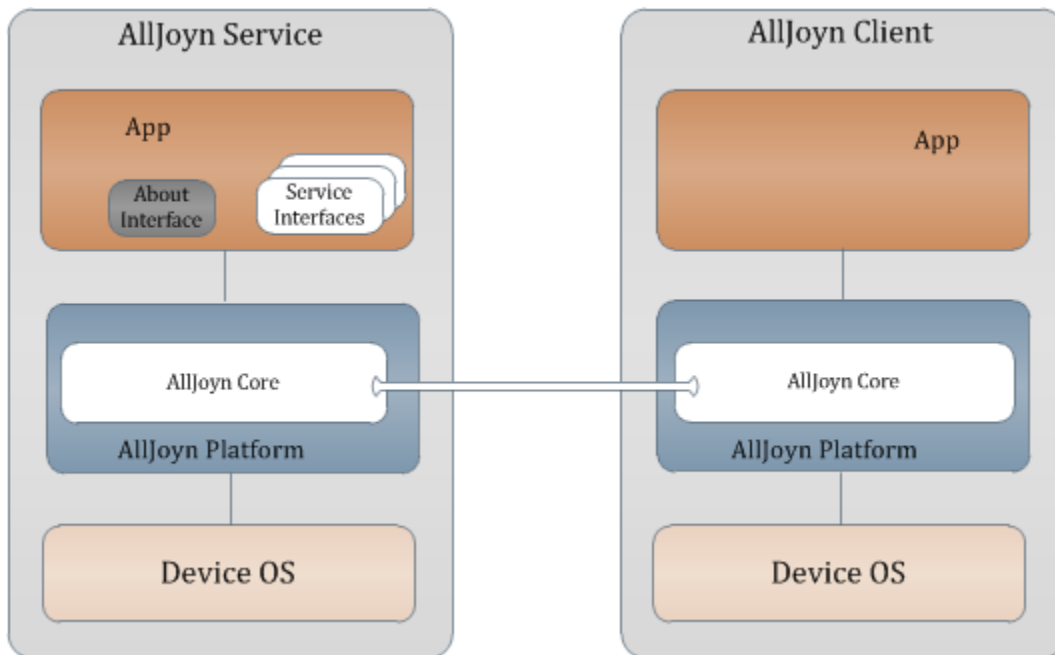


## Definition Overview

The About interface is to be implemented by an application on a target device. This interface allows the app to advertise itself so other apps can discover it. The following figure illustrates the relationship between a client app and a service app.



**Figure:** About feature architecture within the AllJoyn™ framework

**NOTE:** All methods and signals are considered mandatory to support the AllSeen Alliance Compliance and Certification program.

