

OJP & OSDM

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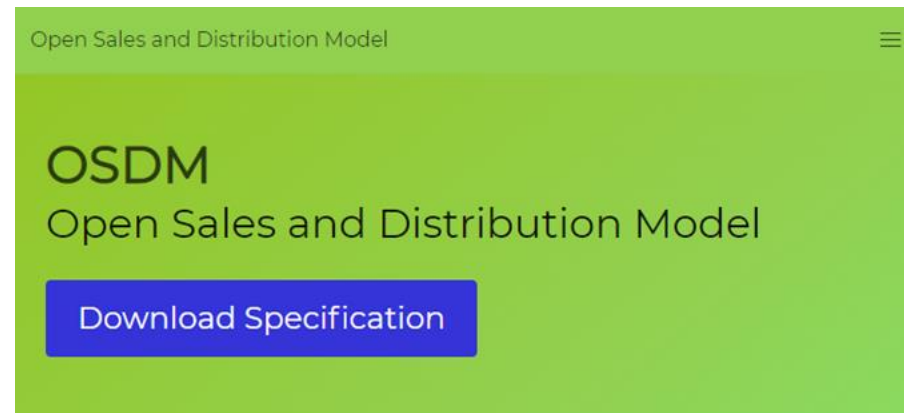
OSDM – What is it?

The aims of the **Open Sales and Distribution Model (OSDM)** are twofold:

- to substantially **simplify the booking process for customers** of public transport trips and,
- to **lower complexity and distribution costs** for distributors and carriers.

OSDM **strengthens rail and public transport** as a convenient and ecological means of transportation by simplifying distribution. Finally, it lays a **solid fundament** which can be extended to the distribution of other means of transportation.

<https://unioninternationalcheminsdefer.github.io/OSDM/>



Introduction

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The OSDM Online API and specification essentially consists of two parts: **Offline Model** and **Online API**. The Online API works in two modes: **Distributor Mode** and **Allocator Mode**. The Allocator Mode differs from the Distributor Mode only in that additionally to **Admissions (aka. tickets)**, **Reservations**, **Integrated reservations**, or **Ancillaries** also **Fares (priced segments)** are offered and can be booked.

OSDM Flows

A booking process is modelled by the following steps:

- Searching for trips
- Getting offers
- Booking an offer
- Confirmation of the booking
- Fulfillment of the booking

Analogously, the after-sale process is modelled in the following steps:

- Getting a refund/exchange offers
- Booking a refund/exchange offer
- Fulfillment of the booking

Trips resources to search for trips and locations

GET `/locations` Returns matching locations for a given match value based on MatchType.

GET `/locations/{locationId}` Returns a location element with a given locationId.

GET `/trips/{tripId}` Returns a trip element representing a travel trip.

GET `/trips-collection/{tripsCollectionId}` Returns a collection of trips for a specified origin and destination (and via).

POST `/trips-collection` Returns a collection trips for a specified origin and destination (and via).

Offers resources to get bookable offers

GET `/trip-offers-collection/{tripOffersCollectionId}` Returns different offers and trips for a specified origin and destination (and via).

POST `/trip-offers-collection` Returns trip offers for origin and destination (and via) locations.

GET `/trip-offers/{tripOfferId}` Returns different offers for a specified tripOfferId.

GET `/offers/{offerId}` Returns an offer fpr the id requested.

POST `/offers-collection` Returns offers for non-journey based products.

Bookings resources to manipulate bookings

POST `/bookings/search` Allows to search for and find bookings based on a set of criteria.

POST `/bookings` Allows to create a booking based on a previously requested offer.

GET `/bookings/{bookingId}` Returns a booking with the id provided.

DELETE `/bookings/{bookingId}` Deletes the booking with the id provided.

PATCH `/bookings/{bookingId}` Allows updating the fulfillment type of the booking.

