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Please find the recording of the presentation here:
https://www.youtube.com/watch?v=WBD7CL9oQqE

BETTER SAFE THAN SORRY

CCP Security

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CCP Security :: Who we are

EVE FANFEST 2015

CCP Security

Team Security

InfoSec

Internal Affairs

CCP Grimmi
Security Analyst

- With CCP since 2003
- Game Master, Customer Support Specialist and Payment Fraud Guardian since 2003
- Topics: Account Security, Payment Fraud, Anti-RMT Squad

CCP Peligro
Security Analyst

- With CCP since 2006
- Game Master 2006-2007, Internal Affairs 2007-2012, Team Security since 2012
- Topics: Game Data Analytics, Anti-RMT Squad

CCP Random
Security Engineer

- With CCP since 2014
- IT-Security Professional since 2008
- Topics: Infrastructure Security and Secure Development, Incident Handling

CCP Bugartist
Director of Information Security

- With CCP since 2013
- Information-Security Professional since 2003
- Topics: Security Processes, Concepts and Guidelines, Wizard, Enablement

CCP Arkanon
Internal Affairs Manager

- With CCP since 2002
- LeadGM 2003-2007, IA 2007-
- Topics: Internal policies/processes/ guidelines

Today's Agenda

- Introduction
- Security @ CCP
- Input Multiplexing/Broadcasting
- Team Security
  - Bans; Why, How, Where and Whom?
  - Real Money Trading
- SECRET PART
- Security Awareness

*For Q&A – Please join our Round Table in **Dodixie** right after this presentation!*

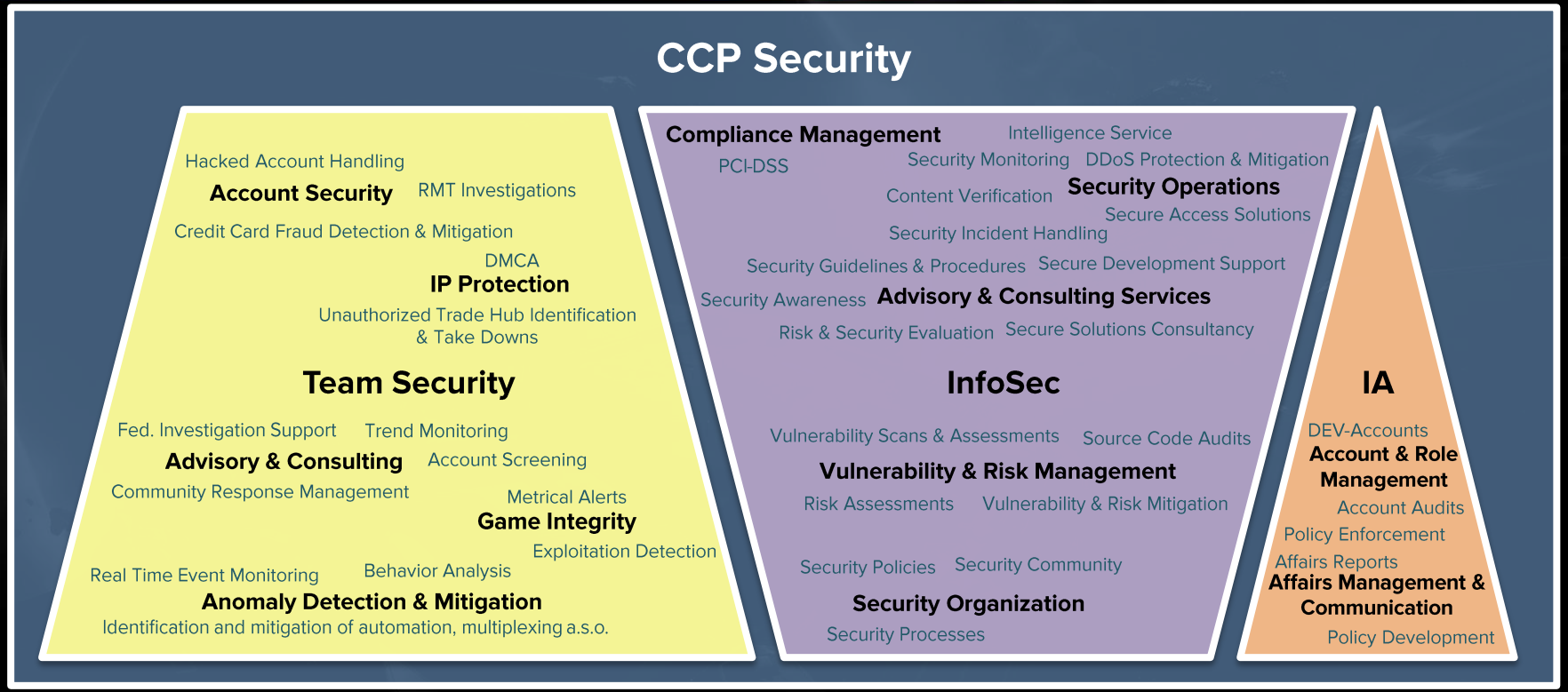
Security @ CCP

What, How and especially Why

CCP Bugartist

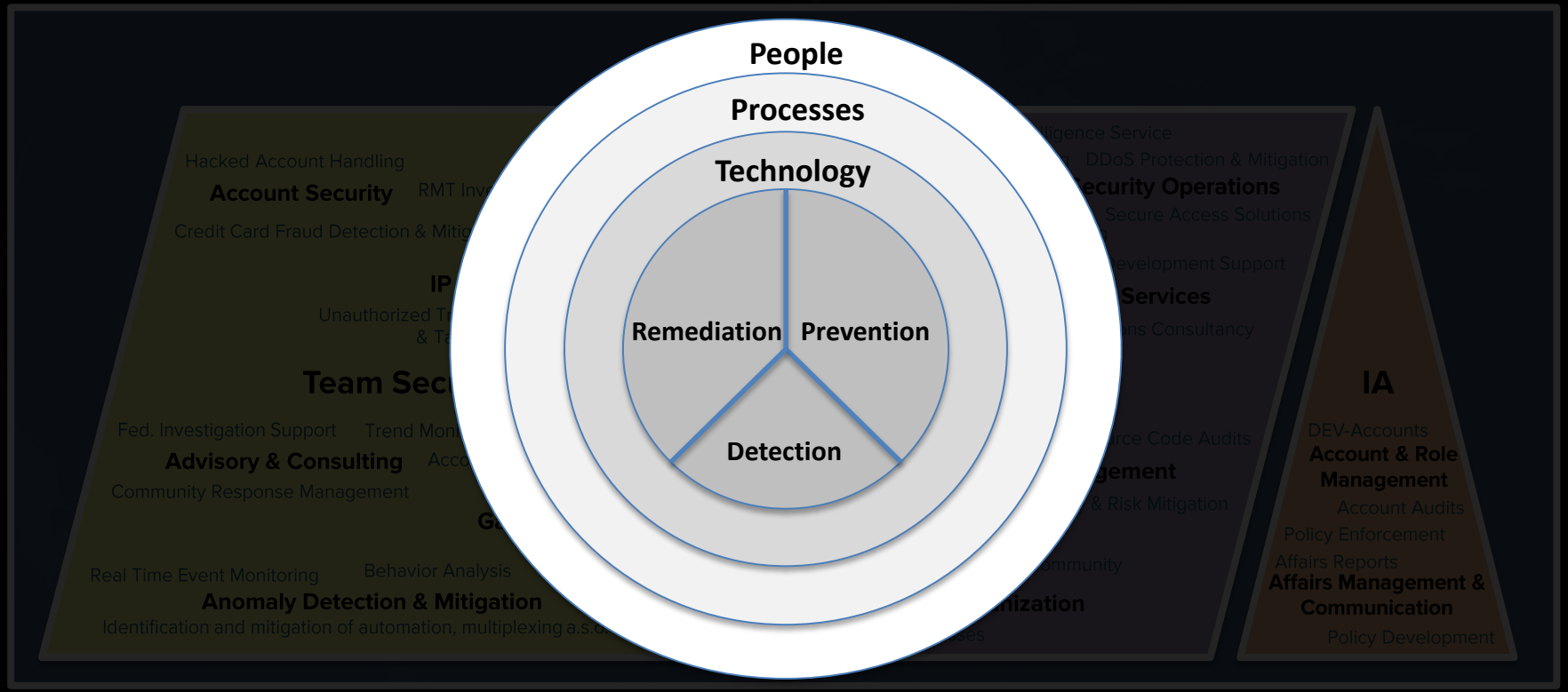
Security @ CCP :: What?

EVE FANFEST 2015



Security @ CCP :: What?

EVE FANFEST 2015



Security @ CCP :: Detection, How?

EVE FANFEST 2015

We

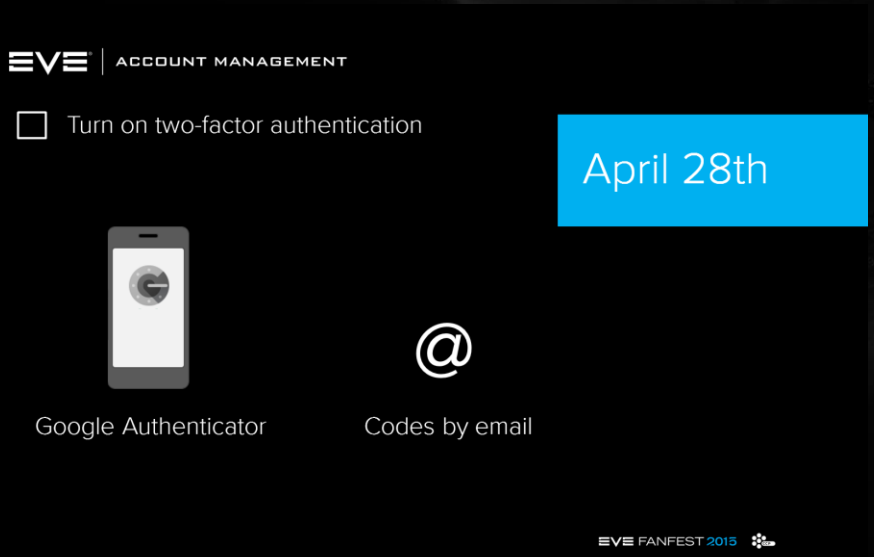
- Collect all information we are allowed to
- Correlate & Analyze it
- *Shake it*
- Generate Alerts & Trends

...and use it to improve our collection and detection capabilities.

Security @ CCP :: Why?

We keep the universe in balance and protect Your Personal Information and Virtual Assets so that You can enjoy your journey through New Eden.

By Example :: Account Security



- Just in case you missed the EVE Online Keynote…
- Yes, we will get Multi-Factor Authentication in April!

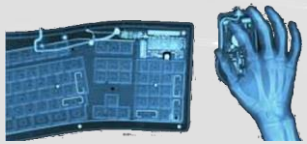
Input Multiplexing/Broadcasting

How we see it and why we address it

CCP Random

Multiboxing

Your input devices



1st input

2nd input

unmodified Eve Client 1

unmodified Eve Client 2

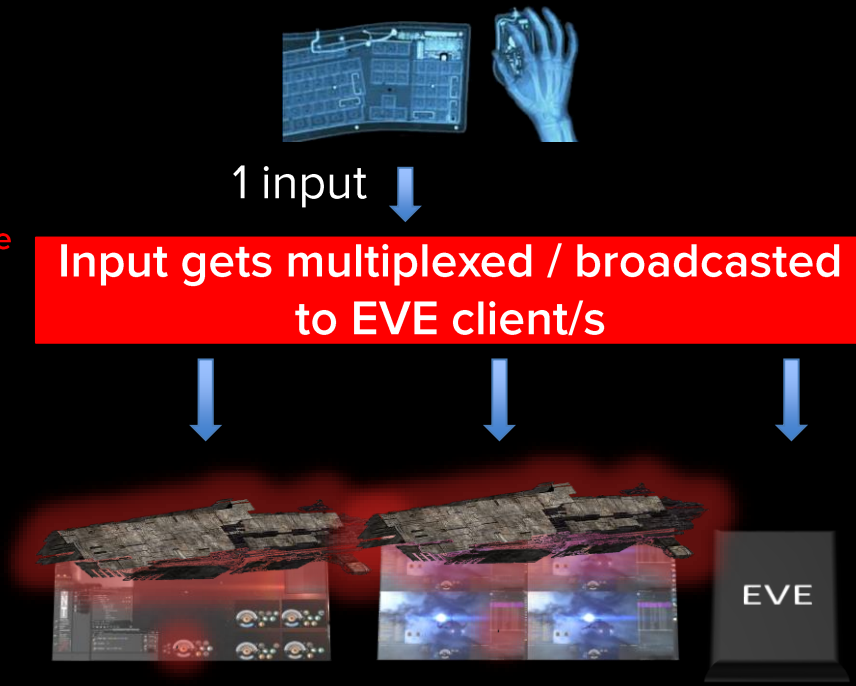
- We define „Multiboxing“ as playing with two or more EVE clients at once
  - Sequential manual input
  - Unlimited number of clients
  - Unlimited number of computers
  - Individually controlled gameplay
- Multiboxing is allowed
  - The interaction speed and accuracy is depending on a human player
  - Competition based on the same preferences
  - Teamplay matters

Input Multiplexing / Broadcasting

- Any approach to multiplicate or broadcast a single input to EVE client/s is considered Input Multiplexing
  - The method does not matter (software or hardware)

- This is prohibited for actions with consequence to the EVE universe *such as*:
  - Activation and control of ship modules
  - Navigation and movement within the EVE universe
  - Movements of assets and items within the EVE universe
  - Interaction with other characters

- Allowed *for example*:
  - EVE Online settings synchronization
  - EVE client window alignment
  - Login process



Clients are either in foreground or background

FAQs and Frequently Used Answers

EVE FANFEST 2015

„Is Roll-Over allowed, where you inject Macros into the EVE client as overlayed controls?“

„Is Round-Robin Input Multiplexing allowed, with individual delays?“

„Can I have 1 pixel wide squares as invisible overlays?“

All of this is covered by our EULA, in our Third Party Policies:

“*You may not use your own or third-party software to modify any content appearing within the Game environment or change how the Game is played.*”

No EULA change

FAQs and Frequently Used Answers

„What about community tools using CREST/EVE API?"

API tools do not automate gameplay.
Therefore they are fine as long as the API isn't used in conjunction with actions, which are not allowed.

„What about touch-screens with gesture based system overlays for the fingers?"

For multiple clients, this is Multiboxing.
Touch screen systems are not excluded as platforms for EVE.

Rule visualization

Refer to the Botting and Macro statistics.
You might already be in there.

Do you use botting tools?

Do you use recorded or replayable input sequences (Macros) to play EVE

Do you run multiple EVE clients?

Great!

- Activation and control of ship modules
- Navigation and movement within the EVE universe
- Movements of assets and items within the EVE universe
- Interaction with other characters

{ ... }

Do you use Input Multiplexing?

