Data Center Automation with YADT

Berlin | 23.05.2013 | Schlomo Schapiro
Systems Architect, Open Source Evangelist

LINUX
TAG

www.ImmobilienScout24.de

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- >2 billion PI per month
- 2 data center with ~1400 VM
- total of ~600 employees
  - → ~30 crossfunctional IT teams
  - → ~160 in IT
- 15 years in business
- part of Deutsche Telekom

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YADT

an Augmented Deployment Tool

Systems Management with YADT

YADT
an Augmented Deployment Tool

# The Big Picture – Continuous Delivery Platform

Business Decision To Go Live

All Humans are on the Same Side

Build
Config
Deploy
Test
Systems-
Management

Automation

Scale Out
Data Centers

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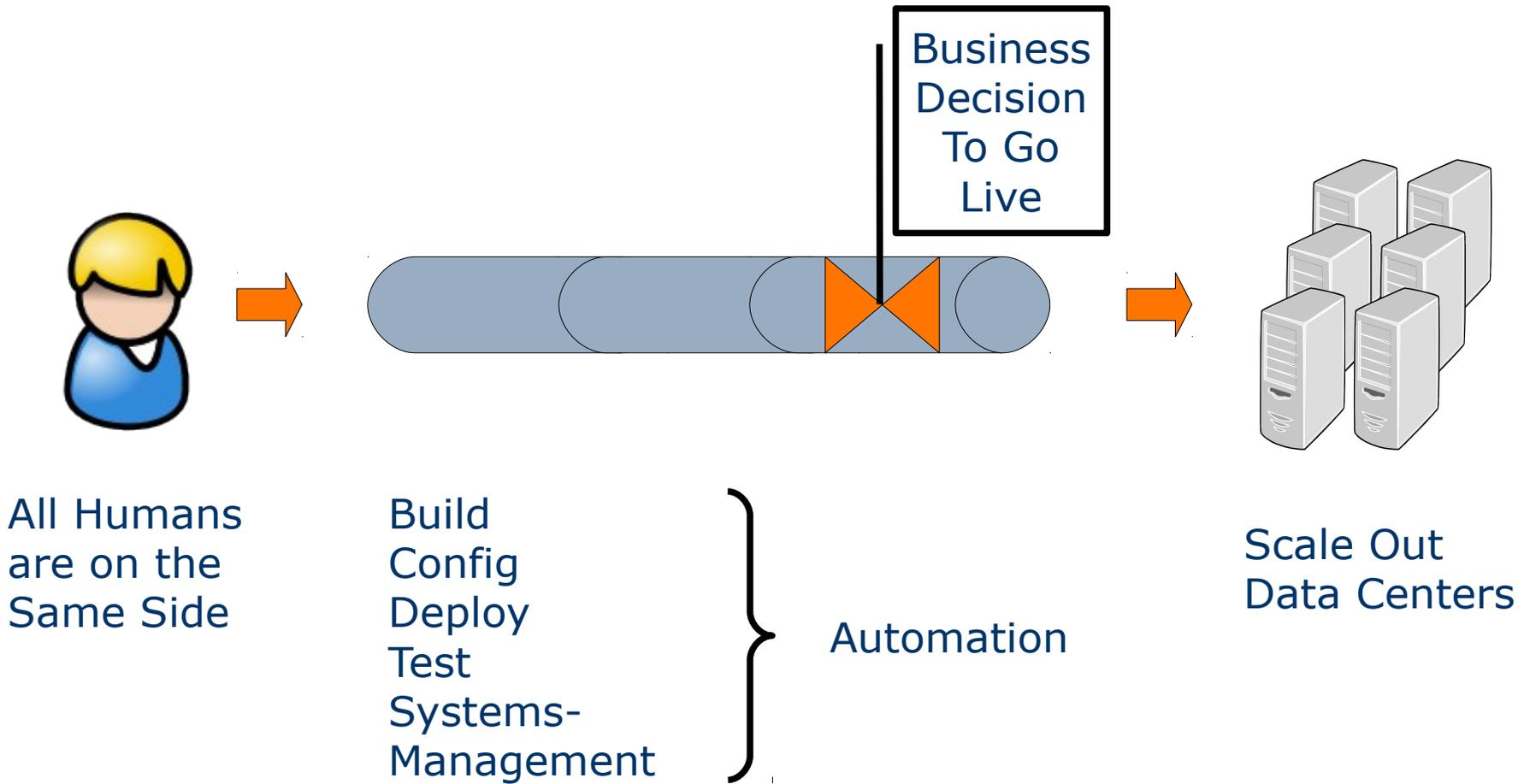
1st task: Reduce Systemic Complexity

File Management

Systems Management

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File Management with RPM & YUM

