

PRAGMATIC CONTINUOUS DELIVERY



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FEDEX PROCESS

- Package
- Dropoff
- Transfer
- Delivery
- Profit!



JAVA EE

- Package
- Test
- Approve
- Deploy
- Profit!

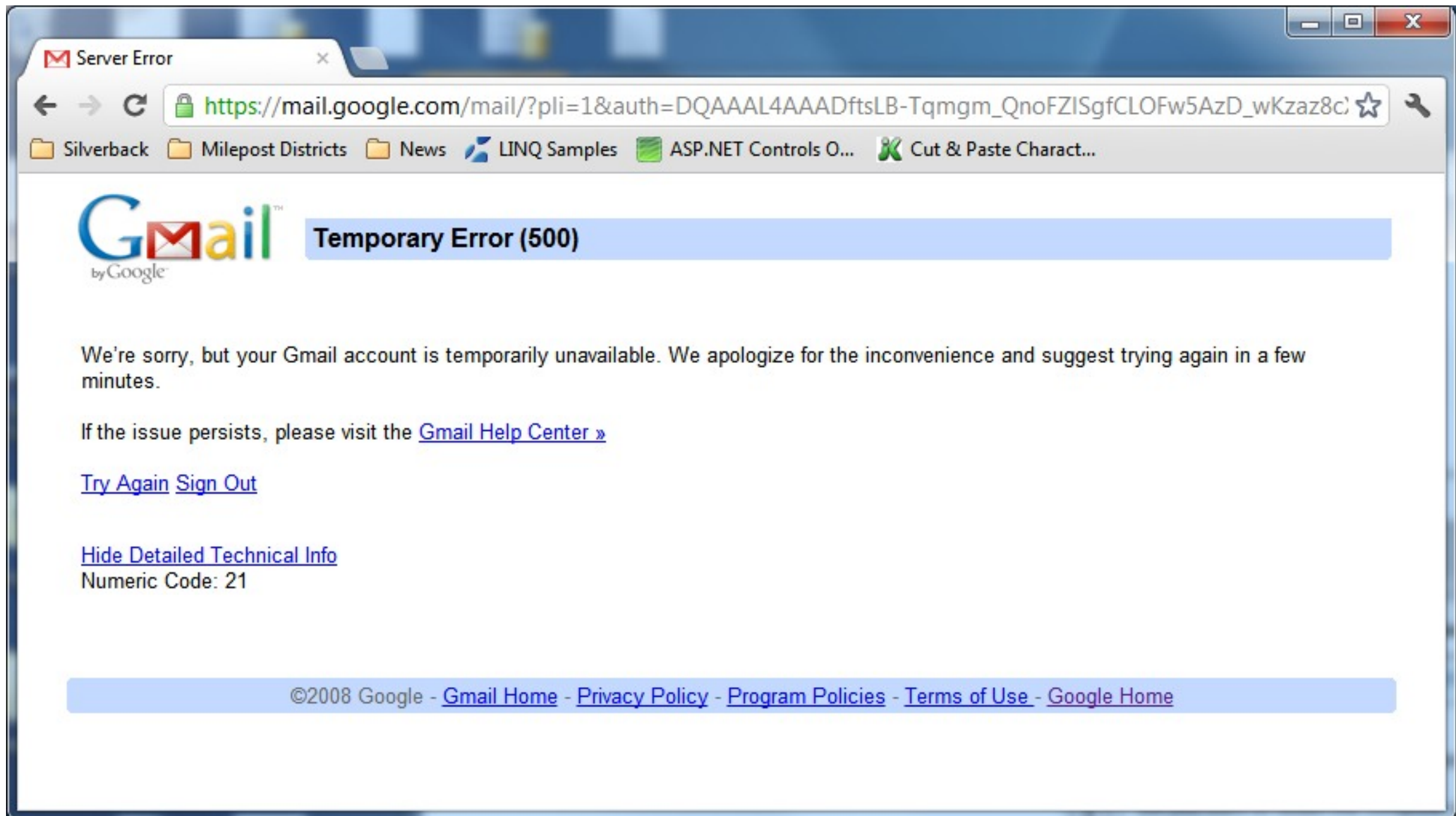
QUESTIONS?

