valentin DRUCKSYSTEME

PRINTER AUTOMATION

Labelstar Office TCP/IP Control

Particulars on delivery, appearance, capacity, dimensions, and weight reflect our knowledge gained at the time of printing.

Subject to modifications.

Constant development of the devices may be responsible for discrepancies arising between the documentation and the device.
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1 TCP/IP-Server

Labelstar Office **T**CP/IP **C**ontrol can receive and process print data sent by a TCP client.

LTC consists of two components: status program and service.

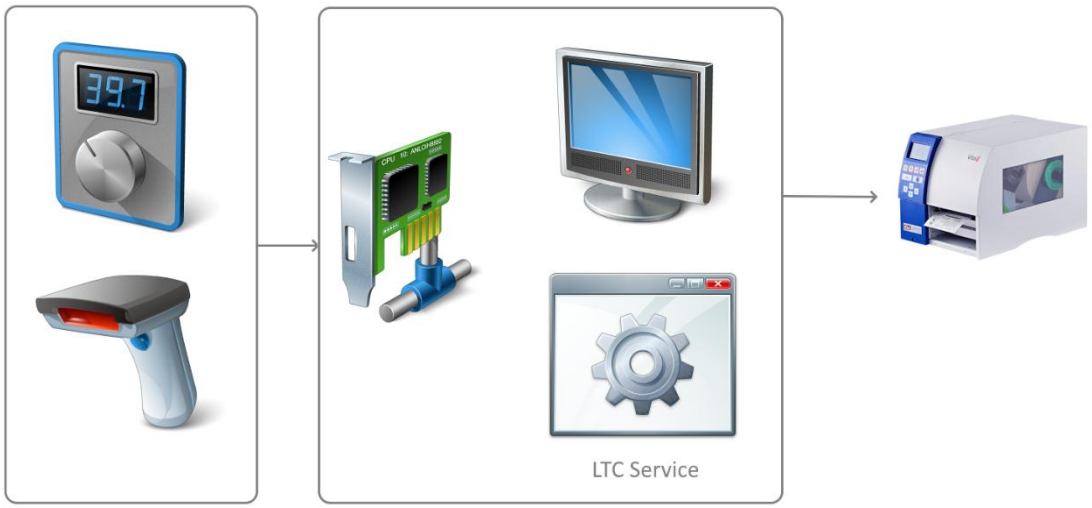
The configuration is done in the status program.

1.1 Basic procedure

LTC is launched as a standalone service on the PC and allows you to connect ‘as many printers as’ you want. Each connection to a printer runs in an independent thread, ensuring parallel processing.

Once the LTC service is started, it is ready to connect to TCP clients.

The received data is analyzed and converted into an XML format that can be read by Labelstar directory monitoring.



Label data must be available on the local PC.

The selected file extension (LBEX or PRN) determines whether Labelstar Office directory monitoring is used or whether a PRN file is sent directly to a printer.

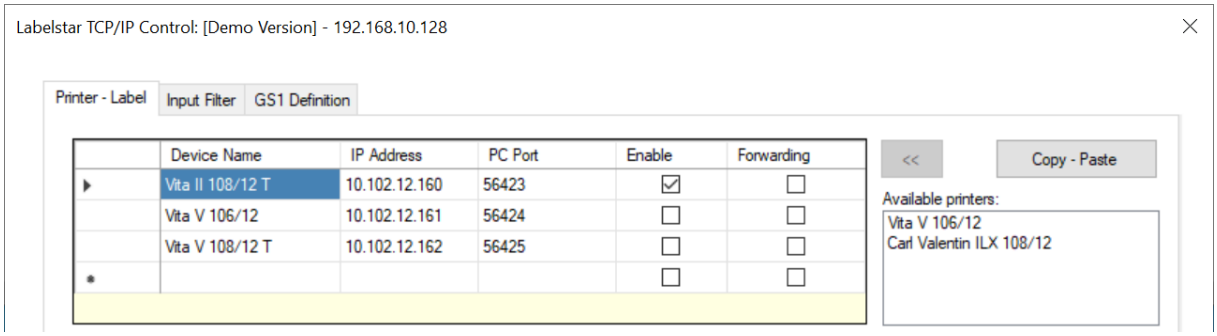
The directory monitoring used must be configured separately.

2 Installation

The program consists of two parts:

- the service
- the status display, including configuration.

After the program has been installed, the configuration dialog opens automatically.

