

ERMAC - another Cerberus reborn

 threatfabric.com/blogs/ermac-another-cerberus-reborn.html

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Intro

On July 23 a forum post appeared regarding a new Android banking trojan. The attached screenshots show that it is named ERMAC. Our investigation shows that ERMAC is almost fully based on the well-known banking trojan Cerberus, and is being operated by BlackRock actor(s).

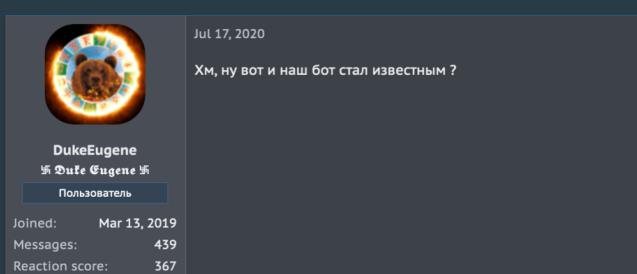
Context

On August 17, a forum member named “ermac” invited anyone interested in this topic to send a PM to make a deal. The user registered just the day before and posted a similar advertisement in his profile. Interestingly enough, the topic starter said that he found the contact 4 days earlier. On the same day, another forum member, “DukeEugene”, posted a message in his account:

“Android botnet ERMAC. I will rent a new android botnet with wide functionality to a narrow circle of people (10 people). 3k\$ per month. Details in PM.”

DukeEugene is known as an actor behind the BlackRock banking trojan that we discovered in 2020. DukeEugene claimed to be the one of the actors shortly after we published our discovery.

BlackRock actor



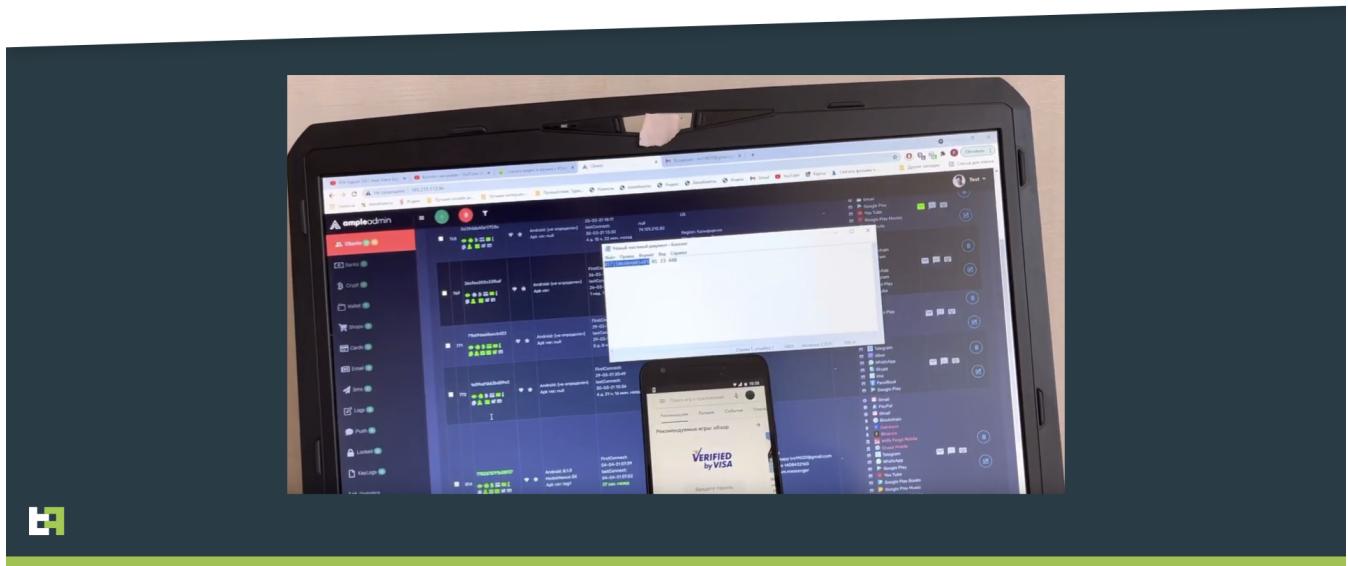
A screenshot of a forum post from the user DukeEugene. The post was made on Jul 17, 2020, with the message "Хм, ну вот и наш бот стал известным ?". The user's profile picture is a circular logo featuring a bear. Below the profile picture, the username is displayed as "DukeEugene" with the Cyrillic equivalent "Джоуи Евгени" and the title "Пользователь". The user's statistics are listed as follows: Joined: Mar 13, 2019; Messages: 439; Reaction score: 367.

"Hm, well, that's the time for our bot to get famous"

We believe that DukeEugene switched from using BlackRock in its operations to ERMAC, as we no longer saw fresh BlackRock samples since the first mentions of ERMAC. One of the reasons behind it could be that BlackRock was discredited: DukeEugene claimed on the forum that one of the buyers who got their bot for test began to scam people advertising it as a new Amplebot banking trojan. The name was taken from the BlackRock's admin panel, which was built using AmpleAdmin template, and the actors didn't change the logo and the name.