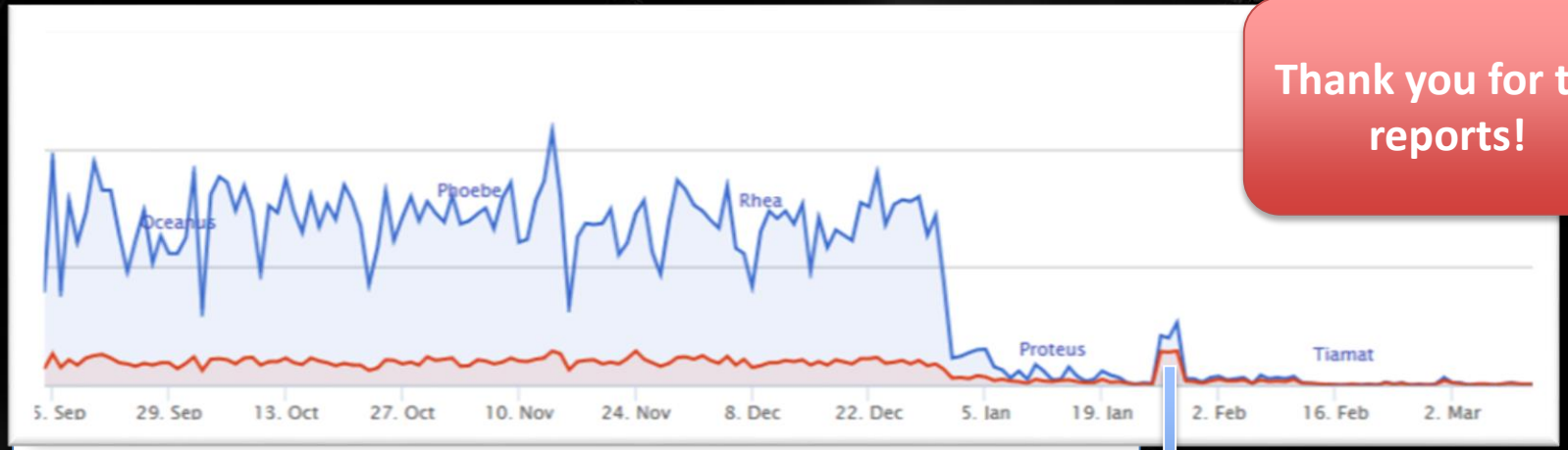
- EVE Online settings synchronization
- EVE client window alignment
- Login process

{ ... }

Statistical impact of the announcement

EVE FANFEST 2015

Accounts used for Input Multiplexing / Broadcasting



Thank you for the reports!

Accounts **Players** For Input Multiplexing / Broadcasting

Detection approach change at the end of January

- Based on BigData

Team Security

Bans; Why, How, Where and Whom?

Real Money Trading

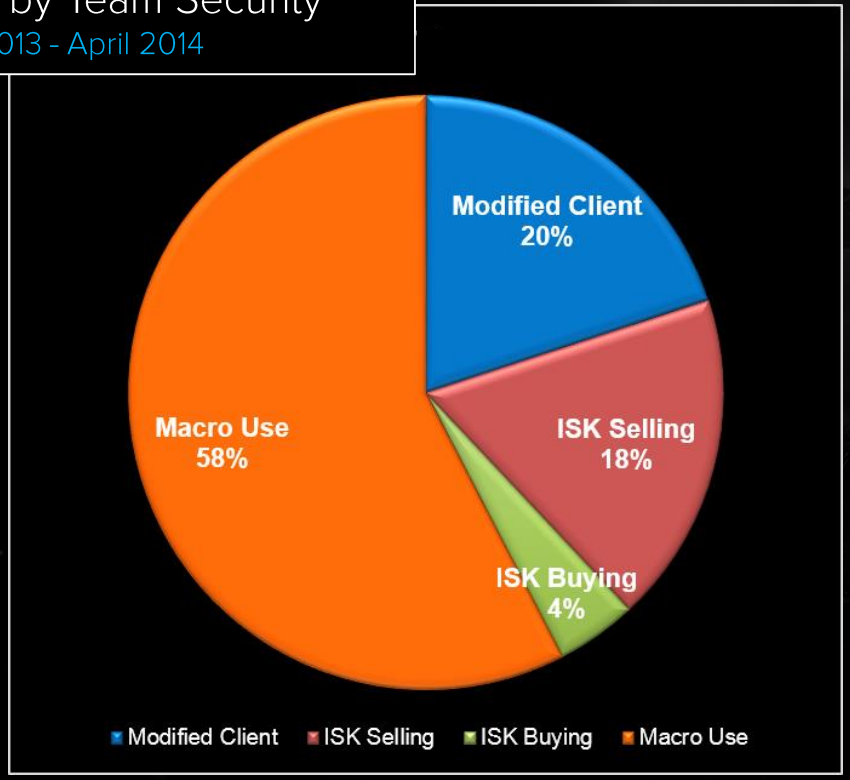
CCP Peligro & CCP Grimmi

BANS

BANNED ACCOUNTS

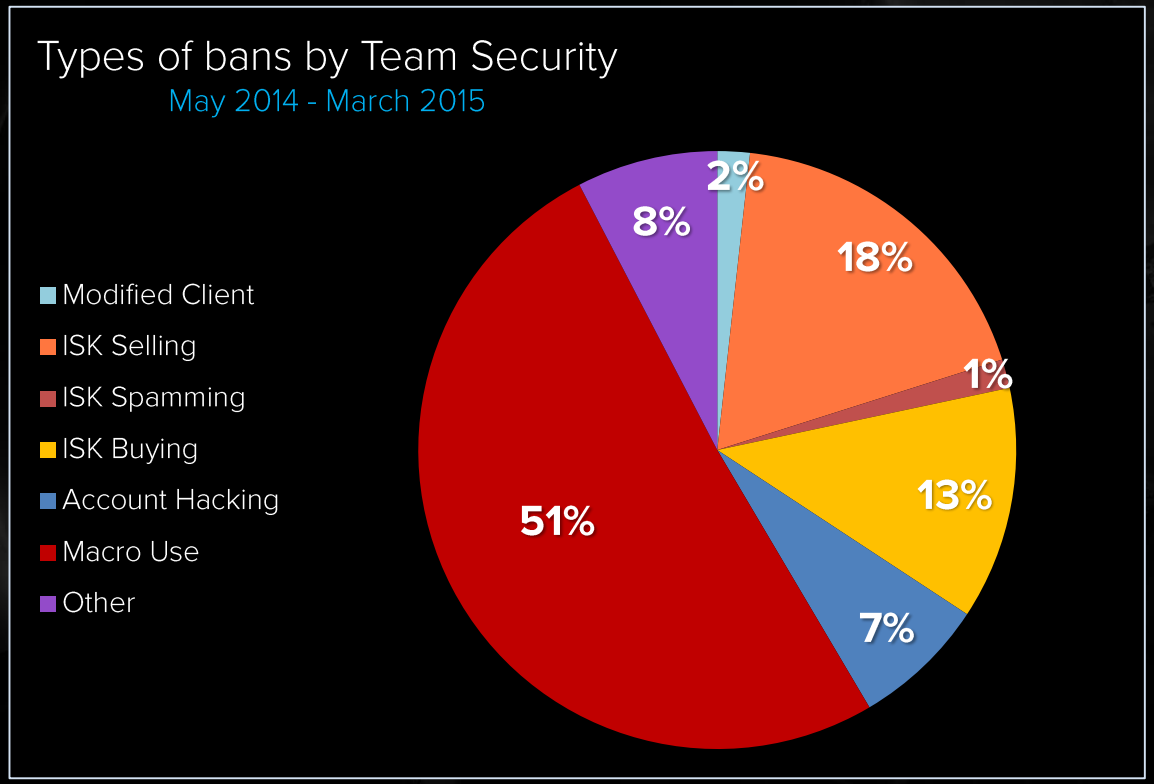
Types of bans by Team Security

January 2013 - April 2014



Monthly average
1,888

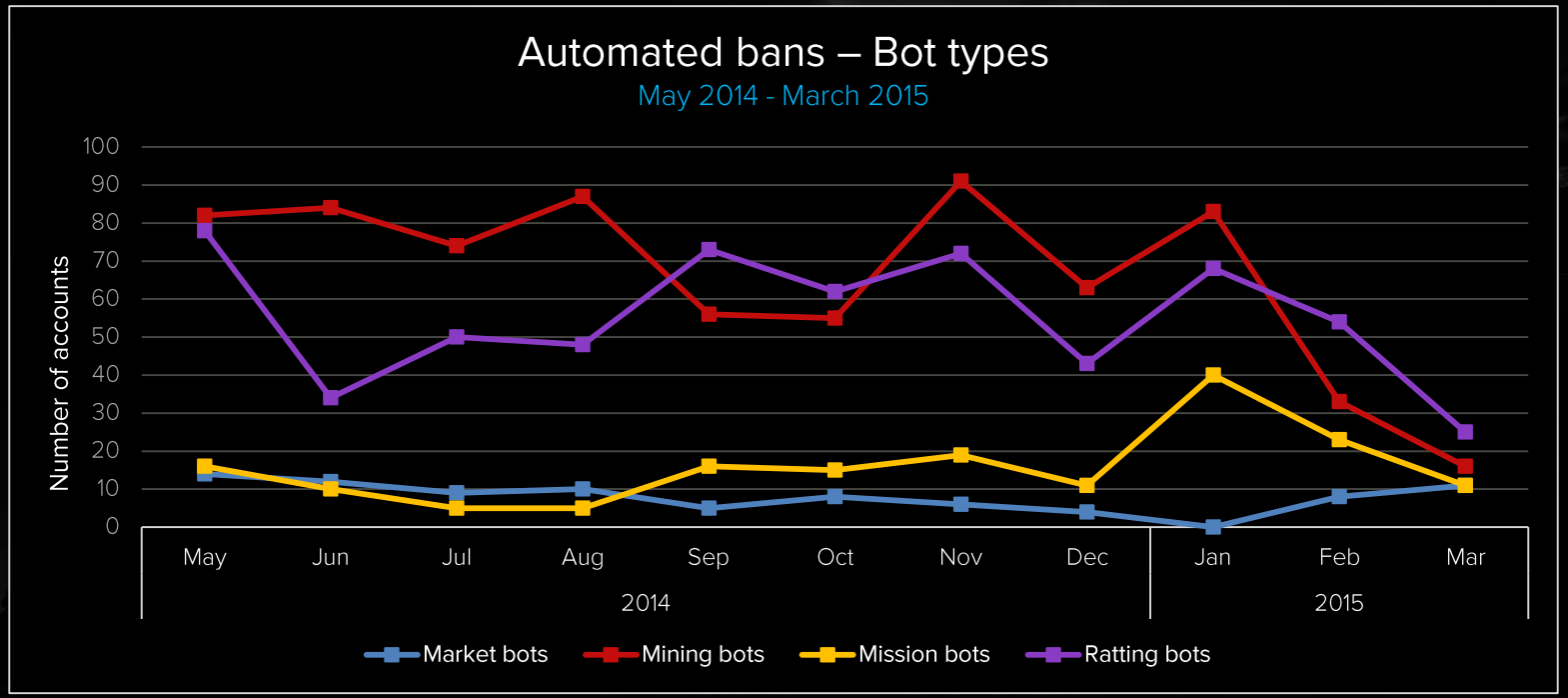
BANNED ACCOUNTS



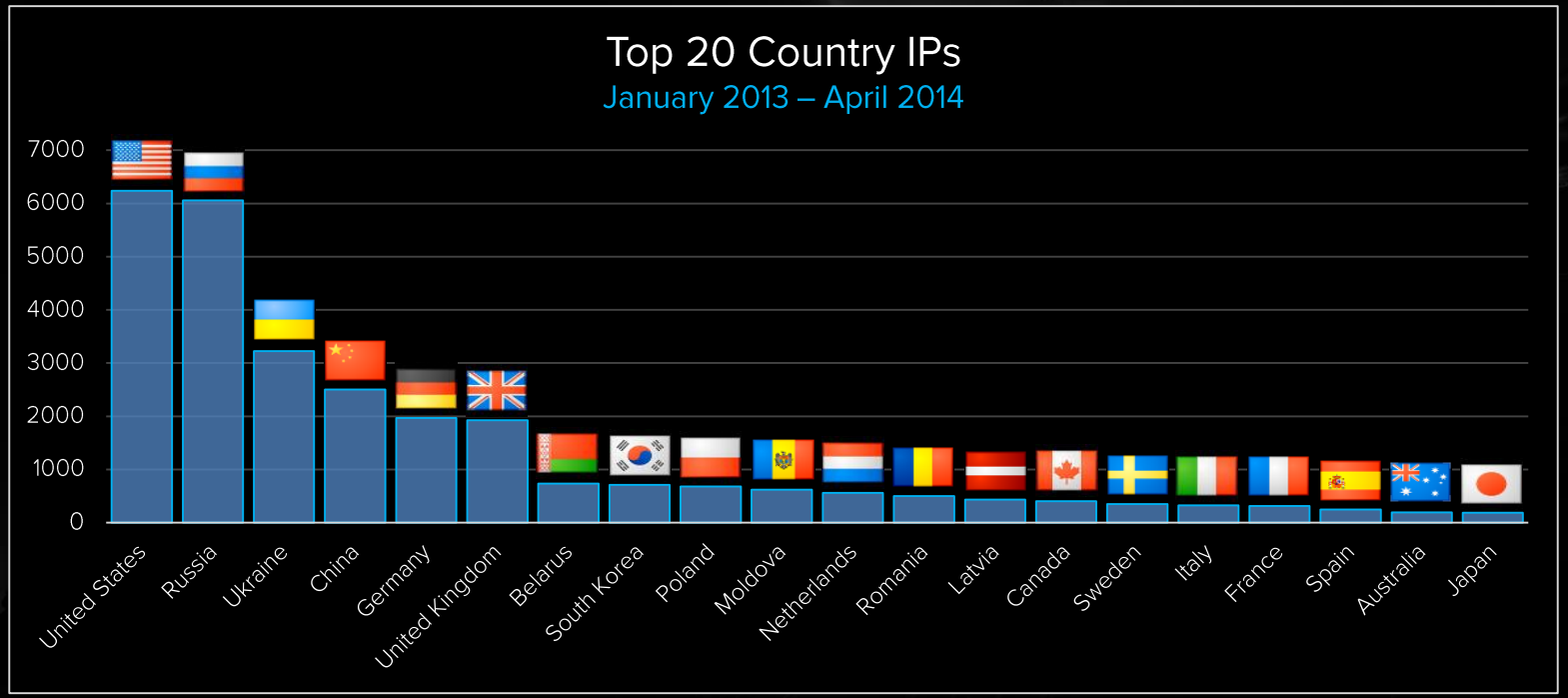
Modified Client	232
ISK Selling	2,430
ISK Spamming	206
ISK Buying	1,667
Account Hacking	959
Macro Use	6,735
Other	1,010
Total:	13,239

Monthly average
1,394

BANNED ACCOUNTS

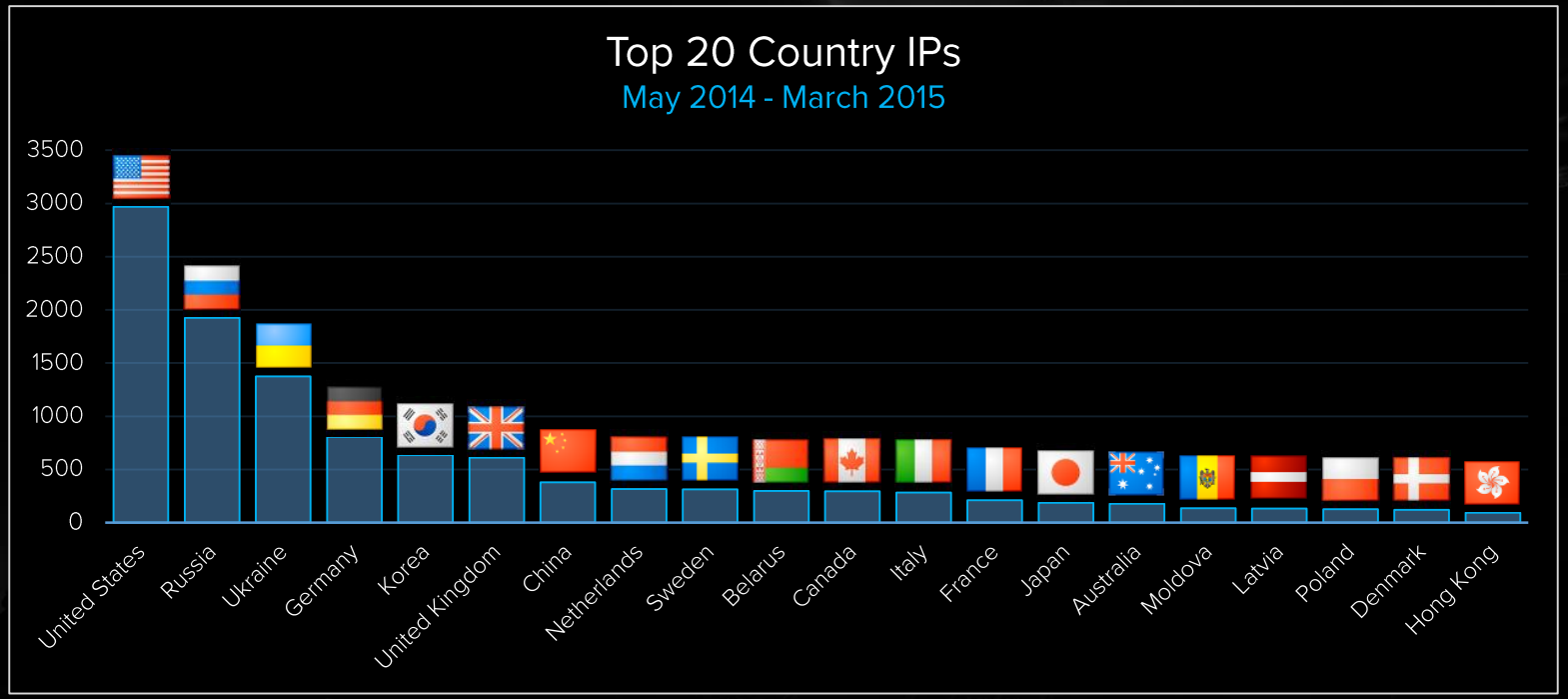


BANNED ACCOUNTS



This is pure tech info, connection IP does not necessarily represent the nationalities of the players.

