

PROVISIONING FROM DEVELOPMENT TO PRODUCTION

ANDRE VON DEETZEN
@VDANDRE



OLIVER WEHRENS
@OWEHRENS



@BERLIN

“FASTER TIME TO MARKET”

4-6

MEANTIME BETWEEN
DELIVERIES IN WEEKS

150

DEV / QA / OPS

> 1000

SOURCE REPOSITORIES

|

RELEASE

“FASTER TIME TO MARKET”

3

AREAS TO CHANGE

ARCHITECTURE
DEPLOYMENT
WORKFLOW

ARCHITECTURE

MANY SMALL SERVICES

STATELESS SERVICES

INDEPENDENT DEPLOYABLE

STABLE INTERFACES

DEPLOYMENT PIPELINE

Stages & Version

Stage	Version
DEV	Development
Testing	Release Candidate
Stable	Certified Release

Tests

Stable

Smoke-
tests

Testing

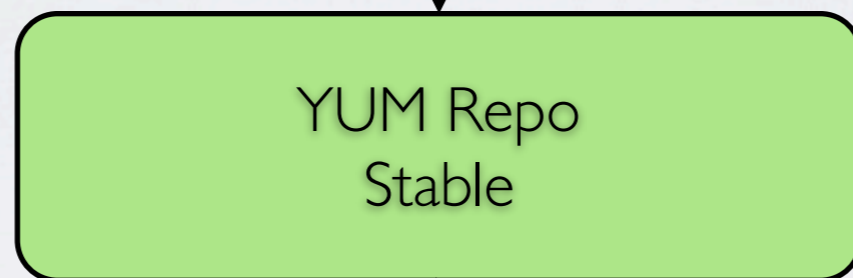
Component -
Integrationtests

DEV

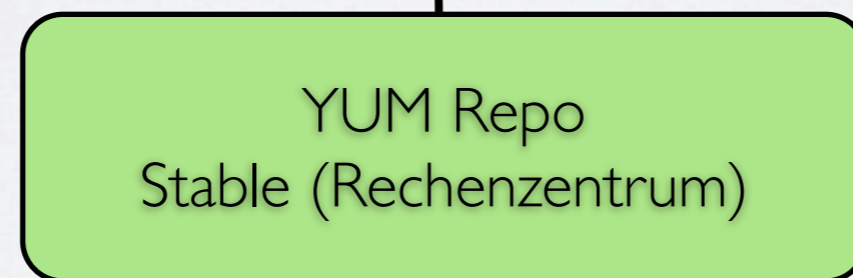
Unit- + Componenttests

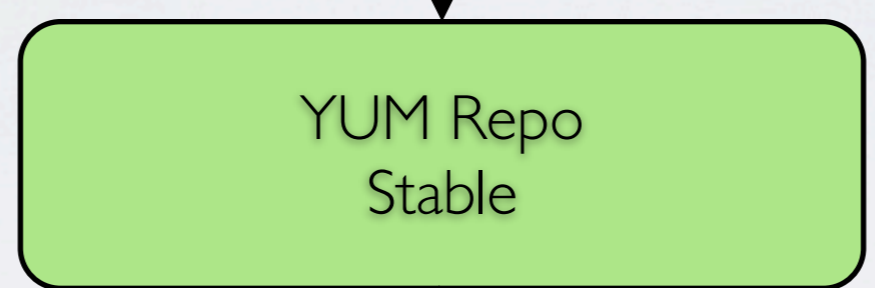


Way to production

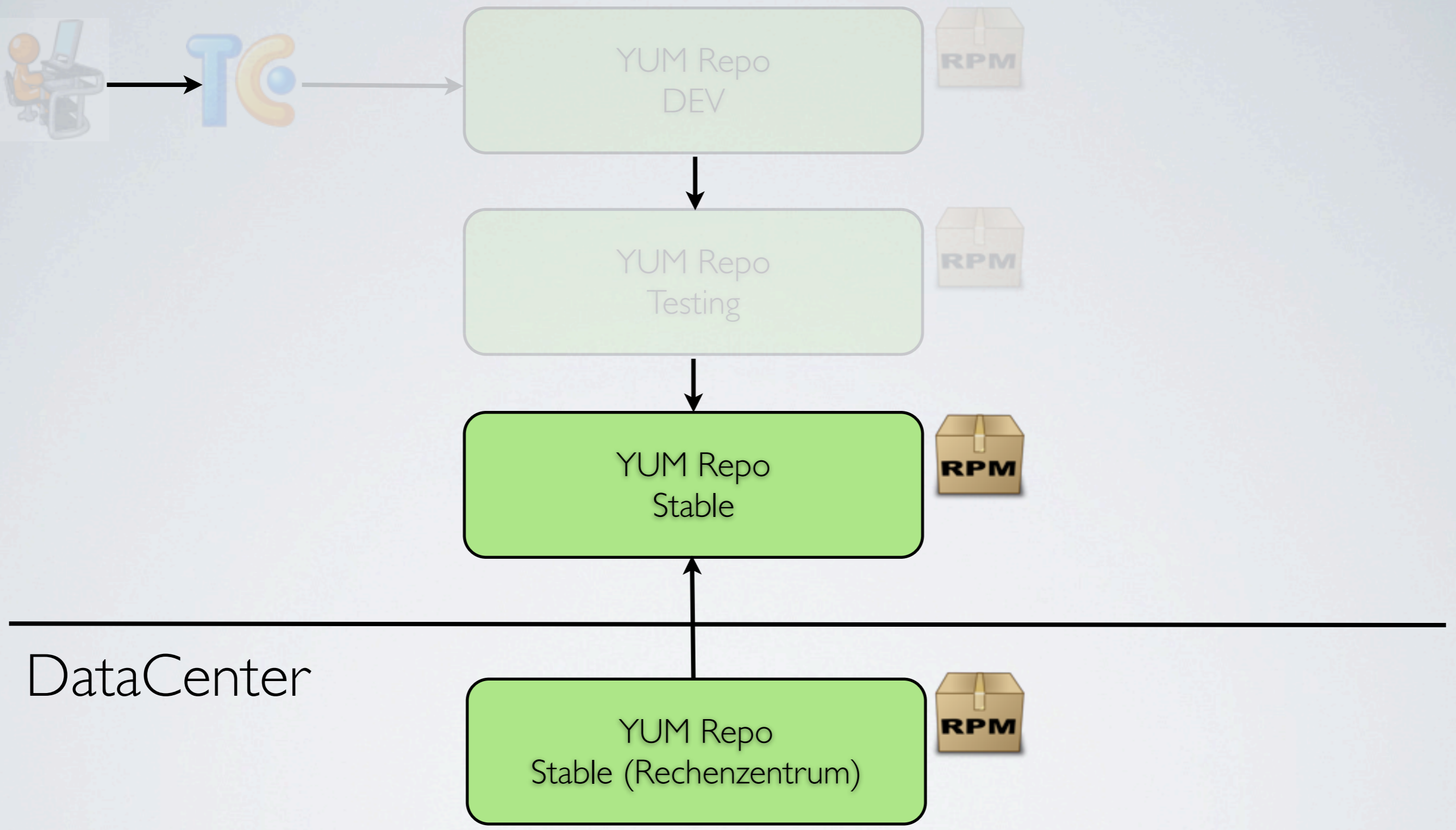
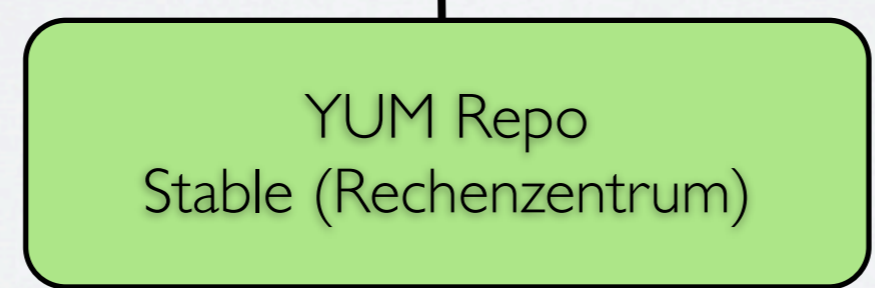


