

My Scale Just Told the Cloud I'm Fat

Access Management, Security, Privacy and IOT

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Is this IOT Today?



"Telescreen". Via Wikipedia - https://en.wikipedia.org/wiki/File:Telescreen.png#mediaviewer/File:Telescreen.png

10T Challenges to Privacy

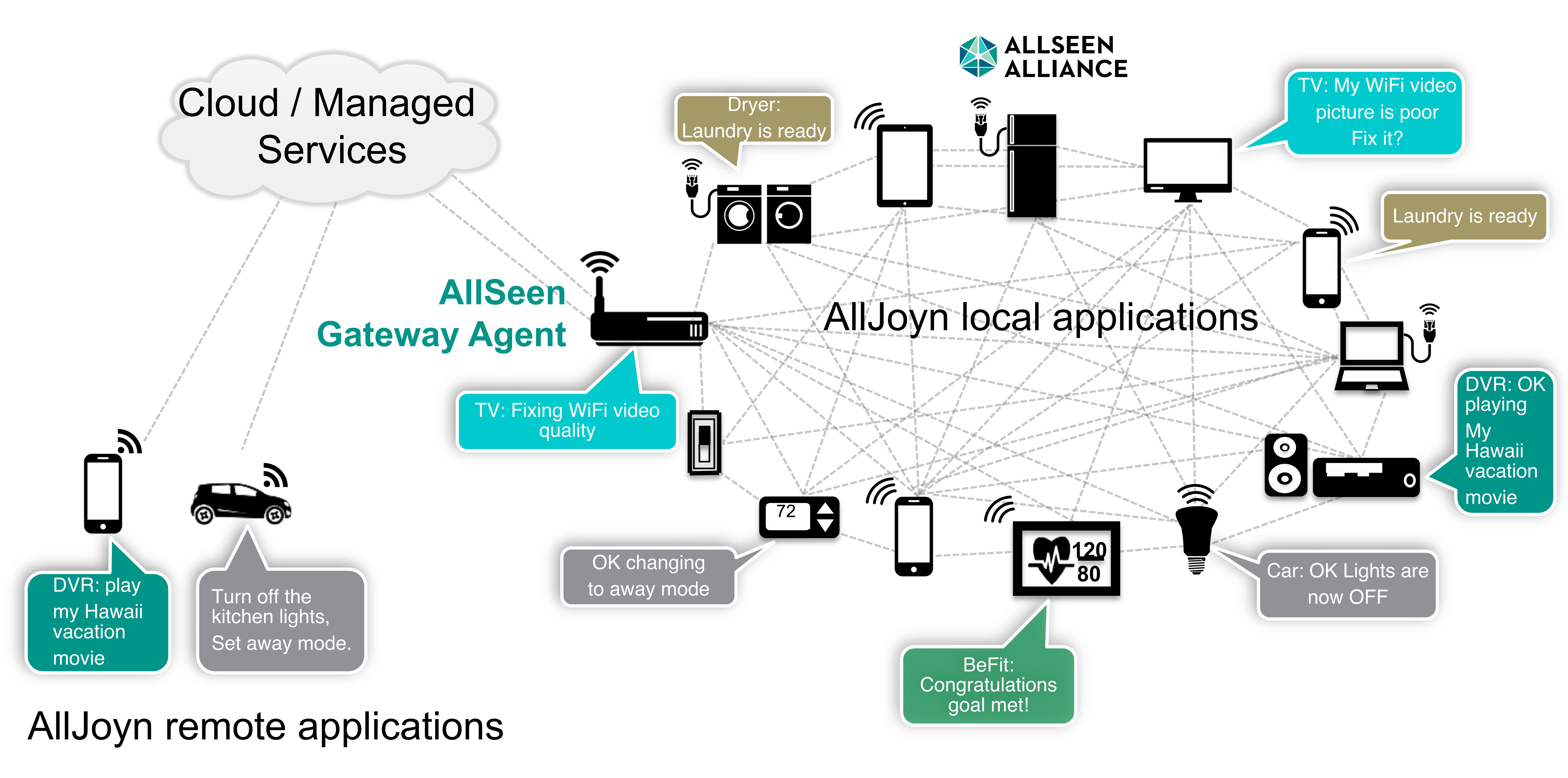
- Ubiquitous data collection
- Unexpected uses of consumer data that could have adverse consequences
- Heightened security risks

