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1. Introduction API

The GLS Shipping API is a RESTful web service solution for printing labels and manifesting shipping data. This solution is available to all customers who want to directly integrate their system with GLS. This document will explain which API end-points are available and how to use them. For every GLS Product and/or Service a json example is available to use as a starting point.

2. Developer portal

The GLS API developer Portal will provide access to the API test and production environment including code examples and the possibility to interact directly with the API from the online API documentation.

2.1.   Link to portal

To access the portal, browse to the following link: https://api-portal.gls.nl

Within the portal the test environment and the production environment descriptions are located in the products section. Information about the different end-points and the field description can also be found here. To interact with the API and to get API keys for test and production sites, a user account within the developer portal is required. By subscribing to a product a API key can be acquired for that product.

2.2.   Test vs production

All development efforts should be done within the test environment. Once the API integration is finished, the API request can be redirected to the production environment.

3. MyGLS account

To be able to send requests to the API successfully, a MyGLS username and password must be included in the API request. The MyGLS credentials are provided to the shipper.

4. API Endpoints

4.1.   ValidateLogin

Operator to validate the MyGLS username and password.

4.2.   CreateLabel

The CreateLabel endpoint is used to generate a shipment and corresponding shipping labels. The unit numbers are generated by the API and returned in the API response together with the label(s).

4.2.1. CustomerNo

This field should only be used when there is more than one operational customer number linked to the MyGLS API account. If only one operational customer number is linked then this field may be omitted.

4.2.2. ShipType

The API can be used to create Parcel shipments ("ShipType"="P") as well as Freight shipments ("ShipType"="F"). The maximum weight of a parcel is 32kg. The weights and dimensions for freight units are presented in the table below.

4.2.3. UnitType

UnitTypes are only passed in the request for Freight shipments ("ShipType"="F"). .

UnitType	ShipType	Description	Max Weight	Dimensions
BP	F	Block pallet	850 kg	120cmx100cmx220cm
CO	F	Collo	32 kg	MaxVolume: 0,4 m3 MaxLength: 200cm MaxPieces: 10
LG	F	Length collo	25 kg	MaxVolume: 0,4 m3 MinLength: 200cm MaxLength:600cm MaxPieces: 10
MP	F	Mini pallet	300 kg	60cmx80cmx150cm
PL	F	Standard pallet	675 kg	120cmx80cmx220cm
RL	F	Roll container	350 kg	80cmx80cmx195cm
XL	F	Oversized pallet	1000 kg	240cmx100cmx220cm

4.2.4. ShippingDate

Adding a shipping date to the request will trigger the release of the label data to the GLS TMS system on that specific date. This option is used when there is no doubt when the parcels are being picked up. If it is not certain when and/or how many of the parcels are being shipped, then you should omit the shipping date and use the LabelConfirm endpoint to confirm the individual units that are being shipped.

4.2.5. LabelType

The API can generate labels in ZPL format (Zebra Printing Language) or PDF format (Base64 encoded). The type of label is determined by the content of field "LabelType". The following types are available:

LabelType	Level	Property in response
zpl	unit	label
pdf	unit	label
pdfa6u	unit	label
pdfa6s	shipment	labels
pdfroutingonly	unit	label
pdf2a4	shipment	labels
pdf4a4	shipment	labels
None		

Regular labels are returned in field "Label" (single labels) or "Labels" (A4). The additional Shop-Return label is returned in field "LabelShopReturn"

4.2.6. ReturnRoutingData

Customers with specific demands regarding the label are able to create the labels themselves. In this case all the label fields can be included in the API response by adding "ReturnRoutingData":"Y" or "LabelType":"None"

4.2.7. TrackingLink

A tracking link can be included in the API response. These are two different levels.
- "TrackingLinkType: U" will return a tracking link on unit level
- "TrackingLinkType: S" will return a tracking link on shipment level.

4.3. DeleteLabel

The DeleteLabel endpoint is used to delete shipping units for which a label was already printed. To delete a shipping unit an existing unit number must be included in the request.

4.4. ConfirmLabel

The ConfirmLabel endpoint is used to confirm which unit numbers are being shipped out. To confirm a shipping unit, an existing unit number must be included in the request. Unit numbers that are not confirmed remain in the system and can be confirmed on a later point in time.