## Discovery

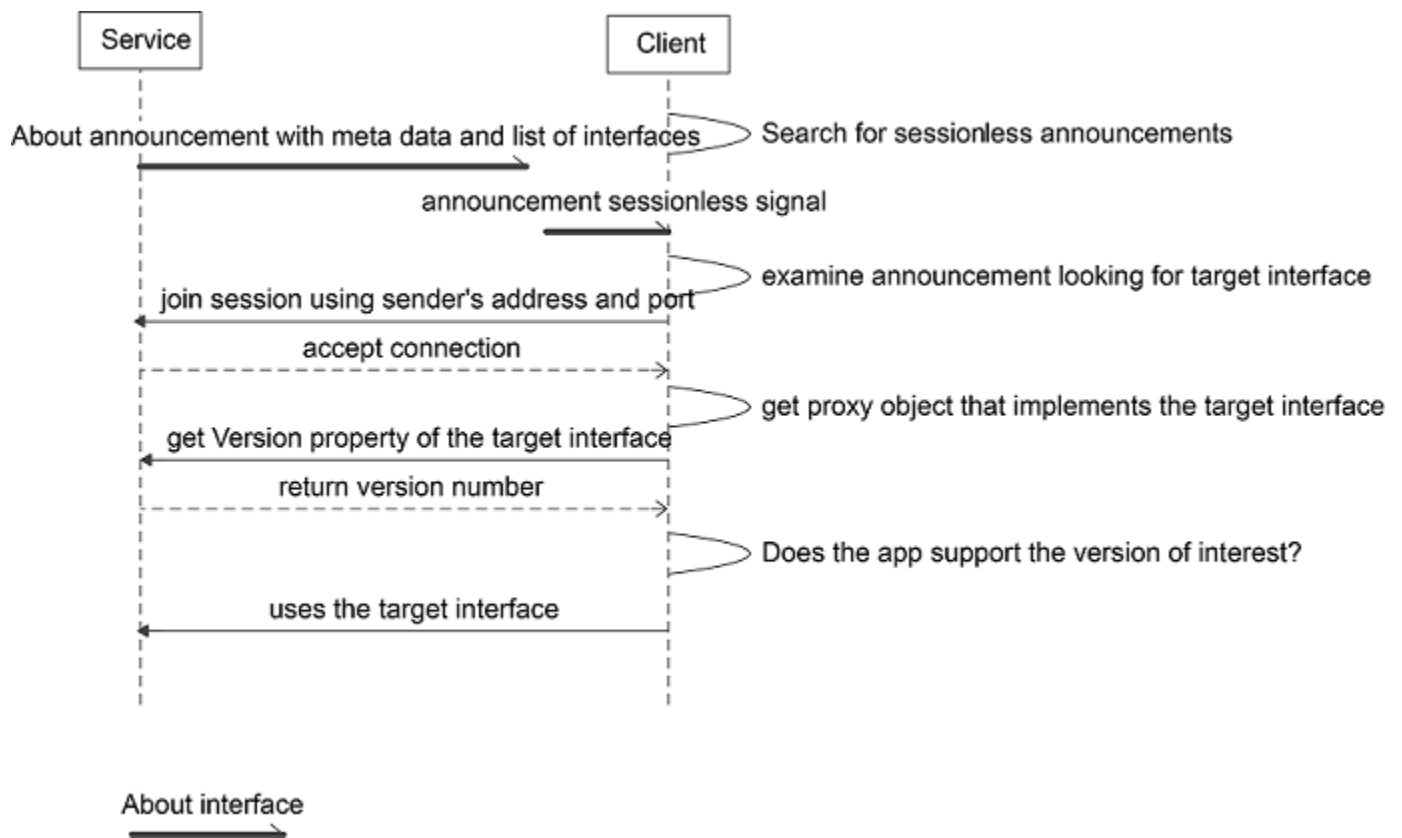
A client can discover the app via an announcement which is a sessionless signal containing the basic app information like app name, device name, manufacturer, and model number. The announcement also contains the list of object paths and service framework interfaces to allow the client to determine whether the app provides functionality of interest.

In addition to the sessionless announcement, the About interface also provides the on-demand method calls to retrieve all the available metadata about the app that are not published in the announcement.

