

API Reference

FerryTix

API Version: 1.0.0

This is the api for the FerryTix Passenger Ferry Ticketing System, that is both accessible to the vending machines and to other clients.

CONTACT

EMAIL: hendrik.lankers.hl@gmail.com

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Security and Authentication

SECURITY SCHEMES

| KEY | TYPE | DESCRIPTION |
|------------|--------|-------------|
| ApiKeyAuth | apiKey | |

API

1. FAEHRCARD

1.1 GET /faehrCard/{uuid}

Return full details on a single FaehrCard.

REQUEST

PATH PARAMETERS

| NAME | TYPE | DESCRIPTION |
|-------|------|-------------|
| *uuid | uuid | |

RESPONSE

STATUS CODE - 200: faehr card found

RESPONSE MODEL - application/json

| NAME | TYPE | DESCRIPTION |
|-----------------------------|---------|-------------|
| OBJECT WITH BELOW STRUCTURE | | |
| uuid | string | |
| ownedBy | string | |
| balance | integer | |
| issuedAt | string | |
| issuedBy | string | |

STATUS CODE - 400: invalid id

STATUS CODE - 404: no FaehrCard with given uuid found

1.2 GET /faehrCard/{uuid}/balance

Return a FaehrCard's balance.

REQUEST

PATH PARAMETERS

| NAME | TYPE | DESCRIPTION |
|-------|------|-------------|
| *uuid | uuid | |

RESPONSE

STATUS CODE - 200: faehr card found

RESPONSE MODEL - application/json

| NAME | TYPE | DESCRIPTION |
|-----------------------------|---------|-------------|
| OBJECT WITH BELOW STRUCTURE | | |
| balance | integer | |

STATUS CODE - 400: invalid id

STATUS CODE - 404: no FaehrCard with given uuid found

1.3 POST /faehrCard/{uuid}/topup

Top up a FaehrCard's balance.

REQUEST

PATH PARAMETERS

| NAME | TYPE | DESCRIPTION |
|-------|------|-------------|
| *uuid | uuid | |

REQUEST BODY - application/json

| NAME | TYPE | DESCRIPTION |
|-------------|---------|-------------------------------------------------------------------------------------------------|
| uuid | string | |
| for | string | UUID of the FaehrCard the TopUp is for. |
| issuedAt | string | |
| issuedBy | string | The id of the vending machine that the topup has been purchased at. Is null if purchased online |
| amount | integer | |
| paid | integer | |
| payment | object | |
| uuid | string | UUID of the FaehrCard charged. |
| payment | object | |
| uuid | string | |
| amount | integer | |
| method | enum | ALLOWED:FährCard, Cash, ECCard, BankTransfer, PayPal |
| initial | boolean | Describes whether the top up was done when the card was issued |
| saleCounter | integer | |
| signature | string | |

RESPONSE

STATUS CODE - 201: faehr card topped up

RESPONSE MODEL - application/json

| NAME | TYPE | DESCRIPTION |
|-----------------------------|---------|-------------|
| OBJECT WITH BELOW STRUCTURE | | |
| newbalance | integer | |

STATUS CODE - 400: invalid id

STATUS CODE - 404: no FaehrCard with given uuid found

2. MACHINES

2.1 GET /machines

list all active vending machines

REQUEST

No request parameters

RESPONSE

STATUS CODE - 200: vending machines listed

RESPONSE MODEL - application/json

| NAME | TYPE | DESCRIPTION |
|--------------------------------------|--------|-------------------------|
| ARRAY OF OBJECT WITH BELOW STRUCTURE | | |
| uuid | string | |
| publicKey | string | |
| location | enum | ALLOWED:Bislich, Xanten |

2.2 GET /machines/{uuid}

returns a single vending machine

REQUEST

PATH PARAMETERS

| NAME | TYPE | DESCRIPTION |
|-------|------|-------------|
| *uuid | uuid | |

RESPONSE

STATUS CODE - 200: vending machine found

RESPONSE MODEL - application/json

| NAME | TYPE | DESCRIPTION |
|-----------------------------|--------|-------------------------|
| OBJECT WITH BELOW STRUCTURE | | |
| uuid | string | |
| publicKey | string | |
| location | enum | ALLOWED:Bislich, Xanten |

STATUS CODE - 400: invalid id

STATUS CODE - 404: no machine with given uuid found

2.3 GET /machines/{uuid}/status

Returns a single vending machine's status.

