

# Factsheet für mikar (ID : 437)

Zuletzt aktualisiert: 31.05.2026 05:00

## GBFS

Für den Datenlieferanten mikar können über die folgenden GBFS-Endpunkte Daten abgefragt werden:

- <https://mdd.gorheinland.com/gbfs-output/{Datenlieferanten ID}/{GBFS Version}/{Gbfs Endpunkt}.json>

GBFS Endpunkt	GBFS Version
GBFS	2.3, 3.0
SYSTEM_INFORMATION	2.3, 3.0
VEHICLE_TYPES	2.3, 3.0
STATION_INFORMATION	2.3, 3.0
STATION_STATUS	2.3, 3.0
FREE_BIKE_STATUS	2.3
SYSTEM_PRICING_PLANS	2.3, 3.0
MANIFEST	2.3, 3.0
VEHICLE_STATUS	3.0

## GraphQL

GraphQL-Queries erlauben das Abfragen gebündelter Feeds mehrerer Provider. Welche Feeds gebündelt werden kann über den Provider Filter gesteuert werden. Mehr Informationen zu gebündelten Feeds und Filtern können Sie der MDD NRW Schnittstellenbeschreibung entnehmen.

## Legende

- *Kursiver Datentyp*: Aufzählung. Im GraphQL Schema sind alle möglichen Werte aufgelistet.
- **Fetter Datentyp**: Komplexer Datentyp, genaue Definition findet sich im Factsheet und im GraphQL Schema
- [Datentyp] mit eckigen Klammern: Liste mit Einträgen des jeweiligen Datentyps.
- Map(Datentyp1, Datentyp2): Eine Zuordnungstabelle für assoziative Daten.

## Provider

Endpunkte: *listProviders*, *providerById*

Beschreibung: Complex datatype for information about providers. A provider is a source of data from which the MDD NRW receives information.

Attribut	Datentyp	Beschreibung	Beispiel
id	Long	The id is a unique identifier within the same class.	5179
name	String	Name of this provider	VRS
active	boolean	If a provider is active, the data for this provider is updated regularly. A value of "true" equals the state active.	
vehicles	[Vehicle]	Vehicles of this provider	
pricingPlans	[PricingPlan]	Pricing plans of this provider	
sharingStations	[SharingStation]	Sharing stations of this provider	
systemInformations	[SystemInformation]	System information of this provider	
vehicleTypes	[VehicleType]	Vehicle types of this provider	

## Vehicle

Endpunkte: *listVehicles*, *vehicleById*

Beschreibung: Complex datatype for information about vehicles, for example scooters, bikes and cars.

Attribut	Datentyp	Beschreibung	Beispiel
id	Long	The id is a unique identifier within the same class.	5179
provider	<b>Provider</b>	The provider this entity belongs to	
lastUpdated	Date	This entity was last loaded into the MDD NRW at this point. The date is given in UTC.	2024-07-30T09:30:00Z
externalId	String	Id given by provider	
lat	Double	Current WGS84 latitude of the vehicle in decimal degrees	51.890169
lon	Double	Current WGS84 longitude of the vehicle in decimal degrees	6.100169
station	<b>SharingStation</b>	The station in which the vehicle is currently located	
vehicleType	<b>VehicleType</b>	Vehicle type of the vehicle	
status	<i>Status</i>	Current status of the vehicle	AVAILABLE
information	String	Additional information	
remainingRangeInM	Integer	Remaining range of vehicle in meters with current charge	
pricingPlan	<b>PricingPlan</b>	Pricing information for the corresponding vehicle	
isReserved	Boolean	“true” if the vehicle is currently reserved	
isDisabled	Boolean	“true” if the vehicle is currently disabled	
vehicleEquipment	<i>[VehicleEquipment]</i>	List of vehicle equipment	WINTER_TIRES
availableUntil	Date	Date until which the vehicle is available.	2024-07-30T09:30:00Z

## SharingStation

Endpunkte: *listSharingStations*, *sharingStationById*

Beschreibung: Complex datatype for information about sharing stations.