File Management with RPM & YUM

Libraries ➡

Applications ➡

Configuration ➡

Operating System ➡

100 %
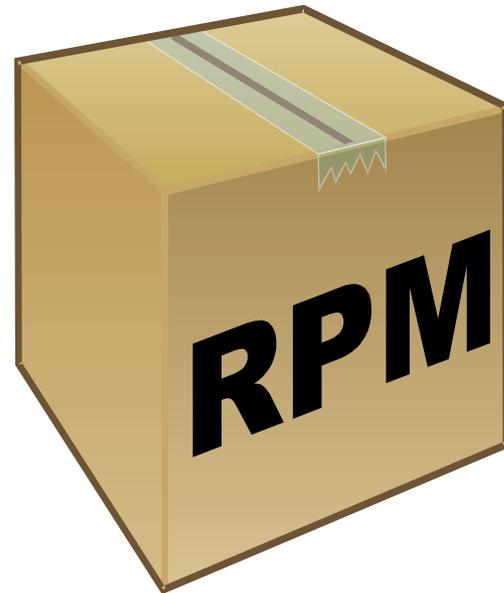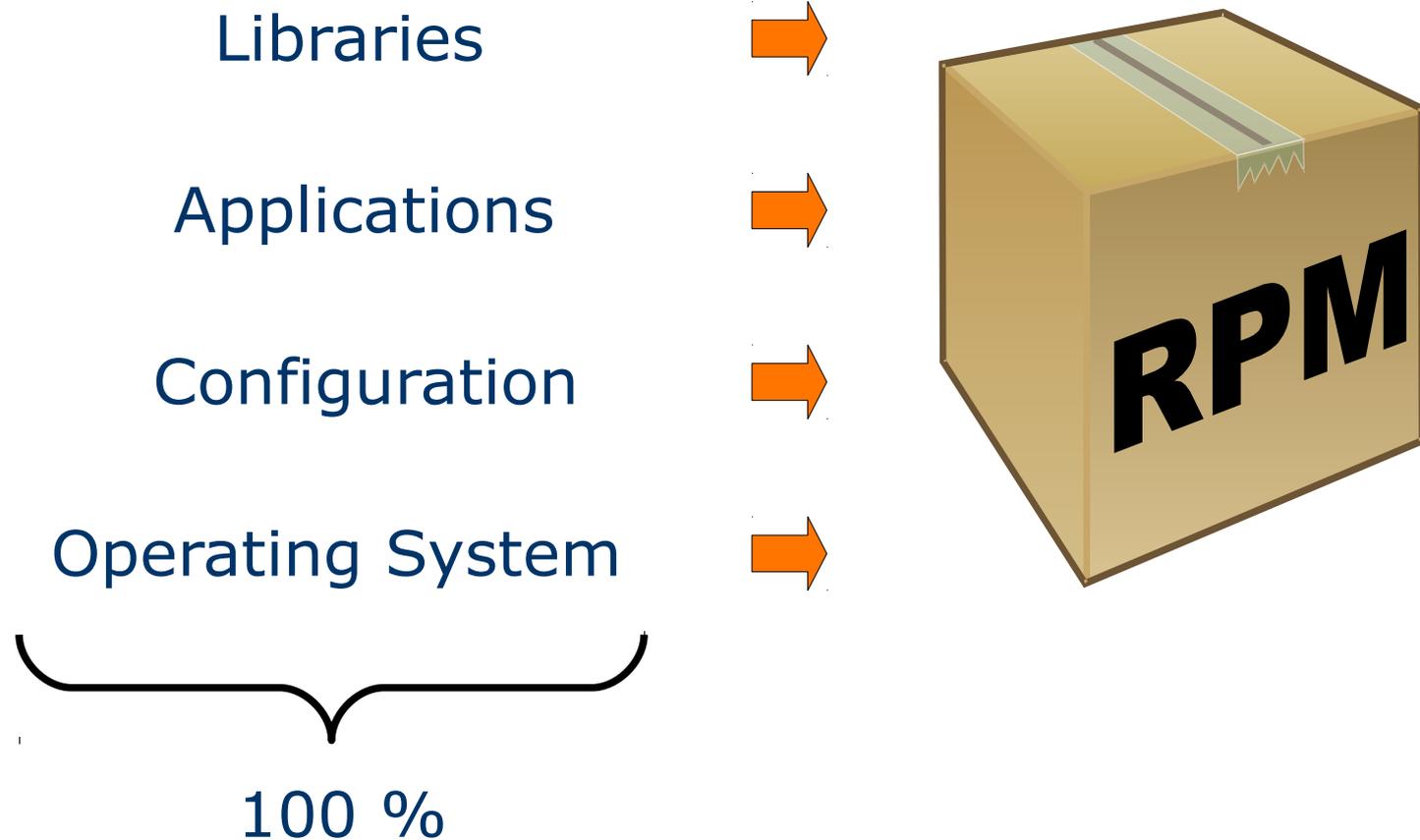
File Management with RPM & YUM
