

How to setup “ROPC(SL6 64bit)/COPPER(SL5 32bit)” system  
from the current “ROPC(SL5 32bit)/COPPER(SL5 32bit)”

S. Yamada (KEK)

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# 1. Setup environment

## 1. Archive tftpboot directory and other files on the old ROPC.

- [Old ROPC: / ] \$ tar cvf ~/tftpboot.tar /tftpboot
- Copy /etc/dhcpd.conf, /etc/xinet.d/eb-xinetd, ~/eb (for event builder0), /etc/exports

## 2. Install SL6 64bit on the new ROPC

- Disable firewall (# /usr/bin/system-config-firewall-tui) and set Selinux permissive (# setenforce 1)

## 3. Extract the files

- [new ROPC : /] \$ tar xvf tftpboot.tar
- And copy other files. ( /etc/dhcpd.conf should be placed under /etc/dhcp/ )
- (Re)start services; /sbin/service dhcpd(nfs,xinetd) restart, /sbin/chkconfig tftpboot on

## 4. Turn on COPPERs and see what happen.

[new ROPC: ] # tail -f /var/log/messages

## 2. Compiling DAQ program

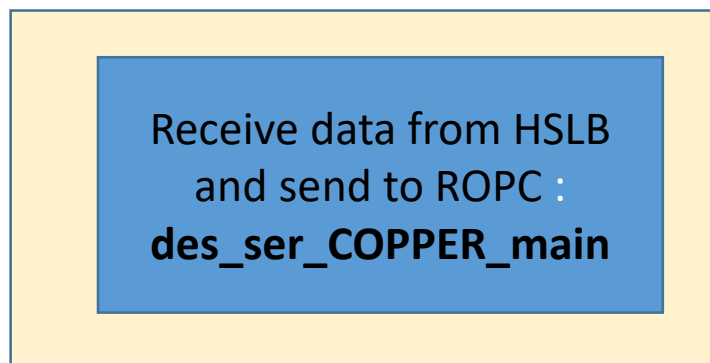
- Install basf2 on ROPC
  - See <https://confluence.desy.de/display/BI/Software+SoftwareInstallation>
  - Compile basf2 by 'scons' on ROPC
- Compile DAQ programs
  - ROPC : `cd ~/basf2/release/daq/ropc; make ropc`
  - COPPER: `cd ~/basf2/release/daq/ropc; make copper`

### 3. Run DAQ program

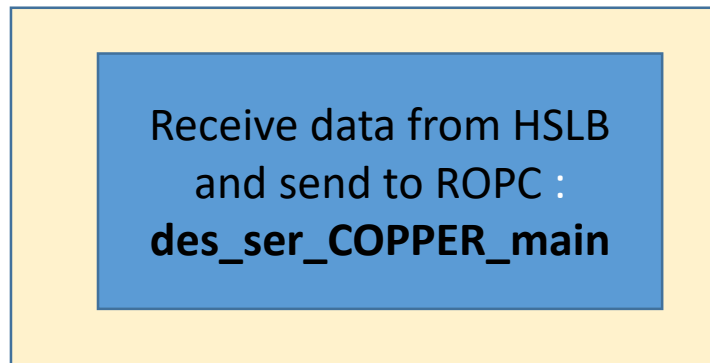
```
[ropc:]$ ${BELLE2_LOCAL_DIR}/daq/copper/daq_scripts/run_start_mono.sh
```

