



## Rise in Active RaaS Groups Parallel Growing Victim Counts: Ransomware in 2H 2023

This data sheet collates relevant information on the ransomware threat landscape for the third and fourth quarters of 2023, obtained from ransomware-as-a-service (RaaS) and extortion groups' leak sites, Trend Micro's open-source intelligence (OSINT) research, and Trend threat intelligence. The data presented here describes ransomware activity in general and the three most prominent ransomware families in the threat landscape during the six-month span.

	JUL	AUG	SEP	OCT	NOV	DEC
Email threats	256,371	258,155	361,162	135,242	114,629	122,068
URL threats	167,066	149,861	120,402	130,214	132,727	135,753
File threats	606,886	1,420,386	995,452	1,525,343	519,208	321,088
Total	1,030,323 1,828,402 1,477,016		5 1,790,799 766,564 578,9			
Total quarterly	4,335,741				3,136,272	

Table 1. The number of ransomware threats detected and blocked by Trend across email, URL, and file layers per month in the third and fourth quarters of 2023

Source: Trend Research telemetry

	1H 2023	2H 2023			
Total active RaaS and extortion groups	45	52			
Victim organizations	1,999	2,524			

Table 2. The numbers of active RaaS and extortion groups and victim organizations of successful ransomware attacks in 2023

Sources: RaaS and extortion group leak sites

Q3		Q4		
Industry	Victim count	Industry	Victim count	
Manufacturing	113	Manufacturing	131	
Finance	104	Healthcare	101	
IT	101	Finance	86	
Professional services	99	Professional services	83	
Healthcare	93	Construction	72	
Construction	92	Academe	64	
Academe	72	IT	64	
Legal services	66	Transportation	58	
Hospitality	59	Legal services	49	
Materials	56	Materials	48	

Table 3. The top 10 industries affected by successful RaaS and extortion attacks in the third and fourth quarters of 2023

Sources: RaaS and extortion group leak sites and Trend's OSINT research

Segment	JUL	SEP	ОСТ	TOTAL
Enterprise	13,040	14,924	13,164	41,128
Consumer	2,169	2,155	2,474	6,798
SMB	1,971	1,961	1,797	5,729

Table 4. The number of ransomware file detections in machines in each business segment per month in the third quarter of 2023

Segment	ост	NOV	DEC	TOTAL	Percentage of increase in Q3 vs. Q4
Enterprise	17,254	16,743	12,564	46,561	13.2% increase
Consumer	2,354	2,602	2,461	7,417	9.1% increase
SMB	1,134	1,938	1,992	5,064	28.7% decrease

Table 5. The number of ransomware file detections in machines in each business segment per month in the fourth quarter of 2023

Source: Trend Research telemetry

Q3		Q4		
Country	victim count Country		Victim count	
United States	641	United States	547	
United Kingdom	84	United Kingdom	79	
Canada	54	Canada	58	
Germany	54	Germany	42	
France	45	Italy	42	
Italy	42	France	38	
Australia	37	Australia	32	
Spain	22	Netherlands	22	
Bulgaria	19	Spain	21	
Unknown	47	Unknown	28	

Table 6. The top 10 countries affected by successful RaaS and extortion attacks in the third and fourth quarters of 2023

Sources: RaaS and extortion group leak sites and Trend's OSINT research

	<b>3</b> 3	Q4		
Ransomware Number of victim family organizations		Ransomware family	Number of victim organizations	
LockBit	252	LockBit	266	
Clop	175	Play	112	
BlackCat	110	BlackCat	95	

Table 7. The top three ransomware families used in successful RaaS and extortion attacks in terms of victim organizations in the third and fourth quarters of 2023

Sources: RaaS and extortion group leak sites

Organization	LockBit		t BlackCat		Clop	
size	Q3	Q4	Q3	Q4	Q3	Q4
Small (1 to 200 employees)	167	153	52	52	110	4
Medium (201 to 1,000 employees)	41	62	33	23	33	3
Large (more than 1,001 employees)	12	20	19	13	31	0
Unknown	32	31	6	7	1	1

Table 8. The distribution by organization size of LockBit, BlackCat, and Clop's successful attacks in terms of victim organizations in the third and fourth quarters of 2023