REQUEST

PATH PARAMETERS

| NAME | TYPE | DESCRIPTION |
|-------|------|-------------|
| *uuid | uuid | |

RESPONSE

STATUS CODE - 200: vending machine found

RESPONSE MODEL - application/json

| NAME | TYPE | DESCRIPTION |
|--------------------------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OBJECT WITH BELOW STRUCTURE | | |
| vending | boolean | |
| batteryCharge | number | |
| estimatedReceiptPaperFillLevel | number | |
| receiptPaperRollLength | integer | |
| cpuTemperature | number | |
| ticketsSoldToday | object | |
| withBicycle | integer | |
| withoutBicycle | integer | |
| volumeOfSalesToday | integer | |
| waiting | array | |
| ticketClass | object | |
| bicycle | boolean | whether or not a bicycle was carried |
| return | boolean | whether or not a return trip has been purchased |
| reduced | boolean | reduced fare for physically disabled persons and children under the age of 14 |
| staff | boolean | only for staff members |
| waitingSince | string | |
| saleCounter | integer | Current sale counter. Each vending machine has its own counter, that increases when a sale (TicketSale or TopUp) is completed. The sale counter can't be changed from the outside. |

STATUS CODE - 400: invalid id

STATUS CODE - 404: no machine with given uuid found

2.4 PATCH /machines/{uuid}/status

Update machine status manually.

REQUEST

PATH PARAMETERS

| NAME | TYPE | DESCRIPTION |
|-------|------|-------------|
| *uuid | uuid | |

REQUEST BODY - application/json

| NAME | TYPE | DESCRIPTION |
|--------------------------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| vending | boolean | |
| batteryCharge | number | |
| estimatedReceiptPaperFillLevel | number | |
| receiptPaperRollLength | integer | |
| cpuTemperature | number | |
| ticketsSoldToday | object | |
| withBicycle | integer | |
| withoutBicycle | integer | |
| volumeOfSalesToday | integer | |
| waiting | array | |
| ticketClass | object | |
| bicycle | boolean | whether or not a bicycle was carried |
| return | boolean | whether or not a return trip has been purchased |
| reduced | boolean | reduced fare for physically disabled persons and children under the age of 14 |
| staff | boolean | only for staff members |
| waitingSince | string | |
| saleCounter | integer | Current sale counter. Each vending machine has its own counter, that increases when a sale (TicketSale or TopUp) is completed. The sale counter can't be changed from the outside. |

RESPONSE

STATUS CODE - 200: Updated config of machine.

RESPONSE MODEL - application/json

| NAME | TYPE | DESCRIPTION |
|--------------------------------|---------|-------------|
| OBJECT WITH BELOW STRUCTURE | | |
| vending | boolean | |
| batteryCharge | number | |
| estimatedReceiptPaperFillLevel | number | |
| receiptPaperRollLength | integer | |
| cpuTemperature | number | |
| ticketsSoldToday | object | |
| withBicycle | integer | |
| withoutBicycle | integer | |
| volumeOfSalesToday | integer | |
| waiting | array | |
| ticketClass | object | |

| NAME | TYPE | DESCRIPTION |
|--------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| bicycle | boolean | whether or not a bicycle was carried |
| return | boolean | whether or not a return trip has been purchased |
| reduced | boolean | reduced fare for physically disabled persons and children under the age of 14 |
| staff | boolean | only for staff members |
| waitingSince | string | |
| saleCounter | integer | Current sale counter. Each vending machine has its own counter, that increases when a sale (TicketSale or TopUp) is completed. The sale counter can't be changed from the outside. |

STATUS CODE - 404: no machine with given uuid found

2.5 GET /machines/{uuid}/commands

Retrieve a command for a vending machine with the given id. May return after an undefined timeout

REQUEST

PATH PARAMETERS

| NAME | TYPE | DESCRIPTION |
|-------|------|-------------|
| *uuid | uuid | |

RESPONSE

STATUS CODE - 200: command found

RESPONSE MODEL - application/json

STATUS CODE - 400: invalid id

STATUS CODE - 404: no machine with given uuid found

2.6 POST /machines/{uuid}/commands

Execute a command on a single vending machine.

REQUEST

PATH PARAMETERS

| NAME | TYPE | DESCRIPTION |
|-------|------|-------------|
| *uuid | uuid | |

REQUEST BODY - application/json

RESPONSE

STATUS CODE - 201: Sent command to machine.