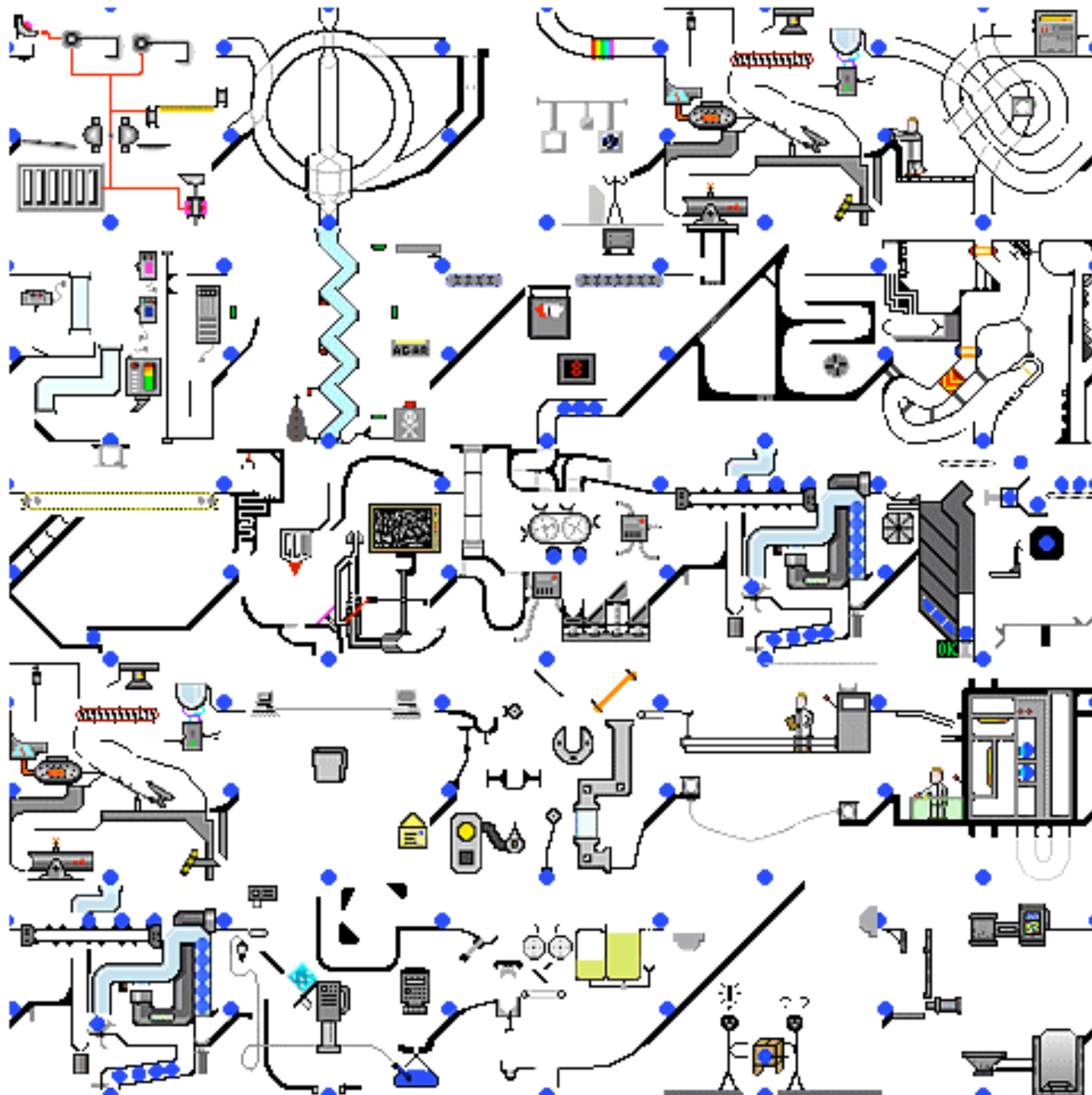
- How do you package the application?
- Where did it come from?
- Where does it go?
- How does it get deployed?
- What exactly is in prod now?

