



**ALLSEEN
ALLIANCE**

**Update
Service**

Update Service allows secure, authorized field upgrades

What is it? Why is it important?

Push FW update packages from one device to another in AJ network

- AllJoyn Update Service Node
- May run on any AllJoyn device
- Advertises Update Service
- Registers Update Clients
- Provides update packages
- May fetch updates from cloud

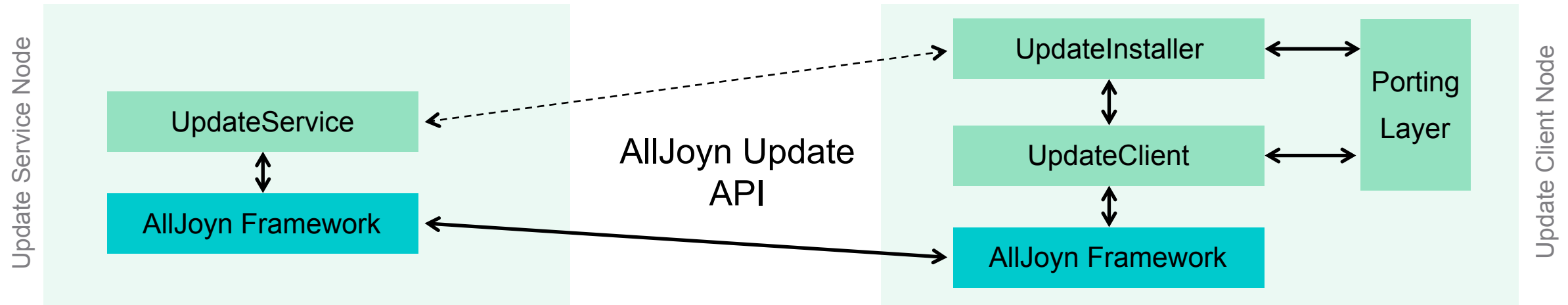


- AllJoyn Update Client
- May run on any AllJoyn device
- Registers with Update Service
- Updates the device software

Exposes API's that allow an Update Service Node (usually AllJoyn Standard Client) to send update packages to an Update Client Node(usually AllJoyn Thin Client) in a standardized manner.

- Update Clients register themselves with Standard Clients capable of providing updates and negotiate when the update is to be transferred and installed on the Update Client.
- The Update Service Node gets updates from an external update server
- Transfer of the update package from the update server to the Update Service Node is not a part of the Update Service Framework

Software Update Service Components



UpdateClient	Implements AllJoyn Update API
UpdateInstaller	Manage the Update Package and hands it off to Update Agent
UpdateAgent	Performs the update (position depends on Flash layout)
Porting Layer	Provides access to platform resources and APIs needed for the Update Client, Installer and Agent
UpdateService	Android application that implements the Update API

Update API's

NewUpdateAvailable (Notification)

- Notify Update Client on new update package
- Provides model name, new version, md5 of update, signature
- Update urgency may be high or normal

GetUpdatePackage (RI)

- Remote invocation from Update Client
- Retrieves a specified chunk of an update package

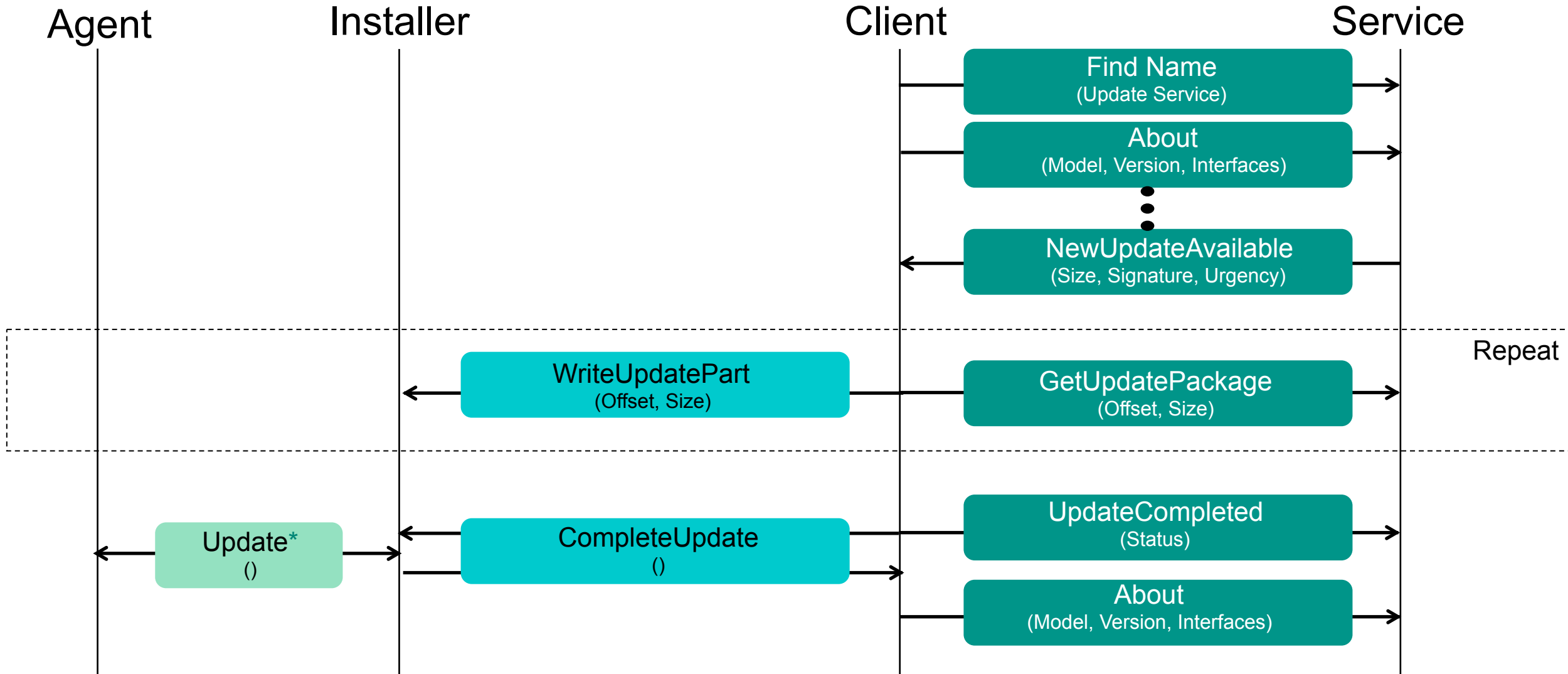
UpdateCompleted (RI)

- Remote invocation from Update Client
- Inform the update service that the update is completed
- Includes success or failure code

Typical Update Flow

How it works

* Update Agent invocation depends on device flash layout (see later)



Update Service

Use Cases



Appliance is Update Client Node, usually configured with AJ TCL



Smart device is Update Service Node



Update Server in Cloud

1. Update Server informs homeowner's smart device that an update is available for their washing machine.
2. The smart device tells the washing machine that an update is available when they are both on the same network.
3. Washing machine and smart device negotiate and agree on time to transfer the update package to the washing machine and when to start the update.
4. The washing machine requests the update package and starts updating itself.
5. The smart device is notified upon completion.



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