



# GASTROFIX

## Standard PMS API



### (Hotel Interface)

Performance meets Stability!

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## Overview

This section shortly describes the initially most relevant points in order to get started with the generic hotel API.

## Version History

September 2018	isVoid flag
July 2018	New fields: nonTurnover, servicePeriod
May 2018	New Features: Block non-revenue payments, cumulated shift close, API Key, service periods

## The generic hotel API

There are two ways to use the GASTROFIX generic hotel API.

- The API enables external PMS systems to access transaction data, by entering an endpoint of the System (provided by the PMS). The POS Checkout System generates a transaction as XML during shift close or invoice to room and sends it to the endpoint. The PMS interprets the XML, thus extracting the relevant data from it.
- Additionally the Generic hotel API can send an XML to the GASTROFIX Bridge Software, a software running on a GIDS (Gastrofix Intelligent Device Server) which translates the XML to external PMS protocols from which those can access the transaction data.

In general this document describes the way the GASTROFIX system can connect and read (e.g. get a list of all rooms) and write data (e.g. charge the restaurant bill to a room).

## Security

All calls are made over SSL. Authentication is ensured through two API-keys. Considering inherent flaws of the SSL protocol (Man-in-the-middle attack), GASTROFIX reserves the right to implement additional security measures.

## Call Flow

In case an external provider develops an interface to GASTROFIX, the Endpoint of this call will be provided by the PMS. GASTROFIX will access this endpoint directly from the POS terminals. See Appendix A how to configure this endpoint URL and other settings in the GASTROFIX Cloud (Restaurant Setup).

In case GASTROFIX offers an interface to a third party system, the POS will first send its data to the Bridge Software. The bridge software then sends the data to a specified endpoint.

Example URL: <https://api.<your domain here>/api/cash/1.0/xml/>

All calling parameters are wrapped in XML and sent using POST. The server's response comes back as XML, too.

All XML is preceded by <?xml version="1.0" encoding="utf-8" ?>. This is omitted in the following examples for more clarity.

### Response

The server's response can be either of status **OK** or **FAIL**, containing further information or error code/msg. Examples:

```
<response status="ok">
    <msg>Hello</msg>
</response>
```

```
<response status="fail">
    <err code="100" msg="Invalid system key"/>
</response>
```

### Authentication

Authentication is done through three parameters:

1. <name>: Arbitrary value (e.g. "Checkout Pro"), helps identifying your calls within log files. Should be configurable by the end user to allow settings like "Checkout Pro / Counter" and "Checkout Pro / Service".
2. <systemkey>: This mandatory key identifies the caller. The caller can obtain a key from PMS system and needs to integrate it into the software. The key must be kept secret. The system key verifies the caller against the third party system.
3. <clientkey>: This mandatory key identifies the end user (hotelier). He'll find it in the PMS settings options (after activating the API) and has to transfer it to the callers software (e.g. by entering it in the options of the external cash system). This key too must be kept secret. The client key verifies the business of the caller within the third party system.

### Introduction Example

Method: Ping

Description: Used to ping the server for test purpose

- This is just an example, GASTROFIX will not ping the endpoint -

**Send:**

```
<method name="Ping">
    <authentication clientkey="z" name="x" systemkey="y" />
</method>
```

**Response (ok):**

```
<response status="ok"></response>
```

**Response (fail):**

```
<response status="fail">
    <err code="100" msg="Invalid system key"/>
</response>
```

## Method: GetVersion

The API method *GetVersion* is used by the POS to get the API version that is supported by the server and the server-information (unique name of the PMS product the POS connects to). Both XML tags are required as shown on the “OK” response below. In general the requested XML version is downwards compatible. In case the requested version does not exist / if the server replies with an error code 112 (see appendix), the POS assumes that the server still uses the initial API version 1.0.

Otherwise the POS will use the API methods that are available in that API version which the server supports. When the server does not provide the latest API version, then the POS might not support the full functionality.

The POS will send the following request to the server:

```
<method name="GetVersion">
    <authentication clientkey="z" name="x" systemkey="y"/>
</method>
```

In response to the GetVersion method the server should either reply with an error code 112:



```
<response status="fail">
    <err code="112" msg="Invalid system key"/>
</response>
```

or the server should provide the API version the server supports and the server-information (unique name of the PMS product the POS connects to):

```
<response status="ok">
    <version number="2.7"/>
    <server product="name"/>
</response>
```

## Method: RoomsGetList

By requesting the roomsGetList, you will receive a list of all valid customers of the PMS system. Typical use case: before charging the restaurant bill to a room, the waiter does a plausibility check.

Calling parameters: the status attribute can be used to determine the desired rooms, names, addresses, etc (at the moment just "CheckedIn" for checked-in rooms, in a later version we might also use for instance "All" or "Available". This will be specified with a new API-document).

Response: List of rooms with ID/number from the room and name of guest. Since version 2.1, the Reservation-ID (resid) is also required in the response.

**However, this method is already outdated. You should only use roomsLookupList (see method below).**

### Example:

```
<method name="RoomsGetList" status="CheckedIn">
    <posid>001</posid>
    <posname>Name of Device</posname>
    <posuuid>ABC123</posuuid>
    <posoutlet>1</posoutlet>
    <authentication name="Company" systemkey="X" clientkey="Y"/>
    <startdatetime>2018-02-05 16:57:38</startdatetime>
    <revenuecenter>1</revenuecenter>
</method>
```

```
<response status="ok">
    <rooms>
        <room guestname=" Guest 1" id="105" name="105" resid="ABC123"/>
```

