# Gestix Webshop API

**Gestix Business or above with webshop module**

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# Gestix Webshop API

## Objective

The Gestix Web-Shop Invoicing API (or simply Gestix API) is an Application Programming Interface designed to provide web-developers with the tools to integrate an e-Commerce website with the Gestix ERP software.

## Benefits

By communicating with the Gestix ERP, the e-Commerce website can provide:
- Accurate information about the availability of the selling products;
- Record on-line orders;
- Record newly registered customers;
- Provide the invoice to the user;
- Up to date Inventory information;
- Other benefits.

## How

The Gestix API uses the HTML FORM POST method to exchange information with the e-Commerce website.

The e-Commerce software constructs an HTML FORM to pass Gestix the data it needs to record the on-line transaction. This data includes the Command, and the Response URL to which Gestix will post the results.

The e-Commerce software then posts these forms to Gestix, which will then post the response back to the Response URL. On success, the response will include any pertinent data and, if applicable, HTML and PDF versions of the documents being recorded.

## Requirements

- Gestix Business lifetime licence;
- WebShop aditional module.

# How it's done

The e-Commerce website constructs an HTML *form* using the *post* method:

```
<from action="http://gestix_host/gestix_path/gnet-forms.cgi" method="post">
```

All forms must include the following authentication fields:

```
<input name="autoid" value="usr_autoid" />
```
, as set in Admin, Parameters, `usr_autoid`;

```
<input name="db" value="database" />
```
, as seen in Admin, Summary, Database Name, but without the `gnet_` prefix;

```
<input name="auth1" value="user" />
```
, an user login created in Admin, Logins;

```
<input name="auth2" value="password" />
```
, password for the above mentioned user login;

```
<input name="response_url" value="address" />
```
, complete address of the website's script that will handle Gestix responses';

All requests are uniquely identified by an ordinal number between 0 an 99999999:

```
<input name="ordinal_number" value="ordinal" />';
```

The purpose of the request is stated in the *command* field:

```
<input name="command" value="command" />
```

The *command* may be any from the following available:

- `customer`: to add, update or retrieve customer information;
- `article`: to add or retrieve one article information;
- `article-list`: to get a list of multiple articles;
- `order`: to record an order or a quote;
- `invoice`: to record an invoice or cash sale;
- `receipt`: to record a payment of an invoiced sale and provide a receipt.

Depending on the command given, aditional fields will be required.

After processing the request, Gestix will return the answer to the respose URL, also using the *post* method.

The following fields will always be present:

- `response`: *ok* or *error*, followed by either a success or error message;
- `command`: the same as in the original request;

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- `autoid`: the same as in the original request;

- `version`: the Gestix API version;

- `db`: the database used;

- `ordinal_number`: the ordinal number of the request being answered.

Depending on the command being answered, aditional fields will be present.

The following sections will detail each commands' request and response fields.

Note: Numeric fields will be right aligned and padded with spaces, e.g.: "          15" ( 13 spaces and 2 digits in a 15 character field).

# The `customer` command

## Purpose

With this command it is possible to create, update or retrieve customers' records.

## Usage

To retrieve a record, use either `ent_id`, `ent_taxid` or `ent_email`, exclusively.
When creating a new record, if `ent_id` is not supplied, Gestix will assign one.
When updating an existing record, all previously stored information will be erased.

## Request form fields

| Field Name | Contents | Size and type |
|---|---|---|
| `ent_id` | Customer ID | 15 characters |
| `ent_name` | Customer name, line 1 | 40 characters |
| `ent_name2` | Customer name, line 2 | 40 characters |
| `ent_taxid` | Taxpayer ID | 15 characters |
| `ent_phone` | Customer landline phone number | 20 characters |
| `ent_fax` | Customer fax number | 20 characters |
| `ent_mobile` | Customer cell phone number | 20 characters |
| `ent_email` | Customer electronic mail address | 255 characters |
| `ent_rep` | Sales representative ID, from the Sales Reps menu | 15 characters |
| `ent_obs` | Comments | 255 characters |
| `ent_kword` | Customer product line | 20 characters |
| `ent_cond` | Customer payment terms | 20 characters |
| `adr_1_0` | Customer address, line 1, Street and number | 40 characters |
| `adr_2_0` | Customer address, line 2, City/Suburb | 40 characters |
| `adr_3_0` | Customer address, line 3, Postal code | 40 characters |
| `adr_4_0` | Customer address, line 4, Country | 40 characters |
| `adr_1_1` | Shipping address, line 1, Street and number | 40 characters |
| `adr_2_1` | Shipping address, line 2, City/Suburb | 40 characters |
| `adr_3_1` | Shipping address, line 3, Postal code | 40 characters |
| `adr_4_1` | Shipping address, line 4, Country | 40 characters |

## Response

In the response, all the request's fields will be present, even if empty.

