

Basic Linux Commands

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Why Linux?

- Control system devices tend to be different from desktop computers
 - No monitor, no keyboard
 - Only terminal access via network or serial
- Remote access to control system servers is often also most efficient via terminal
- EPICS “IOC” has no GUI because that would waste CPU & memory

Getting around the file system

- Change Directory
 - `cd /ics/examples/07_plc`
 - `cd /iTAB/exTAB/07TAB`
- Show Current Directory (if not shown in terminal prompt)
 - `pwd`
- List files
 - `ls`
 - `ls -l`

Dealing with Files

- Open in Text Editor
 - `gedit name_of_file &`
 - `gedit namTAB &`
 - may use `vdct` instead of `gedit` for EPICS database file*
- Quickly look at a file
 - `cat name_of_file`
 - `less name_of_file` (cursor up/down, 'h' for help)
- Copy File
 - `cp name_of_file new_file_name`
- Remove/Delete file
 - `rm name_of_file`

Common EPICS Commands

- Channel Access

- caget pv_name
- camonitor pv_name
- caput pv_name new_value
- cainfo pv_name

- Start IOC

- softloc -m "MACRO=value" -d example.db
- eiploc -p plc=10.0.0.112 -m "MACRO=value" -d example.db

- Start CS-Studio

- CSS

Common IOC Commands

- List Records
 - dbl
- Print fields of one record
 - dbpr name_of_record 10
- EtherIP Info
 - drvEtherIP_dump
 - drvEtherIP_report 10