

February 2022

Clean Insights Implementation with Convene

Why Clean Insights?

As an experienced and trusted product team within open source, Guardian Project recognizes the need to balance user privacy and security with reporting. Since many funders require metric reporting, teams often rely on big tech companies like Google to gather analytics. However, this reliance can introduce default structures and harms, such as; data spillage, poor data management, no flexibility within the integrations, and/or no control over what is being collected.

Over the last year, the team at Guardian Project has worked to develop their “cleaner” approach to gathering user data. Known as [Clean Insights](#), the approach offers teams a methodology for collecting data that is approachable, privacy-preserving, user centric and easy to implement. A team can design a measurement campaign which is unique to their product and community of users. Clean Insights seeks to bridge the gap, by collecting usage data while removing identifying user information, and maintain system control.

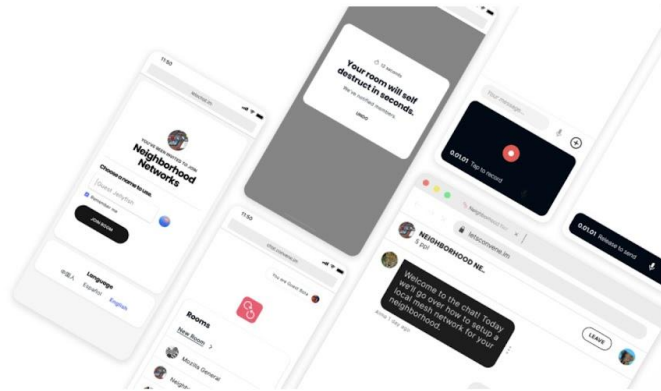
Guardian Project has an ethos that you use what you build. Therefore, the first test of Clean Insights needed to be done within one of their own creations. The team chose to integrate the [Clean Insights Javascript SDK](#) into their [Keanu Engine](#) which powers [Convene](#). Convene is a matrix-based chat platform that supports sharing of any kind. The team designed Convene as easy-to-join, ephemeral group chat rooms that allow participants to share messages via formats such as, videos, pdf files, audios, photos and texts. Rooms are end-to-end encrypted and can be joined using any web browser without creating an account. Guardian Project chose Convene as the test bed, because they had two objectives; determine if the Clean Insights methodology for collecting data was possible, and learn if and how people use rooms and identities within Convene.

KEANU CONVENE

Convene

Click a link and you're in. Ephemeral, lightweight, encrypted group chat in a web browser.

LEARN MORE



Easy to Join

Click a link and you're in a secure chat. No app or account required. No personal information requested.



A Safe Place to Connect

Convene offers an end-to-end encrypted conversation that safeguards against physical and digital threats.



Rooms that Self Destruct

Convene makes it easy to delete all message history and close a room.

Image: Keanu Engine, Convene App Concept

Convene
Chat for everyone

Simply Connect

Tired of looking for the messaging app everyone is using? Chat with Convene.

- ✓ No phone numbers
- ✓ No account setup
- ✓ No app

OPEN A PRIVATE ROOM

letsconvene.im

WELCOME TO
Neighborhood Networks

Choose a name to use.

Guest Jellyfish

Remember me

letsconvene.im

NEIGHBORHOOD NE...
5 ppl

to the chat! Today we'll go over how to setup a local mesh network for your neighborhood.

1:20

Image: Convene Website

What question(s) did the team ask?

The purpose of this initial test was really two-fold:

- Is it possible to collect data on specific features usage anonymously?
- To what extent is their newly released voice chat feature being used?

The Measurement Campaign

In order to answer their questions, while only collecting the necessary data, the team needed to implement a measurement campaign very carefully. The team decided to record the number of voice messages sent. However, it was designed to gather data only *after* getting consent. After a user records and sends their initial voice chat, they are prompted to join the campaign and provide anonymous usage data. This is a crucial design decision because it provides the user with an understanding of what type of usage data would be collected and for how long. In addition, it spares the rest of users an irrelevant and extra question regarding data and consent.

