

API Kick-off Meeting

[Tutu Travel Limited]

Tutu Travel AQC App

API Consulting Services
[02/03/2022]

AGENDA

01



INTRODUCTION

Who we are, who you are

02



PROJECT SCOPE

What is your need

03



PRODUCT PRESENTATION

Overview of the flows to be integrated

04



IMPLEMENTATION

The steps to reach our goal

05



API DEVELOPERS' PORTAL

Understanding where to find the knowledge



1. Introduction



Stakeholders

API consultant
Amadeus

Delivery Segment
Amadeus

Account Manager
Amadeus

Lead developer
Customer

Project manager
Customer

Name:
Gladys Santos

Role:
_Guidelines & Recommendations
_Manage SAP creation & modification
_Guidance during integration phase.

Name:
Adebukola Adekeye

Role:
_Ensure delivery of project in agreed scope & time frame to the level of customer requirement.

Name:
Ayodapo Adigun

Role:
_Commercial liaison.

Name:
Pei Xutong

Role:
_Develop application as per agreed scope.
_Share development plan.
_Review documentation provided by Amadeus.

Name:
Zhang Qianfeng

Role:
_Ensure delivery of project in agreed scope & time frame.
_Ensure good communication with API consultant on project.

2. Project scope



Project Scope

Application Name	Tutu Travel AQC
Application Type	Public website
End User	B2C
Header Version (SOAP only)	N/A
Development Platform (SOAP only)	N/A
Key Functionalities	<ul style="list-style-type: none"> • AQC air booking • Search and book Ancillary services – Bags and Seats • PNR cancelation • Show the fare rules using Amadeus MiniRules product • Complex Itinerary • Search by FBA (Free Baggage Allowance) (to be able to search recommendations with free luggage included) • One-way combinable fares • Retrieve the list of PNRs in a queue • Delay Queuing, Error Queuing and Immediate Queuing (for definitions please refer to Amadeus Web Services Questionnaire) • Get Flight Order By Record Locator
Office ID(s)	LOSN828UU
SAP Name	1ASIUTCH7UUTUT



3. Product Presentation





Modules and Project Scope

Amadeus Quick Connect

Amadeus Quick-Connect is a set of APIs based on REST/JSON and accessible via Ama4Dev portal that allows to book flights and ancillaries.

Amadeus Quick-Connect has been created to reduce time-to-market for a customer application

Amadeus Quick-Connect offers:

- Simple and customizable end-to-end flow
- Easy Implementation
- Multi-content : Full-Service Carrier (FSC), Light Ticketing Carriers (LTC), Python and Extended Air Choice (EAC).



Amadeus Quick-Connect

REST JSON API

Prime
Booking Flow

Flight Offers Search
Flight Offers Price
Flight Orders Create

Order
Management

Flight Get Order
Flight Delete
Flight Patch

get access to

Air Content
(FSC, LCC)

Admin UI for
Customization (Configuration
Questionnaire)

Services

Dedicated
implementation
consultancy

Modules and Project Scope

Flight Offer Search - cheap & relevant flight availabilities and fares

API

Request

- _ Traveler type (adult, child...)
- _ Fare types (public, negotiated, IT fares)
- _ One-way combinable
- _ Open Jaws for Full-Service Carriers only
- _ Cabin restriction
- _ Excluded/included carriers
- _ GDS/Low Cost Carriers (LCC)
- _ Get a calendar view
- _ Baggage allowance and chargeable bags
- _ Fare Families
- _ Max number of connections

For a full list of option check the swagger specs*

Response

- _ Fare per passenger
- _ Last ticketing date
- _ Flight duration
- _ Segment details: airport codes, terminal (FSC only), marketing/operating carrier, number of stops
- _ Baggage allowance, included checked bags
- _ 1st additional check bags can be sent in search response if applicable.
- _ Cabin class

- _ Do you have negotiated, corporate or IIT Fares? Not yet, We are working on it.
- _ Are you interested in One-Way combinables? Yes
- _ Are you interested in complex itineraries? Yes
- _ Are we including Pyton, EAC and LTC content? No

