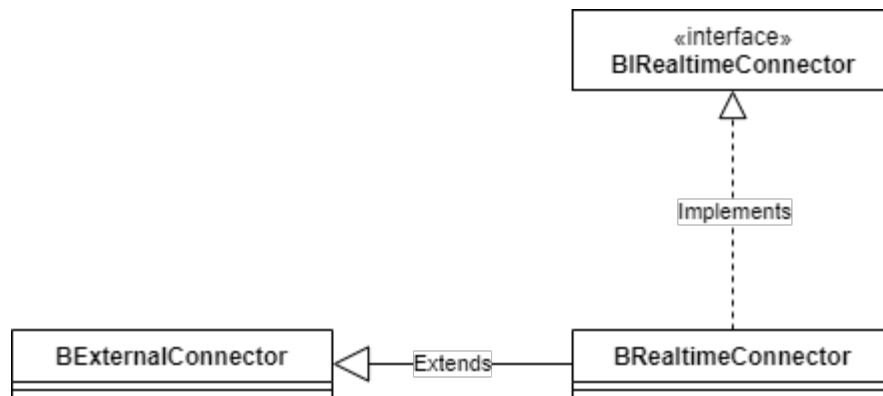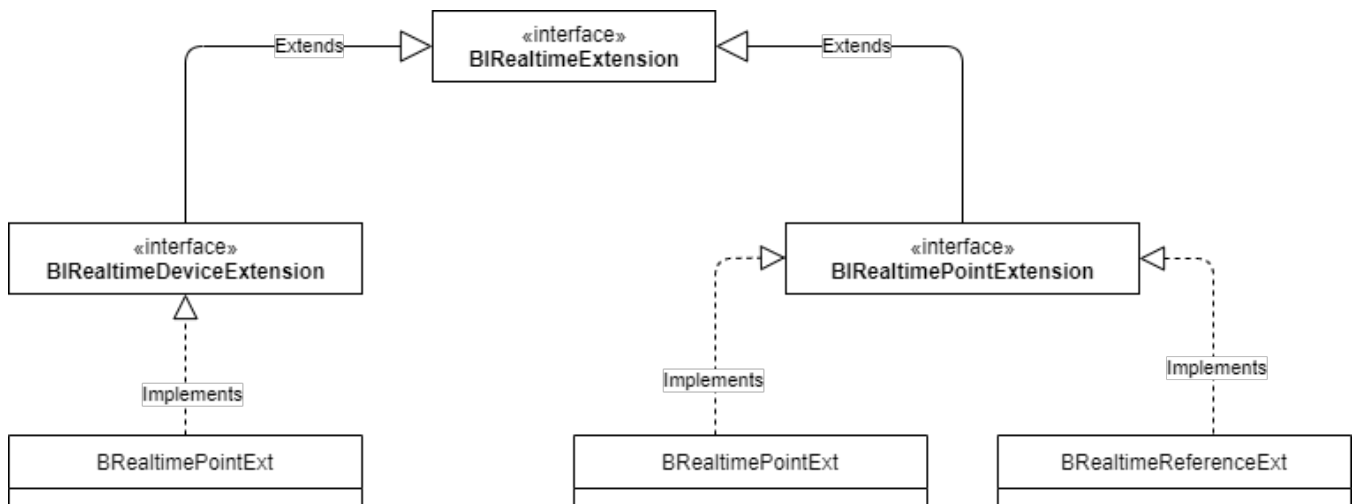# RT Connectors Implementation

Class Hierarchy

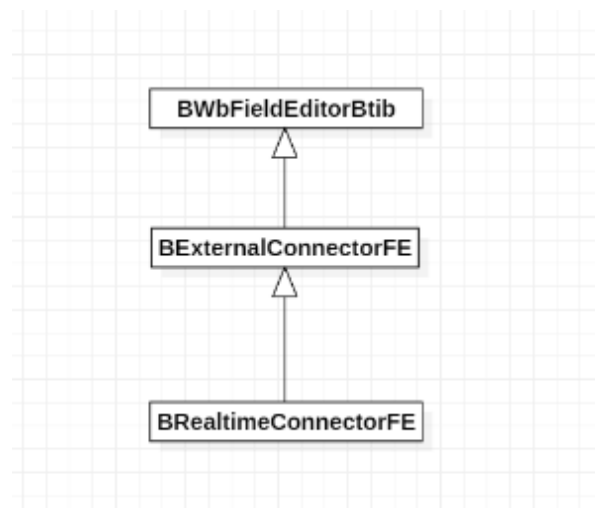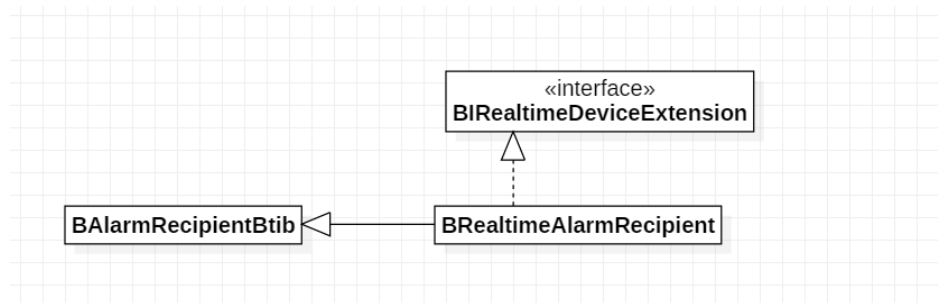**Connector:**