4.5. CreateShopReturn

If only a stand-alone ShopReturn label is required this Endpoint can be used to request this label. This label is usually created when a regular outbound shipment is already delivered and the recipient would like to return (part of) the shipment. This label can be send to the recipient by mail or it could be used within the return section of the merchants web-shop.

4.6. CreatePickup

The CreatePickup endpoint is used to create pickup instructions. The shipments can be returned to the shippers address or a third party address if submitted in the request. There is no shipping label generated by this request. To create a successful Pick-Up instruction 3 addresses need to be included in the request.

- RequesterAddress
- PickUpAddress
- DeliveryAddress

4.7. DeletePickup

The DeletePickup endpoint is used to delete shipping units for which a pickup instruction was already created. To delete a shipping unit an existing unit number must be included in the request.

4.8. GetParcelShops

The GetParcelShops endpoint will return a list of the nearest ParcelShops (a.k.a pickup points) based on the zipcode that is provided in the request. The ParcelShopID of the ParcelShop that is selected during the checkout must be included in the Create label Request (e.g. "ShopDeliveryParcelShopId": "34310025").

4.9. GetDeliveryOptions

To get a list of available delivery options based on a Shippingdate, Zipcode and countyCode the GetDeliveryOptions operator can be used. This may be usefull to display the shipping options during check-out in a webshop.

5. Product/Services

Network	Product Description	DestinationType	Service	Service Description	Combined Services
P	Business Parcel	DOMESTIC			
P	Business Parcel	DOMESTIC	SRS	ShopReturnService	SHD;SCB
P	Business Parcel	DOMESTIC	SHD	ShopDeliveryService	SRS
P	Business Parcel	DOMESTIC	P&S	Pick&ShipService	
P	Business Parcel	DOMESTIC	SCB	SaturdayService	SRS
P	Business Parcel	DOMESTIC	P&R	Pick&ReturnService	
P	Euro Business Parcel	EURO	P&S	Pick&ShipService	
P	Euro Business Parcel	EURO			
P	Euro Business Parcel	EURO	P&R	Pick&ReturnService	
P	ExpressService	DOMESTIC	SRS	ShopReturnService	
P	ExpressService	DOMESTIC			
P	Global Business Parcel	GLOBAL			
F	Business Freight	DOMESTIC			
F	Business Freight	DOMESTIC	P&S	Pick&ShipService	
F	Business Freight	DOMESTIC	P&R	Pick&ReturnService	
F	Euro Business Freight	EURO	P&S	Pick&ShipService	
F	Euro Business Freight	EURO			
F	Euro Business Freight	EURO	P&R	Pick&ReturnService	
F	Freight Solutions	GLOBAL			
F	Business Express Freight	DOMESTIC			

6. Request Examples

6.1. CreateLabel

6.1.1. Business Parcel (BP)| Euro Business Parcel (EBP)| Global Business Parcel (GBP)

The only difference between BP, EBP and GBP is the destination country code. The API determines the product automatically, based on the destination.

```json
{
    "Username": "apitest1",
    "Password": "9PMev9qM",
    "ShippingSystemName": "Magento",
    "ShippingSystemVersion": "2.0",
    "ShipType": "P",
    "ShippingDate": "2019-08-23",
    "Reference": "ORD0000123",
    "LabelType": "pdf",
    "TrackingLinkType": "U",
    "Addresses": {
        "DeliveryAddress": {
            "Name1": "My-Customer",
            "Street": "Kalverstraat",
            "HouseNo": "17",
            "CountryCode": "NL",
            "ZipCode": "1042AB",
            "City": "Amsterdam",
            "Contact": "Joe Black",
            "Phone": "030-2417800",
            "Email": "j.black@my-customer.com",
            "AddresseeType": "P"
        }
    },
    "Units": [
        {
            "UnitID": "A",
            "Weight": 2.5,
            "AdditionalInfo1": "InvoiceNo: P10050432"
        },
        {
            "UnitID": "B",
            "Weight": 8.5,
            "AdditionalInfo1": "InvoiceNo: P10050433",
            "AdditionalInfo2": "Additional info2"
        }
    ],
    "NotificationEmail": {
        "SendMail": true,
        "SenderName": "Top Products BV",
        "SenderReplyAddress": "customerservice@topproducts.com",
        "SenderContactName": "Customer Service",
        "SenderPhoneNo": "+31885503000",
        "EmailSubject": "Your order has been shipped!",
        "EmailCc": "orderinfo@topproducts.com"
    }
}
```