Modules

Flight Offers Price - confirm price and get details

Request

- _ Flight Offer
(Reuse object from Flight Offers Search response available)
- _ Payment method
- _ Traveler information
- _ Informative best pricing
- _ Parameter to request additional bags

Response

- _ Type of fare
- _ Taxes in detail
- _ Fees if applicable
- _ Payment requirements
- _ Booking requirements

- _ Are you including chargeable bags? yes
- _ The Flow requires an additional Price call than the prime Booking Flow:
 - Flight offers Search
 - Flight Offers Price – triggers the catalogue and confirms the chargeable bags price
 - Flight Offers Price – request the chargeable bags
 - Flight Orders Create

Modules and Project Scope

Baggage – Chargeable checked bags

Flight Offers **Search**

- Free bag allowance: parameter in search to get only fares including free bags.
- Additional Bags to get price for 1st additional bag



Flight Offers **Price**

- Parameter to add in the price request
- Depending on the carrier, you can also request a 2nd or 3rd extra bag at the price step
- Chargeable baggage options offered by carrier are returned in the “included” object



Flight Offers **Price**

- Request should include the chargeable bags selected by traveller
- “grandTotal” needs to be manually updated to include the chargeable bags fees
- Response will confirm fare, taxes,, fees and bags.



Flight **Create** Orders

- Creation of PNR with chargeable bags.



Modules and Project Scope

Clarification

Set to true in questionnaire – are you sure about this choice?

After clarification, Tutu Travel approved for the value to be changed to false. Update is done in Amadeus system.

Travel preferences		
<input type="checkbox"/>	Return Fares Including Checked Bags Only	Makes the system return recommendations with at least one bag included in the fare ; <i>Pre req : OID configuration</i>
<input type="checkbox"/>	Return Chargeable Checked Bags Price	Determines whether the price of the first additional bag should be returned at search ; <i>Pre req : OID configuration</i>
<input type="checkbox"/>	Return Branded Fares	Returns the Airline Fare families names in LowFareSearch reponse ; <i>Pre req : OID configuration</i>
<input type="checkbox"/>	Return Mini-Rules	Chargeable: Returns the Amadeus Mini-Rules for eligible offers (possibility of refund, exchange, revalidation and their penalties); <i>Pre req : OID configuration</i>

Modules and Project Scope

API

Flight Create Order - perform a flight booking including ancillaries
Pay & Issue in 1 unique step!

Request

- _ Book regular carriers
- _ Book Low Cost Carriers (LCC)
- _ Book Ancillary Services
- _ Book & Pay (Virtual Card)
- _ Traveler information
- _ Payment information
- _ Remarks
- _ Queue place
- _ Documents (passport, ID, visa...)
- _ Travel agency contact information

Response

- _ Order ID
- _ Recloc ID (PNR)
- _ Flight Order with all elements booked/stored in the order
- _ Ticket number (FSC only)

- Which ticketing solution you would like to implement?
Non of them. Ticketing will be done offline.
 - After order creation – Standalone
 - At order creation time – Immediate

Modules and Project Scope

Issuance – out of scope



1. At order creation time -
Immediate

POST

/booking/flight-orders?issue=true

2. After order creation -
Standalone

POST

/booking/flight-orders/{{book_id}}/issuance

Sample
Get Order
response:

```
"tickets": [
  {
    "documentType": "ETICKET",
    "documentNumber": "057-3322491266",
    "documentStatus": "ISSUED",
    "travelerId": "1",
    "segmentIds": [
      "1",
      "2"
    ]
  },
  {
    "documentType": "EMD",
    "documentNumber": "057-1858808477",
    "documentStatus": "ISSUED",
    "travelerId": "1",
    "segmentIds": [
      "1"
    ]
  }
]
```

Scope:

Are you interested in developing this option?



