

AllSeen Alliance
Technical Steering Committee
Dear AllSeen Alliance Technical Steering Committee:

Red Bend Software, Inc., an AllSeen Alliance Community member (Red Bend), would like to propose that the Alliance instantiate a Project to develop a new AllJoyn common implementation of secure software update service that will enable managing the software of every AllJoyn device.

1. Purpose

AllJoyn devices are software based and require constant flow of software updates to fix various kinds of software defects, especially security holes, and adapt the device's functionality to support new technologies and protocols.

We promote that the AllJoyn devices will share a common software management methodology to enable building a robust software management solution and an easy to use system for the end user.

We therefore propose this project to establish a standard API for software update service to allow a common implementation and secure update of AllJoyn devices.

This project will borrow from the best practice standards to support this requirement. The intended code contribution for software management is based on Red Bend's existing high volume deployment experience.

2. Scope of Project

The scope of the proposed Project is to deliver an API and a common implementation into the open source which accomplishes the following use cases:-

- Enables AllJoyn device owners to securely update their device's software from an –application running on a high end device in the proximity network (e.g. mobile phone)
- Enables AllJoyn device OEM to build a software management solution that provides software update to their AllJoyn devices

This package will implement the following new AllJoyn interfaces and reference software:-

- Software Update Service Interface – the interface between an Update Service and an Update Agent
- Sample AllJoyn Update Agent – The update agent run on the AllJoyn device and is responsible to receive the update from the Update Service and perform the update on the device. The update agent will be implemented on an AllJoyn reference platform.
- Sample AllJoyn Update Service for Android – The update service is a sample application running on Android device that provide update service to the Update Agents connected to it via the AllJoyn network

3. Dependencies

The Project will be based on the 14.06 Alliance release.

4. Project Name

The proposed name for the project is the Alljoyn Update Service and the proposed git repository is "updateservice".

5. Proposed Working Group

We propose that this project becomes a part of a new working group. The proposed group name is the "Software Update" working group. The proposed working group chair is Yair Noam, Chief Architect, Red Bend Software.

6. Project Committers and Contributors

Maintainer

- [PROJECT MAINTAINER] – Yoav Salarios, Development Group Leader

Committers

- Red Bend
 - Yoav Salarios, Development Group Leader
 - Sagi Ben-Akiva, Software Developer

Contributors

- Red Bend
 - Yair Noam, Chief Architect

7. Project Plan

We propose the following high level Project Plan:

- Project creation, requirements, use cases and initial submissions – May 28, 2014
- Update Service AllJoyn Interfaces
 - Aligned with an Alliance release <TBD> time frame
- Sample Update Service and Update Agent
 - Aligned with an Alliance release <TBD> time frame

8. Initial Contribution

Upon formation of the Working Group, the following Initial Contribution is planned:-

- Red Bend will contribute a High Level Design Document that details a proposed architecture and interfaces and design for the Software Management project

Thank you for your consideration and review of this Proposal.

Sincerely,

Yair Noam, Chief Architect

Red Bend Software