Sources: LockBit, BlackCat, and Clop's leak sites and Trend's OSINT research

JUL		AUG		SEP	
LOCKBIT	423	EGOGEN	495	BLACKCAT	388
STOPCRYPT	405	LOCKBIT	350	EGOGEN	350
BLACKCAT	307	BLACKCAT	322	CONTI	348
EGOGEN	249	CONTI	312	STOPCRYPT	280
CONTI	179	STOPCRYPT	249	LOCKBIT	270
SODINOKIBI	150	AKIRA	239	RHYSIDA	124
TARGETCOMP	132	RHYSIDA	164	RAGNAR	118
CLOP	124	CRYPTESLA	133	RAGNARLOCKER	118
CRYPTESLA	122	CLOP	129	CRYPTESLA	117
CRYSIS	102	PHOBOS	120	PHOBOS	113

Table 9. The top 10 ransomware families in terms of ransomware file detections in machines in the third quarter of 2023, with notable ransomware families highlighted

Source: Trend Research telemetry

OCT		NOV		DEC	
GWZICHA	460	BLACKCAT	586	LOCKBIT	518
LOCKBIT	441	LOCKBIT	360	TARGETCOMP	267
STOPCRYPT	326	STOPCRYPT	266	STOPCRYPT	217
CONTI	318	CONTI	250	BLACKCAT	186
BLACKCAT	226	AKIRA	221	AKIRA	166
ENCODER	208	AVOSLOCKER	176	CONTI	158
AKIRA	198	CYCLOPS	166	AVOSLOCKER	152
BLACKSUIT	175	GWZICHA	163	PHOBOS	146
CRYPTESLA	172	CRYPTESLA	159	CRYPTESLA	120
CONVAGENT	164	CRILOCK	150	GWZICHA	107

Table 10. The top 10 ransomware families in terms of ransomware file detections in machines in the fourth quarter of 2023, with notable ransomware families highlighted

JUL		AU	G	SEP	
Industry	File detections	Industry	File detections	Industry	File detections
Banking	1,658	Banking	1,558	Banking	1,519
Government	501	Government	1,557	Fast-moving consumer goods	674
Telecommunications	243	Fast-moving consumer goods	698	Government	309

Table 11. The top three industries in terms of ransomware file detections in machines per month in the third quarter of 2023

ост		NOV		DEC	
Industry	File detections	Industry File detections		Industry	File detections
Technology	1,579	Technology	2,193	Banking	1,343
Banking	1,509	Banking	1,470	Technology	726
Fast-moving consumer goods	1,388	Fast-moving consumer goods	591	Financial	394

Table 12. The top three industries in terms of ransomware file detections in machines per month in the fourth quarter of 2023

Source: Trend Research telemetry

	JUL			AUG			SEP	
Industry	Ransomware family	Detections	Industry	Ransomware family	Detections	Industry	Ransomware family	Detections
Banking	BLACKCAT	39	Banking	EGOGEN	70	Banking	CONTI	50
	LOCKBIT	32		CONTI	44		EGOGEN	29
	CRYPTESLA	29		AKIRA	30		LOCKBIT	26
Government	LOCKBIT	16	Government	LOCKBIT	48	Technology	CONTI	17
	CONTI	15		CONTI	46		LOCKBIT	15
	BLACKCAT	14		EGOGEN	36		CRYPTESLA	13
Telecommunication	LOCKBIT	8	Fast-moving	CONTI	19	Financial	EGOGEN	19
	CLOP	5	consumer	LOCKBIT	16		CONTI	10
	CRYPTESLA	4	goods	CRYPTESLA	14		CRILOCK	6

Table 13. The top three industries in terms of ransomware file detections in machines in the top affected industries per month in the third quarter of 2023, with notable ransomware families highlighted