Modules and Project Scope

Flight Order Management - manage your existing booking record



1. Get your order information

GET

/booking/flight-orders/{flight-ordered}

An OrderID is a unique identifier of QuickConnect Orders

2. Cancel order if not issued

DELETE

/booking/flight-orders/{flight-ordered}

3. Add a seat after booking / Add travelers documents

PATCH

/booking/flight-orders/{flight-ordered}

Sample Get Order response:

```
{
  "data": {
    "type": "flight-order",
    "id": "<<orderId>>",
    "queuingOfficeId": "<<OID>>",
    "associatedRecords": [
      {
        "reference": "<<PNR_ID>>",
        "originSystemCode": "AF",
        "flightOfferId": "1"
      },
      {
        "reference": "<<PNR_ID>>",
        "creationDate": "2019-07-01T14:26:00",
        "originSystemCode": "GDS",
        "flightOfferId": "1"
      }
    ],
    "flightOffers": [
      { ... }
    ]
  }
}
```

Scope:

Are you interested in developing this service?

Modules and Project Scope

Get Flight Order By Record Locator

API



This API allows you to retrieve your booking information using a Record Locator in parameter

GET

/booking/flight-orders/by-reference?reference={record-locator}&originSystemCode=GDS

**Sample
Get Flight
Order By
Record
Locator
response:**

```
{
  "data": {
    "type": "flight-order",
    "id": "<<orderID>>",
    "queuingOfficeId": "<<OID>>",
    "associatedRecords": [
      {
        "reference": "<<PNR_ID>>",
        "originSystemCode": "AF",
        "flightOfferId": "1"
      },
      {
        "reference": "<<PNR_ID>>",
        "creationDate": "2019-07-01T14:26:00",
        "originSystemCode": "GDS",
        "flightOfferId": "1"
      }
    ],
    "flightOffers": [
      { ... }
    ]
  }
}
```

Scope:

Are you interested in developing this service?



Modules and Project Scope

Flight Availabilities Search



Get “flight-availabilities” containing air availability, schedules and timetable information

POST

/v1/shopping/availability/flight-availabilities

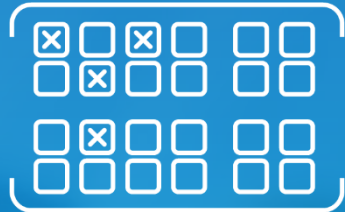
Sample Flight Availabilities Search response:

```
{ "originDestinations": [ {
  "id": 1, "originLocationCode": "PAR",
  "destinationLocationCode": "NYC",
  "departureDateTime": {
    "date": "2021-09-22",
    "time": "10:30:00" } },
  "travelers": [ {
    ...
  },
  "sources": [ "GDS" ],
  "searchCriteria": {
    "excludeAllotments": false,
    "flightFilters": {
      "cabinRestrictions": [ {
        "cabin": "PREMIUM_ECONOMY",
        "originDestinationIds": [ 1 ] },
        "connectionRestriction": {
          "maxNumberOfConnections": 2,
          "airportChangeAllowed": false,
          "technicalStopsAllowed": true } },
        "includeClosedContent": false,
        "class": "A" } }
```

Scope:

Are you interested in developing this service? yes

Use **Seat Map**
plug-in to book your
seats **OR** build your own
UI on top of our API



Seat map display:

GET: to list the seat
map of every flight
in a flight Order

GET
/shopping/seatmaps

POST: to retrieve the
seat map of every
flight in a flight Offer

POST
/shopping/seatmaps

2 different
use cases:

1. Book seat **during
booking flow**
of flight
2. Book seat **after
booking the
flight** from an
existing order
before issuance



Seamless display of all
seat maps proposed by
airlines thanks to the
widget developed by
Amadeus



Providing travelers
free and/or
chargeable seats
at booking time



Customize the
design to fit your
own graphical
charter

Scope - Ancillary Services – Seat reservation API

_ Ancillary services Flow – Seat reservation during PNR Creation

- Flight offers Search
- Seatmap Display by offer
- Flight Offers Price
- Flight Orders Create
- Get

Scope - Ancillary Services – Seat reservation

_ Ancillary services Flow – Seat reservation after PNR Creation

- Get
- Seatmap Display by order
- Patch
- Get



Modules

General Information

- Amadeus Quick Connect generates a unique Ama-Request-ID.
- An Ama-client-ref must be added to each customer flow in order to ease analysis on our side.
- Certification of the application will be done using a Dedicated Access. API Consultant will let you know once this access has been created.
- Application will be moved to production once the certification is completed.

