



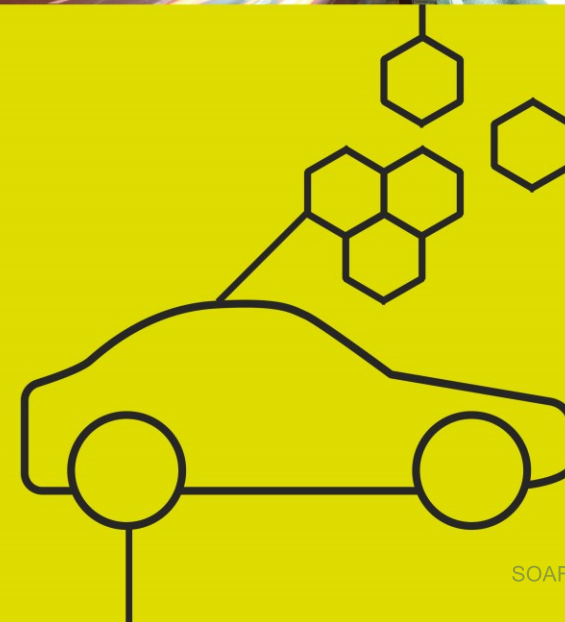
# SOAFEE APAC Regional Hub

2025/05/15

Jerry Jiancong, Zhao

Leader of SOAFEE APAC  
Regional Hub

Panasonic Automotive Systems  
Co., Ltd. R&D Division,  
Chief SDV Architect



# Self Introduction



**Jerry, Jiancong Zhao**



Joined Panasonic since graduate in 2017 and now leading the overall standardization and advanced engineering activities of SDV-related virtualization



AGL SDV-EG Leader since 2020



**(New) Leader of SOAFEE APAC Regional Hub**



Born: Tianjin, China

1993



University: Hong Kong

2012



Work: Yokohama, Japan

2017

Hobby:



Travel



Game



Talk

# Background

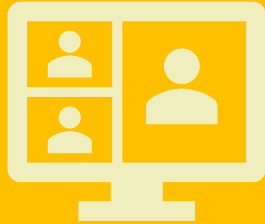
# Barriers for APAC Participants to join Current SOAFEE WG

SOAFEE has 40% APAC members, but



## Time-zone Barrier:

- Most SOAFEE WG meetings are held in 3pm or 4pm UK time, which are the midnight in AP.



## Language Barrier:

- Fast discussion pace and difficult technical words in English blocks APAC participants to join the meeting.



## Cultural Barrier:

- When discussing, APAC members(especially East Asia) tends to be “polite” and “less aggressive”, which causes voices may be not heard.

# Setting Regional Hubs could be a Solution



## Time-zone:

- No overnight meetings anymore.



## Language:

- Communication in the mother tongue or English in a reasonable speed.



## Cultural Barrier:

- More organized and comfortable environment for expressing ideas.

# Pathway to SOAFEE APAC Regional Hub

1<sup>st</sup> SOAFEE APAC Seminar  
@Tokyo, 2023.9

2<sup>nd</sup> APAC Seminar  
@Shanghai, 2024.5

3<sup>rd</sup> APAC Seminar  
@Seoul, 2024.9

→ Brainstorming Workshop  
for Setting up Regional Hub

4<sup>th</sup> APAC Seminar  
@Tokyo, 2025.5

→ Official launch of  
SOAFEE APAC Regional Hub

APAC ASIA EVENT 2023

## Welcome to the SOAFEE Seminar



Join the SOAFEE SIG and China teams  
for the next SOAFEE Seminar on 9  
May 2024.

SOAFEE Seminar  
APAC Region



Location: The Ritz-Carlton Shanghai,  
Pudong, China  
Date: 9 May 2024

## SOAFEE Seminar APAC Region

SOAFEE | 24 September 2024  
LG Science Park

APAC is a pivotal region for the automotive industry. A wide variety of companies are contributing to SOAFEE (Scalable Open Architecture for Embedded Edge), which is enabling the development and deployment of software solutions for the AI-enabled software-defined vehicle (SDV). Therefore, we are thrilled to announce that a SOAFEE Seminar will be held in Korea in September, allowing local teams to collaborate, network and share their software developments and insights with the growing APAC SOAFEE community, which includes renowned industry leaders.