## Discovery Call Flows

### Typical discovery flow

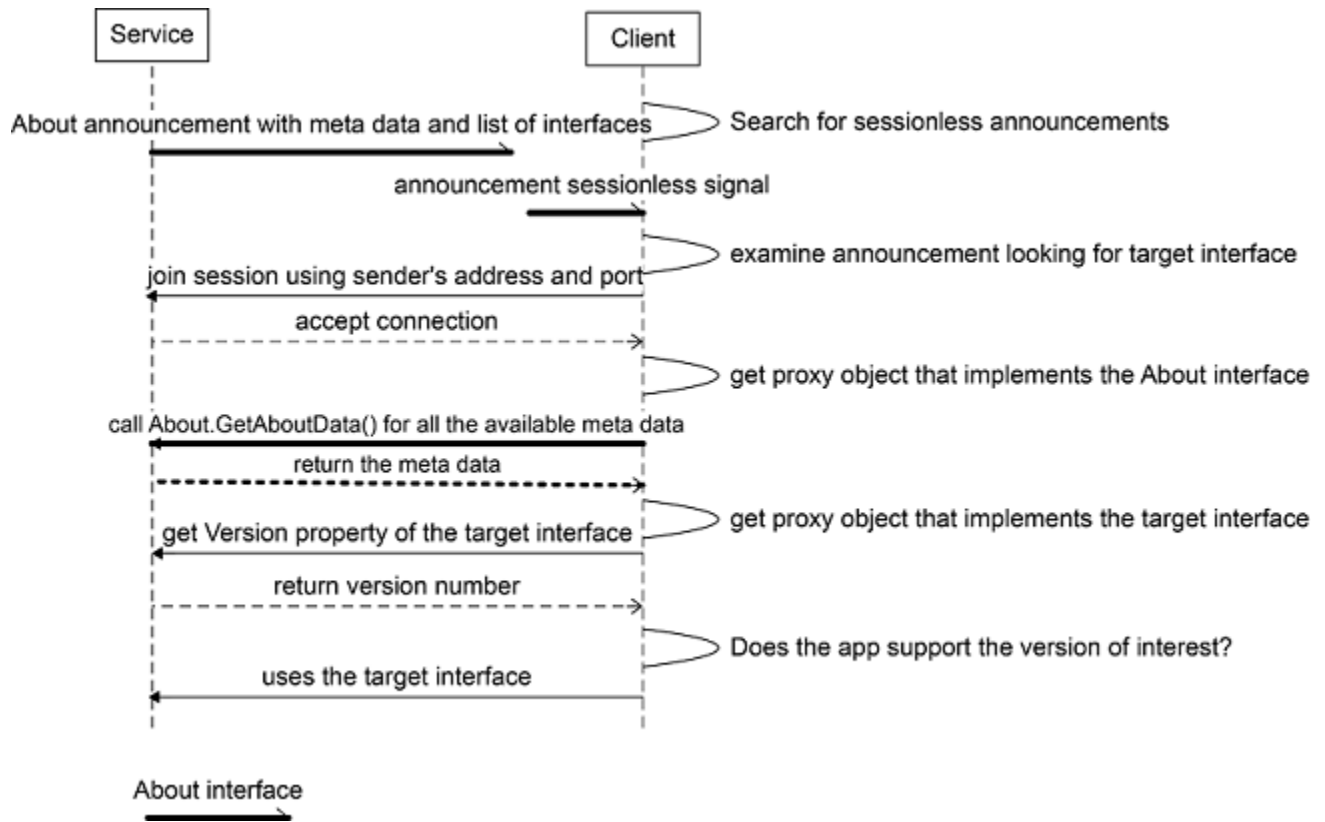
The following figure illustrates a typical call flow for a client to discover a service app. The client merely relies on the sessionless announcement to decide whether to connect to the service app to use its service framework offering.



**Figure:** Typical discovery flow (client discovers a service app)

### Nontypical discovery flow

The following figure illustrates a call flow for a client to discover a service app and make a request for more detailed information.



**Figure:** Nontypical discovery call flow

## Error Handling

The method calls in the About interface will use the AllJoyn error message handling feature (ER\_BUS\_REPLY\_IS\_ERROR\_MESSAGE) to set the error name and error message.

Error name	Error message
org.alljoyn.Error.LanguageNotSupported	The language specified is not supported

## About Interface

Interface name	Version	Secured	Object path
<code>org.alljoyn.About</code>	1	no	<code>/About</code>

## Properties

Property name	Signature	List of values	Read/Write	Description
Version	<code>q</code>	Positive integers	Read Only	Interface version number

## Methods

The following methods are exposed by a BusObject that implements the `org.alljoyn.About` interface.

```
a{sv} GetAboutData('s')
```

## Message arguments

Argument	Parameter name	Signature	List of values	Description
0	<code>languageTag</code>	<code>s</code>	IETF language tags specified by <a href="#">RFC 5646</a> .	The desired language.

## Reply arguments

Argument	Parameter name	Return signature	Description
0	<code>AboutData</code>	<code>a{sv}</code>	A dictionary of the available metadata fields. If language tag is not specified (i.e., ""), metadata fields based on default language are returned.

## Error reply

Error	Description
<code>org.alljoyn.Error.LanguageNotSupported</code>	Returned if a language tag is not supported

## Description

Retrieve the list of available AboutData fields based on the language tag. see [About data interface fields](#)

About data interface fields

The following table lists the names of the metadata fields. The fields with a yes value in the Announced column will also be published via the Announce signal. See [Signals](#) for more information.

Field name	Mandatory	Announced	Localized	Signature	Description
AppId	yes	yes	no	ay	A 128-bit globally unique identifier for the application. The AppId shall be a universally unique identifier as specified in <a href="#">RFC 4122</a> .
DefaultLanguage	yes	yes	no	s	The default language supported by the device. Specified as an IETF language tag listed in <a href="#">RFC 5646</a> .
DeviceName	no	yes	yes	s	Name of the device set by platform-specific means (such as Linux and Android).
DeviceId	yes	yes	no	s	Device identifier set by platform-specific means.
AppName	yes	yes	yes	s	Application name assigned by the app manufacturer

