SHIPPING CODE WITH AURORA

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MANY, MANY

meanings

change is good
BUT IT ISN'T EASY

tools should be
SAFE
SHARP
PREDICTABLE

define the path of
LEAST RESISTANCE

rolling update

rolling update

instances: 9

rolling update

instances: 6

rolling update

instances: 9

rolling update

instances: 6

rolling update

instances: 9

rolling update

instances: 6

rolling update

instances: 9

blue/green

instances: 18

blue/green

instances: 9

sliding update

instances: 9

sliding update

instances: 12

sliding update

instances: 9

sliding update

instances: 12

sliding update

instances: 9

sliding update

instances: 12

sliding update

instances: 9

stop/start

instances: 9

stop/start

instances: 0

stop/start

instances: 9

cron jobs

template

time

cron jobs

time

cron jobs

cron jobs

time

cron jobs

time

cron jobs

cron jobs

time

cron jobs

varying
DEMANDS

DELICATE
balance

starting up

tearing down

a new engine

API

start

pause

resume

abort

pulse

```
JobUpdateRequest {
  TaskConfig taskConfig
  int instanceCount
  JobUpdateSettings settings
}
```
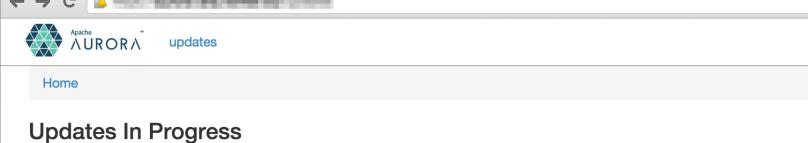
```
JobUpdateSettings {
  ...
}
```

```
JobUpdateSettings {
  ...
  int updateGroupSize
  bool waitForBatchCompletion
  int minWaitInInstanceRunningMs
}
```

```
JobUpdateSettings {
  ...
  int maxPerInstanceFailures
  int maxFailedInstances
  bool rollbackOnFailure
}
```

```
JobUpdateSettings {
 ...
 set<Range> updateOnlyTheseInstances
}
```

```
JobUpdateSettings {
  ...
  int blockIfNoPulsesAfterMs
}
```

Apache
AURORA™   updates

Home

Updates In Progress
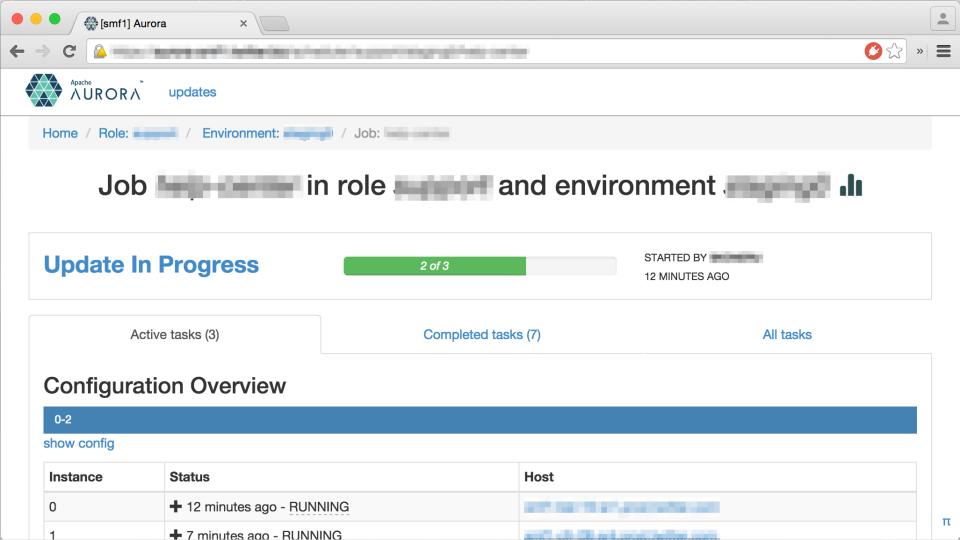
job	user	started	last modified	status
		9 hours ago	2 minutes ago	IN PROGRESS
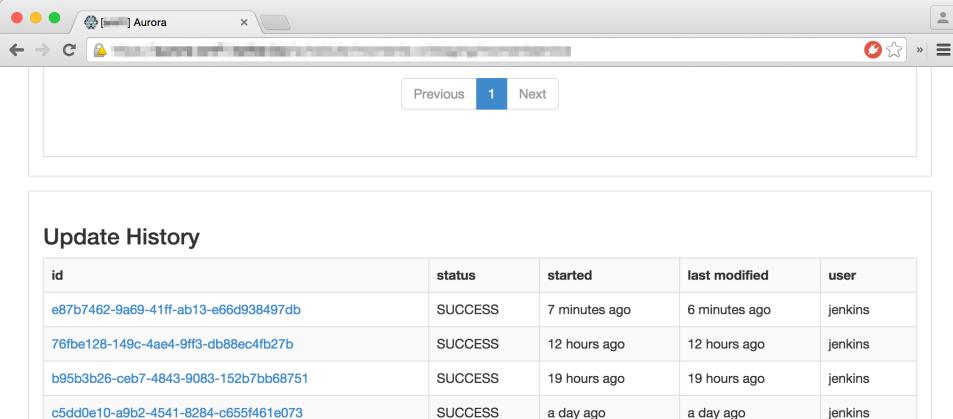
Recently Completed Updates