Ready to be part of an exclusive gathering exploring how SOAFEE is reshaping the automotive landscape? Register now for in-person only places at the event on September 24, 2024, at LG Science Park, Seoul, Korea.

Stay tuned for updates on our distinguished lineup of speakers, including industry pioneers, OEMs, Tier 1 suppliers, and silicon vendors.

Don't miss this chance to join us on the SOAFEE journey as we continue to advance AI-enabled software-defined vehicles in the APAC region.

We can't wait to see you there!

Location: LG Science Park ISC Building (30 Magokjungang 10-ro, Gangseo-gu, Seoul)

Date: September 24, 2024

## Agenda

09:00-09:20	Opening
09:20-09:50	SOAFEE SIG update and future plans
09:50-10:00	Break
10:00-10:30	System design and verification for Mixed-Criticality Systems in SDV
10:30-11:00	Enabling a Software-Defined Automotive Edge with VirtIO based Device Virtualization
11:00-11:30	Internet of Vehicles Platform
11:30-12:30	Lunch
12:30-12:00	The Rise of Software-Defined Vehicles and Cloud-to-Vehicle Edge Parity
13:00-13:30	Introduction to Autoware Open AD Kit
13:30-13:40	Break



## Agenda

Time	Agenda
10:00 - 10:10	Opening
10:10 - 10:40	SOAFEE SIG and APAC Regional Hub
10:40 - 11:10	SOAFEE NEXT Showcasing - Asterio's Virtual Platform aligned with SOAFEE and evolving towards SOAFEE NEXT
11:10 - 11:30	Break & Demo Visit
11:30 - 11:50	Voice of Car OEMs - Promotion of Open Source and Software Supply Chain Management in the SDV Era
11:50 - 12:10	Voice of Car OEMs - Architectural Innovation Driving SDV Evolution: GAC's Framework Achieving Core Objectives & Advancing SOAFEE Implementation
12:10 - 12:30	Voice of Car OEMs - Virtual Platform for "Chip to Factory"
12:30 - 13:30	Lunch & Demo Visit
13:30 - 13:40	Deterministic SDV Overview
13:40 - 14:20	Deterministic SDV - Who is Responsible for the Deterministic System?
14:20 - 15:00	Deterministic SDV - The Curse of Zonal Architecture
15:00 - 15:40	Deterministic SDV - Deterministic middleware for cloud native development
15:40 - 15:55	Break & Demo Visit
15:55 - 16:00	SOAFEE Blueprints: Making the SDV's a Reality
16:00 - 16:30	Blueprints - Decoupling Cockpit Software and Hardware - Introduction of vSipGen and Unified HMI
16:30 - 17:00	Blueprints - Aesdige to enable Scalable Deployment & Mixed Critical Orchestration for Virtual and Real
17:00 - 17:30	Blueprints - LG PICCOLO on EMADL And Next of LG PICCOLO
17:30 - 18:00	Blueprints - SOAFEE NEXT CYCD with CC SOAFEE IntegrationLab to test Blueprints
18:00 - 18:05	Closing
18:05 - 19:30	Networking with drink & food

- Kickoff preparation & Trial operation with a biweekly call since last Nov.
- 20+ SOAFEE members, 10+ Companies actively joining discussions

# Activities

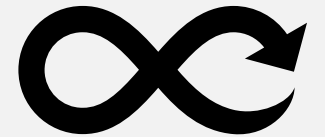


# Objective of Regional Hub

Goal: Solve OEM Challenges in Common towards SDV Shift

Five A“**ct**”

1. **Collect**: Create a platform for unite APAC voices towards SDV
  - a. Address worldwide problems that APAC OEMs are also facing and specific APAC OEMs problems
  - b. Analyze and Commonize to form a consensus towards common problem statements
2. **Enact**: Make standards and reference implementation suitable for APAC needs
3. **Interact**: Play a role of bridge between APAC and World
4. **Connect**: Enhance Collaboration with other APAC OSS/Standardization Organizations
5. **Impact**: Make impact on the region and contribute outcome to the SOAFEE SIG (world)



Cycling at each  
APAC Seminar



# SOAFEE APAC Regional Hub Topics

**SOAFEE:** “Working together to build open-source architecture for software-defined vehicles. Together we have one single goal - to create a shared platform for vehicles using **cloud-native architecture** that accommodates multiple hardware configurations. By making SOAFEE **hardware agnostic**, we plan to **simplify vehicle software solutions radically**.”

