Malvertising campaigns come back in full swing | Malwarebytes Labs

By Threat Intelligence Team

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Server IP	Host	URL	Body	Comments
104.18.156.3	xhamster.com	/categories/mature	195,522	(01)
213.174.157.82	tsyndicate.com	/api/v1/direct/ ?domain=xhamster.com...	0	(02)
31.31.198.165	einlegesohle.com	/	256	(03)
31.31.198.165	einlegesohle.com	/indexx.php	0	(04)
13.52.20.229	avitquay.com	/click?trvid=10001&extid=[tracking]&campid=[campaignid]&creaid=[adid]&d...	1,190	(05)
13.52.20.229	avitquay.com	/double?t=2&d= ...	675	(06)
31.31.198.96	adexhangetomatto.space	/?sxid=er8p3s963a9v	2,732	(07)
31.31.198.96	adexhangetomatto.space	/api.php	719	(08)
31.31.198.96	adexhangetomatto.space	/api.php	90	(09)
216.171.233.6	corbenbaby.press	/1982-12-01/OQb/obZZa.jsp?Resought=3978-Whipworm-5531&Tah=Nuthatch	4,924	(10) Fallout EK
216.171.233.6	corbenbaby.press	/Jointless-Massoy/Nabathean-13630/sthenias_asphodel_xiphistna	28,998	(11) Fallout EK
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216.171.233.6	corbenbaby.press	/Deadlier_sperms_Carried/28_04_1992/Louping_myopathy.phtml	28,460	(13) Fallout EK
216.171.233.6	corbenbaby.press	/xzTy/furnage	35,125	(14) Fallout EK
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Interestingly, this Smoke Loader instance also downloads Raccoon Stealer and ZLoader.

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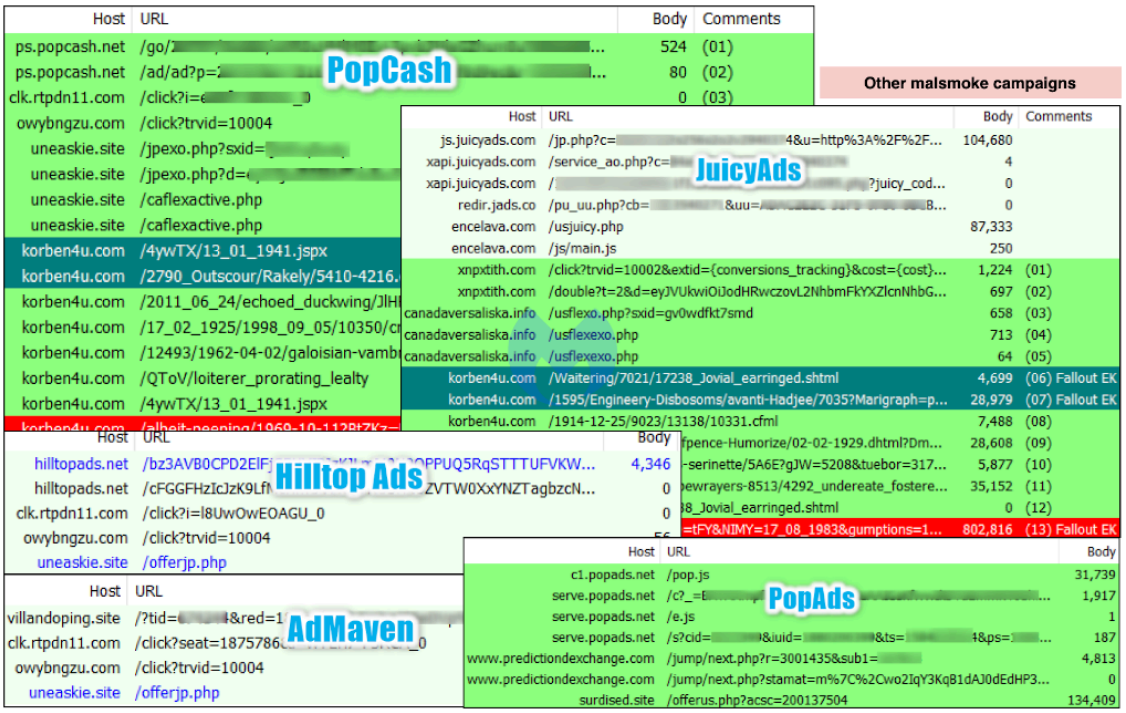

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intica-deco[.]com
websolvent[.]me

Raccoon Stealer

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f319264b36cdf0daeb6174a43aaf4a6684775e6f0fb69aaf2d7dc051a593de93

Raccoon Stealer C2s

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Smoke Loader

23bef893e3af7cb49dc5ae0a14452ed781f841db7397dc3ebb689291fd701b6b

Smoke Loader C2s

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2831ujedkdajsdj[.]info
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Gates used in the malsmoke campaign

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adexhangetomatto[.]space
encelava[.]com/coexo.php
encelava[.]com/caac
uneaskie[.]com/ukexo.php

bumblizz[.]com/auexo.php
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bumblizz[.]com/usexo.php
bumblizz[.]com/usflexexo.php
canadaversaliska[.]info/coflexexo.php
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krostaur[.]com/jpflexo.php
leiomity[.]com/ukexo.php
leiomity[.]com/ukflexexo.php
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surdised[.]com/coexo.php
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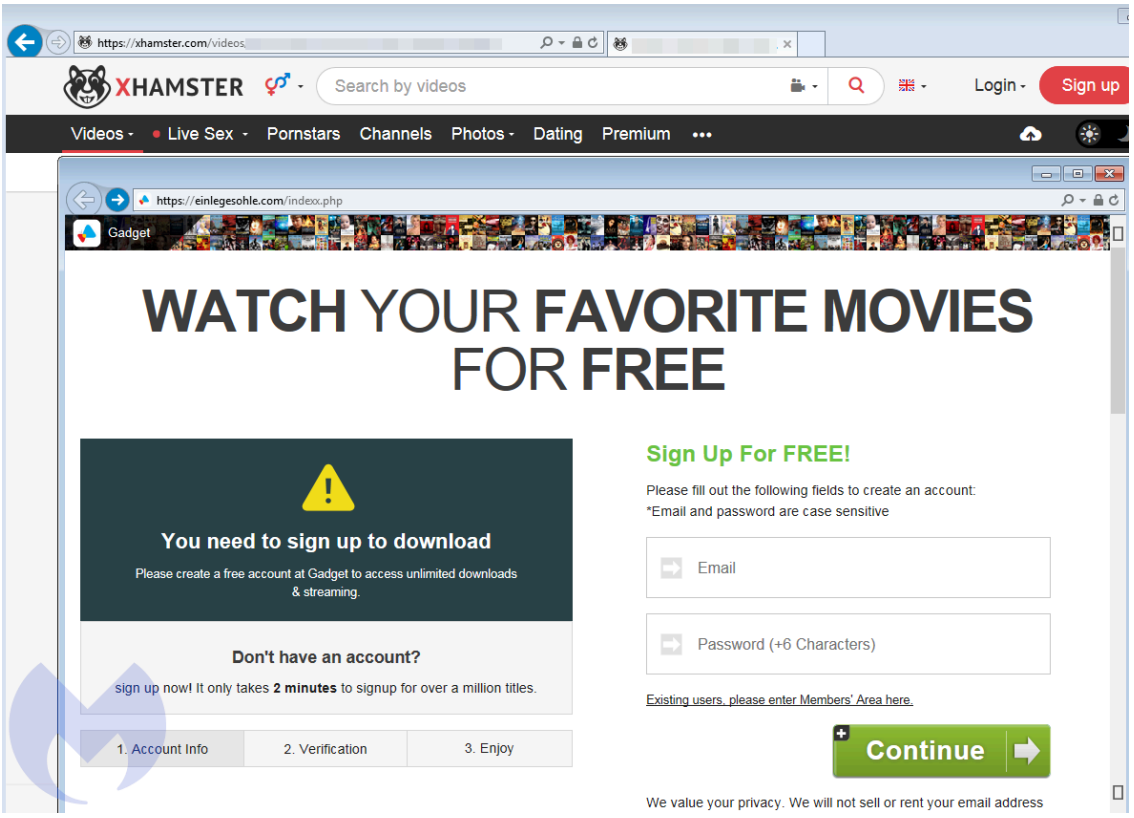

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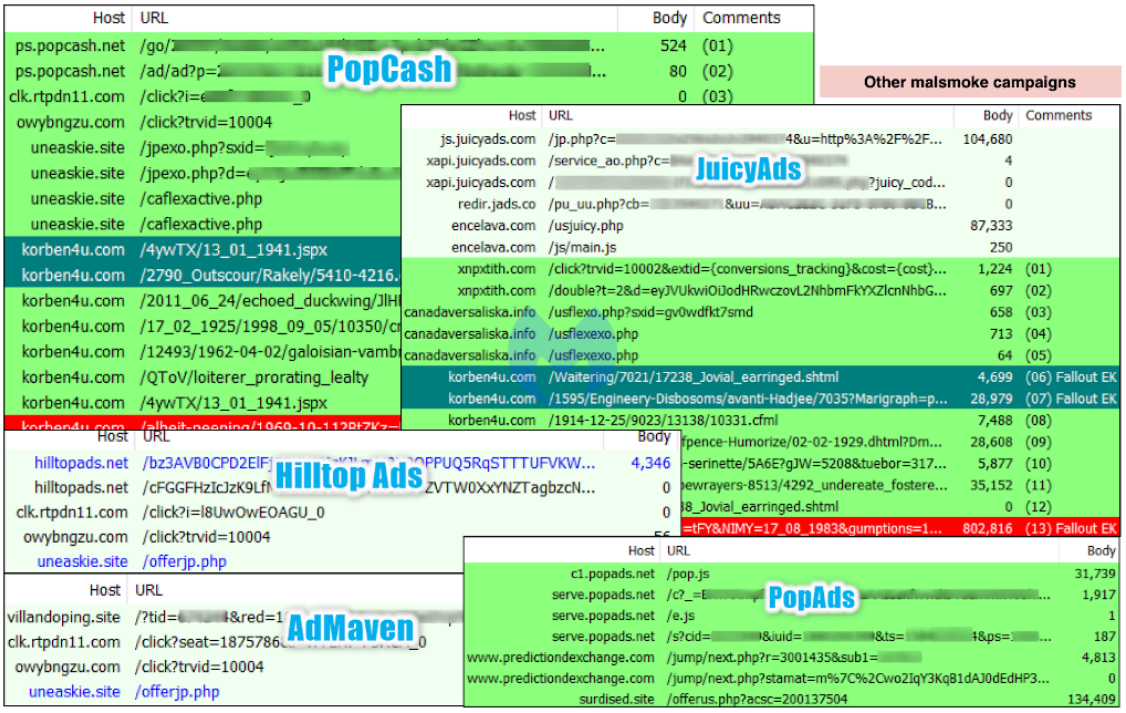

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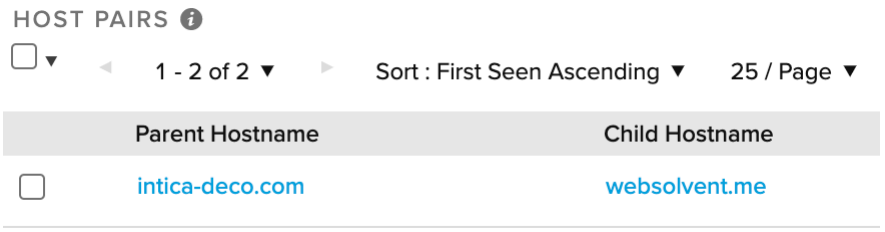