BANNED ACCOUNTS



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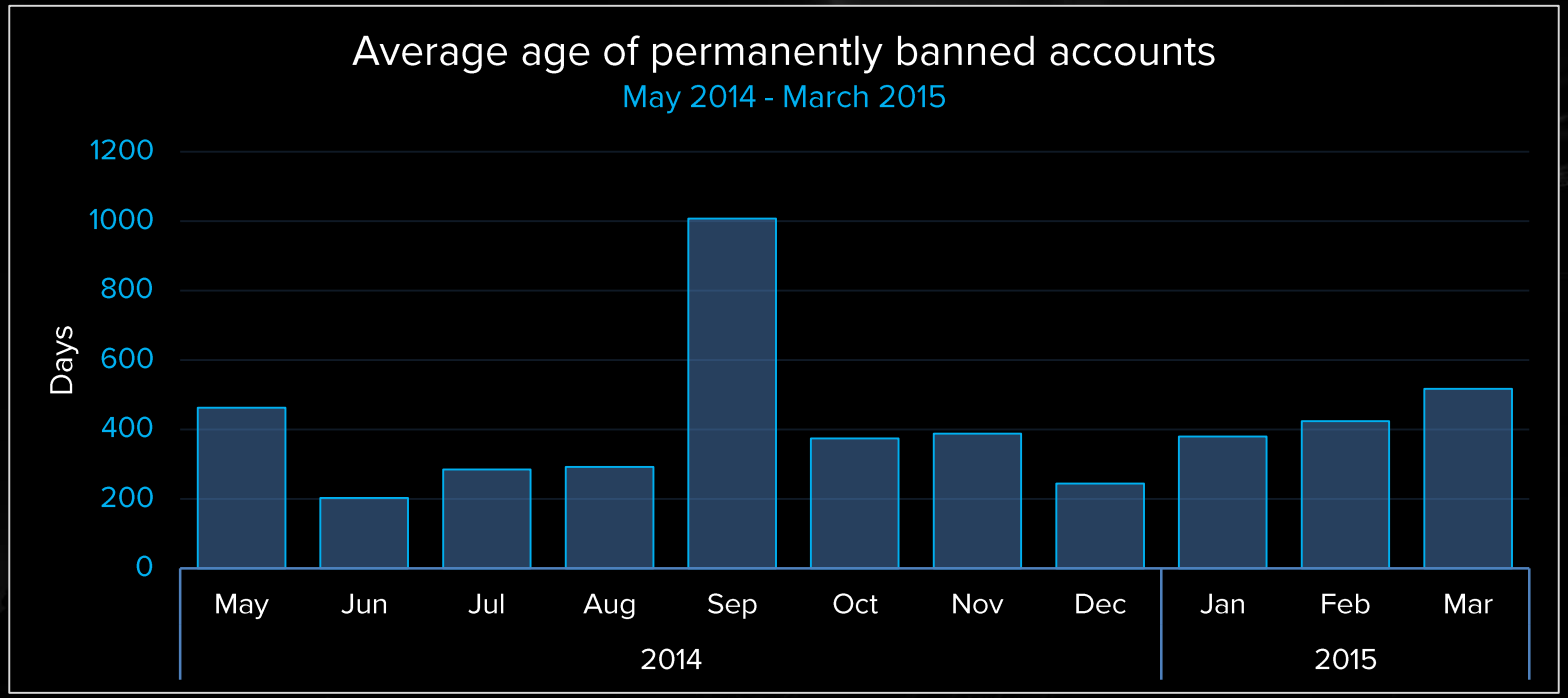
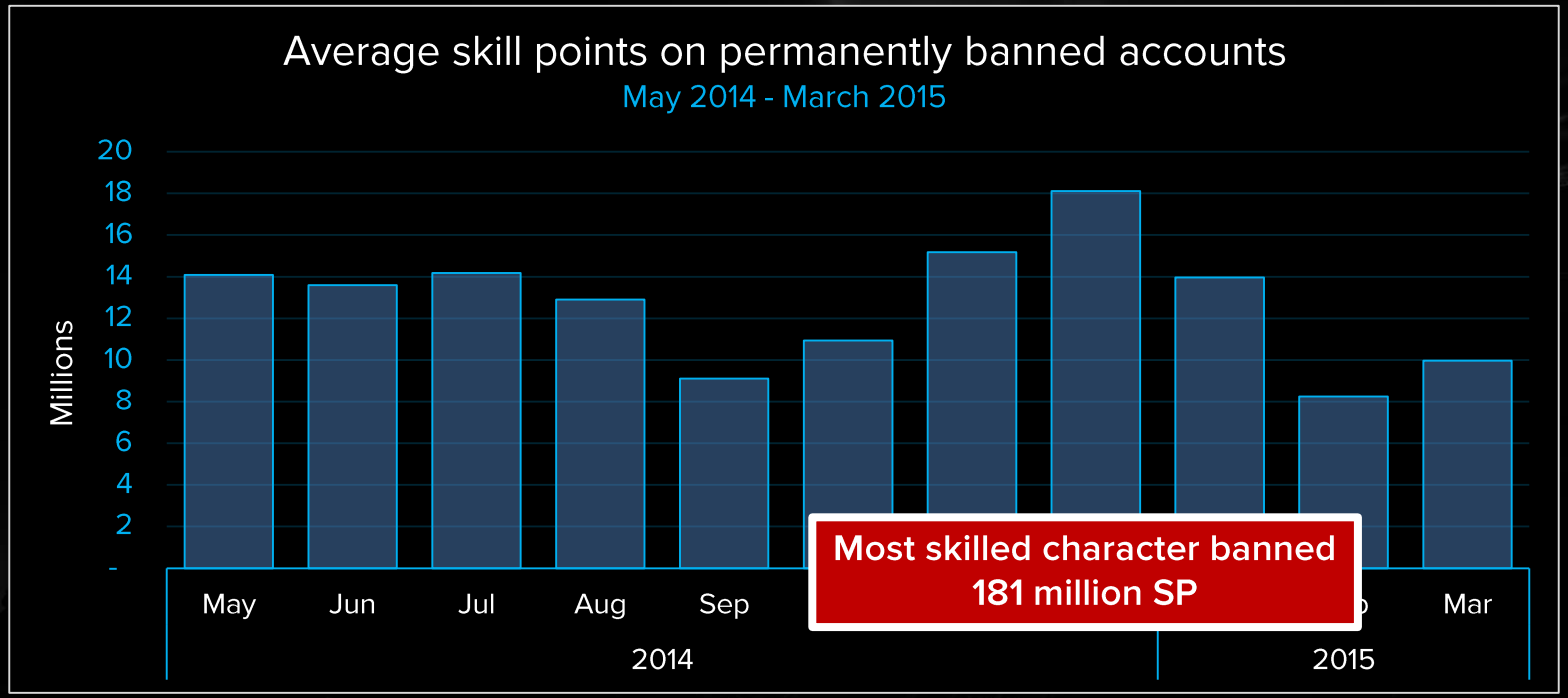
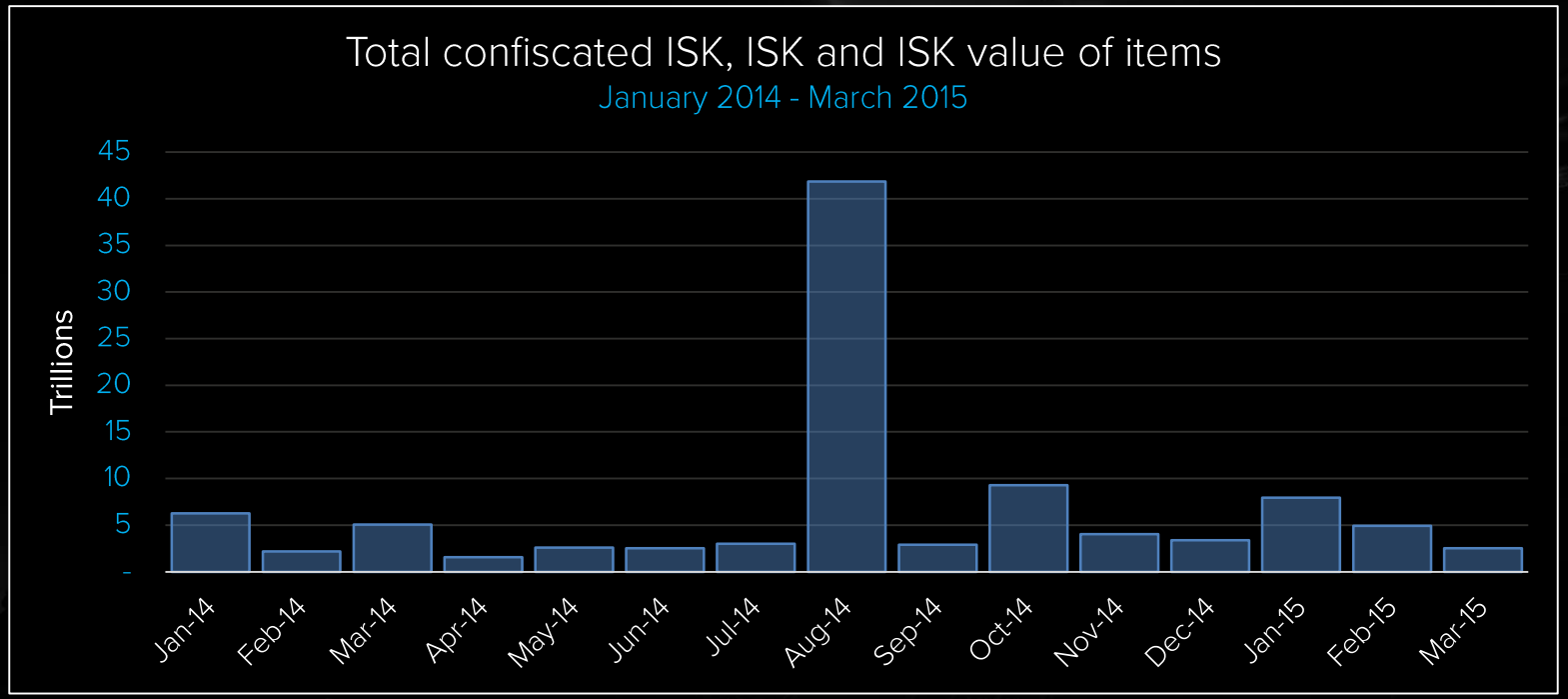
BANNED ACCOUNTS