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6.1.2. Express Parcel

Express is a service that guarantees delivery before a certain time (09h / 12h / 17h) on weekdays or Saturdays. For this service an additional fee will be charged. For parcel shipments the available values for field "ExpressService" are:

- T9   Delivery before 09:00 on weekdays
- T12   Delivery before 12:00 on weekdays
- T17   Delivery before 17:00 on weekdays
- S9   Delivery before 09:00 on Saturday
- S12   Delivery before 12:00 on Saturday
- S17   Delivery before 17:00 on Saturday

```
{
    "Username": "apitest1",
    "Password": "9PMev9qM",
    "ShippingSystemName": "Magento",
    "ShippingSystemVersion": "2.0",
    "ShipType": "P",
    "ShippingDate": "2018-05-23",
    "Reference": "ORD0000123",
    "LabelType": "pdf",
    "TrackingLinkType": "U",
    "Addresses": {
        "DeliveryAddress": {
            "Name1": "My-Customer",
            "Street": "Kalverstraat",
            "HouseNo": "17",
            "CountryCode": "NL",
            "ZipCode": "1042AB",
            "City": "Amsterdam",
            "Contact": "Joe Black",
            "Phone": "030-2417800",
            "Email": "j.black@my-customer.com",
            "AddresseeType": "P"
        }
    },
    "Units": [
        {
            "UnitID": "A",
            "Weight": 2.5,
            "AdditionalInfo1": "InvoiceNo: P10050432"
        }   ],
    "Services": {
        "ExpressService": "T9",
        "ExpressConfirmSMS": "0623456789"
    }
}
```

6.1.3. ShopReturnService (Parcel Only)

When the ShopReturnService is requested, an additional ShopReturn label is returned by the API in field "labelShopReturn". This label is used to return the parcel.

```
{
    "Username": "apitest1",
    "Password": "9PMev9qM",
    "ShippingSystemName": "Magento",
    "ShippingSystemVersion": "2.0",
    "ShipType": "P",
    "ShippingDate": "2018-05-23",
    "Reference": "ORD0000123",
    "LabelType": "pdf",
    "TrackingLinkType": "U",
    "Addresses": {
        "DeliveryAddress": {
            "Name1": "My-Customer",
            "Street": "Kalverstraat",
            "HouseNo": "17",
            "CountryCode": "NL",
            "ZipCode": "1042AB",
            "City": "Amsterdam",
            "Contact": "Joe Black",
            "Phone": "030-2417800",
            "Email": "j.black@my-customer.com",
            "AddresseeType": "P"
        }
    },
    "Units": [
        {
            "UnitID": "A",
            "Weight": 2.5,
            "AdditionalInfo1": "InvoiceNo: P10050432"
        }   ],
    "Services": {
        "ShopReturnService":  true
    }
}
```

6.1.4. ShopDeliveryService (Parcel Only)

To create a ShopDelivery shipment, a ParcelShopID should be included in the label request. The ParcelShopID is returned by the GetParcelShops endpoint

```
{
    "Username": "apitest1",
    "Password": "9PMev9qM",
    "ShippingSystemName": "Magento",
    "ShippingSystemVersion": "2.0",
    "ShipType": "P",
    "ShippingDate": "2018-05-23",
    "Reference": "ORD0000123",
    "LabelType": "pdf",
    "TrackingLinkType": "U",
    "Addresses": {
        "DeliveryAddress": {
            "Name1": "My-Customer",
            "Street": "Kalverstraat",
            "HouseNo": "17",
            "CountryCode": "NL",
            "ZipCode": "1042AB",
            "City": "Amsterdam",
            "Contact": "Joe Black",
            "Phone": "030-2417800",
            "Email": "j.black@my-customer.com",
            "AddresseeType": "P"
        }
    },
    "Units": [
        {
            "UnitID": "A",
            "Weight": 2.5,
            "AdditionalInfo1": "InvoiceNo: P10050432"
        }   ],
    "Services": {
        "ShopDeliveryParcelShopId":  "34310025"
    }
}
```

