

THE PODCAST: A Distributed Streaming Platform.

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Abstract

It is a distributed streaming platform, a version of an audio player. The online platform will enable recorded and livestream on-air vocal media to be broadcast on the internet. This is to enable connected peers to transmit media without need for storage by the trusted third party.

Encryption and data privacy are part of the solution to enable voice media to be secure at the best effort basis as long as peers on the podcast network have shared keys. Streamers can join the network at will, livestream on-air media or listen to the recorded podcasts.

1. INTRODUCTION

Streaming on the internet is basically supported by the cloud storage providers and this keeps the user's data at the verge of being manipulated by the resource providers. Completely accessible media is not possible since the providers are at will to scrap off the services from the primary users. The need for trust spreads hence worrying consumers. What is needed is a secure platform where two parties provide and access data using shared keys.

In this paper, we propose a solution to the personal data ownership problem by using a peer-to-peer distributed media network, to locate within connected nodes the availability of information required by consumers.

2. STORAGE

It portrays storage of data at the users medium, media at the device is hashed on to the system to keep track of the storage location. Each owner of the media publishes it on the platform and is linked to the streamers on the network by hashing. The media on the platform is available for download and the user can verify the hashes to verify the chain of ownership.

The problem is that the secondary user is not aware of the moment when the published media shall be off the network at the sender's will. The only way to confirm availability of a resource is knowing of all the published and accessed media within the connected nodes.

3. STREAMING

The media conveyed over the network is accessible by everyone on the internet via streaming. The information available over the network can still be accessed via in person communication, though there is need for the same information to be transmitted to several communities far from the source. Mechanisms for secure sound propagation on the internet shall be implemented within the platform.

4. PRIVACY

A cryptographic hash-based proof system is integrated onto the platform to enable security of data conveyed over the network, say implementation of SHA-256 that can enable in maintaining the personal ownership of media. This will enable nodes to send media to each other without need for the trusted third-party, cloud service provider but the validity of hashes.

5. CONCLUSION

The proposed channel of communication will be accessible by everyone over the internet and shall be robust in its unstructured way.

~It's yours, own It~