BREAKING UP THE MOTOR MODULE

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PROPOSAL:

Break the motor module into core module(s) & many driver modules

motor-6-10-1

configure

motorApp

motorExApp

iocBoot

???

motor-7-0

motor

motorCore

motorSim
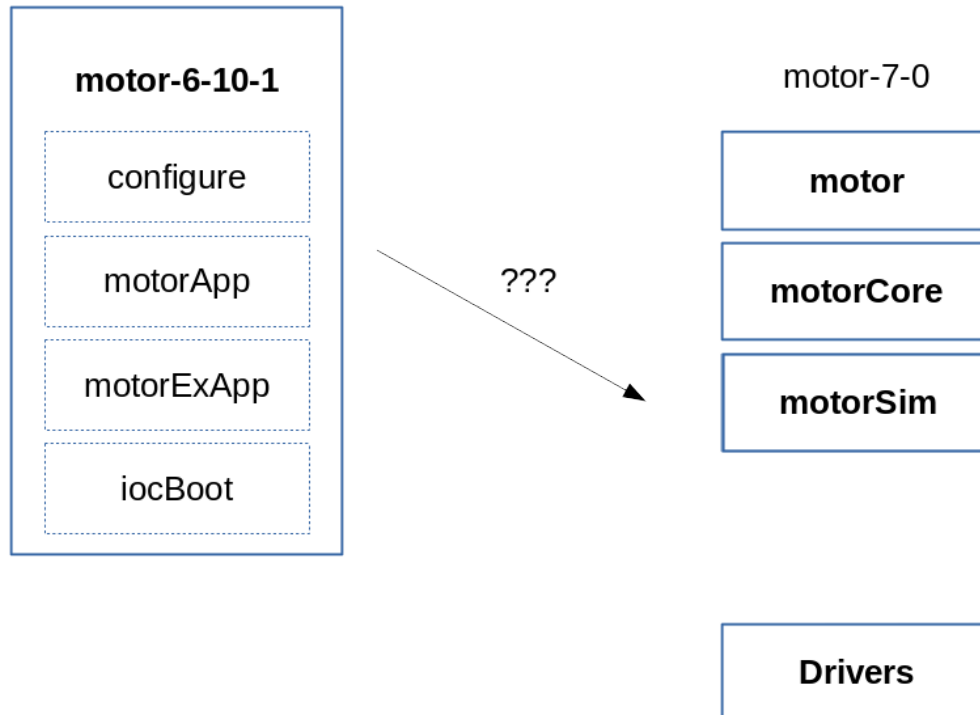
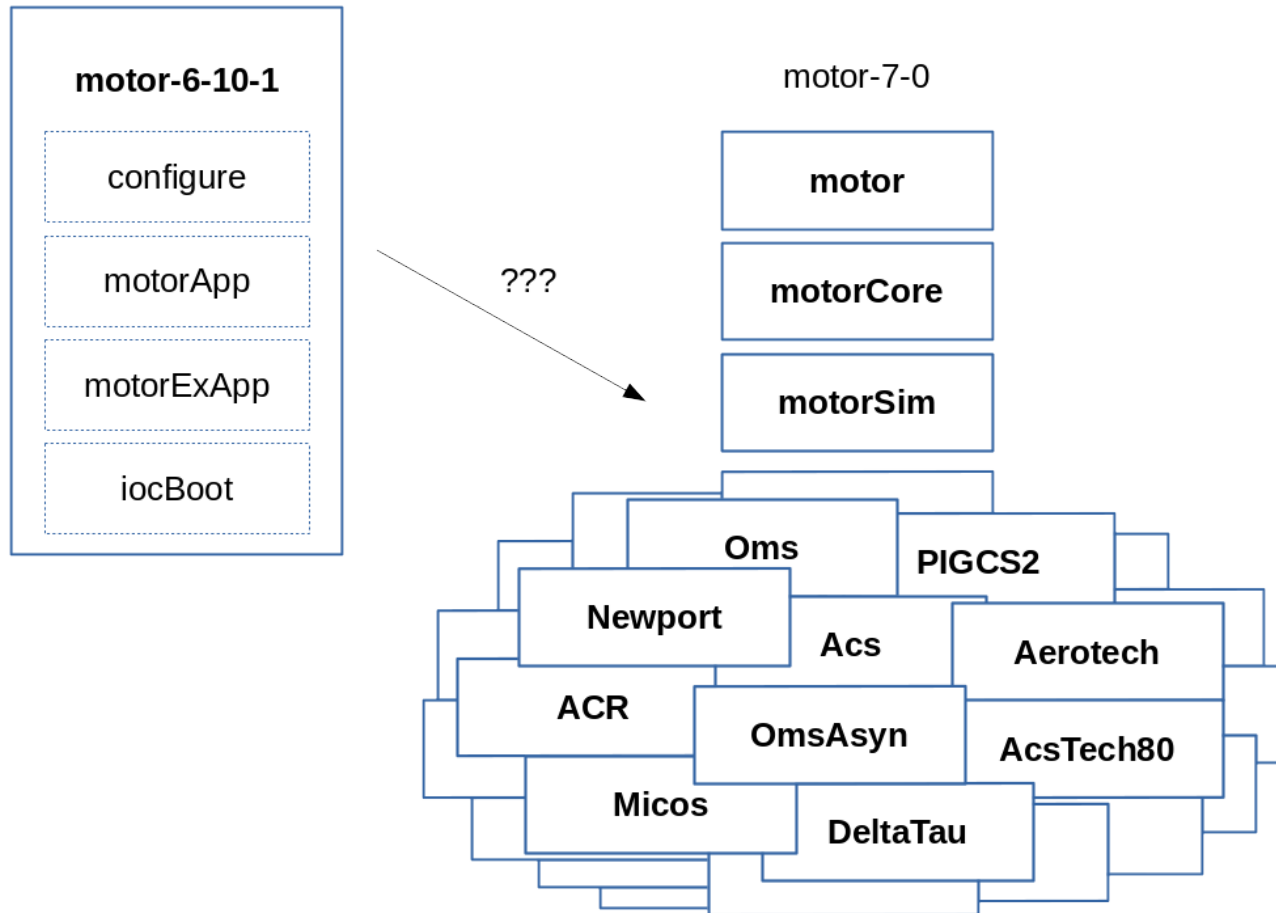**Drivers**