# The `article` command

## Purpose

With this command it is possible to create, update or retrieve articles' records.

## Usage

To retrieve an article record, provide `kit_id`.
When creating a new record, if `kit_id` is not supplied, Gestix will assign one.
When updating an existing record, all previously stored information will be erased.

## Request form fields

| Field Name | Contents | Size and type |
| --- | --- | --- |
| `kit_id` | Article ID, also known as Item Reference | 15 characters |
| `kit_fam` | Family ID | 15 characters |
| `kit_fam_descr` | Family Title | 40 characters |
| `kit_dsctab` | Article Category ID | 11 characters |
| `kit_descr` | Article Description | 80 characters |
| `kit_nomen` | Article nomenclature | 255 characters |
| `kit_obs` | Article comments | 1000 characters |
| `kit_up` | Sale price, default price list | Numeric, 16 integers and 4 decimals |
| `kit_unit` | Unit of Measurement | 15 characters |
| `kit_tax` | Value-Added Tax | Percentage between 0 and 99 |
| `kit_cur` | Currency code | 5 characters |
| `kit_dsc1` | Promotional discount | Percentage between 0 and 99 |
| `kit_dsc2` | Maximum discount | Percentage between 0 and 99 |
| `kit_tax2` | ECO tax | Percentage between 0 and 99 |
| `kit_bc1` | Bar code, line 1 | 15 characters |
| `kit_bc2` | Bar code, line 2 or supplier's item reference | 15 characters |
| `kit_kwords` | Report keyword | 15 characters |
| `kit_grossw` | Gross weight | Numeric, 16 integers |

|  |  | and 4 decimals |
|---|---|---|
| `kit_netw` | Net weight | Numeric, 16 integers and 4 decimals |
| `kit_unitvol` | Unit's volume or capacity | Numeric, 16 integers and 4 decimals |
| `kit_vols` | Volumes per unit | Numeric, 16 integers and 4 decimals |
| `kit_sec` | Security stock | Numeric, 16 integers and 4 decimals |
| `kit_o_days` | Days to shipping | Numeric |
| `kit_o_qtmin` | Minimum sale quantity | Numeric, 16 integers and 4 decimals |

## Response

In the response post, all the request's fields will be present, even if empty.

The following extra fields might be present:

| Field Name | Contents | Size and type |
|---|---|---|
| `price_lists` | In licenses with multiple price lists, number of price lists | Integer |
| `price_list`*N* | In licenses with multiple price lists, price list name, where *N* is the price list index, starting from 0. `price_list0` will always be the price list checked as default | 80 characters |
| `price_list_taxinc`*N* | In licenses with multiple price lists, whether unit price has VAT included, where *N* is the price list index, starting from 0 | 0 means VAT not included, 1 means VAT included |
| `price_`*N* | In licenses with multiple price lists, unit price, where *N* is the price list index, starting from 0. `price_0` will always be the default unit price | Numeric, 16 integers and 4 decimals |
| `kit_up` | In licenses with single price list, unit price | Numeric, 16 integers and 4 decimals |
| `kit_stock` | Stock quantity on hand | Numeric, 16 integers and 4 decimals |
| `kit_pnd_so` | Stock quantity pending on sales orders | Numeric, 16 integers and 4 decimals |

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|---|---|---|
| `kit_pnd_po` | Stock quantity pending on purchase orders | Numeric, 16 integers and 4 decimals |
| `kit_pnd_prd` | In licenses with production module, stock quantity pending production | Numeric, 16 integers and 4 decimals |
| `kit_pnd_cc` | Stock quantity on customer's consignments | Numeric, 16 integers and 4 decimals |
| `kit_pnd_sc` | Stock quantity on supplier's consignments | Numeric, 16 integers and 4 decimals |

# The `article-list` command

## Purpose

With this command it is possible to search the articles' records.

