

EPICS APPLICATION DEVELOPMENT ENVIRONMENT

J. Odagiri

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What I'm going to show you

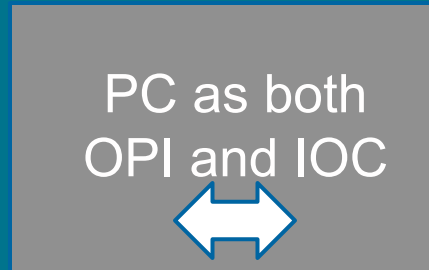
⦿ Self development

- Both MEDM and IOC program are built and run on the same PC

⦿ Cross development

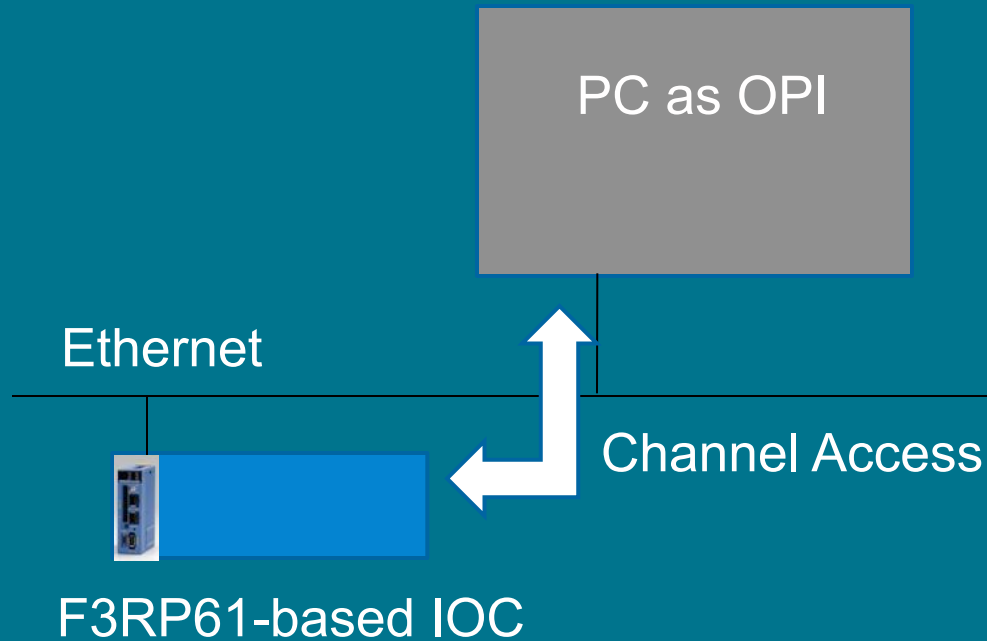
- MEDM runs on the PC
- IOC program is built on the PC but ...
- It runs on the target (F3RP61)

Self development for PC



Channel Access

Cross development for F3RP61



Self development

⦿ Build base

- Un-tar the tar ball
- Make a soft link (just for convenience)
- Just type “make” will do it for me (?)

⦿ Build MEDM

- Make an extension directory
- Un-tar the tar ball
- Just type “make” will do it for me (?)

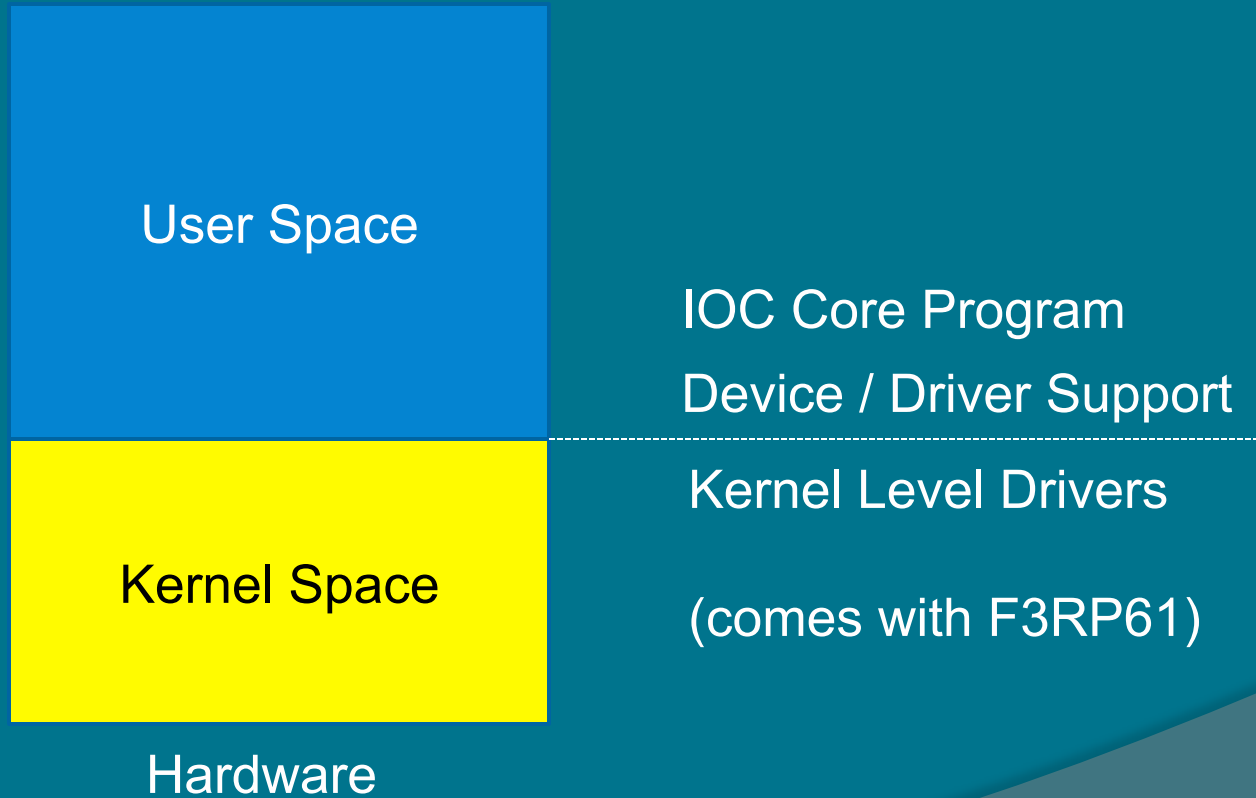
Create an application development environment

- Create an application development directory and go to the directory
- Use “**makeBaseApp.pl**”, a tool in base
 - Need to type twice
 - First, with “**-t example test**”
 - Second, with “**-i -t example test**”
- Type “make” at the top of the application directory

Cross development

- ① Install cross development tool chain from BSP
- ② Modify some files under base/configure
- ③ Build base for the target
- ④ Install device/driver support library and build it
- ⑤ Build application for the target with including the device/driver support library
- ⑥ No need to re-build MEDM, needless to say
 - We do NOT want to run it on the target

EPICS/Linux on the F3RP61



Software Configuration

- ⦿ Linux is on the CF card
 - F3RP61-based IOC boots up from the CF
 - Stand-alone system
 - The PC is NOT necessary to boot up Linux
- ⦿ EPICS is on the PC
 - Provides a development environment
 - EPICS is under /opt/epics
 - F3RP61-based IOC mounts the PC:/opt on local /opt upon the boot

Target mounts PC:/opt