### Response Values

Value	Type	XML Version since	App Version since	Description
method				

<b>name</b>	string	1.0	2.9.3	The name of the method
<b>pattern</b>				Not yet existant: specifies the search string
<b>status</b>	string	2.1	2.12.12	Flag that defines, if a guest(s) is checked in or not
<b>posid</b>	integer	2.1	2.12.12	ID of the POS system
<b>posname</b>	string	2.1	2.12.12	Name of the hardware device
<b>posuuid</b>	string	2.1	2.12.12	UUID of the POS system
<b>posoutlet</b>	integer	2.1	2.12.12	The configured outlet ID for the current business/outlet.
<b>authentication</b>				
<b>name</b>	string	2.1	2.12.12	Name of the company
<b>systemkey</b>	string	2.1	2.12.12	System Key for defining the system the request goes to
<b>clientkey</b>	string	2.1	2.12.12	Client Key for defining the business the request goes to
<b>startdatetime</b>	double	1.0	2.9.3	The timestamp that is provided when the order was created (format: YYYY-MM-DD / HH-MM-SS)
<b>revenuecenter</b>	integer	2.1	2.12.12	The configured revenue/cost center ID for the current business/outlet.
<b>outlet</b>				
Not yet existant: The business Unit ID of the Cloud business.				
<b>response status</b>	method			Response of RoomsGetList
<b>rooms</b>	array	1.0	2.9.3	Array of rooms
<b>room</b>	string	1.0	2.9.3	Name of the guest
<b>guestname</b>				
<b>id</b>	integer	1.0	2.9.3	Unique ID of the room
<b>name</b>	integer	1.0	2.9.3	Number/name of the room (e.g. "5" or "Master Suite" as it is used)
<b>resid</b>	string	2.1	2.12.12	Unique ID of the reservation

## Method: RoomsLookupList

Starting with API Version 2.1 the POS will use the method *RoomsLookupList* when the POS needs to look up a customer / room for payment.

By requesting a certain string, this method is sent to the Bridge which forwards it to the PMS. The response you should get is either a room list with numbers and names, or nothing (in certain cases a customer does not exist or has no credit limit).

The method has an advantage over *RoomsGetList (outdated)* for installations with a couple of hundred rooms and a huge number of guests. The POS does not need to download the complete list, instead the lookup is done on the server side using a search string which was entered at the POS. The server delivers a list of those customers / rooms that match the search string. The response sent by the server has the exact same XML structure as the response to the *RoomsGetList* method.

The request includes the following attributes which control the search:

- *pattern* - Specifies the search string. It is a string, but this might change in the future.
- *field* – Specifies the field that is used for the search. If the attribute is not present, the server should assume the value *Full*
- *status* – Specifies whether all or just customers who are checked in will be returned. If the value is *All*, the server should return all matching customers. If the value is *CheckedIn*, the server should return only customers, who are checked in when the query is run. If the attribute is not present, the server should assume the value *CheckedIn*

The following values can be used for the *field* attribute in a query:

- *Full* – The server should search the customer data on all fields. It resembles a full text search.
- *Room* - Use the search string to look up a customer using the room number
- *Name* - Use the search string to look up a customer using the customer name
- *Phone* - Use the search string to look up a customer using the phone number
- *Address* - Use the search string to look up a customer using the address
- *Email* - Use the search string to look up a customer using the email

### Example:

```
<method field="Full" name="RoomsLookupList" pattern="10" status="CheckedIn">
  <authentication clientkey="553242DD-569D-F91B-0CC7-88AC8476FE86" name="Gastrofix
GmbH" systemkey="9F972637-B137-BE82-019A-4949C1DD053B"/>
  <posid>20</posid>
```

```

<posname>iPad von Simon</posname>
<revenuecenter>1</revenuecenter>
<posuuid>05bb268de1ce477e8f0906d74601c0ca21176777</posuuid>
<startdatetime>2018-02-05 16:58:04</startdatetime>
<posoutlet>1</posoutlet>
<invoice ident="279" outlet="11132"/>
</method>

```

### **Response:**

Value	Type	XML Version since	App Version since	Description
method field				Main object for RoomsGetList containing all related parameters
method				
name	string	1.0	2.9.3	The name of the method
pattern	integer	2.1	2.12.12	Specifies the search string
status	string	2.1	2.12.12	Flag that defines, if a guest(s) is checked in or not
authentication				
clientkey	string	1.0	2.9.3	Client Key for defining the business the request goes to
name	string	1.0	2.9.3	Name of the hardware device (different naming to RoomsGetList-> is authentication name)
systemkey	string	1.0	2.9.3	System Key for defining the system the request goes to
posid	integer	1.0	2.9.3	ID of the POS system
posname	string	1.0	2.9.3	Name of the hardware device
revenuecenter	integer	1.0	2.9.3	The configured revenue/cost center ID for the current business/outlet.
posuuid	string	1.0	2.9.3	UUID of the POS system
startdatetime	double	1.0	2.9.3	The timestamp that is provided when the order was created

				(format: YYYY-MM-DD / HH-MM-SS)
posoutlet	integer	2.1	2.12.12	The configured outlet ID for the current business/outlet.
invoice ident	integer	2.1	2.12.12	The invoice ID of the current transaction for which RoomsLookupList was called
posoutlet	integer	2.1	2.12.12	The configured outlet ID for the current business/outlet (= Cloud ID).
response status	method			Response of RoomsGetList
rooms	array	1.0	2.9.3	Array of rooms
room	string	2.1	2.12.12	Name of the guest
guestname				
id	integer	1.0	2.9.3	Unique ID of the room
name	integer	1.0	2.9.3	Number/name of the room (e.g. "5" or "Master Suite" as it is used)
resid	string	2.1	2.12.12	Unique ID of the reservation

## Method: InvoiceToRoom

Used to charge a bill to a room. After you roomsLookupList has returned valid customers, you can book the opened order on them. A transaction is created on POS side and send to the Bridge. The bridge will interpret the arriving XML, process it to the correct PMS format and sent it to the specified endpoint. Apart from the room ID, all details of the bill must be included.

Unlike standard payments (cash, credit card, etc), the invoice to room will send the transactions directly to the PMS, not at the end of the day.

