

## A9X Defender & Zeus Ransomware

### Executive Summary

Keeping your anti-virus protection updated is extremely important, if you want to protect your marine vessels from new malware attacks. Anti-Virus signatures need to be updated on a regular daily basis. Relying on weekly updates exposes your marine vessels to a serious risk of infection.

With A9X Defender, powered by Windows Defender, supplies a full daily engine and signature update. Updates are downloaded once by the communications PC and distributed across the network. Updates are optimized for maritime and are 100-to-1 times smaller than most updates.

At A9X Cyber Security, we never compromise on security. We streamline the update process to provide full, daily signature updates with comprehensive reporting, rather than a limited weekly snapshot.

### Virus Background

The recent **Zeus Ransomware**, encrypts user data and then prompts them to visit a website to learn how to pay a ransom and get their files back. The ransomware also threatens to publish the stolen data on their website if victims don't pay the ransom. Zeus payloads are a Python-based executable packaged via pyInstaller and further obfuscated via pyArmor to avoid detection.

### Testing

On 29th June 2022, we uploaded a sample of the Zeus ransomware to VirusTotal. Please see sample details were as below:

Family: Trojan:Win32/Casdet!rfn

MD5: fb5a4f129569e3d7aadba52083213e95

SHA256: 8ff189783dc0646513c791421df723187b614f6dbfafad16763e3c369c5dfa2a

### Results

29 anti-virus applications detected the malware that was first uploaded 13 hours ago including A9X Defender:



Notable applications that detected the malware included: BitDefender, Fortinet, CrowdStrike, Microsoft Defender, McAfee, TrendMicro and A9X Defender.

Security Vendors' Analysis ⓘ			
Ad-Aware	🚫 Trojan.Agent.FVZQ	ALYac	🚫 Trojan.Agent.FVZQ
Arcabit	🚫 Trojan.Agent.FVZQ	BitDefender	🚫 Trojan.Agent.FVZQ
CrowdStrike Falcon	🚫 Win/malicious_confidence_70% (W)	Cybereason	🚫 Malicious.7b2593
Cylance	🚫 Unsafe	Cynet	🚫 Malicious (score: 100)
Cyren	🚫 W54/Agent.LDQAI-4074	Elastic	🚫 Malicious (moderate Confidence)
Emsisoft	🚫 Trojan.Agent.FVZQ (B)	eScan	🚫 Trojan.Agent.FVZQ
Fortinet	🚫 W32/PossibleThreat	GData	🚫 Trojan.Agent.FVZQ
Ikarus	🚫 Trojan.Agent	Lionic	🚫 Trojan.Win32.Fvzq.4tc
MAX	🚫 Malware (ai Score=80)	MaxSecure	🚫 Trojan.Malware.300983.susgen
McAfee	🚫 ArtemisIB5A4F129569	McAfee-GW-Edition	🚫 BehavesLike.Win64.Trojan.gc
Microsoft	🚫 Trojan.Win32/Casdetlrfn	Palo Alto Networks	🚫 Generic.ml
QuickHeal	🚫 Trojan.Win32/CIR	Rising	🚫 Trojan.Casdetl8.FAA9 (CLOUD)
SecureAge APEX	🚫 Malicious	SentinelOne (Static ML)	🚫 Static AI - Suspicious PE

The following Anti-Virus programs did not detect the malware:

AhnLab-V3	✅ Undetected	Alibaba	✅ Undetected
Avast	✅ Undetected	Avira (no cloud)	✅ Undetected
Baidu	✅ Undetected	BitDefenderTheta	✅ Undetected
Bkav Pro	✅ Undetected	ClimAV	✅ Undetected
Comodo	✅ Undetected	DrWeb	✅ Undetected
ESET-NOD32	✅ Undetected	F-Secure	✅ Undetected
Gridinsoft	✅ Undetected	Jiangmin	✅ Undetected
K7AntiVirus	✅ Undetected	K7GW	✅ Undetected
Kaspersky	✅ Undetected	Kingsoft	✅ Undetected
Malwarebytes	✅ Undetected	NANO-Antivirus	✅ Undetected
Panda	✅ Undetected	Sangfor Engine Zero	✅ Undetected

## **Check Your Anti-Virus Systems**

Anti-virus programs such as ESET and Kapersky are often relied on within the marine industry to protect your vessels against anti-virus attacks, however these are often not effective as shown above with the Zeus Ransomware. Select an anti-virus system that supplies a full daily engine and signature updates, and relies on compression technology to optimize the data transfer.

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