Key Solutions

- Security by Design
- Data Minimization
- Notice and Choice for unexpected uses

Speech of FTC Chairwoman Edith Ramirez; Privacy and the IoT: Navigating Policy Issues International Consumer Electronics Show, January 6, 2015

AllSeen Gateway Agent – Enables Secure and Private IOT by Design



AllSeen Gateway Agent

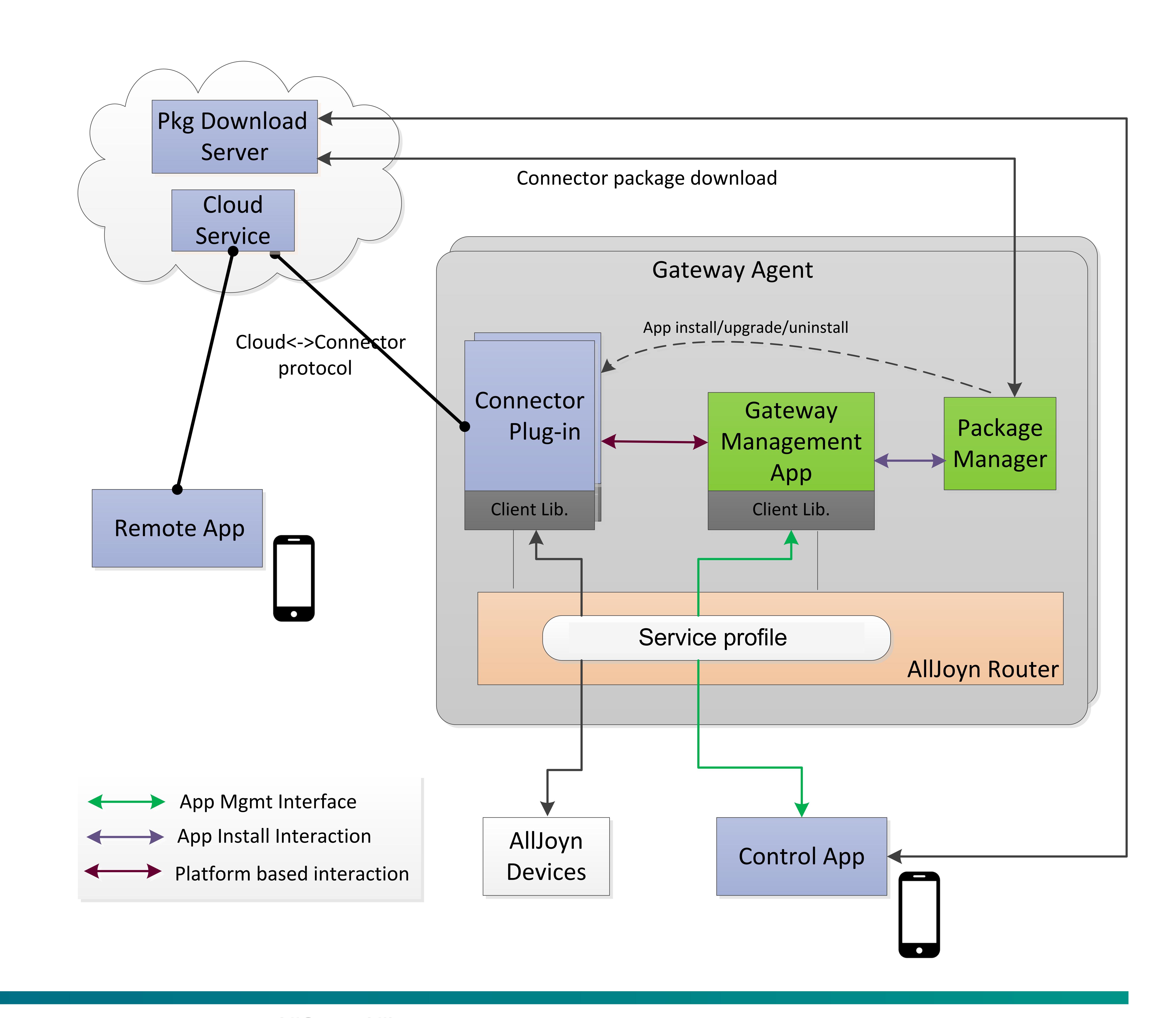
- Embedded application for connecting local AllJoyn devices and applications to external services
 - Cloud / remote services
 - Also provides a gateway to other IOT protocols
 - Plug-in connector architecture supports multiple interfaces
 - Supports persistent remote connections without special firewall or port settings
- Ideal for automation hubs, routers or any "always on" device in the local network

