Infrastructure

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ODIN

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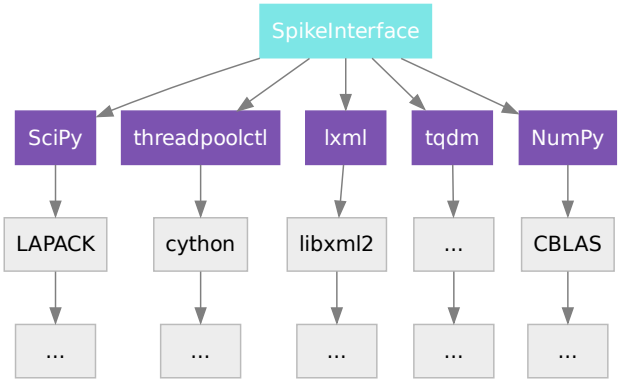
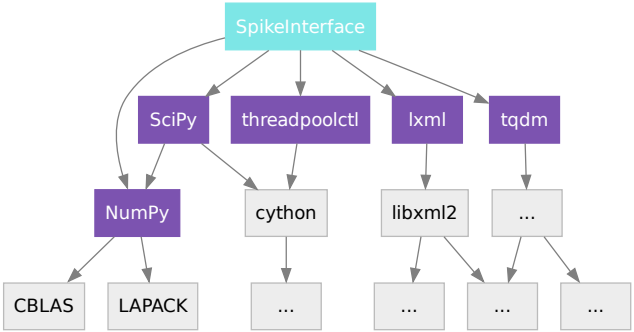
Probably more than you think.

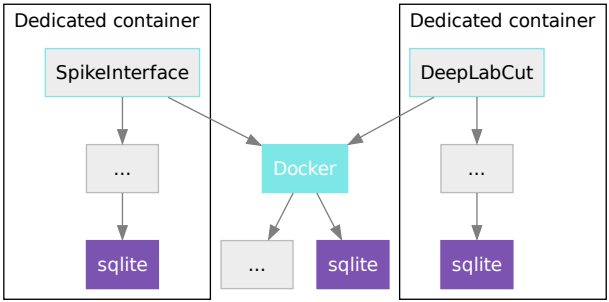


Probably more interconnected than you think.



Probably *much* more complex than you think.

No, but you can make it worse.



- Now you have three clocks and don't know what time it is.

And not just with respect to details.

```
FROM [redacted]matlab-base

USER root

RUN chmod 755 /usr/bin/mlrtapp/[redacted]compiled
ENV PATH="/usr/bin/mlrtapp:${PATH}"

# Installing Python with miniconda
RUN apt-get update && \
    apt-get install -y build-essential  && \
    apt-get install -y wget && \
    apt-get install -y git && \
    apt-get clean && \
    rm -rf /var/lib/apt/lists/*

ENV MINICONDA_VERSION 23.1.0-1
ENV PYTHON_VERSION py39
ENV CONDA_DIR /home/miniconda3
ENV LATEST_CONDA_SCRIPT "Miniconda3-${PYTHON_VERSION}_${MINICONDA_VERSION}-Linux-x86_64.sh"

RUN wget --quiet https://repo.anaconda.com/miniconda/$LATEST_CONDA_SCRIPT -O ~/miniconda.sh && \
    bash ~/miniconda.sh -b -p $CONDA_DIR && \
    rm ~/miniconda.sh
ENV PATH=$CONDA_DIR/bin:$PATH
```

- But good solutions are irresistible.

Key Discussion Items

Concepts:

- distributed workload;
- testing and sustainability;
- user-developer feedback loop;
- flexibility and transparency;
- adaptability;
- resource integration;

Questions:

- What infrastructure do you use (scale/cost, etc.)?
- How do you manage your software stack?
- Do you benefit from controlling your environment?
- What advantages do you gain from open source?
- Do you treat scientific software stacks differently from other software, if so, why?