



Web services

Web service support for cab label printers
General description

Web Service support for cab Label Printers

valid for following printer types:

A+ -Series™
XD4™
Mach 4™
PX -Print ModuleSeries™
Hermes+
XD and XC series printers
and all printing systems based on the cab „X2“ board
furthermore for the EOS series

copyright © **cab Produkttechnik GmbH & Co KG**

all rights reserved

No parts of this manual may be copied, rewritten or used for anything else than for original cab printers.

This interdicts the usage of the manual for OEM products unless you have a written permission.

The cab printers command language is owned and copyrighted by [cab Produkttechnik GmbH & Co KG](#)

cab Produkttechnik GmbH & Co KG
Wilhelm Schickard Str. 14
76131 Karlsruhe / Germany

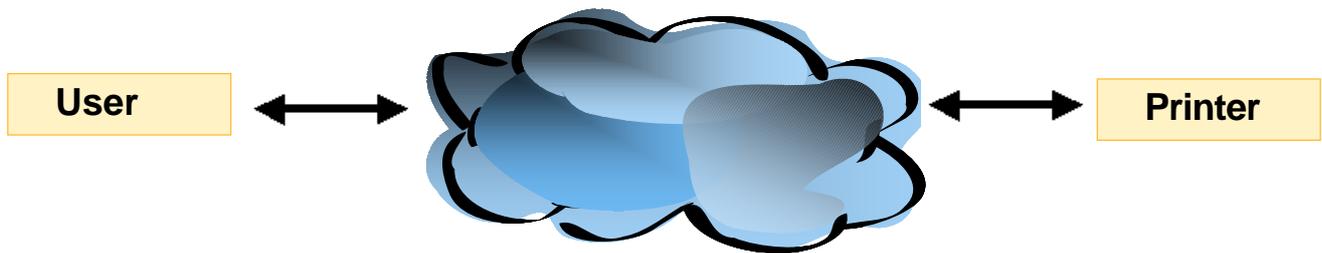
Tel: +49 - 721-6626-0

Fax: +49 - 721-6626-239

Email: support@cabgmbh.com

<http://www.cabgmbh.com>

All registered trademarks or product names are trademarks of their respective companies
Swiss™ is registered Trademark of Bitstream Inc.



Webservices

Plattform independent communication
with cab printers

What is a Webservice?

- No driver and no specific Software required
- Platform independent
- Independent from the programming language
- Usage of standard protocols,
- Independent form the location
- Simple implemantation (usually with the usage of an assistent)
- Support through all important software manufacturers (Microsoft, SAP, Oracle, IBM , etc.)
- Multi language support (Unicode support)

Technical background

- A Webservice is a collection of functions which can be recalled
- The description of this function calls is defined in a XML file called
- WSDL - Web Services Description Language.
- The functions are recalled through SOAP (Simple Object Access Protocol) while SOAP uses http for the transmission.
- Nearly each infrastructure can be used.
- Webservices could be used with authentication if required.
- Webservices are supported by each printer which is based on the X2 board and which uses firmware version 3.17 or higher.
- Request and control functions for status, list of labels on the memory card, list of printed jobs and print a job are available.

Starting with firmware 3.17 we add Web Services support to cab label printers.

Now you can print labels directly from your ERP system, or also you can develop a client which sends the requests to the printer, without the need for a printer driver.

If you plan to use these feature you have to activate it in the applet first. The WSDL (description file for the services) is then available on the URL: 'http://(printerIP address or DNS name)/services.wsdl'.

For EOS printers: http://[printer-IP address or DNS name]/cgi-bin/soap/services.wsdl

The printer offers the following functions:

1. Status query

With the status query you get different status values from your printer.

The input and output values are strings.

Values of the input string can be 'ESCs', 'ESCz', 'ESCi', 'ESCj', 'ESCa', 'ESCj', 'ESC?', 'Generic' and 'Label'

The ESC keywords are documented in the programming manual.

'Generic' will return a generic status from the printer, like 'ready', 'sleeping', 'pause', 'dump mode', 'printing', 'error' or 'menu'.

'Label' will return the name from the latest loaded label file. If no label is loaded the response will be empty.

XML example:

```
Request
  <statusRequest>ESCs</statusRequest>
Response
  <statusResponse>Y-000000N</statusResponse>
```

2. Format list

With the format list query you get a list of available formats on your memory card.

The input value is empty and the response message will be a list with the format names and description. If no formats are available the response list is empty.

XML example:

```
Request
  <listOfFormatsRequest/>
Response
  <listOfFormatsResponse>
    <format>
      <name>TEXT.LBL</name>
      <description>TEXT</description>
    </format>
    <format>
      <name>OBJ.LBL</name>
      <description>Test for objectinfo</description>
    </format>
  </listOfFormatResponse>
```

3. Load format

With the load format query you load a label format from memory card.

The input value is the name of the format. The output value will be a generic message and a boolean

value. If the value is 'true' the format will be loaded, otherwise the requested format could not be found.

(If your label describes a print action without job size, you possibly have to add 'A 1[NO]' otherwise you cannot send the load request twice without sending a print request between.)

XML example:

```
Request
  <loadFormatRequest>OB1.LBL</loadFormatRequest>
Response
  <loadFormatResponse>
    <generic>Selected format not found</generic>
    <result>false</result>
  </loadFormatResponse>
```

4. List of objects

With the list of objects query you get a list of the objects from the loaded formats.

The input value is empty and the response will be a list with the names and type from every object on the format. If no format is loaded the response list will be empty.

XML example:

```
Request
  <listOfObjectsRequest/>
Response
  <listOfObjectsResponse>
    <fObject>
      <name>text1</name>
      <type>Text</type>
    </fObject>
    <fObject>
      <name>ean</name>
      <type>Barcode</type>
    </fObject>
  </listOfObjectsResponse>
```

5. Print format

With the print format query you send a print request. Before you send this you must have loaded a format.

The input values are:

- name and content for the objects you want to change
- an optional job name
- the number of labels to print

With the job name you can identify your job in the following explained job list request.

The output value will be a generic message and a boolean value. If the value is 'true' your job will be put into the print queue, otherwise the input message objects do not match the loaded label. The maximum number of prints in a job can be 999999.

XML example:

```

Request
  <printFormatRequest>
    <objects>
      <fObject>
        <name>barcode_nummer_1</name>
        <value>1234578</value>
      </fObject>
    </objects>
    <jobID>a17</jobID>
    <numbers>100</numbers>
  </printFormatRequest>
Response
  <printFormatResponse>
    <generic>Format will be printed</generic>
    <result>true</result>
  </printFormatResponse>

```

6. Job list request

With the job list request you get a list with the processed jobs from the printer. The input value empty and the response will be a list with the ten latest jobs. A job contains his name, the date a time when it was finished and the status. The status can be 'finished' or 'aborted'. If the job is aborted or not complete it contains the number of printed labels. If no jobs have been executed t response will be empty.

XML example:

```

Request
  <listOfJobsRequest/>
Request
  <listOfJobsResponse>
    <job>
      <id>a17</id>
      <date>2008-12-09</date>
      <time>12:05:51Z</time>
      <status>aborted</status>
    </job>
    <job>
      <id>a17</id>
      <date>2008-12-09</date>
      <time>12:05:50Z</time>
      <status>printed #3</status>
    </job>
  </listOfJobsResponse>

```