the new revolutionary p2p media provider

November 28, 2013

Abstract

WeTube comes in a time in which we are seeing enormous efforts from the people to overcome the problems of censorship and central information control over all Internet. Notorious are the examples of YouTube, Vimeo, and other regulated places. YouTube itself, for example, is directly censored in many countries (https://en.wikipedia.org/wiki/YouTube_ Censorship), impeding people to access to the biggest media database available today for humans, and therefore making a precious source of information not available for human evolution and free interchange of information.

But not only censorship occur to websites, but also the websites themselves are obliged to censor many of the contents that the users upload, many times to adjust to arbitrary regulations that are imposed by a few, only serve a few, and restrict the majority.

We believe this is a serious problem, and we should overcome it by the means we can for the moment: technology.

We are happy to present here a good solution, and we expect that the technology expressed in this document can make you excited enough to understand the big implications that this is going to achieve very soon.

We extort you to join us. We truly need you, as this is a movement from humans to humans. Please read on.

The three pillars of WeTube: freedom, privacy, voluntary moderation

Imagine a web page where you can upload any video, music, image or document, and it will be immediately available to everybody without restrictions, without anybody knowing who you are (if you want), without anybody censoring you.

Imagine a web page where you can access any media you want without anybody having to know what are you doing, not being imposed to authenticate with your real ID, IP, or associated credit card number, not being observed by the big brother, and at the same time the content you access is of high quality and helpful for your evolution and relationships.

Imagine you are a publisher, a journalist or an editor, and there is a place where you can safely publish your discoverings, but without any censorship at all, while at the same time you are able to get rid of the junk and noise around you, providing only good quality researches and associations with you audience.

Imagine you are an artist that lives for and from your art, and you have a free place where you can express your ideas and concepts, participate in community with your followers and other artists, and even earn the money you deserve for your hard work, without imposing others and not having to pay big commissions to any private editor or distributor, nor having to support their greed and censorship.

Imagine a media where you can get rid of the junk so easy as doing a click. Imagine being your own moderator, where you can select what is good and bad for yourself and your family, without having to surrender yourself to what other has decided, specially when that other is trying to impose you a vision you don't agree with.

Imagine a place where you can choose multiple moderators, including your-self or no moderators at all, being them people and organizations you really trust, and the possibility to add or remove them without restriction. Imagine how good a free moderator could be if their motivation is to serve only what people want while removing what they don't, not what a big guy on top of him/her decides. Moderators with big impositions and bad appliance of filters would be rapidly abandoned by the community, and their reputation diminished.

Imagine that the media you see is temporally stored on your computer so you can see it multiple times without having to reload it. Imagine that the content you like most is permanently stored on your computer so if you lost your internet connection you can still access it. Imagine a safeguard of all the important media you have in case of media server shutdowns, human crisis, war, or government censorship. You don't have that in today's standard media providers, as they prohibit you to store the content. Even companies like Google prohibits the publishing of browsers add-ons that use a trick to record the media, making YouTube videos very difficult to get stored locally with the Chrome browser.

Imagine that you are a legit entrepreneur and have a useful and good business that you need to promote. The audience of this new media provider will be large and a real opportunity for you to come in. Every single area of business you can think of is covered, and you'll be able to perfectly select the categories you want to be in. Even better is the fact that advertisers can select to what moderation they want to be attached, so you can perfectly choose moderators who provide legal only content in your country.

Imagine that you are a programmer and/or a system administrator and you want your deserved reward for your hard work while being useful to humanity. You can host a server and earn bitcoins proportional to the amount of bandwidth, space and maintenance you serve. At the same time, the protocol is specially designed to protect you against the arbitrary laws, as you can select which moderators you're going to serve, and therefore, the content your server helps the user to download. But not even that, most of the contents are actually not stored in your servers, but interchanged between users alone, making this protocol a really distributed anonymous one. We even optionally protect your IP with a technology similar to hidden Tor services if you want to serve delicate searches, at only the cost of some added latency. You are a crucial part of this revolution.