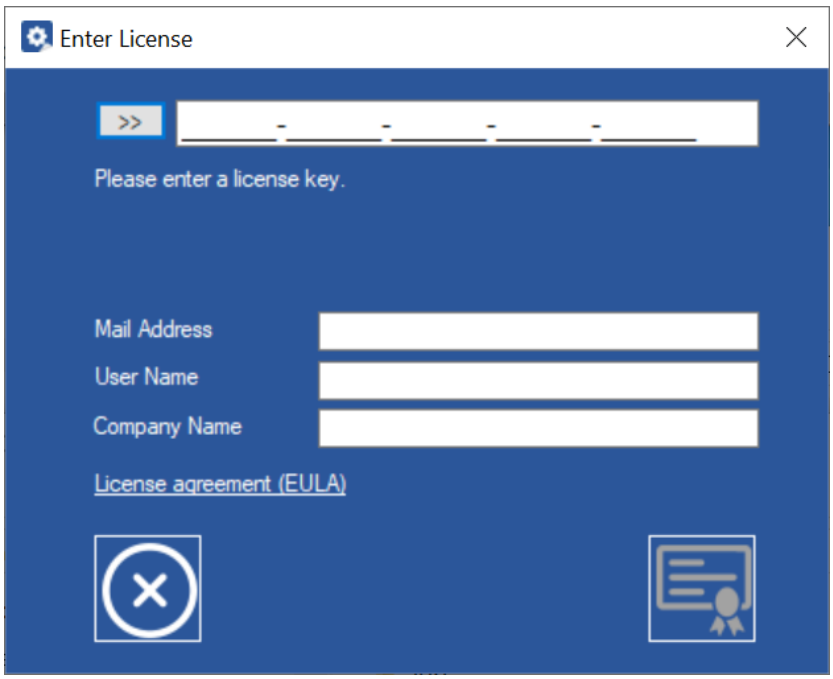


Three printers are provided as examples in the default settings. Although the first printer is active, it would be a coincidence if the address were actually used.

The printers must be set up and activated in the configuration.

The file paths must also be adapted to your own environment.

Because there is no valid license at this point, the next step is to request one.



The service will then be restarted so that the new configuration and license key can be activated.

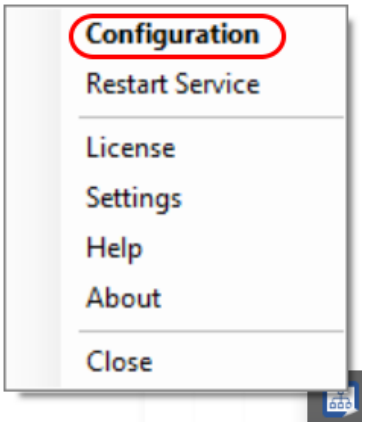
Desktop Icons

If the taskbar icon is not present, the program can be started using the icon on the desktop.

This will also display this icon in the taskbar (bottom right). Right-click on this icon to activate the status display.

3 Configuration

The configuration can be opened via the context menu.

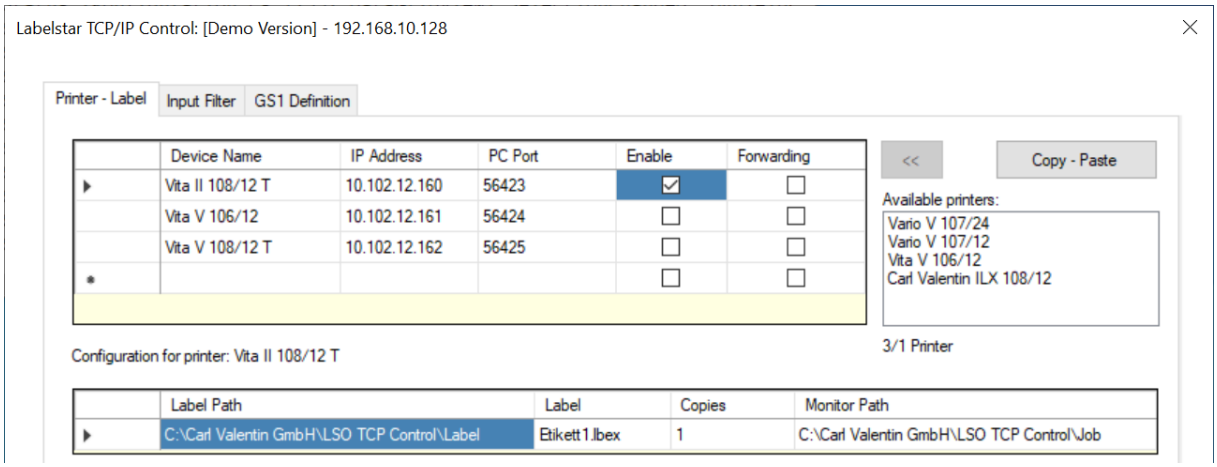


The relevant data can be defined separately for each printer.

First, all printers that are to be used must be defined. Duplicate active printers or IP addresses and ports must be avoided, because otherwise it cannot be determined which printer (status) belongs to which print job.

The *Forwarding* setting should only be activated if the incoming data is to be forwarded directly (without processing) to directory monitoring..