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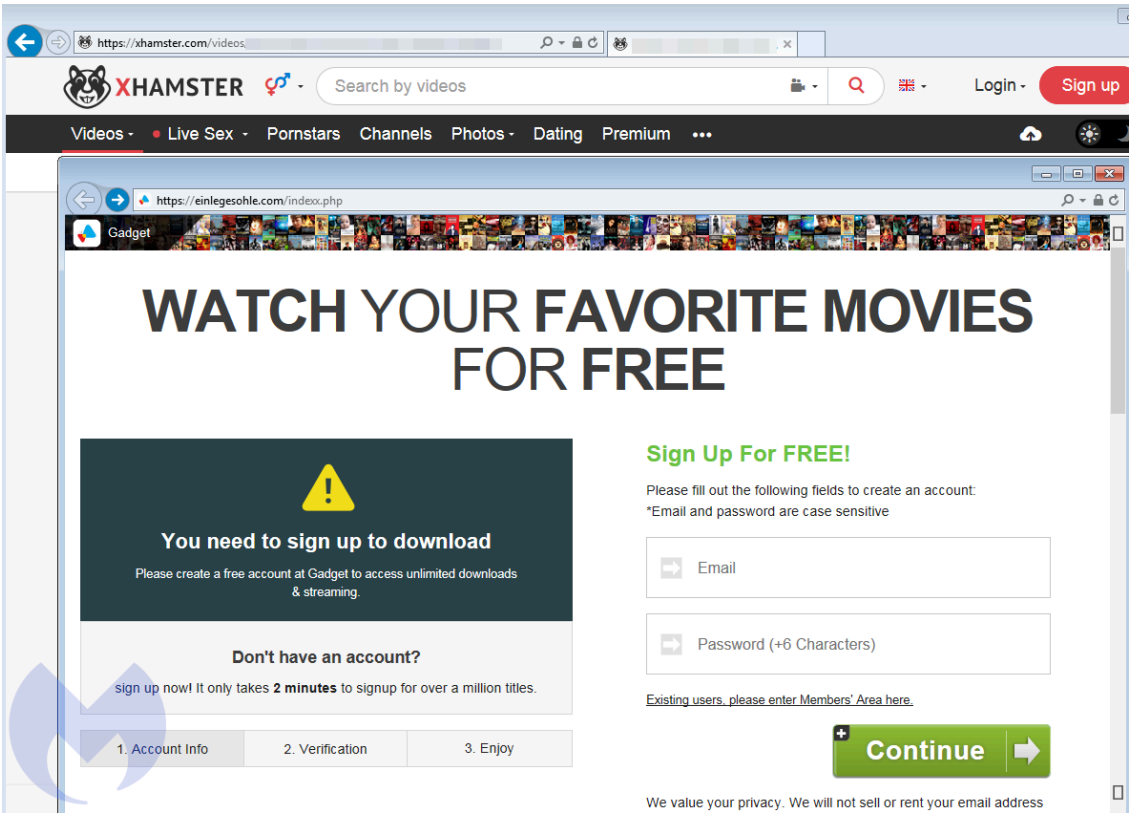

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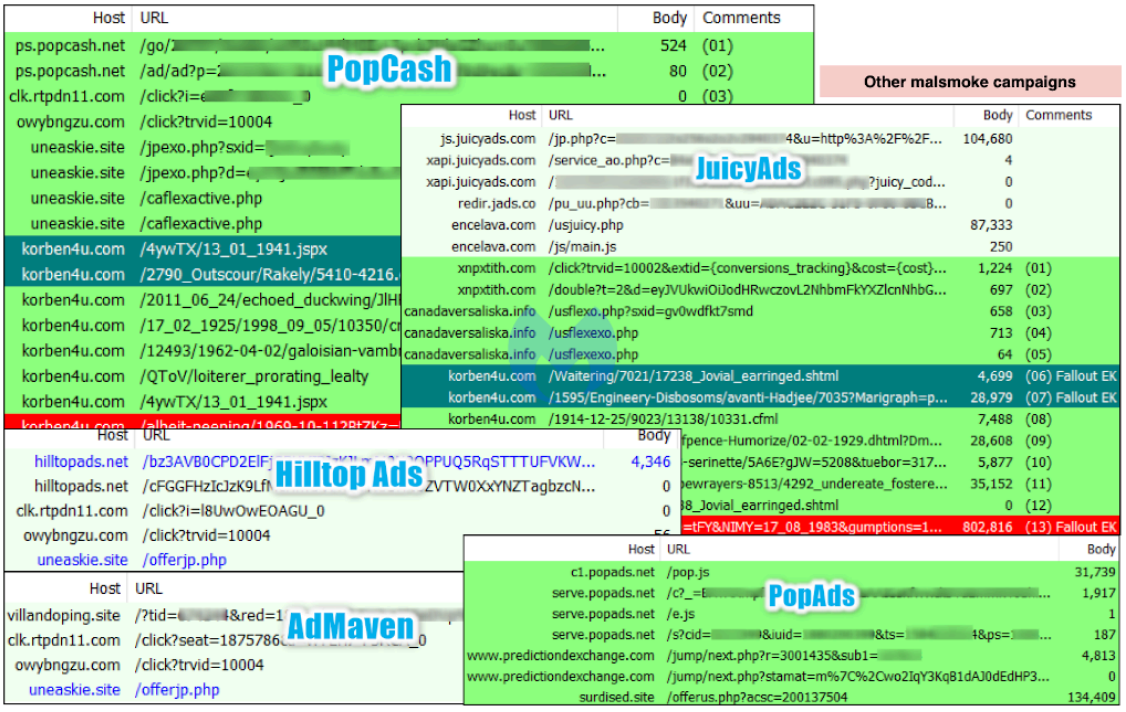

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krostaur[.]com/jpexo.php
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Host	URL	Body	Comments
[redacted].com	/	145,245	Adult site
[redacted].com	/d/exonative1	500	Ad banner
ads.exosrv.com	/ads.js	2,315	ExoClick malvertising
ads.exosrv.com	/nativeads.js	44,978	ExoClick malvertising
syndication.exosrv.com	/splash.php?cat=&idzone=[redacted]type=8&p...	1,504	ExoClick malvertising
syndication.exosrv.com	/splash.php?cat=&idzone=[redacted]type=8&p...	0	ExoClick malvertising
websolvent.me	/8bZQWK	0	Gate to EK
91.210.171.116	/?NjI1MzAw&thiJri&hKBiG=abettor&bwxiSw=di...	101,633	RIG EK [URI] (Landing Page)
91.210.171.116	/?MzIyMjEz&quslwEv&jPLu=callous&wmPhJo=...	483,328	RIG EK [URI] (Payload)
telete.in	/jjJunxShop	4,578	Telegram channel
telete.in	/jjJunxShop	4,579	Telegram channel
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chinadevmonster.top	/gate/log.php	602	RaccoonStealer C2 [URI]

Beyond a common payload, those two domains are also related. A RiskIQ crawl confirms a relationship between these 2 domains where the parent host was caught doing a meta refresh redirect to the child:

HOST PAIRS

1 - 2 of 2 ▼ Sort : First Seen Ascending ▼ 25 / Page ▼

Parent Hostname	Child Hostname
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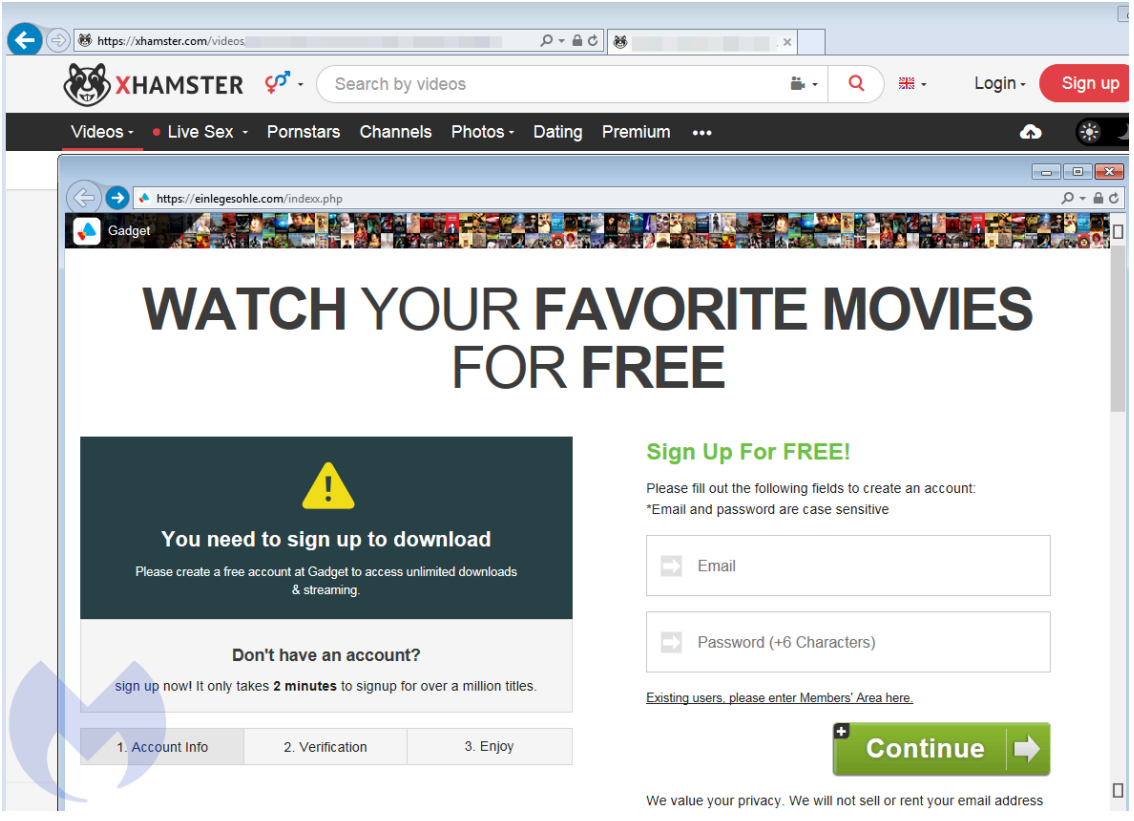

