QCon

Ctrip Mobile Architecture Evolution

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Agenda

- Demo
- Ctrip Mobile Architecture Overview
- Ctrip Mobile Architecture Evolution
  - H5 decoupling
  - App decoupling
  - Testing Environments decoupling
- Gains & Takeaways

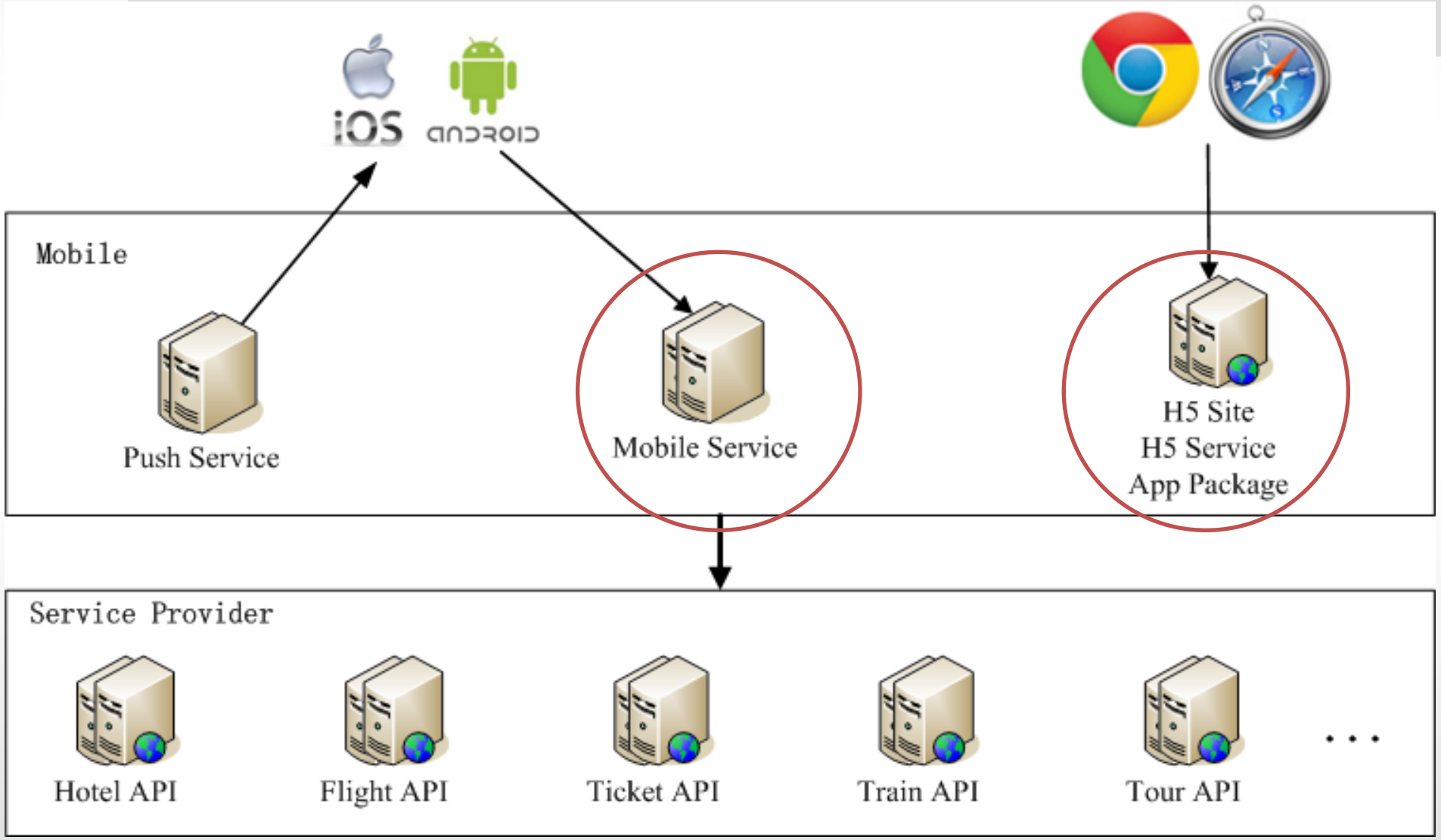
Demo

- Demo

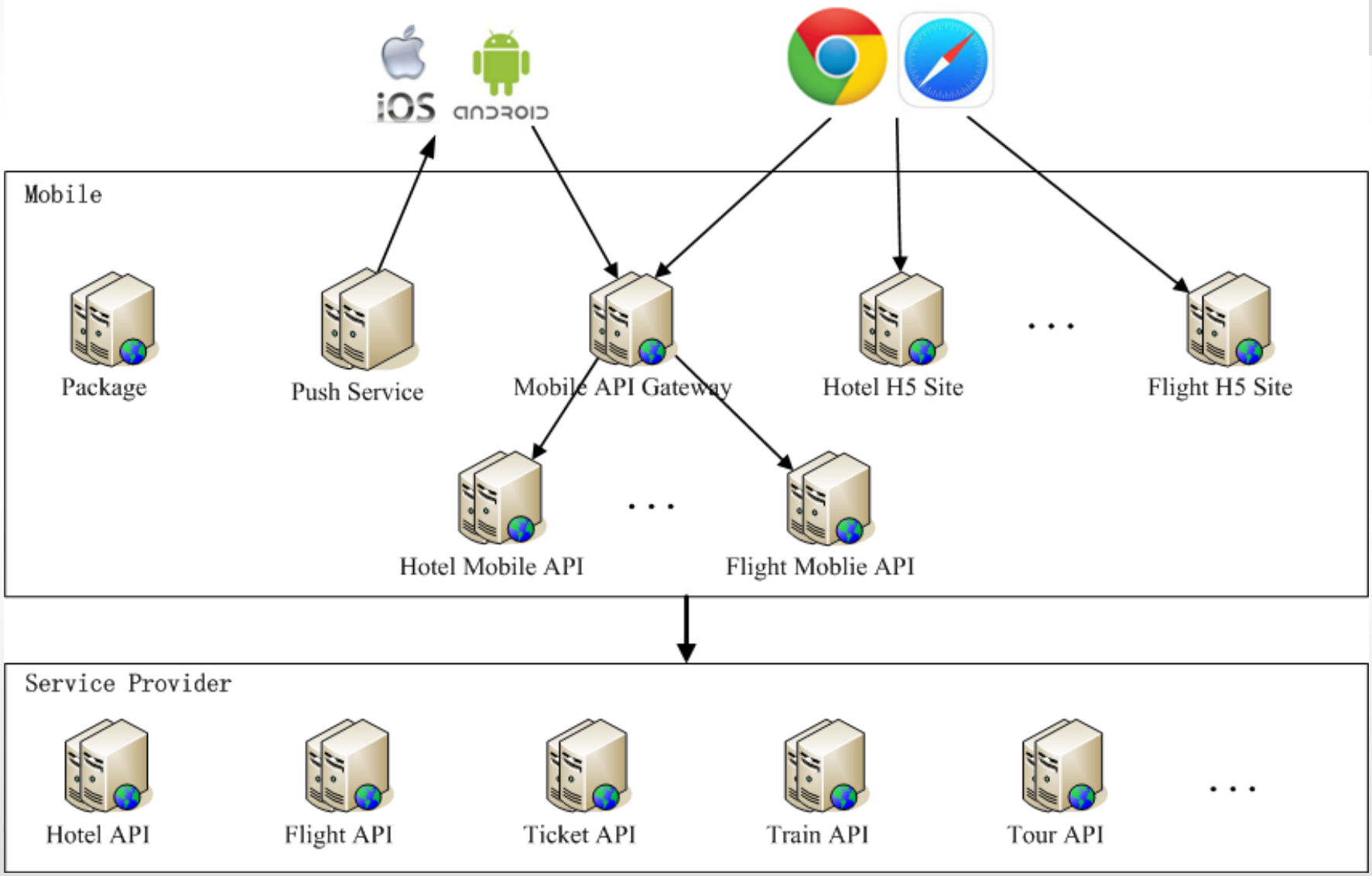
Mobile Architecture 1.0 – Pain Points

- Centralized mobile development Org:
  - Mismatched product roadmap between mobile team and business Team
  - Insufficient business domain knowledge
  - Product requirements piled up
- Mobile Development Shortages
  - SPOF
  - Manual packaging and releasing
  - Insufficient testing environment