The information about the label path, label, and monitored path depends on the file type (Labelstar or PRN).

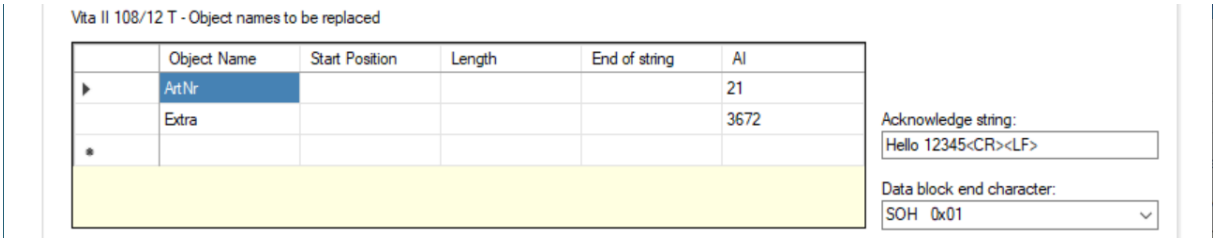


NOTE!

If Labelstar labels are to be used, the monitored path must match the setting in Labelstar directory monitoring.

The object names are the fields that are to be filled in on the label.

Imported XML or CSV data is assigned to the object names in sequence.



The end of data character and the response to the client can also be defined. Control characters can be specified in <...> in the response to the client, which the service converts accordingly.

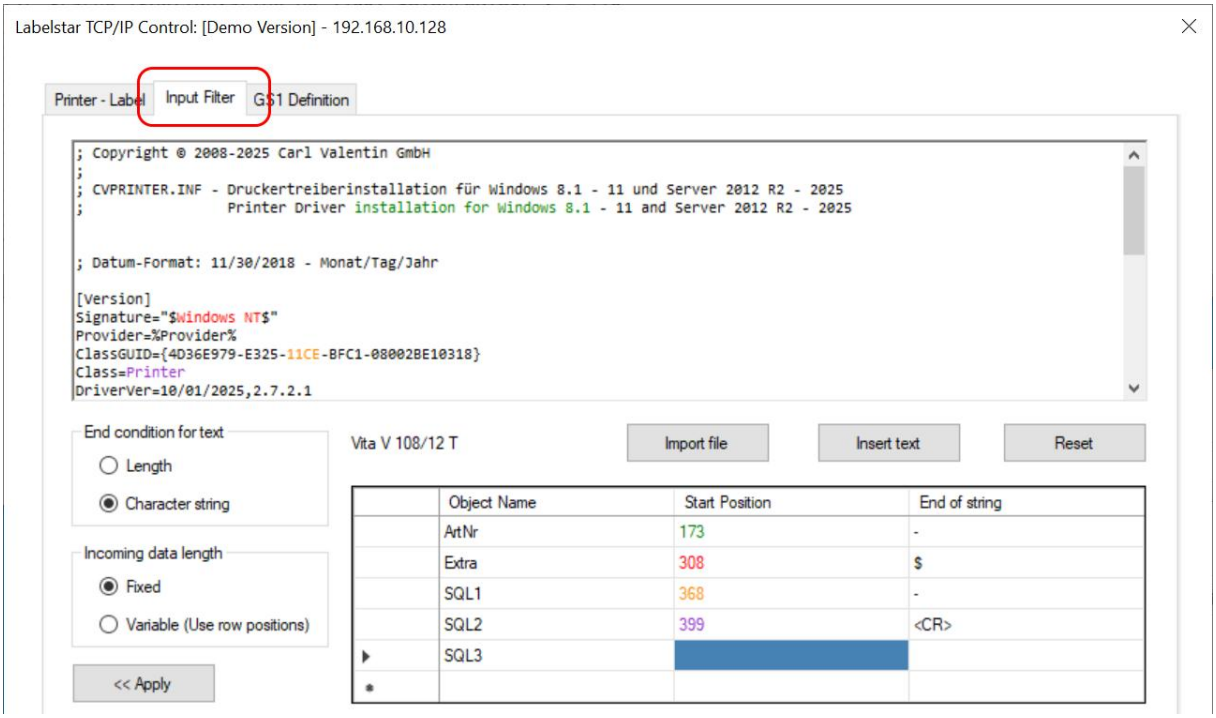
3.1 Input filter

In addition to XML and CSV data, unstructured data can also be used.

To do this, you can insert text into the text field or import a text file. The position and length of the data must match the input data.

The corresponding text passage must be selected and is automatically added to the next available space in the objects. At the same time, the selected position is highlighted in color.