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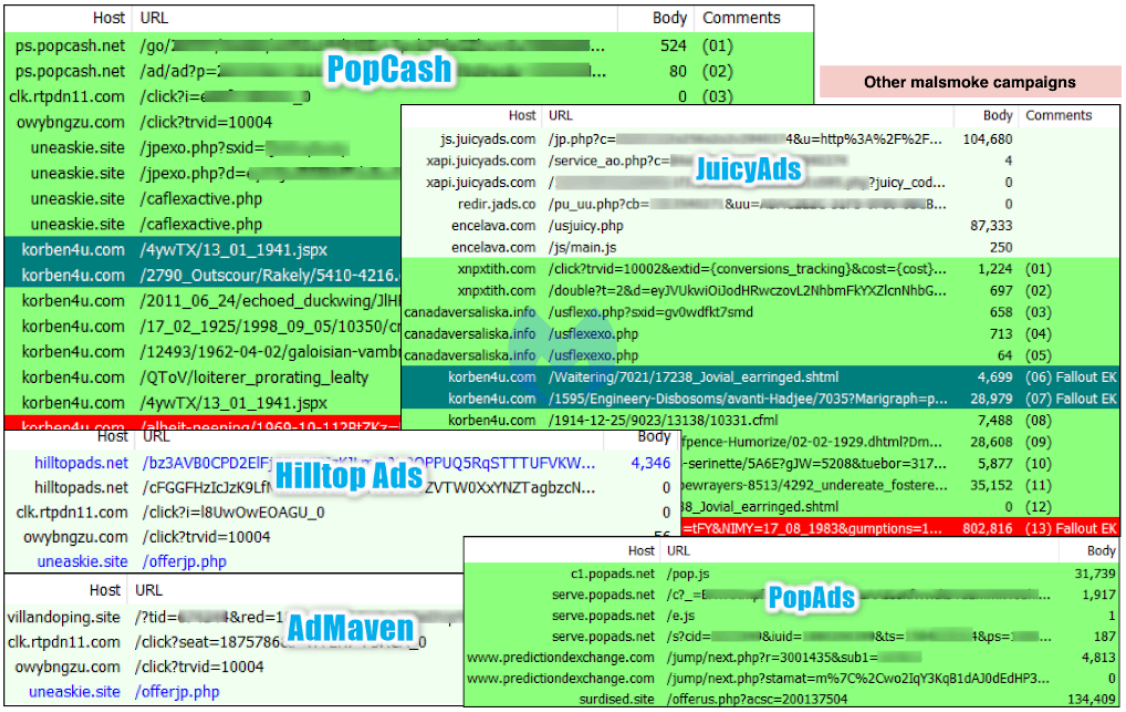

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Gates used in malvertising campaign pushing Raccoon Stealer

intica-deco[.]com
websolvent[.]me

Raccoon Stealer

b289155154642ba8e9b032490a20c4a2c09b925e5b85dda11fc85d377baa6a6c
f319264b36cdf0daeb6174a43aaf4a6684775e6f0fb69aaf2d7dc051a593de93

Raccoon Stealer C2s

34.105.147[.]92/gate/log.php
chinadevmonster[.]top/gate/log.php

Smoke Loader

23bef893e3af7cb49dc5ae0a14452ed781f841db7397dc3ebb689291fd701b6b

Smoke Loader C2s

dkajsdjiqwdwnfj[.]info
2831ujedkdajsdj[.]info
928eijdksasnfss[.]info
dkajsdjiqwdwnfj[.]info
2831ujedkdajsdj[.]info
928eijdksasnfss[.]info

Gates used in the malsmoke campaign

einlegesohle[.]com/indexx.php
adexhangetomatto[.]space
encelava[.]com/coexo.php
encelava[.]com/caac
uneaskie[.]com/ukexo.php
bumblizz[.]com/auexo.php
bumblizz[.]com/auflexexo.php
bumblizz[.]com/caexo.php
bumblizz[.]com/caflexexo.php
bumblizz[.]com/usexo.php
bumblizz[.]com/usflexexo.php
canadaversaliska[.]info/coflexexo.php

canadaversaliska[.]info/coflexo.php
canadaversaliska[.]info/ukflexexo.php
canadaversaliska[.]info/ukflexo.php
canadaversaliska[.]info/usflexexo.php
canadaversaliska[.]info/usflexo.php
krostaur[.]com/jpexo.php
krostaur[.]com/jpflexexo.php
krostaur[.]com/jpflexo.php
leiomity[.]com/ukexo.php
leiomity[.]com/ukflexexo.php
leiomity[.]com/usexo.php
leiomity[.]com/usflexexo.php
surdised[.]com/coexo.php
surdised[.]com/usexo.php

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https://twitter[.]com/MBThreatIntel/status/1245791188281462784
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https://twitter[.]com/tkanalyst/status/1229794466816389120
https://twitter[.]com/nao_sec/status/1209090544711815169

Host	URL	Body	Comments
[redacted].com	/zps/?zone=45	911	Adult site
syndication.realsrv.com	/splash.php?cat=&idzone=+[redacted]&type=8&...	0	ExoClick malvertising
nutsells-dounerous.icu	/voluum/e6f88310-d545-46ab-9052-64574b00...	0	Redirect
intica-deco.com	/	43,712	Gate to EK
intica-deco.com	/redirect.php	84	Gate to EK
colorado4u.club	/13565/EzYF/wailment/Camions.cfm	4,986	Fallout EK [HTML/JS] (Landing
colorado4u.club	/24-09-1982/F0sMs?e6e3X=yXcT&iqi=Tiniest	29,044	Fallout EK [HTML/JS] (Landing
colorado4u.club	/12023/14_10_1944/04_06_1910/pKVHB	7,512	Fallout EK [URI]
colorado4u.club	/chorizos/Cleavage_Frustum	28,544	Fallout EK [URI]
colorado4u.club	/Blastoff-10001/Thinkably-bunsen/bnmZX/hSM...	35,153	Fallout EK [URI] (Flash Exploit)
colorado4u.club	/grandads_Stopwatch_Bittering/pEQM/OuV.as...	5,785	Fallout EK [URI]
colorado4u.club	/13565/EzYF/wailment/Camions.cfm	0	Fallout EK [URI]
colorado4u.club	/Tearier-10943/posited/ovNul/8642?misquote=...	508,416	Fallout EK [Headers] (Payload)
telete.in	/jjJunxShop	4,579	Telegram channel
telete.in	/jjJunxShop	4,579	Telegram channel
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telete.in	/jjJunxShop	4,944	Telegram channel
34.105.147.92	/gate/log.php	571	RaccoonStealer C2 [URI]

About 10 days later, another domain, websolvent[.]me, became active but used a different redirection technique, a 302 redirect, also known as 302 cushioning. This time we see the RIG exploit kit which also delivers Raccoon Stealer.

Host	URL	Body	Comments
[redacted].com	/	145,245	Adult site
[redacted].com	/d/exonative1	500	Ad banner
ads.exosrv.com	/ads.js	2,315	ExoClick malvertising
ads.exosrv.com	/nativeads.js	44,978	ExoClick malvertising
syndication.exosrv.com	/splash.php?cat=&idzone=[redacted]type=8&p...	1,504	ExoClick malvertising
syndication.exosrv.com	/splash.php?cat=&idzone=[redacted]type=8&p...	0	ExoClick malvertising
websolvent.me	/8bZQWK	0	Gate to EK
91.210.171.116	/?NjI1MzAw&thiJri&hKBiG=abettor&bwxiSw=di...	101,633	RIG EK [URI] (Landing Page)
91.210.171.116	/?MzIyMjEz&quslwEv&jPLu=callous&wmPhJo=...	483,328	RIG EK [URI] (Payload)
telete.in	/jjJunxShop	4,578	Telegram channel
telete.in	/jjJunxShop	4,579	Telegram channel
telete.in	/jjJunxShop	4,579	Telegram channel
chinadevmonster.top	/gate/log.php	602	RaccoonStealer C2 [URI]

Beyond a common payload, those two domains are also related. A RiskIQ crawl confirms a relationship between these 2 domains where the parent host was caught doing a meta refresh redirect to the child:

HOST PAIRS

1 - 2 of 2 ▼ Sort : First Seen Ascending ▼ 25 / Page ▼

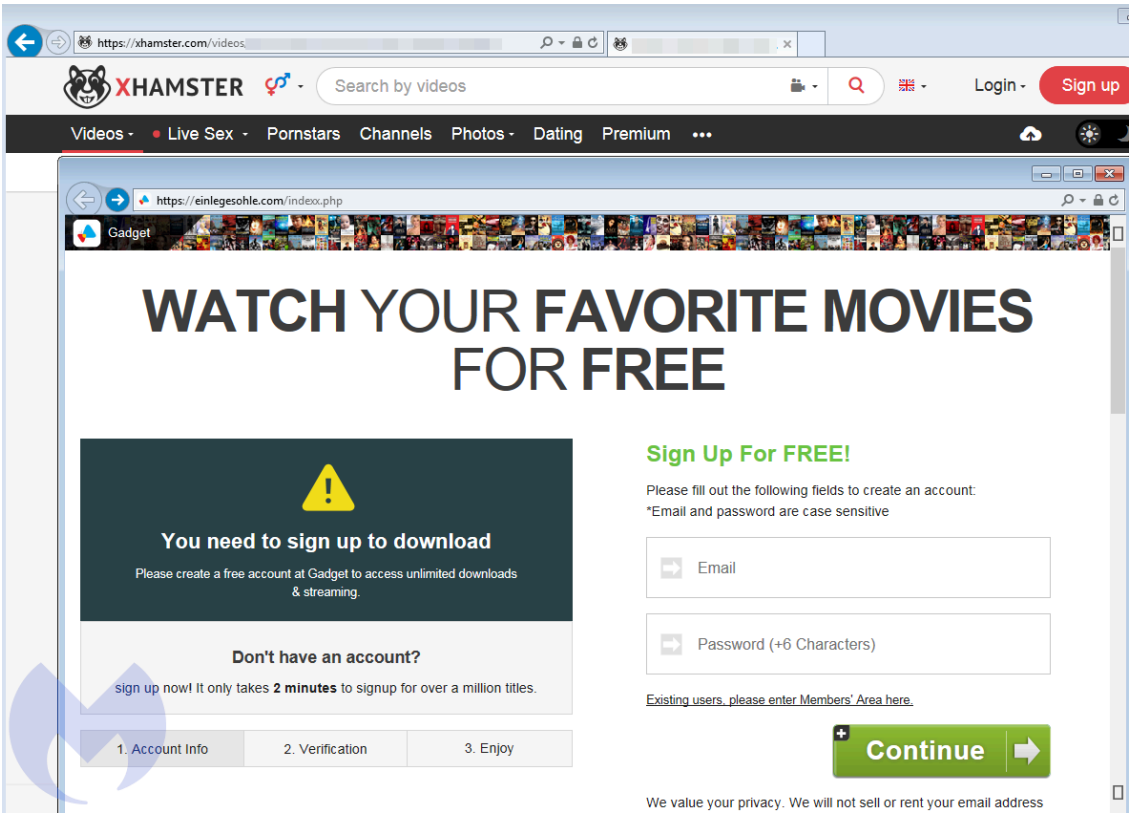
Parent Hostname	Child Hostname
intica-deco.com	websolvent.me

Malvertising on top adult site gets maximum reach

The second malvertiser ('malsmoke') is one that we have tracked diligently over the past several months and whose end payload is often the Smoke Loader malware. It is by far the most daring and successful one in that it goes after larger publishers and a variety of ad networks. However, up until now we had only seen them on publishers from the adult industry that are still relatively small in scale.

In this instance, the threat actor was able to abuse the Traffic Stars ad network and place their malicious ad on xhamster[.]com, a site with just over 1.06 billion monthly visits according to SimilarWeb.com.

The gates used by this group also use a decoy site and over time they have registered domains mocking ad networks and cloud providers.



The redirection mechanism is more sophisticated than those used in other malvertising campaigns. There is some client-side fingerprinting and connectivity checks to avoid VPNs and proxies, only targeting legitimate IP addresses.

