

# Data Dictionary

## Ship Table

Ship			
Name	Type	Restrictions	Explanation
mmsi	varchar(10)	Unique value. Must be an integer with 9 digits exactly.	The ship unique identification code.
imo	varchar(10)	Unique value. Format: IMO at the beginning and 7 numbers.	The ship unique identification number.
callsign	varchar(255)	Unique value. Must be a string.	The ship unique call sign.
name	varchar(255)	Doesn't have any restriction.	The ship name.
length	float	Doesn't have any restriction.	The ship length.
width	float	Doesn't have any restriction.	The ship width.
capacity	integer	Doesn't have any restriction.	The ship load capacity.
draft	float	Doesn't have any restriction.	The ship draft.
nEnergyGen	integer	If the ship doesn't have generators, it can be 0.	The ship's number of energy generators.

## Truck Table

Truck			
Name	Type	Restrictions	Explanation
name	varchar(255)	Doesn't have any restriction.	The truck name.

## Client Table

Client			
Name	Type	Restrictions	Explanation
id	varchar(255)	Doesn't have any restriction.	The client's identification.
name	varchar(255)	Doesn't have any restriction.	The client's name.
email	varchar(255)	Unique value.	The client's unique email.
ccNumber	varchar(8)	Must have 8 digits.	The client's citizen card number.
phoneNumber	varchar(255)	Must have 9 digits.	The client's phone number.
birthDate	date	Must respect the date format.	The client's birthdate.

## Role Table

Role			
Name	Type	Restrictions	Explanation
id	varchar(255)	Doesn't have any restriction.	The role identification.
roleDescription	varchar(255)	Not nullable.	The role description.

## Employee Table

Employee			
Name	Type	Restrictions	Explanation
id	varchar(255)	Doesn't have any restriction.	The employee identification.
email	varchar(255)	Unique value.	The employee email.
name	varchar(255)	Doesn't have any restriction.	The employee name.

## Container Table

Container			
Name	Type	Restrictions	Explanation
containerId	varchar(255)	Doesn't have any restriction.	The container's identification.
payload	float	Doesn't have any restriction.	The container's payload.
tare	float	Doesn't have any restriction.	The container's tare.
gross	float	Doesn't have any restriction.	The container's gross.

## Cargo Manifest Container Table

CargoManifestContainer			
Name	Type	Restrictions	Explanation
xPos	integer	Not nullable.	The container's x coordinate.
yPos	integer	Not nullable.	The container's y coordinate.
zPos	integer	Not nullable.	The container's z coordinate.

## Cargo Manifest Table

CargoManifest			
Name	Type	Restrictions	Explanation
id	varchar(255)	Doesn't have any restriction.	The cargo manifest's identification.
date	date	Must respect the date format.	The cargo manifest's date.

## Positional Message Table

Positional Message			
Name	Type	Restrictions	Explanation
baseDateTime	date	Doesn't have any restriction.	The positional message's date.
longitude	float	It can range from -180 to 180. If it is 181, it is not available.	The ship longitude.
latitude	float	It can range from -90 to 90. If it is 91, it is not available.	The ship latitude.
SOG	float	Doesn't have any restriction.	The ship speed over ground.
COG	float	It can range from 0 to 359. Can't be negative.	The ship course over ground.
heading	float	It can range from 0 to 359. If it is 511, it is not available.	The ship heading.

## Facility Table

Facility			
Name	Type	Restrictions	Explanation
id	varchar(255)	Doesn't have any restriction.	The facility identification.
name	varchar(255)	Doesn't have any restriction.	The facility name.
latitude	float	It can range from -90 to 90. If it is 91, it is not available.	The localization latitude.
longitude	float	It can range from -180 to 180. If it is 181, it is not available.	The localization longitude.

## Continent Table

Continent			
Name	Type	Restrictions	Explanation
id	varchar(255)	Doesn't have any restriction.	The continent identification.
name	varchar(255)	Doesn't have any restriction.	The continent name.

## ISO Code Table

ISOCode			
Name	Type	Restrictions	Explanation
id	varchar(255)	Doesn't have any restriction.	The ISO code identification.
width	double	Doesn't have any restriction.	The ISO code width.
length	double	Doesn't have any restriction.	The ISO code length.
height	double	Doesn't have any restriction.	The ISO code height.

## Refrigerator Container Table

RefrigeratorContainer			
Name	Type	Restrictions	Explanation
energyConsume	integer	Doesn't have any restriction.	The refrigerator container's energy consume.
refrigerationTemperature	float	Doesn't have any restriction.	The refrigerator container's temperature.

## Cargo Manifest Type Table

CargoManifestType			
Name	Type	Restrictions	Explanation
id	varchar(255)	Doesn't have any restriction.	The cargo manifest identification.
type	integer	Can only be either 1 (offload) or 2 (load).	The cargo manifest type.

## Address Table

Address			
Name	Type	Restrictions	Explanation
idAddress	varchar(255)	Doesn't have any restriction.	The address identification.
street	varchar(255)	Doesn't have any restriction.	The address street.
postalCode	varchar(255)	Doesn't have any restriction.	The address postal code.

## City Table

City			
Name	Type	Restrictions	Explanation
cityId	varchar(255)	Doesn't have any restriction.	The city identification.
name	varchar(255)	Doesn't have any restriction.	The city name.

## Trip Table

Trip			
Name	Type	Restrictions	Explanation
tripId	varchar(255)	Doesn't have any restriction.	The trip identification.
startDate	date	Must respect the date format.	The trip start date.
endDate	date	Must respect the date format.	The trip end date.

## Transceiver

Transceiver			
Name	Type	Restrictions	Explanation
id	varchar(255)	Doesn't have any restriction.	The transceiver identification.
transceiver	byte	Not nullable.	The ship's transceiver.
class	varchar(255)	Doesn't have any restriction.	The transceiver class

## Vehicle Table

Vehicle			
Name	Type	Restrictions	Explanation
id	varchar(255)	Doesn't have any restriction.	The vehicle identification.

## Country Table

Country			
Name	Type	Restrictions	Explanation
id	varchar(255)	Doesn't have any restriction.	The country identification.
name	varchar(255)	Doesn't have any restriction.	The country name.

## Facility Type Table

FacilityType			
Name	Type	Restrictions	Explanation
id	varchar(255)	Doesn't have any restriction.	The facility identification.
type	integer	Can only be either 1 (port) or 2 (warehouse).	The facility type.

## User Table

User			
Name	Type	Restrictions	Explanation
id	varchar(255)	Doesn't have any restriction.	The user identification.
username	varchar(255)	Unique value.	The user username.
password	varchar(255)	Doesn't have any restriction.	The user password.

Vessel Type Table

VesselType			
Name	Type	Restrictions	Explanation
id	varchar(255)	Doesn't have any restriction.	The vessel type identification.
type	integer	Doesn't have any restriction.	The vessel type.

Generator Table

Generator			
Name	Type	Restrictions	Explanation
id	varchar(255)	Doesn't have any restriction.	The generator identification.
generatorPow	float	Doesn't have any restriction.	The generator power output.