6.1.5. SaturdayService (Parcel Only)

Parcels that are shipped on Friday can be delivered on Saturday if the SaturdayService property is included in the label request. For this service an additional fee will be charged.

```
{
    "Username": "apitest1",
    "Password": "9PMev9qM",
    "ShippingSystemName": "Magento",
    "ShippingSystemVersion": "2.0",
    "ShipType": "P",
    "ShippingDate": "2018-05-23",
    "Reference": "ORD0000123",
    "LabelType": "pdf",
    "TrackingLinkType": "U",
    "Addresses": {
        "DeliveryAddress": {
            "Name1": "My-Customer",
            "Street": "Kalverstraat",
            "HouseNo": "17",
            "CountryCode": "NL",
            "ZipCode": "1042AB",
            "City": "Amsterdam",
            "Contact": "Joe Black",
            "Phone": "030-2417800",
            "Email": "j.black@my-customer.com",
            "AddresseeType": "P"
        }
    },
    "Units": [
        {
            "UnitID": "A",
            "Weight": 2.5,
            "AdditionalInfo1": "InvoiceNo: P10050432"
        }  ],
    "Services": {
        "SaturdayService":  true
    }
}
```

6.1.6. Business- / Euro-business Freight

Below an example of a standard Freight Shipment without additional services.

```json
{
    "Username": "apitest1",
    "Password": "9PMev9qM",
    "ShippingSystemName": "Magento",
    "ShippingSystemVersion": "2.0",
    "ShipType": "F",
    "ShippingDate": "2018-05-23",
    "Reference": "ORD9000123",
    "LabelType": "ZPL",
    "TrackingLinkType": "U",
    "Addresses": {
        "DeliveryAddress": {
            "Name1": "My-Customer",
            "Street": "Kalverstraat",
            "HouseNo": "17",
            "CountryCode": "NL",
            "ZipCode": "1042AB",
            "City": "Amsterdam",
            "Contact": "Joe Black",
            "Phone": "030-2417800",
            "Email": "j.black@my-customer.com",
        }
    },
    "Units": [
        {
            "UnitID": "A",
            "UnitType": "BP",
            "Weight": 112.5,
            "AdditionalInfo1": "InvoiceNo: P10050432"
        }]
}
```

6.1.7. Freight Express Service

Express is a service that guarantees delivery before a certain time (10h or 12h) on weekdays. For this service an additional fee will be charged. For Freight shipments the available values for field "ExpressService" are T10 for delivery before 10:00 and T12 for delivery before 12:00.

```
{
    "Username": "apitest1",
    "Password": "9PMev9qM",
    "ShippingSystemName": "Magento",
    "ShippingSystemVersion": "2.0",
    "ShipType": "F",
    "ShippingDate": "2018-05-23",
    "Reference": "ORD9000123",
    "LabelType": "ZPL",
    "TrackingLinkType": "U",
    "Addresses": {
        "DeliveryAddress": {
            "Name1": "My-Customer",
            "Street": "Kalverstraat",
            "HouseNo": "17",
            "CountryCode": "NL",
            "ZipCode": "1042AB",
            "City": "Amsterdam",
            "Contact": "Joe Black",
            "Phone": "030-2417800",
            "Email": "j.black@my-customer.com",
        }
    },
    "Units": [
        {
            "UnitID": "A",
            "UnitType": "BP",
            "Weight": 112.5,
            "AdditionalInfo1": "InvoiceNo: P10050432"
        }],
    "Services": {
        "ExpressService": "T10"
    }
}
```

6.2. DeleteLabel

To delete a unit (Parcel or Freight) the DeleteLabel endpoint should be used.

```
{
  "unitNo": "006909919060",
  "Username": "apitest1",
  "Password": "9PMev9qM",
  "shippingSystemName": "Magento",
  "shippingSystemVersion": "2.0",
  "shiptype": "F"
}
```

