CGS ~~Applications~~System

Version No. : 0.0.~~2~~1

Date : ~~30~~07/~~05~~06/2021

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1 Introduction

1.1 Document Purpose

The purpose of this document is to provide a ~~high-level~~high-level technical view of a CGS (Central Ground Service) for use by both application development and application support teams. It should be read in combination with 'System overview and support' document. ~~In particular, it~~It will give a quick start to new joiners and so minimize the training effort.

~~CGS (Central Ground Service) facilitates hotels booking process (including third party) using Yalago API through Hotel Search Engine and Hotel Provider.~~

~~Yalago API act as Gateway which do the integration of application along with performing authentication and authorization. It use to do the integration with API using fixed format of XML~~

~~Hotel Search Engine is standalone software/tool which has algorithms to provide best deal to end user/customer, it provides best deal to customer by contacting every provider using multi-threading,~~

1.2 Scope

Complete list of behaviours and features of CGS ~~application suite~~System are governed by list of applications and services. There are mainly two main categories of applications and services, one which is fully controlled and maintained by CGS teams, so these applications and services are listed under in-scope. There is another category of services which are supported by 3rd party service providers, and all the third party services are consumed on the basis of predefined contracts and declarations, so these services are kept under~~<Mention the in-scope and out-scope applications/components/modules/features applicable in this project/application.>~~ out-scope, because their complete internal behaviours and features are fully controlled and maintained by 3rd party service providers.

1.2.1 In-Scope

Below listed applications/modules/services are major part of CSG System~~application suite~~.

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1. **Yalago AutoBooker**
2. **Yalago API**
3. **Affiliate Extranet**
4. **Purple Derwent**
5. **AutoCompleter**
6. **Hotel Search Engine**
7. **dnataContracts**
8. **dnataExtranet**
9. **Contract Service**
10. **Green Derwent**
11. **Hotel Extranet**

Out-scope

1.2.2

Below listed services are integral part of CGS applications but supported by third party service providers. So internal details about business processing are beyond the scope of this document.~~Although Hotel booking eco system is bifurcated into two parts (Derwent Platform, CGS/Yalago), yet in our scope is limited to only CSG/Yalago.~~

~~CSG/Yalago is composition of below applications~~

~~3. Yalago AutoBooker~~

~~4. Yalago API~~

~~5. Affiliate Extranet~~

~~6. Pruple Derwent~~

~~7. AutoCompleter~~

~~9. Hotel Search Engine~~

~~11. Bonotel~~

~~12. Melia~~

1. Jumeirah
2. Bonotel
3. Melia

~~13.~~4. Derwent Platform system

~~14.~~1. ~~dnataContracts~~

~~1. dnataExtranet~~

~~15.~~1. ~~Contract Service~~

~~15.~~1. ~~Green Derwent~~

~~15.~~1. ~~Hotel Extranet~~

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~~<Mention the in-scope and out-scope applications/components/modules/features applicable in this project/application.>~~

~~The top level functional and technical architecture. The aim is to give a top level view of the system, its use by the business and its technical infrastructure. It is also to give an idea of the size and importance and complexity of the system - so you can tell the difference between Eclipse and Paragon.~~

~~Clearly mention inclusions and exclusions.~~

~~1.6~~1.3 Audience

This overview document is to be used by application development and application support teams. ~~In particular, it~~It will serve as a baseline for anyone joining the ~~dnata~~ CGS Teams in understanding the **CGS** Applications and services.

~~1.7~~ Definitions and Acronyms

1.4 ~~<Terms, acronyms and definitions>~~

Term	Description
CGS	Central Ground Service
Dnata	Dubai National Air Travel Agency
Agent	Internal User (Affiliate Web Portal)
Affiliate client	3rd Party Clients

~~1.8~~1.5 Assumptions and Dependencies

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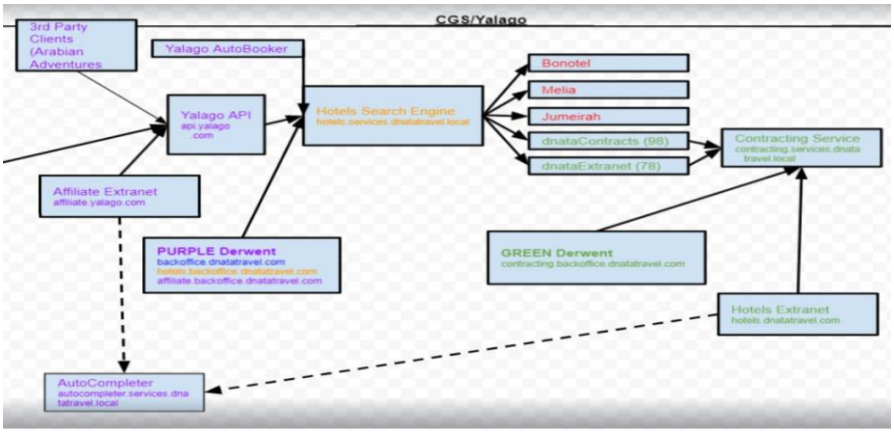
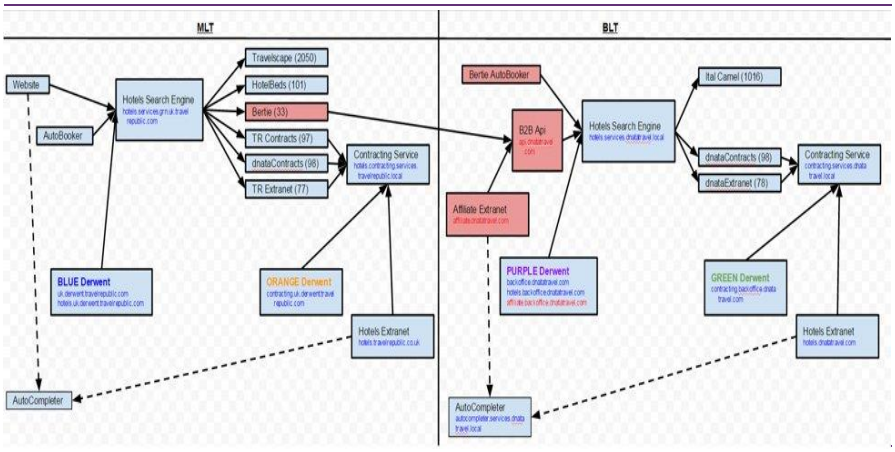
2 Business Overview

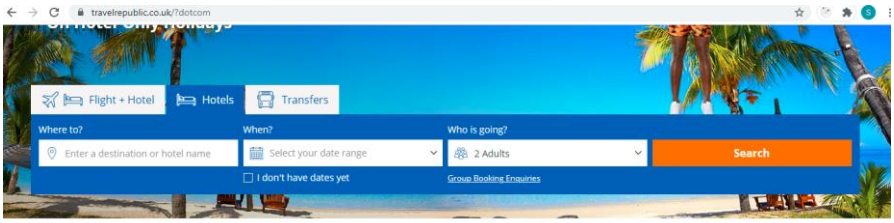
2.1 Functional Overview

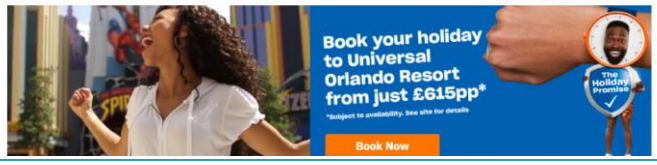
CGS offers services which are mainly used for hotel search and booking purposes, it provides best deal to customer by contacting various service provider connected to Hotel Search Engine (Bonotel, dnataContracts ~~and~~ etc.)~~in the market~~. Its services help businesses to perform operations under the B2B commercial transactions mode. CGS has the Yalago API as a primary product which serves all aforesaid services. Functional workflow of CGS services is depicted in below diagram.





As per above image, A website which provides hotel booking service to end customer can consume CGS service (Yalago API). And when customer searches for hotel as shown below (for illustration purpose only.)





Internally Yalago API is contacted to return response to website based on user preference provided in parameter of service (i.e. Where to?, Where, Who is going).