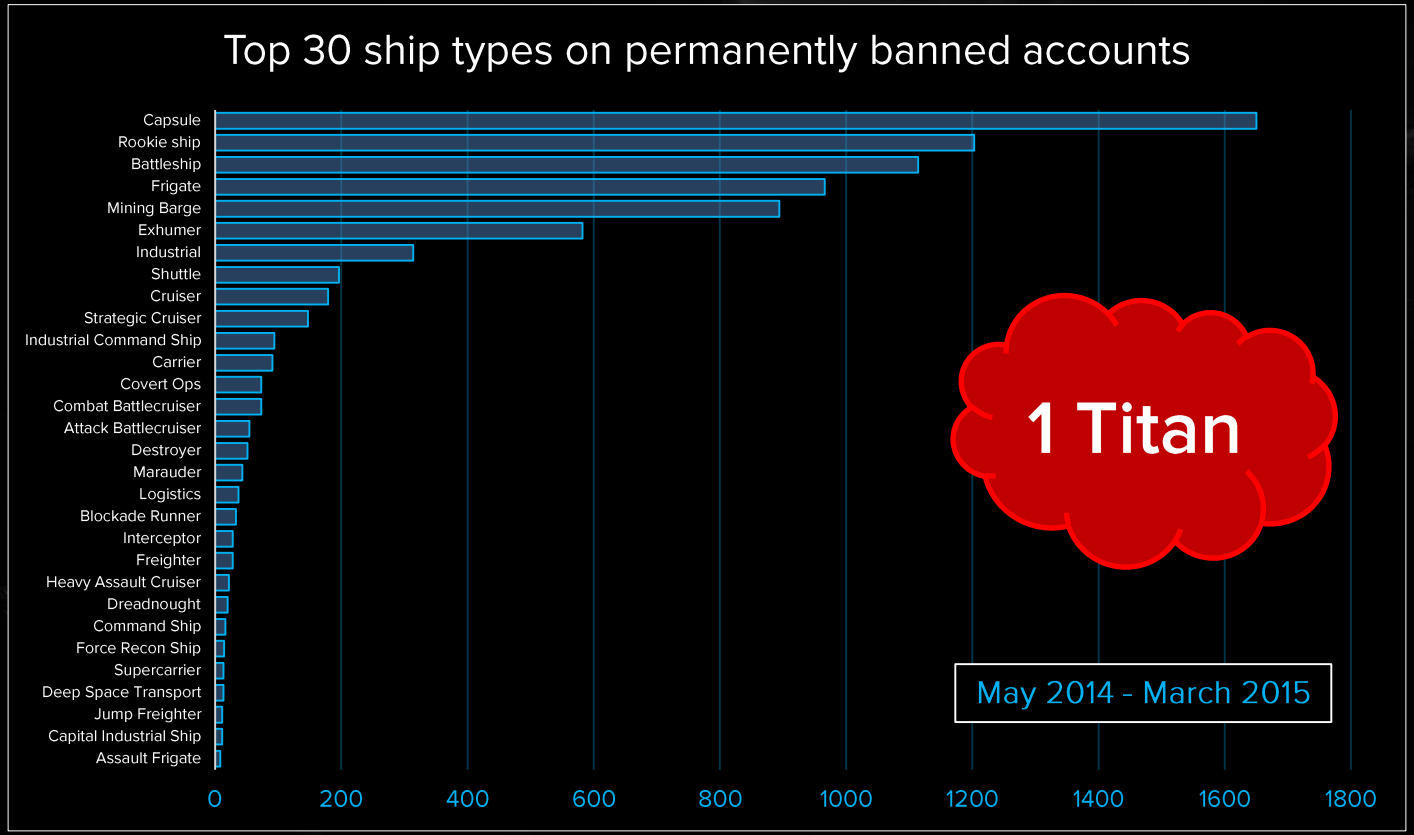
BANNED ACCOUNTS



BANNED ACCOUNTS



BANNED ACCOUNTS



BANNED ACCOUNTS

EVE FANFEST 2015

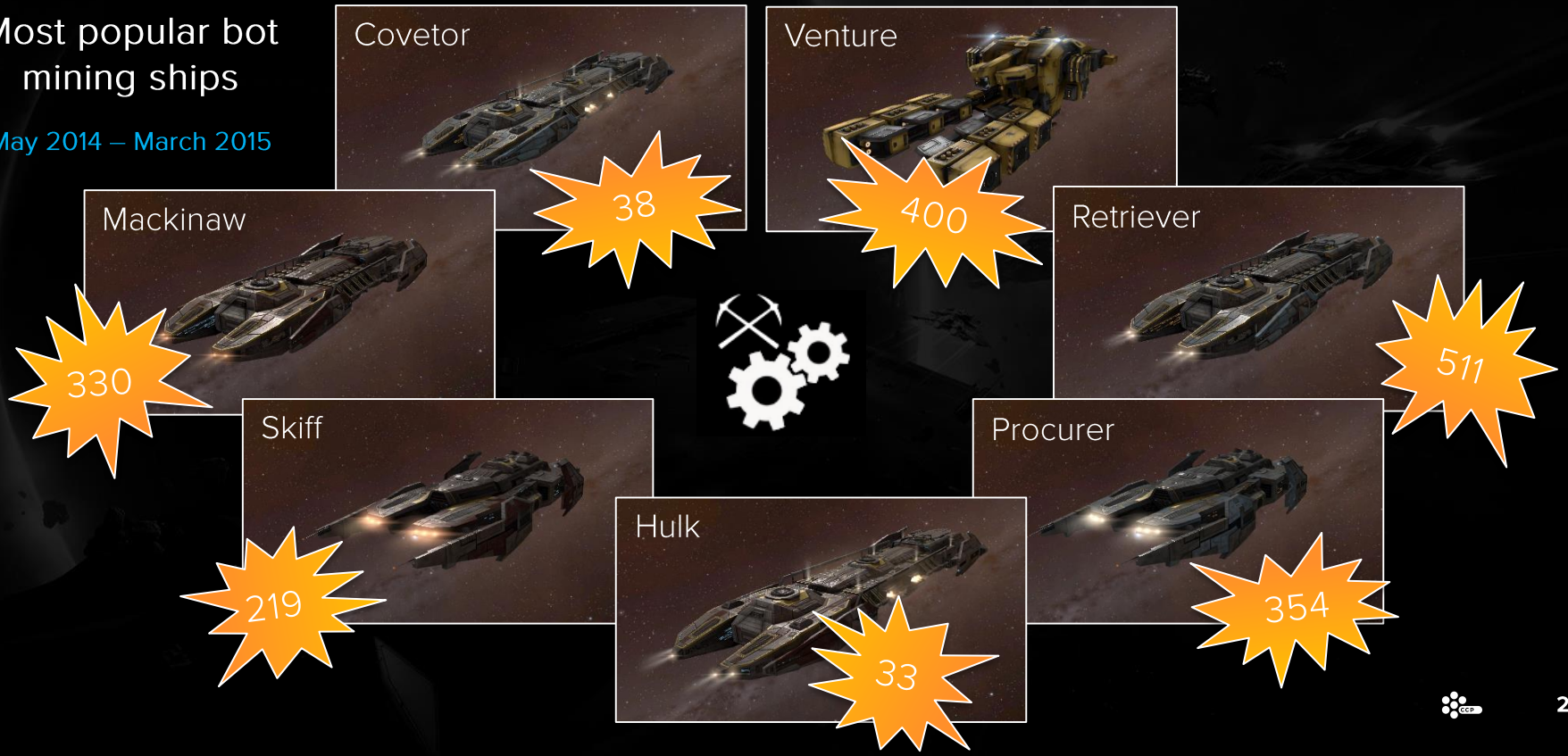
BANNED ACCOUNTS

BANNED ACCOUNTS

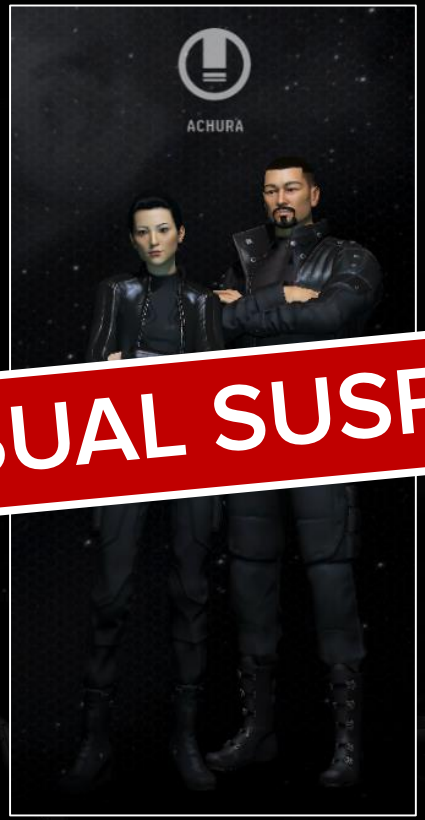
EVE FANFEST 2015

Most popular bot mining ships

May 2014 – March 2015



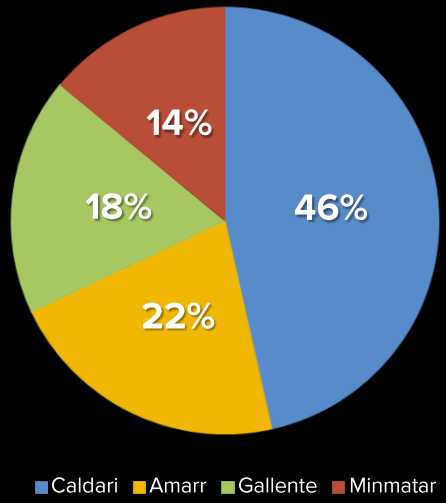
BANNED ACCOUNTS



THE USUAL SUSPECTS

Races/bloodlines used for botting

May 2014 – March 2015

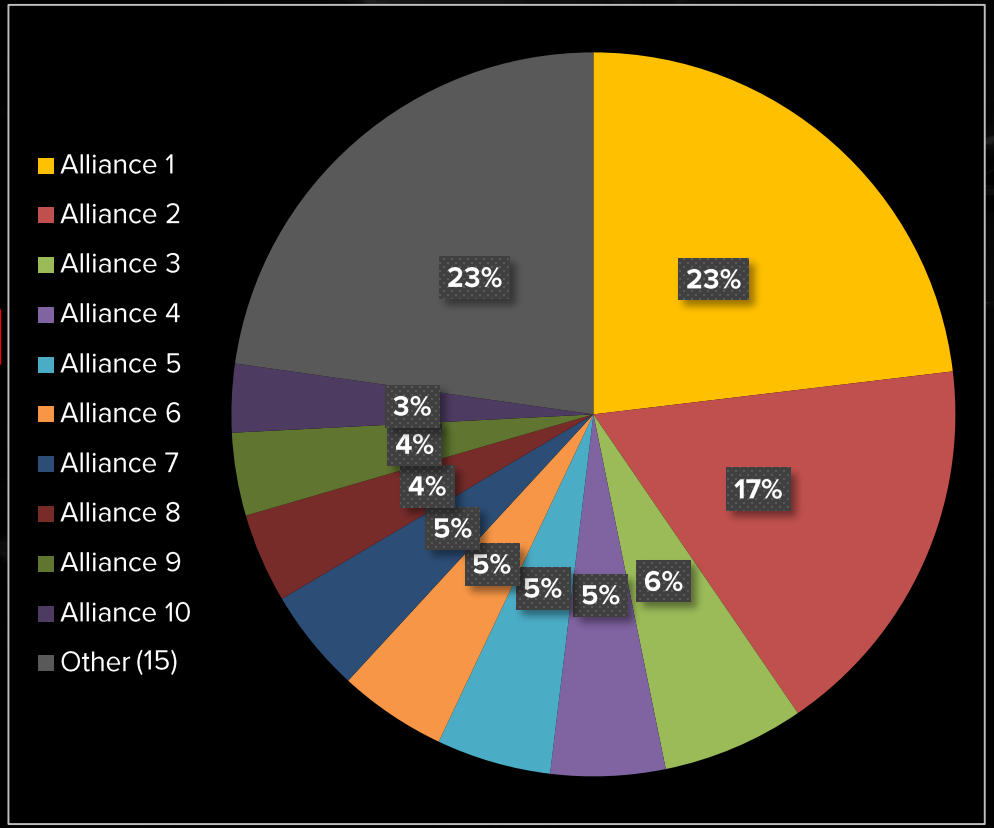


BANNED ACCOUNTS

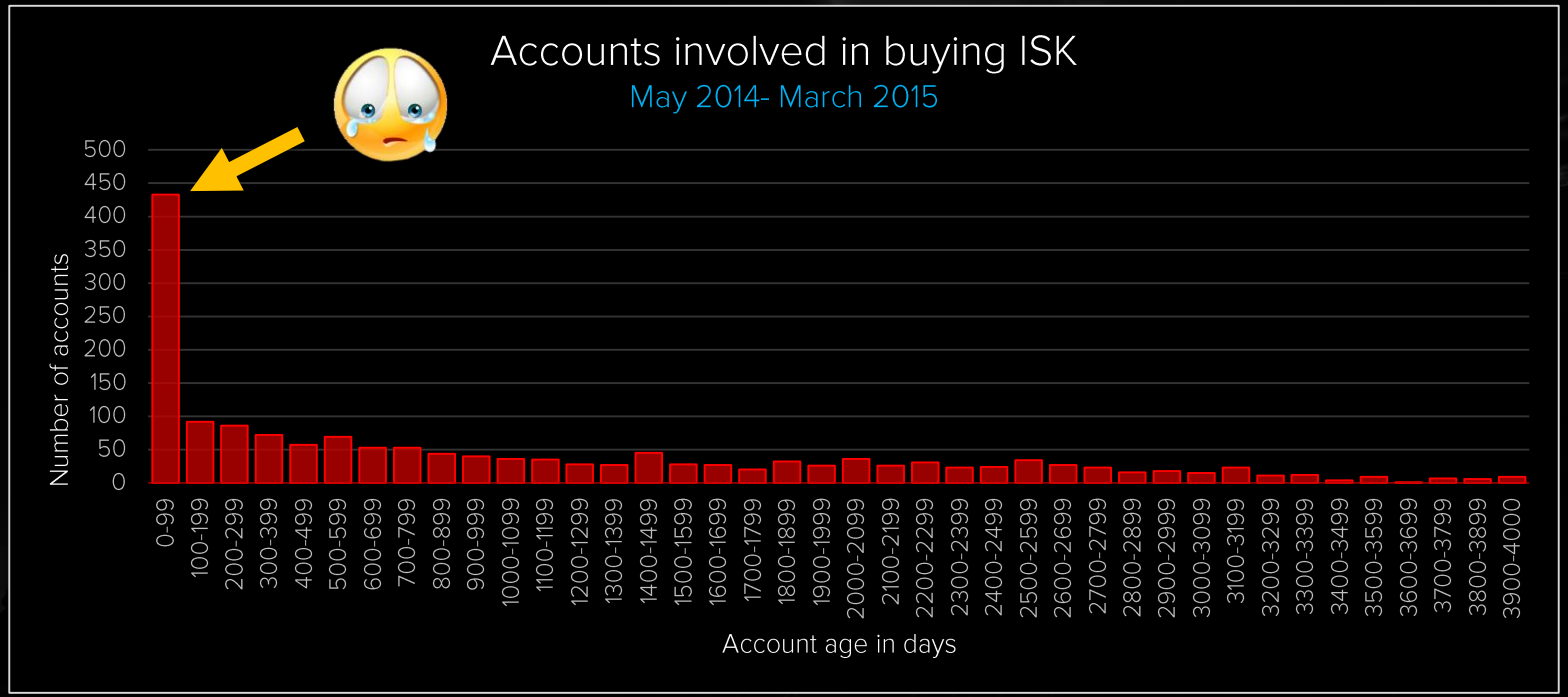
Banned accounts by Alliance

May 2014 – March 2015

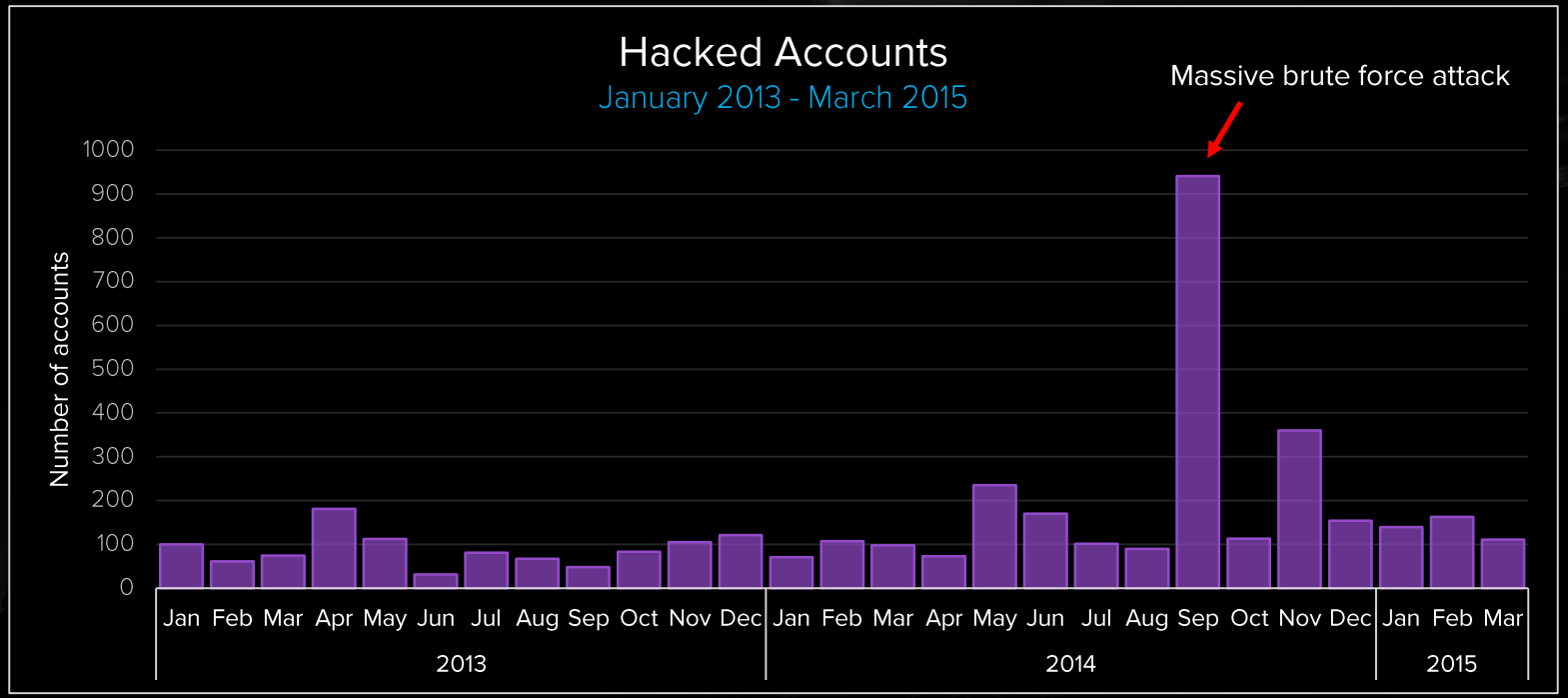
The top 3 are all well known renter alliances