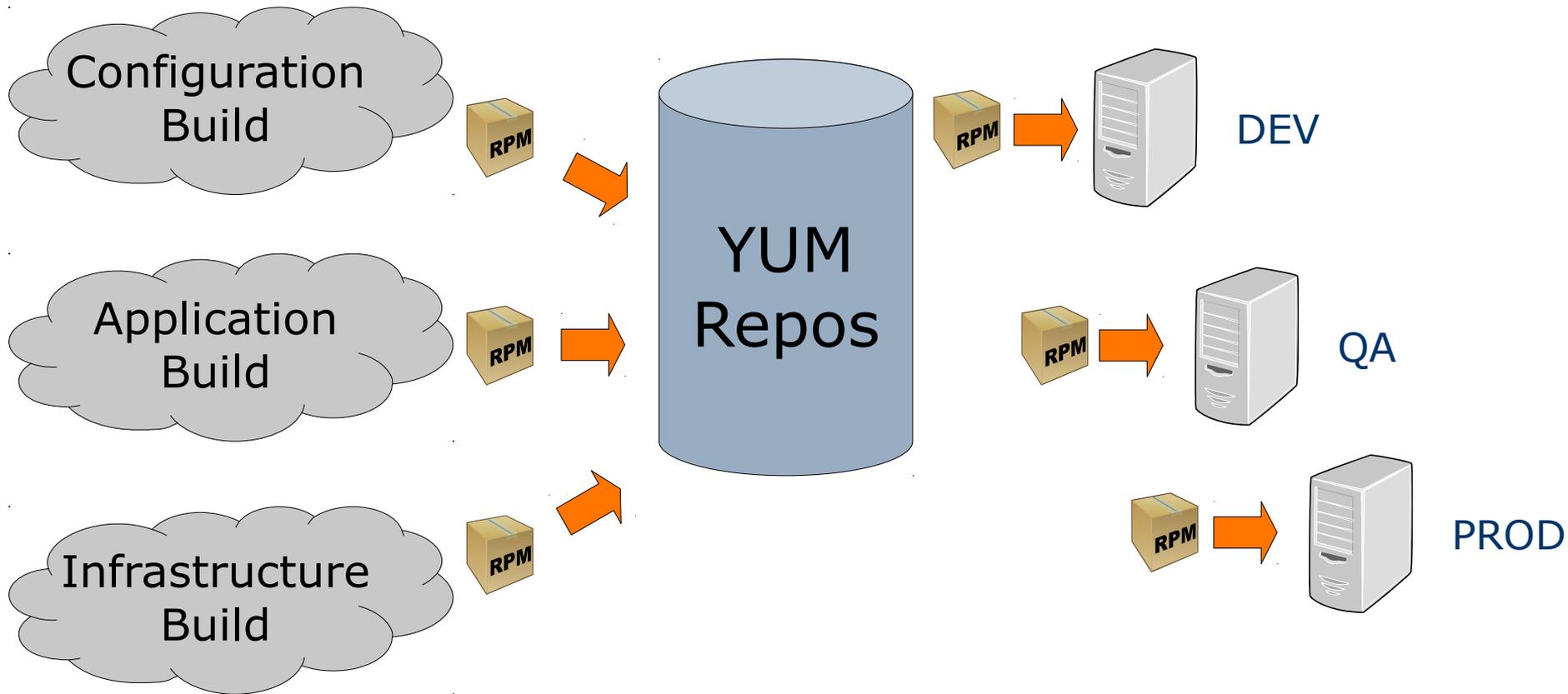
File Management with RPM & YUM
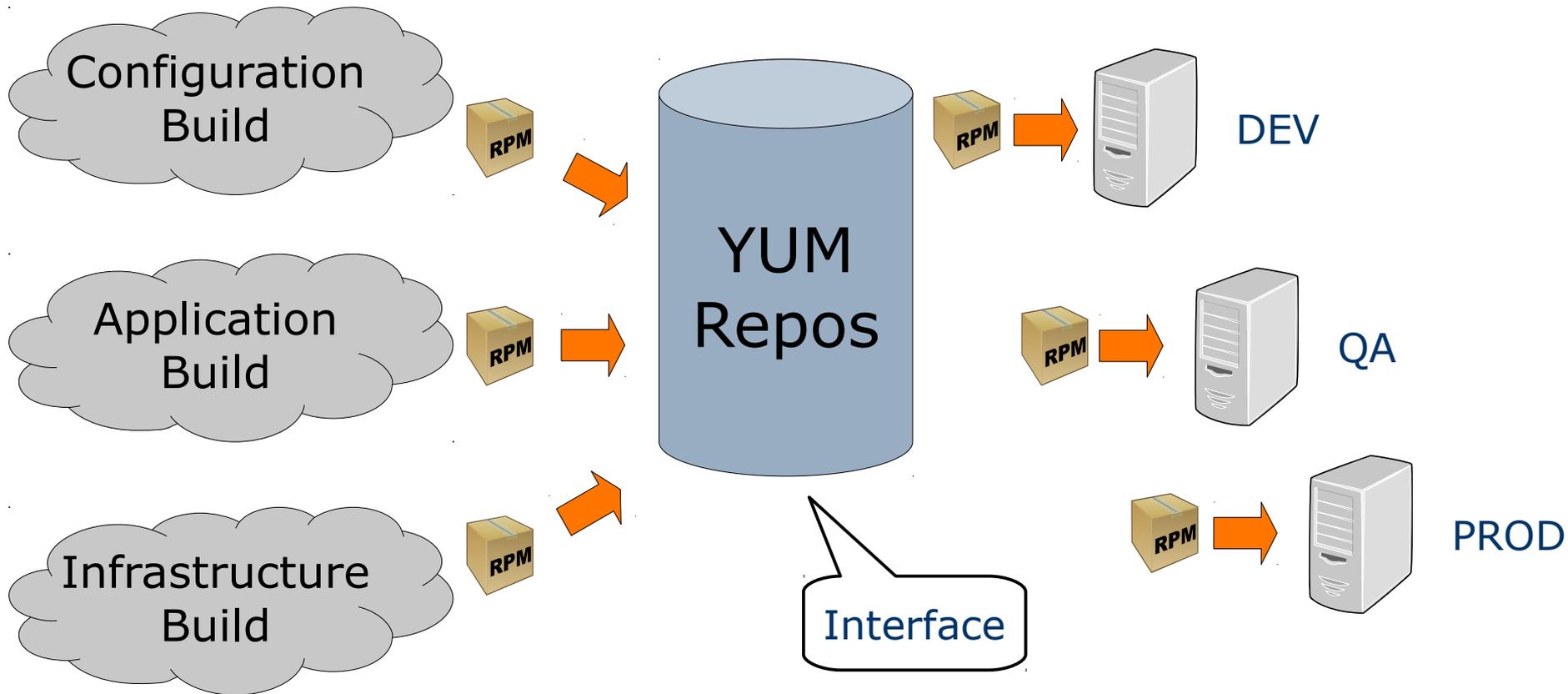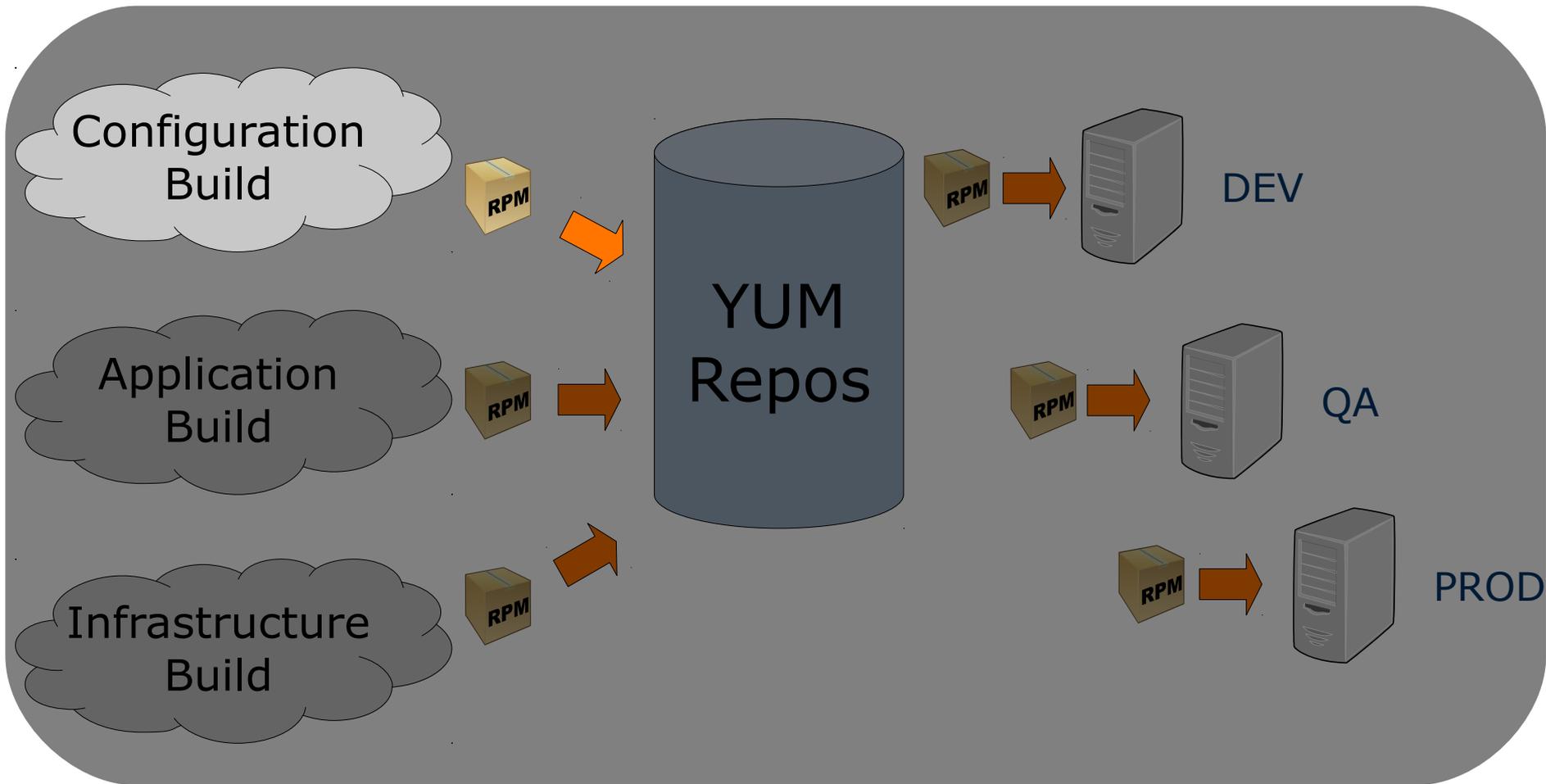
Configuration Build – Pre-built Config Content