job	user	started	last modified	status
		12 minutes ago	5 minutes ago	SUCCESS
		30 minutes ago	13 minutes ago	SUCCESS
		16 minutes ago	13 minutes ago	SUCCESS
		17 minutes ago	15 minutes ago	SUCCESS
		26 minutes ago	19 minutes ago	SUCCESS

Apache
AURORA™   updates

Job ▨▨▨▨ in role ▨▨▨▨ and environment ▨▨▨▨

Update In Progress

| 2 of 3 |

STARTED BY ▨▨▨▨
12 MINUTES AGO

| Active tasks (3) | Completed tasks (7) | All tasks |

Configuration Overview

0-2

show config

Instance	Status	Host
0	✚ 12 minutes ago - RUNNING	▨▨▨▨
1	✚ 7 minutes ago - RUNNING	▨▨▨▨

π

Previous | **1** | Next

Update History

id	status	started	last modified	user
e87b7462-9a69-41ff-ab13-e66d938497db	SUCCESS	7 minutes ago	6 minutes ago	jenkins
76fbe128-149c-4ae4-9ff3-db88ec4fb27b	SUCCESS	12 hours ago	12 hours ago	jenkins
b95b3b26-ceb7-4843-9083-152b7bb68751	SUCCESS	19 hours ago	19 hours ago	jenkins
c5dd0e10-a9b2-4541-8284-c655f461e073	SUCCESS	a day ago	a day ago	jenkins
f9918b15-04e3-44bd-bc8b-be80e6da60a7	SUCCESS	2 days ago	2 days ago	jenkins
f0cbc96b-dcb9-49e8-8399-25ec0950a802	SUCCESS	2 days ago	2 days ago	jenkins
81fcba2d-3ae5-4601-a23e-de26ec23f07f	SUCCESS	3 days ago	3 days ago	jenkins
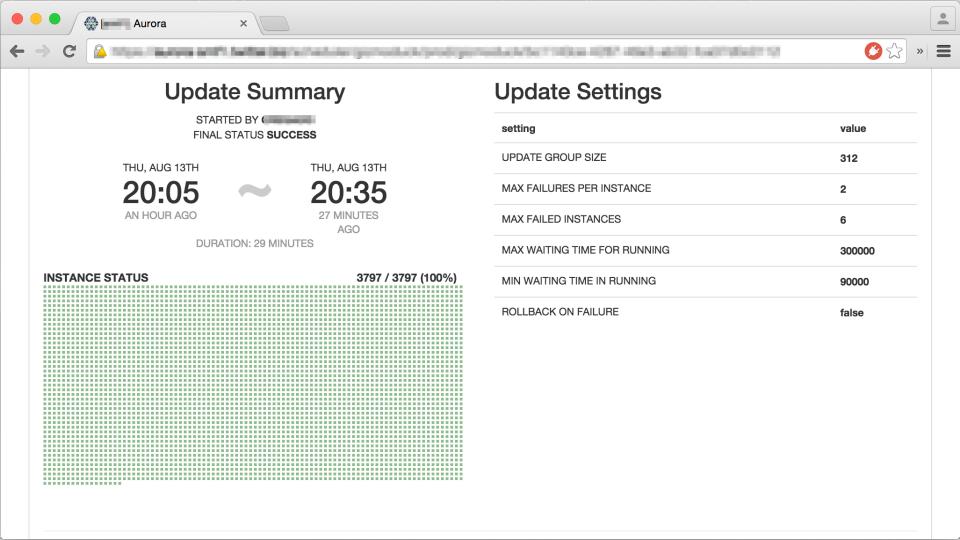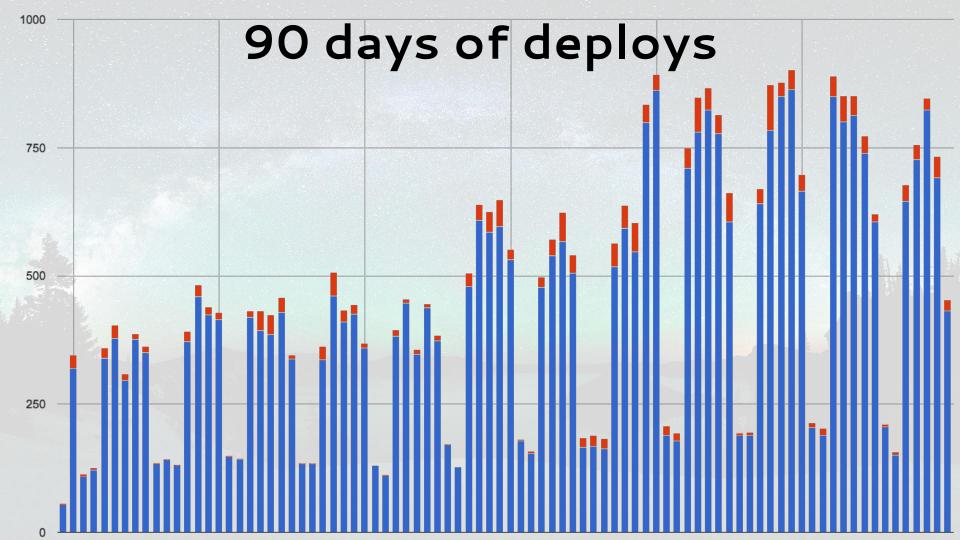
Update Summary