### Example:

```
<method name="InvoiceToRoom">
  <resid>1.1974</resid>
  <isVoid>False</isVoid>
  <startdatetime>2018-07-23 15:20:24</startdatetime>
  <posid>91</posid>
  <roomid>300</roomid>
  <authentication clientkey="553242DD-569D-F91B-0CC7-88AC8476FE86" name="Gastrofix
  GmbH" systemkey="9F972637-B137-BE82-019A-4949C1DD053B" />
  <revenuecenter>1</revenuecenter>
  <posuuid>fb21a068be3c4f44b51d9e27a921727c07097693</posuuid>
  <posoutlet>1</posoutlet>
  <invoice>
    <datetime>2018-07-23 15:20:24</datetime>
    <posuuid>fb21a068be3c4f44b51d9e27a921727c07097693</posuuid>
    <currency>EUR</currency>
    <guests>5</guests>
    <table>1/01</table>
    <total>200.00</total>
    <posname>iPad von Simon</posname>
    <waiterid>141</waiterid>
    <tip>25.75</tip>
    <serviceid> MUSTERMANN2016[Neu] 15</serviceid>
    <posoutlet>1</posoutlet>
    <startdatetime>2018-07-23 15:19:51</startdatetime>
```

```
<invoicenumber>362</invoicenumber>
<outlet>11132</outlet>
<categories>
    <category amount="10.00" ident="3" name="Diverse" vatrate="19.00" />
    <category amount="168.50" ident="1" name="Getränke" vatrate="19.00" />
    <category amount="160.00" ident="2" name="Speisen" vatrate="19.00" />
</categories>
<ident>279</ident>
<processnumber>362</processnumber>
<posid>91</posid>
<items>
    <item amount="8.50" count="1" discountable="true" groupid="4000"
        groupname="Cocktails" id="e1c9f715-32a5-42f6-a9f3-0c762c9d447f"
        ident="4002" name="Caipirinha" price="8.50" superGroupId="1"
        superGroupName="Getränke" type="item" vatid="105" vatrate="19.00" />
    <item amount="10.00" count="1" discountable="true" groupid="1"
        groupname="Getränke" id="81bc6e3b-307f-495a-ba68-9d800c72a3fe"
        ident="333333" name="Haupt Zwang" price="10.00" superGroupId="1"
        superGroupName="Getränke" type="constraint" vatid="105" vatrate="19.00"
        />
    <item amount="10.00" count="1" discountable="true" groupid="3"
        groupname="Diverse" id="9e626cf9-bd04-459e-83a1-a36800951146"
        ident="123123" name="Zwangsartikel 1" price="10.00"
        ref="81bc6e3b-307f-495a-ba68-9d800c72a3fe" superGroupId="3"
        superGroupName="Diverse" type="item" vatid="105" vatrate="19.00" />
    <item amount="0.00" count="1" discountable="true" groupid="32002"
        groupname="Aggregated Disc" id="4901e893-2f19-4558-a08f-d543e220feaf"
        ident="1234" name="Aggregated Disc Main" price="0.00" superGroupId="2"
        superGroupName="Speisen" type="aggregated" vatid="105" vatrate="19.00"
        />
    <item amount="150.00" count="1" discountable="true" groupid="1"
        groupname="Getränke" id="e3389c81-5b7f-4e2c-9a6d-9b4ae917dc24"
        ident="1234567" name="Aggregated Disc Sub 3" price="150.00"
        ref="4901e893-2f19-4558-a08f-d543e220feaf" superGroupId="1"
        superGroupName="Getränke" type="item" vatid="105" vatrate="19.00" />
    <item amount="100.00" count="1" discountable="true" groupid="2"
```

```
groupname="Speisen" id="0afc6522-7c52-4ef3-aa83-a3bcef4360c6"
ident="123456" name="Aggregated Disc Sub 2" price="100.00"
ref="4901e893-2f19-4558-a08f-d543e220feaf" superGroupId="2"
superGroupName="Speisen" type="item" vatid="105" vatrate="19.00" />
<item amount="50.00" count="1" discountable="true" groupid="2"
groupname="Speisen" id="f6922a11-5e56-4854-9290-9611e0ecfff6"
ident="12345" name="Aggregated Disc Sub 1" price="50.00"
ref="4901e893-2f19-4558-a08f-d543e220feaf" superGroupId="2"
superGroupName="Speisen" type="item" vatid="105" vatrate="19.00" />
<item amount="10.00" count="1" discountable="false" groupid="32014"
groupname="Non-Turnover NonDisc"
id="ac9ce393-1159-4e81-a8ff-c923691eed1d" ident="4444"
name="Non-Turnover NonDisc Common" price="10.00" superGroupId="2"
superGroupName="Speisen" type="item" vatid="105" vatrate="19.00" />
<item amount="-164.25" count="1" ident="0" name="Discount"
price="-164.25" vatrate="0.00" />
<item amount="25.75" count="1" ident="-1" name="gratuity" price="25.75"
vatrate="0.00" />
</items>
<revenuecenter>1</revenuecenter>
</invoice>
<posname>iPad von Simon</posname>
</method>
```

### Response:

```
<response status="ok"></response>
```

### Calling parameters

The following is a description from the available Calling parameters for the method "InvoiceToRoom". If the parameter description is dependant on the used version that is

requested and downwards compatible. The parameter version is dependant on the used App version as described in the table.

Value	Type	XML Version since	App Version since	Description
Method	method			
name	string	1.0	2.9.3	The name of the method
resid	string	2.1	2.12.12	Unique ID of the reservation where the bill will be charged to. Oracle: 1.1974 → 1= Hotel ID and 1974 = Reservation ID from the PMS (important) Sihot: 2147.Walk-in/1234 → 2147 = Account number (important) from the PMS and Walk-in or 1234 is the reservation number
isVoid	boolean	2.7	2.18	Boolean that states, if an invoice is a normal transaction or a void. False=Normal True=Void
startdatetime	double	1.0	2.9.3	The timestamp that is provided when the order was created (format: YYYY-MM-DD / HH-MM-SS)
posid	integer	1.0	2.9.3	The ID of the POS system that was added in the cloud
roomid	integer	1.0	2.9.3	Unique ID of the room where the bill will be charged to
Authentication	string	1.0	2.9.3	Client Key for defining the business the request goes to
clientkey	string	1.0	2.9.3	Name of the company
systemkey	string	1.0	2.9.3	System Key for defining the system the request goes to
revenuecenter	integer	1.0	2.9.3	The revenue center that was configured in the cloud for this POS system
posuuid	string	1.0	2.9.3	The UUID of the Tablet