Amplebot/BlackRock panel

Screenshot from "Amplebot" demo video



To summarize the story full of twists: a new banking malware appeared on the threat landscape called ERMAC. But is it really new?

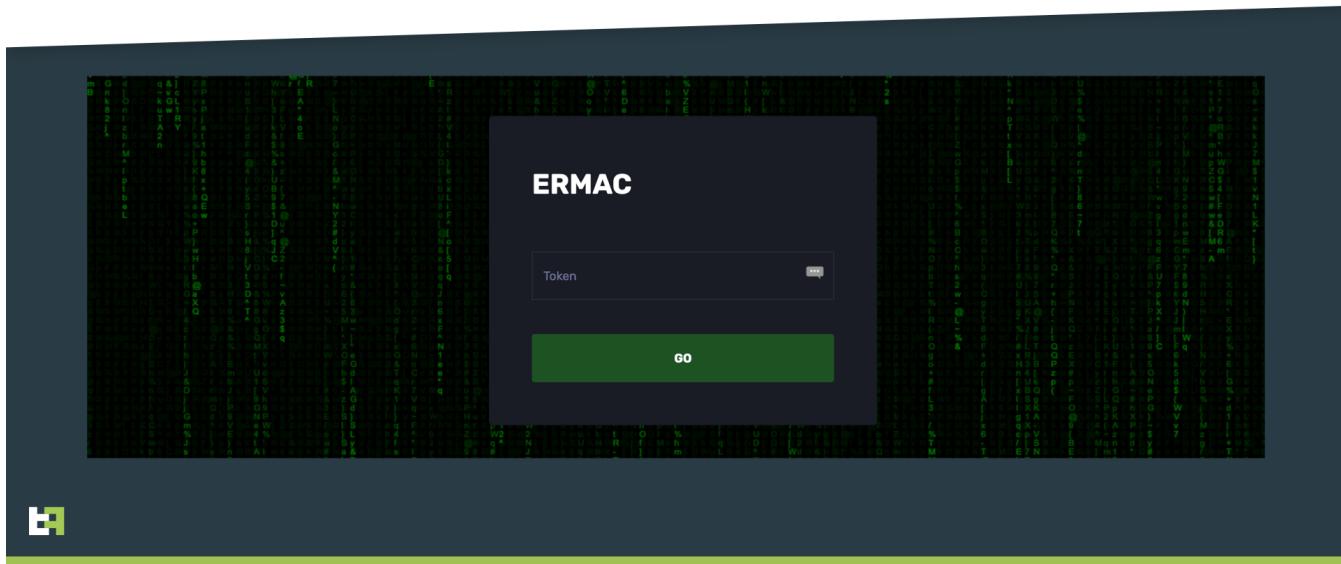
You can't escape Cerberus

If we investigate ERMAC, we can find out that ERMAC is a code-wise inheritor of a well-known malware [Cerberus](#). It uses almost identical data structures when communicating with the C2, it uses the same string data, et cetera.

When we first encountered ERMAC samples, we thought it to be just another variant of Cerberus since the code was leaked several times and a lot of actors try to build their own malware based on its sources. However, the admin panel login page clearly states that this is ERMAC indeed:

ERMAC

Control panel login page



Despite the usage of different obfuscation techniques and new method of string encryption - using Blowfish encryption algorithm, we can definitely state that ERMAC is another Cerberus-based trojan.

Compared to the original Cerberus, ERMAC uses different encryption scheme in communication with the C2: the data is encrypted with AES-128-CBC, and prepended with double word containing the length of the encoded data:

ERMAC

C2 communication

A screenshot of a terminal window displaying a log of network connections. The log is a table with columns for connection ID, source IP, destination IP, port, protocol, and various metadata fields. A red arrow points to the "Data length" column, which contains the value "00 00 02 89".