Data Minimization and Security

- Filters LAN AllJoyn traffic from remote traffic only traffic needed for the user's cloud or remote services are passed
- Connector Plug-ins with Remote Service Profiles configure what data/traffic is routed externally
 - Enhances the user's privacy and security
 - Enables managed service privacy policies
 - Improves scaling performance minimizing external loading
- Extends AllJoyn's end to end security model to external services
- The Gateway Agent also can support Connector plug-ins to other PAN protocols with AllJoyn (6LowPAN, ZigBee, etc.)

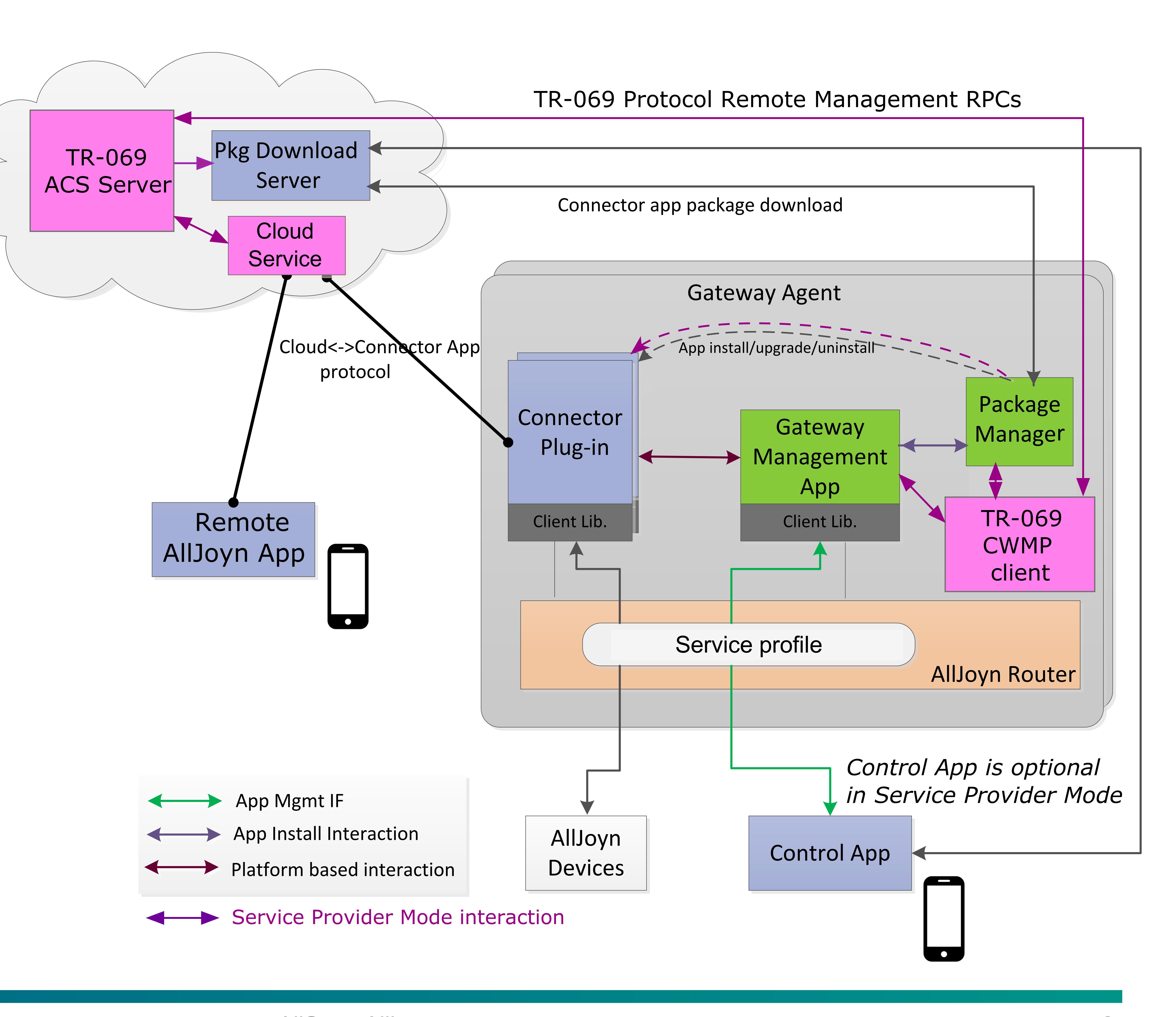
Consumer Mode Operation

- User self-manages
 their AllJoyn
 connections to external
 services
 - Services provisioned via a mobile app with the Gateway Control App component
 - Connector Plug-in installed
 - Service Profilemanaged
 - Consumer must be at home when configuring their cloud service using Control App



Service Provider Mode Operation

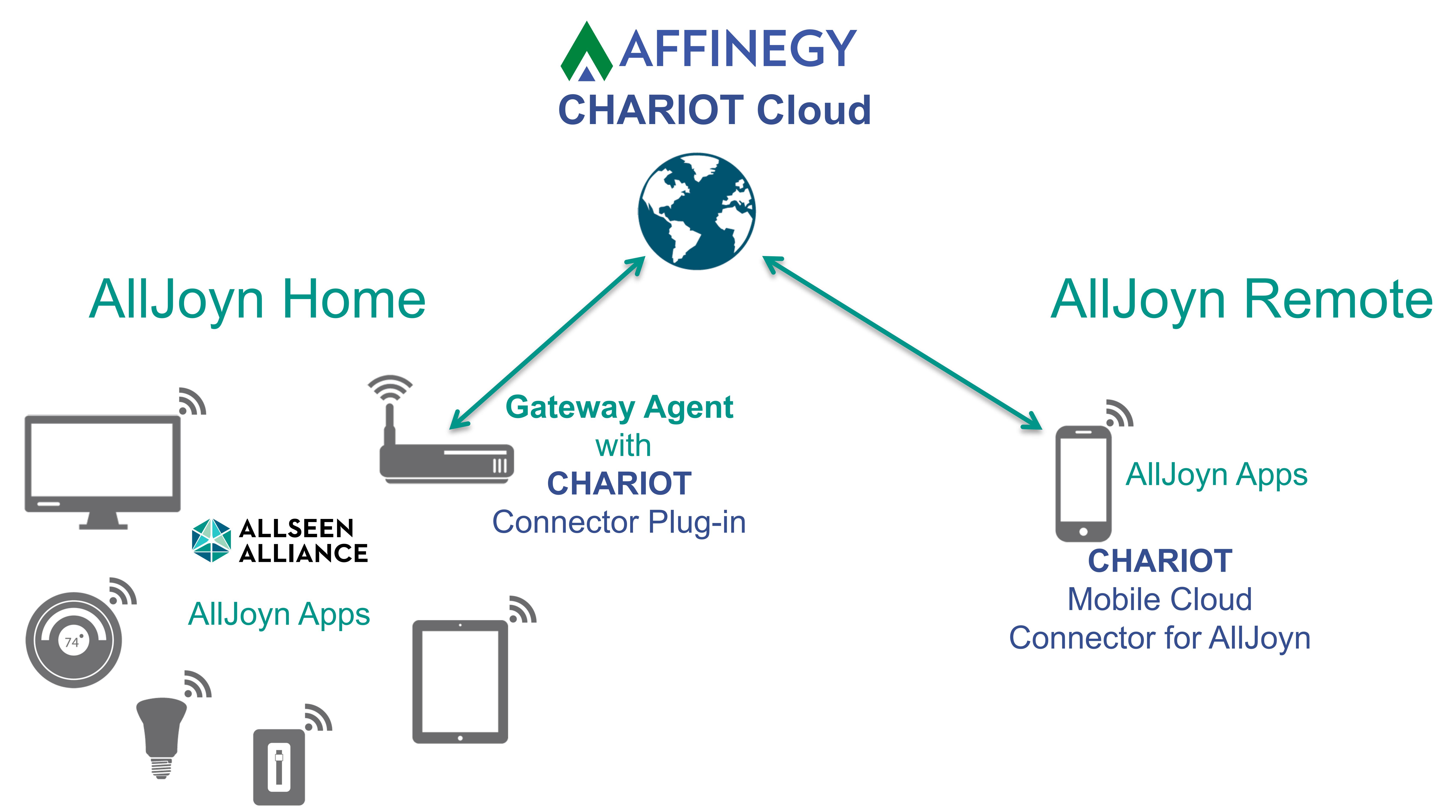
- Ideal for Managed
 Services Providers
 - Remote software installation and update management for
 - Connector Plug-in(s)
 - Firmware of the hub or gateway
 - Full remote
 management of
 - AllJoyn ServicesProfile
 - The overall gateway/hub configuration
 - Implemented with TR-069a5 enhanced with



Cloud Services for Gateway Agent available from Affinegy

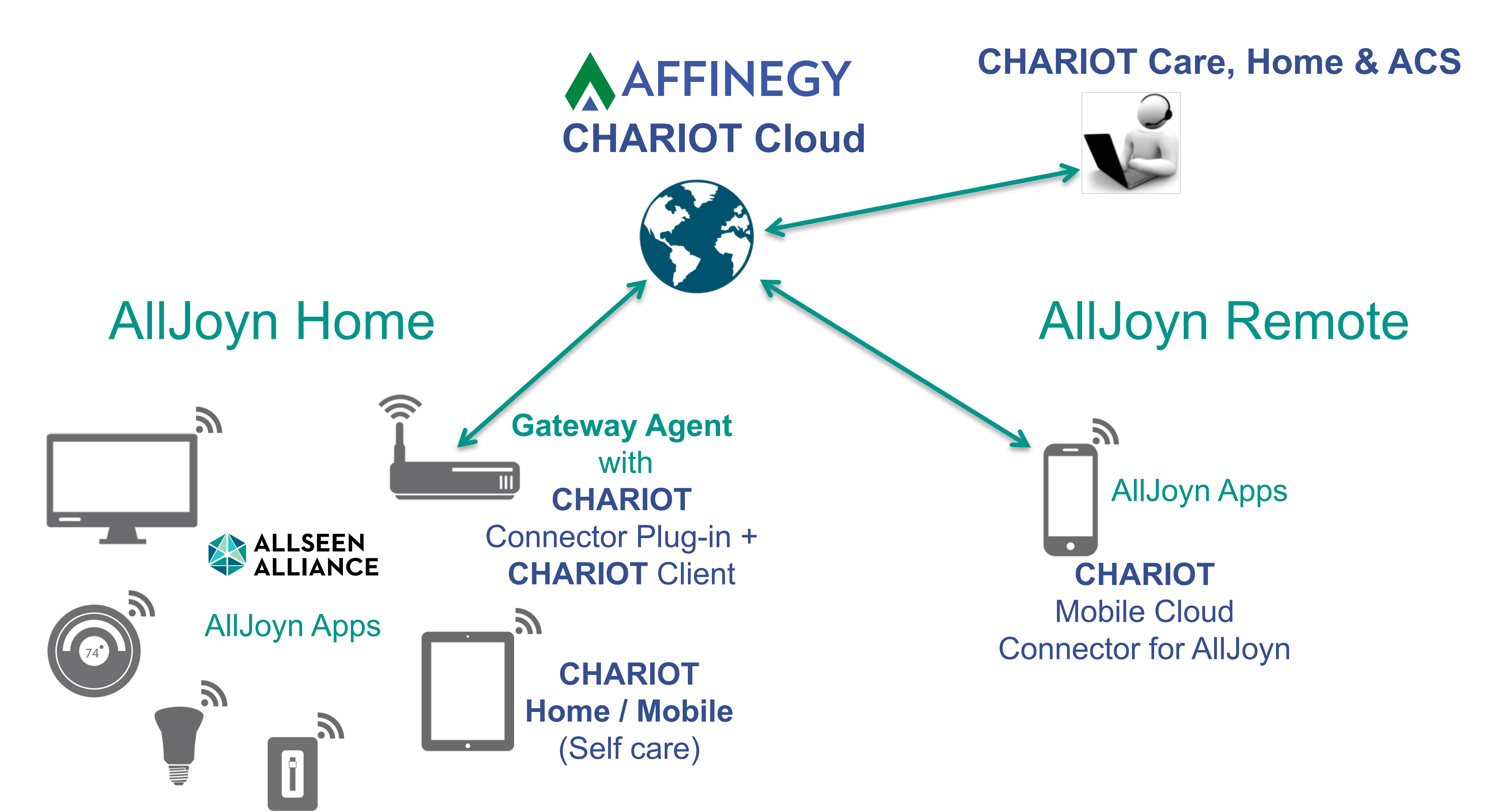
- Affinegy CHARIOT Server Platform
 - Provides IOT cloud services fully compatible with AllSeen Gateway Agent
 - Embedded AllJoyn to XMPP connector plug-in
 - XMPP server for high scale, persistent IOT services and management
 - For Service Provider Mode Advanced TR-069 ACS remote management server to manage the IOT service profiles and the hub
 - Provides full turn-key installation and support management
- No cost developer hosted access available from Affinegy
- Commercial CHARIOT server licensing available from Affinegy, both hosted and installed options

Affinegy CHARIOT Cloud Services for AllJoyn with AllSeen Gateway Agent



Turn-key enables existing AllJoyn Apps for cloud services

Affinegy CHARIOT Cloud Services for AllJoyn with AllSeen Gateway Agent



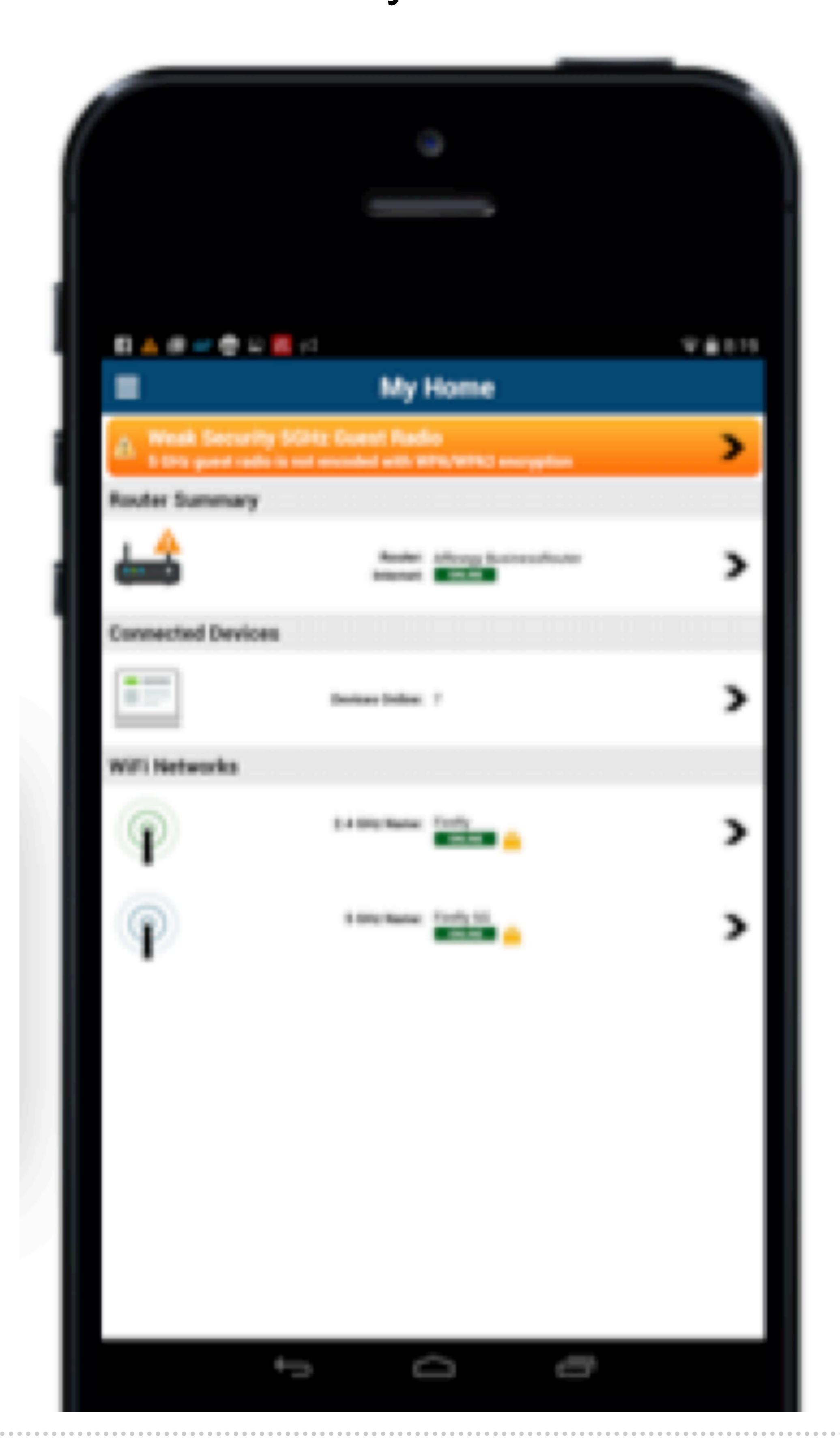
CHARIOT - One Converged Managed Services Platform



AllJoyn Notifications Enabled Self-Care

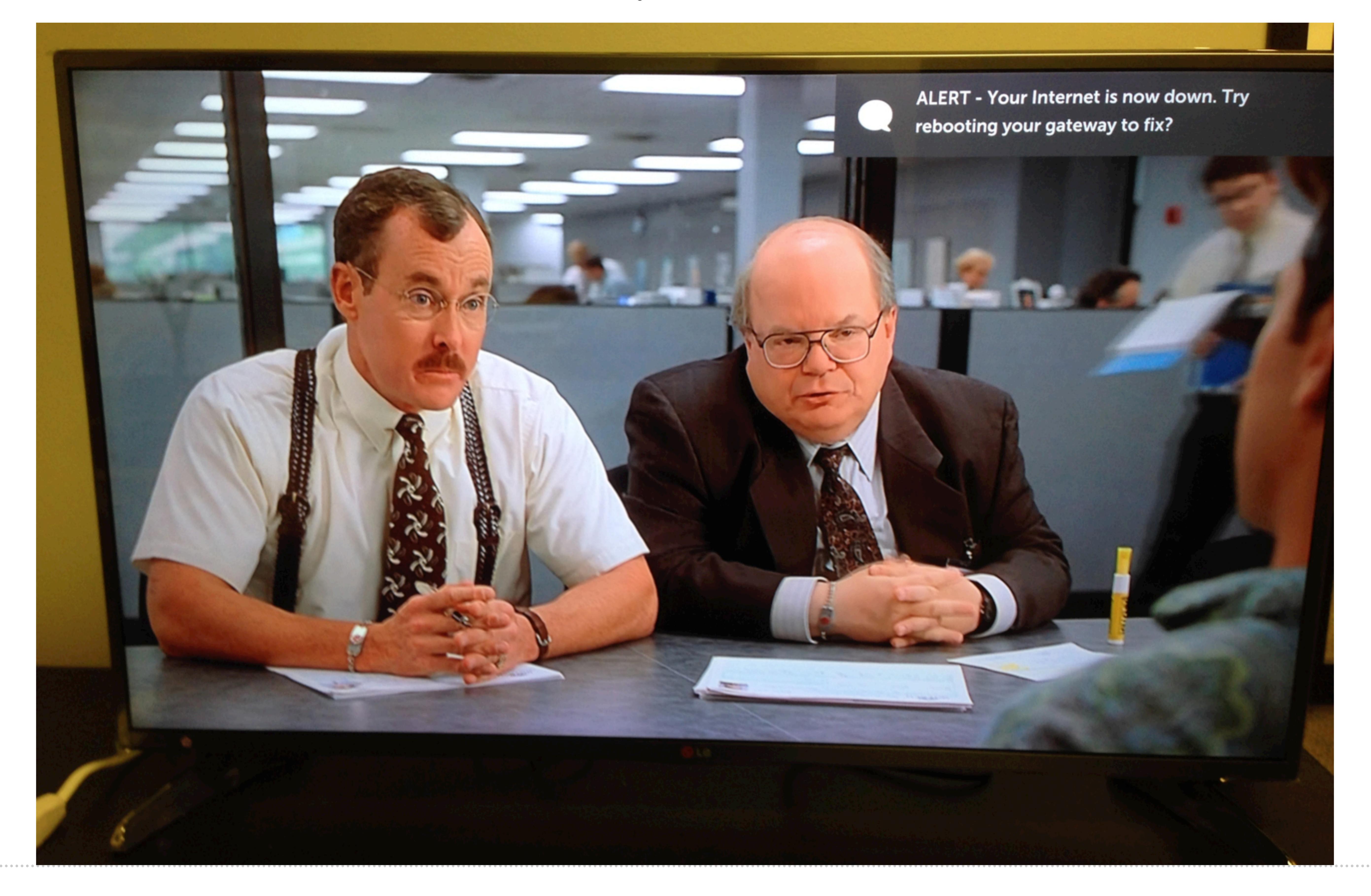
CHARIOT Mobile

Local and remote diagnostics with AllJoyn notfications



LG Smart TV with AllSeen Notification Service

Local and remote diagnostics from CHARIOT Server and Gateway with CHARIOT Client



Gateway Agent Developer Information

- Gateway Working Group Wiki https://wiki.allseenalliance.org/gateway/gatewayagent
 - Documentation and presentations
 - Open source GIT repository
 - Weekly working group meetings
 - Multiple companies participating developing Connector Plug-ins
- Released code available now in AllSeen GIT:
 - Gateway Agent management app (embedded for Linux and OpenWRT)
 - Sample Connector Plug-in
 - Sample Android Control App for managing connectors and the service profile

AllSeen Gateway Working Group Contributors

- Affinegy
 - Art Lancaster, CTO contributor and W.G. chair
 - Committers: Josh Spain, Jim Howard
- Qualcomm
 - Shane Dewing, Senior Director Product Management contributor
 - Committers: Mike Quon, Aaron Pulliam, Binita Gupta

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Thank you

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