Field name	Mandatory	Announced	Localized	Signature	Description
					(developer or the OEM).
Manufacturer	yes	yes	yes	s	The manufacturer's name of the app.
ModelNumber	yes	yes	no	s	The app model number.
SupportedLanguages	yes	no	no	as	List of supported languages.
Description	yes	no	yes	s	Detailed description expressed in language tags as in <a href="#">RFC 5646</a> .
DateOfManufacture	no	no	no	s	Date of manufacture using format YYYY-MM-DD (known as XML DateTime format).
SoftwareVersion	yes	no	no	s	Software version of the app.
AJSoftwareVersion	yes	no	no	s	Current version of the AllJoyn SDK used by the application.
HardwareVersion	no	no	no	s	Hardware version of the device on which the app is running.
SupportUrl	no	no	no	s	Support URL (populated by the manufacturer).

`a(oas) GetObjectDescription()`

## Message arguments

None.

## Reply arguments

Argument	Parameter name	Return signature	Description
0	<code>objectDescription</code>	<code>a(oas)</code>	Return the array of object paths and the list of supported interfaces provided by each object.

## Description

Retrieve the object paths and the list of all interfaces implemented by each of objects.

## Signals

The following signals are emitted by a BusObject that implements the `org.alljoyn.About` interface.

```
Announce ('qqa(oas)a{sv}')
```

Announce signal is a Sessionless signal

## Message arguments

Argument	Parameter name	Signature	List of values	Description
0	<code>version</code>	<code>q</code>	positive	Version number of the About interface.
1	<code>port</code>	<code>q</code>	positive	Session port the app will listen on incoming sessions.
2	<code>objectDescription</code>	<code>a(oas)</code>	Populated based on announced interfaces	Array of object paths and the list of supported interfaces provided by each object.
3	<code>aboutData</code>	<code>a{sv}</code>	array of key/value pairs	All the fields listed in <a href="#">About data interface fields</a> with a yes value in the Announced

Argument	Parameter name	Signature	List of values	Description
				column are provided in this signal.

## AllJoyn Introspection XML

```

<node name="/About" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="http://www.allseenalliance.org/schemas/introsp
ect.xsd">
  <interface name="org.alljoyn.About">
    <property name="Version" type="q" access="read"/>
    <method name="GetAboutData">
      <arg name="languageTag" type="s" direction="in"/>
      <arg name="aboutData" type="a{sv}" direction="out"/>
    </method>
    <method name="GetObjectDescription">
      <arg name="objectDescription" type="a(oas)" direction="out"/>
    </method>
    <signal name="Announce">
      <arg name="version" type="q"/>
      <arg name="port" type="q"/>
      <arg name="objectDescription" type="a(oas)"/>
      <arg name="metaData" type="a{sv}"/>
    </signal>
  </interface>
</node>

```

## Icon Interface

Interface name	Version	Secured	Object path
org.alljoyn.Icon	1	no	/About/DeviceIcon

## Properties



Property name	Signature	List of values	Read/Write	Description
<code>Version</code>	<code>q</code>	Positive integers	Read Only	Interface version number
<code>MimeType</code>	<code>s</code>	The Mime type corresponding to the icon's binary content	Read Only	Mime type for the icon
<code>Size</code>	<code>u</code>	The size in bytes of the icons binary content	Read Only	Size of the Icon

## Methods

The following methods are exposed by a BusObject that implements the `org.alljoyn.Icon` interface.

`s GetUrl()`

### Message arguments

None.

### Reply arguments

Argument	Parameter name	Return signature	Description
0	<code>url</code>	<code>s</code>	The URL if the icon is hosted on the cloud

### Description

Retrieve the URL of the icon if the icon is hosted on the cloud.

`ay GetContent()`

Argument	Parameter name	Return signature	Description
0	<code>content</code>	<code>ay</code>	The binary content for the icon

## Signals

None.

## AllJoyn Introspection XML

```
<node name="/About/DeviceIcon"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:noNamespaceSchemaLocation="http://www.alljoyn.org/schemas/introspect.xsd"
>
  <interface name="org.alljoyn.Icon">
    <property name="Version" type="q" access="read"/>
    <property name="MimeType" type="s" access="read"/>
    <property name="Size" type="u" access="read"/>
    <method name="GetUrl">
      <arg type="s" direction="out"/>
    </method>
    <method name="GetContent">
      <arg type="ay" direction="out"/>
    </method>
  </interface>
</node>
```