2.1.1 API Interaction Workflow

As mentioned above that any website or any B2B service sends request to CGS service (Yalago API) to get the response against the user provided input as mentioned in diagram 1. Given below the component diagram for understanding.

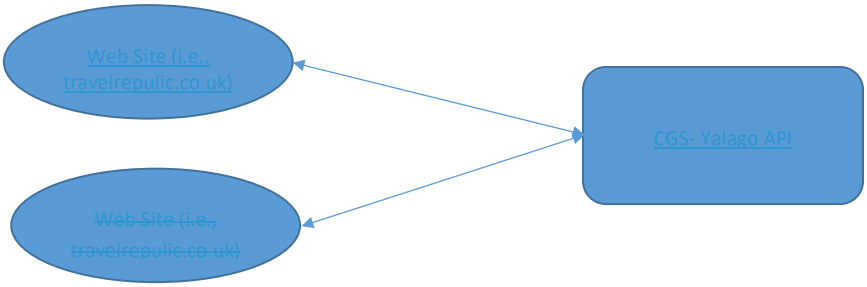


Diagram 1

There is also role of Bertie AutoBroker which is not clear as of now. Above detail and diagram will be updated based on knowledge of Bertie autobroker.

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2.1.2 Hotel Search Engine (Yalago API) workflow

In Yalago API, Hotel Search engine is the main component which is responsible to process the user request. So as request arrives here, it uses three type of sources to get the date, first is dnata contracts and second is dnata Extranet and third is 3rd party service provider. These sources return the data back to Hotel Search engine based on input parameters forwarded to them. Below is the diagram for typical Hotel Search Engine.

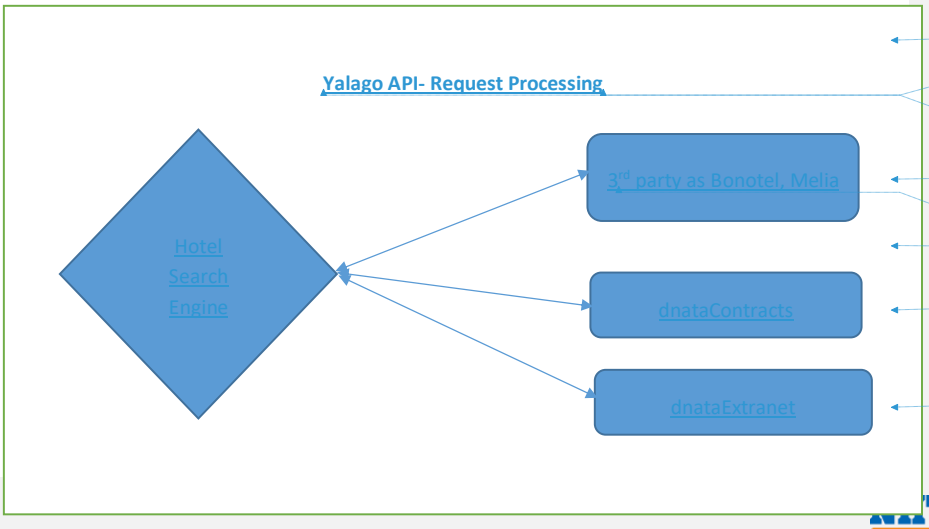

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Diagram 2 ~~Diagram 2~~

After collecting data from 3rd party provider, dnataContracts and dnataExtranet, it applies certain business rules which further filters and sorts the result. And after filtering and sorting it returns the response to caller (*i.e.*, Any website, B2B API).

2.1.3 Business Rules in Hotel Search Engine

There is provision to filter and sort the search result based on some defined and configurable business rules. Giving below few most important businesses rules and criteria.

2.1.3.1 Result Filter Criteria

1. Always give priority to dnata contracted service results.
2. There could be some trusted business partners as 3rd party provider. Their search result may take precedence sometimes.
3. Search result may contain "no availability of beds in some hotel", Those results will be filtered.

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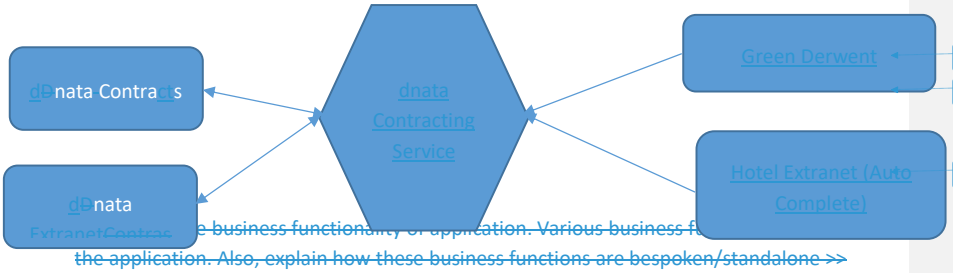
2.1.3.2 Result Sort Criteria

1. The default sort order will be based on price from Low to High.
2. There could be some more sort options as based on popularity, or most relevant, or have some offer or coupon, But it need to confirm from business team.

2.1.4 dnataContracts, dnataExtranet and Contracting Service

Dnata has a dedicated team to find hotel suppliers and they can be further added in CGS system as business partner (business associates). They are added in system in direct contract category so their priority will be always high as business rule suggests. Below diagram shows the flow and behaviour of Contracting service.



~~e business functionality of application. Various business f~~
~~the application. Also, explain how these business functions are bespoken/standalone >>~~

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Diagram 3

~~Describe:~~

- ~~key business processes, functions, data flows – ideally diagrammatically and relative criticality of differing functions~~
- ~~user groups~~
- ~~business rules~~
- ~~critical business processes, periods and deadlines~~
- ~~any known Client/Business Service Levels, eg batch to be completed by 06.30hrs, or file transfer to xxx by 02:00hrs mon-fri, or online availability – for information only~~
- ~~periodic events~~
- ~~business cycles, routines, peaks & troughs of activity~~
- ~~bank holiday impacts/requirements~~

2.2 3rd Party API Clients

Yalago API is platform which provide access (internal/external client) to hotel/inventories. External client is also known as 3rd party clients. ~~Yalago API(dnata) customers are the 3rd Party API Clients, who provide a platform (Yalago API) to access various hotels/inventories.~~

3rd Party API clients are the Yalago API (dnata) customers who integrate this platform (Yalago API) to get access of various hotels /inventory which are mapped with various supplier along with ~~and dnata~~ contracts. These client are also called as Affiliate clients.

- ~~I~~travelr~~R~~epublic.co.uk is an internal client for Yalago API (dnata).
- Arabian Adventures is an external client for Yalago API (dnata).

~~is~~ntegration/connectivity between affiliate client and Yalago API is done using XML/JSON provided by Yalago itself. Standard procedure for communication between Yalago API and application are XML/JSON/REST/SOAP~~s~~.

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3rd Party API Integration with Yalago API

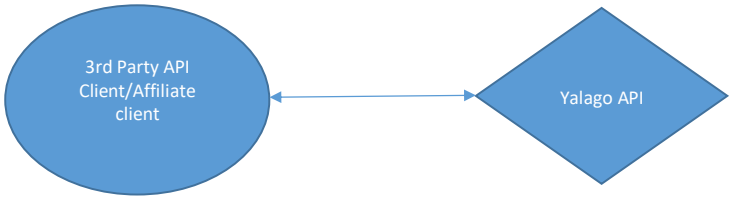

Diagram 4

<< More details requires >>

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2.3 Yalgo AutoBooker

~~Revise~~

<< More details requires >>

2.4 Affiliate Extranets (Web Portal)

Affiliate extranet is a B2B portal., Dnata provides this portal for checking to the affiliate clients (3rd party API Clients) ~~to check~~ and validate search result from Yalago API. It is a Web Portal for the Yalago API. Basically there are two type of users:

- **Internal User's:**
  Internal users are known as agents who have access of all suppliers and domains/branches.
- **External User's:**
  These are client users (affiliate) who have~~s~~ access to their domains and branches. They can validate the Yalago API result. Also they can get more details from the API data.
- **Client's:**
  Yalago API consumers are called clients/ Affiliate clients/ 3rd Party API Clients (eg. t~~T~~ravelrepublic.co.uk is a client for Yalago API).
- **Domains/Branches:**
  Domains/Branches are ~~the~~a~~a~~n entity of any client. A client can have multiple domains (eg. Travelrepublic) and multiple ~~s~~branches (travelrepublic.co.uk, travelrepublic.com etc.).
- **Supplier:**
  Supplier provides the Hotels/Beds inventory. As we can see in the main workflow there are some supplier~~'~~s' names such as ~~(~~HardRock, Hotel Beds V4 etc.~~)~~.
- **Destination:**
  It is a GEO/Place/Area/Location where the users want to search the Hotel/Beds.