FEDEX FAIL



SOFTWARE FAIL





HOW DO WE FIX THIS?

KEY PROBLEMS

- Failure
- Downtime

SOLUTION:

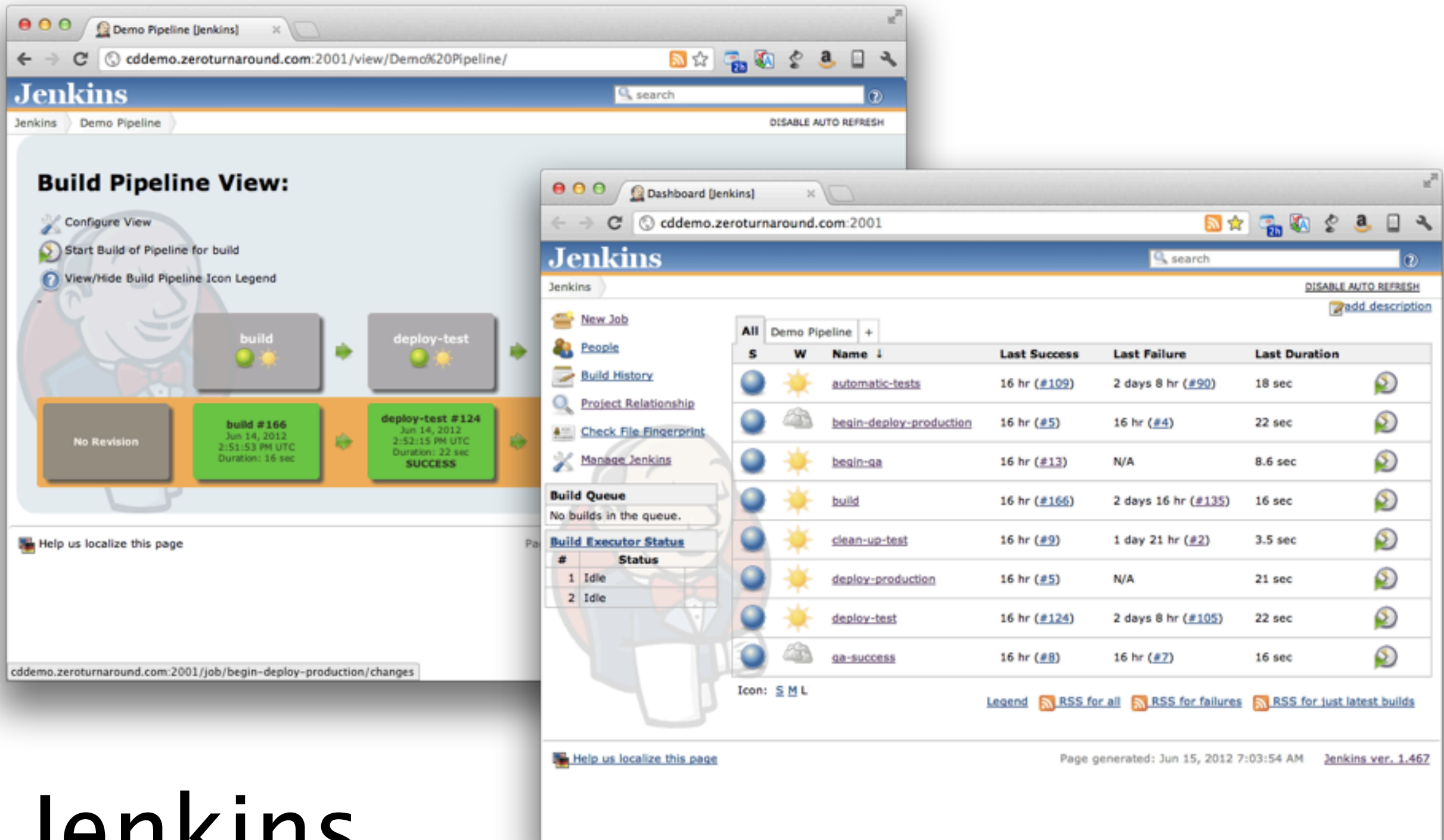
CONTINUOUS DELIVERY

PHILOSOPHY

- Automate
- Record
- Test
- Recover

THE PIPELINE

- Orchestration Platform
- Delivery Manager
- Artifact Repository



Build Pipeline View:

- Configure View
- Start Build of Pipeline for build
- View/Hide Build Pipeline Icon Legend

build → deploy-test

No Revision

build #166
Jun 14, 2012
2:51:53 PM UTC
Duration: 16 sec

deploy-test #124
Jun 14, 2012
2:52:15 PM UTC
Duration: 22 sec
SUCCESS

Help us localize this page

cddemo.zereturnaround.com:2001/job/begin-deploy-production/changes

Dashboard [Jenkins]

cddemo.zereturnaround.com:2001

Jenkins

DISABLE AUTO REFRESH

add description

New Job

People

Build History

Project Relationship

Check File Fingerprint

Manage Jenkins

Build Queue

No builds in the queue.

Build Executor Status

#	Status
1	Idle
2	Idle

S	W	Name ↓	Last Success	Last Failure	Last Duration
●	☀	automatic-tests	16 hr (#109)	2 days 8 hr (#90)	18 sec
●	☁	begin-deploy-production	16 hr (#5)	16 hr (#4)	22 sec
●	☀	begin-qa	16 hr (#13)	N/A	8.6 sec
●	☀	build	16 hr (#166)	2 days 16 hr (#135)	16 sec
●	☀	clean-up-test	16 hr (#9)	1 day 21 hr (#2)	3.5 sec
●	☀	deploy-production	16 hr (#5)	N/A	21 sec
●	☀	deploy-test	16 hr (#124)	2 days 8 hr (#105)	22 sec
●	☁	qa-success	16 hr (#8)	16 hr (#7)	16 sec

Icon: S M L

Legend [RSS for all](#) [RSS for failures](#) [RSS for just latest builds](#)

Help us localize this page

Page generated: Jun 15, 2012 7:03:54 AM [Jenkins ver. 1.467](#)