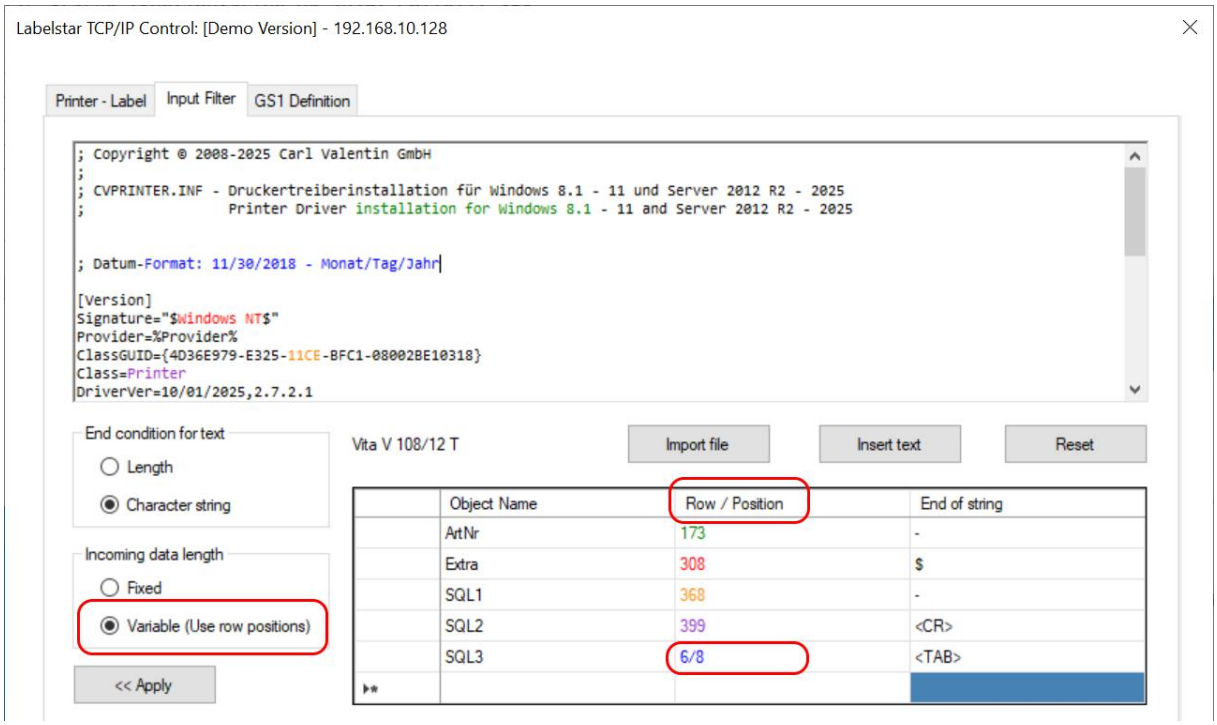
A distinction is made between fixed and variable data lengths for input data.



The start position and length can still be corrected manually if necessary.

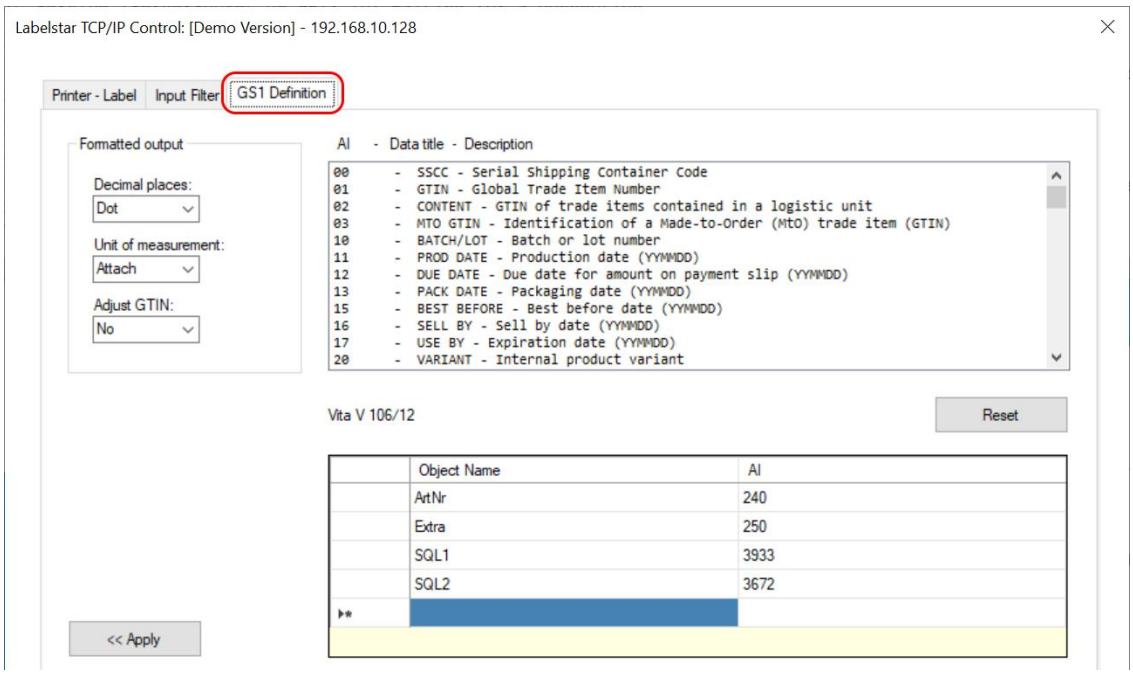
The ‘Apply’ button transfers the data to the start dialog, and the configuration can then be activated.

