How to Add a New Image Type Handler Into CCS

To add a new image type into CCS-ECL library, you need two handler routines and know about first one or two character of magic number in the new type of the image for pipe handling. The two handlers are header handler and data handler. The parameter format is (int job_id, U_IMAGE *img, va_list ...) for both handlers. Add header handler call into bridge_header_handle() routine in *sysenv.c* and data handler call into std_interface() routine in *convertu.c*. Put them before the case of TiFF, which has to be the last one case since TiFF library is not cooperated with error handling and I/O piping. If you prefer to use pipe feature for your image type, be sure to add the first one or two magic characters into pull_Itype() routine in sysenv.c. It is easy to do just by looking at the pull_Itype() routine. The last thing is to define your new image type in imagedef.h after type COLOR_PS, (for example after JPEG), change ENDITYPE to new image type if the new type is the last one or rearrange the rest type after the new type, and add new image type name string into IName_List in proper position.

The current version of CCS-ECL allows only three parameters in va_list for bridge_header_handle() and std_interface() routines since the depth of va_list is 1 for C implementation, so this is no way to pass va_list from user interface (the to routines above) to system interface (e.g. your image handlers). I will try to find a solution for it. One solution is that the system interfaces have to called from user interface. That is, they can not be called in any other manners. Any suggestions can be directed to me. Thanks.

CCS-ECL Future and Limitations

The complex conversion system - extended C library “CCS-ECL” (the public release 1.0 was CCS) is fully open to public in release version 1.2. The table interface is completed. The X libraries, network, and all others are released to public with certain restriction. Since the HIPS is licensed to users, some tools are unbuildable. This is not crucial for non-HIPS user because they may not have HIPS images. Unfortunately, the question is that you will re-create tons of programs existed in HIPS package, which handles not only the HIPS, but also other image formats under CCS interface. Therefore, if you are interested in knowing HIPS, here is the person and address to contact:

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The future of the CCS-ECL is focusing on following areas:

(1) complete adaptive interface. (version 2.x)

(2) cooperate any advanced functions and routines blow the CCS-ECL

user level (see handbook, How to Use This Handbook, and About This Manual, in handbook Reference Manual - I) into CCS-ECL library to build user interface to simplify the system and user program.

The area 1 is aimed to image processing. The area 2 is a long run term. None of further changes will effect to current CCS-ECL interface, and every enhancement will be transparent to users.