	OCT			NOV			DEC	
Industry	Ransomware family	Detections	Industry	Ransomware family	Detections	Industry	Ransomware family	Detections
Technology	LOCKBIT	39	Technology	LOCKBIT	59	Banking	TARGETCOMP	34
	CONTI	38		CONTI	58		LOCKBIT	26
	BLACKCAT	28		BLACKCAT	50		CRYPTESLA	24
Banking	CONTI	50	Banking	CRYPTESLA	28	Technology	LOCKBIT	21
	AKIRA	35		LOCKBIT	27		SODINOKIBI	15
	CRYPTESLA	28		CONTI	26		CONTI	14
Fast-moving	CONTI	35	Fast-moving	CRILOCK	11	Financial	LOCKBIT	18
consumer	LOCKBIT	30	consumer	CONTI	10		TARGETCOMP	17
goods	CRYPTESLA	28	goods	LOCKBIT	10		AVOSLOCKER	17

Table 14. The top three industries in terms of ransomware file detections in machines in the top affected industries per month in the fourth quarter of 2023, with notable ransomware families highlighted

	JUL			AUG			SEP	
Industry	Ransomware family	Detections	Industry	Ransomware family	Detections	Industry	Ransomware family	Detections
Enterprise	LOCKBIT	372	Enterprise	EGOGEN	495	Enterprise	EGOGEN	343
	STOPCRYPT	250		BLACKCAT	309		CONTI	317
	EGOGEN	243		CONTI	300		BLACKCAT	296
	BLACKCAT	242		LOCKBIT	288		LOCKBIT	182
	CONTI	175		AKIRA	237		STOPCRYPT	159
Consumer	STOPCRYPT	123	Consumer	STOPCRYPT	73	Consumer	STOPCRYPT	82
	LOCKBIT	42		LOCKBIT	57		LOCKBIT	55
	PHOBOS	31		PHOBOS	34		DRODZP	35
	CRYPTOLOAD	21		MAGNIBER	25		CRYPTOLOAD	26
	TARGETCOMP	19		CRYPTOLOAD	24		DWNLDR	22
SMB	BLACKCAT	57	SMB	STOPCRYPT	26	SMB	BLACKCAT	90
	STOPCRYPT	25		BLACKCAT	7		LOCKBIT	28
	RYUK	14		CRYPTESLA	6		STOPORYPT	25
	PHOBOS	11		LOCKBIT	5		CONTI	20
	TARGETCOMP	10		PHOBOS	5		SPORA	10

Table 15. The top five ransomware families in terms of ransomware file detections in machines per business segment and per month in the third quarter of 2023, with notable ransomware families highlighted

	OCT			NOV			DEC	
Industry	Ransomware family	Detections	Industry	Ransomware family	Detections	Industry	Ransomware family	Detections
Enterprise	GWZICHA	460	Enterprise	BLACKCAT	558	Enterprise	LOCKBIT	395
	LOCKBIT	382		LOCKBIT	272		TARGETCOMP	231
	CONTI	305		CONTI	214		BLACKCAT	160
	BLACKCAT	204		AKIRA	210		AKIRA	153
	AKIRA	195		AVOSLOCKER	167		AVOSLOCKER	144
Consumer	STOPCRYPT	126	Consumer	STOPCRYPT	94	Consumer	STOPCRYPT	122
	LOCKBIT	44		LOCKBIT	53		LOCKBIT	61
	DRODZP	29		DRODZP	52		DRODZP	44
	CRYPTOLOAD	21		CRYPTOLOAD	34		CRYPTOLOAD	32
	DWNLDR	19		EXMAS	29		PHOBOS	24
SMB	PLAYDE	47	SMB	PLAYDE	71	SMB	LOCKBIT	52
	STOPCRYPT	36		LOCKBIT	28		CONTI	23
	BLACKCAT	14		BLACKCAT	22		STOPORYPT	21
	LOCKBIT	14		STOPCRYPT	21		PHOBOS	16
	ISHTAR	8		CONTI	21		CRILOCK	16

Table 16. The top five ransomware families in terms of ransomware file detections in machines per business segment and per month in the fourth quarter of 2023, with notable ransomware families highlighted

