

A Optimal List of Nodes Considered for Correlation Attack

A.1 Middle-guard Nodes

Type	Nom	Adresse IP	Type	Nom	Adresse IP
M	OKCompanion	207.154.232.207	MG	TorFafache	51.255.44.183
MG	nastja	134.19.177.109	M	TORVoid	207.154.239.150
M	currentlane	46.4.125.2	MG	anonymiton	138.201.132.17
M	DanWin1210	45.77.56.43	MG	Arne	193.35.52.53
MG	cry	192.42.115.101	M	Gromit	94.23.173.93
MG	dopper	192.42.113.102	MG	JPsi2	37.200.99.251
MG	0x3d004	62.138.7.171	MG	GermanBight	136.243.114.62
M	linuxthefish2	62.210.142.39	MG	NinJaIs	195.154.226.249
MG	motmot	137.205.124.35	MG	tiflin	163.172.21.117
MG	locksat	62.210.93.142	MG	Lule	193.11.164.243
MG	poiuty	5.39.64.7	M	Unnamed	188.165.138.6
MG	ginoBlanco	157.97.107.57	MG	mullbinde9	163.172.13.165
MG	BlickWinkel	80.100.250.244	MG	Richie	217.79.178.60
M	Iridium	62.138.7.231	M	losttrail	104.131.181.174
M	bradpit	217.160.141.52	MG	niftychipmunk	94.198.98.61
MG	Zitroneneis	144.76.128.206	MG	FastR42	163.172.82.3
MG	0x3d001	91.121.23.100	MG	Torres	138.201.149.21
M	epow0tornode	146.0.32.144	M	marcobr	79.137.35.149
MG	BlueLine	178.62.22.36	MG	TorMeSoftly	79.137.112.5
MG	Onyx	192.42.115.102	MG	itl16	5.34.180.231
M	NikkelPerformance	82.165.96.163	MG	startx1	163.172.186.200
MG	HumanistischeUnion	193.24.209.70	MG	gongoing	178.63.26.116
MG	OrangeLine	188.166.23.127	MG	wg1337	188.165.145.157
M	DerNick	84.187.138.82	MG	remedy	212.16.170.158
M	slacknet	148.251.221.163	MG	ratatata	217.20.130.72
MG	belphegor	178.62.107.194	MG	Unnamed	138.68.174.81
MG	radia4	91.121.230.216	MG	Jans1	212.51.134.123
MG	ENiGMA	5.9.121.207	MG	TheEpTicRelay1	51.15.131.29
MG	3cce3a91f6a625	85.145.173.31	MG	topinambour2	92.89.144.177
MG	LinuxLanNetDUS	89.163.128.59	MG	HORUS1	85.10.203.171
MG	Cloveri	84.80.80.69	MG	firstor	93.115.97.242
MG	torfa	79.172.193.32	M	TykRelay06	185.96.180.29
M	selma	188.165.28.152	M	MunichSkyLoxalNet	94.130.32.101
MG	sigaba	188.165.204.220	M	Heimdall	178.32.71.248
MG	0x3d002	91.121.23.100	MG	Aerodynamik03	193.70.43.76
MG	RSF12thMarch	192.36.27.7	MG	Unnamed	51.255.39.110
MG	proton	138.201.211.234	MG	ieditedheconfig	148.251.182.82
MG	SchizoTor	188.165.194.195	M	stars1	8.26.94.18
MG	supc0re	217.160.15.198	M	Unnamed	91.121.136.132
MG	lovejoy	178.62.60.37	M	Nav	178.62.213.105
MG	spechttor1	138.201.169.12	MG	torfyshin	51.15.135.103
MG	criticalmass	192.36.27.4	MG	SoulOfTheInternet	109.239.58.247
M	sevek	93.190.138.115	M	kcaj	188.166.155.3
MG	colosimo	109.236.90.209	M	Infarction	98.109.29.99
M	sousveillance	51.255.75.3	MG	sbg	51.254.115.225
MG	TykRelay03	85.235.225.239	MG	metallica	89.163.210.164
MG	radia3	91.121.230.214	MG	BARACUDA	93.180.156.84
M	bluesky	178.62.193.49	MG	NurvnetTor01	78.192.89.9
MG	badja	5.39.218.131	MG	tbl	46.4.45.188