00000000	50 4f 53 54 20 2f 67 61	74 65 2e 70 68 70 20 48	POST /gate.php H
00000010	54 54 50 2f 31 2e 31 0d	0a 55 73 65 72 2d 41 67	TTP/1.1 User-Agent: Mozilla/5.0
00000020	65 6e 74 3a 20 4d 6f 7a	69 6c 6c 61 2f 35 2e 30	ent: Macintosh; U;
00000030	20 28 4d 61 63 69 6e 74	6f 73 68 3b 20 55 3b 20	Intel Mac OS X 1
00000040	49 6e 74 65 6c 20 4d 61	63 20 4f 53 20 58 20 31	0.4; en-US; rv:1
00000050	30 2e 34 3b 20 65 6e 2d	55 53 3b 20 72 76 3a 31	9.2.2) Gecko/20
00000060	2e 39 2e 32 2e 32 29 20	47 65 63 6b 6f 2f 32 30	100316 Firefox/3
00000070	31 30 30 33 31 36 20 46	69 72 65 66 6f 78 2f 33	.6.2 Content-Length: 653 Content-Type: application/x-www-form-
00000080	2e 36 2e 32 0d 0a 43 6f	6e 74 65 6a 74 2d 4c 65	Data length
00000090	6e 67 74 68 3a 20 36 35	33 0d 0a 43 6f 6e 74 65	:3000 Connection: close Accept-Encoding: gzip, deflate
000000a0	6e 74 2d 54 79 70 65 3a	20 61 70 70 6c 69 63 61	
000000b0	74 69 6f 6e 2f 78 2d 77	77 77 2d 66 6f 72 6a 2d	
000000c0	75 72 6c 65 6e 63 6f 64	65 64 0d 0a 48 6f 73 74	
000000d0	3a 20 31 38 35 2e 32 31	35 2e 31 31 33 2a 34 32	
000000e0	3a 33 30 30 30 0d 0a 43	6f 6e 6e 65 63 74 69 6f	
000000f0	6e 3a 20 63 6c 6f 73 65	0d 0a 41 63 63 65 70 74	
00000100	2d 45 6e 63 6f 64 69 6e	67 3a 20 67 7a 69 70 2c	
00000110	20 64 65 66 6c 61 74 65	0d 0a 0d 0a 00 00 02 89	
00000120	6a 51 41 54 57 72 4d 37	51 6d 52 70 58 55 4c 66	QOATWrM7QmRpXULf
00000130	47 32 6d 71 75 62 5a 67	4f 53 77 4b 46 33 4d 38	G2mqubZgOSwKF3M8
00000140	2b 55 36 44 79 33 78 6d	71 54 63 59 50 62 55 77	+U6Dy3xmqtCYPbUw
00000150	51 4e 30 57 47 39 6f 46	75 47 6c 68 6b 33 66 49	QNOWG9oFuGhkh3fl
00000160	30 50 4d 30 59 6c 52 64	67 47 68 44 0a 79 6b 48	OPM0YIRdgGhD ykH

Another point to support the connection between BlackRock actor(s) and ERMAC actor(s): both BlackRock and ERMAC are known to use **185.215.113.*** IP addresses as their C2.

Commands list

The commands ERMAC receives and processes, are almost identical to the latest Cerberus commands. A couple of commands are added that can clear the cache of the specified application and steal device accounts (new commands **bold**).

Command	Description
push	Shows a push notification (clicking on the notification will result in launching specified app)
startAuthenticator2	Launches the Google Authenticator application
startAdmin	Triggers request for admin privileges
startApp	Starts the specified application
getInstallApps	Gets the list of applications installed on the device
getContacts	Gets the contact names and phone numbers from the address book of the infected device
deleteApplication	Triggers the removal of the specified application
forwardCall	Enables call forwarding to the specified number
sendSms	Sends a text message with specified text from the infected device to the specified phone number
SendSMSALL	Sends text messages with specified text from the infected device to all contacts of the infected device
startInject	Triggers the overlay attack against the specified application
startUssd	Executes the specified USSD code
openUrl	Opens the specified URL in the WebView
getSMS	Gets all text messages from the infected device
killMe	Triggers the kill switch for the bot
updateModule	Updates the payload module
updateInjectAndListApps	Triggers update of the target list
clearCash/clearCashe	Triggers opening specified application details
getAccounts/logAccounts	Triggers stealing a list of the accounts on the device

Campaigns

We were able to identify several campaigns with ERMAC involved. The first major campaign started in late August where ERMAC was masquerading as Google Chrome. We have also seen ERMAC masquerading as antivirus, banking, and media player apps.

At the time of writing this blog we see ERMAC targeting Poland and being distributed under the guise of delivery service and government applications (special thanks to [@malwrhunteam](#)):

ERMAC

Multiple campaigns

Google Chrome

Multiple short campaigns

Poland campaign

Icon	Package Name	SHA-256
Google Chrome icon	com.ngtzcedtzaviep.rohptgea	d692f7db5883c3d99878db61f20ba61491d42a955acf88e2aba86d8c4e10647f
Google Chrome icon	com.uiqawnkudkvjgb.lvcrgylm	6e585ea22d7c68b98be995ab6a3d658d98828e7e19cc1f652fc098021546e9b2
Google Chrome icon	com.qokykbosuwilmduidmt	0b44c4992c48aeffbcf5295d0281b1f41f116e7672186c3fe66b59ce15a67ab80
BoxDeals icon	com.czxvfknrqnqv.huslcn	65619e3afe53268fbcbeseaea6429f23e712c4412edab878def3eb25382894
Media Player icon	com.docmrbjrhecfvgl.xzxf	5c1caebfbfc15fa2cb37ed825492154683659c3c449ae5da9868a89c125f533
Media Player icon	com.apbseapvpvcvlmu.yhun	081av5ba19ef466b71e9ba2fbdd6527dd89f4bdebb02a962a347617b41585
Sabadell Seguridad icon	com.ifmbamixdqxz.hqrwxdfj	eb7362bc1618da2b2b596eeep7fd7f84ac31b933d8c4c9ef221a88ce4afe
McAfee icon	com.fdwqfsqmnkkwem.bhqqzfrk	a03b071555f66f87e338e11ff41ds57b839718fc3f253ac9ec138ee2be0d
mObywatel icon	com.tafupqzpqgmn.tmnhkq	495a0621b2afc6adefbf17dc6c3cf5e92ba8227ac6939a20439b1b9dde878617
mObywatel icon	com.oyouvieqsyf.wotpln	db6246bd192fdfa9614af0a0968362c5de8a3b1cd23b5748392218d2a7d22a
DPD Mobile icon	com.mhyjbezusdvpvxu.jukviuhn	c97882651b478e2836c141cb8a034ccbefdf8f86f4c9f59d5881450eda2424e1
DPD Mobile icon	com.izllwgqflhaao.leyihzm	1832b42c859c747bcc159b7536dc3325869d3722f5673d13a7b86633245ebf32

Conclusion

The story of ERMAC shows one more time how malware source code leaks can lead not only to slow evaporation of the malware family but also bring new threats/actors to the threat landscape. Being built on Cerberus basement, ERMAC introduces couple of new features. Although it lacks some powerful features like RAT, it remains a threat for mobile banking users and financial institutions all over the world.

