

# Latest Spam Campaigns from TA505 Now Using New Malware Tools Gelup and FlowerPippi

Appendix

## Indicators of Compromise (IoCs)

### Hashes Related to TA505's Latest Spam Campaigns

SHA-256	Trend Micro Detection	Notes
32b518411ad33b1454812d7c8fe2c8e7b507d3659c7a620adf570cd3cbd12913	Backdoor.Win32.FLAWEDAMMY.AN	MSI
f07a0970cb9a1a8172a7980bf08b3bfcc7007b4d12cc207d0ad6a5a02732ace8		
d08e515044a61b2b2dad9deda564460914a9559cdfb9772babf04039d3814252		Amadey
ae46e7530fc3e51829e8939fab1dbb1958d4426598d81c5e1cf8ad8ef30bf44b	Backdoor.Win32.FLAWEDAMMY.AP	Email stealer
1e931d4b48dc12ae3e1b725471fb812486aa6dc15aa66f6803b0ca39ce5bcd9b	Backdoor.Win32.FLAWEDAMMY.SMKAT	FlawedAmmyy Downloader
9988a8e5dc49a84f1397a224e0b69a73609d40227540b1ac6eeb4f5d3475caa9		MSI
3353f306853844c951f6332af61b804004b7759b8f56b3a62f4eeb485c793b94		
b25d805a85f9d2bb611b6f6c03836ef58210af18b8421c57ce5fa31b3cb5fb10		FlawedAmmyy RAT
8034a77e0feeaada1abc5c9ccd6b7fef76fe6d01eae63a83c37cecf2899e255		MSI
fd76972a310d77524b47676e944e7a348f20634da5e4e295bed4ad6cfd1b83cf		FlawedAmmyy Downloader
1317703bfb7b0f3eeab6af67ec0fb29368ab12b06b256f6639648b85e8aa76bb		FlawedAmmyy RAT
a1d8dfcea46dcdf2e5faab857389a6fa2bf19a29a4dbb7a31e8aecffc468bdc		FlawedAmmyy Downloader
5b589d5d3e226818a9eeb4f8294d18d1251a3a57eb3a28131fb8729e9957e5ed		Amadey
744d44cb8b6f4d9ea547553e89152827629090701bc56c386a36264125ed81da		MSI
7e885b76fd19fc8f9733aeecdd3789a6aeb2c2fb810bfa90a600f20805b68b71		
7e885b76fd19fc8f9733aeecdd3789a6aeb2c2fb810bfa90a600f20805b68b71		FlawedAmmyy Downloader
da6af8a50e2be3abd46bd24a9d125706e00b26b6721c1b28faf4eb0b2384d52e		Amadey
744d44cb8b6f4d9ea547553e89152827629090701bc56c386a36264125ed81da		MSI
7e885b76fd19fc8f9733aeecdd3789a6aeb2c2fb810bfa90a600f20805b68b71		
526582ad66a0f96cfac8dd11841ba499a34310efbca37799d9217abe6beca88c		FlawedAmmyy RAT
3b92b542c31e879657f2b41a51ce8a347821a43feb3b4177bc242bd47833831f		