Attribut	Datentyp	Beschreibung	Beispiel
id	Long	The id is a unique identifier within the same class.	5179
provider	<b>Provider</b>	The provider this entity belongs to	
lastUpdated	Date	This entity was last loaded into the MDD NRW at this point. The date is given in UTC.	2024-07-30T09:30:00Z
externalId	String	Id given by the provider	
name	String	Name of the sharing station	
lat	Double	WGS84 latitude of the sharing station in decimal degrees	51.890169
lon	Double	WGS84 longitude of the sharing station in decimal degrees	6.100169
address	String	Address of the sharing station	Hauptstraße 35
postCode	String	Postcode where the station is located	
rentalMethods	<i>[RentalMethod]</i>	Payment methods accepted at this station	
isChargingStation	Boolean	Does the station support charging of electric vehicles?	
numBikesAvailable	Integer	Number of available vehicles of any type at the station	
vehicleTypesAvailable	Map(VehicleType, VehicleTypesAvailability)	Number of available vehicles of a vehicleType at a sharingStation	

isInstalled	Boolean	"true" if the station is currently on the street	
isRenting	Boolean	"true" if the station is currently renting vehicles	
isReturning	Boolean	"true" if the station is currently accepting vehicle returns	
lastReported	Date	The last time this station reported its status to the operator's backend	2024-07-30T09:30:00Z
currentlyStationedVehicles	[Vehicle]	List of vehicles currently parked at this station	

### VehicleTypesAvailability

Beschreibung: Complex datatype for the count of vehicles of a given type.

Attribut	Datentyp	Beschreibung	Beispiel
sharingStation	<b>SharingStation</b>	VehicleTypesAvailability applies for this sharing station.	
vehicleType	<b>VehicleType</b>	VehicleTypesAvailability applies for this sharing station.	
count	Integer	Number of vehicles of vehicleType available at sharing station	

### VehicleType

Endpunkte: *listVehicleTypes*, *vehicleTypeById*

Beschreibung: Complex datatype for information about vehicle types. Vehicles of the same type share the available attributes.

Attribut	Datentyp	Beschreibung	Beispiel
id	Long	The id is a unique identifier within the same class.	5179
provider	<b>Provider</b>	The provider this entity belongs to	
lastUpdated	Date	This entity was last loaded into the MDD NRW at this point. The date is given in UTC.	2024-07-30T09:30:00Z
type	String	External id given by provider	

formFactor	<i>VehicleFormFactor</i>	The vehicle's general form factor	SCOOTER
propulsionType	<i>VehiclePropulsionType</i>	The primary propulsion type of the vehicle	ELECTRIC
riderCapacity	Integer	The number of riders (driver included) the vehicle can legally accommodate.	
maxRangeMeters	Integer	Maximum range in meters this vehicle can travel when fully charged without refueling	4000
publicName	String	Public name of this vehicle type	
vehicleAccessories	<i>[VehicleAccessory]</i>	Additional information about the vehicle	KEYLESS, AUTOMATIC, DOORS_5
make	String	The name of the vehicle manufacturer	
model	String	The name of the vehicle model	
color	String	The color of the vehicle	
wheelCount	Integer	Number of wheels	
maxPermittedSpeedKmH	Integer	The maximum speed in kilometers per hour this vehicle is permitted to reach	
ratedPowerW	Integer	The rated power of the motor for this vehicle type in watts. 1PS corresponds to about 735W.	
returnConstraint	<i>VehicleReturnConstraint</i>	The conditions for returning the vehicle at the end of the rental	FREE_FLOATING
defaultPricingPlan	<b>PricingPlan</b>	Default pricing plan for this vehicle type	
pricingPlans	<i>[PricingPlan]</i>	List of pricing plans that are applied to this vehicle type	
vehicles	<i>[Vehicle]</i>	Vehicles that have this vehicle type	
vehicleTypesAvailable	<i>[VehicleTypesAvailability]</i>	Number of available vehicles of a vehicleType at this sharing station	

## PricingPlan

Endpunkte: *listPricingPlans*, *pricingPlanById*

Beschreibung: Complex datatype for information about pricing plans.

