

International SLH Project Architecture & API

AFACT Plenary, Japan

November 2016

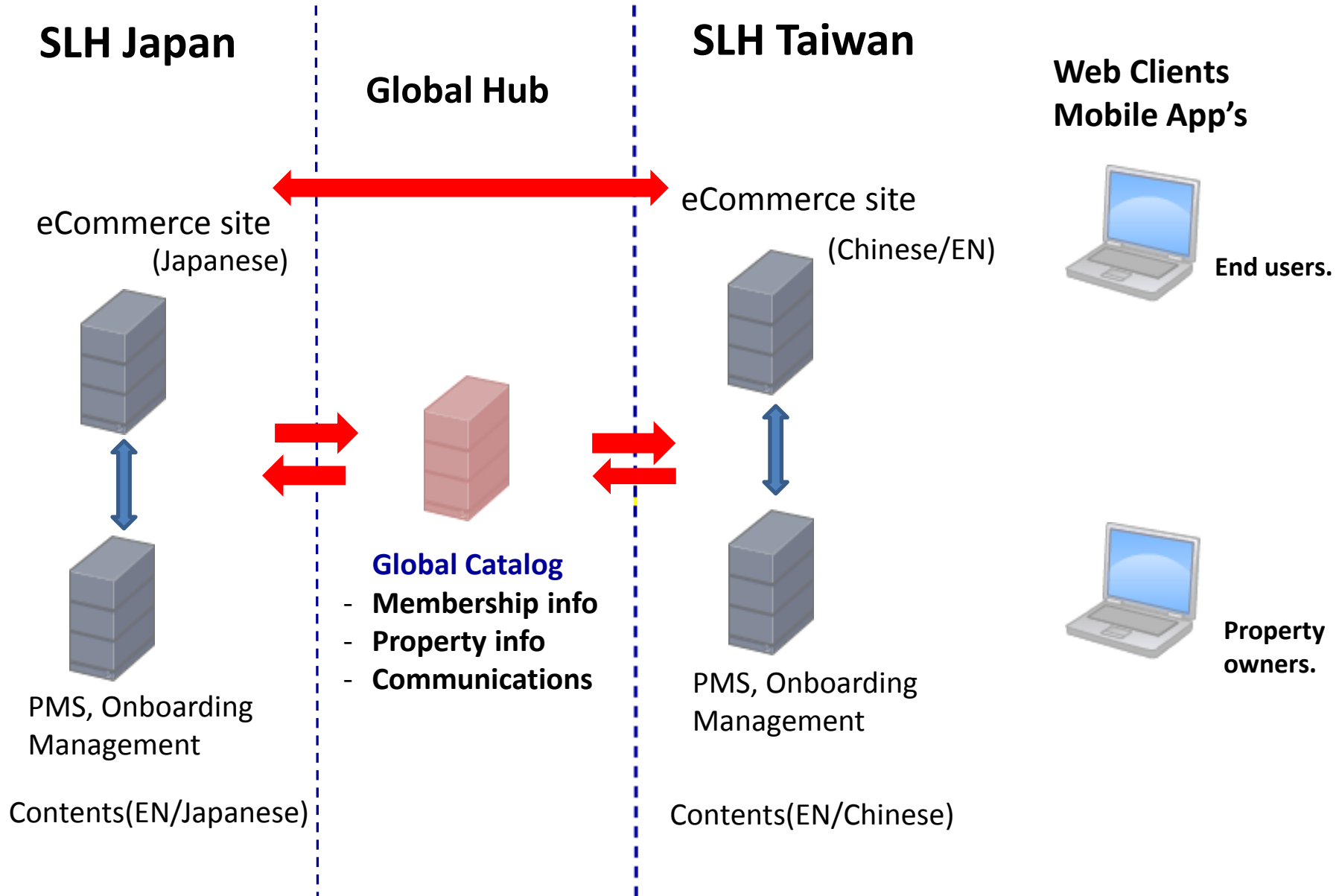
Kami Chen, Morris H. Hsiao

III, Taiwan

SLH Pilot System

- System architecture
- Member registration
- Property publishing
 - Property (SLH) information loading/Publishing
 - Property (SLH) Updates
 - Description changes
 - Price changes
- Shared e-Business
 - Search and Retrieve
 - Booking
- API and web services examples
- Status
 - The development situation