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Affiliate Extranet portal

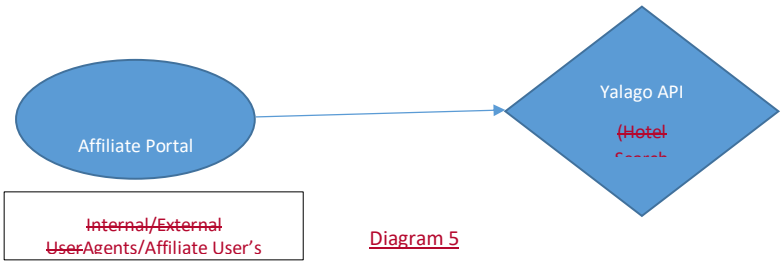

Diagram 5

This is the home screen of Yyalago affiliate portal. There are relationships between destination, branch and supplier.

Auto completer service is used for populating data in Destination, Branch and supplier dropdowns.

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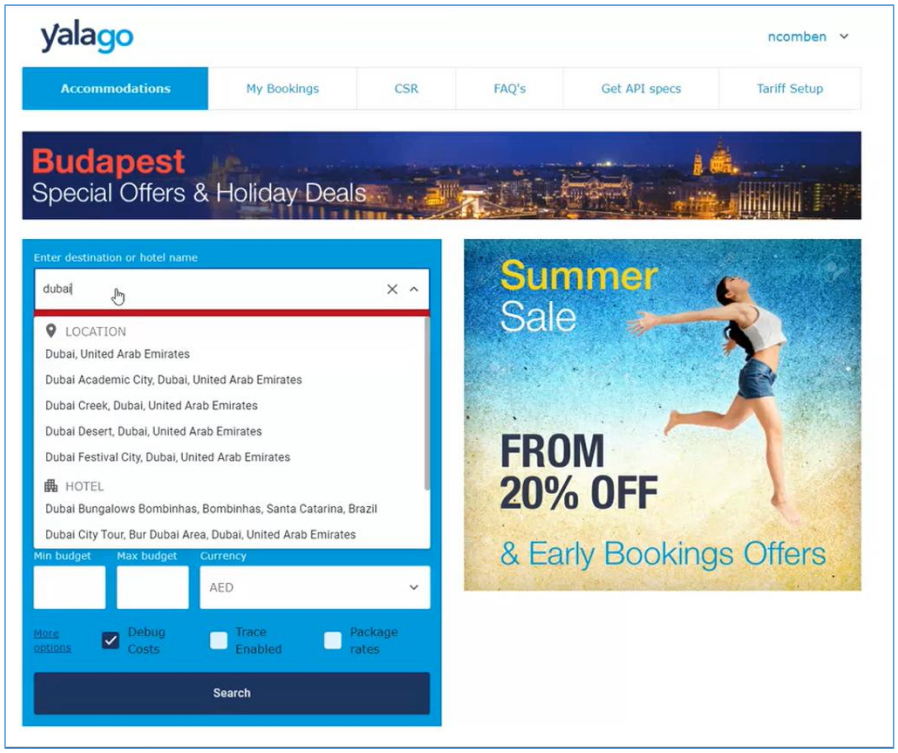
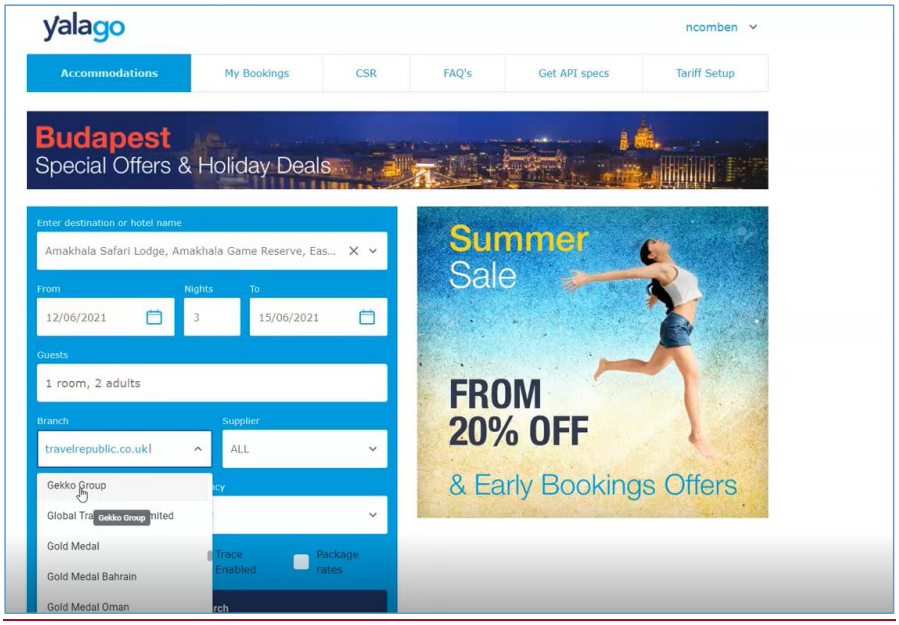
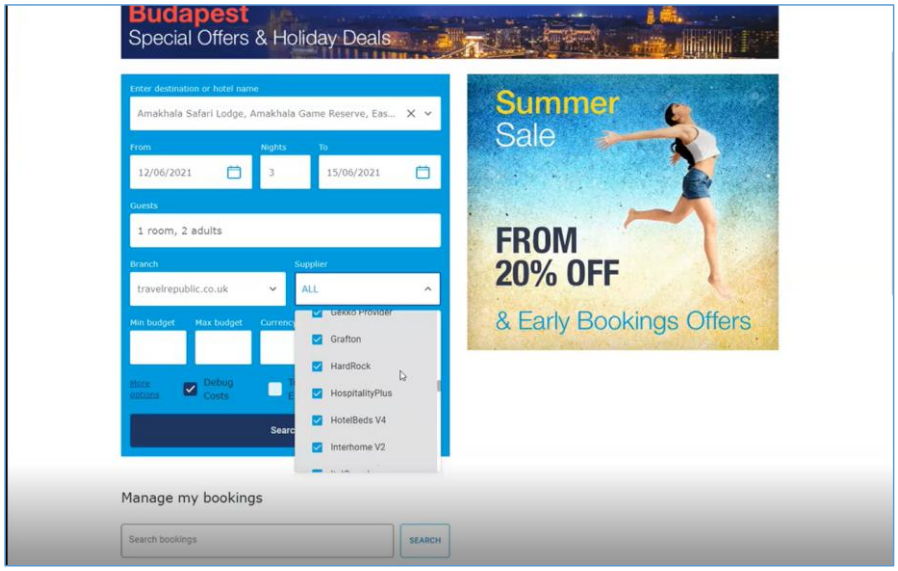
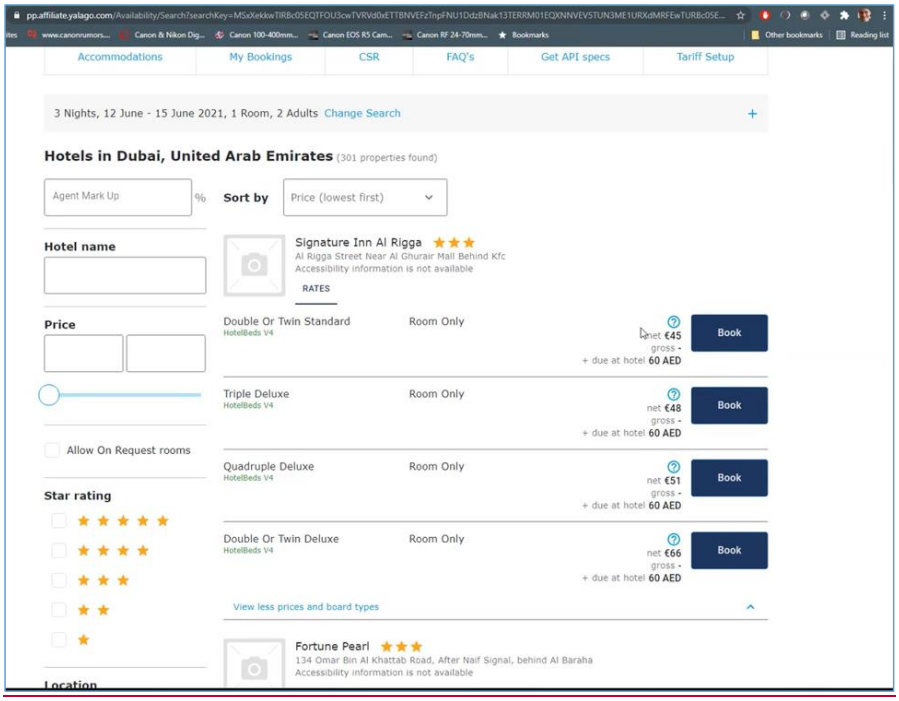