Extensions:

Field Editor:

The field editor is used by the device extension to show a drop down of connectors to choose.
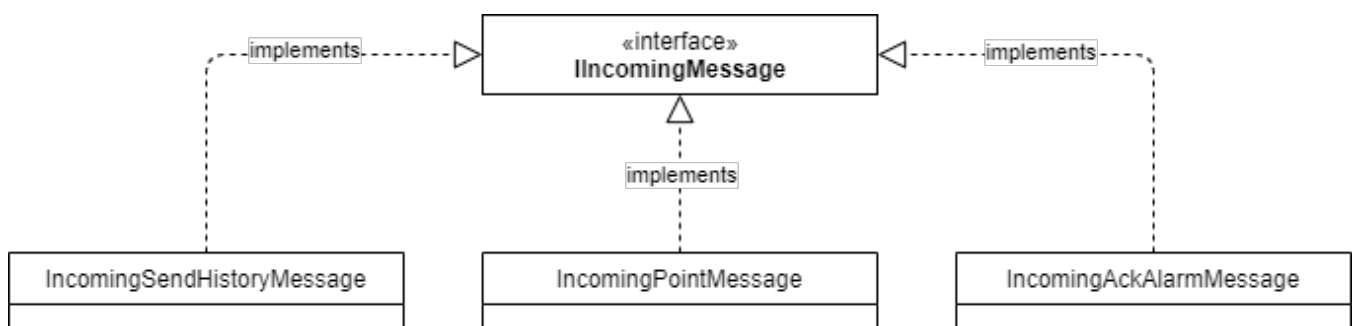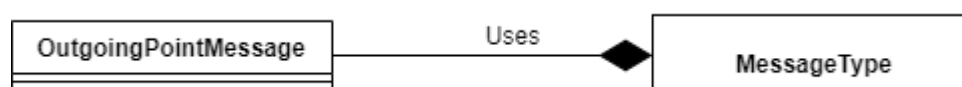
Alarm Recipient:

The real-time alarm recipient is represented as a device in the connector architecture so it implements the device extension interface.
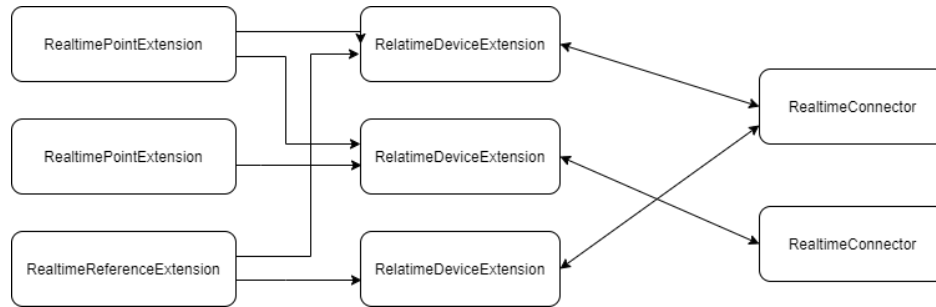

Incoming Messages:

Outgoing Message:

Execution Flow

When an action is triggered by the point extension (a change of value for example), the extension fetches its related device extensions (which selects a connector), then it retrieves this connector and invokes the desired action.

```
┌──────────────────────┐      ┌──────────────────────┐
│ RealtimePointExtension│─────▶│ RelatimeDeviceExtension│
└──────────────────────┘      └──────────────────────┘         ┌──────────────────────┐
                                                                │  RealtimeConnector   │
┌──────────────────────┐      ┌──────────────────────┐         └──────────────────────┘
│ RealtimePointExtension│─────▶│ RelatimeDeviceExtension│
└──────────────────────┘      └──────────────────────┘         ┌──────────────────────┐
                                                                │  RealtimeConnector   │
┌──────────────────────────┐  ┌──────────────────────┐         └──────────────────────┘
│ RealtimeReferenceExtension│─▶│ RelatimeDeviceExtension│
└──────────────────────────┘  └──────────────────────┘
```

- Each **RealtimePointExtension** or **RealtimeReferenceExtension** can be related to 1 or multiple **RealtimeDeviceExtension** of the same type.
- Each **RealtimeDeviceExtension** is linked to one and only **RealtimeConnector** of the same type at a time.
- Each **RealtimeConnector** can be used by multiple **RealtimeDeviceExtension**.