posoutlet	integer	2.1	2.12.12	The configured outlet ID for the current business/outlet (= Cloud ID).
invoice	array	1.0	2.9.3	The bill / invoice
datetime	string	1.0	2.9.3	The timestamp is provided at the time the transaction was payed. Timestamp (format: YYYYY-MM-DD / HH:MM:SS)
posuuid	string	1.0	2.9.3	Duplicate: The UUID of the Tablet
Currency	string	1.0	2.9.3	3-digit ISO-Code (e.g. EUR / USD / CHF)
guests	integer	1.0	2.9.3	The count of guests on the order
table	string	1.0	2.9.3	Optional: table number / table name
total	double	1.0	2.9.3	The total sum of the transaction (gross total amount (from the item tag) + tips - discount; format: 0.00)
posname	string	1.0	2.9.3	Name of the Tablet that is used
waiterid	integer	2.1	2.12.12	ID of the waiter
tip	double	2.1	2.12.12	The total amount of tip the customer paid for this order (format: 0.00). The tip does not have to be present. If the tag is missing, 0.00 is assumed
serviceid	string	1.0	2.9.3	Name of the customer that is "checked in" in the room the bill is charged to
posoutlet		2.1	2.12.12	The configured outlet ID for the used restaurant / cloud ID (like Restaurant = ID 1 / Bar = ID 2, etc).
startdatetime	double	1.0	2.9.3	Duplicated: The timestamp that is provided when the order was

				created (format: YYYY-MM-DD / HH-MM-SS)
invoicenumber	integer	1.0	2.9.3	Unique invoice ID that matches the same invoice within the cash system
outlet	integer	2.1	2.12.12	Unique restaurant ID which is used in the Gastrofix cloud
serviceperiod	integer	2.7	2.21.0	Service periods that will define the period during which the transaction was ordered (e.g. breakfast, lunch, dinner)
Categories	Array			Array that contains the article-groups that are present in the order
Category amount	double	1.0	2.9.3	Total amount that needs to be paid for this article group (format: 0.00)
Ident	Integer	1.0	2.9.3	Unique identifier used in the cash system to reference the article group. Gastrofix returns the article-group ID
Name	String	1.0	2.9.3	Name of the article-group
Vatrate	double	1.0	2.9.3	VAT rate from the article group (format: 0.00)
ident	integer	2.2		Identifier of the transaction ID
process number	integer	1.0	2.9.3	Unique invoice ID that matches the same invoice within the cash system. Works since XML v2.15, before the number didn't change.
posid		2.1	2.12.12	Duplicated: ID of the POS system
Items	array			List of all items
item amount	double	1.0	2.9.3	Total price (=count*price / format: 0.00)
Count	integer	1.0	2.9.3	Quantity of the item

discountable	boolean	2.3	unknown	Referenciation if an item belongs to a discountable group or not
groupid	integer	2.1	2.12.12	ID of the article-group to which the article belongs to
groupname	string	2.1	2.12.12	Name of the article-group to which the article belongs to
ID	string	2.3	2.18.1648	An ID of an item used for aggregated / constraint items by referencing the ID-string in the ref field.
ident	integer	1.0	2.9.3	Unique identifier used within the cash system to reference the item, GASTROFIX returns the PLU number (e.g. "12345"). Max field length: 200 characters
name	string	1.0	2.9.3	Name (e.g. "Roast Beef")
price	double	1.0	2.9.3	Unit price (format: 0.00)
ref	string	2.3	unknown	Referencing ID of the group the item belongs to (depends on Main item ID)
superGroup ID	integer	2.2	2.15.5	ID of the super-group to which the article belongs to
superGroupName	string	2.2	2.15.5	Name of the super-group (e.g. food)
type	string	2.3	unknown	Upcoming: Type of the item, that defines whether an item is a unique position or belongs to a group of items (e.g. aggregated)
vatid	integer	2.1	2.12.12	ID of the VAT rate
vatrate	double	1.0	2.9.3	VAT rate (format: 0.00)
nonTurnover	boolean	2.7	2.18.2280	Defines if an item can be added to the overall turnover, or if it is a non-turnover item (on which no taxes should be paid for)

Discount Item: item amount	integer	1.0	2.9.3	The total amount of the discount that was applied (price x quantity; format: -0.00).
Discount Item:Count	integer	1.0	2.9.3	Quantity of discounts that were given
Discount Item: ident	integer	1.0	2.9.3	The identifier of the discount line item. The ID is set to "0"
Discount Item: name	string	1.0	2.9.3	The name of the discount
Discount Item: price	integer	1.0	2.9.3	The single price of the original discount (format: -0.00).
Discount Item: vatrate	double	1.0	2.9.3	The vatrate of the discount line item (should usually be 0; format: 0.00).
Tip Item: item amount	integer	1.0	2.9.3	The total amount of the tip that was applied (price x quantity; format: 0.00).
Tip Item:Count	integer	1.0	2.9.3	Quantity of tips that were given
Tip Item: ident	integer	1.0	2.9.3	The identifier of the tip line item. The ID is set to "-1"
Tip Item: name	string	1.0	2.9.3	The name of the tip
Tip Item: price	integer	1.0	2.9.3	The single price of the original tip (format: 0.00).
Tip Item: vatrate	double	1.0	2.9.3	The vatrate of the tip line item (should usually be 0; format: 0.00).
revenuecenter	integer	1.0	2.9.3	Duplicated: The configured revenue/cost center ID for the current business/outlet.
posname		2.1	2.12.12	Name of the hardware device
note	string	1.0	2.9.3	Optional: comment

The <item> tag can contain items showing the given gratuity (tip) and discount. These tags can be ignored or used based on the given requirements.