yalago
ncomben
Accommodations
My Bookings
CSR
FAQ's
Get API specs
Tariff Setup
Budapest
Special Offers & Holiday Deals
Enter destination or hotel name
Amakhala Safari Lodge, Amakhala Game Reserve, Eas...
From
12/06/2021
Nights
3
To
15/06/2021
Guests
1 room, 2 adults
Branch
travelrepublic.co.uk
Supplier
ALL
Gekko Group
Gold Medal
Gold Medal Bahrain
Gold Medal Oman
Trace Enabled
Package rates
Summer
Sale
FROM
20% OFF
& Early Bookings Offers


Budapest
Special Offers & Holiday Deals
Enter destination or hotel name
Amakhala Safari Lodge, Amakhala Game Reserve, Eas...
From
12/06/2021
Nights
3
To
15/06/2021
Guests
1 room, 2 adults
Branch
travelrepublic.co.uk
Supplier
ALL
Min budget
Max budget
Debug Costs
Grafton
HardRock
HospitalityPlus
HotelBeds V4
Interhome V2
Summer
Sale
FROM
20% OFF
& Early Bookings Offers
Manage my bookings
Search bookings
SEARCH

Based on the search criteria, Yalago API (Hotel Search engine) returns matched hotels/beds from the mapped suppliers.



2.6 Auto completer

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It's a service, which suggests similar kind of data while entering data in input control in screen (eg. select destination, branch, supplier and etc.)

<<More details required>>

2.7 Purple Derwent (Web Portal)

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Purple Derwent is the main bed bank application. It is used by internal users. It holds all the business information related to bookings, customers, suppliers, etc. and is interfaced with other internal and external systems for the purpose of processing the bookings.

This portal is used to configure the mapping between Branch/domain and supplier. Based on the contract/agreement these mapping can be done from the dnata backend team.

Destination Supplier Mapping

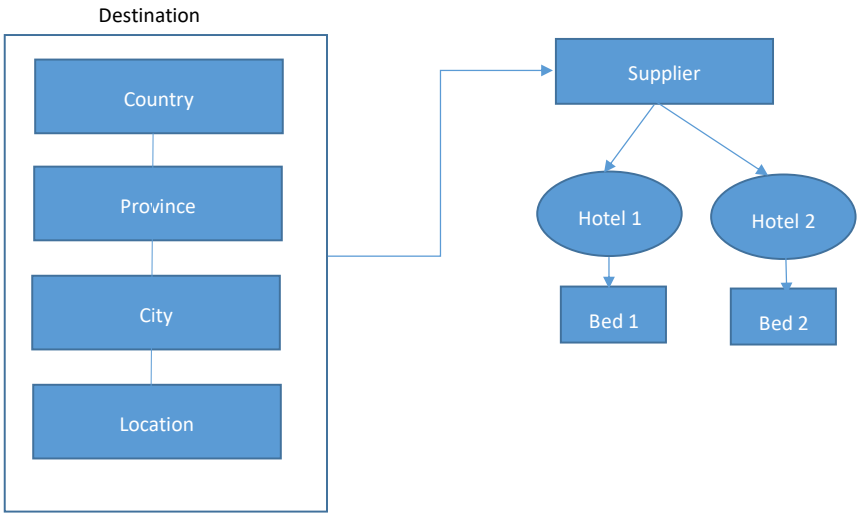

Diagram 7

- There is a relationship between destination, domain and supplier for clients.
- Destination connects with suppliers and supplier connects with clients.
- A client is just an account which has multiple domains called ~~as~~ branch.
- There is a supplier establishment ID which provide by the supplier, ~~w~~and establishment id provided by the dnata for the same. ~~s~~

- Based on the supplier and dnata contracts/agreements these mappings can be done from purple Derwent.

- Dnata back office user can restrict any supplier for any branch depending on the contract ~~done~~ between them.
- Supplier is an account and Pprovider is part of the Ssupplier. Supplier is the logical and Pprovider is the physical connection.

- Providers are the code bases which are mapped ~~with~~to multiple supplier.
~~Supplier is an account and provider is part of the supplier. Supplier is logical and provider is physical.~~
- Most of the time Yalago API shows direct contract hotels. So that they can sell more associated beds. But direct contract doesn't cover the whole world so ~~so thus~~ Yalago API includes supplier based beds result. Dnata always prefers direct contract so that they can get more commission/benefit.
- Dnata gets commission from supplier and similarly dnata gives commission to clients. These are business contract relationships between dnata and supplier.
- There are two type of commission rates.
    - Gross rates: Supplier specify gross rate on bed rates to yalogo/dnata and in this rate supplier offer commissions to yalogo/dnata (eg. Suppose supplier gives one hotel to the dnata @ $150. Then he gives commission of 10% to dnata).
      Commission is already added in gross rates.
    - Net Rates: In other option supplier specify the net rate on which they offer hotel to the dnata. Dnata can sell that hotel on any price on their portal above that net rate.
      Commission rate is already fixed basis on contract in Net Rats.
      <<More details required>>
- There are some restrictions, some clients might not have access ~~of~~to all the suppliers i.e (If a supplier has~~ve~~ no beds on selected geo area then ~~,~~Client would not have that supplier access, which is maintained by the backend office).
- Yalago is responsible for Accommodation, Bookings, CSR, API specs.
- Establishment refer for hotels in purple Derwent.