DataCenter





DataCenter





YUM Repo
DEV



YUM Repo
Testing



YUM Repo
Stable

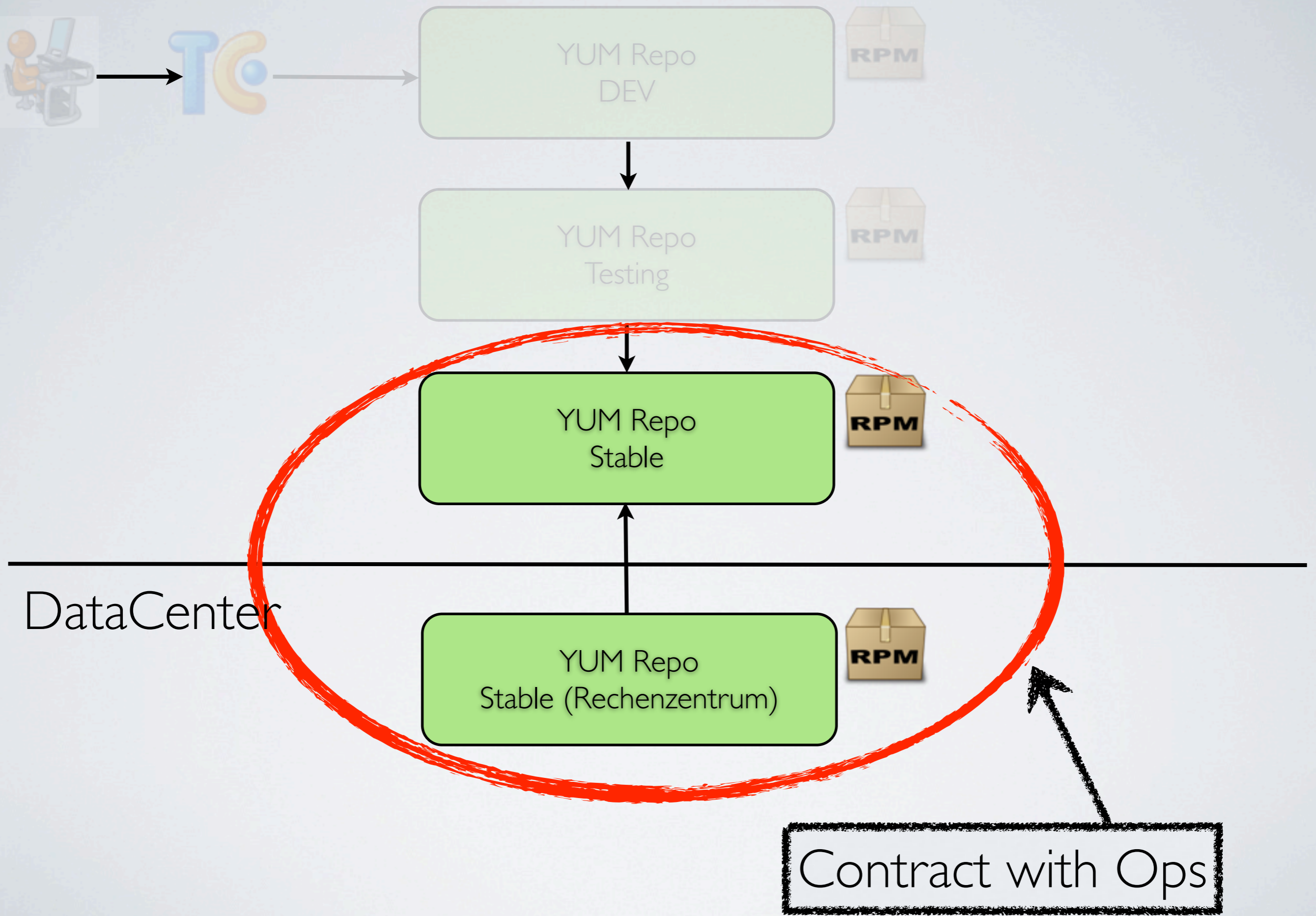
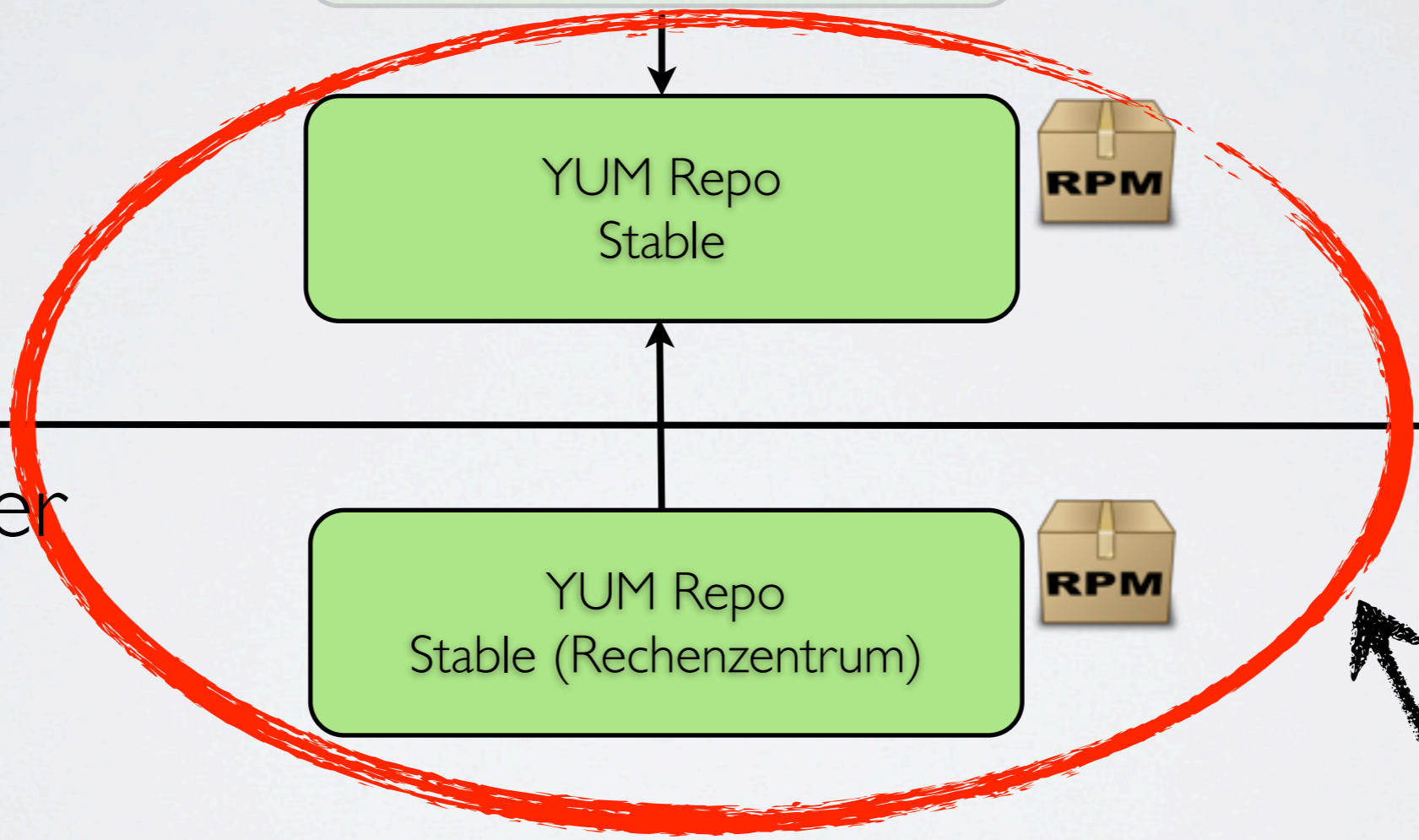