**Example:**

```
<invoice>
  <categories>
    <category amount="5.25" ident="34" name="Speisen" nettoAmount="4.41"
      vatid="28" vatrate="19.00"/>
    <category amount="1.75" count="1" ident="-1" name="gratuity"
      price="1.75" vatrate="0"/>
  </categories>
  <currency>EUR</currency>
  <datetime>2016-04-15 11:33:37</datetime>
  <invoicenumber>60</invoicenumber>
  <items>
    <item amount="5.25" count="1" groupid="1200" groupname="Speisen"
      ident="400" name="Caesar Salad " price="5.25" vatid="28"
      vatrate="19.00"/>
    <item amount="1.75" count="1" ident="-1" name="gratuity" price="1.75"
      vatrate="0"/>
    <item amount="-2.70" count="1" ident="0" name="Discount" price="-2.70"
      vatrate="0.00"/>
  </items>
```

**Method: InvoicesShiftClose (Extension for transmission of all tables)**

Will transmit a list of all tables paid during the shift without the tables already transferred to the PMS through the InvoiceToRoom - Method (so all tables/invoices paid with a different payment method than PMS/Hotel/To-Room).

This method will only be executed if flag **Shift-End transfer to PMS** is YES. See Appendix A.

**Example:**

```
<method name="InvoicesShiftClose">
  <invoices>
    <invoice>
```

```
<datetime>2018-07-24 16:35:18</datetime>
<posuuid>bec5b8d37df94164bcee092ea6d2c36c54963055</posuuid>
<currency>EUR</currency>
<guests>1</guests>
<table>1/1</table>
<total>8.50</total>
<posname>iPad von Simon</posname>
<waiterid>141</waiterid>
<note />
<posoutlet>1</posoutlet>
<startdatetime>2018-07-24 16:35:09</startdatetime>
<invoicenumber>366</invoicenumber>
<isVoid>False</isVoid>
<outlet>11132</outlet>
<categories>
    <category amount="8.50" ident="1" name="Getränke" vatrate="19.00" />
</categories>
<processnumber>366</processnumber>
<posid>92</posid>
<items>
    <item amount="8.50" count="1" discountable="true" groupid="4000" groupname="Cocktails" id="6874b7c9-175d-4853-88cb-32f009a6d182" ident="4002" name="Caipirinha" price="8.50" superGroupId="1" superGroupName="Getränke" type="item" vatid="105" vatrate="19.00" />
</items>
<revenuecenter>1</revenuecenter>
<payments>
    <payment amountbasecurrency="8.5" currencycode="EUR" currencyexchangerate="1.00" ident="250" internal="false" name="Cash" totalAmount="8.50" vat="19.00" vatid="105" />
</payments>
</invoice>
<invoice>
    <datetime>2018-07-24 16:36:38</datetime>
```

```
<posuuid>bec5b8d37df94164bcee092ea6d2c36c54963055</posuuid>
<currency>EUR</currency>
<guests>5</guests>
<table>1/1</table>
<total>338.50</total>
<posname>iPad von Simon</posname>
<waiterid>141</waiterid>
<note />
<posoutlet>1</posoutlet>
<startdatetime>2018-07-24 16:36:20</startdatetime>
<invoicenumber>367</invoicenumber>
<outlet>11132</outlet>
<categories>
    <category amount="10.00" ident="3" name="Diverse" vatrate="19.00" />
    <category amount="168.50" ident="1" name="Getränke" vatrate="19.00" />
    <category amount="160.00" ident="2" name="Speisen" vatrate="19.00" />
</categories>
<processnumber>367</processnumber>
<posid>92</posid>
<items>
    <item amount="8.50" count="1" discountable="true" groupid="4000" groupname="Cocktails" id="73da7818-bc54-41b4-90cd-eeff86faf4c1" ident="4002" name="Caipirinha" price="8.50" superGroupId="1" superGroupName="Getränke" type="item" vatid="105" vatrate="19.00" />
    <item amount="10.00" count="1" discountable="true" groupid="1" groupname="Getränke" id="5fc6d2be-ce01-4196-81ae-d79438f16227" ident="333333" name="Haupt Zwang" price="10.00" superGroupId="1" superGroupName="Getränke" type="constraint" vatid="105" vatrate="19.00" />
    <item amount="10.00" count="1" discountable="true" groupid="3" groupname="Diverse" id="cc4891ab-5551-4460-a39d-c615c5c17b71" ident="123123" name="Zwangsartikel 1" price="10.00" />
```

```
ref="5fc6d2be-ce01-4196-81ae-d79438f16227" superGroupId="3"
superGroupName="Diverse" type="item" vatid="105" vatrate="19.00"
/>
<item amount="0.00" count="1" discountable="true" groupid="32002"
groupname="Aggregated Disc"
id="6011de07-f036-450b-829a-396e521463af" ident="1234"
name="Aggregated Disc Main" price="0.00" superGroupId="2"
superGroupName="Speisen" type="aggregated" vatid="105"
vatrate="19.00" />
<item amount="50.00" count="1" discountable="true" groupid="2"
groupname="Speisen" id="bd67d23c-8ff1-46b8-96cb-f2b390857fc0"
ident="12345" name="Aggregated Disc Sub 1" price="50.00"
ref="6011de07-f036-450b-829a-396e521463af" superGroupId="2"
superGroupName="Speisen" type="item" vatid="105" vatrate="19.00"
/>
<item amount="100.00" count="1" discountable="true" groupid="2"
groupname="Speisen" id="912ef2ee-cc2f-48df-88ff-7bf5d6e69267"
ident="123456" name="Aggregated Disc Sub 2" price="100.00"
ref="6011de07-f036-450b-829a-396e521463af" superGroupId="2"
superGroupName="Speisen" type="item" vatid="105" vatrate="19.00"
/>
<item amount="150.00" count="1" discountable="true" groupid="1"
groupname="Getränke" id="a5f17773-24ed-4fee-94d3-44a397998b70"
ident="1234567" name="Aggregated Disc Sub 3" price="150.00"
ref="6011de07-f036-450b-829a-396e521463af" superGroupId="1"
superGroupName="Getränke" type="item" vatid="105" vatrate="19.00"
/>
<item amount="10.00" count="1" discountable="false"
groupid="32014" groupname="Non-Turnover NonDisc"
id="2983b206-cd44-432a-a6b4-73ac53dc7bee" ident="4444"
name="Non-Turnover NonDisc Common" price="10.00" superGroupId="2"
superGroupName="Speisen" type="item" vatid="105" vatrate="19.00"
/>
</items>
<revenuecenter>1</revenuecenter>
<payments>
```

```
<payment amountbasecurrency="328.5" currencycode="EUR"
  currencyexchangerate="1.00" ident="257" internal="false"
  name="AMEX" totalAmount="328.50" vat="19.00" vatid="105" />
<payment amountbasecurrency="10" currencycode="EUR"
  currencyexchangerate="1.00" ident="257" internal="false"
  name="AMEX" totalAmount="10.00" vat="19.00" vatid="105" />
<payment amountbasecurrency="-10" currencycode="EUR"
  currencyexchangerate="1.00" ident="257" internal="false"
  name="AMEX" totalAmount="-10.00" vat="19.00" vatid="105" />
</payments>
</invoice>
<invoice>
  <datetime>2018-07-24 16:36:49</datetime>
  <posuuid>bec5b8d37df94164bcee092ea6d2c36c54963055</posuuid>
  <currency>EUR</currency>
  <guests>1</guests>
  <table>1/1</table>
  <total>7.00</total>
  <posname>iPad von Simon</posname>
  <waiterid>141</waiterid>
  <note />
  <posoutlet>1</posoutlet>
  <startdatetime>2018-07-24 16:36:43</startdatetime>
  <invoicenumber>368</invoicenumber>
  <outlet>11132</outlet>
  <categories>
    <category amount="7.00" ident="1" name="Getränke" vatrate="19.00"
      />
  </categories>
  <processnumber>368</processnumber>
  <posid>92</posid>
  <items>
    <item amount="7.00" count="1" discountable="true" groupid="4000"
      groupname="Cocktails" id="96a89074-fff2-4628-8bf4-93edfb9c639f"
      ident="4005" name="Martini Gigger" price="7.00" superGroupId="1"
      superGroupName="Getränke" type="item" vatid="105" vatrate="19.00"
    </item>
  </items>
</invoice>
```

```

        />
    </items>
    <revenuecenter>1</revenuecenter>
    <payments>
        <payment amountbasecurrency="7" currencycode="EUR"
            currencyexchangerate="1.00" ident="280" internal="true"
            name="Non-Revenue" totalAmount="7.00" vat="19.00" vatid="105" />
    </payments>
    </invoice>
</invoices>
<authentication clientkey="553242DD-569D-F91B-0CC7-88AC8476FE86" name="Gastrofix
GmbH" systemkey="9F972637-B137-BE82-019A-4949C1DD053B" />
</method>
```