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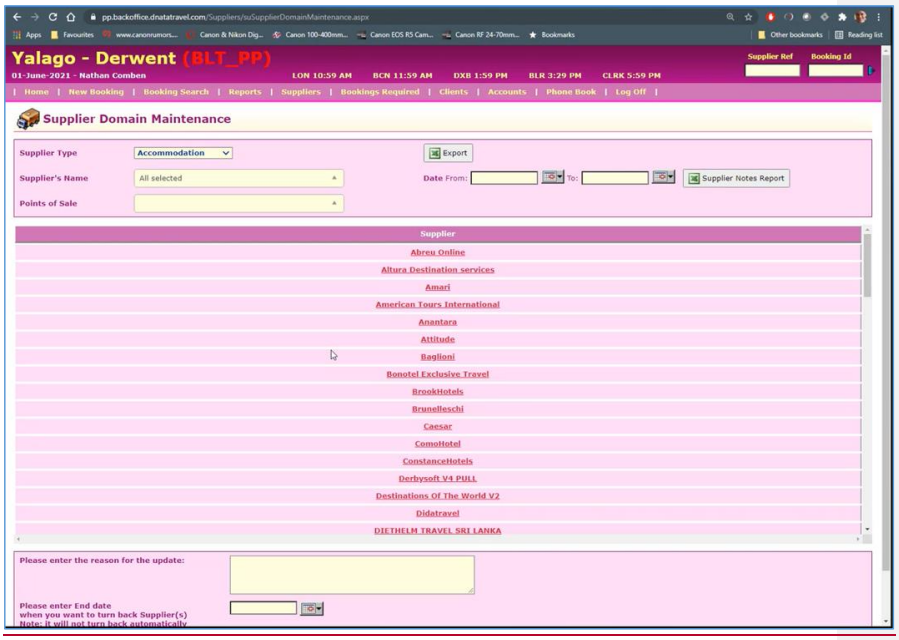
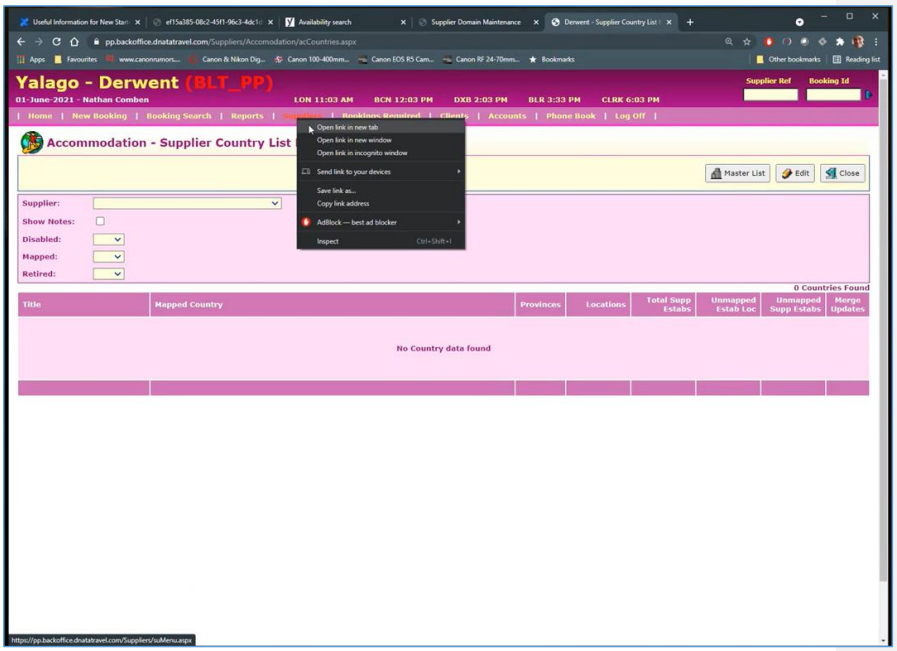
Domain/supplier relationship mapping can be configured from below screen.



Below screen will navigate to manage supplier option:



Below screen refers ~~for~~ Dnata back office team dashboard. User can select supplier from below screen for mapping configuration.

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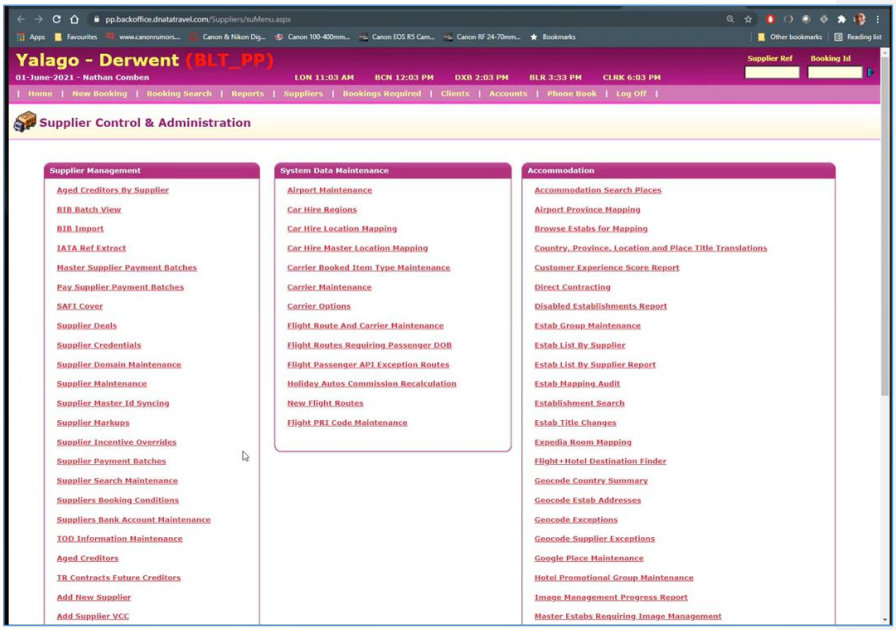
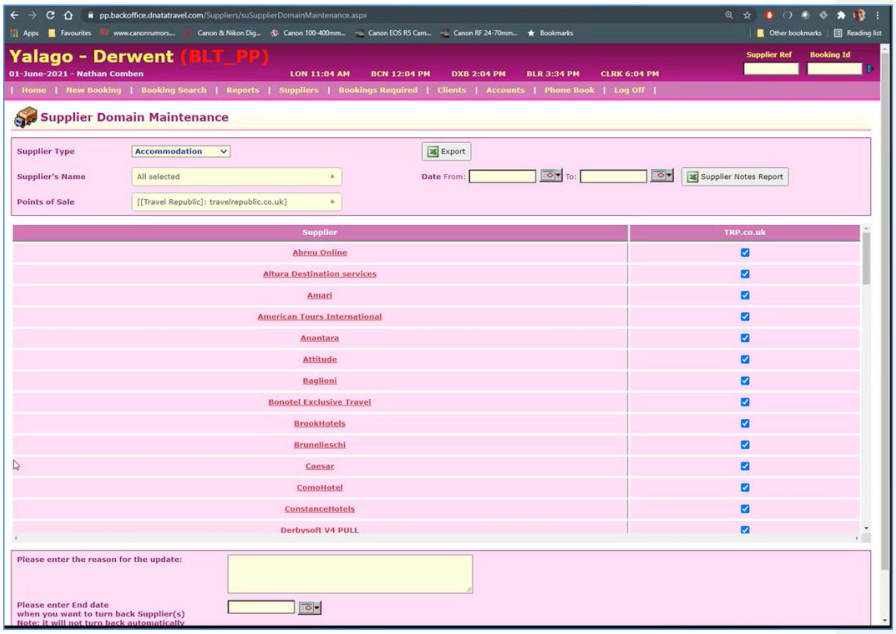
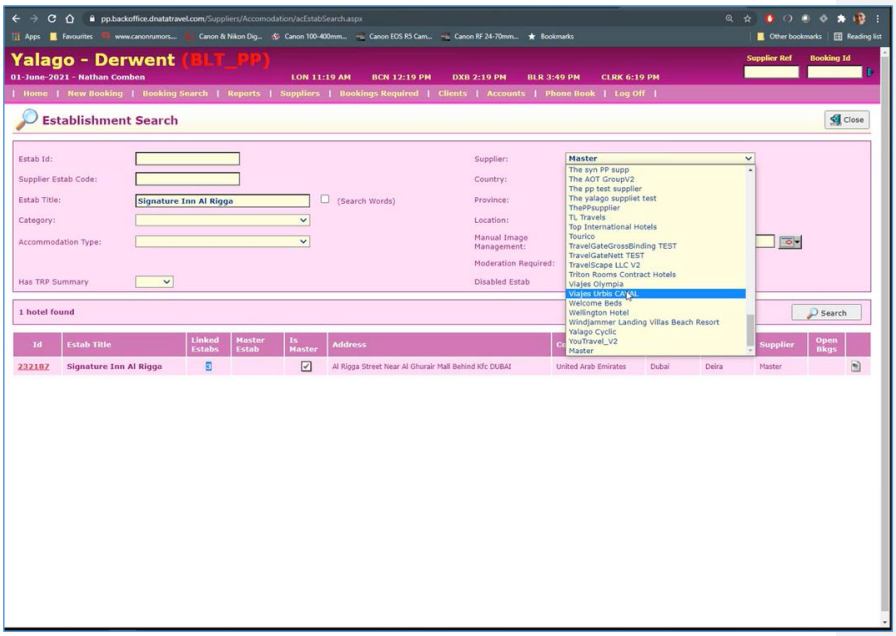
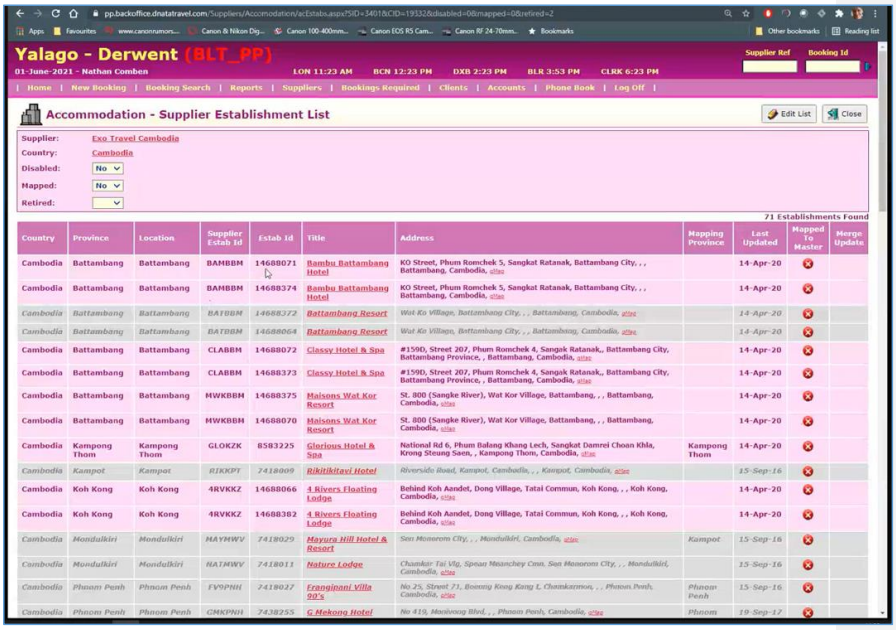