How we help our customers

ThreatFabric makes it easier than it has ever been to run a secure mobile payments business. With the most advanced threat intelligence for mobile banking, financial institutions can build a risk-based mobile security strategy and use this unique knowledge to detect fraud-by-malware on the mobile devices of customers in real-time.

Together with our customers and partners, we are building an easy-to-access information system to tackle the ever growing threat of mobile malware targeting the financial sector. We especially like to thank the Cyber Defence Alliance (CDA) for collaborating and proactively sharing knowledge and information across the financial sector to fight cyber-threats.

ThreatFabric has partnerships with TIPs all over the world.

If you want to request a free trial of our MTI-feed, or want to test our own MTI portal for 30 days, feel free to contact us at: sales@threatfabric.com

If you want more information on how we detect mobile malware on mobile devices, you can directly contact us at: info@threatfabric.com

Appendix

ERMAC Samples

App name	Package name	SHA-256
mObywatel	com.tafupqzpqgmn.tmnhkq	495a0621b2afc6adefbf17dc6c3cf5e92ba8227ac6939a20439b1b9dde878617

App name	Package name	SHA-256
Google Chrome	com.hxfumpfgokky.bufvpk	2de0f59fd03512e5527c8b8b19595483564ae54cd4904457c4f5bf127949019d
DPD Mobile	com.mhyjbezusdpxu.jukviuhn	1032b42c859c747bcc159b75366c3325869d3722f5673d13a7b06633245ebf32
BoxDeals	com.czxvfknrqnqv.huslcn	65619e3afe53268f5cbe5eae6a429f23e712c4412eda8c70dcfd3ebb25382894

C2 URL

URL

hxxp://185.215.113.42:3000/gate.php

hxxp://185.215.113.94:3000/gate.php

hxxp://185.215.113.81:3000/gate.php

hxxp://178.132.6.150:3000/gate.php

Targets

The list of the targeted applications.

PackageName	AppName
alior.bankingapp.android	Usługi Bankowe
app.wizink.es	WiZink, tu banco senZillo
ar.com.santander.rio.mbanking	Santander Argentina
at.spardat.bcrmobile	Touch 24 Banking BCR
at.volksbank.volksbankmobile	Volksbank hausbanking
au.com.amp.myportfolio.android	My AMP
au.com.bankwest.mobile	Bankwest
au.com.commbank.commbiz.prod	CommBiz
au.com.cua.mb	CUA Mobile Banking
au.com.hsbc.hsbcaustralia	HSBC Australia
au.com.ingdirect.android	ING Australia Banking
au.com.macquarie.authenticator	Macquarie Authenticator
au.com.macquarie.banking	Macquarie Mobile Banking
au.com.mebank.banking	ME Bank
au.com.nab.mobile	NAB Mobile Banking
au.com.newcastlepermanent	NPBS Mobile Banking
au.com.rams.RAMS	myRAMS
au.com.suncorp.SuncorpBank	Suncorp Bank
au.com.ubank.internetbanking	UBank Mobile Banking
ca.mobile.explorer	CA Mobile

PackageName	AppName
ca.tangerine.clients.banking.app	Tangerine Mobile Banking
cc.bitbank.bitbank	bitbank - Bitcoin & Ripple Wallet
cgd.pt.caixadirectaparticulares	Caixadirecta
ch.autoscout24.autoscout24	AutoScout24 Switzerland – Find your new car
cl.bancochile.mbanking	Mi Banco de Chile
clientapp.swiftcom.org	ePayments: wallet & bank card
co.edgesecure.app	Edge - Bitcoin, Ethereum, Monero, Ripple Wallet
co.zip	Zip - Shop Now, Pay Later
com.BOQSecure	BOQ Secure
com.CIMB.OctoPH	CIMB Bank PH
com.CredemMobile	Credem
com.EurobankEFG	Eurobank Mobile App
com.IngDirectAndroid	ING France
com.Plus500	Plus500: CFD Online Trading on Forex and Stocks
com.Version1	PNB ONE
com.aadhk.woinvoice	Invoice Maker: Estimate & Invoice App
com.abanca.bancaempresas	ABANCA Empresas
com.abanca.bm.pt	ABANCA - Portugal
com.abnamro.nl.mobile.payments	ABN AMRO Mobiel Bankieren
com.advantage.RaiffeisenBank	Raiffeisen Smart Mobile
com.aff.otpdirekt	OTP SmartBank
com.airbitz	Bitcoin Wallet - Airbitz
com.akbank.android.apps.akbank_direkt	Akbank
com.albarakaapp	Albaraka Mobile Banking
com.alrajhietailapp	Al Rajhi Mobile
com.amazon.mShop.android.shopping	Amazon Shopping - Search, Find, Ship, and Save
com.amazon.sellermobile.android	Amazon Seller
com.ambank.ambankonline	AmOnline
com.americanexpress.android.accts vcs.us	Amex
com.android.vending	Google Play
com.anz.android.gomoney	ANZ Australia
com.anz.transactive.global	ANZ Transactive - Global
com.aol.mobile.aolapp	AOL - News, Mail & Video
com.appfactory.tmb	Teachers Mutual Bank