FINAL STATUS **SUCCESS**

THU, AUG 13TH

20:05

AN HOUR AGO

~

THU, AUG 13TH

20:35

27 MINUTES
AGO

DURATION: 29 MINUTES

INSTANCE STATUS 3797 / 3797 (100%)

Update Settings

setting	value
UPDATE GROUP SIZE	312
MAX FAILURES PER INSTANCE	2
MAX FAILED INSTANCES	6
MAX WAITING TIME FOR RUNNING	300000
MIN WAITING TIME IN RUNNING	90000
ROLLBACK ON FAILURE	false

90 days of deploys

grouped by hour

DOS: centralizing policy

DOS: centralizing policy

DOS: centralizing policy

DOS: centralizing policy

further reducing
OPERATOR ERROR

CDR (LMP)

TRANSFER CAM
PREL CKS:
   LM STATUS/PHOTO 3 GEAR
   TERRAIN
   LIGHTING/PHOTO SAM AREAS
   PHOTO EGRESS
TV-CHANGE LENS(FAM)(SWC)
PHOTO SWC-CAM ON MESA
BULK SAMP (EVA & ENVIR)
   UNSTOW BAG/SCOOP/HAMMER
   UNPACK SRC/COL SAMP
   SEAL SRC (UNSTOW ALSCC)
   HOOK UP LEC
LM INSPECT-CLOSE UP PHOTOS

RECV STILL CAMERA-PHOTO
   QUAD II/-Y GEAR
   EASEP OFFLOAD/PANORAMA
EASEP DEPLOY & PHOTO
DOCUMENTED SAMPLE COL:
   STEREO CORE TUBE
   TETHER BAG/UNSTOW GNOMON
   PHOTO & BAG SAMPLES
   HOLD ENVIR/GSA SAM CONT
   RETRV SWC-SOIL MECH
   PACK/CLOSE SRC(INGRESS)
PHOTO LMP/CAM MAG TO LEC
TRANSFER BULK SRC
TRANSFER D.S. SRC

Workflow Details

dmclaughlin
super-important-job

v6

Staged by **dmclaughlin** on 6/31/2015

0 / 4

Targets Released

ABORT ⚙

Targets

1   smf1/dmclaughlin/devel/super_important_job/0

ⓘ Ready to be released.