SHA-256	Trend Micro Detection	Notes
43029bb89b0c7203743f75cc46f137041304b0e253fb0f7e58b3eb27e7928b5a	Backdoor.Win32.FLAWEDAMMY.SMKAT	FlawedAmmyy Downloader
bc7a23485a8c10672ebc7c998687fe837ab296e01fbf36fde08a8ce013ff67be		MSI
19d8993c742fc1a7c651ab3dba4d8c7f5e142a8421e22dd0c20c2db2d5dccffd		FlawedAmmyy Downloader
cb114123ca1c33071cf6241c3e5054a39b6f735d374491da0b33dfdaa1f7ea22		MSI
cbea31ca496945a22c1ddb992f3954056060e764d6599f1725ce3f3293b30934		FlawedAmmyy Downloader
5075f2381e2bdf01104da1b4d28a7806b4cbe90d7a3726a565e2a8fadbf09ab0		FlawedAmmyy RAT
c2c6f548fe6832c84c8ab45288363b78959d6dda2dd926100c5885de14c4708b		FlawedAmmyy
163a485bdeb03b6d5f9ad97f0b5292a38844ed86e8185e44e151dc5df4f7a272		
4e26c3b4710ef97462a74baa0c9dd78524655f7aa9371570b8c3a270b5111f47	Backdoor.Win32.FLAWEDAMMY.END	FlawedAmmyy Downloader
d0ebd37bd6a4d1760210d251130c3cd8ed239161e65b78f54366720daca954bc		MSI
4996c6994768eb2fb9e37efdf2993a8a41927f0bfaaa0c094923da51529b5ecf		FlawedAmmyy RAT
f34ff2325ecc38fd660042df1723a44f066011dd875f1c89e41457dd5131db1		MSI
e12c906b60bbb7fe15ad8aaa4029d36679b9707e8c0dc494ef5cf31a973b1693		FlawedAmmyy Downloader
b07340bd812ac1d6bab85b1b49c4e935f100b17d59da632533c8ddd361529f10		
c3d03d9f9b132d1a326ad37d4046ad7b44b93785d20f2c41e950e63f7b316210	Backdoor.Win32.FLOWERPIPPI.A	FlowerPippi
4022ee8ea5880443aad6650f0a88821c841b9b823d4882afccb6d08a7daa9a1b		
39eaba807eaeed6f3ed79e3237c70a492fbce871a98a79c551bdfda240a4e4b2		
d4ad423482621e32a8b9477a7adba1374a51c07b1c0049b6f11cea1ff2cfcffa		
17d11b9e324faf3b1a53d8fdb002508fc0b6236472d762822d9b550c690b2623	Backdoor.Win32.SERVHELPER.B	NSIS / ServHelper
517119d4d9ae8f0b7e2ae6b6b9adc1f0546118660ee1e71afd9e7c1bb8d4c691	TROJ_FRS.VSNW11F19	HTML
955c3c04762858f1a779d51d6a288158feed69f0f20e0b0a0f254ea36b168555	Trojan.HTML.DEDEX.A	
b2ab1a485306bb25f75ad94f334ea5ad829b4d6339324575e04d3d6a18ff8b3f	Trojan.HTML.DLOADR.VWD	
9c0e8ab53fcea4c41d1887c99f12cadbd2dfa4934554bcc2ef179e4f59b7f986	Trojan.HTML.DLOADR.VWEA	

