Dealing with Cheating
5 Years of Evolving Approaches

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Screen 1

150 / 150 (+6) CREW FULL

UPGRADE

LEVEL 53
$ CASH $3.1 billion
R RESPECT 2667

Battle

Family

Wins: 1161
Losses: 906

Total War Wins 3
Status

Most Recent Rivals

There is currently no activity

Lv. 59

Jobs

Lv. 51

Spread a Little Wealth to B...
20%

Lv. 70

Bounties

Most Recent Target:
Bounty: $661.8 M
Claimed By:

GLOBAL

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Screen 2

150 / 150 (+6) CREW FULL

UPGRADE

LEVEL 53
$ CASH $3.1 billion
R RESPECT 2667

Level 49
Crew members High
756W - 464L
Battle

Level 58
Family: W A R 212
Crew members High
224W - 606L
Battle

Level 58
Family: W A R 47
Crew members High
182W - 853L
Battle

Level 68
Family: CLOCKWORK ORANGE
Crew members High
919W - 955L
Battle

Level 49
Crew members High
239W - 1785L
Battle

GLOBAL Level 53
107W - 532L

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Screen 3

150 / 150 (+6) CREW FULL

UPGRADE

LEVEL 53
$ CASH $3.1 billion
R RESPECT 2667

cycling Plant
01:21:45
ontrolled By

Construction Yard
+10% cash from jobs

Pawn Shop
00:02:39
Controlled By

Explosives Lab 2
00:44:24
Controlled By

GLOBAL

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What we'll be talking about

- Working together (Community and Developers)
- Community Feedback Meetings
- Sharing feedback with the entire team

- Room 3022 for discussion

Defining cheat parameters

- Why is it important?

says:

⑤

Why would we buy gold bars now?? We can be banned at random and with out reason or any warning...

212 weeks ago.

says:

⑤

EVERYONE PLEASE GIVE THIS GAME A ONE STAR RATING

212 weeks ago.

Player Actions

- Auto-Clicking
- Account Sharing
- Exploitation of "Features"
- Sophisticated Browser Scripts

Consequences

- Character Reset
- Banning

Attempt - Autoclicker Detector

- Count Actions (Clicks)
- Simple Captcha (Are you human?)
- Simple Math (2+2=5?)

Response

- It Sucked
- Only handled "Autoclickers"
- Clunky
- Community hated it
- Never really worked

Lesson

Cheaters will find a way around your roadblocks. What matters is the community's perception.

Attempt - Screw It, Look at the Logs

- Comb through activity logs
- Community reports potential cheaters

Date	Session Key	Event	Health	Stamina	Energy	Level	Uken Points	Money	Vault	User Agent	Host		
01/03/16 02:30:24	1ee5bdb4bQ	home#index Q	650 / 650	70 / 70	944 / 10	98 Q	6	19223625	44681669177941	Mozilla/5.0 (Linux; Andr Q	208.54.70.238 Q	Raw	USys
01/03/16 02:30:34	1ee5bdb4bQ	home#reload_partial Q	650 / 650	70 / 70	944 / 10	98 Q	6	19223625	44681669177941	Mozilla/5.0 (Linux; Andr Q	208.54.70.238 Q	Raw	USys
01/03/16 02:30:34	1ee5bdb4bQ	chat#tab_wall Q	650 / 650	70 / 70	944 / 10	98 Q	6	19223625	44681669177941	Mozilla/5.0 (Linux; Andr Q	208.54.70.238 Q	Raw	USys
01/03/16 02:30:34	1ee5bdb4bQ	chat#tab_convo Q	650 / 650	70 / 70	944 / 10	98 Q	6	19223625	44681669177941	Mozilla/5.0 (Linux; Andr Q	208.54.70.238 Q	Raw	USys
01/03/16 02:30:34	1ee5bdb4bQ	chat#tab_clan Q	650 / 650	70 / 70	944 / 10	98 Q	6	19223625	44681669177941	Mozilla/5.0 (Linux; Andr Q	208.54.70.238 Q	Raw	USys
01/03/16 02:31:24	1ee5bdb4bQ	profile#self Q	650 / 650	70 / 70	944 / 10	98 Q	6	19223625	44681669177941	Mozilla/5.0 (Linux; Andr Q	208.54.70.238 Q	Raw	USys
01/03/16 02:32:06	1ee5bdb4bQ	chat#show_custom Q	650 / 650	70 / 70	944 / 10	98 Q	6	19223625	44681669177941	Mozilla/5.0 (Linux; Andr Q	208.54.70.238 Q	Raw	USys
01/03/16 02:32:20	1ee5bdb4bQ	chat#tab_clan_mark_read Q	650 / 650	70 / 70	944 / 10	98 Q	6	19223625	44681669177941	Mozilla/5.0 (Linux; Andr Q	208.54.70.238 Q	Raw	USys
01/03/16 02:32:26	1ee5bdb4bQ	home#reload_partial Q	650 / 650	70 / 70	944 / 10	98 Q	6	19223625	44681669177941	Mozilla/5.0 (Linux; Andr Q	208.54.70.238 Q	Raw	USys
01/03/16 02:32:36	1ee5bdb4bQ	chat#tab_clan_mark_read Q	650 / 650	70 / 70	944 / 10	98 Q	6	19223625	44681669177941	Mozilla/5.0 (Linux; Andr Q	208.54.70.238 Q	Raw	USys
01/03/16 02:36:36	1ee5bdb4bQ	chat#say Q	650 / 650	70 / 70	944 / 10	98 Q	6	19223625	44681669177941	Mozilla/5.0 (Linux; Andr Q	208.54.70.238 Q	Raw	USys
01/03/16 02:36:53	1ee5bdb4bQ	home#reload_partial Q	650 / 650	70 / 70	944 / 10	98 Q	6	19223625	44681669177941	Mozilla/5.0 (Linux; Andr Q	208.54.70.238 Q	Raw	USys
01/03/16 02:36:55	1ee5bdb4bQ	clan#myclan Q	650 / 650	70 / 70	944 / 10	98 Q	6	19223625	44681669177941	Mozilla/5.0 (Linux; Andr Q	208.54.70.238 Q	Raw	USys
01/03/16 02:37:19	1ee5bdb4bQ	clan#leave Q	650 / 650	70 / 70	944 / 10	98 Q	6	19223625	44681669177941	Mozilla/5.0 (Linux; Andr Q	208.54.70.238 Q	Raw	USys
01/03/16 02:37:20	1ee5bdb4bQ	clan#myclan Q	650 / 650	70 / 70	944 / 10	98 Q	6	19223625	44681669177941	Mozilla/5.0 (Linux; Andr Q	208.54.70.238 Q	Raw	USys
01/03/16 02:37:20	1ee5bdb4bQ	clan#clans Q	650 / 650	70 / 70	944 / 10	98 Q	6	19223625	44681669177941	Mozilla/5.0 (Linux; Andr Q	208.54.70.238 Q	Raw	USys

