



OTM5 Communication

From X(ML) to OTM5

XML

- Is a markup language/
file format
- Contains structure of the
messages
(+ validation using XSDs)

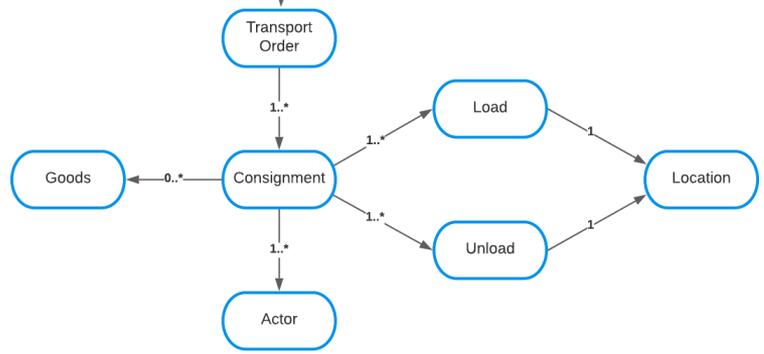
OTM5

- A semantic model
containing the structure
and the interpretation of
messages in traffic and
logistics
- A protocol on *how* to
communicate
- Is always in JSON

What is OTM?

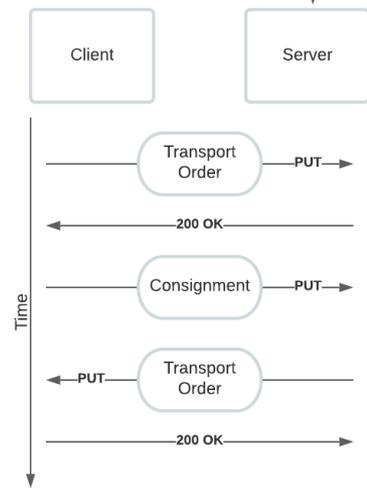
Data

Concepts:
data in logistics & traffic
and what it means



Protocol

Process:
How to interact between
different parties





Flexibel & future proof

JSON & Versioning

Backwards and forwards compatible between versions.

Associations (relations of entities)

Different use cases require different data.

External Attributes

Important data inside businesses outside of OTM.