Attribut	Datentyp	Beschreibung	Beispiel
id	Long	The id is a unique identifier within the same class.	5179
provider	<b>Provider</b>	The provider this entity belongs to	
lastUpdated	Date	This entity was last loaded into the MDD NRW at this point. The date is given in UTC.	2024-07-30T09:30:00Z
externalId	String	External id given by provider	
url	String	Url with more details about this pricing plan	
name	String	Name of the pricing plan	
currency	<i>PriceCurrency</i>	Currency used to pay the price	EUR
price	Double	Price in unit specified by currency	1.29
isTaxable	Boolean	Indicates whether additional tax will be added to the price	
description	String	Description	
perKmPricing	[PricingModel]	Additional price per kilometer interval. The kilometer interval length and the price per interval differ depending on the ride length.	
perMinPricing	[PricingModel]	Additional price per time interval. The time interval length and the price per interval differ depending on the ride length.	
vehicleTypes	[VehicleType]	List of vehicle types to which this pricing plan applies	
vehicleTypesWithDefaultPricingPlan	[VehicleType]	List of vehicle types that have this pricing plan as a default	
vehicles	[Vehicle]	Vehicles using this pricing plan	
isMinimalPrice	Boolean	Indicates whether the pricing information describes the minimal and not the complete price for using this vehicle.	

## PricingModel

Beschreibung: Complex datatype for information about the pricing model for a ride. Pricing Models are either based on duration or distance.

Attribut	Datentyp	Beschreibung	Beispiel
start	Integer	The pricing model applies when start is reached.	0
rate	Double	Price per interval	0.22
interval	Integer	Interval length	1

## SystemInformation

Endpunkte: *listSystemInformation*, *systemInformationById*

Beschreibung: Complex datatype for information about the system of a provider. A provider can have multiple systems with differing information. Contains for example contact details and language information.

Attribut	Datentyp	Beschreibung	Beispiel
id	Long	The id is a unique identifier within the same class.	5179
provider	<b>Provider</b>	The provider this entity belongs to	
lastUpdated	Date	This entity was last loaded into the MDD NRW at this point. The date is given in UTC.	2024-07-30T09:30:00Z
systemId	String	External id given by provider	
language	String	Language of information by this provider	
name	String	Name of the system	
operator	String	Name of the system operator	
url	String	Url of the system	
email	String	Email address of this system's customer service department	
feedContactEmail	String	Contact email to report technical issues with feeds	
timezone	String	The timezone where the system is located	
termsUrl	String	URL pointing to the terms of service	
termsLastUpdated	LocalDate	The date that the terms of service provided at termsUrl were last updated.	
privacyUrl	String	URL pointing to the privacy policy for the service	
privacyLastUpdated	LocalDate	The date that the privacy policy provided at privacyUrl was last updated	
rentalApps	<b>RentalApps</b>	Rental app information	
licenseId	String	License ID	CC0-1.0
attributionOrganizationName	String	Name of the organization to which attribution should be provided.	
attributionUrl	String	URL of the organization to which attribution should be provided.	
openingHours	String	Opening hours for this system	24/7, Mo-Fr 08:30-20:00

## RentalApps

Beschreibung: Complex datatype for rental app information.

Attribut	Datentyp	Beschreibung	Beispiel
android	<b>AppUri</b>	Rental app information for android	
ios	<b>AppUri</b>	Rental app information for ios	

## AppUri

Beschreibung: Complex datatype for app URI information.

Attribut	Datentyp	Beschreibung	Beispiel
discoveryUri	String	URI that can be used to discover if the rental app is installed on the device.	
storeUri	String	URI where the rental app can be downloaded from.	