With variable data lengths, the start position is relative to the respective line. This makes it possible to specify the start position in a line and define the end only by means of an end character.



As an alternative to unstructured data, GS1 barcode data can also be filtered.

To do this, simply select the desired AI numbers. These will be transferred to the next available field in the object names.



For various AI numbers, e.g., 312n, several numbers are available. The last digit normally indicates the number of decimal places. The entered number 3120 must be adjusted manually accordingly, e.g., to 3123.

When transferring the data (to directory monitoring), it is also possible to define whether decimal places, units of measurement, or a GTIN-EAN13 adjustment should be made.

Here, too, the *Apply* button transfers the data to the start dialog so that the configuration can be activated.

Define additional printers

By selecting a printer line, you can create a copy using the *Copy* – *Paste* button and then edit it.

It is important to pay attention to the IP address used or to deactivate duplicate entries if necessary.

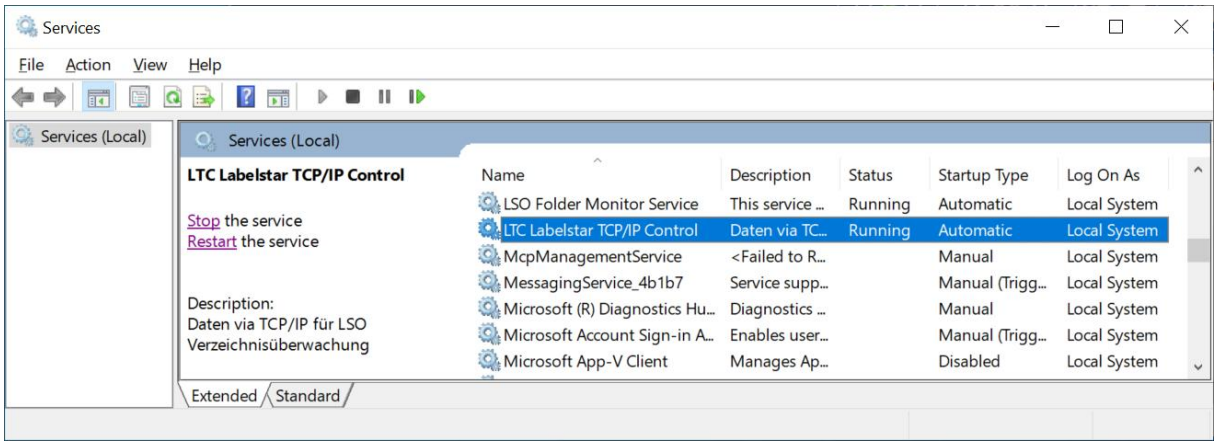
Enable settings

The settings can be activated using the first switch. The service will restart automatically.

The middle buttons can be used to stop the service or export or import settings.

4 Automatic start as a service

The service is normally started even without logging in to the system.



If the service should ever hang, it can be restarted in the Services dialog or via the context menu.

5 Directory monitoring

LTC creates an XML file from the configuration data and the input data.

Directory monitoring is not necessary for prn files.

NOTE!

