

PitBoss

Anti-Cheat for iGaming



CogniSafes' PitBoss addresses the challenge of cheating in on line games. PitBoss offers an end-point based solution in which an agent is located on every machine to be protected. The PitBoss agents collect data from different sources, extract the relevant information concerning cheats, making sure personal data is removed prior to forwarding to a central CogniSafe server that is located at the operator's site.

The CogniSafe solution offers:

- Real time detection of variety of cheats.
- Tracking users and trends: Help operators better manage their business by providing user profiling and segmentation.

A unique ability of the CogniSafe technology is to provide the above value while:

- Making sure gamer privacy is strictly maintained.
- Non intrusive interfacing: No integration with the game software is needed.



Cheat types

CogniSafe addresses online cheating detection covering different types, such as:

Collusion

When two or more gamers (or one gamer using multiple computers) at the same table, share information about their state (such as the holding cards).

Software cheats

Hacking the game client gaining unfair advantage over other gamers.

Online Advisors

When gamers use probability calculators to boost their performance.

Online Playing Bots

When Bots play instead of the gamer. Bot types include among others Collusion Bots and Bonus Bots.

Inside Information

When the gamer has access to information that should be confidential (such as the next card to be dealt).

"Cutting the cord"

When a gamer disconnects his Internet connection upon realizing that his cards won't hold up.

Real time detection of cheats

The PitBoss agent is a monitor that continuously tracks the end point machine execution both at the Operation System level and the application level. At the Operation System level, the agent traces system calls, computing resources usage (such as memory use) and I/O. At the application level, the agent tracks events related to specific processes (either the game client or Malware).

The agent processes incoming events employing two different detection schemes:

- Known behavior patterns: identifying previously known patterns addressing mainly known Malware.
- Behavior analysis: looking for deviation from normal usage patterns targeting mainly unknown cheats.

Once a cheat is detected an alarm is sent to the operator's console.

Real-time detection of cheats offers:

- Fair and secure game environment.
- Identification of cheats and cheaters in real-time.
- Automatic detection of unknown threats.

The CogniSafe PitBoss technology is protected by US patent 11/850,223.

Profile and Segmentation Module

PitBoss continuously creates and maintains user profiles. The profiles are a combination of raw and processed data. The raw data is collected from sources such as:

- Real time information gathered by the PitBoss agents.
- Game session logs.
- Operator's data.

User profiles capture information regarding:

- Gamer playing patterns and strategies (gamer modeling).
- Skill level.
- Integrity level.

CogniSafe offers segmentation of the gamers by profile dividing gamers into similarity groups.

Potential benefits of gamer segmentation are:

- Better matching of gamers.
- Enabling targeted profile based advertising.
- Selective gamer tracking based on gamer's profile.