4. Implementation





Project Life Cycle

Kick-Off

- _ Definition of scope details.
- _ Workflow design.
- _ Definition of phases.

3.

2.

Construction (per phase)

- _ Access delivery.
- _ Development of user stories.
- _ Validation.

1.

Transition

- _ Delivery of report.
- _ Delivery of production access.
- _ Transitional Support (option 1).

GO!

Go-Live

- _ Launch of the application in production.
- _ Transitional Support (option 2).
- _ Project closure.

Project duration: 1 month

Assumptions:

Project start: 23 Feb

Project closure: 23 March

Live feedback on scope and timing : development team is ready to start once credentials are shared by Gladys? yes

Implementation



Example of REST Use cases (full list available in the Integration guide (Developers Portal))

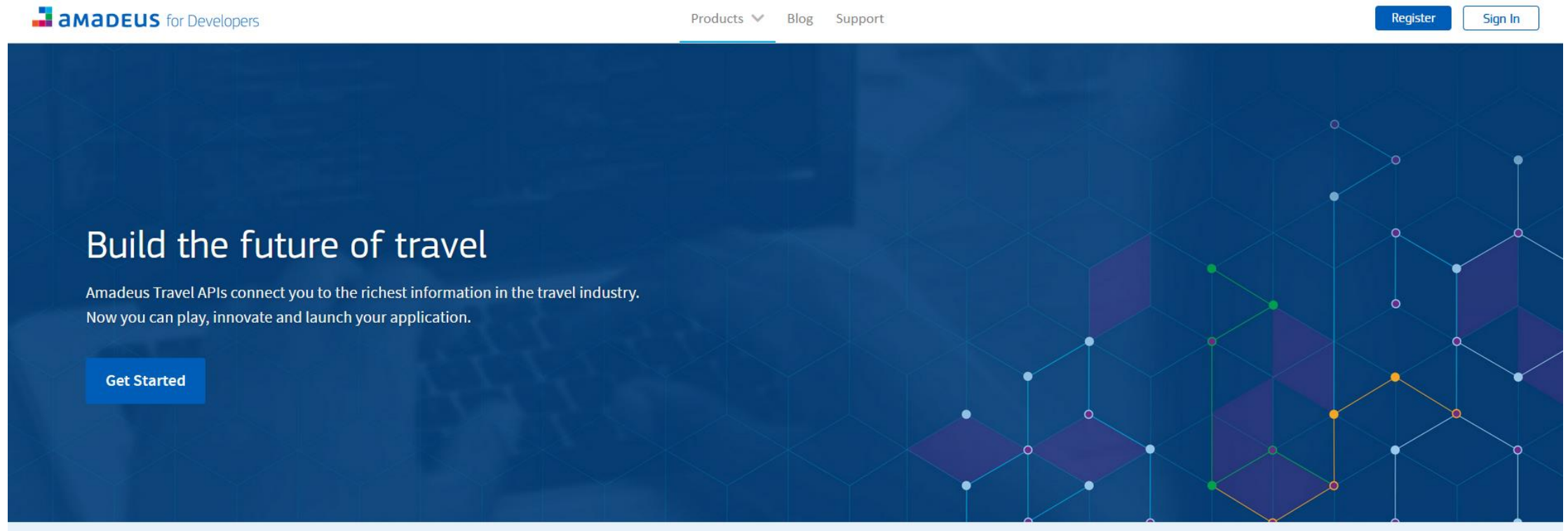
Use Case	Implementation Type/Content Source	Scenario	Ama-Client-Ref	Date	Status
1	Booking flow – Main Full Service Carrier (FSC)	Search, Price and Book FSC content with Published Fares for a family PNR (2ADTs, 1CHD, 1INF)			
2	Booking flow – One-way combinable	Search, Price and Book one-way combinable Fares for 2ADTs			
3	Booking flow – Ancillary Bags (chargeable)	Search, Price and Book FSC with Published Fares for a family PNR (2ADTs, 1CHD, 1INF) including chargeable bags for all qualifying passengers			
4	Booking flow – Ancillary Bags (chargeable)	Search, Price and Book FSC with Published Fares for a family PNR (2ADTs, 1CHD, 1INF) including chargeable bags only for the 2 adults			
5	Booking flow – Ancillary Seats (chargeable)	Search, Price and Book FSC with Published Fares for a family PNR (2ADTs, 1CHD, 1INF) including chargeable seats for all qualifying passengers – during PNR creation			
6	Flight Order Management	Search, Price and Book FSC with Published Fares for a family PNR (2ADTs, 1CHD, 1INF) including chargeable seats for all qualifying passengers – after PNR creation			
7	Flight Order Management	Search, Price, Book, GET, and CANCEL an order id			
8	Flight Order Management	Search, Price, Book, GET, and PATCH an order id – Add remarks			

