

SICFilePlus: Customisation Solutions for Advanced Printing



SICFilePlus is a range of products of non standard solutions for advanced printing. For standard UNIX solutions we recommend the *SQue 10.x* product, which works well under most conditions. Yet, to use the full range of possibilities of your printer you might want to do more or different things than possible with the standard SQue solution. Therefore we propose the **SICFilePlus** product.

SICFilePlus is not only limited to UNIX/Linux environments: some solutions work also in MS Windows environments.

Some of the **SICFilePlus** products can be shipped and then installed by yourself. Some, however, would require on-site support by SIC International. Currently this is only possible for tender business cases, except for France.

The SIC Success Stories page gives some examples of implemented solutions.

Some **SICFilePlus** solutions include:

Filters to change finishing behaviour

Some legacy applications cannot be changed. Others are designed for a certain type of output and the customer does not want to modify its behaviour. By means of a filter program existing output data streams can be modified, for example: change the paper format (Letter to A4, for example). Or change the input tray. Or send output to a specific output bin, etc. This way you would not have to modify the main application.

This type of filter can be implemented to work inside a printer queue on the server of the main application. But it could also be implemented on a dedicated printer server, serving several Canon devices at the same time.

Printing with overlays

SQue has some support of overlay printing in PCL. This is described in the manuals of SQue.

The SICFilePlus solution consists of a dedicated printer queue including automatic overlay printing.

It may include the development of the overlays.

For Canon printers, when existing HP PCL overlays are available it is possible to transform them into Canon compatible overlays. Even though a Canon device does support PCL overlay with the standard HP PCL macros, the file format for overlays is Canon proprietary.

If you want to replace a matrix printer with pre-printed forms by a laser printer, printing a page multiple times on a form this is possible too.

Another possibility is the printing of one form on the front page, and another on the back page.

Finally printing with overlays in a PostScript environment is possible too.

The *SICFilePlus* solution can be implemented either on a UNIX, Linux or MS Windows workstation, where for MS Windows the Canon CPCA printer driver can be used as a starting point.

The *SICFilePlus* solutions can be implemented either on a UNIX, Linux or MS Windows workstation or as a print server in a "black box" serving various laser printers at the same time.

Optimised printer queues

This product may be of help to optimise printing on laser printers in the following cases.

- * If printing on a laser printer does not reach the desired output speed.
- * Jobs would come out in a different order than expected, in connection with certain UNIX systems.

Some UNIX applications produce documents consisting of one job per page. For small documents this is no problem. For large documents, however, this may generate a large number of (almost simultaneous) jobs on the printer. Especially some Canon iRXXXX devices may be slow under these circumstances.

Also some UNIX systems (for example SCO UNIX) may send the jobs in a certain order, but the printer will print them in a different order. The *SICFilePlus* solution will concatenate all the jobs into one file and then send that file to the printer. It will do the concatenation in a separate file for each UNIX login, so different users will not interfere with each other. After a certain time out the reception of jobs will be considered as finished and the resulting data will be send to the printer. This solution may require some customising with respect to the time-out parameters.

The solution works both for PostScript and PCL printer queues.

CPCA Server on Linux with Samba

This product may be of help for printing on Canon iR devices within a MS Windows environment where a Linux printer server with Samba is used.

As governments push administrations more and more to Open Source applications, often a first step is a Linux print server within a traditional Windows environment.

The Samba server assure sharing of printers with the Window clients.

The Canon drivers for Windows are once uploaded to the Samba server.

Thereafter they are available for the Windows clients. Please note that all Canon drivers for Windows for iR devices use CPCA (a Canon proprietary protocol).

If the site wants to use **department accounting** a problem arises. Technically the department accounting within a Windows environment uses a special CPCA protocol to query the Canon device whether the account does exist before printing. With the Samba server in place, this does not work.

The **SICFilePlus** solution consists in this case of a CPCA server program, which runs on the Linux server. It receives the CPCA jobs from Windows clients, who now print without department accounting.

But the server program has a data base which links Windows login or user names to department accounting user IDs and/or passwords. Thus the department accounting is done automatically, without any user intervention on the Windows side.

To be more precise the CPCA server program on the Linux server can:

- Redirect a job based on the Windows login or user name to a department account with a user ID (and possibly a password).
- Redirect a job based on the Windows login or user name to a specific mailbox.
- Redirect a job coming from a specific PC to a department account with a user ID (and possibly a password).
- Redirect a job coming from a specific PC to a to a specific mailbox.

If a job comes from an unknown user or PC, then either the job will be rejected (i.e. not printed) or the job will be redirected to a default account (or mailbox).

The CPCA server program is licenced with a software key based on the MAC or Ethernet address of the Linux server.

The server program works both for PostScript and PCL CPCA printer queues.

Both CPCA V1.0 and CPCA V2.0 are supported.

Also genuine PostScript printer queues (EFI controlled devices) are supported with the same mechanism.

SICFilePlus Fax Solution for Canon iR devices

This product may be of help to send faxes through a Canon iR device.

Basically two types of input are supported:

- Postscript data.
- Text or PCL data.

This is related to a technical specification of the Canon iR device which imposes us to rasterise the data into Fax group G4 format on the UNIX/Linux workstation before sending the data to the Canon device.

Some customising will always be required: The fax number of the document should be communicated one way or the other.

Quite often a home made application will be able to supply this information in a simple manner, for example as an argument on the command line.

In other cases the S.I.C. fax program will search for this information within the data stream itself. In general a solution will be found easily after a short discussion with the customer.

Normally the S.I.C. fax driver will be working from within a printer queue and the customer simply sends his data (sometimes with the fax number as an argument of the command line).

Technically this solution works in the following manner:

- The input data (PostScript or PCL) are rasterised in a fax group G4 bitmap.
- This bitmap is, together with the fax number, transformed into a CPCA file.
- The CPCA file is then send to the iR device, which should of course have a fax board.
- Finally the iR device will send the fax. As a special option it is possible to send the fax with a customer defined form or overlay.

The SICFilePlus solutions can be implemented either on a UNIX, Linux or MS Windows workstation or as a print server in a "black box" serving various laser printers at the same time.

Assistance

Supplementary and more recent information are regularly available on the site of the SIC Forum:
<http://www.franet.com/sicforum>.

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