

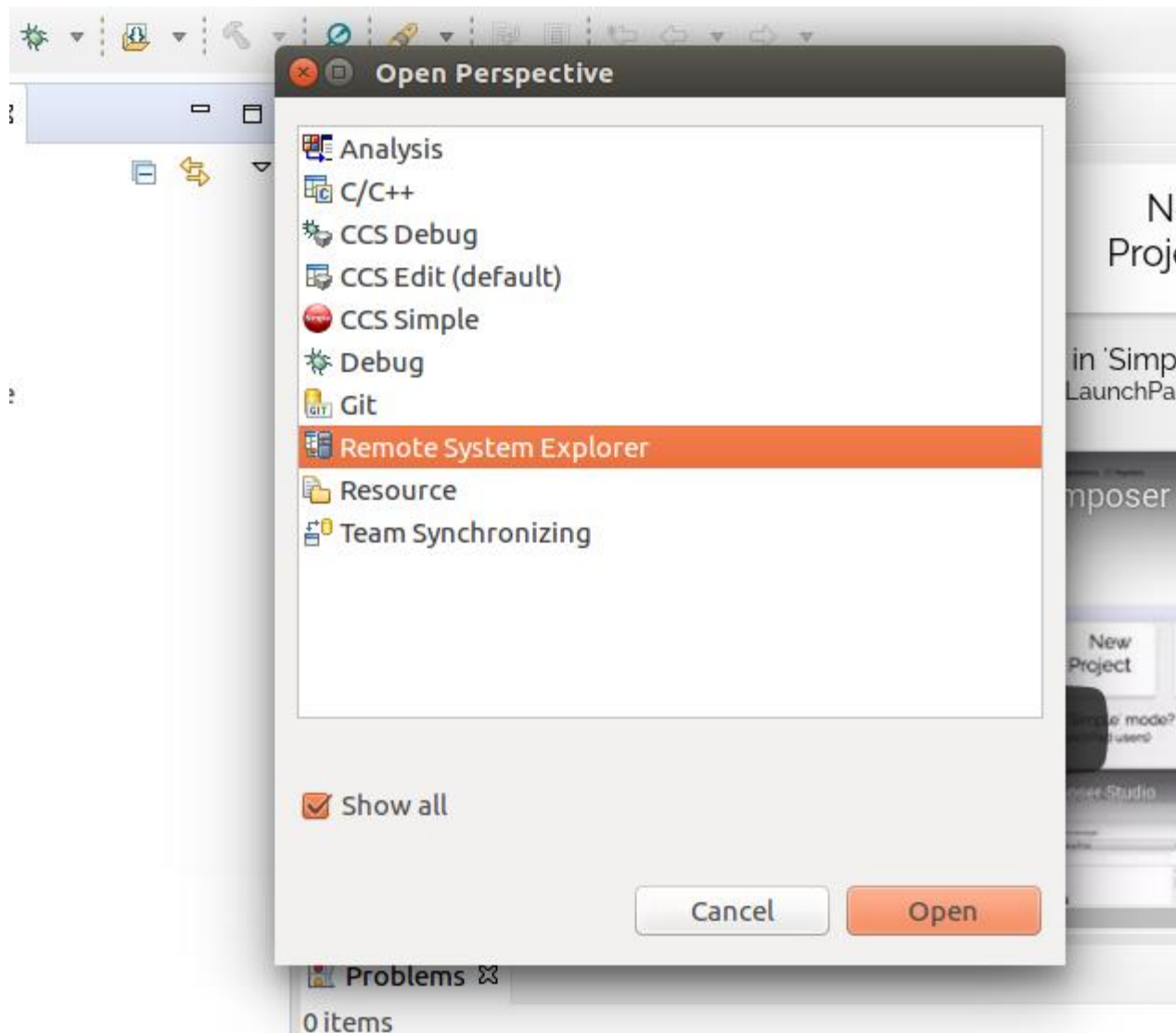
AM5728 OpenCV Test

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CCS 상에서 원격 저장 설정을 수행하면 작업을 수행할 수 있다.