5. Developers portal





The Amadeus Developer Portal



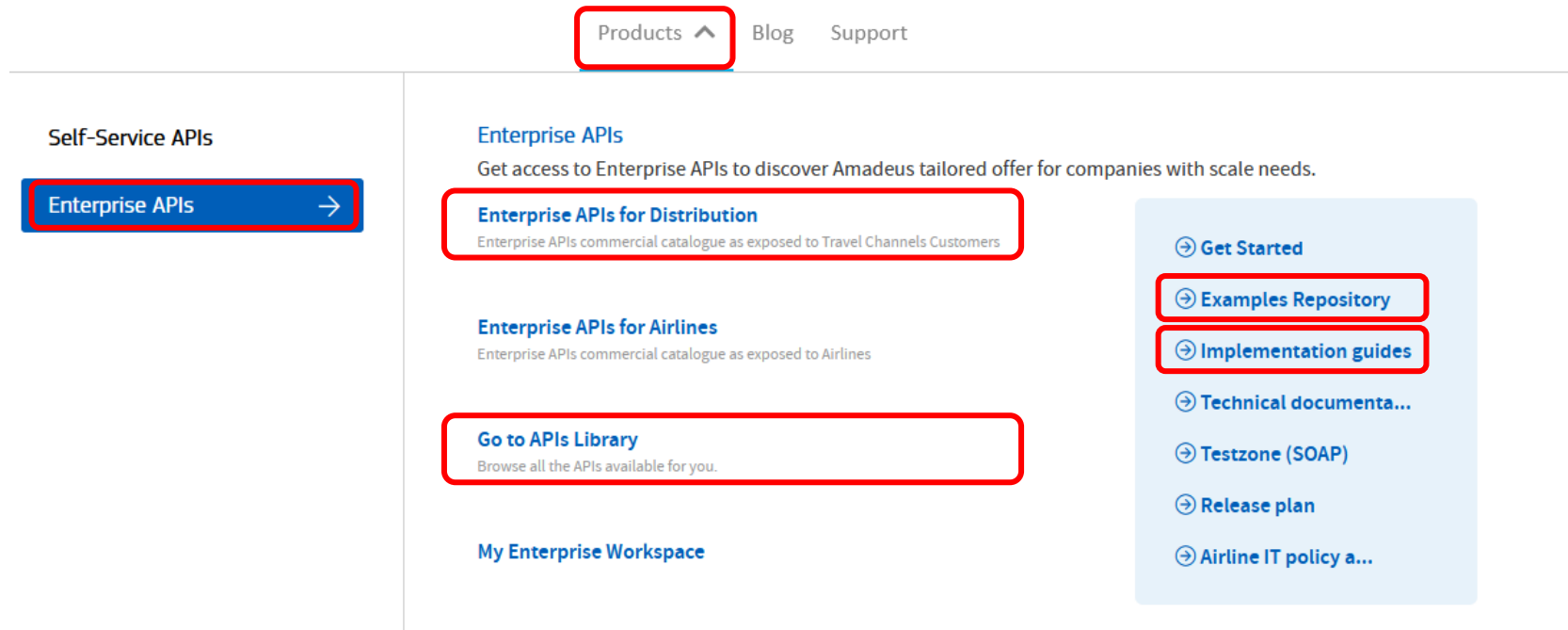
<https://developers.amadeus.com/>

Customized secured access with all relevant information and tools: product news, functional doc, test zone, etc.