Server IP	Host	URL	Body	Comments
104.18.156.3	xhamster.com	/categories/mature	195,522	(01)
213.174.157.82	tsyndicate.com	/api/v1/direct/ ?domain=xhamster.com...	0	(02)
31.31.198.165	einlegesohle.com	/	256	(03)
31.31.198.165	einlegesohle.com	/indexx.php	0	(04)
13.52.20.229	avitquay.com	/click?trvid=10001&extid=[tracking]&campid=[campaignid]&creaid=[adid]&d...	1,190	(05)
13.52.20.229	avitquay.com	/double?t=2&d= ...	675	(06)
31.31.198.96	adexhangetomatto.space	/?sxid=er8p3s963a9v	2,732	(07)
31.31.198.96	adexhangetomatto.space	/api.php	719	(08)
31.31.198.96	adexhangetomatto.space	/api.php	90	(09)
216.171.233.6	corbenbaby.press	/1982-12-01/OQb/obZZa.jsp?Resought=3978-Whipworm-5531&Tah=Nuthatch	4,924	(10) Fallout EK
216.171.233.6	corbenbaby.press	/Jointless-Massoy/Nabathean-13630/sthenias_asphodel_xiphistna	28,998	(11) Fallout EK
216.171.233.6	corbenbaby.press	/UwdtBz/12-01-1933	7,424	(12) Fallout EK
216.171.233.6	corbenbaby.press	/Deadlier_sperms_Carried/28_04_1992/Louping_myopathy.phtml	28,460	(13) Fallout EK
216.171.233.6	corbenbaby.press	/xzTy/furnage	35,125	(14) Fallout EK
216.171.233.6	corbenbaby.press	/5045_Diagonial_6596/y2bPs.aspx?b95=prealter-10268-13730&cleanlier=900...	5,771	(15) Fallout EK
216.171.233.6	corbenbaby.press	/1982-12-01/OQb/obZZa.jsp?Resought=3978-Whipworm-5531&Tah=Nuthatch	0	(16) Fallout EK
216.171.233.6	corbenbaby.press	/tc497/1946_11_09.cfm	158,208	(17) Fallout EK

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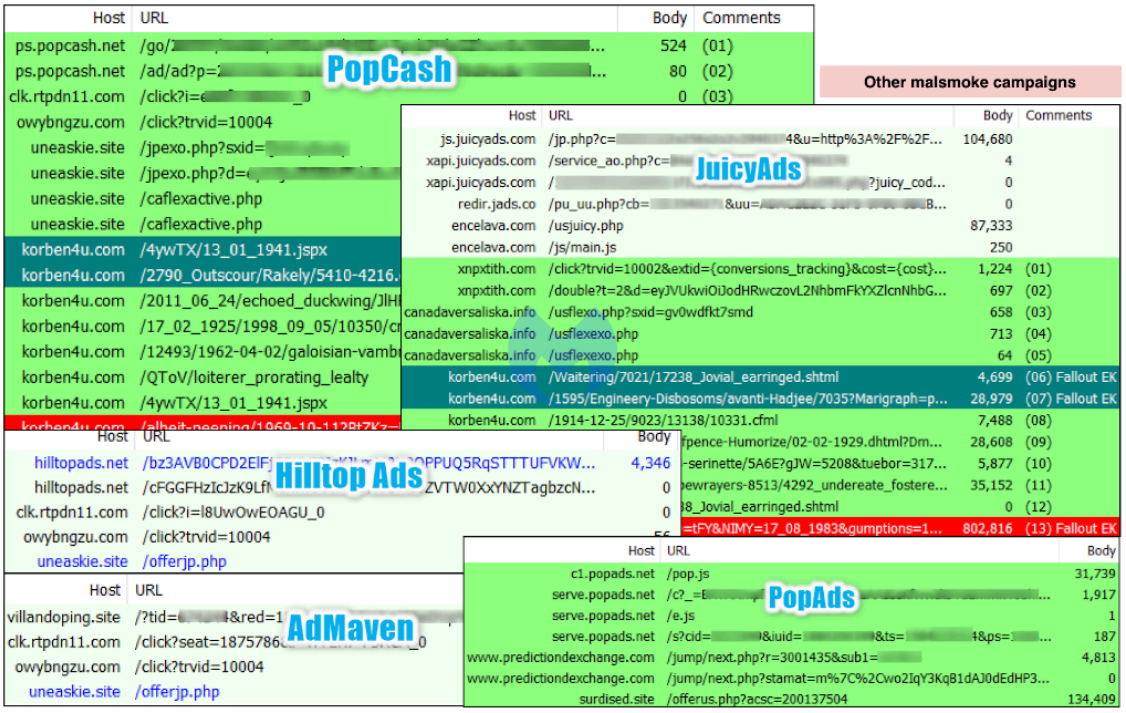

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adexhangetomatto[.]space
encelava[.]com/coexo.php
encelava[.]com/caac
uneaskie[.]com/ukexo.php
bumblizz[.]com/auexo.php
bumblizz[.]com/auflexexo.php
bumblizz[.]com/caexo.php
bumblizz[.]com/caflexexo.php
bumblizz[.]com/usexo.php
bumblizz[.]com/usflexexo.php
canadaversaliska[.]info/coflexexo.php
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canadaversaliska[.]info/ukflexo.php
canadaversaliska[.]info/usflexexo.php
canadaversaliska[.]info/usflexo.php
krostaur[.]com/jpexo.php
krostaur[.]com/jpflexexo.php
krostaur[.]com/jpflexo.php
leiomity[.]com/ukexo.php
leiomity[.]com/ukflexexo.php
leiomity[.]com/usexo.php
leiomity[.]com/usflexexo.php
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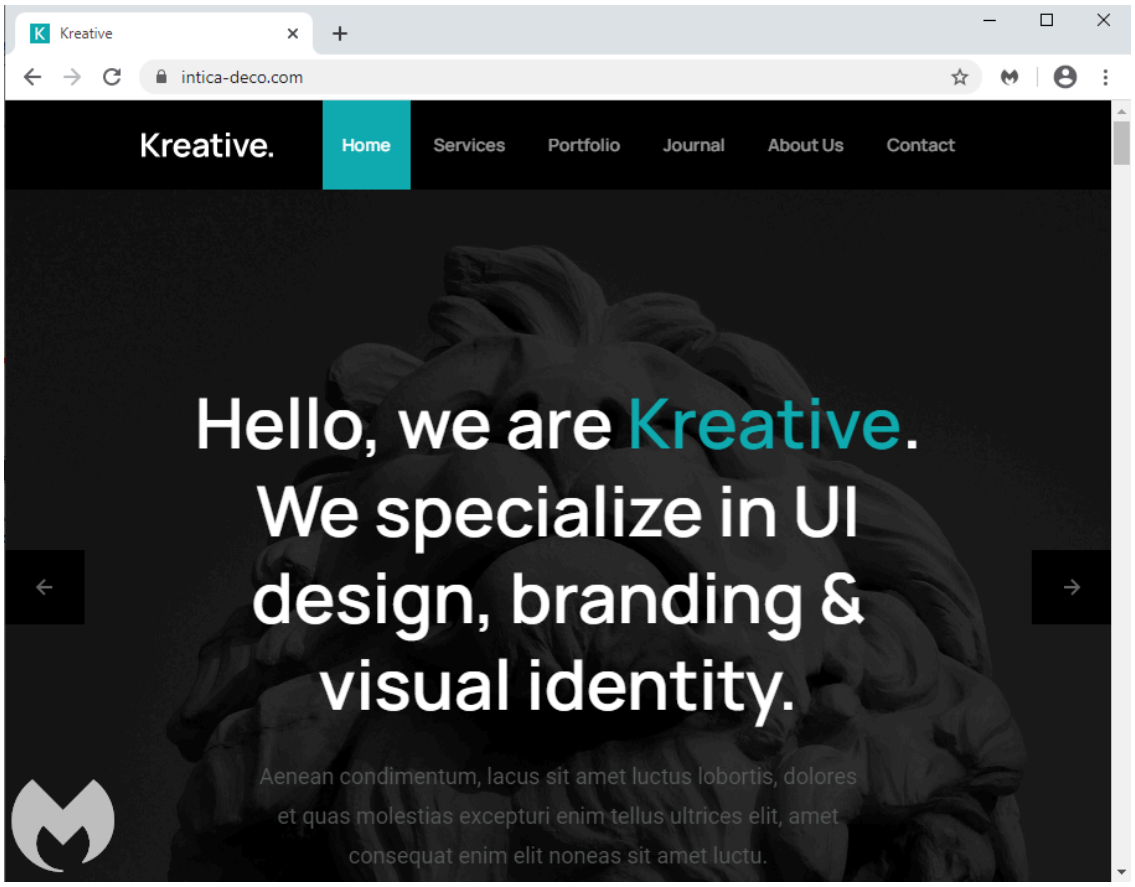
https://twitter[.]com/tkanalyst/status/1229794466816389120
https://twitter[.]com/nao_sec/status/1209090544711815169



Simple server-side cloaking performs the redirect to a Fallout exploit kit landing page which attempts to exploit CVE-2019-0752 (Internet Explorer) and CVE-2018-15982 (Flash Player) before dropping the Raccoon Stealer.

Host	URL	Body	Comments
.com	/zps/?zone=45	911	Adult site
syndication.realsrv.com	/splash.php?cat=&idzone=+ &type=8&...	0	ExoClick malvertising
nutsells-dounerous.icu	/voluum/e6f88310-d545-46ab-9052-64574b00...	0	Redirect
intica-deco.com	/	43,712	Gate to EK
intica-deco.com	/redirect.php	84	Gate to EK
colorado4u.club	/13565/EzYF/wailment/Camions.cfm	4,986	Fallout EK [HTML/JS] (Landing
colorado4u.club	/24-09-1982/F0sMs?e6e3X=yXcT&iqi=Tiniest	29,044	Fallout EK [HTML/JS] (Landing
colorado4u.club	/12023/14_10_1944/04_06_1910/pKVHB	7,512	Fallout EK [URI]
colorado4u.club	/chorizos/Cleavage_Frustum	28,544	Fallout EK [URI]
colorado4u.club	/Blastoff-10001/Thinkably-bunsen/bnmZX/hSM...	35,153	Fallout EK [URI] (Flash Exploit)
colorado4u.club	/grandads_Stopwatch_Bittering/pEQM/OuV.as...	5,785	Fallout EK [URI]
colorado4u.club	/13565/EzYF/wailment/Camions.cfm	0	Fallout EK [URI]
colorado4u.club	/Tearier-10943/posited/ovNul/8642?misquote=...	508,416	Fallout EK [Headers] (Payload)
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telete.in	/jjJunxShop	4,944	Telegram channel
34.105.147.92	/gate/log.php	571	RaccoonStealer C2 [URI]

About 10 days later, another domain, websolvent[.]me, became active but used a different redirection technique, a 302 redirect, also known as 302 cushioning. This time we see the RIG exploit kit which also delivers Raccoon Stealer.

