Anonymised broadcasting system research overview

Before actually dealing with how the system would work and what would be done w need to understand why it is being done. Anonymity is a very important part when it comes to private. Both good and bad things can come out of privacy. But for this we are only looking at he positive things. When we look at some reason why people used this private way of communication we notice it was always to either share secrets or hide from others the fact that two or more people were conversing with each other. Another reason may have been that it was considered illegal in certain areas even though no harmful content was being transmitted and so to ensure anonymity this platform was used.

In recent recording done by PewResearchCentre around 2013( (LEE RAINIE, 2013)) it was noted that 86% of adult internet users have at some point in time performed steps to insure avoidance of surveillance by other people or organizations. Another 21% of online adults have had their emails hijacked and another 11% had vital information stolen. Within these steps to avoid being watched it was noted that for the communication part 14% of users tended to encrypt their data sent. No even while doing this they still leave a trail behind to follow, such as their email they send the communication from and the email received on the recipients side.

But what if there was a way to remove that tracability? In the system being the developed various aspects from different areas of privacy will be looked at and incorporated into the system to ensure the most anonymous broadcast system possible

# No site and mail server storage

The first thing to consider is that even when using you own encrypted communication channel the data is still stored on a server. Now G. H. Ford Jr., R. K. Karne, A. L. Wijesinha and P. Appiah-Kubi ( (Jr., et al., 2009)) did explain how to design and create a bare bones PC email server but it stills keeps track of the emails coming in and out. Building on top of this idea the proposed system will be a site-based email server, but it will not make use of any tracking what so ever. There will never be any information saved other than the servers basic functions and user will always have to know who they are sending to and what they are sending. When an email is sent out normal this sent email is stored in its own sent folder. In order to ensure that there is no tracible information at all the sent mailbox will be purged after every mail is sent. This means a function will be used that always removes emails from the sent mailbox as they are sent. If an email was not sent an outbox which normal would store these would also be purged if a failure to deliver is received.

String identities cutting

When sending emails there may still be details within the email that can reveal the identity of user even without them even knowing, details such as the mention of any name may reveal details about the user. Now a pseudonym can be used to replace these names to provide an more anonymous approach but instead a different approach of using string replace function similar to the one provided by apurvi gulati( (gulati, n.d.)) which originally would locate a word and remove but instead will now jus locate words that represent any possible name from a composed dictionary of common names and convert this words one of many other random words that can represent people in various ways.

So for example if a sentence was structured as:

“Good Day,

Sarah says thank you.

Kind regards

Stacey “

The email would be reworded as so:

“Good Day,

Human says thank you.

Kind regards

Person “

API system functions

Apart from the email services, there are functions of the server that all need to be stored in a safe and secure place which is where a secure api comes in which will be the main brains of the system and hold all the needed details to connect and send the emails to where they need to go. By implementing own code as well as code from Vishal Chauhan( (Chauhan, 2020)), emails will be allowed to be easily sent over the internet but with the senders always being anonymous.

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