PackageName	AppName
com.arkea.android.application.cmb	Crédit Mutuel de Bretagne
com.arkea.android.application.cmso2	CMSO ma banque : solde, virement & épargne
com.att.myWireless	myAT&T
com.azimo.sendmoney	Azimo Money Transfer
com.bancodebogota.bancamovil	Banco de Bogotá
com.bancomer.mbanking	BBVA México (Bancomer Móvil)
com.bankaustralia.android.olb	Bank Austria MobileBanking
com.bankinter.empresas	Bankinter Empresas
com.bankinter.launcher	Bankinter Móvil
com.bankofqueensland.boq	BOQ Mobile
com.barclaycardus	Barclays US
com.barclays.android.barclaysmobilebanking	Barclays
com.barclays.ke.mobile.android.ui	Barclays Kenya
com.bbva.bbvacontigo	BBVA Spain
com.bbva.mobile.pt	BBVA Portugal
com.bbva.netcash	BBVA Net Cash ES & PT
com.bbva.nxt_peru	BBVA Perú
com.bcp.bank.bcp	Banca Móvil BCP
com.bendigobank.mobile	Bendigo Bank
com.binance.dev	Binance - Buy & Sell Bitcoin Securely
com.bitfinex.mobileapp	Bitfinex
com.bitmarket.trader	Aplikacja Bitmarket
com.bitpay.wallet	BitPay – Secure Bitcoin Wallet
com.bmo.mobile	BMO Mobile Banking
com.bmoharris.digital	BMO Digital Banking
com.bochk.com	BOCHK
com.botw.mobilebanking	Bank of the West Mobile
com.boursorama.android.clients	Boursorama Banque
com.btcturk	BtcTurk Bitcoin Borsası
com.caisse.epargne.android.tablette	Banque pour tablettes Android
com.caisseepargne.android.mobilebanking	Banque
com.cajasiete.android.cajasiereport	Report
com.cajasur.android	Cajasur
com.chase.sig.android	Chase Mobile

PackageName	AppName
com.cibc.android.mobi	CIBC Mobile Banking®
com.cic_prod.bad	CIC
com.cimbmalaysia	CIMB Clicks Malaysia
com.citibank.CitibankMY	Citibank MY
com.citizensbank.androidapp	Citizens Bank Mobile Banking
com.clairmail.fth	Fifth Third Mobile Banking
com.cm_prod.bad	Crédit Mutuel
com.coinbase.android	Coinbase – Buy & Sell Bitcoin. Crypto Wallet
com.comarch.mobile.banking.bgzbnpparibas.biznes	Mobile BiznesPI@net
com.comarch.security.mobilebanking	ING Business
com.commbank.netbank	CommBank
com.connectivityapps.hotmail	Connect for Hotmail & Outlook: Mail and Calendar
com.cooperativebank.bank	The Co-operative Bank
com.csam.icici.bank.imobile	iMobile by ICICI Bank
com.db.mm.norisbank	norisbank App
com.db.pbc.DBPay	DB Pay
com.db.pbc.miabanca	La Mia Banca
com.db.pbc.mibanco	Mi Banco db
com.db.pwcc.dbmobile	Deutsche Bank Mobile
com.denizbank.mobildeniz	MobilDeniz
com.desjardins.mobile	Desjardins mobile services
com.dhanlaxmi.dhansmart.mtc	Dhanlaxmi Bank Mobile Banking
com.discoverfinancial.mobile	Discover Mobile
com.ebay.mobile	eBay: Buy, sell, and save money on home essentials
com.empik.empikapp	Empik
com.empik.empikfoto	Empik Foto
com.engage.pbb.pbengage2my.release	PB engage MY
com.eofinance	EO.Finance: Buy and Sell Bitcoin. Crypto Wallet
com.exictos.mbanka.bic	Banco BIC, SA
com.exmo	EXMO Official - Trading crypto on the exchange
com.facebook.katana	Facebook
com.fi7026.godough	Commercial Bank Mobile Banking
com.fibabanka.Fibabanka.mobile	Fibabanka Mobile
com.fibabanka.mobile	Fibabanka Corporate Mobile

