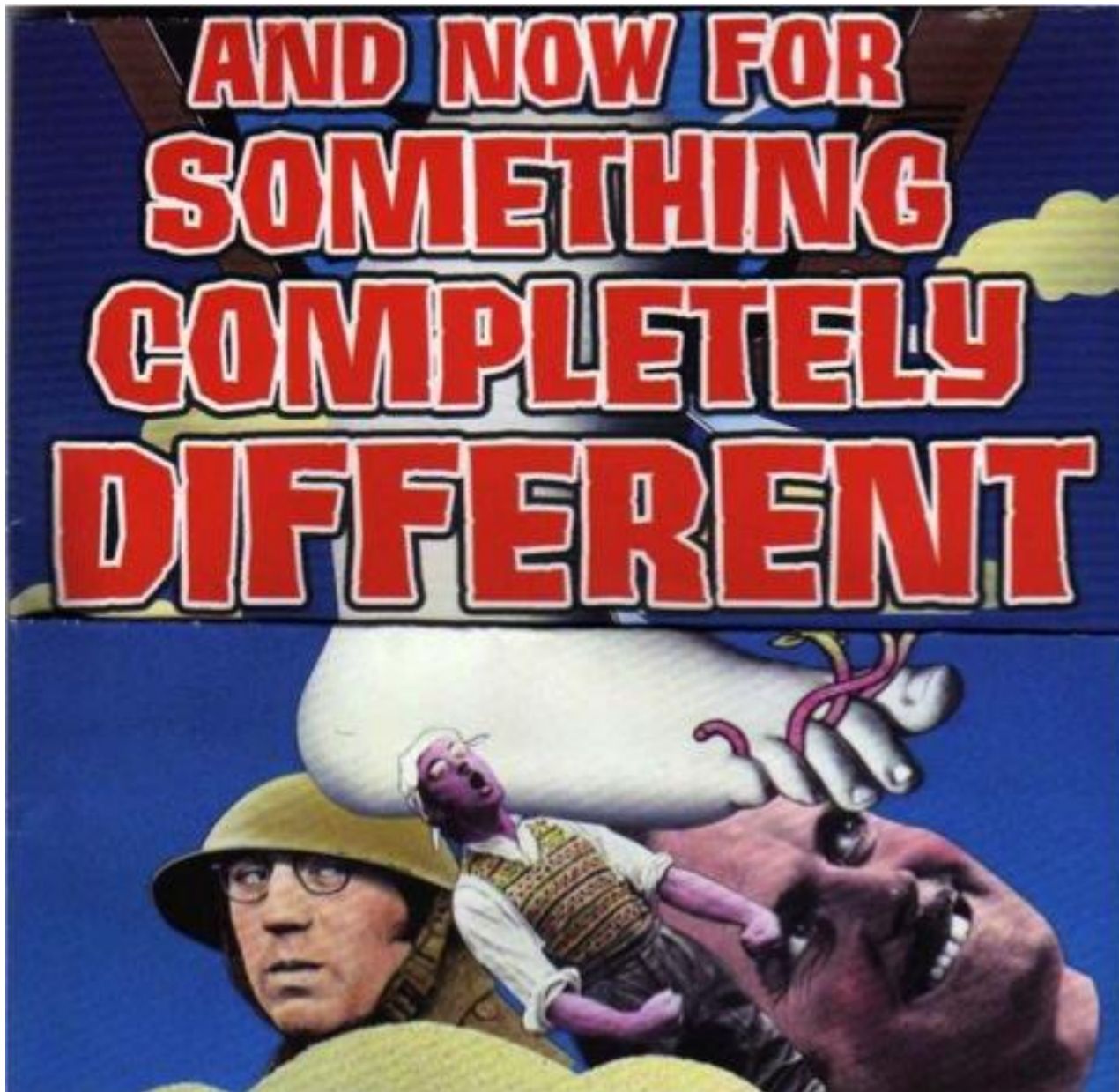




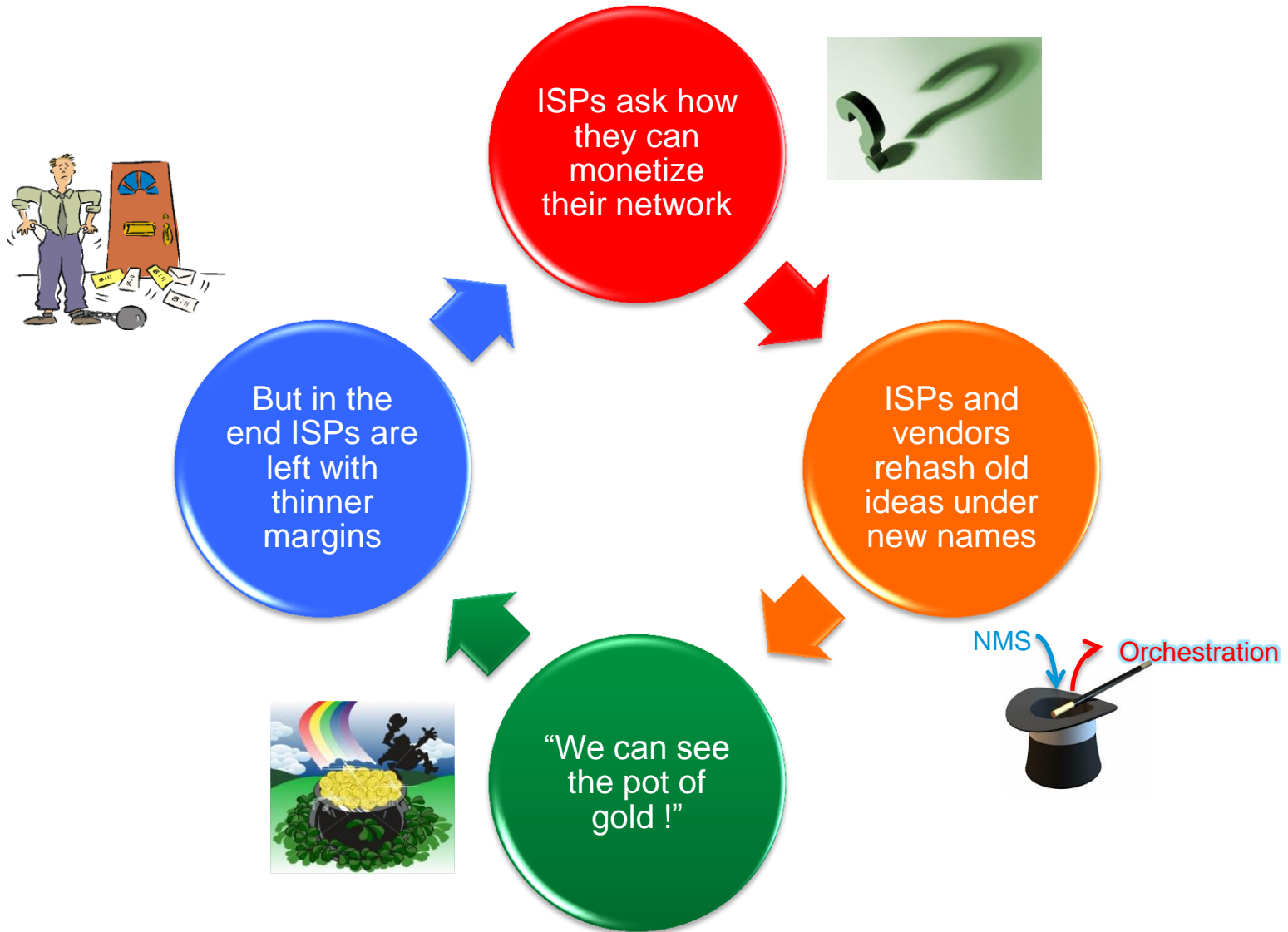
# Application-Enabled Open Networking

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Systems Engineer

May 2013



# Monetization Cycle



# Breaking the Cycle

- Problem:

The network is built for a fairly static, predictable set of uses.

