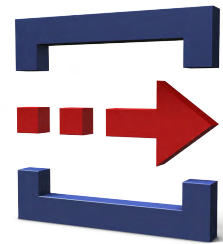


[LibertySoft]

Better Documents & Communication



From the Output to the Web Document

What is LibertySoft designed for?

LibertySoft produces many types of documents for various output media, in the individual layout requirements of a company's Corporate Design.

LibertySoft automatically transforms source data from various applications into formatted documents – or it transforms the data into a different data format required for communication (B2B, B2C), e.g. XML, PDF or HTML.

It can dynamically output the produced documents or data streams via various channels: This allows printing of documents in parallel with digital archiving.

You can also automatically send documents as e-mail attachments or place them on a web server in HTML format. LibertySoft is also used to automate sorting and electronic distribution of documents. Besides use in the field of output management, the LibertySoft functions can also be called directly from independent applications, e.g. via CGI scripts in web applications.

Why is it required?

Despite a permanent need for business documents, such as orders, invoices, confirmations, dunning letters, notifications, accompanying documents or barcode records, client/server operating systems themselves don't offer tools or support for these tasks directly – neither in document layout and creation nor in the connected production and work flows.

These functions – though globally required – are designated to the application level. So it's no wonder that systems for standard applications, e.g. ERP systems, have their own particular, and often limited, facilities for document production. Thus many companies turn to LibertySoft in conjunction with their ERP system, e.g. SAP R/3 – and use it for many other related applications too.

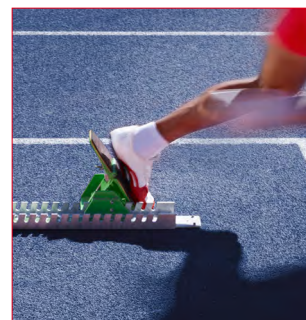
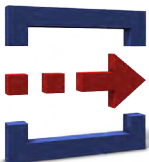
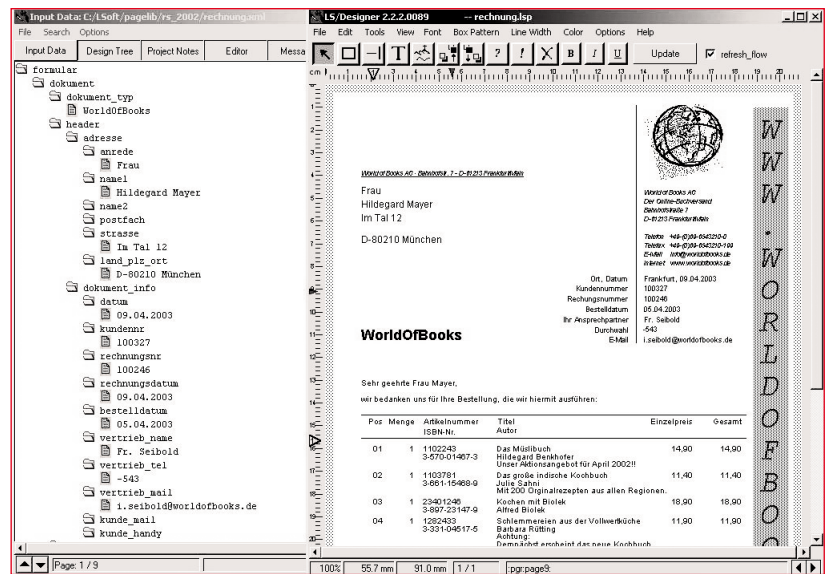


... and how it is integrated?

LibertySoft is the global software solution from DETEC. It is placed between application system layer and operating system layer. Under Unix and Linux, LibertySoft works as a modular element (“filter”) of an existing standard spooling system.

This type of integration (a filter process) is also used for embedding into output management systems (OMS) under Unix, Linux and Windows. For direct (native) use in Windows systems – i.e. without additional OMS – another integration technique is brought into play, namely LibertySoft is integrated as a Windows Print Processor.

In all cases, LibertySoft receives the output data from the various – unmodified – applications. It selects only specific output data for processing (the data of specific document types, e.g. invoices) – and leaves other data streams unchanged.



Producing, Sorting & Distributing

Document layout

LS/Designer is the component used to develop document layouts. It's graphic tools allow a WYSIWYG design of documents with rigid or dynamic structure. Examples of documents with rigid structure are the classical pre-printed forms. Documents with dynamic layouts are those whose final appearance, including line graphics, tables and images, are based on the content of the data to be output. LibertySoft supports both and LS/Designer can process variable data in XML and many other formats. During the designing process the layout displayed in the LS/Designer window is constantly adjusted to match the current data (e.g. when paging forward through sample data), always showing a real-time simulation of how the data will appear in production. Users have the possibility of complementing LS/Designer projects by applying procedural application calls. In this way, you can extend the functional spectrum of the LS/Designer by applying tailored procedures where required. Documents created with LibertySoft reflect the individual Corporate Design of a company. At the same time, individual documents can be personalized and/or tailored to endcustomer requirements.