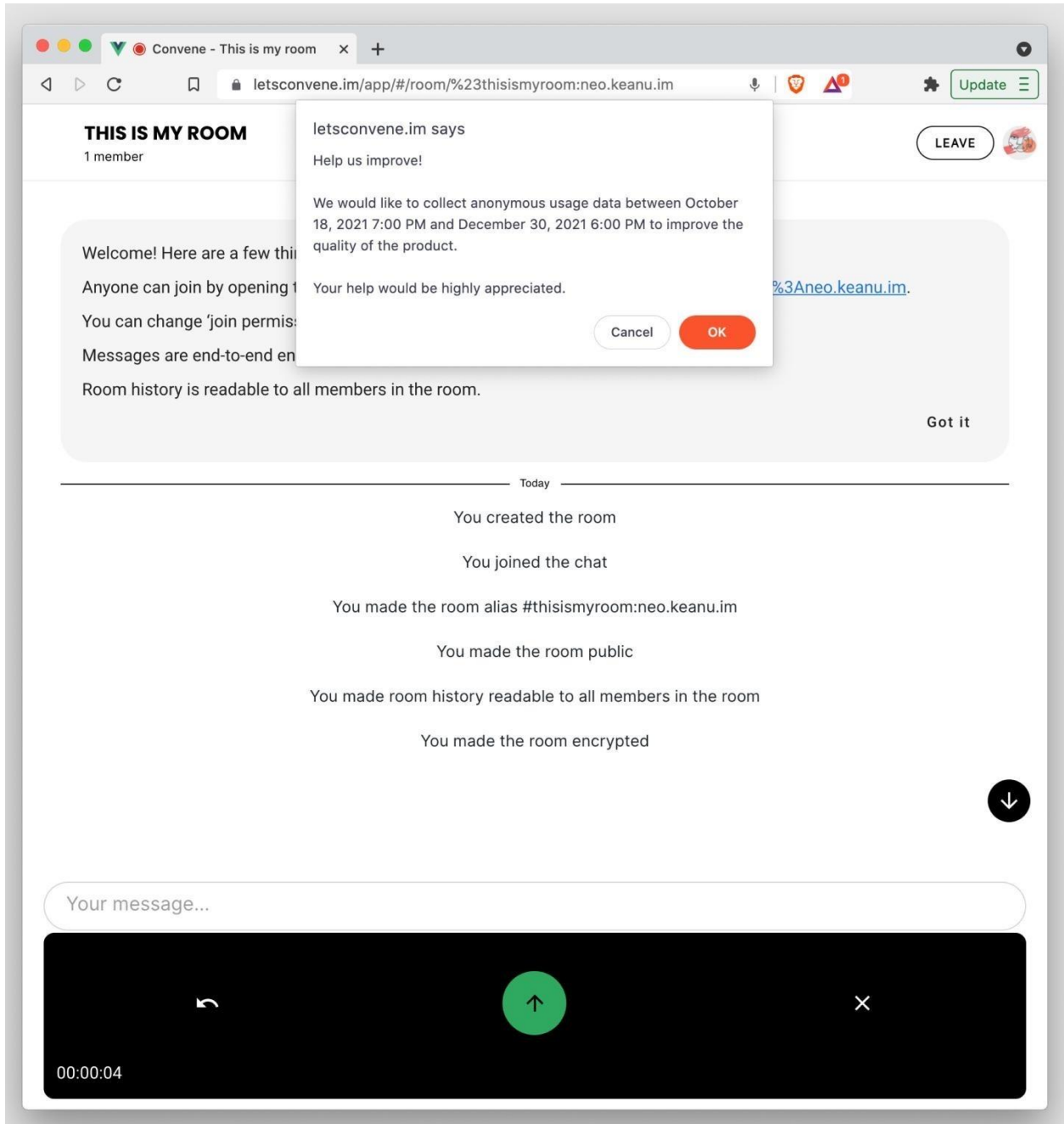


Image: Screen Capture of Consent UI for the Clean Insights Measurement Campaign within the Convene App

The campaign recorded how many voice chat messages were sent over 6 months. If a user opts-in, usage data is collected during the week, then sent to Guardian Projects' Matomo dashboard using the [Clean Insights Matomo Proxy](#).