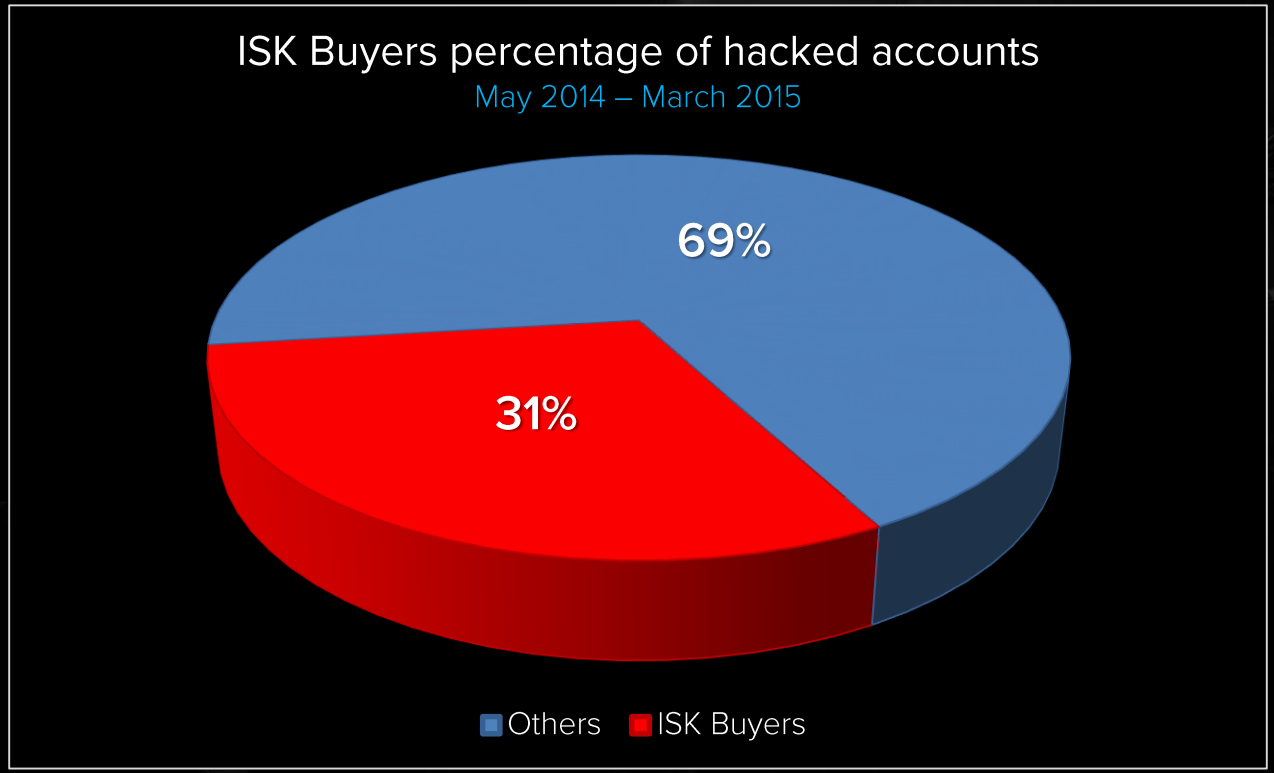
ISK BUYERS


Accounts involved in buying ISK
May 2014- March 2015
Number of accounts
0
50
100
150
200
250
300
350
400
450
500
0-99
100-199
200-299
300-399
400-499
500-599
600-699
700-799
800-899
900-999
1000-1099
1100-1199
1200-1299
1300-1399
1400-1499
1500-1599
1600-1699
1700-1799
1800-1899
1900-1999
2000-2099
2100-2199
2200-2299
2300-2399
2400-2499
2500-2599
2600-2699
2700-2799
2800-2899
2900-2999
3000-3099
3100-3199
3200-3299
3300-3399
3400-3499
3500-3599
3600-3699
3700-3799
3800-3899
3900-4000
Account age in days