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ads.exosrv.com	/nativeads.js	44,978	ExoClick malvertising
syndication.exosrv.com	/splash.php?cat=&idzone= &type=8&p...	1,504	ExoClick malvertising
syndication.exosrv.com	/splash.php?cat=&idzone= &type=8&p...	0	ExoClick malvertising
websolvent.me	/8bZQWK	0	Gate to EK
91.210.171.116	/?NjI1MzAw&thiJri&hKBiG=abettor&bwxiSw=di...	101,633	RIG EK [URI] (Landing Page)
91.210.171.116	/?MzIyMjEz&quslwEv&jPLu=callous&wmPhJo=...	483,328	RIG EK [URI] (Payload)
telete.in	/jjJunxShop	4,578	Telegram channel
telete.in	/jjJunxShop	4,579	Telegram channel
telete.in	/jjJunxShop	4,579	Telegram channel
chinadevmonster.top	/gate/log.php	602	RaccoonStealer C2 [URI]

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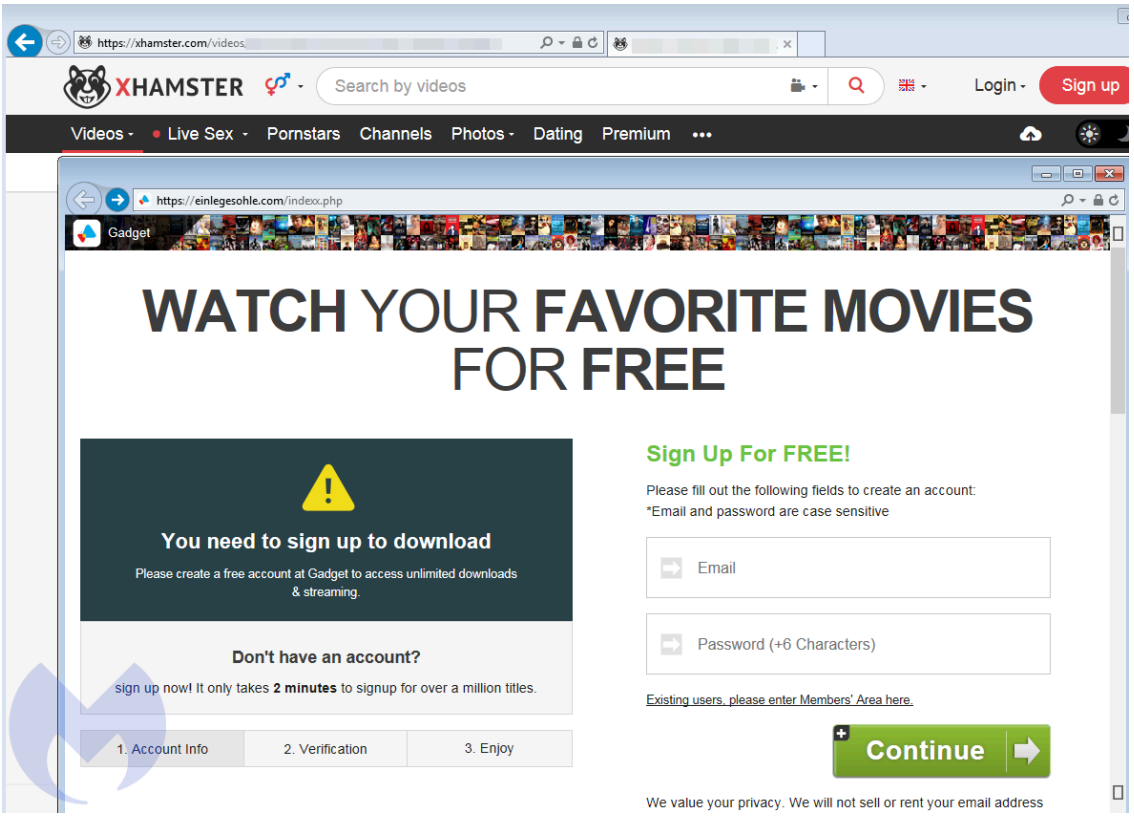

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13.52.20.229	avitquay.com	/click?trvid=10001&extid=[tracking]&campid=[campaignid]&creaid=[adid]&d...	1,190	(05)
13.52.20.229	avitquay.com	/double?t=2&d= ...	675	(06)
31.31.198.96	adexhangetomatto.space	/?sxid=er8p3s963a9v	2,732	(07)
31.31.198.96	adexhangetomatto.space	/api.php	719	(08)
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216.171.233.6	corbenbaby.press	/UwdtBz/12-01-1933	7,424	(12) Fallout EK
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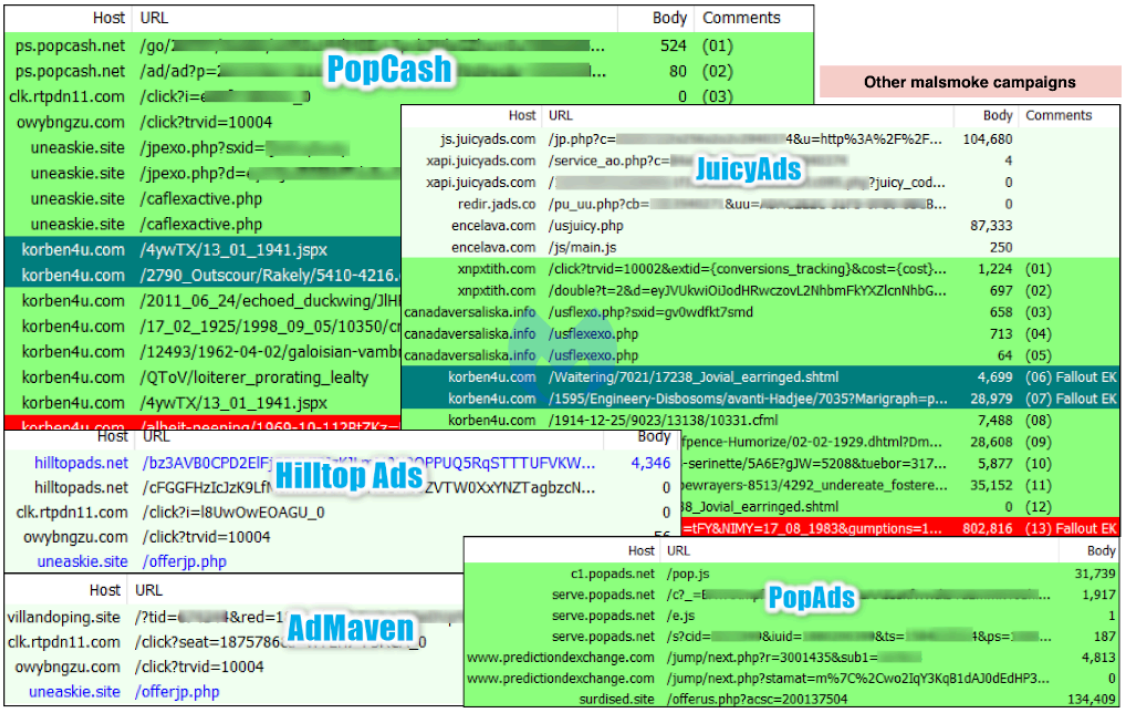

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bumblizz[.]com/auexo.php
bumblizz[.]com/auflexexo.php
bumblizz[.]com/caexo.php
bumblizz[.]com/caflexexo.php
bumblizz[.]com/usexo.php
bumblizz[.]com/usflexexo.php
canadaversaliska[.]info/coflexexo.php

canadaversaliska[.]info/coflexo.php
canadaversaliska[.]info/ukflexexo.php
canadaversaliska[.]info/ukflexo.php
canadaversaliska[.]info/usflexexo.php
canadaversaliska[.]info/usflexo.php
krostaur[.]com/jpexo.php
krostaur[.]com/jpflexexo.php
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leiomity[.]com/ukflexexo.php
leiomity[.]com/usexo.php
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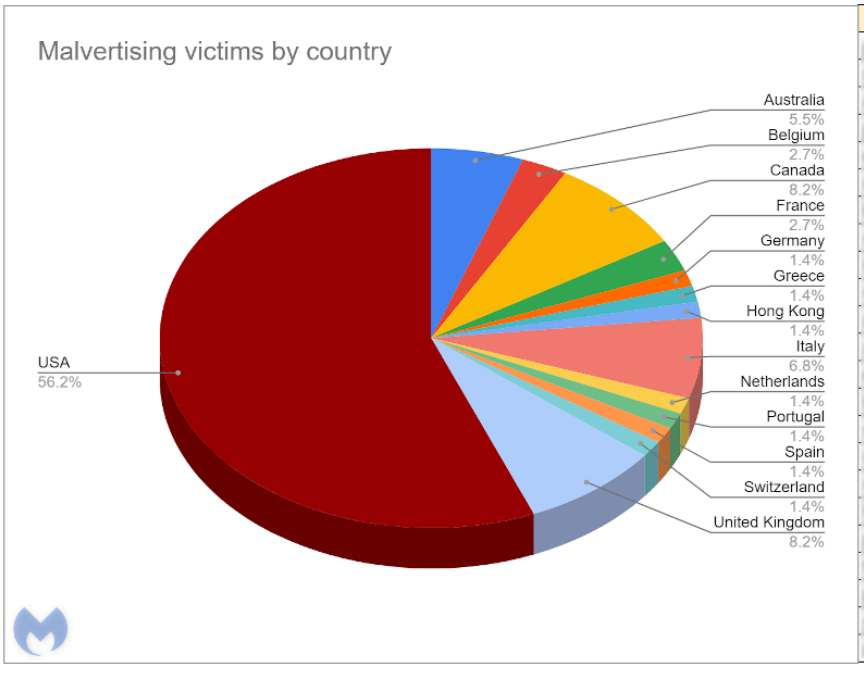
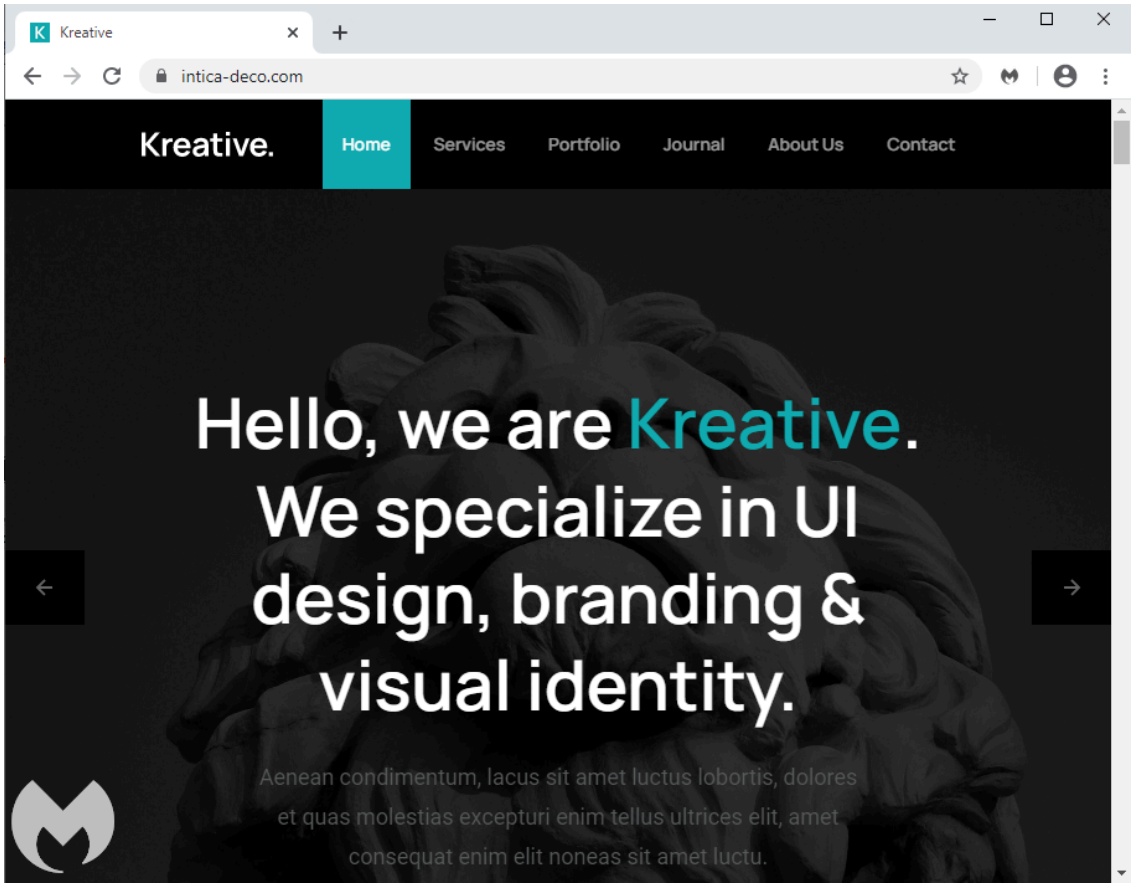
https://twitter[.]com/nao_sec/status/1231149711517634560
https://twitter[.]com/tkanalyst/status/1229794466816389120
https://twitter[.]com/nao_sec/status/1209090544711815169



Site	Traffic (in M)
[redacted]	59
[redacted]	54
[redacted]	47
[redacted]	46
[redacted]	45
[redacted]	39
[redacted]	31
[redacted]	24
[redacted]	22
[redacted]	21
[redacted]	17
[redacted]	17
[redacted]	16
[redacted]	12
[redacted]	11
[redacted]	11
[redacted]	9
[redacted]	8
[redacted]	6
[redacted]	6
[redacted]	6
[redacted]	4
[redacted]	4

In this campaign, the crooks abused the popular ad network ExoClick by using different redirection pages. However, each time we were able to notify the ad network and get them shut down quickly.