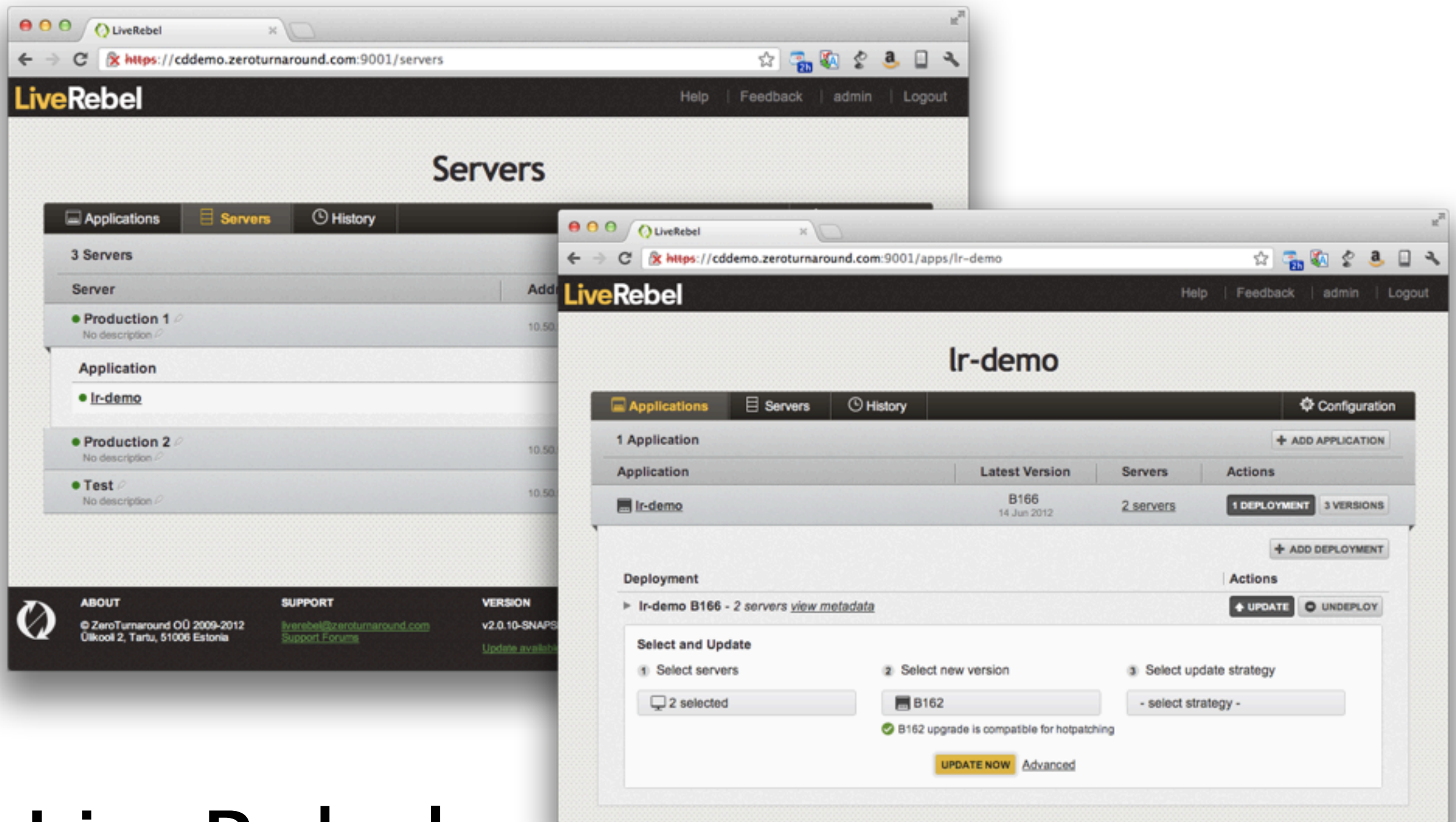
Jenkins

(OSS Continuous Integration Server)

ORCHESTRATION PLATFORM

JENKINS

- Logging
- Notifications
- Clustered
- GUI
- Authentication
- Authorization



LiveRebel

(Commercial Delivery Manager)

WHAT'S SO DIFFERENT?