Pilot System Architecture



Member Registration

SLH Japan

SLH Taiwan

Global Hub

Web Clients Mobile App's

eCommerce site
(Japanese)

eCommerce site
(Chinese/EN)



1a. Register
1b. Subscribe

1a. Register
1b. Subscribe

2. Update
membership db

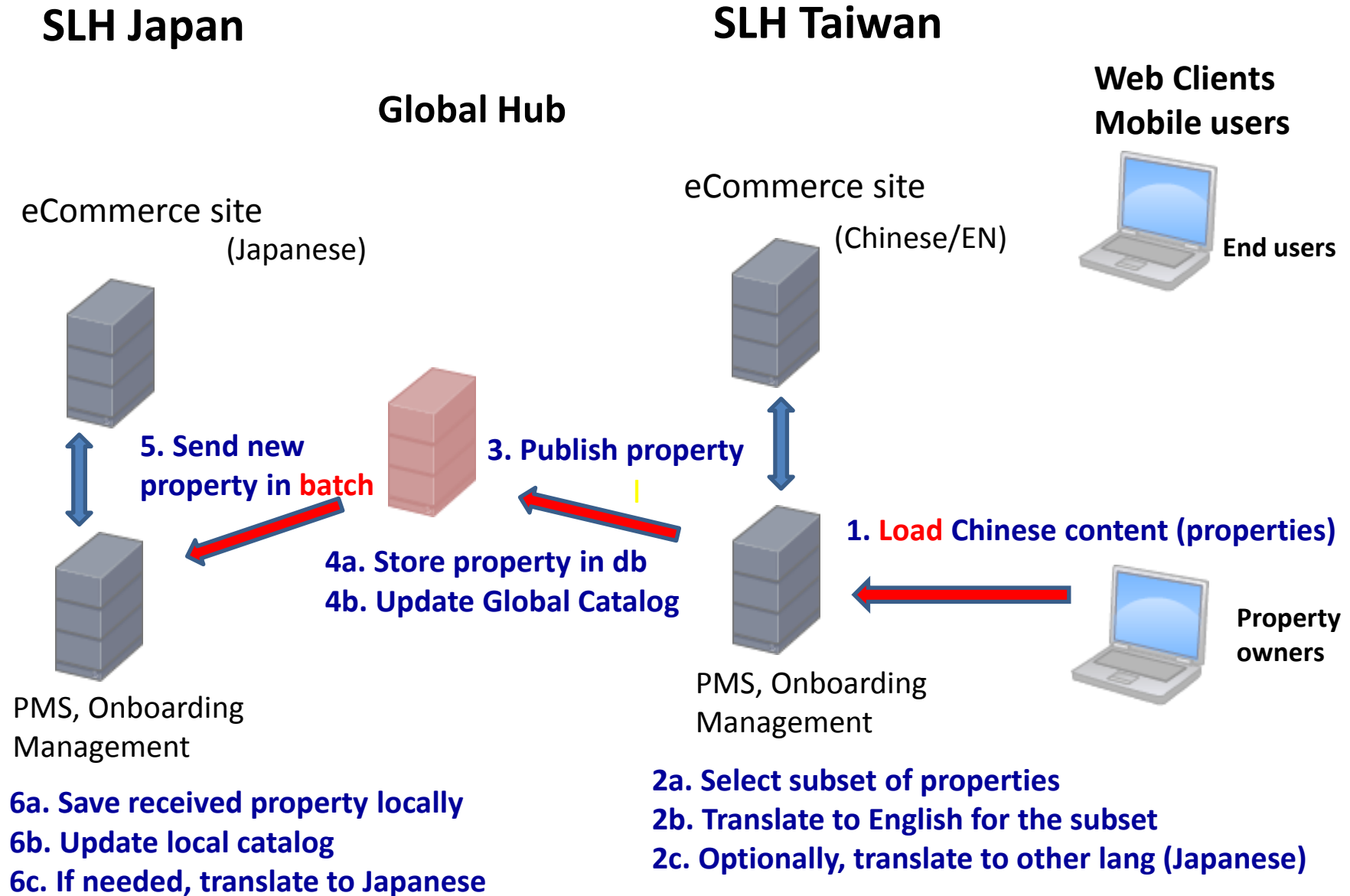
PMS, Onboarding
Management

PMS, Onboarding
Management



PROPERTY PUBLISHING

Member Property Publishing



Property Update (I/U/D)

SLH Japan

SLH Taiwan

Global Hub

Web Clients
Mobile Users

eCommerce site
(Japanese)

eCommerce site
(Chinese/EN)



End users



5. Send updated