Remote System Explorer 를 설정해야 하며

이후에 imshow 가 아닌 imwrite 를 사용하여 이미지를 읽고 저장하는 것이 가능함을 확인할 수 있다.



```

~/ti-processor-sdk-linux-am57xx-evm-04.03.00.05/linux-devkit/sysroots/x86_64-arago-linux/usr/arm-linux-gnueabi/libc/usr$ cd lib
~/ti-processor-sdk-linux-am57xx-evm-04.03.00.05/linux-devkit/sysroots/x86_64-arago-linux/usr/arm-linux-gnueabi/libc/usr/lib$ ls
libgettextpo.so          libopencv_fuzzy.so.3.1.0      libQt5Quick.prl
libgettextpo.so.0        libopencv_highgui.so.3.1      libQt5Quick.so
libgettextpo.so.0.3.0    libopencv_highgui.so.3.1.0    libQt5Quick.so.5
libgettextsrc-0.16.1.so  libopencv_highgui.so.3.1.0    libQt5Quick.so.5.7
libgettextsrc.so         libopencv_imgcodecs.so        libQt5Quick.so.5.7.1
libgfortran.so          libopencv_imgcodecs.so.3.1    libQt5QuickTest.prl
libgio-2.0.so           libopencv_imgcodecs.so.3.1.0  libQt5QuickTest.so
libgio-2.0.so.0         libopencv_imgproc.so          libQt5QuickTest.so.5
libgio-2.0.so.0.4800.2  libopencv_imgproc.so.3.1      libQt5QuickTest.so.5.7
libgirepository-1.0.so  libopencv_imgproc.so.3.1.0    libQt5QuickTest.so.5.7.1
libgirepository-1.0.so.1 libopencv_line_descriptor.so   libQt5QuickWidgets.prl
libgirepository-1.0.so.1.0.0 libopencv_line_descriptor.so.3.1 libQt5QuickWidgets.so
libGLCM.so              libopencv_line_descriptor.so.3.1.0 libQt5QuickWidgets.so.5
libGLCM.so.1            libopencv_ml.so               libQt5QuickWidgets.so.5.7
libGLCM.so.1.14.3699939 libopencv_ml.so.3.1           libQt5QuickWidgets.so.5.7.1
libGLESV2.so            libopencv_ml.so.3.1.0        libQt5Script.prl
libGLESV2.so.1          libopencv_objdetect.so        libQt5Script.so
libGLESV2.so.1.14.3699939 libopencv_objdetect.so.3.1    libQt5Script.so.5
libGLESV2.so.2          libopencv_objdetect.so.3.1.0  libQt5Script.so.5.7
...

```

192.168.219.112 - PuTTY

```
root@am57xx-evm:/usr/share/OpenCV# ls
OpenCVConfig-version.cmake  OpenCVModules-release.cmake  haarcascades  samples
OpenCVConfig.cmake          OpenCVModules.cmake          lbpcascades
root@am57xx-evm:/usr/share/OpenCV# cd samples/
root@am57xx-evm:/usr/share/OpenCV/samples# ls
bin  python
root@am57xx-evm:/usr/share/OpenCV/samples# cd ..
root@am57xx-evm:/usr/share/OpenCV# ls
OpenCVConfig-version.cmake  OpenCVModules-release.cmake  haarcascades  samples
OpenCVConfig.cmake          OpenCVModules.cmake          lbpcascades
root@am57xx-evm:/usr/share/OpenCV# git clone https://github.com/opencv/opencv_extra.git
Cloning into 'opencv_extra'...
fatal: unable to access 'https://github.com/opencv/opencv_extra.git/': SSL certificate problem: certificate not yet valid
root@am57xx-evm:/usr/share/OpenCV# cd ~
root@am57xx-evm:~# ls
AM5728_test_app  airshow_p352x288.h264  opencv_extra-master.zip
root@am57xx-evm:~# ls /usr/share/OpenCV/
OpenCVConfig-version.cmake  OpenCVModules-release.cmake  haarcascades  samples
OpenCVConfig.cmake          OpenCVModules.cmake          lbpcascades
root@am57xx-evm:~# cd /usr/share/OpenCV/
root@am57xx-evm:/usr/share/OpenCV# mv ~/opencv_extra-master.zip ./
root@am57xx-evm:/usr/share/OpenCV# ls
OpenCVConfig-version.cmake  OpenCVModules-release.cmake  haarcascades  opencv_extra-master.zip
OpenCVConfig.cmake          OpenCVModules.cmake          lbpcascades  samples
root@am57xx-evm:/usr/share/OpenCV#
```

```
root@am57xx-evm:/usr/share/OpenCV# clear
root@am57xx-evm:/usr/share/OpenCV# ls
OpenCVConfig-version.cmake  OpenCVModules-release.cmake  haarcascades  opencv_extra-master.zip
OpenCVConfig.cmake          OpenCVModules.cmake          lbpcascades   samples
root@am57xx-evm:/usr/share/OpenCV# unzip opencv_extra-master.zip
Archive:  opencv_extra-master.zip
  creating: opencv_extra-master/
  inflating: opencv_extra-master/.gitattributes
  inflating: opencv_extra-master/.gitignore
  inflating: opencv_extra-master/README.md
    creating: opencv_extra-master/testdata/
      creating: opencv_extra-master/testdata/cv/
        creating: opencv_extra-master/testdata/cv/agast/
  inflating: opencv_extra-master/testdata/cv/agast/result0.xml
  inflating: opencv_extra-master/testdata/cv/agast/result1.xml
  inflating: opencv_extra-master/testdata/cv/agast/result2.xml
    creating: opencv_extra-master/testdata/cv/cameracalibration/
  inflating: opencv_extra-master/testdata/cv/cameracalibration/BoardStereoL1.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/BoardStereoL2.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/BoardStereoL3.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/BoardStereoL4.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/BoardStereoL5.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/BoardStereoL6.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/BoardStereoR1.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/BoardStereoR2.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/BoardStereoR3.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/BoardStereoR4.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/BoardStereoR5.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/BoardStereoR6.png
    creating: opencv_extra-master/testdata/cv/cameracalibration/asymmetric_circles/
  inflating: opencv_extra-master/testdata/cv/cameracalibration/asymmetric_circles/acircles1.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/asymmetric_circles/acircles2.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/asymmetric_circles/acircles3.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/asymmetric_circles/acircles4.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/asymmetric_circles/acircles5.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/asymmetric_circles/acircles6.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/asymmetric_circles/acircles7.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/asymmetric_circles/acircles8.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/asymmetric_circles/acircles9.png
  inflating: opencv_extra-master/testdata/cv/cameracalibration/asymmetric_circles/acircles_corners1.dat
  inflating: opencv_extra-master/testdata/cv/cameracalibration/asymmetric_circles/acircles_corners2.dat
```