Mobile Architecture V1.0



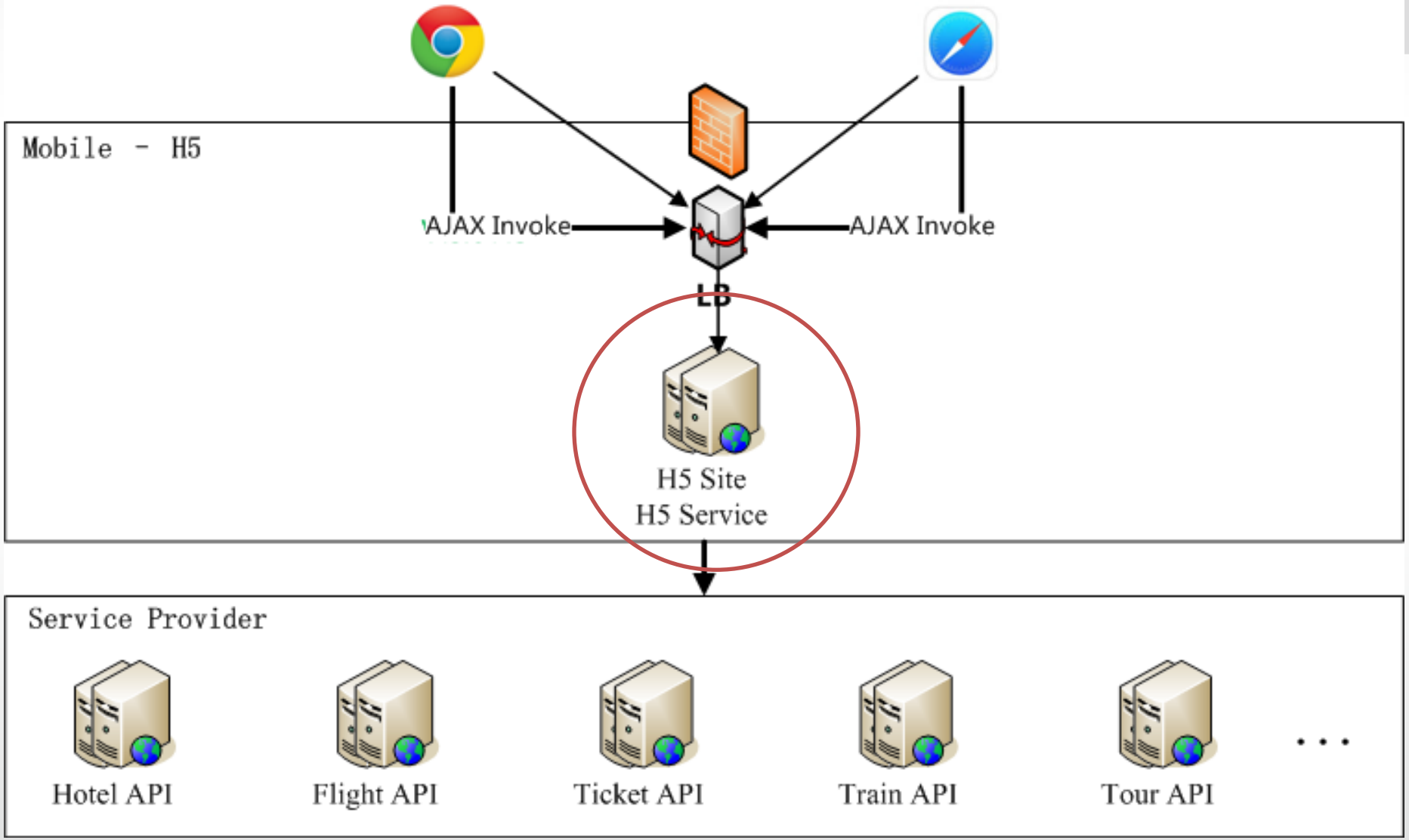
Mobile Architecture V2.0



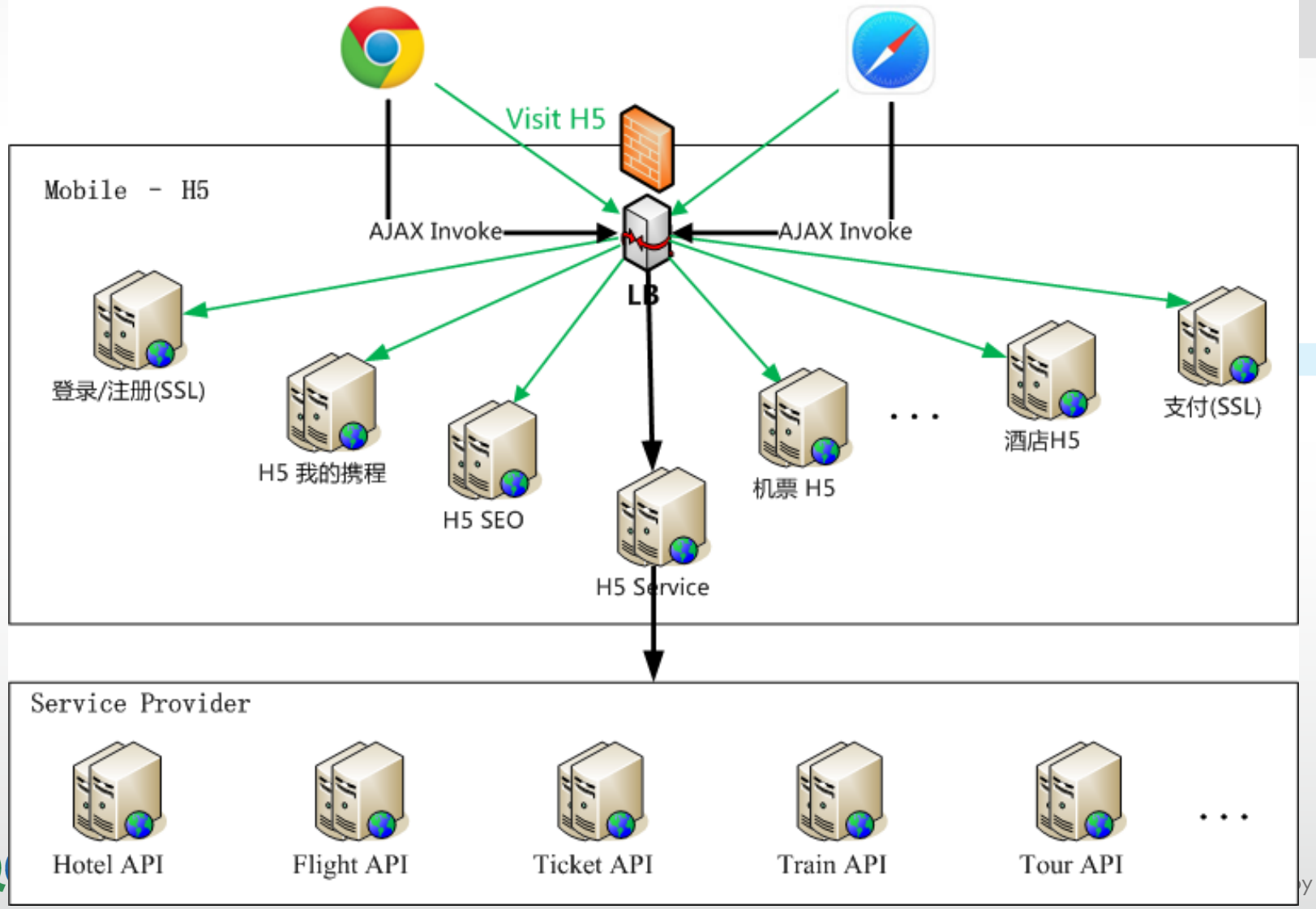
What was redesigned

- H5 Decoupling
  - H5 Site/ H5 Service
- App Decoupling
  - App / Mobile Service
- Security Enhancement
- Automation on testing
- Automation on release