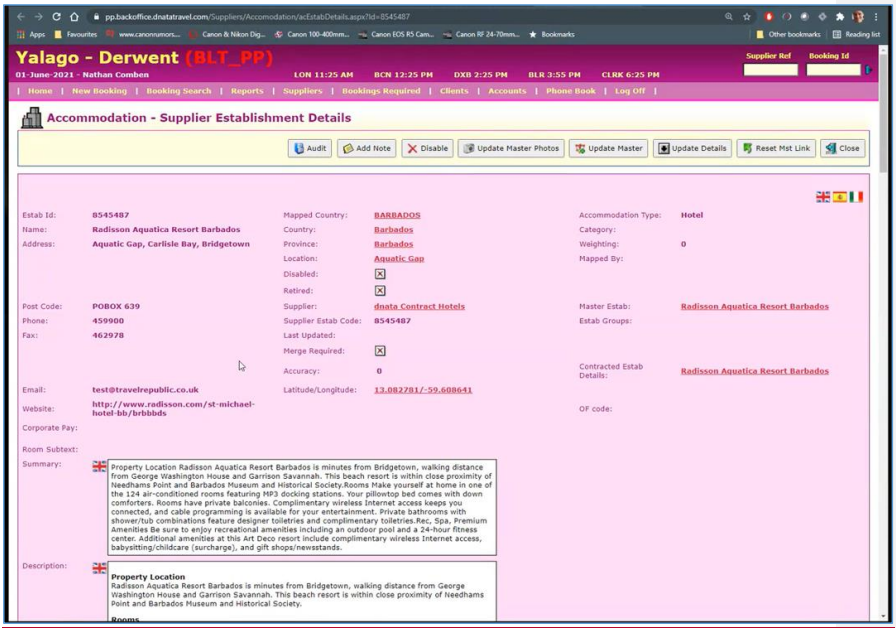

pp.backoffice.dnatatravel.com/Suppliers/suSupplierDomainMaintenance.aspx
Yalago - Derwent (BLT_PP)
01-June-2021 - Nathan Comben
LON 11:04 AM BCN 12:04 PM DXB 2:04 PM BLR 3:34 PM CLRK 6:04 PM
Supplier Ref
Booking Id
Home | New Booking | Booking Search | Reports | Suppliers | Bookings Required | Clients | Accounts | Phone Book | Log Off
Supplier Domain Maintenance
Supplier Type
Accommodation
Export
Supplier's Name
All selected
Date From:
To:
Supplier Notes Report
Points of Sale
[[Travel Republic]: travelrepublic.co.uk]
Supplier
TRP.co.uk
Abreu Online
Altura Destination services
Amari
American Tours International
Anantara
Attitude
Baglioni
Bonotel Exclusive Travel
BrookHotels
Brunelleschi
Caesar
ComoHotel
ConstanceHotels
Derbysoft V4 PULL
Please enter the reason for the update:
Please enter End date
when you want to turn back Supplier(s)
Note: It will not turn back automatically


pp.backoffice.dnatatravel.com/Suppliers/Accomodation/acEstabSearch.aspx
Yalago - Derwent (BLT_PP)
01-June-2021 - Nathan Comben
LON 11:19 AM BCN 12:19 PM DXB 2:19 PM BLR 3:49 PM CLRK 6:19 PM
Supplier Ref
Booking Id
Home | New Booking | Booking Search | Reports | Suppliers | Bookings Required | Clients | Accounts | Phone Book | Log Off
Establishment Search
Close
Estab Id:
Supplier Estab Code:
Estab Title:
Signature Inn Al Rigga
(Search Words)
Category:
Accommodation Type:
Has TRP Summary
Supplier:
Master
Country:
Province:
Location:
Manual Image Management:
Moderation Required:
Disabled Estab
The syn PP supp
The AOT GroupV2
The pp test supplier
The yalago suppliet test
ThePPsupplier
TL Travels
Top International Hotels
Tourico
TravelGateGrossBinding TEST
TravelGateNett TEST
TravelScape LLC V2
Triton Rooms Contract Hotels
Viajes Olympia
Viajes Urbis CANX
Welcome Beds
Wellington Hotel
Windjammer Landing Villas Beach Resort
Yalago Cyclic
YouTravel_V2
Master
1 hotel found
Search
Id
Estab Title
Linked Estabs
Master Estab
Is Master
Address
Supplier
Open Bkgs
232187
Signature Inn Al Rigga
Al Rigga Street Near Al Ghurair Mall Behind kfc DUBAI
United Arab Emirates
Dubai
Deira
Master

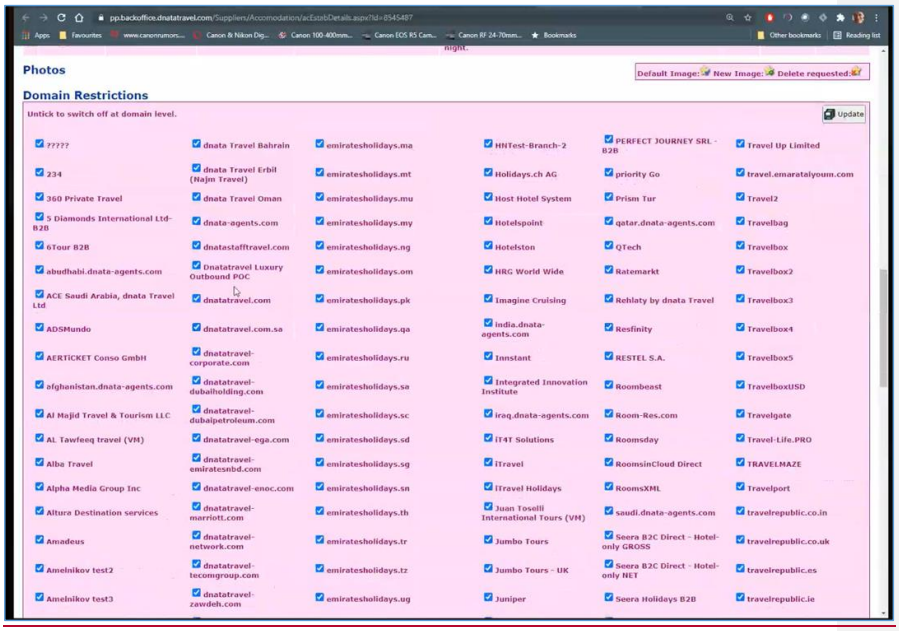
In this screen, User can filter any supplier establishment. This list contains all of the address of the selected supplier. Green list means live property and red list means property is retired.