Configuration Build – Pre-built Config Content

commit
config file

SVN

build
config RPM

YUM Repo

RPMs with static content

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Configuration Build – Pre-built Config Content

commit config file

SVN

build config RPM

YUM Repo

Templating Variables Overlaying

RPMs with static content

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Configuration Build – Pre-built Config Content

SVN build config RPM **YUM Repo**

commit config file

Templating Variables Overlaying

we use 1 RPM per host

RPMs with static content

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Configuration Build – Pre-built Config Content

commit
config file

SVN

build
config RPM

YUM Repo

Shared
responsability
Ops, Dev, QA …

Templating
Variables
Overlaying

we use
1 RPM
per host

RPMs
with
static
content

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Application Build – Continuous Release Delivery
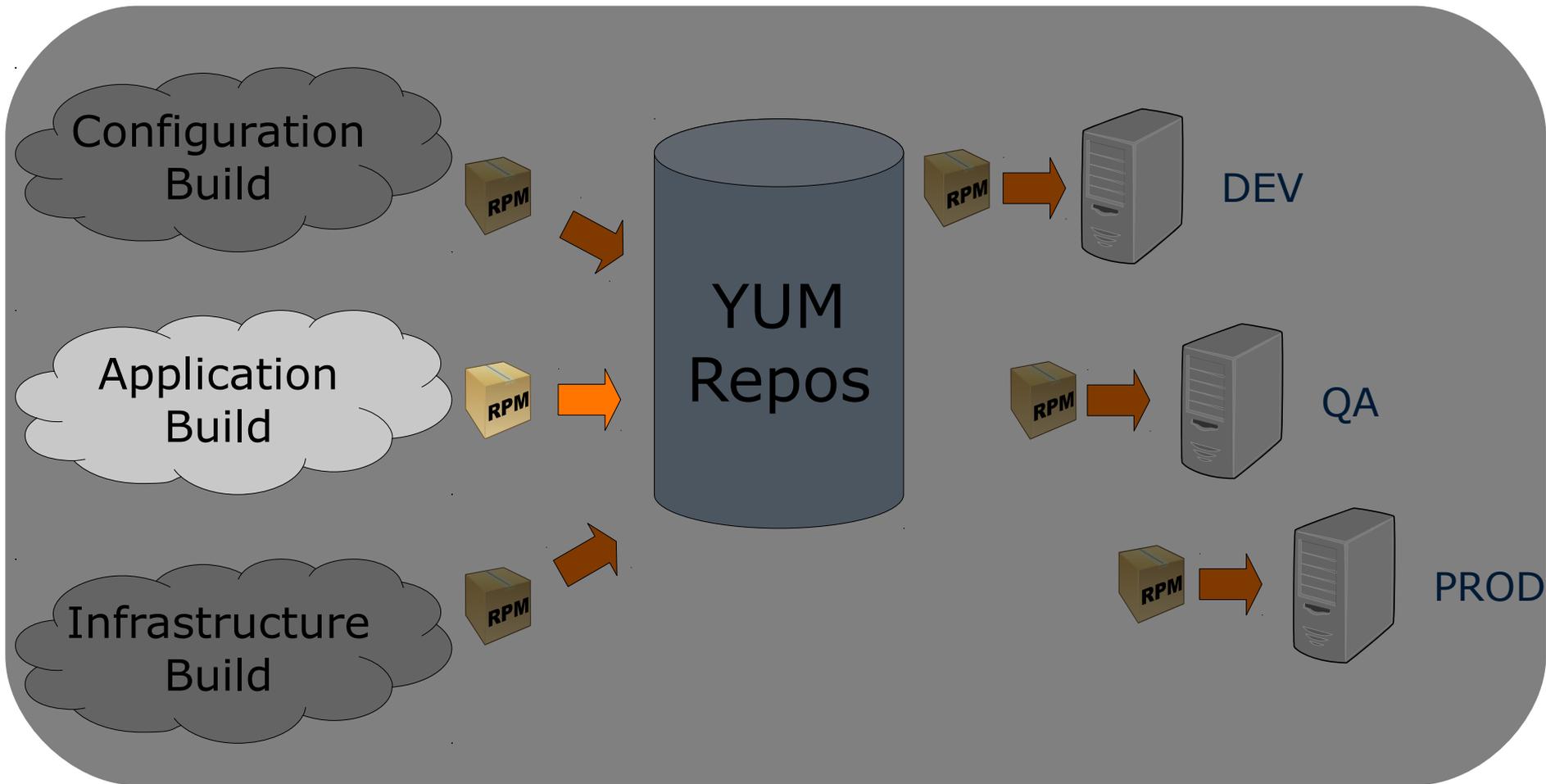
Configuration Build → RPM → YUM Repos → RPM → DEV