OpenAPI & REST

Widely used standards for (describing) distributed systems

JSON & Semantic Versioning

Backwards compatible

JSON valid according to OTM5.0 will be valid according to OTM5.x

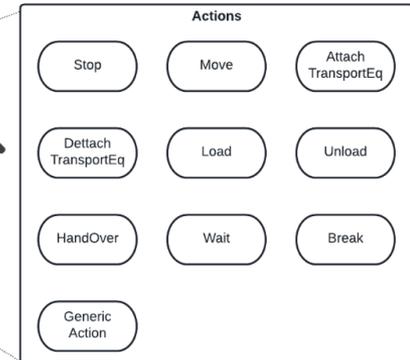
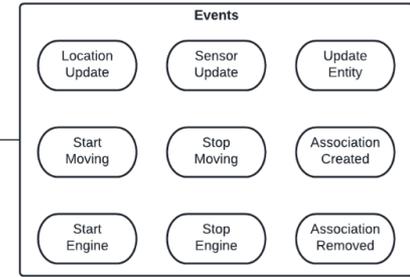
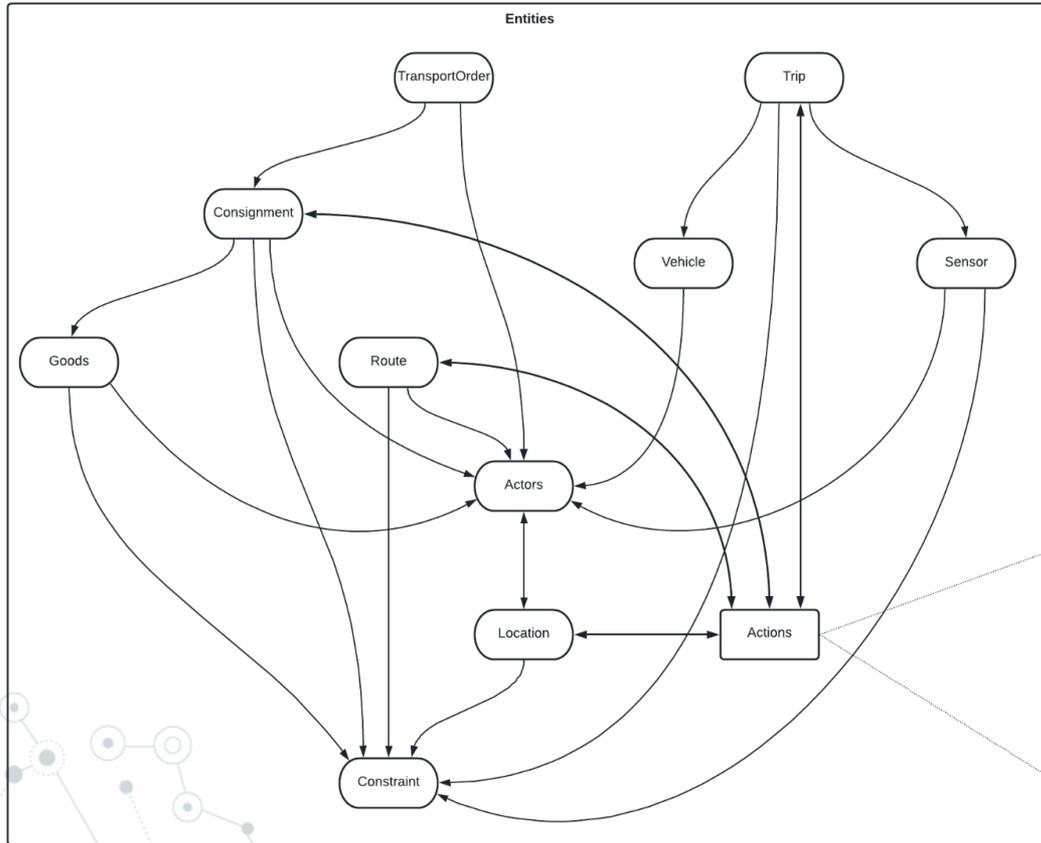
So nothing will be removed or changed (only additions)

Forwards compatible

JSON valid according to OTM5.x will be valid according to OTM5.0*

* As long as you ignore instead of reject

Associations (relations between entities)





Downside?

More room for misinterpretation & confusion

Question: In Consignment, when put constraints on consignment-level and when on goods-level? #42

Open

BobZuidhoek opened this issue on Oct 26, 2021 · 1 comment

Profiles

- Overview
- Concepts >
- How To Model? v
- Adding Constraints
- Shipping goods
- OTM Profiles v
 - What are OTM5 profiles?
 - Various profiles v
 - Transport Orders**
 - Monitoring trips
 - VESDI
- Adopters

Exchanging Transport Orders

Overview

The very first step of transporting goods from one place to another starts with the *transport order*. It is concerned with what needs to be transported under what constraints (i.e. before a certain date, or below a certain temperature). It is generally the initial communication between a *carrier* and a *shipper*. Afterwards, the transport order is served as input in creating actual planning data as part of the [Monitoring Trips](#) profile.