<<More details required>>

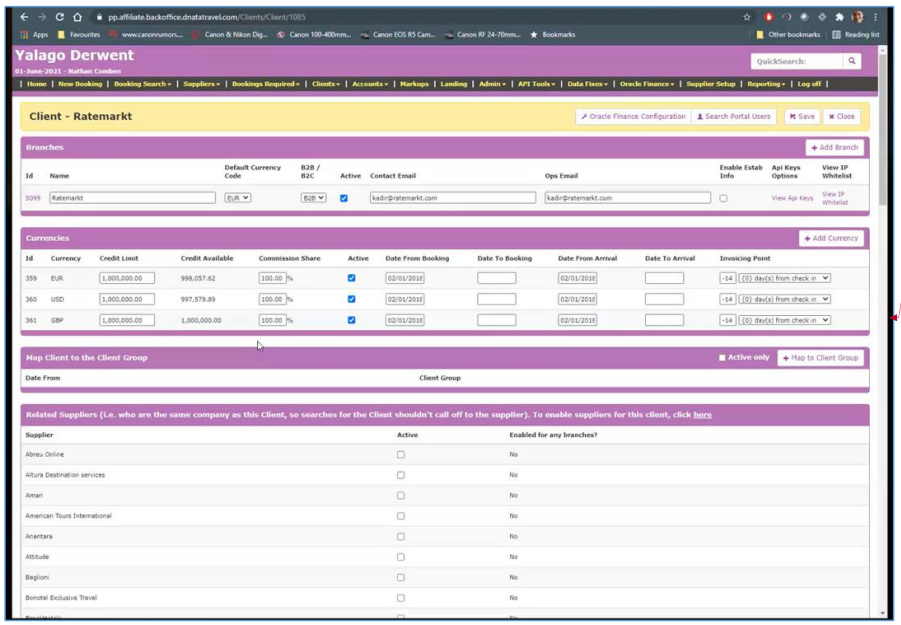




This screen contains all the domain/branch associated with the supplier. User can restrict any domain for selected supplier.



Ratemarket is a client who ~~have~~has access of below supplier hotel/beds.



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2.9 Green Derwent

All the agreement/contracts between hotel and dnata are managed in this portal by dnata backend user. Hotel Content/Images are also managed from this portal.

<<More details required>>

2.10 Contracting service

<<More details required>>

2.11 Dnata Contracts

dnata contracts are the contracts where inventory is loaded in Derwent.

<<More details required>>

2.12 Dnata Extranets

Extranet contracts are the contracts where inventory is managed by supplier through a dedicated portal.

<<More details required>>

2.13 Hotel Extranet

<<More details required>>

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~~2.2~~2.14 Processing Description

Describe in application terms how the processing is carried out

~~2.3~~2.15 Users of System

<This section should list the departments using the system, the approximate number of users and where they are based (e.g. 100 LDC call operators at Sheffield Call centre, 4 administrators at each of 16 LDCs). It should also list key expert users by name with detail on their expertise e.g. John Smith – the main administrator for the system, who understands its functionality very well indeed.>

<e.g.>

Business Unit	No. of User	Criticality	User Location
US	10	High	California
Canada	5	Med	Canada
American Customer Care	33	Low	US Call Centers (PA & Philippines)
People Support & Resolve	43	Med	RDC Call Centers (Canada & Philippines)

~~2.4~~2.16 Hours of Operations and Usage

<When are the hours that this system is operated and what is the timetable of use. For example, the system may be operated 24/7, with the online business day of 7am to 7pm Monday to Friday and with batch jobs running from 7pm weekdays and at weekends.>

Support Location	Support Hours		Emergency Support Mode
	Weekdays(Mon-Fri)	Weekends(Sat-Sun)	
US	Mon-Fri	8am - 11pm EST	On Call
India	Mon-Fri	9am - 6pm IST	On Call

~~2.5~~2.17 Criticality of the System

<This section defines the criticality of the system to the Business. Is it defined as Mission Critical or Business Critical? >

~~2.6~~2.18 Implications if the System is not available

<This explains the impact on the business if this system is not available.>

Business Units Impacted	Remarks

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3 Application Architecture

CSG system has built in multiple parts unlike limited to single application. Hotel booking engine is one of the prominent parts of CSG system and play very vital role to book hotel. It receives the data receive the data from multiple sources and provide input to Hotel Providers then after hotel provider send back the available inventories to Hotel Booking Engine.

Below are application/API which provide data to Hotel Search Engine to room from available inventory of Hotel's Providers.

- Yalago Auto Booker
- Yalago API
- Affiliate Extranet
- Purple Derwent

Below are applications (providers) which receive data form Hotel Search Engine to return available inventory.

- Bonotel
- Melia
- Jumeirah

~~Provide a high level overview of the application architecture, including key application interfaces and key processing elements of the application eg batch, online, real-time~~

~~Describe as relevant~~

- ~~outline system specification/requirements~~
- ~~applications system structure~~
- ~~system flow chart(s)~~
- ~~functionality for key/critical modules~~
- ~~system limitations~~
- ~~system location~~

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3.1 Deployment - Physical Data Model

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Describe as relevant

- physical data models
- data structures/tables & definitions
- database/files & limitations
- transaction/data volumes
- capacity planning predictions
- reference data
- parameters, flags
- business ownership of data items
- data management requirements, including BAU data adjusts
- data manipulation tools

3.2 Data Flow

3.3 Programs

Describe as relevant

- Program documentation – focus on critical, complex, volatile areas
- Online applications
- Batch processing
- Data extracts
- Interfaces, inputs & outputs
- Cross-reference of jobs, programs, files/data, screens, reports for ease of reference & impact analysis

3.4 Online Screens

Describe as relevant

- Screen layouts
- Validation
- Security
- Transaction response times

3.5 Reports

Describe as relevant

- Report layouts
- Key reports, including deadlines
- Ad-hoc reports

3.6 Interfaces

Describe as relevant key application interfaces eg timings, type, dependencies, interface definition (layouts). Identify any interfaces between this system and other systems and define the type and frequency of any transactions over these interfaces. Indicate any inter-dependencies with other systems and, where possible the effect on this and other systems of any failure of these interfaces

3.6.1 External Interfaces (to 3rd Parties)

3.6.2 Internal Interfaces

3.7 Common Components and Frameworks

Identify any common software components used, particularly those that are currently mandated for use i.e. Reference Service, Logging Service, Exception Management and Security Service.

3.8 Third Party Components

If used, identify any 3rd party software components.

4 Physical (Deployment) Architecture

4.1 Software used - Versions and Licenses

4.2 Infrastructure Architecture Overview

This section should contain an overview of the infrastructure that the system requires to operate. It should outline how the system being designed utilises the infrastructure, such as which software components for the systems will be deployed on which hardware components.

4.3 Application URL and Namespaces

Where an application has its own URL this section must specify the URL to be used in the live environment.

4.4 Infrastructure Architecture Configuration

This section should contain a Network Topology Diagram detailing the various physical or logical arrangements of the infrastructure. It should include elements such as firewalls, routers, bridges, hubs, Internet Servers, Database Servers, Middle Tier Component Servers, Application Servers, Storage Devices and Backup Devices, which together form the underpinning infrastructure for the systems.

5 Technical Environments

5.1 Operational/Production Environments

Listing below major technology used in CGS System.

- Dot Net Framework 4.7.2
- C#
- VB.NET
- Dot Net Standard 2.0
- Dot Net Core 3.1
- Web Forms ASP.Net
- jQuery
- Angular 2
- JavaScript
- React
- Rabbit MQ
- Redis
- SQL Server
- Scheduling systems
- Microsoft Reporting Services
- AmazonS3
- ~~5.1~~ Azure App Service

Inventory of environments used & who owns them. Provide a high-level overview of the technical architecture eg hardware & location, operating system, platforms and programming languages

5.2 Test Environments

Include testing strategy, data/beds, scripts, and tools for unit/link/system/integration/regression.