property in **batch**



3. Publish

4a. Store property in DB
4b. Update Global Catalog



1. **Update Property**



Property
owners

PMS, Onboarding
Management

PMS, Onboarding
Management

- 6a. Save received property locally
- 6b. Update local catalog
- 6c. If needed, translate to Japanese

- 2a. In the (or Add to) published set?
- 2b. Yes - Create/update EN content
Optionally, update Japanese content

Room Rate Change

SLH Japan

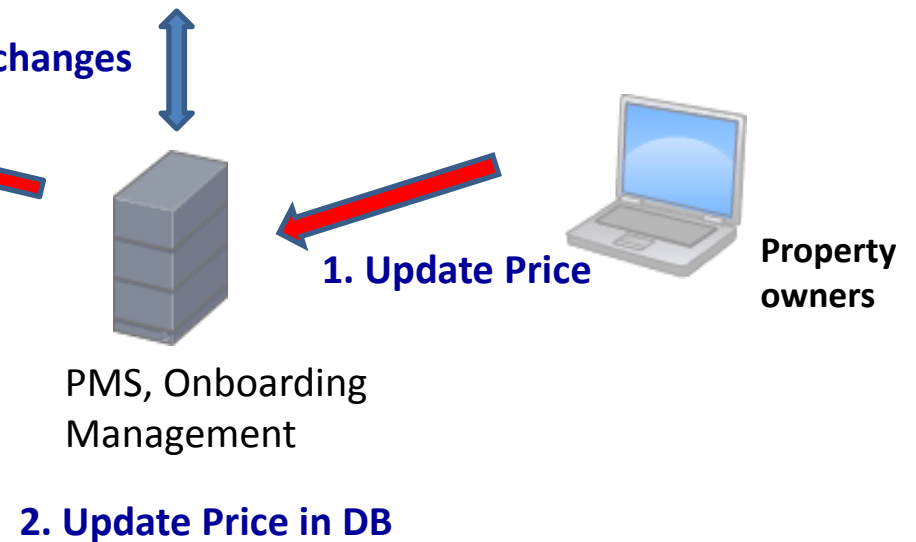
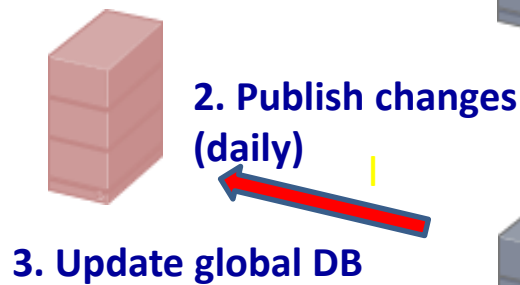
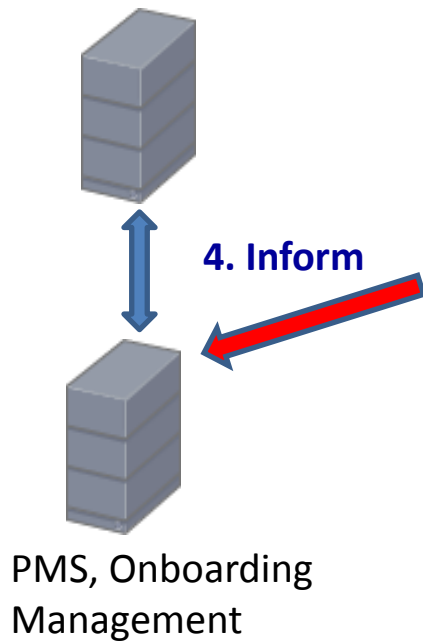
SLH Taiwan