<https://www.soafee.io/>

**Bottom-up Approach -> From existing SOAFEE direction. Collecting member company SOAFEE blueprints.**

- **Abstraction:** To abstract and decouple software from hardware -> Hardware agnostic
  - e.g. VirtIO, Unified HMI
- **Containerization:** To establish simple architecture for microservices and enable migration between cloud and automotive edge
  - e.g. Piccolo, Lingua Franca, IOV
- **Cloudification:** To create cloud-native architecture to enable automotive software capable to be developed or executed in cloud environment
  - e.g. Virtual Hardware, Graviton, Virtual Prototyping, vSkipGen

**Top-down Approach -> New approach in Regional Hub. Listen to industry (especially OEMs) needs & voices  
-> SOAFEE APAC Seminar & Workshop arranged**

# SOAFEE APAC Regional Hub Biweekly Meeting

- Bi-Weekly regular meeting at 11am – noon of JST.
  - APAC friendly time slot;-)
  - The next meeting is on May 28
- Regular Topics
  - SOAFEE SIG Updates (TSC, MSC and other WGs)
  - Blueprint Sharing & Updates (If any)
- Timely Topics
  - SOAFEE APAC Seminar Wrap-up & Next Actions
- How to join?
  - Contact Jerry or Morris to add you into the invitation
    - Zhao Jiancong(Jerry) <chou.kensou@jp.panasonic.com>
    - Morris Hung <Morris.Hung@arm.com>

# Today's Seminar Topics

# Topic Overview

Time	Topic
10:00 AM - 10:10 AM	Opening
10:10 AM - 10:40 AM	SOAFEE SIG and APAC Regional Hub
10:40 AM - 11:10 AM	SOAFEE.NEXT Showcasing – Astemo's Virtual Platform aligned with SOAFEE and evolving towards SOAFEE.NEXT
11:10 AM - 11:30 AM	Break & Demo Visit
11:30 AM - 12:30 PM	Voice of Car OEM - Promotion of Open Source and Software Supply Chain Management in the SDV Era
11:50 - 12:10	Voice of Car OEMs - Architectural Innovation Driving SDV Evolution: GAC's Framework Achieving Core Objectives & Advancing SOAFEE Implementation
12:10 -12:30	Voice of Car OEMs - Virtual Platform for "Chip to Factory"
12:30 PM - 1:30 PM	Lunch & Demo Visit
1:30 PM - 1:40 PM	Deterministic SDV Overview
1:40 PM - 2:20 PM	Deterministic SDV - Who Is Responsible for the Deterministic System?
2:20 PM - 3:00 PM	Deterministic SDV - The Curse of Zonal Architecture
3:00 PM - 3:40 PM	Deterministic SDV - Deterministic Middleware for Cloud Native Development
3:40 PM - 3:55 PM	Break & Demo Visit
3:55 PM - 4:00 PM	SOAFEE Blueprints: Making the SDV's a Reality
4:00 PM - 4:30 PM	Blueprints - Decoupling Cockpit Software and Hardware – Introduction of vSkipGen and Unified HMI
4:30 PM - 5:00 PM	Blueprints - AosEdge to enable Scalable Deployment & Mixed Critical Orchestration for Virtual and Real
5:00 PM - 5:30 PM	Blueprints - LG PICCOLO on EWAOL, And Next of LG PICCOLO
5:30 PM - 6:00 PM	Blueprints – SOAFEE.NEXT CI/CD with CC: SOAFEE IntegrationLab to test Blueprints
6:00 PM - 6:05 PM	Closing
6:05 PM - 7:30 PM	Social Gathering with Drink & Food

## SOAFEE Updates

## Voices of OEMs

## Deterministic SDV

## SDV in SOAFEE Blueprints



Thank You

Danke

Gracias

Grazie

谢谢

ありがとう

Asante

Merci

감사합니다

धन्यवाद

Kiitos

شكرًا

ধন্যবাদ

תודה

