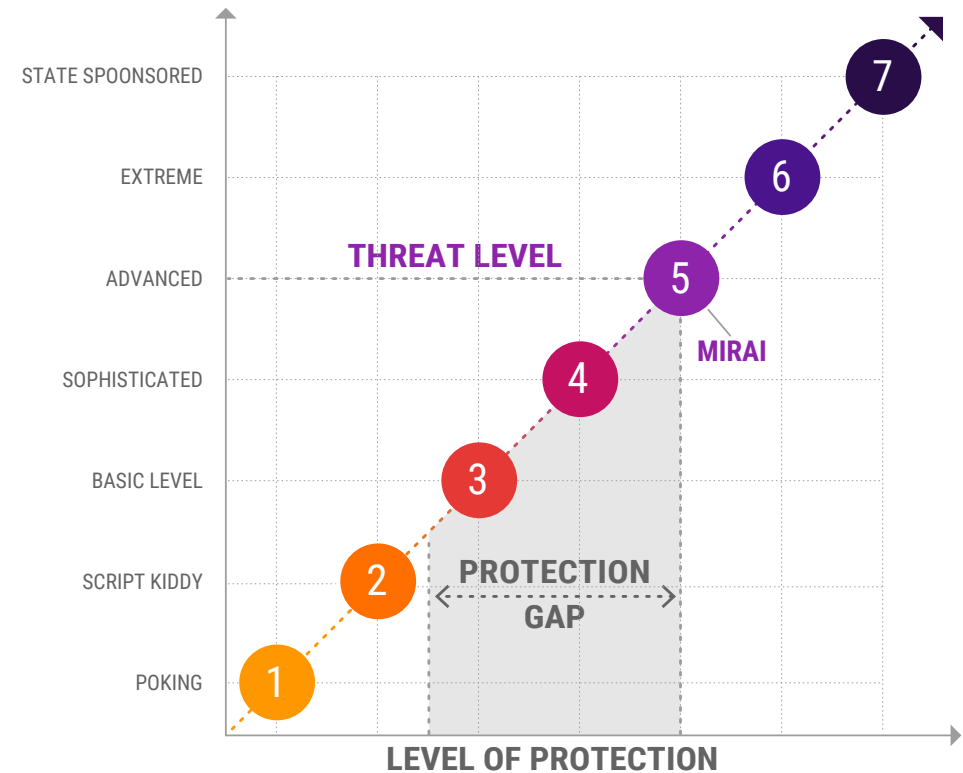» that guy that can download a script from github
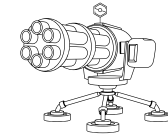
Level 1 // Poking

» basically F5 F5 F5

How measuring a possible protection gap works

Use an DDoS-expert for the following

» measure your threatlevel, either by industry, recent ddos-campaigns or blackmail-threat

› banks are usually 5-6

› ecommerce 4-5

› smaller ISP 5-6

› if there is an actual campaign going on against your industry, usually 5

» measure your protection – level by stresstest/assessments (preferred) or by paperwork

» if you protectionlevel doesnt meet your threatlevel, you have a protectiongap that should be adresses

» you now are able to number the costs to close the gap (good for C-level) and to calculate, if this is money spent well or not

STATE SPOONSORED — 7

EXTREME — 6

THREAT LEVEL

ADVANCED — 5

MIRAI

SOPHISTICATED — 4

BASIC LEVEL — 3

SCRIPT KIDDY — 2   PROTECTION GAP

POKING — 1

LEVEL OF PROTECTION

References

r.1 https://zero.bs/ddos-incident-response-ein-bericht-von-der-front.html

r.2 *https://www.netscout.com/blog/asert/lazarus-bear-armada-lba-ddos-extortion-attack-campaign-october*

r.3 *https://cloud.google.com/blog/products/identity-security/identifying-and-protecting-against-the-largest-ddos-attacks*