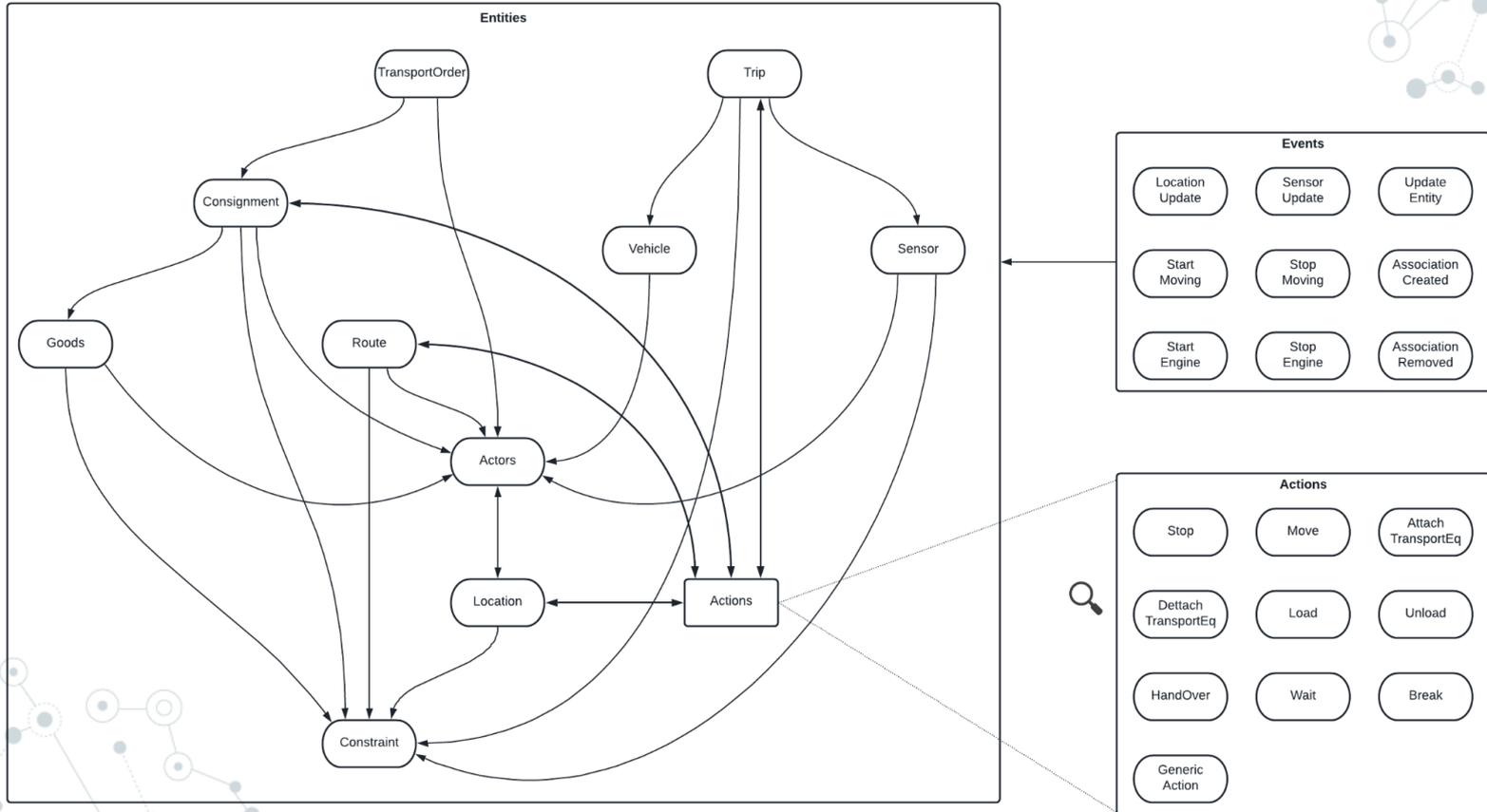
General structure

At the bottom of the hierarchy we have *goods*, physical units with dimensions, weights, etc. that need to be transported. Goods are part of a *consignment*, which is an administrative unit that groups the goods together. Note that groups within one consignment cannot be split, they are always part of the same transported unit. If goods need or can be split they should be part of different consignments.