### Alternative scheme w/o eb0

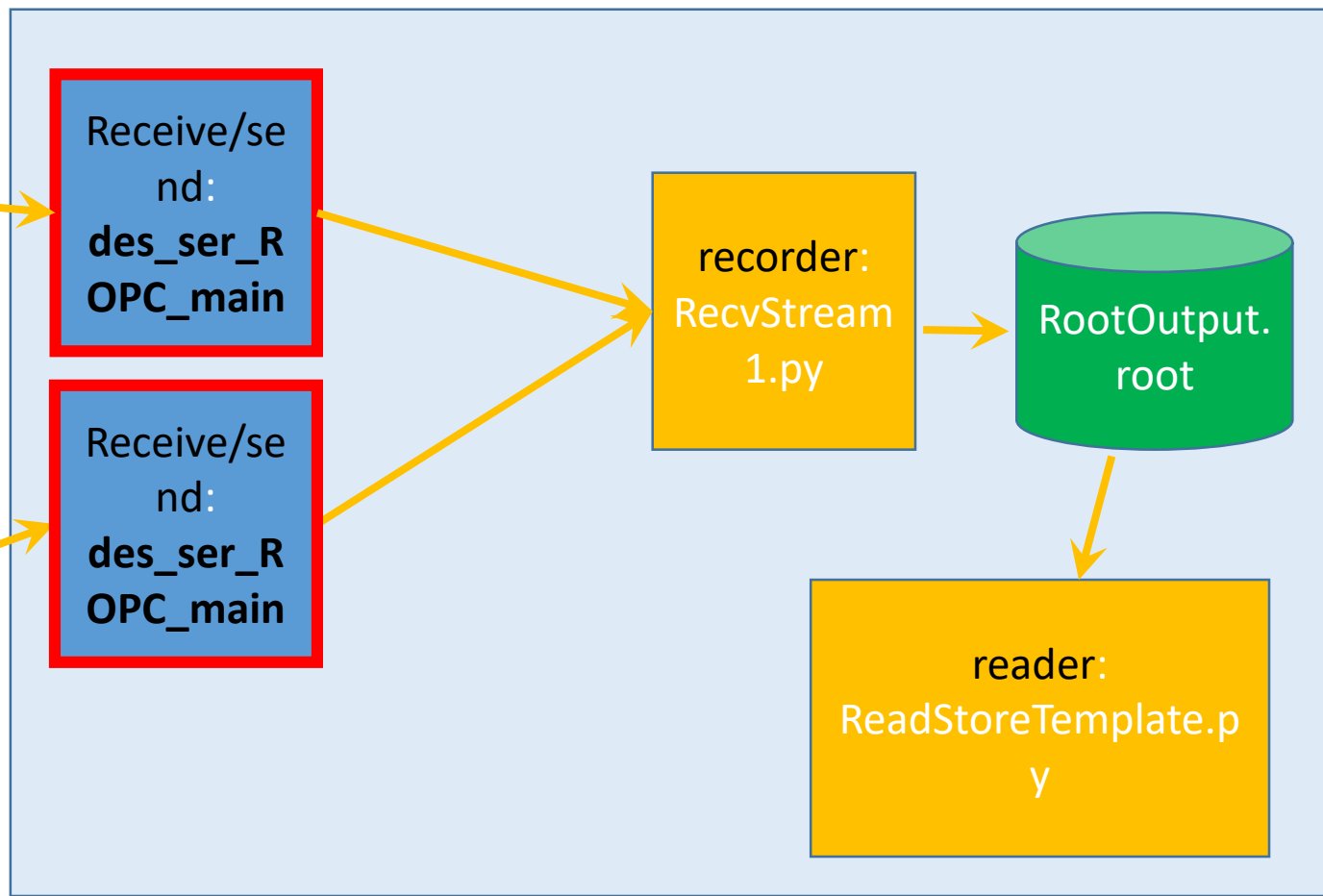
COPPER CPU



COPPER CPU



Readout PC



Orange color components are basf2 components.

## 3, How to set parameters in scripts

- Please see “Take data using COPPER and setting for that” at <https://confluence.desy.de/display/BI/DAQ+PocketDAQ>
  - P.8 : How to modify daq/rawdata/example/RecvStream1.py
  - P.14 and p.16 : How to modify daq/copper/daq\_scripts/run\_start\_mono.sh