Application Build → RPM → YUM Repos → RPM → QA

Infrastructure Build → RPM → YUM Repos → RPM → PROD

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Application Build – Package Promotion Pipeline

DEV

Pre-PROD

PROD

YUM Repo

YUM Repo

YUM Repo

Comitted Repo

Tested Repo

Released Repo

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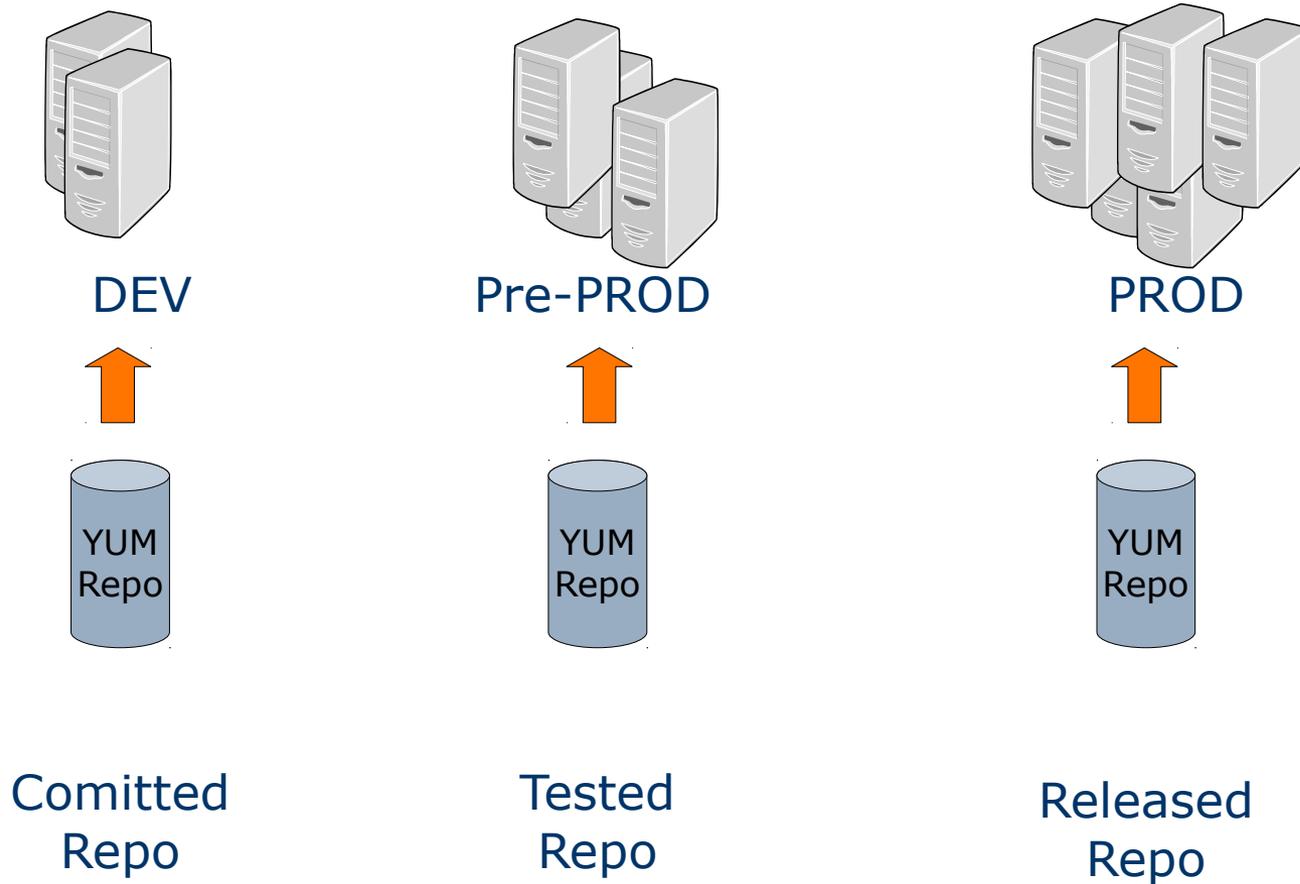
Application Build – Package Promotion Pipeline
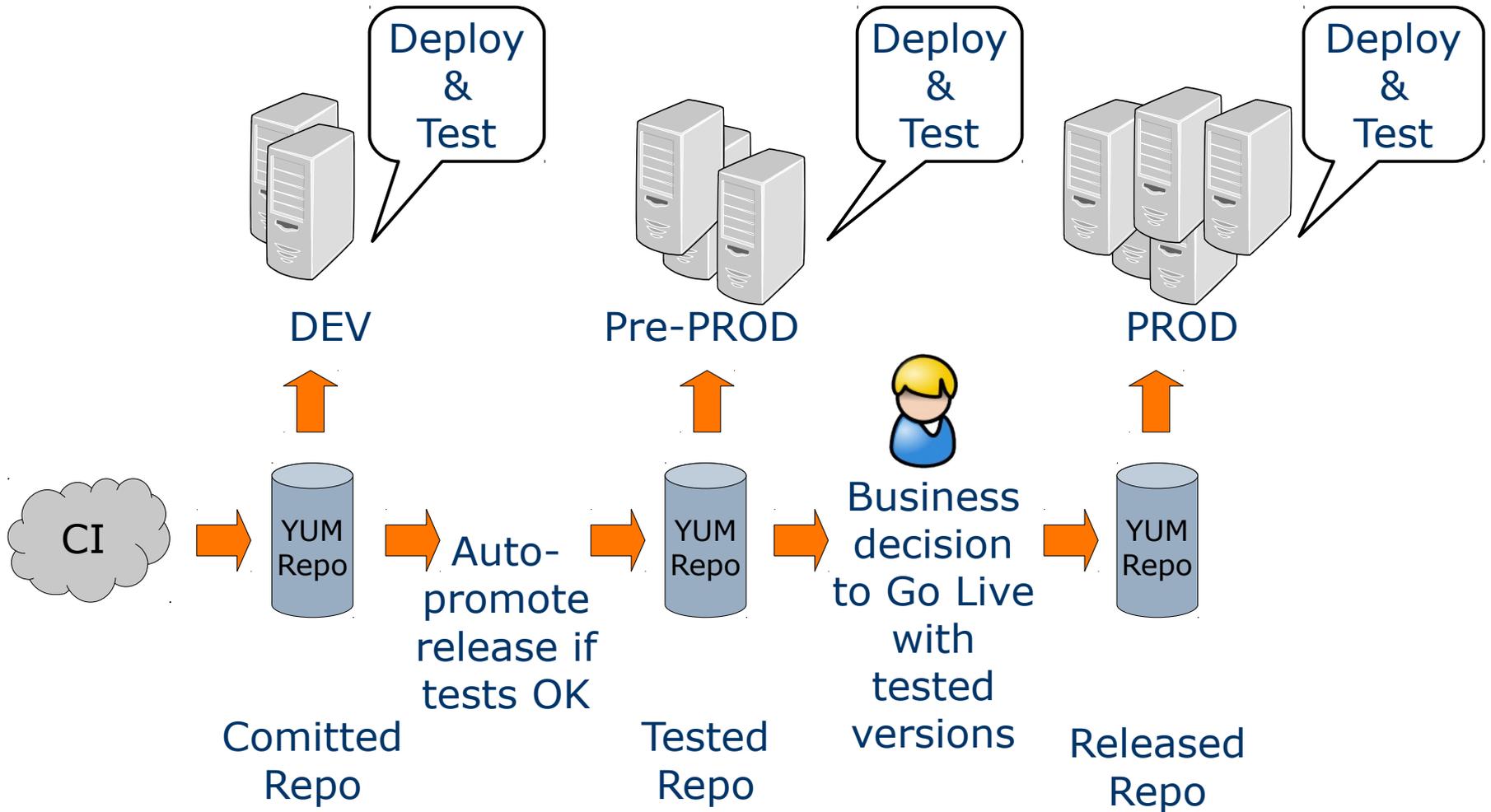
File Management through many YUM repositories
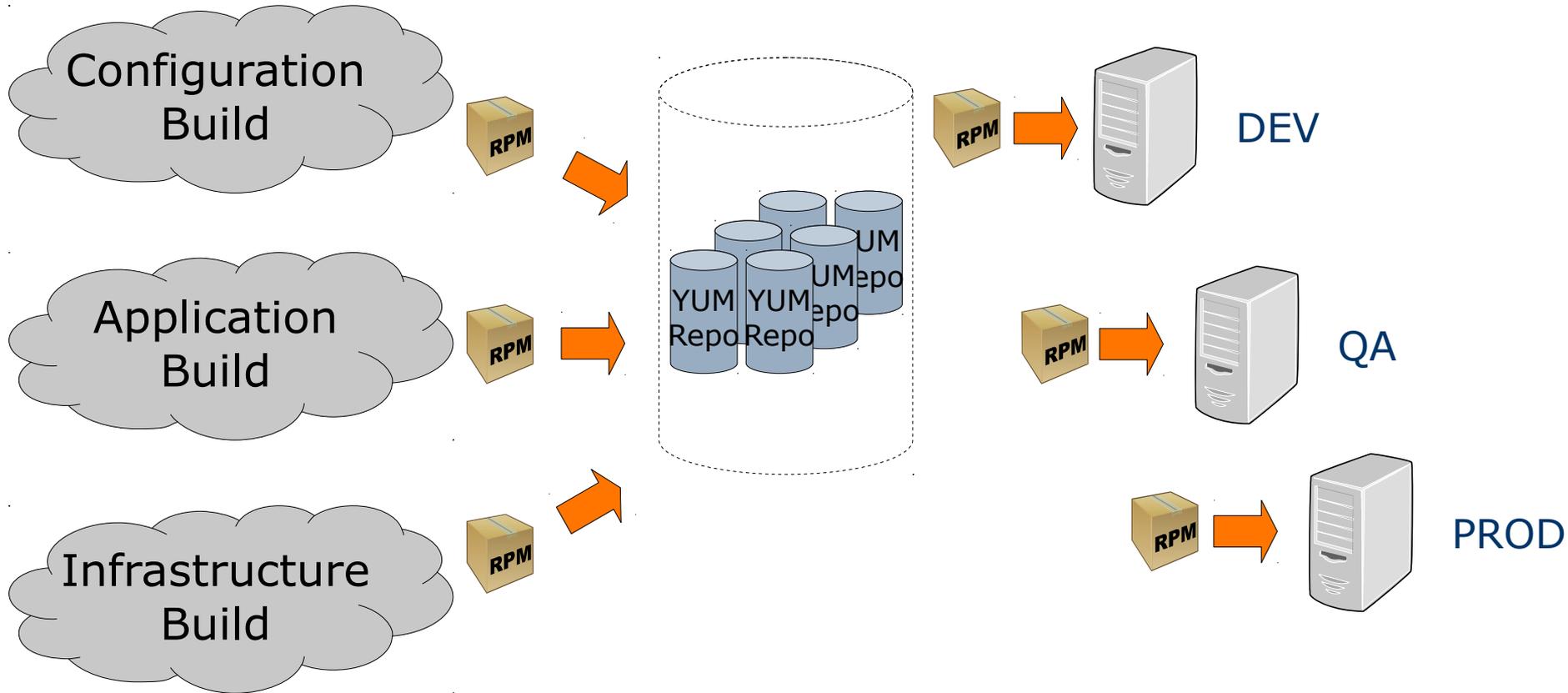
Systems Management with YADT

