

# Effectively prevent fraud from Utopian users

- A case study by Punctured -

The main problem of the verification methods Utopian has so far suggested is:

**They're based on systems, where users can create multiple profiles.**

You need a way to accurately determine the real world identity of a Utopian user. Utopian need to “**bridge the gap**” between Utopian platform and the real world.

I have a suggestion, that would solve this problem.

# Make sure to get things right

Since Utopian is an Italian based company. You need to consider EU's General Data Protection Regulation (GDPR in short).

Should a breach result in users' data being leaked, the EU can issue fines of up to 2% of a company's annual revenue.

Consequence: You do **not** want to store users' private data

You need a way to validate a user's real world identity without ever touching it.

Cooperation with the Byteball Platform might be exactly the solution you need!

# What is Byteball Platform?

Basically Byteball is a crypto project just like Steem and other platforms. They are not blockchain based, but has implemented the same architecture IOTA and NANO are using. A Directed Acyclic Graph.

Byteball is to DAG what Ethereum is to blockchain. Only much easier to use, implement and benefit from.

I'll try to illustrate one very interesting feature of the Byteball platform.

The screenshot shows a window titled "Byteball — smart payments" with a "Close" button and a "Choose private profile" header. A dropdown menu displays "ANTON CHURYUMOV". Below this, the "Attested by:" field shows a long alphanumeric string. The "Attested address:" field shows another alphanumeric string, with "(current wallet)" below it. A section titled "Choose which fields to send:" contains several rows, each with a label, a value, and a toggle switch:

- First name: ANTON (toggle checked)
- Last name: CHURYUMOV (toggle checked)
- Date of birth: (toggle unchecked)
- Country: (toggle unchecked)
- ID number: (toggle checked)
- ID type: (toggle unchecked)

# Built-in “Real Name Attestation”

Byteball has a partnership with Jumio, who offers identity attestation. Jumio provide ID attestation to eBay and other established companies, too.

When a user attest their identity with Jumio, it is stored in the user’s local wallet.

Upon request, the user can choose to share any of the available information with a 3rd party.

Utopian probably don’t need to know anything about the real world identity. Just that the identity was attested.

The user sends a hash enabling any third party to validate, the Jumio attestation. Without revealing “real” identity information, the user can prove that he successfully attested his identity with Jumio.

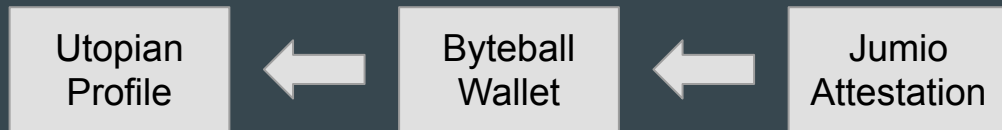
People cannot create multiple attested identities (this would require identity fraud like fake passports etc.)

# The signup process

I've tried to make an illustration of what the process of validating Utopian users could be:

- 1: Create a Utopian profile
- 2: Install the Byteball wallet (free, open source and available on PC, Mac and Android)
- 3: Attest your real world identity from inside the wallet (it's an easy 3-step process)
- 4: Link your wallet address to your Utopian account

Only users who want to be able to receive Utopian rewards, need to attest their identity!



# Potential downsides and obstacles

## Barrier of entry

Every identity attestation with Jumio costs \$8, which will have to be paid in Bytes (the currency of the Byteball platform). The upside is, that every successful attestation is rewarded \$20 worth of Bytes. The reward programme won't last forever, so in the future, users will have to spend the \$8 without receiving anything in return but the right to receive Utopian rewards.

## Users must acquire \$8 worth of Bytes (the Currency of the Byteball platform)

Bytes are available on several exchanges, so users must trade SBD or another currency to obtain bytes for the attestation.

## Work involved

Integration with the Byteball wallet is said to be extremely easy and straightforward. However, someone has to build the integration. My guess is, that with all the developers on your team, this won't be an issue.

# Positive effects and benefits

## Users will think twice before risking a ban

With the risk of being banned and knowing you cannot get another user, people will seriously refrain from fraud.

## The \$8 price per user will scare off scammers

If user profiles are free, anyone can create multiple profiles to “test” if they can find a way to cheat the system and the moderators. Knowing that each attempt will potentially cost them \$8, most will refrain from doing so.

## Tighter integration with the Byteball platform

The platform has “Smart Contracts”, that might be worth looking at. It would allow a reward to be paid out, only if a given event takes place. There’s “Oracles” providing data to determine outcome of contracts, and it’s possible to create oracles feeding data into the Byteball platform. There’s definitely several use cases worth exploring in the future.

# How to proceed?

## Contact details

If you want to know more about the Byteball platform, please get in touch with @Punqtured on Utopian Discord.

To contact the main developer of the Byteball platform, join the community slack and join the #tech channel. <http://slack.byteball.org/>

## Read more

A couple of useful links:

The Byteball Website: <http://byteball.org>

The Jumio website: <https://www.jumio.com/>

Byteball Smart Contracts: <https://medium.com/@Suirelav/introduction-to-byteball-part-3-smart-contracts-81efa010a0b3>

The Byteball Core GitHub project: <https://github.com/byteball/byteballcore>

Information on Attested profiles: <https://github.com/byteball/byteballcore/wiki/Using-attested-private-profiles>