**Home Depot Upgrade Scoping Call**

*Led by Paul Anderson*

*2017-08-01 1000 MDT*

Puppet: Erica Sivak, Dan Bennett, Paul Anderson, Greg Loughmiller

Home Depot: Patrick (Practitioner), Noel (PM), Sean (Stakeholder, Sr.Manager), Andrew (Practitioner), John (Practitioner)

Erica: Health Check, Code Review and Upgrade to LTS. What do you think?

Sean: Recorded a demo, and the team put “Micro managed by Sean” in their demo credits

John - Lead

Patrick & Andrew - “Integral to upgrade, moving from monolithic to split”

Noel - PM, keeps Sean going in right direction and keeps team focused.

Let’s talk about upgrade first:

Want to be on 2016.4.2 by end of August. Is rolled out to Dev/QA

Having issues/apprehension pushing into prod

“Getting the hell and gone from opsware into Puppet”

Has lots of their own code in place

Environments:

Dev - Split install. Postgres is load balanced

QA - Split,

Non-prod - Double mom, 2 puppet DB’s, 2 consoles, 2 hubs (1000’s of nodes managed)

Has highest churn/load/visibility

1000 unique changes (module versions), generating 26k resource changes

Change window would be evening due to high usage

Prod - DC - Double mom, 2 puppet DB’s, 2 consoles, 2 hubs (1000’s of nodes managed)

Lower churn

Change window would be morning/afternoon due to code promotion schedule in evening

Prod - Store - Double mom, 2 puppet DB’s, etc. (maybe 10000, a little less managed)

49 unique changes last week, 21k resource changes

Change window would be morning/afternoon due to code promotion schedule in evening

After QA, were doing some testing to validate/verify non-prod. Ran into an issue with their custom code. Continuous development (fast paced) led to a discussion of sanity checking QA for this stuff before moving forward to non-prod.

Hope this week to have a solid understanding of go/no go for non-prod. Mostly concern about code.

Previously upgraded in place. Must be in place: Complexity with firewalls. Would lose logging, etc. Can take snapshots.

MCollective: Deploying modules, control repo,

Puppet calls in for a daily noop run. Otherwise, triggered by mcollective

Mcollective tuning ongoing. Spokes die out due to memory issues. Think that mcollective issues mentioned in 2016.4 release notes as fixed will be useful.

Integration: Jenkins,

Non prod has Jenkins

Prod + Non prod: git

R10k has a story in the queue to look at “code manager” (This is off the table for this SOW)

Want any documentation for testing \* Erica will send some notes and have a follow-on meeting.

Service Now - Developed inhouse. The Service Now plugin sucked,so they rolled their own. Used Servicenow web API and then their code does whatever it needs to go to Puppet. ~8/9k LOC.

EL but for broker. Broker is running a newer version of Python.

EL6 masters, clients are mix EL5, 6, 7 and Cent 7.

Ubuntu on the horizon, but out of scope.

Solaris, AIX is a thing, but not intended to be managed by Puppet

Path forward issues:

Sat 6.x (6.2?)

Productized HA

Ubuntu support

Code Manager

Want to upgrade nonprod to 2016.4.2, perhaps after hours.

Some OOB fact changes have already been accommodated for. (Are they talking about facter 3-> 4?)

Production store & production data center during the day. (Tend to be worked on in the evening, so upgrade in the morning/afternoon shouldn’t have much impact)

Questions:

Sizes

Infrastructures

Integrations

2 different sites: austin & atlanta

Work location: Austin

Estimated scope:

1. Some sort of discovery ( 1 week?) Health Check
2. 3 days \* 3 environments = 9 days + 1 spare (Wants this reduced to 1 week?)
3. Code review

Focus on upgrade.

Last week of August is holiday-ish for Home Depot.

Links:

Old-ish-but-still-current-enough architecture discussion: <https://confluence.puppetlabs.com/pages/viewpage.action?pageId=55642610>

Scoping Brainstorming:

Risks:

Hand-rolled (unsupported) HA config

PuppetDB and PostgresQL via load balancer

Double MOM, double Console

Hand-rolled (~9k LoC) Servicenow integration

They’ve already upgraded Dev and QA but haven’t upgraded non-prod due to issue with their custom code!?!

Customer has a tight schedule, wants quick turn around and short(!?!) engagement 2-weeks.

Large, heavily-used infrastructures with maintenance windows (non-prod may be done in the evening)

Tailwinds:

Customer staff seems pretty conversant in their infrastructure. (Can state role of arbitrary puppet-related hostnames)

VM Snapshots

TAM

Custom HA Upgrades: Zack, Nate

Look for: