Secure Cloud and Remote Service Connections for AllJoyn Applications

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Agenda

1. Gateway Agent Working Group
2. Software components and usage
   - Consumer Mode
   - Service Provider Mode
3. Affinegy CHARIOT Cloud solutions for AllJoyn and IOT
4. Gateway Agent developer information
Gateway Agent Working Group – AllJoyn meets Cloud / Managed Services

Cloud / Managed Services

AllJoyn Gateway Agent

AllJoyn local applications

AllJoyn remote applications

DVR: play my Hawaii vacation movie

Dryer: Laundry is ready

TV: Fixing WiFi video quality

OK changing to away mode

Car: OK Lights are now OFF

DVR: OK playing My Hawaii vacation movie

Laundry is ready

TV: My WiFi video picture is poor Fix it?

BeFit: Congratulations goal met!

Turn off the kitchen lights, Set away mode.
AllSeen Gateway Agent Application

• Software application ideal for an always on, connected hardware device in the proximal network turning it into an AllJoyn to remote services gateway

• Provides a standard and secure method for connecting the local AllJoyn devices and applications to external services
  – Works with any Internet connection
  – Supports persistent remote connections without special firewall or port settings
Managed and Secure AllJoyn Remote Routing Node

• Filters LAN AllJoyn traffic from remote traffic – only traffic needed for the user’s cloud or remote services are passed

• Which AllJoyn applications and traffic are determined by the Gateway Agent’s remote Service Profiles – managed by the Gateway Agent Control API
  – Enhances the user’s privacy and security
  – Enables managed service privacy policies

• Supports multiple independent cloud services in one device with modular, Connector plug-ins

• The Gateway Agent also can support Connector plug-ins to other PAN protocols with AllJoyn
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 Profile managed

- 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 Services Profile
  - The overall gateway/hub configuration
- Implemented with TR-069a5 enhanced with XMPP
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 Cloud

AllJoyn Home

Gateway Agent with CHARIOT Connector Plug-in + CHARIOT Client

CHARIOT Home / Mobile (Self care)

CHARIOT Remote

AllJoyn Apps

CHARIOT Mobile Cloud Connector for AllJoyn

CHARIOT - One Converged Managed Services Platform
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
  - Inviting contributors now for Connector Plug-ins for remote and PAN protocols

- Code available now in AllSeen GIT:
  - Gateway management app, Package Manager (embedded for OpenWRT and Linux)
  - Sample Android Control App

- Additional code for release 1 – December
  - Sample Connector Plug-in
  - TR-069 component for Service Provider mode.
AllSeen Gateway Working Group Contributors

• Affinegy
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  – Committers: Josh Spain, Kevin Sandifer, Jim Howard

• Qualcomm
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Thank you

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