



Firefox OS

***UNLEASH  
THE FUTURE***



# Multi-Screen Support on FxOS

Create seamless experiences with your FxOS device  
and other displays

## **Contributors**

Alive Kuo  
Henry Chang  
James Cheng  
Kevin Chen  
Marco Chen  
Shelly Lin

# 2 UA vs. 1 UA

- 2 UA is the case where we connect two or more FxOS devices together, or with devices that run Firefox browser
- 1 UA is connecting a FxOS device with another display which does not run gecko, or not even any OS
- We are introducing you the support of **1 UA, multi-screen display with a FxOS device**



# A Freer Architecture

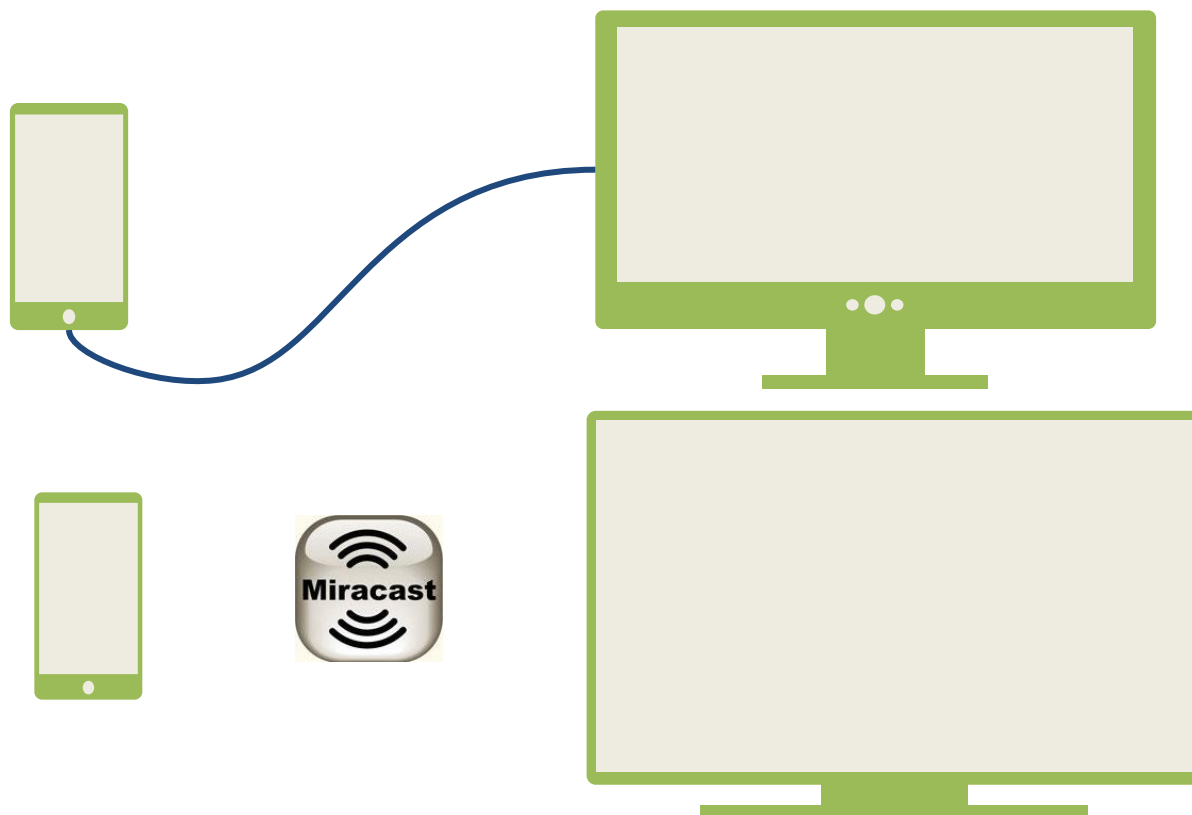
- Extended-screen not only allows objects to be moved between, but also straddled across displays as they are one
- Mirror mode limits the content and layout presented in remote screen
- Although both extended-screen and mirror mode are doable, we are not going to limit ourselves, but push the boundary of multi-screen

What we can do...



# Connect with External Displays

- The following wired and wireless protocols are what we have implemented now
  - Physical HDMI cord via DisplayPort adapter
  - Wifi Display



# Promising Features

- Secondary device is treated as a remote displayer
- Contents including apps, web sites, videos that launched to remote screen, are **rendered locally but in the resolution of that external display**
- A new API is added to **window.open**, giving users the choice of which window to open to
- Primary device keeps its control and access, which we are still able to launch apps, browse web sites, and watch videos on the original FxOS device
- Connecting with **more than two displays** in the same time is doable
- No extra effort for apps except Responsive Design in order to be displayed on secondary display



- How many displays can we connect to a FxOS device in the same time?
  - Theoretically we can open arbitrary number of top level windows, and associate each window to a display device, but in reality it depends on the hardware supportance
- How can we interact with apps of remote display?
  - We have presented you the “**virtual touchpad**” as a temporary solution, please see the demo clip for more details.
- Does app know it is being launched to the remote display?
  - No, and the app doesn't need to, as long as it adapts the responsive web design.



Thank You

And click [here](#) to watch our demo video!