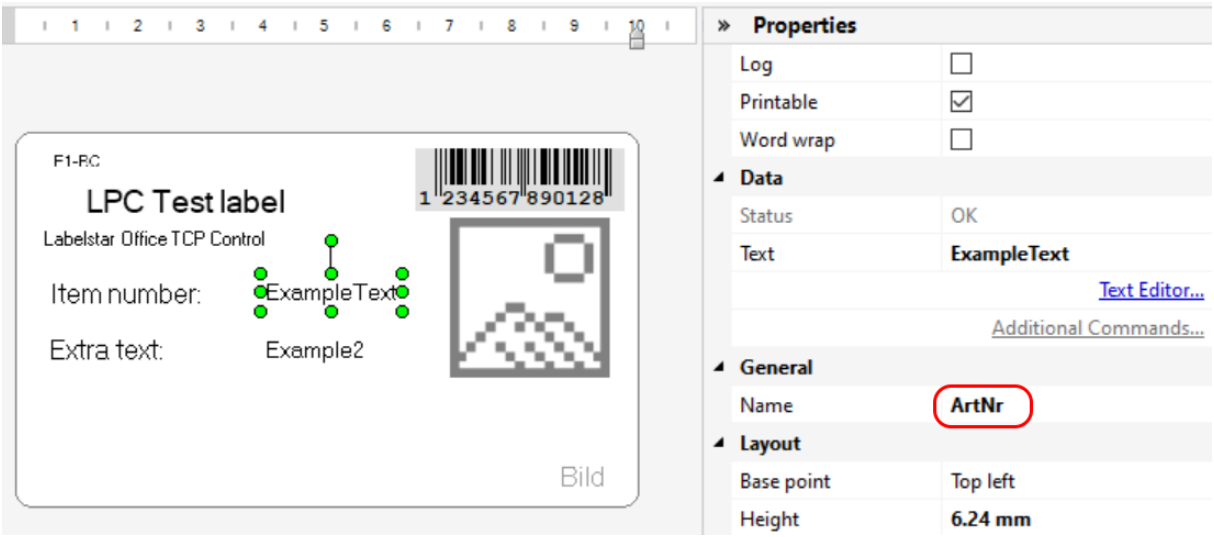
When creating label templates and configuring LTC, it is essential to ensure that the object names match. Otherwise, incorrect or empty values will be printed.

5.1 Labelstar Office

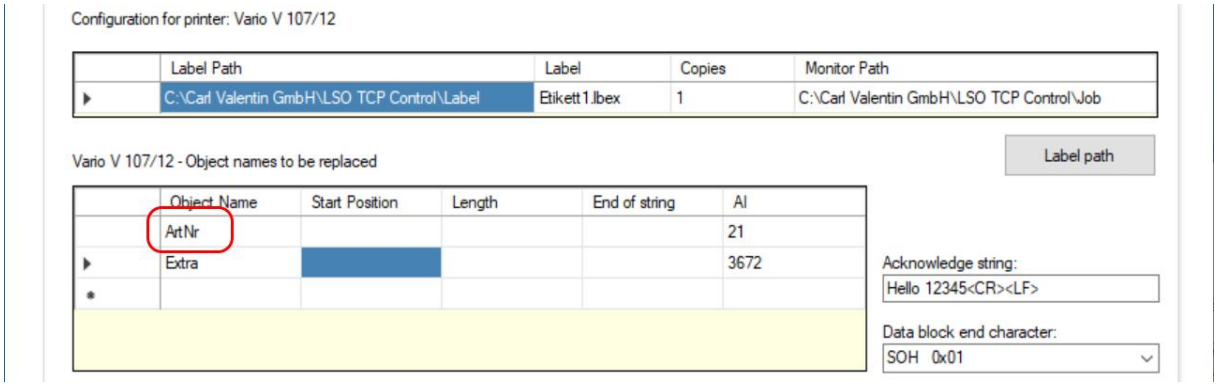
Label designer

Various texts, barcodes, or images are positioned on the label.

Texts that are to be replaced must be defined with unique names. In this example, ArtNr for an item number.



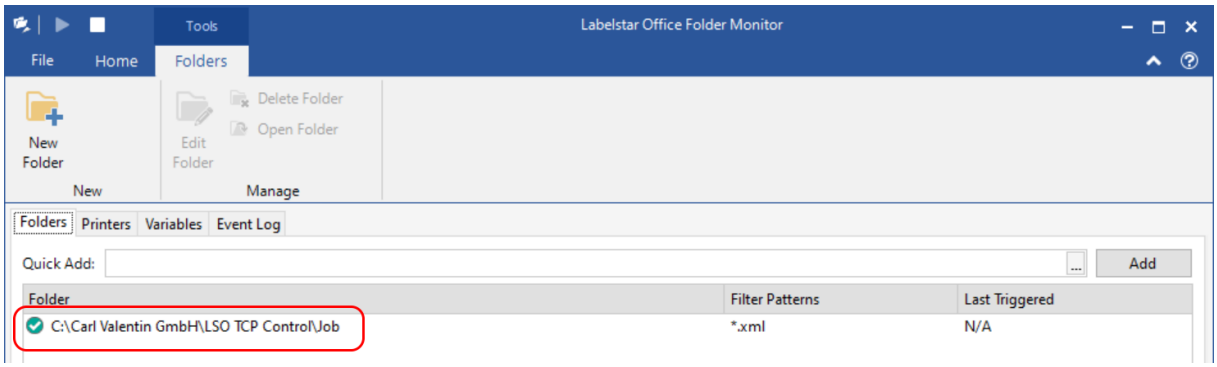
Exactly this object name must be entered in the configuration.