Subscribers requires flexible, on-demand network services.

And there lies the issue. The services the network is capable of providing does not meet the needs to the subscribers.

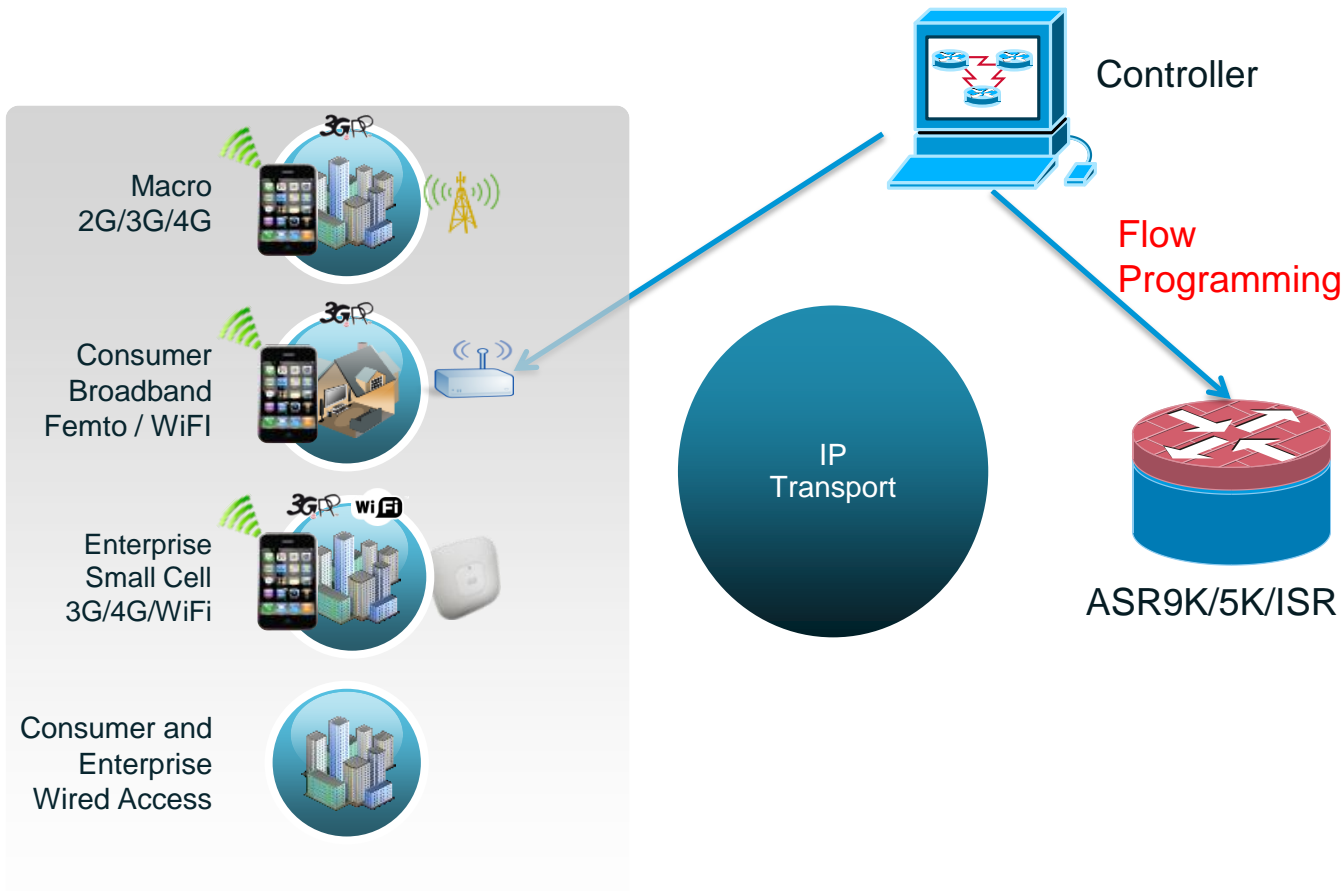
- Opportunity:

The opportunity to significantly monetize is when subscribers are in the process of using an application, otherwise the window closes.