6.3. ConfirmLabel

Each unit that is shipped must be confirmed at the end of the day using the ConfirmLabel end-point.

```
{
  "unitNo": "56270124700509",
  "Username": "apitest1",
  "Password": "9PMev9qM",
  "shippingSystemName": "string",
  "shippingSystemVersion": "string",
  "shiptype": "p"
}
```

6.4. CreateShopReturn

```
{
    "Username": "apitest1",
    "Password": "9PMev9qM",
    "ShippingSystemName": "Magento",
    "ShippingSystemVersion": "2.0",
    "ShipType": "P",
    "ShippingDate": "2018-05-23",
    "Reference": "ORD0000123",
    "LabelType": "pdf",
    "SendLabelsByEmail": "true",
    "TrackingLinkType": "U",
    "Addresses": {
        "DeliveryAddress": {
            "Name1": "My-Customer",
            "Street": "Kalverstraat",
            "HouseNo": "17",
            "CountryCode": "NL",
            "ZipCode": "1042AB",
            "City": "Amsterdam",
            "Contact": "Joe Black",
            "Phone": "030-2417800",
            "Email": "j.black@my-customer.com",
            "AddresseeType": "P"
        },
        "PickupAddress": {
            "Name1": "GLS Netherlands BV",
            "Street": "Proostwetering",
            "HouseNo": "40",
            "CountryCode": "NL",
            "ZipCode": "3543AG",
            "City": "Utrecht",
            "Contact": "Jan de Man",
            "Phone": "030-2417800",
            "Email": "ronald.migo@gls-netherlands.com"}
    },
    "Units": [
        {
            "UnitID": "A",
            "Weight": 2.5,
            "AdditionalInfo1": "InvoiceNo: P10050432"
        } ]
}
```

6.5. GetParcelShops (Parcel Only)

Request for the x nearest ParcelShops based on the ZipCode in the request.

```
{
  "Username": "apitest1",
  "Password": "9PMev9qM",
  "ZipCode": "3543AG",
  "AmountOfShops": 5
}
```

6.6. GetDeliveryOptions (Parcel Only)

Request for the available shipping options based on the properties included in the request.

```
{
  "Username": "apitest1",
  "Password": "9PMev9qM",
  "ShippingDate": "28-10-2019",
  "ZipCode": "3543AG",
  "CountryCode": NL
  "LangCode": nl
}
```

6.7. ValidateLogin

Operator to validate the MyGLS API credentials

```
{
  "Username": "apitest1",
  "Password": "9PMev9qM",
}
```

6.8. CreatePickup

Request to create a pick-up instruction.

```
{
    "Username": "apitest1",
    "Password": "9PMev9qM",
    "ShipType": "P",
    "PickupDate": "2019-06-03",
    "Addresses": {
        "DeliveryAddress": {
            "Name1": "Sogeti BV",
            "Street": "Langedreef",
            "HouseNo": "17",
            "CountryCode": "NL",
            "ZipCode": "4132RE",
            "City": "Vianen"
        },
        "PickupAddress": {
            "Name1": "GLS Netherlands BV",
            "Street": "Proostwetering",
            "HouseNo": "40",
            "CountryCode": "NL",
            "ZipCode": "3543AG",
            "City": "Utrecht"
        },
        "RequesterAddress": {
            "Name1": "GLS Netherlands BV",
            "Street": "Proostwetering",
            "HouseNo": "40",
            "CountryCode": "NL",
            "ZipCode": "3543AG",
            "City": "Utrecht"
        }
    },
    "Units": [
        {
            "UnitID": "A",
            "Weight": 2.5
        },
        {
            "UnitID": "B",
            "Weight": 8.5
        }
    ]
}
```

6.9. DeletePickup

To delete a unit (Parcel or Freight) the DeletePickup endpoint should be used.

```
{
  "unitNo": "006909919060",
  "Username": "apitest1",
  "Password": "9PMev9qM",
  "shippingSystemName": "Magento",
  "shippingSystemVersion": "2.0",
  "shiptype": "F"
}
```

7. Move solution to production

When development is done the solution can be moved to production To get access to the production environment, a valid MyGLS account is required.