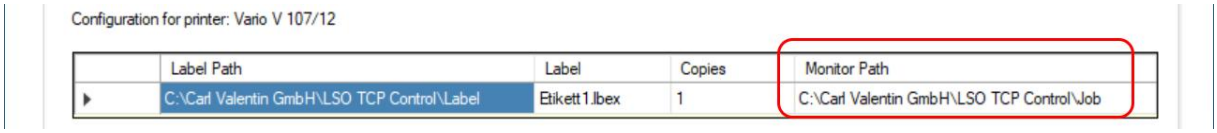
Images can be assembled and printed using phantom fields (non-printable) with relative path specifications and the received image name, for example.

Directory monitoring

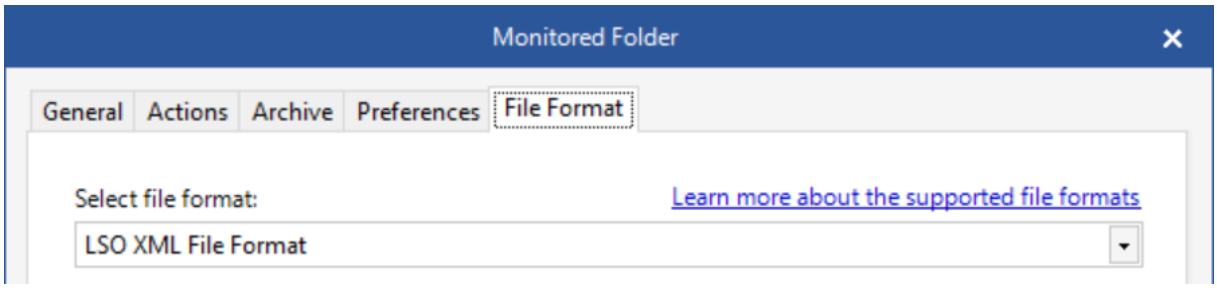
Only two settings need to be made in directory monitoring:



The monitored directory must match the entry in the LPC configuration.



Double-click on *.XML (filter criteria) to select the *LSO XML file format*.



This is important so that the generated XML format is also recognized.

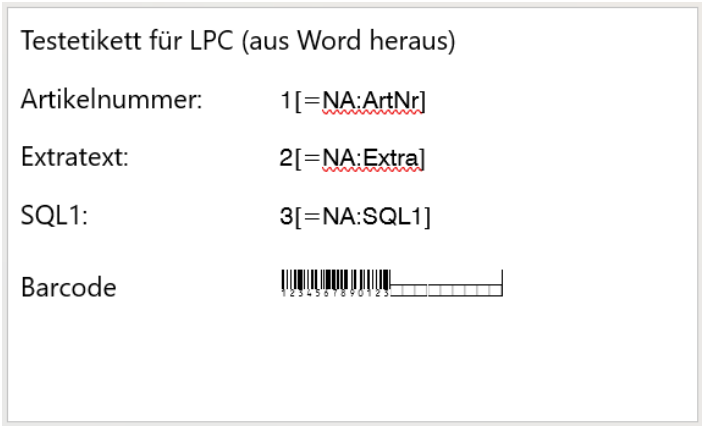
NOTE!

If a change is made in directory monitoring, it must be restarted.