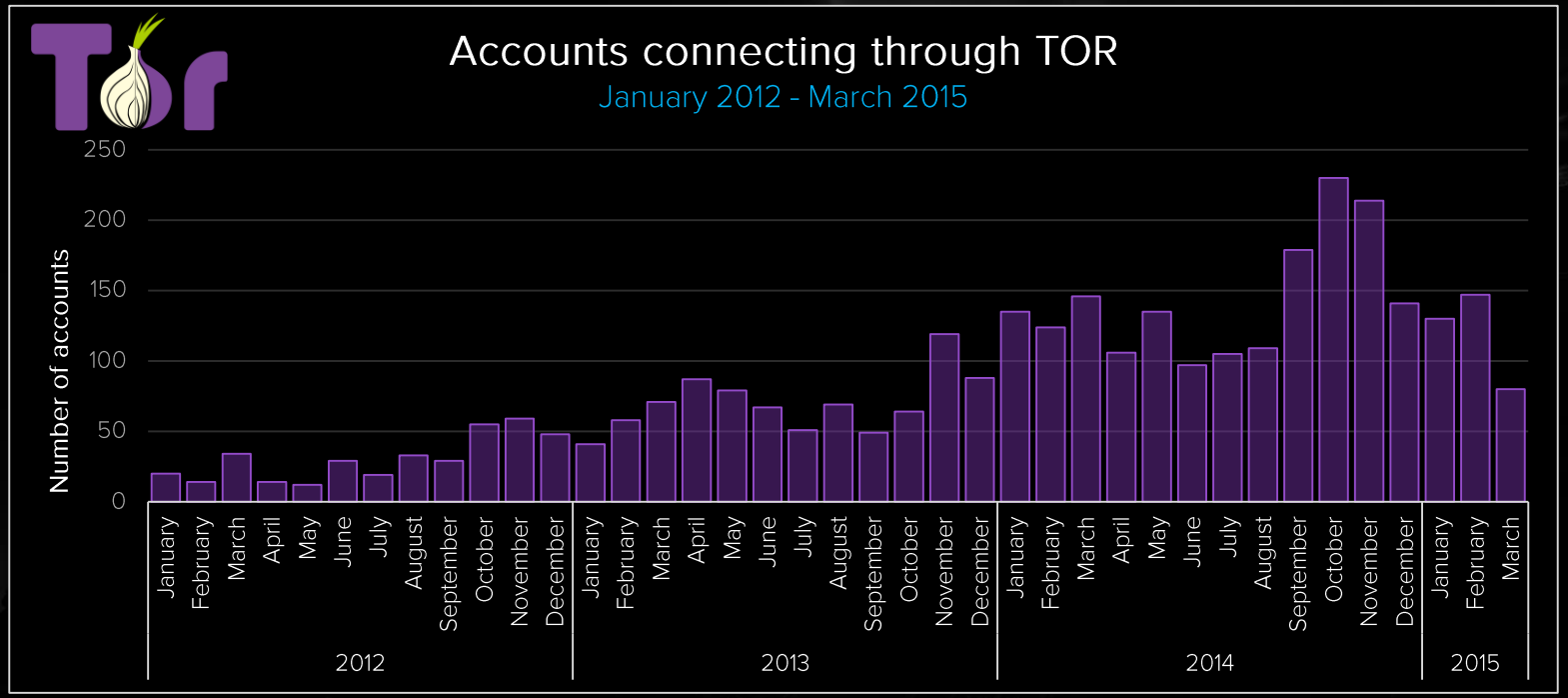
ACCOUNT SECURITY



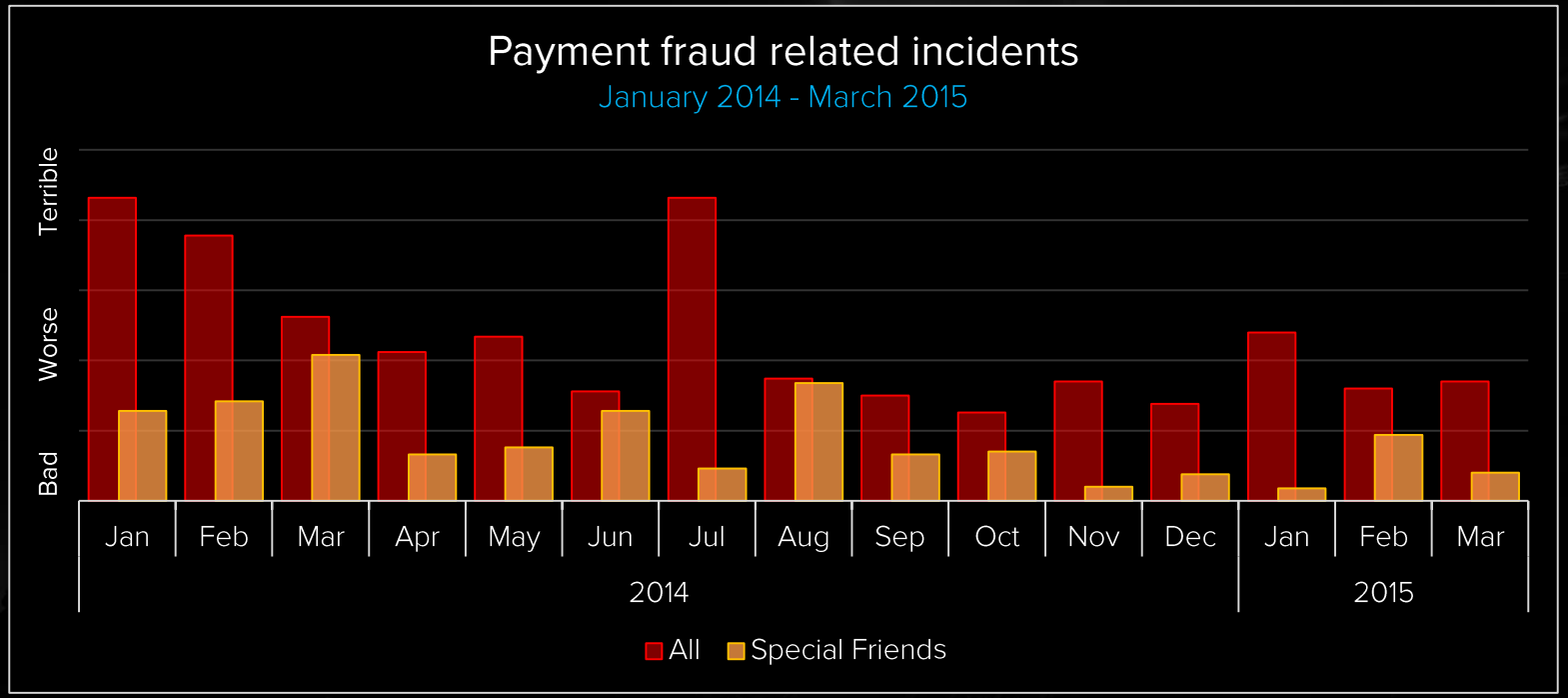
ACCOUNT SECURITY



ACCOUNT SECURITY

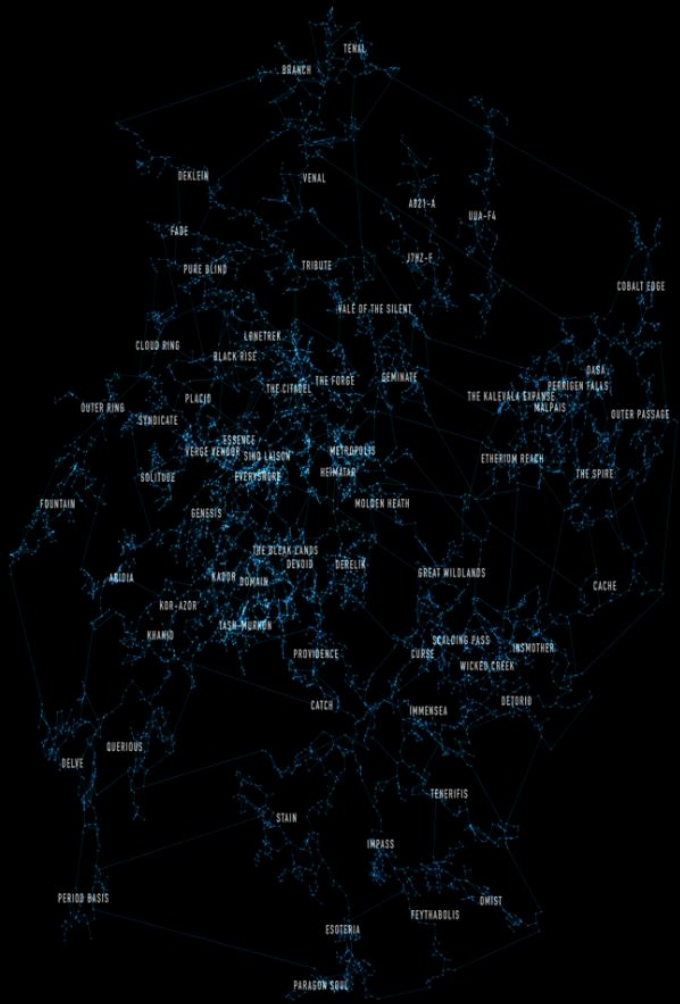


PAYMENT FRAUD



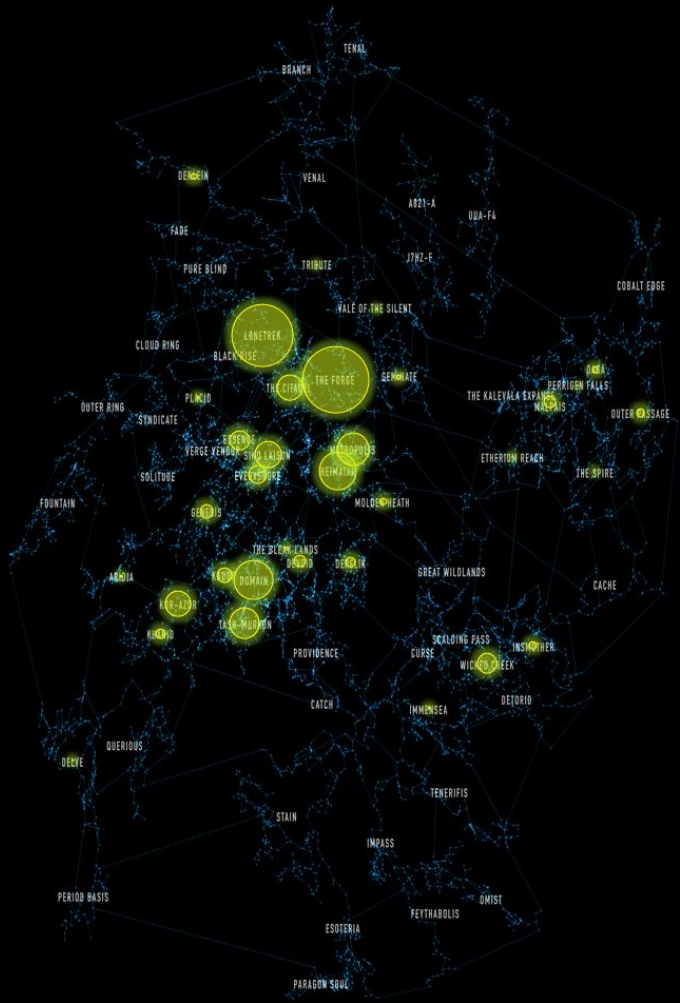
HEAT MAPS

EVE World Map



Bots banned by region
Mining bots

January 2013 - April 2014



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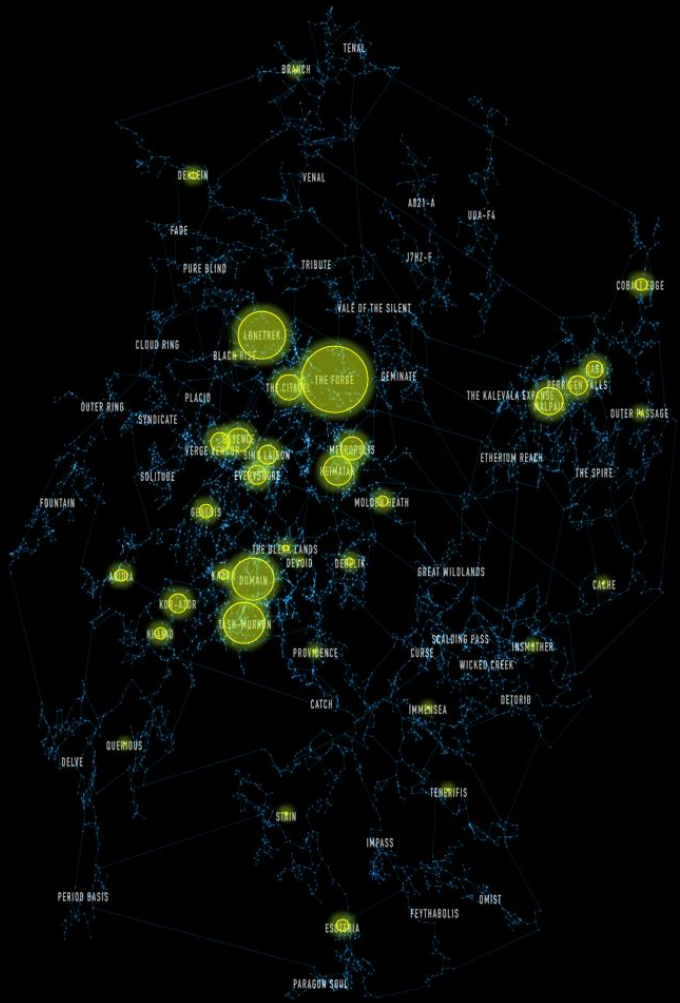
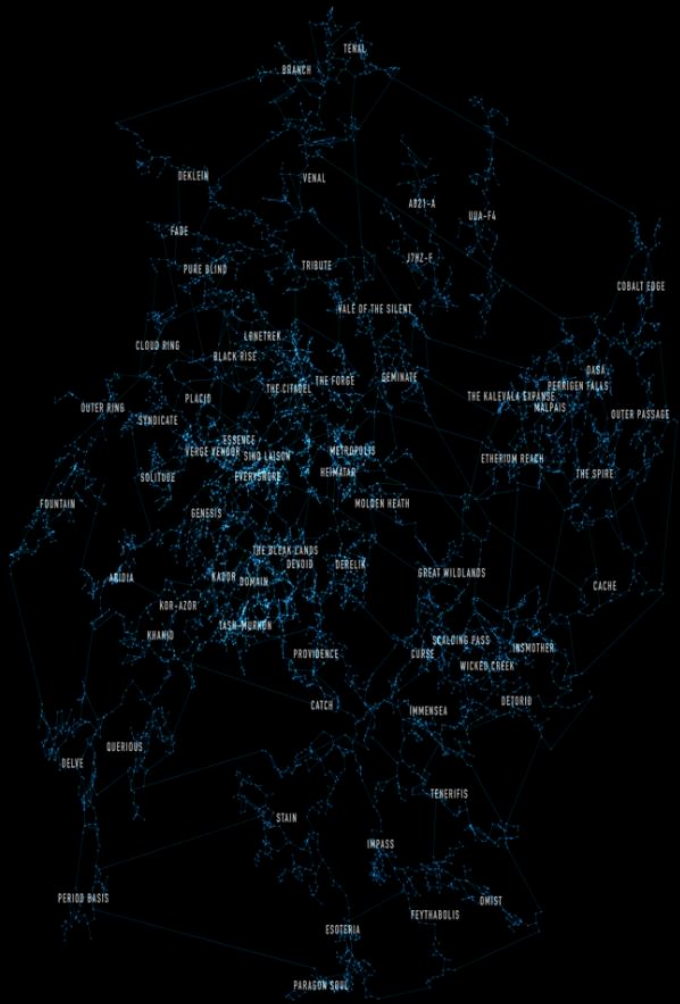


Bots banned by region
Combat bots



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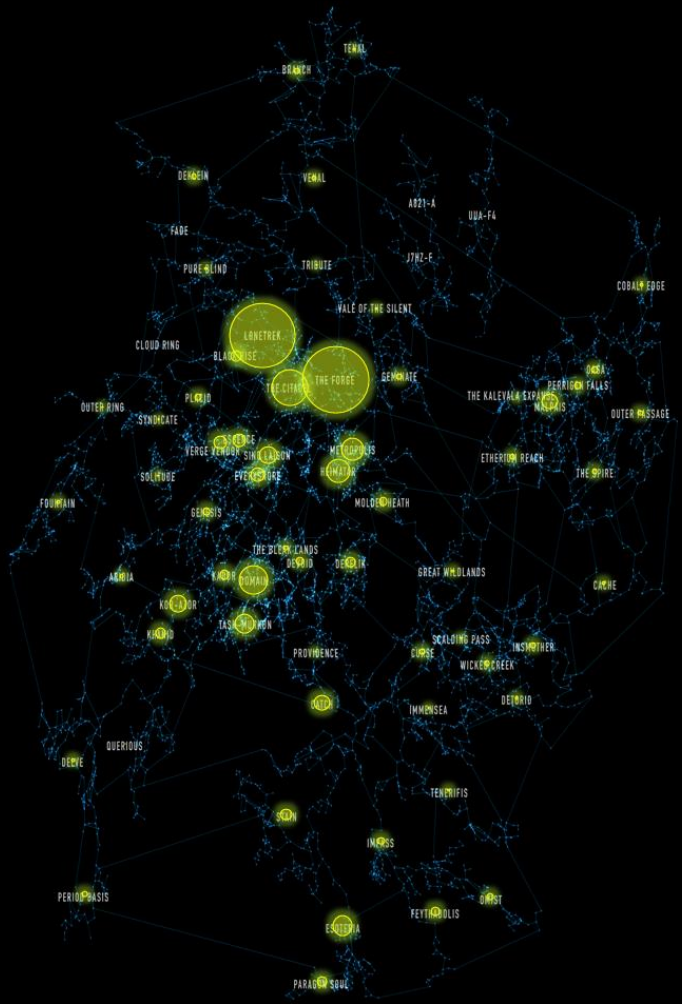
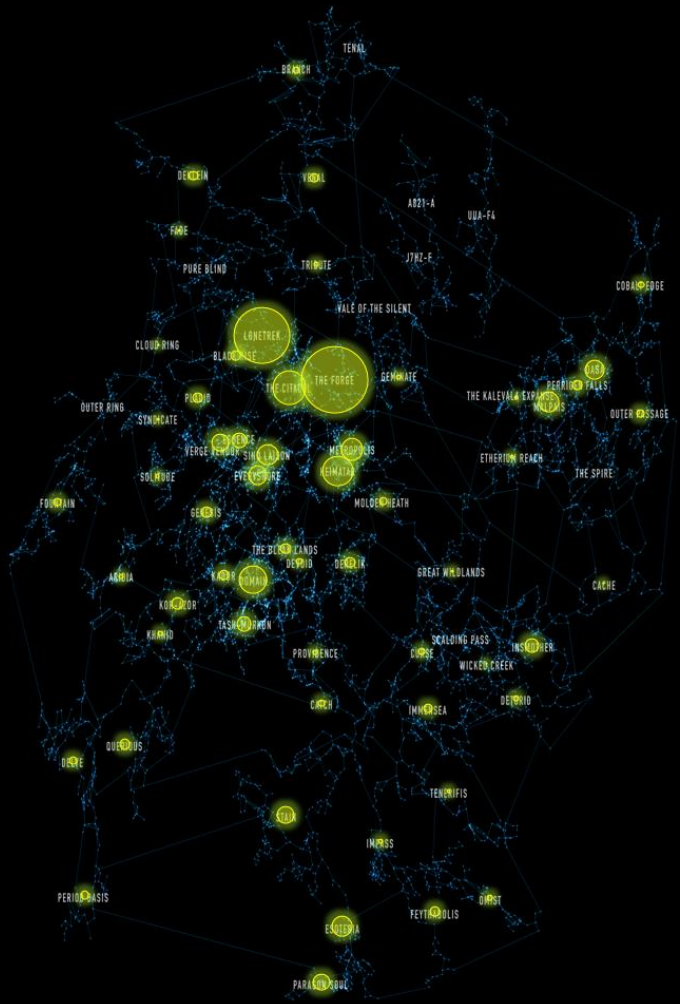


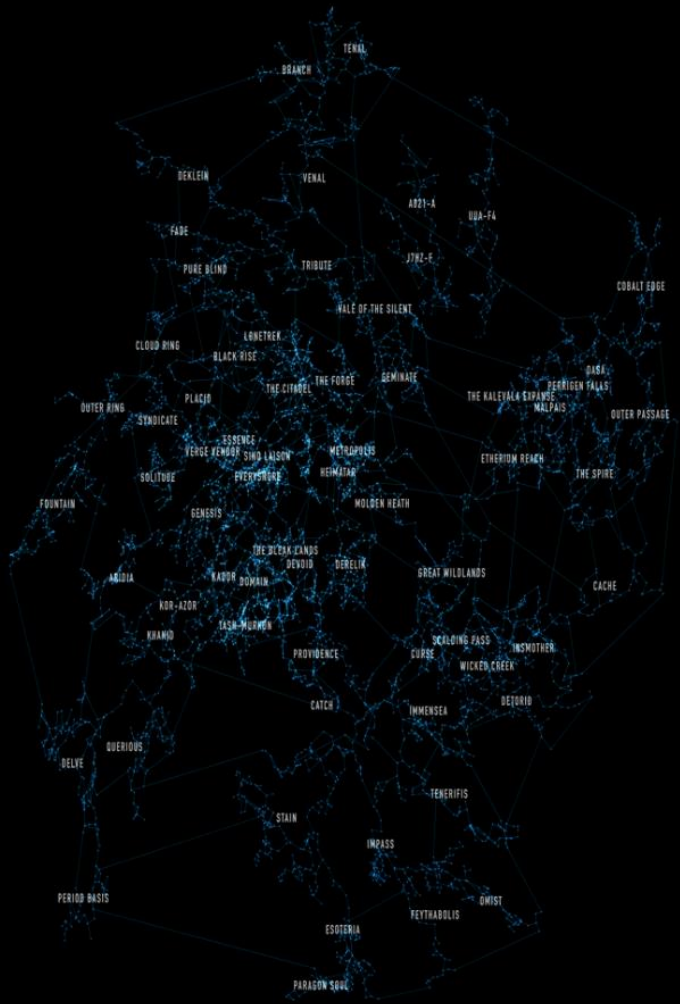
Bots banned by region
Combat bots

May 2014 – March 2015



ISK Buyers by region

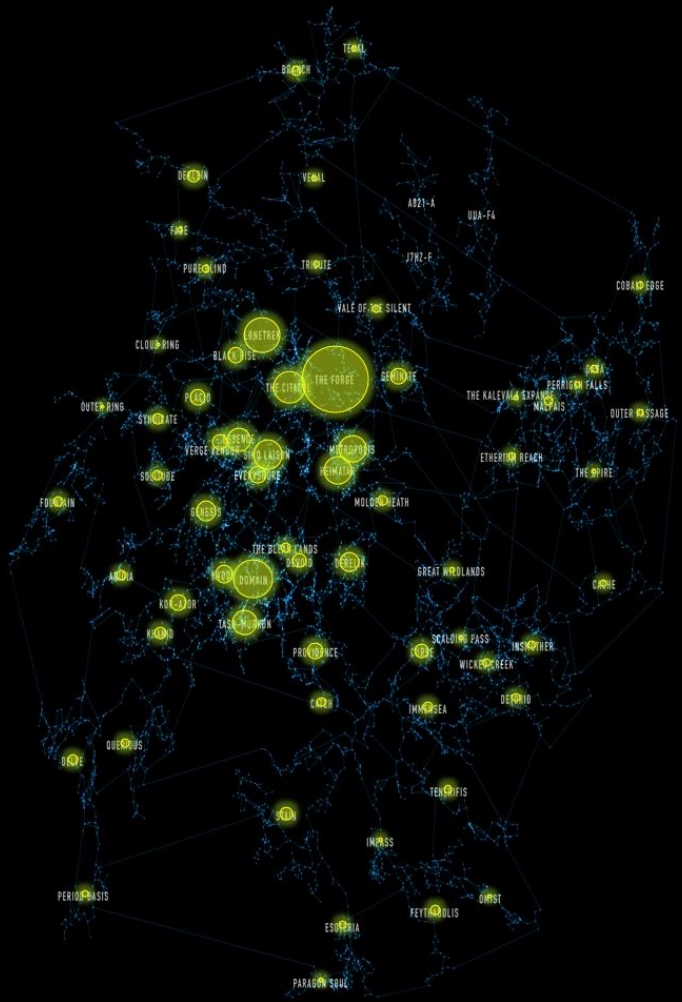
$



ISK Buyers by region

$

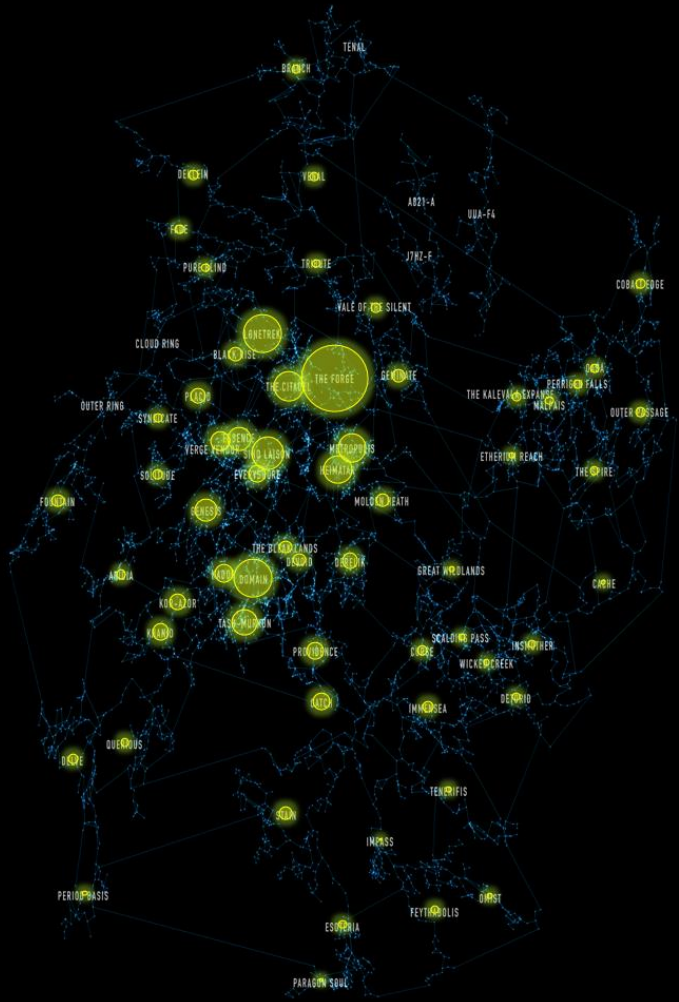
January 2013 - April 2014



ISK Buyers by region

$

May 2014 – March 2015



Secret Part

?