Global Hub

Web Clients Mobile Users

eCommerce site
(Japanese)

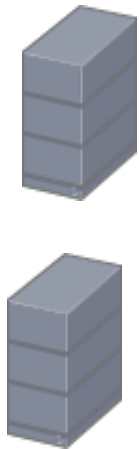
eCommerce site
(Chinese/EN)



SHARED E-BUSINESS

Browse and Search

SLH Japan



Global Hub



Global Catalog

SLH Taiwan

eCommerce site



PMS, Onboarding
Management

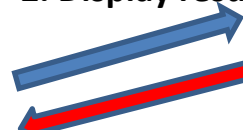
Contents(Chinese/EN)

Web Clients
Mobile Users



End users

2. Display results



1. Browse & Search
(Chinese/EN)

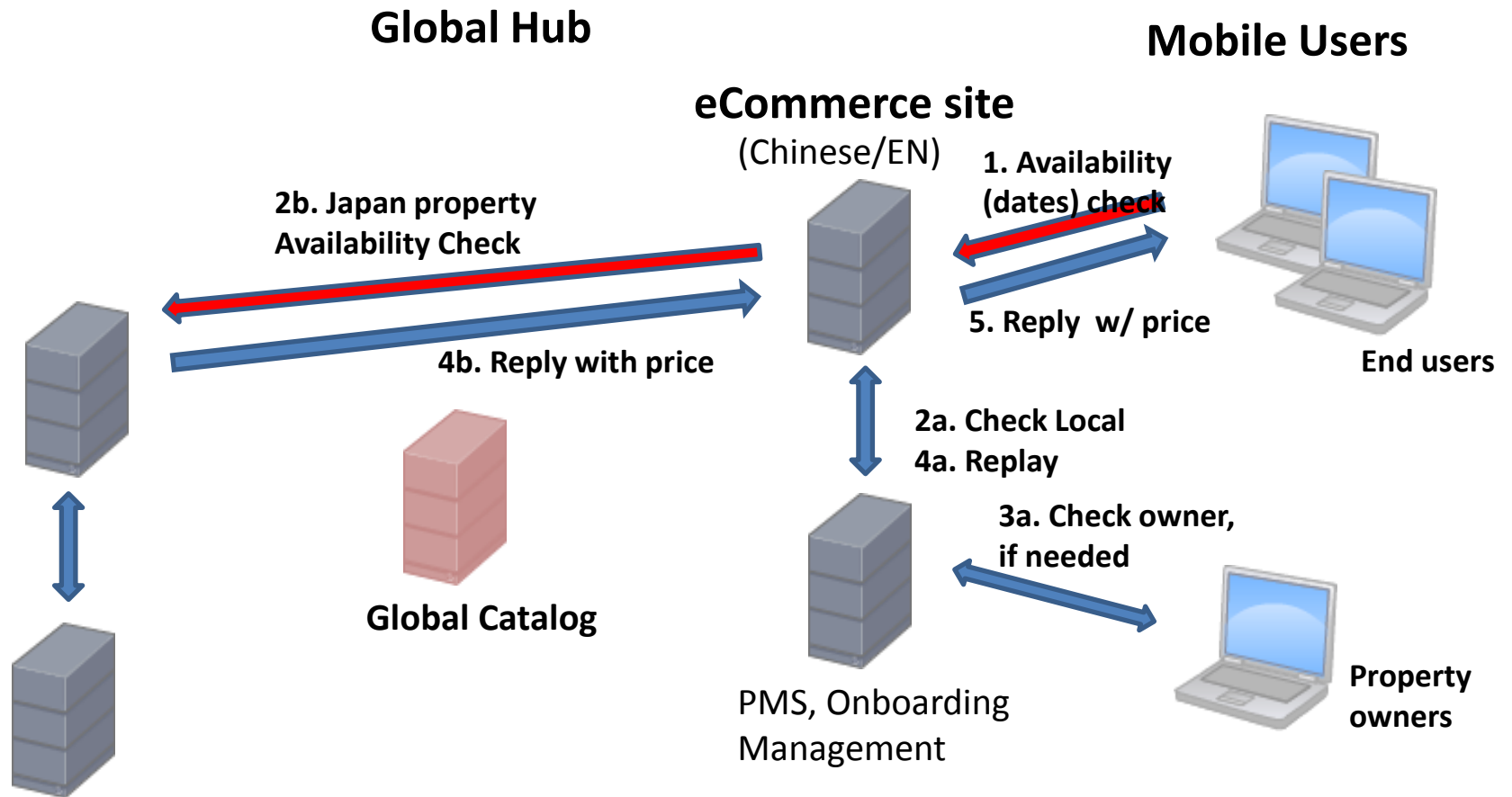


Booking – Check Availability

SLH Japan