Is this another moderated system?

Yes and no. It is moderated in the sense that oneself can be the moderator, or relay the task to a trusted moderator or a group of moderators. The magic of

this system is that it allows full freedom, while maintaining the convenience of good-quality results and potential legality, as explained bellow.

First things first. In WeTube, there is a root moderator called "unmoderator" which accepts everything and cannot be violated in any form. This moderator resides in no place and all its content is purely in the cloud of users. Not a single part of this moderator content and searches resides in any server, except if the server administrator decides so, which s/he must explicitly configure to. This moderator fulfills freedom and zero discrimination, which unfortunately includes low quality results and potentially some illegal content in some countries.

You can compare this unmoderator with raw eMule, Tor hidden services, Gnutella, Kademlia, and other p2p protocols offering searches and/or magnet links. One who has used those programs knows that the results are more often than not of very low quality, when not illegal or honeypots. But yet, people use those programs because of censorship and copyright issues in their countries, so they accept the junk in favor to obtain some valuable content.

That drives us to a problem: because no moderation is taken place, both the quality and legality of the content is diminished, and most people don't use them because of that.

So, what to do? We don't want to be illegal, and at the same time we want full access to quality content which is censored in central mainstream medias. We also want privacy, one thing which we don't have today unless we use very complicated technology.

The point here is: you can't have legality and good quality content in an unmoderated system. After a while, the system will be full of junk and legally dangerous staff.

So we introduce moderators. But let the thing be WELL done. We choose to be OUR OWN moderators. Certainly not a good thing for oppressive business and governments, who want to be the only one moderators (we should call them oppressive censurers, or just fascists), but still a good thing for governments and entrepreneurs who embrace freedom and really take care of their citizens/clients.

When a user enters in the WeTube network, s/he is usually attached to a moderator which only censors things which are not relevant to the theme s/he is attached to. For example, one moderator can specialize only on providing news, throwing out the rest. Another moderator could provide a good collection of music of a specific style. There could be also more general moderators which only accepts everything which is legal in his/her country. And there could be another interesting type of moderator which accept content which is censored in his/her country, but that content is globally considered good in the rest of the world, making him/herself an activist pro human rights against dictatorships.

A user of WeTube always can choose whose moderators s/he wants. He is presented with a default, which is usually a group of moderators which keeps things legal. But s/he can all ways choose to exit that moderation, or combine with others. Yes, multiple moderators are allowed, but interesting enough, the system allows also to be attached only to "unmoderated" (moderators themselves enter in this mode to pick good staff throughout filtering).

Anyone can be a moderator and no personal information is required. Just register a nick and go to the moderation area, and there you got it.

Now it is time to introduce the concept of WeTube entry points:

The entrance to the world of WeTube

The p2p programs are a problem in themselves. They require the user to install an application in their computers and configure things. The learning curve is also usually high, and passing links to another person is complicate because requires both sides to have the program installed and configured. Another important problem is that those programs are not really real-time, so the user must wait for the entire media to download in order to start watching it, which is extremely slow and inconvenient.

So we propose a very nice solution: WeTube can run in your browser and in your mobile device, so you can pass links around, use a nice interface, embed videos in your blogs, send by email, and do with the content all the things you can actually do with with any page.

But, because WeTube is in fact a p2p protocol, with thousands of servers and users connected to it and making it run, the web is only one of the possible interfaces. As a protocol, it can run on web-pages, but also in the form of applications which uses the WeTube libraries to present themselves in other convenient forms. Desktop applications and mobile applications are perfectly possible.

The average user will use a simple web interface as his/her entry point. Many WeTube servers will also provide an entry point that will download the JavaScript program that runs in the browser, which is in fact the interface for WeTube. Optionally, every entry point to WeTube can choose their default moderators, and even disallow the users to select moderators which provide illegal material, just to avoid legal issues. Of course, in this case, the user can change the entry point for another less restricted that allows more moderators, or simply download a full-featured browser extension with unlimited access.

The matter of allowing entry points to be fully moderated has many advantages:

- The site itself can avoid legal issues.
- A site that is meant to provide content for just one specific area, for example, news or scientific, can filter the rest out.
- A site with content only allowed for children, could be considered safe and can provide only useful and educative content for them, filtering out violence or sex, and also boring things.
- Those sites are also a way to promote WeTube itself.

The rise of privacy

Privacy is a big problem today. Corporations and governments keep track of everything yo do, and use the information they collect from you to make a profile of your personality that they then use to impose certain things and make decisions

People tend to think that the information they collect from them is just for advertising purposes, but that is only a tiny part. And I will put some examples:

The main target are libertarians, anarcho-socialist, anti-capitalists, anarcho-capitalists, communist, people aware of their rights as citizens, artists, media

distributors (incorrectly named "hackers"), protesters, open source activists, many minorities, people protesting against governments regulations, people protesting against monopolies, scientific out of the statuesque, and more. In a sense: people who embrace freedom, whether they are from the left or the right.

Wars are used as an excuse to impose vigilance and coercion against the people. Actual corporations want to earn money, yes, but the point is that, meanwhile, they are a tool to impose censorship and control. Any good company who is worried about their clients privacy is usually forced to give all the information they gather to government agencies. And this is happening in most countries, some more than others.

But we believe in freedom and self-responsability. And privacy is vital at this point, because we must protect ourselves against censorship. It doesn't matter what you have to say, what are your ideas, if you can't spare them.

Important is also your economic privacy. Remember that most media providers requires you to give your credit card number in order to start downloading media, even if it is free media. iTunes and Google Play are examples. When you give your credit card to them, not only are you de-facto telling them who you are exactly, but you are telling banks and therefore government agencies what are you doing with your money. This is a very strong form of coercion to artists too, because that implies that only artists approved by them can reach a sufficient audience to make a life.

So we embrace Bitcoin and derivatives for the economic parts of WeTube, because it allows anonymous and non-coercible transactions.

More importantly, we base our identity parts in Keyhotee, that has an impressive list of privacy and security features, including the possibility to register any nick in a completely distributed network, not owned by anybody, and therefore out of the information collectors. This is the only way today to obtain real private anonymous IDs.

Of course, we also protect your IP. Even if you need an internet connection to connect to WeTube, in the very moment you enter into it, your privacy is guarantied because all data travels encrypted and completely distributed. So the only thing that a man in the middle can see is that you are connected to WeTube, but cannot know what are you truly doing.

But what about criminals? Couldn't they have impunity in this system?

They can't have impunity because this is a moderated system. Criminal activities should be immediately rejected by most moderators. Illegalities could also be cut-off.

Yes, they could still broadcast media to the unmoderated area, but that area will be mostly ignored by normal people.

We believe that if you try to censor terrorists or psychopaths, the only thing you will obtain is a stronger response from those groups, and motivate them to use actual physical forces. Most moderators and users do understand that the best they can do is ignore criminals, or even better: create content that severely expose their badness and identities by investigations.

Also, we should consider that most people are actually good people and don't like violence. Most of the biggest threads to humanity did precisely came from

wars and false-flag actions, of course motivated by the dark sides of governments and bankers.

Economic incentives

WeTube is a Distributed Autonomous Corporation (DAC), this means that it is going to have:

- Investors (those who buy its stock).
- Workers, those who sell their art, maintain servers, do the programming, moderate, promote the site, and also users that share their internet connection.
- Clients, those who contract preferential services, pay for art, or advertising space.
- Free clients, those who benefit from the system but don't require special treatment, which are the majority. Free clients should have a satisfactory experience without having to pay anything, like in YouTube.
- Dividends! To be automatically paid to workers and investors.

But, the interesting thing is that anyone without exception can participate from this entrepreneur. Lets repeat this very loud:

IN A DAC, ABSOLUTELY EVERYBODY CAN PARTICIPATE, IT IS ANONYMOUS, PAYMENTS ARE FULLY AUTOMATIC, THE CORPORATION IS NOT BELONGED TO ANYBODY IN PARTICULAR, NOR BEING PLACED IN ANY PARTICULAR SERVER. IT IS FULLY DISTRIBUTED AND AUTOMATED. You can buy shares (MediaCoins) and wait for dividends. Yo can put a server and win dividends. You can be an artist and receive payments in the form of dividends. You can be a moderator and be rewarded for you hard work with dividends. All will be fully automatic, nobody is going to approve or deny you. And the more you work/invest, the more you're going to obtain. There are no human contracts to be negotiated or signed. Every worker/investor/client is free to enter or exit the system in the way and amount s/he wants. All algorithms to achieve this are very cleverly programmed. In fact, the only rules are in the software, based on mathematical facts, so everybody is treated in function of that. There is no possible violation nor human intervention in the automated process.

This way of constructing business is incredible! In one hand it satisfy libertarian approaches because it permits investment, innovation, and voluntarism, and in the other hand it also satisfies anarcho-socialists because this is a community of workers that get paid with justice and inviolability, maintaining their rights and aspirations. You can think of a DAC like a big autonomous corporation or cooperative of workers and investors. And everything is voluntary.

All payments should be in Bitcoin and/or any other important alt-coin.

People can buy shares (MediaCoins), so they receive dividends. Shares of WeTube could become very valuable in the future!

Media Coin, the shares of WeTube DAC

Every single registered user and worker has an associated free MediaCoin wallet. MediaCoin is a new virtual coin, representing the shares of the WeTube stock.

This is the first virtual currency that is not mined, but earn by actual work. This currency is backed up by the work of moderators and servers. For the first time, there is an intrinsic human value in a virtual currency, value that comes from direct human work and internet bandwidth.

Every single thing that can be bought in WeTube, uses MediaCoins. So if you want to pay an artist, you must easily exchange Bitcoins to MediaCoins. We are doing tremendous efforts to ensure that exchanging Bitcoins to MediaCoins becomes extremely easy, so we are presenting an exchange page in the main interface, that every single user can access.

There are going to be human exchangers, who put their prices for MediaCoins there, and then the user comes, send his Bitcoins to a coin-address and get her/his MediaCoins immediately after 3 confirmations. From there, s/he can do whatever s/he wants with the MediaCoins, including returning them to his/her Bitcoin wallet.

There is not going to be any kind of commissions, and manual escrow is not needed because transactions are fully automated and checked in real time. This is just wonderful! Escrow is fully automated and free. How does this work? The MediaCoin seller put MediaCoins in sell mode and provides a Bitcoin address where to receive payment. By putting an amount in sell mode, the seller automatically put the MediaCoins in escrow mode, so he cannot spend those coins for a defined period of time. Then the buyer sends the mandatory amount to that Bitcoin address, and the WeTube network watches it. When 3 confirmations are made, the system send the MediaCoins to the buyer from the seller account and finish the escrow. If the buyer doesn't pay after a period of time, the escrow is released and MediaCoins return to the seller and become expendable again.

But even more, having MediaCoins converts you into a investor! So you have the right to receive dividends. More on this below.

Earn MediaCoins by sharing

WeTube system pays coins to their normal registered users, if they share their bandwidth and help to propagate content. Every single time that a user adds one media to favorites, and have the interface loaded, s/he shares that media, and a distributed algorithm along all the servers is in charge to calculate the profit, in function of bandwidth shared.

There is also a cache configurable by the user, which stores content that the user watches temporally. The content of this cache is also shared, but with less preference than the favorite ones.

This encourage users to maintain sharing and become a great community, while providing good broadcast for the most quality pieces.

