ALLSEEN ALLIANCE

Technical Steering Meeting

August 29, 2016

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Agenda

1. Approve minutes from previous meeting
2. CDM 16.04 Update
3. GW WG Update
4. HDB Update

HAE/CDM 16.04 Update

Inhwan Choi

Timeline for CDM 16.04 Release

- Based on TSC's approval on merging CDM and HAE, the work done by HAE project is being migrated into CDM and it will be released as CDM's 16.04 version.
- Timeline for the 16.04 release

Item	Target Date	Notes
Update interface definitions and request reaffirming by IRB/SSC.	Done	• Only renaming (HAE → CDM) & typo corrections. • No essential changes from the last pass of IRB (May 13, 2016) & SSC (June 16, 2016) review.
Update implementation codes	~ 8/19	• Only renaming (HAE → CDM). Codes, file/folder names, and file path, etc.
Update test cases spec. and request reaffirming by C&C	~ 8/19	• Only renaming (HAE → CDM) & typo corrections. • No essential changes from the 1st review request (June 26, 2016).
Request TSC review for the inclusion of 16.04 Base Implementation.	~ 8/31	• Assuming that reaffirmation by IRB/SSC and C&C reviewers would be done by end of August. • Before the request, WiKi, Git, and mailing list, etc will be consolidated.

Gateway Work Group Update

August 29, 2016
Art Lancaster, Chair (Affinegy)

Topics

- Status update for current Gateway Working Group projects
- Gateway Agent project status and release plan update
- AllJoyn XMPP Connector project status

Gateway Work Group – Projects Status Overview

Project	Description	Contributors	Release	Status
Gateway Agent	A manageable AllJoyn routing node for connections with external networks, segments, devices and services	Affinegy	Released at v14.12 and part of the CBI v15.04 release ready	v15.04 QA complete, full release by 8/31/2016 V16.04 in QA testing now, release planned for 9/30/16 See project status slide.
AllJoyn XMPP Connector	A managed services and secure remote access connector for AllJoyn via XMPP with support for Gateway Agent.	Affinegy	v15.04 QA complete First official release will be v16.04	Has been available at 15.04 in beta form since 4/2016 16.04 official release by end of September
Device System Bridge	Bring non-AllJoyn devices to AllJoyn as virtual devices on the AllJoyn network	Microsoft	Released at v14.12 and updated to v15.04 supporting Windows 10.	Extensive documentation and samples available at Microsoft Dev Center for IOT. Is Windows only – see HDB project of other platforms
SIP End to End Connector	A secure remote access connector for SIP end to end services	SmartConn – Beijing Heng Sheng Dong Yang Tech. Co.		Started October 2015 – release expected before end of 2016
MQTT Connector	MQTT Connector for Gateway Agent for Linux and OpenWRT	Midea Group		Started May 2016 – well underway, release expected soon
U+ Connector	An AllJoyn to U+ Connector. U+ being a Haier home automation protocol	Haier		Started in May 2016 – in progress
Home Device Bridge	A portable AllJoyn bridge supporting ZigBee, Z-wave and others in Linux and Android	Innopia	Planned for v16.04	Code is submitted and HDB is in testing. See project status presentation by Innopia

Gateway Agent Project - Status

- Status
  - Testing and QA complete for AllJoyn v15.04. Release documentation and release by 8/31/2016
    - Gateway Agent is part of the AllJoyn base implementation. Once we have completed the 15.04 release we will send the approval request to the TSC
  - 16.04 version is in testing, release planned for 9/30/2016
- What's new in v15.04 release
  - Now includes a full AllJoyn routing node and daemon. Becomes the only AllJoyn routing node needed in the device.
  - Bug fixes and updated to core and base services 15.04, is backwards compatible with 14.12
- What's planned as new in v16.04
  - Updated to core and base services 16.04
- Deferred from v16.04 to next release for v16.10
  - We moved the Package Manager for AllJoyn.JS applications from v16.04 to v16.10. Customer projects urgently needed the support for updates to introspection XML and events and actions description from 16.04.
    - The package manager will support installing and managing any AllJoyn.JS Javascript application – general applications, or Gateway Agent JS connectors
  - To meet the needed schedule we moved the new feature to the v16.10 release, expected by end of year.

AllJoyn XMPP Connector Project - Status

- XMPP Connector features summary
  - Enables standard AllJoyn applications in connected home products to connect with AllJoyn applications away from home, just like they were at home
  - AllJoyn becomes cloud native, and the need to add other cloud protocol APIs is eliminated. End to End connections and privacy retained through cloud service.
- Beta releases have been available and supported commercially by Affinegy since 2015-09. Stable, master branch at 15.04 in AllSeen GIT
- Revised release plan – first official AllSeen Alliance release moved to v16.04.
  - During initial QA testing and working with customers, we learned there were many issues with support for events and actions and XML annotations/descriptions. This took substantial work to support
  - Full AllJoyn compatibility for all functions required fix of https://jira.allseenalliance.org/browse/ASACORE-2592 which is completed in v16.04 (Introspection description handling)
  - Overview
    - Supports Core and Base Services 16.04
    - Supports Linux (Ubuntu, OpenWrt BB & CC)
  - Status
    - Completed code update for v16.04 – we are at feature freeze and in QA testing
    - Enhancements now supports all of AllJoyn remotely including sessionless signals, events/actions, and with v16.04 supports Higgns
    - Affinegy's CHARIOT XMPP service is available for development and testing at http://community.chariot.global , including the mobile app connector.
    - Needs release and certification documentation. Release planned for end of September at 16.04

