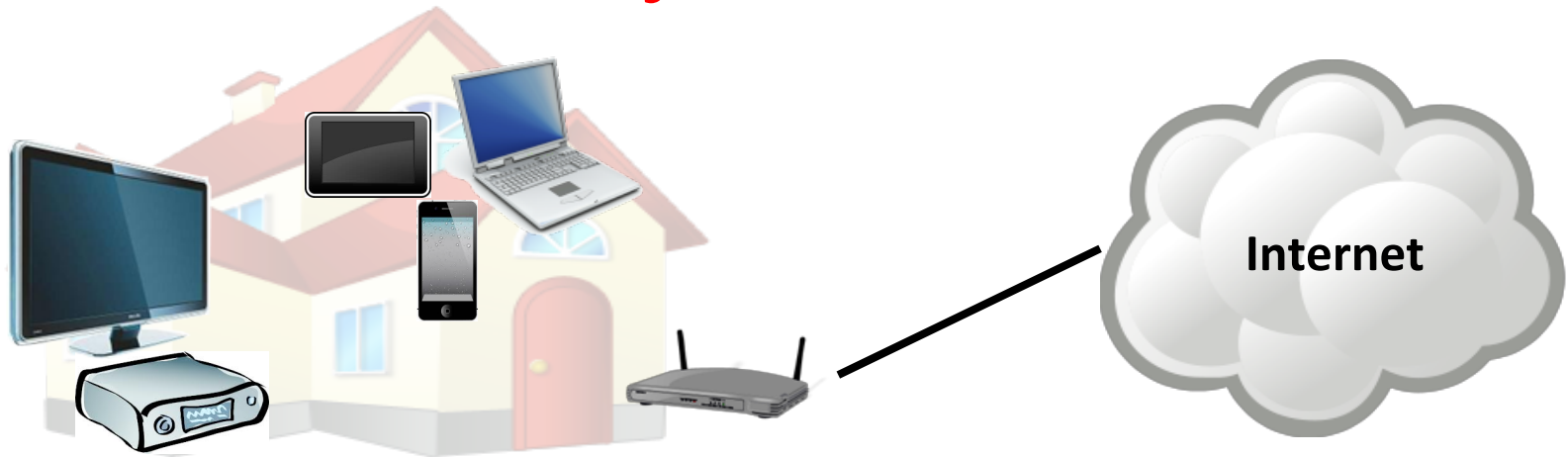




Home Network Performance Diagnosis

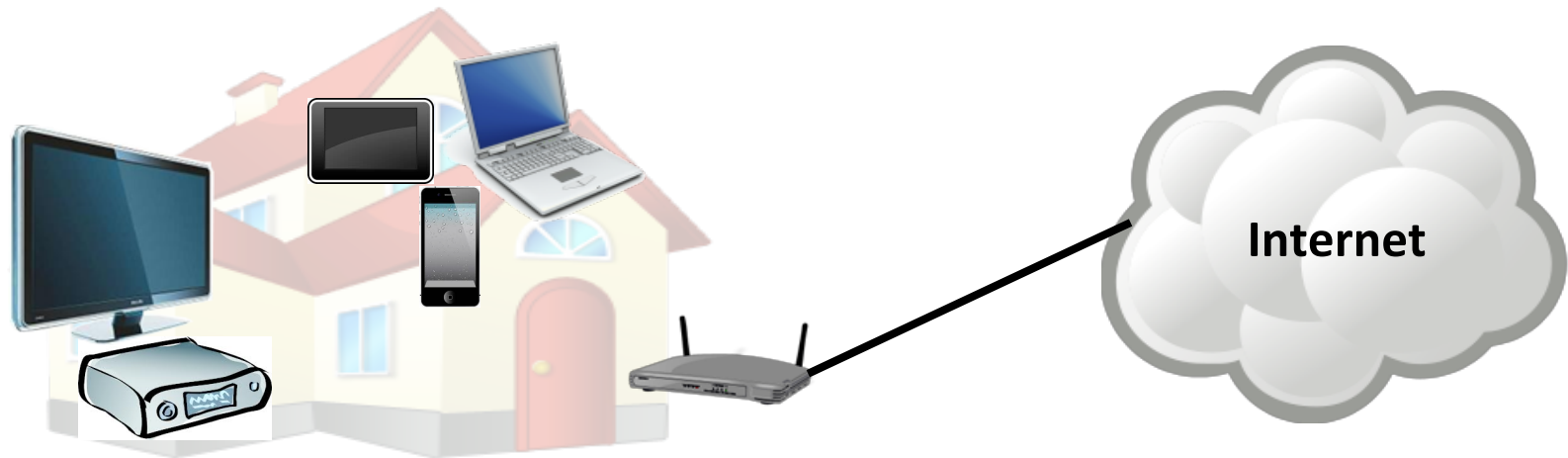
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Internet connectivity is central in today's homes



- Problem
 - The home network can disrupt networked applications
 - Users don't know what is happening
- Goal: easy-to-use home network diagnosis tools
 - Assist both users and ISPs

Is bottleneck in ISP or home wireless?



- Passive measurements at gateway
 - Performance bottlenecks experienced by users
 - Gateway directly “sees” bottlenecks
- Threshold-based bottleneck detection

Home troubleshooting from the browser

- Build on top of the web browser
 - Available on most platforms, familiar interface
 - Fathom Firefox extension to perform measurements
- Leverage collaboration among devices
 - Multiple Fathom-enabled devices
 - Instrumented home gateway (optionally)
 - Open source projects such as OpenWRT/BISmark
- Leverage device mobility within the home
 - Ask users to help by moving around the home