YADT
## an Augmented Deployment Tool

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YADT – Unified Dependency Tree

Load Balancer

HTTPD

Tomcat

Web Server

App Server

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YADT – Unified Dependency Tree

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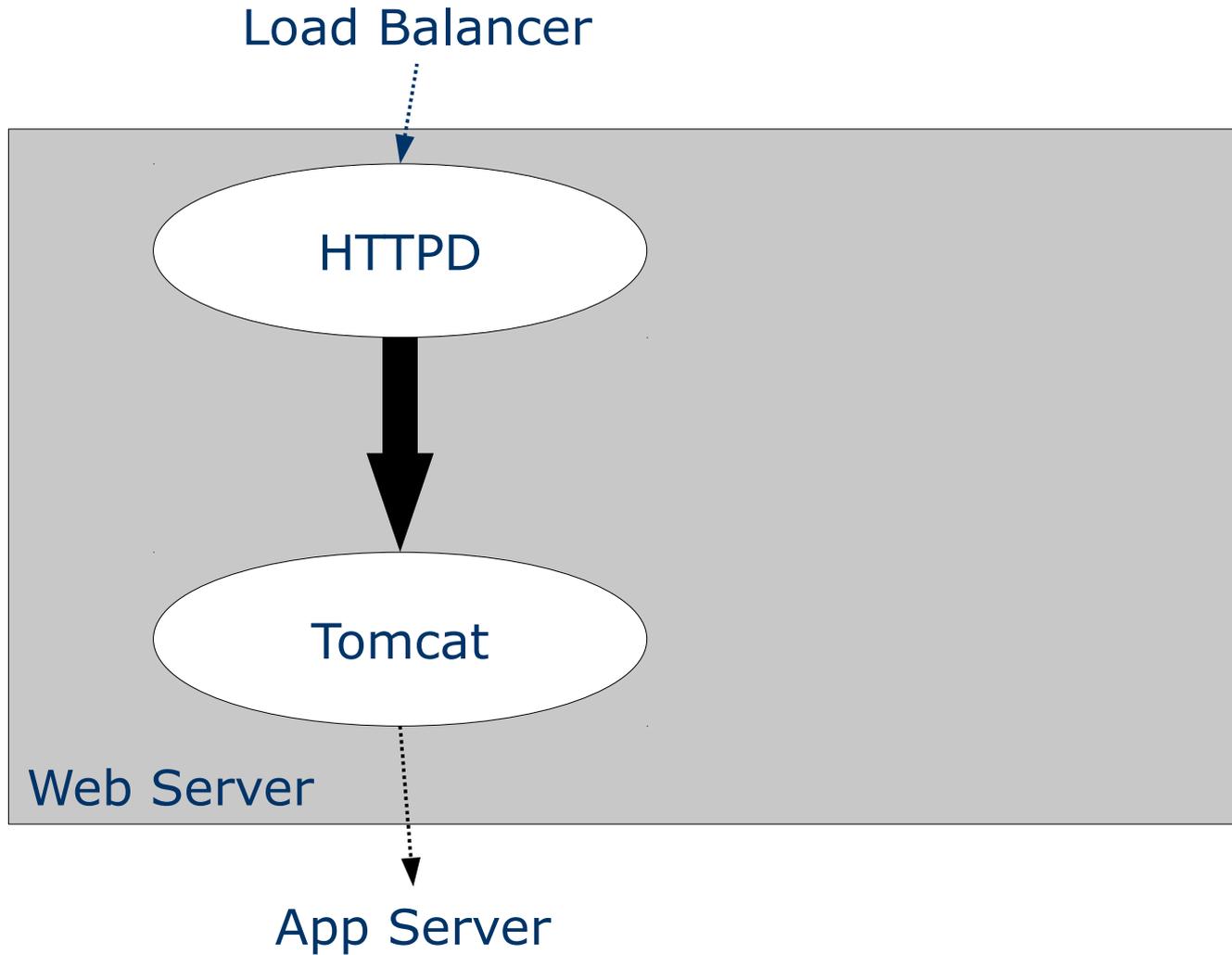