The Amadeus Developer Portal

Functional documentation

- User guides & Implementation guides written by the functional experts.
- Examples of XML queries & replies.
- Detail of query & response structure for each web service.





Amadeus Developers Portal

Functional Documentation

[Products](#) [Blog](#) [Support](#)[APIs Library](#)[SOAP APIs](#)[REST APIs](#)[Other APIs](#)[Home](#) / [APIs Library](#) / [REST APIs](#)

REST APIs

Filter by:



API name



Package name



Functional area



Transaction type



Flight Offers Price

Request Response

Flight Offers Search

Request Response

Flight Order Issue

Request Response

Flight Order Management

Request Response

Get Flight Order By Record Locator

Request Response


Records per page [10](#) [20](#) [50](#) [100](#)

Showing all records (5)



Amadeus Developers Portal

REST APIs - Functional Documentation

[Products](#)  [Blog](#) [Support](#)[Home](#) / [APIs Library](#) / [REST APIs](#) / [Flight Offers Search](#)

Flight Offers Search

[REST](#)[Version 2.6](#) 

Overview

The Flight Offers Search API allows to get cheapest flight recommendations and prices on a given journey. It provides a list of flight recommendations and fares from a given origin (city or airport), for a given date (or date range) and for a given list of passengers. Additional information such as bag allowance, first ancillary bag prices or fare details are also provided

API documentation and examples

Visit our API documentation and examples page to test this API and see the reference documentation. Also, you can download the .

[Go to API documentation and examples](#)[Swagger spec](#)

API version 2.6 changelog



The Amadeus Developer Portal

Technical documentation

REST guides

Ready to use our Enterprise REST APIs? Here you will learn how to get started along with best practices and recommendations.

[Go to REST guides](#)

Swagger codegen

The aim of this tutorial is to provide a step by step procedure to successfully consume REST JSON APIs exposed by Amadeus by creating your own client.

[Go to Swagger codegen tutorial](#)

General guidelines

Session management best practices

Here are some guidelines about the best practices for handling sessions. [Click here to read more.](#)

[➔ Examples Repository](#)[➔ Implementation guides](#)[➔ Technical documenta...](#)[➔ Testzone \(SOAP\)](#)[➔ Release plan](#)[➔ Airline IT policy a...](#)

Self-Service APIs

[Enterprise APIs](#)[Products](#) [Blog](#) [Support](#)

Enterprise APIs

Get access to Enterprise APIs to discover Amadeus tailored offer for compa

Enterprise APIs for Distribution

Enterprise APIs commercial catalogue as exposed to Travel Channels Customers

Enterprise APIs for Airlines

Enterprise APIs commercial catalogue as exposed to Airlines

Go to APIs Library

Browse all the APIs available for you.

My Enterprise Workspace



Amadeus Developers Portal

REST Application - How to find the credentials

2.

amadeus for Developers

Products ▾ Blog Support

My Enterprise Workspace / REST apps / AMA Test App

AMA Test App 11/17

App Name: AMA Test App
Creator: Andreas_Bonk@outlook.de
Description: AMA Test App

App keys
You can use these keys to consume all our Enterprise APIs. To learn more about how our APIs work check the [quick start guide](#).

Sandbox keys

API Key	nnhhggffddeetrrtttt
API Secret	*****

Production access

This application is only used in test environment. To get production access, the user needs to get in touch with his account manager.

AccessCredentials details in Test

SAP	SASOUTCH2308
LSS org ID	NNMC-BONKELU
LSS office ID	AMADEUS1001
LSS user ID	US023080

APIs
Below you can find the list of all the APIs available for you.