SHA-256	Trend Micro Detection	Notes
531cfa6a35d94624903f498bfcd43fc0df89937fd1891221a8d6303f44dfd191	Trojan.HTML.DLOADR.VWEB	HTML
648bee316a490ea2cc1831a9b3de91252e1fe1d5ac13d04b35bbe09103c201bb	Trojan.HTML.DLOADR.VWEC	
105df91a08857c2e66ea64e899e8ee5702423d213cc372ba035d6e9003ee43c0	Trojan.HTML.DLOADR.VWED	
1b2a92c230fd944ef553f46e4d5576c622c37d2fc5a23aacd327424b0578d586		
ba175e84c6f519570f22d084e12e9bf749aa73bc322643788b622eda5ce636cd	Trojan.HTML.DLOADR.VWEE	
3c1cb96996ae865fc2ba9c9b89fd4b1faf38fb1cdcd39f6de8641c0498247579		
cbfd13caa5f8301c9e0000b39b147cc79d83b03c41aacf3aedfcb9fbde71ef8f		
9e0ba57890bca06af9f92e7e520804a8c1d53445fe21859517362ba0fad8a2c		
cbd8490b8cb50ff0d7dfa5a4c94e9856daa093a0cfa4a28d3e2d1dd1c7e2a11	Trojan.HTML.FLAWEDAMMY.AA	
da1ae3da119271163353b68a5bce6dae96f15208c27549680056bcd4f227fdc		
5bc0cb4909f66436dee7db6d51ac0347865e2841598b7399d26d3932249b9b95	Trojan.HTML.FLAWEDAMMY.F	
769988272bef7c201e328e9609d3e465b6f90c82d01b8cc0415b590d6f2f1379	Trojan.HTML.FLAWEDAMMY.E	
502a73c776d5c46b94f880f6d27702c0bd0ed14c297a9412b1986b1d9ee7bc57		
e72a88c8b388ebf51bb6a43813e9d39ab12e18468c81af7e8eaa4a0903a43453	Trojan.HTML.MALINK.FASFE	
f6c15547ae8187155e00902bccbe655babd8fd92f7e1dff45ed119750a43a64f	Trojan.HTML.PHISH.TIAOOHGS	
a62a8f18cb563332171b0bcd6b646aeac19594186413ffadef69e925bce058		
6ebdd60d46c454c463cd6c9aa487a226ac0b505684e1882208c6ded91e9cb36f	Trojan.HTML.REDIR.WVEHXO	
4a05aa6a5667598f93a5a5089bf110f52a0f7c6fc510db2bbcccccf789565090	Trojan.W97M.DLOADER.PUP	Excel VBA Macro
0bab91b3290a63c14f2bcc134e89c47b520f8e09d97d1771ec2c2506dce0a57e		Doc VBA Macro
10f163f27391c8a9cae6676af2871604b34fbc0cff548b086cd5d1cfe1007949		
b2e35df4e3b4317cbc35001897c6cd53d428416b03639bb65933e3ce1f160fa2	Trojan.W97M.FLAWEDAMMY.AA	Doc Macro
0fe745b26efe3c4d82389d10c43e5755a30e1a794d920a807915313f049048eb		
34ef6ca151453369a321fee1a17450808b40bd35b6fa16de79742d88e382c31b	Trojan.W97M.FLAWEDAMMY.AB	Doc VBA Macro

SHA-256	Trend Micro Detection	Notes
09cfcc51dd91c7e16f8936f9f47842276974e0d5fe993566911e031b37e98d63	Trojan.W97M.FLAWEDAMMY.AB	Doc VBA Macro
50d5cd656ba4061b85e048667bb9720ad0ad309116c591c3158726a165d83bae		
5c361bab21f7db6a58f23c6db38d88b35943544687bd8c643031add429ed135d	Trojan.W97M.FLAWEDAMMY.AC	
fcfaa5a008448be96b273ca3d59e28d4a0b20156909da676520dc5103d15ad77	Trojan.Win32.DELF.AKT	ServHelper
0617ddb1b7e7ab86159bc7be01c86c50a9d7a57db0914486c496e277c10b19ae	Trojan.Win32.DLOADR.AUSUQE	Amadey
5e1e97fc52d2a0eed9272dc4b5603d2a5c142326cc3fb8fa22fb70902e9d056e	Trojan.Win32.FLAWEDAMMY.AA	FlawedAmmy Downloader
bb5054f0ec4e6980f65fb9329a0b5acec1ed936053c3ef0938b5fa02a9daf7ee	Trojan.Win32.GELUP.A	Gelup
f3b2d2d16ee2b16fe5c288f9cccb2b2ade13475ed902fda49fdb36493515332e		
1f2be0267a715b6537e14dc8150b32e5cd48bd2642889f89912ec3d1a4bfe1ea	Trojan.X97M.DLOADER.PUP	Excel VBA Macro
65ddf99b086091548237f563f39e7b9752f9e4f0d4d59ef50068cc7ab852097b	Trojan.X97M.DLOADR.JHLZ	Excel Macro
6bfe268c3725cbb75a10f998f019c297e46d09ca9e6222b852d746a5cf522673		
0ca16e3bbff4db92f13797cced761ad59b08d0f6d1489dd24124afbd060c9811		
45aee15c3da9bea29f189e8440ca4f0db7af2ed03b3173b203037c1d282e64b7		
ff0ef9cda2216faa837aeecc4c69b5cb77712557746fddc1939b032db910a6efd		
71207a001ee28a5c517d7dfc1567825a1f7c23ab17813712d09fbed2b139206d		
524b71a88312eaf5953eb839e9d43c8a51d3ff8c9753a837efa34cdb6f3d9cd8		HTML
4094e075b1a9523f76b451071c2df62c345e6fea65c1813758a4154f5688390d	Trojan.X97M.DLOADR.JHMA	Excel 4.0
df3268cf0b904734819ceb7cc10a3955992edb6d596fc432f0e44c79184f2b3		Excel Macro
d8e569dec9850e2b034f99d78cc78fb3b3fad0ab724f890cf65e7110fef3ce4f		
9a1cde5e4e066932debff522b48144ddcf9507955b618cd99815853a230a0ebe	Trojan.X97M.DLOADR.JHMB	Excel VBA Macro
412a76221b95352ff08b86f569ed99599a7cd6ebacc24ccbdd770a7b24b121c7		
a13669d5f8f5d5b67f72b1e5e83e9eaa28ad3e23a9757f2484ce7f5878af2251	Trojan.X97M.DONOFF.AI	Excel 4.0
4708ef059434d195c3eb2e7d01188ee42bccb4219a7aa2d12b0e7ac90544439d	Trojan.X97M.FLAWEDAMMY.SM	Excel Macro