### Response:

```
<response status="ok"></response>
```

### Calling parameters

The following is a description from the available Calling parameters.

Value	Type	XML Version since	App Version since	Description
method name	string	1.0		The name of the method
invoices	array	1.0	2.9.3	Array of all invoices in InvoicesShiftClose
invoice	array	1.0	2.9.3	The bill / invoice
datetime	string	1.0	2.9.3	The timestamp is provided at the time the transaction was payed. Timestamp (format: YYYY-MM-DD / HH:MM:SS)
posuuid	string	1.0	2.9.3	Duplicate: The UUID of the Tablet

Currency	string	1.0	2.9.3	3-digit ISO-Code (e.g. EUR / USD / CHF)
guests	integer	1.0	2.9.3	Optional: The count of guests on the order
table	string	1.0	2.9.3	Optional: table number / table name
total	double	1.0	2.9.3	The total sum of the transaction (gross total amount (from the item tag) + tips - discount; format: 0.00)
posname	string	1.0	2.9.3	Name of the Tablet that is used
waiterid	integer	2.1	2.12.12	ID of the waiter
note	string	1.0	2.9.3	Optional: comment
posoutlet	integer	2.1	2.12.12	The configured outlet ID for the current business/outlet.
startdatetime	double	1.0	2.9.3	The timestamp that is provided when the order was created (format: YYYY-MM-DD / HH-MM-SS)
invoicenumber	integer	1.0	2.9.3	Unique invoice ID that matches the same invoice within the cash system
isVoid	boolean	2.7	2.18	Boolean that states, if an invoice is a normal transaction or a void. False=Normal True=Void
outlet	integer	2.1	2.12.12	Unique restaurant ID which is used in the Gastrofix cloud
Categories	Array			Array that contains the article-groups that are present in the order
Category amount	double	1.0	2.9.3	Total amount that needs to be paid for this article group (format: 0.00)
Ident	Integer	1.0	2.9.3	Unique identifier used in the cash system to reference the article group. Gastrofix returns the article-group ID
Name	String	1.0	2.9.3	Name of the article-group
Vatrate	double	1.0	2.9.3	VAT rate from the article group (format: 0.00)
process number	integer	1.0	2.9.3	Unique invoice ID that matches the same invoice within the cash

posid	integer	1.0	2.9.3	system. Works since XML v2.15, before the number didn't change. The ID of the POS system that was added in the cloud
Items	array			List of all items
item amount	double	1.0	2.9.3	Total price (=count*price / format: 0.00)
Count	integer	1.0	2.9.3	Quantity of the item
discountable	boolean	2.3	unknown	Referenciation if an item belongs to a discountable group or not
groupid	integer	2.1	2.12.12	ID of the article-group to which the article belongs to
groupname	string	2.1	2.12.12	Name of the article-group to which the article belongs to
ID	string	2.3	2.18.1648	An ID of an item used for aggregated / constraint items by referencing the ID-string in the ref field.
ident	integer	1.0	2.9.3	Unique identifier used within the cash system to reference the item, GASTROFIX returns the PLU number (e.g. "12345"). Max field length: 200 characters
name	string	1.0	2.9.3	Name (e.g. "Roast Beef")
price	double	1.0	2.9.3	Unit price (format: 0.00)
ref	string	2.3	unknown	Referencing ID of the group the item belongs to (depends on Main item ID)
superGroup ID	integer	2.2	2.15.5	ID of the super-group to which the article belongs to
superGroup Name	string	2.2	2.15.5	Name of the super-group (e.g. food)
type	string	2.3	unknown	Upcoming: Type of the item, that defines whether an item is a unique position or belongs to a group of items (e.g. aggregated)
vatid	integer	2.1	2.12.12	ID of the VAT rate