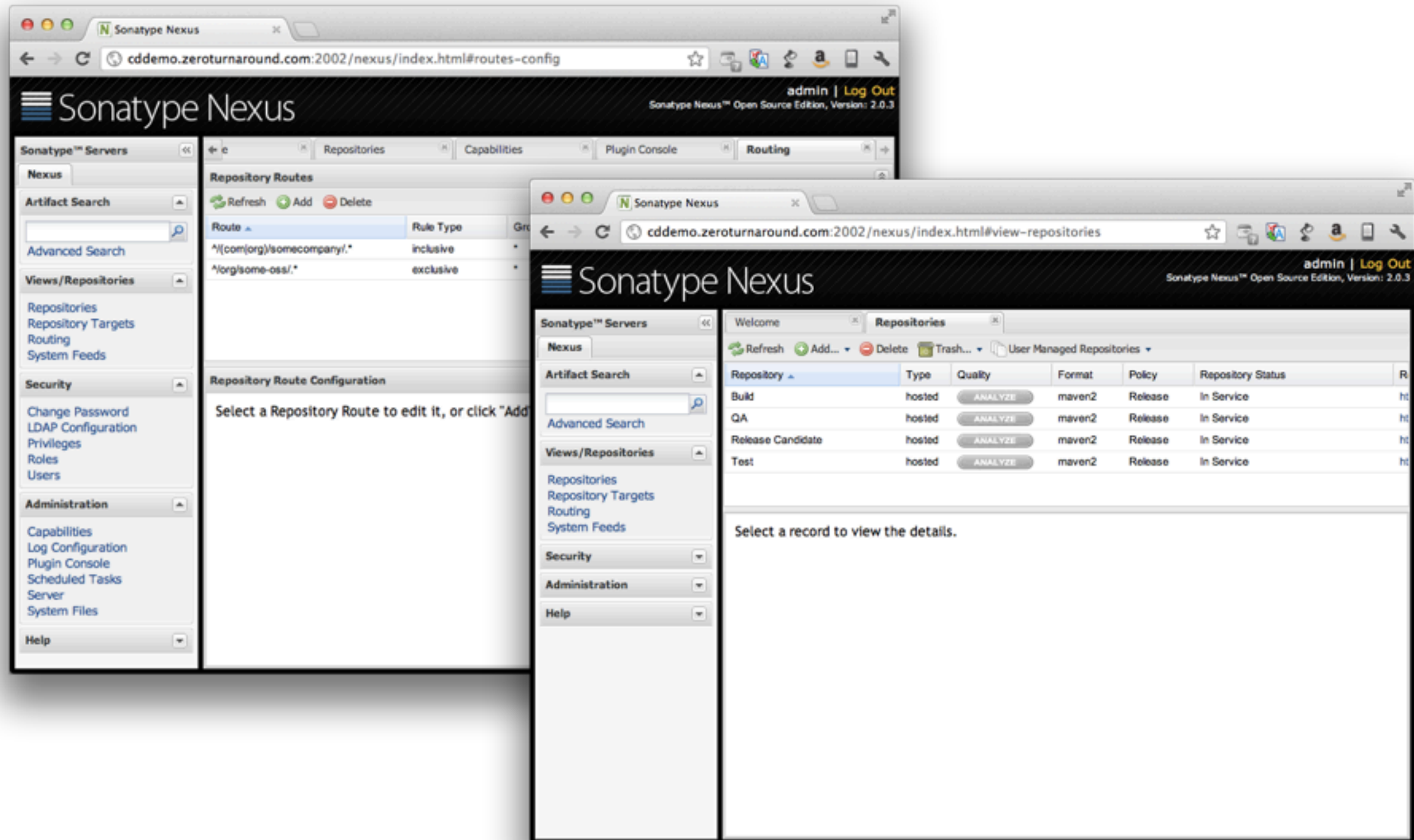
- No Downtime
- Failsafe Delivery & Recovery
- Wide Ecosystem Support
- Exact Knowledge
- Zero Configuration

WHAT CAN YOU DO WITH LIVEREBEL?

- Deploy/Undeploy
- Update
 - No downtime
 - No lost sessions
 - Plain old restarts
- Edit in place

WHY LIVEREBEL?

- No good OSS alternative
- Supports many containers
- No downtime updates
- Integrates with OSS projects