## Usage

Fill in the fields with the search criteria. Multiple field search criteria is allowed. The '*' wildcard can be used.

## Request form fields

| Field Name | Contents | Size and type |
|---|---|---|
| `kit_id` | Article ID, also known as Item Reference | 15 characters |
| `kit_fam` | Family ID | 15 characters |
| `kit_descr` | Article Description | 80 characters |
| `kit_s_chk` | Articles checked as 'Listed in Point of Sale' | '*' will search all articles; blank or absent will only search checked articles |
| `kit_dsctab` | Article Category ID | 11 characters |

## Response

The response fields for the `article-list` command are the same as for the `article` command.

An extra field with the total number of records listed is provided.

All article's fields are suffixed with an underscore and index number. Some examples are shown bellow.

| Field Name | Contents | Size and type |
|---|---|---|
| `nr_of_items` | Total number of records listed | Integer |
| `kit_descr_X` | Article description for item index number $X$, with $X$ between 0 and `nr_of_items-1` | e.g.: `kit_descr_5`: article description for the 6th item. |
| `price_N_X` | Unit price in price list $N$ for article index $X$, with $N$ between 0 and `price_lists-1` and $X$ between 0 and `nr_of_items-1` | e.g.: `price_3_5`: 4th price-list unit price for the 6th item |

# The `order` command

## Purpose

This command is used to record a sales order or a sales quote.

## Usage

Provide customer information and a lists of articles or services.
To use previously recorded customer information, simply provide one of `ent_id`, `ent_taxid` or `ent_email`, exclusively. If any of them is provided and aditional customer information fields are sent, even if empty, these will supersede the information previously stored. The new information will be used in the document being requested and written to the customer's record.
If a customer's record cannot be found using the provided information, a new record is created and an `ent_id` is assigned to it by Gestix.
To select an existing article or service, provide both `dit_type` and `dit_kit_id`.

## Request form fields

| Field Name | Contents | Size and type |
|---|---|---|
| **Document information** | | |
| `dhd_ser` | Document series ID, as set in Admin, Customer's Documents | |
| `dhd_ref` | Document reference (not the order number) | 15 characters |
| `dhd_yref` | Customer's order reference | 15 characters |
| `dhd_pay_type` | Payment type ID, as set in Admin, Payment Types | |
| `dhd_pay_ref` | Payment reference | 24 characters |
| **Customer information** | | |
| `ent_id` | Customer ID | 15 characters |
| `ent_name` | Customer name | 80 characters |
| `ent_rep` | Sales Representative ID | 15 characters |
| `ent_taxid` | Customer taxpayer ID | 15 characters |
| `ent_phone` | Customer landline telephone number | 20 characters |
| `ent_fax` | Customer fax number | 20 characters |
| `ent_email` | Customer electronic mail address | 255 characters |
| `adr_1_0` | Customer address, line 1, Street and number | 40 characters |
| `adr_2_0` | Customer address, line 2, City/Suburb | 40 characters |
| `adr_3_0` | Customer address, line 3, Postal code | 40 characters |

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|---|---|---|
| adr_4_0 | Customer address, line 4, Country | 40 characters |
| adr_1_1 | Shipping address, line 1, Street and number | 40 characters |
| adr_2_1 | Shipping address, line 2, City/Suburb | 40 characters |
| adr_3_1 | Shipping address, line 3, Postal code | 40 characters |
| adr_4_1 | Shipping address, line 4, Country | 40 characters |
| **Item information** | | |
| lines | number of lines (items) being sent | integer |
| The following field names must be suffixed with an item index number, shown as *N*, ranging from 0 up to lines-1 | | |
| dit_type*N* | Item type, 'P' for articles (default when dit_kit_id is provided), 'S' for services or 'T' for free text (default when dit_kit_id is not provided) | |
| dit_kit_id*N* | Item ID, either Article ID or Service ID | 15 characters |
| dit_descr*N* | Item description | 80 characters |
| dit_unit*N* | Unit of measurement | |
| dit_qty*N* | Sale quantity | |
| dit_up*N* | Sale unit price | |
| dit_dsc1*N* | Rebate expressed as a percentage Discount. Defaults to the promotion discount when specified in the Article record. | |
| dit_tax*N* | Sales tax. The Default Tax if absent. | |
| dit_s_taxinc*N* | Whether sale unit price includes tax | '1' if tax included, otherwise '0' or absent |
| ksn_id*N* | Serial number of item (Enterprise only) | |