vatrate	double	1.0	2.9.3	VAT rate (format: 0.00)
nonTurnover	boolean	2.7	2.18.2280	Defines if an item can be added to the overall turnover, or if it is a non-turnover item (on which no taxes should be payed for)
Discount Item: item amount	integer	1.0	2.9.3	The total amount of the discount that was applied (price x quantity; format: -0.00).
Discount Item:Count	integer	1.0	2.9.3	Quantity of discounts that were given
Discount Item: ident	integer	1.0	2.9.3	The identifier of the discount line item. The ID is set to "0"
Discount Item: name	string	1.0	2.9.3	The name of the discount
Discount Item: price	double	1.0	2.9.3	The single price of the original discount (format: -0.00).
Discount Item: vatrate	double	1.0	2.9.3	The vatrate of the discount line item (should usually be 0; format: 0.00).
Tip Item: item amount	double	1.0	2.9.3	The total amount of the tip that was applied (price x quantity; format: 0.00).
Tip Item:Count	integer	1.0	2.9.3	Quantity of tips that were given
Tip Item: ident	integer	1.0	2.9.3	The identifier of the tip line item. The ID is set to "-1"
Tip Item: name	string	1.0	2.9.3	The name of the tip
Tip Item: price	integer	1.0	2.9.3	The single price of the original tip (format: 0.00).
Tip Item: vatrate	double	1.0	2.9.3	The vatrate of the tip line item (should usually be 0; format: 0.00).
revenuecenter	integer	1.0	2.9.3	The revenue center that was configured in the cloud for this POS system
payments	array	1.0	2.9.3	contains the used payment methods
payment amountbase currency	double	2.1	2.12.12	Amount of the payment in the base currency (format: 0.00)
currencycode	string	2.1	2.12.12	3-digit ISO-Code (e.g. EUR / USD / CHF) from the currency that was used by the customer

currency exchangerate	double	2.1	2.12.12	Exchange rate that is specified in the Gastrofix cloud (e.g. the customer pays with SFR and the base currency is EUR, he has to pay $10 * 1.08 - 10.8$ SFR)
ident	integer	1.0	2.9.3	Unique identifier used in the cash system to reference the payment method; GASTROFIX returns the payment method ID
internal	boolean	2.4	2.18.1639	Defines whether a payment is an internal (non-revenue) or normal (revenue) payment
name	string	1.0	2.9.3	name of the payment method
totalamount	double	1.0	2.9.3	total amount that was paid via the payment method (format: 0.00)
vat	double	1.0	2.9.3	VAT rate (format: 0.00)
vatid	integer	2.1	2.12.12	ID from the VAT rate
authentication clientkey	string	1.0		Client Key for defining the business the request goes to
name	string	1.0		Name of the company
systemkey	string	1.0		System Key for defining the system the request goes to

If no or negative response is coming in, the POS will retry every 1 minute sending the complete block again.

The Parameters “groupid” and “groupname” are only available as of an app version that supports the API version 2.1.

## Additional Information

### Sandbox

The System is configurable for testing against a Sandbox Environment. Please contact us for your individual agreement and further details.

### Error Codes

The error code format is “ggg.cc” (g = error group digit, c = error code digit). The first part of the code denotes the error group (e.g. BRIDGE, ORACLE, SIHOT, etc.) and the second part specifies the exact error reason. Not all combinations are in use right now. PMS needs to provide these error codes in the answers to a POS request / method:

#### Error Groups:

- 100: BRIDGE
- 102: ORACLE
- 103: SIHOT

#### Bridge Error Codes

- 1: INVALID\_REQUEST
- 11: CANNOT\_CONNECT
- 15: REJECTED\_INVOICE
- 18: ROUNDING\_NOT\_FIXED
- 20: INVALID\_DISCOUNT\_SPLIT
- 25: INVALID\_SYSTEM\_KEY
- 26: INVALID\_SERVICE\_PERIOD
- 99: UNKNOWN

#### Oracle Error Codes

- 1: INCORRECT\_SUPER\_GROUP\_MAPPING

#### Sihot Error Codes

- 12: SHIFT\_CLOSE\_DISABLED

#### Error Messages

The error messages that are sent within an error response (value of the “msg” attribute in the “err” tag) are suited for displaying to the end user (and are shown in case of the Gastrofix POS). In order to achieve that technical details are left out. The exact error can be determined when looking at the error code (multiple error codes may share the same message for simplicities sake).

- 100.1: Invalid request.
- 100.11: Could not connect to the hotel system.
- 100.15: Invoice was rejected by the hotel system.
- 100.18: Received invalid data.
- 100.20: Received invalid data.
- 100.25: Invalid cloud configuration.
- 100.26: Invalid cloud configuration.
- 102.1: Invalid cloud configuration.
- 103.12: Invalid cloud configuration.