AllJoyn Home Device Bridge Project Update

August, 2016

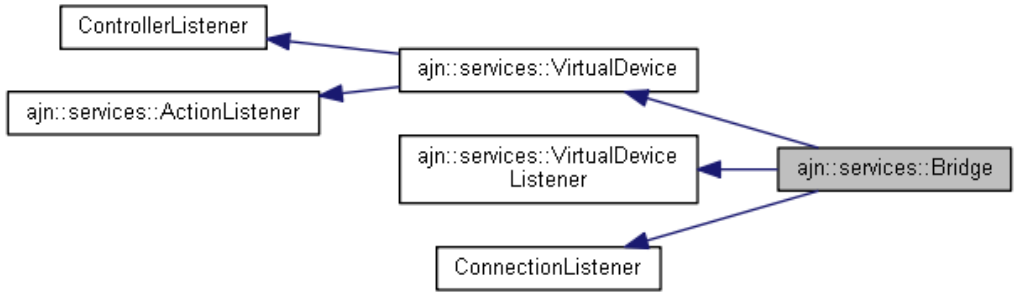
- Cheol Hwi Kim, Innopia Technologies, Inc.

AllJoyn Home Device Bridge Project Update

- HDB Project Progress
  - The first alpha version of HDB has been uploaded on the git repository.
  - https://git.allseenalliance.org/cgit/hdb.git/

  - The first alpha version includes HDB for ZigBee HA1.2 standard in Linux OS.
  - The second alpha version including HDB for Z-Wave standard in Linux OS.
  - Further update will include HDB for ZigBee HA1.2 standard and Z-Wave standard in OpenWRT OS.

AllJoyn Home Device Bridge Interfaces



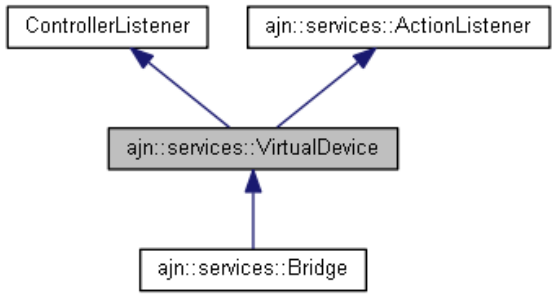
Public Member Functions

	Bridge ()
	~Bridge ()
QStatus	InitControllers ()
void	DeviceFound (ConnectionType connType, DeviceType devType, uint16_t nodeId)
void	DeviceLost (ConnectionType connType, uint16_t nodeId)
void	DeviceRemoved (uint16_t nodeId)
void	StateChanged (ControllerState state)
void	Reported (RepDataT data)
void	StateChanged (uint16_t id, VDeviceState state)
void	NotiRequest (uint16_t id, char *deviceName, char *msg)

- Public Member Functions inherited from ajn::services::VirtualDevice
- Public Member Functions inherited from ControllerListener
- Public Member Functions inherited from ajn::services::ActionListener
- Public Member Functions inherited from ConnectionListener

- Bridge:
  - For the initial operation each plugin controllers will be initialized.
  - Call back APIs are provided to call DeviceFound() ~ NotiRequest() from plugins.
  - If DeviceFound() callback is requested from plugin, AllJoyn Virtual Device is created in the Bridge.
  - DeviceLost(), DeviceRemoved() – delete objects.
  - StateChanged() – deliver notification and status update.
  - Reported() – event signal triggered according to devices.
  - NotiRequest() – create and deliver notification.

AllJoyn Home Device Bridge Interfaces



Public Member Functions

	VirtualDevice (ConnectionType connType, DeviceType devType, uint16_t id)
	~VirtualDevice ()
QStatus	Init ()
void	DeviceRemoved (uint16_t nodeId)
void	StateChanged (ControllerState state)
void	Reported (RepDataT data)
void	ActionCallback (const char *member)
void	AddListener (VirtualDeviceListener *listener)
Options *	GetOptions ()

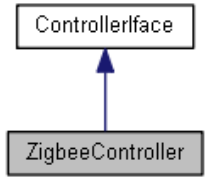
▸ Public Member Functions inherited from ControllerListener

▾ Public Member Functions inherited from ajn::services::ActionListener

virtual	~ActionListener ()

- Virtual Device:
  - Plugin objects are produced according to the connection type(ZigBee or Z-Wave) for Virtual Device created in the Bridge.
  - DeviceRemoved() ~ Reported() call back APIs are provided for each plugin objects
  - When ActionCallback() is called to callback for AllJoyn Action, relevant API(developed by each users) for plugin action will be called.

AllJoyn Home Device Bridge Interfaces



Public Member Functions

	ZigbeeController (uint16_t nodeId, **DeviceType** devType)
	~ZigbeeController ()
ControllerState	**Init** ()
ControllerState	**Start** ()
void	**Final** ()
ControllerState	**GetState** ()
void	**SetState** (**ControllerState** state)
void	**Reset** ()
void	**AddListener** (**ControllerListener** *listener)
void	**RemoveListener** (**ControllerListener** *listener)
void	**AddConnListener** (**ConnectionListener** *listener)
void	**RemoveConnListener** (**ConnectionListener** *listener)

▸ Public Member Functions inherited from **ControllerIface**

- ZigBee Controller Example:
  - Provide Init() ~ RemoveConnListner() APIs that can be called from Virtual Device.
  - APIs listed on the left table is an example that each user can implement (listener() API is provided in HDB)

Thank you

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