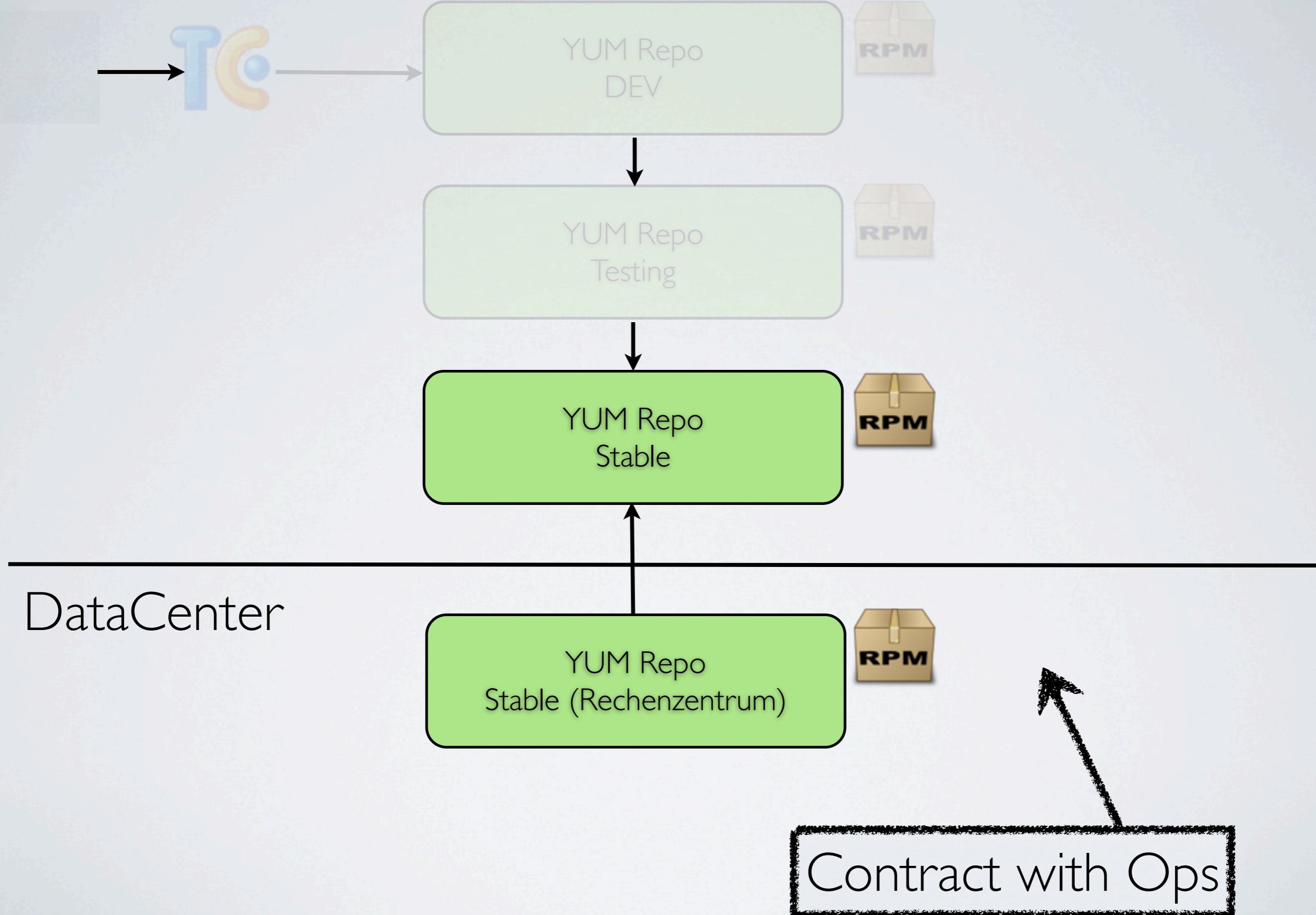
DataCenter

YUM Repo
Stable (Rechenzentrum)