The Workers

Programmers - the great initial winners

In you have read something about economics of Bitcoins, DACs and the approach of Invictus Innovations, all of them are based in the concept of mining. This has some advantages and disadvantages.

Advantages of mining:

- You attract a lot of investors and other people interested in your idea. You only have to see the impressive success of Protoshares and how thousands of people got involved into it the first week.
- People worry about your project and encourage the adoption of it.

However, it has also serious disadvantages:

- Real workers are not motivated to do any programming, so you must centralize this task and put money of your own to overcome it in the form of bounties. This is ironic, as you pursue decentralization but you obtain the contrary: centralization of human resources, at great cost.
- Many criminals mine virtually for free, using botnets, a form of virus that steal computer power from infected computers of innocents. They obtain at least 1000 more shares this way than an individual. And solutions to end up this are not clear nor efficient.

It is my opinion that a DAC of this characteristics should not be driven by the greed of eventual hackers. It is also my opinion that the persons who do most of the efforts should be the initial shareholders of this company, just like it happens in the real world. Do you imagine Steve Jobs doing what he did knowing that he had only 0.0001% of the company he just created? No, he had a good share because he took the risks and has the ideas (it is irrelevant if after some years he sold them).

So I propose something that would not like very much to speculators, but certainly will motivate programmers and serious investors to do serious work here

My proposition is to centralize the capital in a group of programmers EXACTLY ONLY for the INITIAL phase of the project until we have the first alpha released to the world. I mean: the initial shares of the company are equally distributed to the programmers, only in function of the amount of code/art/documentation they write manually. We can debate how amounts are measured. And, after the release of the software, the company becomes COMPLETELY, without exception, DECENTRALIZED. This is the equivalent of the actual way in which most companies start: first it comes the idea, then comes the partners who do the initial work, and then, if the company has succeed, it goes to the stock market.

This way, the programmers will obtain their part with justice, their work will be rapidly rewarded once the system if fully functional, in the form of dividends. And because they obtain a good part of it, this project should become very primordial in their minds. They should be very motivated to maintain the source code in the future because they have a proper share that they don't want to drop in value.

Compare this with a programmer who has been paid a simple bounty. S/he would have no further motivation to maintain it.

My proposition is to form a democratic virtual cooperative of programmers in which everybody who contributes can share her/his ideas, with the compromise to obtain their shares one day before the launch and then become investors. After that moment, WeTube DAC will be maintained by its workers (artists, moderators, clients and servers), but the programmers will still have the important role and motivation of maintaining the software itself.

Because I know that there are people who want to invest but don't have any skills to contribute, we can also create a ProtoMediaShares, similar to what Protoshares is, that could be converted to WeTube DAC's shares at the launch, at some proportion. We are open to this proposition if we still give programmers something like 3/4 of the total initial shares. But some shares could be given to miners-only with a moral condition: please promote WeTube!

Our intention to develop this initial political system is precisely to encourage the initial decentralization of human resources, which are the most valuable of them all, and without them we can only fail and give power to people who don't really want to get involved but just get rich without having to do nothing. Think about this question: would you give shares of your company to someone who steals money from someone else? He will steal from you when he find the proper moment, too.

After the initial share partition upon programmers (and probably some miners that act as promoters), people can invest in the usual ways for WeTube: by serving, by uploading content, by moderating, or just by buying shares in the Bitshares market.

How do we know when to do the partition for the programmers and become fully decentralized? Very simple: when we start to operate and receive the first clients, so we are forced to become a BitAsset and operate on Bitshares market. This comes exactly at the same time that the first alpha release happens, the same time at which the original block of our block-chain is released. From there on, WeTube DAC is fully decentralized an it is on its own. :)

And what part of the stock do we reserve for programmers and miners? I propose 10% for programmers and 2.5% for miners. The 87.5% left is reserved for workers to be earn slowly once the system starts running. 10% is really a lot if we consider that this DAC could become the next YouTube. Imagine you do about 10% of the programming, that would give you 1% of the total shares that WeTube will ever have, which would convert you in a millionaire in some years.

