

SP Wi-Fi Services over Residential Architectures

(draft-gundavelli-v6ops-community-wifi-svcs)

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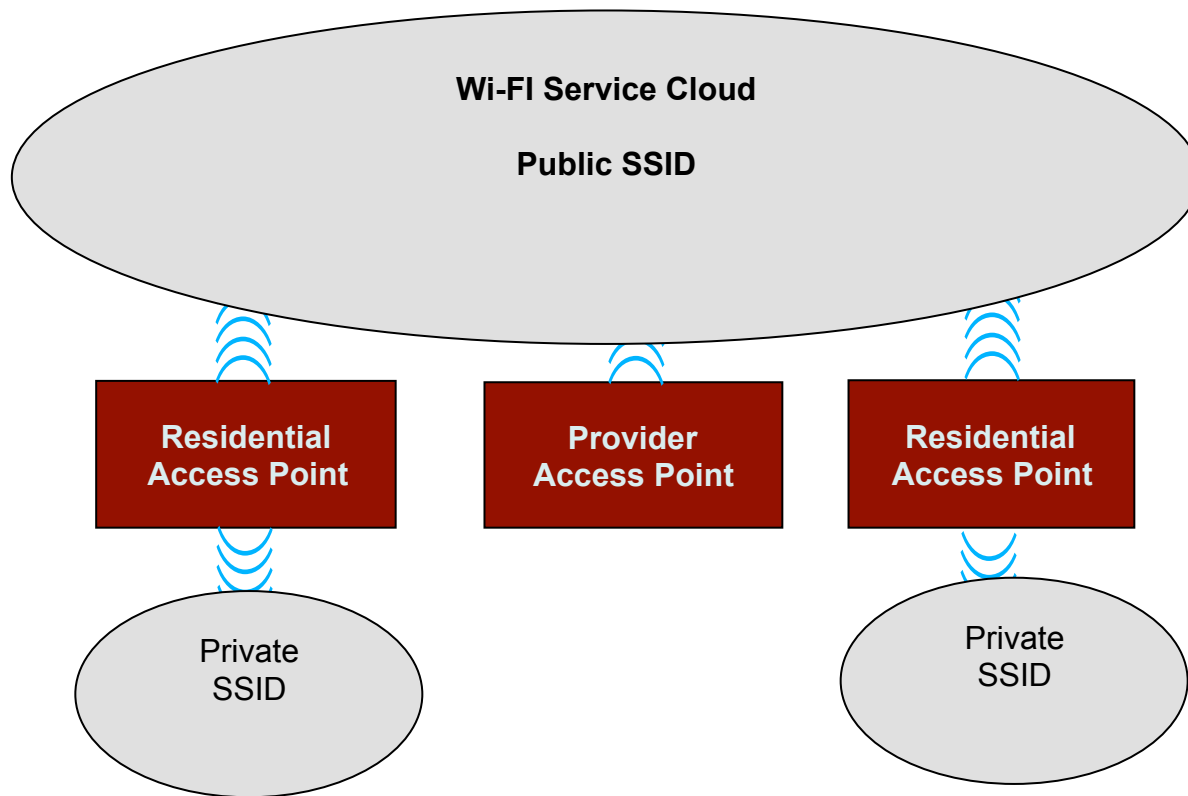
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Motivation