M	DeltaIV	37.61.209.150	M	panopticism	51.255.75.3
MG	peace	138.201.149.20	MG	ChickenLiver	178.62.112.71
MG	serenitor	78.194.220.54	MG	TykRelay01	85.235.250.88
M	catelyntully	188.165.19.61	MG	Viking	62.210.84.34
MG	inky	82.220.89.53	MG	falared	195.154.200.129
MG	HSLtor	192.36.27.7	MG	PROEFFECTivePy	46.101.42.155
MG	porthill	136.243.176.148	MG	KennyMcCormick	216.218.222.10
M	Iridium66	62.138.10.62	MG	mccowan	179.43.168.166
M	undercoveragent	178.32.47.140	MG	bakunin2	178.16.208.59
MG	redjohn1	62.210.92.11	MG	bakunin	178.16.208.57
MG	tor1kryptonit	78.156.117.236	MG	idfTor1	62.210.105.47
M	ak3812	212.47.234.212	MG	torpidsDEmyloc1	185.15.244.124
MG	MariaBonita	139.59.172.93	MG	AsiaArgento	163.172.94.119
MG	alder	138.68.76.180	MG	hamster	178.62.201.15
M	MrBelvedere	178.62.98.16	MG	PinkLine	198.199.64.217
MG	collide	138.201.211.235	MG	devsum	51.254.101.242
M	hsjeufh24h6	93.186.200.213	MG	sputnik	188.40.128.246
M	idabwells	5.189.138.9	MG	torpidsDEdomainf2	134.119.36.135
MG	henkdefriemel	84.245.27.209	MG	PartitoPirata	188.166.16.91
MG	Unnamed	89.163.225.115	MG	IPonU0	51.255.168.229
MG	OmuraVPN01	188.166.50.222	MG	PaulG	94.23.154.36
M	Torratiju3	62.210.140.119	M	torpidsDEevanzo	178.254.40.5
M	anonymous	138.201.255.245	MG	falklands	213.32.19.158
MG	DanWin1210	46.4.77.210	MG	RedLine	159.203.32.149
M	Wallace	94.23.173.93	MG	TEXAS	51.15.129.181
MG	joszef	195.154.209.91	MG	fr0akatala	176.31.163.89
MG	TORfrance	94.23.29.204	M	FishersTorRelay2	173.212.197.112
M	Pudhus	138.68.78.95	MG	powerrelay	163.172.209.161
M	ksdev2	37.187.176.64	MG	elektrobier3	46.165.221.207
M	paulbsd	163.172.131.164	MG	nij03	163.172.149.122
M	CatRelay	85.14.244.114	MG	DietMtnDewCodeRed	94.242.209.120
MG	Smeerboel	192.87.28.82	MG	bauruine201	62.210.137.230
MG	quadhead	148.251.190.229	MG	bos	108.61.99.149
MG	Eos	212.227.9.77	MG	TykRelay08	185.96.88.164
MG	radia5	91.121.230.218	MG	belina	151.80.141.122
M	LunaRises	176.9.43.26	MG	HomwerRELAY	144.76.91.46
M	VSIFweb	163.172.147.53	MG	minisausage	50.7.184.58
MG	GrmmLITavis	163.172.194.53	MG	tralhalla	193.70.43.233
MG	GermanCraft	94.23.204.175	MG	scaletor	212.47.229.2
MG	Cajun	46.101.104.245	MG	arnall	82.103.140.87
MG	saisamon	5.255.61.130	MG	pusith	88.99.21.171
MG	0x3d005	62.138.7.171	MG	bauruine204	212.83.154.33
MG	Unnamed	217.79.179.177	MG	nosf3ratu	89.163.224.70
MG	demang	93.115.91.66	MG	bountiful	46.105.227.109
MG	regar42	62.210.244.146	MG	spiraldog	178.62.20.117
MG	tor7kryptonit	78.156.117.236	MG	awoooooo	163.172.24.57
M	GoodfellowTorRelay	92.222.180.87	MG	bauruine203	212.83.154.33
M	CryoBBNx	51.254.45.43	MG	1337haxx0r	164.132.100.131
MG	swain	185.38.14.241	MG	randomCyclone	62.210.250.192
MG	Unnamed	195.154.237.147	MG	0x0143	185.61.148.199
MG	DETor02	89.163.225.7	MG	Alastor	62.210.123.24
MG	AlwaysWaanaFly	207.154.244.55	MG	tor02k	163.172.152.231