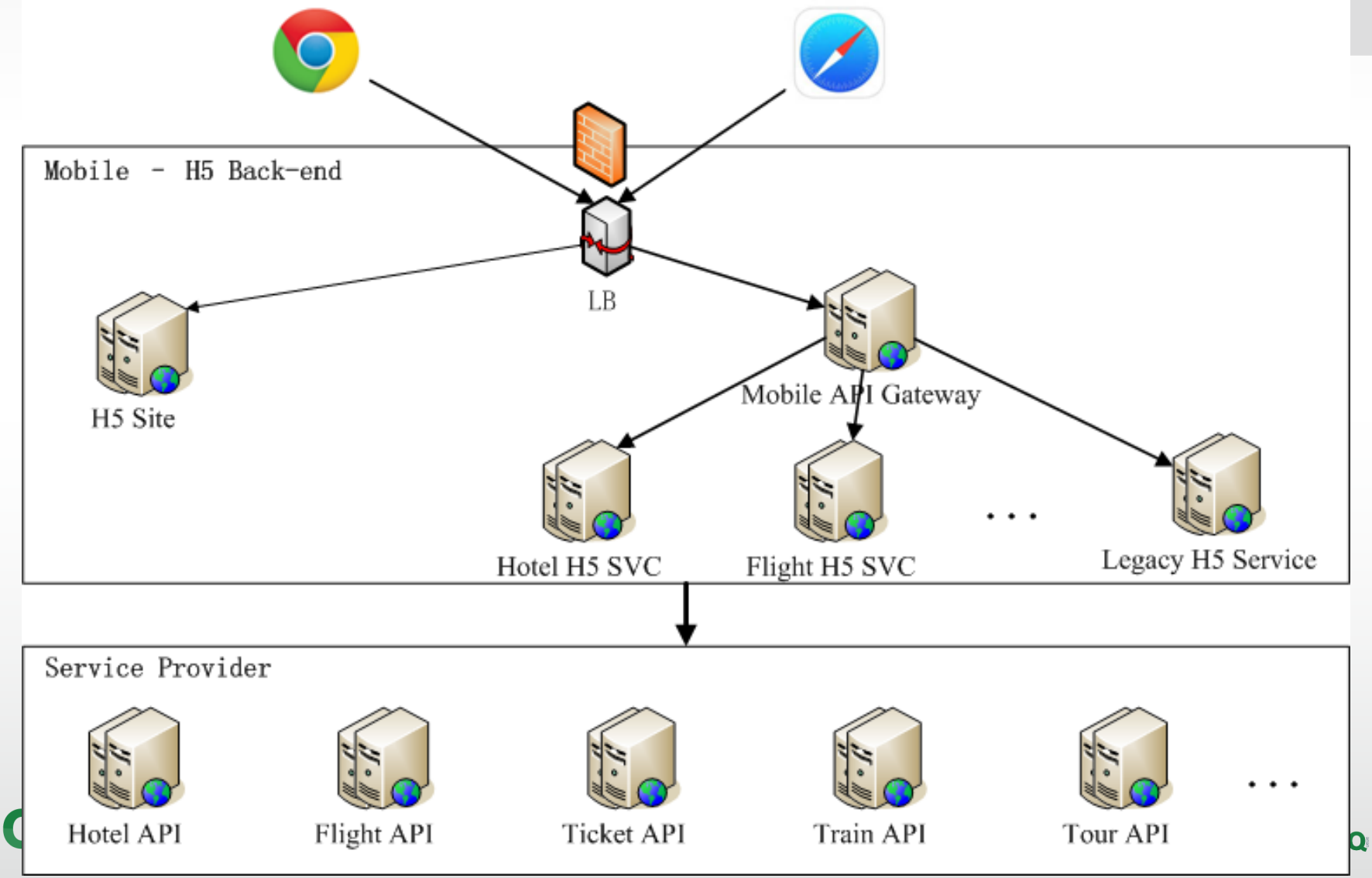
H5 Decoupling - V1.0



H5 Decoupling - V2.0 (Front-end)



H5 Decoupling - V2.0 (Back-end)



