

Handmade Seattle uses Element Matrix Services as pop-up hallways, water coolers and coffee shops



Handmade Seattle is an independent conference for systems programmers, inspired by the Handmade manifesto, Handmade Hero and NASA's coding philosophy.

The first Handmade Seattle, in 2019, was an in-person event to bring together leading experts on game engines, kernels, drivers, compilers and other systems programming. It hosted 300 people - mainly from the Seattle area and the states -who were able to share their expertise, technical insights and enthusiasm.

Lovingly crafted plans for Handmade Seattle 2020 had to change in the face of the COVID-19 pandemic. Handmade Seattle's driving force, Abner Coimbre, could have simply skipped the 2020 event but instead created a virtual version of Handmade Seattle.


“It’s too much to expect people to sit and watch two days of back-to-back online presentations,” says Coimbre. “So much of the value of Handmade Seattle is people being able to meet and discuss ideas; people inspire each other, as much as the content. So I really wanted there to be a way for people to connect personally with each other, and to do so securely and in real time.”

Handmade Seattle’s secret sauce

With the event being virtual, and in keeping with its mission of inspiring the next generation of systems programmers, Coimbre decided to make conference content available for free through Twitch and Vimeo.


To actually attend and participate, however, required ticket purchase so that Handmade Seattle could cover its costs. That made the live community aspect of Handmade Seattle 2020 a key part of providing value for money through a high quality in-person experience.

“People meeting, bonding and staying in touch was a huge part of the success of Handmade Seattle’s first event,” recalls Coimbre. “So the major challenge of going virtual was how Handmade Seattle would keep the same informal, indie vibe and recreate the in-person experience.”



Handmade Seattle at a glance

- Systems programmers of all ages
- A 'zero sponsors' event held annually
- Fully virtual event with end-to-end encryption for maximum privacy



What works for attendees, works for the conference

A suitable community platform for Handmade Seattle's conference had to fit a complex criteria.

An independent conference that operates without sponsorship, Handmade Seattle ideally wanted a 'minimum-hassle' hosted solution - and one that could be easily spun up and closed down to support a two-day conference. Accessibility and the ability to operate across a wide range of devices (for Web, Android, iOS, macOS, Windows & Linux) was also important.

But the absolute prime requirement was privacy, as Coimbre explains: “We’re a technology community. We know that free isn’t free. I didn’t want attendees to be someone else’s product, so knowing that attendees’ data and discussion was under our own control and management was really important.”

Handmade Seattle's requirements at a glance	Element	Mainstream messaging alternatives	Mainstream collaboration alternatives
Data sovereignty	✓	✗	✗
Managed solution, with custom domain support	✓	✗	✗
Open, federation network	✓	✗	✗
Quick to set-up and deprovision	✓	✓	✗
Default E2EE	✓	✓	✗
Accessibility	✓	✗	✗

Element and the Matrix network compared to mainstream messaging (WhatsApp, Signal) and collaboration (Microsoft Teams, Slack) apps

Although it was a specific brief, Coimbre didn’t have to look too far for his solution: “I drew up the criteria and it struck me that I already knew the solution. I use Element Matrix Services (EMS) on a personal level, so I investigated a larger set-up to support hundreds of users.”

Data sovereign real time communication, without the hassle

Element Matrix Services (EMS) is a fully managed hosting solution for Matrix-based messaging services. It enabled Coimbre to configure a data sovereign host to support Handmade Seattle and all of its attendees' messaging and collaboration. “On top of everything else I was handling, I didn't want to have to install a Matrix server and monitor multiple users - so just off-loading to a hosted version was a big time saver,” says Coimbre.

Attendees could simply download the Element app or visit the Handmade Seattle chat page and be set-up, knowing their data was securely owned and controlled by the conference rather than a datamining megacorp.

“At an in-person conference, people can speak freely to one another,” explains Coimbre. “That’s what EMS provided. A secure space, where content and discussion is protected by being hosted with a trusted partner and fully end-to-end encrypted. We won’t get that with Discord, Slack, WhatsApp or whatever else.”

After speaking to Element Matrix Services to explain the ‘pop-up’ nature of the deployment, Coimbre was able to configure his EMS host shortly ahead of the show.

The intuitive admin panel helped specify both the configuration and options such as public and closed chat rooms.

“That Matrix is federated is a huge part of the attraction and why it’s so popular,” Coimbre states. “We had exclusive rooms for ticket holders watching the Twitch and Vimeo simulcast. But allowing ticket holders to create their own invite-only rooms was federation at its finest. They could invite friends using their existing own Matrix-based set-up.

Putting users in their Element

Handmade Seattle 2020 was a far more international conference than 2019’s in-person event. Four hundred individuals registered or donated from North America, across Europe, Japan, Brazil, Australia and elsewhere with the majority taking full advantage of the Element app.

“People were impressed with Element and felt right at home,” recalls Coimbre. “It was the hallways, water coolers and coffee shops where people congregate at a physical show. It really powered the general vibe and community.”

Attendees were discussing talks live through Element, and speakers who pre-recorded their talks were answering questions in real-time. There were official rooms for ticket-holders only, and attendees were free to create their own rooms as they wished. Although much of the discussion was live, a slice of attendees outside of the West Coast time zone joined post-conference to enjoy the commentary - an impossible dynamic for physical gatherings. Discussion as a whole carried on several days after the conference had officially closed.

Coimbre smiles: “Our ticket holders absolutely loved the dynamic and that we went the extra mile to protect their privacy and ensure our ownership of our own data. It really resonated with them. People don’t want engagement forced upon them. It was a secured environment; nothing could be datamined and their private conversations were encrypted.”

Sowing seeds for the future

Such was the success of Handmade Seattle 2020 that Coimbre is considering two events during 2021; a physical event (if possible) and a bigger, more international virtual event:

“We can really build out the use of Element next time. I am thinking of a fully bridged instance of EMS with approved listing access so that ticket-holders can stay in their own app - be it their existing Matrix app, Discord, Slack or whatever else. There’s more we can do with interactivity - such as voting - and in the chat rooms, like adding in data feeds using widgets. It would also be neat to reveal a world map and allow users to mark their location.”

Reflecting on a successful event, Coimbre adds: “Without COVID having made a physical event impossible, I probably wouldn’t have taken Handmade Seattle virtual. But it’s actually created a whole new phenomenon and - thanks to Element - is enabling us to create a global community to celebrate and inspire systems programmers.”

Further reading

[Element Matrix Services](#)

[Contact us](#)