Include instructions on

- Requesting use of a test environment
- moving code between environments, or changing code in an environment to a new baseline
- recording and controlling which project has use of which environment in which timeframe
- resolving conflicts when there are more projects requiring an environment than there are environments available
- recovering test environments from an archive, protecting them from being archived, or reconstructing environments if they cannot be successfully recovered from archive.

Name the NIIT individual who is the owner of each environment, when responsibility lies with NIIT.

When responsibility for the environment is with Client or a Third Party, name the owner organisation and the NIIT individual who is responsible for requesting use of, and specifying who can have access to, the environment.

Where there is no test environment, document reasons why, and any agreements with the client which protect the service despite the lack of a test environment.

What differences between production and (development/ test) environments exist; what risks have been identified and what impact would they have.

5.3 Development Environments

Inventory of development environments used.

5.4 Tools and Techniques

Consider information useful to new starters, such as how to change code, compile, extract data from a file, recreate corrupt data, run a job using live data, data loads, backups, restores etc.

5.5 Routine Maintenance, Monitoring & Housekeeping

Describe any activities NIIT (or other service providers) responsible eg daily/weekly checks or monitoring of batch jobs, data including

- Activity
- Frequency &
- Limits/checks required within activity
- Role/team responsible for undertaking activity
- Escalation – roles & timescales
- Effort required
- Logs used to evidence monitoring & access

6 Development & Testing

6.1 Overview

Function	Name	IP Address	Location
Development Server			
Deployment Server			
Staging Web Server			
Staging Database Server			
Live Web Server			
Live Database Server			

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6.2 Source Code Libraries

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6.3 Code Release Procedures

We will follow the same code release procedure as we do for other Internet applicartions. For reference please follow Intranet release process on WIKI

6.4 Testing procedures

7 Configuration & Release Procedure

7.1 Configuration Management Plan/Manager

Refer to relevant Service Configuration Management Plan or to relevant local Configuration Management Plan.

If there is no local Configuration Management Plan, document local variations to the Plan in the areas of:-

- Baselining
- Access Control
- Status Accounting and Reporting
- Housekeeping and Archiving
- Use of tools other than Endevor for mainframe code, and Perforce for all other configurable items (CIs)
- Which non-code items are treated as CIs.

Identify relevant configuration manager and any local configuration role/responsibilities

7.2 Configuration Items and Naming Conventions

If there is no local Configuration Management Plan:-

- List all types of code CIs used by the application, with reference to where each is held on the Configuration Management System.
- Define any naming conventions specific to this application any in addition to the NIIT Document Naming and Version Standards, including environments, software, data and libraries.
- Where NIIT has custodial authority only of Third Party code, and where this is only supplied as object code on disks or other magnetic media, detail the location where this material is safely stored.

7.3 Configuration Details

Reference/link to Configuration form (as controlled & managed by the Environments' Management team) for this application

7.4 Release Management

Detail any release build and deployment instructions, scripts or notes specific to this application.

8 Deployment Procedures

8.1 Steps

8.2 Special Instructions

9 Application Support & Maintenance Processes & Procedures

This section should consider application and infrastructure aspects required to enable effective and timely support of the solution by the NIIT application support team. This section is where the NIIT support team need to document the access they require to effectively support the application once it is installed in the live environment. It is then used by Fujitsu to determine the configuration of the NIIT support accounts to provide the support access requested here. This section is generally completed immediately prior to deploying a new application into the live environment, however where the application is being installed on shared infrastructure that already exists this section should be completed sufficiently in advance of that deployment to allow Fujitsu to review and configure the support accounts in advance.

List the processes which will need to be elaborated in the maintenance manuals

Refer to the SMP for service levels etc.

Refer also to the policies

9.1 Support Users and Groups & Access Required

Detail any special access users or Active Directory groupings required.

Specific Server Support Requirements

For each server…

General Management Tools	Required	Details
Computer Management		
Component Services		
Event Viewer		
Performance Monitor		

Internet Services Manager	Req	Details
Web Sites		list all with access requirements
Virtual Directories		
FTP		
Restart		

File System access	Req	Details
Disk Folders	Y/N	

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Shares	Y/N	

Other System Access	Req	Details
Registry Keys	Y/N	Identify all we need to insert/edit with values
System Services	Y/N	Identify all we may need to stop/start
Database Connections	Y/N	Identify with type (Oracle/SQL), db name, username, password, etc.

Applications	Req	Details
Databases e.g. SQL Server	Y/N	Identify all databases we need with access requirements

9.2 Operations Calendar (Daily, Weekly, Monthly, Quarterly, Annual, Adhoc Activities)

9.3 User Management

Description of how various types of users work with this application

9.3.1 Application Users

9.3.2 Technical Users (IT & Support Staff)

9.4 Purging & Archiving of Data

How growing data and log files are to be handled

9.4.1 Log Files

9.4.2 Data Files

9.5 Job Scheduling & Tools

<Mention job names, purpose, frequency>

< This section describes job support and details the tools used to support the system>

<There are no externally scheduled jobs for this system>

<Tool 1

<define the objective of the tool and explain what information the tool provides>

provide licensing information on the tool, if relevant

Provide vendor information if applicable

Provide login information to the tools, if required, and details of how to use the tools.

Tool 2>

9.6 Backup and Recovery Procedures

9.6.1 Backup Schedule

<If the system is restarted how should any lost data recovered, if applicable >

9.7 Outage of Application

9.7.1 Organisation & Checklist for a Planned Outage

9.7.2 Impact of Shutdown of This Application

9.7.3 Impact of Shutdown of Interfacing System to this Application

9.8 Common/Known Problems and Solutions

Describe any common or known problems (including the Problem Record ref number for the corresponding raised/outstanding PIR logged with Problem Management) with known workaround instructions or any hints and tips for handling incidents/problems.

9.9 Known Limitations

9.9.1 Known Functional Limitations

9.9.2 Known Technical Limitations

9.9.3 Known Capacity / Availability Related Limitations

9.10 Application Support Processes

9.10.1 Incident Management

Details required only if not covered in Service Management Plan or elsewhere

9.10.2 Problem Management

Details required only if not covered in Service Management Plan or elsewhere

9.10.3 Configuration Management

Details required only if not covered in Service Management Plan or elsewhere

9.10.4 Change Management

Details required only if not covered in Service Management Plan or elsewhere

9.11 Shift Handover Process

<If shifts do not exist, then use

The system is supported during UK business hours. There is only one team supporting the system. Beyond UK business hours, on call support will be provided for P1 incidents. >

- <If shifts exist, then use
- <Document shift timings>
- Outgoing team lead will provide updates to incoming team on
- Current status of active incidents. (Irrespective of shift change, team currently handling P1s will resolve them)
- The day's Incident handling strategies
- Incident volumes
- Details of interfacing communications with stakeholders – service desk, development team, business users, CEMC, MIM teams >

10 IT Service Continuity

Identify any security, back-up and/or recovery arrangements and responsibilities specific to this application.

- Who and how evoked
- Targets for recovery of service
- BCP running targets (availability)
- Full flow processes for recovery of each piece or architecture
- Each part of the process, and the overall BCP process, should have an owner (team)
- It should show how the process is co-ordinated (i.e. Client Project manager?)
- Who manages the test schedule and what is it.
- Who owns the backup strategy and how is it implemented and audited (Tape, XRC,)
- Who owns the BCP risk process and have risks been raised and are they audited.

11 System Documentation

Include reference to any coding standards, technical guidelines/manuals, work instructions, checklists, tool guides (eg ServiceCenter, Redbox) - including reference/link to location of this documentation.

Show as much path as possible rather than 'hidden' path within text of document name only.

These items should all be in the CI index for this application, or else in the CI index for a related area (ie a Technology-wide area)

Document name	Document purpose	Version (if not part of doc name)	Location (or, if confidential, person/ team/ mailbox via whom access can be obtained)

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12 References

Table below should contain information related to following areas:

- Reference document
- Client specific document
- Documents from a related application

Document Name	Description	Location	Version