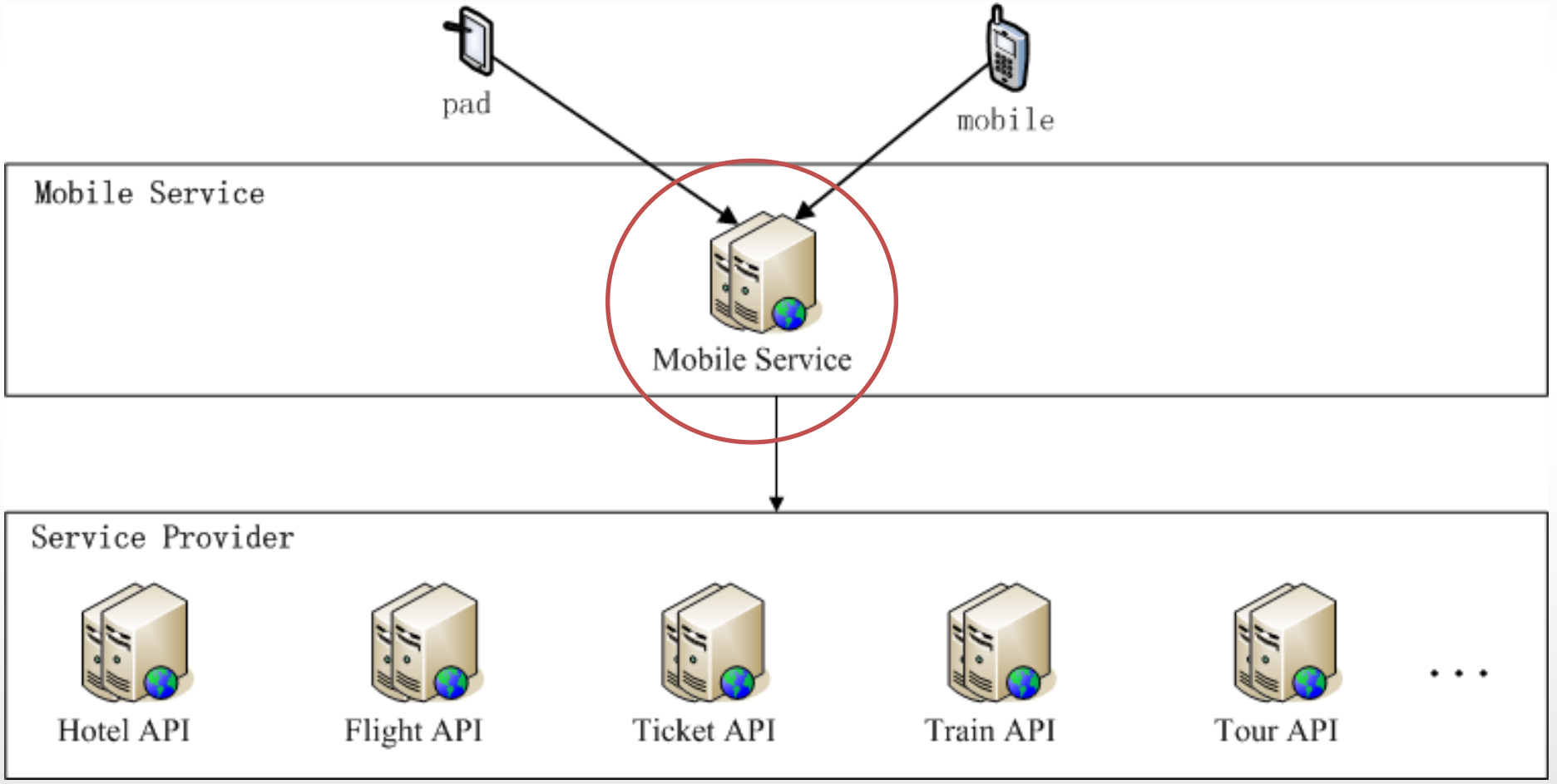
H5 Architecture Decoupled

- Decoupling H5 Site and H5 Service
- Mobile API Gateway
  - Service Routing
  - Real time monitor
  - Bot Blocker
  - Rate limiting and Fuse off
  - Multiple IDC support

