

# Lush Technology GmbH ElderCare MessageBroker and DataTrolley Integration

## Summary

Our app detects elder people daily activities in the camera's field of view. After an activity is detected, it publishes information about the activities to interested parties. The app can detect daily activities like :

- Walking.
- Sleeping.
- Eating.
- Using Inhalers.
- Falling from chair.
- etc...

## API that was used to send data

DataTrolley and MessageBroker API.

## What data does my app send?

- *Construct and build MetadataChannel.Build to obtain the channel.*
- *Use Channel.getChannelPathForJSONPayload() to obtain the channel path for use with IoT Gateway.*
- *FramePayload.toString() to get a string representation of payload.*

Our app sends the following payloads about the detected activity:

1. **Information about the activity scene** - This information includes,
  - o ID – unique identifier for each detected person
  - o Label – the label for each detected activity
  - o Confidence- the confidence score for detected activity
  - o Customdata – frame number (ByteString)

Here's a sample payload:

```
timestamp: 1633443180571
objects {
  id: "0"
  label: "sleeping"
  confidence: 0.5426565
}
customData: "\000\000\000\000\000\000\000\022"
```

This data can be consumed by,

1. All apps that use DataTrolley - Your app can receive information about in the form of a `FramePayload` by subscribing to the "person" channel as

```
new MetadataChannel.Builder(context)
    .setName("person")
    .setMetadataType(MetadataChannel.MetadataType.OTHER).build();
```

2. IoT Gateway - you can configure IoT Gateway to listen to `sst:/metadata/json/com.lushtech.eldercare.activity/other/person` and receive this information in JSON format.

## API that was used to receive data

N/A.

## What data does my app receive?

N/A.