Update Settings

batch size: 1
max failures per instance: 0
max failed instances: 0
max waiting time for running: 1 minute
min waiting time in running: 30s
rollback on failure: true

Change Summary

Packages

aurora:deploy-orchestration-service v65	→	**aurora:deploy-orchestration-service v68**
jenkins_project: aurora-source-deploy-orchestration-service		jenkins_project: aurora-source-deploy-orchestration-service
gitsha: 58y435734h5jh345h34j5h34j53456872xnn3jdfj48		gitsha: 5852a44a25f48d08001e20982410a031c3e85cc4
jenkins_build_number: 1		jenkins_build_number: 2
branch: origin/deploy-orchestration-service_R10		branch: origin/deploy-orchestration-service_R12
jenkins_host: smfc-aif-02-sr3.corpdc.twitter.com		jenkins_host: smfc-ait-08-sr1.corpdc.twitter.com

Resources

Instances: 40	→	Instances: 40
RAM: 1024MB		RAM: 2048MB
CPU: 10		CPU: 20
Disk: 10GB		Disk: 50GB

release

2   smf1/dmclaughlin/devel/super_important_job

Awaiting release of smf1/dmclaughlin/devel/super_important_job/0

view details ⓘ

release

3   smf1/dmclaughlin/prod/super_important_job

dmclaughlin · super-important-job

v8

Status: Waiting for release of smf1/dmclaughlin/prod/super-important-job
Rolled back from 0 at 6/31/2015 by **ui-user**
Last updated at 6/31/2015 by **ui-user**

0 / 4
Targets Released

v7

Status: Waiting for release of smf1/dmclaughlin/prod/super-important-job
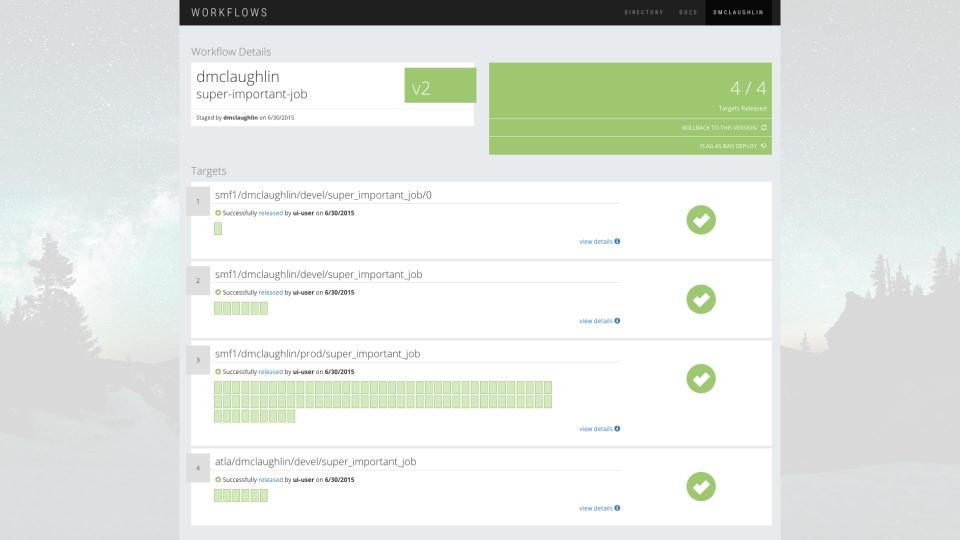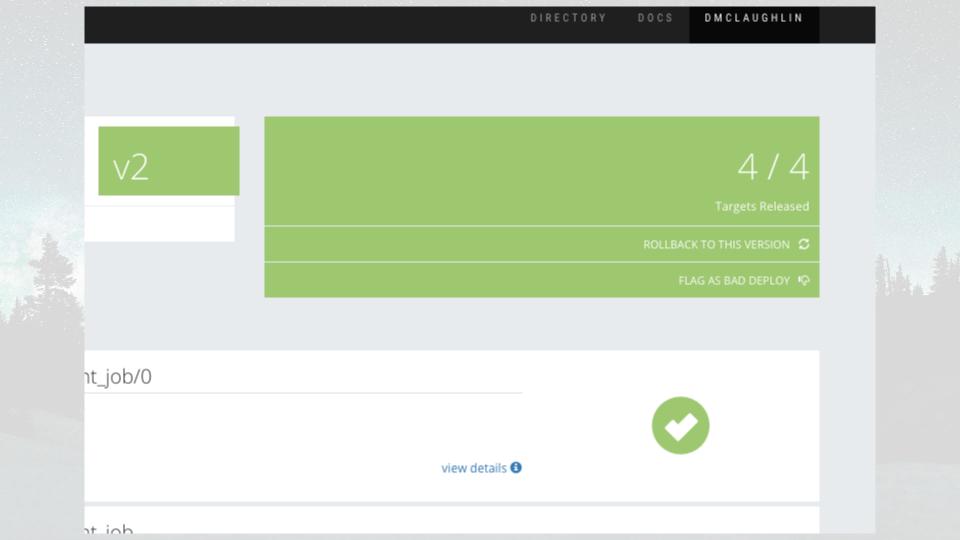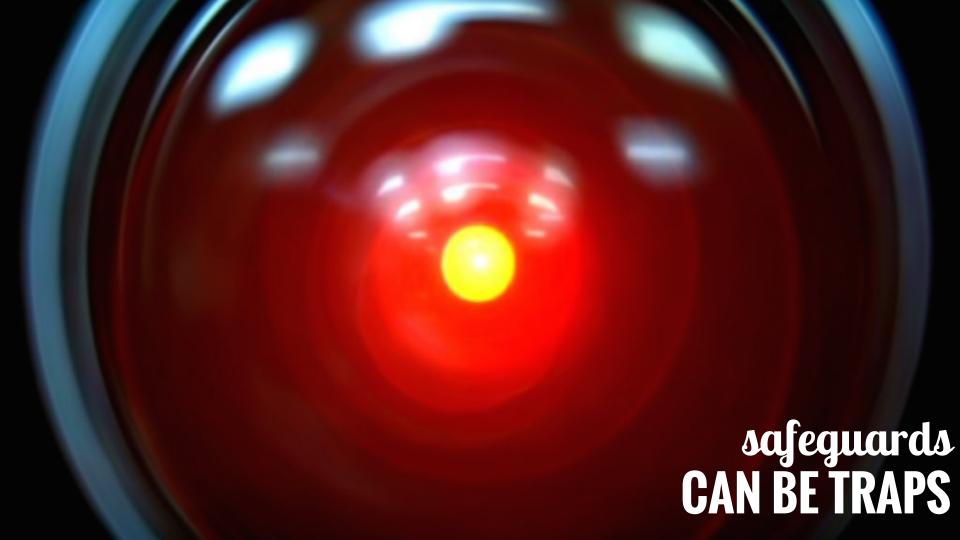Staged at 6/31/2015 by **dmclaughlin**
Last updated at 6/31/2015 by **dmclaughlin**