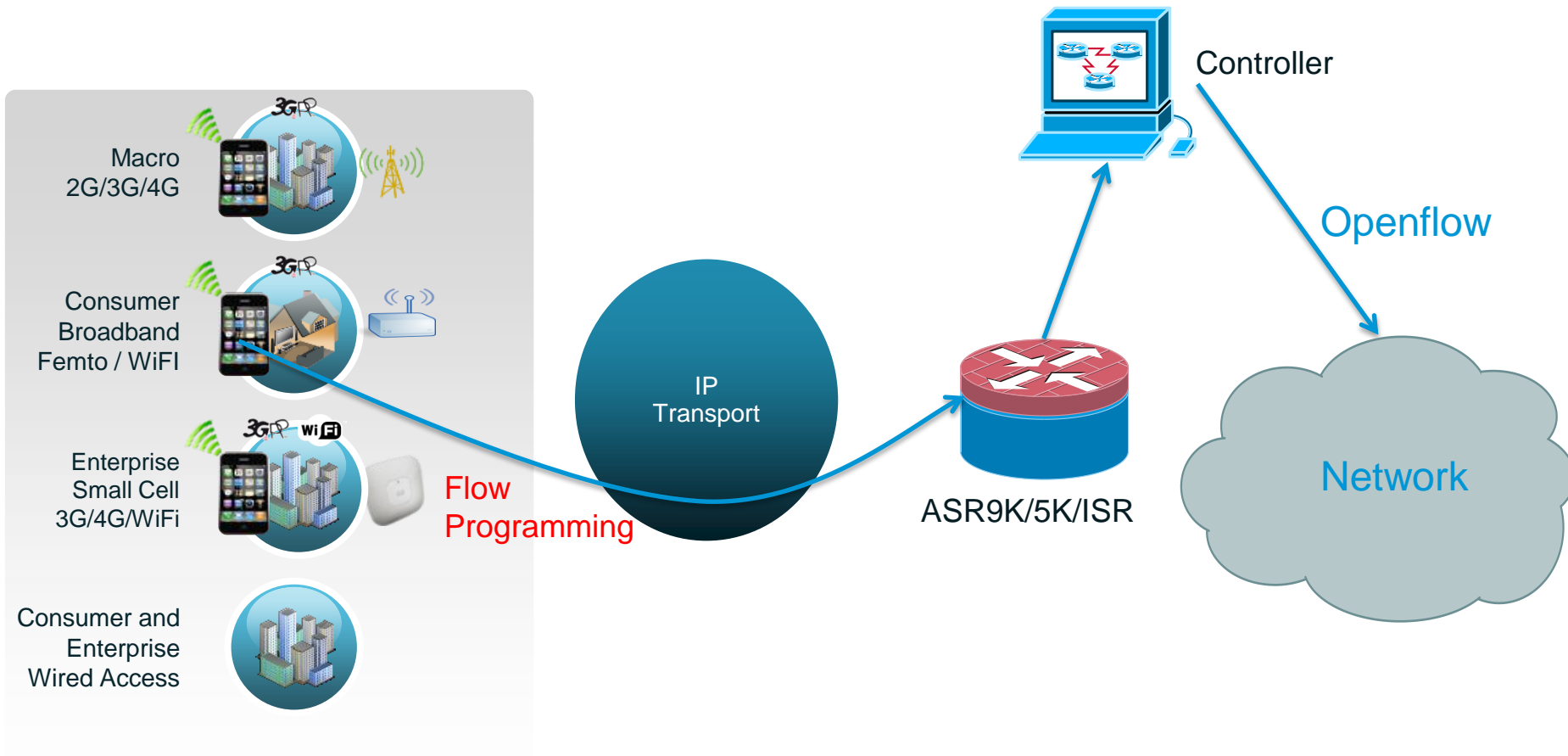
- Solution:

The network needs to change to allow direct application to network signaling.

# Traditional SDNs



# AEON



# AEON Concepts

- Simplicity

Applications use a simple set of protocols (PCP, STUN & ICE) to dynamically request network services to create a better user-experience.

- End-to-edge or End-to-End

End can be applications on a mobile phone or a video server on a data center

- Access Agnostic.

Same protocols and concepts across Wireline, Wireless, Hotspots and Home.

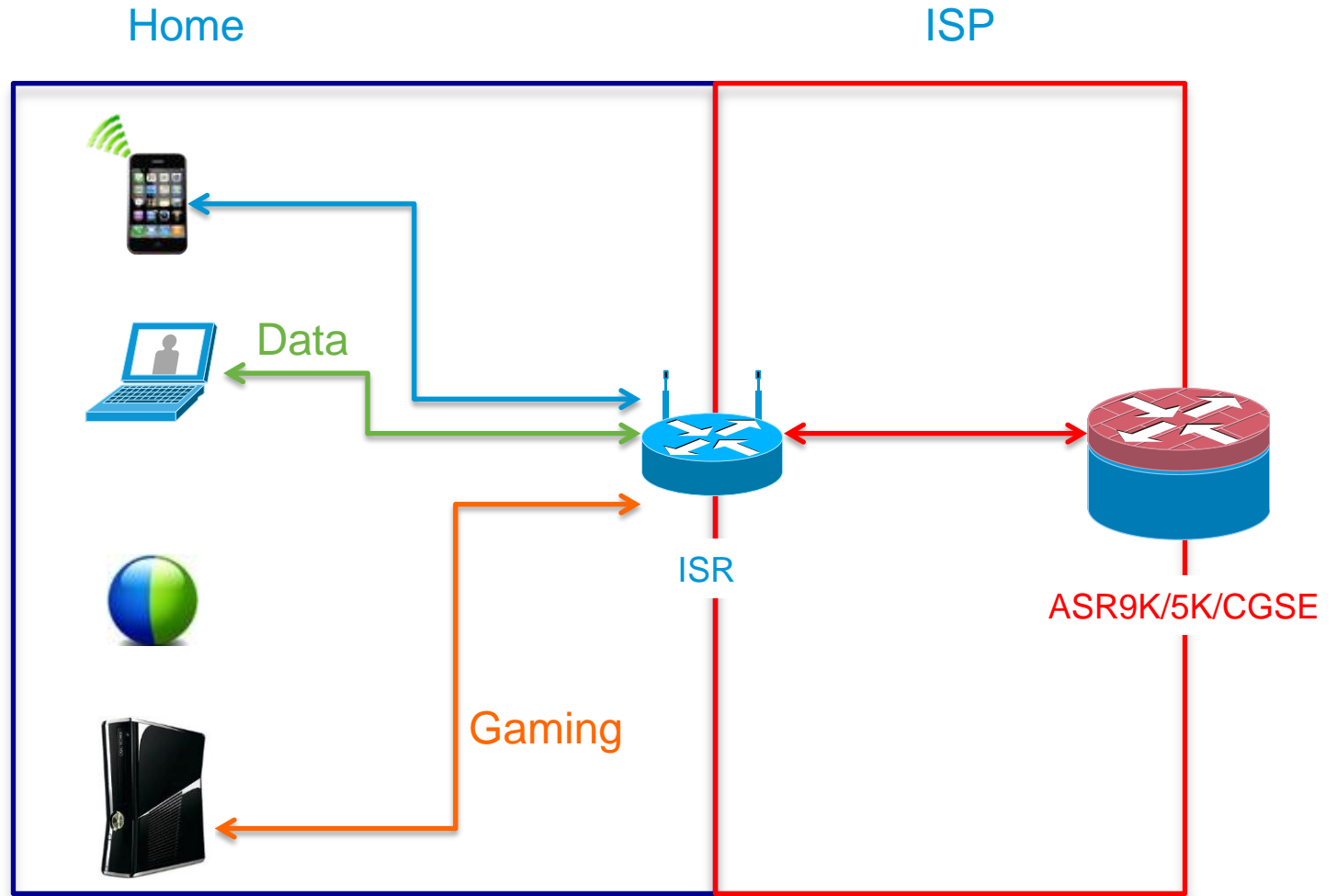
- Dynamic, on-demand

Hands-off experience, no subscriber or administrator intervention.