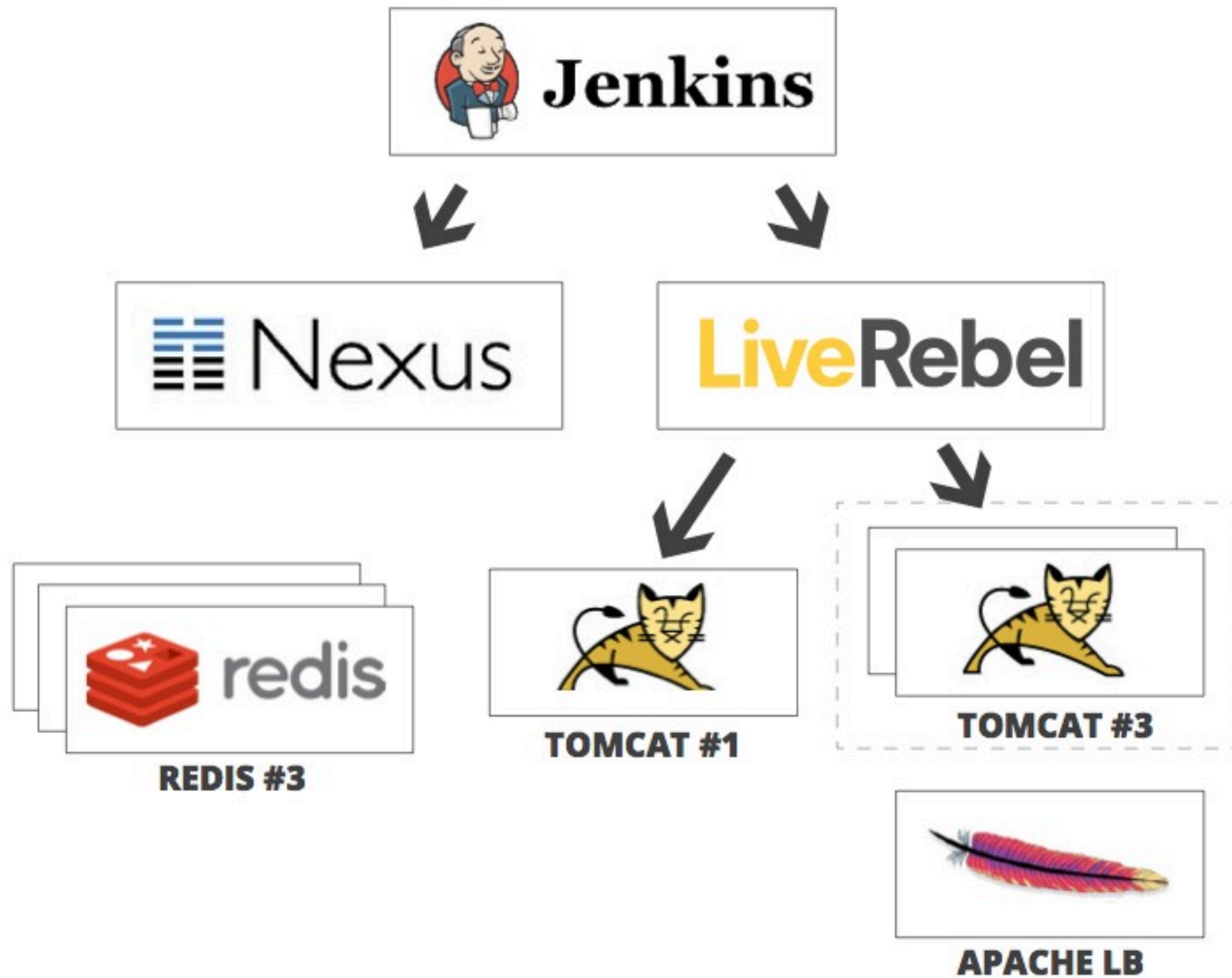


Nexus

(OSS/Commercial Artifact Repository)

KEY FEATURES

- Repositories
- Authentication
- Authorization
- Logging



**NOW LET'S BUILD A
PIPELINE!**



The Pipeline / The Repos

BUILD

- Build the artifact
- Upload to “build” repository

TEST

- Download “build” artifact
- Create a new test deployment
- Run acceptance tests
- Upload “test” artifact

QA

- Download “test” artifact
- Send email to QA to begin testing
- Upload “qa” artifact
 - When QA finished!
- Clean up test deployment

PROD

- Download “qa” artifact
- Upload “rc” artifact
- Send email to Biz for decision
- Deploy to production

THINGS NOT COVERED

- Database
- Configuration & Environment
- Tests & Monitoring

QUESTIONS?

- How do you package the application?
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- Where does it go?
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NO WAY MY BOSS LET'S ME DO THIS!

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- Changing process is hard

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- SOLUTION: Sneak it in :)

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- Create a workflow that captures current process

NO WAY MY BOSS LET'S ME DO THIS!

- Changing process is hard
- **SOLUTION:** Sneak it in :)
- Create a workflow that captures current process
- **Then Automate!**

CONCLUSIONS

- **Jenkins** jobs represent the workflow
- **Nexus** is a sync-point for long-running workflows
- **LiveRebel** manages apps and users
- **Manual flows** with email/REST
- **Tracking** with scripts & text files

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WANT MORE?

[HTTP://ZEROTURNAROUND.COM](http://zeroturnaround.com)

GOOGLE: “PRAGMATIC CONTINUOUS DELIVERY”

Q & A