				JU	L				
Turk	еу	Kuwa	ait	it Germany		India	1	UAE	
Ransomware family	Detections								
LOCKBIT	87	CRYPTESLA	28	EGOGEN	28	LOCKBIT	53	LOCKBIT	16
CONTI	82	LOCKBIT	26	STOPCRYPT	23	STOPCRYPT	44	CONTI	15
SODINOKIBI	75	CRILOCK	24	LOCKBIT	22	EGOGEN	40	BLACKCAT	11
CLOP	44	CONTI	23	MATSNU	17	BLACKCAT	29	ISHTAR	8
BLACKCAT	42	SPORA	22	CONTI	15	TARGETCOMP	17	CRYPCTB	8
VENUSLOCK	41	CRYPTLOCK	20	TARGETCOMP	15	CELANCYC	15	CLOP	7
EGOGEN	39	ISHTAR	18	CRYPTESLA	14	CLOP	15	EGOGEN	7
BLACKBYTE	38	CRYPHYDRA	18	CRILOCK	12	RYUK	14	CRYPHYDRA	7
AKIRA	35	SODINOKIBI	16	SPORA	11	SODINOKIBI	14	SODINOKIBI	7
CRYSIS	32	CRYPMIC	16	BLACKCAT	11	AKIRA	13	CRILOCK	7

Table 17. The top 10 ransomware families in the top five countries in terms of ransomware file detections in machines in July 2023, with notable ransomware families highlighted

				Al	UG			,	
Braz	ii.	Turk	еу	Kuwait		Germany		Saudi Arabia	
Ransomware family	Detections	Ransomware family	Detections	Ransomware family	Detections	Ransomware family	Detections	Ransomware family	Detections
EGOGEN	101	LOCKBIT	48	CRYPTESLA	28	EGOGEN	52	LOCKBIT	19
CONTI	59	CONTI	47	CRILOCK	24	CONTI	39	CONTI	18
LOCKBIT	52	CLOP	36	LOCKBIT	23	AKIRA	21	CRYPTESLA	14
AKIRA	43	BLACKCAT	33	SPORA	22	LOCKBIT	19	CRILOCK	12
RHYSIDA	35	SODINOKIBI	27	CONTI	20	RHYSIDA	17	BLACKCAT	11
BLACKCAT	33	CRYPTESLA	27	CRYPTLOCK	18	STOPCRYPT	15	SPORA	11
SODINOKIBI	23	EGOGEN	24	CRYPHYDRA	17	CRYPTESLA	15	CRYPTLOCK	10
CRILOCK	22	RYUK	21	ISHTAR	16	RAGNARLOCKER	13	CRYPHYDRA	9
CLOP	21	BACUCRYPT	19	SODINOKIBI	16	CRILOCK	12	CRYPMIC	9
ARCRYPTER	21	CRYPMIC	19	CRYPCTB	16	TARGETCOMP	12	CLOP	9

Table 18. The top 10 ransomware families in the top five countries in terms of ransomware file detections in machines in August 2023, with notable ransomware families highlighted

				SE	P				
Germ	any	Kuwa	ait	Turke	Algei	ria	Taiwan		
Ransomware family	Detections	Ransomware family	Detections	Ransomware family	Detections	Ransomware family	Detections	Ransomware family	Detections
CONTI	53	LOCKBIT	26	CONTI	26	CONTI	17	MAGNIBER	23
EGOGEN	46	CRYPTESLA	26	CRYPTESLA	16	LOCKBIT	15	STOPORYPT	15
LOCKBIT	40	CONTI	26	LOCKBIT	16	CRYPTESLA	13	PHOBOS	11
AKIRA	25	CRILOCK	24	STOPCRYPT	15	CRILOCK	12	SCARAB	9
BLACKCAT	24	SPORA	22	BABUK	12	SPORA	11	RODUK	8
STOPCRYPT	21	CRYPTLOCK	20	CRILOCK	12	BLACKCAT	11	LOCKBIT	8
SPORA	21	CLOP	19	MOUNTLOCKER	11	CRYPTLOCK	10	CRYPZXAS	7
CRILOCK	20	CRYPHYDRA	18	BLACKCAT	11	SODINOKIBI	9	ENCODER	7
CRYPTESLA	19	ISHTAR	16	SPORA	11	STOPCRYPT	8	CRYPTOLOCKER	6
CRYPHYDRA	18	SODINOKIBI	16	CRYPTLOCK	10	CRYPHYDRA	8	CRYPAURA	9

Table 19. The top 10 ransomware families in the top five countries in terms of ransomware file detections in machines in September 2023, with notable ransomware families highlighted