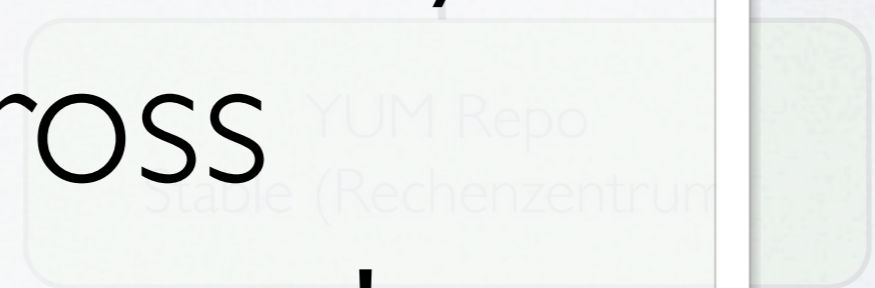
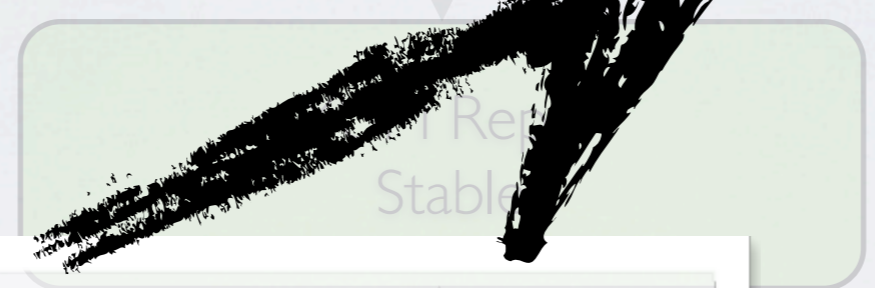
Contract with Ops