SHA-256	Trend Micro Detection	Notes
edaae521bf4d85a08748119d38d905ef1fd101f63f977f9a2111a280773b3655	Trojan.X97M.FLAWEDAMMY.SM	Excel VBA Macro
15301f69844ff2bdcf77dab4bc3cc604a1ba19460eda5c2ccdab077fe7624d287		
55110e9d4b69f35fbc1c41c21c54ffb556e261fdeb2fa5da7ddd2b4fabled3827		
a092bd3894ef02b6b4c9ec7112befad2791b0b907b3510f90b4fcf2ef8d23450		
5f701d503f9e4fb31fcc5c251f9e647e6dcf266d0635ca4b6b856b50942bd78a		
c05f5f4559ce43fbcefdcbf76c7a9e71db4db97afe45786b5c7e924aa130cfb		
1ea33acd21085c06a97d0ff240a55de8fb2496900bd6fd0e03247d107e80ca	Trojan.X97M.FLAWEDAMMY.C	Excel Macro
b35e2f1010f2f0203f414437362f44044254e62c11895ad0b7561e22d41c8e15		Excel VBA Macro
5e3243428001552bdf3873d7bdbde0303d67253c5ec43dc5951ce5de939087a9		
ff6f9f3006945512678c8f8148345ea75468cbb5a2e7f82f470db3d2382f9007		
7dfc8de60b4e192cb0d6d5479b18715597164ccdc433021aac5af4ce017aee8		
a9ec81179948798b21929d56ac0e8883fd30bf6ac17f6e9dcbf9c85bbc4a3be7		
6311fda702418ed9e24b3d554296ea847d884c602316ca6f7a3544b44cb17221	Trojan.X97M.FLAWEDAMMY.D	Excel VBA Macro
8621fa54946096ed38aee5cbcc068c0620416a05c17328a527673e808847850d		
eb3792fc83cd65823bc466e7253caf12064826b058230666d2ed51542ac59275		
f21039af47e7660bf8ef002dfcdb0c0f779210482ee1778ab7e7f51e8233e35c		
0e91e6e17f8c8e2f1ae29e13f116c8611cb7679607695eed355025295fb1999a		
01163d0223a353014d14347e1ed2f2873df3ed441d3b91652c045309ba171df5		
11a9ae4896f5568c43d697a6e2949746d2c6cef8a35beabbd96e03bb9e8de521	Trojan.XF.DEDEX.M	
56db1f67c467094b0386b7790cb12efb6f2de5cbbb2ed1f8f63a8bb698b4e26b	Trojan.XF.DEDEX.SMNH3	
a9e508392956bdab0d7ccaaf423569d645af43154ba5d9213864328aa28662f9		
c402673cfc7d3012789efdcc0ea865273aa18cf1ffd4e2364959b97b352f85e5		
ecf19496fcbde3c92aa37000ba6e87f26f19d6d753c958830b7f411d39eccc07		