Document distribution

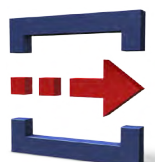
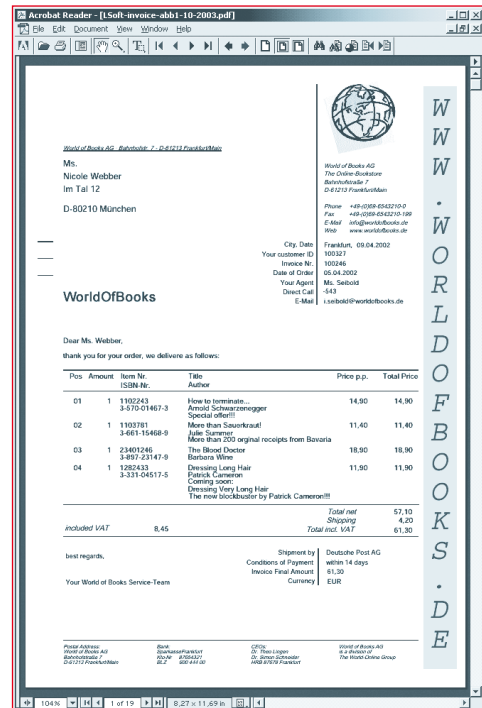
Many tasks in document production also require an "intelligent" document distribution. A simple example: documents of the same type, e.g. invoices, are not only to be printed but also digitally archived. Therefore LibertySoft has to supply several output channels with differently processed documents – invoices for printing in Post-Script format but copies for archiving as PDF documents.

LibertySoft distributes individual documents of a batch (file, print job) to different output channels. It can also automatically duplicate source data for additional channels. You can define the sort order of the documents for each output channel. And finally, you have the possibility of basing the "data to channel" assignment on logical conditions, e.g. the existence of specified character strings in the variable data.

Increase in value for spooling Systems and OMS

Due to its modular design, LibertySoft can easily be used together with other systems. It's capability for simple integration is regularly utilized when combining LibertySoft with spooling or output management systems. This extends these spooling/OM systems not only with the ability to create formatted documents but also by the fore-mentioned distribution functions, including sorting.

LibertySoft thus improves the functional spectrum of standard print spooling systems and many output management systems (OMS) considerably.





*Hans Klimmer, MGR, Software Technology and Training:
"Documents produced with LibertySoft can reflect an organization's Corporate Design – and they can be as personalized as required by today's information recipients as well."*

Standards & Communication

XML, SAP and other data formats

Used as a communication platform, LibertySoft transforms incoming data into new, required data formats – or into formatted, printable documents which can also be displayed in a web browser (HTML) and other viewers.

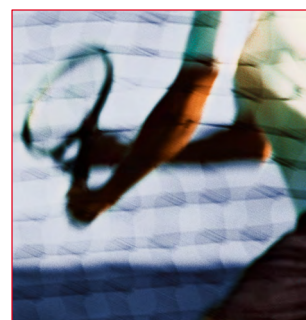
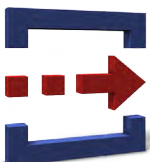
In order to avoid the requirement to change existing applications, LibertySoft supports a number of data formats including XML and PDF. It processes the various SAP standard formats such as RDI, XSF and SAPGOF as input data formats and is certified by SAP. LibertySoft can also process raw data in the form of plain ASCII files or line printer format.

The generated output consists of print data streams such as AF-PDS, PCL and Post-Script. Besides PDF, it is also possible to create TIFF and XML. In addition, a LibertySoft-internal GDI driver (Windows Graphics Device Interface) supports all other printers and output devices accessible via Windows. This gives support for all output devices and interfaces for which a Windows driver exists.

Producing documents conforming to web standards

The LibertySoft HTML driver produces web documents as "images" of printed documents. This driver, which is based on CSS (Cascading Style Sheets) technique, allows positioning at the pixel level and produces documents which look identical to their printed counterparts. In addition the generated data stream is compact so that endusers with simple modem dialing to a web site can easily download and read the final document in comfort.

The HTML documents can also be used within company intranets, e.g. for document viewing. Special elements such as animated GIFs are also supported by the LibertySoft HTML driver (Compare example on this page).



Layouts using external processes

LibertySoft is capable of calling external programs and thus load additional data not included in the normal input data stream. These calls can be executed while formatting the documents and during the production of an output data stream (driver level). Such calls allow, for example, the results of database inquiries, automatic Internet research or direct file access to be included into the currently produced document.

Refining documents already formatted

LibertySoft makes a fundamental distinction between two source data formats:

- Data already formatted for a specific output medium and
- Raw data – i.e. data not containing any information on its presentation.

SAP R/3, for example, outputs data optionally with formatting (ALF, OTF, SAPGOF) or in raw format (RDI, XSF) for post-processing by external formatters. LibertySoft processes all these types.

Interfaces for archiving,e-mail, SMS

LibertySoft is available for many platforms, usable for many applications and easily integrated with other systems.