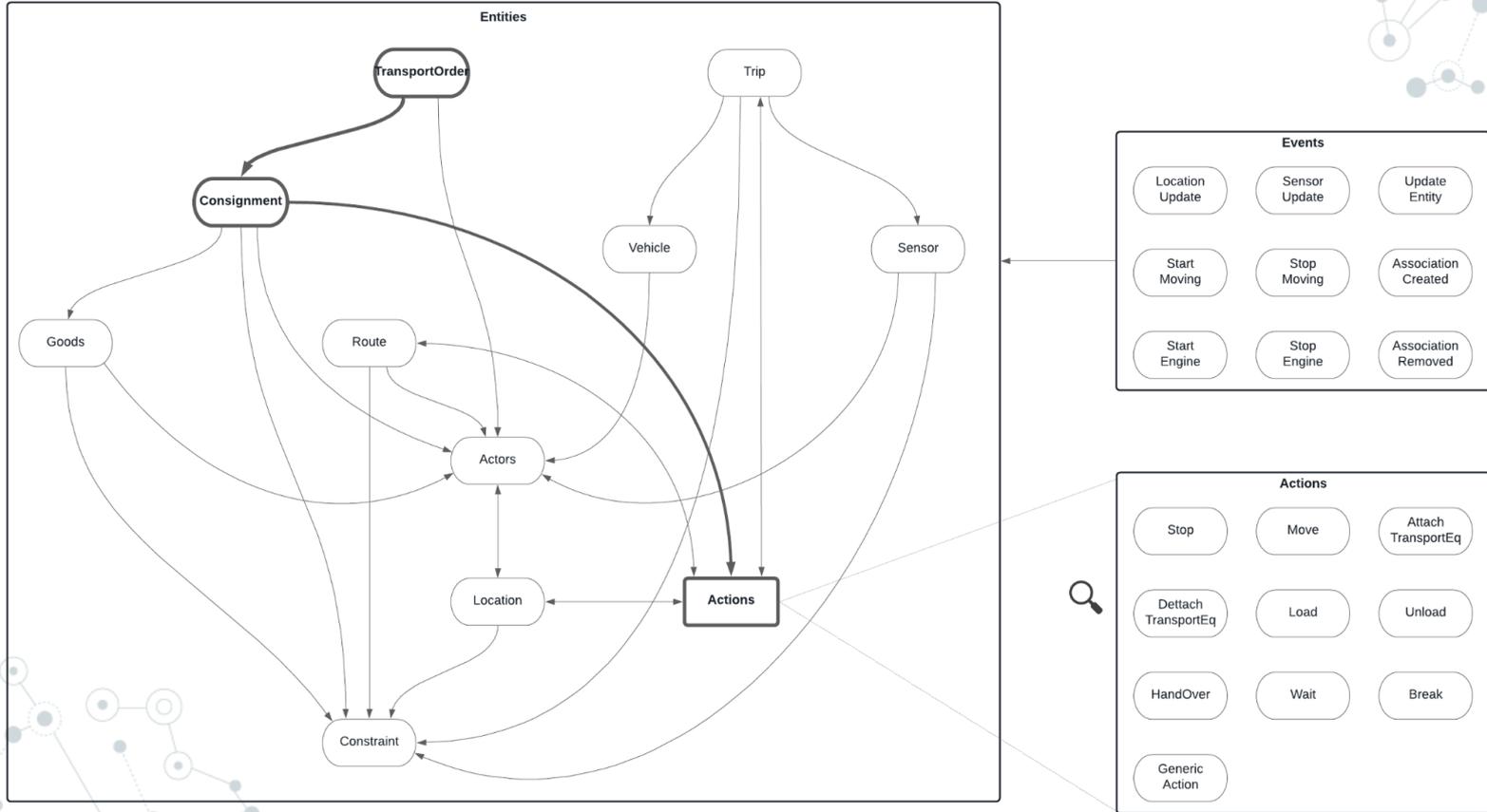
On the top of the chain, we have the transport order, that is able to group multiple consignments. For example, because they are part of one assignment given by some shipper.

