

An Operating System for the Home

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1: Summary

Like many of the operating system papers we have read in this class, this paper looks to apply a pc-like organization to tech in the home. Luckily they ran an actual implementation. Smart home is not a new idea. It has been discussed for decades. But for a large scale commercial use, there are various barriers to entry. That's why it has remained in research stage for so long.

We can view the home as computing system as such. We have many networked devices which are our peripherals. The tasks we do on them are our applications. We can manage these devices, add tasks, and add devices.

The HomeOS centralizes all the devices in the home / networks them together. Then applications to modify and use these devices are written on top of the HomeOS and shared on the HomeStore.

This still brings up the struggle from the previous paper that you need someone technically skilled to manage the network.

They tested this question through field tests in 12 real homes. It turned out users could manage the HomeOS and like being able to extend their tech with these applications and added control.

On the other hand when things broke it was hard for users to fix.

Essentially this project is leading towards a world where we can abstract our home and begin writing useful applications.

2: Strengths

- User study

3: Weaknesses

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4: Future Directions

- Make more non-tech friendly