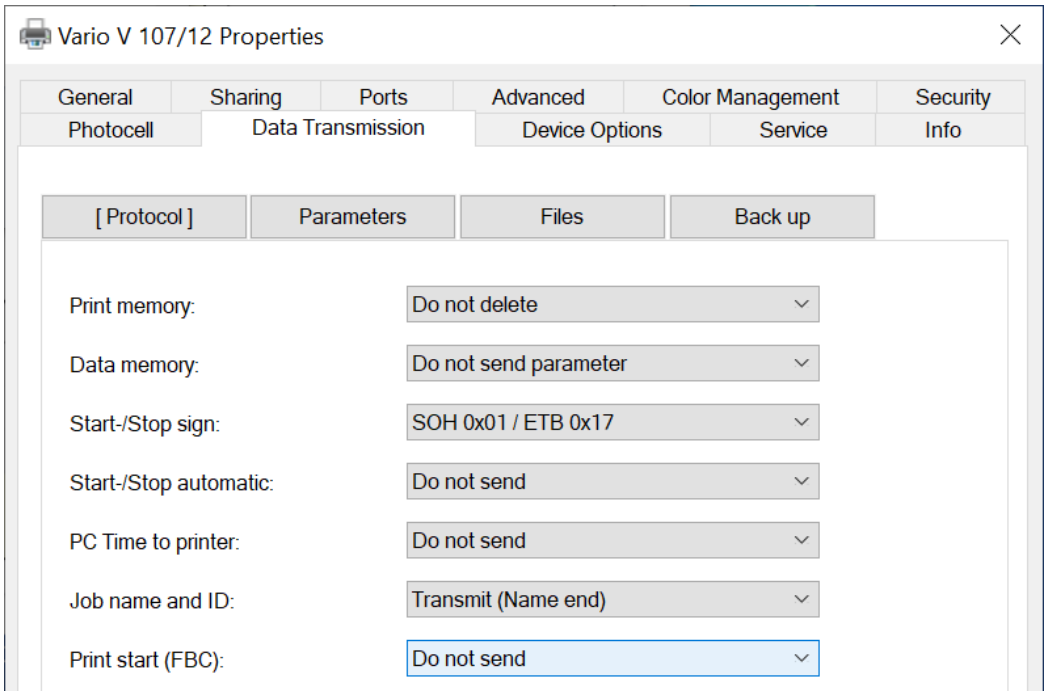
5.2 Any print files

Labels with object names can also be created using any program (e.g., Microsoft Word, etc., but also a designer). These must be defined in a print font, e.g., Swis721.

The Valentin printer driver can assign a name to this object using the addition [=NA:ArtNr].



In the driver itself, the *Print start (FBC)* option must be set to *Do not send* in the printer properties in the *Data Transmission - Protocol* dialog box.



In the *Data Transmission - Files* dialog box, you can specify where the PRN file should be saved.

When using Microsoft Word, it is particularly important to ensure that the *In general desegment* option is activated in the *Fonts - Administration* dialog box in the print settings.

After ‘printing’ this label, the generated PRN file can be used.

NOTE!

Due to the missing print start command, no label is printed for this print job.

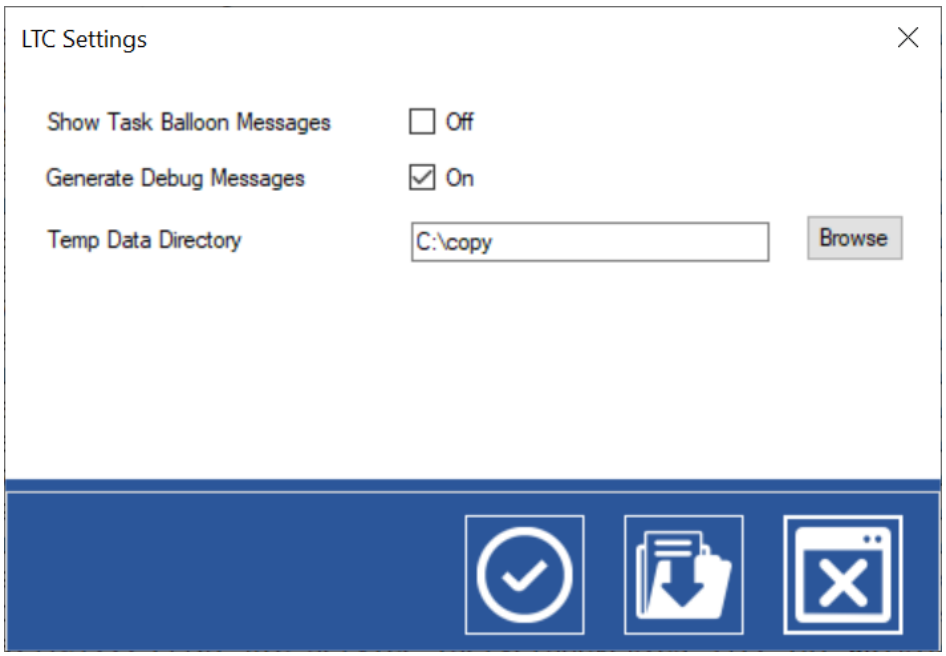
6 Other settings

These can be opened via the context menu and the *Settings* command.

The respective file for directory monitoring is temporarily stored until all information is available. This file is then copied to the monitored directory, where it is further processed by the directory monitoring system and deleted.

This auxiliary directory can be defined in the following dialog. If no specification is made, c:\logfiles is used.

Log and debug files are also stored in this directory.



7 System requirements

- Windows 10 or Windows Server 2016 or newer
- .NET Framework 4.8
- Printer: at least SH3 series with Ethernet connection

7.1 Used ports

The service uses port 7420.

Ports 9100 and 9099 are used for the printer.

The corresponding ports, e.g. 56423, must be enabled for the TCP connection.

8 Response times

The threads that are started run in parallel and are therefore dependent on the system. This means that the program cannot guarantee that responses to received data will occur in real time.

Connections to newly switched on printers are made with a timeout of approximately three seconds and a response time of one second for other processes.

9 Maximum number of printers

The maximum number depends on the license. With a license > 10, 15 printers is realistic. In this case, attention must be paid to CPU utilization and PC performance. Although more than 15 printers are theoretically possible, this is not recommended.

10 Note

Since every system can behave differently, it cannot be guaranteed that software will behave identically on every system.

Subject to changes.

Illustrations or descriptions in this document may differ slightly in more recent software versions.

Further information can be found in the help file.

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