- Lightweight

Enables local decision by devices instead of relying on a N step provisioning & orchestration process for even simple services & decisions.

# AEON



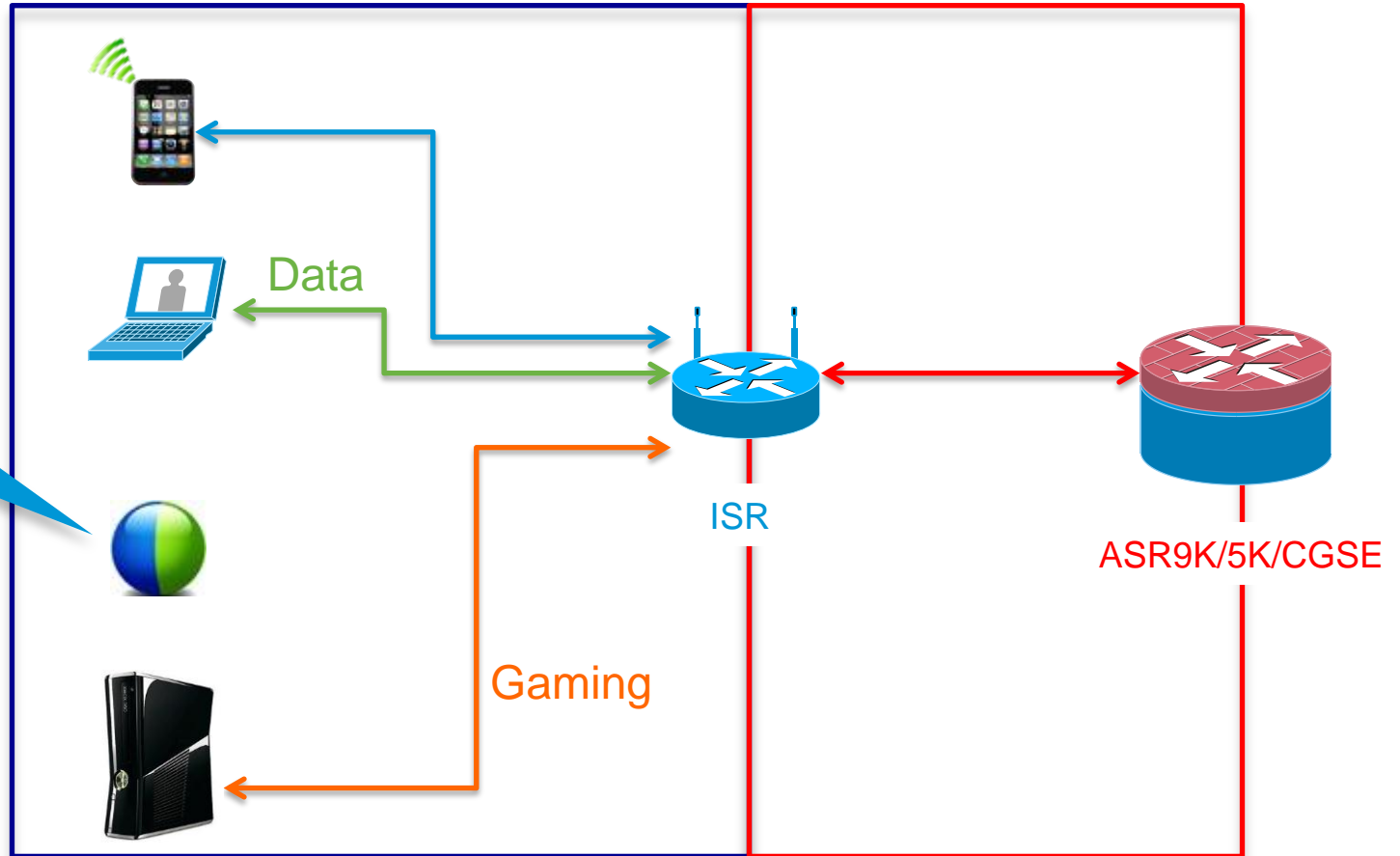


# AEON

Home

ISP

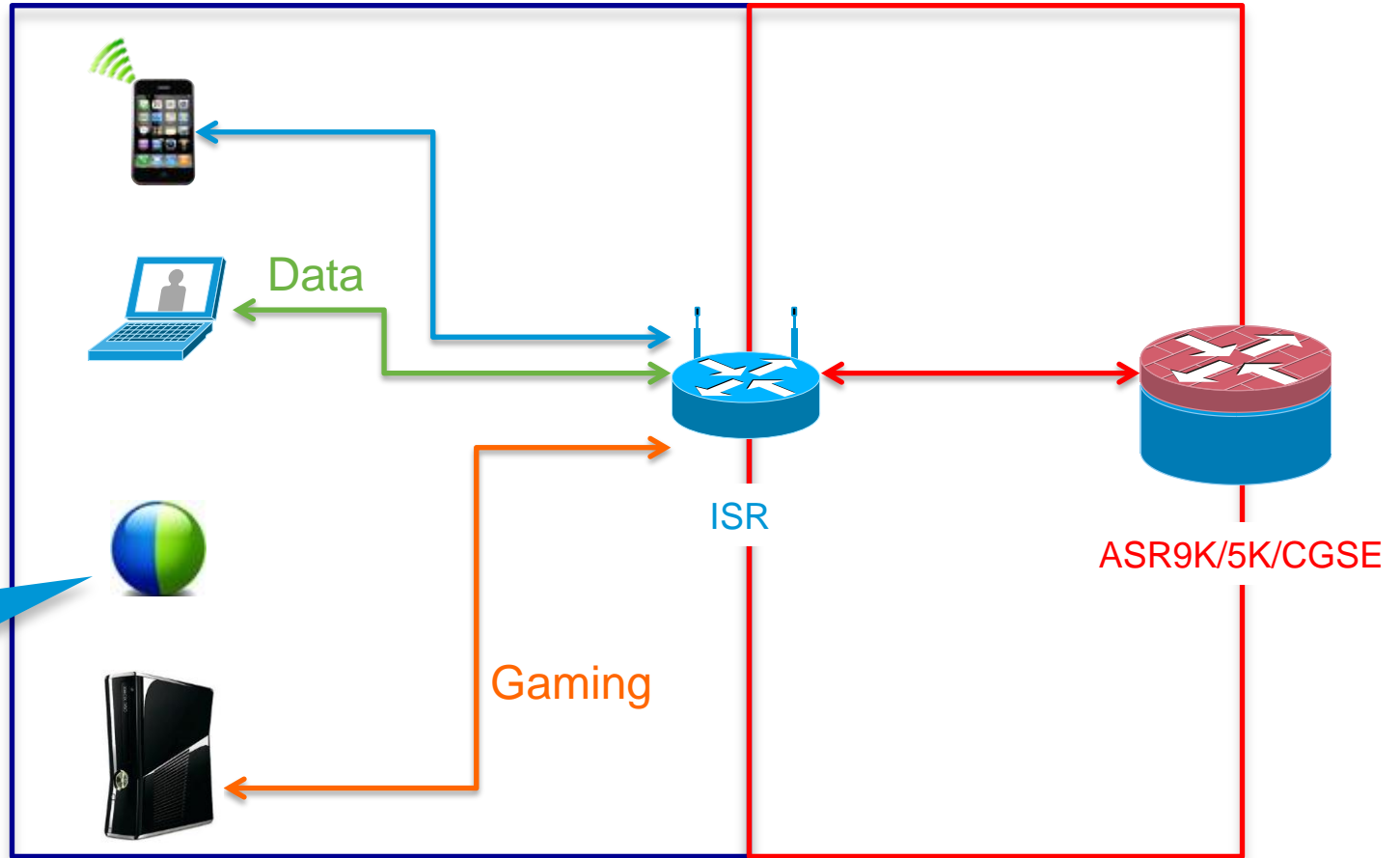
I will start a video conf and need specific Priority and QoS