MG	Unnamed	93.186.200.68	MG	marschiertor	134.130.181.43
MG	SchizoTor2	94.23.1.164	MG	azertyFR	62.210.178.248
MG	meinkleinertor	31.7.186.142	MG	DanWin1210	5.196.29.217
MG	VivaLuxxx	91.121.224.10	MG	randomaccess	89.163.210.163
MG	rofftor1	164.132.77.175	MG	voidray	163.172.56.248
M	torexitnode	185.50.191.250	MG	toBee	85.220.190.246
MG	tor4kryptonit	188.114.140.245	MG	FreeSpeechSwissFTTH	144.2.123.135
M	Init6TorRelay	178.63.138.17	MG	servbr7	193.70.43.102
MG	OzDqSjWvi2NFpDubvxp	94.23.7.161	MG	Unnamed	62.210.206.25
MG	BrainStone	188.165.222.39	MG	Challenger	149.202.181.214
MG	TORmany	89.163.225.145	M	silentrocket	82.223.21.74
MG	Hydra	212.227.11.25	M	spying	37.230.119.37
MG	tesuji	148.251.14.214	M	somerandomnode	213.251.226.175
MG	StarGAYed	89.22.100.64	MG	csailmitnoexit	128.52.170.130
MG	radia0	91.121.230.208	MG	Lightbeam	37.252.185.87
M	hellodear	149.202.181.41	MG	elektrobier2	46.165.254.40
MG	redjohn	62.210.92.11	M	ninov2	164.132.107.108
M	luclu7	195.154.171.158	MG	0xFFFF	90.87.20.111
MG	LittleFoxTSA	178.63.154.93	M	dovecote	149.86.117.215
M	abcdefghijklm	188.165.5.14	M	bruins	85.25.44.141
MG	NewtonsConfigIT	80.127.137.14	MG	fra1iejide	79.133.37.237
M	FishersTorRelay1	138.201.3.75	M	ididnteditheconfig	81.30.159.75
MG	Scrubsss	212.83.165.54	MG	Unnamed	46.4.49.201
MG	DunphysTorRelay	62.210.213.17	MG	raptor	91.134.133.88
MG	TykRelay02	144.76.253.229	MG	behrmann	46.28.207.107
MG	tagos	77.68.11.42	MG	bauruine202	62.210.137.230
MG	Tor4ebeishoeto	163.172.129.29	MG	servbr2	212.83.158.20
MG	Jans	212.51.134.123	MG	tornoderdednl	178.62.199.226
MG	SEC6xFreeBSD64	192.87.28.28	MG	fluxe4	131.188.40.188
MG	tor0kryptonit	188.114.140.245	MG	Evey	87.106.249.118
MG	TotorBE2	5.39.33.178	MG	beddini	94.242.255.112
MG	wien	94.23.247.42	MG	sauronkingofmortor	137.74.116.214
M	turtletor00	83.169.6.12	MG	Aerodynamik01	5.196.23.64
MG	Unnamed	195.154.240.145	MG	RelayW	37.187.30.78
M	hsjeufh24h7	51.15.52.16	M	nevermind	212.51.142.37
MG	Unnamed	89.16.176.158	MG	ponttor	134.130.181.212
MG	Tornode	92.222.115.28	MG	DaveDoe	167.114.219.61
M	fastprivacyo1	51.175.193.142	MG	mamba	78.142.19.11
MG	CalyxInstitute07	82.94.251.227	MG	ritirong	46.165.250.224
M	T0Relay1	178.254.41.20	MG	pitcairn	81.7.10.203
M	everdene	95.215.61.4	MG	Rhea	104.131.11.214
M	tuasorella	69.195.146.158	MG	guitti	88.99.21.163
M	patty	188.165.28.152	M	v01d	78.107.239.213
MG	BrownLine	46.101.102.71	MG	jaures3	178.16.208.60
MG	inyx	91.134.217.18	MG	pablobm002	178.62.93.36
MG	stoychev	104.238.167.111	MG	Unnamed	91.105.203.92
MG	jaures4	178.16.208.62	M	darknednode01	82.95.100.241
MG	Unnamed	195.154.250.239	MG	cxx4freedom	217.79.190.25
MG	SECxFreeBSD64	195.169.125.226	MG	aruba03	89.40.116.223
MG	torrelay1ph3xat	86.59.119.83	MG	grenouille	178.33.183.251
M	hwds	18.82.3.136	M	nyanpasu	69.30.232.180
M	MacksMaster	85.229.37.150	MG	firstor2	86.105.212.130