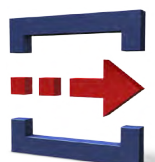
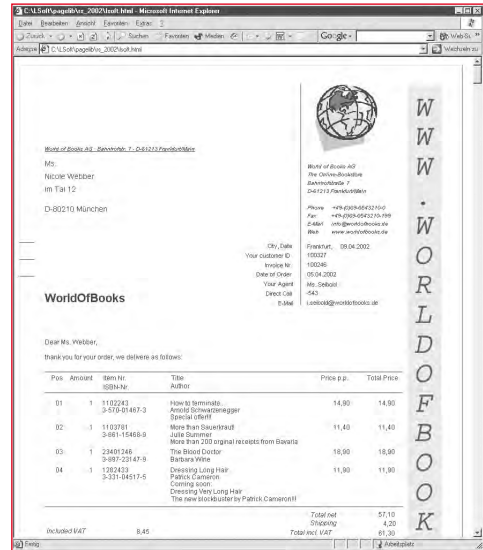
The LS/Archive output interface exists for many archiving systems and is available as a modular option. Besides the PDF or TIFF documents to be archived, LS/Archive also passes indexing information (search criteria) taken from the individual documents to the archiving system used, so that later searches in the archiving system are as simple and efficient as possible.

Via the LS/Mail interface, LibertySoft supports output of formatted documents as e-mail attachments. The variable message body (the actual e-mail), which is also generated automatically, can alternatively include a link to the document instead of the attaching the document directly in the mail. It is also possible to create and send SMS messages via this interface.

Post processing

Whereas raw data would normally be formatted from scratch by LibertySoft, it is also possible to complement and refine pre-formatted data streams. This also applies to PDF documents from SAP R/3 or other systems.

A further example: LibertySoft can add special lines, information and/or barcodes for postal processing machines, e.g. automatically franking documents output by the SAP system. To achieve additional postage optimization, sorting of documents in the order required by the post-office is also possible.



Results count

What does it yield

LibertySoft yields noticeable time and cost savings both in formatting, production and output of documents and in other related areas of application.

Calculable savings

There are many benefits for companies using LibertySoft, ranging from soft factors such as possible sales increases due to better marketing function of customer-oriented documents, to calculable cost savings.

Savings can be achieved by sending document via e-mail, e.g. to field representatives, branch offices or end customers – the cost of production, handling and dispatching of paper documents is eliminated.

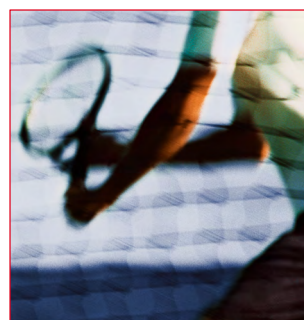
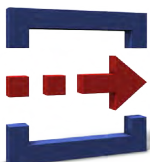
If paper documents are required, LibertySoft offers interfaces and functions for automatic postage optimization and franking. Depending on the quantity of documents dispatched in this way, this alone (sorting and franking with LibertySoft) can result in significant postage cost savings.

Benefits of customer-oriented documents

Using LibertySoft, an attractive design and flexible individual presentation of business documents are key benefits.

As an example, when invoicing customers for adverts placed in magazines or newspapers, a publisher can dynamically insert an image of the published advertisement in the invoice. Supplements can be selectively inserted into envelopes, images and graphics added to individual document prints as required, etc.

Moreover, blank paper is used for printing; pre-printed stationary, and the associated overheads such as destroying outdated forms, are no longer required.



... by producing digital documents versions

If documents are formatted by LibertySoft, digital versions of the documents can also be produced as required. This actively promotes work flows based on digital documents.

Various data formats (e.g. HTML, PDF, TIFF) and a number of output interfaces are supported, including output of digital copies to many different archiving systems – in parallel to print output where required.

Result: Departments and call centers are immediately ready with the latest information when communicating with customer and/or suppliers. They can find, display, reprint, and/or e-mail the digital document as required. Rather than print, documents produced by LibertySoft can be sent via e-mail or made available in PDF or HTML format on a web server.

The real benefits of new document media and new ways of communication as well as work flows based on the digital document are often only tangible once LibertySoft has been implemented – in all cases, new work flow options become possible.

... by optimized use of output devices

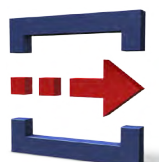
The output data streams generated by LibertySoft are optimized regarding data stream size and throughput in the output device.

Thus complex, flexible customer oriented documents can be created in device neutral formats such as PostScript, with moderate network loads and acceptable output device throughput. Existing infrastructures are used to an optimum.

This includes the capability of representing barcodes in documents on all output devices supported by LibertySoft – without the need for special barcode fonts.

The advantages of compatibility

Companies gain in flexibility by using LibertySoft – modifications to existing hardware and software infrastructures which run and utilize LibertySoft are minimal.



Better Documents & Communication

- | | |
|---------------------------------------|--------------------|
| ▪ Document Presentment | LaserSoft |
| ▪ Interfaces to the archiving systems | LS/Archive |
| ▪ Document Layout | LS/Designer |
| ▪ Interfaces to the e-mail-Services | LS/Mail |
| ▪ Development Environment, Wizzards | LS/Studio |
| ▪ Document Preview | LS/View |