## Response

| Field Name | Contents | Size and type |
|---|---|---|
| **Customer information** | | |
| ent_rfi | Customer record number | |
| ent_id | Customer ID | |
| ent_taxid | Customer taxpayer ID | |
| ent_email | Customer electronic mail address | |

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|---|---|---|
| **ent_name** | Customer name | |
| **Document information** | | |
| **dhd_rfi** | Document record number | |
| **dhd_ser** | Document series | |
| **dhd_sqno** | Document sequential number | |
| **dhd_dt** | Document date | |
| **dhd_liq** | Net amount before taxes | |
| **dhd_taxes** | The amount of taxes | |
| **dhd_tot** | The total amount of the document | |
| **html_file** | The Gestix document print in HTML format | |
| **pdf_file** | The internally-generated PDF version of the HTML document | |

# The `invoice` command

## Purpose

This command is used to record a cash sale or an invoice.

## Usage

Provide customer information and a lists of articles or services.

To use previously recorded customer information, simply provide one of `ent_id`, `ent_taxid` or `ent_email`, exclusively. If any of them is provided and aditional customer information fields are sent, even if empty, these will supersede the information previously stored. The new information will be used in the document being requested and written to the customer's record.

If a customer's record cannot be found using the provided information, a new record is created and an `ent_id` is assigned to it by Gestix.

To select an existing article or service, provide both `dit_type` and `dit_kit_id`.

## Request form fields

| Field Name | Contents | Size and type |
|---|---|---|
| **Document information** | | |
| `dhd_ser` | Document series ID, as set in Admin, Customer's Documents | |
| `dhd_ref` | Document reference (not the invoice number) | 15 characters |
| `dhd_yref` | Customer's purchase order reference | 15 characters |
| `dhd_pay_type` | Payment type ID, as set in Admin, Payment Types | |
| `dhd_pay_ref` | Payment reference | 24 characters |
| **Customer information** | | |
| `ent_id` | Customer ID | 15 characters |
| `ent_name` | Customer name | 80 characters |
| `ent_rep` | Sales Representative ID | 15 characters |
| `ent_taxid` | Customer taxpayer ID | 15 characters |
| `ent_phone` | Customer landline telephone number | 20 characters |
| `ent_fax` | Customer fax number | 20 characters |
| `ent_email` | Customer electronic mail address | 255 characters |
| `adr_1_0` | Customer address, line 1, Street and number | 40 characters |
| `adr_2_0` | Customer address, line 2, City/Suburb | 40 characters |
| `adr_3_0` | Customer address, line 3, Postal code | 40 characters |

| | | |
|---|---|---|
| `adr_4_0` | Customer address, line 4, Country | 40 characters |
| `adr_1_1` | Shipping address, line 1, Street and number | 40 characters |
| `adr_2_1` | Shipping address, line 2, City/Suburb | 40 characters |
| `adr_3_1` | Shipping address, line 3, Postal code | 40 characters |
| `adr_4_1` | Shipping address, line 4, Country | 40 characters |
| **Item information** | | |
| `lines` | number of lines (items) being sent | integer |
| The following field names must be suffixed with an item index number, shown as `N,` ranging from `0` up to `lines-1` | | |
| `dit_typeN` | Item type, '`P`' for articles (default when `dit_kit_id` is provided), '`S`' for services or '`T`' for free text (default when `dit_kit_id` is not provided) | |
| `dit_kit_idN` | Item ID, either Article ID or Service ID | 15 characters |
| `dit_descrN` | Item description | 80 characters |
| `dit_unitN` | Unit of measurement | |
| `dit_qtyN` | Sale quantity | |
| `dit_upN` | Sale unit price | |
| `dit_dsc1N` | Rebate expressed as a percentage Discount. Defaults to the promotion discount when specified in the Article record. | |
| `dit_taxN` | Sales tax. The Default Tax if absent. | |
| `dit_s_taxincN` | Whether sale unit price includes tax | '1' if tax included, otherwise '0' or absent |
| `ksn_idN` | Serial number of item (Enterprise only) | |

