Providing a better video call experience

or not…

Video Calls...

We spend a lot of time on conference calls these days. We are having one right now.

- Work Calls
- User Group Meetings
- Virtual Conferences
- Family Calls

The Evolving Experience

All said, it is improving. I guess there really was no choice on that given how it has evolved over the past year.

If someone had told me in early 2020 that I would spend the next year staring at screens, and cameras, and wearing a headset, I would not have believed them. Now it is the norm.

Work

The past three months have been quite brutal for me and conference calls. The only saving grace has been to not have the camera on all the time. I have been spending between 4 and 7 hours a day on calls.

User Groups

This is considerably lighter and is typically a more relaxed experience. It is also reflecting a topic that I am personally interested in vs. one my employer is interested in. There are overlaps, but this is more fun.

Virtual Conferences

This has been a mixed bag for me. Some are great and some are a great dissapointment.

I will be attending another one in a few weeks. That experience will hopefully be much better. I am looking forward to it, but I'm not expecting miracles. At least I won't be searching for conference rooms in a large multi-tower hotel with a bad map.

Family Calls

And here we get to the real reason for the talk. I have some scattered family that has decided to have a weekly call to let everyone catch up. The family chat/banter is fine, however the call experience has been somewhat problematic.

Why is that?

Well, in general it is a good experience. My nieces are perfectly fine with their phones, my wife and I are fine with the phone/tablet/computer/whatever, but my in-laws want to sit back and use the TV, since they want to see all of us on the screen and that makes the tablet screen hard to see, the computer is too crowded, and the attempts to stand a phone up and 'cast to a TV have been *interesting*.

First Segue

This resonated with a discussion Tug had with us regarding remote management of a computer and options for this. We had explored many options during that discussion, but no real good ideas came out of it.

Failed Ideas

My father-in-law is pretty good with technology. He has kept up and usually has no real issues. I help out a bit when visiting - if he needs it.

His creative solutions to the camera/display battle have been interesting and have all failed in some way, usually amusing rather than bad.

So, how about a managed box?

I ran across a post about creating a fully managed Pi that would act as a conferencing endpoint and it can be controlled via a cloud service. I'm not typically fond of this (privacy, access to inside the network, etc.), but the idea of a 'drop in place' solution was intriguing.

Balena-Dash

I'm sure some of you have seen Balena Etcher by now, the software that lets you burn images to USB sticks or SD cards. They have a kiosk project that is cloud managed from their cloud service.

I tried it out

There are a few steps required to actually get started.

- Create a (free) Balena Cloud account
- Go through the stape to create the "application"
- Add a device (up to 10 on free)
- Deploy to the device.

Sounds simple...

Well, it looked easy. It was not quite as simple as expected.

It turns out that the blog post is old and things are different now. I had many issues with it and we will view the web page in a moment to see what the instructions look like.

They seem OK, but they are somewhat innaccurate as this project has been updated and is reasonably active.

After a lot of work

I got it running. I still had issues and it only started working properly at 00:38 this morning, so not enough time to do some screen shots, sample video, etc.

Having a live demo would also be an interesting activity.

Stay Tuned

BAsed on a quick poll at the end of the talk, there will be a follow-up talk to show how it all went. I have no idea how successful it will be, but I've gone this far and it seems that not continuing on would be a waste.

References

- Balena Home Page
- Video Call Project Blog Post
- Balena-CLI
- Balena-Dash

All of this was accurate when I made the slides:
2021-05-06