---

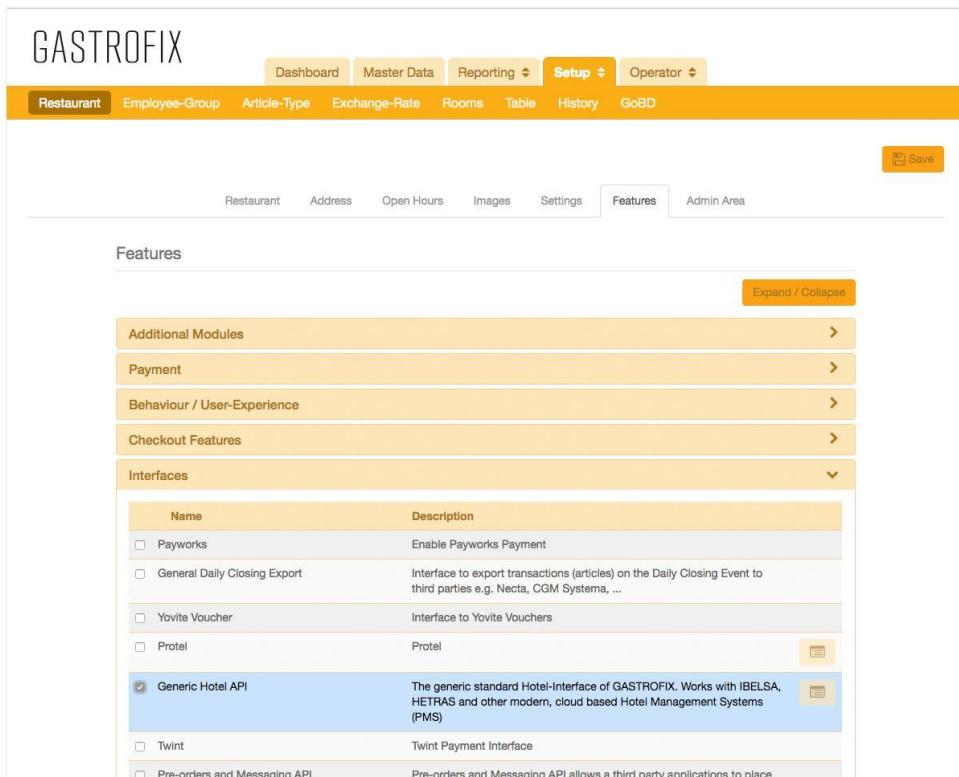
## Technical Details

- Decimal separator: Point (e.g. price="5.50")
- Date format: „yyyy-mm-dd hh:mm:ss“  
(e.g. <datetime>2012-12-12 12:12:12</datetime>)
- System- and ClientKey: classic GUID (with hyphen/uppercase) e.g.  
936DA01F-9ABD-4D9D-80C7-02AF85C822A8
- Currency: 3-digit ISO-Code (e.g. EUR / USD / CHF)
- If not stated otherwise, max length of all strings is 255.

## Appendix A: How to configure a GASTROFIX System

1) Log in to the Cloud at [cloud.gastrofix.com](http://cloud.gastrofix.com) (or [cloud2.gastrofix.com](http://cloud2.gastrofix.com) if we provided access to our test server). If you are running a white label product of GASTROFIX, use the respective URL.

2) Go to Operator / Restaurant / Features, choose "Interfaces" and activate the "Generic Hotel API" as shown below:

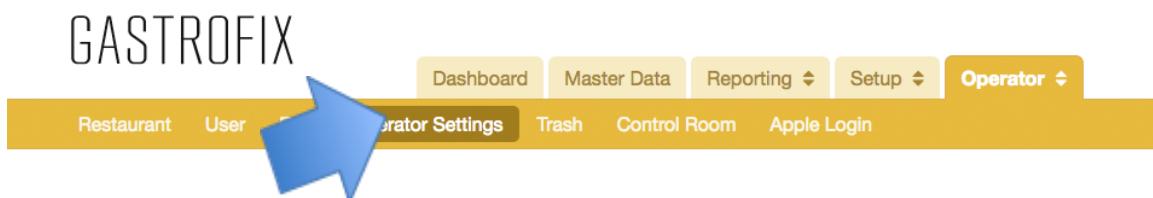


The screenshot shows the GASTROFIX setup interface. At the top, there's a navigation bar with tabs: Dashboard, Master Data, Reporting, Setup (selected), and Operator. Below the navigation bar is another row with tabs: Restaurant (selected), Employee-Group, Article-Type, Exchange-Rate, Rooms, Table, History, and GoBD. The main content area is titled 'Features' and contains a table with several rows. One row, 'Generic Hotel API', has a checked checkbox and is highlighted with a blue background. The table columns are 'Name' and 'Description'. There are also 'Edit' and 'Delete' icons for each row.

Name	Description
<input type="checkbox"/> Payworks	Enable Payworks Payment
<input type="checkbox"/> General Daily Closing Export	Interface to export transactions (articles) on the Daily Closing Event to third parties e.g. Necta, CGM Systems, ...
<input type="checkbox"/> Yovite Voucher	Interface to Yovite Vouchers
<input type="checkbox"/> Protel	Protel
<input checked="" type="checkbox"/> Generic Hotel API	The generic standard Hotel-Interface of GASTROFIX. Works with IBELSA, HETRAS and other modern, cloud based Hotel Management Systems (PMS)
<input type="checkbox"/> Twint	Twint Payment Interface
<input type="checkbox"/> Pre-orders and Messaging API	Pre-orders and Messaging API allows a third party applications to place orders and get information about them.

3) Save the changes and go back to this screen

4) Go to "Operator / Operator Settings":



The screenshot shows the GASTROFIX operator settings interface. At the top, there's a navigation bar with tabs: Dashboard, Master Data, Reporting, Setup, and Operator (selected). Below the navigation bar is another row with tabs: Restaurant, User, Operator Settings (selected), Trash, Control Room, and Apple Login. The main content area is currently empty.

5) Scroll down until you see the Generic PMS API

## Generic Hotel API Settings

Client Key	<input type="text"/>
URL (endpoint of PMS)	<input type="text" value="https://rooms.ibelsa.com/api/cash/1.0/xml/"/>
Customer Group	<input type="text" value="Select value"/>
Transfer all Non-Room Bills to PMS	<input type="radio"/> No

6) Do all the necessary settings and save

**Client key:** The key the PMS provides to the POS to identify the client

**URL:** The PMS endpoint the POS communicates to

**Customer Group:** Any request to get the guest in a room is proxied as a temporary entry in the GASTROFIX customer database. Choose the customer group you want to use for this purpose. (Please note that the feature customer database has to be activated additionally).

**Shift-End transfer to PMS:** Select YES if GASTROFIX should transfer all non-room bills (payment transactions) to the PMS at the shift-closing. In that case the method InvoicesShiftClose will be executed when the shift is closed on the POS (day end or close gastronomic day). If NO is selected, this additional method is not executed and only bills charged to a hotel room will be transferred to the PMS in real time (when the payment to the room is done).