This can be visualized as follows, where the grayed out entities, associations, events and actions are not relevant for this profile:

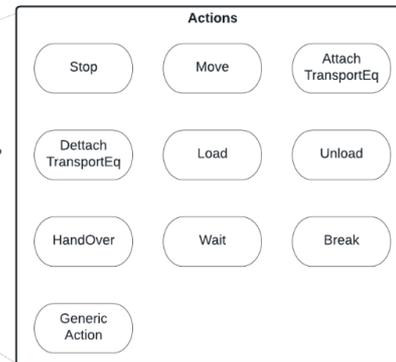
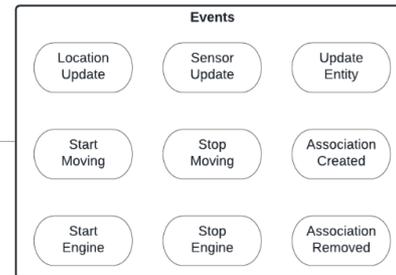
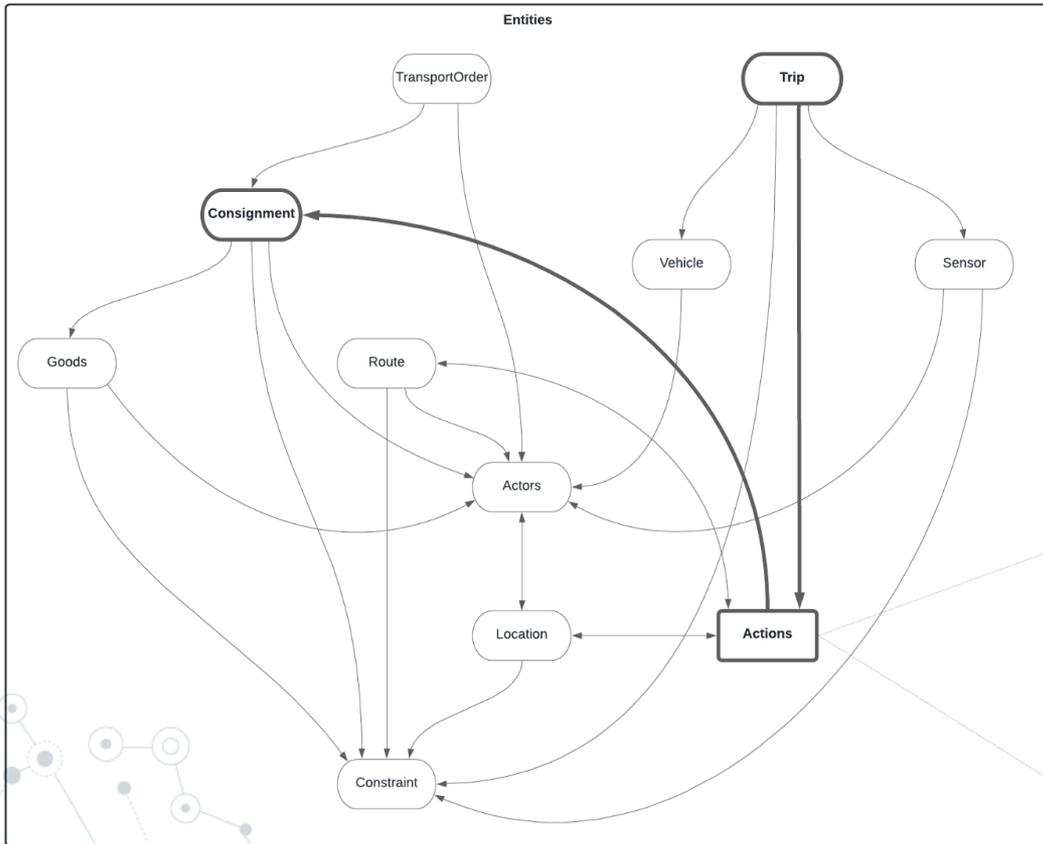
Associations again



Profile 1: transport order



Profile 2: trip



Goal of OTM

Reduce the amount of
custom work
(not eliminate it)