SLH Taiwan

Web Clients
Mobile Users



Commit Booking – Local Property

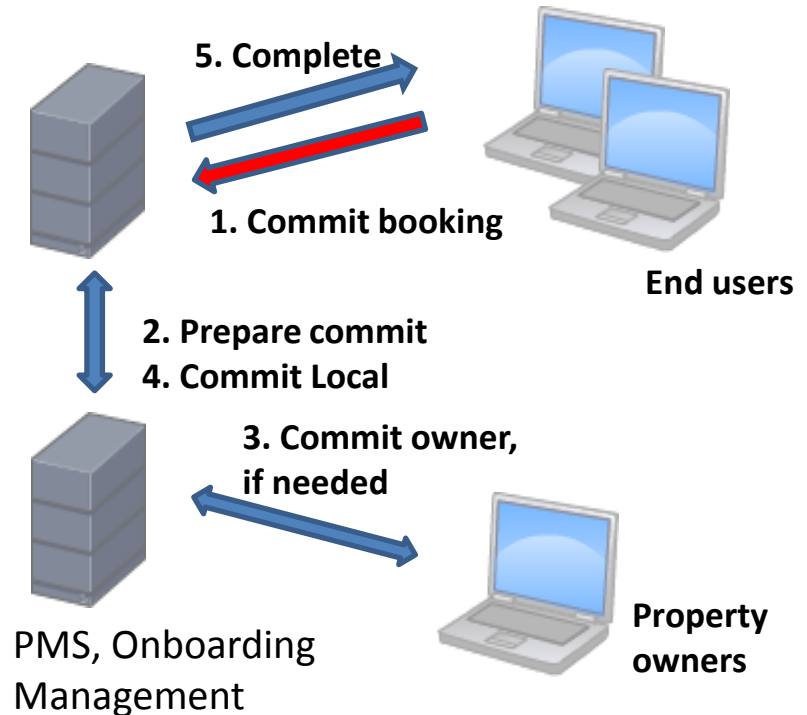
SLH Japan

SLH Taiwan

Global Hub

Web Clients
Mobile Users

eCommerce site



Commit Booking – Foreign Property

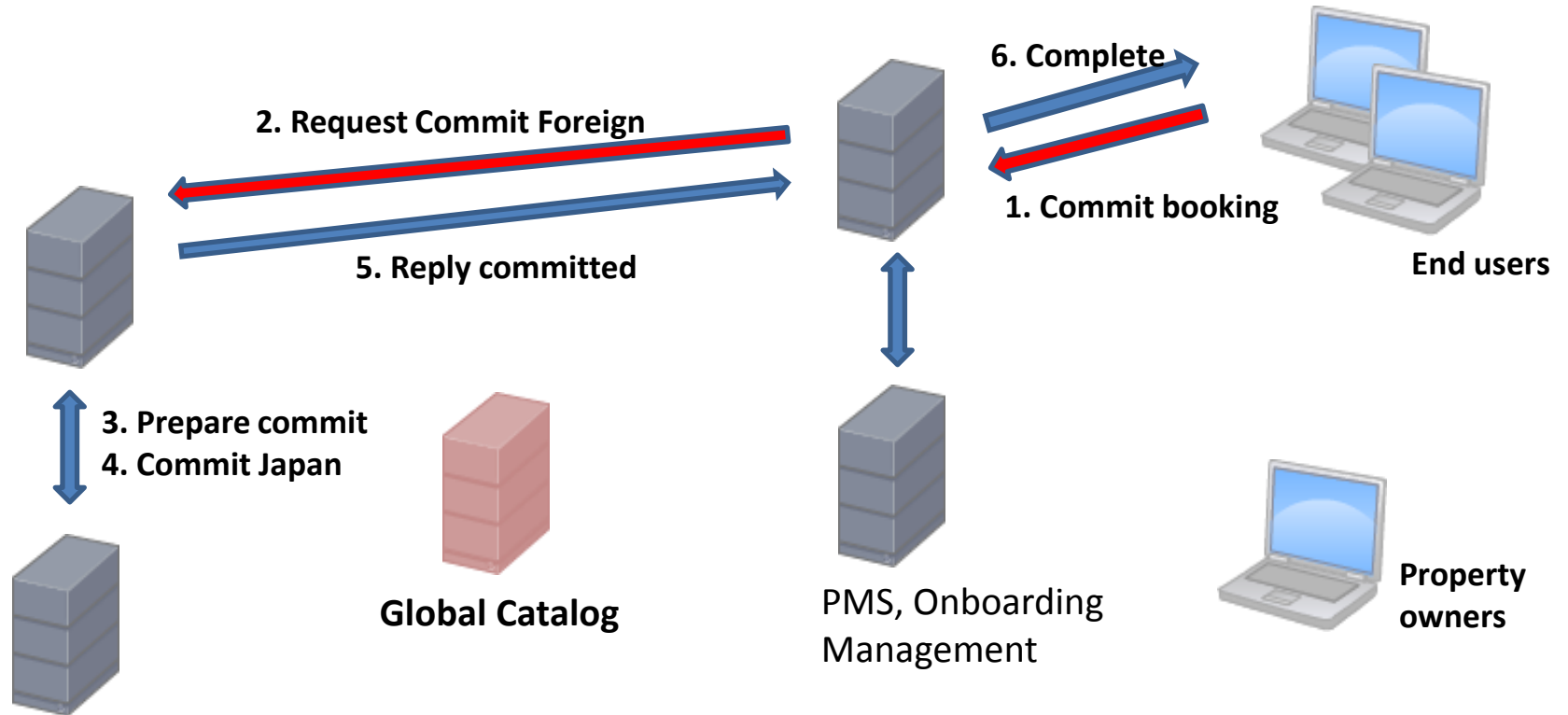
SLH Japan

SLH Taiwan

Global Hub

Web Clients
Mobile Users

eCommerce site



Summary

- Global Hub
 - Manage Registration of participants, membership
 - Cache of Global catalog of SLH property DB in English
 - Manage Vendors' Network communication ports and URL
 - Manage Subscription & forwarding of property information
- Members
 - Store and manage local property information
 - Publish **local** property in English to Global Hub
 - Optionally translate local property information to other foreign language (e.g. Chinese to Japanese or Japanese to Korean)
 - Store **foreign** property info received from Global Hub
 - Optionally translate foreign property information to local language
 - Communicate with **Foreign members** to book **foreign property**