				ОСТ					
Turk	еу	Kuwa	ait	Japan	UAE		Germany		
Ransomware family	Detections								
LOCKBIT	68	CRYPTESLA	25	ENCODER	150	CONTI	29	CONTI	36
CONTI	67	LOCKBIT	21	LOCKBIT	43	CRILOCK	18	LOCKBIT	25
CRYPTESLA	56	CONTI	21	DRODZP	29	LOCKBIT	18	BLACKCAT	23
CRILOCK	52	CRILOCK	20	CRYPTOLOAD	21	CRYPTESLA	16	RHYSIDA	13
SPORA	46	SPORA	19	LOCKYDOWNLOADER	17	SPORA	14	CRYPTESLA	13
CRYPTLOCK	41	CLOP	17	DWNLDR	16	CLOP	14	STOPCRYPT	13
CRYPHYDRA	41	ISHTAR	16	INJECT	15	CRYPTLOCK	13	SODINOKIBI	12
SODINOKIBI	38	CRYPHYDRA	15	STOPCRYPT	11	MATRIX	11	CHAOS	12
BLACKCAT	37	SODINOKIBI	15	SCHOPETS	8	BLACKCAT	11	CRILOCK	12
CRYPMIC	36	EGOGEN	15	SCARAB	8	CRYPCTB	11	SPORA	11

Table 20. The top 10 ransomware families in the top five countries in terms of ransomware file detections in machines in October 2023, with notable ransomware families highlighted

				1	VOV				
Turk	еу	Germ	any	Kuw	ait	Japan		US	
Ransomware family	Detections								
CONTI	68	CONTI	49	CRYPTESLA	28	DRODZP	51	PLAYDE	42
LOCKBIT	67	LOCKBIT	47	LOCKBIT	26	LOCKBIT	34	LOCKBIT	38
CRILOCK	46	CRYPTESLA	40	CONTI	25	EXMAS	29	BLACKCAT	25
CRYPTESLA	45	CRILOCK	38	CRILOCK	24	CRYPTOLOAD	28	CONTI	22
BLACKCAT	44	SPORA	33	SPORA	22	DWNLDR	25	AKIRA	17
SPORA	42	STOPCRYPT	31	CRYPTLOCK	20	INJECT	21	RYUK	17
CRYPTLOCK	38	CRYPTLOCK	30	CLOP	18	LOCKYDOWNLOADER	21	SODINOKIBI	15
CRYPHYDRA	36	SODINOKIBI	28	CRYPHYDRA	18	SMALL	14	PHOBOS	15
CLOP	36	AKIRA	28	BLACKCAT	16	NEMUCOD	14	STOPCRYPT	15
ISHTAR	34	CRYPCTB	27	SODINOKIBI	16	NETWALKER	12	ROYAL	14

Table 21. The top 10 ransomware families in the top five countries in terms of ransomware file detections in machines in November 2023, with notable ransomware families highlighted

				DE	С	,			
US		Germa	any	ny Kuwait		Turkey		Ukraine	
Ransomware family	Detections	Ransomware family	Detections	Ransomware family	Detections	Ransomware family	Detections	Ransomware family	Detections
LOCKBIT	109	AKIRA	35	CONTI	24	CATAKA	32	CONTI	18
BLACKCAT	32	CONTI	34	LOCKBIT	24	LOCKBIT	21	LOCKBIT	16
PHOBOS	27	LOCKBIT	30	CRYPTESLA	24	BLACKKINGDOM	16	BLACKCAT	11
SCARAB	24	CRYPTESLA	25	SPORA	22	CONTI	16	CRILOCK	11
BLACKMATTER	23	TARGETCOMP	24	CRILOCK	21	SODINOKIBI	15	SPORA	10
CRYPTEAR	23	CRILOCK	24	CRYPTLOCK	20	ISHTAR	13	CLOP	9
CONTI	20	SPORA	22	CRYPHYDRA	17	STOPCRYPT	13	CRYPTLOCK	9
CLOP	20	AVOSLOCKER	21	SODINOKIBI	16	CRILOCK	12	CRYPTESLA	9
SODINOKIBI	19	CRYPTLOCK	19	CLOP	16	SPORA	12	CRYPHYDRA	9
PLAYDE	17	CRYPHYDRA	17	CRYPCTB	16	CRYPTESLA	10	SODINOKIBI	8

