

EXECUTIVE SUMMARY

Cybercrime is an industry, with a growing service economy, tools for hire, service providers, channels and end users



The size of this shadow economy is growing. Cybercriminals of different levels of experience can acquire the necessary tools to launch a malicious campaign designed to attack businesses, governments and individuals

Understanding how attackers use these tools and services helps organizations prepare defenses and protect their assets



Build complete threat actor profiles



Analyze trends and patterns across different services utilized



Defend against targeted attacks



The first report in this series covers the first elements of this industry: acquiring malicious code and preparing it for a campaign

HOW CYBERCRIMINALS OBTAIN MALWARE



Writing your own code

Ownership throughout entire campaign

Opportunity to learn from other actors



Hiring developers

Consultancy services can provide outside knowledge from other actors

Tailormade code designed to specifications



Malware-asa-Service (MaaS)

Easy to find, diverse and ready-to-use products

Little technical knowledge required



Labor-intensive

Specific skill sets required

Actors involved in operations as well as development

Expensive

High level of interaction required between vendors and clients

Hidden fees to keep projects private

Cannot modify or alter code

Sometimes already detectable by AV engines



MOST POPULAR MALWARE AVAILABLE



Prices of malicious code increase depending on the objectives, target operating systems, functionality, and version of the malware



Discounts available on some types of malware for splitting the gains of using it between users and developers



Some developers charge for 'add-ons' including additional modules, admin panel installation, privacy etc.



Prominent in Russian-language forums

VIDAR

\$200-300 USD per month \$200-300 USD per month Raccon Stealer

КРОТ

\$65 USD + add-ons

\$150 USD + add-ons

Predator
The Thief

Inter

\$990 USD + discounts for splitting gains

Minimum cost of hiring a malware developer (Dr.Predator)

\$80

UNDERGROUND COMMUNICATION

Jabber / XMPP

Discord

Forums

Marketplaces

Telegram





EVADING AND BYPASSING DETECTION

There has been a rise in the popularity of malware that includes a range of obfuscation, sandbox detection and bypass techniques

Most frequently used tools and services across malware types

Packers

Compresses malicious executables

Crypters

Encrypts malicious executables

PUBLIC

- Free
- Open licensed
- Often already 'known' to AV

PRIVATE (one-off)

- \$100-300 USD
- Unique or custom
- Fully undetectable crypters

PRIVATE (subscription)

- \$30 90 USD per month
- Constantly evolving
- Fully undetectable crypters



Obfuscator

Obscures, conceals, or disguises source code

Many are legitimate tools

Varying price ranges from \$50 – 3000 USD though some are free

Cheapest based on quota of files requiring obfuscation

Most expensive usually carry a subscription and software license

Code signing

Applications that carry an official signature to confirm integrity of the application; identify author of the code

Three types of vendors:

- Resellers
- Intermediary managers
- Binary certification services

Legitimate certificates priced between \$500 - 3000 USD





TESTING ANTIVIRUS AND BLACKLIST EVASION

Finalized malware products and infrastructure must be tested before deployment



No distribute antivirus scanners

Users can test files, URLs, domains, and IP addresses against security protections without distributing elements they scan to security vendors

Static scans test malware across AV products and generate reports





Dynamic scans additionally deploy the malware and provide runtime analysis

Make changes to infrastructure

Tweak products before launch

Improve stealth of tooling



Free models,

seemingly supported by paid advertising



Single-scan pricing

from \$0.01 USD depending on provider

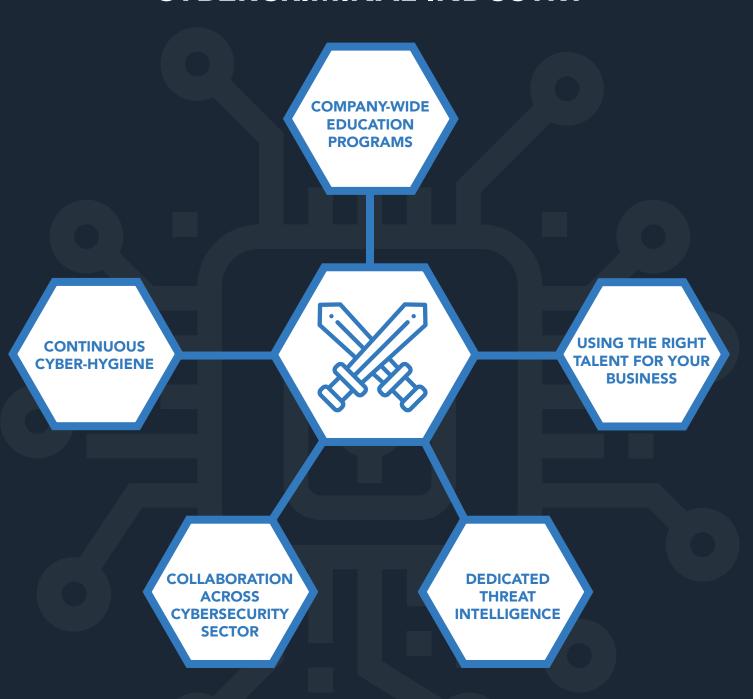


Subscription-based models range from

\$50 to \$299 USD per month



CONFRONTING THE CYBERCRIMINAL INDUSTRY



Blueliv hosts the Threat Exchange Network to aid collaboration.

Join the fight against cybercrime today.

community.blueliv.com