General Logistics Systems

Web Service

Track&Trace

Technical Documentation

Version 1.02

25.06.2012

The specifications and data of this document can be changed without previous announcement. The companies, other firms or data used in the examples are, as far as nothing else is stated, imaginary.

History

Please, be sure to follow the new, modified or added information in the corresponding chapters!

Version	*Revision*	*Edition*	*Chapter*	*Comment*
01	00	22-02-2012		First edition
01	01	25-06-2012	2.3	GetTuPOD: added encoding (Base64)
01	02	25.10.2012	2.3	GetTuPOD: signatures for Germany available

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Preface

The hereafter described GLS web service enables the consignor to integrate the parcel tracking into his ERP-/shipping system or web shop frontend.
For using the web service the consignor must be a registered GLS customer with a valid Uni-Portal login. Please contact your GLS customer consultant for further information.

1 Basics

1.1 Track&Trace

The shipment tracking is possible with the GLS parcel number ort he consignor's own reference number.
The different methods are described in this documentation.

1.2 Web Service

GLS follows the "SOAP" protocol version 1.1. The basic communication is done over http or https. The different methods of querying the status of a shipment are provided as "Web Services Description Language" (WSDL) file.

The WSDL file can be downloaded here:

Tracking.wsdl

2 Methods

Overall there are three methods for determine the status of a shipment.

The two parameters "**username**" and "**password**" are mandatory. In the returned string the elements "**ErrorCode**" and "**ErrorDscr**" are indicators for the successful transmission of the web service stream or giving back information about a possible error.

This is how a positive response stream looks like:

[...]

<ErrorCode>**0**</ErrorCode>

<ErrorDscr>**OK**</ErrorDscr>

[...]

An error message, e.g. wrong login, might look like this :

[...]

<ErrorCode>**502**</ErrorCode>

<ErrorDscr>**Authentication Error**</ErrorDscr>

[...]

A complete list of all (error) codes can be found in the annex.

2.1 GetTuDetail

This method delivers detailed information of a shipment based on the GLS parcel number "**RefValue**" without the check digit.
With the parameters "**Paramcode**" (LangCode) and "**ParamValue**" the language of the search results can be switched (DE = german, EN = english).

A typical web service string is structured as follows, "**?**" is the placeholder of the committed value:

Line no.	XML content	Optional
1	<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:trac="http://gls-group.eu/Tracking/">	
2	<soapenv:Header/>	
3	<soapenv:Body>	
4	<trac:TuDetailsRequest>	
5	**<trac:RefValue>?</trac:RefValue>**	
6	<Credentials> **<UserName>?</UserName>** **<Password>?</Password>** </Credentials>	
7	<trac:Parameters> <trac:ParamCode>?</trac:ParamCode> <trac:ParamValue>?</trac:ParamValue> </trac:Parameters>	 X X
8	</trac:TuDetailsRequest>	
9	</soapenv:Body>	
10	</soapenv:Envelope>	

Example:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:trac="http://gls-group.eu/Tracking/">
  <soapenv:Header/>
  <soapenv:Body>
    <trac:TuDetailsRequest>
        <trac:RefValue>55123456789</trac:RefValue>
        <trac:Credentials>
        <trac:UserName>2760123456</trac:UserName>
        <trac:Password>Rght355Xh</trac:Password>
      </trac:Credentials>
      <!--Zero or more repetitions:-->
      <trac:Parameters>
        <trac:ParamCode>LangCode</trac:ParamCode>
        <trac:ParamValue>EN</trac:ParamValue>
      </trac:Parameters>
    </trac:TuDetailsRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

For reasons of clarity the most important parameters of the answering stream are described only. Generally speaking the rest of the parameters are self-explanatory.

XML content (with example values)	Comment
<p793:TuNo>55123456789</p793:TuNo>	Parcel number (Tu = Transport unit)
<p793:DeliveryDateTime> <p793:Year>2012</p793:Year> <p793:Month>2</p793:Month> <p793:Day>17</p793:Day> <p793:Hour>7</p793:Hour> <p793:Minut>44</p793:Minut> </p793:DeliveryDateTime>	Delivery date & time
<p793:CustomerReference> <p793:ReferenceValue>10129729</p793:ReferenceValue> </p793:CustomerReference>	Customers own reference number
<p793:TuWeight>10.5</p793:TuWeight>	Parcel weight
<p793:History> <p793:Date> <p793:Year>2012</p793:Year> <p793:Month>2</p793:Month> <p793:Day>17</p793:Day> <p793:Hour>7</p793:Hour> <p793:Minut>44</p793:Minut> </p793:Date> <p793:LocationCode>DE 330</p793:LocationCode> <p793:LocationName>Braunschweig</p793:LocationName> <p793:CountryName>Germany</p793:CountryName> <p793:Code>3.0</p793:Code> <p793:Desc>Delivered</p793:Desc> […]	Parcel history, i.e. the different stages the has passed through the GLS system are shown detailed. The latest status is first put. LocationCode = GLS Depot followed by city and country Code = status code Desc = description of status code
<p793:Signature>MUSTERMANN</p793:Signature>	Consignee signature

Summary:

- Search on the basis of the GLS parcel number without check digit (eleven-digit)
- The full details of a shipment are shown

2.2 GetTuList

This method delivers back information about parcels of a defined period "**DateFrom**" – "**DateTo**". It includes the latest status of the parcels in the GLS network.
The parameter "**RefValue**" makes it possible to search also based on the GLS parcel number (without check digit). With the parameter "**CustomRef**" a search on basis of customers own reference number is possible.