RESPONSE MODEL - application/json

| NAME | TYPE | DESCRIPTION |
|--------------------------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OBJECT WITH BELOW STRUCTURE | | |
| vending | boolean | |
| batteryCharge | number | |
| estimatedReceiptPaperFillLevel | number | |
| receiptPaperRollLength | integer | |
| cpuTemperature | number | |
| ticketsSoldToday | object | |
| withBicycle | integer | |
| withoutBicycle | integer | |
| volumeOfSalesToday | integer | |
| waiting | array | |
| ticketClass | object | |
| bicycle | boolean | whether or not a bicycle was carried |
| return | boolean | whether or not a return trip has been purchased |
| reduced | boolean | reduced fare for physically disabled persons and children under the age of 14 |
| staff | boolean | only for staff members |
| waitingSince | string | |
| saleCounter | integer | Current sale counter. Each vending machine has its own counter, that increases when a sale (TicketSale or TopUp) is completed. The sale counter can't be changed from the outside. |

STATUS CODE - 400: invalid id

STATUS CODE - 404: no machine with given uuid found

2.7 PATCH /machines/defaultConfig

Change the default configuration for all vending machines.

REQUEST

REQUEST BODY - application/json

| NAME | TYPE | DESCRIPTION |
|------------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| forMachine | string | The machine id for which to apply these settings. May be left empty in a POST request if applicable for all machines. |
| maxBicycles | integer | |
| maxBicyclesTolerance | integer | Tolerance for the maximal amount of passengers carrying a bicycle in the waiting area. This will determine, to what extent the maximum may be exceeded in some situations. |
| maxPassengers | integer | |
| maxPassengersTolerance | integer | Tolerance for the maximal amount of passengers in the waiting area. This will determine, to what extent the maximum may be exceeded in some situations. |
| fares | array | |
| ticketClass | object | |

| NAME | TYPE | DESCRIPTION |
|---------|---------|-------------------------------------------------------------------------------|
| bicycle | boolean | whether or not a bicycle was carried |
| return | boolean | whether or not a return trip has been purchased |
| reduced | boolean | reduced fare for physically disabled persons and children under the age of 14 |
| staff | boolean | only for staff members |
| fare | integer | |

RESPONSE

STATUS CODE - 200: Updated default config of all machines.

RESPONSE MODEL - application/json

| NAME | TYPE | DESCRIPTION |
|-----------------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OBJECT WITH BELOW STRUCTURE | | |
| forMachine | string | The machine id for which to apply these settings. May be left empty in a POST request if applicable for all machines. |
| maxBicycles | integer | |
| maxBicyclesTolerance | integer | Tolerance fot the maximal amount of passengers carrying a bicycle in the waiting area. This will determine, to what extend the maximum may be exceeded in some situations. |
| maxPassengers | integer | |
| maxPassengersTolerance | integer | Tolerance fot the maximal amount of passengers in the waiting area. This will determine, to what extend the maximum may be exceeded in some situations. |
| fares | array | |
| ticketClass | object | |
| bicycle | boolean | whether or not a bicycle was carried |
| return | boolean | whether or not a return trip has been purchased |
| reduced | boolean | reduced fare for physically disabled persons and children under the age of 14 |
| staff | boolean | only for staff members |
| fare | integer | |

2.8 PATCH /machines/{uuid}/config

Change the configuration of a vending machine.

REQUEST

PATH PARAMETERS

| NAME | TYPE | DESCRIPTION |
|-------|------|-------------|
| *uuid | uuid | |

REQUEST BODY - application/json

| NAME | TYPE | DESCRIPTION |
|-------------|---------|-----------------------------------------------------------------------------------------------------------------------|
| forMachine | string | The machine id for which to apply these settings. May be left empty in a POST request if applicable for all machines. |
| maxBicycles | integer | |
| | integer | |

| NAME | TYPE | DESCRIPTION |
|------------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| maxBicyclesTolerance | | Tolerance fot the maximal amount of passengers carrying a bicycle in the waiting area. This will determine, to what extend the maximum may be exceeded in some situations. |
| maxPassengers | integer | |
| maxPassengersTolerance | integer | Tolerance fot the maximal amount of passengers in the waiting area. This will determine, to what extend the maximum may be exceeded in some situations. |
| fares | array | |
| ticketClass | object | |
| bicycle | boolean | whether or not a bicycle was carried |
| return | boolean | whether or not a return trip has been purchased |
| reduced | boolean | reduced fare for physically disabled persons and children under the age of 14 |
| staff | boolean | only for staff members |
| fare | integer | |

RESPONSE

STATUS CODE - 200: Updated config of machine.