Table 22. The top 10 ransomware families in the top five countries in terms of ransomware file detections in machines in December 2023, with notable ransomware families highlighted

## LockBit

Q3		Q4			
Industry	Victim count	Industry	Victim count		
Construction	25	Manufacturing	38		
Professional services	22	Finance	22		
Academe	20	Healthcare	22		
Healthcare	20	Construction	18		
Manufacturing	20	Professional services	17		
Others	145	Others	149		
Total	252	Total	246		

Table 23. The distribution by industry of LockBit's successful attacks in terms of victim organizations in the third and fourth quarters of 2023

Source: LockBit's leak site

Q3		Q4	
Region	Victim count	Region	Victim count
North America	114	North America	119
Europe	66	Europe	73
Asia-Pacific	24	Asia-Pacific	40
Middle East	19	Latin America and the Caribbean	14
Latin America and the Caribbean	17	Africa	8
Africa	9	Middle East	8
Eastern Europe	1	Eastern Europe	4
Unknown	2		
Total	252	Total	266

Table 24. The distribution by region of LockBit's successful attacks in terms of victim organizations in the third and fourth quarters of 2023

Source: LockBit's leak site

Q3		Q4	
Country	Victim count	Country	Victim count
United States	105	United States	110
France	17	United Kingdom	19
United Kingdom	13	Italy	12
Germany	12	France	11
Canada	9	Germany	10
Others	96	Others	104
Total	252	Total	266

Table 25. The distribution by country of LockBit's successful attacks in terms of victim organizations in the third and fourth quarters of 2023

Source: LockBit's leak site

## BlackCat

Q3		Q4	
Industry	Victim count	Industry	Victim count
Legal services	16	Finance	11
Finance	12	Healthcare	10
Healthcare	12	IT	10
Manufacturing	10	Manufacturing	6
Professional services	6	Professional services	6
Others	52	Others	52
Total	110	Total	95

Table 26. The distribution by industry of BlackCat's successful attacks in terms of victim organizations in the third and fourth quarters of 2023

Source: BlackCat's leak site

Q3		Q4	
Region	Victim count	Region	Victim count
North America	57	North America	62
Europe	23	Asia-Pacific	12
Asia-Pacific	17	Europe	12
Latin America and the Caribbean	5	Latin America and the Caribbean	5
Africa	4	Eastern Europe	2
Middle East	3	Africa	1
Eastern Europe	1	Middle East	1
Total	110	Total	95

Table 27. The distribution by region of BlackCat's successful attacks in terms of victim organizations in the third and fourth quarters of 2023

Source: BlackCat's leak site

Q3		Q4	
Country	Victim count	Country	Victim count
United States	54	United States	57
Germany	6	Canada	5
United Kingdom	6	Australia	4
Australia	5	Brazil	4
Italy	4	United Kingdom	3
Others	35	Others	22
Total	110	Total	95

Table 28. The distribution by country of BlackCat's successful attacks in terms of victim organizations in the third and fourth quarters of 2023

Source: BlackCat's leak site

## Clop

Q3		Q4	
Industry	Victim count	Industry	Victim count
IT	34	Academe	2
Finance	29	Construction	1
Manufacturing	14	Healthcare	1
Professional services	14	Hospitality	1
Healthcare	10	IT	1
Others	74	Others	2
Total	175	Total	8

Table 29. The distribution by industry of Clop's successful attacks in terms of victim organizations in the third and fourth quarters of 2023

Source: Clop's leak site

Q3		Q4	
Region	Victim count	Region	Victim count
North America	119	North America	8
Europe	42		
Asia-Pacific	9		
Middle East	4		
Latin America and	1		
the Caribbean			
Total	175	Total	8

Table 30. The distribution by region of Clop's successful attacks in terms of victim organizations in the third and fourth quarters of 2023

Source: Clop's leak site

Q3		Q4	
Country	Victim count	Country	Victim count
United States	114	United States	7
United Kingdom	12	Canada	1
Germany	9		
Netherlands	7		
Canada	5		
Others	28		
Total	175	Total	8

Table 31. The distribution by country of Clop's successful attacks in terms of victim organizations in the third and fourth quarters of 2023

Source: Clop's leak site



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