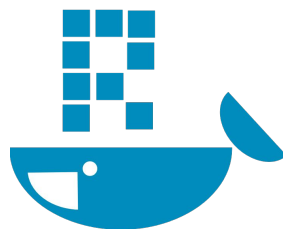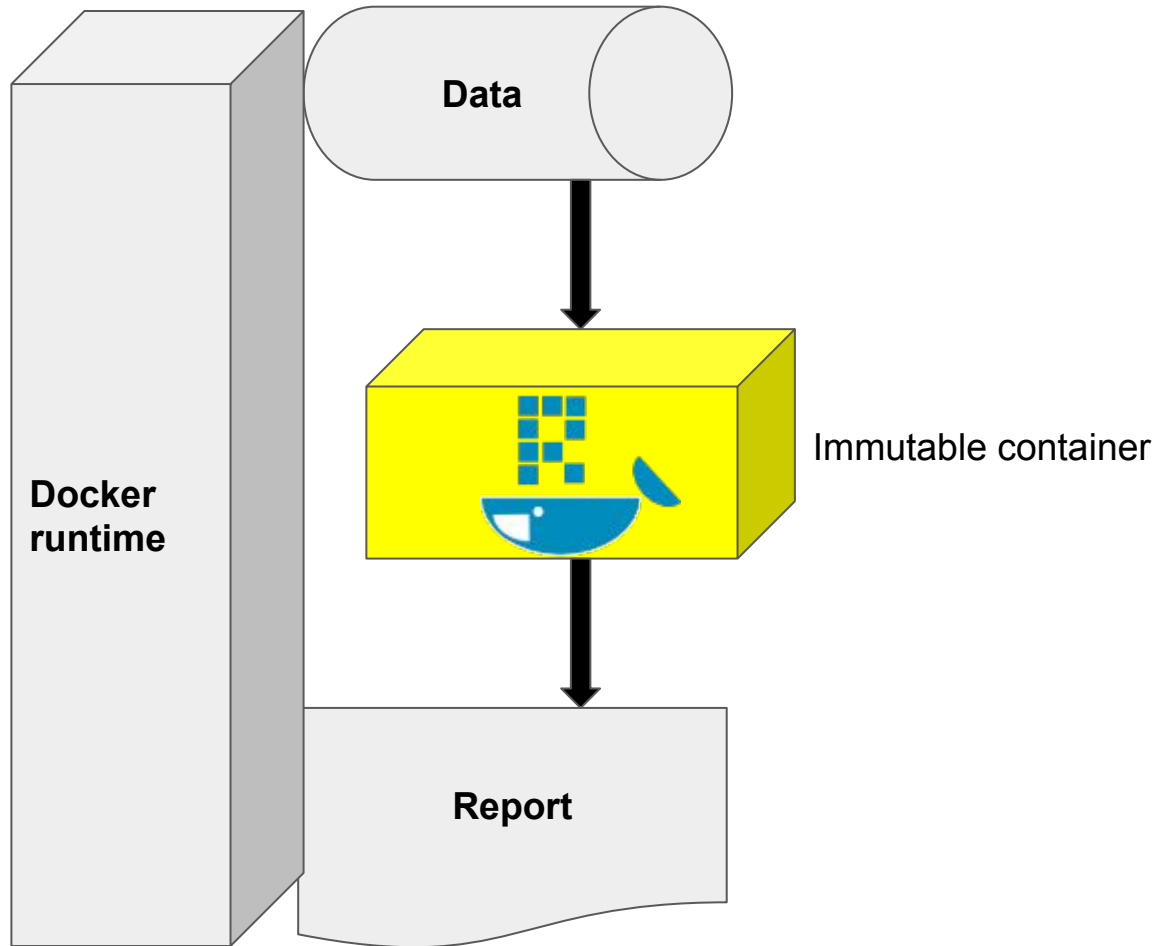# R in containers

Collaboration beyond company boundaries

➔ Collaborate:
- ◆ share data and analysis code

➔ Challenge: **reproducibility**
- ◆ R version
- ◆ R package versions
- ◆ System & math libraries (BLAS, Armadillo)
- ◆ Operating system