A typical web service string is structured as follows, "?" is the placeholder of the committed value:

Line no.	XML content	Optional
1	<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:trac="http://gls-group.eu/Tracking/">	
2	<soapenv:Header/>	
3	<soapenv:Body>	
4	<trac:TuListRequest>	
5	<!--Optional:--> <trac:RefValue>?</trac:RefValue> **<trac:DateFrom>** **<trac:Year>?</trac:Year>** **<trac:Month>?</trac:Month>** **<trac:Day>?</trac:Day>** **<trac:Hour>?</trac:Hour>** **<trac:Minut>?</trac:Minut>** **</trac:DateFrom>** **<trac:DateTo>** **<trac:Year>?</trac:Year>** **<trac:Month>?</trac:Month>** **<trac:Day>?</trac:Day>** **<trac:Hour>?</trac:Hour>** **<trac:Minut>?</trac:Minut>** **</trac:DateTo>** <!--Optional:--> <trac:CustomRef>?</trac:CustomRef> <trac:Credentials> **<trac:UserName>?</trac:UserName>** **<trac:Password>?</trac:Password>** </trac:Credentials> <trac:Parameters> <trac:ParamCode>?</trac:ParamCode> <trac:ParamValue>?</trac:ParamValue> </trac:Parameters>	X X X X

6	</par:GetParcelShopByIdRequest>	
7	</soapenv:Body>	
8	</soapenv:Envelope>	

Example:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:trac="http://gls-group.eu/Tracking/">
  <soapenv:Header/>
  <soapenv:Body>
    <trac:TuListRequest>
      <trac:DateFrom>
        <trac:Year>2012</trac:Year>
        <trac:Month>2</trac:Month>
        <trac:Day>22</trac:Day>
        <trac:Hour>0</trac:Hour>
        <trac:Minut>0</trac:Minut>
      </trac:DateFrom>
      <trac:DateTo>
        <trac:Year>2012</trac:Year>
        <trac:Month>2</trac:Month>
        <trac:Day>22</trac:Day>
        <trac:Hour>23</trac:Hour>
        <trac:Minut>30</trac:Minut>
      </trac:DateTo>
      <trac:Credentials>
        <trac:UserName>2760123456</trac:UserName>
        <trac:Password>Rght355Xh</trac:Password>
      </trac:Credentials>
      <trac:Parameters>
        <trac:ParamCode>LangCode</trac:ParamCode>
        <trac:ParamValue>EN</trac:ParamValue>
      </trac:Parameters>
    </trac:TuListRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

For reasons of clarity the most important parameters of the answering stream are described only. Generally speaking the rest of the parameters are self-explanatory.

XML content (with example values)	Comment
<p793:RefNo>33352168990</p793:RefNo>	Parcel number
<p793:InitialDateTime> <p793:Year>2012</p793:Year> <p793:Month>2</p793:Month> <p793:Day>17</p793:Day> <p793:Hour>8</p793:Hour> <p793:Minut>45</p793:Minut> </p793:InitialDateTime>	Date of the first status in GLS system
<p793:CurrentStatus>Delivered</p793:CurrentStatus>	Latest status of the parcel in GLS system

Summary:

- Search for parcel(s) in a defined time period
- Search based on the GLS parcel number without check digit (eleven-digit)
- Search based on customers own reference number

2.3 GetTuPOD*

This method returns an encoded picture of the "proof of delivery", i.e. the signature of the consignee.

***Please note: due to legal restrictions this method is not available in all GLS countries (e.g. France).**

A typical web service string is structured as follows, "?" is the placeholder of the committed value:

Line no.	XML content	Optional
1	<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:trac="http://gls-group.eu/Tracking/">	
2	<soapenv:Header/>	
3	<soapenv:Body>	
4	<trac:TuPODRequest>	
5	<Credentials> **<UserName>?</UserName>** **<Password>?</Password>** </Credentials>	
6	**<trac:RefValue>?</trac:RefValue>**	
7	<trac:Parameters> <trac:ParamCode>?</trac:ParamCode> <trac:ParamValue>?</trac:ParamValue> </trac:Parameters>	 X X
	</trac:TuPODRequest>	
8	</soapenv:Body>	
9	</soapenv:Envelope>	

For reasons of clarity the most important parameters of the answering stream are described only. Generally speaking the rest of the parameters are self-explanatory.

XML content (with example values)	Comment
<TuPODResponse xmlns="http://gls-group.eu/Tracking/">	
<ExitCode> <ErrorCode>Value</ErrorCode> <ErrorDscr>Value</ErrorDscr> </ExitCode>	
<PODFileName>Name of image</PODFileName>	
<PODFile>Binary data in base 64</PODFile>	Signature picture data in Base64 coded
</TuPODResponse>	

Summary:

- Returns the signature of the consignee

3 Error codes & description

3.1 Overview

With the elements "**ErrorCode**" and "**ErrorDscr**" the web service is returning possible error messages to the ERP-system of the consignor.

3.2 Codes

Error code	Error description	Comment
0	OK	No error
502	Authentication error	The authentication wasn't successful (e.g. wrong login data)
998	No data found	Based on the used parameters the system couldn't find any data