API and Web Services

- API for the international SLH system
 - User/member Registration
 - Property Subscription (country/vendor based)
 - Load/publish property
 - Load/Publish property in batch
 - Remove property
 - Search/Retrieve property
 - Property update
 - Property availability checking
 - Commit booking
 - ...

[Web services examples](#)

Example: API and Web Services

- Search and Retrieve Property

Function	Search and retrieve hotel/lodging property information
Swagger	http://140.92.88.153:3001/explorer/#!/Pois/find
Http Method	GET

- Search Filter

Parameter	Value	Description	Parameter Type	Data Type
filter		Filter defining fields, where, include, order, offset, and limit	query	object

- Response

Response	Array[Property]
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Lodging Global Hub- Log in/Register

Lodging Global Hub

Search

Language Country

我要登入

電子信箱

輸入密碼

記住帳號 [忘記密碼?](#)

登入

[還不是會員?](#)

註冊

Lodging Global Hub- Subscription

Lodging Global Hub

- User
- Project
- Tool
- Connect
- Settings
- Help

Language Country

可訂閱 已訂閱

<input type="checkbox"/>	區域	國家	網址	訂閱人數
<input type="checkbox"/>	亞洲	台灣	http://www.vztaiwan.com/	252
<input type="checkbox"/>	亞洲	香港	http://www.discoverhongkong.com/	228
<input type="checkbox"/>	亞洲	菲律賓	http://www.tourism.gov.ph/	163
<input type="checkbox"/>	亞洲	新加坡	http://www.singapore.com.tw/	365
<input type="checkbox"/>	亞洲	馬來西亞	http://www.tourism.gov.my/	712
<input type="checkbox"/>	亞洲	泰國	http://www.tat.or.th/	339
<input type="checkbox"/>	亞洲	澳門	http://www.macautourism.gov.mo/	294
<input type="checkbox"/>	美洲	美國	http://www.seeamerica.org.tw/index.asp	1058
<input type="checkbox"/>	美洲	智利	http://www.chilnet.cl/bureauveritas/	227
<input type="checkbox"/>	美洲	巴西	http://www.embratur.gov.br/	301
<input type="checkbox"/>	美洲	加拿大	http://caen-keepexploring.canada.travel	582
<input type="checkbox"/>	美洲	巴拿馬	http://www.panamatours.com/	956
<input type="checkbox"/>	歐洲	英國	http://www.visitbritain.com/	963
<input type="checkbox"/>	歐洲	荷蘭	http://www.holland.idv.tw/	1200
<input type="checkbox"/>	歐洲	芬蘭	http://www.mek.fi/	904
<input type="checkbox"/>	歐洲	冰島	http://www.icetourist.is/	752
<input type="checkbox"/>	大洋洲	澳大利亞	http://www.australia.org.tw/	904
<input type="checkbox"/>	大洋洲	澳洲	http://www.australia.com/	752

已訂閱

- 俄羅斯 / <http://www.russia-trav...>
- 瑞典 / <http://www.visit-sweden...>
- 捷克 / <http://www.czechsite.com/>
- 希臘 / <http://www.gnto.gr/>
- 西班牙 / <http://www.spain.info/...>
- 挪威 / <http://www.nortra.no/>
- 德國 / <http://www.germany-tou...>
- 巴西 / <http://www.embratur.gov...>
- 埃及 / <http://www.touregypt.net/>
- 斯里蘭卡 / <http://www.srilankan...>
- 摩洛哥 / <http://www.mincom.go...>
- 夏威夷 / <http://www.gohawaii.com>
- 台灣 / <http://www.vztaiwan.com>
- 紐西蘭 / <http://www.suntravel.com>
- 關島 / <http://www.visitguam.org/>
- 帛琉 / <http://www.visit-palau.com>
- 以色列 / <http://www.singapore.com>