PackageName	AppName
com.finansbank.mobile.cepsube	QNB Finansbank Mobile Banking
com.finanteq.finance.bgz	BNP Paribas GOMobile
com.finanteq.finance.ca	CA24 Mobile
com.fortuneo.android	Fortuneo, mes comptes banque & bourse en ligne
com.fullsix.android.labanquepostale.accountaccess	La Banque Postale
com.fusion.ATMLocator	People's Choice Credit Union
com.fusion.banking	Bank Australia app
com.fusion.beyondbank	Beyond Bank Australia
com.garanti.cepsubesi	Garanti BBVA Mobile
com.getingroup.mobilebanking	Getin Mobile
com.gmowallet.mobilewallet	ビットコイン・暗号資産（仮想通貨）ウォレットアプリ GMOコイン\ チャート・購入・レバレッジ取り
com.google.android.gm	Gmail
com.greater.Greater	Greater Bank
com.grppl.android.shell.BOS	Bank of Scotland Mobile Banking: secure on the go
com.grppl.android.shell.CMBlloydsTSB73	Lloyds Bank Mobile Banking: by your side
com.grppl.android.shell.halifax	Halifax: the banking app that gives you extra
com.grupoavaloc1.bancamovil	Banco de Occidente Móvil
com.grupocajamar.wefferent	Grupo Cajamar
com.hsbc.hsbcnet	HSBCnet Mobile
com.htsu.hsbcpersonalbanking	HSBC Mobile Banking
com.ideomobile.hapoalim	בנק הפעלים - ניהול החשבון
com.imaginbank.app	imaginBank - Your mobile bank
com.imo.android.imoim	imo free video calls and chat
com.imo.android.imoimbeta	imo beta free calls and text
com.imo.android.imoimhd	imo HD-Free Video Calls and Chats
com.indra.itecban.mobile.novobanco	NBapp Spain
com.indra.itecban.triodosbank.mobile.banking	Triodos Bank. Banca Móvil
com.infonow.bofa	Bank of America Mobile Banking
com.infrasofttech.CentralBank	Cent Mobile
com.infrasofttech.MahaBank	Maha Mobile
com.ingbanktr.ingmobil	ING Mobil
com.instagram.android	Instagram
com.isis_papyrus.raiffeisen_pay_eyewdg	Raiffeisen ELBA

PackageName	AppName
com.itau.empresas	Itaú Empresas: Controle e Gestão do seu Negócio
com.kasikorn.retail.mbanking.wap	K PLUS
com.key.android	KeyBank Mobile
com.konylabs.HongLeongConnect	Hong Leong Connect Mobile Banking
com.konylabs.capitalone	Capital One® Mobile
com.konylabs.cbplpat	Citi Handlowy
com.kraken.trade	Pro: Advanced Bitcoin & Crypto Trading
com.krungsri.kma	KMA
com.kutxabank.android	Kutxbank
com.kuveytтурk.mobil	Kuveyt Türk
com.latuabancaperandroid	Intesa Sanpaolo Mobile
com.leumi.leumiwallet	לאומי
com.lynxspa.bancopopolare	YouApp
com.magicclick.odeabank	Odeabank
com.mail.mobile.android.mail	mail.com mail
com.mcom.firstcitizens	First Citizens Mobile Banking
com.mercadolibre	Mercado Libre: compra fácil y rápido
com.mercadopago.wallet	Mercado Pago
com.mfoundry(mb).android.mb_136	People's United Bank Mobile
com.microsoft.office.outlook	Microsoft Outlook: Organize Your Email & Calendar
com.mobikwik_new	BHIM UPI, Money Transfer, Recharge & Bill Payment
com.mobileloft.alpha.droid	myAlpha Mobile
com.mobillium.papara	Papara
com.moneybookers.skrillpayments	Skrill - Fast, secure online payments
com.moneybookers.skrillpayments.neteller	NETELLER - fast, secure and global money transfers
com.msf.kbank.mobile	Kotak - 811 & Mobile Banking
com.mtel.androidbea	BEA 東亞銀行
com.mycelium.wallet	Mycelium Bitcoin Wallet
com.navyfederal.android	Navy Federal Credit Union
com.nearform.ptsb	permanent tsb
com.netflix.mediaclient	Netflix
com.ocito.cdn.activity.creditdunord	Crédit du Nord pour Mobile
com.oxigen.oxigenwallet	Bill Payment & Recharge, Wallet
com.paribu.app	Paribu

PackageName	AppName
com.paxful.wallet	Paxful Bitcoin Wallet
com.payeer	PAYEER
com.payoneer.android	Payoneer – Global Payments Platform for Businesses
compaypal.android.p2pmobile	PayPal Mobile Cash: Send and Request Money Fast
com.pcfinancial.mobile	Simplii Financial
com.pnc.ecommerce.mobile	PNC Mobile
com.polehin.android	Bitcoin Wallet - Buy BTC
com.pozitron.iscep	İşCep - Mobile Banking
com.pttfinans	PTTBank
com.quoine.quoinex.light	Liquid by Quoineライト版（リキッドバイコイン） - ビットコインなどの仮想通貨取引所
com.rbc.mobile.android	RBC Mobile
com.rbs.mobile.android.natwest	NatWest Mobile Banking
com.rbs.mobile.android.rbs	Royal Bank of Scotland Mobile Banking
com.rsi	ruralvía
com.samba(mb	SambaMobile
com.santander.bpi	Santander Private Banking
com.sbi.SBAnywhereCorporate	SBI Anywhere Corporate
com.sbi.SBIFreedomPlus	Yono Lite SBI - Mobile Banking
com.scb.phone	SCB EASY
com.scotiabank.banking	Scotiabank Mobile Banking
com.snapchat.android	Snapchat
com.snapwork.IDBI	IDBI Bank GO Mobile+
com.snapwork.hdfc	HDFC Bank MobileBanking
com.squareup.cash	Cash App
com.starfinanz.smob.android.sfinanzstatus	Sparkasse Ihre mobile Filiale
com.suntrust.mobilebanking	SunTrust Mobile App
com.targo_prod.bad	TARGOBANK Mobile Banking
com.tarjetanaranja.emisor.serviciosClientes.appTitulares	Naranja
com.td	TD Canada
com.tdbank	TD Bank (US)
com.teb	CEPTETEB
com.tecnocom.cajalaboral	Banca Móvil Laboral Kutxa
com.tencent.mm	WeChat