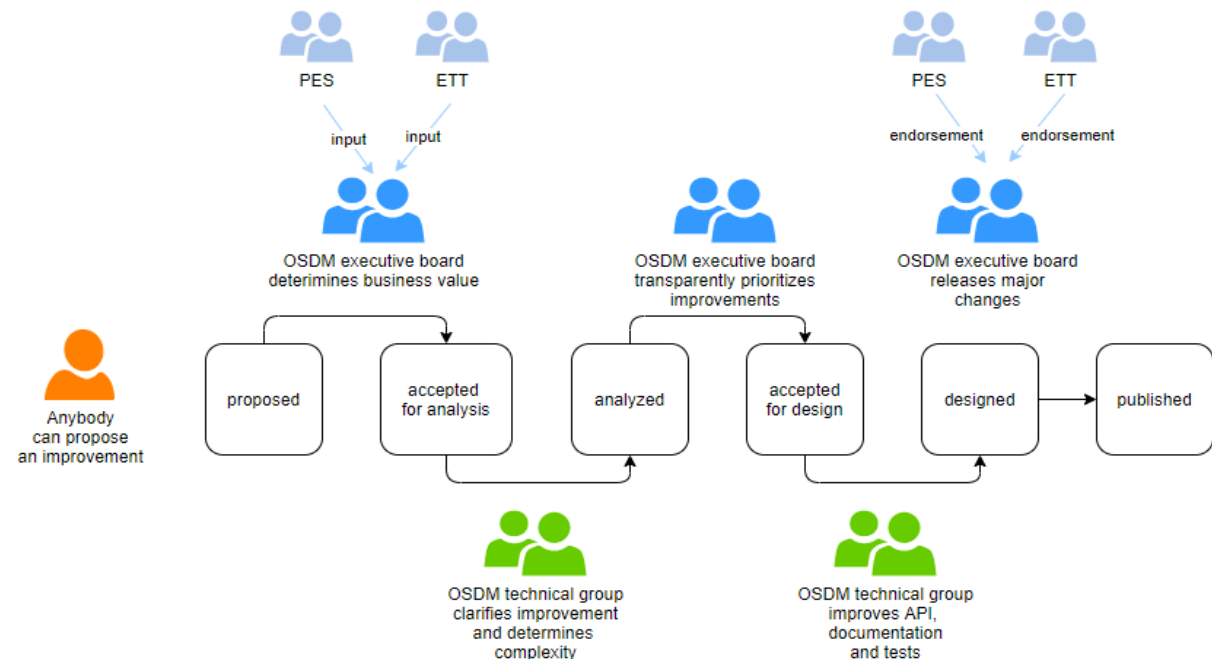
Fares resources to access fares

OSDM is Open Source, Contributions are Welcome

Development happens on [GitHub](#) and on [GitHub Wiki](#). We have a backlog of improvements and work in an agile manner.

Everybody can contribute to the back

We meet every Friday 9:00-11:00.



Location and Trip Search

The current OSDM has its own location and trip search specification.

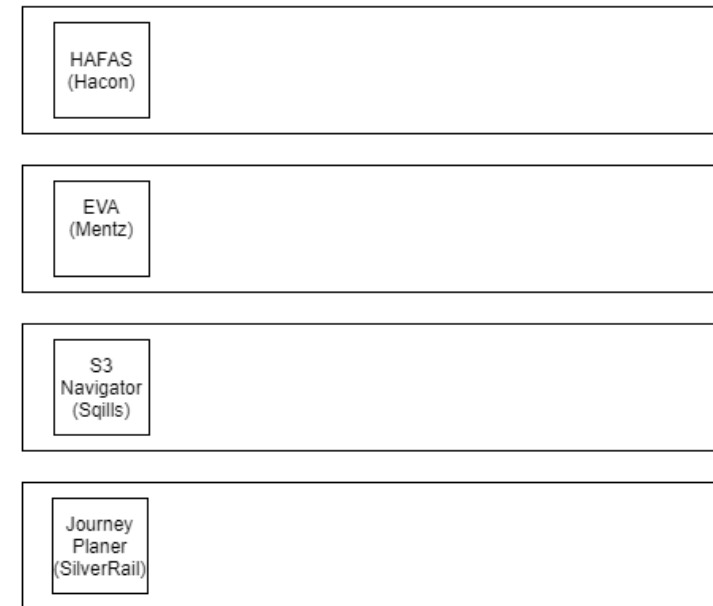
To not add yet another specification, we **OSDM would like to use OJP** and include that to OSDM.