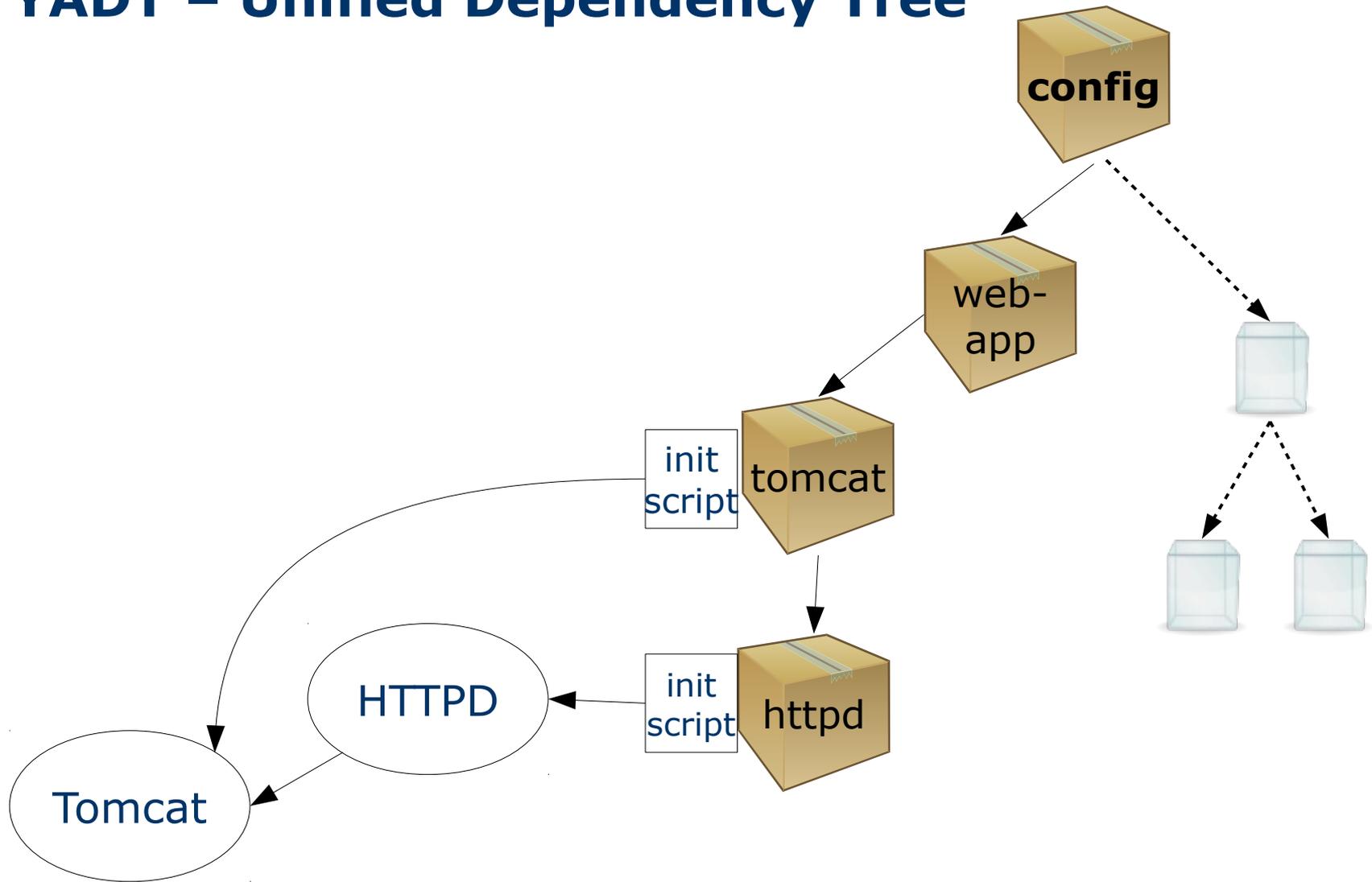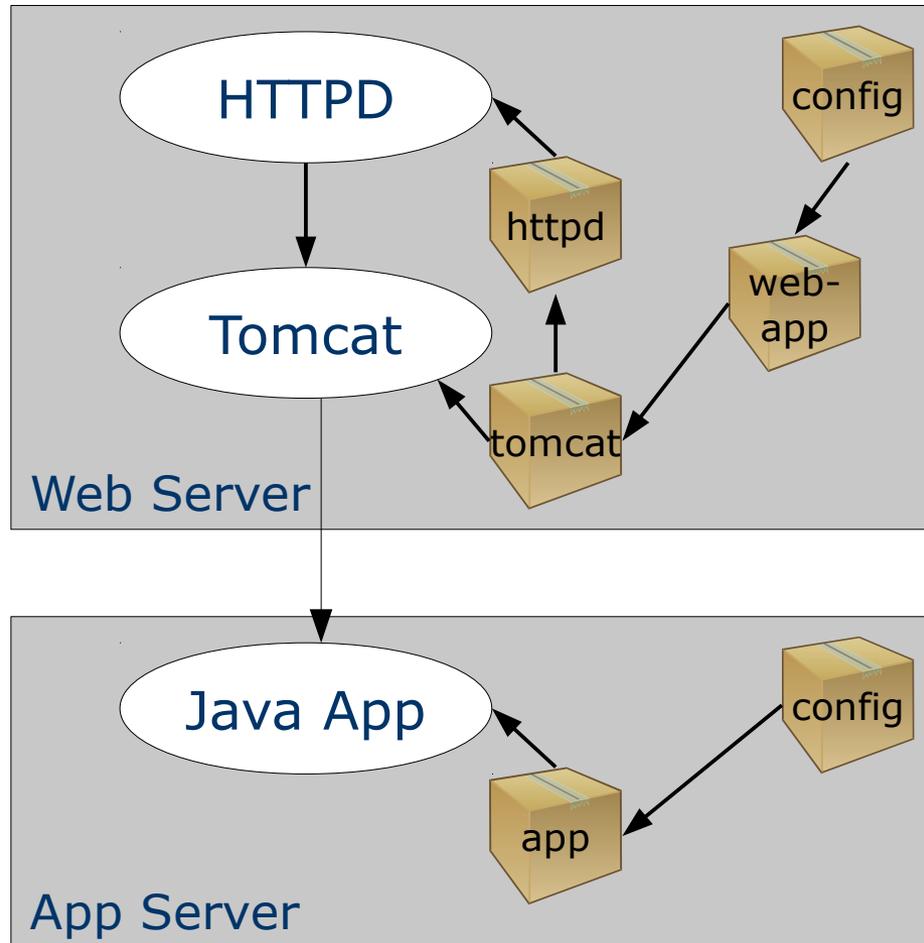
# YADT – Large Scale System Management
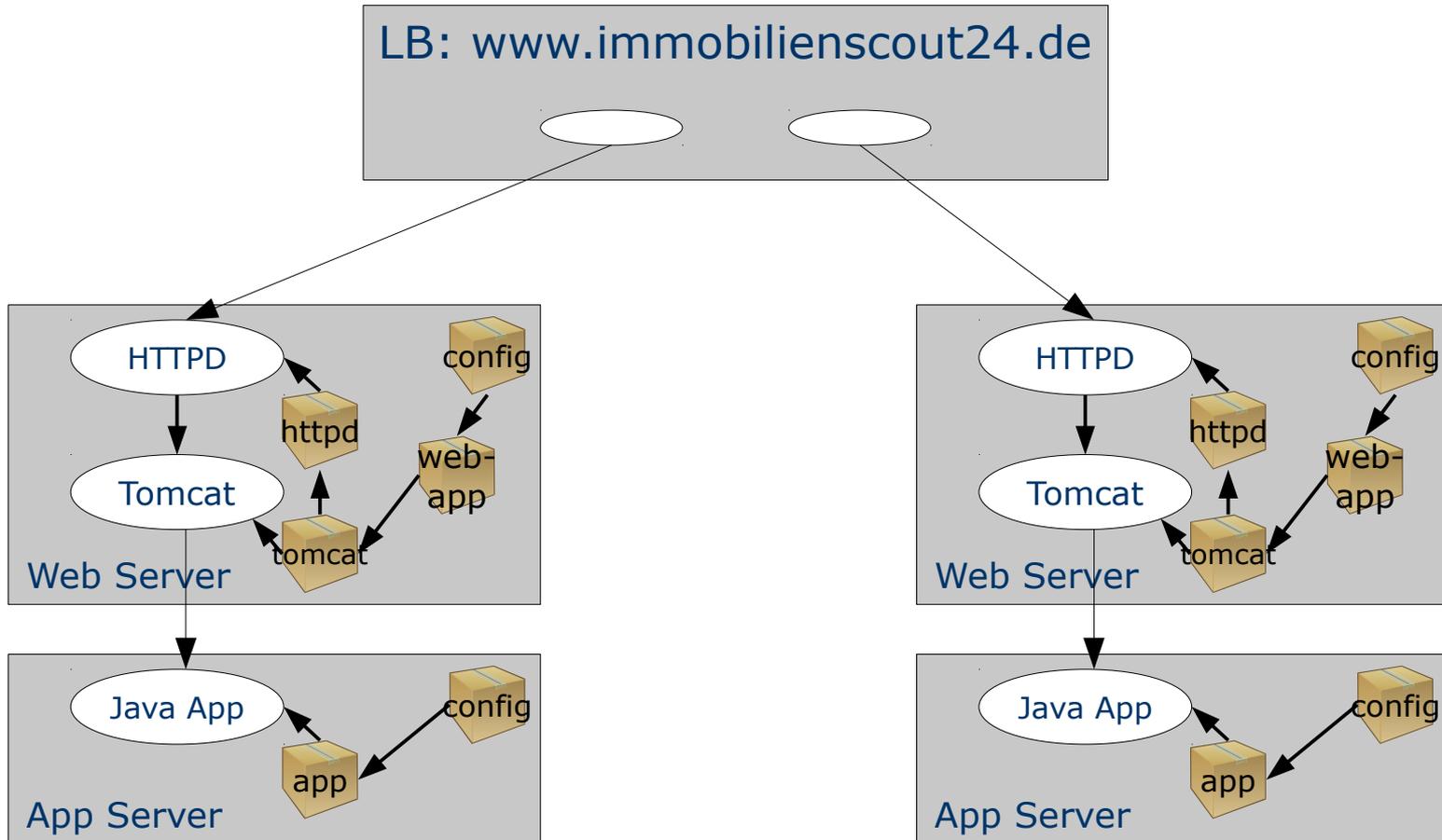
YADT – Large Scale System Management
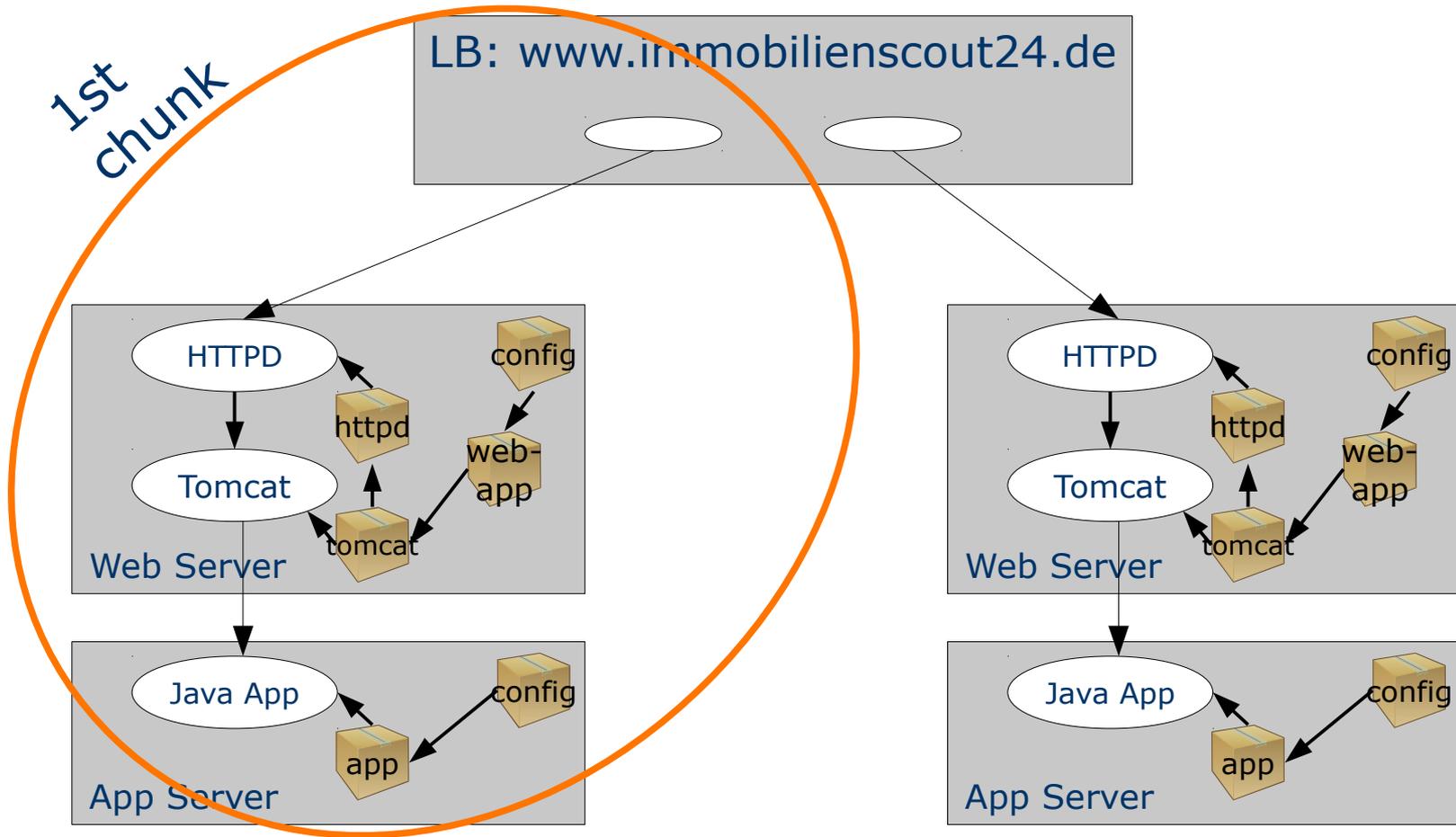
YADT – Large Scale System Management
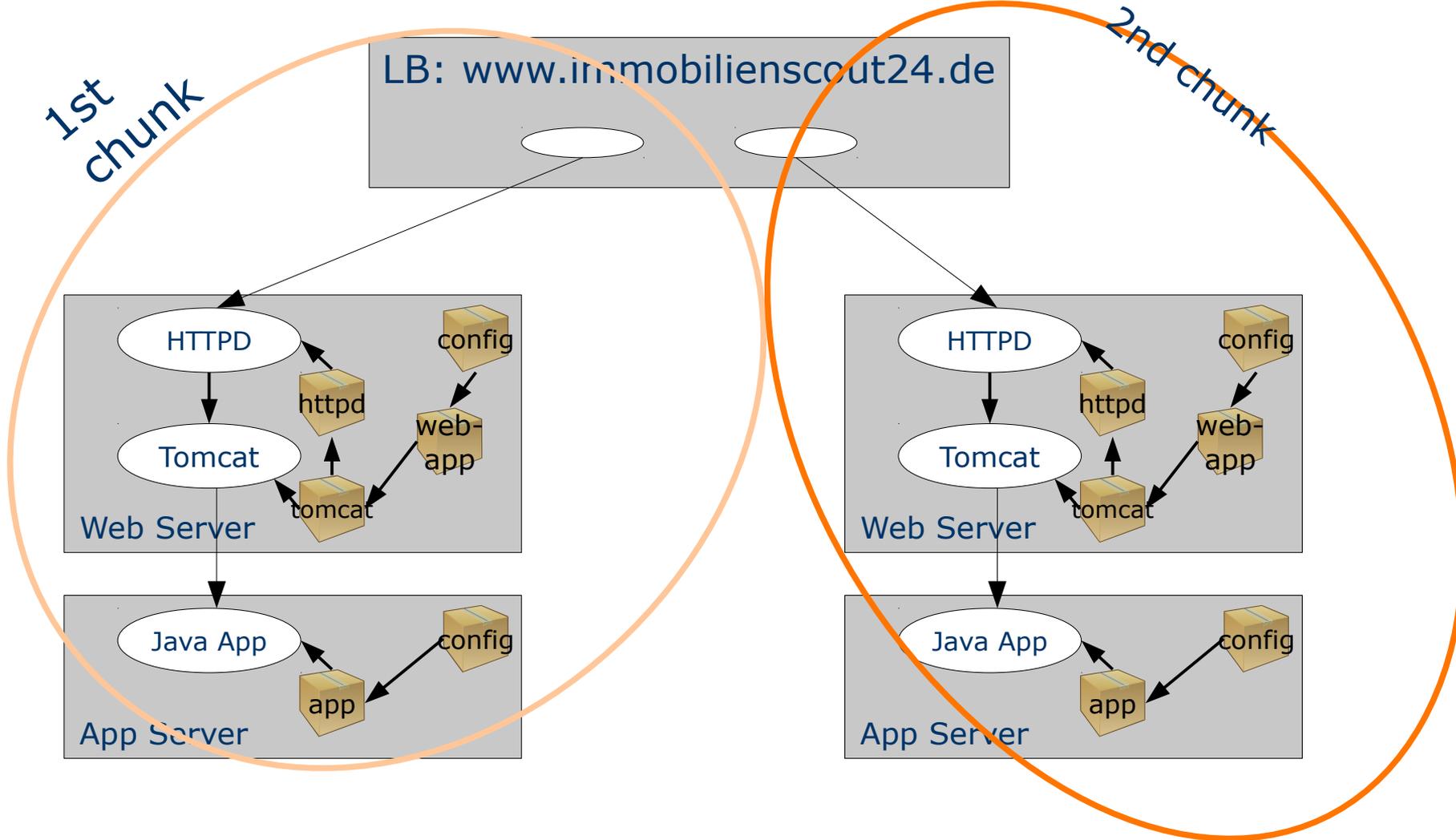
# YADT – Large Scale System Management