RESPONSE MODEL - application/json

| NAME | TYPE | DESCRIPTION |
|------------------------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OBJECT WITH BELOW STRUCTURE | | |
| forMachine | string | The machine id for which to apply these settings. May be left empty in a POST request if applicable for all machines. |
| maxBicycles | integer | |
| maxBicyclesTolerance | integer | Tolerance fot the maximal amount of passengers carrying a bicycle in the waiting area. This will determine, to what extend the maximum may be exceeded in some situations. |
| maxPassengers | integer | |
| maxPassengersTolerance | integer | Tolerance fot the maximal amount of passengers in the waiting area. This will determine, to what extend the maximum may be exceeded in some situations. |
| fares | array | |
| ticketClass | object | |
| bicycle | boolean | whether or not a bicycle was carried |
| return | boolean | whether or not a return trip has been purchased |
| reduced | boolean | reduced fare for physically disabled persons and children under the age of 14 |
| staff | boolean | only for staff members |
| fare | integer | |

STATUS CODE - 404: no machine with supplied uuid found

3. TICKETSALES

3.1 POST /ticketSales/faehrcard

Add a ticket sale.

REQUEST

REQUEST BODY - application/json

| NAME | TYPE | DESCRIPTION |
|------------------|---------|-------------------------------------------------------------------------------|
| uuid | string | |
| issuedBy | string | |
| issuedAt | string | |
| returnValid | boolean | |
| from | enum | ALLOWED:Bislich, Xanten |
| faehrCardPayment | object | |
| uuid | string | UUID of the FaehrCard charged. |
| payment | object | |
| uuid | string | |
| amount | integer | |
| method | enum | ALLOWED:FährCard, Cash, ECCard, BankTransfer, PayPal |
| positions | array | |
| fare | object | |
| ticketClass | object | |
| bicycle | boolean | whether or not a bicycle was carried |
| return | boolean | whether or not a return trip has been purchased |
| reduced | boolean | reduced fare for physically disabled persons and children under the age of 14 |
| staff | boolean | only for staff members |
| fare | integer | |
| count | integer | |
| saleCounter | integer | |
| signature | string | |

RESPONSE

STATUS CODE - 201: The ticket sale has been recorded, if applicable, payment methods have been charged

3.2 POST /ticketSales/ec

Add a ticket sale.

REQUEST

REQUEST BODY - application/json

| NAME | TYPE | DESCRIPTION |
|---------------|---------|-------------------------------------------------------------------------------|
| uuid | string | |
| issuedBy | string | |
| issuedAt | string | |
| returnValid | boolean | |
| from | enum | ALLOWED:Bislich, Xanten |
| ecCardPayment | object | |
| name | string | |
| payment | object | |
| uuid | string | |
| amount | integer | |
| method | enum | ALLOWED:FährCard, Cash, ECard, BankTransfer, PayPal |
| positions | array | |
| fare | object | |
| ticketClass | object | |
| bicycle | boolean | whether or not a bicycle was carried |
| return | boolean | whether or not a return trip has been purchased |
| reduced | boolean | reduced fare for physically disabled persons and children under the age of 14 |
| staff | boolean | only for staff members |
| fare | integer | |
| count | integer | |
| saleCounter | integer | |
| signature | string | |

RESPONSE

STATUS CODE - 201: The ticket sale has been recorded, if applicable, payment methods have been charged

3.3 POST /ticketSales/cash

Add a ticket sale.

REQUEST

REQUEST BODY - application/json

| NAME | TYPE | DESCRIPTION |
|-------------|---------|-------------------------|
| uuid | string | |
| issuedBy | string | |
| issuedAt | string | |
| returnValid | boolean | |
| from | enum | ALLOWED:Bislich, Xanten |
| cashPayment | object | |
| | array | |

| NAME | TYPE | DESCRIPTION |
|---------------|---------|-------------------------------------------------------------------------------|
| denominations | | |
| change | array | |
| payment | object | |
| uuid | string | |
| amount | integer | |
| method | enum | ALLOWED:FährCard, Cash, ECard, BankTransfer, PayPal |
| positions | array | |
| fare | object | |
| ticketClass | object | |
| bicycle | boolean | whether or not a bicycle was carried |
| return | boolean | whether or not a return trip has been purchased |
| reduced | boolean | reduced fare for physically disabled persons and children under the age of 14 |
| staff | boolean | only for staff members |
| fare | integer | |
| count | integer | |
| saleCounter | integer | |
| signature | string | |

RESPONSE

STATUS CODE - 201: The ticket sale has been recorded, if applicable, payment methods have been charged

3.4 DELETE /ticketSales/{uuid}/invalidateReturn

Invalidate a return ticket.

REQUEST

PATH PARAMETERS

| NAME | TYPE | DESCRIPTION |
|-------|------|-------------|
| *uuid | uuid | |

RESPONSE

STATUS CODE - 204: The return ticket has been invalidated.

STATUS CODE - 402: The ticket with the uuid was found, but it isn't a valid return ticket.

STATUS CODE - 404: No Ticket with the supplied uuid has been found.