API	Description
Flight Create Orders	The Flight Create Orders API allows to book flights and ancillaries like bags or seats
Flight Offers Search	The Flight Offers Search API allows to get cheapest flight recommendations and prices on a given journey. It provides a list of flight recommendations and fares from a given origin (city or airport), for a given date (or date range).
Flight Offers Price	Flight Offers Price allows to validate a fare provided by Flight Offers Search. It also provides ancillaries information and payment information details
Flight Availabilities Search	The Amadeus Flight Availability API provides a list of flights with seats for sale on a given itinerary and the quantity of seats available in different fare classes. In addition to availability, the API also returns carrier and aircraft information.
Flight Order Management	The Flight Order Management is an API allowing you to do several operations on your existing booking. With the Get operation, you'll be able to retrieve information stored in the booking record. The Delete operation allows to delete a booking.

Records per page: 10 20 50 100

Showing all records (5)



Amadeus Developers Portal

REST Application - How to find the credentials

3.

App keys

You can use these keys to consume all our Enterprise APIs. To learn more about how our APIs work check the [quick start guide](#).

Sandbox keys		🔄
API Key	VYimaVyhoimwPjXYq7UzEwNklBpVDNuk	📋
API Secret	●●●●●●●●●●●●●●●●	👁️ 📋

Production access

This application is only used in test environment. To get production access, the user needs to get in touch with his account manager.

Click to Copy

AccessCredentials details in Test		
SAP	1ASIUTCHaaabbb	📋
LSS org ID	NMC-xxxx	📋
LSS office ID	NCExxxxxx	📋
LSS user ID	USaaabbb	📋



Recap

Summary and next step

_ Project scope:

- See slide 6

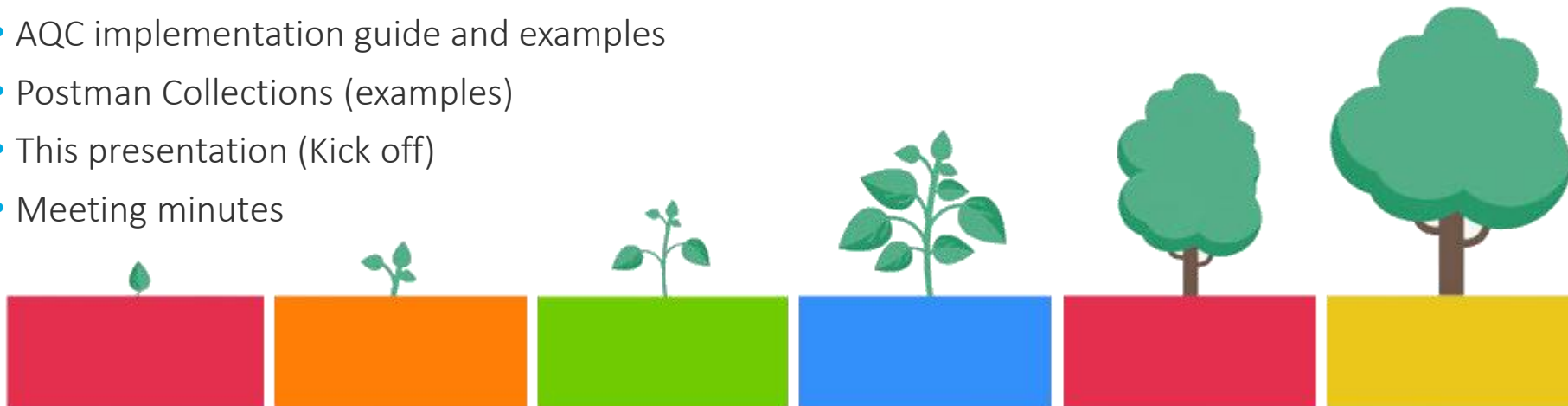
_ Questions, Ama-Client-Ref, & test date to be sent to our group mailbox: apiconsulting-wemea@amadeus.com

_ Please include your [company name](#) in email title e.g. [Tutu Travel Tourism Limited]...

_ 30 minutes weekly call with the developer and the testing team. Invitation will be sent.

_ Materials to be shared with you after this meeting:

- Information on how to access API Key and secret once the application is ready in test (PDT)
- AQC implementation guide and examples
- Postman Collections (examples)
- This presentation (Kick off)
- Meeting minutes



Any Questions?

Thank you!



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amadeus.com/blog

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