MG	hansdahlsson	178.62.18.161	MG	outbreak	46.101.142.174
MG	TheDarkLord	79.137.106.154	MG	dorrisdeebrown	192.36.27.4
M	Unnamed	188.165.138.6	MG	dumpster	81.30.158.213
MG	foobarbaz0815	185.104.140.172	MG	wulfspider2	51.254.99.118
MG	DETor01	89.163.225.6	MG	guinan	95.211.224.12
M	puckownhostcz	207.154.244.147	MG	Biverse	178.63.97.34
M	pw	134.119.3.164	MG	ccorelay	213.32.68.101
MG	Fastnet	188.40.51.232	MG	Alkaid	130.230.113.234
MG	HY100	178.62.197.82	MG	sela	94.23.165.38
MG	TotorBE1	5.39.33.176	MG	sexwarriorHQ	51.254.220.21
MG	servbr6	79.137.33.131	MG	relay0	178.62.196.71
MG	dthpulse	81.0.226.3	MG	wikimediaeqiad1	208.80.154.39
M	justarelay2	178.33.90.156	MG	dousnior	158.255.7.61
MG	belina	136.243.62.99	MG	bauruine11	144.76.71.91
MG	BensTorRelay	195.154.163.119	MG	BassBeatsMelody	185.82.203.209
MG	Zeta	62.210.138.3	MG	Ichotolot62	81.7.14.31
MG	fithnovember	79.137.116.43	MG	Hotel	212.47.230.5
M	skydiver	93.104.209.61	MG	oswin	62.210.36.46
MG	bakunin3	178.16.208.61	MG	radia2	91.121.230.212
MG	Unnamed	137.74.164.213	MG	damita	91.229.76.124
M	rosvozektoriFR	149.202.238.198	MG	deejay	51.15.49.8
MG	csUniHB	134.102.200.101	MG	pldtor	5.196.58.96
M	simplet	87.120.254.204	MG	Unnamed	37.139.24.90
MG	malene	185.73.220.8	MG	servbr5	51.255.203.235
MG	torpidsFRonline3	195.154.164.243	MG	jonasBebe2	193.200.241.195
MG	torkerull	37.191.160.173	MG	torpidsFRonline4	163.172.25.118
MG	bradburn	62.210.125.130	MG	torZilla	195.154.251.25
M	CatRelay	85.14.245.175	MG	Tiloweb	165.227.135.224
M	torpidsDEmyloc3	89.163.224.187	M	whizzpopper01	185.14.185.240
MG	Unnamed	149.202.190.14	MG	Unnamed	51.255.50.238
MG	Parckwart	173.212.233.139	MG	kyrtor	144.76.73.140
MG	isthisthereallife	5.148.175.35	MG	torzabehlice	81.2.209.10
M	isthistherealworld	212.51.156.224	M	rango	82.211.31.242
MG	klauber	94.242.228.174	MG	needlespecial	188.166.94.214
MG	RSFPressFreedom	192.36.27.6	MG	Bratwurst	138.201.92.116
MG	jakobstor	134.130.181.49	MG	jaures	178.16.208.56
MG	khao	87.236.194.23	MG	kili	178.62.173.203