➔ Complete R environment container:
- ◆ R in **docker**

  https://www.rocker-project.org

Containerized Analysis

Data

Docker runtime

Immutable container
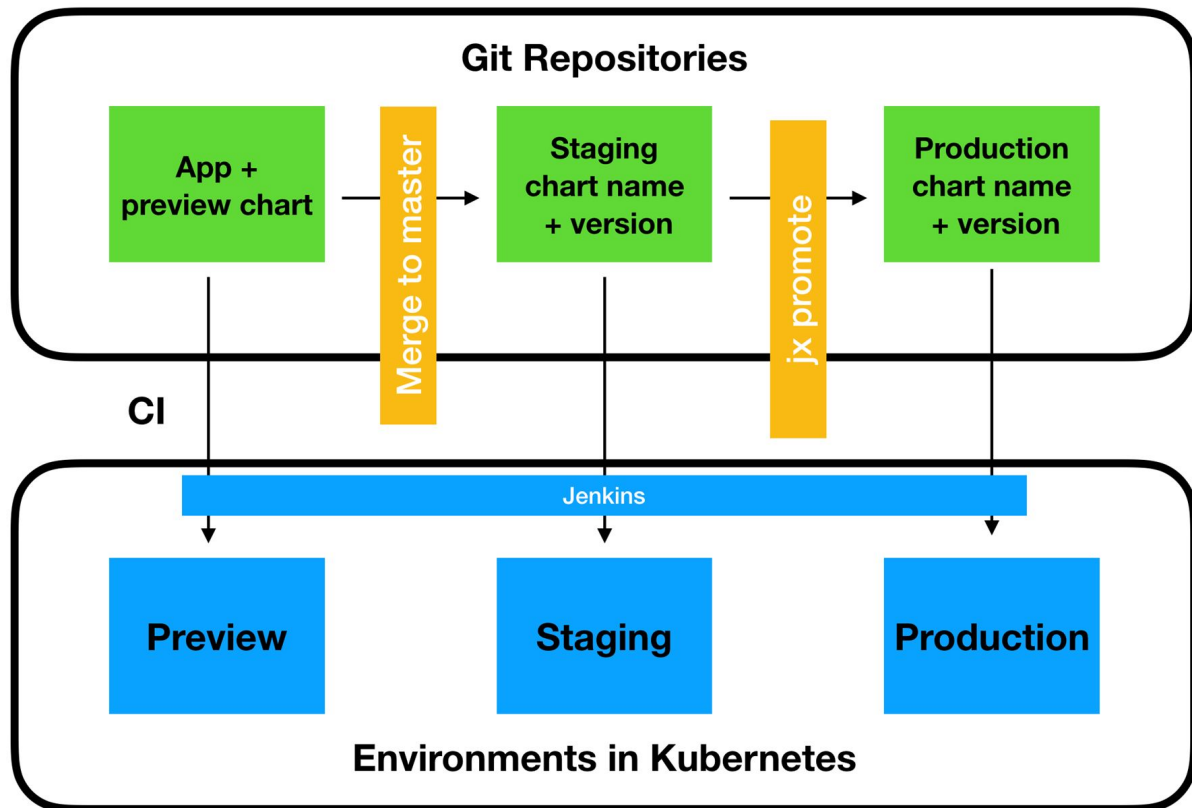
Report

Development of analysis containers

Kubernetes
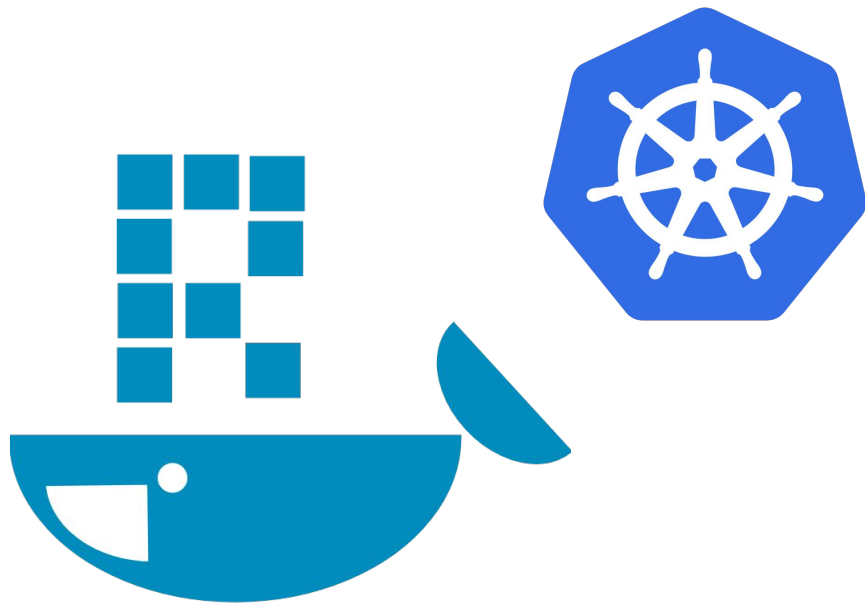- deploys, scales, and manages containers

Jenkins X sets up
- preview, staging, production environments in Kubernetes
- development pipeline controlled by git repositories that
  - builds docker container from code
  - deploys semantically versioned container product

Automated pipeline

Analysis factory

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under construction