The first domain they used was inteca-deco[.]com, which was setup as a web design agency but visibly a decoy page to the trained eye.



Simple server-side cloaking performs the redirect to a Fallout exploit kit landing page which attempts to exploit CVE-2019-0752 (Internet Explorer) and CVE-2018-15982 (Flash Player) before dropping the Raccoon Stealer.

Host	URL	Body	Comments
[redacted].com	/zps/?zone=45	911	Adult site
syndication.realsrv.com	/splash.php?cat=&idzone=+[redacted]&type=8&...	0	ExoClick malvertising
nutsells-dounerous.icu	/voluum/e6f88310-d545-46ab-9052-64574b00...	0	Redirect
intica-deco.com	/	43,712	Gate to EK
intica-deco.com	/redirect.php	84	Gate to EK
colorado4u.club	/13565/EzYF/wailment/Camions.cfm	4,986	Fallout EK [HTML/JS] (Landing
colorado4u.club	/24-09-1982/F0sMs?e6e3X=yXcT&iqi=Tiniest	29,044	Fallout EK [HTML/JS] (Landing
colorado4u.club	/12023/14_10_1944/04_06_1910/pKVHB	7,512	Fallout EK [URI]
colorado4u.club	/chorizos/Cleavage_Frustum	28,544	Fallout EK [URI]
colorado4u.club	/Blastoff-10001/Thinkably-bunsen/bnmZX/hSM...	35,153	Fallout EK [URI] (Flash Exploit)
colorado4u.club	/grandads_Stopwatch_Bittering/pEQM/OuV.as...	5,785	Fallout EK [URI]
colorado4u.club	/13565/EzYF/wailment/Camions.cfm	0	Fallout EK [URI]
colorado4u.club	/Tearier-10943/posited/ovNul/8642?misquote=...	508,416	Fallout EK [Headers] (Payload)
telete.in	/jjJunxShop	4,579	Telegram channel
telete.in	/jjJunxShop	4,579	Telegram channel
telete.in	/jjJunxShop	4,579	Telegram channel
telete.in	/jjJunxShop	4,944	Telegram channel
34.105.147.92	/gate/log.php	571	RaccoonStealer C2 [URI]

About 10 days later, another domain, websolvent[.]me, became active but used a different redirection technique, a 302 redirect, also known as 302 cushioning. This time we see the RIG exploit kit which also delivers Raccoon Stealer.

Host	URL	Body	Comments
[redacted].com	/	145,245	Adult site
[redacted].com	/d/exonative1	500	Ad banner
ads.exosrv.com	/ads.js	2,315	ExoClick malvertising
ads.exosrv.com	/nativeads.js	44,978	ExoClick malvertising
syndication.exosrv.com	/splash.php?cat=&idzone=[redacted]type=8&p...	1,504	ExoClick malvertising
syndication.exosrv.com	/splash.php?cat=&idzone=[redacted]type=8&p...	0	ExoClick malvertising
websolvent.me	/8bZQWK	0	Gate to EK
91.210.171.116	/?NjI1MzAw&thiJri&hKBiG=abettor&bwxiSw=di...	101,633	RIG EK [URI] (Landing Page)
91.210.171.116	/?MzIyMjEz&quslwEv&jPLu=callous&wmPhJo=...	483,328	RIG EK [URI] (Payload)
telete.in	/jjJunxShop	4,578	Telegram channel
telete.in	/jjJunxShop	4,579	Telegram channel
telete.in	/jjJunxShop	4,579	Telegram channel
chinadevmonster.top	/gate/log.php	602	RaccoonStealer C2 [URI]

Beyond a common payload, those two domains are also related. A RiskIQ crawl confirms a relationship between these 2 domains where the parent host was caught doing a meta refresh redirect to the child:

HOST PAIRS

1 - 2 of 2 ▼ Sort : First Seen Ascending ▼ 25 / Page ▼

Parent Hostname	Child Hostname
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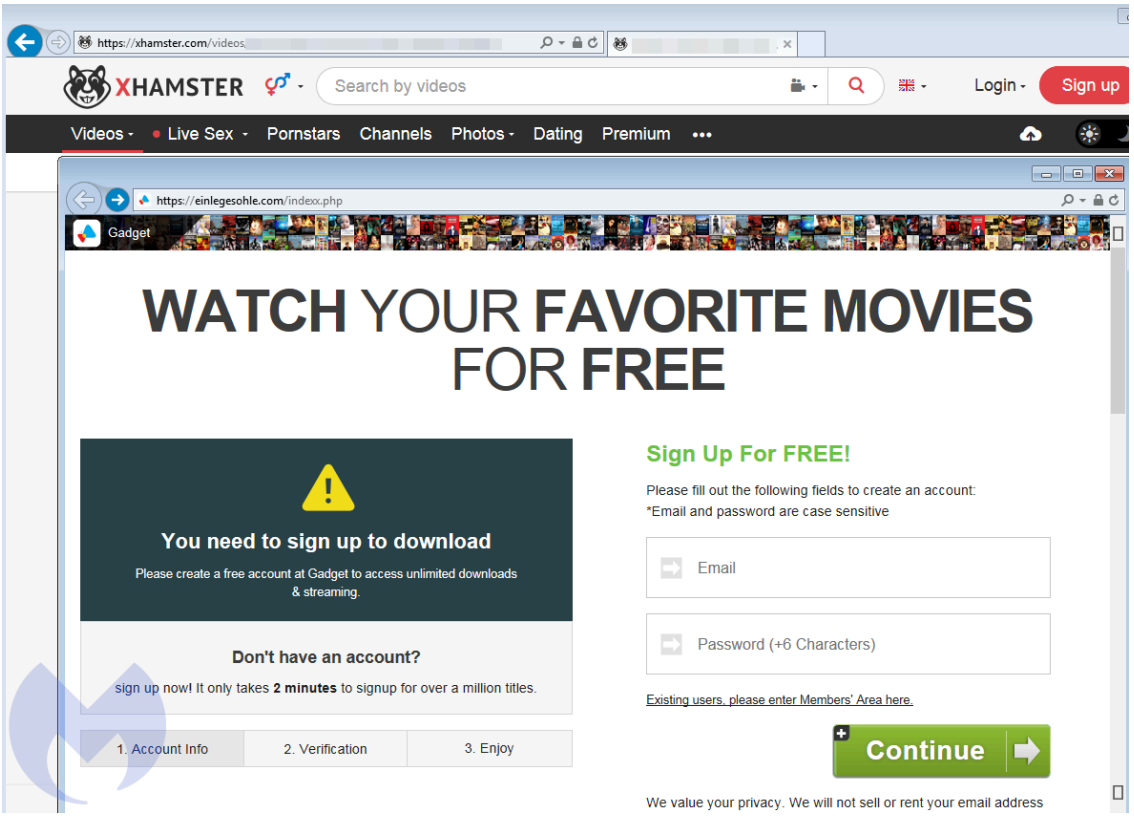
Malvertising on top adult site gets maximum reach

The second malvertiser ('malsmoke') is one that we have tracked diligently over the past several months and whose end payload is often the Smoke Loader malware. It is by far the most daring and successful one in that it goes after larger publishers and a variety of ad networks. However, up until now we had only seen them on publishers from the adult industry that are still relatively small in scale.

In this instance, the threat actor was able to abuse the Traffic Stars ad network and place their malicious ad on xhamster[.]com, a site with just over 1.06 billion monthly visits according to SimilarWeb.com.

The gates used by this group also use a decoy site and over time they have registered domains mocking ad networks and cloud providers.

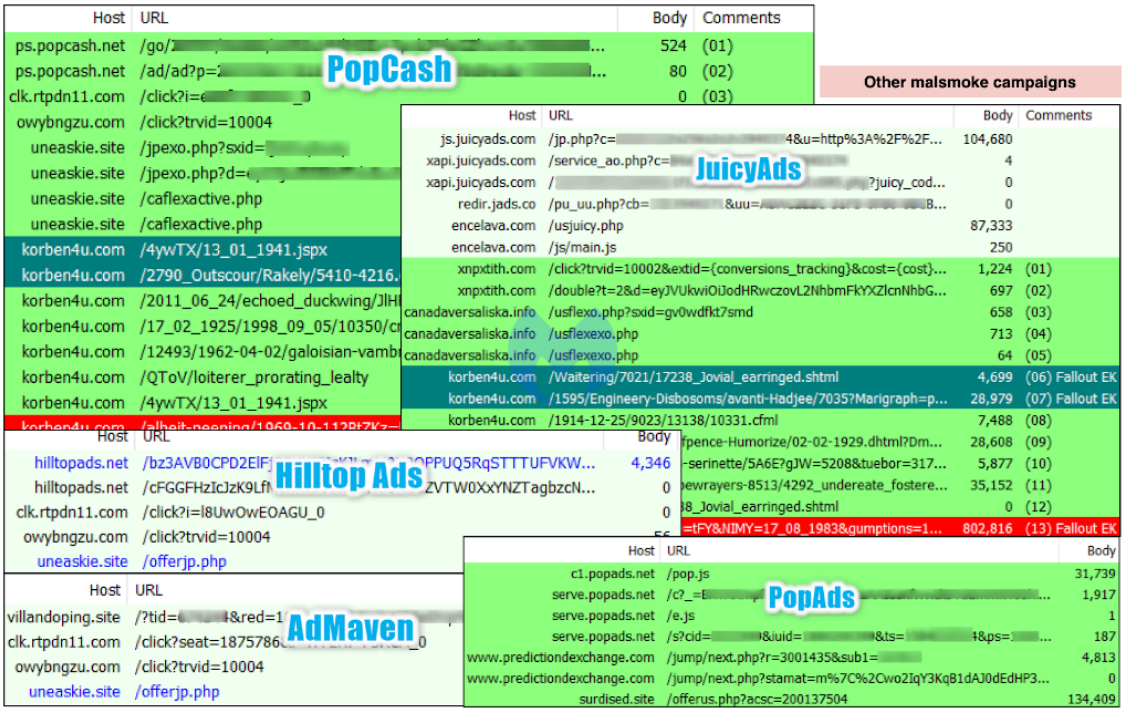


The redirection mechanism is more sophisticated than those used in other malvertising campaigns. There is some client-side fingerprinting and connectivity checks to avoid VPNs and proxies, only targeting legitimate IP addresses.