Reduce Systemic Complexity

Keep It Simple

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Automation is our Continuous Delivery Platform

Business
Decision
To Go
Live

All Humans
are on the
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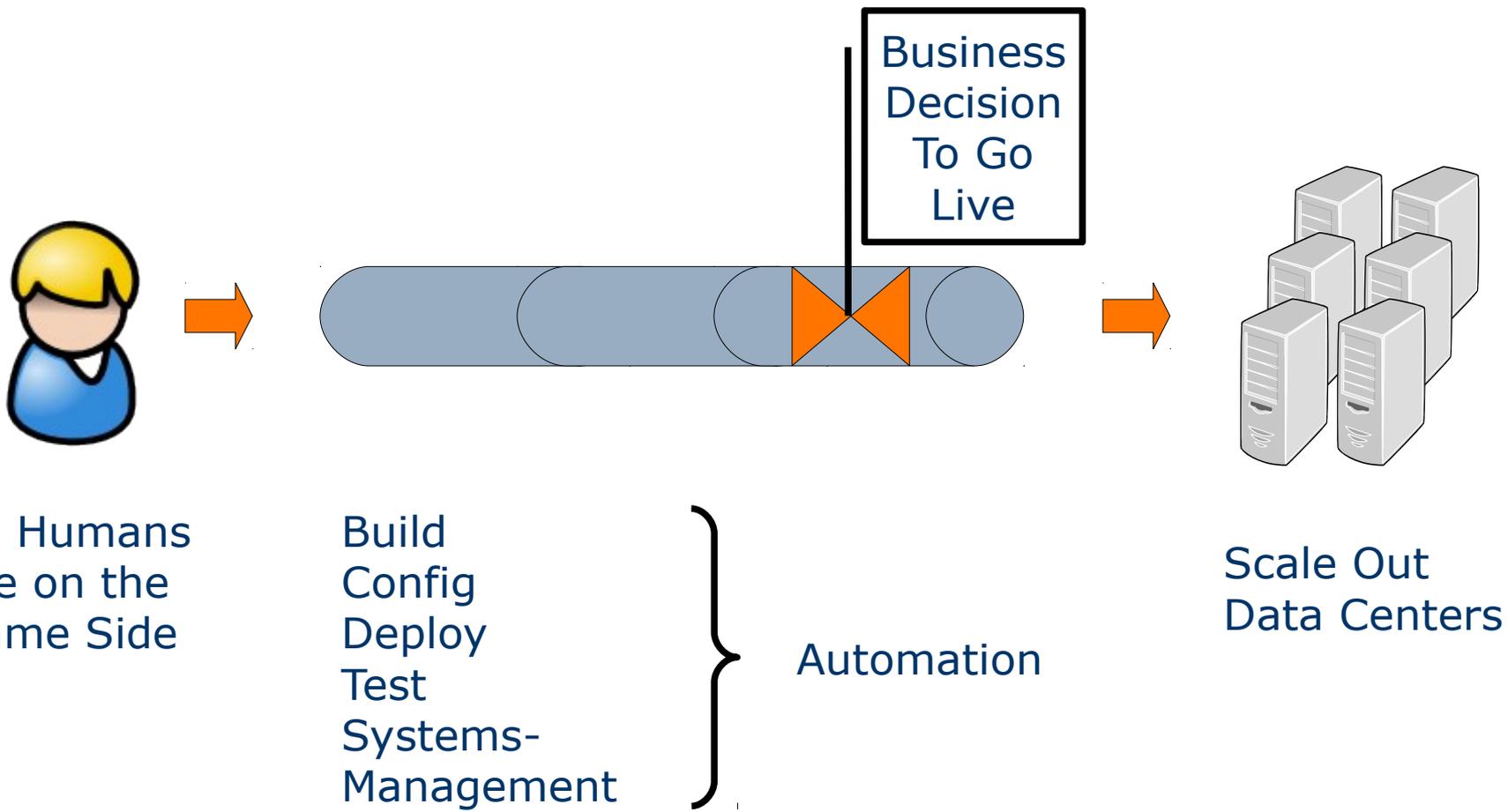
DevOps

We build it together
as one team.

We understand
it completely.

And it is fully automated.

YADT

an Augmented Deployment Tool

www.yadt-project.org

LINUX TAG Stand 7.1C145

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go.schapiro.org/slides

Thank you very much!
Please contact me for further questions and discussions.

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