## Response

| Field Name | Contents | Size and type |
|---|---|---|
| **Customer information** | | |
| `ent_rfi` | Customer record number | |
| `ent_id` | Customer ID | |
| `ent_taxid` | Customer taxpayer ID | |
| `ent_email` | Customer electronic mail address | |

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|---|---|---|
| **ent_name** | Customer name | |
| **Document information** | | |
| **dhd_rfi** | Document record number | |
| **dhd_ser** | Document series | |
| **dhd_sqno** | Document sequential number | |
| **dhd_dt** | Document date | |
| **dhd_liq** | Net amount before taxes | |
| **dhd_taxes** | The amount of taxes | |
| **dhd_tot** | The total amount of the document | |
| **html_file** | The Gestix document print in HTML format | |
| **pdf_file** | The internally-generated PDF version of the HTML document | |

# The `receipt` command

## Purpose

This command is used to record the payment of an invoice and provide a receipt.

## Usage

Provide customer, invoice identification and total amount being paid.
For customer identification, provide one of `ent_id`, `ent_taxid` or `ent_email`, exclusively. If any of them is provided and aditional customer information fields are sent, even if empty, these will supersede the information previously stored. The new information will be used in the document being requested and written to the customer's record.
For invoice identification, provide document series and document sequential number.
Amount paid is also mandatory because partial payments are allowed.

## Request form fields

| Field Name | Contents | Size and type |
|---|---|---|
| **Document information** | | |
| `dhd_ser` | Receipt series ID, as set in Admin, Customer's Documents | |
| `dhd_ref` | Receipt reference (not the receipt and not the invoice number) | 15 characters |
| `dhd_yref` | Customer's purchase order reference | 15 characters |
| `dhd_pay_type` | Payment type ID, as set in Admin, Payment Types | |
| `dhd_pay_ref` | Payment reference | 24 characters |
| **Customer information** | | |
| `ent_id` | Customer ID | 15 characters |
| `ent_name` | Customer name | 80 characters |
| `ent_rep` | Sales Representative ID | 15 characters |
| `ent_taxid` | Customer taxpayer ID | 15 characters |
| `ent_phone` | Customer landline telephone number | 20 characters |
| `ent_fax` | Customer fax number | 20 characters |
| `ent_email` | Customer electronic mail address | 255 characters |
| `adr_1_0` | Customer address, line 1, Street and number | 40 characters |
| `adr_2_0` | Customer address, line 2, City/Suburb | 40 characters |
| `adr_3_0` | Customer address, line 3, Postal code | 40 characters |
| `adr_4_0` | Customer address, line 4, Country | 40 characters |

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|---|---|---|
| `adr_1_1` | Shipping address, line 1, Street and number | 40 characters |
| `adr_2_1` | Shipping address, line 2, City/Suburb | 40 characters |
| `adr_3_1` | Shipping address, line 3, Postal code | 40 characters |
| `adr_4_1` | Shipping address, line 4, Country | 40 characters |
| **Document information** | | |
| `lines` | number of lines (documents) being paid | integer |
| The following field names must be suffixed with an item index number, shown as *N*, ranging from 0 up to `lines-1` | | |
| `dit_kit_id`*N* | Series of the document being paid | |
| `dit_descr`*N* | Sequential number of the document being paid | |
| `dit_up`*N* | Amount being paid | |

## Response

| Field Name | Contents | Size and type |
|---|---|---|
| **Customer information** | | |
| `ent_rfi` | Customer record number | |
| `ent_id` | Customer ID | |
| `ent_taxid` | Customer taxpayer ID | |
| `ent_email` | Customer electronic mail address | |
| `ent_name` | Customer name | |
| **Document information** | | |
| `dhd_rfi` | Document record number | |
| `dhd_ser` | Document series | |
| `dhd_sqno` | Document sequential number | |
| `dhd_dt` | Document date | |
| `dhd_liq` | Net amount before taxes | |
| `dhd_taxes` | The amount of taxes | |
| `dhd_tot` | The total amount of the document | |
| `html_file` | The Gestix document print in HTML format | |

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| | | |
|---|---|---|
| **pdf_file** | The internally-generated PDF version of the HTML document | |