So please consider yourself all this matter. This is a serious business we have here, and a real opportunity.

Moderators

Servers

Entry Points

The Clients

Free users

Most of the clients of this system will be free users. They just enter the system from a moderated entry point, or via a browser extension which allows to change the moderators.

They don't have to pay for viewing anything, but yet, they can in case they want to support artists or editors. Payment is always voluntary.

Users can always choose their own moderators in the browser extension version, and even become moderators themselves whenever they want.

A very nice user interface will be presented to them, with content perfectly categorized by a moderator. They don't have to register to see anything, but if they do, they'll obtain important advantages. When being registered, the user can have play-lists, can vote for the content they watch, and they have favorites. Every time a user adds a content to favorites, the content is immediately stored locally, so s/he can watch it again at any point, and, more important, they contribute to the propagation of that content.

Also every registered user has the right to win shares, in proportion of the amount of bandwidth s/he provides.

Uploading content is always free, and the only requirement is to be registered, with the possibility to earn money, as we'll see in the next section.

Artists, Editors and Entry Points

We have very good news for artists and editors!

WeTube allows you to upload absolutely any content you produce without any censorship of any kind, and it will provide you the bandwidth, the user interface for your audience, the position, and all the privacy you need.

All the content you upload is propagated along the net as fast as the interest in your content is achieved. A copy of your content is stored locally in every computer of your audience. Then, that content is redistributed by your followers almost in a magical way, without you having to do anything. This propagation ensures that nobody can censor you, as there is no particular server to shutdown, nor an external editor that tells you what your content should be, nor a way to impose you any kind of regulation.

If the user likes your content, s/he adds it to favorites, and s/he becomes a permanent redistributer of your work. Now, the interesting thing is that, when s/he adds you to favorites, a pop-up is shown to s/he asking if s/he wants to pay (or donate) you. And you put the price. 90% of what they pay is for you, the other 10% is distributed along WeTube workers, in concept of the services they provide to you.

Additionally, you can optionally indicate that you want ads, so when any of your followers click on an ad, you receive a commission of 1/3 of the the price the advertiser paid. The other 2/3 are going to the moderators and servers,

as they do a hard work too. Ads are always optional and both you and your moderator must agree on having them.

Of course, you can ask moderators that you want your content to be included in their queries, so you augment your possibilities of getting known quickly. You, of course, can select which moderators want and which you don't. We try to make an effort to present you a list of the most common ones, so you can select them easily and fast.

Finally, you can be your own moderator and entry point. For example, you can have a domain with your name, and there you can embed a WeTube interface which is attached to your own moderation, that is, only presents media relevant to your work, that you have yourself moderated. This is a very, very good way to become your own editor. There can be news entry points, promoting your TV channel. There can be scientific entry points, promoting your articles and interviews. There could be entry points for children. There could be entry points for companies selling goods and services and promoting their products. There could be entry points for commercial reviews of products. There could be entry points for artists, writers, musicians, photographs. Possibilities are infinite!

And because you are your own moderator, you can keep your site perfectly legal. In the entry points, the user can't get out of your moderation. They are forced to go to another entry point or use the browser extension external to your site if s/he wants to choose something that you don't want in your site.

But what happens when you are unknown for the public and want yourself to advertise about your work? You can buy MediaCoins and indicate servers to cache your content so distribution is instantaneous and will be available in the main page of entry points as a featured content, and also as the first results of users searches, giving your work an instant boost in popularity. This is incredible!

The Investors

Interface

Videos

Ogg, Webm, H.264

Music

Ogg and MP3. Correct tagging is mandatory.

Documents

Documents are either PDF, ebooks, CHM or simple static HTML pages.

Apps

Categorized by architecture. We need some sort of signatures to avoid viruses and trojans.

The protocol
We need your help