As OSDM is a **REST/JSON specification**, we need OJP in REST.

Specification



Implementations



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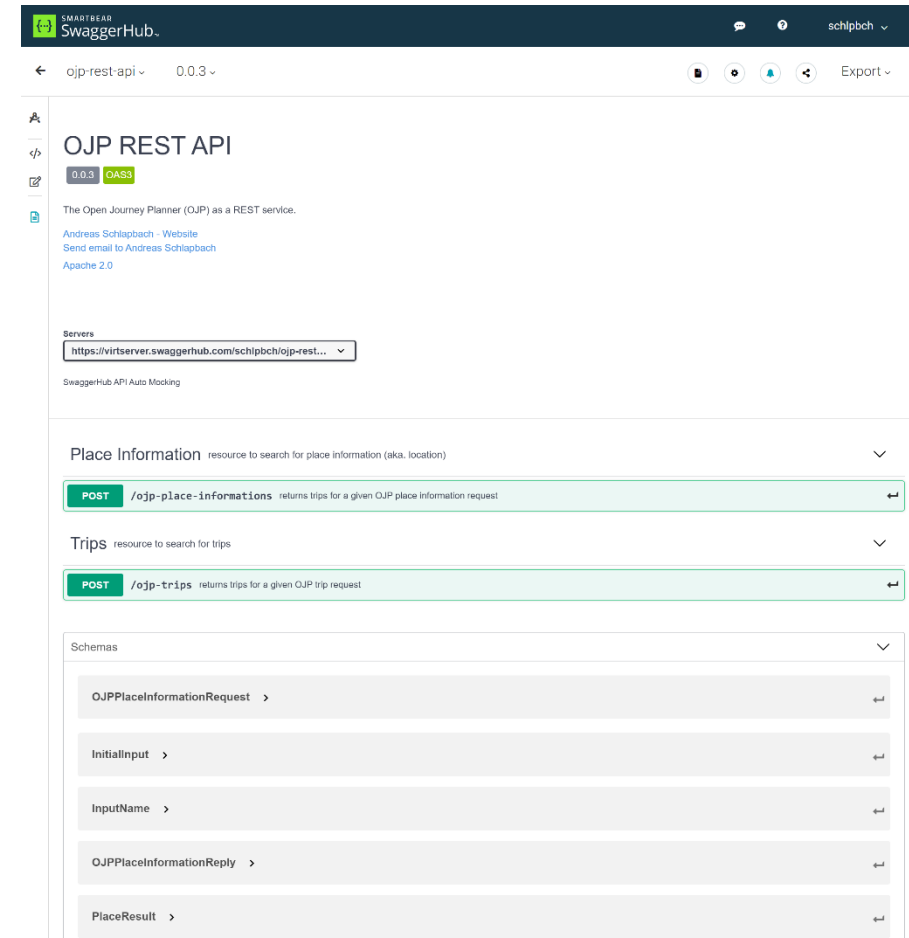
Initial Implementation

As a proof of concept, I've translated the OJP-Place-Information and OJP-trips to OpenAPI.

- <https://github.com/schlpbch/ojp-rest-api>

Topics identified are listed here:

- [Analysis of Mapping OJP-XML to OJP-JSON](#)



Possible Next Steps

1. Next step is to finalize the two resources with your support.
2. Jointly work on the reservation and booking
3. Align fares.