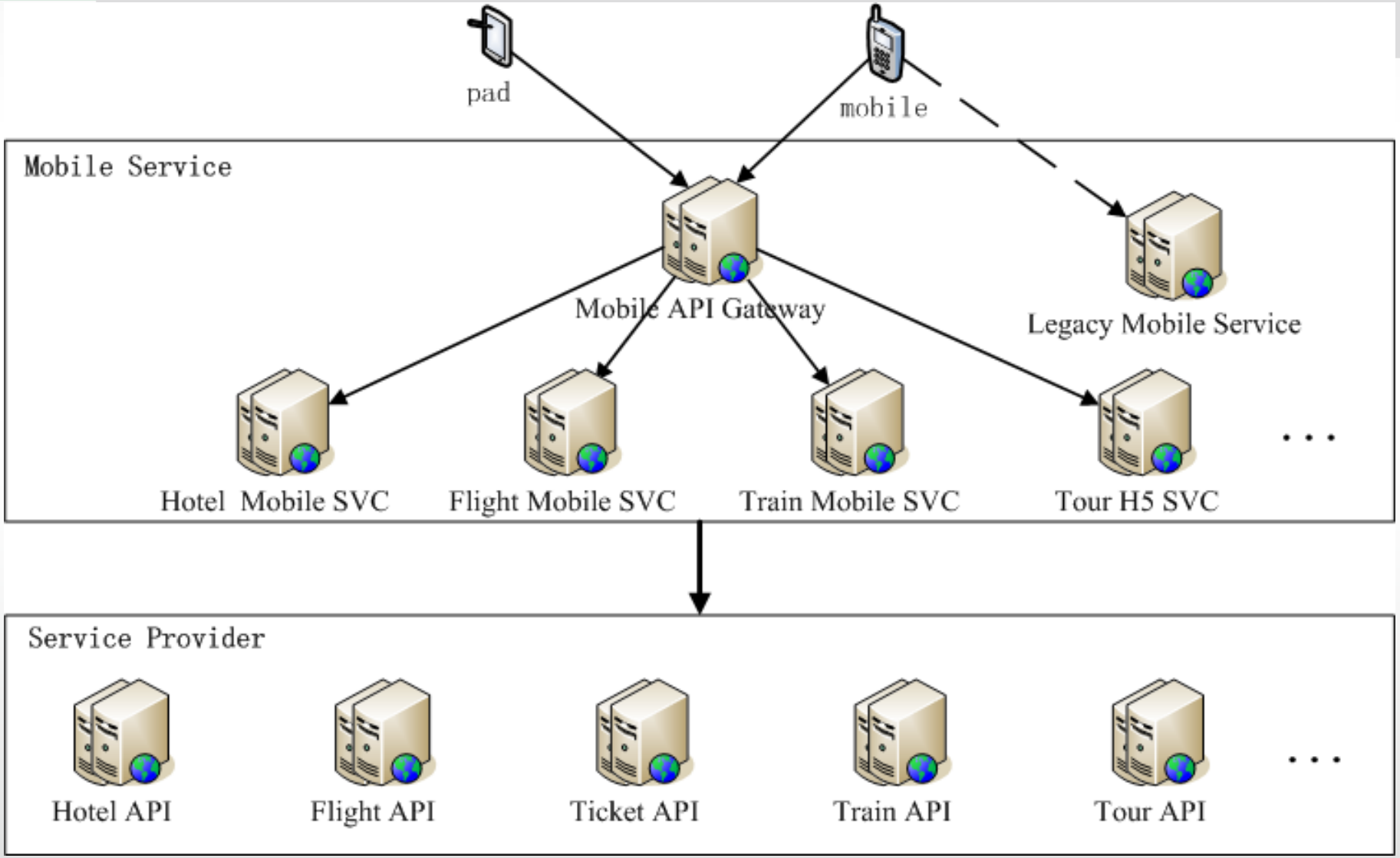
Mobile App Decoupled (Client-end)

- App Decoupled
  - Framework
  - Business module: Hotel, Flight, Community etc.
- Framework upgraded
  - Upgrade Mechanism Enhancement
  - H5 Incremental upgrade
  - Testing Automation
  - Packaging Automation (Android & iOS)
  - Deployment Automation (Android)

Mobile App Architecture 1.0 (Back-end)