Server IP	Host	URL	Body	Comments
104.18.156.3	xhamster.com	/categories/mature	195,522	(01)
213.174.157.82	tsyndicate.com	/api/v1/direct/ ?domain=xhamster.com...	0	(02)
31.31.198.165	einlegesohle.com	/	256	(03)
31.31.198.165	einlegesohle.com	/indexx.php	0	(04)
13.52.20.229	avitquay.com	/click?trvid=10001&extid=[tracking]&campid=[campaignid]&creaid=[adid]&d...	1,190	(05)
13.52.20.229	avitquay.com	/double?t=2&d= ...	675	(06)
31.31.198.96	adexhangetomatto.space	/?sxid=er8p3s963a9v	2,732	(07)
31.31.198.96	adexhangetomatto.space	/api.php	719	(08)
31.31.198.96	adexhangetomatto.space	/api.php	90	(09)
216.171.233.6	corbenbaby.press	/1982-12-01/OQb/obZZa.jsp?Resought=3978-Whipworm-5531&Tah=Nuthatch	4,924	(10) Fallout EK
216.171.233.6	corbenbaby.press	/Jointless-Massoy/Nabathean-13630/sthenias_asphodel_xiphistna	28,998	(11) Fallout EK
216.171.233.6	corbenbaby.press	/UwdtBz/12-01-1933	7,424	(12) Fallout EK
216.171.233.6	corbenbaby.press	/Deadlier_sperms_Carried/28_04_1992/Louping_myopathy.phtml	28,460	(13) Fallout EK
216.171.233.6	corbenbaby.press	/xzTy/furnage	35,125	(14) Fallout EK
216.171.233.6	corbenbaby.press	/5045_Diagonial_6596/y2bPs.aspx?b95=prealter-10268-13730&cleanlier=900...	5,771	(15) Fallout EK
216.171.233.6	corbenbaby.press	/1982-12-01/OQb/obZZa.jsp?Resought=3978-Whipworm-5531&Tah=Nuthatch	0	(16) Fallout EK
216.171.233.6	corbenbaby.press	/tc497/1946_11_09.cfm	158,208	(17) Fallout EK

Interestingly, this Smoke Loader instance also downloads Raccoon Stealer and ZLoader.

Malsmoke is probably the most persistent malvertising campaigns we have seen this year. Unlike other threat actors, this group has shown that it can rapidly switch ad networks to keep their business uninterrupted.



Still using Internet Explorer?

Threat actors still leveraging exploit kits to deliver malware is one thing, but end users browsing with Internet Explorer is another. Despite recommendations from Microsoft and security professionals, we can only witness that there are still a number of users (consumer and enterprise) worldwide that have yet to migrate to a modern and fully supported browser.

As a result, exploit kit authors are squeezing the last bit of juice from vulnerabilities in Internet Explorer and Flash Player (due to retire for good next year).

Malwarebytes customers have long been protected from malvertising and exploit kits. We continue to track and report the campaigns we run into to help do our part in keeping the Internet safer.

Indicators of compromise

Gates used in malvertising campaign pushing Raccoon Stealer

intica-deco[.]com
websolvent[.]me

Raccoon Stealer

b289155154642ba8e9b032490a20c4a2c09b925e5b85dda11fc85d377baa6a6c
f319264b36cdf0daeb6174a43aaf4a6684775e6f0fb69aaf2d7dc051a593de93

Raccoon Stealer C2s

34.105.147[.]92/gate/log.php
chinadevmonster[.]top/gate/log.php

Smoke Loader

23bef893e3af7cb49dc5ae0a14452ed781f841db7397dc3ebb689291fd701b6b

Smoke Loader C2s

dkajsdjiqwdwnfj[.]info
2831ujedkdajsdj[.]info
928eijdksasnfss[.]info
dkajsdjiqwdwnfj[.]info
2831ujedkdajsdj[.]info
928eijdksasnfss[.]info

Gates used in the malsmoke campaign

einlegesohle[.]com/indexx.php
adexhangetomatto[.]space
encelava[.]com/coexo.php
encelava[.]com/caac
uneaskie[.]com/ukexo.php
bumblizz[.]com/auexo.php
bumblizz[.]com/auflexexo.php
bumblizz[.]com/caexo.php
bumblizz[.]com/caflexexo.php
bumblizz[.]com/usexo.php
bumblizz[.]com/usflexexo.php
canadaversaliska[.]info/coflexexo.php
canadaversaliska[.]info/coflexo.php
canadaversaliska[.]info/ukflexexo.php
canadaversaliska[.]info/ukflexo.php
canadaversaliska[.]info/usflexexo.php
canadaversaliska[.]info/usflexo.php
krostaur[.]com/jpexo.php
krostaur[.]com/jpflexexo.php
krostaur[.]com/jpflexo.php
leiomity[.]com/ukexo.php
leiomity[.]com/ukflexexo.php
leiomity[.]com/usexo.php
leiomity[.]com/usflexexo.php
surdised[.]com/coexo.php
surdised[.]com/usexo.php

Tweets referencing the malsmoke campaign

https://twitter[.]com/MBThreatIntel/status/1245791188281462784
https://twitter[.]com/FaLconIntel/status/1232475345023987713
https://twitter[.]com/nao_sec/status/1231149711517634560
https://twitter[.]com/tkanalyst/status/1229794466816389120
https://twitter[.]com/nao_sec/status/1209090544711815169

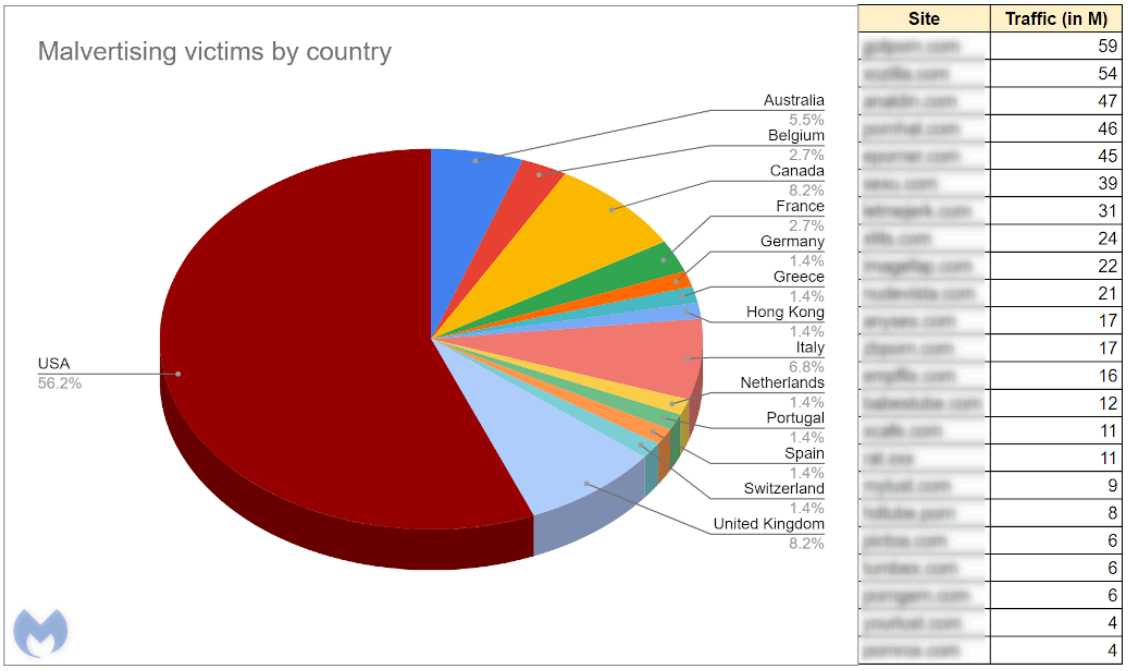
Malvertising campaigns leading to exploit kits are nowhere near as common these days. Indeed, a number of threat actors have moved on to other delivery methods instead of relying on drive-by downloads.

However, occasionally we see spikes in activity that are noticeable enough that they highlight a successful run. In late August, we started seeing a Fallout exploit kit campaign distributing the Raccoon Stealer via high-traffic adult sites. Shortly after we reported it to the ad network, the same threat actor came back again using the RIG exploit kit instead.

Then we saw possibly the largest campaign to date on top site xhamster[.]com from a malvertiser we have tracked for well over a year. This threat actor has managed to abuse practically all adult ad networks but this may be the first time they hit a top publisher.

Malvertising on popular ad network

The first malicious advertiser we observed was able to bid for ads on a number of adult sites by targeting users running Internet Explorer without any particular geolocation restriction, although the majority of victims were in the US.



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[redacted]	6
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In this campaign, the crooks abused the popular ad network ExoClick by using different redirection pages. However, each time we were able to notify the ad network and get them shut down quickly.

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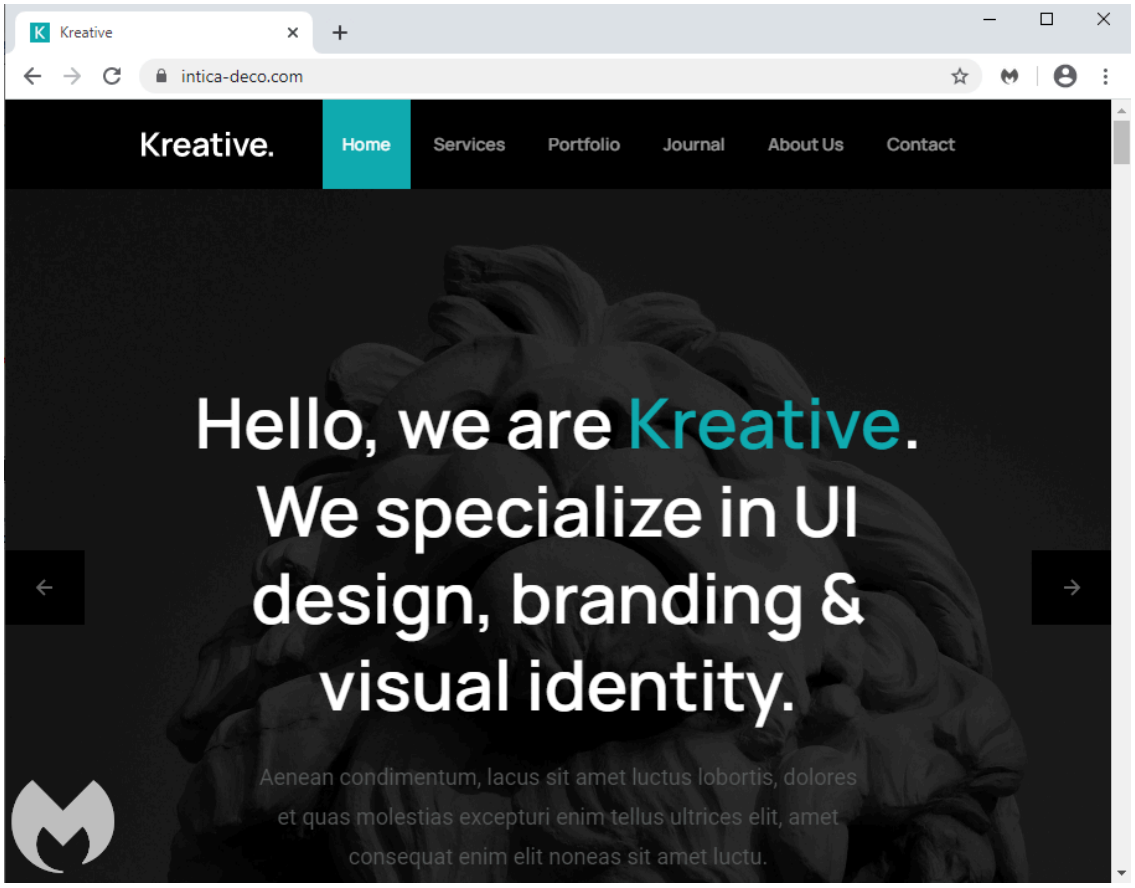