PROPOSAL:

Break the motor module into core module(s) & many driver modules

WHY BREAK UP THE MOTOR MODULE?

There are many advantages:

- Drivers can be released on different schedules
- Releases would be more focused
- Fewer barriers to collaboration (smaller units of responsibility)
- Shorter build times (if few drivers are deployed)

And some disadvantages:

- Manually deploying subset of drivers takes more effort
- More complex (git submodules)
- Change is scary
- _____

THIS IDEA ISN'T ORIGINAL

areaDetector is a model for how to do this
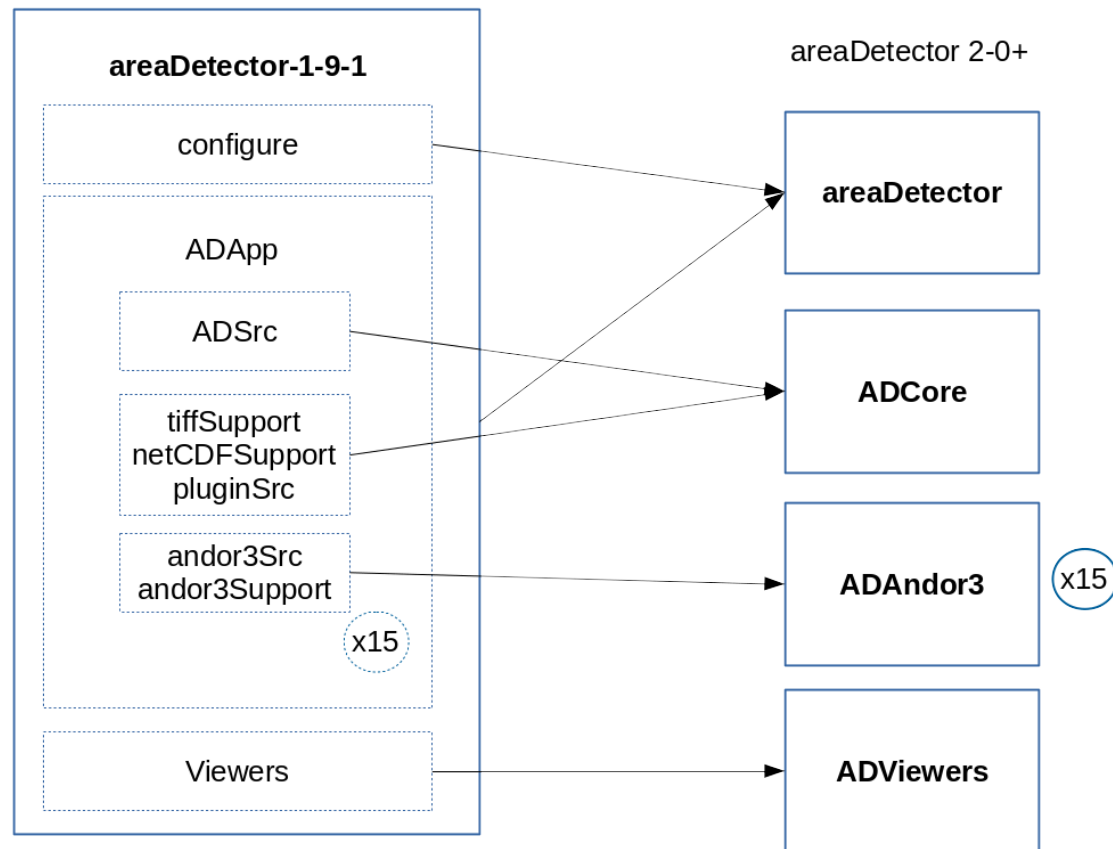
QUESTIONS

These questions are not meant to be rhetorical

Is this a good idea?

Note: the rest of this presentation assumes it is,
but differing opinions are welcome.

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QUESTIONS (CONTINUED)

These questions are not meant to be rhetorical

Where should the repositories reside?

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QUESTIONS (CONTINUED)

Where should the new repositories reside?

- motor currently resides in epics-modules:

    - https://github.com/**epics-modules**/motor

- areaDetector repos reside elsewhere:

    - https://github.com/**areaDetector**/areaDetector

    - https://github.com/**areaDetector**/ADCore

- New motor repos could be added to epics-modules:

    - https://github.com/**epics-modules**/motorCore

- epics-motor organization could be created:

    - https://github.com/**epics-motor**/motor

    - https://github.com/**epics-motor**/motorCore

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QUESTIONS (CONTINUED)

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Should MotorSimSrc get
its own repository?

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QUESTIONS (CONTINUED)

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Should SoftMotorSrc be included in the motor core repository?

soft motor = motor with "Soft Channel" device support

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QUESTIONS (CONTINUED)

These questions are not meant to be rhetorical

Can the top-level motor repository include the motor core?

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QUESTIONS (CONTINUED)

Naming modules is hard

- What should the driver-repository naming convention be?

  - <vendor>

  - <vendor>Motor

  - motor<vendor>

- Directory that complicates naming conventions: **SmartMotorSrc**

  - SmartMotor

  - SmartMotorMotor

  - motorSmartMotor

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ADDITIONAL GOALS

Simplify the deployment process

- Make it easy to build drivers outside of the top-level motor directory.
- Make it easy to build IOCs outside of the driver directory.

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FEEDBACK

There are multiple ways to provide additional feedback

- Comment on the github issue:

    - https://github.com/epics-modules/motor/issues/55

- Revive the tech-talk thread (or better yet, start a new one):

    - https://epics.anl.gov/tech-talk/2017/msg00264.php

- Email me:

    - kmpeters@anl.gov

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THE END.