SHA-256	Trend Micro Detection	Notes
a088b80280f841f2c793dd0a75970ba70d2322eac57778a407d16f899fa53951	Trojan.XF.DEDEX.SMNH3	Excel 4.0
e91feb6dac52ce29aad52daa369cb80e6e118f17427c3abcd03366cefb04ecd9		
55951ac49f5792d8c1bfb0072db56895ab5b290b531ed8803b809b62e1f4f3cb		
751a31e4705a4d0ccf08590ba4a1a50096651b6a045a6f5462716cff4d224c82		
518998b37f6e9f1f7fb102503272d0a3e4a3e37500985a8cdb1d495078e22951		

## Domains and URLs Related to TA505's Latest Spam Campaigns

Domain/URL	Notes
hxxp://bigpresense[.]top:80/es/es[.]php	C&C Server
hxxp://shortag[.]jicu/docs/s[.]php	
tcp://185[.]106[.]122[.]120:80	
tcp://185[.]117[.]89[.]139:80	
tcp://185[.]117[.]89[.]145:80	
hxxp://handous[.]net/ppk/index[.]php	C&C Server (Amadey)
hxxp://safegross[.]com/ppk/index[.]php	C&C Server (FlawedAmmy RAT)
tcp://169[.]239[.]128[.]186:80	FlawedAmmy Downloader
tcp://185[.]117[.]89[.]145:80	
hxxp://179[.]43[.]147[.]77/01[.]dat	
hxxp://54[.]38[.]127[.]28/02[.]dat	FlawedAmmy RAT
hxxp://54[.]38[.]127[.]28/02[.]dat	
hxxp://109[.]94[.]209[.]178/02[.]dat	
hxxp://176[.]105[.]252[.]168/01[.]dat	
tcp://185[.]117[.]89[.]145:80/	

Domain/URL	Notes
hxxp://149[.]5[.]209[.]70/02m	Malicious Doc VBA Macro
hxxp://195[.]123[.]245[.]185/04m	
dp45320398[.]lolipop[.]jip/20[.]06[.]2019_418[.]64[.]doc	Malicious Download URL
dp45320398[.]lolipop[.]jip/20[.]06[.]2019_705[.]12[.]doc	
hxxp://185[.]176[.]221[.]103/01[.]dat	
huseyinyucel[.]com[.]tr/20[.]06[.]2019_781[.]08[.]xls	
hxxp://109[.]94[.]209[.]178/r3	
hxxp://149[.]5[.]209[.]70/02m	
hxxp://169[.]239[.]129[.]60/k1	
hxxp://169[.]239[.]129[.]61/k1	
hxxp://176[.]105[.]252[.]168/r1	
hxxp://179[.]43[.]147[.]77/01[.]dat	
hxxp://179[.]43[.]147[.]77/p2	
hxxp://179[.]43[.]147[.]77/pm1	
hxxp://179[.]43[.]147[.]77/pm2	
hxxp://185[.]140[.]248[.]17/01[.]dat	
hxxp://185[.]140[.]248[.]17/lt1	
hxxp://185[.]140[.]248[.]17/lt2	
hxxp://185[.]140[.]248[.]17/lm1	
hxxp://185[.]140[.]248[.]17/lm2	
hxxp://185[.]176[.]221[.]103/m1	
hxxp://185[.]176[.]221[.]103/m2	
hxxp://185[.]176[.]221[.]103/w1	
hxxp://185[.]176[.]221[.]103/w2	
hxxp://195[.]123[.]245[.]185/04	
hxxp://195[.]123[.]245[.]185/04m	
hxxp://54[.]38[.]127[.]28/02[.]dat	