Secret Part - The Nosy Gamer

EVE FANFEST 2015

The Nosy Gamer

Tuesday, March 17, 2015

Fanfest 2015: Presentations of Interest

An easy post for any blogger here in Reykjavik to write is one on which Fanfest events we intend to attend. I have taken the Golden Circle tour twice and I recommend it to anyone who comes to attend Fanfest. The pub crawl? I'm getting too old for that. So this year, my post is just about the presentations I plan to attend.

I know that a lot of people make a big deal about attending the round tables. Quite frankly, I usually find them a waste of time, so I only go if none of the main rooms have an event I want to attend. Well, except for the Security one, but I have a special interest in that subject.

So here are the presentations I tentatively plan on attending this year...

months I've tracked since the beginning of 2013. In comparison, the amount of ISK sold only increased in January year-over-year from 1130 billion ISK in 2014 to 1224 billion ISK in 2015.

arch 12, 2015

: There's ISK, And Then There's ISK

'm a bit more excited about purchasing products at the Fanfest store st because of some of the selections, but due to the change in the or the U.S. dollar and the Icelandic krona (ISK). Last year at the nfest, the exchange rate according to Oanda was 112.35 ISK to the , the rate was 136.73 ISK to the dollar.

I could use some more glasses

atever

ched Soldier

le, the input knows that CCP g on 1 January 2015. That means that CCP changed the rules and that input broadcasting was allowed before that, right? So then, how could CCP Falcon go on EVE Radio's GRN Show on 25 January and state that nothing in the EULA had changed?

Black Market ISK

A View From The Outside

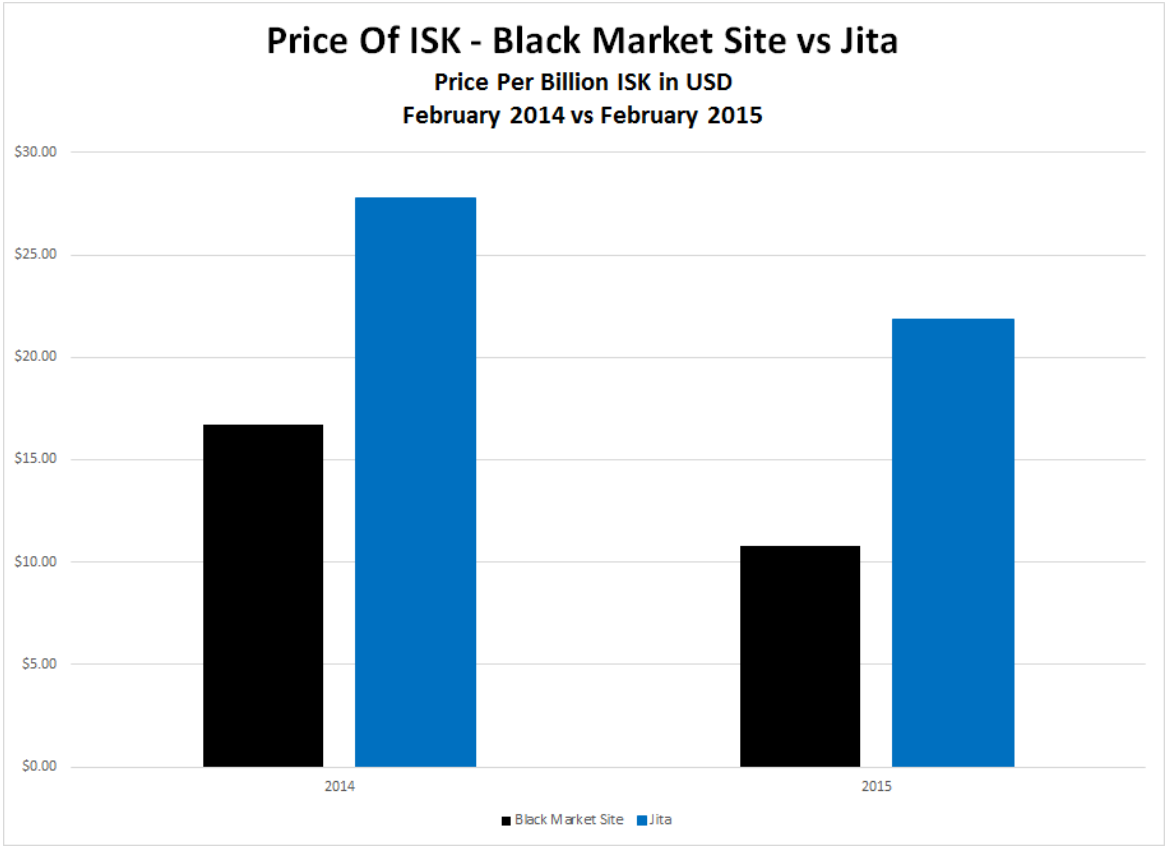
by Nosy Gamer

http://nosygamer.blogspot.com

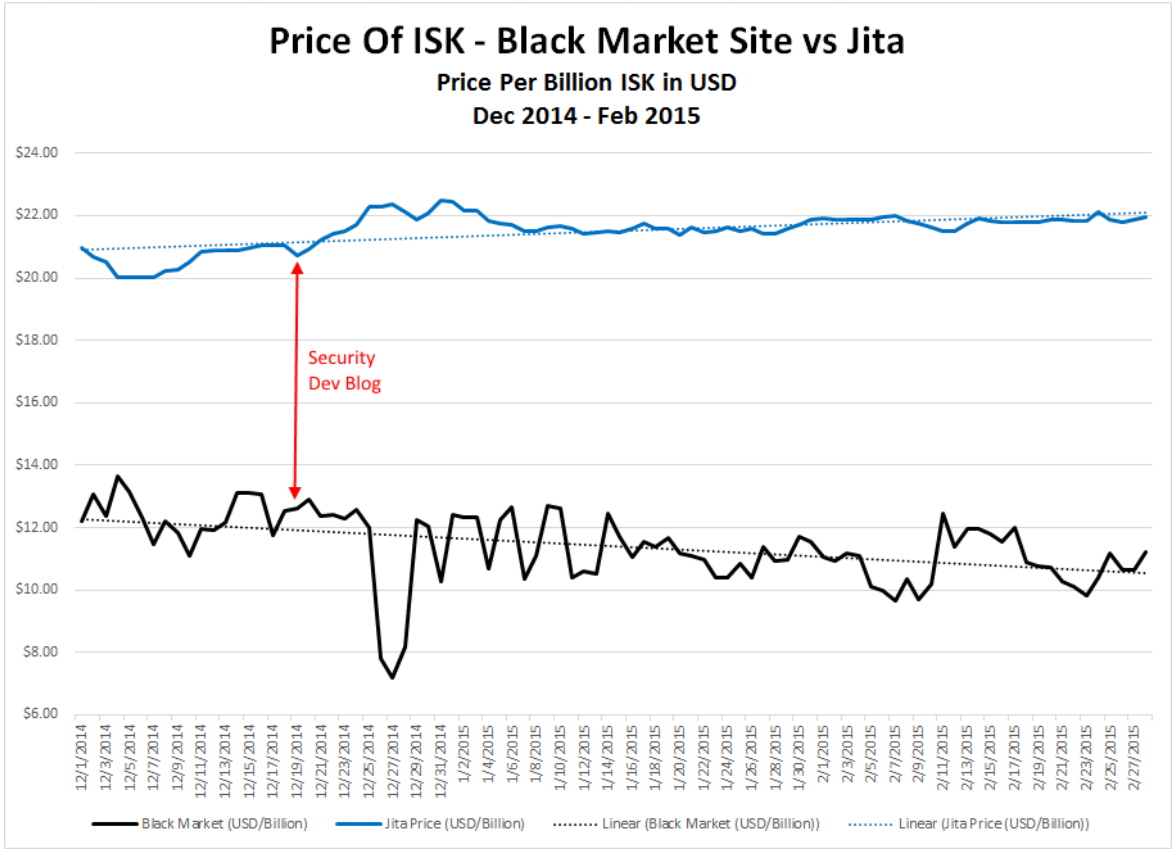
How We Observe CCP's Strategy

- Top Down
- Bottom Up
- Get Out

Black Market ISK
Top Down – The Hazard Discount



Black Market ISK
Top Down – Rules



Black Market ISK
Bottom Up – Rules of Botting

Re: How safe is this bot? 2 Months ago — Karma: 4

rules of eve, don't fly what you can't afford to lose. nothing different here, don't use a pilot you cannot afford to lose.

Bot is currently down. The bot itself is perfectly safe, it is the players that are the threat to it (both yourself and other players)

You don't set it up right and it acts like a bot, its busted. You make foolish isk transfers, busted. Other players try to interact with it and report it as a bot, busted.

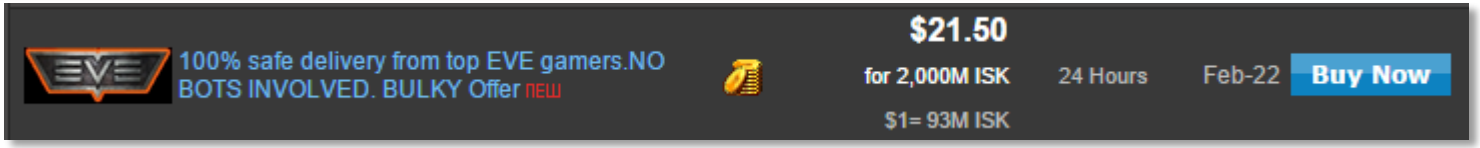
Re: How safe is this bot? 2 Months ago — Karma: 4

after you lose 10-20 accounts you learn a thing you two...

Black Market ISK
Bottom Up – Denial

Description

1 billion isk per $9.50, chunk discounts offered as well...all isk is made by hand with no botting etc.



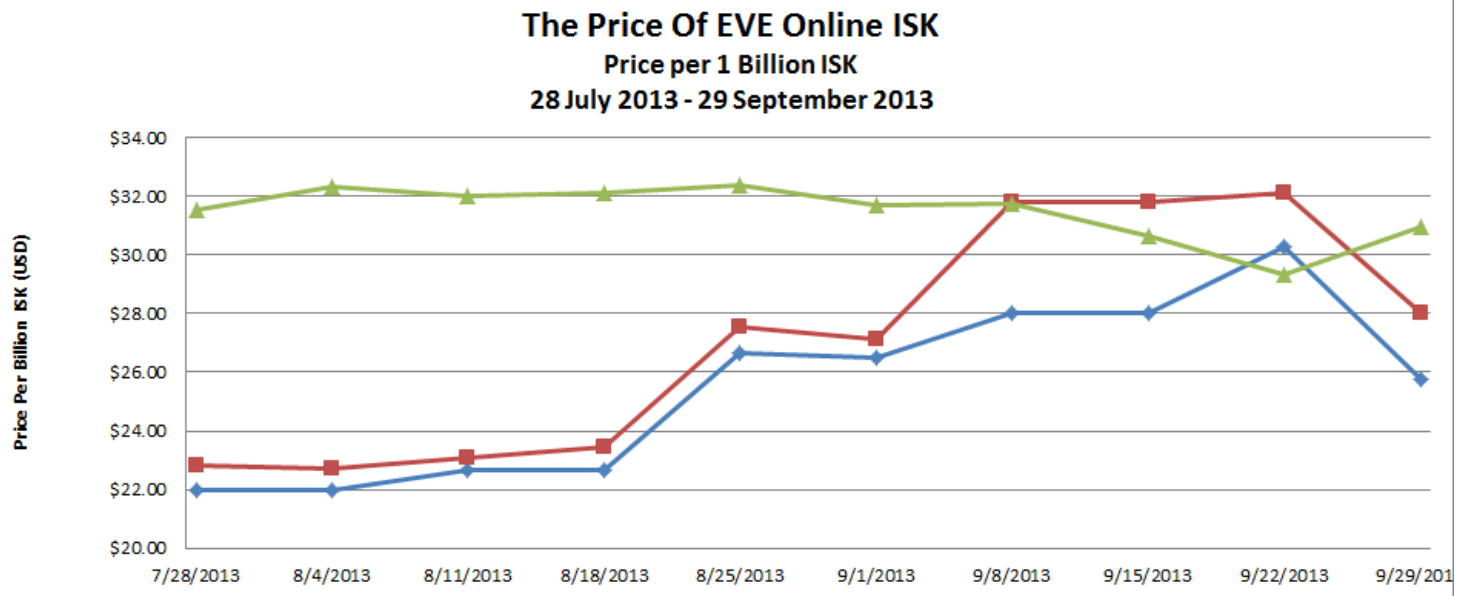
Description

WELCOME everyone. We are small group of professional farmers who making absolute legal isk's since 2008 year. Here you purchase isk's exactly from farmers bypassing dealers, for best prices.
I am new on this site but with big experience in isk selling. I can guarantee fast and as possible safe delivery.

My trading hours are from 6am to 10pm GMT(Greenwich Mean Time)
PLEASE if you need immediate delivery, be sure that i am online and ready to make a deal, also your character must located in Jita system.

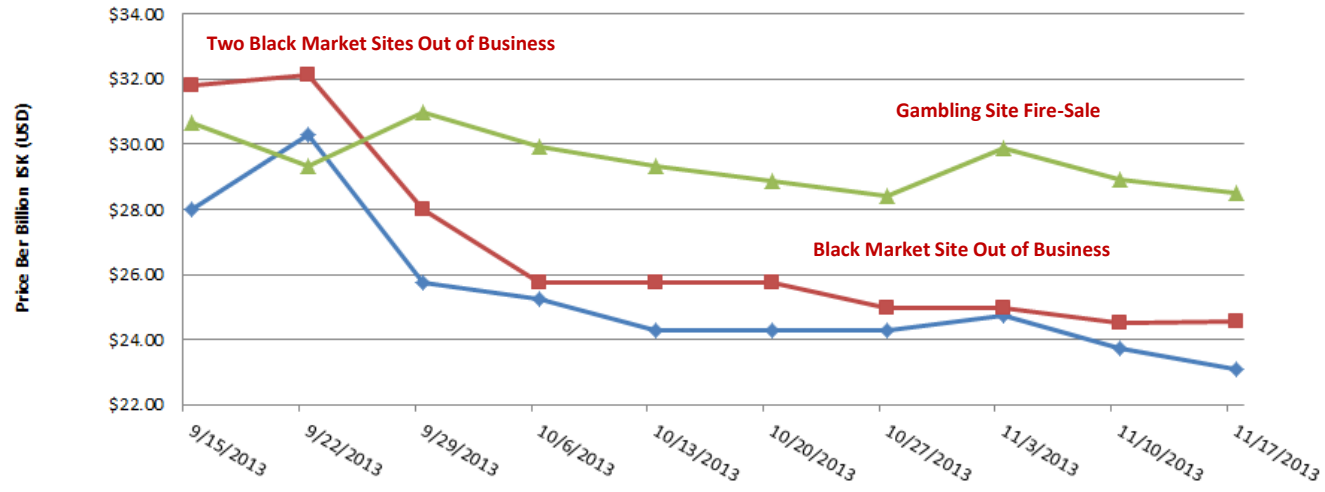
NOTE
WE KNOW PERFECTLY THE GAME !!!
EVERYTHING IS DONE IN MAX SECURITY !!!
TOTALLY EUROPEAN TEAM !!! WE RESPECT ALL THE EVE ONLINE - CCP RULES !!!
WE CAN ENSURE THE MAXIMUM SAFETY !!!
CONTACT US IF YOU NEED MORE INFO OR HAVE ANY QUESTION !!!

