SmartNet

Marvin Shu (Team Lead)
Stefana Gloginic (Scribe)
Krassimir Djonev
Angel Rivera
Hernan Duran
Problem

- Sending an ISP technician to a house costs a lot of money.
- Would be great if technician gets it right the first time.
Solution: SmartNetwork

- Mobile diagnostic tools
  - Video Stream Analyzer (VSA)
  - Wifi speed test
  - Wifi Heatmap

- Easier mobile setup for technicians
  - Automatically connect to the SmartRG router
  - GUI Portal
What we inherited

- WiFi speed tests
- WiFi heatmap (basic functionalities)
- Connect to router via Wi-Fi Protected Setup (WPS)
Our Goals

- Port VSA to Android
- Push birth certificate to router
- GUI portal
- Improve heatmap features
GUI Portal

“Live” Demo
Settings

- Connect to a Network Via WPS
- View Available Networks
- Configure Network Attributes
Enter wifi password

Please enter a password...

☐ show password

Connect    Cancel
Enter wifi password

.  

[ ] show password

[ ] Connect  [ ] Cancel
Enter wifi password

....

- show password

Connect  Cancel
HeatMap + Birth Certificate
Video Stream Analyzer

● Metric tool
  ○ High bandwidth consumption
  ○ Requires a strong connection

● Real-time Data
  ○ Shows Wi-Fi network quality

● Measurements
  ○ Media delivery index
  ○ Packets per second
  ○ Megabytes per second
  ○ Errors per second
What’s Next?

• Cross compare pindrops to figure out where best to place mesh extender
Questions?