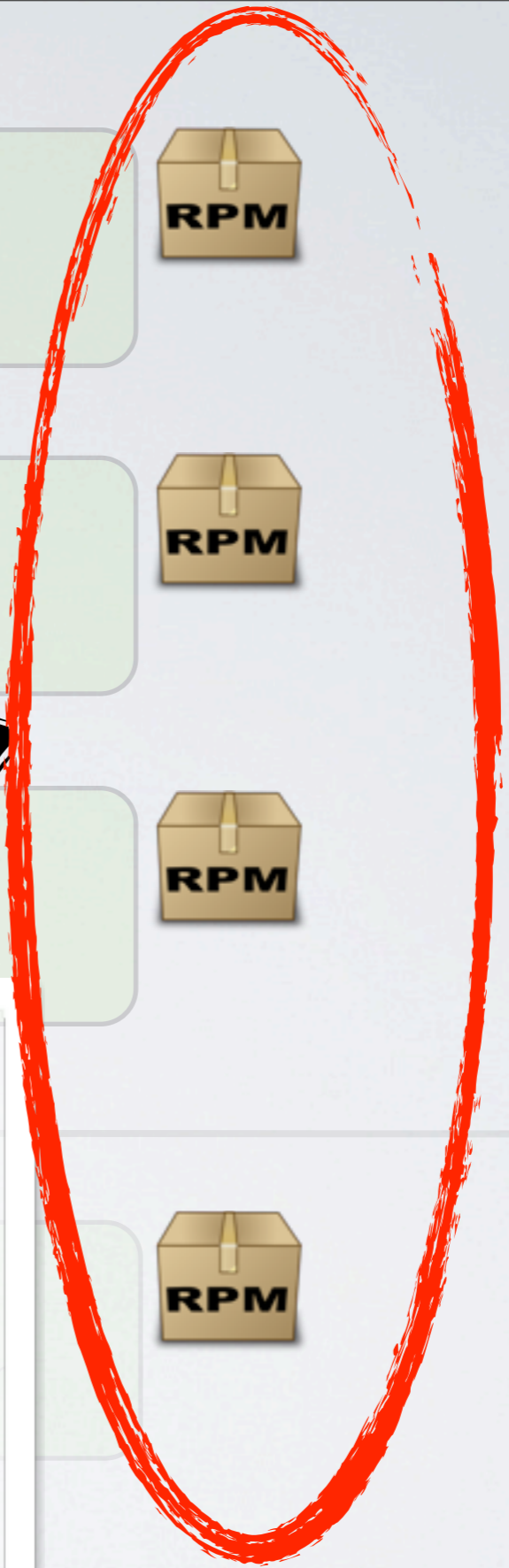


TC



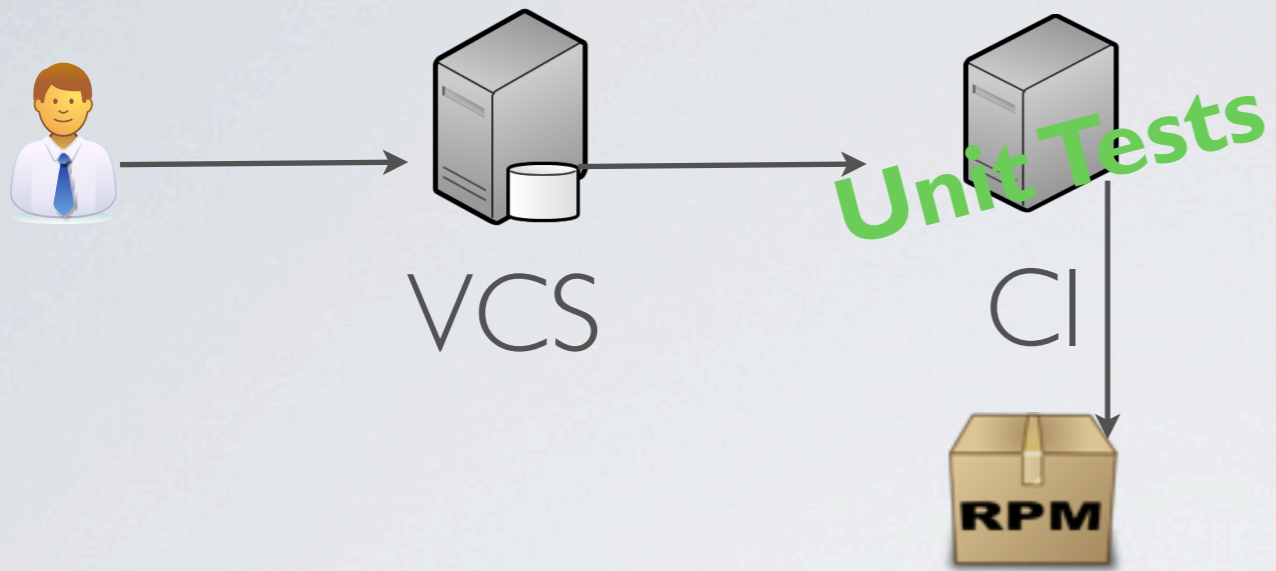
Same Binary
across
all stages!

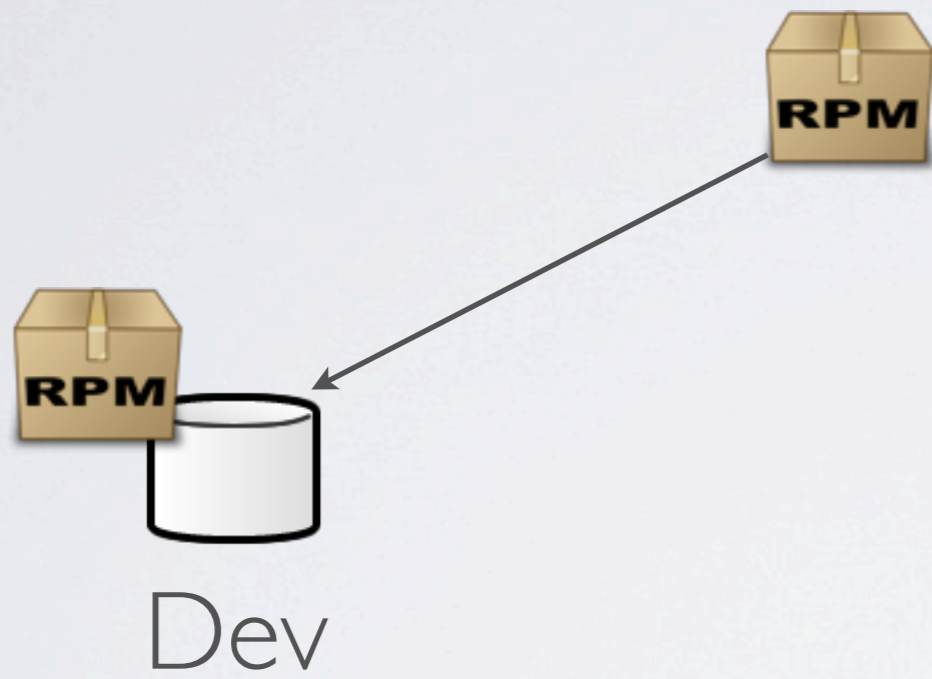




Same Binary
across
all stages!