3 / 4
Targets Released

v6

Status: Waiting for release of smf1/dmclaughlin/prod/super-important-job
Staged at 6/31/2015 by **dmclaughlin**
Last updated at 6/31/2015 by **dmclaughlin**

0 / 4
Targets Released

v5

Status: Waiting for release of smf1/dmclaughlin/prod/super-important-job
Rolled back from 0 at 6/30/2015 by **ui-user**
Last updated at 6/30/2015 by **ui-user**

1 / 4
Targets Released

v4

Status: Waiting for release of smf1/dmclaughlin/prod/super-important-job
Rolled back from 2 at 6/30/2015 by **ui-user**
Last updated at 6/30/2015 by **ui-user**

2 / 4
Targets Released

v3

Status: Waiting for release of smf1/dmclaughlin/prod/super-important-job
Rolled back from 0 at 6/30/2015 by **ui-user**
Last updated at 6/30/2015 by **ui-user**

3 / 4
Targets Released

v2

Status: Complete!
Staged at 6/30/2015 by **dmclaughlin**
Last updated at 6/30/2015 by **dmclaughlin**

4 / 4
Targets Released

v1

Status: Waiting for release of smf1/dmclaughlin/prod/super-important-job
Rolled back from 0 at 6/30/2015 by **ui-user**
Last updated at 6/30/2015 by **ui-user**

0 / 4
Targets Released

v0

Status: Complete!
Staged at 6/30/2015 by **dmclaughlin**
Last updated at 6/30/2015 by **dmclaughlin**

4 / 4
Targets Released

Workflow Details

dmclaughlin
super-important-job

v2

Staged by **dmclaughlin** on 6/30/2015

4 / 4

Targets Released

ROLLBACK TO THIS VERSION ⟳

FLAG AS BAD DEPLOY 🏳

Targets

1   smf1/dmclaughlin/devel/super_important_job/0

✓ Successfully released by **ui-user** on **6/30/2015**

view details ⓘ

2   smf1/dmclaughlin/devel/super_important_job

✓ Successfully released by **ui-user** on **6/30/2015**

view details ⓘ

3   smf1/dmclaughlin/prod/super_important_job

✓ Successfully released by **ui-user** on **6/30/2015**

view details ⓘ

4   atla/dmclaughlin/devel/super_important_job

✓ Successfully released by **ui-user** on **6/30/2015**

view details ⓘ

v2

4 / 4

Targets Released

ROLLBACK TO THIS VERSION ⟳

FLAG AS BAD DEPLOY 🏳

nt_job/0

view details ⓘ

safeguards
CAN BE TRAPS

thanks!

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