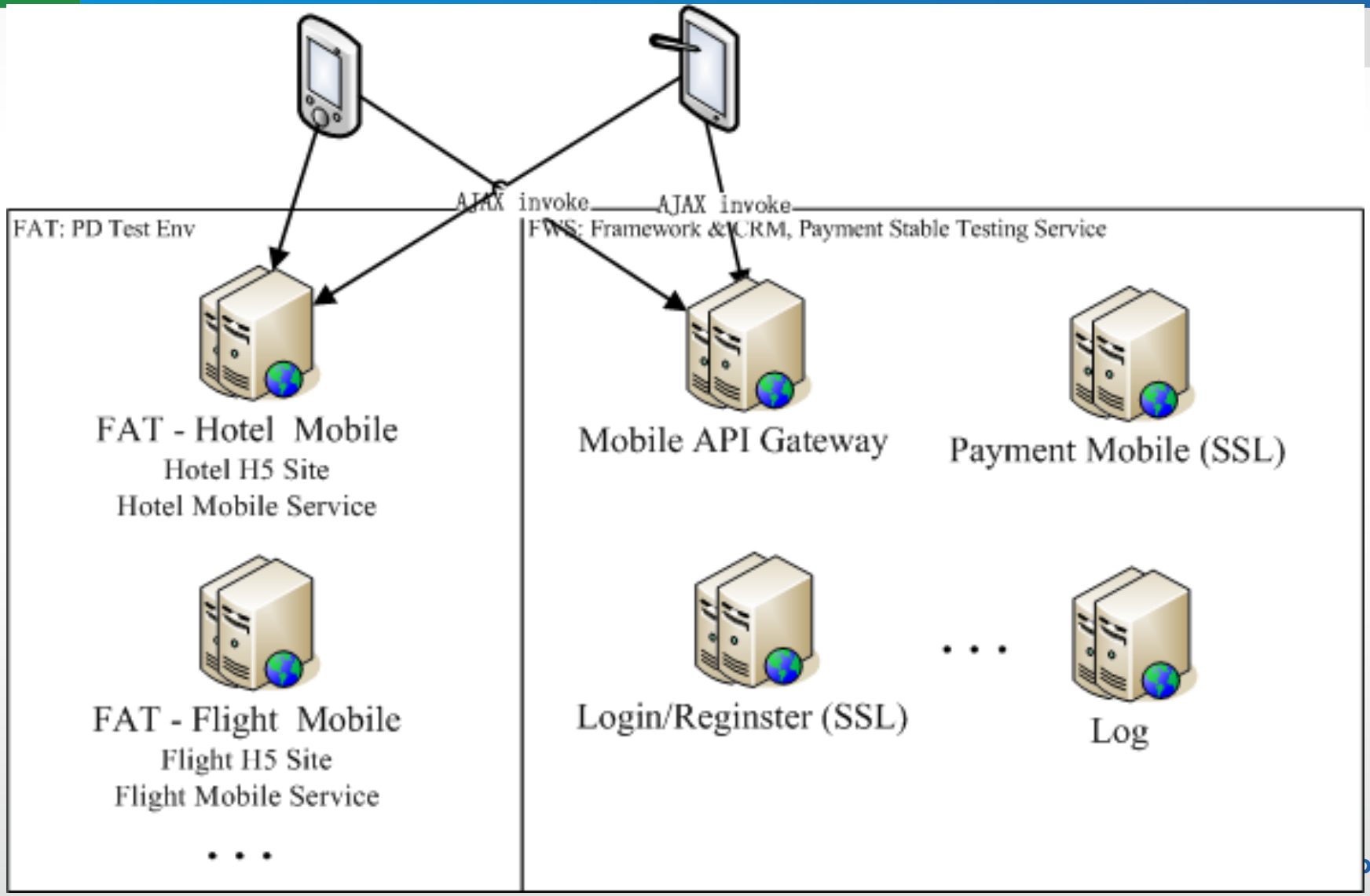
Mobile App Architecture2.0 (Back-end)



Mobile App Decoupled

- Dev teams decoupled
  - Framework dev team
  - Business dev (hotel) / business dev (flight) /…
- API / services decoupled
- Shared Mobile API Gateway
- Automated mobile app release

Testing Environment 2.0 decoupled



Gains of Mobile Architecture 2.0

- Domain ownership clarified
- Mobile App development speed
- APP testing decoupled
- Mobile APP releasing efficiency
- Robust architecture
  - Rate Limiting
  - Decoupled problems
  - Interfering each other is eliminated

AS of 2014/9

CTRIP APP is #1 Travel APP

Sourced from CTCNN, 2014/10/13

Thanks Q&A

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