Response

- It sucked
- Enemies/Rivals identified as cheaters
- Friends/Allies defended as innocent
- No one was happy
- Lacked transparency

Lesson

Maybe we should try to reform cheaters?

Attempt - Sanctioning

- Brand cheaters as cheaters
- Restrict access to certain game features
  - Gameplay they cheated with
  - Events/Tournaments
  - Leaderboards
- Remove any ill-gotten gains

Response

- It *really* sucked
- It made little difference
- 20% of Sanctioned players kept cheating
- 50% of Sanctioned players quit
- 30% of Sanctioned players stopped cheating
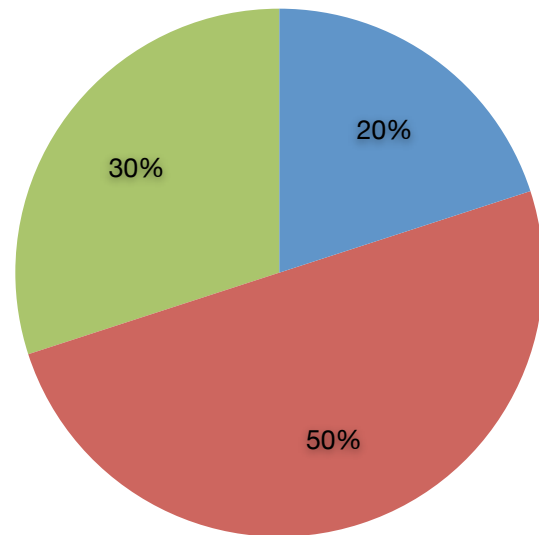
Response

- Punishment didn't feel significant to the community
- Sanctioned players protested publicly
- Community believed action was tied to revenue
- Saw an uptick in the number of players cheating

Lesson

We take cheating seriously - can we work with the community to fix this?

What now?

- Conferred with our moderators about removing the sanctioning status
- Which looks like…

What now?

- Attempt 1 - Autoclicker Detection
- Attempt 2 - Analytical Approach
- Attempt 3 - Sanctioning

- We have to have a guideline in place

Attempt - Back to Analytics

- Report identifying suspect players
- In addition to the activity logs, we also have cumulative stats on player behaviour

10 most suspicious repeated actions

User	Platform	Event	Count
	facebook		18874
	facebook		12832
	facebook		4526
	facebook		4307
	web		3751
	facebook		3670
	facebook		3594
	facebook		3298
	facebook		3097
	facebook		3060

10 most suspicious users

User	Platform	# actions	AVG Actions/sec
	web	32496	143.78
	facebook	30256	124
	facebook	25125	129.51
	facebook	18881	158.66
	facebook	17646	69.74
	web	17539	81.19
	facebook	17122	89.64
	facebook	15599	125.79
	facebook	14695	198.58
	iphone	14392	23.51

Response

- It *didn't* suck
- Able to take preventative action
- Show Community you're proactive
- Community and Mods see notices of action taken as a sign of things moving in a positive direction
- Community generally feels there's still more to do

Lesson

The real cost of cheaters is the loss of trust from the Community when they see the cheating happening.

It will be OK

- Games are still running
- Communities are still strong

- **Remember:** the real cost of cheating is from the Community noticing and losing trust

Don't sweat the small stuff

- Easy to get into a combative mindset with cheaters, avoid it!

- Never going to be able to prevent all cheating

- Focus on preventing the stuff the Community can see

- Don't need to get all cheaters, just prevent their negative impact on the game

Going Forward

- Think about cheating from the start
- Follow security best practices
    - Lock the client
    - Encrypt network traffic
    - Do proper authentication
    - Etc.
- Minimize exploitability
- Build in checks to flag suspicious behaviour

Thanks,

We'll be across from Room 3022 for any questions or discussion!

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