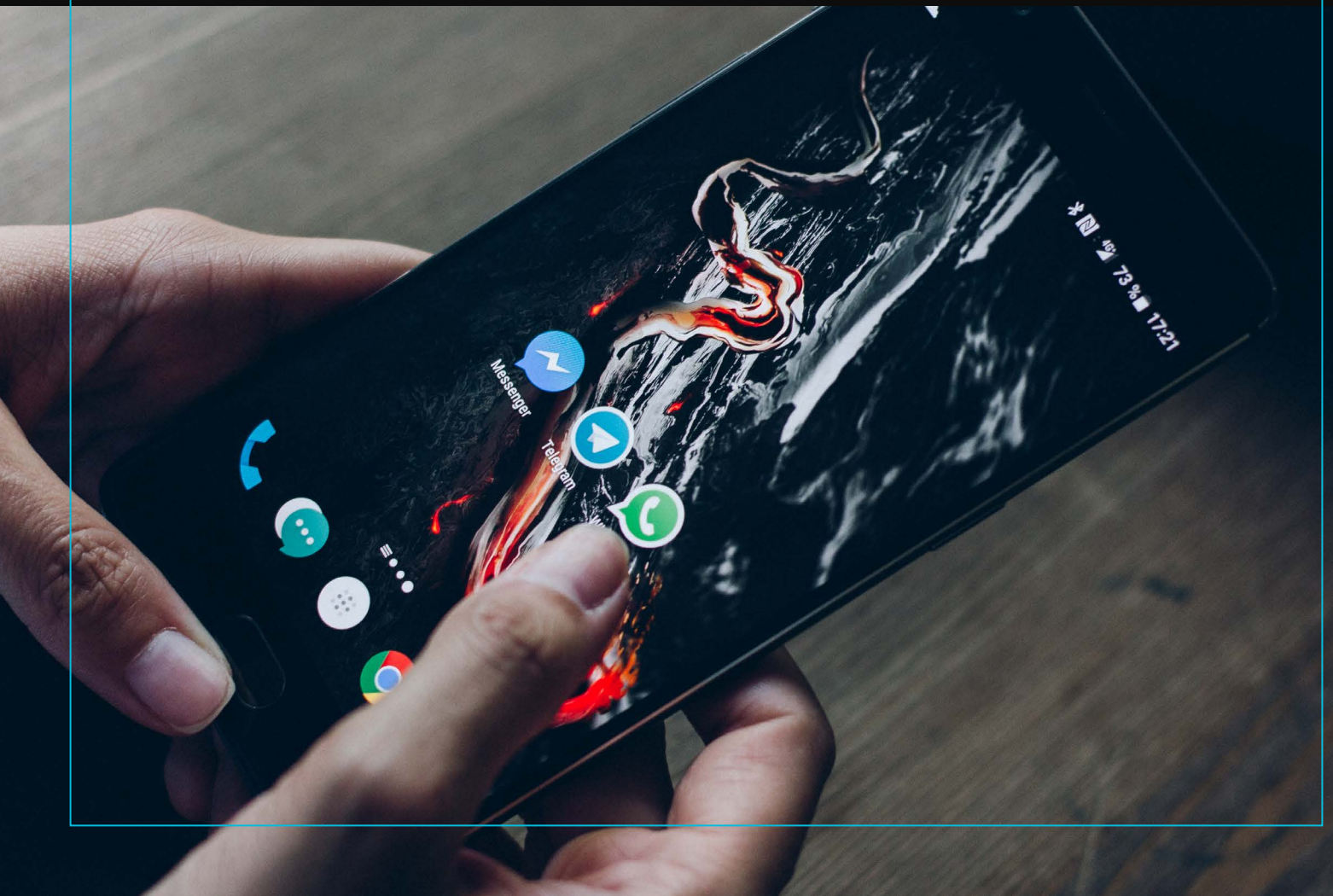




# Telegram Impersonation Targets Cryptocurrency Firm Employees with Malware

Malware Report

DIVISION SEVEN



## Executive Summary

An institutional cryptocurrency customer wanted to understand if its traders had been targeted by crypto-stealing malware highlighted in Microsoft threat research released on December 6, 2022. With SafeGuard Cyber's lookback capabilities for Telegram, our Division Seven (D7) threat intelligence team was able to confirm traders had been targeted months ago, in July 2022. In contrast to the longer trust-building TTPs detailed by Microsoft, our forensic analysis was able to identify the threat actor impersonating a trusted individual to more efficiently carry out the social engineering attack.