# AEON

Home

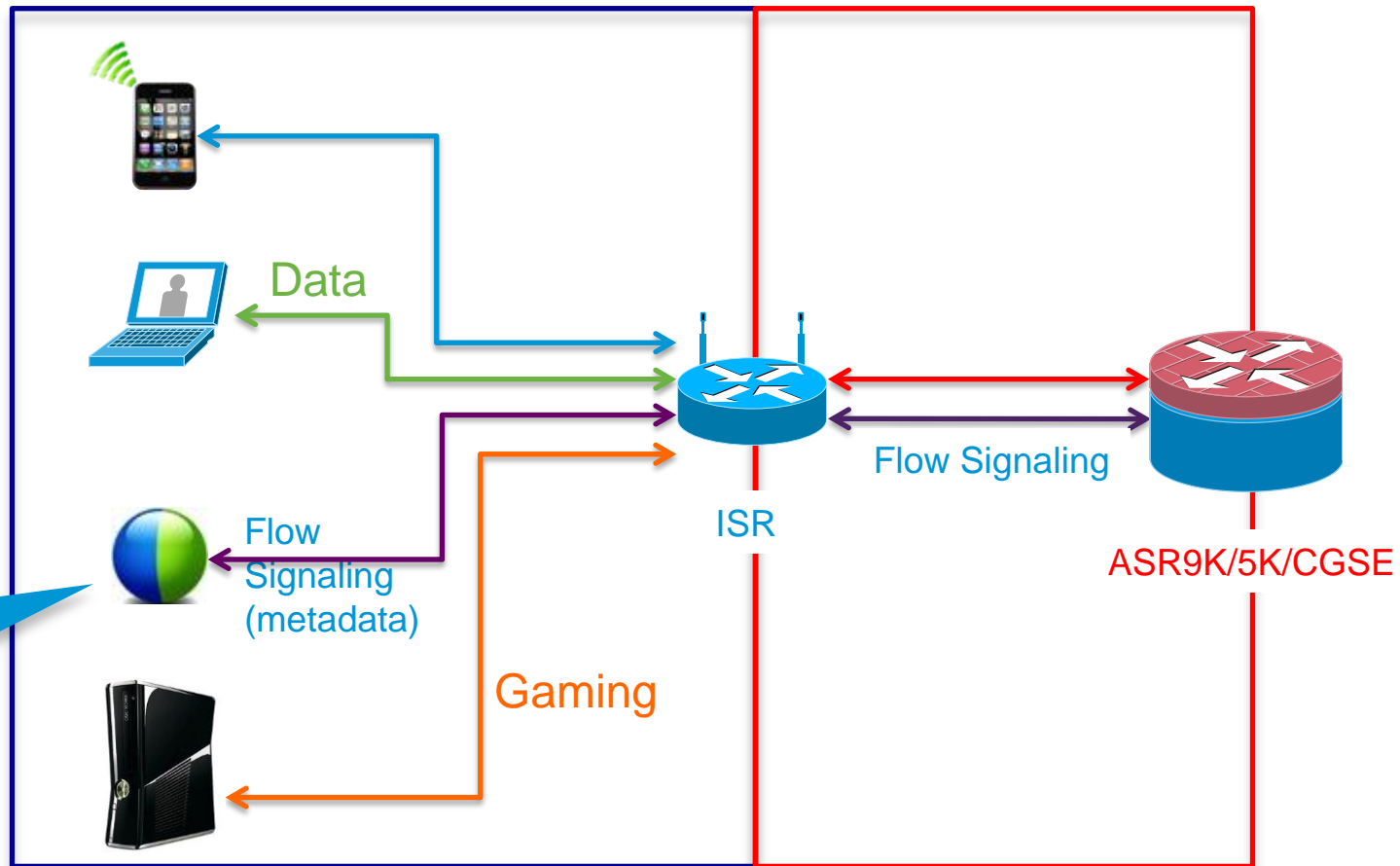
ISP



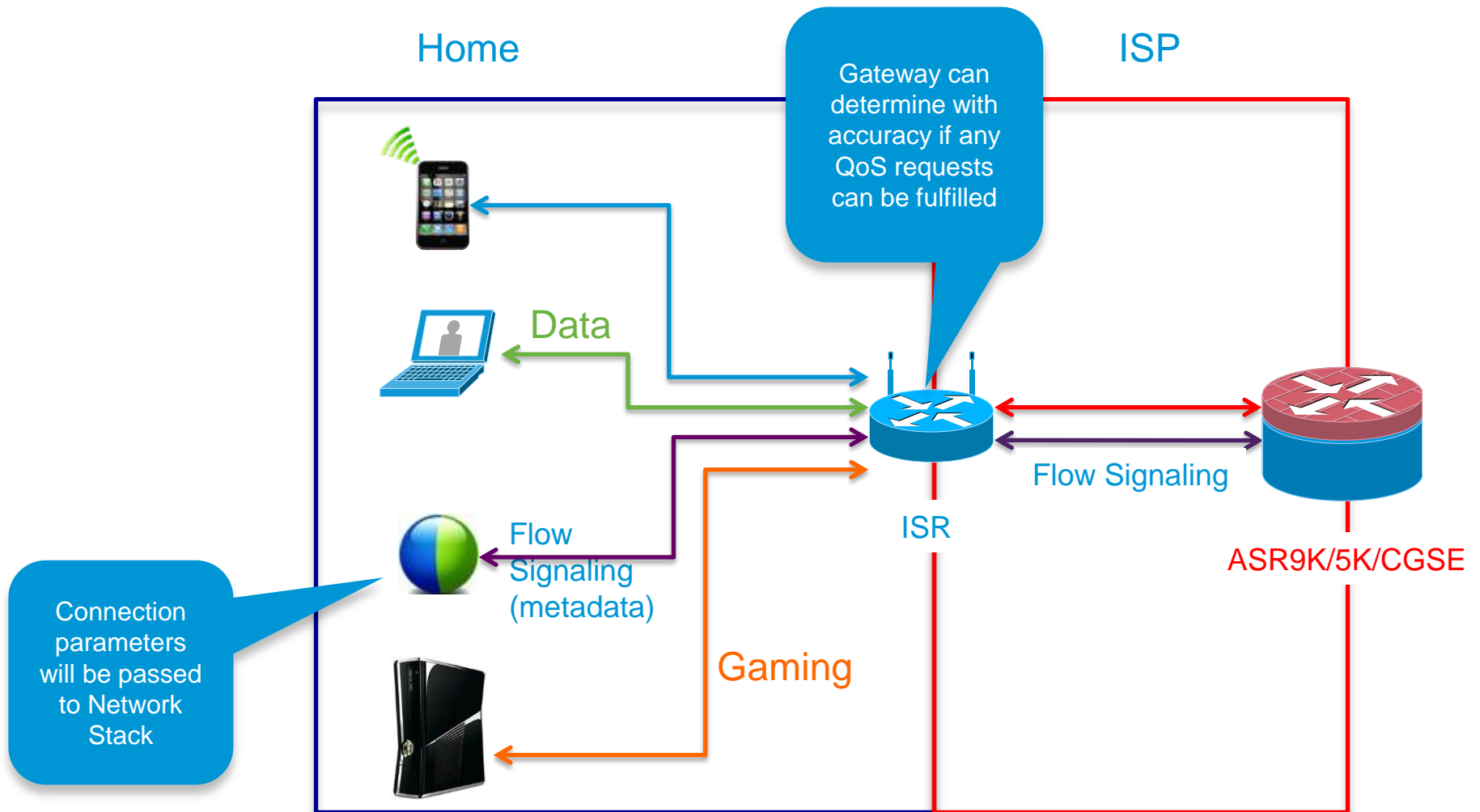
# AEON

Home

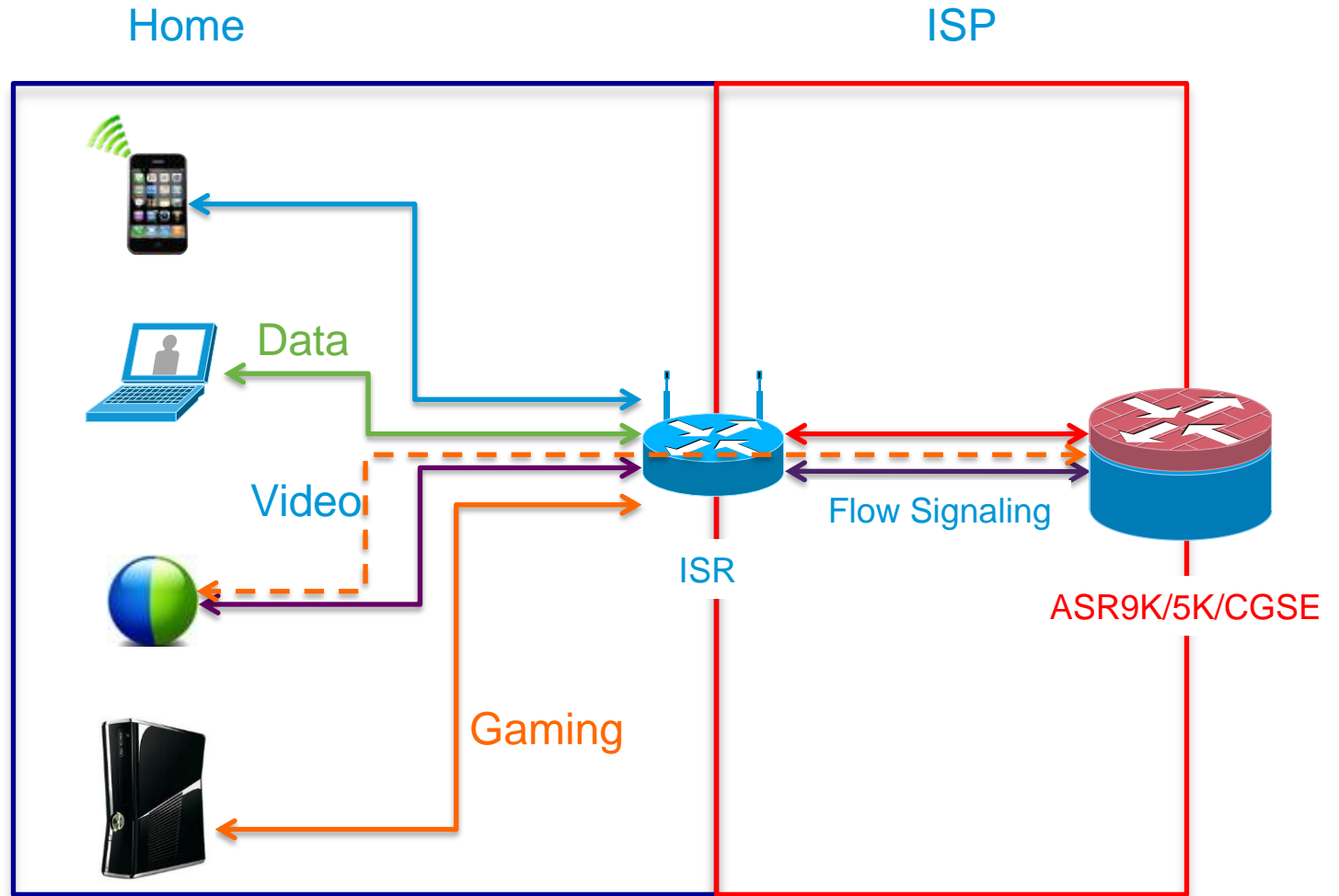
ISP



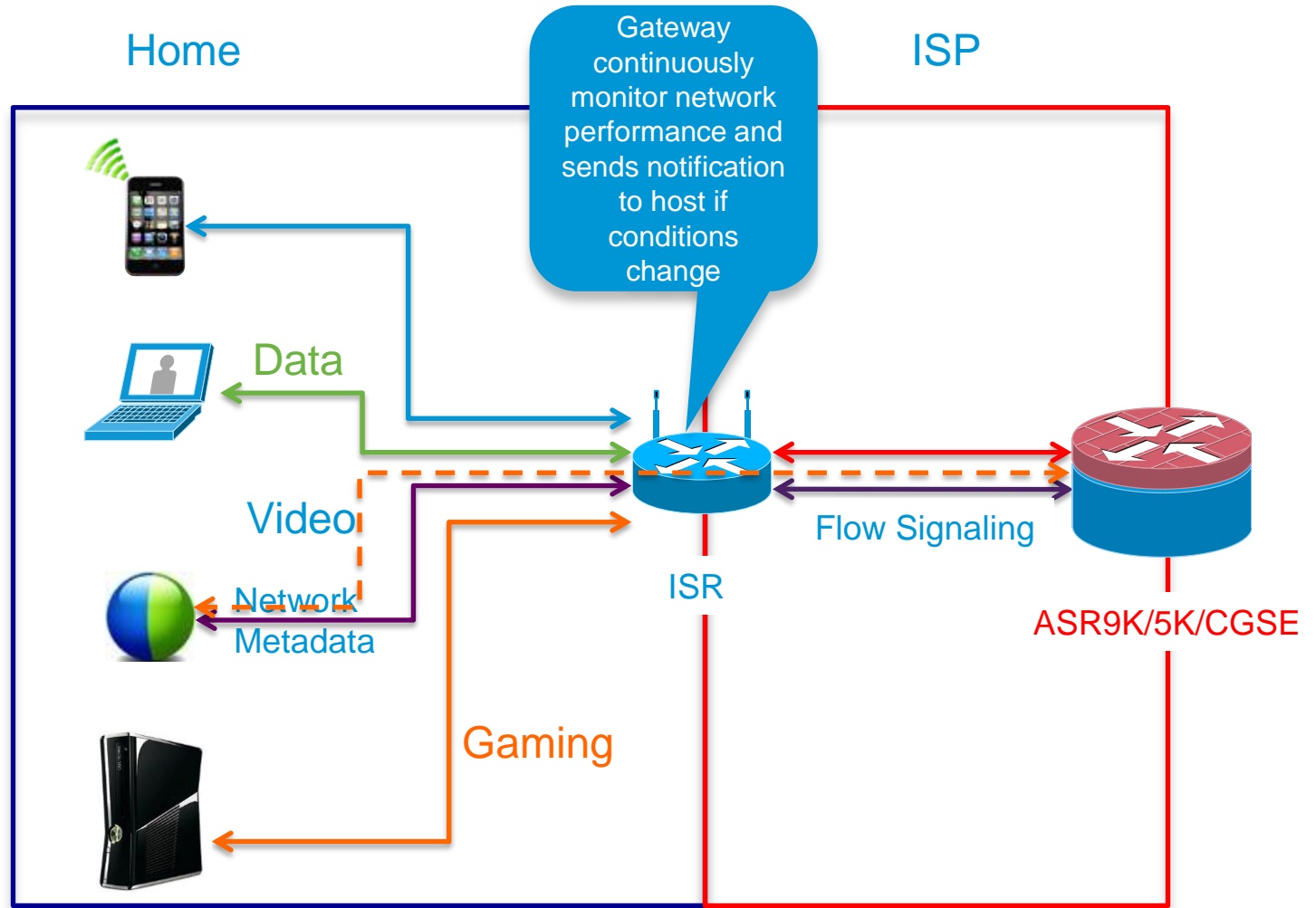
# AEON



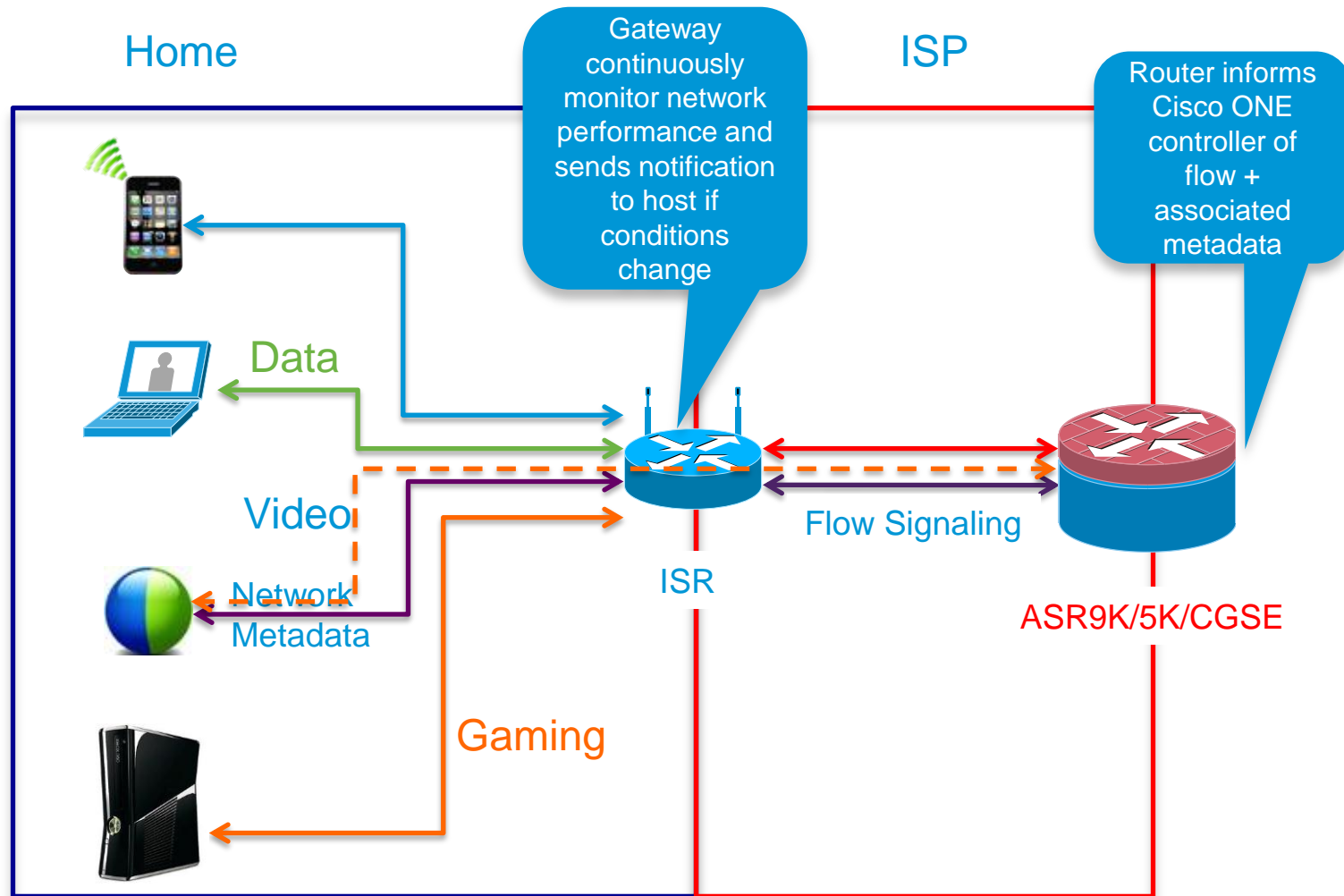
# AEON



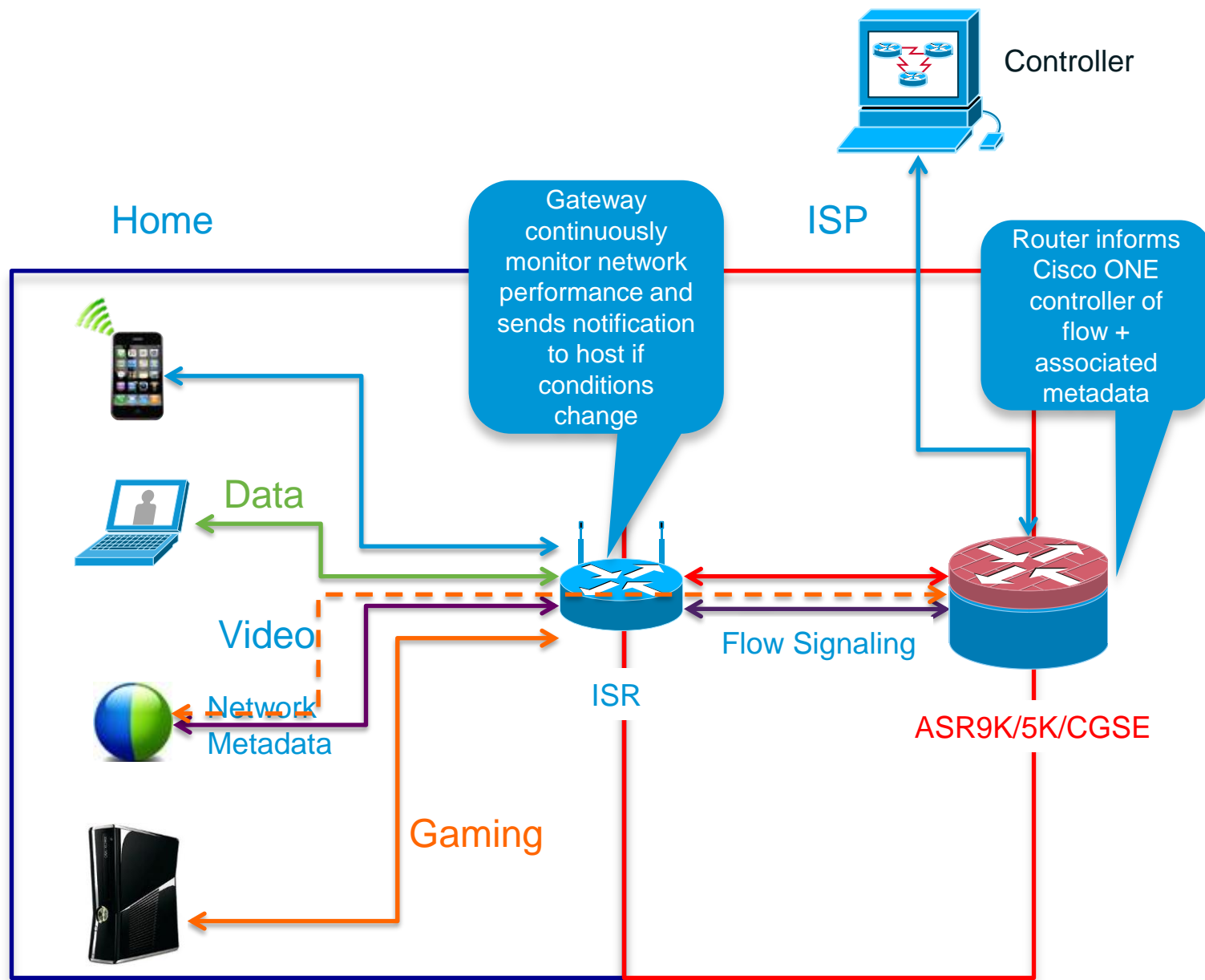
# AEON



# AEON



# AEON





# AEON Architecture

- Applications signals at any time which flows require custom services such as prioritization, NAT/FW traversal, reporting and so on.
- If Edge Network Device such as Mobile Gateway (MGW), Broadband Network Gateway (BNG) or Home Gateway (HGW) is capable of fulfilling request it installs flows and sends response.
- It is important to notice that fulfilling a service is not a requirement for forwarding- this means in the worst case the network continues to work as today.
- If capable, Edge Device proxies request further into the network in order to provide a better QoE.
- If HGW does not support AEON, application might talk directly to Edge Device further in the network.

# Use-Cases

- Managed Services
- Flow Prioritization & RTCWeb
- Multi-Homing Interface Selection
- Usage of excess bandwidth
- Analytics
- Early Warning and Troubleshooting
- ISP Over-the-Top Services

Thank you.