Domain/URL	Notes
hxxp://54[.]38[.]127[.]28/pm4	
hxxp://95[.]216[.]189[.]14/02[.]dat	
hxxp://95[.]216[.]189[.]14/m4	
hxxp://95[.]216[.]189[.]14/w3	
hxxp://95[.]216[.]189[.]14/w4	
hxxp://aureliostefaniniarte[.]com/11-Jun-2019_a437f673[.]xls	
hxxp://bascif[.]com/tt1	
hxxp://bascif[.]com/tt2	
hxxp://carpc[.]si/OZ00488941[.]xls	
hxxp://cdpet[.]org/20190614864789048[.]xls	
hxxp://cjsebbelov[.]dk/11-Jun-2019_b901fe43c[.]xls	
hxxp://counciloflight[.]bravepages[.]com/conto-134[.]xls	
hxxp://e-commerce-shop[.]com/11-Jun-2019_412ac541[.]xls	
hxxp://engast[.]top/rt1	Malicious Download URL
hxxp://engast[.]top/rt2	
hxxp://jbswin[.]net/rt3	
hxxp://jbswin[.]net/rt4	
hxxp://kosmetolodzy[.]com/11-Jun-2019_f963a2afe3[.]xls	
hxxp://kramerleonard[.]com/OZ74509374[.]doc	
hxxp://lancehugginsltd[.]co[.]uk/Attestation_impots[.]xls	
hxxp://lidovemilice[.]unas[.]cz/Payment-503_Copy[.]xls	
hxxp://luchies[.]com/11-Jun-2019_e762a23d[.]xls	
hxxp://makosoft[.]hu:80/out_1[.]exe	
hxxp://nanepashemet[.]com/20[.]06[.]2019_781[.]37[.]xls	
hxxp://nivans[.]pro/Attestation_impots[.]xls	
hxxp://ogallar[.]com/~inaki/11806201980891123[.]doc	
hxxp://operasanpiox[.]bravepages[.]com/20190614890563891[.]xls	

Domain/URL	Notes
hxxp://pack301[.]bravepages[.]com/Payment-892_Copy[.]xls	Malicious Download URL
hxxp://sscvl[.]fcpages[.]com/l1806201990010667[.]doc	
hxxp://staler[.]se/l1806201911266473[.]doc	
hxxp://trictac[.]com/l1806201989006781[.]doc	
hxxp://ulda[.]com/l1806201972395014[.]xls	
hxxp://www[.]versiliaradi[.]it/conto-043[.]xls	
iluj[.]in/20[.]06[.]2019_013[.]93[.]xls	
nagomi-753[.]jp/20[.]06[.]2019_784[.]09[.]doc	
nagomi-753[.]jp/20[.]06[.]2019_800[.]77[.]doc	
nanepashemet[.]com/20[.]06[.]2019_781[.]37[.]xls	
orderlynet[.]net/r5[.]exe	
runpen[.]dothome[.]co[.]kr/20[.]06[.]2019_673[.]81[.]doc	
runpen[.]dothome[.]co[.]kr/20[.]06[.]2019_701[.]82[.]doc	
workingsolutionsrome[.]org/~terryh/20[.]06[.]2019_430[.]22[.]xls	
hxxp://engast[.]top/rt2	Malicious Excel 4.0
hxxp://jbswin[.]net/rt4	
hxxp://179[.]43[.]147[.]77/p2	Malicious Excel VBA Macro
hxxp://179[.]43[.]147[.]77/pm1	
hxxp://179[.]43[.]147[.]77/pm1	
hxxp://179[.]43[.]147[.]77/pm2	
hxxp://179[.]43[.]147[.]77/pm2	
hxxp://ogallar[.]com/~inaki/l1806201980891123[.]doc	Malicious HTML
hxxp://sscvl[.]fcpages[.]com/l1806201990010667[.]doc	
hxxp://staler[.]se/l1806201911266473[.]doc	
hxxp://trictac[.]com/l1806201989006781[.]doc	
hxxp://bigpresense[.]top:80/es/es[.]php	C&C Server

## **TREND MICRO™ RESEARCH**

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