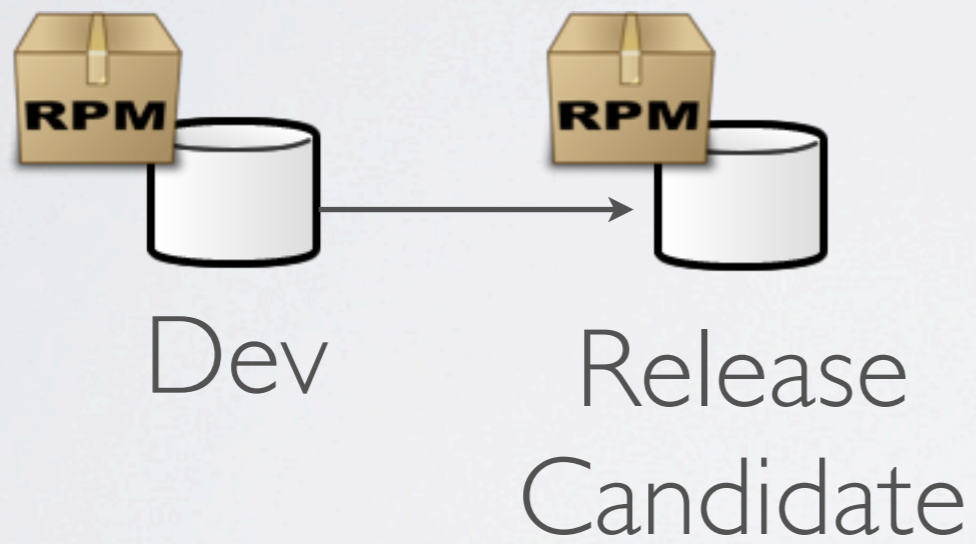
CONFIGURATION
MANAGED BY
PUPPET





**Test with
Mocks**

Dev

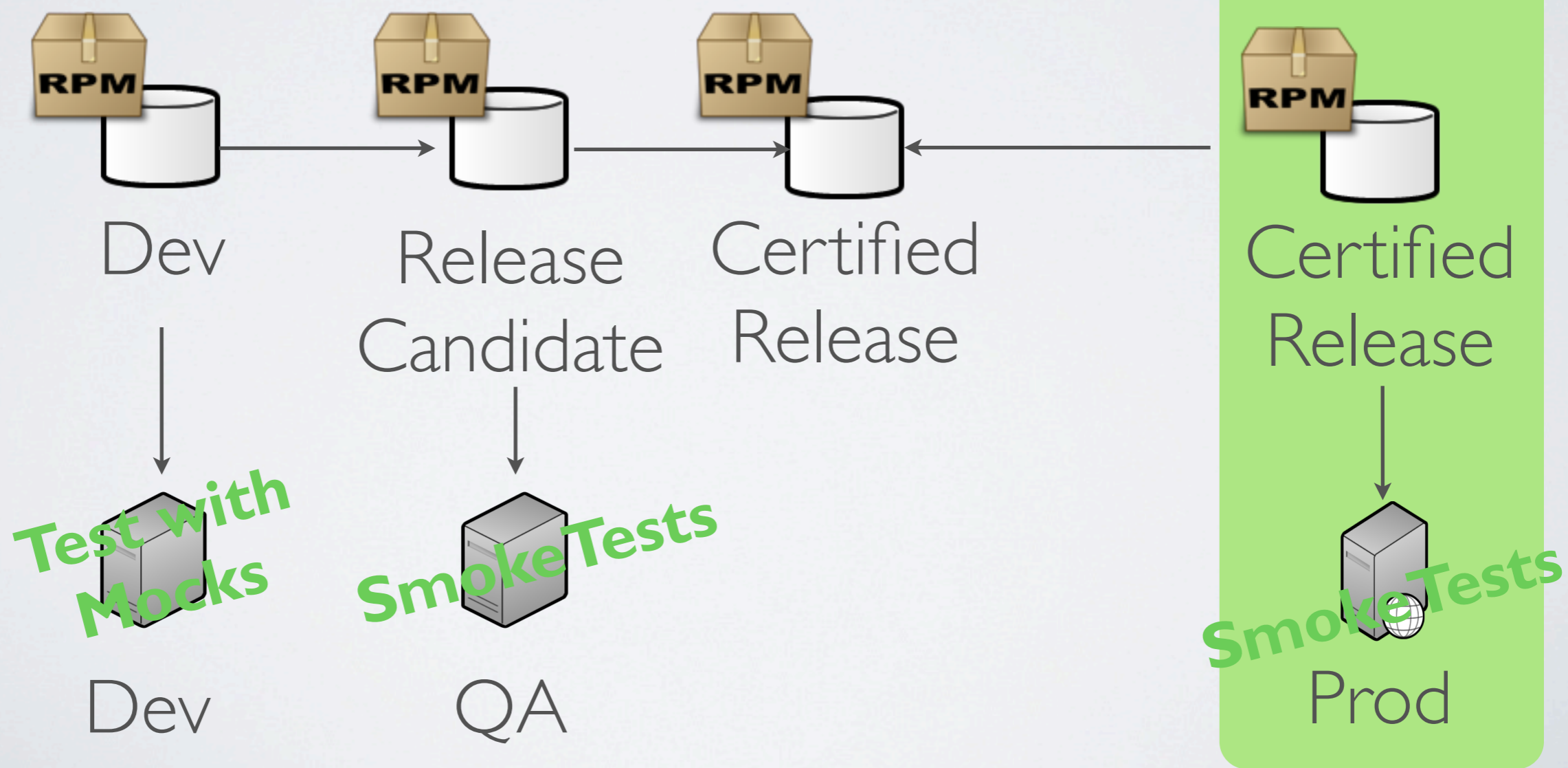


*Test with
Mocks*

Dev

Smoke Tests

Testing





Dev



Release Candidate



Certified Release

fully automated

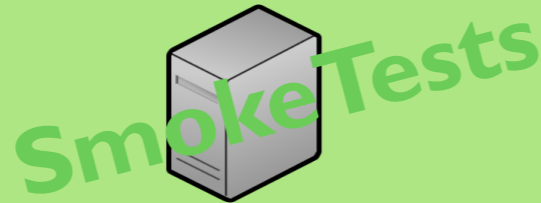
← Pull



Certified Release



Dev



Testing



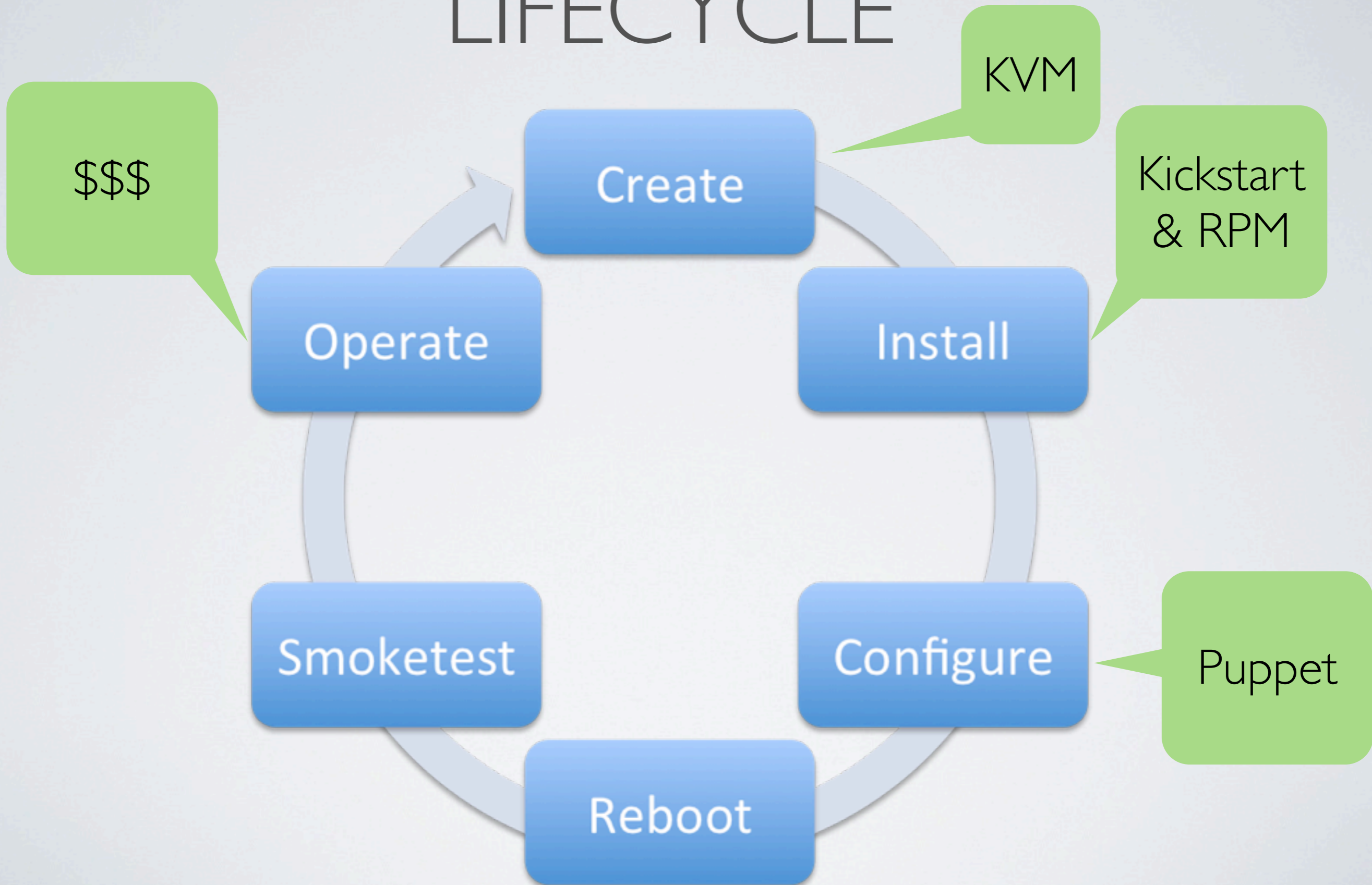
Prod

Repos

Stages

PROVISIONING

LIFECYCLE



DISASTER RECOVERY BUILD IN

BLUE - GREEN DEPLOYMENT

HOW TO TEST LOCALLY?



Developer Operating Systems



VAGRANT



Everything can be tested locally with vagrant

(this means operating system like in production,
configuration management, deployment,
building packages, needed network interfaces, ...)

**WHAT CHANGED
IN OUR WORKFLOW?**

TEAM IS RESPONSIBLE

EVERY COMMIT GOES TO
PRODUCTION

DEPLOY

≠

FEATURE RELEASE

ROLL FORWARD

AUTOMATE ALL THE THINGS

IF IT HURTS DO IT MORE
OFTEN (EXCEPT MEETINGS)

TEST SETUP

VISIBILITY



NEXT STEPS

DB DEPLOYMENT

COMPONENT PUPPET WITH HIERA

SAME KICKSTART
IN DEV & PROD

FEEDBACK: LIVE DATA
IN DEV WITH GRAPHITE

MEASURE, MEASURE, MEASURE

SELF HEALING

LESSONS LEARNED

#1

CLOSE TO PRODUCTION AS
EARLY AS POSSIBLE

#2

EVERYTHING CAN BE
AUTOMATED

#3

MANAGEMENT BUY IN

#4

SELF-SERVICE
INFRASTRUCTURE
FOR TEAMS

#5

RESISTANCE WILL RISE

#6

IT'S WORTH THE EFFORT

~ 30 MIN TO CR

#7

FEEDBACK IS NEVER
FAST ENOUGH

QUESTIONS