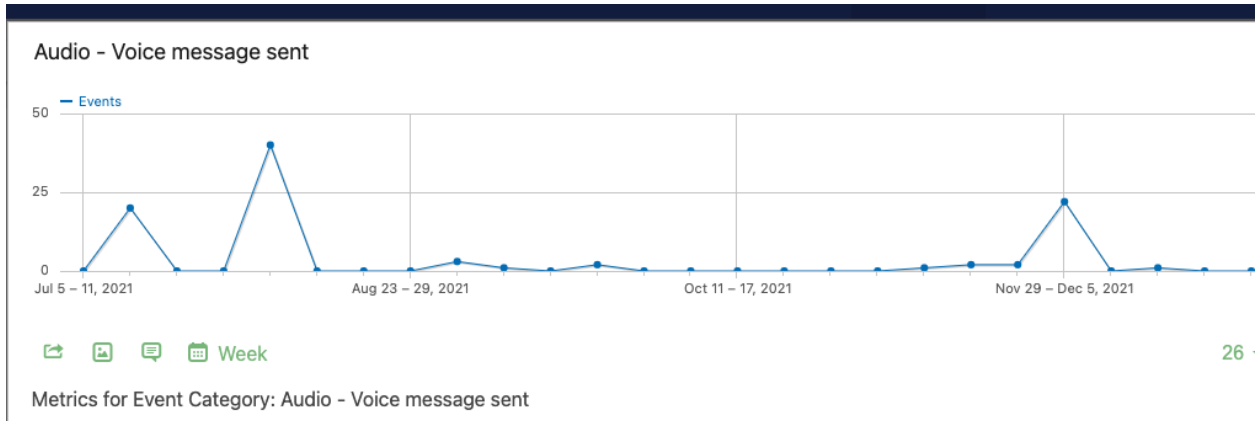


Image: Guardian Project's Matomo Dashboard, Convene Insights

Thanks to Clean Insights, the results are in, people are using voice chat!

The Impact

The team aggregated the data and deciphered that within the limited pool of test users, voice chat was used **100 times over 6 months**. Not only did this implementation prove Clean Insights was possible, but it proved there are privacy conscious users who will consent to sharing their data with a trusted app like Convene. Affirming that with enough teamwork, perseverance, and execution, gathering *clean*, insightful data is achievable!

Ah Ha Moments

"It's exciting to learn that a feature you spent time and effort developing is actually being used." *Keanu weblite developer*

"It's similar to Google analytics without all the tracking baggage. We're able to collect user data that we need in a privacy preserving manner." *Convene product developer*

"It's really helpful to balance reporting pieces with the knowledge that what you are building is being used and helping people." *Convene product developer*

What's Next?

With this new knowledge, the team realized this is just the beginning of what can be learned! The data collected helps the team understand that the feature is being used, but doesn't accurately capture the user behavior. Do users begin to send a voice message, then quit? Are all the numbers coming from one user? Do users prefer voice messages over text? What other measurements can be collected to help create a clearer picture of how people are using Convene? The team now has many more ideas about what to measure next!

After the launch of the original measurement campaign some users got concerned by it, causing the team to remove the original Clean Insights consent and measurement campaign from the app. Due to user feedback, the team is working on an improved user experience and language around consent to make it more clear and cohesive with their measurement campaign, and including an option for users to opt-out or change their preferences at any time. The launch of the new measurement campaign will collect more usage data. The new proposed consent design and possible measurements are featured below.

Possible measurements:

- If you set a name
- If you changed your name
- If you leave a group
- If you delete a group
- The number of groups you're in
- Which browser you're using
- If you encounter errors

Possible consent:

