

BlackCat (Malware Family)

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ALPHV, also known as BlackCat or Noberus, is a ransomware family that is deployed as part of Ransomware as a Service (RaaS) operations. ALPHV is written in the Rust programming language and supports execution on Windows, Linux-based operating systems (Debian, Ubuntu, ReadyNAS, Synology), and VMWare ESXi. ALPHV is marketed as ALPHV on cybercrime forums, but is commonly called BlackCat by security researchers due to an icon of a black cat appearing on its leak site. ALPHV has been observed being deployed in ransomware attacks since November 18, 2021.

ALPHV can be configured to encrypt files using either the AES or ChaCha20 algorithms. In order to maximize the amount of ransomed data, ALPHV can delete volume shadow copies, stop processes and services, and stop virtual machines on ESXi servers. ALPHV can self-propagate by using PsExec to remote execute itself on other hosts on the local network.

2025-12-30 · [US Department of Justice](#) · [Office of Public Affairs](#)

Two Americans Plead Guilty to Targeting Multiple U.S. Victims Using ALPHV BlackCat Ransomware

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When the Defenders Become the Attackers: Cybersecurity Experts Indicted for BlackCat Ransomware Operations

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Scattered Spider

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Octo Tempest crosses boundaries to facilitate extortion, encryption, and destruction

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Malware analysis report: BlackCat ransomware

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BlackCat v3 Decryptor Scripts

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ALPHV/BlackCat ransomware family becoming more dangerous

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Extortion Economics - Ransomware's new business model

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BlackCat ransomware attacks not merely a byproduct of bad luck

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Fat Cats - An analysis of the BlackCat ransomware affiliate program

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BlackCat — In a Shifting Threat Landscape, It Helps to Land on Your Feet: Tech Dive

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Ransomware-as-a-service: Understanding the cybercrime gig economy and how to protect yourself

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Analysis of an ALPHV incident

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Researchers Connect BlackCat Ransomware with Past BlackMatter Malware Activity

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A Bad Luck BlackCat

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Hive ransomware ports its Linux VMware ESXi encryptor to Rust

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This is a BlackCat you don't want crossing your path

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From BlackMatter to BlackCat: Analyzing two attacks from one affiliate

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Ransomware Profile: ALPHV

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BlackCat Ransomware as a Service - The Cat is certainly out of the bag!

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BlackCat ransomware implicated in attack on German oil companies

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Who Wrote the ALPHV/BlackCat Ransomware Strain?

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ALPHV ransomware gang analysis

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BlackCat Ransomware Linux variant

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