Lodging Global Hub- API Info

Lodging Global Hub

- User
- Project
- Tool
- Connect
- Settings
- Help

Search

Language Country

StrongLoop API Explorer

Images : 圖片資訊 Show/Hide | List Operations | Expand Operations | Raw

Installations Show/Hide | List Operations | Expand Operations | Raw

Intelligences Show/Hide | List Operations | Expand Operations | Raw

Lodgings : Poi相關的住宿內容資訊 Show/Hide | List Operations | Expand Operations | Raw

GET /Lodgings Find all instances of the model matched by filter from the data source.

Response Class

Model | Model Schema

```
[ { "grade": 0, "mainAmenities": [ ... ], "serviceInfo": "", "facilities": "", "policies": [ ... ] }, ... ]
```

Response Content Type: application/json

Parameters

Parameter	Value	Description	Parameter Type	Data Type
filter	<input type="text"/>	Filter defining fields, where, include, order, offset, and limit	query	object

Response Messages

HTTP Status Code	Reason	Response Model
200	Request was successful	

[Try it out!](#)

PUT /Lodgings Update an existing model instance or insert a new one into the data source.

POST /Lodgings Create a new instance of the model and persist it into the data source.

PUT /Lodgings/{id} Update attributes for a model instance and persist it into the data source.

DELETE /Lodgings/{id} Delete a model instance by id from the data source.

已訂閱

Search

- 俄羅斯 / http://www.russia-trav... >
- 瑞典 / http://www.visit-sweden... >
- 捷克 / http://www.czechsite.com/ >
- 希臘 / http://www.gnto.gr/ >
- 西班牙 / http://www.spain.info/... >
- 挪威 / http://www.nortra.no/ >
- 德國 / http://www.germany-tou... >
- 巴西 / http://www.embratur.gov... >
- 埃及 / http://www.touregypt.net/ >
- 斯里蘭卡 / http://www.srilankan... >
- 摩洛哥 / http://www.mincom.go... >
- 夏威夷 / http://www.gohawaii.com >
- 台灣 / http://www.vztaiwan.com >
- 紐西蘭 / http://www.suntravel.com >
- 關島 / http://www.visitguam.org/ >
- 帛琉 / http://www.visit-palau.com >
- 以色列 / http://www.singapore.com >

Response Detail

- Response Class

POI {

id (string),

type (number, optional): Poi類型 0 : 景點 , 1 : 美食 , 2 : 活動 , 3 : 伴手禮 ,
4 : Hotel/Lodging , 5: 商店,

location (geopoint, optional): POI location ex: {lat: 25.035732, lng: 121.5640777},

beacon (array[object], optional): POI indoor location ex: [beaconID1,
beaconID2, ...],

createTime (string, optional): POI creation time,

countyId (string, optional),

detailId (number, optional),

statisticsId (number, optional),

detail (Detail): poi 詳細資訊,

lodging (Lodging) : poi 住宿內容

}

Response Detail

- Response Class

Lodging {

id (number),
poild (string, optional),
grade (number, optional): 星等,
mainAmenities (array[string], optional): 主要設施,
serviceInfo (string, optional), 服務資訊
facilities (string, optional): 綜合設施,
policies (array[string], optional): 訂房須知,
language (array[string], optional): 使用語言,
checkInTime (string, optional), 可checkin 時間
checkOutTime (string, optional), 可checkout時間
rooms(array[Room]) : 房型
}

Room {

id (number, optional),
lodgingId (number, optional),
name (string): 房型名稱,
description (string, optional), 描述
price (number, optional), 價位
peopleNumber (number, optional): 房型人數,
facilities (array[string], optional): 房內設施
}