## Background

SafeGuard Cyber has several large cryptocurrency investment firms as customers. One such customer deploys our platform for content capture and archiving for Telegram, on behalf of its traders, to satisfy SEC recordkeeping requirements. However, in early December 2022, Microsoft [published research](#) on a threat actor the company tracks as DEV-O139. In its report, Microsoft noted the threat actor "joined Telegram groups used to facilitate communication between VIP clients and cryptocurrency exchange platforms and identified their target from among the members. The threat actor posed as representatives of another cryptocurrency investment company, and in October 2022 invited the target to a different chat group and pretended to ask for feedback on the fee structure used by cryptocurrency exchange platforms." DEV-O139 sends a weaponized Excel file with the name OKX Binance & Huobi VIP fee comparison.xls armed with malicious macros.

## Event Analysis

Our customer wanted to understand if its traders had been targeted by this threat actor. Using SafeGuard Cyber's lookback capabilities and detection engine, the D7 team was able to locate and confirm an instance when traders were targeted with this malicious file in July 2022. Moreover, in this timeframe, we detected that the threat actor adopted the tactic of impersonating a known employee from our customer organization to deliver the payload.

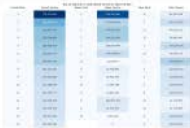
We detected this impersonation because we track communications against "authors," as defined by user metadata. The threat actor attempted the impersonation through use of the legitimate user's initials. The impersonation, however, was detected because they're recorded and flagged as a different unique author. The D7 team believes that DEV-O139's use of detailed trust building, as reported by Microsoft, was likely an adaptation to less successful, albeit easier, impersonation tactics.

The result of this analysis is a compliance customer has enabled deeper security detections for monitored Telegram users. This move is part of a larger trend we have observed over the course of 2022, a greater convergence of security and compliance in financial services to address overall business communication risks.

Messages: Only This Message... Time Range: All-time

**TM** 21-Jul-2022 9:26 AM via Telegram  
 Dear Users This is Ted. We are currently hard at work to adjust the fee structure for our ins your ideal fee structure in the document and send it back to us. So we understand your ne clients. This is our internal plan. So don't share with others.

**TM** 21-Jul-2022 9:28 AM via Telegram  
[Fee Structure Adjustment\\_20220720.xls](#) (138.75 KB)

**TM** 21-Jul-2022 9:28 AM via Telegram  


**TM** 21-Jul-2022 12:00 PM via Telegram  
 hi guys

**TM** 21-Jul-2022 12:00 PM via Telegram  
 hi guys

**Scott Davis** 21-Jul-2022 6:07 PM via Telegram  
 Hey man!

**TM** 21-Jul-2022 6:28 PM via Telegram  
 HI Paul

**TM** 21-Jul-2022 6:44 PM via Telegram  
 Do you guys had a chance to input the fee structure form?

**TM** 21-Jul-2022 6:47 PM via Telegram  
 what is macro?

**TM** 21-Jul-2022 6:49 PM via Telegram  
 can't you open the current document?

**Sergio Flores** 21-Jul-2022 6:50 PM via Telegram  
 No we're not able to open

**TM** 21-Jul-2022 6:51 PM via Telegram  
 Ok, I will require the new version file then.

**Threat Actor is impersonating a legitimate employee.**

They have replaced their profile photo and changed their handle to match the impersonated employee's initials. Despite the change, the SafeGuard Cyber platform identified the actor as a different and distinct author.

NOTE: We have changed the name and photo to protect our customer's employee's identity.



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