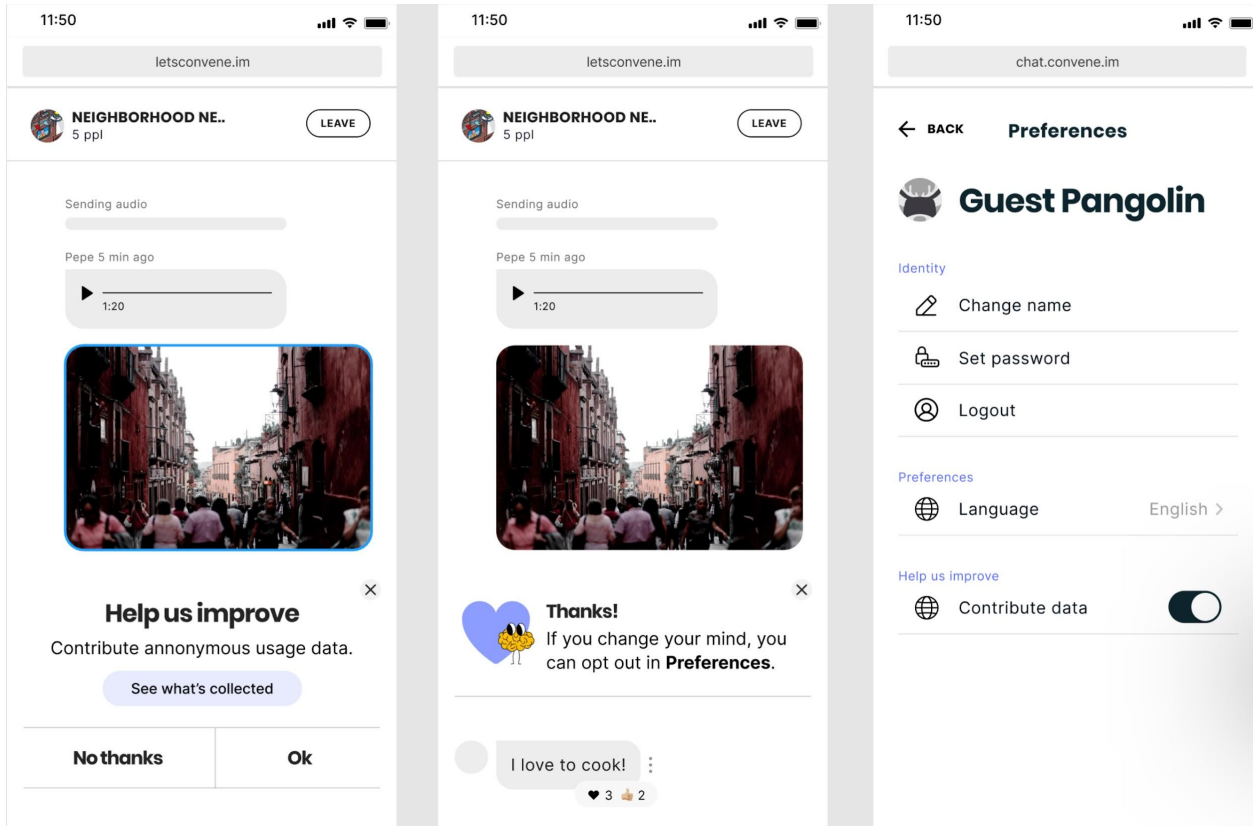


Image: Consent UI Example within the Convene App

After this minimal integration, the team is excited to begin implementing Clean Insights across more of their branded instances of the Keanu Engine. With the realization that privacy preserving measurements are able to be collected, the team hopes to measure more data points around user behaviors to understand how people use identities and groups. By collecting more data points across instances in one unified place, it will provide the team more data points in real-time to correlate the qualitative data points already being collected through trainings with more quantified data collected through Clean Insights.

Impact on Clean Insights Project (Learned Insights)

One question the Clean Insights team has is whether they need a better dashboard for displaying the data coming into Matomo. From the implementation with Convene, the client was extremely satisfied with Matomo. They felt the flexibility of the Matomo dashboard was tremendously helpful! They like having the ability to display all their products in one place, interact with the data in real-time, customize the windows on their dashboard and filter behaviors and visits. All of which makes it easier to deliberate, aggregate and synthesize the metrics for reporting and learning.

Clean Insights may have a more global impact moving forward, with the possibility for increased adoption of Clean Insights in EU tech companies as more rulings are passed regarding GDPR compliance. Read about a recent case study in France:

<https://www.cnil.fr/en/use-google-analytics-and-data-transfers-united-states-cnil-orders-website-manageroperator-comply>

“Google Analytics provides statistics on website traffic. After receiving complaints from the NOYB association, the CNIL, in cooperation with its European counterparts, analysed the conditions under which the data collected through this service is transferred to the United States. The CNIL considers that these transfers are illegal and orders a French website manager to comply with the GDPR and, if necessary, to stop using this service under the current conditions.”

Have an idea for what you'd like to see Convene measure next?

Share it with the team at support@guardianproject.info.

Let the learning begin. Try it out for yourself.

Interested in implementing the Clean Insights methodology in one of your apps?

The Guardian Project is hard at work documenting aspects of the methodology that help make it more accessible for tool teams to implement. Visit the Clean Insights website at

<https://cleaninsights.org> for resources!