Black Market ISK
Top Down – Bottom Up



	7/28/2013	8/4/2013	8/11/2013	8/18/2013	8/25/2013	9/1/2013	9/8/2013	9/15/2013	9/22/2013	9/29/2013
Median Price ISK sellers	$22.00	$22.00	$22.67	$22.67	$26.64	$26.50	$28.00	$28.00	$30.30	$25.75
Median Price ISK sites	$22.80	$22.73	$23.07	$23.46	$27.55	$27.14	$31.80	$31.80	$32.11	$28.00
Average Price The Forge (Jita)	$31.52	$32.34	$32.02	$32.10	$32.40	$31.68	$31.74	$30.66	$29.33	$30.96

Black Market ISK Get Out



	9/15/2013	9/22/2013	9/29/2013	10/6/2013	10/13/2013	10/20/2013	10/27/2013	11/3/2013	11/10/2013	11/17/2013
Median Price ISK sellers	$28.00	$30.30	$25.75	$25.25	$24.26	$24.26	$24.26	$24.72	$23.75	$23.09
Median Price ISK sites	$31.80	$32.11	$28.00	$25.75	$25.75	$25.75	$24.96	$24.96	$24.51	$24.54
Average Price The Forge (Jita)	$30.66	$29.33	$30.96	$29.91	$29.32	$28.85	$28.39	$29.89	$28.92	$28.50

Black Market ISK Inside Out – Results

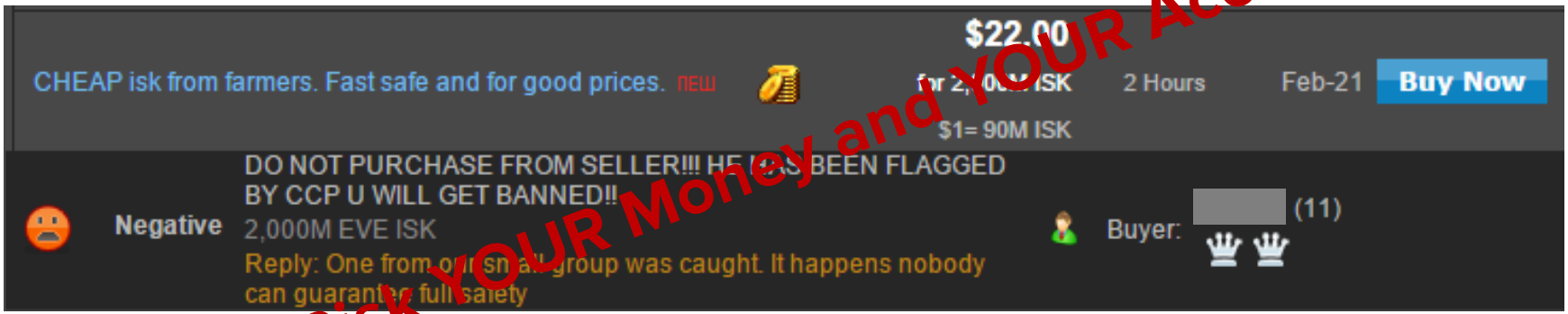
Any decent shops to sell isk to?

I've been searching for a decent MMO currency shop (or at least EVE isk shop) for weeks, but it looks like most shops which can be easily googled fall to one of the following categories:

- chinese and russian shops which are [probably] used to deal with dirt poor farmers, who can work for a bowl of rice daily (i.e. shops which offer ridiculously low price, selling at 2.5x-3x higher price themselves);
- shops which deal in currencies of lots of MMORPGs; in most cases they have no real isk buyers - you can wait for days until some client actually comes;
- some weird "middleman" sites which let you trade directly to customers at normal price, but then again you have to stay online and wait to be ready for deals anytime, which isn't really good;
- some even more weird sites (mostly chinese as well), which occupy multiple domain names, obviously belonging to the same owner - "live support" there is more like dead support, nobody answers to your questions... these are probably one-off scam sites.

So my question is: does anybody know any good european / american shops which actively trade in EVE online, and offer their suppliers some decent price, at least $7.5 / 6 euro per billion?

Black Market ISK
Don't Buy Black Market ISK



Don't Risk YOUR Money and YOUR Accounts!

Security Awareness

Policy re-cap

Real Money Trading

Awareness Success Story

Sov changes by Team Security

CCP Peligro & CCP Grimmi

AWARENESS

Policy re-cap

Macro use

EULA 6.A.

2. You may not use your own or third-party software to modify any content appearing within the Game environment or change how the Game is played.

Two strike botting policy:
1st strike - 30 day ban, removal of botting proceeds + permanent character transfer-lock
2nd strike - Permanent ban

Two strike ISK buying policy:
1st strike - 7 day temporary ban and confiscation of ISK
2nd strike - Permanent ban

Client modification or involvement in RMT sales:
Zero tolerance - permanent ban on first offense.

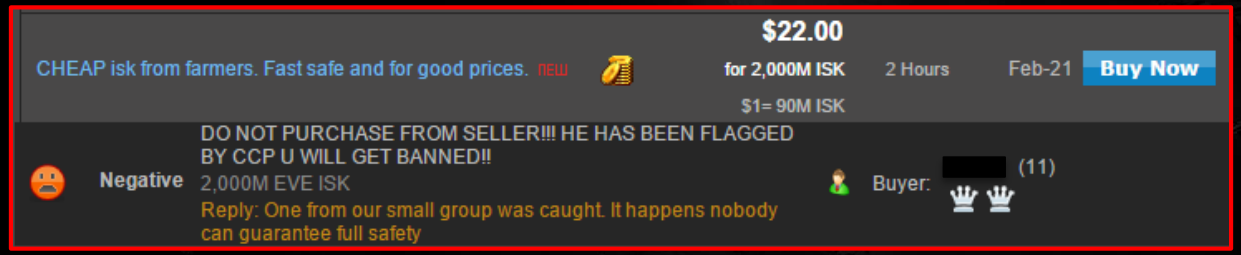
https://community.eveonline.com/support/policies/

AWARENESS

Accounts involved in buying ISK
May 2014- March 2015
New players need to be made aware of our rules
Number of accounts
0
50
100
150
200
250
300
350
400
450
500
0-99
100-199
200-299
300-399
400-499
500-599
600-699
700-799
800-899
900-999
1000-1099
1100-1199
1200-1299
1300-1399
1400-1499
1500-1599
1600-1699
1700-1799
1800-1899
1900-1999
2000-2099
2100-2199
2200-2299
2300-2399
2400-2499
2500-2599
2600-2699
2700-2799
2800-2899
2900-2999
3000-3099
3100-3199
3200-3299
3300-3399
3400-3499
3500-3599
3600-3699
3700-3799
3800-3899
3900-4000
Account age in days

AWARENESS

not this

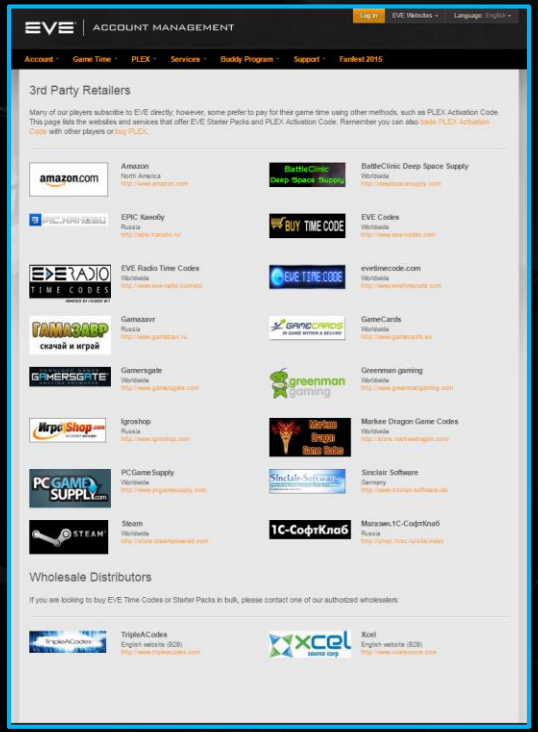


AWARENESS

this

https://secure.eveonline.com/PLEX/

AWARENESS



https://secure.eveonline.com/etc.aspx

AWARENESS

I'M CCP GUARD
AND I APPROVE THIS MESSAGE

Success story

Accounts used for Input Multiplexing / Broadcasting

AWARENESS

sneaky trolls

Local:

[01:29:18] broadcast suspect1 > gf
[01:29:18] broadcast suspect2 > gf
[01:29:18] broadcast suspect3 > gf
[01:29:18] broadcast suspect4 > gf
[01:29:18] broadcast suspect5 > gf
[01:29:19] broadcast suspect6 > gf
[01:29:19] broadcast suspect7 > g f
[01:29:19] broadcast suspect8 > gf
[01:29:19] broadcast suspect9 > gf
[01:29:20] broadcast suspect10 > gf
[01:29:23] broadcast suspect11 > gf
[01:29:28] broadcast suspect12 > gf
[01:29:33] broadcast suspect13 > gf

Fleet:

[17:29:11] another broadcast suspect3 > would you look at that

Local:

[17:29:17] another broadcast suspect1 > would you look at that
[17:29:17] another broadcast suspect2 > would you look at that
[17:29:18] another broadcast suspect3 > would you look at that
[17:29:18] another broadcast suspect4 > would you look at that
[17:29:18] another broadcast suspect5 > would you look at that
[17:29:19] another broadcast suspect6 > would you look at that
[17:29:19] another broadcast suspect7 > would you look at that

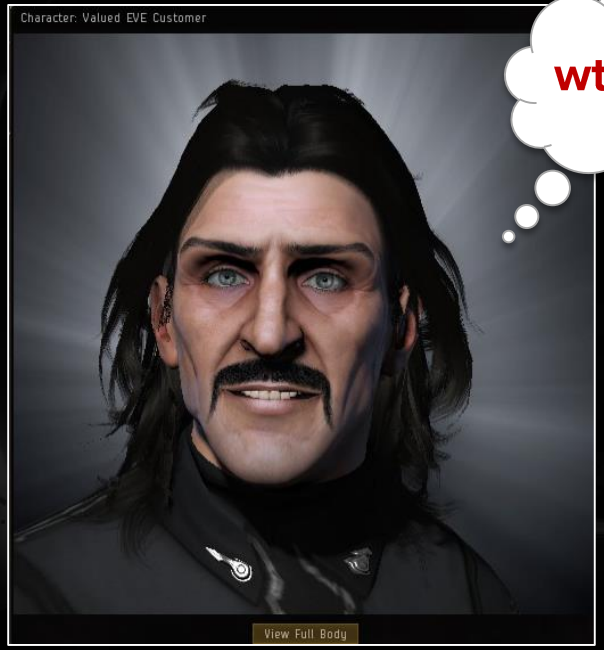
AWARENESS

Thanks for all the reports!

AWARENESS

Some basic tips on how to spot RMT

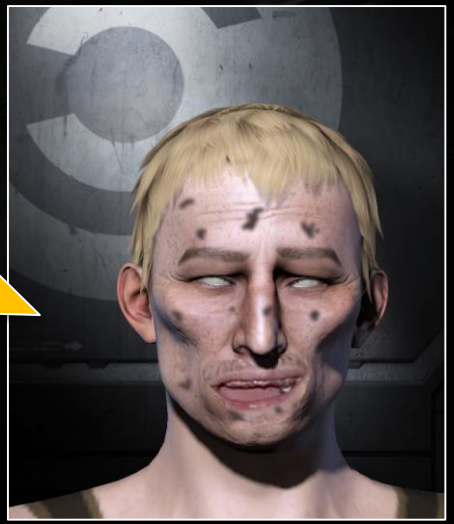
AWARENESS



wtf ?!?

hi
Thanks
have an nice day
Able to come?
ok ??
Please wait
View your warehouse
??
Why not accept the ?
Twice docking
You can be sold separately
Another gives you
You can go to jita come?
1000Million
Fastest boat
how jumps *

Dodgy RMT operative



*actual chat logs of banned RMT operatives

AWARENESS

CCP and authorized retailers do not...

Issue contracts with ISK/PLEX or other items

It's NOT safe!

Don't be that guy

AWARENESS

CCP and authorized retailers do not...

Drop stuff in containers in space

It's NOT safe!

Don't be that guy

AWARENESS

CCP and authorized retailers do not...

Leave a ship in space
for you to board

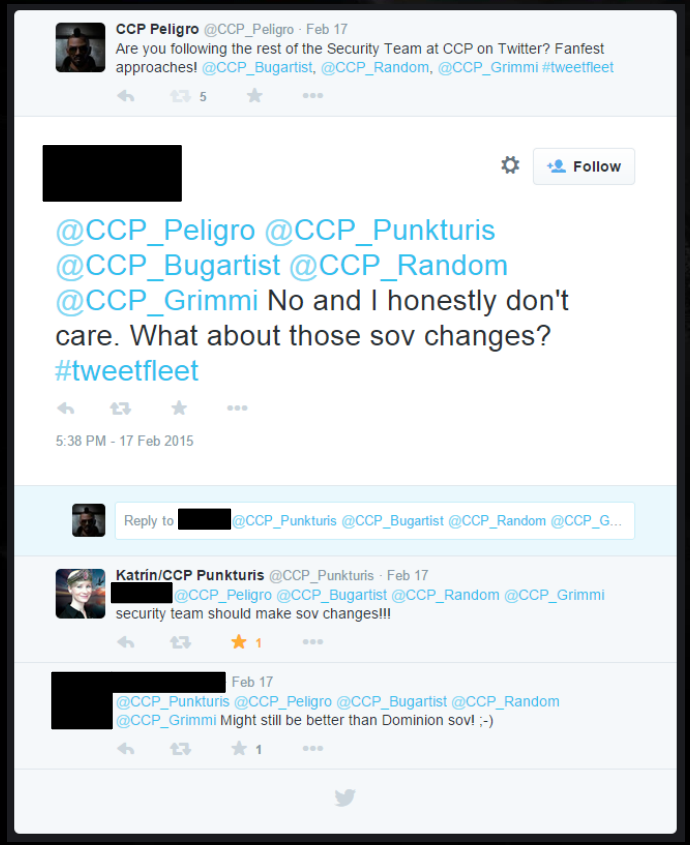
It's NOT safe!

Don't be that guy

AWARENESS

Don't be that guy

AWARENESS



CCP Peligro @CCP_Peligro · Feb 17
Are you following the rest of the Security Team at CCP on Twitter? Fanfest approaches! @CCP_Bugartist, @CCP_Random, @CCP_Grimmi #tweetfleet

5

[redacted] Follow

@CCP_Peligro @CCP_Punkturis @CCP_Bugartist @CCP_Random @CCP_Grimmi No and I honestly don't care. What about those sov changes? #tweetfleet

5:38 PM - 17 Feb 2015

Reply to [redacted] @CCP_Punkturis @CCP_Bugartist @CCP_Random @CCP_G...

Katrín/CCP Punkturis @CCP_Punkturis · Feb 17
[redacted] @CCP_Peligro @CCP_Bugartist @CCP_Random @CCP_Grimmi security team should make sov changes!!!

1

[redacted] Feb 17
@CCP_Punkturis @CCP_Peligro @CCP_Bugartist @CCP_Random @CCP_Grimmi Might still be better than Dominion sov! ;-)

1

Surveillance video

aka

We can change Sov too ;)

AWARENESS

For the video please go to https://youtu.be/WBD7CL9oQqE?t=2958

CCP Security says Thank You!

EVE FANFEST 2015

Thanks a lot for your attention!

Q&A will be in ***Dodixie*** (room) right now!

Get in contact with us:

- security@ccpgames.com
- internalaffairs@ccpgames.com