PackageName	AppName
com.tideplatform.banking	Tide - Smart Mobile Banking
com.tmobtech.halkbank	Halkbank Mobil
com.todo1.davivienda.mobileapp	Davivienda Móvil
com.todo1.mobile	Bancolombia App Personas
com.transferwise.android	TransferWise Money Transfer
com.twitter.android	Twitter
com.twitter.android.lite	Twitter Lite
com.ubercab	Uber - Request a ride
com.ubercab.eats	Uber Eats: Food Delivery
com.unicredit	Mobile Banking UniCredit
com.unionbank.ecommerce.mobile.android	Union Bank Mobile Banking
com.unocoin.unocoinwallet	Unocoin Wallet
com.usaa.mobile.android.usaa	USAA Mobile
com.usbank.mobilebanking	U.S. Bank - Inspired by customers
com.uy.itau.appitauuypf	Itaú Uruguay
com.vakifbank.mobile	VakıfBank Mobil Bankacılık
com.vancity.mobileapp	Vancity
com.viber.voip	Viber Messenger - Messages, Group Chats & Calls
com.westernunion.moneytransferr3app.es	Western Union ES - Send Money Transfers Quickly
com.wf.wellsfargomobile	Wells Fargo Mobile
com.whatsapp	WhatsApp Messenger
com.whatsapp.w4b	WhatsApp Business
com.woodforest	Woodforest Mobile Banking
com.wrx.wazirx	WazirX - Buy Sell Bitcoin & Other Cryptocurrencies
com.yahoo.mobile.client.android.mail	Yahoo Mail – Organized Email
com.ykb.android	Yapı Kredi Mobile
com.zellepay.zelle	Zelle
com.ziraat.ziraatmobil	Ziraat Mobile
com.zoluxiones.officebanking	Banco Santander Perú S.A.
cz.csob.smartbanking	ČSOB Smartbanking
de.adesso_mobile.secureapp.netbank	SecureApp netbank
de.comdirect.android	comdirect mobile App
de.commerzbanking.mobil	Commerzbank Banking - The app at your side
de.consorsbank	Consorsbank

PackageName	AppName
de.dkb.portalapp	DKB-Banking
de.fiducia.smartphone.android.banking.vr	VR Banking Classic
de.ingdiba.bankingapp	ING Banking to go
de.mobile.android.app	mobile.de – Germany's largest car market
de.number26.android	N26 — The Mobile Bank
de.postbank.finanzassistent	Postbank Finanzassistent
de.santander.presentation	Santander Banking
de.traktorpool	tractorpool
enterprise.com.anz.shield	ANZ Shield
es.bancosantander.apps	Santander
es.bancosantander.empresas	Santander Empresas
es.caixagalicia.activamovil	ABANCA- Banca Móvil
es.caixageral.caixageralapp	Banco Caixa Geral Espanha
es.ceca.cajalnet	Cajalnet
es.cm.android	Bankia
es.evobanco.bancamovil	EVO Banco móvil
es.ibercaja.ibercajaapp	Ibercaja
es.lacaixa.mobile.android.newwapicon	CaixaBank
es.liberbank.cajasturapp	Banca Digital Liberbank
es.openbank.mobile	Openbank – banca móvil
es.pibank.customers	Pibank
es.univia.unicajamovil	UnicajaMovil
eu.atlantico.bancoatlanticoapp	MY ATLANTICO
eu.eleader.mobilebanking.invest	plusbank24
eu.eleader.mobilebanking.pekao	Pekao24Makler
eu.eleader.mobilebanking.pekao.firm	PekaoBiznes24
eu.inmite.prj.kb.mobilbank	Mobilni Banka
eu.netinfo.colpatria.system	Scotiabank Colpatria
eu.unicreditgroup.hvbapptan	HVB Mobile Banking
finansbank.enpara	Enpara.com Cep Şubesi
fr.banquepopulaire.cyberplus	Banque Populaire
fr.creditagricole.androidapp	Ma Banque
fr.laposte.lapostemobile	La Poste - Services Postaux
fr.lcl.android.customerarea	Mes Comptes - LCL