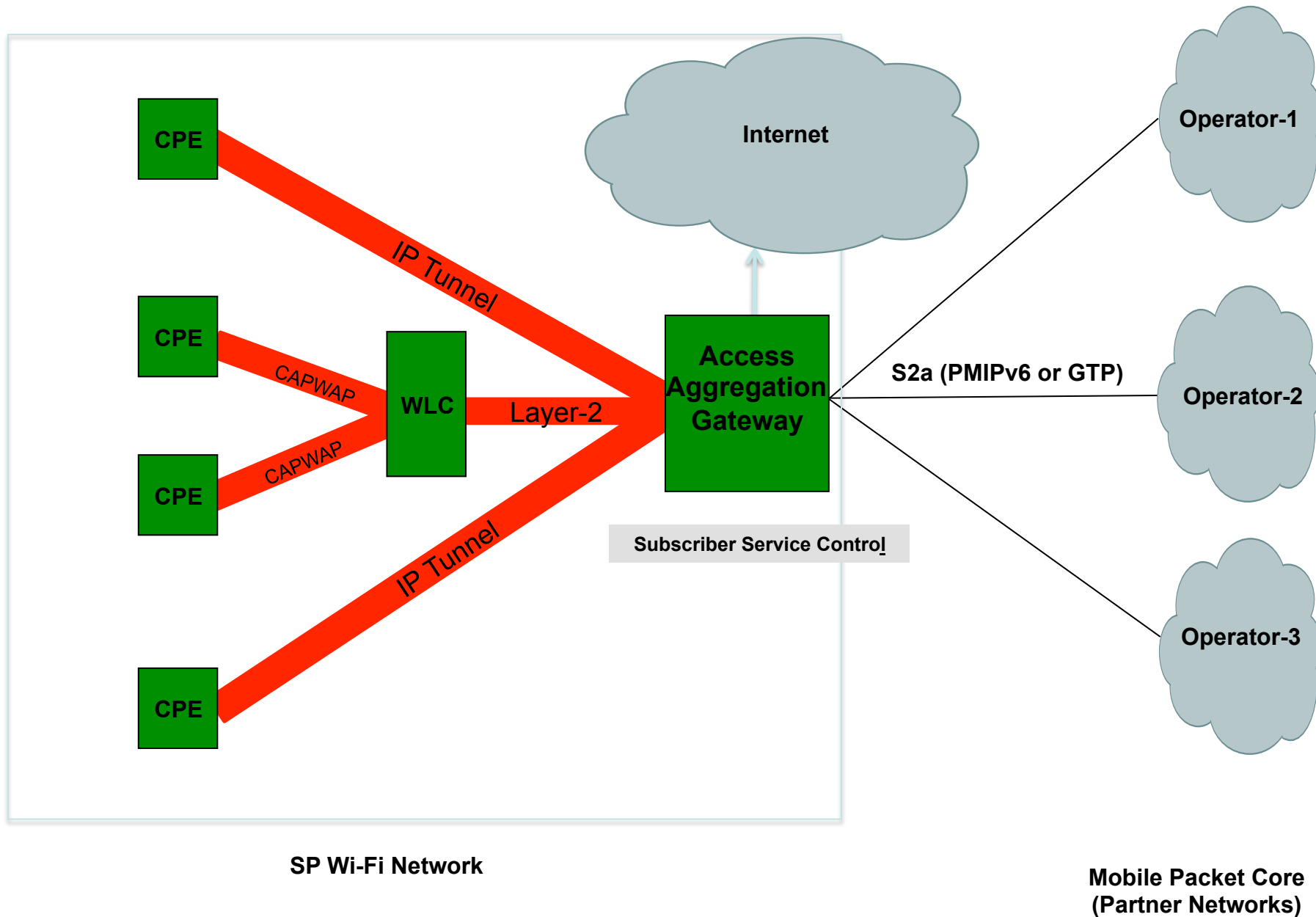
- Service Providers are deploying Wi-Fi Services over residential architectures. They are exploring protocol options for build a new service model that can meet all the service requirements.



Document Scope

- Identify requirements for deploying SP WI-Fi Services
 - IPv6 addressing is a key to the new service model
 - some of the requirements for the service may be not IPv6 specific but may have an impact.
- This document should Identify protocols that can be used to support these architectures. Provide analysis for the different approaches
- The goal is not define protocol extensions
 - but may identify the gaps in existing tools, which can be the basis for new protocol work

SP Wi-Fi Service for Retail Model



Key Service Requirements

- CPE Identity and Authorization
- Subscriber Authentication
 - 802.1x/EAP Authentication
 - Web-based Authentication
 - Transparent Auto Login
- Location based Services
- Local Services Access
 - Integration with Mobile Network
 - Multiple Home Network Service Access
 - Overlapping IPv4 Address Support
- Mobile Network Integration
- IP Mobility
 - Roaming within the WLAN Access Network
 - Roaming across Cellular and WLAN Access Network
- Selective IP Traffic Offload
- Service Differentiation
 - SSID to which the user is attached
 - Home User vs., Visitor
 - Rate Limiting & QoS Control
- IPv6 Accounting
- Lawful Interception
- Charging Function
- Service Provisioning and Monitoring

Conclusions

- What is expected from IETF?
 - Recommendations of the protocols that can be used to support this new service model
 - Identify IPv6 specific gaps in each of those models
 - Analysis of each of the option and how it addresses different requirements