A.2 Exit Nodes

Type	Nom	Adresse IP	Type	Nom	Adresse IP
E	Unnamed	185.170.41.8	E	Daphne	51.15.39.2
E	PrivacyRepublic0001	178.32.181.96	E	Kemmetto	185.48.33.144
E	Unnamed	185.170.42.4	E	Unnamed	46.183.218.199
E	IPredator	197.231.221.211	E	Libero	64.113.32.29
E	hviv104	192.42.116.16	E	Apollo	162.213.3.221
E	apx3	37.220.35.202	E	caucas	85.25.103.69
E	reactortornode	78.109.23.1	E	noiseexit03b	104.223.123.99
E	chulak	176.126.252.11	E	prwseccom	51.15.8.198
E	KyleBroflovski	216.218.222.11	E	runodetor	163.172.125.207
E	orion	94.242.246.24	E	thisisatorexitnode	141.170.2.53
E	marylou1	89.234.157.254	E	noiseexit03a	104.223.123.98
E	apx1	185.38.14.215	E	niftyhutia	51.15.70.13
E	StanMarsh	216.218.222.12	E	Necto7	93.115.95.216
E	aurora	176.126.252.12	E	Necto5	93.115.95.206
E	zwiebeltoralf	5.9.158.75	E	talyn	79.137.79.167
E	MilesPrower	62.210.129.246	E	DigiGesTor2e2	176.10.104.243
E	apx2	185.38.14.171	E	Highflomor	185.48.33.145
E	destiny	94.242.246.23	E	noiseexit03c	104.223.123.100
E	BlockONE	185.170.42.18	E	AlGrothendieck	80.67.172.162
E	memcpy	163.172.67.180	E	lewwerDuarUesSlaav	91.219.237.244
E	birnenpfeffimitzimt	212.21.66.6	E	eddy	109.201.133.100
E	ParEpistemenTaksis	163.172.101.137	E	niftypika	163.172.140.123
E	runningTUX	185.113.128.234	E	DFRI4	171.25.193.78
E	csailmitexit	128.52.128.105	E	noiseexit03d	104.223.123.101
E	watchme	163.172.212.115	E	thenorthremembers	79.137.80.94
E	ogopogo	192.160.102.170	E	Jisdigliz	185.48.33.145
E	Unnamed	62.210.115.87	E	dexter	195.228.45.176
E	manipogo	192.160.102.169	E	niftypedetidae	51.15.62.146
E	icsiExit	185.107.81.233	E	rejozenger	94.142.242.84
E	amazonas	77.247.181.163	E	PhantomTrain7	65.19.167.130
E	PrivacyRepublic0002	178.32.181.97	E	niftyvolcanorabbit	163.172.139.161
E	ns3067031HP	79.137.67.116	E	niftyrat	163.172.162.106
E	tollana	85.248.227.164	E	tor03k	164.132.51.91
E	kree	85.248.227.165	E	torpulse	91.134.232.48
E	lupine	5.28.62.85	E	CryptoQuebec	144.217.167.240
E	DC225TorExitNode	46.101.139.248	E	0xd002	51.15.76.86
E	modiol	193.15.16.4	E	chaucer	192.160.102.166
E	sowinetz	91.223.82.156	E	DigiGesTor1e1	176.10.104.240
E	anomnode1	79.124.59.202	E	DigiGesTor2e1	176.10.104.243
E	DFRI1	171.25.193.77	E	TorRocks	51.255.196.218
E	ori	85.248.227.163	E	Necto2	93.115.95.202
E	MidnightRun	5.254.112.154	E	KActionLibre	62.176.4.10
E	marylou2	89.234.157.254	E	niftypatagonianmara	51.15.45.131
E	niftycapybara	163.172.179.129	E	niftygerbil	51.15.70.226
E	Unnamed	62.210.105.116	E	henkdefrommel	51.15.63.229
E	PiratenParteiNRW	5.199.130.188	E	heineb	51.15.53.83
E	PrivacyRepublic0004	178.32.181.99	E	ibibUNC0	204.85.191.30
E	prawksi	192.160.102.168	E	TildeMash	209.66.119.150
E	liskov0	149.56.223.240	E	vitellius	209.133.66.214
E	cussedotorg	66.70.217.179	E	u4ea98	208.67.1.83
E	Dhalgren	46.165.230.5	E	RingsOfFury	209.249.157.69

E	Necto6	93.115.95.207	E	tor4thepeople3	51.15.43.205
E	Unnamed	62.210.37.82	E	cowcat	192.160.102.165
E	torlesnet1	199.87.154.255	E	Andromeda	144.217.161.119
E	DigiGesTor1e2	176.10.104.240	E	proximus	209.249.180.198
E	BrassHornExit01	185.104.120.7	E	multisec2	193.90.12.87
E	Necto4	93.115.95.205	E	jahjah	173.208.213.114
E	BrassHornExit02	185.104.120.2	E	Necto3	93.115.95.204
E	niftychinchilla	193.70.56.25	E	FreedomWorthNuisanc	185.87.185.45
E	freeBogatov	77.247.181.165	E	FR1h0stedt0r	145.239.74.47
E	PrivacyRepublic0003	178.32.181.98	E	0x00	188.209.52.9
E	BrassHornExit04	185.104.120.3	E	tormachine	87.118.116.12
E	Outfall2	163.172.223.200	E	DigiGesTor3e2	178.209.42.84
E	PhantomTrain4	65.19.167.131	E	venona	163.172.170.161
E	BrassHornExit03	185.104.120.4	E	Unnamed	198.245.60.8
E	Spiral	5.254.79.66	E	niftymouse	51.15.76.81
E	gurgle	198.96.155.3	E	politkovskaja	77.247.181.165
E	dreamatorium	89.31.57.58	E	rehm	62.102.148.67
E	PhantomTrain5	65.19.167.132	E	niftysugarglider	51.15.134.120
E	kramse	185.129.62.62	E	niftycottontail	51.15.34.210