main.cpp mat.hpp makefile imgproc.hpp

test.cpp

»2

```
1 #include <opencv2/opencv.hpp>
2
3 using namespace cv;
4 using namespace std;
5
6 int main(void)
7 {
8     Mat srcImage = imread("uin.jpeg", IMREAD_GRAYSCALE);
9
10    if(srcImage.empty())
11        return -1;
12
13    imwrite("this.jpg", srcImage);
14    //imshow("srcImage", srcImage);
15
16    return 0;
17 }
18
```

Outline

opencv2/opencv.t
cv
std
main(void) : int

Remote System Details Tasks Terminal

SSH root@192.168.219.112 (5/17/18 11:09 PM)

```
root@am57xx-evm:~# ls
AM5728_test_app  a.out  airshow_p352x288.h264  main.cpp  test.cpp  uin.jpeg
root@am57xx-evm:~# ./a.out
No such plugin for spec "Auto"
init done
Using Wayland-EGL
PVR:(Warning): LoadWSModule: Window system module libpvrws_KMS.so did not validate native display [98, /gener
ic_ws.c]
PVR:(Warning): PVRSRVOpenDCDevice: Warning - 138 returned [80, /bridged_pvr_dc_glue.c]
root@am57xx-evm:~# ls
AM5728_test_app  a.out  airshow_p352x288.h264  main.cpp  test.cpp  uin.jpeg
root@am57xx-evm:~# g++ -I/usr/local/include/opencv -I/usr/local/include/opencv2 -L/usr/local/lib -g test.cpp
-lrt -lopencv_core -lopencv_imgproc -lopencv_features2d -lopencv_imgcodecs -lopencv_highgui
root@am57xx-evm:~# ./a.out
root@am57xx-evm:~# ls
AM5728_test_app  a.out  airshow_p352x288.h264  main.cpp  test.cpp  this.jpg  uin.jpeg
root@am57xx-evm:~#
```

```
sdr@sdr-Samsung-DeskTop-System: ~/Pictures
sdr@sdr-Samsung-DeskTop-System:~/my_proj$ cd ~/Pictures/
sdr@sdr-Samsung-DeskTop-System:~/Pictures$ ls
am5728      fork_debug  kernel     lidar      radar_lab  uin.jpeg   zynq_lab
am5728_app  i2c        lecture    ogl_lab    sys_fork3.png vehicle_lab
sdr@sdr-Samsung-DeskTop-System:~/Pictures$ scp root@192.168.219.112 /home/root/t
his.jpg
cp: cannot stat 'root@192.168.219.112': No such file or directory
sdr@sdr-Samsung-DeskTop-System:~/Pictures$ scp root@192.168.219.112:/home/root/t
his.jpg
usage: scp [-12346BCpqrv] [-c cipher] [-F ssh_config] [-i identity_file]
          [-l limit] [-o ssh_option] [-P port] [-S program]
          [[user@]host1:]file1 ... [[user@]host2:]file2
sdr@sdr-Samsung-DeskTop-System:~/Pictures$ scp root@192.168.219.112:/home/root t
his.jpg
scp: /home/root: not a regular file
sdr@sdr-Samsung-DeskTop-System:~/Pictures$ scp root@192.168.219.112:/home/root/t
his.jpg ./
this.jpg                                100% 16KB 16.3KB/s 00:00
sdr@sdr-Samsung-DeskTop-System:~/Pictures$ ls
am5728      fork_debug  kernel     lidar      radar_lab  this.jpg   vehicle_lab
am5728_app  i2c        lecture    ogl_lab    sys_fork3.png uin.jpeg   zynq_lab
sdr@sdr-Samsung-DeskTop-System:~/Pictures$
```