

```

private List<MotionConfigDTO> getMotionConfig(String cameraId, List<SettingIVADTO> settingIVADTOS,
        List<ConfigSaveCameraDTO> configSaveCameraDTOS,
        List<TimeRecordDTO> timeRecordDTOS,
        List<SourceCameraDTO> sourceCameraDTOS,
        SubDeviceDTO subDeviceDTO,
        List<OutputCameraDTO> outputCameraDTOS) {
    MotionConfigDTO dto = new MotionConfigDTO();
    SettingIVADTO motionIVA = settingIVADTOS.stream().filter(x ->
        x.getAnalysisEvent() != null && x.getAnalysisEvent().getIdIVA() == 3 && x.getSubDeviceId().equals(cameraId)
    ).findFirst().orElse(null);

    if (motionIVA == null) {
        return null;
    }

    dto.setType(Constants.EVENT_TYPE.MOTION);
    dto.setEnable(motionIVA.getIsMove() == null ? 0 : motionIVA.getIsMove());
    IVAConfigDTO configDTO = new IVAConfigDTO();
    configDTO.setAlarmSystem(motionIVA.getAlarmSystem());
    configDTO.setBetweenAnalyzes(motionIVA.getBetweenAnalyzes());
    configDTO.setIsKeyFrame(motionIVA.getIsKeyFrame());
    configDTO.setIsMove(motionIVA.getIsMove() == null ? 0 : motionIVA.getIsMove());
}

```

```
configDTO.setIsSaveAnalysis(motionIVA.getIsSaveAnalysis());
```

```
configDTO.setResolution(motionIVA.getResolution());
```

```
configDTO.setUnitFrame(motionIVA.getUnitFrame());
```

```
SourceCameraDTO sourceCameraDTO = sourceCameraDTOS.stream().filter(x ->  
x.getObjectId().equals(motionIVA.getSourceCameraId())).findFirst().orElse(null);
```

```
if (sourceCameraDTO != null) {
```

```
    OutputCameraDTO outputCameraDTO = outputCameraDTOS.stream().filter(x ->  
x.getSourceCameraId().equals(sourceCameraDTO.getObjectId())).findFirst().orElse(new OutputCameraDTO());
```

```
    configDTO.setChannelId(subDeviceDTO.getDeviceDTO().getMacAddress().replace(":", "").replace("-", "")) + Constants.XYZ +  
outputCameraDTO.getId();
```

```
}
```

```
if (motionIVA.getTimeRecord() != null) {
```

```
    List<TimeProfileDTO> timeProfileDTOS = new ArrayList<>();
```

```
    for (TimeRecordDTO timeRecordDTO : motionIVA.getTimeRecord()) {
```

```
        TimeProfileDTO timeProfile = createTimeRecord(timeRecordDTO);
```

```
        timeProfileDTOS.add(timeProfile);
```

```
    }
```

```
if (motionIVA.getZoneConfig() != null && motionIVA.getZoneConfig().getDetectArea() != null) {
```

```
    List<AreaDTO> areaDTOS = new ArrayList<>();
```

```
    ZoneConfigDTO zoneConfigDTO = motionIVA.getZoneConfig();
```

```

for (DetectAreaDTO areaDTO : zoneConfigDTO.getDetectArea()) {
    AreaDTO area = new AreaDTO();
    area.setType(zoneConfigDTO.getZoneSetting());
    area.setX(convertAreaNumber(areaDTO.getX1(), zoneConfigDTO.getWidthDetectArea()));
    area.setY(convertAreaNumber(areaDTO.getY1(), zoneConfigDTO.getHeightDetectArea()));
    area.setW(convertAreaNumber(areaDTO.getX2(), zoneConfigDTO.getWidthDetectArea()));
    area.setH(convertAreaNumber(areaDTO.getY2(), zoneConfigDTO.getHeightDetectArea()));
    area.setOpacity(motionIVA.getZoneConfig().getOpacity());
    areaDTOS.add(area);
}
configDTO.setAreas(areaDTOS);
}
configDTO.setTimeRecord(timeProfileDTOS);
dto.setConfig(configDTO);
}

```

```

ConfigSaveCameraDTO configSave = configSaveCameraDTOS.stream().filter(x
    -> x.getSourceCameraId().getObjectId().equals(motionIVA.getSourceCameraId()) && x.getIsEvent() == Constants.EVENT_TYPE &&
    x.getEventName().equals(Constants.EVENT_TYPE.EVENT_MOTION)).findFirst().orElse(null);

```

```

if (configSave != null) {

```

```
StorageDTO storageDTO = new StorageDTO();

storageDTO.setEnable(Constants.ACTIVE);

Integer retention = Integer.parseInt(configSave.getTimeSave());

if (configSave.getTimeSaveValue().equals(Constants.TIME_PROFILE.DAY)) {
    retention = retention * 24;
    storageDTO.setRetention(retention.toString());
}

if (configSave.getTimeSaveValue().equals(Constants.TIME_PROFILE.MONTH)) {
    retention = retention * 24 * 30;
    storageDTO.setRetention(retention.toString());
}

if (configSave.getTimeSaveValue().equals(Constants.TIME_PROFILE.YEAR)) {
    retention = retention * 24 * 365;
    storageDTO.setRetention(retention.toString());
}

storageDTO.setAfter(configSave.getAfterTimeEvent());
storageDTO.setBefore(configSave.getBeforeTimeEvent());

TimeRecordDTO timeRecordDTO = timeRecordDTOS.stream().filter(x ->
x.getId().equals(configSave.getRecordEventId())).findFirst().orElse(null);

if (timeRecordDTO != null) {
    TimeProfileDTO timeProfile = createTimeRecord(timeRecordDTO);
}
```

```

        timeProfileDTOS.add(timeProfile);
    }
    dto.setStorage(storageDTO);
}
return Arrays.asList(dto);
}

private TimeProfileDTO createTimeRecord(TimeRecordDTO timeRecordDTO){
    TimeProfileDTO timeProfile = new TimeProfileDTO();
    timeProfile.setActiveDate(timeRecordDTO.getStartActive().getTime());
    timeProfile.setExpireDate(timeRecordDTO.getEndActive().getTime());
    timeProfile.setTimeZone(Constants.TIME_ZONE_7);
    int type = timeRecordDTO.getCycleTimes().get(0).getType();
    timeProfile.setType(type);
    if (type == Constants.TIME_PROFILE.MONTH || type == Constants.TIME_PROFILE.WEEK) {
        List<Integer> dateList = new ArrayList<>();
        for (CycleTimeDTO cycleTimeDTO : timeRecordDTO.getCycleTimes()) {
            dateList.add(Integer.parseInt(cycleTimeDTO.getValue()));
        }
        timeProfile.setDateList(dateList);
    }
    if (timeRecordDTO.getPeriodRecords() != null) {

```

```
List<IntervalDTO> intervalDTOS = new ArrayList<>();  
for (PeriodRecordDTO periodRecordDTO : timeRecordDTO.getPeriodRecords()) {  
    IntervalDTO intervalDTO = new IntervalDTO();  
    intervalDTO.setStartTime(Utils.convertDateToSecond(periodRecordDTO.getStartTime()));  
    intervalDTO.setEndTime(Utils.convertDateToSecond(periodRecordDTO.getEndTime()));  
    intervalDTOS.add(intervalDTO);  
}  
timeProfile.setIntervalList(intervalDTOS);  
}  
    return timeProfile;  
}
```