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[redacted].com	/zps/?zone=45	911	Adult site
syndication.realsrv.com	/splash.php?cat=&idzone=+[redacted]&type=8&...	0	ExoClick malvertising
nutsells-dounerous.icu	/voluum/e6f88310-d545-46ab-9052-64574b00...	0	Redirect
intica-deco.com	/	43,712	Gate to EK
intica-deco.com	/redirect.php	84	Gate to EK
colorado4u.club	/13565/EzYF/wailment/Camions.cfm	4,986	Fallout EK [HTML/JS] (Landing
colorado4u.club	/24-09-1982/F0sMs?e6e3X=yXcT&iqi=Tiniest	29,044	Fallout EK [HTML/JS] (Landing
colorado4u.club	/12023/14_10_1944/04_06_1910/pKVHB	7,512	Fallout EK [URI]
colorado4u.club	/chorizos/Cleavage_Frustum	28,544	Fallout EK [URI]
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colorado4u.club	/13565/EzYF/wailment/Camions.cfm	0	Fallout EK [URI]
colorado4u.club	/Tearier-10943/posited/ovNul/8642?misquote=...	508,416	Fallout EK [Headers] (Payload)
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telete.in	/jjJunxShop	4,579	Telegram channel
telete.in	/jjJunxShop	4,579	Telegram channel
telete.in	/jjJunxShop	4,944	Telegram channel
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About 10 days later, another domain, websolvent[.]me, became active but used a different redirection technique, a 302 redirect, also known as 302 cushioning. This time we see the RIG exploit kit which also delivers Raccoon Stealer.

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syndication.exosrv.com	/splash.php?cat=&idzone=[redacted]type=8&p...	1,504	ExoClick malvertising
syndication.exosrv.com	/splash.php?cat=&idzone=[redacted]type=8&p...	0	ExoClick malvertising
websolvent.me	/8bZQWK	0	Gate to EK
91.210.171.116	/?NjI1MzAw&thiJri&hKBiG=abettor&bwxiSw=di...	101,633	RIG EK [URI] (Landing Page)
91.210.171.116	/?MzIyMjEz&quslwEv&jPLu=callous&wmPhJo=...	483,328	RIG EK [URI] (Payload)
telete.in	/jjJunxShop	4,578	Telegram channel
telete.in	/jjJunxShop	4,579	Telegram channel
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chinadevmonster.top	/gate/log.php	602	RaccoonStealer C2 [URI]

Beyond a common payload, those two domains are also related. A RiskIQ crawl confirms a relationship between these 2 domains where the parent host was caught doing a meta refresh redirect to the child:

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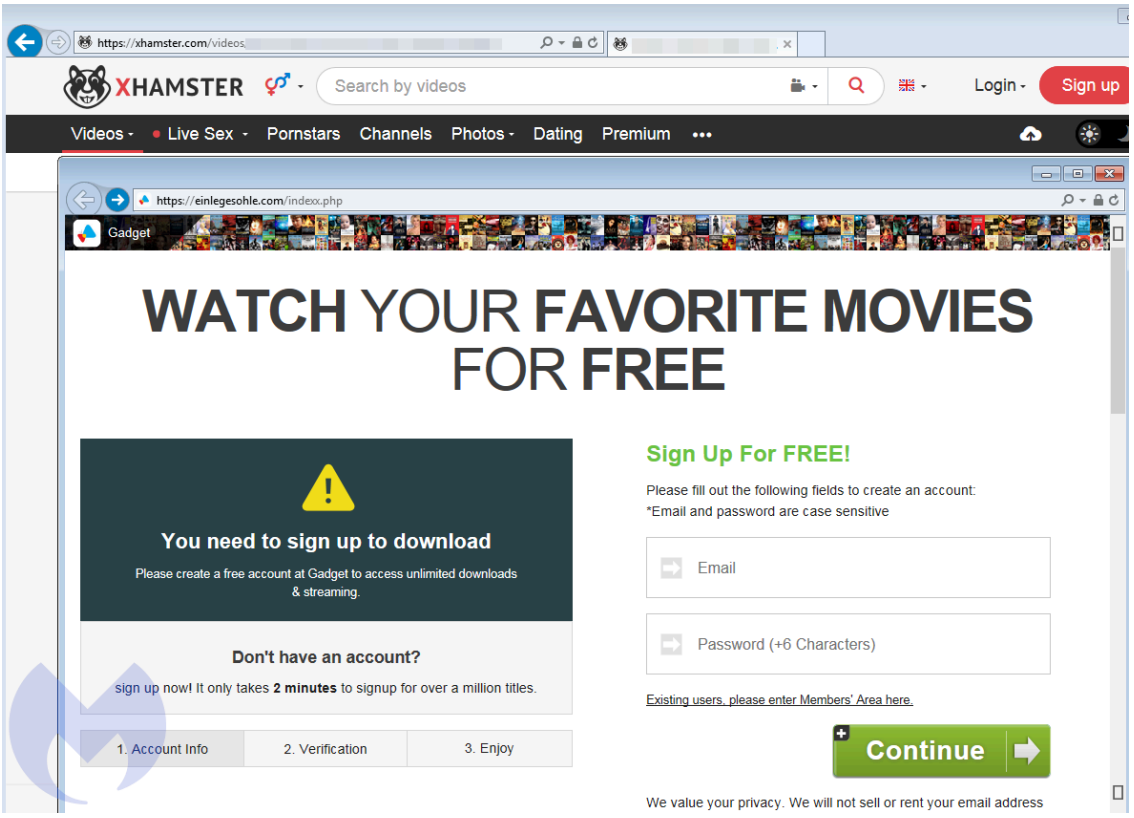

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31.31.198.165	einlegesohle.com	/indexx.php	0	(04)
13.52.20.229	avitquay.com	/click?trvid=10001&extid=[tracking]&campid=[campaignid]&creaid=[adid]&d...	1,190	(05)
13.52.20.229	avitquay.com	/double?t=2&d= ...	675	(06)
31.31.198.96	adexhangetomatto.space	/?sxid=er8p3s963a9v	2,732	(07)
31.31.198.96	adexhangetomatto.space	/api.php	719	(08)
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216.171.233.6	corbenbaby.press	/UwdtBz/12-01-1933	7,424	(12) Fallout EK
216.171.233.6	corbenbaby.press	/Deadlier_sperms_Carried/28_04_1992/Louping_myopathy.phtml	28,460	(13) Fallout EK
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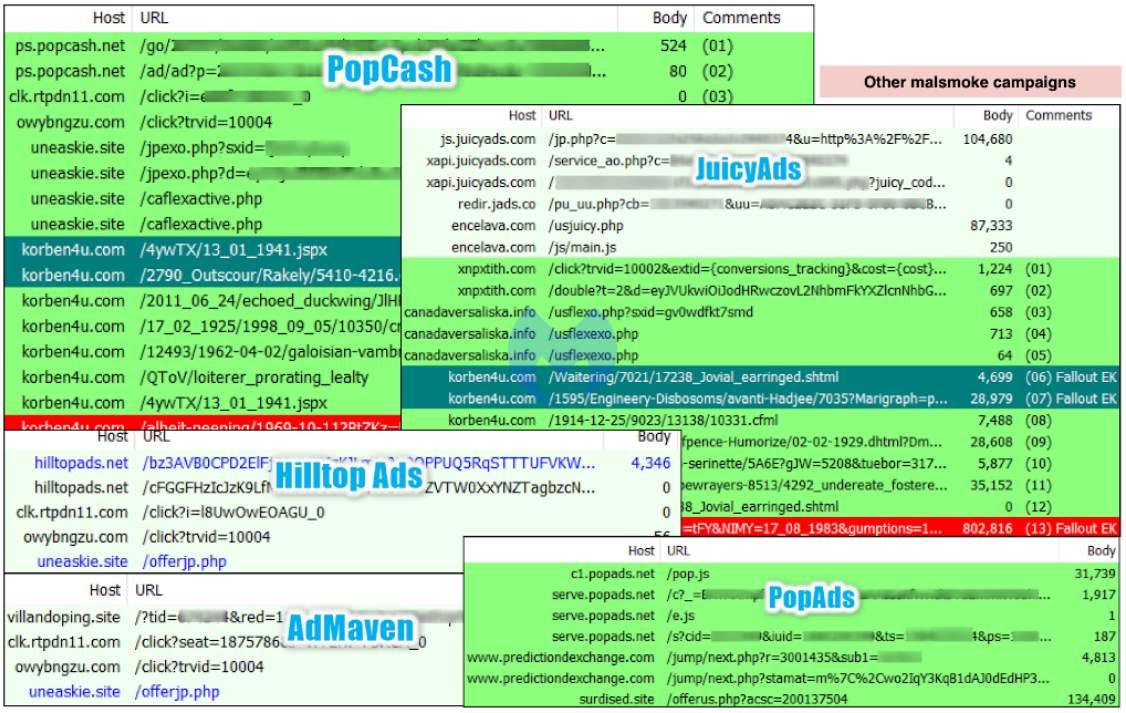

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f319264b36cdf0daeb6174a43aaf4a6684775e6f0fb69aaf2d7dc051a593de93

Raccoon Stealer C2s

34.105.147[.]92/gate/log.php
chinadevmonster[.]top/gate/log.php

Smoke Loader

23bef893e3af7cb49dc5ae0a14452ed781f841db7397dc3ebb689291fd701b6b

Smoke Loader C2s

dkajsdjiqwdwnfj[.]info
2831ujedkdajsdj[.]info
928eijdksasnfss[.]info
dkajsdjiqwdwnfj[.]info
2831ujedkdajsdj[.]info
928eijdksasnfss[.]info

Gates used in the malsmoke campaign

einlegesohle[.]com/indexx.php
adexhangetomatto[.]space
encelava[.]com/coexo.php
encelava[.]com/caac
uneaskie[.]com/ukexo.php
bumblizz[.]com/auexo.php
bumblizz[.]com/auflexexo.php
bumblizz[.]com/caexo.php
bumblizz[.]com/caflexexo.php
bumblizz[.]com/usexo.php
bumblizz[.]com/usflexexo.php
canadaversaliska[.]info/coflexexo.php
canadaversaliska[.]info/coflexo.php
canadaversaliska[.]info/ukflexexo.php
canadaversaliska[.]info/ukflexo.php
canadaversaliska[.]info/usflexexo.php
canadaversaliska[.]info/usflexo.php
krostaur[.]com/jpexo.php
krostaur[.]com/jpflexexo.php
krostaur[.]com/jpflexo.php
leiomity[.]com/ukexo.php
leiomity[.]com/ukflexexo.php
leiomity[.]com/usexo.php
leiomity[.]com/usflexexo.php
surdised[.]com/coexo.php
surdised[.]com/usexo.php

Tweets referencing the malsmoke campaign

https://twitter[.]com/MBThreatIntel/status/1245791188281462784
https://twitter[.]com/FaLconIntel/status/1232475345023987713
https://twitter[.]com/nao_sec/status/1231149711517634560
https://twitter[.]com/tkanalyst/status/1229794466816389120
https://twitter[.]com/nao_sec/status/1209090544711815169