PackageName	AppName
fr.oney.mobile.mescomptes	Oney France
gr.winbank.mobilenext	Winbank Mobile
gt.com.bi.bienlinea	Bi en Línea
hr.asseco.android.mtoken.bos	iBOSStoken
hu.bb.mobilapp	Budapest Bank Mobil App
hu.cardinal.cib.mobilapp	CIB Business Online
hu.cardinal.erste.mobilapp	Erste Business MobilBank
hu.mkb.mobilapp	MKB Mobilalkalmazás
id.co.bitcoin	Indodax
io.cex.app.prod	CEX.IO Cryptocurrency Exchange
io.ethos.universalwallet	Ethos Universal Wallet
it.bnl.apps.banking	BNL
it.carige	Carige Mobile
it.copergmps.rt(pf).android.sp.bmps	Banca MPS
it.ingdirect.app	ING Italia
it.nogood.container	UBI Banca
it.popso.SCRIGNOapp	SCRIGNOapp
jp.co.netbk	住信SBIネット銀行
jp.co.rakuten_bank.rakutenbank	楽天銀行 -個人のお客様向けアpri
jp.coincheck.android	Bitcoin Wallet Coincheck
ktbcs.netbank	Krungthai NEXT
ma.gbp.pocketbank	Pocket Bank
mbanking.NBG	NBG Mobile Banking
me.cryptopay.android	C.PAY
mobi.societegenerale.mobile.lappli	L'Appli Société Générale
mx.bancosantander.supermovil	Santander móvil
my.com.hsbc.hsbcmalaysia	HSBC Malaysia
my.com.maybank2u.m2umobile	Maybank2u MY
net.bnpparibas.mescomptes	Mes Comptes BNP Paribas
net.garagecoders.e_llavescotiainfo	ScotiaMóvil
net.inverline.bancosabadell.officelocator.android	Banco Sabadell App. Your mobile bank
nz.co.asb.asbmobile	ASB Mobile Banking
org.banking.bom.businessconnect	Bank of Melbourne Business App
org.banking.bsa.businessconnect	BankSA Business App

PackageName	AppName
org.banking.stg.businessconnect	St.George Business App
org.banksa.bank	BankSA Mobile Banking
org.bom.bank	Bank of Melbourne Mobile Banking
org.microemu.android.model.common.VTUserApplicationLINKMB	Link Celular
org.stgeorge.bank	St.George Mobile Banking
org.telegram.messenger	Telegram
org.toshi	Coinbase Wallet — Crypto Wallet & DApp Browser
org.westpac.bank	Westpac Mobile Banking
org.westpac.col	Westpac Corporate Mobile
pe.com.interbank.mobilebanking	Interbank APP
pegasus.project.ebh.mobile.android.bundle.mobilebank	George Magyarország
piuk.blockchain.android	Blockchain Wallet. Bitcoin, Bitcoin Cash, Ethereum
pl.aliorbank.aib	Alior Mobile
pl.allegro	Allegro - convenient and secure online shopping
pl.bph	BusinessPro Lite
pl.bps.bankowoscmbilna	BPS Mobilnie
pl.bzwbk.bzwbk24	Santander mobile
pl.bzwbk.ibiznes24	iBiznes24 mobile
pl.ceneo	Ceneo - zakupy i promocje
pl.com.rossmann.centauros	Rossmann PL
pl.envelobank.aplikacja	EnveloBank
pl.eurobank2	eurobank mobile 2.0
pl.fakturownia	Fakturownia.pl
pl.ideabank.mobilebanking	Idea Bank PL
pl.ifirma.ifirmafaktury	IFIRMA - Darmowy Program do Faktur
pl.ing.mojeing	Moje ING mobile
pl.mbank	mBank PL
pl.millennium.corpApp	Bank Millennium for Companies
pl.nestbank.nestbank	Nest Bank nowy
pl.noblebank.mobile	Noble Mobile
pl.orange.mojeorange	Mój Orange
pl.pkobp.iko	IKO
pl.pkobp.ipkobiznes	iPKO biznes
pl.raiffeisen.nfc	Mobilny Portfel

PackageName	AppName
posteitaliane.posteapp.appostepay	Postepay
pt.bancobpi.mobile.fiabilizacao	BPI APP
pt.novobanco.nbapp	NB smart app
pt.santandertotta.mobileparticulares	Santander Particulares
ro.btrl.mobile	Banca Transilvania
softax.pekao.powerpay	PeoPay
tr.com.hsbc.hsbcturkey	HSBC Turkey
tr.com.sekerbilisim.mbank	ŞEKER MOBİL ŞUBE
tsb.mobilebanking	TSB Bank Mobile Banking
uk.co.hsbc.hsbckmobilebanking	HSBC UK Mobile Banking
uk.co.mbna.cardservices.android	MBNA - Card Services App
uk.co.metrobankonline.mobile.android.production	Metro Bank
uk.co.santander.santanderUK	Santander Mobile Banking
uk.co.tescomobile.android	Tesco Mobile
uk.co.tsb.newmobilebank	TSB Mobile Banking
uy.brou	App Móvil del Banco República
uy.com.brou.token	BROU Llave Digital
wit.android.bcpBankingApp.millennium	Millenniumbcp
wit.android.bcpBankingApp.millenniumPL	Bank Millennium
www.ingdirect.nativeframe	ING España. Banca Móvil